

**FINAL
ENVIRONMENTAL IMPACT REPORT**

SDCRAA # EIR-06-01
State Clearinghouse No. 2005091105

AIRPORT MASTER PLAN
SAN DIEGO INTERNATIONAL AIRPORT

**TECHNICAL APPENDICES
VOLUME I: A, B, C, and D**



Lead Agency:
SAN DIEGO COUNTY REGIONAL AIRPORT AUTHORITY
P.O. Box 82776
San Diego, CA 92138-2776
www.san.org

April 2008

APPENDIX A

Notice of Preparation and Public and Agency Outreach

Table of Contents

Part I:	Notice of Preparation (Revised January 2006) and Notice of Preparation (Revised 2005)
Part II	Scoping and Comments Received During Scoping
Part III	Comments on the Notice of Preparation (Revised January 2006) and the Notice of Preparation (Revised September 2005)
Part IV	Comments Received on May 2006 Draft EIR

APPENDIX A

Part I

Notice of Preparation (Revised January 2006) and Notice
of Preparation (September 2005)

Subject: Notice of Preparation (Revised) of a Draft Environmental Impact Report

Lead Agency:

Agency Name San Diego County Regional Airport Authority

Mailing Address P.O. Box 82776
San Diego, CA 92138-2776

Physical Address 3225 N. Harbor Drive
San Diego, CA 92101

Contact Ted Anasis, AICP

The San Diego County Regional Airport Authority (SDCRAA) will be the CEQA Lead Agency and will prepare an Environmental Impact Report (EIR) for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The SDCRAA is requesting input from interested government and quasi-government agencies, other organizations and private citizens regarding the scope and content of environmental information to be included in the EIR. Public agencies receiving this notice may need to use the EIR prepared by the SDCRAA when considering their permits or other approvals for the proposed project.

Any public agencies that respond to this Notice of Preparation are requested, at a minimum, to:

1. Describe significant environmental issues, reasonable alternatives and mitigation measures that they would like to have addressed in the Draft EIR.
2. State whether they are a responsible or trustee agency for the project, explain why and note the specific project elements that are subject to their regulatory authority.
3. Provide the name, address and phone number of the person who will serve as their point of contact throughout the environmental review process for this project.

The project description, location and the potential environmental effects are contained in the attached materials.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but **not later than 30 days** after receipt of this notice.

Please send your response to Ted Anasis, AICP, at the mailing address shown above. We will need the name for a contact person in your agency.

Project Title: San Diego International Airport Master Plan

Project Location: City of San Diego San Diego County
City (nearest) County

Project Description:

See the following description of the proposed project and alternatives.

Date January 13, 2006

Signature 

Title Manager, Airport Planning

Telephone 619.400.2478

San Diego International Airport Master Plan Project Description

January 2006



The San Diego County Regional Airport Authority has prepared a revised Notice of Preparation for a Draft Environmental Impact Report for the San Diego International Airport Master Plan. This revised Notice of Preparation amends the Notice of Preparation published on September 19, 2005. The text description has been revised in bold to explain additional project elements for ease of reading and continuity. The additional project elements that have been added to the Airport Implementation Plan are located in the north area of the airport and are identified with green numbers on Figures 3 and 4. The project elements in the north area will be evaluated in both the proposed Airport Implementation Plan and alternative for environmental impacts.

The San Diego County Regional Airport Authority (SDCRAA or Authority) proposes to develop the San Diego International Airport (SDIA) in accordance with a new Airport Master Plan. The Airport Master Plan will guide the development of SDIA through 2015. The Master Plan process takes into account the Airport Site Selection Program being conducted by SDCRAA to identify an alternative site to meet the region's air transportation needs. The year 2015 has been identified as the earliest time a new facility could be in place to replace SDIA. This time period also corresponds to the point at which operations at SDIA are forecasted to exceed runway capacity, creating congestion and incurring delay.

Regional Context—Airport Site Selection Program

The existing airport site is severely constrained by its location. The constraints associated with the Airport's site adjacent to Downtown San Diego, combined with the region's growth, resulted in a study, now known as the Airport Site Selection Program (ASSP), to determine the feasibility of relocating the region's primary commercial airport. Potential sites have been under continuous study since 2001, beginning with the Air Transportation Action Program (ATAP), a joint project of the San Diego Association of Governments (SANDAG) and the Port of San Diego. Upon the formation of the SDCRAA in January 2003, the responsibility for the ASSP shifted to the SDCRAA.

Originally, 32 sites were considered for the relocation of SDIA. The SDCRAA intends to consider nine civilian and military options together, gradually paring its list as more technical data and other information becomes available. The ASSP will be the subject of a separate environmental review process.

Current Conditions at SDIA

SDIA is located in the northwest portion of the Downtown area within the City of San Diego. It is bounded generally by West Laurel Street and North Harbor Drive to the south, McCain and Neville Roads to the west, the Marine Corps Recruit Depot to the north, and Pacific Highway to the east. Land in the airport vicinity is densely developed with a range of residential, commercial, industrial and open space uses.

SDIA is the smallest major airport site in the U.S., consisting of fewer than 700 acres. The Airport has one runway, making it the busiest single-runway commercial airport in the nation. SDIA's air service continues to grow based upon demand for air travel. In 2004, SDIA served 16.4 million passengers and handled 122,000 tons of cargo.

Airfield. The airfield consists of one runway (useable in both directions) and three primary taxiways. Runway 9-27 is 9,400 feet long and 200 feet wide. Taxiway B is south of, and parallel to, Runway 9-27 and runs the entire length of the runway. Taxiway C is north of, and

parallel to, the eastern half of Runway 9-27. Taxiway D extends from the southeast portion of the airfield to the north-central portion of the airfield at an approximate 30 degree angle to Runway 9-27.

At the western edge of the Airport adjacent to Terminal 2 is the former Naval Training Center (NTC) Property. A 52-acre parcel was conveyed to the Port of San Diego in 2000 and transferred to the SDCRAA as part of the transfer of airport control. The passenger terminal and landside complex is located east of the former NTC property and bounded on the north by Runway 9-27 and on the south by North Harbor Drive.

Terminal. The Airport terminal complex comprises four buildings: the Commuter Terminal, Terminal 1, Terminal 2 East, and Terminal 2 West. Terminals 1 and 2, which include 41 jet gates and other facilities, serve the passenger processing needs of commercial airline passengers. The Commuter Terminal has 10 parking positions for commuter aircraft and serves commuter traffic at SDIA. The ground transportation system located south of the terminals provides access roads, vehicle curbsides and surface parking.

The Commuter Terminal is located in the south central portion of the airfield and accommodates most turbo-prop and regional jet flights to and from the Airport. Primarily, all commuter flights between San Diego and Los Angeles International Airport (LAX) are operated by United Express and American Eagle from this facility.

Terminal 1 is the oldest terminal facility at the Airport. It is located at the east end of the primary terminal area. Terminal 1 has 19 narrow body jet gates. Southwest Airlines, United Airlines, Alaska Airlines, Frontier Airlines, and Midwest Airlines presently serve Terminal 1.

Terminal 2 East is immediately west of Terminal 1. Terminal 2 East has 13 jet gates including two international gates located between Terminal 2 East and Terminal 1. All international arrival flights operate at Terminal 2 East, as well as the domestic operations of Northwest Airlines and American Airlines.

Terminal 2 West is the newest terminal facility at the Airport having opened in 1998. Terminal 2 West has nine jet gates and is served by Delta Airlines, Hawaiian Airlines, jetBlue Airways, Continental Airlines, US Airways, Sun Country Airlines, and West Jet. A new baggage claim facility is housed in Terminal 2 West that provides baggage claim for both Terminal 2 West and Terminal 2 East.

Ground Transportation. All roadway access to the Airport terminal complex is via North Harbor Drive. There are three independent entrance roadways for the Commuter Terminal, Terminal 1 and Terminal 2. There are approximately 6,800 total linear feet of curb front serving the three terminals from a single-level airport roadway. There are approximately 4,055 airport-operated surface parking spaces adjacent to these terminals. Access to the North Area of SDIA is via Pacific Highway at Washington Street and Sassafras Street. Over 1,600 additional remote, long-term, parking spaces are available at the SAN Park Pacific Highway parking lot located in the North Area.

Airport Support. North of Runway 9-27, SDIA provides apron area for air cargo loading and one general aviation Fixed Base Operator. There are freight forwarding cargo facilities totaling approximately 70,000 square feet located on the south side of the Airport between Terminal 1 and the Commuter Terminal. These are the only enclosed cargo sorting facilities located at the Airport. FedEx, UPS and other cargo carriers maintain their own off-airport sort facilities. Apron area for FedEx, DHL and other cargo aircraft is located in the north airfield area. UPS operates an apron aircraft parking position adjacent to the Commuter Terminal apron.

The Airport has an air traffic control tower (operated by the Federal Aviation Administration), an airport rescue and fire fighting facility (ARFF) and a fuel farm located in the north airfield area.

The Airport has a total of 19 Remain-Over-Night (RON) aircraft parking positions. Ten positions

are located adjacent to Taxiway C on the north airfield. The remaining nine positions are located adjacent to the terminal areas on the south airfield.

The San Diego International Airport Master Plan Goals and Forecast

The development of the SAN Master Plan was initiated by the SDCRAA to accommodate existing and future demand for air travel in the San Diego region through 2015. This is the time period when the ASSP will be completed and prior to the approximate time a new regional airport could be operational if the voters of San Diego County choose to approve one. The following goals and objectives have been set to guide future development at SDIA: 1) Improve air service and customer service; 2) Improve tenant facilities; 3) Improve airport access; 4) Utilize developable properties; 5) Improve the regional economy; 6) Meet SDCRAA financial goals; 7) Involve stakeholder and community input; 8) Improve terminal efficiency and capacity; 9) Increase airfield safety, efficiency and capacity; 10) Improve ground transportation efficiency and capacity; 11) Increase compatibility with surrounding land uses; and 12) Complement the Airport Site Selection Program (ASSP).

The SDCRAA prepared both constrained and unconstrained forecasts of aviation activity through 2030 that could be used for facilities planning and in evaluating airport improvements. The unconstrained forecast represents projections of how San Diego passenger demand, airline flights and other activity segments are likely to grow in the future, without consideration of the constraints on the growth that may be imposed by facility limitations at SDIA. The constrained forecast reflects the limitation of the existing SDIA facilities, specifically its single runway, and represents a projection of how aviation activity would grow if no additional runway capacity is provided. In this case, airfield congestion and aircraft operational delay grows at an increasing rate over time. By 2015, operational delays are forecasted to reach congestion levels that would limit further growth in airline flights without the addition of another runway at SDIA.

Proposed Project Components

The project to be evaluated in this EIR consists of two key components. The first is the Airport Land Use Plan and the second is implementation of specific projects contained in the Airport Master Plan, called the Airport Implementation Plan. Each is described as follows.

The Airport Land Use Plan depicts the boundaries of SDIA and describes existing and proposed land uses and future planning areas. For the Airport Land Use Plan, the Authority will describe programs for airport uses, request programmatic approvals and will follow with future project-specific environmental consideration. This approach will ensure that a responsible planning and mitigation program will be implemented at SDIA that considers the full range of development possibilities, cumulative impacts and mitigation opportunities. The Airport Implementation Plan is intended to provide project-level approvals for those elements that are to be developed at this time.

The regional location map for SDIA is depicted as **Figure 1**.

Airport Land Use Plan—Establish and Adopt Land Uses

The Authority proposes to adopt an Airport Land Use Plan that:

- Describes the boundaries of SDIA;
- Describes the land uses on this property; and
- Proposes future planning areas.

The Airport Land Use Plan will include a figure that depicts the properties under the planning jurisdiction of the Authority, **Figure 2**.

The Airport Land Use Plan will describe four general categories of land use on the airport: airfield, terminal, ground transportation and airport support. The Airport Land Use Plan will

describe existing and proposed land uses in areas that are under the Authority's control. The proposed land uses may include depictions of future facilities but subsequent environmental review will be required at a project-level before these future facilities are developed. In order to attain a programmatic level of approval for future development, the following general types of facilities and locations are depicted to analyze program and cumulative impacts and to develop mitigation measures that would:

- Designate land area for future Ground Transportation and Airport Support uses in the North Area;
- Construct new and replacement air cargo facilities in the North Area;
- Construct new and replacement general aviation facilities in the North Area;
- Construct new and relocated ground transportation facilities in the North Area;
- Relocate cargo aircraft parking positions in the North Area; and
- Remove aircraft movement obstructions south of Taxiway B adjacent to and within the Teledyne Ryan property.

The Airport Land Use Plan will also include future planning areas. These areas delineate properties that are not presently under the control of the Authority but are contemplated by the Authority to be used for future airport purposes and potential land uses. One such area is the former Teledyne Ryan property generally located between the Airport and North Harbor Drive, south of Taxiway B and east of the Commuter Terminal.

Proposed Airport Implementation Plan—Develop and Operate Project Components

The Authority has identified specific physical improvements at SDIA to allow the airport to effectively continue its mission of serving San Diego's commercial air transportation needs as forecasted through 2015. The project elements are described as follows and are depicted on **Figure 3**.

Expand existing Terminal 2 West with 10 new jet gates. Construct an addition to the existing Terminal 2 West that would include approximately 310,000 square feet of new space, 10 additional aircraft gates and approximately 1,350 lineal feet of new and reconfigured vehicle curb front on two levels. The new and reconfigured terminal space would be expanded on two floors for passenger processing facilities including airline ticketing, security screening, departure holdrooms, restrooms, concessions, public circulation and outbound baggage areas. The existing Terminal 2 West baggage claim area would be reconfigured to improve service for arriving passengers and their baggage from both Terminal 2 West and Terminal 2 East. The additional aircraft gates would reduce existing crowding in Terminal 1 and accommodate passenger volumes forecasted through 2015 and would reduce severe crowding in all terminals expected from the growth in airport-wide traffic and flights. The proposed terminal expansion would also include an extension of the existing Terminal 2 West vehicle curb front used for pickup and drop-off of arriving and departing passengers. This project feature also includes a reconfiguration of the existing Terminal 2 curb front to improve automobile flow and passenger convenience. The new curb front system for Terminal 2 would vertically segregate arriving and departing vehicle traffic between the existing ground level and a new second level proposed as part of a new parking structure (described below).

Construct new aircraft parking and replacement Remain-Over-Night (RON) aircraft parking apron. This new aircraft parking apron would be constructed to accommodate up to 12 aircraft, including one wash rack area, adjacent to the new Terminal 2 West taxilane. Overnight aircraft would be moved to gates in the morning to resume flight routing.

Construct new apron and aircraft taxilane. This new aircraft apron pavement would be built adjacent to and west of the proposed aircraft gates at Terminal 2 West. It would be used as an

aircraft taxiway for aircraft to proceed between the runway and the new proposed gates. This project element would facilitate efficient aircraft movement on the west end of the terminal area and would include remediation and closure of an existing land fill on the project site area.

Construct new surface parking and vehicle circulation west of Terminal 2 West. New surface parking lots and vehicle circulation areas would be constructed west of Terminal 2 West to accommodate forecasted growth of passengers expected by 2015 and the associated need for additional employee parking. Other uses would include staging for taxis, airport shuttle vans and temporary public parking during the construction of the new parking structure south of Terminal 2 West. A roadway entrance for delivery trucks to drop off airport supplies and concessions and to remove refuse from the terminals would be included in the area west of Terminal 2 West.

Construct a new parking structure, departure curb and vehicle circulation serving Terminal 2. A new parking structure with a second level departure curb would be built to serve additional passengers using the new and reconfigured Terminal 2. This structure would be two to four levels with parking, departure curb and a transit center accommodating shuttles, buses, taxis and circulation lanes.

Additional Project Elements Included in Airport Implementation Plan

Relocate and reconfigure SAN Park Pacific Highway. The existing SAN Park Pacific Highway parking facility, approximately 1,670 public parking spaces, would be relocated and expanded to approximately 2,170 spaces to the north of the existing parking facility to accommodate construction of new airfield and general aviation facilities. The site would be bounded by Pacific Highway to the east and a new access road to the south and west. Access/egress to the parking facility would be provided from the new access road. The parking spaces currently utilized by the Port of San Diego, approximately 210 parking spaces, would remain in the existing location along Pacific Highway.

Construct a new access road from Sassafras Street/Pacific Highway intersection. A new access road would be constructed to provide access to SAN Park Pacific Highway and new general aviation facilities. The access road would utilize the existing Sassafras Street/Pacific Highway intersection and existing traffic signal. Underground utilities required for airport facilities including water, electric, sanitary sewer, and storm drains, would be constructed in conjunction with the access road and connect with existing utilities located along the Pacific Highway corridor.

Construct new general aviation facilities including access, terminal/hangars and apron. New general aviation facilities would be constructed on 12.4 acres to accommodate forecasted general aviation operations through 2015. General aviation uses must be relocated to allow for the construction of airfield/taxiway improvements and apron hold pads. New general aviation terminal/hangars and apron would be located immediately north of the taxiway improvements and provide access to the airfield for general aviation aircraft. Landside access for vehicles and parking would be provided from the new access road through the Sassafras Street/Pacific Highway intersection.

Demolish the existing general aviation facilities. The existing general aviation facilities would be demolished to accommodate airfield/taxiway improvements. The removal of subsurface structures and site remediation, including removal of existing underground storage tanks, would be conducted.

Reconstruct Taxiway C, construct new apron hold pads and new taxiway east of Taxiway D. The existing Taxiway C pavement would be rehabilitated and the taxiway centerline established 400 feet north of the Runway centerline to separate and accommodate the movement of Group V commercial aircraft. A new 195-foot wide aircraft apron and hold pads would be constructed north of Taxiway C and east of Taxiway D to allow aircraft to

hold for extended periods while awaiting departure, but also allowing aircraft movement to continue unimpeded on adjacent taxiways. A new parallel taxiway north of the new apron and east of Taxiway D would also be constructed. This taxiway would facilitate efficient and safe aircraft movement by allowing aircraft to bypass those on the apron and also provide airfield access to the new general aviation facilities.

Airport Implementation Plan Alternative

The Authority has identified an alternate build scenario that would allow the airport to effectively continue its mission of serving San Diego's commercial air transportation needs as forecasted through 2015. The project elements are described as follows and are depicted on **Figure 4**.

Construct new unit terminal with five replacement gates and seven new jet gates.

Construction of a new unit terminal east of Terminal 1, approximately 320,000 square feet of new space, would include seven new aircraft gates plus five replacement gates, holdrooms, ticketing area, baggage claim, security screening, concessions and walkway. The additional aircraft gates would reduce existing crowding in Terminals 1 and 2 while accommodating passenger volumes forecasted through 2015. The proposed terminal expansion would also include a reconfiguration of the existing roadway to gain access to the vehicle curb.

Expand existing Terminal 2 West with three new jet gates. Expansion of the north end of Terminal 2 West passenger concourse to include approximately 30,000 square feet would accommodate three new gates and associated holdrooms. The total new gates for this build alternative would be ten new gates, the same as the proposed project.

Relocate commuter aircraft to Terminal 1 and Terminal 2. Commuter aircraft now operating out of the Commuter Terminal would be relocated to Terminal 1 and Terminal 2.

Construct new aircraft parking and replacement Remain-Over-Night (RON) aircraft parking apron. A new aircraft parking apron would be constructed to accommodate up to 10 aircraft, including one wash rack area, adjacent to the new Terminal 2 West taxilane. Overnight aircraft would be moved to gates in the morning to resume flight routing.

Construct new apron and aircraft taxilane. This new aircraft apron pavement would be built adjacent to and west of the proposed aircraft gates at Terminal 2 West. It would be used as an aircraft taxilane for aircraft to proceed between the runway and the proposed gates. This project element would facilitate efficient aircraft movement on the west end of the terminal area and would include remediation and closure of an existing land fill on the project site area.

Construct new surface parking and vehicle circulation west of Terminal 2 West. This new surface parking lot would be constructed to accommodate forecasted growth of passengers expected by 2015 and the associated need for additional employee parking. Other uses would include staging for taxis, airport shuttle vans and temporary public parking during the construction of the new parking structure south of Terminal 1. The same area would include a roadway entrance for delivery trucks to drop off airport supplies and concessions and to remove refuse from the terminals.

Construct new surface and structured parking and vehicle circulation at Terminal 1 and new unit terminal.

A new surface parking lot and a new parking structure would be constructed to accommodate forecasted growth of passengers expected by 2015 and the associated need for additional employee parking. Other uses would include staging and temporary public parking during the construction of the new parking structure south of Terminal 1. The same area would include a roadway entrance for passenger vehicles accessing the new unit terminal.

Additional Project Elements Included in Airport Implementation Plan Alternative

Relocate and reconfigure SAN Park Pacific Highway. The existing SAN Park Pacific Highway parking facility, approximately 1,670 public parking spaces, would be relocated

and expanded to approximately 2,170 spaces to the north of the existing parking facility to accommodate construction of new airfield and general aviation facilities. The site would be bounded by Pacific Highway to the east and a new access road to the south and west. Access/egress to the parking facility would be provided from the new access road. The parking spaces currently utilized by the Port of San Diego, approximately 210 parking spaces, would remain in the existing location along Pacific Highway.

Construct a new access road from Sassafras Street/Pacific Highway intersection. A new access road would be constructed to provide access to SAN Park Pacific Highway and new general aviation facilities. The access road would utilize the existing Sassafras Street/Pacific Highway intersection and existing traffic signal. Underground utilities required for airport facilities including water, electric, sanitary sewer, and storm drains, would be constructed in conjunction with the access road and connect with existing utilities located along the Pacific Highway corridor.

Construct new general aviation facilities including access, terminal/hangars and apron. New general aviation facilities would be constructed on 12.4 acres to accommodate forecasted general aviation operations through 2015. General aviation uses must be relocated to allow for the construction of airfield/taxiway improvements and apron hold pads. New general aviation terminal/hangars and apron would be located immediately north of the taxiway improvements and provide access to the airfield for general aviation aircraft. Landside access for vehicles and parking would be provided from the new access road through the Sassafras Street/Pacific Highway intersection.

Demolish the existing general aviation facilities. The existing general aviation facilities would be demolished to accommodate airfield/taxiway improvements. The removal of subsurface structures and site remediation, including removal of existing underground storage tanks, would be conducted.

Reconstruct Taxiway C, construct new apron hold pads and new taxiway east of Taxiway D. The existing Taxiway C pavement would be rehabilitated and the taxiway centerline established 400 feet north of the Runway centerline to separate and accommodate the movement of Group V commercial aircraft. A new 195-foot wide aircraft apron and hold pads would be constructed north of Taxiway C and east of Taxiway D to allow aircraft to hold for extended periods while awaiting departure, but also allowing aircraft movement to continue unimpeded on adjacent taxiways. A new parallel taxiway north of the new apron and east of Taxiway D would also be constructed. This taxiway would facilitate efficient and safe aircraft movement by allowing aircraft to bypass those on the apron and also provide airfield access to the new general aviation facilities.

Probable Environmental Effects of the Project

The EIR will include discussion on all CEQA environmental categories required for potential environmental effect determination. These categories include:

Aesthetic/Visual	Minerals	Traffic/Circulation
Agricultural Land	Noise	Vegetation
Air Quality	Public Services	Water Quality
Archaeological/Historical	Schools	Water Supply
Coastal Zone	Septic Systems	Wetland/Riparian
Economics	Sewer Capacity	Wildlife
Fire Hazard	Social	Growth Inducing
Flood/Drainage	Soil Erosion	Incompatible Land Use
Geologic/Seismic	Solid Waste	Cumulative Effects
Jobs/Housing Balance	Toxic/Hazardous	

Based on a preliminary review of the Project site and in consideration of the proposed Project activities, the SDCRAA has determined that potentially adverse effects may occur to the following environmental resources as a result of the project:

- Aesthetic/Visual;
- Air Quality;
- Archaeological/Historical;
- Coastal Zone;
- Noise;
- Toxic/Hazardous;
- Traffic/Circulation;
- Water Quality; and
- Cumulative Effects.

These potential effects will be analyzed in detail in the Draft EIR.

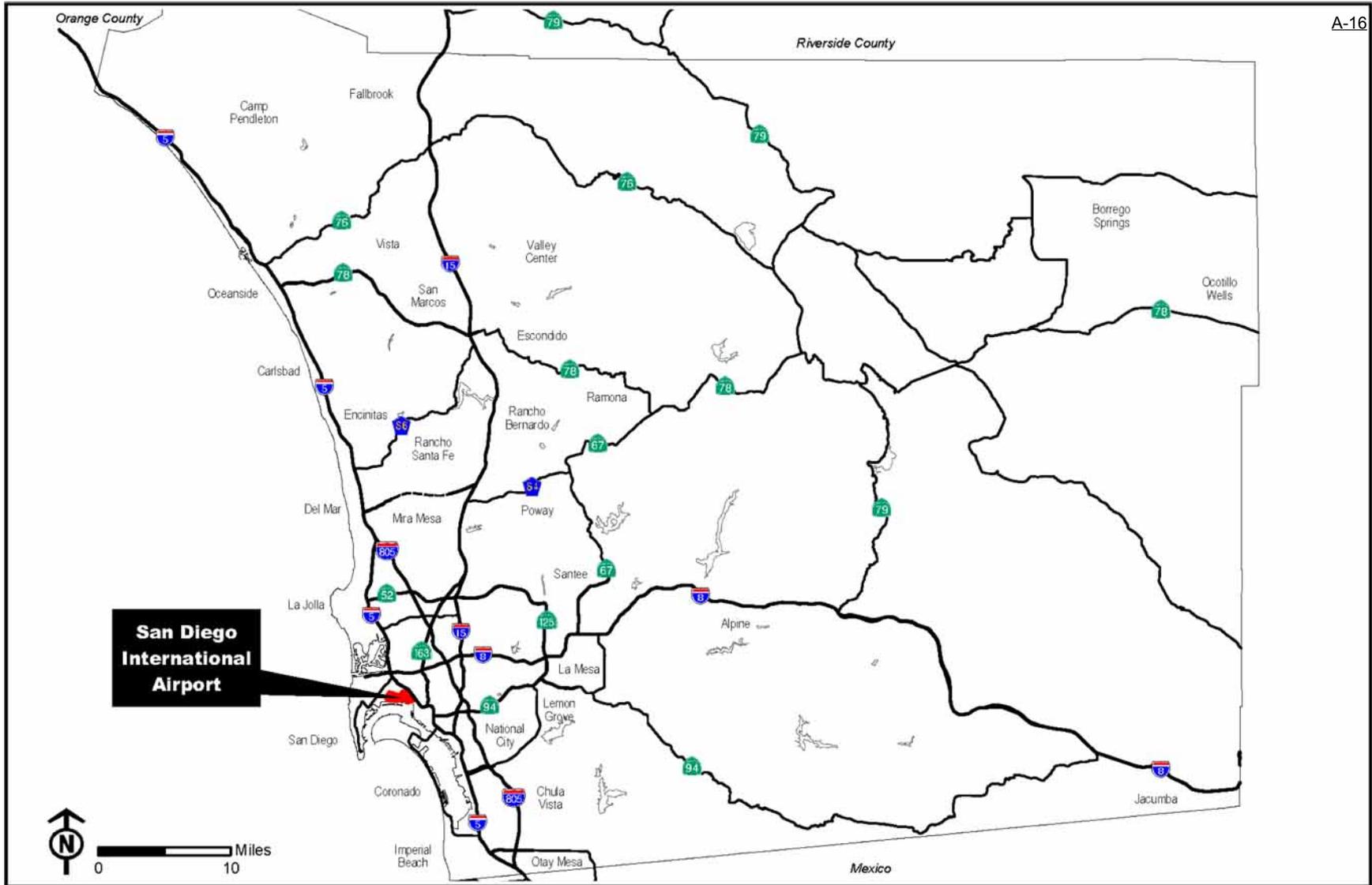
ATTACHMENTS:

Figure 1 – San Diego International Airport Regional Location Map

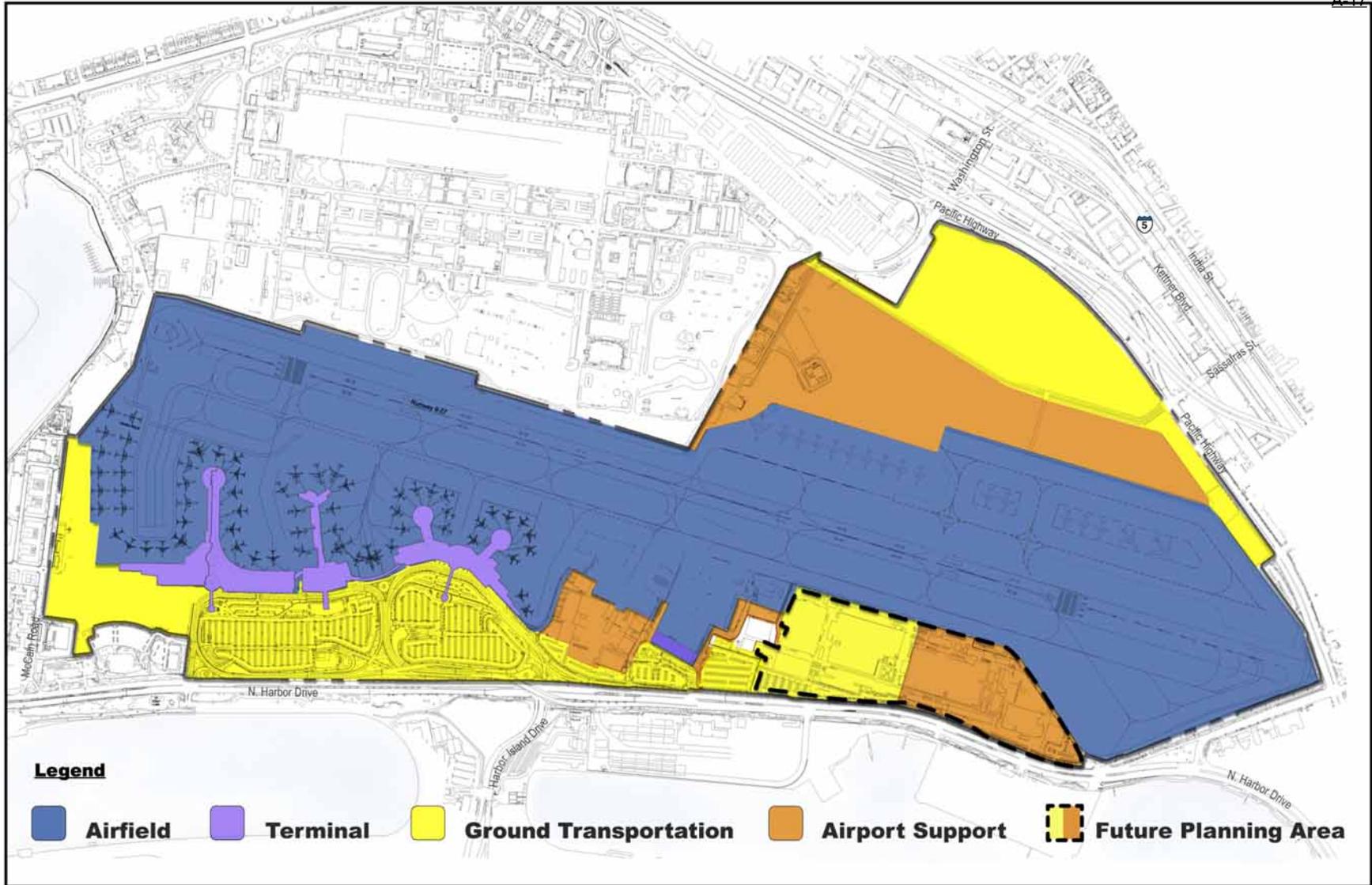
Figure 2 – Airport Land Use Plan

Figure 3 – Proposed Airport Implementation Plan

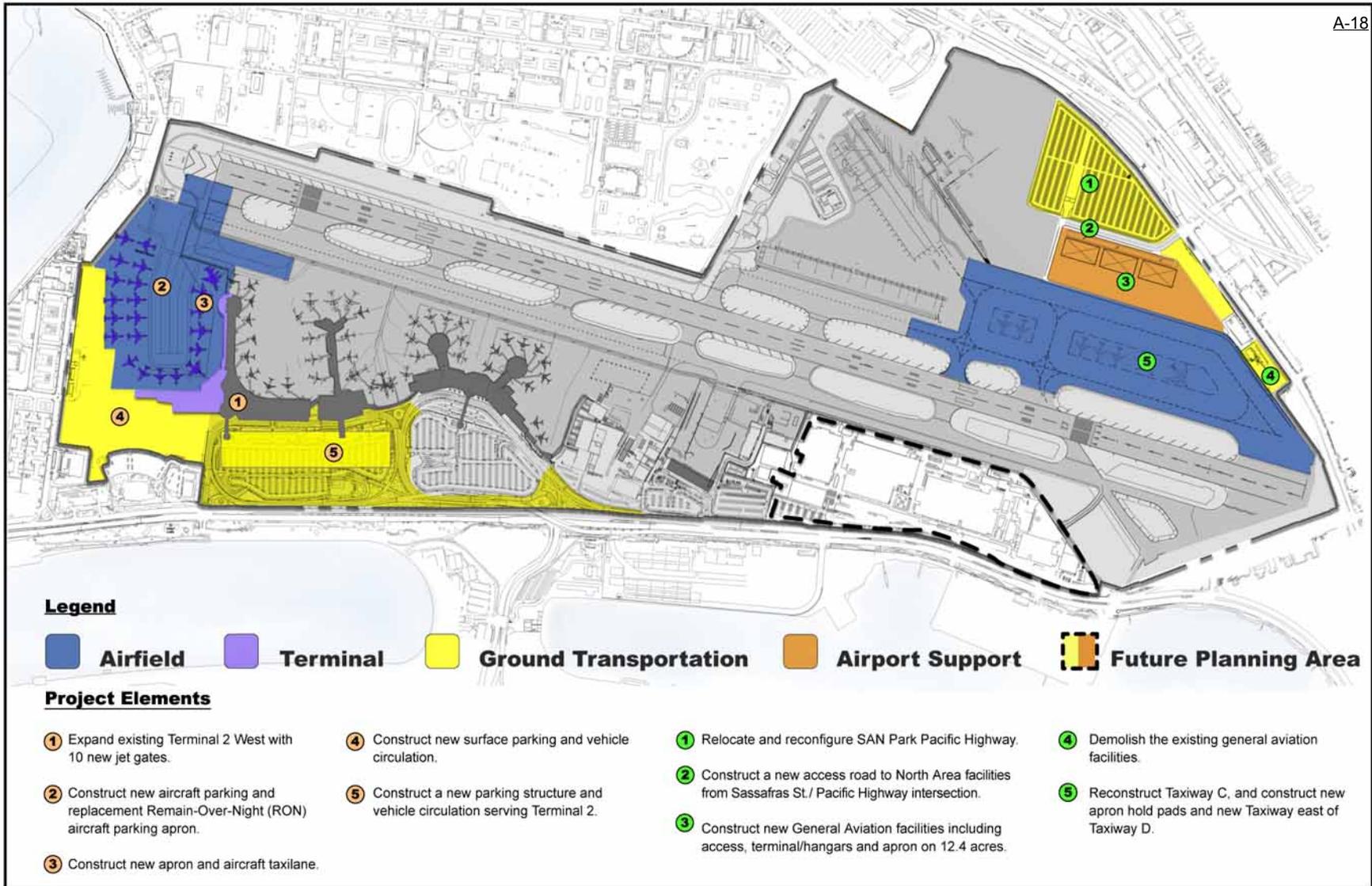
Figure 4 – Airport Implementation Plan Alternative



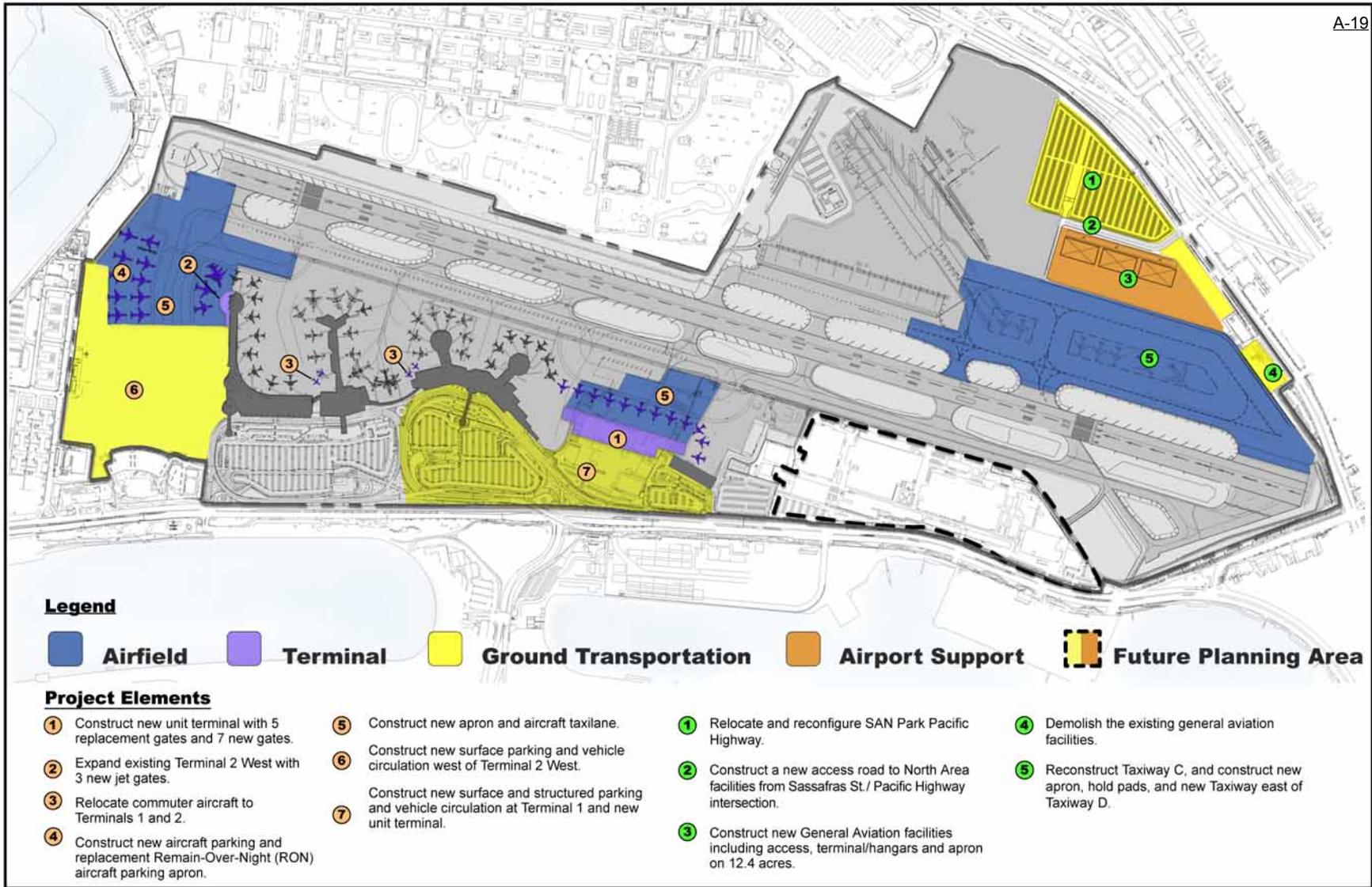
**San Diego International Airport Regional Location Map
Figure 1**



**Airport Land Use Plan
Figure 2**



**Proposed Airport Implementation Plan
Figure 3**



**Airport Implementation Plan Alternative
Figure 4**

Subject: Notice of Preparation of a Draft Environmental Impact Report

Lead Agency:
 Agency Name San Diego County Regional Airport Authority
 Mailing Address P.O. Box 82776
San Diego, CA 92138-2776
 Physical Address 3225 N. Harbor Drive
San Diego, CA 92101
 Contact Ted Anasis, AICP

FILED
 Gregory J. Smith, Recorder/County Clerk

SEP 21 2005

BY *[Signature]*
 DEPUTY

The San Diego County Regional Airport Authority (SDCRAA) will be the CEQA Lead Agency and will prepare an Environmental Impact Report (EIR) for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The SDCRAA is requesting input from interested government and quasi-government agencies, other organizations and private citizens regarding the scope and content of environmental information to be included in the EIR. Public agencies receiving this notice may need to use the EIR prepared by the SDCRAA when considering their permits or other approvals for the proposed project.

Any public agencies that respond to this Notice of Preparation are requested, at a minimum, to:

1. Describe significant environmental issues, reasonable alternatives and mitigation measures that they would like to have addressed in the Draft EIR.
2. State whether they are a responsible or trustee agency for the project, explain why and note the specific project elements that are subject to their regulatory authority.
3. Provide the name, address and phone number of the person who will serve as their point of contact throughout the environmental review process for this project.

The project description, location and the potential environmental effects are contained in the attached materials.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but **not later than 30 days** after receipt of this notice.

Please send your response to Ted Anasis, AICP, at the mailing address shown above. We will need the name for a contact person in your agency.

Project Title: San Diego International Airport Master Plan

Project Location: City of San Diego San Diego County
City (nearest) County

Project Description:

See the following description of the proposed project and alternatives.

Date September 19, 2005 Signature *[Signature]*
 Title Manager, Airport Planning
 Telephone 619.400.2478

Reference: California Code of Regulations, Title 14, (CEQA Guidelines) Sections 15082(a), 15103, 15375.

FILED IN THE OFFICE OF THE COUNTY CLERK
 San Diego County on SEP 21 2005
 Posted SEP 21 2005 Removed _____
 Returned to agency on _____
 Deputy *[Signature]*

San Diego International Airport Master Plan Project Description

September 2005



The San Diego County Regional Airport Authority (SDCRAA or Authority) proposes to develop the San Diego International Airport (SDIA) in accordance with a new Airport Master Plan. The Airport Master Plan will guide the development of SDIA through 2015. The Master Plan process takes into account the Airport Site Selection Program being conducted by SDCRAA to identify an alternative site to meet the region's air transportation needs. The year 2015 has been identified as the earliest time a new facility could be in place to replace SDIA. This time period also corresponds to the point at which operations at SDIA are forecasted to exceed runway capacity, creating congestion and incurring delay.

Regional Context—Airport Site Selection Program

The existing airport site is severely constrained by its location. The constraints associated with the Airport's site adjacent to Downtown San Diego, combined with the region's growth, resulted in a study, now known as the Airport Site Selection Program (ASSP), to determine the feasibility of relocating the region's primary commercial airport. Potential sites have been under continuous study since 2001, beginning with the Air Transportation Action Program (ATAP), a joint project of the San Diego Association of Governments (SANDAG) and the Port of San Diego. Upon the formation of the SDCRAA in January 2003, the responsibility for the ASSP shifted to the SDCRAA.

Originally, 32 sites were considered for the relocation of SDIA. The SDCRAA intended to consider nine civilian and military options together, gradually paring its list as more technical data and other information became available. It has since suspended discussion of Marine Corps Air Station (MCAS) Miramar, Naval Air Station (NAS) North Island, and three other installations to avoid interfering with attempts to protect the region's military infrastructure through the federal Base Realignment and Closure (BRAC) process.

The ASSP will be the subject of a separate environmental review process.

Current Conditions at SDIA

SDIA is located in the northwest portion of the Downtown area within the City of San Diego. It is bounded generally by West Laurel Street and North Harbor Drive to the south, McCain and Neville Roads to the west, the Marine Corps Recruit Depot to the north, and Pacific Highway to the east. Land in the airport vicinity is densely developed with a range of residential, commercial, industrial and open space uses.

SDIA is the smallest major airport site in the U.S., consisting of fewer than 700 acres. The Airport has one runway, making it the busiest single-runway commercial airport in the nation. SDIA's air service continues to grow based upon demand for air travel. In 2004, SDIA served 16.4 million passengers and handled 122,000 tons of cargo.

Airfield. The airfield consists of one runway (useable in both directions) and three primary taxiways. Runway 9-27 is 9,400 feet long and 200 feet wide. Taxiway B is south of, and parallel to, Runway 9-27 and runs the entire length of the runway. Taxiway C is north of, and parallel to, the eastern half of Runway 9-27. Taxiway D extends from the southeast portion of the airfield to the north-central portion of the airfield at an approximate 30 degree angle to Runway 9-27.

At the western edge of the Airport adjacent to Terminal 2 is the former Naval Training Center (NTC) Property. A 52-acre parcel was conveyed to the Port of San Diego in 2000 and transferred to the SDCRAA as part of the transfer of airport control. The passenger terminal and landside complex is located east of the former NTC property and bounded on the north by Runway 9-27 and on the south by North Harbor Drive.

Terminal. The Airport terminal complex comprises four buildings: the Commuter Terminal, Terminal 1, Terminal 2 East, and Terminal 2 West. Terminals 1 and 2, which include 41 jet gates and other facilities, serve the passenger processing needs of commercial airline passengers. The Commuter Terminal has 10 parking positions for commuter aircraft and serves commuter traffic at SDIA. The ground transportation system located south of the terminals provides access roads, vehicle curbsides and surface parking.

The Commuter Terminal is located in the south central portion of the airfield and accommodates most turbo-prop and regional jet flights to and from the Airport. Primarily, all commuter flights between San Diego and Los Angeles International Airport (LAX) are operated by United Express and American Eagle from this facility.

Terminal 1 is the oldest terminal facility at the Airport. It is located at the east end of the primary terminal area. Terminal 1 has 19 narrow body jet gates. Southwest Airlines, United Airlines, US Airways and Alaska Airlines presently serve Terminal 1.

Terminal 2 East is immediately west of Terminal 1. Terminal 2 East has 13 jet gates including two international gates located between Terminal 2 East and Terminal 1. All international arrival flights operate at Terminal 2 East, as well as the domestic operations of Northwest Airlines and American Airlines.

Terminal 2 West is the newest terminal facility at the Airport having opened in 1998. Terminal 2 West has nine jet gates and is served by Delta Airlines, Hawaiian Airlines, jetBlue Airways, Continental Airlines, America West Airlines, Frontier Airlines, Independence Air, Sun Country Airlines and West Jet. A new baggage claim facility is housed in Terminal 2 West that provides baggage claim for both Terminal 2 West and Terminal 2 East.

Ground Transportation. All roadway access to the Airport terminal complex is via North Harbor Drive. There are three independent entrance roadways for the Commuter Terminal, Terminal 1 and Terminal 2. There are approximately 6,800 total linear feet of curb front serving the three terminals from a single-level airport roadway. There are approximately 4,055 airport-operated surface parking spaces adjacent to these terminals. Access to the North Area of SDIA is via Pacific Highway at Washington Street and Sassafras Street. Over 1,600 additional remote, long-term, parking spaces are available at the SAN Park Pacific Highway parking lot located in the North Area.

Airport Support. North of Runway 9-27, SDIA provides apron area for air cargo loading and one general aviation Fixed Base Operator. There are freight forwarding cargo facilities totaling approximately 70,000 square feet located on the south side of the Airport between Terminal 1 and the Commuter Terminal. These are the only enclosed cargo sorting facilities located at the Airport. FedEx, UPS and other cargo carriers maintain their own off-airport sort facilities. Apron area for FedEx, DHL and other cargo aircraft is located in the north airfield area. UPS operates an apron aircraft parking position adjacent to the Commuter Terminal apron.

The Airport has an air traffic control tower (operated by the Federal Aviation Administration), an airport rescue and fire fighting facility (ARFF) and a fuel farm located in the north airfield area.

The Airport has a total of 19 Remain-Over-Night (RON) aircraft parking positions. Ten positions are located adjacent to Taxiway C on the north airfield. The remaining nine positions are located adjacent to the terminal areas on the south airfield.

The San Diego International Airport Master Plan Goals and Forecast

The development of the 2005 SAN Master Plan was initiated by the SDCRAA to accommodate existing and future demand for air travel in the San Diego region through 2015. This is the time period when the ASSP will be completed and prior to the approximate time a new regional airport could be operational if the voters of San Diego County choose to approve one. The following goals and objectives have been set to guide future development at SDIA: 1) Improve air service and customer service; 2) Improve tenant facilities; 3) Improve airport access; 4) Utilize developable properties; 5) Improve the regional economy; 6) Meet SDCRAA financial goals; 7) Involve stakeholder and community input; 8) Improve terminal efficiency and capacity; 9) Increase airfield safety, efficiency and capacity; 10) Improve ground transportation efficiency and capacity; 11) Increase compatibility with surrounding land uses; and 12) Complement the Airport Site Selection Program (ASSP).

The SDCRAA prepared both constrained and unconstrained forecasts of aviation activity through 2030 that could be used for facilities planning and in evaluating airport improvements. The unconstrained forecast represents projections of how San Diego passenger demand, airline flights and other activity segments are likely to grow in the future, without consideration of the constraints on the growth that may be imposed by facility limitations at SDIA. The constrained forecast reflects the limitation of the existing SDIA facilities, specifically its single runway, and represents a projection of how aviation activity would grow if no additional runway capacity is provided. In this case, airfield congestion and aircraft operational delay grows at an increasing rate over time. By 2015, operational delays are forecasted to reach congestion levels that would limit further growth in airline flights without the addition of another runway at SDIA.

Proposed Project Components

The project to be evaluated in this EIR consists of two key components. The first is the Airport Land Use Plan and the second is implementation of specific projects contained in the Airport Master Plan, called the Airport Implementation Plan. Each is described as follows.

The Airport Land Use Plan depicts the boundaries of SDIA and describes existing and proposed land uses and future planning areas. For the Airport Land Use Plan, the Authority will describe programs for airport uses, request programmatic approvals and will follow with future project-specific environmental consideration. This approach will ensure that a responsible planning and mitigation program will be implemented at SDIA that considers the full range of development possibilities, cumulative impacts and mitigation opportunities. The Airport Implementation Plan is intended to provide project-level approvals for those elements that are to be developed at this time.

The regional location map for SDIA is depicted as **Figure 1**.

Airport Land Use Plan—Establish and Adopt Land Uses

The Authority proposes to adopt an Airport Land Use Plan that:

- Describes the boundaries of SDIA;
- Describes the land uses on this property; and
- Proposes future planning areas.

The Airport Land Use Plan will include a figure that depicts the properties under the planning jurisdiction of the Authority, **Figure 2**.

The Airport Land Use Plan will describe four general categories of land use on the airport: airfield, terminal, ground transportation and airport support. The Airport Land Use Plan will describe existing and proposed land uses in areas that are under the Authority's control. The proposed land uses may include depictions of future facilities but subsequent environmental

review will be required at a project-level before these future facilities are developed. In order to attain a programmatic level of approval for future development, the following general types of facilities and locations are depicted to analyze program and cumulative impacts and to develop mitigation measures that would:

- Designate land area for future Ground Transportation and Airport Support uses in the North Area;
- Construct new and replacement air cargo warehouses in the North Area;
- Construct new and replacement general aviation facilities in the North Area;
- Construct new and relocated ground transportation facilities in the North Area;
- Relocate cargo aircraft parking positions in the North Area; and
- Remove aircraft movement obstructions south of Taxiway B adjacent to and within the Teledyne Ryan property.

The Airport Land Use Plan will also include future planning areas. These areas delineate properties that are not presently under the control of the Authority but are contemplated by the Authority to be used for future airport purposes and potential land uses. One such area is the former Teledyne Ryan property generally located between the Airport and North Harbor Drive, south of Taxiway B and east of the Commuter Terminal.

Proposed Airport Implementation Plan—Develop and Operate Project Components

The Authority has identified specific physical improvements at SDIA to allow the airport to effectively continue its mission of serving San Diego's commercial air transportation needs as forecasted through 2015. The project elements are described as follows and are depicted on **Figure 3**.

Expand existing Terminal 2 West with 10 new jet gates. Construct an addition to the existing Terminal 2 West that would include approximately 310,000 square feet of new space, 10 additional aircraft gates and approximately 1,350 lineal feet of new and reconfigured vehicle curb front on two levels. The new and reconfigured terminal space would be expanded on two floors for passenger processing facilities including airline ticketing, security screening, departure holdrooms, restrooms, concessions, public circulation and outbound baggage areas. The existing Terminal 2 West baggage claim area would be reconfigured to improve service for arriving passengers and their baggage from both Terminal 2 West and Terminal 2 East. The additional aircraft gates would reduce existing crowding in Terminal 1 and accommodate passenger volumes forecasted through 2015 and would reduce severe crowding in all terminals expected from the growth in airport-wide traffic and flights. The proposed terminal expansion would also include an extension of the existing Terminal 2 West vehicle curb front used for pickup and drop-off of arriving and departing passengers. This project feature also includes a reconfiguration of the existing Terminal 2 curb front to improve automobile flow and passenger convenience. The new curb front system for Terminal 2 would vertically segregate arriving and departing vehicle traffic between the existing ground level and a new second level proposed as part of a new parking structure (described below).

Construct new aircraft parking and replacement Remain-Over-Night (RON) aircraft parking apron. This new aircraft parking apron would be constructed to accommodate up to 12 aircraft, including one wash rack area, adjacent to the new Terminal 2 West taxiway. Overnight aircraft would be moved to gates in the morning to resume flight routing.

Construct new apron and aircraft taxiway. This new aircraft apron pavement would be built adjacent to and west of the proposed aircraft gates at Terminal 2 West. It would be used as an aircraft taxiway for aircraft to proceed between the runway and the new proposed gates. This

project element would facilitate efficient aircraft movement on the west end of the terminal area and would include remediation and closure of an existing land fill on the project site area.

Construct new surface parking and vehicle circulation west of Terminal 2 West. New surface parking lots and vehicle circulation areas would be constructed west of Terminal 2 West to accommodate forecasted growth of passengers expected by 2015 and the associated need for additional employee parking. Other uses would include staging for taxis, airport shuttle vans and temporary public parking during the construction of the new parking structure south of Terminal 2 West. A roadway entrance for delivery trucks to drop off airport supplies and concessions and to remove refuse from the terminals would be included in the area west of Terminal 2 West.

Construct a new parking structure, departure curb and vehicle circulation serving Terminal 2. A new parking structure with a second level departure curb would be built to serve additional passengers using the new and reconfigured Terminal 2. This structure would be two to four levels with parking, departure curb and a transit center accommodating shuttles, buses, taxis and circulation lanes.

Airport Implementation Plan Alternative

The Authority has identified an alternate build scenario that would allow the airport to effectively continue its mission of serving San Diego's commercial air transportation needs as forecasted through 2015. The project elements are described as follows and are depicted on **Figure 4**.

Construct new unit terminal with five replacement gates and seven new jet gates. Construction of a new unit terminal east of Terminal 1, approximately 320,000 square feet of new space, would include seven new aircraft gates plus five replacement gates, holdrooms, ticketing area, baggage claim, security screening, concessions and walkway. The additional aircraft gates would reduce existing crowding in Terminals 1 and 2 while accommodating passenger volumes forecasted through 2015. The proposed terminal expansion would also include a reconfiguration of the existing roadway to gain access to the vehicle curb.

Expand existing Terminal 2 West with three new jet gates. Expansion of the north end of Terminal 2 West passenger concourse to include approximately 30,000 square feet would accommodate three new gates and associated holdrooms. The total new gates for this build alternative would be ten new gates, the same as the proposed project.

Relocate commuter aircraft to Terminal 1 and Terminal 2. Commuter aircraft now operating out of the Commuter Terminal would be relocated to Terminal 1 and Terminal 2.

Construct new aircraft parking and replacement Remain-Over-Night (RON) aircraft parking apron. A new aircraft parking apron would be constructed to accommodate up to 10 aircraft, including one wash rack area, adjacent to the new Terminal 2 West taxilane. Overnight aircraft would be moved to gates in the morning to resume flight routing.

Construct new apron and aircraft taxilane. This new aircraft apron pavement would be built adjacent to and west of the proposed aircraft gates at Terminal 2 West. It would be used as an aircraft taxilane for aircraft to proceed between the runway and the proposed gates. This project element would facilitate efficient aircraft movement on the west end of the terminal area and would include remediation and closure of an existing land fill on the project site area.

Construct new surface parking and vehicle circulation west of Terminal 2 West. This new surface parking lot would be constructed to accommodate forecasted growth of passengers expected by 2015 and the associated need for additional employee parking. Other uses would include staging for taxis, airport shuttle vans and temporary public parking during the construction of the new parking structure south of Terminal 1. The same area would include a roadway entrance for delivery trucks to drop off airport supplies and concessions and to remove refuse from the terminals.

Construct new surface and structured parking and vehicle circulation at Terminal 1 and new unit terminal. A new surface parking lot and a new parking structure would be constructed to accommodate forecasted growth of passengers expected by 2015 and the associated need for additional employee parking. Other uses would include staging and temporary public parking during the construction of the new parking structure south of Terminal 1. The same area would include a roadway entrance for passenger vehicles accessing the new unit terminal.

Probable Environmental Effects of the Project

The EIR will include discussion on all CEQA environmental categories required for potential environmental effect determination. These categories include:

Aesthetic/Visual	Minerals	Traffic/Circulation
Agricultural Land	Noise	Vegetation
Air Quality	Public Services	Water Quality
Archaeological/Historical	Schools	Water Supply
Coastal Zone	Septic Systems	Wetland/Riparian
Economics	Sewer Capacity	Wildlife
Fire Hazard	Social	Growth Inducing
Flood/Drainage	Soil Erosion	Incompatible Land Use
Geologic/Seismic	Solid Waste	Cumulative Effects
Jobs/Housing Balance	Toxic/Hazardous	

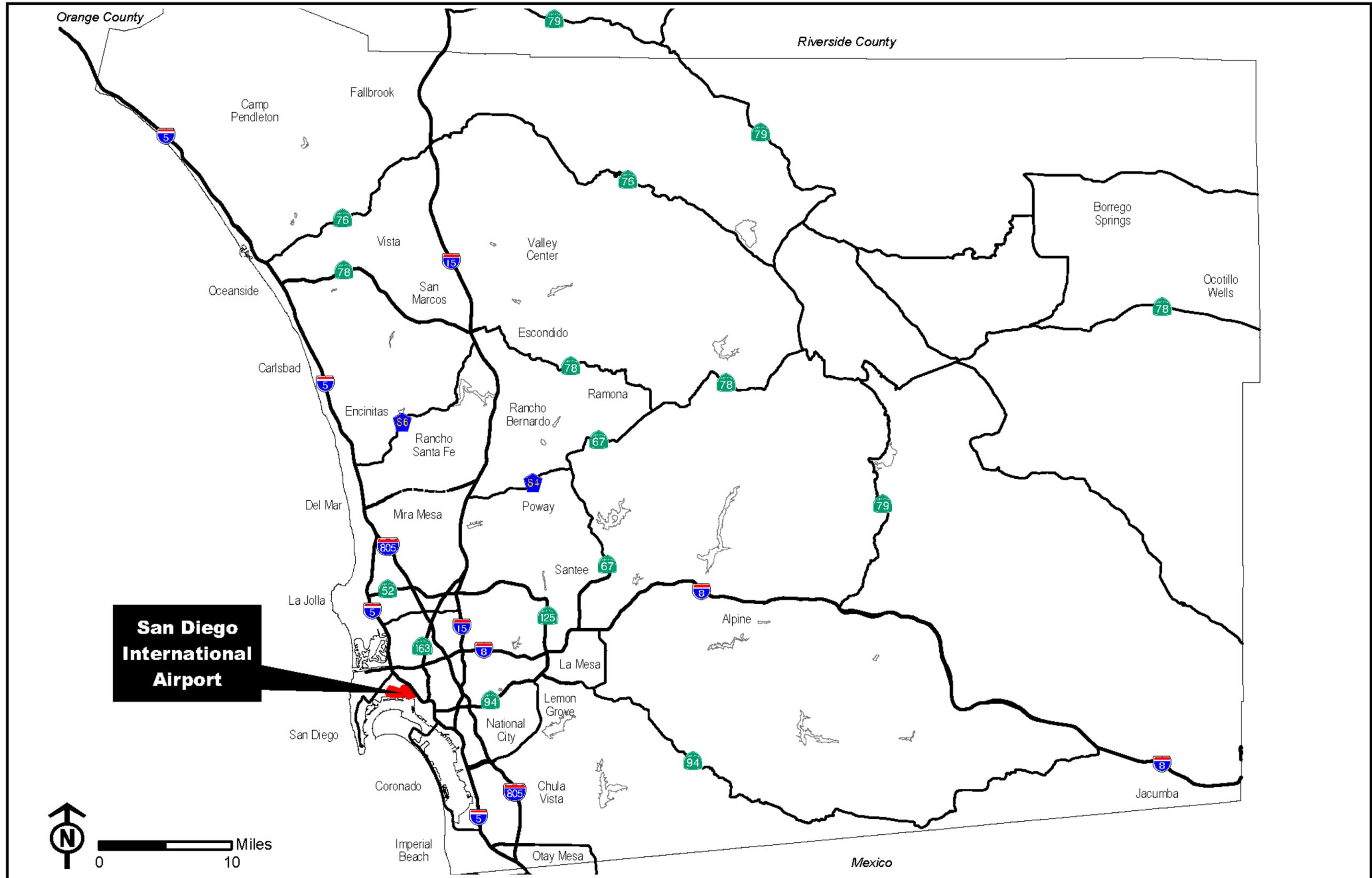
Based on a preliminary review of the Project site and in consideration of the proposed Project activities, the SDCRAA has determined that potentially adverse effects may occur to the following environmental resources as a result of the project:

- Aesthetic/Visual;
- Air Quality;
- Archaeological/Historical;
- Coastal Zone;
- Noise;
- Toxic/Hazardous;
- Traffic/Circulation;
- Water Quality; and
- Cumulative Effects.

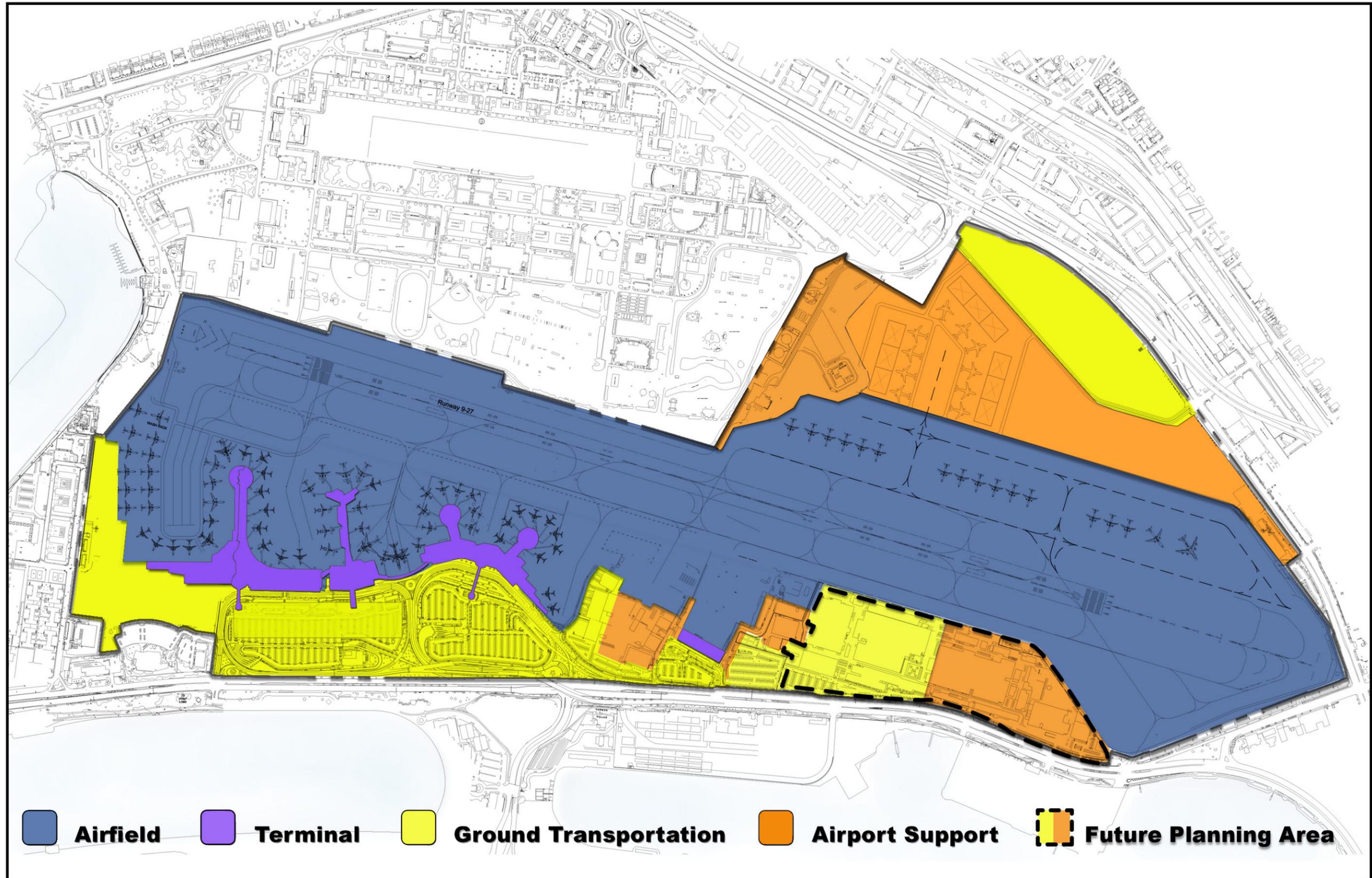
These potential effects will be analyzed in detail in the Draft EIR.

ATTACHMENTS:

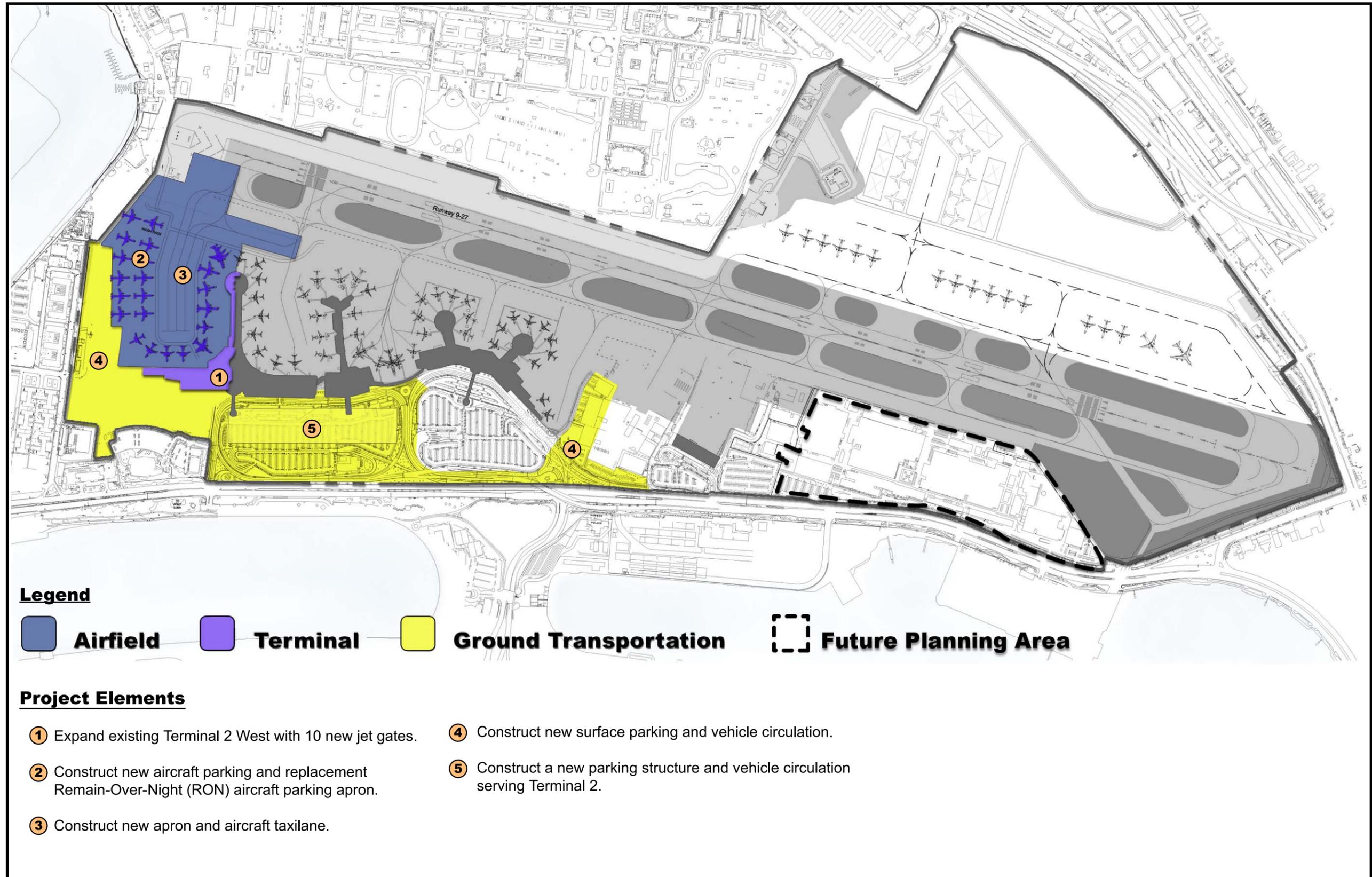
- Figure 1 – San Diego International Airport Regional Location Map
- Figure 2 – Airport Land Use Plan
- Figure 3 – Proposed Airport Implementation Plan
- Figure 4 – Airport Implementation Plan Alternative



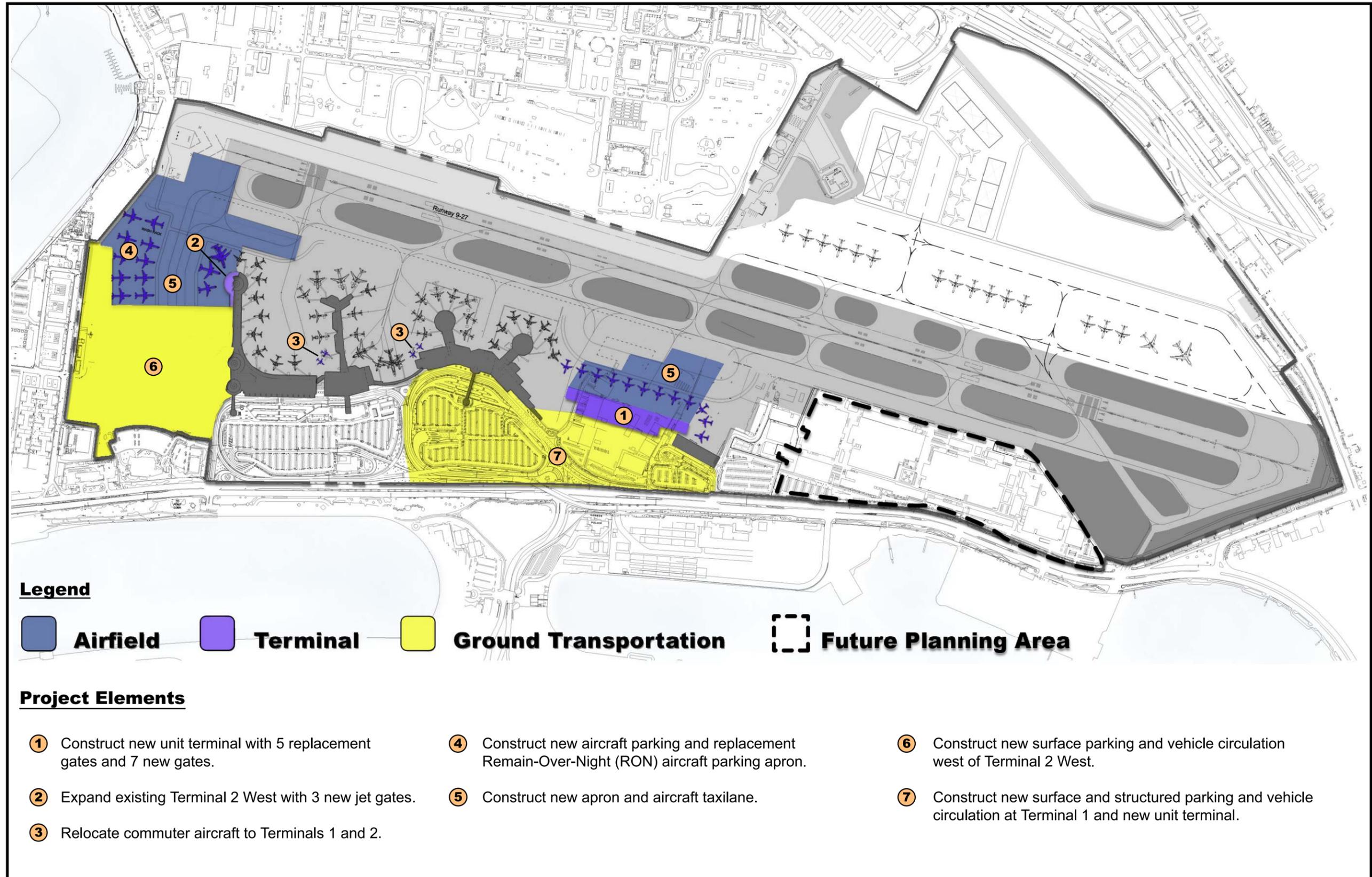
**San Diego International Airport Regional Location Map
Figure 1**



**Airport Land Use Plan
Figure 2**



**Proposed Airport Implementation Plan
Figure 3**



**Airport Implementation Plan Alternative
Figure 4**

APPENDIX A

Part II

Scoping and Comments Received During Scoping



AVAILABILITY OF A NOTICE OF PREPARATION

for a Draft Environmental Impact Report for the
San Diego International Airport Master Plan

PROJECT DESCRIPTION AND LOCATION: The San Diego County Regional Airport Authority has prepared a Notice of Preparation (NOP) for a Draft Environmental Impact Report (EIR) for the Airport Master Plan (including the adoption of an airport land use plan and implementation plan) for San Diego International Airport located in the City of San Diego.

COPIES OF THE NOTICE OF PREPARATION ARE AVAILABLE at the San Diego County Regional Airport Authority's Airport Planning Department offices, located in the Commuter Terminal at San Diego International Airport, during the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday. Copies may also be downloaded at **www.san.org** under Environmental Review/CEQA link or may be requested by contacting Ted Anasis at **(619) 400-2478**.

PUBLIC SCOPING MEETINGS will be held at the Airport Authority offices, located on the third floor of the Commuter Terminal at San Diego International Airport. Parking at the Commuter Terminal will be validated. You are invited to attend one of the four identical scoping meetings.

- **Monday, September 19, 2005 – 2:00 to 3:30 p.m. or 6:00 to 7:30 p.m.**
- **Tuesday, September 20, 2005 – 2:00 to 3:30 p.m. or 6:00 to 7:30 p.m.**

The public scoping meetings will consist of a brief overview presentation of the Airport Master Plan and the EIR scoping process. Attendees will have an opportunity to provide oral and written comments on the scope and content of the EIR.



How can I make a comment?

The San Diego County Regional Airport Authority is accepting written comments on the scope and content to be included in the Draft Environmental Impact Report for the San Diego International Airport Master Plan. Scoping is helpful in identifying the potentially adverse environmental effects to be analyzed in depth in the environmental review process.

You may mail, e-mail, hand deliver or fax your written comments. To ensure that your comments are addressed in the draft EIR, comments should be received at the address below ***no later than 5:00 pm on October 21, 2005.***

Mail:

San Diego County Regional
Airport Authority
Attn: Mr. Ted Anasis
P.O. Box 82776
San Diego, CA 92138-2776

E-mail:

planning@san.org
(Airport Authority will accept
responses via e-mail only if the
comments: (i) contain less than
500 words, and (ii) do not
contain any attachments.)

Hand deliver:

San Diego International
Airport
Commuter Terminal
Third Floor
3225 N. Harbor Dr.
San Diego, CA 92101

Fax:

Attn: Airport
Planning
(619) 400-2448

If you have questions, please call Ted Anasis at (619) 400-2478.



How can I make a comment?

The San Diego County Regional Airport Authority is accepting written comments on the scope and content to be included in the Draft Environmental Impact Report for the San Diego International Airport Master Plan. Scoping is helpful in identifying the potentially adverse environmental effects to be analyzed in depth in the environmental review process.

You may mail, e-mail, hand deliver or fax your completed comments. To ensure that your comments are addressed in the draft EIR, comments should be received at the address below ***no later than 5:00 pm on October 21, 2005.***

Mail:

San Diego County Regional
Airport Authority
Attn: Mr. Ted Anasis
P.O. Box 82776
San Diego, CA 92138-2776

E-mail:

planning@san.org
(Airport Authority will accept
responses via e-mail only if the
comments: (i) contain less than
500 words, and (ii) do not
contain any attachments.)

Hand deliver:

San Diego International
Airport
Commuter Terminal
Third Floor
3225 N. Harbor Dr.
San Diego, CA 92101

Fax:

Attn: Airport
Planning
(619) 400-2448

If you have questions, please call Ted Anasis at (619) 400-2478.

Sign In Sheet
 Scoping Meeting
 September 19, 2005
 6:00 - 7:30

Company	Contact	Address	City	State	Zip	Phone #	Fax #	E-mail Address
Arnold B. Williams		2954 Chabonuk	SD	CA	92106	222-1173		hal@kaimuel.com
Mary Kay Ken Mackie		4169 Poinsettia	SD	CA	92106	222-7969		
Dawn Gardner		422 21st	S.D.	CA	92107	619-222-1630		
Donna R. Kautop		232 West Hawthorne	SD	CA	92101	223-0971		
Jo & Ken Roll		3030 Kingsley	SD	CA	92106	223-7810		
Lance Murphy		4530 Santa Monica	SD	CA	92107	223-0333		
Lent, Lomed		1780 Kettner, 316	SD	CA	92101	300-4996		lenlomed@comcast.net
Joe LaRocco Jr		3012 Meadow Grove Dr.	SD	CA	92110	377-1031		
Ellis Dingwall		3246 Elliott St	SD	CA	92106	233-5703		
Jennifer Ross		3974 La Cresta Dr	S.D.	CA	92107	619-222-3387		JenRossRealtor@comcast.net
Stephen Ross		3974 La Cresta Dr.	SD	CA	92107	619-222-3387		stephenross2000@comcast.net
TIM RUTHERFORD		2368 2ND AVE	SD	CA	92101	619-222-5263		TRR@TRR.LF.SOCOMAIL.COM
JC LANGLOIS		3445 Brooming	SD	CA	92106	619-758-9807		
Sue Munz		3739 La Cresta	SD	CA	92107	619-222-9111		sdsmunz-airport@yahoo.com
Paul Selep		2565 Albatross	SD	CA	92107	619-239-9167		PWETTERER@midwest.com
PAM & KEITH WETTERER		3741 ALISTA DR	S.D.	CA	92107	619-224-2516		KJLMP30@SBCS.COM
KYLE HOPKINS		2999 W. BAYVIEW RD	SD	CA	92106	619-222-0210		
Anula Makings		3437 Macanley St	SD	CA	92106	619-223-0965		
Denise Umstoy		3132 Crimby St	SD	CA	92106			karen.koumija@hotmail.com
Karen Koumija		P.O. Box 84136	S.D.	CA	92138	619-851-1161		Iscl@comcast.com
KAREN TOM		2716 CAMDEN	SD	CA	92107			KARENT@SCA-SD.COM
Walter Jordan		4103 TENNYSON	SD	CA	92107			
Kimberly Kinkade		3121 Elliott	SD	CA	92106			
Charles Kinkade		1803 Capistrano	SD	CA	92106	619-546-5751		Charles.Kinkade@goodrich.com
Charles Johnson		1803 Capistrano	SD	CA	92106	619-222-6512		
Lawrence Louasso		3402 Wisteria Dr.	SD	CA	92106	619-224-8872		LOUASSO@COMCAST.NET
Libor		3747 JAMES ST	SD	CA	92106			
Dawn Bardelli		6611 Willow	SD	CA	92106	222-3695		
Max The Huber		3018 Waring St	SD	CA	92110	224-9718		
Jim Carrigan		3220 Lewis St	SD	CA	92106	523-1645		JIMCARRIGAN@BECKETEL.COM
Richard Schelly		3445 JONAH	SD	CA	92107	224-7571		BOYCE@SCA-SD.COM
BO SHIRLEY		4556 Alamo	SD	CA	92106	223-5812		
DAG MUNKS		3105 Elliott	SD	CA	92106	224-1278		
Stephanie Onger		3104 Dumas	SD	CA	92106	224-1278		
		3475 Pt. Loma	SD	CA	92107	224-5490		StephanieOnger@aol.com

CERTIFICATE OF PUBLICATION

Paul Webb
SDCRAA/Airport Planning
P.O. Box 82776
San Diego, CA 92101

IN THE MATTER
OF
Airport Master Plan Update

NO.

I, Christine Seiveno, am a citizen of the United States and a resident of the county aforesaid; I am over the age of eighteen years, and not party to or interested in the above entitled matter. I am the principal clerk of the Daily Transcript, a newspaper of general circulation, printed and published daily, except Saturdays and Sundays, in the City of San Diego, County of San Diego and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of San Diego, State of California, under the date of January 23, 1909, Decree No. 14894; and the

NOTICE OF PREPARATION

is a true and correct copy of which the annexed is a printed copy and was published in said newspaper on the following date(s), to wit:

SEPTEMBER 14

I certify under penalty of perjury that the foregoing is true and correct.

Dated at San Diego, California this 14 day of

September 2005


(Signature)

San Diego Regional Airport Authority
Airport Master Plan Update

PROJECT DESCRIPTION AND LOCATION: The San Diego County Regional Airport Authority has prepared a Notice of Preparation (NOP) for a Draft Environmental Impact Report (EIR) for the Airport Master Plan (including the adoption of an airport land use plan and implementation plan) for San Diego International Airport located in the City of San Diego.

COPIES OF THE NOTICE OF PREPARATION ARE AVAILABLE at the San Diego County Regional Airport Authority's Airport Planning Department offices, located in the Commuter Terminal at San Diego International Airport, during the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday. Copies may also be downloaded at www.san.org under Environmental Review/CEQA link or may be requested by contacting Ted Anasis at (619) 400-2478.

AVAILABILITY OF A NOTICE OF PREPARATION for a Draft Environmental Impact Report for the San Diego International Airport Master Plan. **PUBLIC SCOPING MEETINGS** will be held at the Airport Authority offices, located on the third floor of the Commuter Terminal at San Diego International Airport. Parking at the Commuter Terminal will be validated. You are invited to attend one of the four identical scoping meetings.

- * Monday, September 19, 2005 - 2:00 to 3:30 p.m. or 6:00 to 7:30 p.m.
- * Tuesday, September 20, 2005 - 2:00 to 3:30 p.m. or 6:00 to 7:30 p.m.

The public scoping meetings will consist of a brief overview presentation of the Airport Master Plan and the EIR scoping process. Attendees will have an opportunity to provide oral and written comments on the scope and content of the EIR.
Pub. Sept. 14-k114907

Affidavit of Publication

Affidavit of Publication of

SAN DIEGO COUNTY REGIONAL

P.O. BOX 82776

SAN DIEGO, CA 92138-2776

ATTN: CHERYL BROWN

Legal Classified Advertisement

Ad # 3031867

Ordered by: CHERYL BROWN

STATE OF CALIFORNIA } ss.
County of San Diego }

The Undersigned, declares under penalty of perjury under the laws of the State of California: That....She is a resident of the County of San Diego. THAT....She is and at all times herein mentioned was a citizen of the United States, over the age of twenty-one years, and thatShe is not a party to, nor interested in the above entitled matter; thatShe is..... Chief Clerk for the publisher of

The San Diego Union-Tribune

a newspaper of general circulation, printed and published daily in the City of San Diego, County of San Diego, and which newspaper is published for the dissemination of local news and intelligence of a general character, and which newspaper at all the times herein mentioned had and still has a bona fide subscription list of paying subscribers, and which newspaper has been established, printed and published at regular intervals in the said City of San Diego, County of San Diego, for a period exceeding one year next preceding the date of publication of the notice hereinafter referred to, and which newspaper is not devoted to nor published for the interests, entertainment or instruction of a particular class, profession, trade, calling, race, or denomination, or any number of same; that the notice of which the annexed is a printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following date, to-wit:

SEPTEMBER 14, 2005

Dida Cesneros
Chief Clerk for the Publisher

Airport Master Plan Update

AVAILABILITY OF A NOTICE OF PREPARATION for a Draft Environmental Impact Report for the San Diego International Airport Master Plan

PROJECT DESCRIPTION AND LOCATION: The San Diego County Regional Airport Authority has prepared a Notice of Preparation (NOP) for a Draft Environmental Impact Report (EIR) for the Airport Master Plan (including the adoption of an airport land use plan and implementation plan) for San Diego International Airport located in the City of San Diego.

COPIES OF THE NOTICE OF PREPARATION ARE AVAILABLE at the San Diego County Regional Airport Authority's Airport Planning Department offices, located in the Commuter Terminal at San Diego International Airport, during the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday. Copies may also be downloaded at: www.san.org under Environmental Review/CEQA link or may be requested by contacting Ted Anasis at (619) 400-2478.

PUBLIC SCOPING MEETINGS will be held at the Airport Authority offices, located on the third floor of the Commuter Terminal at San Diego International Airport. Parking at the Commuter Terminal will be validated. You are invited to attend one of the four identical scoping meetings.

- Monday, September 19, 2005 - 2:00 to 3:30 p.m. or 6:00 to 7:30 p.m.
- Tuesday, September 20, 2005 - 2:00 to 3:30 p.m. or 6:00 to 7:30 p.m.

The public scoping meetings will consist of a brief overview presentation of the Airport Master Plan and the EIR scoping process. Attendees will have an opportunity to provide oral and written comments on the scope and content of the EIR.

The San Diego
Union-Tribune.

San Diego International Airport Master Plan Update Scoping Meeting Comments

Comment Date	Topic	Comment
9/19/2005 Meeting 1	Airport Expansion	My name is Bill Kelly, W.V. Kelly. I live in Point Loma on Rosecrans Street. Let me first qualify myself. I've been a licensed pilot for the last 46 years. I flew jets with the Navy, carrier-qualified. I live close by. I've listened to the tower all the time, both towers, and I'm a fan of the airport. That's my way of saying I'm not opposing the airport. I like the airport. I like where it is. I like it at its present size. And I'd like to do everything I can to make sure it stays its present size. Although, as you've listed in your various goals and objectives -- what is it -- 12 of them, practically all of them have the word "improve" in them. And I have absolutely no argument with improving airport access, efficiency, and capacity. I am curious, though, that one of these, No. 5, is to improve the regional economy. I don't see that as a goal of the airport. I see the goal of the airport, with respect to the economy, to support the directions that the economy goes in. And it seems to be entirely possible that the airport could go in directions that are not compatible with improving the economy. Whether that improvement be an expansion or shrinking or readjustment, as we all know, the aerospace industry is practically gone from San Diego. The new facility across the way, ConAir, is not here anymore. So that was a big adjustment. It would be foolish for us to imagine that similar adjustments couldn't take place in the future, which would call for, perhaps, a completely new look at the airport. One that I particularly like is No. 11: Increasing compatibility with surrounding land use. One of the things that comes to mind immediately is MCRD, and that other concept manages to surround it. I think that's kind of odd. Anyway, I want to thank you for the opportunity to make an input. And I would like to be able to stay in touch. As much as we don't like some of the other options, I know that's not on the agenda today. Thanks very much.
9/19/2005 Meeting 1	Airport Improvements	My name is Carl Robinson with a "C." I live here in San Diego, although, I guess, as a full disclosure, I'm also working with the finance team and refinancing your existing debt. I have three narrow questions just on what is proposed. I don't know if you're going to answer them or not, but you propose to do a two-level arrival/departure. My question on that is whether you plan to do that for both Terminal 1 and Terminal 2 or only the new portion of Terminal 2, or what do you propose in that regard? The second question is about your remain-overnight parking. As I read what you put out, it looks like an aircraft can't remain overnight in the existing 41 gates. I want to know if that's true or not. Just a straight question. And then secondly, you propose 12 additional -- or 12 remaining-overnight parking spots. I'm curious whether those are in addition to the existing 19 or whether they're going to be replacements. So again, I have no political comment at this time; just some curious questions of what you're planning to do. Thank you.
9/19/2005 Meeting 1	Draft EIR Process; Economic Effects	My name is Marie Ambrose, and I live in San Diego at 2924 Poinsettia Drive. And I just had a few questions. Obviously, I'm just getting this. I don't really understand much about the process, and thank you for going over that. But a few questions that I have: The published draft, once you've finished that, because it's going out to the public, in what manner are you delivering that to the public? Obviously we're not going to be voting on this, so also, how are you getting the money to do this? And I noticed that in your "Potentially Adverse Effects Anticipated," you did not highlight economics. And why do you not think that that is a problem, especially since the continuing site selection process will obviously cost more? And also, how does this complement the site selection process? In what way, considering the future expansion and the complete -- the way the two processes are so different, the plans are different, how do they complement each other?
9/19/2005 Meeting 1	Parking	My name is David Bonaparte. I'm with Five Star Parking. And I was just curious: When they did the study, did they consider how much parking there was off-site in their scoping and planning? And if so, are they planning on charging them trip fees?
9/19/2005 Meeting 1	Airport Expansion; Environmental Effects	My name is Herb Stern. I live in Point Loma. I -- from Hermosa Park. I've been breathing jet fuel for about 24 years there. I have two or three questions I'd like to ask. One is why is there no figure that shows the present configuration for the airport plan? I mean, all these additions are shown, but -- unless I'm missing something -- I cannot see what the configuration is right now. And I'd like to have that to compare with what you're planning to do. And secondly, when we're talking about these environmental effects, I don't see any mention of cancer. And does cancer come under the heading of "toxics" and how that would -- you know, I want to -- I want that to be a focus of what's going on. That's all. Thanks.

9/19/2005 Meeting 1	Traffic	Renee Stone on Seaside Street. Is this going to include more traffic coming into the airport? And if so, did anyone talk about noise and then the pollution in the air -- jet fuel landing on everybody's homes? Thanks.
9/19/2005 Meeting 1	Noise	My name is Bill Howard. I live in Loma Portal. My question is this: You're enabling the airport to have more flights. I mean, it's going to make more noise. Are you doing anything to speed up the quiet-home program? It seems like the money comes in rather slow, and this should be a time when that money should increase so that you can improve the speed of which you're doing this. Thank you.
9/19/2005 Meeting 2	Land-use, Noise, Pollution Impacts	LANCE MURPHY: Good evening. Thank you for the opportunity to participate in this. I will try to keep my comments relevant to the draft EIR requirements, but, as such, I believe that the project hasn't really described the full impact. I say that because you have only one minor comment in here about compatibility with surrounding land uses. But nowhere in the whole presentation did you talk about your impact on those surrounding land uses and, in fact, what we're facilitating by allowing the expansion of the airport. I agree the airport is running at a very good clip right now. In fact, I believe I've made this point several times before that your June 2003 forecast had last year's 2004's operations forecast. And I believe it was about 200,000; they ran 207,000. That wasn't forecasted to occur until the year 2007 or 2008, depending on how you read it. So we're running at a huge clip. We're going to hit the 2015 capacity much earlier than originally forecasted, yet I have no one telling me what the real forecast number is. And it's the basis for why we're doing this expansion. But, on to that, nowhere in this plan do I see any plan for the traffic impact exterior to the airport. It's got to be coordinated. You can't just plan your airport roads. In fact, I think I've heard previous presentations talk about how it was going to be, in effect, a bumper-to-bumper all the way back to Interstate 5. Second is, obviously, the noise impacts. And third is the pollution impacts. And I mean the pollution and noise impacts of the airport under its expanding structure. And, in fact, if you don't get the additional gates, at some point, you will be capacity constrained, but by the aircraft being able to get to the runway; not the runway limitations. So, one other item I'd like to bring in is there's a whole new noise mitigation project that you do. And I believe you allocated something like ten million dollars to it over the next couple of years. That additional allocation is just to accommodate the homes that have now are finding themselves within 70 db zones; not the 65 as stated by state and federal requirements, but only to what your limitations are at your funding levels. But I believe you're going to spend close to 500 million on this expansion that you have. So let me get this straight: You're spending about two percent on noise mitigation to the impacted community. I just don't understand where your priorities are. So, I've run out of time, but I'd appreciate, at some point, the Airport acknowledging that their forecast is incredibly faulted.
9/19/2005 Meeting 2	Adverse Impacts; Parking	CHARLES KINKADE: Hi. How are you guys doing? Again, Charles Kinkade, and I just want to briefly point out some things. I know that the Environmental Impact Report is a long document, and some things tend to get very little attention when they deserve more. And I want to emphasize on the adverse effects. It talks about aesthetic and visual, but it doesn't specifically mention lighting, and light pollution is a huge problem with airports, especially when they undergo expansion. All these additional terminals are going to require gate lighting and traffic lighting and all sorts of boundary lighting as well if you're going to be pushing out the boundaries a little bit. And the second point is the Harbor Boulevard merging. When you're going east on Harbor Boulevard towards downtown from Point Loma, you have left-hand turn lanes, mostly, to get into the terminals. You have merging ramps to get out of the terminals, but not to get in. And those left-hand turn lanes fill up pretty quick. So that's something I also didn't notice in there. And also -- I'm sure I'm probably not the only one, but if more attention could be spent on public transportation rather than just additional parking, so -- like rail to rail alternative to additional parking. And that's it.
9/19/2005 Meeting 2	Impacts of Expansion	My name is Martha Hall, and I was just noting some of the categories which I was surprised were omitted from your EIR. I think when I saw it, you did not highlight schools. You've got five or six elementary schools, and you've got two high schools. You have got several new schools being built on the Naval Training Center right next to where you're planning to expand your airport, and you're going to increase the noise pollution and the air pollution for all of those children. You've got the expansion of a high-tech high school and a high-tech middle school and a new elementary school that just moved there. And I was shocked to see that you didn't highlight that for your public services. Nor did you highlight the effect of this expansion on housing. It, of course, is going to affect the housing. And I would just, you know, echo the earlier comment about the fact that the noise abatement is going on at a fairly slow clip, and you're -- at the same time that that is making a sort of snails-pace progress in the community, you're going to increase the noise. And so another question is: How is the noise abatement going to measure up to the increase in noise? Are you actually setting it back? Do you need to go in and reassess whether or not you're going to have to do additional noise abatement on the houses already addressed? Are you going to need to

		<p>expand an area that you have already designated? And I guess my -- also, my secondary worry is that we'll continue on the way that we have for however many years, which is, instead of really putting your resources into picking a good site for a large airport for this region, what you're doing is -- just every time there's a problem, you expand Lindbergh a little bit, and you infringe upon the community, and you change the community and the impact of the community with this bit-by-bit encroachment you think will go less noticed than some more drastic step. And I just think it's time to stop and focus your efforts on getting a new airport.</p>
<p>9/19/2005 Meeting 2</p>	<p>Impacts of Expansion</p>	<p>CYNTHIA CONGER: Good evening. You see me often sitting in the community planning board. We have brought up a lot of these issues before. One of the things I was going to talk about was the schools as well. That is, again, federal and state law to allow those schools to begin now, and it's your responsibility. But I have some questions. As Lance was talking about, how many more flights per year will there be with the existing airport if there's no expansion? How many more flights will there be per year with this small expansion? As well, how many more flights will there be with this terminal -- at the existing second terminal, or No. 6? How much more will that increase the noise in decibels? I think there's a contract with the existing community that the Airport is supposed to hold to. Is that going to force us to go ahead and have to sell? How many more homes will be impacted now that are not underneath the planes because they'll have to take off in more headings than is already there just to avoid separation problems? What about the health impacts of all this additional traffic just trying to get to and from this airport in a congested area already with diesel, with exhaust, all around it? How about the hazard zones? Isn't the hazard zone supposed to be around 6,000 feet around an airport? And if you have a 305-foot-high hill to climb, you're supposed to be five miles away from the end of the runway? This is substandard all the way around. Compatibility with existing land use, we've talked about that. The traffic increase, how are you going to get more people? And you didn't even present anything about the parking lot on this alternative. Is that proposed, or is it the alternative? Is it the alternative proposed? Why wasn't this on the paper that's out there? You said the proposed is going to have a second level of parking. Why didn't we take a look at it? Does that mean that there is a certain number of parking spaces required for each additional gate? Where's that ratio that we should be studying? And you also don't have the site schools. You don't have jobs and housing. And you don't have parks and recreation. We have three dedicated parks in the peninsula -- excuse me. We have two dedicated parks of 26 acres for 64,000 people right now. There's supposed to be an additional 46 acres at NTC. Do you think this won't impact it being directly under it? Excuse me. Where's the environmental report on that? And the help for the whole region that we're trying to draw into this community for park and recreation? What about Shelter Island and all the rest of the wonderful tourist areas that we're trying to draw people here? Water quality, you mentioned, but I don't think anybody paid attention to the tourism, the issue of tourism. How will that impact it when people won't want to come here to our water sports because they have planes going over them every day, every night?</p>
<p>9/19/2005 Meeting 2</p>	<p>Community Impact</p>	<p>H.B. WILLIAMS: Because I come here as really related to the Map No. 2, Figure 3 --The reason I've addressed this particular point is that I don't think the public, generally, understands the scope of this map as you have before you. And as a point of clarification, I ask you to name the dimensions on both sides that people would understand. If you go all the way up to the freeway, you take out all the post office areas, the Midway area, all of that activity, you take out. Cleared out here on the -- obviously, you take out Ryan and that kind of thing. That's understood. But I don't think people understand the scope that you're talking about. It is very messy. It is not just "go 2,000 to 6,000 acres" and all this kind of thing. It is a very, very large impact on the community just in your scope. The people don't -- the public generally do not understand that scope. And so, generally speaking, you talk in terms of -- I've heard that -- you talk about which course would involve, in this case, revenue financing, revenue bond financing, because you don't -- you certainly can't do it on San Diego's credit. But if you're talking about taking out all of that property, you're talking about -- you can't do it for 500 million, or any other estimate you've really put into it isn't going to allow you to do that for \$500 million. Now, you might say, "Well, this is for the general benefit," like New Haven, Connecticut, and you can take away your property rights if you want and claim that this is for public betterment and all that kind of thing, but that's not even the concept that people have of accommodating the airport and moving the airport to serve the community. You get in that area of serving the community where part of it is service, and part of it is confiscation. It's not really a fair way for you to go. And I think that it is the responsibility of your commission to make known to the community the full scope of your plans. And in a little bit, it is sort of like that water drop on your forehead. Anything that just --that it gets bigger and bigger and bigger, and sooner or later, you have really conned into the confiscation area in order to try to meet your budget. Thank you.</p>

9/19/2005 Meeting 2	Community Impacts	LANCE MURPHY: I would ask that you would include in your environmental impact statement the impact on the community. In effect, what Ms. Conger said was the community will believe that the airport will expand further. Because of this expansion, you've created a snowball.
9/20/2005 Meeting 1	Airport Expansion	Nobody said they had a problem hearing me. I'm Jarvis Ross. I am with the Peninsula Committee Planning Board. I am also on the board of directors of a 263-unit town home complex here in Point Loma, which is impacted by anything that the airport does over here. So you know where I'm coming from. First of all, I would like to say in terms of forecasts, I am often reminded of my economics professor back in college. He said that statistics don't lie, but statisticians do. I have always carried that thought with me because so often I see arguments predicated on a false assumption and then built upon that false assumption. Several things that came to mind, one of them I just picked up a magazine that came to the home today, and it said that in the first 125 years, we used the first trillion barrels of oil. We'll use the next trillion within 30 years. There is an article there. That's from the chairman the board of Chevron Corporation asking for conservation of fuel and its impacts on the economy. Basically where I'm coming from is most of the people that I talk to and, of course, most of them are here in Point Loma, are opposed to any kind of expansion of the airport, whether it be horizontal out this way or whether it be in another direction. Most San Diegans that I have talked to that have lived here for many, many years don't want to see the city get bigger and denser. They don't mean dense in the head; they mean denser population. This is a thing that I think we really have to seriously look at. Do we want more aircraft landing here? Do we want more expansion? The message I'm getting from the public, not from as I refer to the two-piece suits, no offense to the gentlemen in the two-piece suits, but those typically represent the downtown people, from the Convention Center, the business bureau, all of that. They are the ones that want to see more traffic coming in here. The hotels do, but the people that live here year round don't want to see this increase from the people that I talked to. I just encourage you that we take another look at what we're doing here. I respect the people that are employed here. They are employed to do a job, and I respect that part of it. What I have a problem with is when that job is expanded into areas that don't respect the public interests. And I think this expansion -- I do approve, I saw that you were talking about a two-level parking lot. I hope you don't hire the same architect that designed the second terminal. That was a mess, as everybody knows. If you looked at any of the major airports, most of them have a two-level system for parking. That's my time. Thank you.
9/20/2005 Meeting 1	Parking	My name is Keith Webb, and we own and operate a company here in town called Park and Ride. First of all, I would like to commend the staff for thinking outside the box. You cannot have a master plan without thinking what may happen in the future. When you improve the existing facility, you must, by logic, try to determine how these proposed plan is deeply flawed for the following reasons. When you propose a parking structure without indicating how large, how many spaces and so forth, the public cannot make an intelligent comment or a decision on it. And secondly, it appears that the general aviation port that you're allocating to general aviation is grossly small, and it has been indicated in the past that the airport is thinking very strongly about taking the general aviation away from any private operator. If this is true, then I can see why you would want to shrink the general aviation part in your EIR. Third, you have completely left out what was indicated a few weeks ago as the future site that was designated for a transportation plaza. This I wonder why, and you put it into some future decision-making on this after I brought it to your attention at the last whatever the meeting was that I attended, that this was really, when you consider - you just now said there was over 8000 offsite airport parking spaces. We're adding 800 more in the next month. Think what that is going to do to the transportation plaza. The designated roadway seems to interfere with airport operations unless you go offsite and eliminate Jim's Air Parking, Solar Parking, block off the Coast Guard ingress, and all the existing parking that belonged to the old former hotel of the Lion Corporation. Then, of course, you -- the toxic considerations that you mentioned as one of the reviews, we all know that there is large, large pockets of contamination on that area. And why would you leave out a probable impact on the sewer capacity when San Diego's sewers are very, very inadequate. Thank you very much.
9/20/2005 Meeting 1	Parking	Thank you. Good afternoon. My name is Adrian Catacowski. I am here representing Park and Ride Airport Parking. I want to thank you for this process of allowing the public numerous opportunities to come out to the numerous segments to provide comments. So I was here yesterday for the first session, and one of the things you didn't highlight is the economic factor. That, you didn't even look at. I mean, some of the things that are being proposed in your proposals would have economic impacts specifically in our business. We're interested in regards to the parking structure, how many parking spaces are you proposing? Your proposal said two or four stories. That's not definitive enough, as far as we're concerned. Is there some sort

		of passenger-to-parking formula? You're saying you're going to have 100 percent increase in the passenger load. Is there a national standard as to how much parking is required for a passenger? Once again, how many parking spaces, if it's two stories or four stories. We're seriously concerned about this because as you have seen with other issues of general aviation and what the Airport Authority has done with the parking business, the Airport Authority is getting into the business of competing with its lessees, and that's not a good thing. So with a larger parking structure, would you then be getting into the business of long-term parking, these excess spaces are utilized until demand increases. It's a challenge to provide adequate feedback.
9/20/2005 Meeting 2	Airport Expansion	I'm Jarvis Ross. This is my second time here today, seeing as you can't condense everything here into three minutes. So I won't cover things that I covered earlier today. But I do want to say I'm with the Peninsula Community Planning Board and representing that Board's position. There are a few notes I took for the comments here this evening. I want to say first off, I never believe in shooting the messengers. Those are the messengers back here. It's the message that we take the shots at. I want to thank Sara. I want to thank you. I did want to explain, because you pointed out about the master plan, most of us did not know what the Master Plan was. Therein lay the problem of why they thought that covered Concept 6 also. So therein was a confusion. I do want to compliment the Airport Authority. I think they have done an excellent job. But even with that, we find that about eight out of 10 people still don't know about the Airport Master Plan, still don't know about the site selection; and therein lies the problem for the people that live in the area here. A couple of things I noticed; and one of them was that this program tonight was to complement the site selection program; that it really was not about the site selection program. I have a little difficulty with that because really this is a site, and it is a part of the overall long plan. If this airport is expanded here, it becomes even more entrenched in terms of the future and other sites that might be selected could then become under the impacts of -- we have so much invested here, what's the point of looking someplace else. So that's one of my concerns. Just to get down to some specifics, the parking structure, I think, is a good idea. The major airports that I have been to throughout the country do have that two-tiered level. So I support that. One thing that was not mentioned, one of the consultants on an aside told me that it would cost to build that additional seven or eight terminals over here -- not terminals -- access. Gates, I should say. To build those is actually on top of a toxic waste dump over there. It would run about \$45 million to clean up that dump. And my thing is just taking from what one of the speakers said is that apparently Terminal 1 is overcrowded and Terminal 2 is not. So maybe the thing to do is instead of building new gates is to shift United or American over to Terminal 2 and shift some of the smaller airlines back in the other direction. You might solve the problem there. I have run out of time.
9/20/2005 Meeting 2	Expansion	Dashiell Botter. I just want to echo some of his concerns that if we put more money into this airport that will that make it more likely that they will choose this site to continue to build into the homes and schools in the area here in Point Loma. And I think if that is going to make it more likely, then that's a bad idea. That's it.
9/20/2005 Meeting 2	Airport Expansion	Greg Finley, 2178 Historic Decater, No. 31, San Diego. I don't think I need this. I talk loud enough. Thank you for your comments, Jarvis. Very worthy and, you know, the words rearranging the deck chairs on the Titanic come to mind every time we talk about any improvements to Lindbergh Field. As a second generation native and a pilot, I remain very concerned about the safety issues which are not addressed in this plan that I can see, anyway, and let's hope that we don't have a massive problem that could occur at this airport. It does operate under a waiver every year. So having said that, we need an airport up until the point where we can get around to selecting Miramar as the new airport. So we do have to make these improvements. I am very concerned as a resident here, and I am sure you are, too, that we have some very severe environmental problems that we are going to be facing, particularly the air pollution problems, as we continue to build this thing into overcapacity, which it looks like we're going to do whether we like it or not. If there was a way to move this process forward so that we don't have to continue to hope the Titanic isn't going to sink at the wrong time, I would certainly be in favor for this. By the way, I am running for City Council, Second District, and I hope that I'm elected, No. 1. No. 2, I really hope that we can provide some needed political leadership to get this thing off the dime. They started discussing and studying a site for a new airport in San Diego in the year I was born, which was 1947, and I may be off by six months on that, but pretty darn close. It's time. 50 years is long enough. If there is a way to move this forward faster, it would be my preference. That's certainly going to be what I'm going to endeavor to do if elected to this council. We need some strong guidance here. You folks are doing a good job. As Jarvis said, there's no point in shooting the messengers. They're here to try to help the situation, but I think that we all need to provide not only input on this plan; but let's support the concept that if we can move this forward faster, let's do it. Thank you very much. I appreciate it.

9/20/2005 Meeting 2	Airport Expansion	<p>Okay. Linda Patterson, 4419 Saratoga. The reason I'm here is I've got questions. I'm not sure who to address them to. The question I have got is, how long is it going to take to build your planning team? Well then, here is my concerns. It kind of echoes the first two people that were talking. If, in fact, it takes quite a number of years to get their Master Plan of this airport built, it's going to encroach really close to 2015. And the next part of it is looking at 2030. So my other question, since I can't ask it formally, I'm going to say is, in fact, the plan of enlarging this airport to fit in, if they do select this site, and my guess is that it probably is. Probably the terminals and everything else are going to lead right into the side of Point Loma. And if that's the case, then I know why everyone is putting money into it now: and if that's not going to be the choice of Concept 6, why are we putting all this money and time into it? If another site is going to be chosen, let's get on with the other site. It just seems like it's a lot of games to get the site going. I'm just a little bit concerned about the whole process. Thank you.</p>
------------------------	----------------------	---

Total comments from Scoping meetings: 20 comments

APPENDIX A

Part III

Comments on the Notice of Preparation (Revised January 2006) and the Notice of Preparation (September 2005)

**REVISED NOTICE OF PREPARATION FOR AIRPORT MASTER PLAN EIR
COMMENTS RECEIVED**

A-57

AGENCY / LETTER SIGNED BY	DATE OF LETTER	DATE RECEIVED	VIA
STATE AGENCIES			
State of California Governor's Office of Planning and Research State Clearinghouse and Planning Unit 1400 Tenth Street P.O. Box 3044 Sacramento, CA 95812-3044 Scott Morgan Project Analyst (916) 445-0613 - phone (916) 323-3018 - fax	01/17/06	01/24/06	US Mail
Native American Heritage Commission 915 Capitol Mall, Room 364 Sacramento, CA 95814 Carol Gaubatz Program Analyst (916) 653-6251 - phone (916) 657-5390 - fax	01/30/06	02/06/06	US Mail
Department of Transportation Division of Aeronautics - MS #40 1120 "N" Street P.O. Box 942873 Sacramento, CA 94273-0001 Sandy Hesnard Aviation Environmental Specialist (916) 654-5314 - phone (916) 653-9531 - fax	02/09/06	02/14/06	US Mail
Department of Transportation - District 11 2829 Juan Street P.O. Box 85406, MS 50 San Diego, CA 92110-2799 Mario H. Orso Chief, Development Review Branch (619) 688-6954 - phone (619) 688-4299 - fax (619) 688-6819 - Brent McDonald, addtl contact	02/15/06	02/15/06 02/21/06	Fax US Mail
State of California Public Utilities Commission 320 West 4th Street, Suite 500 Los Angeles, CA 90013 Rosa Munoz, PE Utilities Engineer Rail Crossings Engineering Section Consumer Protection & Safety Division (213) 576-7078 - phone rxm@cpuc.ca.gov	02/16/06	02/21/06	US Mail

**REVISED NOTICE OF PREPARATION FOR AIRPORT MASTER PLAN EIR
COMMENTS RECEIVED**

A-58

AGENCY / LETTER SIGNED BY	DATE OF LETTER	DATE RECEIVED	VIA
LOCAL AGENCIES			
<p>San Diego County Office of the County Clerk 1600 Pacific Highway San Diego, CA 92101</p> <p>Gregory J. Smith Recorder/County Clerk</p>	<p>01/17/06 (Filing Notice)</p>	<p>01/23/06 (copy of pg 1 only) & 02/24/06 (entire revised NOP - full color copy)</p>	<p>US Mail (via Corporate Svcs)</p>
<p>San Diego Unified Port District 3165 Pacific Highway San Diego, CA 92101 P.O. Box 120488 San Diego, CA 92112-0488</p> <p>John W. Helmer Manager, Planning Services Land Use Planning (619) 686-6468 - phone (619) 686-6508 - fax</p>	<p>02/14/06</p>	<p>02/17/06 02/21/06</p>	<p>Fax & E-Mail US Mail</p>
<p>County of San Diego Department of Environmental Health Land and Water Quality Division P.O. Box 129261 San Diego, CA 92112-9261</p> <p>Donn A. LiPera Project Manager Site Assessment and Mitigation Program (619) 338-2244 - phone (619) 338-2315 - fax</p>	<p>03/27/06</p>	<p>04/03/06</p>	<p>US Mail</p>
ORGANIZATIONS			
<p>San Diego Off-Airport Parking Association 625 Broadway, Suite 1221 San Diego, CA 92101</p> <p>Paul Chacon President (619) 544-7000 - phone (619) 544-6886 - fax</p>	<p>02/09/06</p>	<p>02/15/06</p>	<p>US Mail</p>
<p>Park & Ride 3550 Kettner Blvd. San Diego, CA 92101</p> <p>Thomas J. Traver Vice President (619) 295-6659 or 295-2832 - phone (619) 287-8957 - fax</p>	<p>02/14/06</p>	<p>02/15/06</p>	<p>US Mail</p>

**REVISED NOTICE OF PREPARATION FOR AIRPORT MASTER PLAN EIR
COMMENTS RECEIVED**

AGENCY / LETTER SIGNED BY	DATE OF LETTER	DATE RECEIVED	VIA
INDIVIDUALS			
Otto Emme 2290 Via Lucia La Jolla, CA 92037 (858) 454-1991 - phone ooemme@san.rr.com	02/07/06	02/13/06	US Mail



STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Arnold
Schwarzenegger
Governor

Sean Walsh
Director

Notice of Preparation

January 17, 2006

To: Reviewing Agencies
Re: San Diego International Airport Master Plan
SCH# 2005091105

Attached for your review and comment is the Notice of Preparation (NOP) for the San Diego International Airport Master Plan draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Ted Anasis
San Diego County Regional Airport Authority
P.O. Box 82776
San Diego, CA 92138-2776

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

SM Scott Morgan
Project Analyst, State Clearinghouse

Attachments
cc: Lead Agency

RECEIVED

JAN 24 2006

PLANNING DEPT. #44

Document Details Report
State Clearinghouse Data Base

A-62

SCH# 2005091105
Project Title San Diego International Airport Master Plan
Lead Agency San Diego County Regional Airport Authority

Type **NOP** Notice of Preparation
Description The San Diego International Airport Master Plan includes the development and operation of the following project components: expand existing Terminal 2 West with 10 new jet gates; construct new aircraft parking apron; construct new apron and aircraft taxi lane; construct new surface parking and vehicle circulation; and construct a new parking structure, departure curb and vehicle circulation serving Terminal 2.

Lead Agency Contact

Name Ted Anasis
Agency San Diego County Regional Airport Authority
Phone (619) 400-2478 **Fax**
email
Address P.O. Box 82776
City San Diego **State** CA **Zip** 92138-2776

Project Location

County San Diego
City San Diego
Region
Cross Streets San Diego International Airport - North Harbor Drive

Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways I-5
Airports San Diego International
Railways
Waterways
Schools
Land Use San Diego International Airport

Project Issues Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Coastal Zone; Drainage/Absorption; Economics/Jobs; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife; Growth Inducing; Landuse; Cumulative Effects

Reviewing Agencies Resources Agency; Regional Water Quality Control Board, Region 9; Department of Parks and Recreation; Native American Heritage Commission; Office of Historic Preservation; Department of Fish and Game, Region 5; Department of Water Resources; California Coastal Commission; California Highway Patrol; Caltrans, District 11; Air Resources Board, Airport Projects; Department of Toxic Substances Control; Caltrans, Division of Aeronautics; Department of Boating and Waterways

Date Received 01/17/2006 **Start of Review** 01/17/2006 **End of Review** 02/15/2006

Resources Agency

Resources Agency
Nadell Gayou

Dept. of Boating & Waterways
David Johnson

California Coastal Commission
Elizabeth A. Fuchs

Colorado River Board
Gerald R. Zimmerman

Dept. of Conservation
Roseanne Taylor

California Energy Commission
Roger Johnson

Dept. of Forestry & Fire Protection
Allen Robertson

Office of Historic Preservation
Wayne Donaldson

Dept of Parks & Recreation
Environmental Stewardship Section

Reclamation Board
DeeDee Jones

S.F. Bay Conservation & Dev't. Comm.
Steve McAdam

Dept. of Water Resources
Resources Agency
Nadell Gayou

Conservancy

Fish and Game

Dept. of Fish & Game
Scott Flint
Environmental Services Division

Fish & Game Region 1
Donald Koch

Fish & Game Region 2
Banky Curtis

Fish & Game Region 3
Robert Floerke

Fish & Game Region 4
Mike Mulligan

Fish & Game Region 5
Don Chadwick
Habitat Conservation Program

Fish & Game Region 6
Gabrina Gatchel
Habitat Conservation Program

Fish & Game Region 6 I/M
Tammy Allen
Inyo/Mono, Habitat Conservation Program

Dept. of Fish & Game M
George Isaac
Marine Region

Other Departments

Food & Agriculture
Steve Shaifer
Dept. of Food and Agriculture

Dept. of General Services
Public School Construction

Dept. of General Services
Robert Sleppey
Environmental Services Section

Dept. of Health Services
Veronica Ramerlz
Dept. of Health/Drinking Water

Independent Commissions/Boards

Delta Protection Commission
Debbie Eddy

Office of Emergency Services
Dennis Castrillo

Governor's Office of Planning & Research
State Clearinghouse

Native American Heritage Comm.
Debbie Treadway

Public Utilities Commission
Ken Lewis

State Lands Commission
Jean Sarino

Tahoe Regional Planning Agency (TRPA)
Cherry Jacques

Business, Trans & Housing

Caltrans - Division of Aeronautics
Sandy Hesnard

Caltrans - Planning
Terri Pencovic

California Highway Patrol
John Olejnik
Office of Special Projects

Housing & Community Development
Lisa Nichols
Housing Policy Division

Dept. of Transportation

Caltrans, District 1
Rex Jackman

Caltrans, District 2
Marcelino Gonzalez

Caltrans, District 3
Katherine Eastham

Caltrans, District 4
Tim Sable

Caltrans, District 5
David Murray

Caltrans, District 6
Marc Birnbaum

Caltrans, District 7
Cheryl J. Powell

Caltrans, District 8
Dan Kopulsky

Caltrans, District 9
Gayle Rosander

Caltrans, District 10
Tom Dumas

Caltrans, District 11
Mario Orso

Caltrans, District 12
Bob Joseph

CalEPA

Air Resources Board
Airport Projects
Jim Lerner

Transportation Projects
Kurt Karperos

Industrial Projects
Mike Tollstrup

California Integrated Waste Management Board
Sue O'Leary

State Water Resources Control Board
Jim Hockenberry
Division of Financial Assistance

State Water Resources Control Board
Student Intern, 401 Water Quality Certification Unit
Division of Water Quality

State Water Resources Control Board
Steven Herrera
Division of Water Rights

Dept. of Toxic Substances Control
CEQA Tracking Center

Department of Pesticide Regulation

Regional Water Quality Control Board (RWQCB)

RWQCB 1
Cathleen Hudson
North Coast Region (1)

RWQCB 2
Environmental Document Coordinator
San Francisco Bay Region (2)

RWQCB 3
Central Coast Region (3)

RWQCB 4
Jonathan Bishop
Los Angeles Region (4)

RWQCB 5S
Central Valley Region (5)

RWQCB 5F
Central Valley Region (5)
Fresno Branch Office

RWQCB 5R
Central Valley Region (5)
Redding Branch Office

RWQCB 6
Lahontan Region (6)

RWQCB 6V
Lahontan Region (6)
Victorville Branch Office

RWQCB 7
Colorado River Basin Region (7)

RWQCB 8
Santa Ana Region (8)

RWQCB 9
San Diego Region (9)

Other


NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
 SACRAMENTO, CA 95814
 (916) 653-4082
 (916) 657-5390 - Fax

January 30, 2006

RECEIVED

FEB 06 2006

Mr. Ted Anasis
 San Diego County Regional Airport Authority
 P.O. Box 82776
 San Diego, CA 92138-2776

Re: San Diego International Airport Master Plan

SCH# 2005091105

PLANNING DEPT. #44

Dear Mr. Anasis:

Thank you for the opportunity to comment on the above-referenced document. In order to adequately identify and mitigate project-related impacts on cultural resources in accordance with the CEQA Guidelines (15063 (d) (3)), the Commission recommends that you provide evidence that all of the following actions be taken:

- Contact the appropriate California Historic Resources Information Center for a record search. The record search will determine:
 - If a part or all of the area of project effect (APE) has been previously surveyed for cultural resources.
 - If any known cultural resources have already been recorded on or adjacent to the APE.
 - If the probability is low, moderate, or high that cultural resources are located in the APE.
 - If a survey is required to determine whether previously unrecorded cultural resources are present.
- If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure.
 - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological information center.
- Contact the Native American Heritage Commission (NAHC) for a Sacred Lands File search of the project area and information on tribal contacts in the project vicinity who may have additional cultural resource information.
 - Please provide U.S.G.S. location information for the project site, including Quadrangle, Township, Section, and Range.
 - We recommend that you contact all tribes listed on the contact list to avoid the unanticipated discovery of sensitive Native American resources after the project has begun.
- Lack of surface evidence of archeological resources does not preclude their subsurface existence.
 - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5 (f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
 - Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.
- Lead agencies should include provisions for discovery of Native American human remains or cemeteries in their mitigation plans. Health and Safety Code §7050.5 and Public Resources Code §15064.5 (e) and §5097.98 mandate procedures to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.
- Lead agencies should consider avoidance, as defined in Section 15370 of the CEQA Guidelines, when significant cultural resources are discovered during the course of project planning.

Please feel free to contact me at (916) 653-6251 if you have any questions.

Sincerely,

Carol Gaubatz
 Program Analyst

CC: State Clearinghouse

DEPARTMENT OF TRANSPORTATION

DIVISION OF AERONAUTICS – M.S.#40
1120 N STREET
P. O. BOX 942873
SACRAMENTO, CA 94273-0001
PHONE (916) 654-4959
FAX (916) 653-9531
TTY (916) 651-6827

A-65



*Flex your power!
Be energy efficient!*

RECEIVED

FEB 14 2006

February 9, 2006

PLANNING DEPT. #44

Mr. Ted Anasis
San Diego County Regional Airport Authority
P.O. Box 82776
San Diego, CA 92101

Dear Mr. Anasis:

Re: Notice of Preparation of a Draft Environmental Impact Report for the San Diego International Airport Master Plan Update; SCH# 2005091105

The California Department of Transportation (Caltrans), Division of Aeronautics (Division), reviewed the above-referenced document with respect to airport-related noise and safety impacts and regional aviation land use planning issues pursuant to the California Environmental Quality Act (CEQA). The Division has technical expertise in the areas of airport operations safety and airport land use compatibility. We are a funding agency for airport projects and we have permit authority for public and special use airports and heliports. The following comments are offered for your consideration.

The San Diego County Regional Airport Authority (SCDRAA) is updating the San Diego International Airport Master Plan to accommodate existing and future demand for air travel in the San Diego Region through 2015. The project to be evaluated in the Draft Environmental Impact Report (DEIR) consists of "two key components" according to the Notice of Preparation (NOP). The first component is the Airport Land Use Plan, which will describe four general categories of land use on the airport: airfield, terminal, ground transportation and airport support. The second component is implementation of specific projects contained in the Airport Master Plan, called the Airport Implementation Plan.

We ask that you provide copies of all airport master plan documents to the Division for review. The airport master plan coordinator for San Diego County, Philip Crimmins, can be contacted at (916) 654-6223.

Prior to releasing State funds for airport projects, the Division, as a Responsible Agency, must ensure that the proposal is in full compliance with CEQA. The issues of primary concern to us include airport-related noise and safety impacts on the surrounding community as well as the community's potential effect on airport operations.

CEQA, Public Resources Code Section 21096, requires the Caltrans Airport Land Use Planning Handbook (Handbook) be utilized as a resource in the preparation of environmental documents for projects within an airport land use compatibility plan boundaries or if such a plan has not been adopted, within two miles of an airport. The Handbook is a resource that should be applied to all public use airports and is published on-line at <http://www.dot.ca.gov/hq/planning/aeronaut/>.

Mr. Ted Anasis
February 9, 2006
Page 2

Public Utilities Code (PUC) Section 21676.c requires that "each public agency within the boundaries of an airport land use commission plan shall, prior to the modification of its airport master plan, refer such proposed change to the airport land use commission." The airport land use commission must then determine whether the proposed master plan is consistent or inconsistent with the adopted compatibility plan for that airport. If inconsistencies are identified, then the airport land use commission should take steps to amend its airport land use compatibility plan.

PUC Section 21659 prohibits structures from penetrating airport imaginary surfaces in accordance with Federal Aviation Regulations (FAR) Part 77. The guidance in the Federal Aviation Administration (FAA) Advisory Circular 150/5370-2E, *Operational Safety on Airports During Construction*, should also be incorporated into the project design in order to identify any permanent or temporary construction-related impacts (e.g. construction cranes, etc.) to the airport/heliport imaginary surfaces. This advisory circular is available at <http://www.faa.gov/ARP/publications/-acs/5370-2e.pdf>. Depending on structural heights during construction, the FAA may require a Notice of Proposed Construction or Alteration (Form 7460-1) pursuant to FAR Part 77. Form 7460-1 is available at <http://forms.faa.gov/forms/faa7460-1.pdf>.

The protection of airports from incompatible land use encroachment is vital to California's economic future. Although the need for compatible and safe land uses near airports in California is both a local and a state issue, airport staff, airport land use commissions and airport land use compatibility plans are key to protecting an airport and the people residing and working in the vicinity of an airport. Consideration given to the issue of compatible land uses in the vicinity of an airport should help to relieve future conflicts between airports and their neighbors.

These comments reflect the areas of concern to the Division of Aeronautics with respect to airport-related noise and safety impacts and regional airport land use planning issues. We advise you to contact our District 11-San Diego Office at (619) 688-6785 concerning surface transportation issues.

Thank you for the opportunity to review and comment on this proposal. We look forward to reviewing all future documentation for the Airport Master Plan update. If you have any questions, please call me at (916) 654-5314.

Sincerely,


SANDY HESNARD
Aviation Environmental Specialist

c: State Clearinghouse

California Department of Transportation – District 11
 Planning Division – Development Review
 P. O. Box 85406 (M.S. 50)
 San Diego, CA 92186-5406

Attn: Brent C. McDonald
 (619) 688-6819
 FAX: 688-4299
 brent.mcdonald@dot.ca.gov



Fax

To: Ted Anasis
 Regional Airport Authority

From: Brent C. McDonald

Phone: (619) 400-2478

Pages: 6 (incl. cover sheet)

Fax: (619) 400-2448

Date: February 15, 2006

Re: San Diego International Airport
 Master Plan – revised NOP

cc: Scott Morgan
 State ClearingHouse

Urgent For Review Please Comment Please Reply Please Recycle

Comments:

San Diego County Regional Airport Authority
SCH 2005091105

(hard copy to follow via regular mail)

RECEIVED

FEB 15 2006

PLANNING DEPT. #44

DEPARTMENT OF TRANSPORTATION

District 11 · 2829 Juan Street
 P. O. BOX 85406, M.S. 50
 San Diego, CA 92110-2799
 PHONE (619) 688-6954
 FAX (619) 688-4299



*Flex your power!
 Be energy efficient!*

February 15, 2006

**11-SD-005
 PM 17.53**

Mr. Ted Anasis
 San Diego County Regional Airport Authority
 P. O. Box 82776
 San Diego, CA 92138-2776

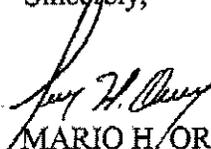
RE: San Diego International Airport Master Plan – revised NOP (SCH 2005091105)

To Mr. Anasis:

The California Department of Transportation (Caltrans) appreciates the opportunity to review the revised Notice of Preparation (NOP) for a Draft Environmental Impact Report (EIR) for the San Diego International Airport (SDIA) Master Plan. Interstate 8 (I-8), State Route 163 (SR-163), and especially Interstate 5 (I-5) are State Highways in the immediate vicinity of the Airport which could be affected by changes proposed in the Master Plan.

Please address the comments from the Department's previous letter to the Regional Airport Authority dated October 18, 2005 (attached). Thank you again for the opportunity to be involved in the Master Plan process. Caltrans looks forward to continuing cooperation with the Airport Authority in coordinating land use and transportation issues. If you have any questions on the Department's comments, please contact Brent McDonald at (619) 688-6819.

Sincerely,


 MARIO H. ORSO, Chief
 Development Review Branch

cc: BMcDonald	Dev. Rvw.	MS-50
EAllegre	Planning	MS-50
EGojuangco	Frwy. Ops.	MS-55
SMorgan	State ClearingHouse(SCH)	

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION

District 11 - 2829 Juan Street
P. O. BOX 85406, M.S. 50
San Diego, CA 92110-2799
PHONE (619) 688-6954
FAX (619) 688-4299



*Flex your power!
Be energy efficient!*

October 18, 2005

**11-SD-005
PM 17.53**

Mr. Ted Anasis
San Diego County Regional Airport Authority
P. O. Box 82776
San Diego, CA 92138-2776

RE: San Diego International Airport Master Plan – NOP (SCH 2005091105)

To Mr. Anasis:

The California Department of Transportation (Caltrans) appreciates the opportunity to review the Notice of Preparation (NOP) of a Draft Environmental Impact Report (EIR) for the San Diego International Airport Master Plan. Given our mission of improving mobility and our direct responsibility as the owner / operator of the State Highway System, Caltrans considers itself a key stakeholder in regional transportation planning efforts. The State highways serving the airport (e.g., Interstate 5 [I-5], Interstate 8 [I-8], State Route 163 [SR-163]) should be regarded as both local and regional assets that facilitate access and mobility needs for the entire San Diego region.

Caltrans believes that the San Diego International Airport (SDIA), as one of the region's primary transportation hubs, should possess a well-balanced, multi-modal transportation system that accommodates travel to and from the City of San Diego and beyond. Caltrans encourages the Airport Authority to incorporate the following ideals from a multi-modal, "smart growth" vision: design features and siting which encourage walking and bicycling, vastly expanded public transit options, accessibility for children, the elderly, and persons with disabilities, and transit priority measures. Given the importance of mobility options, the Master Plan should provide an assessment of how various transportation options will be incorporated into the project.

Of particular concern to Caltrans is how this Master Plan will affect the State Highway system. Interstate 5 is the primary regional roadway serving SDIA, providing access to local streets and arterials connecting to North Harbor Drive and the Airport's major activity centers. I-5 currently experiences congestion during the morning and evening peak periods. Changes to land use in the Airport area may contribute to vehicular demand which exceeds the capacity for this facility, particularly at the local interchange ramps to/from I-5.

The San Diego Association of Governments (SANDAG) prepares the Regional Transportation Plan (RTP) and the Regional Transportation Improvement Program (RTIP) to document how improvements to local and regional transportation facilities in the San Diego region are to be implemented to address transportation deficiencies. The San Diego International Airport Master

"Caltrans improves mobility across California"

Mr. Ted Anasis
October 18, 2005
Page 2

Plan should clearly document a nexus between phased implementation of the RTP and RTIP with implementation of the Master Plan. In order to assure sound coordination between transportation and land use, additional airport land use intensification affecting the local and regional circulation system should only be implemented subject to the development of accompanying transportation projects. Concurrently staged development of transportation and land use is necessary to maintain adequate mobility for travelers in the San Diego region.

Cumulative impacts of a project, together with other related projects, must be considered when determining a project's impacts. A cumulative impact is the sum of the impacts of existing conditions, other projects, and the project – no matter how small the contribution is from the project itself. There is no minimum size limitation on developments that may be required to mitigate for cumulative impacts if the project contributes to a traffic or congestion problem in any amount. Caltrans supports the concept of "fair share" contributions on the part of developers for future interchange improvement projects and/or other mitigation measures, such as freeway mainline improvements.

Land use intensity changes may necessitate mitigation requirements in order to effectively deal with increased impacts. Caltrans may suggest that the Airport Authority pursue Locally Funded Project highway / interchange improvements. The locally funded improvement process includes a Project Study Report (PSR), Project Report and Environmental Document, final design, and construction of improvements. Potential improvements may include – but not be limited to – widening I-5, widening existing ramps, ramp metering, modification to ramp signals, and/or adding auxiliary lanes to I-5.

The Central Interstate 5 Corridor Study (November 2002) developed an effective program of transportation improvements to address overall freeway congestion as well as access issues between I-5 and major activity centers in and around the Downtown / Airport area. Caltrans encourages the Airport Authority to integrate plan concepts and transportation improvements from the Central I-5 Corridor Study into the Master Plan. Caltrans also supports the participation of local transit agencies (SANDAG / Metropolitan Transit System [MTS]) in the Master Plan. As a transportation partner in the San Diego region, Caltrans expects that MTS's TransitWorks and Transit First! endeavors will be integrated into the Master Plan. Caltrans also encourages the Airport Authority to work with SANDAG and Caltrans on future updates to the RTP. SANDAG latest RTP (*Mobility 2030* [April 2003]) includes recommendations from the aforementioned Central I-5 Study, which are based on land-use assumptions from previous Master Plan endeavors. In this study, long-range improvements to I-5 assumed terminal development on the north side of the airfield with associated internal roadway circulation. Current Master Plan proposals have since relocated such terminal expansion back to the south side of the airfield.

SANDAG's latest Regional Transportation Plan (RTP) calls for the development of a regional system of HOV / Managed Lanes as well as a robust "Bus Rapid Transit" (BRT) system to accompany existing light rail transit and commuter rail systems. It is anticipated that SANDAG

Mr. Ted Anasis
October 18, 2005
Page 3

will continue this policy of system development in future RTPs as San Diego County's local transportation sales tax program (TransNet) is implemented. Within the sphere of influence of the current Lindbergh Field site, long-range improvement plans for I-5 include additional widening to accommodate high-occupancy vehicle (HOV) lanes. While these improvements are anticipated beyond the proposed Master Plan's time horizon, it is important to note the region's commitment to increasing freeway capacity, as well as increasing vehicle occupancy and transit ridership. Caltrans recommends that the proposed Master Plan develop viable transportation / circulation concepts that foster and complement the region's commitment to the major transportation systems in the vicinity of the current Lindbergh Field site. The Airport Authority should also work with the City of San Diego to develop, refine, and otherwise maximize the utility of the existing local roadway system that serves not only Lindbergh Field but surrounding communities as well.

Transportation / circulation improvements in the Master Plan should take advantage of short- and mid-range regional investments in light rail transit (e.g., the newly-opened Green Line Trolley, proposed light rail [LRT] extension from Old Town to University City / UTC) as well as commuter rail transit (e.g., expanded Coaster service). Transportation / circulation improvements in the Master Plan should also harmonize with long-range regional investments in freeways (e.g., HOV facilities on I-5) as well as commuter and intercity rail (e.g., double-tracked LOSSAN rail corridor). Including practical and coordinated transportation / circulation plans in the Master Plan would provide a solid foundation to build upon should the current Lindbergh Field site remain the region's long-term aviation solution.

Understanding the proposed Master Plan's context within the regional transportation planning process, Caltrans recommends the Airport Authority work with the City of San Diego and the Centre City Development Corporation (CCDC) to establish Pacific Highway as a regional high-occupancy vehicle (HOV) corridor from I-8 to downtown. Street treatments which improve travel times to HOV and transit vehicles along Pacific Highway would support HOV / transit connectivity between Lindbergh Field, Old Town, and the downtown Central Business District. In the short-term, HOV priority on Pacific Highway could support the existing Route 992 Flyer service to downtown, as well as support intermodal connections to and from in the proposed Ground Transportation Center on the north side of the airfield. In the long-term, HOV / transit vehicles on Pacific Highway could connect to future HOV lanes on I-5 should Lindbergh Field remain the only commercial airport in the region.

Also, coordinating the Airport Master Plan within the regional transportation planning process, Caltrans recommends the Airport Authority work with the Caltrans and the City of San Diego to ensure adequate operations at critical street segments serving Interstate 5. There are five (5) local streets within the sphere of influence of Lindbergh Field that either directly or indirectly provide access to Interstate 5: Washington, Sassafras, Laurel, Hawthorn, and Grape Streets. Caltrans currently does not currently have plans to improve the local interchange ramps within this highly constrained portion of I-5. With the anticipated increase in traffic levels on each of

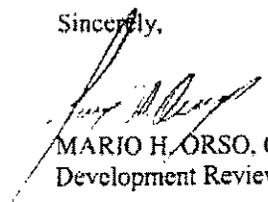
Mr. Ted Anasis
 October 18, 2005
 Page 4

these local streets by the year 2015, local street and freeway ramp and mainline operations may be adversely affected.

Continuing further coordination of the Master Plan and local transportation concerns, Caltrans recommends the Airport Authority work with the City of San Diego to ensure adequate operations at critical street segments having at-grade rail crossings. There are six (6) local streets within the sphere of influence of Lindbergh Field that have at-grade crossings with the San Diego Northern Railway: Washington, Sassafras, Palm, Laurel, Hawthorn, and Grape Streets. Short and mid-range plans call for increased intercity, commuter, and freight rail service on this busy rail corridor, which will further increase crossing delays. With the anticipated increase in traffic levels on each of these local streets by the year 2015, an increase in rail operations could significantly impact access to and from the airport and the surrounding environs.

Caltrans recognizes the important link between transportation and land use, which is especially critical in the regional transportation hub that is the San Diego International Airport. Caltrans does acknowledge that the proposed Master Plan for SDIA only addresses short-range deficiencies (to the year 2015) at the current Lindbergh Field site and understands the context in which the Master Plan process fits within the Airport Authority's plans to increase address the region's long-range aviation needs (i.e., the Airport Site Selection Program [ASSP]). However, the previously mentioned issues and concerns remain pertinent for airport planning at this site. Thank you again for the opportunity to be involved in the Master Plan process. Caltrans looks forward to continuing cooperation with the San Diego County Regional Airport Authority in coordinating land use and transportation issues. Caltrans envisions a continuing level of participation in the Plan and subsequent activities, and we encourage a more committed partnership to reflect this vision. If you have any general questions on the Department's comments, please contact Brent McDonald at (619) 688-6819.

Sincerely,



MARIO H. ORSO, Chief
 Development Review Branch

cc: BMcDonald	Dev. Rvw.	MS-50
EAllegre	Planning	MS-50
EGojuangco	Frwy. Ops.	MS-55
S Murgue	scH	

"Caltrans improves mobility across California"

PUBLIC UTILITIES COMMISSION

320 WEST 4TH STREET, SUITE 500
LOS ANGELES, CA 90013

February 16, 2006

Ted Anasis
San Diego Regional Airport Authority
P.O. Box 82776
San Diego, CA 92138-2776

RECEIVED

FEB 21 2006

VICE PRESIDENT
STRATEGIC

Dear Mr. Anasis:

Re: SCH# 2005091105; San Diego Regional Airport Master Plan

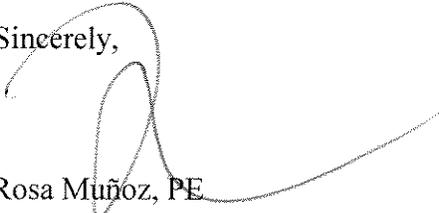
As the state agency responsible for rail safety within California, we recommend that any development projects planned adjacent to or near the BNSF Railway Company right-of-way be planned with the safety of the rail corridor in mind. New developments may increase traffic volumes not only on streets and at intersections, but also at at-grade highway-rail crossings. This includes considering pedestrian circulation patterns/destinations with respect to railroad right-of-way.

Safety factors to consider include, but are not limited to, the planning for grade separations for major thoroughfares, improvements to existing at-grade highway-rail crossings due to increase in traffic volumes and appropriate fencing to limit the access of trespassers onto the railroad right-of-way.

The above-mentioned safety improvements should be considered when approval is sought for the new development. Working with Commission staff early in the conceptual design phase will help improve the safety to motorists and pedestrians.

Please advise us on the status of the project. If you have any questions in this matter, please contact me at (213) 576-7078 or at rxm@cpuc.ca.gov.

Sincerely,



Rosa Muñoz, PE
Utilities Engineer
Rail Crossings Engineering Section
Consumer Protection & Safety Division

C: John Shurson, BNSF Railway Company

Subject: Notice of Preparation (Revised) of a Draft Environmental Impact Report

RECEIVED

JAN 23 2006

Lead Agency:

Agency Name San Diego County Regional Airport Authority

Mailing Address P.O. Box 82776
San Diego, CA 92138-2776

Physical Address 3225 N. Harbor Drive
San Diego, CA 92101

Contact Ted Anasis, AICP

FILED
Gregory J. Smith, Recorder/County Clerk

PLANNING DEPT. #44

JAN 17 2006

BY *[Signature]* DEPUTY

The San Diego County Regional Airport Authority (SDCRAA) will be the CEQA Lead Agency and will prepare an Environmental Impact Report (EIR) for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The SDCRAA is requesting input from interested government and quasi-government agencies, other organizations and private citizens regarding the scope and content of environmental information to be included in the EIR. Public agencies receiving this notice may need to use the EIR prepared by the SDCRAA when considering their permits or other approvals for the proposed project.

Any public agencies that respond to this Notice of Preparation are requested, at a minimum, to:

1. Describe significant environmental issues, reasonable alternatives and mitigation measures that they would like to have addressed in the Draft EIR.
2. State whether they are a responsible or trustee agency for the project, explain why and note the specific project elements that are subject to their regulatory authority.
3. Provide the name, address and phone number of the person who will serve as their point of contact throughout the environmental review process for this project.

The project description, location and the potential environmental effects are contained in the attached materials.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but **not later than 30 days** after receipt of this notice.

Please send your response to Ted Anasis, AICP, at the mailing address shown above. We will need the name for a contact person in your agency.

Project Title: San Diego International Airport Master Plan

Project Location: City of San Diego San Diego County
City (nearest) County

Project Description:

See the following description of the proposed project and alternatives.

Date January 13, 2006 Signature *[Signature]*

Title Manager, Airport Planning

Telephone 619.400.2478

Reference: California Code of Regulations, Title 14, (CEQA Guidelines) Sections 15082(a), 15103, 15375.

FILED IN THE OFFICE OF THE COUNTY CLERK
San Diego County, CA
JAN 17 2006
JAN 17 2006
Returned to agency on *[Signature]*



February 14, 2006

Ted Anasis
San Diego County Regional Airport Authority
P.O. Box 82776
San Diego, CA 92138-2776

RECEIVED

FEB 21 2006

VIC PRESIDENT
STRATEGIC PLANNING

Re: SDIA Airport Master Plan Notice of Preparation (NOP)

Dear Mr. Anasis:

Thank you for the opportunity to comment on the Notice of Preparation for the San Diego International Airport Master Plan. The Port of San Diego, as former administrator for the Airport for over 40 years, recognizes and understands the sensitive and complicated issues surrounding land use in and around airports. We are particularly interested in the Airport's Master Planning efforts in that the Airport and District share a common boundary.

We would appreciate very much the opportunity to discuss the Airport Master Plan with you, understand what the Airport's goals and objectives are and work with you in a meaningful and productive manner towards achieving a mutually beneficial outcome. We are hopeful that the Airport Authority and Port District can continue to have meaningful dialog regarding this and other issues, especially considering the Airport's potentially significant impacts to the Port tidelands.

We look forward to reviewing the Draft EIR and providing comments and input as your Master Plan progresses.

Sincerely:

A handwritten signature in black ink, appearing to read "John W. Helmer".

John W. Helmer
Manager, Planning Services
Land Use Planning
Unified Port of San Diego

Cc: Dan Wilkens
Ralph Hicks
Ellen Corey-Born
Irene McCormack



County of San Diego

GARY W. ERBECK
DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
LAND AND WATER QUALITY DIVISION

P.O. BOX 129261, SAN DIEGO, CA 92112-9261
619-338-2222/FAX 619-338-2315/1-800-253-9933

www.sdcounty.ca.gov/deh/lwq

March 27, 2006

Mr. Rick Adcock
San Diego Regional Airport Authority
P.O. Box 82776
San Diego, CA 92138-2776

Dear Mr. Adcock:

VOLUNTARY ASSISTANCE PROGRAM CASE #H04497-016
COMMENTS ON NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT
REPORT FOR THE FORMER GENERAL DYNAMICS FACILITY LOCATED AT
3302 PACIFIC HIGHWAY, SAN DIEGO, CA 92101

I have received and reviewed the *Notice of Preparation (Revised) of a Draft Environmental Impact Report (EIR)*. The notice identifies proposed development changes at the San Diego International Airport in accordance with the new Airport Master Plan. You have requested that we comment on the proposed future developments and if there are any impacts from known contamination that would require cleanup or other special conditions.

I will comment only about the proposed developments to the airport, identified in the report, that involve the property previously occupied by General Dynamics (GD).

Several areas were identified to be contaminated on the former GD site, with various compounds, such as petroleum hydrocarbons, oils, solvents and metals. Each area was investigated and appropriate remedial actions taken to mitigate impacts. The Airport improvements proposed for the former GD area do not appear to require any additional remedial action, or other special conditions. Due to the inherent uncertainties of environmental investigation work contamination might exist that was not identified by the previous work. Therefore, we recommend that an experienced environmental consultant monitor all soil excavation and removal. If previously unidentified contamination is discovered which may affect public health, safety and/or water quality, additional site assessment and cleanup may be necessary.

Please be advised that this letter does not relieve you of any liability under the California Health and Safety Code or the Porter Cologne Water Quality Control Act.

If you have any questions, please call me at (619) 338-2244.

Sincerely,

DONN A. LIPERA, Project Manager
Site Assessment and Mitigation Program

DAL:kd

cc: Bill Hays, Port District

RECEIVED

APR 03 2006

SDCRAA
Environmental Affairs
Department

WP/H04497-016-306VAPCON

SAN DIEGO OFF-AIRPORT PARKING ASSOCIATION

RECEIVED

FEB 15 2006

PLANNING DEPT. #44

MEMBERS

February 9, 2006

AMPCO
System Parking
Five Star Parking
Park & Ride
Airport Parking

San Diego County Regional Airport Authority
Attn: Mr. Ted. Anasis
P.O. Box 82776
San Diego, CA 92138-2776

OFFICERS

RE: Comments on Airport Master Plan Revised Draft EIR

Paul Chacon
President

Dear Mr. Anasis:

Thomas J. Traver
Treasurer

We are submitting our comments to you regarding the Revised Airport Master Plan Draft EIR. After reviewing the revised plan, we have identified the following areas of concern.

Jeff S. Fuller
Secretary

Construct a new parking structure, departure curb and vehicle circulation serving Terminal 2 (Page 6 of 9)

There was not enough detailed information on this proposal provided in the Revised Draft EIR. All that was mentioned in the Master Plan was that it might be two or four levels. Our questions are as follows:

- We would like to know how many spaces are being proposed for this two or four level structure?
- What the demand for parking will be over the next ten, twenty and thirty years?
- What are the proposed uses for excess parking capacity until demand catches up with supply?
- Does the Airport Authority plan on expanding its long term parking business utilizing the additional spaces at the proposed Terminal 2 parking structure?

SAN DIEGO OFF-AIRPORT PARKING ASSOCIATION

Continued

Comments on Airport Master Plan Revised EIR

Relocate and reconfigure SAN Park Pacific Highway (Page 6 of 9)

The Master Plan will relocate and expand the SAN Park Pacific Highway parking facility currently at 1,670 public parking spaces to approximately 2,170 spaces. Our questions are as follows:

- What criteria did the Airport Authority use to justify the expansion of this parking facility?
- What is the demand for off-airport parking over the next ten, twenty and thirty years?
- We would like to know the defined parking space expansion proposal for this facility. An approximation of 2,170 is not definitive enough. Could it be more spaces? Could it be fewer spaces?

Passenger to parking space formula

Is there a passenger to parking space formula for airports? How many parking spaces will San Diego International Airport need to serve the anticipated growth in passenger traffic?

In summary, we do want express that it is a challenge to provide thoughtful and useful feedback on the revised draft EIR because it is missing important details on issues like the proposed Terminal 2 parking structure and the impact of the Airport Master Plan on Harbor Drive and the surface transportation network.

We look forward to hearing your responses to our questions and concerns.

Sincerely,



Paul Chacon
President



Airport Parking

3550 Kettner Blvd.
San Diego, CA 92101

February 14, 2006

San Diego County Regional Airport Authority
Attn: Mr. Ted. Anasis
P.O. Box 82776
San Diego, CA 92138-2776

(619) 295-6659
295-2832
FAX 287-8957

RE: Comments on Airport Master Plan Revised Draft EIR

Dear Mr. Anasis:

We are submitting additional comments to you regarding the Revised Airport Master Plan Draft EIR. After reviewing the revised plan, we have identified the following area of concern.

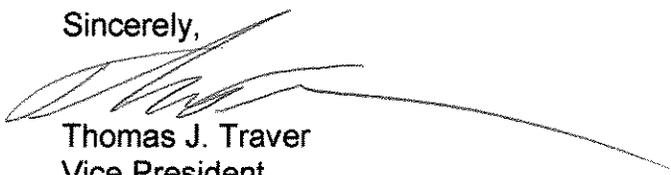
Relocate and reconfigure SAN Park Pacific Highway (Page 6 of 9)

The Master Plan will relocate and expand the SAN Park Pacific Highway parking facility currently at 1,670 public parking spaces to approximately 2,170 spaces. Our questions are as follows:

- What criteria did the Airport Authority use to justify the expansion of this parking facility?
- What is the demand for off-airport parking over the next ten, twenty and thirty years?
- We would like to know the defined parking space expansion proposal for this facility. An approximation of 2,170 is not definitive enough.
 - Could it be more spaces?
 - Could it be fewer spaces?

We look forward to learning more about this project.

Sincerely,



Thomas J. Traver
Vice President
Park & Ride Airport Parking

RECEIVED

FEB 15 2006

PLANNING DEPT. #44

February 7, 2006

Dear Mr. Anasis

I am writing to you as a citizen concerning the San Diego International Airport Master Plan Environmental impact report.

As a follow up to our conversation, I wish to restate my concerns of possible historic resources at San Diego Airport to include the Future Planning Areas.

I would request the master plan address the historic resources at the entire airport site. Specifically, that a historic site survey be undertaken to identify structures more than 45 years of age on all airport authority property.

Additionally, that an individual assessment of each identified structure be undertaken. The assessment would include but not limited to condition, historicity and alterations. The survey and assessment should be undertaken by a qualified historic architectural firm.

I would hope that identified historic resources can be preserved and an adapted reuse be undertaken. A near by example is the SPWAR site or San Diego Port Authority Building.

A base line of historic methodology or standards needs to be clarified as to whether State, County or City will be followed. I believe it should be a blending of standards. Local historic resources boards in the County of San Diego and City of San Diego should be kept informed as to the historic resources at San Diego International Airport. These two groups should be given an opportunity to give input once a survey and assessment is completed.

Sincerely



Otto Emme
2290 Via Lucia
La Jolla CA 92037

858 454 1991
ooemme@san.rr.com

RECEIVED

FEB 13 2006

PLANNING DEPT. #44

NOTICE OF PREPARATION FOR AIRPORT MASTER PLAN EIR
COMMENTS RECEIVED

A-81

AGENCY / LETTER SIGNED BY	DATE OF LETTER	DATE RECEIVED	VIA
STATE AGENCIES			
State of California Governor's Office of Planning and Research State Clearinghouse and Planning Unit 1400 Tenth Street P.O. Box 3044 Sacramento, CA 95812-3044 Scott Morgan Senior Planner (916) 445-0613 - phone (916) 323-3018 - fax	09/20/05	10/10/05	US Mail
Air Resources Board 1001 "I" Street P.O. Box 2815 Sacramento, CA 95812 Gary Honcoop Manager, Strategic Analysis and Liaison Section (916) 322-8474 - phone (916) 322-6007 - Dr. Jim Lerner, addt'l contact	10/06/05	10/12/05	US Mail
State of California Department of Transportation District 11 2829 Juan Street P.O. Box 85406, M.S. 50 San Diego, CA 92110-2799 Mario H. Orso Chief, Development Review Branch (619) 688-6954 - phone (619) 688-4299 - fax (619) 688-6819 - Brent McDonald, addt'l contact	10/18/05	10/18/05 10/21/01	Fax US Mail
Department of Toxic Substances Control 5796 Corporate Avenue Cypress, CA 90630 Greg Holmes Unit Chief Southern California Cleanup Operations Branch - Cypress Office (714) 484-5477 - Teresa Hom, Proj Mgr, addt'l contact thom@dtsc.ca.gov	10/20/05	10/25/05	US Mail
Native American Heritage Commission 915 Capitol Mall, Room 364 Sacramento, CA 95814 Carol Gaubatz Program Analyst (916) 653-6251 - phone (916) 657-5390 - fax	10/24/05	10/31/05	US Mail

NOTICE OF PREPARATION FOR AIRPORT MASTER PLAN EIR
COMMENTS RECEIVED

AGENCY / LETTER SIGNED BY	DATE OF LETTER	DATE RECEIVED	VIA
LOCAL AGENCIES			
San Diego County Office of the County Clerk 1600 Pacific Highway San Diego, CA 92101 Gregory J. Smith Recorder/County Clerk	09/21/05 (Filing Notice)	09/26/05	US Mail
SANDAG 401 "B" Street, Suite 800 San Diego, CA 92101-4231 Toni Bates Division Director of Transit Planning (619) 699-1900 - phone (619) 699-1905 - fax	10/12/05	10/14/05	US Mail
City of San Diego Planning Department 202 "C" Street, MS 5A San Diego, CA 92101-3865 Keith Greer Deputy Director (619) 236-6479 - phone (619) 236-6478 -fax (619) 533-4550 - Tait Galloway, Assoc Planner, addt'l contact	10/19/05	10/19/05	Delivered
San Diego Unified Port District 3165 Pacific Highway San Diego, CA 92101 P.O. Box 120488 San Diego, CA 92112-0488 Ralph T. Hicks Director, Planning (619) 686-6200 - phone (619) 686-6508 - fax (619) 686-6282 - Wileen Manaois, Planner, addt'l contact	10/19/05	10/19/05 10/21/05	Fax US Mail

NOTICE OF PREPARATION FOR AIRPORT MASTER PLAN EIR
COMMENTS RECEIVED

AGENCY / LETTER SIGNED BY	DATE OF LETTER	DATE RECEIVED	VIA
ORGANIZATIONS			
Park & Ride Airport Parking 3550 Kettner Blvd. San Diego, CA 92101 Thomas J. Traver Vice President (619) 295-6659 or 295-2832 - phone (619) 287-8957 - fax	09/23/05	09/26/05	US Mail
Peninsula Community Planning Board Cynthia Conger Chair	10/20/05	10/20/05	Community Group Meeting
SANNoise P.O. Box 70194 San Diego, CA 92167 Lance G. Murphy (619) 892-5003 - phone lance-ianette@cox.net sannoise@cox.net	10/20/05	10/20/05 10/24/05	E-mail US Mail
Luce, Forward, Hamilton & Scripps LLP 600 West Broadway, Suite 2600 San Diego, CA 92101-3372 (Representing tenant: Jimsair Aviation Services, Inc.) Stephen L. Marsh Partner (619) 699-2418 - phone (619) 645-5363 - fax smarsh@luce.com	10/21/05	10/21/05 10/26/05	Fax US Mail
McMillin-NTC, LLC 2750 Womble Road San Diego, CA 92106 Kathleen Riser Vice President - Project Management (619) 794-1307 - phone (619) 336-3027 - fax kriser@mcmillin.com	10/21/05	10/21/05	E-Mail

NOTICE OF PREPARATION FOR AIRPORT MASTER PLAN EIR
COMMENTS RECEIVED

A-84

AGENCY / LETTER SIGNED BY	DATE OF LETTER	DATE RECEIVED	VIA
INDIVIDUALS			
Richard S. Phillips 1712 Granada Avenue San Diego, CA 92102	09/21/05	09/26/05	US Mail
Karen F. Tom Project Manager, Interior Design Smith Consulting Architects 12220 El Camino Real, Suite 200 San Diego, CA 92130 (858) 793-4777 x207 - phone (858) 793-4787 - fax karent@sca-sd.com	09/22/05	09/22/05	E-Mail
Kathleen Bush 1611 Willow Street San Diego, CA 92106-2126 kathleenb@cox.net	10/19/05	10/19/05	E-Mail

11/1/05 ljt



STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Arnold
Schwarzenegger
Governor

Sean Walsh
Director

Notice of Preparation

September 20, 2005

To: Reviewing Agencies
Re: San Diego International Airport Master Plan
SCH# 2005091105

Attached for your review and comment is the Notice of Preparation (NOP) for the San Diego International Airport Master Plan draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Ted Anasis
San Diego County Regional Airport Authority
P.O. Box 82776
San Diego, CA 92138-2776

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Senior Planner, State Clearinghouse

Attachments
cc: Lead Agency

RECEIVED

OCT 10 2005

PLANNING DEPT. #44

Document Details Report
State Clearinghouse Data Base

A-86

SCH# 2005091105
Project Title San Diego International Airport Master Plan
Lead Agency San Diego County Regional Airport Authority

Type NOP Notice of Preparation

Description The San Diego International Airport Master Plan includes the development and operation of the following project components: expand existing Terminal 2 West with 10 new jet gates; construct new aircraft parking apron; construct new apron and aircraft taxi lane; construct new surface parking and vehicle circulation; and construct a new parking structure, departure curb and vehicle circulation serving Terminal 2.

Lead Agency Contact

Name Ted Anasis
Agency San Diego County Regional Airport Authority
Phone (619) 400-2478 **Fax**
email
Address P.O. Box 82776
City San Diego **State** CA **Zip** 92138-2776

Project Location

County San Diego
City San Diego
Region
Cross Streets San Diego International Airport - North Harbor Drive
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways I-5
Airports San Diego International
Railways
Waterways
Schools
Land Use San Diego International Airport

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Coastal Zone; Drainage/Absorption; Economics/Jobs; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife; Growth Inducing; Landuse; Cumulative Effects

Reviewing Agencies Resources Agency; California Coastal Commission; Department of Parks and Recreation; Department of Water Resources; Department of Fish and Game, Region 5; Department of Health Services; Office of Emergency Services; Native American Heritage Commission; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 11; Air Resources Board, Airport Projects; Department of Toxic Substances Control; Regional Water Quality Control Board, Region 9

Date Received 09/19/2005 **Start of Review** 09/19/2005 **End of Review** 10/18/2005



<input type="checkbox"/> <u>Resources Agency</u> Nadell Gayou	<input type="checkbox"/> <u>Fish & Game Region 3</u> Robert Floerke	<input type="checkbox"/> <u>Public Utilities Commission</u> Ken Lewis	<input type="checkbox"/> <u>Caltrans, District 8</u> Dan Kopulsky	<input type="checkbox"/> <u>Regional Water Quality Control Board (RWQCB)</u>
<input checked="" type="checkbox"/> <u>Resources Agency</u> Nadell Gayou	<input type="checkbox"/> <u>Fish & Game Region 4</u> Mike Mulligan	<input type="checkbox"/> <u>State Lands Commission</u> Jean Sarino	<input type="checkbox"/> <u>Caltrans, District 9</u> Gayle Rosander	<input type="checkbox"/> <u>RWQCB 1</u> Cathleen Hudson North Coast Region (1)
<input type="checkbox"/> <u>Dept. of Boating & Waterways</u> David Johnson	<input checked="" type="checkbox"/> <u>Fish & Game Region 5</u> Don Chadwick Habitat Conservation Program	<input type="checkbox"/> <u>Tahoe Regional Planning Agency (TRPA)</u> Cherry Jacques	<input type="checkbox"/> <u>Caltrans, District 10</u> Tom Durnas	<input type="checkbox"/> <u>RWQCB 2</u> Environmental Document Coordinator San Francisco Bay Region (2)
<input checked="" type="checkbox"/> <u>California Coastal Commission</u> Elizabeth A. Fuchs	<input type="checkbox"/> <u>Fish & Game Region 6</u> Gabrina Gatchel Habitat Conservation Program	<input type="checkbox"/> <u>Business, Trans & Housing</u>	<input checked="" type="checkbox"/> <u>Caltrans, District 11</u> Mario Orso	<input type="checkbox"/> <u>RWQCB 3</u> Central Coast Region (3)
<input type="checkbox"/> <u>Colorado River Board</u> Gerald R. Zimmerman	<input type="checkbox"/> <u>Fish & Game Region 6 I/M</u> Tammy Allen Inyo/Mono, Habitat Conservation Program	<input type="checkbox"/> <u>Caltrans - Division of Aeronautics</u> Sandy Hesnard	<input type="checkbox"/> <u>Caltrans, District 12</u> Bob Joseph	<input type="checkbox"/> <u>RWQCB 4</u> Jonathan Bishop Los Angeles Region (4)
<input type="checkbox"/> <u>Dept. of Conservation</u> Roseanne Taylor	<input type="checkbox"/> <u>Dept. of Fish & Game M</u> George Isaac Marine Region	<input type="checkbox"/> <u>Caltrans - Planning</u> Terri Pencovic	<input type="checkbox"/> <u>Caltrans, District 13</u> Bob Joseph	<input type="checkbox"/> <u>RWQCB 5S</u> Central Valley Region (5)
<input type="checkbox"/> <u>California Energy Commission</u> Roger Johnson	<input type="checkbox"/> <u>Other Departments</u>	<input type="checkbox"/> <u>Housing & Community Development</u> Lisa Nichols Housing Policy Division	<input type="checkbox"/> <u>Caltrans, District 14</u> Bob Joseph	<input type="checkbox"/> <u>RWQCB 5F</u> Central Valley Region (5) Fresno Branch Office
<input type="checkbox"/> <u>Dept. of Forestry & Fire Protection</u> Allen Robertson	<input type="checkbox"/> <u>Food & Agriculture</u> Steve Shaffer Dept. of Food and Agriculture	<input type="checkbox"/> <u>Dept. of Transportation</u>	<input type="checkbox"/> <u>Caltrans, District 15</u> Bob Joseph	<input type="checkbox"/> <u>RWQCB 5R</u> Central Valley Region (5) Redding Branch Office
<input type="checkbox"/> <u>Office of Historic Preservation</u> Wayne Donaldson	<input type="checkbox"/> <u>Dept. of General Services</u> Public School Construction	<input type="checkbox"/> <u>State Water Resources Control Board</u> Jim Hockenberry Division of Financial Assistance	<input type="checkbox"/> <u>Caltrans, District 16</u> Bob Joseph	<input type="checkbox"/> <u>RWQCB 6</u> Lahontan Region (6)
<input checked="" type="checkbox"/> <u>Dept. of Parks & Recreation</u> Environmental Stewardship Section	<input type="checkbox"/> <u>Dept. of General Services</u> Robert Sleppy Environmental Services Section	<input type="checkbox"/> <u>State Water Resources Control Board</u> Student Intern, 401 Water Quality Certification Unit Division of Water Quality	<input type="checkbox"/> <u>Caltrans, District 17</u> Bob Joseph	<input type="checkbox"/> <u>RWQCB 6V</u> Lahontan Region (6) Victorville Branch Office
<input type="checkbox"/> <u>Reclamation Board</u> DeeDee Jones	<input checked="" type="checkbox"/> <u>Dept. of Health Services</u> Veronica Rameriz Dept. of Health/Drinking Water	<input type="checkbox"/> <u>State Water Resources Control Board</u> Steven Herrera Division of Water Rights	<input type="checkbox"/> <u>Caltrans, District 18</u> Bob Joseph	<input type="checkbox"/> <u>RWQCB 7</u> Colorado River Basin Region (7)
<input type="checkbox"/> <u>S.F. Bay Conservation & Dev't. Comm.</u> Steve McAdam	<input type="checkbox"/> <u>Independent Commissions/Boards</u>	<input type="checkbox"/> <u>Dept. of Toxic Substances Control</u> CEQA Tracking Center	<input type="checkbox"/> <u>Caltrans, District 19</u> Bob Joseph	<input type="checkbox"/> <u>RWQCB 8</u> Santa Ana Region (8)
<input checked="" type="checkbox"/> <u>Dept. of Water Resources</u> Resources Agency Nadell Gayou	<input type="checkbox"/> <u>Delta Protection Commission</u> Debbie Eddy	<input type="checkbox"/> <u>Department of Pesticide Regulation</u>	<input type="checkbox"/> <u>Caltrans, District 20</u> Bob Joseph	<input checked="" type="checkbox"/> <u>RWQCB 9</u> San Diego Region (9)
<input type="checkbox"/> <u>Conservancy</u>	<input checked="" type="checkbox"/> <u>Office of Emergency Services</u> Dennis Castrillo		<input type="checkbox"/> <u>Caltrans, District 21</u> Bob Joseph	
<input type="checkbox"/> <u>Fish and Game</u>	<input type="checkbox"/> <u>Governor's Office of Planning & Research</u> State Clearinghouse		<input type="checkbox"/> <u>Caltrans, District 22</u> Bob Joseph	
<input type="checkbox"/> <u>Dept. of Fish & Game</u> Scott Flint Environmental Services Division	<input checked="" type="checkbox"/> <u>Native American Heritage Comm.</u> Debbie Treadway		<input type="checkbox"/> <u>Caltrans, District 23</u> Bob Joseph	
<input type="checkbox"/> <u>Fish & Game Region 1</u> Donald Koch			<input type="checkbox"/> <u>Caltrans, District 24</u> Bob Joseph	
<input type="checkbox"/> <u>Fish & Game Region 2</u> Banky Curtis			<input type="checkbox"/> <u>Caltrans, District 25</u> Bob Joseph	



Alan C. Lloyd, Ph.D.
Agency Secretary

Air Resources Board

1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

A-88



Arnold Schwarzenegger
Governor

October 6, 2005

Mr. Ted Anasis, AICP
San Diego County Regional Airport Authority
P.O. Box 83776
San Diego, California 92101

RECEIVED

OCT 12 2005

PLANNING DEPT. #44

Dear Mr. Anasis:

Thank you for providing the Air Resources Board (ARB) staff the opportunity to comment on the Notice of Preparation to prepare a Draft Environmental Impact Report (Draft EIR) for future development recommended by the Master Plan (Plan) for the San Diego International Airport (Airport). We understand that the improvements—terminal expansion to accommodate 10 new gates, additional parking facilities, aircraft parking areas, and related taxiways—are being proposed to enable the Airport to serve the forecasted increase in passengers and air cargo through 2015.

The Airport is located in San Diego County (County), which is currently designated as nonattainment for the federal eight-hour ozone standard and the State ozone, inhalable particulate matter (PM10), and fine particulate matter (PM2.5) standards. Air toxic exposures are also a concern. Because air quality is an issue in the County and because of the expected continuing growth and congestion at the Airport, the Draft EIR should thoroughly and comprehensively address the potential emission impacts from the proposed project.

Estimating Emissions and Impacts

The analysis of air quality impacts in the Draft EIR should quantify all increases in emissions of oxides of nitrogen (NOx), reactive organic gases (ROG), PM2.5, PM10, and toxic air contaminants from both construction activities and the operation of the Airport as configured with the proposed improvements through 2015. The analysis should include emissions from aircraft operations, ground service equipment (GSE), ground access vehicles, and stationary and area sources. The analysis should also assess the potential for any increase in emissions of these pollutants to cause or contribute to violations of federal and State air quality standards. We recommend that the Draft EIR include details about all the assumptions and methodologies used in the analysis. We also request that summaries and descriptions be complete, clear, and understandable to the layperson.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website: <http://www.arb.ca.gov>.

California Environmental Protection Agency

Mr. Ted Anasis, AICP
October 6, 2005
Page 2

Studies are underway to update data on the constituents and quantities of organic gas emissions and to better characterize PM emissions from commercial jet aircraft engines. We recommend that you consult with ARB staff on the appropriate speciation data to use in the Draft EIR. For total PM emissions from aircraft, we recommend that you use the First Order Approximation Version 2.0 recently approved for use by the Federal Aviation Administration and that you consult with ARB staff on the appropriate method to use in modeling the dispersion of aircraft PM emissions.

Emission increases resulting from implementing the Plan should be compared with emissions in the applicable State Implementation Plan (SIP), currently the 2002 Ozone Maintenance Plan approved by the U.S. Environmental Protection Agency effective July 28, 2003.

Community Impacts

The Draft EIR should present the magnitude and location of health risks to people on-site and in the surrounding area—including residences, workplaces, and schools—from toxic air contaminants, such as formaldehyde, acrolein, benzene, and 1,3-butadiene, resulting from aircraft operations associated with proposed Airport improvements.

The Draft EIR should describe and assess the potential individual and community multi-pathway health impacts. The health risk assessment should be based on methodology, procedures, and health effects information presented in the five Office of Environmental Health Hazard Assessment (OEHHA) Air Toxic Hot Spots Risk Guideline Documents (1999–2002), plus any OEHHA-released supplemental information.

Diesel exhaust PM is a pervasive toxic air contaminant that poses significant risks across the region and statewide. The Diesel Risk Reduction Plan adopted by ARB in 2000 established a goal to reduce diesel PM emissions 85 percent by 2020. The Draft EIR impacts analysis should quantify diesel PM emission increases expected to result from the improvements proposed in the Plan, including emissions from construction as well as operation. The impacts analysis should also quantify the increase in human health risk associated with exposure to diesel PM emissions (including the construction phase) and discuss measures that will be used to mitigate these emissions. We recommend that the results of the community impacts analysis and health risk assessment be in a single place in a simplified format.

Mr. Ted Anasis, AICP
October 6, 2005
Page 3

Mitigation

The Draft EIR should identify and incorporate all feasible, cost-effective mitigation measures to minimize air pollution and risk. We believe the Plan should include zero- and near-zero emission technologies wherever possible.

Health risks due to exposure to toxic species of ROG associated with the operation of commercial jet aircraft is dominated by emissions during taxi, idle, and queue. Since the Plan proposes the addition of gates to permit additional aircraft operations to accommodate growth, there is a likelihood for increased taxi, idle, and queue emissions. Therefore, we recommend that the Draft EIR assess whether the proposed Plan will minimize the time spent by aircraft in ground operations and, if not, suggest potential modifications that would reduce taxi, idling, and queue times.

As noted above, ARB's Diesel Risk Reduction Plan targets diesel PM emissions. With increased passenger and air cargo operations, there will likely be increases in diesel vehicles to service these operations. Therefore, we recommend that specific mitigation measures be identified to reduce diesel PM emissions in the timeframe addressed in the Plan. For example, several types of diesel-fueled GSE can be replaced with electric models which have been proven to be very feasible and cost-effective.

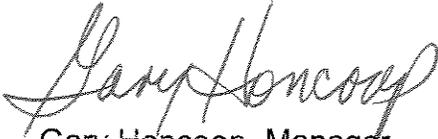
Finally, we recommend that if the Plan does not specify that all gates are to have electricity and pre-conditioned air (PCA) for use by aircraft and electricity for recharging electric GSE that the Draft EIR include those as mitigation measures. We also recommend that the Airport institute a program to encourage all air carriers to maximize the use of electricity and PCA while at the gates in order to minimize emissions from aircraft auxiliary power units.

We have worked with air carriers and a number of airports to develop effective mitigation programs and are available to assist you with mitigation measures. We commend the Airport staff for the steps already taken to reduce emissions at the airfield and look forward to on-going cooperation to further reduce emissions.

Mr. Ted Anasis, AICP
October 6, 2005
Page 4

If you have any questions, please contact me at (916) 322-8474 or Dr. Jim Lerner of my staff at (916) 322-6007.

Sincerely,



Gary Honcoop, Manager
Strategic Analysis and Liaison Section

cc: Mr. Rob Reider
San Diego County Air Pollution
Control District
9150 Chesapeake Drive
San Diego, California 92123-1096

Mr. John Kelly
Planning Office, Region 9
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, California 94105

Mr. Scott Morgan
Project Analyst
State Clearinghouse
SCH# 2005091105
Office of Planning and Research
P.O. Box 3044
Sacramento, California 95812-3044

DEPARTMENT OF TRANSPORTATION

District 11 · 2829 Juan Street
P. O. BOX 85406, M.S. 50
San Diego, CA 92110-2799
PHONE (619) 688-6954
FAX (619) 688-4299

**RECEIVED***Flex your power!
Be energy efficient!*

OCT 21 2005

October 18, 2005

PLANNING DEPT. #44

11-SD-005
PM 17.53

Mr. Ted Anasis
San Diego County Regional Airport Authority
P. O. Box 82776
San Diego, CA 92138-2776

RE: San Diego International Airport Master Plan – NOP (SCH 2005091105)

To Mr. Anasis:

The California Department of Transportation (Caltrans) appreciates the opportunity to review the Notice of Preparation (NOP) of a Draft Environmental Impact Report (EIR) for the San Diego International Airport Master Plan. Given our mission of improving mobility and our direct responsibility as the owner / operator of the State Highway System, Caltrans considers itself a key stakeholder in regional transportation planning efforts. The State highways serving the airport (e.g., Interstate 5 [I-5], Interstate 8 [I-8], State Route 163 [SR-163]) should be regarded as both local and regional assets that facilitate access and mobility needs for the entire San Diego region.

Caltrans believes that the San Diego International Airport (SDIA), as one of the region's primary transportation hubs, should possess a well-balanced, multi-modal transportation system that accommodates travel to and from the City of San Diego and beyond. Caltrans encourages the Airport Authority to incorporate the following ideals from a multi-modal, "smart growth" vision: design features and siting which encourage walking and bicycling, vastly expanded public transit options, accessibility for children, the elderly, and persons with disabilities, and transit priority measures. Given the importance of mobility options, the Master Plan should provide an assessment of how various transportation options will be incorporated into the project.

Of particular concern to Caltrans is how this Master Plan will affect the State Highway system. Interstate 5 is the primary regional roadway serving SDIA, providing access to local streets and arterials connecting to North Harbor Drive and the Airport's major activity centers. I-5 currently experiences congestion during the morning and evening peak periods. Changes to land use in the Airport area may contribute to vehicular demand which exceeds the capacity for this facility, particularly at the local interchange ramps to/from I-5.

The San Diego Association of Governments (SANDAG) prepares the Regional Transportation Plan (RTP) and the Regional Transportation Improvement Program (RTIP) to document how improvements to local and regional transportation facilities in the San Diego region are to be implemented to address transportation deficiencies. The San Diego International Airport Master

Mr. Ted Anasis
October 18, 2005
Page 2

Plan should clearly document a nexus between phased implementation of the RTP and RTIP with implementation of the Master Plan. In order to assure sound coordination between transportation and land use, additional airport land use intensification affecting the local and regional circulation system should only be implemented subject to the development of accompanying transportation projects. Concurrently staged development of transportation and land use is necessary to maintain adequate mobility for travelers in the San Diego region.

Cumulative impacts of a project, together with other related projects, must be considered when determining a project's impacts. A cumulative impact is the sum of the impacts of existing conditions, other projects, and the project – no matter how small the contribution is from the project itself. There is no minimum size limitation on developments that may be required to mitigate for cumulative impacts if the project contributes to a traffic or congestion problem in any amount. Caltrans supports the concept of “fair share” contributions on the part of developers for future interchange improvement projects and/or other mitigation measures, such as freeway mainline improvements.

Land use intensity changes may necessitate mitigation requirements in order to effectively deal with increased impacts. Caltrans may suggest that the Airport Authority pursue Locally Funded Project highway / interchange improvements. The locally funded improvement process includes a Project Study Report (PSR), Project Report and Environmental Document, final design, and construction of improvements. Potential improvements may include – but not be limited to – widening I-5, widening existing ramps, ramp metering, modification to ramp signals, and/or adding auxiliary lanes to I-5.

The Central Interstate 5 Corridor Study (November 2002) developed an effective program of transportation improvements to address overall freeway congestion as well as access issues between I-5 and major activity centers in and around the Downtown / Airport area. Caltrans encourages the Airport Authority to integrate plan concepts and transportation improvements from the Central I-5 Corridor Study into the Master Plan. Caltrans also supports the participation of local transit agencies (SANDAG / Metropolitan Transit System [MTS]) in the Master Plan. As a transportation partner in the San Diego region, Caltrans expects that MTS's TransitWorks and Transit First! endeavors will be integrated into the Master Plan. Caltrans also encourages the Airport Authority to work with SANDAG and Caltrans on future updates to the RTP. SANDAG latest RTP (*Mobility 2030* [April 2003]) includes recommendations from the aforementioned Central I-5 Study, which are based on land-use assumptions from previous Master Plan endeavors. In this study, long-range improvements to I-5 assumed terminal development on the north side of the airfield with associated internal roadway circulation. Current Master Plan proposals have since relocated such terminal expansion back to the south side of the airfield.

SANDAG's latest Regional Transportation Plan (RTP) calls for the development of a regional system of HOV / Managed Lanes as well as a robust “Bus Rapid Transit” (BRT) system to accompany existing light rail transit and commuter rail systems. It is anticipated that SANDAG

Mr. Ted Anasis
October 18, 2005
Page 3

will continue this policy of system development in future RTPs as San Diego County's local transportation sales tax program (TransNet) is implemented. Within the sphere of influence of the current Lindbergh Field site, long-range improvement plans for I-5 include additional widening to accommodate high-occupancy vehicle (HOV) lanes. While these improvements are anticipated beyond the proposed Master Plan's time horizon, it is important to note the region's commitment to increasing freeway capacity, as well as increasing vehicle occupancy and transit ridership. Caltrans recommends that the proposed Master Plan develop viable transportation / circulation concepts that foster and complement the region's commitment to the major transportation systems in the vicinity of the current Lindbergh Field site. The Airport Authority should also work with the City of San Diego to develop, refine, and otherwise maximize the utility of the existing local roadway system that serves not only Lindbergh Field but surrounding communities as well.

Transportation / circulation improvements in the Master Plan should take advantage of short-and mid-range regional investments in light rail transit (e.g., the newly-opened Green Line Trolley, proposed light rail [LRT] extension from Old Town to University City / UTC) as well as commuter rail transit (e.g., expanded Coaster service). Transportation / circulation improvements in the Master Plan should also harmonize with long-range regional investments in freeways (e.g., HOV facilities on I-5) as well as commuter and intercity rail (e.g., double-tracked LOSSAN rail corridor). Including practical and coordinated transportation / circulation plans in the Master Plan would provide a solid foundation to build upon should the current Lindbergh Field site remain the region's long-term aviation solution.

Understanding the proposed Master Plan's context within the regional transportation planning process, Caltrans recommends the Airport Authority work with the City of San Diego and the Centre City Development Corporation (CCDC) to establish Pacific Highway as a regional high-occupancy vehicle (HOV) corridor from I-8 to downtown. Street treatments which improve travel times to HOV and transit vehicles along Pacific Highway would support HOV / transit connectivity between Lindbergh Field, Old Town, and the downtown Central Business District. In the short-term, HOV priority on Pacific Highway could support the existing Route 992 Flyer service to downtown, as well as support intermodal connections to and from in the proposed Ground Transportation Center on the north side of the airfield. In the long-term, HOV / transit vehicles on Pacific Highway could connect to future HOV lanes on I-5 should Lindbergh Field remain the only commercial airport in the region.

Also, coordinating the Airport Master Plan within the regional transportation planning process, Caltrans recommends the Airport Authority work with the Caltrans and the City of San Diego to ensure adequate operations at critical street segments serving Interstate 5. There are five (5) local streets within the sphere of influence of Lindbergh Field that either directly or indirectly provide access to Interstate 5: Washington, Sassafras, Laurel, Hawthorn, and Grape Streets. Caltrans currently does not currently have plans to improve the local interchange ramps within this highly constrained portion of I-5. With the anticipated increase in traffic levels on each of

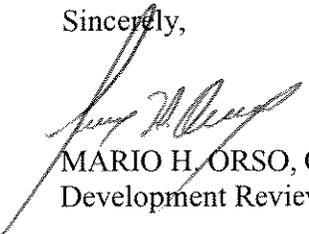
Mr. Ted Anasis
 October 18, 2005
 Page 4

these local streets by the year 2015, local street and freeway ramp and mainline operations may be adversely affected.

Continuing further coordination of the Master Plan and local transportation concerns, Caltrans recommends the Airport Authority work with the City of San Diego to ensure adequate operations at critical street segments having at-grade rail crossings. There are six (6) local streets within the sphere of influence of Lindbergh Field that have at-grade crossings with the San Diego Northern Railway: Washington, Sassafras, Palm, Laurel, Hawthorn, and Grape Streets. Short and mid-range plans call for increased intercity, commuter, and freight rail service on this busy rail corridor, which will further increase crossing delays. With the anticipated increase in traffic levels on each of these local streets by the year 2015, an increase in rail operations could significantly impact access to and from the airport and the surrounding environs.

Caltrans recognizes the important link between transportation and land use, which is especially critical in the regional transportation hub that is the San Diego International Airport. Caltrans does acknowledge that the proposed Master Plan for SDIA only addresses short-range deficiencies (to the year 2015) at the current Lindbergh Field site and understands the context in which the Master Plan process fits within the Airport Authority's plans to increase address the region's long-range aviation needs (i.e., the Airport Site Selection Program [ASSP]). However, the previously mentioned issues and concerns remain pertinent for airport planning at this site. Thank you again for the opportunity to be involved in the Master Plan process. Caltrans looks forward to continuing cooperation with the San Diego County Regional Airport Authority in coordinating land use and transportation issues. Caltrans envisions a continuing level of participation in the Plan and subsequent activities, and we encourage a more committed partnership to reflect this vision. If you have any general questions on the Department's comments, please contact Brent McDonald at (619) 688-6819.

Sincerely,



MARIO H. ORSO, Chief
 Development Review Branch

cc: BMcDonald	Dev. Rvw.	MS-50
EAllegre	Planning	MS-50
EGojuangco	Frwy. Ops.	MS-55
S Morgan	SCH	



Alan C. Lloyd, Ph.D.
Agency Secretary
Cal/EPA

Department of Toxic Substances Control

5796 Corporate Avenue
Cypress, California 90630



Arnold Schwarzenegger
Governor

October 20, 2005

RECEIVED

OCT 25 2005

Mr. Ted Anasis
AICP
San Diego County Regional Airport Authority
P.O. Box 82776
San Diego, California 92138

PLANNING DEPT. #44

NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT
FOR THE SAN DIEGO INTERNATIONAL AIRPORT (SDIA) MASTER PLAN
(SCH# 2005091105)

Dear Mr. Anasis:

The Department of Toxic Substances Control (DTSC) has received your submitted Notice of Preparation for a Draft Environmental Impact Report (EIR) for the above-mentioned project. Your document states the Description of Project: "The San Diego International Airport Master Plan includes the development and operation of the following project components: expand existing Terminal 2 West with 10 new jet gates; construct new aircraft parking apron; construct new apron and aircraft taxi lane; construct new surface parking and vehicle circulation; and construct a new parking structure, departure curb and vehicle circulation serving Terminal 2." Based on the review of the submitted document DTSC has comments as follows:

- 1) The EIR should identify the current or historic uses at the project site that may have resulted in a release of hazardous wastes/substances.
- 2) The EIR should identify the known or potentially contaminated sites within the proposed Project area. For all identified sites, the EIR should evaluate whether conditions at the site may pose a threat to human health or the environment. Following are the databases of some of the regulatory agencies:
 - National Priorities List (NPL): A list maintained by the United States Environmental Protection Agency (U.S.EPA).

Mr. Ted Anasis
October 20, 2005
Page 2

- Site Mitigation Program Property Database (formerly CalSites): A Database primarily used by the California Department of Toxic Substances Control.
 - Resource Conservation and Recovery Information System (RCRIS): A database of RCRA facilities that is maintained by U.S. EPA.
 - Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS): A database of CERCLA sites that is maintained by U.S.EPA.
 - Solid Waste Information System (SWIS): A database provided by the California Integrated Waste Management Board which consists of both open as well as closed and inactive solid waste disposal facilities and transfer stations.
 - Leaking Underground Storage Tanks (LUST) / Spills, Leaks, Investigations and Cleanups (SLIC): A list that is maintained by Regional Water Quality Control Boards.
 - Local Counties and Cities maintain lists for hazardous substances cleanup sites and leaking underground storage tanks.
 - The United States Army Corps of Engineers, 911 Wilshire Boulevard, Los Angeles, California, 90017, (213) 452-3908, maintains a list of Formerly Used Defense Sites (FUDS).
- 3) The EIR should identify the mechanism to initiate any required investigation and/or remediation for any site that may be contaminated, and the government agency to provide appropriate regulatory oversight. If hazardous materials or wastes were stored and used at the site, a Site Assessment could determine if a release had occurred. If so, further studies should be carried out to delineate the nature and extent of the contamination, and the potential threat to public health and/or the environment should be evaluated. It may be necessary to determine if an expedited response action is required to reduce existing or potential threats to public health or the environment. If no immediate threat exists, the final remedy should be implemented in compliance with state regulations and policies.

Mr. Ted Anasis
October 20, 2005
Page 3

- 4) All environmental investigations, sampling and/or remediation for the site should be conducted under a Workplan approved and overseen by a regulatory agency that has jurisdiction to oversee hazardous substance cleanup. The findings of any investigations, including Phase I and II investigations should be summarized in the document. All sampling results in which hazardous substances were found should be clearly summarized in a table.
- 5) Proper investigation, sampling and remedial actions overseen by a regulatory agency, if necessary, should be conducted at the site prior to the new development or any construction. All closure, certification or remediation approval reports by these agencies should be included in the EIR.
- 6) If any property adjacent to the project site is contaminated with hazardous chemicals, and if the proposed project is within 2,000 feet from a contaminated site, then the proposed development may fall within the "Border Zone of a Contaminated Property." Appropriate precautions should be taken prior to construction if the proposed project is within a Border Zone Property.
- 7) If buildings or other structures, asphalt or concrete-paved surface areas are being planned to be demolished, an investigation would be conducted for the presence of lead-based paints or products, mercury, and asbestos containing materials (ACMs). If lead-based paints or products, mercury or ACMs were identified, proper precautions would be taken during demolition activities. Additionally, the contaminants should be remediated in compliance with California environmental regulations and policies.
- 8) The project construction may require soil excavation and soil filling in certain areas. Appropriate sampling is required prior to disposal of the excavated soil. If the soil is contaminated, properly dispose of it rather than placing it in another location. Land Disposal Restrictions may be applicable to these soils. Also, if the project proposes to import soil to backfill the areas excavated, proper sampling should be conducted to make sure that the imported soil is free of contamination.
- 9) Human health and the environment of sensitive receptors should be protected during the construction or demolition activities. A study of the site overseen by the appropriate government agency should be conducted to determine if there are, have been, or will be, any releases of hazardous materials that may pose a risk to human health or the environment.

Mr. Ted Anasis
October 20, 2005
Page 4

- 10) If it is determined that hazardous wastes are, or will be, generated by the proposed operations, the wastes must be managed in accordance with the California Hazardous Waste Control Law (California Health and Safety Code, Division 20, chapter 6.5) and the Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Division 4.5).
- 11) If it is determined that hazardous wastes are or will be generated and the wastes are (a) stored in tanks or containers for more than ninety days, (b) treated onsite, or (c) disposed of onsite, then a permit from DTSC may be required. If so, the facility should contact DTSC at (714) 484-5423 to initiate pre application discussions and determine the permitting process applicable to the facility.
- 12) If it is determined that hazardous wastes will be generated, the facility should obtain a United States Environmental Protection Agency Identification Number by contacting (800) 618-6942.
- 13) Certain hazardous waste treatment processes may require authorization from the local Certified Unified Program Agency (CUPA). Information about the requirement for authorization can be obtained by contacting your local CUPA.
- 14) If the project plans include discharging wastewater to storm drain, you may be required to obtain a wastewater discharge permit from the overseeing Regional Water Quality Control Board (RWQCB).
- 15) If during construction/demolition of the project, the soil and/or groundwater contamination is suspected, construction/demolition in the area would cease and appropriate health and safety procedures should be implemented.
- 16) If the site was used for agricultural production, onsite soils and groundwater might contain pesticides, agricultural chemical, organic waste or other related residue. Proper investigation, and remedial actions, if necessary, should be conducted under the oversight of and approved by a government agency at the site prior to construction of the project.

DTSC provides guidance for cleanup oversight through the Voluntary Cleanup Program (VCP) for other parties. For additional information on the VCP, please visit DTSC's web site at www.dtsc.ca.gov.

Mr. Ted Anasis
October 20, 2005
Page 5

If you have any questions regarding this letter, please contact Ms. Teresa Hom, Project Manager, at (714) 484-5477 or email at thom@dtsc.ca.gov.

Sincerely,



Greg Holmes
Unit Chief
Southern California Cleanup Operations Branch - Cypress Office

cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044

Mr. Guenther W. Moskat, Chief
Planning and Environmental Analysis Section
CEQA Tracking Center
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806

CEQA# 1212


NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
 SACRAMENTO, CA 95814
 (916) 653-4082
 (916) 657-5390 - Fax

October 24, 2005

Mr. Ted Anasis
 San Diego County Regional Airport Authority
 P.O. Box 82776
 San Diego, CA 92138-2776

Re: NOP: San Diego International Airport Master Plan

SCH# 2005091105

Dear Mr. Anasis:

Thank you for the opportunity to comment on the above-referenced document. In order to adequately identify and mitigate project-related impacts on cultural resources in accordance with the CEQA Guidelines (15063 (d) (3)), the Commission recommends that you provide evidence that all of the following actions be taken:

- Contact the appropriate California Historic Resources Information Center for a record search. The record search will determine:
 - If a part or all of the area of project effect (APE) has been previously surveyed for cultural resources.
 - If any known cultural resources have already been recorded on or adjacent to the APE.
 - If the probability is low, moderate, or high that cultural resources are located in the APE.
 - If a survey is required to determine whether previously unrecorded cultural resources are present.
- If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure.
 - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological information center.
- Contact the Native American Heritage Commission (NAHC) for a Sacred Lands File search of the project area and information on tribal contacts in the project vicinity who may have additional cultural resource information.
 - Please provide U.S.G.S. location information for the project site, including Quadrangle, Township, Section, and Range.
 - We recommend that you contact all tribes listed on the contact list to avoid the unanticipated discovery of sensitive Native American resources after the project has begun.
- Lack of surface evidence of archeological resources does not preclude their subsurface existence.
 - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5 (f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
 - Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.
- Lead agencies should include provisions for discovery of Native American human remains or cemeteries in their mitigation plans. Health and Safety Code §7050.5 and Public Resources Code §15064.5 (e) and §5097.98 mandate procedures to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.
- Lead agencies should consider avoidance, as defined in Section 15370 of the CEQA Guidelines, when significant cultural resources are discovered during the course of project planning.

Please feel free to contact me at (916) 653-6251 if you have any questions.

Sincerely,


 Carol Gaubatz
 Program Analyst

RECEIVED

OCT 31 2005

CC: State Clearinghouse

PLANNING DEPT. #44



401 B Street, Suite 800
 San Diego, CA 92101-4231
 (619) 699-1900
 Fax (619) 699-1905
 www.sandag.org

October 12, 2005

File Number 3000600

Mr. Ted Anassis, AICP
 San Diego County Regional Airport Authority
 P. O. Box 82776
 San Diego, CA 92138-2776

Dear Mr. Anassis:

This letter is in response to the Notice of Preparation of a Draft Environmental Impact Report (EIR) for the San Diego International Airport Master Plan. Our comments reflect the need to analyze the impacts of the master plan on transit services and to consider alternative means of serving airport users with enhanced transit services.

The EIR should examine how higher-speed transit could access the terminal areas from other points in the region. Currently, the terminals are served by the Airport Flyer (Route 992), which provides relatively frequent and convenient service from downtown. The Flyer, with a signal priority system, is one way of enhancing regional connections to the airport from downtown. Other transit options that should be considered are a new or relocated trolley station on the north side of the airport, connected with an on-airport transport system (monorail, bus, or other) connecting directly to the terminals, and a Bus Rapid Transit route from the Old Town Transit Center that would use dedicated lanes, signal priority, and queue jumpers to gain direct access to the terminals. To successfully work as a ground access option for an expanded airport, this latter option would require the addition of structured parking at the Old Town Transit Center to accommodate demand. The Airport Authority should consider the feasibility and benefit of additional parking at Old Town to address its ground access needs.

Thank you for the opportunity to comment on the NOP. We look forward to working with you as the Master Plan progresses.

Sincerely,

TONI BATES
 Division Director of Transit Planning

TB/MK/gkr

RECEIVED

OCT 14 2005

PLANNING DEPT. #44

MEMBER AGENCIES

Cities of
 Carlsbad
 Chula Vista
 Coronado
 Del Mar
 El Cajon
 Encinitas
 Escondido
 Imperial Beach
 La Mesa
 Lemon Grove
 National City
 Oceanside
 Poway
 San Diego
 San Marcos
 Santee
 Solana Beach
 Vista
 and
 County of San Diego

ADVISORY MEMBERS

Imperial County
 California Department
 of Transportation
 Metropolitan Transit System
 North San Diego County
 Transit Development Board
 United States
 Department of Defense
 San Diego
 Unified Port District
 San Diego County
 Water Authority
 Mexico



THE CITY OF SAN DIEGO

October 19, 2005

RECEIVED

OCT 19 2005

Mr. Ted Anasis, AICP
Manager, Airport Planning
San Diego County Regional Airport Authority
Post Office Box 82776
San Diego, CA 92138-2776

PLANNING DEPT. #44

Dear Mr. Anasis:

Subject: City of San Diego Review and Comment on the Notice of Preparation of a Draft Environmental Impact Report for the San Diego International Airport Master Plan Project

The City of San Diego appreciates the opportunity to review the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the San Diego International Airport (SDIA) Master Plan Project and respectfully offers the following comments and recommendations for your consideration.

It is the understanding of the City that the San Diego County Regional Airport Authority (SDCRAA) prepared both constrained and unconstrained forecasts of aviation activity through 2030 that could be used for facilities planning and in evaluating airport improvements. The City is unclear how the proposed project will affect existing and forecasted Community Noise Equivalent Level (CNEL) contours. The City is recommending that the DEIR specifically address which forecast will be used to determine the CNEL contours up to the year 2015 and how this will affect the continued implementation of the Quieter Home Program. As a noise mitigation measure for the Airport Master Plan (AMP), the City is recommending that SDCRAA consider installing additional remote monitoring sites surrounding SDIA to further improve noise monitoring and flight track data.

It is the understanding of the City that the proposed project will expand Terminal 2 West with 10 new jet gates and approximately 310,000 new square feet. It is foreseeable that the project will create demand for additional vehicle trips to SDIA. The City is recommending that the DEIR address potential traffic and circulation impacts to regional and local serving transportation facilities and on and off-site parking demand and supply. As a potential traffic/circulation mitigation measure for the AMP, the City is recommending that SDCRAA consider improving multimodal serving facilities at and to SDIA. This could include, but is not limited to improving direct transit access to SDIA,



Planning Department

202 C Street, MS 5A • San Diego, CA 92101-3865
Tel (619) 236-6479 Fax (619) 236-6478

Page 2

Mr. Ted Anasis, AICP

October 19, 2005

preferential access and curb front pick up and drop off for high occupancy vehicles, and a commuter program for airport employees.

We look forward to having a continued opportunity to discuss our recommendations with SDCRAA staff. If there are any questions, please contact Tait Galloway, Associate Planner at (619) 533-4550.

Sincerely,



 Keith Greer
Deputy Director

KG/tg

cc: Bob Manis, Assistant Deputy Director, Development Services
Nancy Bragado, Acting Program Manger, Planning
Samir Hajjiri, Senior Traffic Engineer, Planning
Linda Marabian, Senior Traffic Engineer, Planning
Steve Celniker, Senior Traffic Engineer, Planning/SANDAG
Miriam Kirshner, Senior Planner, SANDAG
Kenneth Teasley, Senior Planner, Development Services
Tait Galloway, Associate Planner, Planning

October 19, 2005

RECEIVED

OCT 21 2005

PLANNING DEPT. #44

Mr. Ted Anasis, AICP
Manager, Airport Planning
San Diego County Regional Airport Authority
PO Box 82776
San Diego CA 92101-2776

Subject: Comments on Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the San Diego International Airport Master Plan

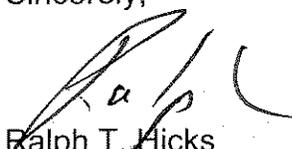
Dear Ted,

Thank you for the opportunity to comment on the above-referenced document. The Port of San Diego (Port) is particularly interested in any potential environmental impacts on tidelands surrounding the Airport boundaries that are within the Port's jurisdiction. To that end, the Port requests that the Airport Authority address the following comments in the DEIR:

- In the discussion of cumulative impacts, please include appropriate projects adjacent to the Airport and located on Port tidelands, such as on Harbor Island and the Embarcadero area. If warranted, the Port would welcome the opportunity to meet with the Airport Authority to discuss these projects.
- In the project description, please provide more detail on, and anticipated timing of, the land uses/project components that will be analyzed at a programmatic level in the DEIR. Please also note that the former Sky Chefs parcel is still within the Port's ownership and jurisdiction.
- In the project description, please provide more discussion on any possible improvements (including mitigation measures) adjacent to the Airport that may be located on lands within the Port's land use and coastal permitting jurisdiction.

The Port looks forward to reviewing the DEIR when it is available. Please include the Port's Land Use Planning Department on your distribution list for the DEIR. If you would like to meet to further discuss these comments, or if the Port can be of any assistance, please contact Wileen Manaos, Planner, at (619) 686-6282.

Sincerely,



Ralph T. Hicks
Director, Planning

cc: Dan Strum



Airport Parking

3550 Kettner Blvd.
San Diego, CA 92101

September 23, 2005

(619) 295-6659
295-2832
FAX 287-8957

San Diego County Regional Airport Authority
Attn: Mr. Ted. Anasis
P.O. Box 82776
San Diego, CA 92138-2776

RECEIVED

SEP 26 2005

RE: Comments on Scope of Draft EIR

PLANNING DEPT. #44

Dear Mr. Anasis:

Our representatives provided feedback and comments at the September 20, 2005 2:00 p.m. public scoping meeting regarding the Airport Master Plan update. We are also submitting our comments to you in letter format for the public record.

First off, we want to thank the Airport Authority for providing the public with four opportunities to learn about the draft EIR for the Airport Master Plan and to provide you with feedback during those four meetings.

After reviewing the draft EIR materials, and your PowerPoint presentation during the public scoping meeting, these are our questions and concerns:

Economic and Jobs impact

In the draft EIR PowerPoint presentation under the Potentially Adverse Effects Anticipated section, Economics and Jobs/Housing were not factored in, but they should be in the EIR. For example, the proposed Terminal 2 parking structure might have an Economic and Jobs impact on the off-site parking industry.

Proposed Terminal 2 parking structure

There was not enough detailed information on this proposal. All that was mentioned was that it might be two or four floors.

- We would like to know how many spaces are being proposed?
- What the demand for parking will be over the next ten, twenty and thirty years?
- What are the proposed uses for excess parking capacity until demand catches up with supply?
- Does the Airport Authority plan on expanding its parking business utilizing the additional spaces at the proposed Terminal 2 parking structure?

Continued

Comments on Scope of Draft EIR

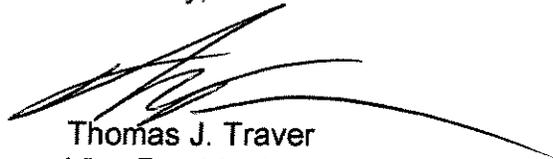
Passenger to parking space formula

Is there a passenger to parking space formula for airports? How many parking spaces will San Diego International Airport need to serve the anticipated growth in passenger traffic?

In summary, we do want to express that it is a challenge to provide thoughtful and useful feedback on a draft EIR that is missing important details on issues like the proposed Terminal 2 parking structure and the impact of the Airport Master Plan on Harbor Drive and the surface transportation network.

We look forward to hearing your responses to our questions and concerns, and those of others expressed during the process.

Sincerely,



Thomas J. Traver
Vice President
Park & Ride Airport Parking

October 20, 2005

Airport Planning
San Diego County Regional Airport Authority
P.O. Box 82776
San Diego, CA 92138-2776

RECEIVED

OCT 20 2005

Re: NOP for Master Plan

PLANNING DEPT. #44

Mr. Anasis,

The Peninsula Community Planning Board is an interested party in the upcoming EIR process for the Airport Master Plan. We would like to be consulted on the following impact areas and mitigation plans as they directly affect our constituents:

- A. Aircraft Noise from departing and arriving flights as the airport increases the frequency and average size of planes using Lindbergh Field.
- B. Overflight noise, safety issues and air pollution from flights departing and arriving over the Peninsula. This is an ongoing concern when we regularly witness flights that are not following the 275 departure path, often because of 'Separation' issues. What specific mitigation measures will be taken to reduce the potential safety problems as more aircraft traverse a limited corridor?
- C. Increasing air pollution from aircraft and ground vehicles serving the airport, including the increasing number of passengers and their vehicles. *"Toxics"*
- D. Traffic congestion surrounding the airport, including the construction equipment during the expansion.
- E. Ongoing Traffic congestion as the airport increases the number of passengers served. It should be obvious that as the Harbor Drive area on the eastern side becomes congested, there will be a greater number of vehicles departing to the west, further compounding our already struggling traffic problems.
- F. Late night and early morning noise from flights that are arriving, performing missed approaches and operating illegally during the curfew.
- G. Construction noise and pollution during the expansion. What particular steps will be taken when the known polluted area west of the runway is excavated?

It has become obvious that the Airport Authority is intent on increasing the operation of Lindbergh Field to its maximum capacity, limited only by the single runway. In all prior expansions there has been no accommodation to the impacted community and the increased environmental burden placed on these residents. This will not be tolerated in this round of construction. We would sincerely appreciate a more thoughtful and comprehensive plan to mitigate the burden of Noise, Air Pollution, Safety and Traffic Congestion. *(In the Coastal Region!)*

*Cynthia Conger, Chair,
Peninsula Community Planning Bd.*



SanNoise
P.O. Box 70194
San Diego, CA 92167

October 20, 2005

Airport Planning
San Diego County Regional Airport Authority
P.O. Box 82776
San Diego, CA 92138-2776

RECEIVED

OCT 24 2005

PLANNING DEPT. #44

Re: NOP for Master Plan

Mr. Anasis,

I represent a community organization named SANNoise.org and would like to register as an organization and as an individual in the upcoming Master Plan EIR. My contact information is as follows:

Lance Murphy
PO Box 70194
San Diego, CA 92167

Phone 619.892.5003
Email: sannoise@cox.net

In particular, I am most interested in noise issues related to the Master Plan and its impact on the residents of the area surrounding Lindbergh Field. Assuming that a primary goal of the Master Plan is to increase the capacity of the Airport, its terminals and ground transportation, how will the following items be mitigated:

1. Increased noise from all departing flights – in general terms, the flights are expected to be more frequent, thus increasing the Noise Impact Area and adjoining properties.
2. Increased frequency of off-course departures as more opportunities for ‘separation problems’ occur.
3. Increased frequency of Curfew departures as more flights are scheduled around the Curfew times.
4. Increased frequency of late night (during curfew) arrivals and missed approaches as more flights are landing during the late night period.
5. Increased frequency of non-runway missed approaches as more flights are in competition for the single runway. Particularly a problem when a departing flight has not cleared the departure airspace when an arriving flight needs to perform a missed approach.

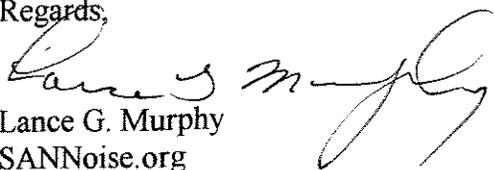


SanNoise
P.O. Box 70194
San Diego, CA 92167

6. Inability of the 'Quiet Homes' project to keep pace with the expanding 70db impact area, let alone the 65db zone that is also growing rapidly from homes that were previously only in a 60db zone – or less.

It should be apparent that the airport will be making a considerable impact on the community and has taken little or no proactive actions to mitigate without considerable pressure from the impacted residents. This sort of reactive accommodation will not be sufficient in this expansion phase and will not be tolerated further.

Regards,


Lance G. Murphy
SANNoise.org

LUCE FORWARD
 ATTORNEYS AT LAW • FOUNDED 1873
 LUCE, FORWARD, HAMILTON & SCRIPPS LLP

STEPHEN L. MARSH, PARTNER
 DIRECT DIAL NUMBER 619.699.2418
 DIRECT FAX NUMBER 619.645.5363
 EMAIL ADDRESS smارش@luce.com

600 West Broadway
 Suite 2600
 San Diego, CA 92101
 619.236.1414
 619.232.8311 fax
 www.luce.com

RECEIVED

OCT 26 2005

18158-00020

PLANNING DEPT. #44

October 21, 2005

San Diego County Regional Airport Authority
 Attention: Mr. Ted Anasis
 Post Office Box 82776
 San Diego, CA 92138

Re: *Comments on the Notice of Preparation of Draft Environmental Impact Report for the San Diego International Airport Master Plan*

Dear Mr. Anasis:

I am writing on behalf of Jimsair Aviation Services, Inc. ("Jimsair") to comment on the Notice of Preparation ("NOP") of the Draft Environmental Impact Report ("EIR") for the San Diego International Airport Master Plan received on September 21, 2005. As an interested organization, current tenant of the Airport and a stakeholder, Jimsair has the following comments:

1. We recommend that the Draft Environmental Impact Report discuss potential impacts resulting from each of the alternative proposed uses of the North Area of the airport, including Cargo, Ground Transportation and General Aviation/Corporate Aviation Fixed Based Operations ("FBO"), separately so that the relative contributions of the impacts of each to the overall impacts can be fully analyzed. It is important that the report not assume that one type of use will be more impactful than another. To do so may open the EIR results to challenge or result in the need for further extensive environmental review if the allocation of uses change.
2. Jimsair urges you not to defer analysis of project-specific impacts of the North Area Airport Support uses because, where impacts can reasonably be forecast, CEQA requires that they be considered.
3. To the extent that any specific projects or proposed projects are contemplated or likely to be approved or adopted for the North Area of the airport, they should each be included in detail in the analysis of the Draft EIR to ensure that potential cumulative effects are not understated.

San Diego County Regional Airport Authority

Attention: Mr. Ted Anasis

October 21, 2005

Page 2

4. The Draft EIR should consider all reasonably likely project proposals for the Airport Support area, including competing alternative proposals, because review now may obviate the need for further environmental review if (a) the alternative plans are analyzed now and (b) the projects ultimately adopted are sufficiently consistent with those reviewed.
5. Even where multiple options for specific uses are being considered, but have not yet been chosen, each should be discussed in sufficient detail so as to obviate the need for further environmental review on a project-specific basis, thus, streamlining the review process.
6. The Draft EIR should note the potential positive impacts of General Aviation/Corporate Aviation on the regional economy as a potential overriding effect of any potential negative impacts on other categories.
7. The Draft EIR should include an analysis of projected expansion of FBO facilities and alternatives, including project-specific information where available. For example, Jimsair's previously proposed construction and improvements to the corporate aviation hangars and overnight parking spaces could have a net positive impact by decreasing the number of airport general aviation operations.

Jimsair appreciates the opportunity to comment on this NOP and looks forward to reviewing the Draft EIR. Please contact me if you have any questions regarding these comments. Please forward a copy of the Draft EIR to my attention for future review.

Very truly yours,



Stephen L. Marsh

of

LUCE, FORWARD, HAMILTON & SCRIPPS LLP

SLM:rj

cc: Mr. Phil Bracamonte

Lee Burdick, Esq.

2119511.1



October 21, 2005

Mr. Theodore Anasis, AICP
 San Diego County Regional Airport Authority
 P. O. Box 82776
 San Diego, CA 92138-2776

RE: San Diego International Airport Master Plan

Dear Mr. Anasis:

Thank you for the opportunity to comment on the scope of the Environmental Impact Report for the San Diego International Airport Master Plan. As master developer of the redevelopment of the former Naval Training Center, now known as Liberty Station, we have reviewed the Notice of Preparation and make the following comments:

1. We agree with the environmental issues identified in the Notice of Preparation. Of particular concern to us is the potential for increase in average noise that will shift the location of the CNEL contour lines.
2. The adoption of the Master Plan will not require that the City of San Diego modify any existing planning approvals at NTC (Zoning, Precise Plan/LCP, Master Planned Development Permit, etc.).
3. The adoption of the Master Plan will not create any right or responsibility for the Airport Authority to review any discretionary or ministerial permits at NTC except as currently allowed by the Airport Approach Overlay Zone and the Precise Plan/LCP Appendix "A" - Use Restrictions for the Runway Protection Zone.

We appreciate the continuing dialogue with the Airport Authority staff concerning Liberty Station.

Sincerely,

McMillin-NTC, LLC

Kathleen Riser
 Vice President-Project Management

cc: Barbara E. Lichman, Ph.D.

1712 Granada Ave.
San Diego, CA 92102

RECEIVED

September 21, 2005

SEP 26 2005

PLANNING DEPT. #44

Mr. Ted Anasis
AICP
San Diego County Regional Airport Authority
P.O. Box 82776
San Diego, CA 92138-2776

Re: Notice of Preparation

Dear Mr. Anasis:

I noted from the San Diego County Regional Airport Authority's website that an Environmental Impact Report (EIR) will be prepared for the proposed land use and project elements (projects) for the San Diego International Airport (SDIA). Several issues need to be addressed in the EIR that impact the quality of life and enjoyment of property by the surrounding residential areas of SDIA. I am a resident east of the airport facility and a member of the Greater Golden Hill Community Development Corporation. To date, the Golden Hill area has been neglected by the Authority and its predecessor agency in addressing noise and other impacts of airport operations on this highly urbanized and diverse community.

The proposed projects will facilitate generation of increased passenger and air cargo operations creating more aircraft landings and take offs, generating additional noise impacts, affect air quality, traffic and circulation, impact historical resources, and increase the area of incompatible land uses around airport facility. The potential environmental effects of these issues must be addressed in the EIR and mitigation measures determined.

In 1972, the County of San Diego designed SDIA is a noise problem airport. For a designated noise problem airport, such as SDIA, the noise impact area is defined by state law as the area within the airport's 65dB CNEL. The 2003 Annual Contours of Aircraft Community Noise Equivalent Level (CNEL) obtained from the Authority's website is contained as an attachment. Within the 65 dB CNEL contour are a significant amount of incompatible land uses such as residences, public and private schools, hospitals, convalescent home, churches and other places of worship. The Golden Hill Community Plan (adopted by the City of San Diego 1988) identified the noise generated by Lindbergh Field (now SDIA) as a source of adverse noise conditions imposed on the community. The implementation of the proposed projects will have negative effects on the highly developed and urbanized area beneath aircraft take-off and landings.

Issues the EIR must address are:

What will be the increased noise impact area with the implementation of the projects?

How will SDIA mitigate the increased aggravation of noise generated by additional aircraft operations (both take off and landing) facilitated by the proposed projects?

How will SDIA address the noise and vibration impacts to historically designated properties, neighborhoods and potential historic districts in the Golden Hill area imposed by the implementation of the projects? (see Historic and Cultural Resources, Map Two, City of San Diego, February 11, 2004 map enclosed)

How will the projects' adverse impacts affect under-represented and low and lower-income households that reside in the Golden Hill within the impacted area? (See Population and Housing Estimates, Golden Hill Community Planning Area, July 2004, SANDAG)

How will SDIA address these impacts?

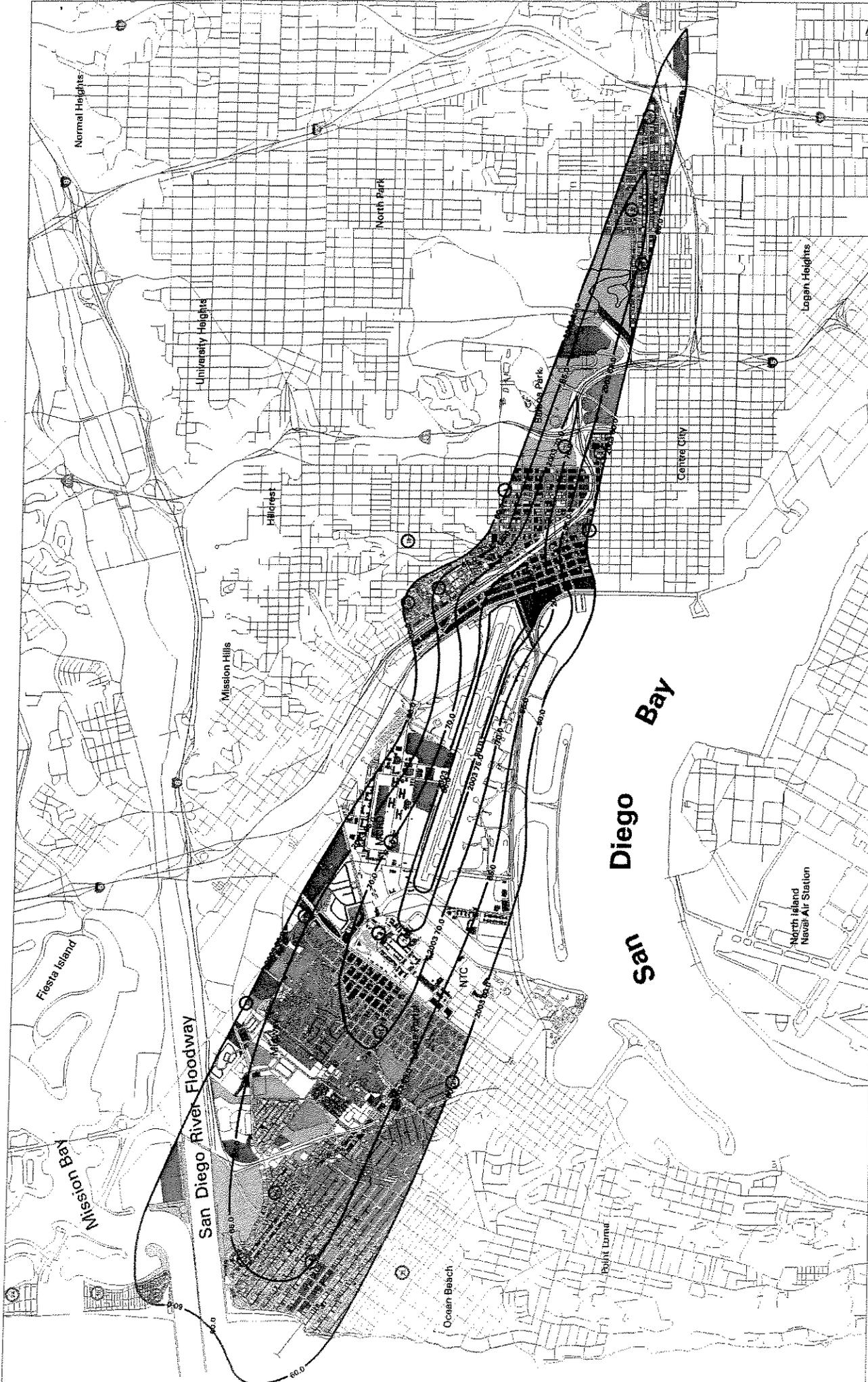
These, as well as other environmental affects of the projects must be detailed and mitigation efforts determined in the preparation of the EIR.

Sincerely,



Richard S. Phillips

C: Greater Golden Hill Community Development Corporation



DATE: 10/20/2003	PROJECT: 2003 ANNUAL CONTOURS
DATE: 10/20/2003	PROJECT: 2003 ANNUAL CONTOURS
DATE: 10/20/2003	PROJECT: 2003 ANNUAL CONTOURS
DATE: 10/20/2003	PROJECT: 2003 ANNUAL CONTOURS

SAN DIEGO COUNTY REGIONAL AIRPORT AUTHORITY
2003 ANNUAL CONTOURS, IN DECIBELS, OF AIRCRAFT
COMMUNITY NOISE EQUIVALENT LEVEL (CNEL)
 January 7, 2003 Through December 31, 2003
 Proprietary Information: Access to and use of this information is restricted by a nondisclosure agreement. No sale, transfer, license, or assignment of this information is permitted.

DATE: 10/20/2003	PROJECT: 2003 ANNUAL CONTOURS
DATE: 10/20/2003	PROJECT: 2003 ANNUAL CONTOURS
DATE: 10/20/2003	PROJECT: 2003 ANNUAL CONTOURS
DATE: 10/20/2003	PROJECT: 2003 ANNUAL CONTOURS



Community Noise Impact Area (CNIA)* = 13 sq. mi.
 *CNIA = Area within the 65+ dB Contour
 Military Noise Impact Area = 0.14 sq. mi.
 Within NMACU & within Noise Hospital
 Total Population within CNIA = 25,989
 Total Dwelling Units within CNIA = 13,089

- Remote Monitoring Station
- Churches
- Commercial/Cultural
- Residential, Single Family
- Residential, Multi-Family
- Military
- Hospitals/Clinics
- Mitigated Residential/Airport Easement
- Mitigated Public/Private Schools
- Parks
- Moats



Map ONE

Greater Golden Hill

Existing Conditions Land Use

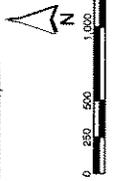
Legend

- Single Family Residential
- Multi-Family Residential
- Group Quarters
- Mobile Home Park
- Commercial
- Industrial, Warehouse/Storage
- Communication Utilities, Transmission Related
- Institutional
- Military Use
- Schools
- Park Open Space
- Private Recreation
- Facilities of Water
- Undeveloped

Map ONE - Greater Golden Hill - Existing Conditions Land Use. This map shows the existing land use conditions for the Greater Golden Hill area. The map is based on the City of San Diego's Land Use Map and the City's General Plan. The map shows the following land use conditions:

- Single Family Residential
- Multi-Family Residential
- Group Quarters
- Mobile Home Park
- Commercial
- Industrial, Warehouse/Storage
- Communication Utilities, Transmission Related
- Institutional
- Military Use
- Schools
- Park Open Space
- Private Recreation
- Facilities of Water
- Undeveloped

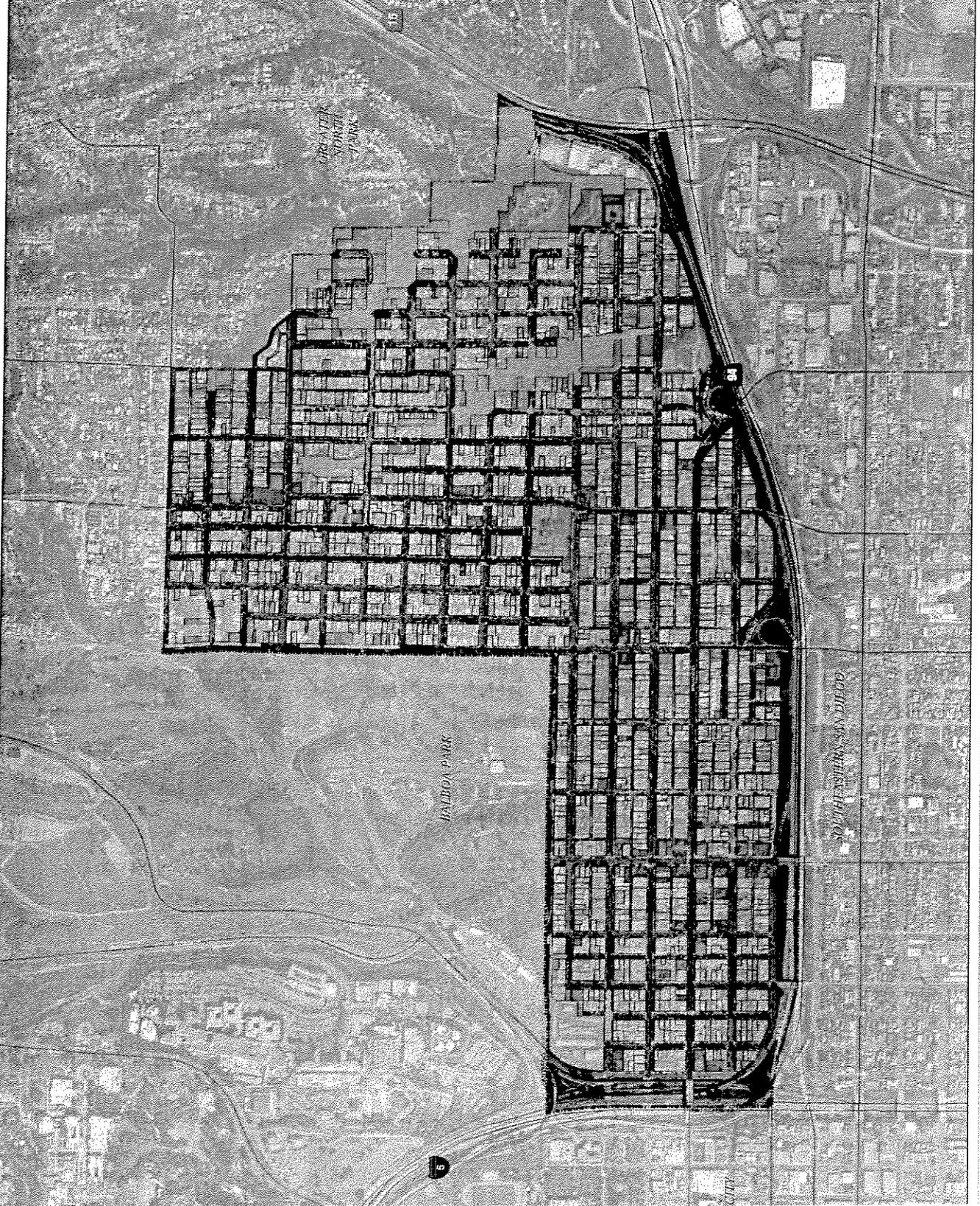
All land use designations are based on the City of San Diego's Land Use Map and the City's General Plan. The map is for informational purposes only and does not constitute a guarantee or warranty of any kind. The City of San Diego is not responsible for any errors or omissions on this map.



City of San Diego
Planning Department
February 11, 2004

A-117

City of San Diego
Planning Department
February 11, 2004



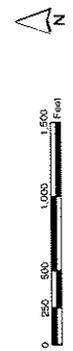
Greater Golden Hill

Existing Conditions

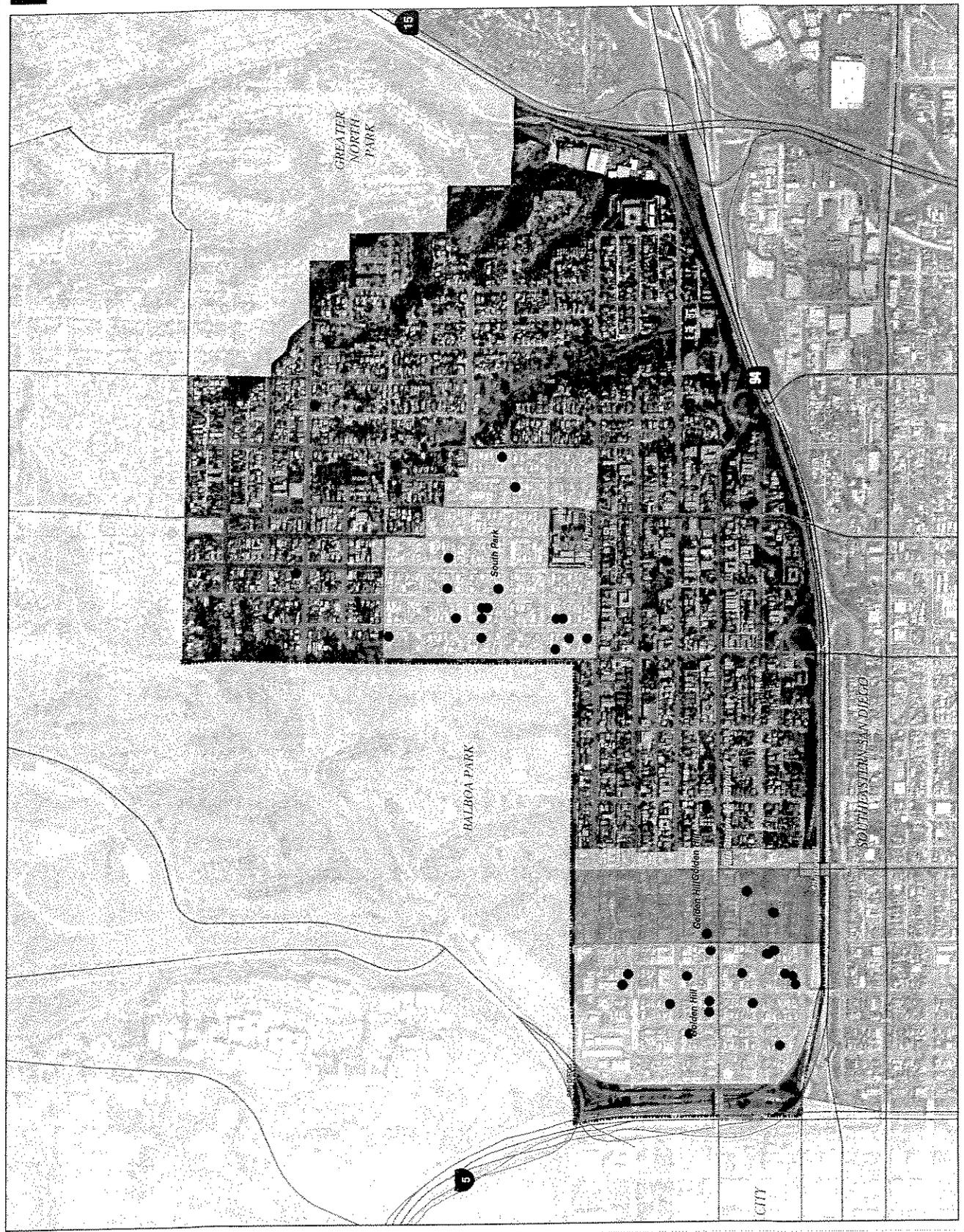
Historic and Cultural Resources

Legend

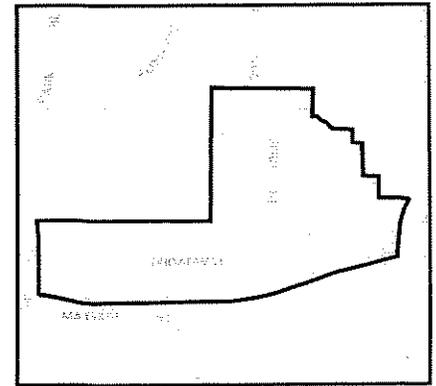
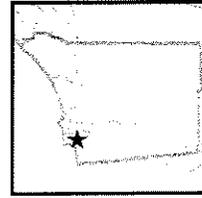
- Designated Historic Landmarks
- Existing Historic Districts
- Potential Historic Districts
- Cultural Districts
- Public Art or Cultural Feature



City of San Diego
 Planning Department
 February 11, 2004



POPULATION AND HOUSING ESTIMATES
Golden Hill Community Planning Area
City of San Diego



POPULATION AND HOUSING (2000 and 2004)

	April 1	January 1	2000 to 2004 Change	
	2000 Census	2004	Numeric	Percent
Total Population	17,989	18,684	695	3.9%
Household Population	17,517	18,099	582	3.3%
Group Quarters Population	472	585	113	23.9%
Total Housing Units	7,369	7,386	17	0.2%
Single Family	2,817	2,827	10	0.4%
Multiple Family	4,545	4,552	7	0.2%
Mobile Home and Other	7	7	0	0.0%
Occupied Housing Units	6,984	7,001	17	0.2%
Single Family	2,654	2,663	9	0.3%
Multiple Family	4,324	4,331	7	0.2%
Mobile Home and Other	6	7	1	16.7%
Vacancy Rate	5.2%	5.2%	0.0%	0.0%
Persons per Household	2.51	2.59	0.08	3.2%

HOUSEHOLD INCOME (real 1999 dollars, adjusted for inflation)

	April 1	January 1	2000 to 2004 Change	
	2000 Census	2004	Numeric	Percent
Households by Income Category				
Less than \$15,000	1,558	1,351	-207	-13.3%
\$15,000-\$29,999	1,887	1,780	-107	-5.7%
\$30,000-\$44,999	1,325	1,391	66	5.0%
\$45,000-\$59,999	773	852	79	10.2%
\$60,000-\$74,999	550	538	-12	-2.2%
\$75,000-\$99,999	419	534	115	27.4%
\$100,000-\$124,999	192	248	56	29.2%
\$125,000-\$149,999	139	163	24	17.3%
\$150,000-\$199,999	72	79	7	9.7%
\$200,000 or more	69	65	-4	-5.8%
Total Households	6,984	7,001	17	0.2%
Median Household Income				
Adjusted for inflation (1999 \$)	\$30,532	\$33,985	3,453	11.3%
Not adjusted for inflation (current \$)	\$30,532	\$37,949	7,417	24.3%

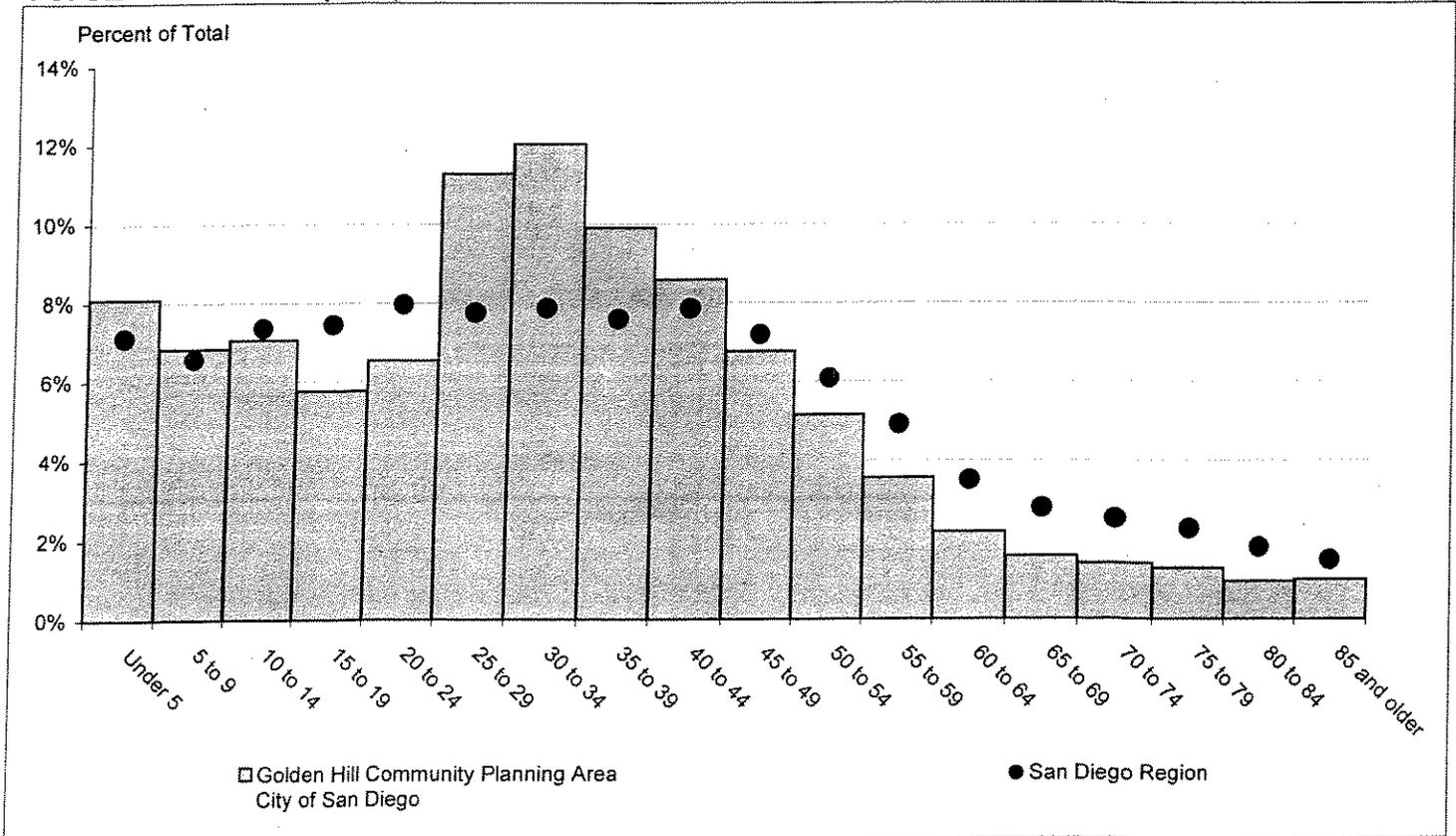
ADVISORY:

Caution should be taken when using data for small population groups, particularly at small levels of geography. Some 2000 Census data may not match information published by the U.S. Census Bureau for the following reasons: sample census data have been controlled to match 100 percent count (Summary File 1) data; and some minor adjustments were made (such as correcting the location of housing units that were erroneously allocated by the Census Bureau to roads and open space) to more accurately reflect the region's true population and housing distribution.

POPULATION BY GENDER AND AGE (2004)

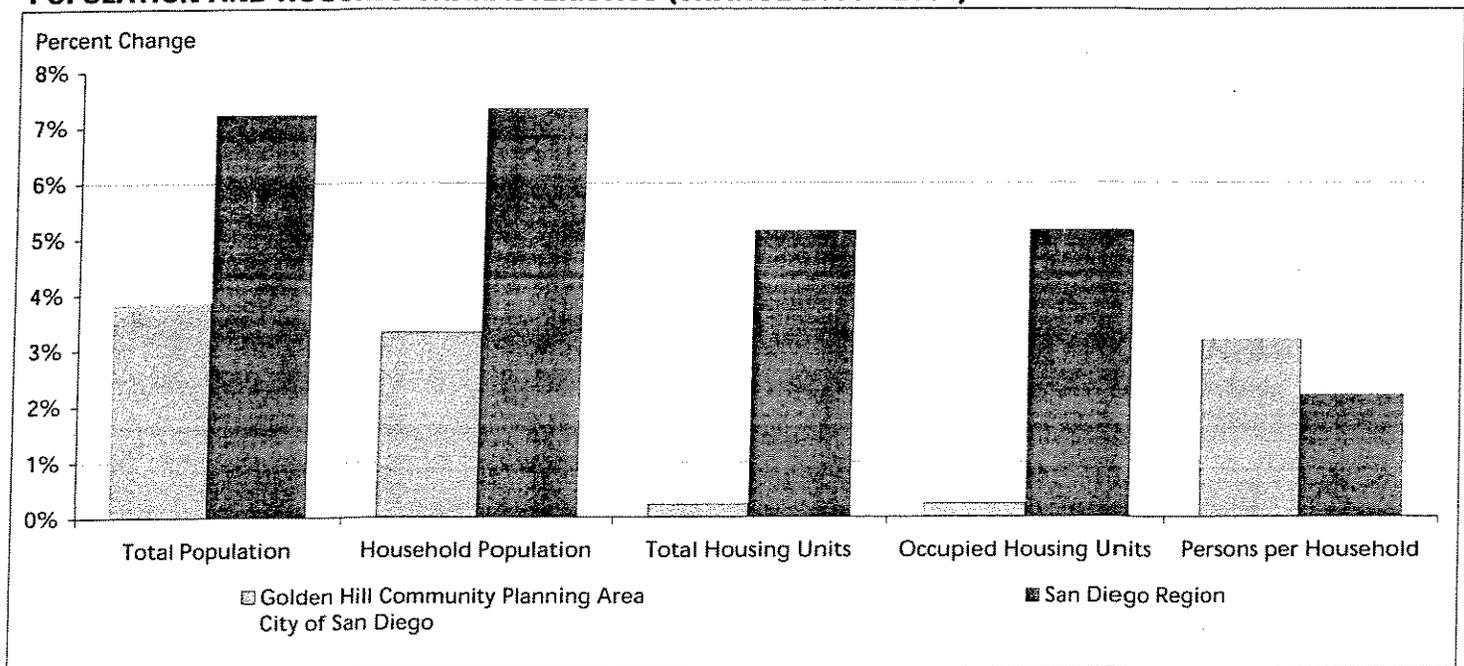
	Total	Male	Female	Percent Female
Total Population	18,684	9,515	9,169	49%
Under 5	1,513	683	830	55%
5 to 9	1,277	656	621	49%
10 to 14	1,320	686	634	48%
15 to 17	673	363	310	46%
18 and 19	405	222	183	45%
20 to 24	1,222	609	613	50%
25 to 29	2,104	1,080	1,024	49%
30 to 34	2,246	1,185	1,061	47%
35 to 39	1,848	1,002	846	46%
40 to 44	1,603	875	728	45%
45 to 49	1,264	686	578	46%
50 to 54	963	476	487	51%
55 to 59	666	305	361	54%
60 and 61	182	85	97	53%
62 to 64	229	109	120	52%
65 to 69	297	142	155	52%
70 to 74	264	110	154	58%
75 to 79	241	100	141	59%
80 to 84	179	65	114	64%
85 and older	188	76	112	60%
Under 18	4,783	2,388	2,395	50%
65 and older	1,169	493	676	58%
Median age	31.8	31.9	31.7	-

POPULATION BY AGE (2004)



POPULATION BY RACE, ETHNICITY AND AGE (2004)

	Non-Hispanic							
	Hispanic	White	Black	American Indian	Asian	Hawaiian & Pac. Isl.	Other	2 or More Races
Total Population	10,822	5,682	1,105	69	516	40	14	436
Under 5	1,064	298	74	4	25	2	2	44
5 to 9	1,006	160	57	2	19	2	1	30
10 to 14	1,073	131	68	3	18	1	2	24
15 to 17	535	78	31	2	12	0	1	14
18 and 19	303	59	20	0	9	1	0	13
20 to 24	944	167	55	4	24	1	1	26
25 to 29	1,333	558	89	3	72	1	2	46
30 to 34	1,302	709	86	6	90	8	1	44
35 to 39	970	675	79	15	48	7	4	50
40 to 44	685	652	150	19	41	11	0	45
45 to 49	484	593	109	9	34	5	0	30
50 to 54	336	488	94	1	16	0	0	28
55 to 59	245	334	48	0	24	0	0	15
60 and 61	79	79	14	0	8	0	0	2
62 to 64	94	108	16	0	9	0	0	2
65 to 69	117	125	26	0	23	0	0	6
70 to 74	91	105	43	1	14	1	0	9
75 to 79	77	125	19	0	14	0	0	6
80 to 84	54	91	21	0	11	0	0	2
85 and older	30	147	6	0	5	0	0	0
Under 18	3,678	667	230	11	74	5	6	112
65 and older	369	593	115	1	67	1	0	23
Median age (total)	26.8	40.0	39.6	38.5	34.4	37.9	25.0	32.4
Median age (male)	26.4	40.2	40.3	39.0	34.9	37.5	32.5	33.2
Median age (female)	27.3	39.9	37.3	38.3	33.9	38.8	16.5	31.8

POPULATION AND HOUSING CHARACTERISTICS (CHANGE 2000 - 2004)

From: Kathi Riser [kriser@mcmillin.com]
Sent: Friday, October 21, 2005 3:21 PM
To: Airport Planning
Cc: cal@calairlaw.com
Subject: SDIA Master Plan
Attachments: 2005.10.22.PDF

Attached please find our response to the Notice of Preparation.

Kathi Riser
619.794-1307

Effective May 9, 2005

New address: 2750 Womble Road, San Diego, CA 92106

New mailing address: P.O. Box 85104, San Diego, CA 92186-5104

New Telephone number: 619.794.1307

Fax (619.336.3027) and email (kriser@mcmillin.com) remain the same

RECEIVED

OCT 21 2005

PLANNING DEPT. #44

From: kathleenb@cox.net
Sent: Wednesday, October 19, 2005 11:51 AM
To: Airport Planning
Subject: Draft EIR for SDIA Master Plan

I am very distressed to learn of the proposed plan. I moved west of Nimitz Boulevard 17 years ago because there was very little airplane noise in that location. Over the last few years, the noise has become worse and worse. Only by extreme persistence is it possible to ascertain how and to whom to address complaints; then, complaints go unanswered or are referred to another person. The airport authority is not receptive to noise complaints or requests for information and should remedy this rather than planning any expansion of any sort, which will lead to more noise.

Kathleen Bush
1611 Willow Street
San Diego CA 92106-2126

RECEIVED

OCT 19 2005

PLANNING DEPT. #44

APPENDIX A

Part IV

Comments Received on May 2006 Draft EIR

**DRAFT EIR FOR AIRPORT MASTER PLAN EIR
COMMENTS RECEIVED**

A-127

AGENCY / LETTER SIGNED BY	DATE OF LETTER	DATE RECEIVED	VIA
FEDERAL AGENCIES			
United States Marine Corps Marine Corps Recruit Depot/Western Recruiting Region 1600 Henderson Avenue, Ste. 238 San Diego, CA 92140-50017 Col. D.W. Zautcke (619) 524-4381 - contact Major Frank McClintick frank.mcclintick@usmc.mil	09/14/06	09/18/06	US Mail
STATE AGENCIES			
State of California Governor's Office of Planning and Research State Clearinghouse and Planning Unit 1400 Tenth Street P.O. Box 3044 Sacramento, CA 95812-3044 Scott Morgan Senior Planner (916) 445-0613 - phone (916) 323-3018 - fax	05/22/06 (Notice of project forwarding to agencies)	05/26/06	US Mail
State of California Department of Toxic Substances Control Southern California Region 5796 Corporate Avenue Cypress, CA 90630 Greg Holmes Unit Chief, Southern California Cleanup Operations Branch - Cypress Office (714) 484-5471 - contact Joseph Kaslowski, Proj Mgr jkaslowski@dtsc.ca.gov	06/12/06	06/15/06	US Mail
State of California California Coastal Commission 45 Fremont, Ste. 2000 San Francisco, CA 94105-2219 Larry Simon Federal Consistency Coordinator (415) 904-5200 - phone (415) 904-5400 - fax	09/14/06	09/18/06	US Mail

**DRAFT EIR FOR AIRPORT MASTER PLAN EIR
COMMENTS RECEIVED**

A-129

AGENCY / LETTER SIGNED BY	DATE OF LETTER	DATE RECEIVED	VIA
ORGANIZATIONS			
Park & Ride 3550 Kettner Blvd. San Diego, CA 92101 Thomas J. Traver Vice President (619) 295-6659 or 295-2832 - phone (619) 287-8957 - fax	09/14/06	09/18/06	US Mail
Luce, Forward, Hamilton & Scripps LLP 600 West Broadway, Ste. 2600 San Diego, CA 92101-3372 (representing Jimsair) Stephen L. Marsh Partner (619) 699-2418 - phone (619) 645-5363 - fax	09/15/06	09/15/06 09/18/06	Fax US Mail
Fox & Sohagi, LLP 10960 Wilshire Boulevard, Ste. 1270 Los Angeles, CA 90024-3702 (representing San Diego Unified Port District) Margaret M. Sohagi (310) 444-7805 - phone (310) 444-7813 - fax	09/15/06	09/18/06 09/19/06	US Mail (copy to Thella Bowens) USPS Express Mail (orig to Airport Planning)
INDIVIDUALS			

ljt 9/18/06



UNITED STATES MARINE CORPS
 MARINE CORPS RECRUIT DEPOT/WESTERN RECRUITING REGION
 1600 HENDERSON AVENUE SUITE 238
 SAN DIEGO, CALIFORNIA 92140-50017

5090
 G4FAC

SEP 14 2006

Mr. Ted Anasis
 San Diego County Regional Airport Authority
 P.O. Box 82776
 San Diego, California 92138-2776

RECEIVED

SEP 18 2006

Dear Mr. Anasis,

Thank you for the opportunity to comment on the Draft Environmental Impact Report for the San Diego International Airport Master Plan. Our comments are provided below:

PLANNING DEPT. #44

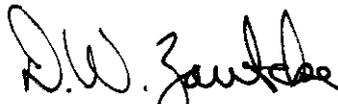
1. Lease for runway extension and Instrument Landing System (ILS) - 1.2.1. The runway extension and Instrument Landing System are located on parcels of Marine Corps Recruit Depot, San Diego (MCRDSD) property that are leased to the Airport Authority. Although the expiration date of the lease is beyond the 2015 projections, it should be included to be a more accurate reflection of Airport holdings.
2. California Environmental Quality Act (CEQA) document - 1.5 and 2.1.1. MCRDSD requests to be included as an interested party for review of the document when available.
3. Aviation forecast - 2.2.2 (Table 2-5). A chart that reflects past projections of annual passenger loading versus actual would be beneficial. A 1997 Master Plan working group document projected 2005 annual passenger loading to be 10,000,000 versus the actual amount of 17,372,521. The chart would allow the reviewer a more accurate picture of projections and potential impacts.
4. Development of the north side of the runway - 2.4.2 & 4.5.4. MCRDSD is concerned with any development proposed near Washington Street. The Washington Street gate is the main gate for visitor entry and tractor/trailer deliveries.
5. Capacity - 3.2.2. A key premise of the report is the assumption that the proposed actions will not increase capacity. That assumption is based upon the airlines current financial situation. Adding additional gates does make it possible for the airport to increase capacity if the fiscal situation changes.

6. Noise discussed as an average - 5.1.1. Disruption and irritation from aircraft typically come from spikes in noise. With more take-offs and landings, the frequency of the spikes increases. Averaging tends to camouflage the impact. Please address the frequency, duration and decibel level of the spikes in the final document.

7. California Advisory Handbook for Community and Military Compatibility Planning (Handbook). Several sections of the report highlight planning guidelines and community plans. Please include the Handbook in the report. It can be found on <http://www.opr.ca.gov/military.html>.

8. View corridor - Fig 5.95. The discussions and photographs of view corridors did not include Henderson Avenue. The proposed 10-gate extension will make the terminal visible on this primary street. This may constitute an adverse impact to the MCRDSD Historic District.

9. The point of contact for this matter is Major Frank McClintick at (619)524-4381 or frank.mcclintick@usmc.mil.



D. W. ZAUTCKE
Colonel USMC
By direction



Arnold Schwarzenegger
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Sean Walsh
Director

Memorandum

Date: May 22, 2006
To: All Reviewing Agencies
From: Scott Morgan, Senior Planner
Re: SCH # 2005091105
San Diego International Airport Master Plan

The State Clearinghouse forwarded the above-mentioned project to your agency for review on May 19, 2006 with incorrect review dates. Please make note of the following information for your files:

Review period began: May 19, 2006

Review period ends: September 18, 2006

We apologize for any inconvenience this may have caused. All other project information remains the same.

cc: Ted Anasis
San Diego County Regional Airport Authority
P.O. Box 82776
San Diego, CA 92138-2776

RECEIVED

MAY 26 2006

PLANNING DEPT. #44

**San Diego County Regional Airport Authority**

Mailing Address: P.O. Box 82776, San Diego, CA 92138-2776

Physical Address: 3225 N. Harbor Drive, San Diego, CA 92101

www.san.org**NOTICE OF AVAILABILITY****DRAFT ENVIRONMENTAL IMPACT REPORT
SAN DIEGO INTERNATIONAL AIRPORT MASTER PLAN**

PROJECT DESCRIPTION AND LOCATION: The San Diego County Regional Airport Authority has prepared a Draft Environmental Impact Report (EIR) for the Airport Master Plan (including the adoption of an airport land use plan and implementation plan) for San Diego International Airport located in the City of San Diego.

COPIES OF THE DRAFT EIR ARE AVAILABLE from the Airport Planning Department, San Diego County Regional Airport Authority, with offices located in the Commuter Terminal at San Diego International Airport, 3225 North Harbor Drive, San Diego, CA, during the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday. Copies of the Draft EIR may be downloaded at www.san.org under Environmental Review/CEQA. A copy of the same may also be requested by contacting Ted Anasis at (619) 400-2478.

A REVIEW PERIOD, during which the San Diego County Regional Airport Authority will receive comments upon the proposed Draft EIR, commences on May 22, 2006. Comments should be addressed to the San Diego County Regional Airport Authority. **The deadline for receiving written comments regarding the adequacy of the Draft EIR is September 18, 2006.** Comments may be submitted by:

- Mail to the Authority offices at SDCRAA, P.O. Box 82776, San Diego, CA 92138-2776 (these comments must be postmarked by Friday, September 15, 2006).
- E-mail to the Authority offices at planning@san.org. The Airport Authority will accept comments to this notice via e-mail received by 5:00 p.m. on Monday, September 18, 2006, if the comments: (i) contain less than 2,000 words; and (ii) the e-mail comments do not contain any attachments. Any comments or responses to this notice containing more than 2,000 words, or which are accompanied by any attachments, must be delivered in writing to the address specified above, or they will not be considered as a valid response to this notice.
- Delivery to the Authority offices at San Diego International Airport or faxed to (619) 400-2448 by 5:00 p.m. on Monday, September 18, 2006.

Notice of Completion & Environmental Document Transmittal

Appendix C

A-135

Mail to: State Clearinghouse, P. O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
 For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # **2005091105**

Project Title: San Diego International Airport Master Plan
 Lead Agency: San Diego County Regional Airport Authority Contact Person: Ted Anasis, AICP
 Mailing Address: P.O. Box 82776 Phone: (619) 400-2478
 City: San Diego, CA Zip: 92138-2776 County: San Diego County

Project Location:
 County: San Diego County City/Nearest Community: City of San Diego
 Cross Streets: San Diego International Airport - North Harbor Drive Zip Code: 92101
 Assessor's Parcel No.: _____ Section: _____ Twp.: _____ Range: _____ Base: _____
 Within 2 Miles: State Hwy # Interstate 5 Waterways: _____
 Airports: San Diego International Airport Railways: _____ Schools: _____

Document Type:
 CEQA: NOP Draft EIR NOI Other: Joint Document
 Early Cons Supplement/Subsequent EIR EA Final Document
 Neg Dec (Prior SCH No.) Draft EIS Other _____
 Mit Neg Dec Other FONSI

RECEIVED
 MAY 19 2006
 STATE CLEARING HOUSE

Local Action Type:
 General Plan Update Specific Plan Rezone Annexation
 General Plan Amendment Master Plan Prezone Redevelopment
 General Plan Element Planned Unit Development Use Permit Coastal Permit
 Community Plan Site Plan Land Division (Subdivision, etc.) Other _____

Development Type:
 Residential: Units _____ Acres _____ Water Facilities: Type _____ MGD
 Office: Sq. ft. _____ Acres _____ Employees _____ Transportation: Type San Diego International Airport
 Commercial: Sq. ft. _____ Acres _____ Employees _____ Mining: Mineral _____
 Industrial: Sq. ft. _____ Acres _____ Employees _____ Power: Type _____ MW
 Educational _____ Waste Treatment: Type _____ MGD
 Recreational _____ Hazardous Waste: Type _____
 Total Acres (approx.) _____ Other: _____

Project Issues Discussed in Document:
 Aesthetic/Visual Fiscal Recreation/Parks Vegetation
 Agricultural Land Flood Plain/Flooding Schools/Universities Water Quality
 Air Quality Forest Land/Fire Hazard Septic Systems Water Supply/Groundwater
 Archeological/Historical Geologic/Seismic Sewer Capacity Wetland/Riparian
 Biological Resources Minerals Soil Erosion/Compaction/Grading Wildlife
 Coastal Zone Noise Solid Waste Growth Inducing
 Drainage/Absorption Population/Housing Balance Toxic/Hazardous Land Use
 Economic/Jobs Public Services/Facilities Traffic/Circulation Cumulative Effects
 Other _____

Present Land Use/Zoning/General Plan Designation:
San Diego International Airport

Project Description: (please use a separate page if necessary)
 The San Diego International Airport Master Plan includes the development and operation of the following major project components: expand existing Terminal 2 West with 10 new jet gates; construct new aircraft parking apron; construct new apron and aircraft taxiway; construct new surface parking and vehicle circulation; and construct a new parking structure, departure curb and vehicle circulation serving Terminal 2. A project description and site plans describing additional project components are included in the Draft EIR.

State Clearinghouse Contact: (916) 445-0613
 State Review Began: 5-19-2006
 SCH COMPLIANCE: 9-18-2006
Per Lead

- Project Sent to the following State Agencies**
- Resources
 - Boating & Waterways
 - Coastal Comm
 - Colorado Rvr Bd
 - Conservation
 - Fish & Game # 5M
 - Delta Protection Comm
 - Forestry & Fire Prot
 - Historic Preservation
 - Parks & Rec
 - Reclamation Board
 - Bay Cons & Dev Comm
 - DWR
 - OES (Emergency Svcs)
 - Bus Transp Hous
 - Aeronautics
 - CHP
 - Caltrans # 11
 - Trans Planning
 - Housing & Com Dev
 - Food & Agriculture
 - Health Services
 - State/Consumer Svcs
 - General Services
 - Cal EPA
 - ARB - Airport Projects
 - ARB - Transportation Projects
 - ARB - Major Industrial Projects
 - Integrated Waste Mgmt Bd
 - SWRCB: Clean Wtr Prog
 - SWRCB: Wtr Quality
 - SWRCB: Wtr Rights
 - Reg. WQCB # 9
 - Toxic Sub Ctrl-CTC
 - Yth/Adlt Corrections
 - Corrections
 - Independent Comm
 - Energy Commission
 - NAHC
 - Public Utilities Comm
 - State Lands Comm
 - Tahoe Rgl Plan Agency
 - Conservancy

Please note State Clearinghouse Number (SCH#) on all Comments
 SCH#: 2005001105
 Please forward late comments directly to the Lead Agency
 AQMD/APCD 27
 (Resources: 5, 20)



Department of Toxic Substances Control



Linda S. Adams
Secretary for
Environmental Protection

Maureen F. Gorsen, Director
5796 Corporate Avenue
Cypress, California 90630



Arnold Schwarzenegger
Governor

June 12, 2006

RECEIVED

JUN 15 2006

Mr. Ted Anasis, AICP
San Diego County Regional Airport Authority
P.O. Box 82776
San Diego, California 92138-2776

PLANNING DEPT. #44

DRAFT ENVIRONMENTAL IMPACT REPORT FOR SAN DIEGO INTERNATIONAL
AIRPORT MASTER PLAN (SCH# 2005091105)

Dear Mr. Anasis:

The Department of Toxic Substances Control (DTSC) has received your submitted draft Environmental Impact Report (EIR) for the above-mentioned project. The following project description is stated about your document: "The San Diego International Airport Master Plan includes the development and operation of the following major project components: expand existing Terminal 2 West with 10 new jet gates; construct new aircraft parking apron; construct new apron and aircraft taxi lane; construct new surface parking and vehicle circulation; and construct a new parking structure, departure curb and vehicle circulation serving Terminal 2."

Based on the review of the submitted document, DTSC has comments as follow:

- 1) The EIR should identify the mechanism to initiate any required investigation and/or remediation for any site that may be contaminated, and the government agency to provide appropriate regulatory oversight. If hazardous materials or wastes were stored at the site, an environmental assessment should be conducted to determine if a release has occurred. If so, further studies should be carried out to delineate the nature and extent of the contamination, and the potential threat to public health and/or the environment should be evaluated. It may be necessary to determine if an expedited response action is required to reduce existing or potential threats to public health or the environment. If no immediate threat exists, the final remedy should be implemented in compliance with state regulations, policies, and laws.

Mr. Ted Anasis, AICP
June 12, 2006
Page 2

The draft EIR states: "There are several sites both on, and adjoining, SDIA that are known or have the potential to contain hazardous materials and environmental contamination. The most potentially significant of these are the former NTC Landfill, former Teledyne-Ryan Facility, and former General Dynamics Facility."

- 2) All environmental investigations, sampling and/or remediation for the site should be conducted under a Workplan approved and overseen by a regulatory agency that has jurisdiction to oversee hazardous substance cleanup. The findings of any investigations, including Phase I and II investigations, should be summarized in the document. All sampling results in which hazardous substances were found should be clearly summarized in a table.
- 3) Proper investigation, sampling and remedial actions, if necessary, should be conducted at the site prior to the new development or any construction, and overseen by a regulatory agency.
- 4) If any property adjacent to the project site is contaminated with hazardous chemicals, and if the proposed project is within 2,000 feet from a contaminated site, except for a gas station, then the proposed development may fall within the "Border Zone of a Contaminated Property." Appropriate precautions should be taken prior to construction if the proposed project is within a "Border Zone Property."
- 5) If building structures, asphalt or concrete-paved surface areas or other structures are planned to be demolished, an investigation should be conducted for the presence of lead-based paints or products, mercury, and asbestos containing materials (ACMs). If lead-based paints or products, mercury or ACMs are identified, proper precautions should be taken during demolition activities. Additionally, the contaminants should be remediated in compliance with California environmental regulations, policies, and laws.
- 6) The project construction may require soil excavation and soil filling in certain areas. Appropriate sampling is required prior to disposal of the excavated soil. If the soil is contaminated, properly dispose of it rather than placing it in another location. Land Disposal Restrictions (LDRs) may be applicable to these soils. Also, if the project proposes to import soil to backfill the areas excavated, proper sampling should be conducted to make sure that the imported soil is free of contamination.

Mr. Ted Anasis, AICP
June 12, 2006
Page 3

- 7) Human health and the environment of sensitive receptors should be protected during the construction or demolition activities. A study of the site, overseen by the appropriate government agency, might have to be conducted to determine if there are, have been, or will be, any releases of hazardous materials that may pose a risk to human health or the environment.
- 8) If it is determined that hazardous wastes are, or will be, generated by the proposed operations, the wastes must be managed in accordance with the California Hazardous Waste Control Law (California Health and Safety Code, Division 20, chapter 6.5) and the Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Division 4.5). If so, the facility should obtain a United States Environmental Protection Agency Identification Number by contacting (800) 618-6942.
- 9) If during construction/demolition in the Project area, soil and/or groundwater contamination is suspected, construction/demolition in the area should cease and appropriate health and safety procedures should be implemented. If it is determined that contaminated soil and/or groundwater exist, the EIR should identify how any required investigation and/or remediation will be conducted, and the appropriate government agency to provide regulatory oversight. The draft EIR states: "In the areas of the Former Rental Car Facility Fuel Farm and Former Lindbergh Field Fuel Farm, petroleum-contaminated soil and/or groundwater may be encountered by the construction contractor.

DTSC provides guidance for cleanup oversight through the Voluntary Cleanup Program (VCP). For additional information on the VCP, please visit DTSC's web site at www.dtsc.ca.gov.

If you have any questions regarding this letter, please contact Mr. Joseph Kaslowski, Project Manager, at (714) 484-5471 or email at jkaslowski@dtsc.ca.gov.

Sincerely,



Greg Holmes
Unit Chief
Southern California Cleanup Operations Branch - Cypress Office

cc: See next page

Mr. Ted Anasis, AICP
June 12, 2006
Page 4

cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044

Mr. Guenther W. Moskat, Chief
Planning and Environmental Analysis Section
CEQA Tracking Center
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806

CEQA # 1431

CALIFORNIA COASTAL COMMISSION

45 FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE AND TDD (415) 904-5200
FAX (415) 904-5400



September 14, 2006

RECEIVED

SEP 18 2006

PLANNING DEPT. #44

Ted Anasis, AICP
Manager, Airport Planning
San Diego County Regional Airport Authority
P.O. Box 82776
San Diego, CA 92138-2776

Subject: Draft Environmental Impact Report (DEIR) for the Airport Master Plan for San Diego International Airport

Dear Mr. Anasis:

The Coastal Commission federal consistency staff conducted a brief review of the above-referenced document for San Diego International Airport and submits the following comments. The DEIR evaluates the proposed Airport Master Plan, which consists of two elements: the Airport Land Use Plan and airport facility improvement projects designed to meet forecast air traffic demand through 2015. The Land Use Plan is a policy document that describes the boundaries of and the land uses on the airport. The proposed improvement projects include (but are not limited to) expansion of Terminal 2 West with ten new jet gates, construction of new aircraft parking aprons and aircraft taxilanes, reconstruction of Taxiway C and construction of a new taxiway east of Taxiway D, construction of a new parking structure and a surface parking lot, and construction of new general aviation facilities.

The DEIR states that one or more of these projects may require additional environmental review and approvals from government agencies. The DEIR states on page 5.10-1 that:

In accordance with the Coastal Act and Airport Authority Act, SDCRAA will seek Coastal Development Permits (if necessary) for the proposed developments at SDIA that would follow adoption of the plan (e.g., Implementation Plan projects).

...

Where Coastal Development Permits are necessary, SDCRAA will apply for these directly to the Coastal Commission.

The Commission staff agrees that that the SDCRAA will need to obtain coastal development permits from the Commission for proposed development at SDIA contemplated under the proposed Airport Master Plan.

Ted Anasis
San Diego County Regional Airport Authority
Page 2

Section 3.3 of the DEIR examines proposed federal, state, and local actions and required permits for the Airport Master Plan and states in part that:

The proposed Federal actions include Federal Aviation Administration approval of the Airport Layout Plan showing the proposed development, and the completion of the National Environmental Policy Act documentation.

Pursuant to the federal Coastal Zone Management Act (CZMA Section 307 (16 U.S.C. §1456), and 15 CFR Part 930 of the CZMA Federal Consistency Regulations) the Commission reviews federal activities, development projects, permits and licenses, and financial support to state and local governments for consistency with the California Coastal Management Program (CCMP) and in particular, the Chapter 3 policies of the California Coastal Act. Should the Federal Aviation Administration (FAA) propose development at SDIA in conjunction with or independent of the SDCRAA's proposed improvement projects, the FAA will need to prepare and submit to the Commission a consistency determination for such development. The FAA may also need to determine that Commission review of a consistency determination is needed in order for the FAA to complete its responsibilities under the National Environmental Policy Act for proposed development at SDIA. In addition, the SDCRAA may need to prepare and submit to the Commission a consistency certification for the FAA's approval of the aforementioned Airport Layout Plan.

The Commission notes that the FAA's requirement for Commission review of a consistency determination (under any of the above scenarios) may precede the SDCRAA's anticipated schedule for submitting coastal development permit applications for airport improvement projects. In a case where the FAA is proposing development (e.g., navigation aids for airport operations proposed under the Airport Master Plan), the Commission can review a consistency determination from the FAA and either concur with or object to the project, based on conformance with the CCMP. Alternatively, where the SDCRAA is seeking Commission concurrence with the FAA's approval of an Airport Layout Plan that reflects the SDCRAA's proposed Airport Master Plan, the Commission could review that consistency certification and concur in concept (if it conforms with the CCMP), acknowledging that it will subsequently review more detailed coastal development permit applications from the SDCRAA for specific improvement projects described in the Airport Master Plan.

The primary issues that the Coastal Commission will focus on in its review of coastal development permits, consistency determinations, and consistency certifications are biological resources, water quality, and public access. The standard of review for consistency determinations and certifications is the CCMP and in particular, the Chapter 3 policies of the Coastal Act.

Thank you for the opportunity to comment on the DEIR. Additional procedural and substantive information on the federal consistency process can be obtained at the Commission's web site, www.coastal.ca.gov/fedcd/fedcndx.html. Please contact me at (415) 904-5288 should you have

Ted Anasis
San Diego County Regional Airport Authority
Page 3

any questions regarding the federal consistency process. Please contact Diana Lilly in the Commission's San Diego Coast District Office at (619) 767-2370 for questions regarding the coastal development permit process.

Sincerely,

A handwritten signature in black ink that reads "LARRY SIMON". The signature is written in a cursive, slightly slanted style.

Larry Simon
Federal Consistency Coordinator

cc: CCC – San Diego Coast District
FAA – San Diego



San Diego County Regional Airport Authority

Mailing Address: P.O. Box 82776, San Diego, CA 92138-2776

Physical Address: 3225 N. Harbor Drive, San Diego, CA 92101

www.san.org

FILED
Gregory J. Smith, Recorder/County Clerk

MAY 26 2006

NOTICE OF AVAILABILITY

BY  DEPUTY

DRAFT ENVIRONMENTAL IMPACT REPORT SAN DIEGO INTERNATIONAL AIRPORT MASTER PLAN

PROJECT DESCRIPTION AND LOCATION: The San Diego County Regional Airport Authority has prepared a Draft Environmental Impact Report (EIR) for the Airport Master Plan (including the adoption of an airport land use plan and implementation plan) for San Diego International Airport located in the City of San Diego.

COPIES OF THE DRAFT EIR ARE AVAILABLE from the Airport Planning Department, San Diego County Regional Airport Authority, with offices located in the Commuter Terminal at San Diego International Airport, 3225 North Harbor Drive, San Diego, CA, during the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday. Copies of the Draft EIR may be downloaded at www.san.org under Environmental Review/CEQA. A copy of the same may also be requested by contacting Ted Anasis at (619) 400-2478.

A REVIEW PERIOD, during which the San Diego County Regional Airport Authority will receive comments upon the proposed Draft EIR, commences on May 22, 2006. Comments should be addressed to the San Diego County Regional Airport Authority. **The deadline for receiving written comments regarding the adequacy of the Draft EIR is September 18, 2006.** Comments may be submitted by:

- Mail to the Authority offices at SDCRAA, P.O. Box 82776, San Diego, CA 92138-2776 (these comments must be postmarked by Friday, September 15, 2006).
- E-mail to the Authority offices at planning@san.org. The Airport Authority will accept comments to this notice via e-mail received by 5:00 p.m. on Monday, September 18, 2006, if the comments: (i) contain less than 2,000 words; and (ii) the e-mail comments do not contain any attachments. Any comments or responses to this notice containing more than 2,000 words, or which are accompanied by any attachments, must be delivered in writing to the address specified above, or they will not be considered as a valid response to this notice.
- Delivery to the Authority offices at San Diego International Airport or faxed to (619) 400-2448 by 5:00 p.m. on Monday, September 18, 2006.

FILED IN THE OFFICE OF THE COUNTY CLERK
San Diego County on MAY 26 2006
Posted MAY 26 2006 Removed JUN 27 2006
Returned to agency on JUN 27 2006
Deputy 



THE CITY OF SAN DIEGO

September 8, 2006

Ted Anasis, AICP
Manager, Airport Planning
San Diego County Regional Airport Authority
P.O. Box 82776
San Diego, California 92138-2776

RECEIVED

SEP 11 2006

PLANNING DEPT. #44

Dear Mr. Anasis:

Subject: Comments to Draft EIR for SDCRAA SCN: #2005091105

Thank you for the meeting of August 28, and for this opportunity to comment on the draft EIR for the Lindberg Field Expansion. As we discussed at our meeting, the one-time construction impacts and the going impacts associated with operation of the facility would result in significant strain to an already under-capacity disposal system. Every effort must be made to reduce solid waste generation impacts. We believe this can be accomplished with the development and implementation of a solid waste management plan that addresses construction and demolition debris and also ongoing waste generation. A variety of issues should be addressed in the plan. For example, the plans and specs for the project should insure that sufficient areas for the sorting of materials for reuse and recycling is provided, and that the project "closes the loop" by including post-consumer content materials, where appropriate. Our staff can provide models and other assistance on the development of this plan, portions of which should be included in the Mitigation Monitoring and Reporting Program.

Additionally, several inaccuracies in the text were discussed in our meeting. As we agreed, we will provide review of the new language as it pertains to

- our C&D ordinance,
- future disposal opportunities, such as the Gregory Canyon Landfill,
- the proposed expansion of the Sycamore Landfill,
- the San Diego County Siting Element, and
- the rate of acceptance of refuse at the Miramar Landfill.

Finally, our disposal staff is aware of your need to dispose of clean and contaminated materials associated with this project and also a future project. As we discussed, in order for us, the LEA, and the public to completely understand this project, we must also understand the subsequent project, and the relationship between the two. We will be looking for this information in the final version of the EIR.



Resource Management Division • Environmental Services Department

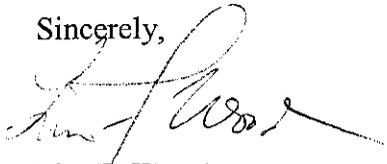
9601 Ridgehaven Court, Suite 210 • San Diego, CA 92123-1636

Tel (858) 573-1200 Fax (858) 492-5021



Thank you for your attention to these comments. Please call me at 858-573-1236 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Lisa F. Wood", with a long horizontal flourish extending to the right.

Lisa F. Wood
Senior Environmentalist



THE CITY OF
SAN DIEGO

CITY OPERATIONS BUILDING ♦ 1222 First Avenue ♦ San Diego, California 92101

OFFICE OF
DEVELOPMENT SERVICES DEPARTMENT
[FAX] 446-5499

SEP 18 2006

FAX TRANSMITTAL

DATE: 9/18/06

TO: Ted ANONIS

SUBJECT: Comments to DEIR

FROM: MARC CASS

[FAX] 446-5499

NUMBER OF PAGES (EXCLUDING COVER): 11

Please notify sender immediately if material noted was not received.



THE CITY OF SAN DIEGO

September 18, 2006

Ted Anasis
San Diego Regional Airport Authority
P.O. Box 82776
San Diego, CA 92138-2776

Subject: City of San Diego Comments on the Draft Environmental Impact Report (EIR) for the Airport Master Plan for the San Diego International Airport (SCH No. 2005091105).

Dear Ted Anasis:

The City of San Diego's Development Services Department, offers the following comments on the Draft EIR for the San Diego International Airport Master Plan Project:

Development Services Department, Land Development Review, Transportation Analysis: Fernando Lasaga (619) 446-5298

1. The proposed project is the increase in San Diego International Airport activity from 16.4 million annual passengers (MAP) in 2004 to 22.8 MAP in 2015, and the corresponding increase in average daily traffic (ADT) from 75,228 ADT in 2004 to 104,596 ADT in 2015. The proposed project creates an additional 29,368 ADT that needs to be analyzed in the traffic study with 1,762 (1,057 in; 705 out) trips occurring in the am peak hour and 2,056 (1,028 in; 1,028 out) trips occurring in the pm peak hour. The project must propose specific transportation mitigation such as transit service improvements and transportation demand management (TDM) in order to take credit for any reduction in the proposed project trip generation. The Traffic Impact Study for the Airport Master Plan EIR utilized a reduction of 5,096 ADT.
2. The peak hour trips corresponding to the proposed project should be distributed and the study area should be defined to include all street segments and freeway segments that carry 50 peak hour project trips in at least one direction of travel, all the adjacent signalized intersections, interchanges, and ramps, and any adjacent un-signalized intersection where there are stop controlled project trips. The requested revisions in the study area should also include (1) the first major signalized intersection to the west at Nimitz Boulevard and North Harbor Drive, and (2) the I-5 Freeway.



Development Services

1222 First Avenue, MS 501 • San Diego, CA 92101-4155

Tel (619) 444-5447

3. Each street segment needs to be analyzed with the existing functional classification and this classification needs to be consistent with the *corresponding community plan designation* for the street segment. Please do not alter the classification of a street segment because of turn lanes or merging ramps.
4. Also, do not alter the capacity of a street segment from the capacity shown in the *City of San Diego Traffic Impact Study Manual* for the corresponding street classification. Please note the following changes in street classification and capacity:
 - A. North Harbor Drive is at most a 6-lane prime arterial with a capacity of 60,000 ADT.
 - B. Any three-lane one-way major street has a capacity of 25,000 ADT.
 - C. Laurel Street is a 4-lane collector with a capacity of 30,000 ADT.
 - D. Palm Street is a 2-lane local street with a carrying capacity of 2,200 ADT.
 - E. Sassafras Street between Pacific Highway and Kettner is classified as a 2-lane collector but the assumed capacity of 12,000 ADT is acceptable.
5. The Traffic Impact Study for the Airport Master Plan EIR must analyze the following traffic scenarios at a minimum:
 - A. The existing traffic scenario.
 - B. The near term traffic scenario without the proposed project. This is the 2015 model with the existing 75,228 airport trips.
 - C. The near term traffic scenario with the proposed project. This is the 2015 model with the 104,596 airport trips that result from combining the existing 75,228 airport trips with the 29,368 proposed project trips.
6. A comparison of the two 2015 traffic scenarios with and without the proposed project should determine the significantly impacted street segments, intersections, freeway segments, interchanges and ramps in the study area.
7. The Traffic Impact Study for the Airport Master Plan EIR analyzes a 2015 traffic scenario where several roadway segments and intersections were found to be operating at an unacceptable level of service. The Airport Authority should take responsibility to bring these impacts to below the level of significance and to maintain an acceptable level of service by proposing improvements to the roadway segments and intersections. In addition, the Airport Authority should implement alternative mitigation measures, such as public transit, private transit, and transportation demand management, that could reduce the number of the proposed project's vehicle trips and further reduce the proposed project's traffic impacts to below the level of significance, and result in an acceptable level of service within the study area.

Development Services Department, Current Planning: Billy Church (619) 446-5343

1. At least one alternative discusses demolition of a structure (ASIG building) which is 45 years of age or older. This building, along with several others on the airport has been identified as having the potential to be historic as designated by either City, State, or National agencies as historic resources. Any future proposal to demolish structures which are 45 or more years old will be reviewed by the City of San Diego, Development Services Department as a potential historic resource.

If any of the buildings are within historic districts or designated historic resources at the time development is proposed, the development proposal may require a Site Development Permit in accordance with Process Four per Land Development Code Section 126.0502(d). These items should be discussed in the regulatory framework.

The City of San Diego's Planning Department offers the following comment on the Draft EIR for the San Diego International Airport Master Plan Project:

City Planning and Community Investment: Tait Galloway (619) 533-4550

1. Airport Land Use Plan

- A. The city is unable to determine the potential impacts associated with the Airport Land Use Plan without having the benefit of reviewing the proposed policies since the Airport Authority has not made the Airport Master Plan document available for public review. The DEIR states on page 1-4 that, "The proposed project is the Airport Master Plan. The Airport Master Plan consists of two components: preparation of an Airport Land Use Plan; and implementation of improvements to meet forecast demand through 2015." The DEIR further states on page 1-4 that, "The Airport Land Use Plan is a policy document only."

The DEIR primarily addresses the impacts associated with the airport implementation improvements identified in the DEIR and not the impacts associated with airport land use policies in the Airport Land Use Plan. The DEIR only addresses the portion of airport development up to 2015 as identified in proposed airport implementation component, yet the DEIR states on page 4-2 that, "The Airport Land Use Plan is a planning guide to ensure that Airport facilities are planned with thought and foresight to serve the greatest number of people." The DEIR states that the Airport Land Use Plan would designate future ground transportation and airport support uses for the former Teledyne Ryan

property. The city is concerned that other potential development projects beyond those analyzed in the DEIR are mentioned, but not analyzed at a programmatic level.

- B. The DEIR also indicates on page 4-2 that the Airport Authority will analyze these potential future projects, which are beyond those analyzed in the implementation component, at the project level to ensure consistency with the Airport Land Use Plan. The city is concerned that the DEIR is not fully addressing the cumulative affects of implementing future projects that are not included in the DEIR. The DEIR states that these future unidentified projects would be consistent with the proposed Airport Land Use Plan. The city is concerned that the Airport Authority will analyze these future projects incrementally without have the full benefit of first having analyzed the cumulative impacts associated with full implementation or other implementation alternatives of the Airport Land Use Plan.
- C. The city understands that DEIR only addresses the implementation of projects up to the year 2015 and that the DEIR acknowledges that the Airport could remain at it present location beyond 2015 depending on the outcome of the current airport site selection process. The city understands that the DEIR states that runway capacity limits the capacity of the airport; nevertheless, SDIA at Lindbergh Field could potentially continue to operate beyond 2015, which will likely require the implementation of additional projects. The DEIR does not fully address alternative land use scenarios and operational policies that the Airport Authority could be utilize to improve or optimize the operation of the airport system beyond 2015. The DEIR does not also address the relocation of general aviation and/or regional serving commuter aviation operations to other airports within the county.
- D. Without have the benefit of reviewing the Draft Airport Master Plan document, the city is unable to determine if the airport is considering any operational policies to improve the operation of the airport system. In addition, the city understands that DEIR states on page 2-16 that, "The tendency for airlines to spread operations to off-peak periods as delays increase is somewhat offset by the increase in the percentage of long-haul flights, which because of time zone differences are more limited in the hours in which they can operate." The DEIR table 2-7 "Current San Diego International Airport Gate Use" indicates that Short and Medium Haul Airlines (35) and Southwest (84) combined currently has 119 average annual day departures, which accounts for 74 percent of the total gated departures. The DEIR does not fully address the feasibility of operational policies including, but not limited to providing incentives for air carriers to shift flights to off peak day-time periods (specifically for short and Medium Haul Airlines and Southwest) or to

use larger passenger capacity aircraft as a method to consolidate multiple flights to the same designation.

- E. The city understands that the DEIR states on page 2-21 that, "Beyond the year 2015 runway delay values begin to mount requiring consideration of airfield improvements to meet natural growth at San Diego International Airport." A September 10, 2006, *San Diego Union Tribune* article states that, "Consultants to the Airport Authority say demand will exceed capacity by 2022." The city is unclear if the year 2015 represents when delay in operations will become a factor or if it represents when forecasted demand will exceed runway capacity.
- F. The city understands that the Federal Aviation Administration (FAA) has regulations as contained in Airport Circular 150/5300-13 that limit uses within the Runway Protection Zones (RPZs) to enhance the protection of people and property on the ground. Although not fully addressed in the DEIR, there are existing land uses in the RPZs with could not be considered compatible with FAA. The city is unable to determine if the Draft Airport Master Plan document contains policies that address the potential of purchasing properties within the RPZ.

Recommendations:

The city recommends that the Airport Authority provide the draft Airport Master Plan document for public review and comment and extend the DEIR comment period, so that draft airport land use policies in the Plan document can be fully addressed and reviewed with the DEIR.

The city also recommends that the DEIR address the following:

- The full implementation of the Airport Land Use Plan, including the former Teledyne Ryan property, to ensure that all of the potential impacts are disclosed and addressed at a programmatic level.
- Other alternative land use scenarios including, but not limited to the relocation of general aviation facilities to other airports in the county improve operations have not been considered.
- Operational policy alternatives including, but not limited to the policies that provide incentives for air carriers to reschedule flights from peak air travel periods to non-peak periods.
- When the forecasted passenger demand will exceed existing runway capacity.
- The feasibility of purchasing properties within the RPZs.

2. No Project Alternative

- A. The city understands that the DEIR indicates that in theory the existing airport gates could accommodate the forecasted passenger demand up to 2015. The DEIR states on page 2-14 states:

“The estimate of common use gate requirements, as shown in Table 2-6, indicates that the projected 2015 passenger aircraft traffic could be theoretically accommodated with the existing number of gates, provided that commuter aircraft operations continue to use the commuter terminal. The 2010 and 2015 flight schedules were gated using the existing terminal layout. No changes in flight schedules were required; however, airlines would be required to share gates much more than they do currently and passenger hold rooms would not be expanded.”

The city is uncertain if the DEIR analyzed if the passenger holding rooms and other terminal areas limited to ticketed passengers could safely accommodate the passengers departing and arriving to and from the projected number of flights for the no project alternative. The DEIR does not indicate the estimated maximum number of passengers in the holding rooms and other areas limited to ticketed passengers that could occur under the no project alternative and if this maximum could exceed the allowed occupancy capacity.

- B. The DEIR does not address the future conditions of other terminal aspects such as security check points, restrooms, and baggage areas. The city is uncertain if the no project analysis addressed the potential for additional areas that may be needed for security screening and claiming baggage to meet the forecasted 2015.
- C. The city understands that the DEIR indicates that in theory the existing number of gates could accommodate the forecasted demand although extremely poor passenger services could possibly affect the demand. The DEIR states on page 2-14 that:

“The gating exercise demonstrates the projected 2015 flight schedule with the existing gates, under common gate use assumptions. The gating exercise does not account for additional delays resulting from the high congestion, lack of flexibility, operational complexity resulting from extensive gate sharing, and extremely poor passenger service levels resulting from the crowded terminal area and congested roadways. All these factors could possibly induce airlines to reduce service levels even if their projected flight schedules could technically be accommodated.”

The city is concerned that although the no project alternative gate utilization assumption could be theoretically possible by itself; it may not be feasible or realistic when considering the other terminal services that passengers need to use at the airport. The DEIR indicates that a reduction of airline services due to congestion and extremely poor passenger service levels could result, but the DEIR does not contain an analysis of this potential alternative. This could result in impacts that are not fully addressed in the DEIR.

- D. The DEIR did not provide level of service measurements to compare existing levels of service to the forecasted 2015 and the no project level of service. The city is unable to determine the level of difference between the Baseline 2005 conditions, the no project, and project alternatives.

Recommendations:

The city recommends that the DEIR do the following:

- Address if the holding rooms and other areas limited to ticketed passengers would have adequate capacity to allow for the acceptable movement of people and evacuation of people in the event of an emergency.
- Provide measures for the existing and projected passenger levels of service.
- Address the capacity of other terminal services used by passengers including, but not limited to security screening, restrooms, and baggage areas to meet forecast 2015 demand.
- Amend the no project alternative to include an analysis that assumes a less than theoretical gate utilization given the other mentioned existing airport constraints that could have an affect on future airline service.

3. Airport Land Use Compatibly Plan

- A. The DEIR states on page 2-26 that, "State law requires future land use development near airports to be consistent with compatibility criteria include in an Airport Land Use Development Plan." The city understands that state law allows the City Council the ability to overrule an Airport Land Use Commission consistency determination with a two-thirds vote.

- B. DEIR section 2.6.2 does not clearly state that there is an adopted 2004 Airport Land Use Compatibility Plan currently in place. The city understands that the section paragraph of this section addresses the draft Airport Land Use Compatibility Plan.

Recommendations:

The city recommends that the DEIR do the following:

- Address that city as the local land use jurisdiction has the ability under state law to override the Airport Land Use Commission.
- Insert the word "Draft" in the second paragraph of section 2.6.2 of the DEIR before all references to the "Airport Land Use Compatibility Plan."
- Address that state law requires Airport Land Use Compatibility Plans to address airport growth during at least the next 20 years.

4. **Noise**

- A. The city understands that the DEIR analysis concludes that there is a less than significant impact from the preferred project alternative. The DEIR states on page 5.1-5 that:

"According to a detailed grid analysis of points spaced at 0.1 nautical mile intervals within the 60 CNEL, including noise sensitive uses such as schools, hospitals, places of worship, and historic sites, there are no locations that would experience a change of 1.5 CNEL or more within the 65 CNEL, or 3.0 or more within the 60 CNEL, due to the Proposed Project (Preferred Alternative) as compared to the No Project Alternative for both 2010 and 2015 and the Baseline 2005 conditions. Therefore, the Proposed Project (Preferred Alternative) would have a less than significant impact in terms of cumulative aircraft-induced noise exposure."

The city is unable to determine from the DEIR analysis what the specific forecasted measurement of change in CNEL is for Proposed Project (Preferred Alternative) as compared to the No Project Alternative for both 2010 and 2015 and the Baseline 2005 conditions.

- B. The city understands that the DEIR analysis concluded that Proposed Project as compared to the Baseline 2005 conditions would have a less than significant impact in terms of cumulative aircraft-induced noise exposure. DEIR Table 2-5 "Estimated Average Weekday Peak Month Operations – Aviation Activity High Constrained Forecast" on page 2-11 indicates that the average annual day operations in 2005 is 574 aircraft

operations and by 2015 it will be 716 aircraft operations. This represents an increase of 142 additional operations. The city was unable to determine if the DEIR analysis assumed a potential decrease in aircraft engine noise due to the retirement of older aircraft and introduction of new aircraft with quieter aircraft engines.

- C. The city understands that the impact analysis for noise (section 5.1.1.5) compared the differences in the number of units affected between the no project and the project alternatives. The analysis did not provide a breakdown of the difference between multifamily and single-family units. The city was unable to determine if the analysis used census 2000, 2005 estimates, or SANDAG forecasted housing units.
- D. The city understands that the Federal Aviation Administration has determined that residences within the 65 and above CNEL around the Airport are eligible for sound attenuation treatments to mitigate aircraft noise through the "Quieter Home Program" operated by the Airport Authority. The city is concerned that the DEIR analysis did not address the number of existing homes that would eligible for sound attenuation treatments with the Quieter Home Program.

Recommendations:

The city recommends that the DEIR do the following:

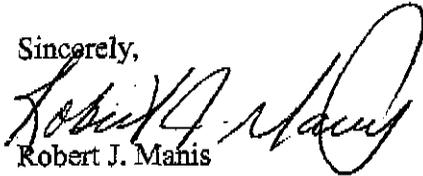
- Address the specific forecasted measurement of change in CNEL for the Proposed Project (Preferred Alternative) as compared to the No Project Alternative for both 2010 and 2015 and the Baseline 2005 conditions.
- Address the analysis, including any assumptions, used to determine the CNEL differences from the 2005 existing conditions to the proposed project alternative given the forecasted increase in daily operations.
- Provide a breakdown between single-family and multifamily units in the impact analysis for noise.
- Determine the difference between the number of existing units and new forecasted units for 2010 and 2015 that would be impacted by the project alternatives using the SANDAG housing forecast.

Determine the number of existing units that are located below the 65 CNEL in the Baseline 2005 conditions that could be affected by the project alternatives and as a result would be eligible for the Quieter Home Program.

Page 10 of 10
Ted Anasis

Please contact the appropriate above-named individual(s) if you have any questions on the submitted comments. We ask that you please address this issue and please provide us with a copy of the draft.

Sincerely,

A handwritten signature in cursive script, appearing to read "Robert J. Manis".

Robert J. Manis
Assistant Deputy Director
Land Development Review Division

RECEIVED

SEP 15 2006

PLANNING DEPT #44



OCEAN BEACH PLANNING BOARD, INC.
 P.O. Box 70184, Ocean Beach, CA 92167

Thank you for giving the Ocean Beach Planning Board an opportunity to review and comment on the May 2006 draft Environmental Impact Report, which pertains to the proposed expansion of the San Diego International Airport. Key components of the proposed expansion include the addition of 10 new jet gates to Terminal 2 West and the construction of a new parking structure, among other improvements.

The draft EIR notes that, in 2015, the number of passengers flying in and out of SDIA is expected to reach 22.8 million, an increase of more than 30% from 2005. Similarly, the draft EIR notes that the number of flights in and out of the Airport is expected to reach more than 700 per day in 2015, a gain of 25% versus 2005.

The draft EIR goes on to state that the implementation of the proposed expansion "is needed because forecasted growth can not be reasonably accommodated within the existing Airport facilities. Without these improvements, passenger traffic through the existing terminal buildings will become severely congested during longer periods of each day and level of service will be reduced further beyond its existing degraded level." The draft EIR also notes that "these factors could possibly induce airlines to reduce" their flight offerings "even if their projected flight schedules could technically be accommodated."

As required by the California Environmental Quality Act, the draft EIR compares the expected impacts of the proposed expansion versus the impacts of a "No Project" alternative, under which none of the proposed expansion would take place. In this comparison, the draft EIR states that the No Project alternative "does not provide for adequate level of service to accommodate growth forecast through 2015. The draft EIR notes that areas of deficiency under the No Project alternative are expected to include ticketing, security screening, passenger hold rooms, baggage claims, airport access roads and parking areas, and airport support facilities.

Despite this broad range of projected deficiencies under the No Project alternative - and despite the acknowledged potential for a reduction in airline flight offerings - the draft EIR maintains that *the growth in the number of passengers and flights traveling to and from SDIA would be equivalent* under either the proposed expansion or under the No Project alternative. As a result, the draft EIR concludes that *the proposed expansion would not result in any additional airplane noise* to be borne by the communities surrounding the airport.

In the opinion of the Ocean Beach Planning Board, the draft EIR fails to develop this conclusion comprehensively, particularly considering that the conclusion seems to contradict the stated reason for expanding SDIA: to accommodate projected growth. In our opinion, the final EIR for the proposed expansion of SDIA should improve on the analysis in the draft EIR by incorporating these elements:

- case studies of similar terminal expansions at other airports, and these expansions' impact on the number of flights and passengers serviced by the airports
- analysis of the potential extent of passenger "switching" to other airports and/or means of transportation given the sharp decline in SDIA customer service levels predicted under the No Project alternative

OBPB response to EIR for expansion of San Diego Int'l Airport (due Mon 9/18)

- in general, evidence to support or to refute the draft EIR's claim that SDIA's passenger and flight numbers will be the same with or without the proposed expansion

Again, we appreciate the opportunity to review and comment on the May 2006 draft EIR. By doing so, we hope to contribute to the achievement of the stated goal of the Airport Master Plan: to provide a financially and environmentally responsible guideline for future Airport development.

From: Lance Murphy [lmurphy@cox.net]
Sent: Monday, September 18, 2006 5:08 PM
To: Airport Planning
Cc: Cynthia Conger
Subject: Attached comments for Draft EIR

Attachments: PCPB EIR Response.pdf

RECEIVED

SEP 18 2006

PLANNING DEPT. #44



PCPB EIR
sponse.pdf (204 KB)

Ted,
Attached is a pdf file detailing our comments concerning the Draft EIR.
Regards,
Lance Murphy
Peninsula Community Planning Board

Officers

Cynthia Conger
Chair

Gregg Robinson
Vice Chairman

Katheryn Rhodes
Second Vice Chair

Cydney G. Shinn
Treasurer

Board Members

Robert Bedore

Glenn Fisher

Edwina Goddard

Helen Kinnaird

Geoff Page

Cleo Pearson

Patti Rank

Katherine Rhodes

Mignon Scherer

Maggie Valentine

Dee Wylie

Peninsula Community Planning Board
1537 Rosecrans Street, #D, San Diego CA 92106
(619) 665-3210

September 18, 2006

RECEIVED

Mr. Ted Anasis,
Manager - Airport Planning
San Diego County Regional Airport Authority
P.O. Box 82776, San Diego, CA 92138-2776

SEP 18 2006

PLANNING DEPT. #44

Subject: Response to Draft Environmental Impact Report
Airport Master Plan, dtd. May 2006

Mr. Anasis,

The Peninsula Community Planning Board represents one of the most heavily impacted communities surrounding the San Diego International Airport. We have tried to work with the Airport Authority in better understanding the assumptions of the Draft Environmental Impact Report (Draft EIR) and have concluded that either there is a gross misstatement of the facts or an intentional attempt to mislead the community, public agencies and regulatory authorities.

We believe that a principal error driving the entire analysis assumes that there is no net difference in the forecasts of Airport traffic (passengers, aircraft and vehicles) between the "No Project" and either proposed alternative. The Airport Authority has repeatedly assumed that their forecast of demand will occur, even without the proposed expansion of Gates, Taxiways, Aircraft Parking, Roadways, and Vehicle Parking. Based on this assumption, the Airport Authority is effectively declaring no difference between the impact of "No Project" and either alternative on the Noise, Air Quality, Biotic Communities, Coastal Resources, Hazards, etc. As a result there is little recognition of the incremental impact caused by the expansion over the 'status quo' represented by the "No Project".

The Peninsula Community Planning Board has consistently challenged the forecasts of the Airport Authority and has previously stated its concerns for the impact on our community. This entire Draft EIR is based on a recent forecast that is unreliable and understated. To date the actual operations of the Airport have consistently exceeded the 'High' forecast, which is now being used in the Draft EIR as the 'expected' level of passengers and flights. The most recent meeting of the Airport Noise Advisory Council has heard the Planning Manager, Ted Anasis, declare this forecast as the 'Worst Case' approximation of the traffic at San Diego International Airport. If this is the 'Worst Case', how come it has been consistently exceeded?

Throughout the Draft EIR there are statements concerning the negative impact on the airport efficiency and passenger experience if the proposed expansion doesn't occur (the "No Project Alternative"). In Section 4.3.5, the Draft EIR summarizes the impacts of the "No Project Alternative" (emphasis added):

4.3.5 Summary of No Project Alternative

Without expanding facilities to serve the forecast demand for air service in and out of San Diego, it is not possible for San Diego County Regional Airport Authority to maintain existing levels of service. *The No Project Alternative would result in a steady deterioration of levels of service due to an overall increase in delay associated with overburdened passenger processing and other facilities. As delay continues to increase with demand, costs would begin to rise for the passengers and airlines using San Diego International Airport.* This is directly in conflict with the Airport's goal of providing facilities that can meet the forecast demand for operations and passengers in an environmental responsible manner as laid out in the Airport Master Plan.

This simple summary of the "No Project Alternative" should be reflected in the analysis of the net difference in forecast of passengers and the ability of the Airport to provide facilities to support the number of aircraft operations – as compared to the forecast using the comprehensive enhancement provided by the Master Plan improvements. In every analysis the Draft EIR has assumed that the number of passengers, aircraft flights and vehicles will be the same with only minor differences in timing and delays, obviously an analysis with an inappropriate bias.

This bias is clearly evident in the following excerpt from page 2-5 of the Draft EIR:

The Airport Master Plan used the single-runway constrained forecast to develop airport requirements for airfield, terminal and ground transportation facilities. While each of these facilities has unique characteristics, they operate collectively as a system for moving people and goods. The capacity of this Airport system is limited by its constraining component, the single runway. Capacity improvements made to the terminals and ground transportation components in this situation will increase the level of service experienced by the user without increasing the overall capacity of the San Diego International Airport.

The above citation explains that the ultimate capacity constraint is the single runway, we agree. BUT there are impacts on the daily passenger demand and operational efficiency that will result in a general decrease of passengers, flights and vehicle trips if these other facility elements are not improved as proposed in the Airport Master Plan.

Based on these facts, the Peninsula Community Planning Board (PCPB) rejects the entire analysis of the "No Project Alternative" and requests that a formal economic and operational analysis is performed to identify the differences in the forecasts (with and without the Master Plan improvements). Based on the forecast for the constrained (existing) facilities, we would expect a mitigation plan for all increases in environmental issues that result from the increased capacity of the Airport.

The PCPB (through their Airport Noise Advisory Council -ANAC representative) has requested and briefly reviewed the previous Draft EIR for the Immediate Action Plan (IAP) – the last expansion of the Airport that created Terminal 2 – West. It is noteworthy that there are obvious differences in the estimating procedures for traffic between the two Draft EIRs:

PCPB Response to Draft EIR – Airport Master Plan

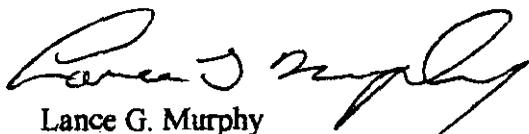
In the 1992 Draft EIR for the IAP, the Port District established significant shortfalls in both Aircraft Operations and Passengers with and without the proposed expansion. In the current EIR there is no such shortfall. Simple comparisons of the facilities improvement for the two expansions are nearly identical for the IAP and the current Airport Master Plan (AMP). With the IAP the first half of the Terminal 2 – West facility was constructed. With the current AMP this terminal will effectively double in size. In the IAP the parking and traffic routing was significantly improved; the current MAP also adds significant traffic elements.

Basically, the question is: If the 1992 Draft EIR forecasted a reduced demand and capacity without the improvements, why doesn't the current Draft EIR have a similar forecast impact?

The PCPB has specific concerns about the increased traffic and capacity of San Diego International Airport with the proposed Airport Master Plan. It is our concern that the following increased environmental impacts will occur with the expansion:

1. The increased number of flights will increase the noise as measured by the CNEL.
2. The increased number of flights will also significantly increase the number of noise events (over flights) regardless of the general reduction of noise for each flight as the fleets of planes become quieter.
3. The air pollution caused by the increased flights will add to health problems for our residents.
4. The traffic congestion will shift a significant number of vehicles to exit the airport to the West into our neighborhoods as the limited Harbor Drive capacity to the East causes a bottleneck. This is exacerbated by the planned increase in parking facilities at the airport. The Draft EIR forecasts that the ratio of departing vehicles (west vs. east) will remain the same as the number of vehicle trips increase – this is a faulty assumption not supported by any analysis or 'common sense'.
5. The ground hazards and noise caused by increasing the number of flights on this limited runway will be evidenced in an increase of 'head to head' diversions over our neighbors to the south of the 275 degree departure path.
6. The number of late night (curfew hours) departures will increase noise impacts as the airport provides added capacity to load and depart.
7. The number of late night and early morning arrivals (legally allowed during curfew hours) will increase both noise and ground hazards for our community based on the increased number of overnight parking, gates and cargo operations provided by the proposed Master Plan.
8. The 'missed approach' ground hazards and noise will increase with the increased capacity provided by the proposed Master Plan.

In summary, this current Draft EIR is fatally flawed and the above items cannot be effectively reviewed to judge the environmental impacts given the inaccurate forecast in the "No Project Alternative".



Lance G. Murphy
 Airport Committee Chair
 Peninsula Community Planning Board



Airport Parking

3550 Kettner Blvd.
San Diego, CA 92101

(619) 295-6659
295-2832
FAX 287-8957

September 14, 2006

San Diego County Regional Airport Authority
Attn: Mr. Ted. Anasis
P.O. Box 82776
San Diego, CA 92138-2776

RECEIVED

SEP 18 2006

PLANNING DEPT. #44

RE: Comments on Airport Master Plan Draft EIR

Dear Mr. Anasis:

After reviewing the Airport Master Plan EIR dated May 2006, we continue to have the same concerns that we identified in our comment letter dated September 22, 2005.

Economic and Jobs impact

As part of the Master Plan EIR, Economics and Jobs/Housing were not factored in, but they should have been. The proposed SAN Park Pacific Highway will have a potential negative financial impact on our parking structure located at Sassafras Street and Kettner Boulevard.

Proposed Terminal 2 Parking Structure

The Master Plan EIR has identified that a two or four story parking structure is being proposed for Terminal 2 with an additional 3,200 stalls. It is still not clear to us if these 3,200 additional spaces are intended to be used for short term or long term parking.

North Area Development Mitigation

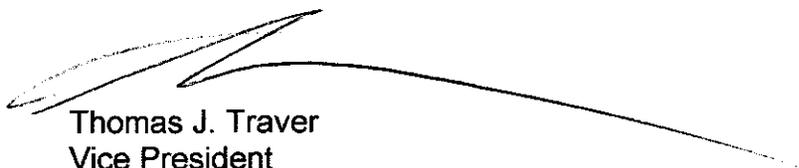
The Master Plan calls for the expansion of the SAN Park Pacific Highway facility in addition to relocating the Fixed Base Operator. Both of these facilities will be adjacent to a new access road that is to be built as an extension of Sassafras Street and onto airport property. Since the Port of San Diego has jurisdiction over Pacific Highway and the City of San Diego has jurisdiction over Sassafras Street and other feeder roads it has not been identified how the Airport Authority plans to implement any mitigation proposals when it does not have any jurisdiction over the roadway system on the north side of the airport.

EIR Comments
Page Two

We are greatly disappointed and puzzled that economics were not factored into the EIR since the proposed SAN Park Pacific Highway expansion will impact Park & Ride Airport Parking, Inc. To us, it seems that this should have been and it begs the question as to whether or not the EIR has been fully vetted.

In closing, we also fully support the issues raised by the San Diego Off-Airport Parking Association.

Sincerely,

A handwritten signature in black ink, appearing to read 'Thomas J. Traver', with a long, sweeping underline that extends to the right.

Thomas J. Traver
Vice President
Park & Ride Airport Parking

LUCE FORWARDATTORNEYS AT LAW • FOUNDED 1873
LUCE, FORWARD, HAMILTON & SCRIPPS LLPSTEPHEN L. MARSH, PARTNER
DIRECT DIAL NUMBER 619.699.2418
DIRECT FAX NUMBER 619.645.5363
EMAIL ADDRESS smارش@luce.com**RECEIVED**SEP 18 2006¹**PLANNING DEPT. #44**600 West Broadway
Suite 2600
San Diego, CA 92101
619.236.1414
619.232.8311 fax
www.luce.com

18158-00020

September 15, 2006

***Via Facsimile and
United States Mail***San Diego County Regional Airport Authority
Attention: Mr. Ted Anasis (Airport Planning)
Post Office Box 82776
San Diego, CA 92138***Re: Comments on the Draft Environmental Impact Report for the San Diego
International Airport Master Plan – SDCRAA #EIR-06-01***

Dear Mr. Anasis:

I am writing on behalf of Jimsair Aviation Services, Inc. (“Jimsair”) to comment on the Draft Environmental Impact Report (“DEIR”) for the San Diego International Airport Master Plan SDCRAA #EIR-06-01 promulgated in May 2006. As an interested organization, current tenant of the Airport and a stakeholder, Jimsair has the following comments:

1. We recommend that the Final Environmental Impact Report discussion of the Airport Land Use Plan include reference to the fact that areas designated for “Airport Support” uses potentially include more than one Fixed Base Operator (“FBO”). For example, because FAA regulations do not permit the grant of an exclusive right, a second FBO, either full service or limited use, could potentially be located either in the north airport area or in the areas to the south of the runway, designated for Airport Support purposes. In fact, it has been Jimsair’s consistent position that the Authority is already legally obligated to begin planning for a second FBO at Lindbergh Field and that such planning should be reflected in this DEIR.
2. Regarding the Airport Implementation Plan, Table 5-88 in the Hazards and Hazardous Materials section of the DEIR (Section 5.15) correctly includes the Airport Fuel Farm (Site No. 6) as a site or facility with the potential to contain hazardous wastes or environmental contamination. However, the Table omits the underground storage tank at Jimsair. While there has been no reported environmental contamination or leaks from the storage tank at Jimsair, it should be included as a fuel storage facility for completeness

LUCE FORWARD

ATTORNEYS AT LAW • FOUNDED 1873

LUCE, FORWARD, HAMILTON & SCRIPPS LLP

San Diego County Regional Airport Authority

Attention: Mr. Ted Anasis

September 15, 2006

Page 2

and to ensure there are no misunderstandings or later objections to the EIR for failure to include this potential impact.

3. Similarly, we recommend including a reference to the storage of aviation fuel at the new FBO to be built on 12.4 acres designated as the site for a relocated FBO in the northern Airport Support area. While this will not create any additional significant environmental impacts as it is merely a continuation of existing operations in a relocated area, it should be included in the EIR to ensure there are no misunderstandings or grounds for future challenge.
4. We recommend the Airport Authority reconsider the potential for acquisition or a land exchange with the Marine Corps Recruit Depot ("MCRD") for the purpose of extending the north Taxiway C the full length of the runway. The Draft EIR at page 4-17 states that this is not feasible because the MCRD was not listed on the most recent Federal Base Realignment and Closure ("BRAC") report and, consequently, could not be acquired within the "relevant time horizon". The SDCRAA should reconsider this analysis in light of its selection of Miramar MCAS as a site for the location of a future civilian commercial airport despite Miramar also being excluded from the most recent BRAC closure list and the SDCRAA's publicly stated belief that it can feasibly be acquired in virtually the same "relevant time horizon".

Jimsair appreciates the opportunity to comment on this DEIR and looks forward to reviewing the Final EIR. Please contact me if you have any questions regarding these comments. Please forward a copy of the Final EIR to my attention for future review.

Very truly yours,



Stephen L. Marsh

of

LUCE, FORWARD, HAMILTON & SCRIPPS LLP

SLM/rj

cc: Mr. Phil Bracamonte

Lee Burdick, Esq.

3744778.2

LAW OFFICES

FOX & SOHAGI, LLP

A REGISTERED LIMITED LIABILITY PARTNERSHIP

10960 WILSHIRE BOULEVARD, SUITE 1270

LOS ANGELES, CALIFORNIA

90024-3702

DEBORAH J. FOX
 MARGARET MOORE SOHAGI
 NICOLE GOODHUE HOEKSMAN
 GREGORY J. NEWMARK
 NICOLE KRASNY ASCH

HELENE V. SMOOKLER
 PHILIP A. SEYMOUR
 DAWN ANDREWS MCINTOSH
 OF COUNSEL

FACSIMILE
 (310) 444-7813

TELEPHONE
 (310) 444-7805



RECYCLED PAPER

September 15, 2006

RECEIVED

SEP 19 2006

PLANNING DEPT. #44

San Diego County Regional Airport Authority
 Attention: Airport Planning
 P.O. Box 82776
 San Diego, California 92138-2776

Re: *Comments on Draft Environmental Impact Report
 Airport Master Plan, San Diego International Airport*

Dear Sir or Madam:

Fox & Sohagi, LLP has been retained by the San Diego Unified Port District (“the Port”) to review the Draft Environmental Impact Report (“DEIR”) prepared for the proposed San Diego International Airport Master Plan. Our detailed comments are set forth below. The Port’s primary concern is with several major deficiencies contained in the current DEIR. The first is the failure to address potential impacts associated with a vast expansion of parking and rental car facilities on the airport property. Currently, these services are in large part provided off-site. While certain benefits may accrue to the Airport from creating new parking and rental car facilities on the airport property itself, the Airport Authority must carefully consider the impacts its actions will have on surrounding businesses and properties. The EIR must fully evaluate and disclose the extent to which the transfer or closure of existing off-site parking and rental car facilities will result in adverse changes to the physical environment.

The Port is also concerned that the approach to assessing traffic impacts in the DEIR fails to correctly assign responsibility for cumulative traffic impacts. The current DEIR falsely assumes that implementation of the master plan will have no significant traffic impacts, since airport traffic is expected to increase anyway. But ongoing growth in airport-related traffic cannot be separated for planning or mitigation purposes from improvement projects designed to increase the airport’s current capacity and service levels. The traffic analysis in the DEIR needs to be revised accordingly, and must identify mitigation measures that will offset the airport’s full cumulative impacts on area-wide traffic. Considerable further attention must also be paid in the DEIR to the problem of toxic air contaminant increases, which may adversely affect the health of workers on the Airport property and the surrounding community.

San Diego County Regional Airport Authority
 Attention: Planning Department
 September 15, 2006
 Page 2

Our detailed comments are as follows:

Chapter 1 EXECUTIVE SUMMARY

Page 1-12. Section 5.13.6.1 of the DEIR identifies construction phase aesthetic impacts as potentially significant, but mitigable with stated mitigation measures. The summary table does not include this significant impact or the identified mitigation measures.

Chapter 2 INTRODUCTION, BACKGROUND AND PROJECT DESCRIPTION

Section 2.2.2 Aviation Forecast.

At p. 2-4 the text indicates the high growth scenario was used for estimating increases in passengers and air operations during the study period, even though the high growth scenario has under-predicted actual growth for the first two full years in the forecast period. Actual growth in excess of the predicted high growth scenario occurred despite a significant loss of international flights to London and Canada. (DEIR p. 2-6.) What is the justification for using a forecast that has already been shown to be potentially misleading? Although the text notes that recent increases in jet fuel prices may dampen passenger growth, this does not seem likely to alter growth in passengers and air operations in the long term. Because any under prediction of growth rate will result in under prediction of cumulative impacts associated with airport activity, we request that the forecasts be revised by (1) using a growth rate that reflects observed growth rates; or (2) augmenting the forecasts to include a new high growth scenario based on observed growth rates plus an additional small (e.g., .5% or 1%) margin of error. This latter approach would yield new low and high growth rates, the former being the current forecasts in the DEIR, and the latter being based more closely on actual observed growth. Alternatively the forecast should be based on the maximum capacity that the Airport can lease based on the new facilities proposed.

Chapters 3 and 4 PROJECT OBJECTIVES and PROJECT DESCRIPTION AND ALTERNATIVES

Section 3.3 Proposed Federal State and Local Actions and Required Permits (pp. 3-12 - 3-13).

The list of required permits appears incomplete. What further approvals will be required by the Airport Authority prior to actual construction of the various implementation projects?

San Diego County Regional Airport Authority
 Attention: Planning Department
 September 15, 2006
 Page 3

Section 4.4 Alternatives to Land Use Plan.

It is fundamental that an EIR must consider alternatives to the proposed project. (Guidelines § 15126.6; *Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal.App.4th 477, 487.) The DEIR, however, does not evaluate any alternatives to the proposed Land Use Plan. This is particularly troubling in light of the long range projections for increased passenger use and air operations, which suggest that major additional facilities will be required in the future to address steadily increasing demand. It is recognized that the Airport Authority is considering major alternatives for long range operation of the airport through the Airport Site Selection Program referenced in Section 1.1.4. However, this does not dispense with the need to consider alternatives to the proposed Land Use Plan in the DEIR, particularly since future relocation of airport operations from the current airport site (whether partial or complete) is highly contingent upon any number of factors and may not occur at all.

It strongly appears that, absent a major relocation of airport operations, construction of additional terminal facilities will eventually be required. The DEIR should evaluate the alternative of reserving additional terminal space on-site, and address transportation needs (parking, rental car operations) through a combination of additional curb-side drop-offs, off-site facilities and improved shuttle services.

Chapter 5 ENVIRONMENTAL SETTING, CONSEQUENCES AND MITIGATION MEASURES

Section 5.1 Noise.

Section 5.1.1.4 Existing Setting (pp. 5.1-3 5.1-4).

The text indicates that monitored noise data was *not* used to establish baseline conditions or projected future noise levels, allegedly because this would lead to inconsistency in the methods used to determine current and projected future impacts. There is nothing in CEQA that allows a lead agency to ignore hard monitored data in favor of projections. It is understood that given the magnitude of the study area and the need to establish the project's incremental effects, it may be necessary to rely on a modeled baseline rather than monitored data for the preliminary analysis. However, there appears no reason than the results could not be validated (and modified where necessary) by reference to monitored data where it is already available or can be easily obtained. At

San Diego County Regional Airport Authority
Attention: Planning Department
September 15, 2006
Page 4

a minimum, the monitored baseline data should be disclosed and the analysis identify any areas where future noise levels may actually be significantly higher or lower than forecast in the current DEIR in light of the monitored noise information.

Section 5.2 Land Use Planning.

The DEIR notes that parking for airport passengers is currently provided at a variety of off-site locations. (*See, e.g.*, Section 3.2.3.4, p. 3-11.) Similarly, the rental car activity supported by the airport is currently housed off-site. However, the implementation projects will provide substantial additional on-site vehicle parking space, and the long-term improvements contemplated in the Master Plan include an additional 5,000+ public parking spaces as well as 9,000 rental car parking spaces and associated rental car facilities. (DEIR p. 5.3-27.) A potential secondary impact of the project will therefore be massive relocation of parking to the airport property. This potential impact should be evaluated in the EIR.

Section 5.3 Traffic.

Section 5.3.1 General Approach and Methodology.

The horizon year for the analysis is 2015, although the text acknowledges that the analysis should extend to 2025 to conform to the SANTEC/ITE standard. There is no valid justification for this limitation on the traffic analysis, particularly since the project consists of a master airport plan and various permanent improvements intended to improve service levels at the airport. The traffic analysis must be extended through 2025.

The Port is aware of the possibility that all or some airport operations may be shifted to another location sometime after 2015. However, the prospect of new or additional off-site airport facilities is speculative at this time, and is not a valid justification for imposing a ten year horizon on traffic study for this project.

Traffic Modeling and Trip Generation Analysis (subsections 5.3.1.2, 5.3.5, 5.3.5.1).

There are significant problems with the trip generation assumptions used for analysis of traffic from both elements of the project, *i.e.*, the Implementation Plan and future build out of the Land Use Plan. These are discussed separately below. The Port is particularly concerned with potential impacts on the area's freeway system. These impacts are seriously understated in the DEIR.

San Diego County Regional Airport Authority
Attention: Planning Department
September 15, 2006
Page 5

Implementation Plan. (DEIR pp. 5.3-21 - 5.3-22.)

The analysis assumes that the Implementation Plan will actually generate *no* additional traffic. Instead, all future traffic growth is deemed to be the result of increased airport use generally, and is thus the same under both the Implementation Plan and the No Project Alternative. (DEIR p. 5.3-21, Assumptions, first bullet.) A minor exception is allowance for 15 ADT growth due to expansion of the general aviation area. (DEIR p. 5.3-22.) This in turn serves as the basis for the subsequent conclusion that the impacts of the Implementation Plan will be limited to a limited redistribution of existing and projected traffic in the immediate project area, and that no mitigation is required. There are two basic flaws with this approach.

First, and most fundamentally, the analysis effectively assumes that future increases in traffic and ongoing development of the airport are separate and unrelated phenomena. This assumption effectively allows the Airport Authority to avoid responsibility for mitigating cumulative traffic impacts associated with expanded airport use. This is neither logical nor equitable. The Port does not believe that the expansion and improvement of airport facilities to serve increased passenger loads and related air operations can be considered separately from the impacts associated with the increased passenger activity and air operations they are designed to accommodate. As the project description in the DEIR makes clear, the primary purpose of the Implementation Plan is to alleviate declines in service levels at the airport, *i.e.* inadequate parking, terminal facilities, curb-side loading/unloading frontage and constraints on aircraft operations and overnight parking. (See Sections 3.2.11 - 3.2.4.2, pp. 3-6 - 3-12.) Traffic impacts associated with the increased airport activity served by the Implementation Plan must be evaluated as an impact associated with the proposed project.

The traffic analysis currently undertaken in the DEIR may have a certain limited usefulness in assessing incremental impacts associated with redistribution of airport traffic caused by the planned Implementation projects. However, for general planning, impact assessment and mitigation purposes, it is wholly inadequate. There are two possible avenues for addressing this issue.

First, a reasonable share of projected airport traffic increases can be assigned to the various project components. A reasonable share would be a share representative of the increased service capacity provided by each improvement or expansion of existing facilities, in relation to the capacity of the airport as a whole. Appropriate mitigation measures, if indicated, may be identified accordingly.

San Diego County Regional Airport Authority
Attention: Planning Department
September 15, 2006
Page 6

Alternately, ongoing traffic increases associated with the airport may be considered as a cumulative impact. However, as this cumulative impact is directly attributable to the airport itself, the Authority would bear responsibility for mitigation of the effects of its entire cumulative contribution to area traffic increases.

A second problem with the current analysis is that even if one assumes that increased demand for air travel is the primary driver of traffic growth at the airport, it does not follow that the various improvements in the Implementation Plan will have no effect on total vehicle trips to and from the airport. For example, while increasing public parking spaces on the airport property may have beneficial effects, it will also reduce one of the major incentives for utilizing public transportation or private van services to reach the airport. This in turn translates into more average daily trips. Provision of additional curb-side loading/unloading space may have a similar effect.

It also cannot safely be assumed that improvements of other types, such as addition of terminal facilities and consequent improvement of passenger services will have no influence at all on airplane ridership. For example, potential airplane passengers in northern San Diego County may be more likely to utilize the San Diego International Airport than other airports within driving distance, or less likely to utilize alternate means of travel such as rail, if service levels at SDIA improve.

It is recognized that some improvements, *e.g.* additional parking facilities, may have a positive influence on trip generation which must be factored in. An example would be a round-trip passenger who drives himself or herself to the airport and parks the rental car while away, as opposed to being dropped off and then picked up again on return by an office mate or family member. It is also recognized that the influence of the project components on trip generation may be difficult to quantify. But the DEIR currently makes no honest effort to evaluate the net potential effects of the project on trip generation at all. Even assuming these effects may be difficult to quantify, virtually any reasoned effort to assess these impacts would be better than the completely arbitrary assumption in the current DEIR that the various airport improvements included in the Implementation Plan will have no effect on traffic at all.

Proposed Airport Land Use Plan. (DEIR pp. 5.3-26 - 5.3-29.)

The analysis makes a number of insupportable assumptions. The trip generation and impact analysis should be corrected accordingly.

- The analysis assumes no increase in terminal-related traffic, although development of the TDY site and new Rental Car/Parking garage will include an estimated

San Diego County Regional Airport Authority
 Attention: Planning Department
 September 15, 2006
 Page 7

5,170 new public parking spaces. (DEIR p. 5.3-27, Assumptions, fourth bullet and p. 5.3-29, Traffic Impacts.) As indicated in the previous discussion of traffic from the implementation projects, the EIR should not assume that provision of additional facilities will have no effect on vehicle trips to and from the airport.

- The trip generation analysis assumes that traffic associated with the existing rental car facilities on Rental Car Road will cease when these rental car operations are relocated to the new on-site facility. (DEIR p. 5.3-27, Trip Generation.) This is a valid assumption only if the vacated facilities remain unoccupied and are not converted to other uses. Traffic associated with reuse of these properties should be reinserted in the trip generation figures unless it can be shown that reuse of these properties will not occur.
- The trip generation analysis assumes no new traffic associated with the new air cargo facilities. (DEIR p. 5.3-29.) However, the DEIR also indicates that the new cargo facilities will allow cargo carriers to conduct cargo sorting on-site, rather than trucking cargo to and from sorting facilities at other locations. This strongly suggests (1) an increase in the number of on-site employees; and (2) potential increase in number of cargo carrying vehicles traveling to and from the new facilities, since loads will no longer be consolidated at off-site sorting facilities. Additional traffic associated with these changes should be included in the analysis.

Section 5.3.3.1 Significance Criteria/Traffic Operations.

The stated threshold of significance for traffic impacts on freeway ramps is not appropriate for this project, and leads to a serious understatement of impacts and the need for appropriate mitigation measures. The stated threshold effectively provides that at ramps currently operating without delays, the project (or project plus cumulative traffic) may increase delays by as much as 14 minutes without being considered to have a significant impact. If the ramp is already operating with 15 minute or greater delays, the project must add at least two full minutes of delay to have an impact which is recognized as significant. Using these criteria, the DEIR concludes that increased delays of 7 minutes at the I-5 southbound ramps at Grape Street and Washington/Hancock Streets (and 9 minutes in the a.m. peak hour at the latter ramp) by the year 2015 would be less than significant impacts. (DEIR pp. 5.3-32, 5.3-42.)

Although the significance threshold used in the DEIR is purportedly adopted from the SANTE/ITE Guidelines, it does not follow that it is valid for purposes of CEQA. An EIR cannot use a significance threshold that is unreasonably high in order to minimize

San Diego County Regional Airport Authority
 Attention: Planning Department
 September 15, 2006
 Page 8

environmental impacts, or to avoid responsibility for identifying mitigation measures. The fact that impacts may be acceptable under adopted planning standards does not necessarily qualify an impact as insignificant for purposes of CEQA. With respect to traffic impacts, the controlling question is whether the impact represents a significant in relation to existing conditions, not whether the changed conditions will fall within specified planning or engineering standards. (*Gentry v. City of Murietta* (1995) 36 Cal.App.4th 1359, 1414-1417.) Given that area ramps appear to be presently operating without significant delays, delay times of 7 or 9 minutes represent an extremely serious change. By way of comparison, traffic impacts at a surface road intersection that caused vehicles to experience delays of full additional signal-cycle – typically 2 - 3 minutes – would be considered a significant impact under almost any circumstances. There is no reason that delays in freeway access should be treated as any less significant. The Port recommends that the significance threshold be revised to state that freeway ramp impacts are significant if traffic will cause traffic (veh/hr) to exceed the existing maximum meter rate, or if it will cause existing delays to increase by two minutes or more.

As to surface street impacts, there is an apparent inconsistency between the first significance criteria on p. 5.3-11, the second bulleted criterion on p. 5.3-12, and Table 5-20 referenced in both of these criteria. Do these criteria apply when an intersection will operate at LOS D, E or F (as per the chart), or only when the intersection will operate at LOS E or F with cumulative and project traffic?

Section 5.3.5 Impact Analysis.

The traffic impact analyses needs to be done in light of the previous comments on trip generation analysis and standards for significance. The Port is particularly interested in seeing the revised analysis for both direct and cumulative traffic impacts on freeway ramps utilizing a more appropriate threshold of significance.

Section 5.3.6 Construction Impacts.

The discussion acknowledges potential (but less than significant) impacts from construction traffic. However, some of the suggested amelioration measures mention detours. (DEIR p. 5.3-50.) Does this mean that road closures are anticipated in the course of construction? If so, a more detailed analysis of potential impacts related to road closures or lane closures should be included in the EIR.

San Diego County Regional Airport Authority
Attention: Planning Department
September 15, 2006
Page 9

Section 5.3.7 Cumulative Impacts.

For reasons discussed above, the DEIR cannot treat future increases in airport-related traffic as simply a background phenomenon unconnected to the proposed project. At a minimum, ongoing traffic increases associated with airport operations must be considered a cumulative impact for which the Airport Authority bears mitigation responsibility. If not analyzed elsewhere, the extent of this cumulative impact should be analyzed in this section, and mitigation measures identified for any impacts attributable directly to increases in airport-related traffic.

Section 5.3.8 Mitigation Measures.

This section should be expanded to include mitigation measures for any cumulative traffic impacts identified in the expanded impact analyses requested in the previous sections.

Also, the DEIR prescribes 3 mitigation measures (MM 5.3-1, MM 5.3-2 and MM 5.3-3) for acknowledged significant impacts of build out of the Airport Land Use Plan. (DEIR pp. 5.3-52 - 5.3-53.) Will the Airport fund these proposed mitigation measures? If not, how will they be implemented?

Section 5.5 Air Quality.

First, a general comment. A primary purpose of CEQA is to provide information to decision makers and the public concerning the environmental effects of proposed activities (Guidelines § 15002(a)(1), (4); *see also, Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 376). The Air Quality section makes that goal difficult to achieve. It provides a large amount of technical and complicated information, with little explanation. In lieu of providing the basic background information in the section, the reader is told: "To avoid repetition, Appendix E, *Air Quality*, contains further and more detailed discussions of the methodologies, models, data sources, and assumptions used in these analyses." (*See*, 5.5.1, 5.5.5, and 5.5.6.1.) The difficulty with this direction is that Appendix E contains 202 pages of technical data that only an air quality modeler or analyst can decipher. In addition, Appendix E provides no discernable discussion of assumptions.

In vacating the certification of the EIR, the Court in *Santa Clarita Organization for Planning the Environment, et al. v. County of Los Angeles* (2003) 106 Cal.App.4th 715, issued a stern warning to lead agencies not to "bur[y] in an appendix" information that should be examined in the body of the document.

San Diego County Regional Airport Authority
 Attention: Planning Department
 September 15, 2006
 Page 10

The chapter references 5.16 Health Risk Assessment for air quality health impacts. That analysis does not include assessment for on-site workers. The health impacts from toxic air contaminant, including those from mobile sources, must be analyzed. (*See, Berkeley Keep Jets Over the Bay Committee v. Board of Port Commissioners of the City of Oakland* (2001) 91 Cal.App.4th 1344.)

Section 5.5.2 Regulatory Framework.

This section lacks a discussion of relevant rules and regulations that protect air quality in San Diego. (*See, <http://www.sdapcd.org/rules/rules/REG4.html>*.) Some examples include:

- SDAPCD Rule 50: Visible Emissions
- SDAPCD Rule 62: Sulfur Content of Fuels
- SDAPCD Rule 68: Fuel Burning Equipment
- USEPA 40 CFR 80: Aircraft Engine Emission Standards

Section 5.5.3 Significance Criteria.

The chapter utilizes the CEQA Criteria for Air Quality and City of San Diego, Development Department Comparable CEQA Guidelines. While useful for some projects, they focus on qualitative factors to identify potential adverse air impacts. The better approach, and one supported by the San Diego APCD, is to use the significance thresholds included in Section 6 of the SCAQMD *CEQA Handbook*. It is a more objective methodology to determine potential adverse air quality impacts for both construction and operations emissions. (We do note that you do utilize the SCAQMD emission factors for off-road vehicles, Table E-31.)

Footnote 74 under this section, states that: “The applicable quantitative thresholds are based upon the SDAPCD Rule 1501 (Conformity General Federal Action).” This raises the question as to why there is no discussion of General Conformity Thresholds other than a short footnote. The Federal Clean Air Act (“CAA”) (176(c)(1)) requires that projects that involve federal funding, permits or other approvals must evaluate whether the project would conflict with provisions of the CAA. The transportation conformity requirements would be addressed by SANDAG.

Section 5.5.7 Construction Emissions.

The Draft EIR states that the CARB OFFROAD and EMFAC2002 models were used to obtain estimates of annual total emissions. Were the construction emissions then

San Diego County Regional Airport Authority
 Attention: Planning Department
 September 15, 2006
 Page 11

calculated using UBERMIS 2002, Version 8.7.0? Was a control efficiency applied to the uncontrolled PM10 emissions factor to account for soil stabilization, etc.?

Section 5.5.8 Cumulative Impacts.

This section is inadequate. It does not include specificity, explanation or sufficient analysis for assessment of cumulative impacts. Is it based only on AMP improvement projects? Are there no other reasonably foreseeable projects in the area?

Section 5.5.9 Mitigation Measures.

The mitigation measures lack specificity. For example:

MM5.5-2 needs to include some performance standard. Will low end zero emitting vehicles comprise 50% of the equipment? 20%?

MM5.5-8 needs a maximum speed. 15 MPH?

MM5.5-9. Does this include grates, wheel washing systems, etc. At all site exits?

MM5.5-12. What will the signs say?

Section 5.5.10 Level of Significance after Mitigation Measures.

Statements lack substantial evidence. For example, there is no discussion regarding sensitive receptors. Neither 5.5 nor 5.16 describe the location of sensitive receptors.

Section 5.6 Hydrology & Water Quality Impacts.

Section 5.6.7 Cumulative Impacts (p. 5.6-11).

The text acknowledges that the project will result in an increase of impermeable surfaces of about 6% on site, and presumably a corollary increase in runoff. The text also acknowledges that the current storm drain system appears inadequate when evaluated using San Diego County Hydrology Manual procedures. These factors indicate that the runoff impacts of the project may be cumulatively significant, if not significant in and of themselves. An appropriate remedy would be to adopt the recommendations of the Hydraulic Report as a mitigation measure in Section 5.6.8, and further require that any

San Diego County Regional Airport Authority
 Attention: Planning Department
 September 15, 2006
 Page 12

improvements identified as necessary through further studies be funded and implemented in connection with the individual construction projects that comprise the Implementation Program.

Section 5.13 Aesthetic Impacts.

Section 5.13.4.1 Key View Locations and Characteristics (pp. 5.13-6 - 5.13.7).

While the impact analysis covers a large number of viewing locations, it does not consider possible view impacts from the downtown waterfront area across the bay to the airport. Potential impacts on views from the waterfront area should be included in the impact analysis, or the reasons for omitting consideration of these views indicated in the EIR.

Section 5.13.5.1 Proposed Project.

Proposed Airport Land Use Plan/Views. (DEIR pp. 5.13-7 - 5.13-9.)

Some of the narrative descriptions (*e.g.* Key View 12) do not state why the view impact was deemed insignificant, while others (*e.g.* Key Views 14 - 17) do provide a brief statement of reasons for the conclusion of no significant impact. Because aesthetic considerations are necessarily somewhat subjective, a review of the photographs does not necessarily explain the basis for the DEIR's conclusions. A more complete statement should be provided where it is currently lacking.

Section 5.13.8 Mitigation Measures.

The text does not list the mitigation measures for construction impacts identified in the previous subsection 5.13.6.1. As these impacts were significant in the absence of mitigation measures, the mitigation measures identified in subsection 5.13.6.1 should be listed here (as well as incorporated into final conditions of approval and the statutorily required mitigation monitoring plan).

Section 5.15.8 Mitigation Measures.

The text states that "Because the project improvements are provided to reduce potential impact associated with hazards and" What specific project improvements' does this refer to?

San Diego County Regional Airport Authority
 Attention: Planning Department
 September 15, 2006
 Page 13

Section 5.16 Human Health Risk Assessment.

Sections 5.16-3 - 5.16.5 Impact Analysis.

Table 5-90 indicates that the incremental acute health risks calculated for the proposed project are generally lower (in some cases significantly lower) than the incremental risks calculated for the No Project alternative (Table 5.94.) What is the explanation for this, or does it indicate the modeling is unreliable?

The discussion of Construction Impacts claims that since these emissions are temporary in nature and generally confined to the construction site and the access/egress roadways, "they are not expected to cause a significant incremental change in cancer incidences or health risks to the receptors located in the vicinity of the Airport." This is not the position of U.S. EPA. Measure E1: *Exceedances of Short-Term Air Quality Standards*, states that "Particulate matter in the air (often called PM-10 or PM-2.5) has been found to cause increase risk of mortality (death), hospital admissions and emergency room visits for heart and lung diseases, respiratory effects, and decreases in lung function. Such health effects have been associated with both short-term and long-term exposure to particulate matter."

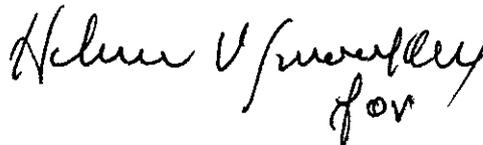
Chapter 6 OTHER EFFECTS OF THE PROPOSED PROJECT

Section 6.3 Growth Inducing Impacts.

Page 5-3, item 5. As previously noted in the comments on land use impacts, the project involves long-term construction of public parking spaces and relocation of existing rental car operations onto the airport property. May this not lead to change of use and ultimate intensification of use of other properties in the area that currently provide airport parking or serve rental car operations? Please analyze this potential impact.

This concludes our comments on the DEIR. On behalf of the San Diego Port Authority, thank you for your anticipated responses and revisions to the EIR.

Very truly yours,



MARGARET M. SOHAGI
 of FOX & SOHAGI, LLP

San Diego County Regional Airport Authority
Attention: Planning Department
September 15, 2006
Page 14

cc: Chairman and Board Members, San Diego County Regional Airport Authority
President and CEO, San Diego County Regional Airport Authority
Chair and Commissioners, Board of Port of San Diego
Ralph T. Hicks, Jr., Director, Land Use Planning, Port of San Diego
C. D. Magnus, Assistant Planner, Port of San Diego
Duane Bennett, District Counsel, Port of San Diego

Port of San Diego - Airport Master Plan EIR\Corres\Final comment letter.ltr.doc
70340.004

SAN DIEGO OFF-AIRPORT PARKING ASSOCIATION

MEMBERS

AMPCO
System Parking

Five Star Parking

Park & Ride
Airport Parking

OFFICERS

Paul Chacon
President

Thomas J. Traver
Treasurer

Jeff. S. Fuller
Secretary

STAFF

Adrian Kwiatkowski
Executive Director

September 5, 2006

San Diego County Regional Airport Authority
Attn: Mr. Ted. Anasis, AICP
P.O. Box 82776
San Diego, CA 92138-2776

RE: Comments on Airport Master Plan Draft EIR

Dear Mr. Anasis:

On behalf of the San Diego Off-Airport Parking Association (SDOPA) we are submitting our comments to you regarding the Revised Airport Master Plan Draft EIR dated May 2006. After reviewing the plan, we continue to have concerns with the following issues that we have raised before.

The following issues have not been addressed to our satisfaction.

Section 2.4.2 Airport Master Plan Component #2: Proposed Airport Implementation Plan – Develop and Operate Project Components.

Construct a new parking structure, departure curb and vehicle circulation serving Terminal 2

There was not enough detailed information on this proposal provided in the Master Plan. We still have the following questions:

Section 3.2.3.3 Need to Increase Public Parking Areas, states that the demand for on-Airport public parking will exceed supply by 4,326 parking stalls in 2015.... And that a new ... four level parking garage will be built over the existing Terminal 2 West surface parking lot, providing 3,200 additional parking spaces in the terminal area.

- What are the proposed uses for excess parking capacity of 3,200 spaces until demand catches up with this new supply?
- Does the Airport Authority plan on expanding its long term parking business utilizing the additional spaces at the proposed Terminal 2 parking structure and its new 3,200 spaces?

The current and future demand for short term parking seems to be a legitimate responsibility of the Airport Authority to meet since it alone controls the on-airport parking in closest proximity to all terminals. This short term parking is the most expensive in the vicinity since it provides the traveling public with the most convenience. The total demand for long term parking has traditionally been met by the private sector using off

RECEIVED

SEP 20 2006

PLANNING DEPT. #44

Page Two
SDOPA

site parking lots and garages which are developed on less expensive land and can offer a cheaper alternative to the traveling public.

- Has any consideration been given to the existing supply of private, off airport parking as a means to meet the increased parking demand?
- Has any consideration been given to encouraging the development of private off airport facilities, at a reduced cost, as a means to provide a less expensive long term parking alternative to the traveling public?

Relocate and reconfigure SAN Park Pacific Highway

The Master Plan will relocate and expand the SAN Park Pacific Highway parking facility which is currently at 1,670 public parking spaces. The new facility will add 500 spaces bringing the total number of spaces to 2,170 at this facility.

Section 1.1 Introduction and Background There, states that San Diego International Airport is the smallest major airport site in the United States, consisting of 661 acres.

It seems to us that utilizing limited airport acreage for parking, and then expanding that parking operation to utilize even more limited acreage, is not the best use of this public property. We agree with your statement, and the fact, that the airport is limited in size and we feel that the Airport Authority should develop a policy that the priority usage for acreage should be aviation related enterprises.

SDOPA is again curious as to whether the Airport Authority conducted an inventory of the parking spaces available at nearby privately operated parking lots to see if there is enough supply at these facilities to meet future customer demand? In our opinion, there are private development opportunities available that could help the Airport Authority manage future parking demand without the need to utilize limited public land and financial resources.

In summary, we hope that these questions are finally answered when the San Diego County Regional Airport Authority Board is presented with the EIR.

Sincerely,



Paul Chacon
President



Adrian Kwiatkowski
Executive Director

CC: San Diego County Regional Airport Authority Board
SDOPA Board of Directors

Comment Summary – 2006 Master Plan DEIR San Diego International Airport

The Draft Environmental Impact Report for the San Diego International Airport Master Plan was distributed for review from cooperating agencies, organizations, and the public in May 2006. All of the comments were received via mail, fax, or delivered by messenger between June 12 and October 20, 2006. This section briefly summarizes the comments received by agencies and organizations. Comments are summarized in detail by category in the Appendix A.

A total of 21 agencies, organizations, and Community Planning Groups submitted comments to the SDCRAA for review and consideration during development of the Draft Environmental Impact Report. Public and agency comments were encouraged by the SDCRAA, as it is helpful in the identification of issues that warrant additional consideration.

Table 1 summarizes the number of comments received by Federal, State, and Local Agencies, Organizations, and Community Planning Groups.

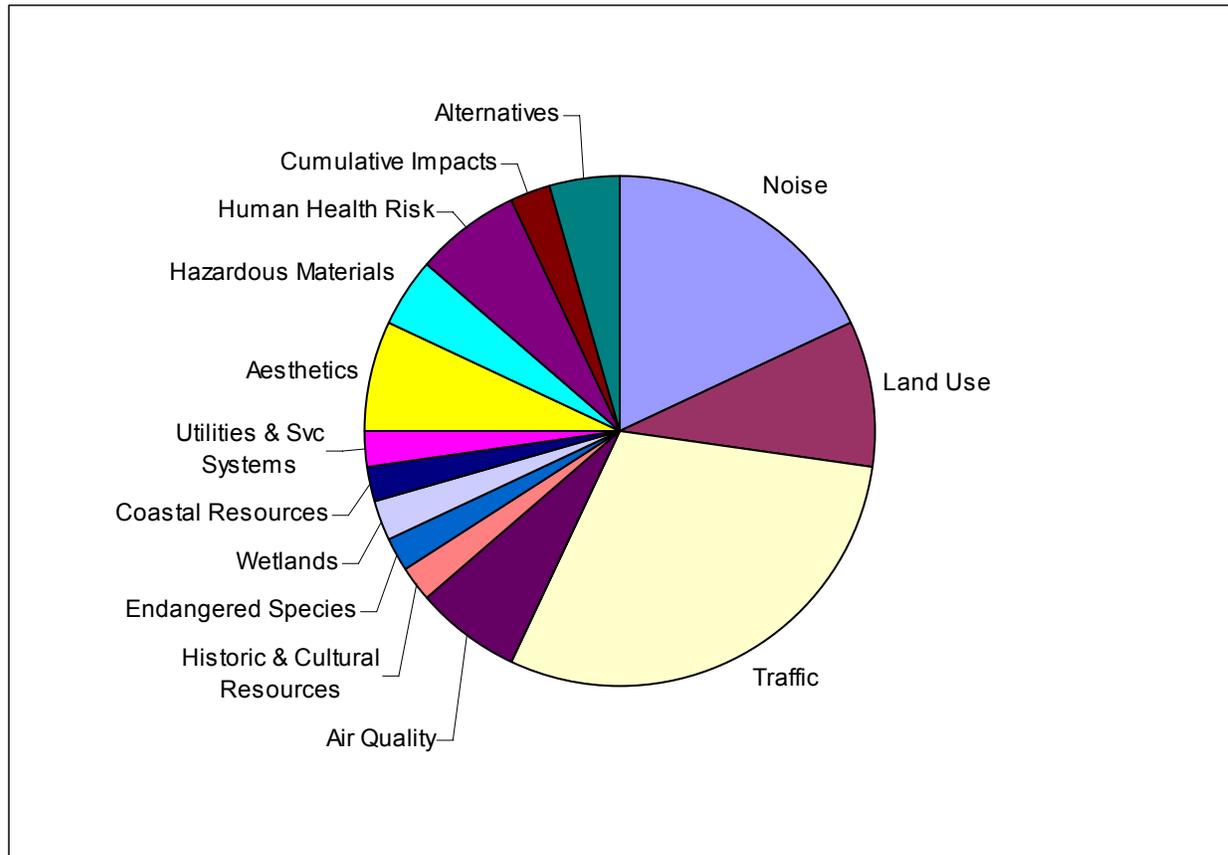
Table 1-5
Summary of Comments Received

Commenter	Written Comments
Federal Agencies	2
State Agencies	5
Local Agencies	4
Organizations	8
Community Planning Groups	2

All of the comments received addressed the Proposed Project. Several agencies included remarks about the No Project Alternative as well, but these comments typically focused on a comparison between the Proposed Project and No Project Alternatives. No comments were received that addressed the East Terminal Alternative.

As shown in Figure 1, comments were submitted regarding several categories, with the most significant emphasis placed on (1) traffic, (2) noise, and (3) land use issues. Several comments also brought into question operational levels for the No Project and Proposed Project Alternatives, as operational levels were the same for all alternatives considered through the year 2015. Several comments expressed the need to extend the analysis year beyond 2015 to better plan for the airport's growth. The comments that were received have been addressed throughout the text of the re-circulated Draft EIR.

Figure 1-1
Summary of Comments Received



As shown in Figure 1, the majority of comments received address the following issues:

1. Traffic
2. Noise
3. Land Use

Each issue category is summarized below.

Traffic and Circulation

Comments concerning traffic and circulation in the DEIR related to traffic and parking-related issues. Several comments suggested an increase in traffic on roadways surrounding the airport and the need to conduct further analyses and mitigation at several additional intersections. Some comments requested additional information about the expansion of parking facilities on the airport site. Several organizations would like public transit to be a higher priority in planning for transportation and access to the airport. Coordination with all local transit agencies for the improvement of airport accessibility was suggested. It was also suggested to extend the future timeline beyond the year 2015 for a better estimation of future traffic impacts using the proposed alternative and No Project alternative.

Noise

Comments were made concerning the noise impact analysis completed for the DEIR. Some comments were in regard to the type of analysis that was used to compute existing and future noise exposure. Agencies and organizations questioned the method of averaging daily noise

exposure. Comments also noted that further evidence was needed to support the finding that the Proposed Project and the No Project alternatives would both produce the same number of passengers and flights, and indicated that it would stand to reason that with the proposed expansion, the number of flights would increase, along with airport noise.

Land Use

Several comments received from organizations and agencies addressing land use in the DEIR stated that the document does not fully address alternative land use scenarios and operational policies. Additionally, there were no alternatives to the Land Use Plan stated. Comments also requested revisiting the possibility of acquiring adjacent land to ease the airport's expansion. It was also noted that the timeline for addressing airport growth should be extended beyond 2015.

Air Quality

The comments addressing air quality expressed concern that increased flights would worsen air pollution and add to health problems in the San Diego area. Comments were also directed at the complexity of the air quality information in the DEIR. Additional explanation of the air quality analysis methodology and the air quality findings was requested.

Historic, Architectural, Archaeological, Paleontological, and Cultural Resources

Comments regarding the historic and cultural resources were concerned with the appropriate review of any structures 45 years or older that could be affected by the proposed alternative.

Biotic Communities/Endangered Species

The protection of active bird nests and listed endangered species throughout any construction activities and potential development were of primary interest in comments related to Biotic Communities and Endangered Species. The federally and state-listed California Least Tern species inhabits areas of the airport. Agencies recommend preventative action against disturbing these birds during project construction, in addition to their protection, pending any new development.

Wetlands

The comment received concerning wetlands states that the Department of Fish and Game and the US Army Corps of Engineers should confirm that on-site waters and wetlands are not under jurisdiction of the Federal or State government, and appropriate actions should be taken to protect any stream or riparian resources found.

Coastal Resources

Comments regarding Coastal Resources confirmed that coastal permits from the California Coastal Commission will need to be obtained for developments proposed in the Airport Master Plan, and that federal activities, development projects, permits and licenses, and financial support must comply with the California Coastal Management Program (CCMP).

Utilities and Service Systems

Comments received referred to the strain on the under-capacity disposal system that would be increased with proposed expansion to facilities in the Airport Master Plan. Comments expressed the need for a Solid Waste Management Plan that addresses construction and demolition (C&D) debris and ongoing waste generation.

Aesthetics

Specific comments addressing aesthetics included concern for the appearance of the Washington Street gate area at the MCRD, which is the main gateway for visitors to the base. Other comments were interested in mitigation measures for the short term impacts to aesthetics during construction phases of the Proposed Project. Concern for the documentation of the Henderson Avenue corridor and protection of Marine Corps Recruit Depot Historic District (MCRDSD) were also stated.

Hazards and Hazardous Materials

Comments reinforced the appropriate procedures to follow prior to any construction or demolition of any potentially hazardous or contaminated sites. Any contaminants should be remediated in compliance with California environmental regulations, policies, and laws. Appropriate soil and waste disposal actions should be taken where contaminated materials exist. The underground fuel storage tank at Jimsair Aviation Services, Inc. should be added to the DEIR's list of Fuel Storage Facilities (Table 5-88).

Human Health Risk Assessment

Health risk-related comments were primarily related to air quality concerns. Comments related to the potential harm to on-site workers due to increased exposure to exhaust and gases emitted from vehicles and aircraft.

Cumulative Impacts

Cumulative impacts comments received were directed toward the impacts anticipated by cumulative airport-related traffic and consideration of mitigation for the ongoing traffic increase associated with airport operations.

Alternatives

All comments received addressing Project Alternatives were in relation to the No Project Alternative. Comments focused on the concern that analysis comparing the Proposed Project and No Project alternatives produced similar results, especially in noise and traffic-related impacts.

APPENDIX B

Noise and Its Effect on People

APPENDIX B

Table of Contents

B.1 Noise Metrics

- Decibel (dB)
- A-Weighted Decibel (dBA)
- Maximum Sound Level (L_{max})
- Sound Exposure Level (SEL)
- Equivalent Sound Level (L_{eq})
- Day-Night Average Sound Level (DNL)
- Community Noise Equivalent Level (CNEL)
- Number of Events (NA)
- Time Above in Minutes

B.2 The Effects of Aircraft Noise on People

- Community Annoyance
- Speech Interference
- Sleep Disturbance

B.3 Aircraft Noise Modeling Technical Report

- Noise Model
- Fleet Mix
- Runway Use
- Flight Tracks
- Ground Noise
- Results and Limitations

B.4 Aircraft Noise Analysis Figures

B.5 Aircraft Noise Analysis Summary Tables

B.6 Vehicular Analysis

APPENDIX B: NOISE AND ITS EFFECT ON PEOPLE

This appendix presents the details of noise metrics and the effect of noise on people. This appendix also presents the following:

- The aircraft noise modeling technical report ([Section B.3](#))
- Results of the noise impact analysis for the Proposed Project (Preferred Alternative) and its alternatives in the years 2020 and 2025 ([Section B.4](#))
- The aircraft noise analysis summary tables ([Section B.5](#))
- The vehicular noise analysis summary tables ([Section B.6](#))

In the State of California, the evaluation of aircraft noise exposure in environmental documents is based primarily on analysis using the Community Noise Equivalent Level (CNEL) metric. In addition to CNEL, this study also uses supplemental noise metrics to provide a comprehensive evaluation of both cumulative and single event noise. To assist reviewers in interpreting these noise metrics, this appendix presents an introduction to the relevant fundamentals of acoustics and noise terminology (see Section B.1) and the effects of noise on human activity (see Section B.2). The technical details of the noise model used to calculate aircraft noise exposure are discussed in Section B.3 and Section B.4 includes the aircraft noise analysis figures. Summary tables of the analysis are presented in Section B.5. Section 5.1 of Chapter Five builds on this background information to provide impact analysis of aircraft noise. Section B.5 provides the Transportation Noise Study.

B.1 NOISE METRICS

Noise, which is often defined as unwanted sound, is one of the most common environmental issues associated with aircraft operations. Of course, aircraft are not the only sources of noise in an urban or suburban surrounding, where interstate and local roadway traffic, rail, industrial, and neighborhood sources may also intrude on the everyday quality of life. Nevertheless, aircraft are readily identifiable to those affected by aviation noise and are typically singled out for criticism. Consequently, aircraft noise problems often dominate analyses of environmental impacts.

A “metric” is defined as something “of, involving, or used in measurement.” As used in environmental noise analyses, a metric refers to the unit or quantity that quantitatively measures the effect of noise on the environment. The Community Noise Equivalent Level (CNEL) is the noise metric used by the State of California to assess cumulative (i.e., multiple aircraft events) community noise in the vicinity of airports. While the FAA uses the methodologically similar Day-Night Average Sound Level (DNL) metric for noise analyses through the United States, the FAA accepts use of the CNEL metric for federal aviation noise assessments in California. Additionally, this study uses Time Above (TA), Sound Exposure Level (SEL), and Number of Event (NA) metrics to

provide additional comprehension on the meaning of the CNEL noise analysis, especially for daytime noise impacts to schools and nighttime noise impacts to residents.

Accordingly, this appendix discusses the following acoustic terms and metrics:

- Decibel (dB)
- A-Weighted Decibel (dBA)
- Maximum Sound Level (L_{max})
- Sound Exposure Level (SEL)
- Equivalent Sound Level (L_{eq})
- Day-Night Average Sound Level (DNL)
- Community Noise Equivalent Level (CNEL)
- Number of Events (NA)
- Time Above in Minutes (TA)

B.1.1 Decibel (dB)

All sounds come from a sound source—a musical instrument, a speaking voice, and an airplane passing overhead. Energy is needed to produce sound. The sound energy produced by any sound source is transmitted through the air in sound waves—tiny, quick oscillations of pressure just above and just below atmospheric pressure. These oscillations, or sound pressures, impinge on the ear, creating the sound we hear.

Human ears are sensitive to a wide range of sound pressures. The loudest sound that people hear without pain has about one trillion times more energy than the quietest sounds heard. As this range, on a linear scale, is unwieldy, the total range of sound pressures is compressed into to a more meaningful range by introducing the concept of sound pressure level (SPL) and its logarithmic unit of decibel (dB).

SPL is a measure of the sound pressure of a given noise source relative to a standard reference value (typically the quietest sound that a young person with good hearing can detect). Decibels are logarithmic quantities, i.e., the ratio of the two pressures: the numerator being the pressure of the sound source of interest (e.g., an aircraft), and the denominator being the reference pressure (the quietest sound we can hear).

The logarithmic conversion of sound pressure to SPL means that the quietest sound people can hear (the reference pressure) has a SPL of about zero decibels, while the loudest sounds heard without pain have SPLs of about 120 dB. Most sounds in our day-to-day environment have SPLs from 30 to 100 dB.

Because decibels are logarithmic quantities, they require logarithmic math and not simple (linear) addition and subtraction. For example, if two sound sources each produce 100 dB and are operated together, they produce only 103 dB—not 200 dB as might be expected. Four equal sources operating simultaneously result in a total SPL of 106 dB. In fact, for every doubling of the number of equal sources, the SPL (of all of the sources combined) increases another three decibels. A ten-fold increase in the number

of sources makes the SPL increase by 10 dB. A hundredfold increase makes the level increase by 20 dB and it takes a thousand equal sources to increase the level by 30 dB.

If one source is much louder than another, the two sources together will produce the same SPL (and sound to our ears) as if the louder source were operating alone. For example, a 100 dB source plus an 80 dB source produce 100 dB when operating together. The louder source “masks” the quieter one. But if the quieter source gets louder, it will have an increasing effect on the total SPL. When the two sources are equal, as described above, they produce a level 3 decibels above the sound level of either one by itself.

From these basic concepts, note that one hundred 80 dB sources will produce a combined level of 100 dB; if a single 100 dB source is added, the group will produce a total SPL of 103 dB. Clearly, the loudest source has the greatest effect on the total.

There are two useful rules of thumb to remember when comparing SPLs: (1) most of us perceive a 6 to 10 dB increase in the SPL to be an approximate doubling of loudness, and (2) changes in SPL of less than about 3 dB are not readily detectable outside of a laboratory environment.

B.1.2 A-Weighted Decibel (dBA)

Another important characteristic of sound is its frequency, or “pitch.” This is the rate of repetition of the sound pressure oscillations as they reach our ear. Frequency can be expressed in units of cycles per second (cps) or Hertz (Hz). Although cps and Hz are equivalent, Hz is the preferred scientific unit and terminology.

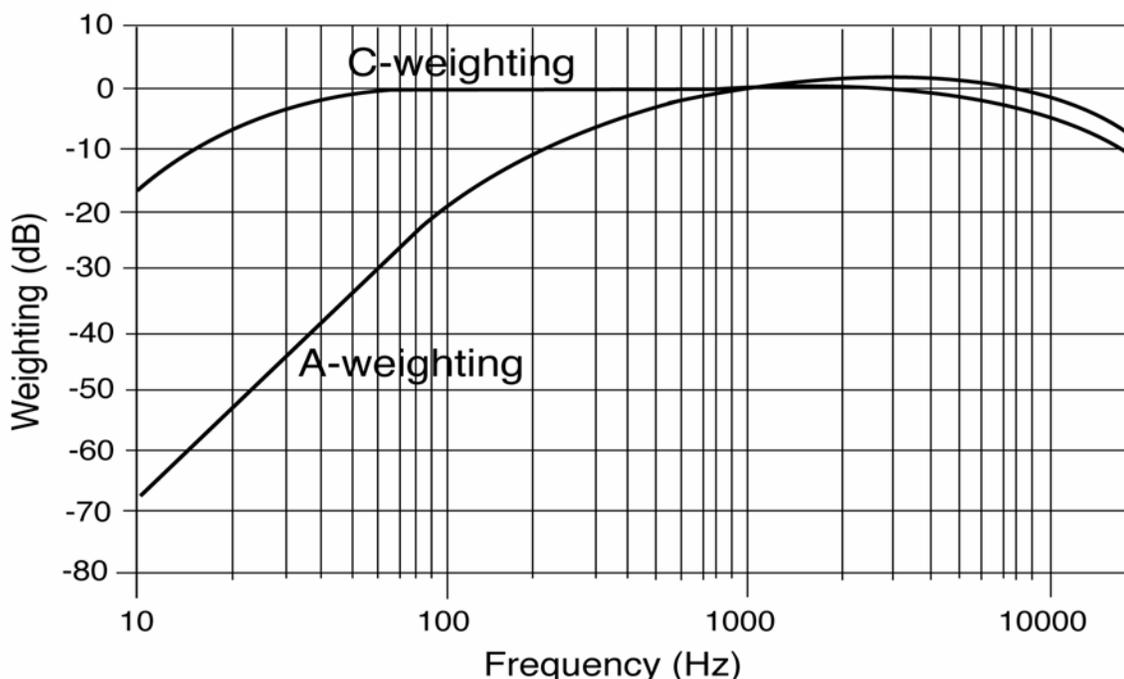
A very good ear can hear sounds with frequencies from 16 Hz to 20,000 Hz. However, most people hear from approximately 20 Hz to approximately 10,000-15,000 Hz. People respond to sound most readily when the predominant frequency is in the range of normal conversation, around 1,000 to 4,000 Hz. Acousticians have developed and applied “filters” or “weightings” to SPLs to match our ears’ sensitivity to the pitch of sounds and to help us judge the relative loudness of sounds made up of different frequencies. Two such filters, “A” and “C,” are most applicable to environmental noises.

A-weighting significantly deemphasizes noise at low and high frequencies (below approximately 500 Hz and above approximately 10,000 Hz) where people do not hear as well. The filter has little or no effect at intervening frequencies where human hearing is most efficient. [Figure B-1](#) shows a graph of the A-weighting as a function of frequency and its aforementioned characteristics. Because this filter generally matches our ears’ sensitivity, sounds having higher A-weighted sound levels are usually judged to be louder than those with lower A-weighted sound levels, a relationship which does not always hold true for unweighted levels. Therefore, A-weighted sound levels are normally used to evaluate environmental noise. SPLs measured through this filter are referred to as A-weighted decibels (dBA).

As shown in [Figure B-1](#), C-weighting is nearly flat throughout the audible frequency range, hardly deemphasizing the low frequency noise. C-weighted levels are not used

as frequently as A-weighted levels, but they may be preferable in evaluating sounds whose low-frequency components are responsible for secondary effects such as the shaking of a building, window rattle, perceptible vibrations, or other factors that can cause annoyance and complaints. Uses include the evaluation of blasting noise, artillery fire, sonic boom, and, in some cases, aircraft noise inside buildings. SPLs measured through this filter are referred to as C-weighted decibels (dBC).

Figure B-1
Frequency Response Characteristics of A and C Weighting



Source: ANSI S1.4-1983 "Specification of Sound Level Meters"

Other weighting networks have been developed to correspond to the sensitivity and perception of other types of sounds, such as the "B" and "D" filters. However, A-weighting has been adopted as the basic measure of community environmental noise by the U.S. Environmental Protection Agency (EPA) and nearly every other agency concerned with aircraft noise throughout the United States.

Figure B-2 presents typical A-weighted sound levels of several common environmental sources. Sound levels measured (or calculated) using A-weighting are most properly called "A-weighted sound levels" while sound levels measured without any frequency weighting are most properly called "sound levels." However, since this study deals only with A-weighted sound levels, the A-weighted sound levels are referred to simply as sound levels in the interests of conciseness.

An additional dimension to environmental noise is that sound levels vary with time and typically have a limited duration, as shown in **Figure B-3**. For example, the sound level increases as an aircraft approaches, then falls and blends into the background as the aircraft recedes into the distance. Sounds can be classified by their duration as continuous like a waterfall, impulsive like a firecracker or sonic boom, or intermittent like an aircraft overflight or vehicle passby.

**Figure B-2
Sound Levels of Typical Noise Sources (dBA)**

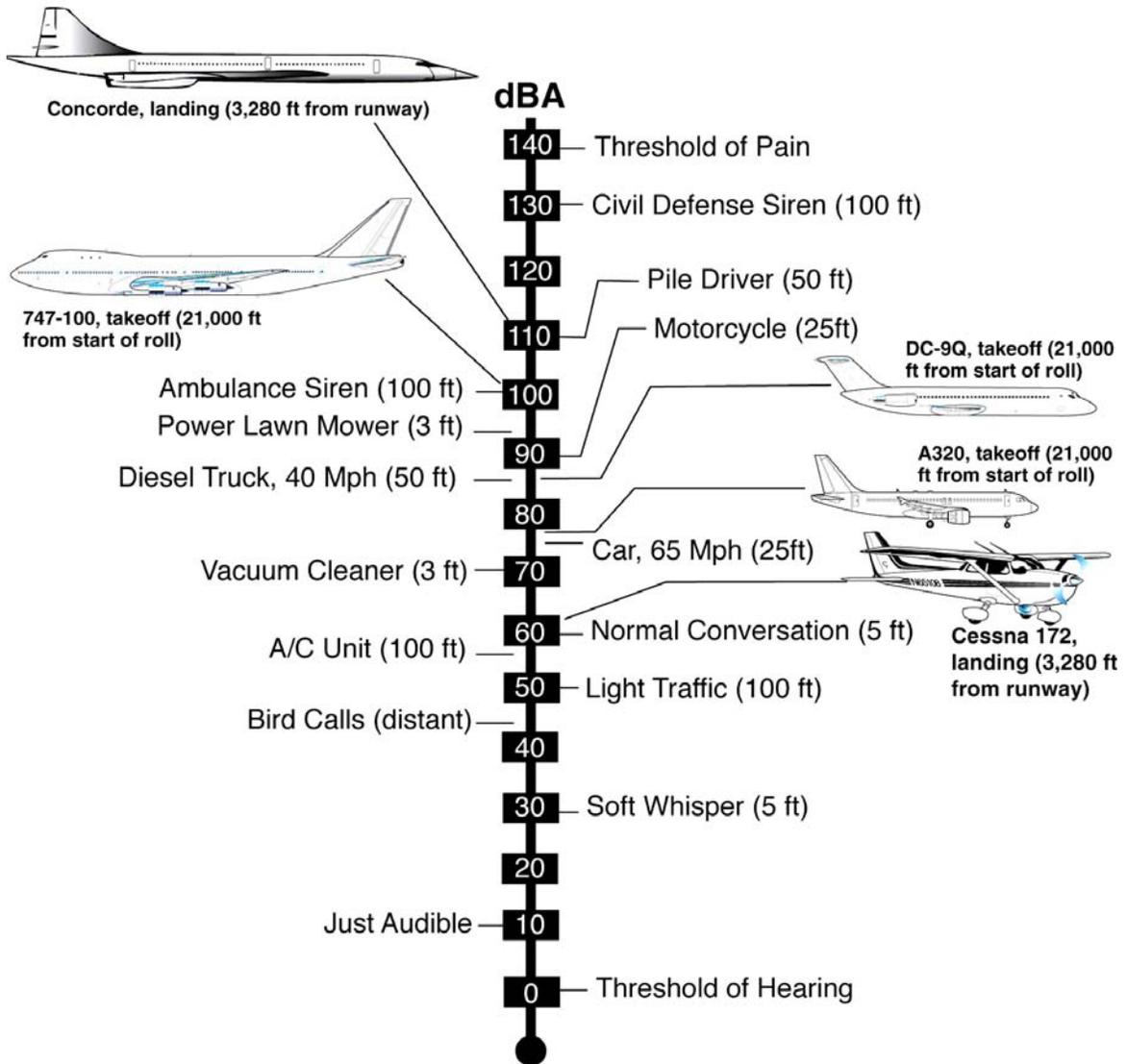
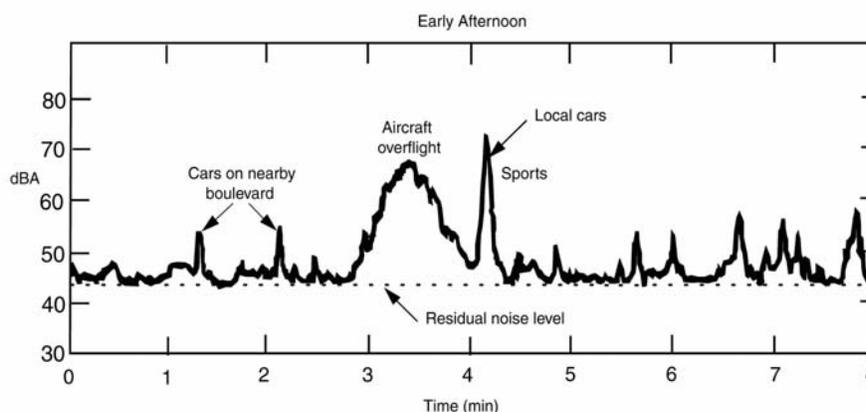


Figure B-3
Variation of Community Noise in a Suburban Neighborhood



Source: "Community Noise," NTID 300.3 EPA, December 1971.

B.1.3 Maximum Sound Level (L_{max})

The variation in sound level over time often makes it convenient to describe a particular noise "event" by its maximum sound level, abbreviated as L_{max} . For example, the L_{max} due to the aircraft overflight event in [Figure B-3](#) is approximately 67 dBA.

[Figure B-4](#) shows L_{max} values for a variety of common aircraft from the FAA's Integrated Noise Model database. These L_{max} values for each aircraft type are for aircraft performing a maximum stage (trip) length departure on a day with standard atmospheric conditions at a reference distance of 3.5 nautical miles from their brake release point. Of the dozen aircraft types listed on the figure, the Concorde has the highest L_{max} and the Saab 340 turboprop has the lowest L_{max} .

The L_{max} describes only one dimension of an event; it provides no information on the cumulative noise exposure generated by a sound source. In fact, two events with identical maxima may produce very different total exposures (i.e., total influence of an event). One may be of short duration, while the other may continue for an extended period. This Sound Exposure Level metric, as discussed in the next section, corrects for this deficiency.

B.1.4 Sound Exposure Level (SEL)

The Sound Exposure Level (SEL) is frequently used to describe noise exposure for a single aircraft flyover. This metric is also sometimes referenced as the Single Event Sound Exposure Level, or SENEL. SEL may be considered an accumulation of the sound energy over the duration of an event. The shaded area in [Figure B-5](#) illustrates that portion of the sound energy (or "dose") included in an SEL computation. The dose is then normalized (standardized) to a duration of one second.

**Figure B-4
Common Aircraft Departure Noise Levels**

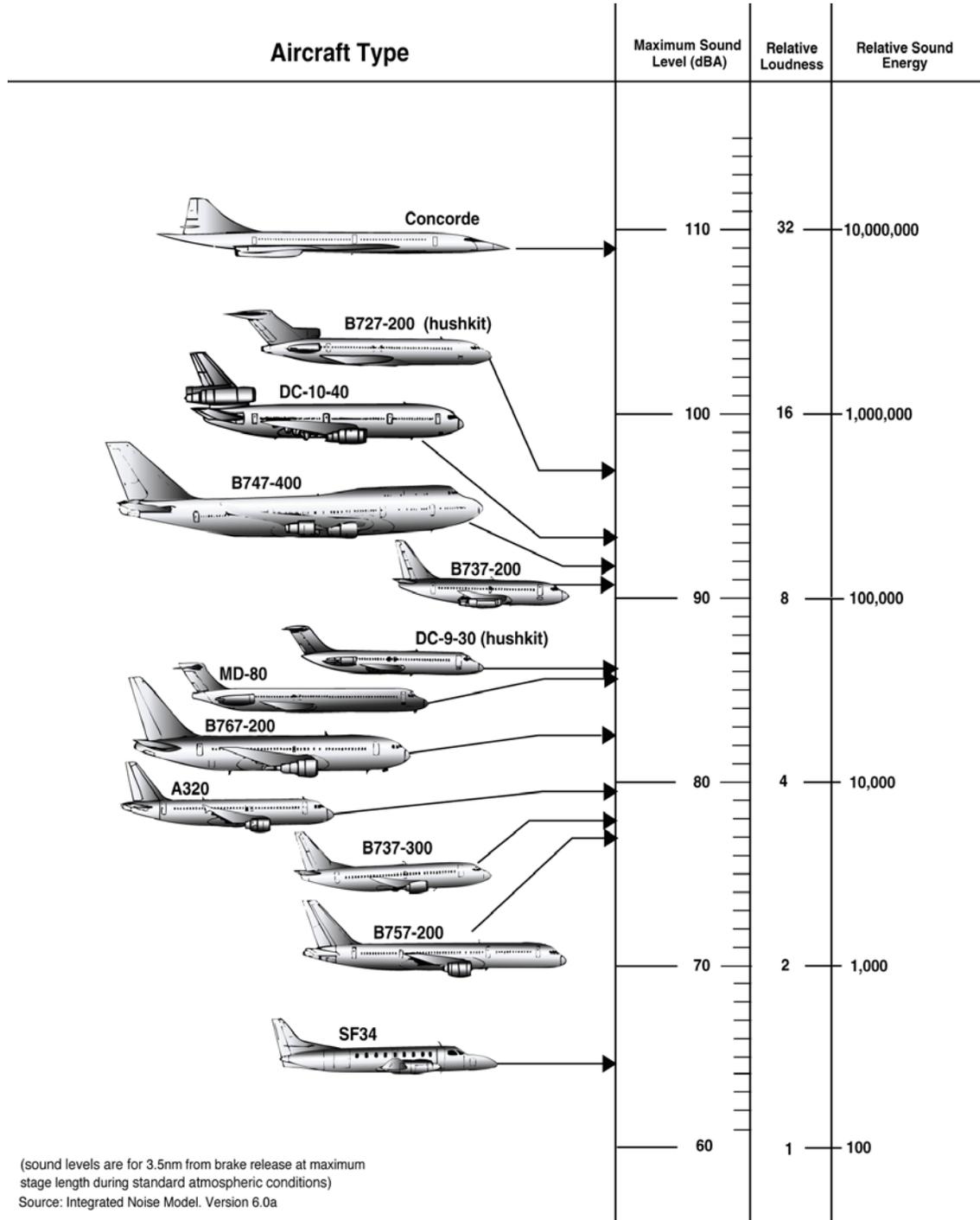
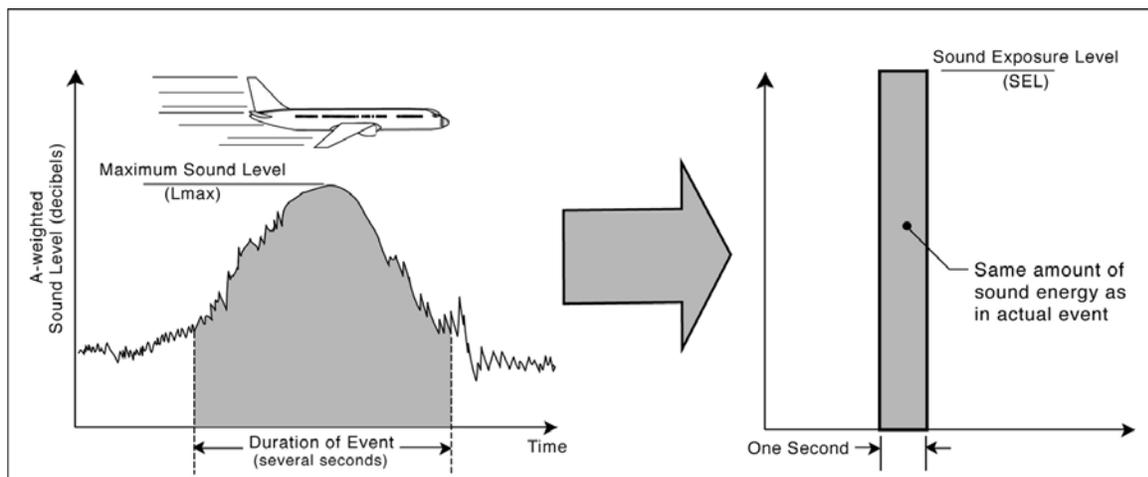


Figure B-5
Relationship between Single Event Noise Metrics



This “revised” dose is the SEL, shown as the shaded rectangular area in [Figure B-5](#). Mathematically, the SEL represents the sound level of the constant sound that would, in one second, generate the same acoustic energy as the actual time-varying noise event. For events that last more than one second, SEL does not directly represent the sound level heard at any given time, but rather provides a measure of the net impact of the entire acoustic event.

Note that, because the SEL is normalized to one second, it will always be larger in magnitude than the L_{max} (for an event that lasts longer than one second). In fact, for most aircraft overflights, the SEL is on the order of 7 to 12 dBA higher than the L_{max} . With the SEL metric, not only do louder flyovers have higher SELs than quieter ones (of the same duration), but longer flyovers also have greater SELs than shorter ones (of the same L_{max}).

SEL’s inclusion of both the intensity and duration of a sound source makes it the metric of choice for comparing the single-event levels of varying duration and maximum sound level. This metric provides a comprehensive basis for modeling a noise event in determining overall noise exposure; aggregate SEL values from multiple events are used to calculate cumulative noise exposure levels with the L_{eq} , DNL, and CNEL noise metrics.

B.1.5 Equivalent Sound Level (L_{eq})

The Equivalent Sound Level (abbreviated L_{eq}), is a measure of the noise exposure resulting from the accumulation of A-weighted sound levels over a particular period of interest (e.g., an hour, an 8-hour school day, nighttime, or a full 24-hour day). However, because the length of the period can be different depending on the time frame of interest, the applicable period should always be identified or clearly understood when discussing the metric. Such durations are often identified through a subscript, for example $L_{eq(8)}$ or $L_{eq(24)}$.

Conceptually, L_{eq} may be thought of as a constant sound level over the period of interest that contains as much sound energy as the actual time-varying sound level with its normal “peaks” and “valleys,” as illustrated in [Figure B-3](#). In the context of noise from typical aircraft flight events and as noted for SEL, L_{eq} does not represent the sound level heard at any particular time, but rather represents the total sound exposure for the period of interest. Also, it should be noted that the “average” sound level suggested by L_{eq} is not an arithmetic value, but a logarithmic, or “energy-averaged,” sound level. Thus, loud events tend to dominate the noise environment described by the L_{eq} metric.

As for its application to airport noise issues, L_{eq} is often presented for consecutive 1-hour periods to illustrate how the hourly noise dose rises and falls throughout a 24-hour period, as well as how certain hours of the day are significantly affected by a few loud aircraft.

B.1.6 Day-Night Average Sound Level (DNL)

DNL is the same as L_{eq} (an energy-average noise level over a 24-hour period) except that 10 dB is added to those noise events occurring during the nighttime (between 10 p.m. and 7 a.m.). This weighting reflects the added intrusiveness of nighttime noise events due to community background noise levels that typically decrease by about 10 dB during those nighttime hours.

Typical DNL values for a variety of noise environments are shown in [Figure B-6](#) to indicate the range of noise exposure levels usually encountered.

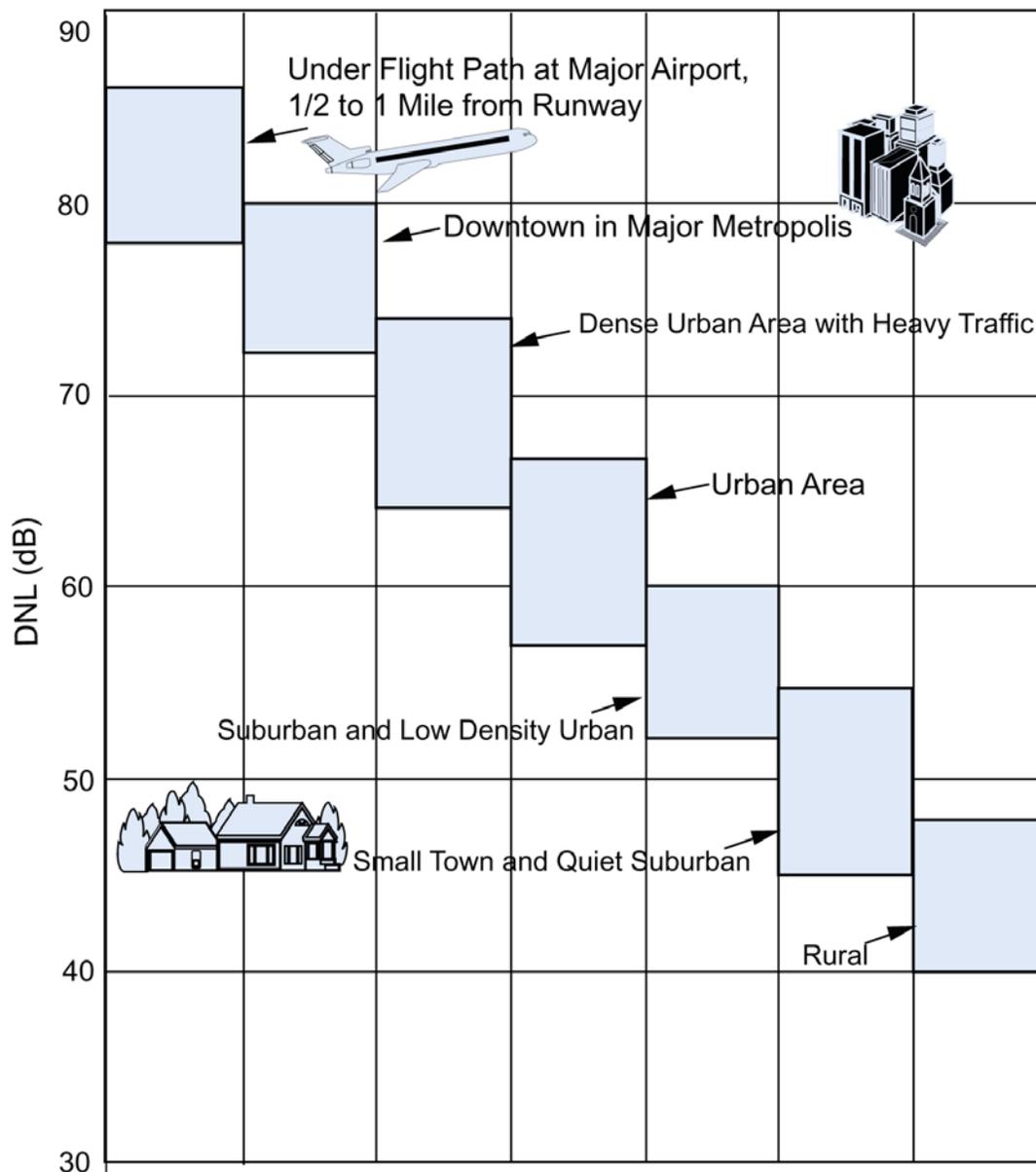
As an example of the cumulative time-average nature of the DNL metric, [Table B-1](#) shows the correlation between the number of flights at a given SEL that are needed to generate a specific DNL. The table shows how the DNL metric correlates the number and sound energy of events into a time-average cumulative metric. As such, DNL represents the total sound exposure on the average day and not a specific single-event heard at a particular time.

Number of Flights	SEL of Flights	Resulting DNL
500	87.4 dB	65 dB
100	94.4 dB	65 dB
50	97.4 dB	65 dB

Source: FAA Office of Environment and Energy

Due to the DNL metric’s excellent correlation with the degree of community annoyance from aircraft noise (the subject of Section B.2), DNL has been formally adopted by most federal agencies for measuring and evaluating aircraft noise for land use planning and noise impact assessment. Federal interagency committees such as the Federal Interagency on Urban Noise (FICUN) and the Federal Interagency on Noise (FICON), which include the EPA, FAA, Department of Defense, Department of Housing and

Figure B-6
Typical Range of Outdoor Community Day-Night Average Sound Levels



Source: U.S. Department of Defense. Departments of the Air Force, the Army, and the Navy, 1978.
Planning in the Noise Environment. AFM 19-10. TM 5-803-2, and NAVFAC P-970.
 Washington, D.C.: U.S. DoD.

Urban Development (HUD), and Veterans Administration, found DNL to be the best metric for land use planning. Also, the federal interagency committees have not identified a new cumulative sound descriptors or metrics of sufficient scientific standing to substitute for DNL. Other cumulative metrics can be used to supplement, but not replace, DNL. FAA Orders 1050.1E and 5050.4B require that environmental studies

use the DNL metric to describe cumulative noise exposure and identify aircraft noise/land use compatibility issues.^{1 2 3 4 5 6}

B.1.7 Community Noise Equivalent Level (CNEL)

CNEL is the average noise level over a 24-hour period with a 10 dB increase to nighttime operations (between 10 p.m. and 7 a.m.) and a 3 dB increase to evening operations (operations between 7 PM to 10 PM). CNEL is similar to DNL, except that CNEL adds a 3-dB penalty to evening operations. The State of California has adopted the CNEL as the standard for assessing community noise impact.

B.1.8 Number of Events (NA)

In this study, contours were developed to show the number of aircraft operations (i.e., events) that occurred above a specific threshold in SEL. Specifically, this study evaluates the number of events during the nighttime (10:00 p.m. to 7:00 a.m.) that produce noise above specific thresholds. This is used to assess the probability of increased awakenings. The abbreviations NA80 and NA90 refer to the number of events above 80 SEL and 90 SEL, respectively. The purpose of the number of events metric is to describe the frequency of aircraft overflights that occur at or above a given SEL, in order to provide a direct comparison between years of analysis and alternatives in regards to nighttime activity. This supplements the information evaluated with the cumulative CNEL metric, which evaluated operations throughout the 24-hour annual average day.

B.1.9 Time Above in Minutes

The time above metric shows the total number of minutes that aircraft operations result in noise levels above a specific dBA threshold. For example, TA65, TA75, and TA85 are the abbreviations used to represent time above 65, 75, and 85 dBA, respectively, in total minutes. In this study, the time above metric is used to evaluate cumulative noise exposure from multiple aircraft operations. Time above metrics provide a straightforward and easy to understand representation of the total amount of time that aircraft-induced noise levels are above a given threshold.

¹ U.S. Environmental Protection Agency, "Information on Levels of Environmental Noise Requisite to Protect the Public Health and Welfare with an Adequate Margin of Safety," Report 550/9-74-004, March 1974.

² "Guidelines for Considering Noise in Land Use Planning and Control," Federal Interagency Committee on Urban Noise, June 1980.

³ Federal Interagency Committee on Noise, "Federal Agency Review of Selected Airport Noise Analysis Issues," August 1992.

⁴ 14 CFR Part 150, Amendment 150-3, December 8, 1995.

⁵ FAA Order 1050.1E, Environmental Impacts: Policies and Procedures, Department of Transportation, Federal Aviation Administration, June 8, 2004.

⁶ FAA Order 5050.4B, National Environmental Policy Act Implementing Instructions for Airport Actions, Department of Transportation, Federal Aviation Administration, April 28, 2006.

B.2 THE EFFECTS OF AIRCRAFT NOISE ON PEOPLE

To many people, aircraft noise can be an annoyance and a nuisance. It can interfere with conversation and listening to television, disrupt classroom activities in schools, and disrupt sleep. Relating these effects to specific noise metrics aids in the understanding of how and why people react to their environment. This section addresses three ways we are potentially affected by aircraft noise: annoyance, interference of speech, and disturbance of sleep.

B.2.1 Community Annoyance

The primary potential effect of aircraft noise on exposed communities is one of annoyance. The U.S. EPA defines noise annoyance as any negative, subjective reaction on the part of an individual or group.⁷

Scientific studies^{8 9 10 11 12} and a large number of social/attitudinal surveys^{13 14} have been conducted to appraise U.S. and international community annoyance due to all types of environmental noise, especially aircraft events. These studies and surveys have found the DNL to be the best measure of that annoyance.

This relation between community annoyance and DNL has been confirmed, even for infrequent aircraft noise events.¹⁵ For helicopter overflights occurring at a rate of 1 to 52 per day, the stated reactions of community individuals correlated with the daily time-average sound levels of the helicopter overflights.

The relationship between annoyance and DNL (that has been determined by the scientific community and endorsed by many federal agencies, including the FAA) is shown in **Figure B-7**. Two lines in **Figure B-7** represent two large sets of social/attitudinal surveys: one for a curve fit of 161 data points compiled by an individual researcher, Ted Schultz, in 1978¹⁶ and one for a curve fit of 400 data points (which include Schultz's 161 points) compiled in 1992 by the U.S. Air Force.¹⁷ The agreement of these two curves simply means corroborates the survey results.

⁷ U.S. Environmental Protection Agency, "Information on Levels of Environmental Noise Requisite to Protect the Public Health and Welfare with an Adequate Margin of Safety," Report 550/9-74-004, March 1974.

⁸ Ibid.

⁹ "Guidelines for Considering Noise in Land Use Planning and Control," Federal Interagency Committee on Urban Noise, June 1980.

¹⁰ Federal Interagency Committee on Noise, "Federal Agency Review of Selected Airport Noise Analysis Issues," August 1992.

¹¹ "Sound Level Descriptors for Determination of Compatible Land Use," American National Standards Institute Standard ANSI S3.23-1980."

¹² "Quantities and Procedures for Description and Measurement of Environmental Sound, Part I," American National Standards Institute Standard ANSI S21.9-1988.

¹³ Schultz, T.J., "Synthesis of Social Surveys on Noise Annoyance," *J. Acoust. Soc. Am.*, 64, 377-405, August 1978.

¹⁴ Fidell, S., Barger, D.S., Schultz, T.J., "Updating a Dosage-Effect Relationship for the Prevalence of Annoyance Due to General Transportation Noise." *J. Acoust. Soc. Am.*, 89, 221-233, January 1991.

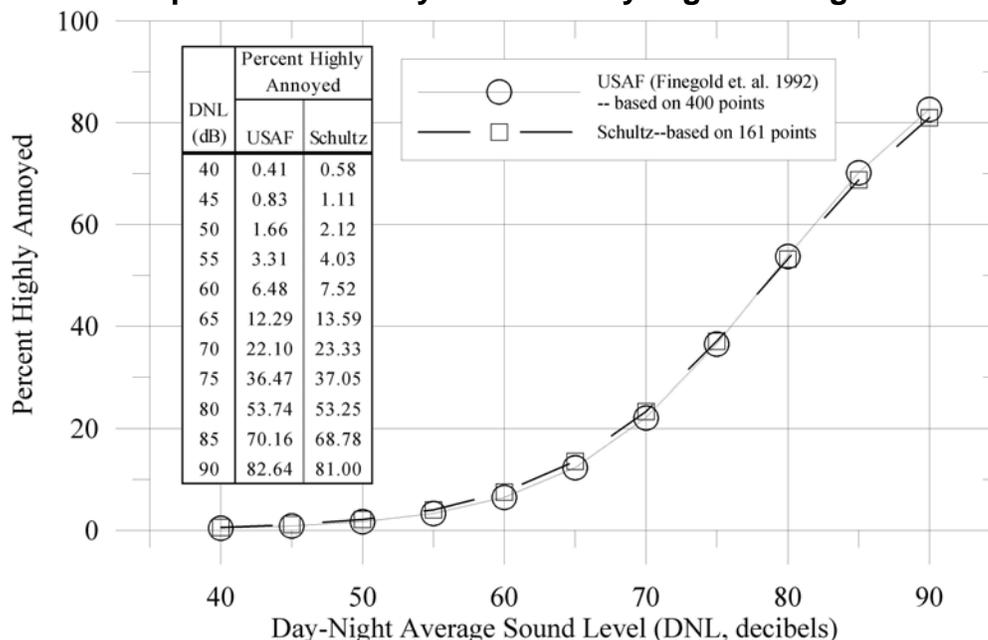
¹⁵ "Community Reactions to Helicopter Noise: Results from an Experimental Study," *J. Acoust. Soc. Am.*, 479-492, August 1987.

¹⁶ Schultz, T.J., "Synthesis of Social Surveys on Noise Annoyance," *J. Acoust. Soc. Am.*, 64, 377-405, August 1978.

¹⁷ Fidell, S., Barger, D.S., Schultz, T.J., "Updating a Dosage-Effect Relationship for the Prevalence of Annoyance Due to General Transportation Noise." *J. Acoust. Soc. Am.*, 89, 221-233, January 1991.

Figure B-7 shows the percentage of people “highly annoyed” by a given DNL. For example, the two curves in the figure yield a value of about 13% for the percentage of the people that would be highly annoyed by a DNL exposure of 65 dB. The figure also shows that at very low values of DNL, such as 45 dB or less, 1% or less of the exposed population would be highly annoyed. Furthermore, at very high values of DNL, such as 90 dB, more than 80% of the exposed population would be highly annoyed.

Figure B-7
Relationship between Annoyance and Day-Night Average Sound Level



Source: Federal Interagency Committee on Noise (FICON),
"Federal Agency Review of Selected Airport Noise Analysis Issues",
August 1992, p. 3-6, Figure 3.1

Recently, the use of DNL has been criticized as not accurately representing community annoyance and land-use compatibility with aircraft noise. One frequent criticism is based on the inherent feeling that people react more to single noise events, rather than difficult-to-comprehend time-average sound levels. In fact, a time-average noise metric, such as DNL, takes into account both the noise levels of all individual events which occur during a 24-hour period and the number of times those events occur. As described briefly above, the logarithmic nature of the decibel unit causes the noise levels of the loudest events to control the 24-hour average.

As a simple example of this characteristic, consider a case in which only one aircraft overflight occurs in daytime hours during a 24-hour period, creating a sound level of 100 dB for 30 seconds. During the remaining 23 hours 59 minutes and 30 seconds of the day, the ambient sound level is 50 dB. The DNL for this 24-hour period is 65.5 dB.

As a second example, assume that ten such 30-second overflights occur in daytime hours during the next 24-hour period, with the same ambient sound level of 50 dB

during the remaining 23 hours and 55 minutes of the day. The DNL for this 24-hour period is 75.4 dB.

Clearly, the averaging of noise over a 24-hour period does not ignore the louder single events and tends to emphasize both the sound levels and number of those events. This is the basic concept of a time-average sound metric, and, specifically, the DNL. It is often suggested that a lower DNL, such as 60 or 55 dB, be adopted as the threshold of community noise annoyance for airport environmental analysis documents. While there is no technical reason why a lower level cannot be measured or calculated for comparison purposes, a DNL of 65 dB:

- (1) Provides a valid basis for comparing and assessing community noise effects.
- (2) Represents a noise exposure level that is normally dominated by aircraft noise and not other community or nearby highway noise sources.
- (3) Reflects the FAA's threshold for grant-in-aid funding of airport noise mitigation projects.
- (4) Is used by HUD in determining eligibility for federally guaranteed home loans.

B.2.2 Speech Interference

A primary effect of aircraft noise is its tendency to drown out or “mask” speech, making it difficult to carry on a normal conversation.

Speech interference associated with aircraft noise is a primary cause of annoyance to individuals on the ground. The disruption of routine activities, such as radio or television listening, telephone use, or family conversation, causes frustration and aggravation. Research has shown that “whenever intrusive noise exceeds approximately 60 dB indoors, there will be interference with speech communication.”¹⁸

Indoor speech interference can be expressed as a percentage of sentence intelligibility among two people speaking in relaxed conversation approximately one meter apart in a typical living room or bedroom.¹⁹ The percentage of sentence intelligibility is a non-linear function of the (steady) indoor background sound level, as shown in **Figure B-8**. This curve was digitized and curve-fitted for the purposes of this document. Such a curve-fit yields 100 percent sentence intelligibility for background levels below 57 dB and yields less than 10 percent intelligibility for background levels above 73 dB. Note that the function is especially sensitive to changes in sound level between 65 dB and 75 dB. As an example of the sensitivity, a 1 dB increase in background sound level from 70 dB to 71 dB yields a 14 percent decrease in sentence intelligibility.

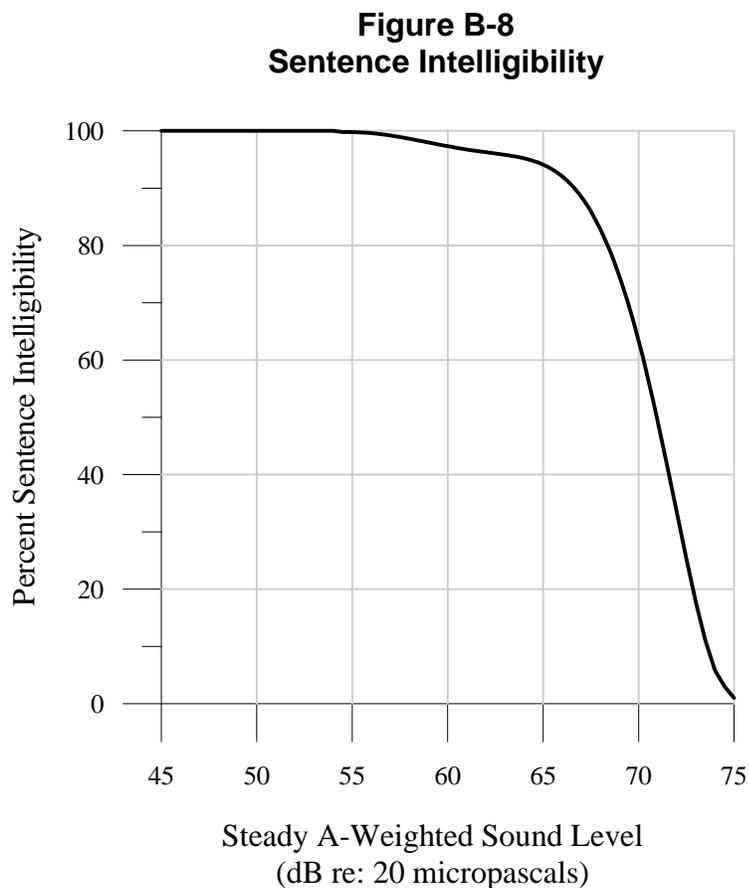
¹⁸ U.S. Environmental Protection Agency, “Information on Levels of Environmental Noise Requisite to Protect the Public Health and Welfare with an Adequate Margin of Safety,” Report 550/9-74-004, March 1974.

¹⁹ Ibid.

In the same document from which [Figure B-8](#) was taken, the EPA established an indoor criterion of 45 dB DNL as requisite to protect against speech interference indoors.

B.2.3 Sleep Disturbance

Sleep disturbance is another source of annoyance associated with aircraft noise. This is especially true because of the intermittent nature and content of aircraft noise, which is more disturbing than continuous noise of equal energy and neutral meaning.



Source: EPA, 1974

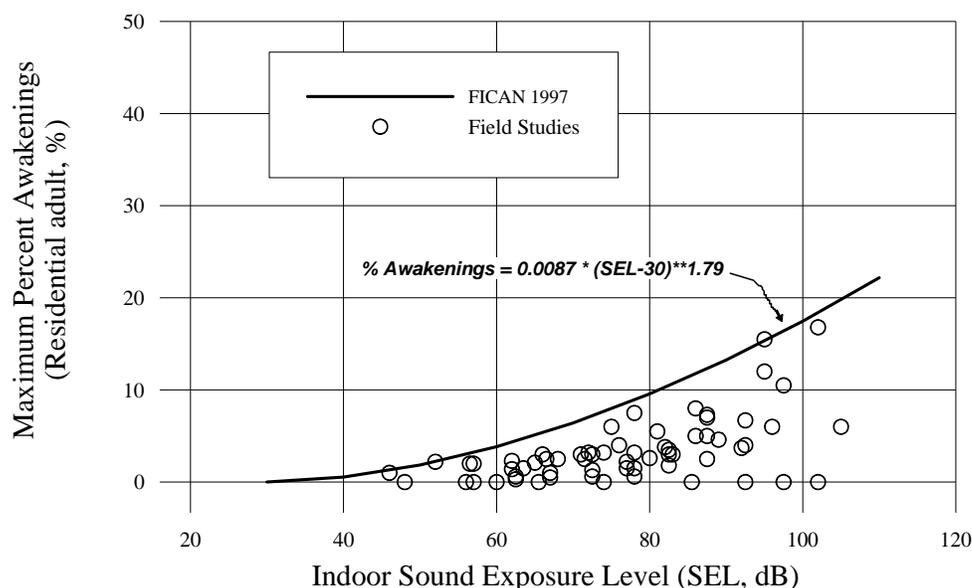
Sleep disturbance can be measured in one of two ways. “Arousal” represents awakening from sleep, while a change in “sleep stage” represents a shift from one of four sleep stages to another stage of lighter sleep without awakening. In general, arousal requires a higher noise level than does a change in sleep stage.

In terms of average daily noise levels, some guidance is available to judge sleep disturbance. The EPA identified an indoor DNL of 45 dB as necessary to protect against sleep interference.²⁰ In June 1997, the Federal Interagency Committee on

²⁰ U.S. Environmental Protection Agency, “Information on Levels of Environmental Noise Requisite to Protect the Public Health and Welfare with an Adequate Margin of Safety,” Report 550/9-74-004, March 1974.

Aviation Noise (FICAN) reviewed the sleep disturbance issue and presented a sleep disturbance dose-response prediction curve.²¹ FICAN based their curve on data from field studies^{22 23 24 25} and recommends the curve as the tool for analysis of potential sleep disturbance for residential areas. **Figure B-9** shows this curve which, for an indoor SEL of 60 dB, predicts that a maximum of approximately 5 percent of the residential population exposed are expected to be behaviorally awakened. FICAN cautions that this curve should only be applied to long-term adult residents.

Figure B-9
Sleep Disturbance Dose-Response Relationship



Source: FICAN, 1997

B.3 AIRCRAFT NOISE MODELING TECHNICAL REPORT

This section summarizes development of the noise model used to evaluate aircraft-induced noise impacts for this study.

²¹ Federal Interagency Committee on Aviation Noise (FICAN), "Effects of Aviation Noise on Awakenings from Sleep," June 1997.

²² Pearson, K.S., Barber, D.S., Tabachnick, B.G., "Analyses of the Predictability of Noise-Induced Sleep Disturbance," USAF Report HSD-TR-89-029, October 1989.

²³ Ollerhead, J.B., Jones, C.J., Cadous, R.E., Woodley, A., Atkinson, B.J., Horne, J.A., Pankhurst, F., Reyner, L., Hume, K.I., Van, F., Watson, A., Diamond, I.D., Egger, P., Holmes, D., McKean, J., "Report of a Field Study of Aircraft Noise and Sleep Disturbance." London Department of Safety, Environment, and Engineering, 1992.

²⁴ Fidell, S., Pearsons, K., Howe, R., Tabachnick, B., Silvati, L., Barber, D.S. "Noise-Induced Sleep Disturbance in Residential Settings," AL/OE-TR-1994-0131, Wright Patterson AFB, OH, Armstrong Laboratory, Occupational and Environmental Health Division, 1994.

²⁵ Fidell, S., Howe, R., Tabachnick, B., Pearsons, K., Sneddon, M., "Noise-Induced Sleep Disturbance in Residences Near Two Civil Airports," Langley Research Center, 1995.

B.3.1 Noise Model

Noise calculations, including the development of CNEL and Time Above contours and detailed grid analyses, were generated using version 6.1 of the FAA's Integrated Noise Model (INM). INM uses annual average daily operations to compute existing and forecast noise. Annual average daily operations are representative of all aircraft operations that occur over the course of a year. The total annual operations are divided by 365 days to determine the annual average daily operations. Runway and flight track use is also averaged over one year.

The use of INM and computer-based noise modeling allow for the projection of future, forecast noise exposure. When the calculations are made in a consistent manner, INM is most accurate for comparing "before-and-after" noise effects resulting from forecast changes or potential alternatives. INM allows noise predictions for such forecast change actions without the actual implementation and noise monitoring of those actions.

Average temperature (60.4F), humidity (72.7%), pressure values (28.44 in-Hg) were calculated using a 10-year sample of NCDC hourly weather data at SDIA. High temperatures decrease air density, which decreases aircraft performance (e.g., takeoff distance increases and climb rate decreases) and generally results in increased noise. In conjunction with temperature, humidity affects the propagation of noise through the air. In general, sound travels farther in more humid conditions. Relative humidity is highest at night and gradually drops during the day, with the lowest point generally occurring in the afternoon.

Terrain data at 10-foot intervals were used in the noise model. Also, the displaced landing thresholds on Runways 09 and 27 are included in the noise model.

B.3.2 Fleet Mix

Table B-2 summarizes the fleet mix by aircraft type used for the years 2005, 2010, and 2015. For a given year of analysis, the fleet mix and operational level is the same for each alternative. **Tables B-3 through B-5** summarize the fleet mix by aircraft type used for the years 2020, 2025, and 2030 for the No Project Alternative, the East Terminal Alternative, and the Proposed Project (Preferred Alternative), respectively. The fleet mix was developed from the gated flight schedule that was produced from the aviation activity forecasts, as described in Appendix I. For the noise analysis, the simulation results (see Appendix C) were used to define the time of day for aircraft operations (i.e., daytime, evening, and nighttime periods of CNEL) based upon the effect of delay as estimated by the SIMMOD analysis. The gated flight schedule provided information on stage lengths.

Table B-2
Average Daily Fleet Mix (2005, 2010, 2015)

Aircraft Group	ICAO Aircraft Type	2005	2010	2015
Passenger	A319	20	22	22
	A320	42	70	88
	A321	6	-	-
	A342	-	2	-
	A343	-	-	2
	B733	104	114	82
	B734	14	10	8
	B735	4	22	26
	B737	86	82	136
	B738	20	22	36
	B739	4	4	4
	B752	40	24	28
	B762	-	2	-
	B763	12	8	10
	B772	-	4	10
	CRJ1	18	36	40
	CRJ7	-	20	24
	CRJ9	14	-	-
	E120	36	-	-
	E140	18	44	44
	E190	-	24	30
	MD11	-	-	2
	MD83	42	44	46
MD90	-	8	8	
SF34	38	-	-	
	Total	518	562	646
Cargo	A306	8	2	2
	B72Q	8	4	4
	B752	2	-	2
	B762	2	2	4
	B763	-	2	2
	DC10	-	2	4
	MD11	-	2	-
		Total	20	14
General Aviation	BE20	4	12	12
	BE55	2	-	-
	C340	2	-	-
	C525	2	-	-
	C560	2	-	-
	C650	2	-	-
	C680	2	-	-
	CL60	-	6	8
	GLF4	4	18	18
	GLF5	2	-	-
	H25B	2	10	12

Table B-2
Average Daily Fleet Mix (2005, 2010, 2015)

Aircraft Group	ICAO Aircraft Type	2005	2010	2015
	L29B	2	-	-
	LJ35	2	-	-
	LJ60	2	-	-
	PRM1	2	-	-
	SR22	2	-	-
	WW24	2	-	-
	Total	36	46	50
Military	HU25	-	2	2
	Total	-	2	2
Grand Total		574	624	716

Sources: Gated flight schedule as discussed Appendix J.

Table B-3
Average Daily Fleet Mix (2020, 2025, 2030)

Air Craft Group	ICAO Aircraft Type	2020 No Project	2025 No Project	2030 No Project
Cargo	A306	4	6	6
	B72Q	4	2	
	B752		2	4
	B762	4	4	4
	B763	4	6	8
	DC10	4	2	2
	MD11	2	4	8
	Total	22	26	32
General Aviation	BE20	12	12	12
	CL60	8	8	8
	GLF4	18	18	18
	H25B	12	12	12
	Total	50	50	50
Military	FA20	2	2	2
	Total	2	2	2
Passenger	A319-131	28	28	20
	A320-211	98	124	132
	A321-232	4	4	4
	A343	4	4	4
	B733	38	20	
	B734	8	6	4
	B735	26	24	12
	B737	188	206	250
	B738	46	82	76
	B739	2	2	6
	B752	32	34	46
	B763	12	10	10
	B764	2	2	4
	B772	12	16	20
	CRJ1	42	32	30
	CRJ7	22	22	14
	E140	44	30	20
	E190	32	20	18
	MD11	2	2	2
	MD83	44	28	12
MD90	8			
	Total	694	696	684
Grand Total		768	774	768

Sources: Gated flight schedule as discussed Appendix J.

Table B-4
Average Daily Fleet Mix (2020, 2025, 2030)

Air Craft Group	ICAO Aircraft Type	2020 East Terminal Alternative	2025 East Terminal Alternative	2030 East Terminal Alternative
Cargo	A306	4	6	6
	B72Q	4	2	
	B752		2	4
	B762	4	4	4
	B763	4	6	8
	DC10	4	2	2
	MD11	2	4	8
	Total	22	26	32
General Aviation	BE20	12	12	12
	CL60	8	8	8
	GLF4	18	18	18
	H25B	12	12	12
Total	50	50	50	
Military	FA20	2	2	2
	Total	2	2	2
Passenger	A319-131	28	34	38
	A320-211	98	112	142
	A321-232	4	4	2
	A343	4	4	4
	B733	38	22	
	B734	8	6	4
	B735	26	24	14
	B737	188	216	256
	B738	46	82	92
	B739	2	2	2
	B752	32	32	30
	B763	12	10	8
	B764	2	2	4
	B772	12	16	20
	CRJ1	42	36	30
	CRJ7	22	22	24
	E140	44	30	20
	E190	32	32	30
	MD11	2	2	2
	MD83	44	28	12
MD90	8			
Total	694	716	734	
Grand Total		768	794	818

Sources: Gated flight schedule as discussed Appendix J.

Table B-5
Average Daily Fleet Mix (2020, 2025, 2030)

Air Craft Group	ICAO Aircraft Type	2020 Proposed Project (Preferred Alternative)	2025 Proposed Project (Preferred Alternative)	2030 Proposed Project (Preferred Alternative)
Cargo	A306	4	6	6
	B72Q	4	2	
	B752		2	4
	B762	4	4	4
	B763	4	6	8
	DC10	4	2	2
	MD11	2	4	8
	Total	22	26	32
General Aviation	BE20	12	12	12
	CL60	8	8	8
	GLF4	18	18	18
	H25B	12	12	12
	Total	50	50	50
Military	FA20	2	2	2
	Total	2	2	2
Passenger	A319-131	28	34	38
	A320-211	98	112	142
	A321-232	4	4	2
	A343	4	4	4
	B733	38	22	
	B734	8	6	4
	B735	26	24	14
	B737	188	216	256
	B738	46	82	92
	B739	2	2	2
	B752	32	32	30
	B763	12	10	8
	B764	2	2	4
	B772	12	16	20
	CRJ1	42	36	30
	CRJ7	22	22	24
	E140	44	30	20
	E190	32	32	30
	MD11	2	2	2
	MD83	44	28	12
MD90	8			
Total	694	716	734	
Grand Total		768	794	818

Sources: Gated flight schedule as discussed Appendix J.

Standard aircraft types and profiles for INM version 6.1 were used in the CNEL contours. For aircraft not included in INM, the FAA's pre-approved substitution list was used to identify appropriate substitution aircraft.

B.3.3 Runway Use

Table B-6 shows overall average runway use. Runway use information for the noise modeling was developed from the simulation results, in order to be consistent with the overall operational assumptions and the air quality analysis. Runway use in the SIMMOD is derived from the annual usage of the runway use configurations (i.e., West Flow VFR, West Flow IFR, and East Flow IFR). Runway use is similar for all alternatives and years of analysis.

For the purpose of calculating the average headwind for each runway end, hourly weather data was matched to the 3-month sample of ANOMS data from the fourth quarter of 2003. Typical headwinds for Runway 27 operations are 3.5 mph, while Runway 09 has typical headwinds of 0.9 mph.

Previous noise analysis for the Airport Comprehensive Land Use Plan (ACLUP) has shown slightly higher arrival usage to Runway 9 during nighttime hours than is reflected in the SIMMOD analysis. During the morning hours (during the nighttime period extending up to 7 a.m.), aircraft will often land on Runway 09 in order to utilize the ILS approach when there is ground fog. This is not directly modeled in SIMMOD, due to the practical limitations of the model. A sensitivity analysis was performed to compare a higher percentage of nighttime arrivals to Runway 09, similar to what was modeled for the ACLUP. The difference in the arrival lobes at the 60 CNEL, versus the SIMMOD-derived runway use, was about 0.1 dB. Accordingly, this difference is not considered substantial.

Operation Type	Time of Day	Runway		
		09	27	Total
Arrival	Daytime	3.2%	96.8%	100.0%
	Evening	3.7%	96.3%	100.0%
	Nighttime	3.7%	96.3%	100.0%
	Total (EDO)	3.6%	96.4%	100.0%
Departure	Daytime	1.6%	98.4%	100.0%
	Evening	1.7%	98.3%	100.0%
	Nighttime	2.0%	98.0%	100.0%
	Total (EDO)	1.8%	98.2%	100.0%
Overall	Daytime	2.3%	97.7%	100.0%
	Evening	2.9%	97.1%	100.0%
	Nighttime	2.8%	97.2%	100.0%
	Total (EDO)	2.7%	97.3%	100.0%
Notes:				
EDO: Equivalent Daily Operations				
Small differences exist between alternatives				
Source: SIMMOD analysis.				

B.3.4 Flight Tracks

Flight track layout was developed from a 15-day sample of radar data from October 11 to 25, 2003, as part of the ACLUP. This sample was identified for flight track analysis due to the near-average temperature spreads that prevailed during the period and the availability of operations data for both Runways 09 and 27. **Figures B-10 and B-11** show arrival and departure flight tracks in west and east flows, respectively. **Table B-7** shows average daily flight track use, with the same track identifiers shown on Figures B-10 and B-11.

Modeled departure flight tracks were developed for the 250, 275, 290, and 305/310 headings off Runway 27, as well as the 090-heading and left turn tracks off Runway 09. Multiple sub tracks were developed to the left and right of the primary flight tracks in order to model the dispersion that occurs due to weather, wind, and varying aircraft performance. Modeled arrival flight tracks were developed for the approaches to Runways 09 and 27 (e.g., the ILS RWY 9 and LOC RWY 27 IAPs), with dispersion and turns onto the final approach path as indicated by the radar data. The modeled flight tracks were developed to depict typical flight paths in the vicinity of SDIA, i.e., within a few miles of the airport to include the extents of the CNEL contours.

Operation Type	Runway	Track Identifier	Time of Day			Equivalent Daily Ops
			Daytime	Evening	Nighttime	
Arrivals	09	A09A0	78.7%	87.7%	86.4%	84.7%
		A09A1	2.9%	1.5%	0.4%	1.3%
		A09A2	17.8%	10.8%	9.8%	12.2%
		A09A3	0.0%	0.0%	0.0%	0.0%
		A09A4	0.6%	0.0%	3.4%	1.8%
		Total	100.0%	100.0%	100.0%	100.0%
	27	A27A0	90.7%	90.9%	91.9%	91.3%
		A27A1	2.8%	2.7%	3.0%	2.8%
		A27A2	3.1%	1.2%	1.8%	2.0%
		A27A3	0.7%	0.8%	0.4%	0.6%
		A27A4	0.6%	0.9%	0.6%	0.6%
		A27B0	0.1%	0.1%	0.0%	0.1%
		A27B1	0.1%	0.0%	0.0%	0.0%
		A27B2	0.1%	0.3%	0.8%	0.5%
		A27B3	0.1%	0.1%	0.0%	0.0%
		A27B4	0.3%	0.0%	0.2%	0.2%
		A27C0	0.3%	2.0%	0.5%	0.8%
		A27C1	0.1%	0.2%	0.4%	0.3%
		A27C2	0.4%	0.4%	0.2%	0.3%
		A27C3	0.2%	0.3%	0.0%	0.1%
		A27C4	0.2%	0.1%	0.0%	0.1%
		A27C5	0.0%	0.0%	0.2%	0.1%
		A27C6	0.2%	0.0%	0.0%	0.1%
		Total	100.0%	100.0%	100.0%	100.0%

Table B-7 Average Daily Flight Track Use						
Operation Type	Runway	Track Identifier	Time of Day			Equivalent Daily Ops
			Daytime	Evening	Nighttime	
Departures	09	D09A0	10.9%	0.0%	0.3%	3.3%
		D09A1	0.0%	32.1%	0.0%	5.3%
		D09A2	43.5%	25.5%	53.9%	46.2%
		D09A3	0.0%	0.0%	19.6%	10.7%
		D09A4	27.9%	17.3%	3.7%	13.0%
		D09B0	4.4%	0.0%	0.0%	1.3%
		D09B1	4.4%	0.0%	1.4%	2.1%
		D09B2	0.0%	0.0%	19.6%	10.7%
		D09B3	0.0%	0.0%	1.4%	0.8%
		D09B4	8.9%	0.0%	0.0%	2.6%
		D09B5	0.0%	0.0%	0.0%	0.0%
		D09B6	0.0%	25.1%	0.0%	4.1%
		Total	100.0%	100.0%	100.0%	100.0%
		27	D27A0	0.0%	0.0%	0.0%
	D27A1		0.0%	0.1%	0.0%	0.0%
	D27A2		0.0%	0.0%	0.0%	0.0%
	D27A3		0.0%	0.1%	0.0%	0.0%
	D27A4		0.0%	0.0%	0.0%	0.0%
	D27A5		0.0%	0.0%	0.0%	0.0%
	D27A6		0.0%	0.0%	0.0%	0.0%
	D27B0		16.6%	20.7%	12.2%	15.1%
	D27B1		15.8%	23.3%	24.4%	21.4%
	D27B2		5.2%	2.4%	0.3%	2.3%
	D27B3		4.5%	15.9%	18.0%	13.2%
	D27B4		0.6%	0.4%	0.0%	0.3%
	D27B5		0.4%	1.4%	1.0%	0.9%
	D27B6		0.3%	0.0%	0.0%	0.1%
	D27C0		18.7%	7.8%	17.7%	16.3%
	D27C1		5.8%	8.0%	5.3%	6.0%
	D27C2		24.8%	15.0%	16.4%	18.9%
	D27C3		1.0%	2.7%	1.3%	1.4%
	D27C4		5.9%	1.5%	3.2%	3.8%
	D27C5		0.1%	0.6%	0.0%	0.2%
	D27C6	0.1%	0.0%	0.2%	0.1%	
D27C7	0.0%	0.0%	0.0%	0.0%		
D27C8	0.0%	0.0%	0.0%	0.0%		
D27D0	0.0%	0.0%	0.0%	0.0%		
D27D1	0.0%	0.0%	0.0%	0.0%		
D27D2	0.0%	0.0%	0.0%	0.0%		
D27D3	0.0%	0.0%	0.0%	0.0%		
D27D4	0.0%	0.0%	0.0%	0.0%		
D27D5	0.0%	0.0%	0.0%	0.0%		
D27D6	0.1%	0.0%	0.0%	0.0%		
Total	100.0%	100.0%	100.0%	100.0%		
Notes: EDO: Equivalent Daily Operations Small differences exist between alternatives						
Source: HNTB analysis of 15-day sample of radar data from October 2003.						

Flight track use (including dispersion about the primary and sub tracks) was developed in reference to the modeled flight tracks and the aircraft operations within the 15-day sample of radar data from October 11 to 25, 2003. Similar to runway use data, the flight track use data was categorized by reference to arrival/departure, time of day, and aircraft group.

B.3.5 Ground Noise

In order to assess the effects of noise produced during ground movements (e.g., aircraft taxiing, engine start, pulling up to a gate/RON, etc.), a sensitivity analysis was conducted to assess single event noise levels and the potential effect on cumulative noise exposure levels in the vicinity of SDIA.

The noise from aircraft that are taking off and landing is substantially louder than that produced during ground movements and so the noise from aircraft ground movements is not typically included in noise modeling as it would not appreciably change the CNEL contours. In addition, INM does not account for the substantial shielding effects due to buildings and other objects on the ground. This is an important limitation.

The ground noise from two aircraft types, the B737-300 (i.e., INM type 7373B2) and MD83, which represent the most numerous and largest contributor to cumulative noise exposure, respectively, in 2010 were analyzed to estimate SEL and the potential for ground noise to change the CNEL contours. The aircraft were modeled with daytime operations at a sample of RON and gate positions that are part of the Proposed Project (Preferred Alternative). As these locations are farther to the west than current ground movements at SDIA, the analysis of noise from these positions provides for a conservative evaluation. In addition, the aircraft were modeled at a high idle/breakaway thrust setting for a period of 20 minutes per sampled operation. This provides for a conservative estimate of engine start and movement in/out of a gate, as aircraft in the gate area would often be operating at lower thrust settings.

The resulting noise at locations along Harbor Island and the Navy Channel were calculated. SELs varied from a low of about 70 dB to a high of 114 dB, with a median value of 90 dB. Note that the value of 114 SEL is not realistic, given the typical attenuation and blocking provided by buildings and vegetation. Also, INM does not account of the effect of water on sound propagation, which is a noteworthy limitation for consideration of ground noise at SDIA. SEL diminishes substantially with distance from the fixed noise source, and the analysis indicates that a substantial number of operations would be needed to appreciably increase CNEL levels.

B.3.6 Results and Limitations

The noise model provides a reasonable estimate of existing and future noise exposure due to aircraft operations at SDIA. Due to the predominant west flow runway use with arrivals to and departures from Runway 27, the CNEL contours to the east of SDIA are relatively narrow and thus reflect the concentration of arrival aircraft on the approach

path. Conversely, the wider CNEL contours to the west of SDIA reflect the dispersion of departure tracks that occurs as aircraft are routed in different directions.

Note that variances in factors such as the fleet mix and time of day of operations will likely affect actual future noise exposure levels. Additionally, there are limitations and constraints with INM that are important to consider. Due to terrain, the approaches into SDIA are flown at steeper angles than the standard 3.0-degree approach that is used at most airports. The standard profiles used in INM are modeled at a 3.0-degree approach angle. As a result, aircraft in the SDIA noise model are at a slightly lower altitude and higher thrust setting than actual operations; calculated noise exposure is increased slightly as a result. Additionally, noise monitoring efforts by SDIA staff have previously indicated measured data differs from INM's calculations of lateral attenuation due to takeoff noise in the vicinity of the Runway 27 approach end. Depending on the location, INM can overstate or understate noise exposure levels. This is due to the terrain (including buildings) in the vicinity of SDIA, and the prevalence of both hard and soft ground coverage. INM assumes that surfaces are soft and absorb some sound energy; however, in reality the hard surfaces (such as water, streets, etc.) in the vicinity of SDIA tend to reflect and increase noise exposure.

B.4 AIRCRAFT NOISE ANALYSIS FIGURES

B.4.1 Noise Analysis Figures

This section provides the potential supplemental noise figures associated with the Proposed Project (Preferred Alternative) and its alternatives for the years 2020 and 2025. Baseline Condition 2005 results, as well as the comparison for the years of analysis of 2010, 2015, and 2030 and their corresponding figures, can be found in Chapter Five, section 5.1.5, *Impact Analysis*.

Proposed Project - With or Without Parking Structure

Figures B-12 and B-13 provide a comparison of the Proposed Project (Preferred Alternative) and No Project Alternative for the 2020 and 2025 years of analysis. Baseline Conditions 2005 CNEL contours are also shown for comparison. **Figures B-14 and B-15** show Time Above 65 dB (TA65) contours for the Proposed Project (Preferred Alternative) in 2020 and 2025, respectively.

As would be expected, the differences between the contours for the Proposed Project (Preferred Alternative) versus the No Project Alternative are small, as both alternatives have a similar number of operations and a similar flight schedule for a given year of analysis. The primary differences in the noise contours for the same year of analysis are due to small variations in the time of day (i.e., daytime, evening, and nighttime periods in CNEL) of aircraft operations that result from delay levels estimated with the SIMMOD analysis. As discussed in Appendix C, SIMMOD is a SIMulation MOdel that simulates the movement of each aircraft operation on the airfield and in the airspace, in order to calculate aggregate delay and travel time.

Sleep Disturbance: These contours show areas that are affected by an approximate number of aircraft overflights that produce noise levels at or above a specific SEL threshold. The contours are referenced as NA80 and NA90 (i.e., NA is Number Above a specified SEL), representing the number of aircraft events above 80 SEL and 90 SEL, respectively. As discussed in Appendix B, SEL normalizes the sound energy from an aircraft flight to a duration of one second. Therefore, SEL has a larger magnitude than the maximum A-weighted level for an event that lasts longer than one second. In fact, for most aircraft overflights, the SEL is on the order of 7 to 12 dB higher than the maximum sound level.

Figure 5.1-18 in Chapter Five, shows that most areas within the 60 CNEL contour of the Baseline Conditions 2005 (see Section 5.1.4, *Environmental Setting*, and Figure 5.1-1) experience, on an average day, from between 10 to 30 nighttime aircraft events with SELs greater than 80 dB (i.e., NA80). **Figure B-16** shows the NA80 comparison between the Proposed Project (Preferred Alternative) 2020 and the Baseline 2005, while **Figure B-17** shows the comparison between the Proposed Project (Preferred Alternative) 2020 and the No Project 2020 for NA80. **Figure B-18** shows the NA80 comparison between the Proposed Project (Preferred Alternative) 2025 and the Baseline 2005, while **Figure B-19** shows the comparison between the Proposed Project (Preferred Alternative) 2025 and the No Project 2025 for NA80.

Figure B-20 shows the NA90 comparison between the Proposed Project (Preferred Alternative) 2020 and the Baseline 2005, while **Figure B-21** shows the comparison between the Proposed Project (Preferred Alternative) 2020 and the No Project 2020 for NA90. **Figure B-22** shows the NA90 comparison between the Proposed Project (Preferred Alternative) 2025 and the Baseline 2005, while **Figure B-23** shows the comparison between the Proposed Project (Preferred Alternative) 2025 and the No Project 2025 for NA90.

East Terminal Alternative - With or Without Parking Structure

Figures B-24 and B-25 provide a comparison of the East Terminal Alternative and No Project Alternative for the 2020 and 2025 years of analysis. Baseline Conditions 2005 CNEL contours are also shown for comparison.

TA65 contours for the East Terminal Alternative, years 2020 and 2025, respectively, are shown in **Figures B-26 and B-27**. As would be expected, the differences between the contours for the East Terminal Alternative versus the No Project Alternative are small, as both alternatives have a similar number of operations and a similar flight schedule for a given year of analysis. The primary differences in the noise contours for the same year of analysis are due to small variations in the time of day (i.e., daytime, evening, and nighttime periods in CNEL) of aircraft operations that result from delay levels estimated with the SIMMOD analysis. Appendix C provides the description of the SIMMOD analysis and results.

Sleep Disturbance: These contours show areas that are affected by an approximate number of aircraft overflights that produce noise levels at or above a specific SEL threshold. The contours are referenced as NA80 and NA90 (i.e., NA is Number Above a specified SEL), representing the number of aircraft events above 80 SEL and 90 SEL,

respectively. As discussed in Appendix B, SEL normalizes the sound energy from an aircraft flight to a duration of one second. Therefore, SEL has a larger magnitude than the maximum A-weighted level for an event that lasts longer than one second. In fact, for most aircraft overflights, the SEL is on the order of 7 to 12 dB higher than the maximum sound level.

Figure 5.1-18 in Chapter Five, shows that most areas within the 60 CNEL contour of the Baseline Conditions 2005 (see Section 5.1.1.4, *Environmental Setting*, and Figure 5.1-1) experience, on an average day, from between 10 to 30 nighttime aircraft events with SELs greater than 80 dB (i.e., NA80). **Figure B-28** shows the NA80 comparison between the East Terminal Alternative 2020 and the Baseline 2005, while **Figure B-29** shows the comparison between the East Terminal Alternative 2020 and the No Project 2020 for NA80. **Figure B-30** shows the NA80 comparison between the East Terminal Alternative 2025 and the Baseline 2005, while **Figure B-31** shows the comparison between the East Terminal Alternative 2025 and the No Project 2025 for NA80.

Figure B-32 shows the NA90 comparison between the East Terminal Alternative 2020 and the Baseline 2005, while **Figure B-33** shows the comparison between the East Terminal Alternative 2020 and the No Project 2020 for NA90. **Figure B-34** shows the NA90 comparison between the East Terminal Alternative 2025 and the Baseline 2005, while **Figure B-35** shows the comparison between the East Terminal Alternative 2025 and the No Project 2025 for NA90.

No Project Alternative

Figures B-36 and B-37 show the TA65 contours for the No Project Alternative.

Sleep Disturbance: These contours show areas that are affected by an approximate number of aircraft overflights that produce noise levels at or above a specific SEL threshold. The contours are referenced as NA80 and NA90 (i.e., NA is Number Above a specified SEL), representing the number of aircraft events above 80 SEL and 90 SEL, respectively. As discussed in Appendix B, SEL normalizes the sound energy from an aircraft flight to a duration of one second. Therefore, SEL has a larger magnitude than the maximum A-weighted level for an event that lasts longer than one second. In fact, for most aircraft overflights, the SEL is on the order of 7 to 12 dB higher than the maximum sound level.

Figure 5.1-18 in Chapter Five, shows that most areas within the 60 CNEL contour of the Baseline Conditions 2005 (see Section 5.1.1.4, *Environmental Setting*, and Figure 5.1-1) experience, on an average day, from between 10 to 30 nighttime aircraft events with SELs greater than 80 dB (i.e., NA80). **Figures B-38 and B-39** show contours for the number of aircraft operations above 80 and 90 SEL, respectively, for the No Project Alternative in the year 2020. **Figures B-40 and B-41** show the contours for the number of aircraft operations above 80 and 90 SEL, respectively, for the No Project Alternative in the year 2025.

B.4.2 Population Analysis Tables

Tables B-8 through B-10 provide a comparison of the population and housing units within the CNEL contours for 2020 and 2025.

Table B-8
Population and Housing Units within the Proposed Project (Preferred Alternative) CNEL Contours

<u>Decibel Level</u>	<u>2020 Proposed Project (Preferred Alternative) CNEL</u>		<u>2020 No Project CNEL</u>		<u>Baseline 2005 CNEL</u>	
	<u>Population</u>	<u>Housing Units</u>	<u>Population</u>	<u>Housing Units</u>	<u>Population</u>	<u>Housing Units</u>
<u>60dB</u>	<u>38945</u>	<u>16781</u>	<u>42586</u>	<u>17663</u>	<u>34,729</u>	<u>15,395</u>
<u>65dB</u>	<u>29389</u>	<u>11924</u>	<u>32862</u>	<u>14296</u>	<u>28,577</u>	<u>11,837</u>
<u>70dB</u>	<u>4072</u>	<u>1937</u>	<u>6297</u>	<u>2238</u>	<u>5,112</u>	<u>2,285</u>
<u>75dB</u>	<u>260</u>	<u>168</u>	<u>682</u>	<u>446</u>	<u>91</u>	<u>55</u>
	<u>2025 Proposed Project (Preferred Alternative) CNEL</u>		<u>2025 No Project CNEL</u>		<u>Baseline 2005 CNEL</u>	
	<u>Population</u>	<u>Housing Units</u>	<u>Population</u>	<u>Housing Units</u>	<u>Population</u>	<u>Housing Units</u>
<u>60dB</u>	<u>45501</u>	<u>19019</u>	<u>45560</u>	<u>19057</u>	<u>34,729</u>	<u>15,395</u>
<u>65dB</u>	<u>33178</u>	<u>14093</u>	<u>32874</u>	<u>13894</u>	<u>28,577</u>	<u>11,837</u>
<u>70dB</u>	<u>6008</u>	<u>2014</u>	<u>5795</u>	<u>1960</u>	<u>5,112</u>	<u>2,285</u>
<u>75dB</u>	<u>807</u>	<u>526</u>	<u>794</u>	<u>517</u>	<u>91</u>	<u>55</u>

Source: HNTB analysis using SANDAG GIS land use coverage and 2000 Census Block Demographics. This information does not represent significant new information and does not affect the significance determinations presented in the Draft EIR.

Table B-9
Population and Housing Units within the East Terminal Alternative CNEL
Contours

Decibel Level	2020 East Terminal CNEL		2020 No Project CNEL		Baseline 2005 CNEL	
	Population	Housing Units	Population	Housing Units	Population	Housing Units
60dB	42571	17651	42586	17663	34,729	15,395
65dB	32866	14289	32862	14296	28,577	11,837
70dB	6297	2241	6297	2238	5,112	2,285
75dB	682	446	682	446	91	55
	2025 East Terminal CNEL		2025 No Project CNEL		Baseline 2005 CNEL	
	Population	Housing Units	Population	Housing Units	Population	Housing Units
60dB	45388	18958	45560	19057	34,729	15,395
65dB	33184	14109	32874	13894	28,577	11,837
70dB	6054	2027	5795	1960	5,112	2,285
75dB	805	525	794	517	91	55

Source: HNTB analysis using SANDAG GIS land use coverage and 2000 Census Block Demographics. This information does not represent significant new information and does not affect the significance determinations presented in the Draft EIR.

Table B-10
Population and Housing Units within the No Project Alternative CNEL
Contours

	2020 No Project CNEL		Baseline 2005 CNEL	
	Population	Housing Units	Population	Housing Units
60dB	42586	17663	34,729	15,395
65dB	32862	14296	28,577	11,837
70dB	6297	2238	5,112	2,285
75dB	682	446	91	55
	2025 No Project CNEL		Baseline 2005 CNEL	
	Population	Housing Units	Population	Housing Units
60dB	45560	19057	34,729	15,395
65dB	32874	13894	28,577	11,837
70dB	5795	1960	5,112	2,285
75dB	794	517	91	55

Source: HNTB analysis using SANDAG GIS land use coverage and 2000 Census Block Demographics. This information does not represent significant new information and does not affect the significance determinations presented in the Draft EIR.

B.5 AIRCRAFT NOISE ANALYSIS SUMMARY TABLES

This section includes **Tables B-811 through B-103**, as referenced and discussed in Section 5.1.2.4 of Chapter Five. The tables show the supplemental change analysis for schools, using time above exterior noise levels. Baseline conditions for the schools are shown in Table 5-1.6 of Chapter Five.

	Time Above Exterior Noise Level (minutes)															
	Noise Level (dB)	Proposed Project (Pref. Alt.) 2010	Change versus No Project 2010	Change versus Baseline 2005	Proposed Project (Pref. Alt.) 2015	Change versus No Project 2015	Change versus Baseline 2005	Proposed Project (Pref. Alt.) 2020	Change versus No Project 2020	Change versus Baseline 2005	Proposed Project (Pref. Alt.) 2025	Change versus No Project 2025	Change versus Baseline 2005	Proposed Project (Pref. Alt.) 2030	Change versus No Project 2030	Change versus Baseline 2005
	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chancellor William McGill School of Success	65	3.1	0	-0.3	3.9	0.1	0.5	15.4	-0.1	6.9	18.6	0.7	10.1	20.7	0.2	12.2
	75	0.1	-0.1	0	0.2	0	0.1	0.2	0	0.1	0.2	0	0.1	0.2	0	0.1
	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Charter School of San Diego	65	1.7	-0.1	-1.3	2.5	0	-0.5	7	0	0.6	6.8	0.2	0.4	6.1	0.2	-0.3
	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chavez (Cesar) Elementary	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chollas/ Mead Elementary	65	41.7	-1.1	3.7	53.7	0	15.7	61.3	0	21.1	69.2	1.3	29	74.8	4	34.6
	75	0.5	0	-0.2	0.8	0.1	0.1	1	0	0.3	0.9	0	0.2	0.9	-0.2	0.2
	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
City Tree Christian	65	44.5	-1.3	5.1	55.5	0	16.1	62.7	0	20.7	69.4	1.5	27.4	74.5	4.2	32.5
	75	3.1	0	-0.3	3.8	0.1	0.4	8.1	0	3.6	9.9	0.4	5.4	11.1	0.2	6.6
	80	0.3	0	0.1	0.3	0	0.1	0.4	0	0.2	0.4	0	0.2	0.4	0	0.2
	85	0	-0.1	-0.1	0.1	0	0	0.1	0	0.1	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Correia Middle	65	75.9	0.5	12.7	86.5	-0.8	23.3	96.7	0	31.9	102.5	2.5	37.7	108.2	8.3	43.4
	75	14.5	0.1	1.9	16.9	-0.2	4.3	21.9	0	5.8	23.2	0.3	7.1	24.2	1.6	8.1
	80	3.9	0	0.1	4.4	-0.1	0.6	4.6	0	1.2	4.2	0	0.8	3.7	0.3	0.3

	Time Above Exterior Noise Level (minutes)															
	Noise Level (dB)	Proposed Project (Pref. Alt.) 2010	Change versus No Project 2010	Change versus Baseline 2005	Proposed Project (Pref. Alt.) 2015	Change versus No Project 2015	Change versus Baseline 2005	Proposed Project (Pref. Alt.) 2020	Change versus No Project 2020	Change versus Baseline 2005	Proposed Project (Pref. Alt.) 2025	Change versus No Project 2025	Change versus Baseline 2005	Proposed Project (Pref. Alt.) 2030	Change versus No Project 2030	Change versus Baseline 2005
Emmanuel Arts Academy	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	65	0.2	0	0	0.2	0	0	0.3	0	0	0.3	0	0	0.3	0	0
	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Garfield High	65	27.9	-0.7	2.1	34.9	0.1	9.1	43.7	-0.1	14.4	50	1.1	20.7	54.7	1.4	25.4
	75	0.4	0	0	0.5	0	0.1	0.6	0	0.2	0.6	0	0.2	0.7	0.1	0.3
	80	0.1	0	0	0.1	0	0	0.1	0	0	0.1	0	0	0.1	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gompers Secondary	65	2.1	0	-0.3	3.4	0	1	3.9	0	1.5	4.6	0.1	2.2	5	0.1	2.6
	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Harborside	65	7.5	-0.3	-1.1	9.6	-0.2	1	5.3	0	1.7	6.1	0.1	2.5	6.5	0.5	2.9
	75	0.1	0	0	0.1	0	0	0.1	0	0	0.1	0	0	0.1	0	0
	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
High Tech High	65	77	0.4	10.7	87.3	-0.9	21	101.2	0.1	30.8	109.6	1.4	39.2	117	8.4	46.6
	75	15.6	0	1.2	18	-0.2	3.6	18.7	0	5.3	20	0.1	6.6	20.6	1.2	7.2
	80	2.7	-0.1	-0.4	3.2	-0.1	0.1	3.1	0	0.6	2.9	0	0.4	2.5	0.2	0
	85	0.1	0	-0.2	0.2	0	-0.1	0.2	0	0	0.2	0	0	0.1	0	-0.1
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
High Tech Inter-national	65	62.8	0.3	7.1	71.3	-0.7	15.6	85.6	0	24.8	93.1	0.8	32.3	99.4	6.7	38.6
	75	6	0	-0.3	6.8	-0.1	0.5	7.2	0.1	2.1	7.5	0.1	2.4	7.1	0.4	2
	80	0.6	-0.1	-0.4	0.9	0	-0.1	0.7	0	0	0.6	0	-0.1	0.4	0	-0.3
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
High Tech Middle	65	80.5	0.5	11.8	91.2	-0.9	22.5	105	0	32.3	113.6	1.5	40.9	121.2	8.8	48.5
	75	18.7	0.1	2	21.3	-0.2	4.6	23	0	6.7	24.7	0.1	8.4	25.9	1.7	9.6
	80	3.4	-0.1	-0.4	4.1	-0.1	0.3	4.3	0	1.2	4.2	0	1.1	3.9	0.3	0.8

	Time Above Exterior Noise Level (minutes)															
	Noise Level (dB)	Proposed Project (Pref. Alt.) 2010	Change versus No Project 2010	Change versus Baseline 2005	Proposed Project (Pref. Alt.) 2015	Change versus No Project 2015	Change versus Baseline 2005	Proposed Project (Pref. Alt.) 2020	Change versus No Project 2020	Change versus Baseline 2005	Proposed Project (Pref. Alt.) 2025	Change versus No Project 2025	Change versus Baseline 2005	Proposed Project (Pref. Alt.) 2030	Change versus No Project 2030	Change versus Baseline 2005
San Diego Cooperative Charter	65	1.4	-0.2	-1	2.3	0	-0.1	1.9	1.9	0.7	2.1	2.1	0.9	2.3	2.3	1.1
	75	0	0	0	0	0	0	0	-1.9	0	0	-2.1	0	0	-2.2	0
	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
San Diego Senior High	65	45	-1.3	5.2	56.6	0.1	16.8	63.7	63.7	21.7	71.4	71.4	29.4	77.1	77.1	35.1
	75	1.5	0	-0.2	1.9	0.1	0.2	4.3	-59.4	1.7	5	-65	2.4	5.4	-67.4	2.8
	80	0.2	0	0	0.2	0	0	0.2	-4.1	0	0.2	-4.6	0	0.3	-5.2	0.1
	85	0	0	0	0	0	0	0	-0.2	0	0	-0.2	0	0	-0.2	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sherman Elementary	65	0.6	0	0	0.7	0	0.1	0.8	0.8	0.2	0.8	0.8	0.2	0.8	0.8	0.2
	75	0	0	0	0	0	0	0	-0.8	0	0	-0.8	0	0	-0.8	0
	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Silver Gate Elementary	65	9.7	0	-0.8	11.5	-0.2	1	15.8	15.8	4	17	17	5.2	17.5	17.5	5.7
	75	0	0	-0.1	0	0	-0.1	0	-15.8	-0.1	0	-16.6	-0.1	0	-16.5	-0.1
	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
St. Augustine High School	65	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0
	75	0	0	0	0	0	0	0	-0.1	0	0	-0.1	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
St. Charles Borromeo Academy	65	99.5	0.4	12.4	112	-0.9	24.9	124.7	124.7	35.2	133	133	43.5	140.3	140.3	50.8

	Time Above Exterior Noise Level (minutes)															
	Noise Level (dB)	Proposed Project (Pref. Alt.) 2010	Change versus No Project 2010	Change versus Baseline 2005	Proposed Project (Pref. Alt.) 2015	Change versus No Project 2015	Change versus Baseline 2005	Proposed Project (Pref. Alt.) 2020	Change versus No Project 2020	Change versus Baseline 2005	Proposed Project (Pref. Alt.) 2025	Change versus No Project 2025	Change versus Baseline 2005	Proposed Project (Pref. Alt.) 2030	Change versus No Project 2030	Change versus Baseline 2005
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Washington Elementary	65	38.6	-1	3.6	48.4	0	13.4	53.1	53.1	16.9	60.1	60.1	23.9	65.4	65.4	29.2
	75	0.8	0	-0.1	1.1	0	0.2	1.4	-51.7	0.4	1.4	-57.8	0.4	1.5	-61.2	0.5
	80	0.2	0	0	0.2	0	0	0.3	-1.1	0.1	0.3	-1	0.1	0.3	-1.2	0.1
	85	0	0	-0.1	0.1	0.1	0	0.1	-0.2	0.1	0	-0.3	0	0	-0.3	0
	90	0	0	0	0	0	0	0	-0.1	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Webster Elementary	65	0.4	0	0	0.5	0	0.1	0.6	0.6	0.2	0.6	0.6	0.2	0.7	0.7	0.3
	75	0	0	0	0	0	0	0	-0.6	0	0	-0.6	0	0	-0.6	0
	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Source: HNTB analysis

	Time Above Exterior Noise Level (minutes)															
	Noise Level (dB)	East Terminal 2010	Change versus No Project 2010	Change versus Baseline 2005	East Terminal 2015	Change versus No Project 2015	Change versus Baseline 2005	East Terminal 2020	Change versus No Project 2020	Change versus Baseline 2005	East Terminal 2025	Change versus No Project 2025	Change versus Baseline 2005	East Terminal 2030	Change versus No Project 2030	Change versus Baseline 2005
Elementary	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Emerson/ Bandini Elementary	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Emmanuel Arts Academy	65	0.2	0	0	0.2	0	0	0.3	0	0	0.4	0.1	0.1	0.3	0	0
	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Garfield High	65	28.8	0.2	3	34.9	0.1	9.1	43.8	0	14.5	50.1	1.2	20.8	54.8	1.5	25.5
	75	0.4	0	0	0.4	-0.1	0	0.6	0	0.2	0.7	0.1	0.3	0.7	0.1	0.3
	80	0.1	0	0	0.1	0	0	0.1	0	0	0.1	0	0	0.1	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gompers Secondary	65	2.1	0	-0.3	3.4	0	1	3.9	0	1.5	4.7	0.2	2.3	5.1	0.2	2.7
	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Harborside	65	7.1	-0.7	-1.5	9.5	-0.3	0.9	5.3	0	1.7	6.3	0.3	2.7	6.6	0.6	3
	75	0.1	0	0	0.1	0	0	0.1	0	0	0.1	0	0	0.1	0	0
	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
High Tech High	65	75.8	-0.8	9.5	87.6	-0.6	21.3	101.2	0.1	30.8	109.3	1.1	38.9	116	7.4	45.6
	75	15.2	-0.4	0.8	18	-0.2	3.6	18.7	0	5.3	19.9	0	6.5	20.2	0.8	6.8

	Time Above Exterior Noise Level (minutes)															
	Noise Level (dB)	East Terminal 2010	Change versus No Project 2010	Change versus Baseline 2005	East Terminal 2015	Change versus No Project 2015	Change versus Baseline 2005	East Terminal 2020	Change versus No Project 2020	Change versus Baseline 2005	East Terminal 2025	Change versus No Project 2025	Change versus Baseline 2005	East Terminal 2030	Change versus No Project 2030	Change versus Baseline 2005
	80	2.6	-0.2	-0.5	3.2	-0.1	0.1	3.1	0	0.6	2.8	-0.1	0.3	2.3	0	-0.2
	85	0.1	0	-0.2	0.2	0	-0.1	0.2	0	0	0.2	0	0	0.1	0	-0.1
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
High Tech Inter-national	65	61.8	-0.7	6.1	71.5	-0.5	15.8	85.7	0.1	24.9	92.8	0.5	32	98.5	5.8	37.7
	75	5.7	-0.3	-0.6	6.8	-0.1	0.5	7.1	0	2	7.4	0	2.3	6.8	0.1	1.7
	80	0.5	-0.2	-0.5	0.9	0	-0.1	0.7	0	0	0.6	0	-0.1	0.4	0	-0.3
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
High Tech Middle	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	65	79.3	-0.7	10.6	91.5	-0.6	22.8	105	0	32.3	113.3	1.2	40.6	120.2	7.8	47.5
	75	18.2	-0.4	1.5	21.3	-0.2	4.6	23	0	6.7	24.6	0	8.3	25.4	1.2	9.1
	80	3.2	-0.3	-0.6	4.1	-0.1	0.3	4.3	0	1.2	4.2	0	1.1	3.7	0.1	0.6
Holly Drive Leadership Academy	85	0.3	0	-0.3	0.5	0	-0.1	0.4	0	0	0.4	0	0	0.2	0	-0.2
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	65	16.9	0.1	0	21.4	0.1	4.5	25	0	8.4	30.3	1	13.7	32.7	1.2	16.1
	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Horton Elementary	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	65	22.8	0.1	1.9	29.1	0.1	8.2	31.7	-0.1	11.5	38.2	0.7	18	41.6	1.6	21.4
	75	0	0	0	0	0	0	0.1	0	0.1	0	0	0	0	0	0
Integrity Charter	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Johnson Elementary	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	65	0.3	0	0	0.3	0	0	0.4	0	0.1	0.5	0.1	0.2	0.5	0.1	0.2

	Time Above Exterior Noise Level (minutes)															
	Noise Level (dB)	East Terminal 2010	Change versus No Project 2010	Change versus Baseline 2005	East Terminal 2015	Change versus No Project 2015	Change versus Baseline 2005	East Terminal 2020	Change versus No Project 2020	Change versus Baseline 2005	East Terminal 2025	Change versus No Project 2025	Change versus Baseline 2005	East Terminal 2030	Change versus No Project 2030	Change versus Baseline 2005
Webster Elementary	65	0.4	0	0	0.5	0	0.1	0.6	0.6	0.2	0.7	0.7	0.3	0.7	0.7	0.3
	75	0	0	0	0	0	0	0	-0.6	0	0	-0.6	0	0	-0.6	0
	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Source: HNTB analysis																

	Time Above Exterior Noise Level (minutes)										
	Noise Level (dB)	No Project 2010	Change versus Baseline 2005	No Project 2015	Change versus Baseline 2005	No Project 2020	Change versus Baseline 2005	No Project 2025	Change versus Baseline 2005	No Project 2030	Change versus Baseline 2005
Burbank Elementary	65	0	0	0	0	0	0	0	0	0	0
	75	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0
Cabrillo Elementary	65	0	-0.3	0.2	-0.1	0.2	-0.1	0.2	-0.1	0	-0.3
	75	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0
Chancellor William McGill School of Success	65	3.1	-0.3	3.8	0.4	15.5	7	17.9	9.4	20.5	12
	75	0.2	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.2	0.1
	80	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0
Charter School of San Diego	65	1.8	-1.2	2.5	-0.5	7	0.6	6.6	0.2	5.9	-0.5
	75	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0
Chavez (Cesar) Elementary	65	0	0	0	0	0	0	0	0	0	0
	75	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0
Chollas/	65	42.8	4.8	53.7	15.7	61.3	21.1	67.9	27.7	70.8	30.6

	Time Above Exterior Noise Level (minutes)										
	Noise Level (dB)	No Project 2010	Change versus Baseline 2005	No Project 2015	Change versus Baseline 2005	No Project 2020	Change versus Baseline 2005	No Project 2025	Change versus Baseline 2005	No Project 2030	Change versus Baseline 2005
	85	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0
Dewey Elementary	65	67.8	6.8	78.1	17.1	95.7	26.5	101.5	32.3	100.7	31.5
	75	5.4	-0.2	6.2	0.6	7.3	1.3	7.1	1.1	5.8	-0.2
	80	0.4	0	0.5	0.1	0.7	0.1	0.5	-0.1	0.3	-0.3
	85	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0
El Toyon Elementary	65	0	0	0	0	0	0	0	0	0	0
	75	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0
Emerson/ Bandini Elementary	65	0	0	0	0	0	0	0	0	0	0
	75	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0
Emmanuel Arts Academy	65	0.2	0	0.2	0	0.3	0	0.3	0	0.3	0
	75	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0
Garfield High	65	28.6	2.8	34.8	9	43.8	14.5	48.9	19.6	53.3	24
	75	0.4	0	0.5	0.1	0.6	0.2	0.6	0.2	0.6	0.2
	80	0.1	0	0.1	0	0.1	0	0.1	0	0.1	0
	85	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0
Gompers	65	2.1	-0.3	3.4	1	3.9	1.5	4.5	2.1	4.9	2.5

	Time Above Exterior Noise Level (minutes)										
	Noise Level (dB)	No Project 2010	Change versus Baseline 2005	No Project 2015	Change versus Baseline 2005	No Project 2020	Change versus Baseline 2005	No Project 2025	Change versus Baseline 2005	No Project 2030	Change versus Baseline 2005
King (Martin Luther, Jr.)	65	1.3	0	1.6	0.3	2.5	0.8	2.4	0.7	2.8	1.1
Elementary	75	0	0	0	0	0.1	0.1	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0
King/ Chavez Charter	65	0.1	0	0.1	0	0.1	0	0.1	0	0.1	0
	75	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
KIPP Adelante Preparatory Academy	65	17.4	0.7	21.2	4.5	30.1	9.4	33.5	12.8	36.5	15.8
	75	0.4	0.1	0.4	0.1	0.5	0.1	0.5	0.1	0.5	0.1
	80	0.1	0	0.1	0	0.1	0	0.1	0	0.1	0
	85	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
Knox Elementary	65	0.1	0	0.1	0	0.2	0	0.2	0	0.2	0
	75	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
Logan Elementary	65	0.1	0	0.1	0	0.1	0	0.1	0	0.1	0
	75	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
Loma Portal Elementary	65	83.9	14.2	96.6	26.9	106	33.9	111.2	39.1	111	38.9
	75	28.2	3.8	32.5	8.1	35.8	10.5	38.5	13.2	38.7	13.4

	Time Above Exterior Noise Level (minutes)										
	Noise Level (dB)	No Project 2010	Change versus Baseline 2005	No Project 2015	Change versus Baseline 2005	No Project 2020	Change versus Baseline 2005	No Project 2025	Change versus Baseline 2005	No Project 2030	Change versus Baseline 2005
	90	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0
Point Loma Nazarene University	65	0	0	0	0	0	0	0	0	0	0
	75	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0
Point Loma Senior High	65	76.6	12.2	88.6	24.2	98.5	30.9	103.7	36.1	104	36.4
	75	21.5	2.6	25	6.1	28	7.9	29.7	9.6	29.9	9.8
	80	6.4	0.7	7.7	2	8.9	2.7	9.3	3.1	9	2.8
	85	1.7	0	1.8	0.1	1.7	0.3	1.3	-0.1	1	-0.4
	90	0	-0.2	0.1	-0.1	0.1	-0.1	0.1	-0.1	0	-0.2
	95	0	0	0	0	0	0	0	0	0	0
Promise Charter	65	0.7	0.1	0.7	0.1	1	0.3	1	0.3	1.1	0.4
	75	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0
Roosevelt Middle	65	0.1	0	0	-0.1	0.1	0	0.1	0	0	-0.1
	75	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0
Rowan Elementary	65	0.9	0	1	0.1	1.3	0.3	1.4	0.4	1.4	0.4
	75	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
	80	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0
Sacred Heart Academy	65	55	6.2	64	15.2	71.9	19.8	75.3	23.2	76.9	24.8
	75	6.5	0.4	7.7	1.6	9.9	2.3	9.7	2.1	9	1.4

	Time Above Exterior Noise Level (minutes)										
	Noise Level (dB)	No Project 2010	Change versus Baseline 2005	No Project 2015	Change versus Baseline 2005	No Project 2020	Change versus Baseline 2005	No Project 2025	Change versus Baseline 2005	No Project 2030	Change versus Baseline 2005
San Diego Senior High	65	46.3	6.5	56.5	16.7	63.7	21.7	70	28	72.8	30.8
	75	1.5	-0.2	1.8	0.1	4.3	1.7	4.8	2.2	5.5	2.9
	80	0.2	0	0.2	0	0.2	0	0.2	0	0.2	0
	85	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
Sherman Elementary	65	0.6	0	0.7	0.1	0.8	0.2	0.8	0.2	0.8	0.2
	75	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
Silver Gate Elementary	65	9.7	-0.8	11.7	1.2	15.8	4	16.6	4.8	16.5	4.7
	75	0	-0.1	0	-0.1	0	-0.1	0	-0.1	0	-0.1
	80	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
St. Augustine High School	65	0	0	0	0	0.1	0.1	0.1	0.1	0	0
	75	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
St. Charles Borromeo Academy	65	99.1	12	112.9	25.8	124.6	35.1	130.9	41.4	130.1	40.6
	75	29.3	3.5	34	8.2	35.8	10.6	38.1	12.9	37.4	12.2

	Time Above Exterior Noise Level (minutes)										
	Noise Level (dB)	No Project 2010	Change versus Baseline 2005	No Project 2015	Change versus Baseline 2005	No Project 2020	Change versus Baseline 2005	No Project 2025	Change versus Baseline 2005	No Project 2030	Change versus Baseline 2005
Warren-Walker School, Inc.	65	8.4	-0.4	10.1	1.3	13.3	3	13.3	3	13.2	2.9
	75	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
Washington Elementary	65	39.6	4.6	48.4	13.4	53.1	16.9	59.2	23	62.7	26.5
	75	0.8	-0.1	1.1	0.2	1.4	0.4	1.3	0.3	1.5	0.5
	80	0.2	0	0.2	0	0.3	0.1	0.3	0.1	0.3	0.1
	85	0	-0.1	0	-0.1	0.1	0.1	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
Webster Elementary	65	0.4	0	0.5	0.1	0.6	0.2	0.6	0.2	0.6	0.2
	75	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0

Source: HNTB analysis

B.6 Transportation Noise Study

Road traffic noise was assessed by comparing the existing noise levels to those of the various future alternatives, in terms of the peak hour L_{EQ} . [Tables B-1414 and B-1415](#) show the Peak Hour Road Traffic Noise Level and [Tables B-1416 and B-1417](#) show the Daily Road Traffic CNEL for years 2010, 2015, 2025, and 2030.

**Table B-1114
Peak Hour Road Traffic Noise Level Increase by Alternative Compared to Existing (2005) Condition**

Roadways	2005 L _{EQ} in dBA at 50 Feet to Center Line of Road	Increase in dBA L _{EQ} Compared to Existing (2005) Conditions (at 50 Feet to Center Line of Road)																								
		No Project					Proposed Project Implementation Plan with Structure					Proposed Project Implementation Plan without Structure					East Terminal Alternative Implementation Plan with Structure					East Terminal Alternative Implementation Plan without Structure				
		2010	2015	2020	2025	2030	2010	2015	2020	2025	2030	2010	2015	2020	2025	2030	2010	2015	2020	2025	2030	2010	2015	2020	2025	2030
North Harbor Drive																										
West of NTC	70.8	0.4	1.0	1.7	2.0	2.5	0.4	1.0	1.7	2.0	2.6	0.4	1.0	1.7	2.0	2.6	0.4	1.0	1.7	2.0	2.6	0.4	1.0	1.7	2.0	2.6
NTC - Spanish Landing	71.7	0.6	1.0	1.7	1.9	2.4	0.0	0.4	1.2	1.4	1.9	0.1	0.5	1.2	1.4	1.9	0.6	1.1	1.8	2.0	2.6	0.6	1.1	1.8	2.0	2.6
Spanish Landing - T2 Access	70.7	0.9	1.3	1.7	1.8	2.4	1.0	1.4	1.8	1.9	2.5	1.0	1.3	1.7	1.8	2.3	1.0	1.4	1.9	2.0	2.6	1.0	1.4	1.9	2.0	2.6
T2 Access - Harbor Island	73.1	0.2	0.7	1.0	1.1	1.5	0.4	1.0	1.5	1.6	2.0	0.4	0.9	1.3	1.5	1.8	0.2	0.8	1.1	1.3	1.7	0.2	0.8	1.2	1.3	1.7
Harbor Island - T1 Access	73.4	0.1	0.4	0.6	0.8	0.9	0.5	0.9	1.2	1.4	1.6	0.5	0.8	1.0	1.3	1.4	0.5	0.8	1.0	1.3	1.5	0.5	0.8	1.0	1.3	1.5
T1 Access - Winship	74.2	0.4	0.8	1.1	1.3	1.3	0.6	1.0	1.3	1.6	1.7	0.6	0.9	1.2	1.5	1.5	-0.2	0.2	0.5	0.8	1.0	-0.2	0.2	0.5	0.8	1.0
Winship - Rental Car Rd	74.3	0.4	0.8	1.2	1.3	1.3	0.5	0.9	1.3	1.5	1.6	0.5	0.9	1.2	1.4	1.5	-0.1	0.3	0.6	0.9	1.0	-0.1	0.3	0.6	0.9	0.9
Rental Car Rd - Laurel	77.7	0.2	0.7	1.1	1.2	1.1	0.2	0.7	1.1	1.2	1.3	0.2	0.7	1.1	1.2	1.3	0.2	0.7	1.1	1.2	1.3	0.2	0.7	1.1	1.2	1.3
Laurel - Hawthorn	74.1	0.2	0.6	1.0	1.2	1.3	0.1	0.6	1.0	1.3	1.5	0.1	0.6	1.0	1.2	1.4	0.1	0.6	1.0	1.2	1.4	0.1	0.6	1.0	1.2	1.4
Hawthorn - Grape	73.6	0.1	0.5	0.8	1.0	1.1	0.1	0.5	0.8	1.1	1.2	0.1	0.5	0.8	1.1	1.2	0.1	0.5	0.8	1.1	1.2	0.1	0.5	0.8	1.1	1.2
Grape Street																										
Harbor - Pacific	66.7	0.2	0.8	1.3	1.5	1.7	0.2	0.7	1.3	1.5	1.8	0.2	0.7	1.3	1.5	1.7	0.2	0.7	1.3	1.5	1.8	0.2	0.7	1.3	1.5	1.8
Pacific - Kettner	67.7	0.9	1.3	1.6	1.7	1.9	0.9	1.3	1.6	1.8	2.0	0.9	1.2	1.6	1.8	2.0	0.9	1.3	1.7	1.8	2.0	0.9	1.3	1.6	1.8	2.0
Kettner - I-5	70.3	0.8	1.0	0.9	1.1	1.4	0.7	1.0	0.9	1.1	1.5	0.8	1.0	0.9	1.1	1.5	0.7	1.0	0.9	1.1	1.5	0.7	1.0	0.9	1.1	1.5
Hawthorne Street																										
Harbor - Pacific	66.9	0.2	0.8	1.3	1.5	1.7	0.2	0.8	1.3	1.5	1.8	0.2	0.7	1.3	1.5	1.8	0.2	0.7	1.3	1.5	1.8	0.2	0.7	1.3	1.5	1.8
Pacific - Kettner	66.9	0.2	0.7	1.2	1.4	1.6	0.1	0.6	1.2	1.4	1.7	0.1	0.6	1.1	1.4	1.7	0.1	0.6	1.2	1.4	1.7	0.1	0.6	1.1	1.4	1.7
Kettner - I-5	70.9	0.3	0.8	1.2	1.4	1.7	0.3	0.8	1.2	1.4	1.8	0.3	0.8	1.1	1.4	1.8	0.3	0.8	1.2	1.4	1.8	0.3	0.8	1.1	1.4	1.8
India Street																										
Laurel - Palm	74.4	0.2	0.9	0.6	0.7	1.4	0.2	0.9	0.5	0.7	1.4	0.2	0.9	0.5	0.7	1.4	0.2	0.9	0.5	0.7	1.4	0.2	0.9	0.5	0.7	1.4
Palm - Sassafras	74.6	0.0	0.7	0.3	0.4	0.8	0.0	0.7	0.3	0.4	0.9	0.0	0.7	0.3	0.4	0.9	0.0	0.7	0.3	0.4	0.9	0.0	0.7	0.3	0.4	0.9
Sassafras - Washington	71.7	0.3	0.8	1.1	1.1	1.9	0.3	0.8	1.1	1.1	1.9	0.3	0.8	1.1	1.1	1.9	0.3	0.8	1.1	1.1	1.9	0.3	0.8	1.1	1.1	1.9
Kettner Blvd																										
Sassafras - Palm	75.9	0.3	0.8	2.1	2.0	1.2	0.3	0.8	2.1	2.0	1.4	0.3	0.8	2.1	2.0	1.3	0.3	0.8	2.1	2.0	1.4	0.3	0.8	2.1	2.0	1.4
Palm - Laurel	71.2	0.2	0.7	2.2	1.8	1.3	0.1	0.7	2.1	1.9	1.4	0.1	0.7	2.1	1.8	1.4	0.1	0.7	2.1	1.9	1.4	0.1	0.6	2.1	1.8	1.4
Laurel - Hawthorn	68.1	-0.5	0.0	2.2	1.4	1.6	-0.5	-0.1	2.2	1.4	1.6	-0.5	-0.1	2.2	1.4	1.6	-0.5	-0.1	2.2	1.4	1.6	-0.5	-0.1	2.2	1.4	1.6
Hawthorn - Grape	68.8	0.6	1.1	2.2	1.9	2.3	0.6	1.1	2.2	1.9	2.2	0.6	1.1	2.2	1.9	2.3	0.6	1.1	2.2	1.9	2.2	0.6	1.1	2.2	1.9	2.2
Laurel Street																										
Harbor - Pacific	68.6	0.4	0.9	1.2	1.1	0.7	0.3	0.9	1.2	1.1	0.9	0.3	0.9	1.2	1.1	0.9	0.3	0.9	1.2	1.1	0.9	0.3	0.9	1.1	1.1	0.9
Pacific - Kettner	69.7	0.4	1.0	1.2	1.3	1.6	0.3	0.9	1.1	1.3	1.7	0.3	0.9	1.2	1.4	1.7	0.3	0.9	1.1	1.4	1.7	0.3	0.9	1.1	1.3	1.7
Kettner - I-5	72.1	0.4	1.1	1.1	1.3	1.9	0.3	1.0	1.0	1.2	1.9	0.3	1.0	1.0	1.3	1.9	0.3	1.0	1.0	1.2	1.9	0.3	1.0	1.0	1.3	1.9
Nimitz																										
Harbor - Rosecrans	64.9	0.1	0.4	1.1	1.3	2.0	0.0	0.3	1.1	1.4	2.1	0.0	0.3	1.1	1.3	2.1	0.0	0.3	1.1	1.4	2.1	0.0	0.3	1.1	1.3	2.0

Pacific Highway																										
Sassafras - Palm	71.6	1.1	1.9	2.0	2.2	1.3	1.3	2.0	2.0	2.3	1.3	1.3	2.0	2.0	2.3	1.3	1.3	2.0	2.0	2.3	1.3	1.3	2.0	2.0	2.3	1.3
Palm - Laurel	72.1	1.1	1.8	1.9	2.0	1.0	0.4	1.2	1.7	2.1	1.5	0.4	1.2	1.7	2.1	1.5	0.4	1.2	1.7	2.1	1.5	0.4	1.2	1.7	2.1	1.5
Laurel - Hawthorn	70.5	1.5	2.3	2.8	3.2	2.5	2.2	2.9	3.4	3.7	3.2	2.2	2.9	3.4	3.7	3.2	2.2	2.9	3.4	3.7	3.2	2.2	2.9	3.4	3.7	3.2
Palm Street																										
Pacific - Kettner	70.7	0.0	0.0	-0.1	-0.2	-0.2	0.0	0.0	-0.1	-0.2	-0.2	0.0	0.0	-0.1	-0.2	-0.2	0.0	0.0	-0.1	-0.2	-0.2	0.0	0.0	-0.1	-0.2	-0.2
Rosecrans																										
Barnett - Sport Arena	72.1	-0.2	0.1	-0.7	-0.6	-0.3	-0.2	0.1	-0.7	-0.6	-0.3	-0.2	0.1	-0.7	-0.6	-0.3	-0.2	0.1	-0.7	-0.6	-0.3	-0.2	0.1	-0.7	-0.6	-0.3
Nimitz - Barnett	71.6	-0.1	0.0	-0.5	-0.4	-0.3	-0.1	-0.1	-0.5	-0.4	-0.2	-0.1	-0.1	-0.5	-0.4	-0.2	-0.1	-0.1	-0.5	-0.4	-0.2	-0.1	-0.1	-0.5	-0.4	-0.2
Sassafras Street																										
Pacific - Kettner	70.1	1.4	2.1	2.2	2.6	1.4	1.7	2.4	2.4	2.8	1.8	1.6	2.4	2.4	2.8	1.8	1.7	2.4	2.4	2.8	1.8	1.8	2.4	2.5	2.8	1.8
Washington Street																										
Pacific - Kettner	70.6	0.4	2.0	2.5	2.5	1.7	0.4	1.0	1.2	1.3	0.1	0.4	1.0	1.2	2.5	0.1	0.4	1.0	1.2	1.2	0.1	0.4	1.0	1.2	1.2	0.1
I-8 Freeway																										
Westbound 50 feet from Frontage Road Centerline	71.4	-0.2	-0.2	-0.3	-0.3	-0.4	-0.2	-0.2	-0.3	-0.3	-0.4	-0.2	-0.2	-0.3	-0.3	-0.4	-0.2	-0.2	-0.3	-0.3	-0.4	-0.2	-0.2	-0.3	-0.3	-0.4
Eastbound: 50 feet from Frontage Road Centerline	72.1	0.1	0.3	0.0	0.1	0.0	0.1	0.3	0.0	0.1	0.0	0.1	0.3	0.0	0.1	0.0	0.1	0.3	0.0	0.1	0.0	0.1	0.3	0.0	0.1	0.0

**Table B-1215
Peak Hour Road Traffic Noise Level Increase by Alternative Compared to No Project**

Roadways	Increase in dBA L _{EQ} Compared No Project (at 50 Feet to Center Line of Road)																			
	Proposed Project Implementation Plan with Structure					Proposed Project Implementation Plan without Structure					East Terminal Alternative Implementation Plan with Structure					East Terminal Alternative Implementation Plan without Structure				
	2010	2015	2020	2025	2030	2010	2015	2020	2025	2030	2010	2015	2020	2025	2030	2010	2015	2020	2025	2030
North Harbor Drive																				
West of NTC	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
NTC - Spanish Landing	-0.6	-0.6	-0.6	-0.5	-0.5	-0.5	-0.6	-0.6	-0.5	-0.5	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1
Spanish Landing - T2 Access	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.1	0.2	0.2	0.2	0.3
T2 Access - Harbor Island	0.2	0.3	0.4	0.5	0.5	0.2	0.2	0.3	0.3	0.3	0.0	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2
Harbor Island - T1 Access	0.3	0.4	0.6	0.6	0.7	0.3	0.3	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.6	0.4	0.4	0.5	0.5	0.6
T1 Access - Winship	0.1	0.2	0.2	0.2	0.3	0.1	0.1	0.1	0.1	0.2	-0.6	-0.6	-0.6	-0.6	-0.4	-0.6	-0.6	-0.6	-0.6	-0.4
Winship - Rental Car Rd	0.1	0.1	0.1	0.2	0.3	0.1	0.0	0.1	0.1	0.2	-0.5	-0.5	-0.5	-0.4	-0.4	-0.5	-0.5	-0.5	-0.5	-0.4
Rental Car Rd - Laurel	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	-0.1	0.0	0.0	0.0	0.1
Laurel - Hawthorn	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	-0.1	0.0	0.0	0.0	0.1
Hawthorn - Grape	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1
Grape Street																				
Harbor - Pacific	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Pacific - Kettner	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1
Kettner - I-5	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Hawthorne Street																				
Harbor - Pacific	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	-0.1	-0.1	0.0	0.0	0.1	-0.1	-0.1	0.0	0.0	0.1
Pacific - Kettner	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	-0.1	0.0	0.0	0.0	0.1
Kettner - I-5	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
India Street																				
Laurel - Palm	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Palm - Sassafras	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Sassafras - Washington	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1
Kettner Blvd																				
Sassafras - Palm	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Palm - Laurel	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Laurel - Hawthorn	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hawthorn - Grape	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Laurel Street																				
Harbor - Pacific	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	-0.1	0.0	0.0	0.0	0.1
Pacific - Kettner	0.0	0.0	-0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	-0.1	0.0	-0.1	0.0	0.1	-0.1	-0.1	-0.1	0.0	0.1
Kettner - I-5	-0.1	-0.1	-0.1	-0.1	0.0	-0.1	-0.1	-0.1	0.0	0.1	-0.1	-0.1	-0.1	-0.1	0.0	-0.1	-0.1	-0.1	0.0	0.1
Nimitz																				
Harbor - Rosecrans	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1

Pacific Highway																				
Sassafras - Palm	0.2	0.2	0.1	0.0	0.0	0.1	0.2	0.1	0.0	0.0	0.2	0.2	0.1	0.0	0.0	0.2	0.2	0.1	0.0	0.0
Palm - Laurel	-0.7	-0.7	-0.1	0.0	0.4	-0.7	-0.6	-0.1	0.1	0.4	-0.6	-0.6	-0.1	0.0	0.4	-0.6	-0.6	-0.1	0.1	0.4
Laurel - Hawthorn	0.7	0.6	0.6	0.5	0.7	0.7	0.6	0.6	0.5	0.7	0.6	0.6	0.5	0.5	0.7	0.7	0.6	0.6	0.5	0.7
Palm Street																				
Pacific - Kettner	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rosecrans																				
Barnett - Sport Arena	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nimitz - Barnett	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sassafras Street																				
Pacific - Kettner	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.4	0.3	0.2	0.2	0.2	0.4	0.3	0.3	0.3	0.3	0.4
Washington Street																				
Pacific - Kettner	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pacific - Kettner	0.0	-1.1	-1.3	-1.3	-1.6	0.0	-1.1	-1.3	0.0	-1.6	0.0	-1.1	-1.3	-1.3	-1.6	0.0	-1.1	-1.3	-1.3	-1.6
I-8 Freeway																				
Westbound 50 feet from Frontage Road Centerline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Eastbound: 50 feet from Frontage Road Centerline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table B-1316
Daily Road Traffic CNEL Increase by Alternative Compared to Existing (2005) Condition

Roadways	2005 CNEL at 50 Feet to Center Line of Road	Increase in CNEL Compared to Existing (2005) Conditions (at 50 Feet to Center Line of Road)																								
		No Project					Proposed Project Implementation Plan with Structure					Proposed Project Implementation Plan without Structure					East Terminal Alternative Implementation Plan with Structure					East Terminal Alternative Implementation Plan without Structure				
		2010	2015	2020	2025	2030	2010	2015	2020	2025	2030	2010	2015	2020	2025	2030	2010	2015	2020	2025	2030	2010	2015	2020	2025	2030
North Harbor Drive																										
West of NTC	71.3	0.4	1.0	1.7	2.0	2.5	0.4	1.0	1.7	2.0	2.6	0.4	1.0	1.7	2.0	2.6	0.4	1.0	1.7	2.0	2.6	0.4	1.0	1.7	2.0	2.6
NTC - Spanish Landing	72.2	0.6	1.0	1.7	1.9	2.4	0.0	0.4	1.2	1.4	1.9	0.1	0.5	1.2	1.4	1.9	0.6	1.1	1.8	2.0	2.6	0.6	1.1	1.8	2.0	2.6
Spanish Landing - T2 Access	71.2	0.9	1.3	1.7	1.8	2.4	1.0	1.4	1.8	1.9	2.5	1.0	1.3	1.7	1.8	2.3	1.0	1.4	1.9	2.0	2.6	1.0	1.4	1.9	2.0	2.6
T2 Access - Harbor Island	73.6	0.2	0.7	1.0	1.1	1.5	0.4	1.0	1.5	1.6	2.0	0.4	0.9	1.3	1.5	1.8	0.2	0.8	1.1	1.3	1.7	0.2	0.8	1.2	1.3	1.7
Harbor Island - T1 Access	73.9	0.1	0.4	0.6	0.8	0.9	0.5	0.9	1.2	1.4	1.6	0.5	0.8	1.0	1.3	1.4	0.5	0.8	1.0	1.3	1.5	0.5	0.8	1.0	1.3	1.5
T1 Access - Winship	74.7	0.4	0.8	1.1	1.3	1.3	0.6	1.0	1.3	1.6	1.7	0.6	0.9	1.2	1.5	1.5	-0.2	0.2	0.5	0.8	1.0	-0.2	0.2	0.5	0.8	1.0
Winship - Rental Car Rd	74.8	0.4	0.8	1.2	1.3	1.3	0.5	0.9	1.3	1.5	1.6	0.5	0.9	1.2	1.4	1.5	-0.1	0.3	0.6	0.9	1.0	-0.1	0.3	0.6	0.9	0.9
Rental Car Rd - Laurel	78.2	0.2	0.7	1.1	1.2	1.1	0.2	0.7	1.1	1.2	1.3	0.2	0.7	1.1	1.2	1.3	0.2	0.7	1.1	1.2	1.3	0.2	0.7	1.1	1.2	1.3
Laurel - Hawthorn	74.6	0.2	0.6	1.0	1.2	1.3	0.1	0.6	1.0	1.3	1.5	0.1	0.6	1.0	1.2	1.4	0.1	0.6	1.0	1.2	1.4	0.1	0.6	1.0	1.2	1.4
Hawthorn - Grape	74.1	0.1	0.5	0.8	1.0	1.1	0.1	0.5	0.8	1.1	1.2	0.1	0.5	0.8	1.1	1.2	0.1	0.5	0.8	1.1	1.2	0.1	0.5	0.8	1.1	1.2
Grape Street																										
Harbor - Pacific	67.2	0.2	0.8	1.3	1.5	1.7	0.2	0.7	1.3	1.5	1.8	0.2	0.7	1.3	1.5	1.7	0.2	0.7	1.3	1.5	1.8	0.2	0.7	1.3	1.5	1.8
Pacific - Kettner	68.2	0.9	1.3	1.6	1.7	1.9	0.9	1.3	1.6	1.8	2.0	0.9	1.2	1.6	1.8	2.0	0.9	1.3	1.7	1.8	2.0	0.9	1.3	1.6	1.8	2.0
Kettner - I-5	70.8	0.8	1.0	0.9	1.1	1.4	0.7	1.0	0.9	1.1	1.5	0.8	1.0	0.9	1.1	1.5	0.7	1.0	0.9	1.1	1.5	0.7	1.0	0.9	1.1	1.5
Hawthorne Street																										
Harbor - Pacific	67.4	0.2	0.8	1.3	1.5	1.7	0.2	0.8	1.3	1.5	1.8	0.2	0.7	1.3	1.5	1.8	0.2	0.7	1.3	1.5	1.8	0.2	0.7	1.3	1.5	1.8
Pacific - Kettner	67.4	0.2	0.7	1.2	1.4	1.6	0.1	0.6	1.2	1.4	1.7	0.1	0.6	1.1	1.4	1.7	0.1	0.6	1.2	1.4	1.7	0.1	0.6	1.1	1.4	1.7
Kettner - I-5	71.4	0.3	0.8	1.2	1.4	1.7	0.3	0.8	1.2	1.4	1.8	0.3	0.8	1.1	1.4	1.8	0.3	0.8	1.2	1.4	1.8	0.3	0.8	1.1	1.4	1.8
India Street																										
Laurel - Palm	74.9	0.2	0.9	0.6	0.7	1.4	0.2	0.9	0.5	0.7	1.4	0.2	0.9	0.5	0.7	1.4	0.2	0.9	0.5	0.7	1.4	0.2	0.9	0.5	0.7	1.4
Palm - Sassafras	75.1	0.0	0.7	0.3	0.4	0.8	0.0	0.7	0.3	0.4	0.9	0.0	0.7	0.3	0.4	0.9	0.0	0.7	0.3	0.4	0.9	0.0	0.7	0.3	0.4	0.9
Sassafras - Washington	72.2	0.3	0.8	1.1	1.1	1.9	0.3	0.8	1.1	1.1	1.9	0.3	0.8	1.1	1.1	1.9	0.3	0.8	1.1	1.1	1.9	0.3	0.8	1.1	1.1	1.9
Kettner Blvd																										
Sassafras - Palm	76.4	0.3	0.8	2.1	2.0	1.2	0.3	0.8	2.1	2.0	1.4	0.3	0.8	2.1	2.0	1.3	0.3	0.8	2.1	2.0	1.4	0.3	0.8	2.1	2.0	1.4
Palm - Laurel	71.7	0.2	0.7	2.2	1.8	1.3	0.1	0.7	2.1	1.9	1.4	0.1	0.7	2.1	1.8	1.4	0.1	0.7	2.1	1.9	1.4	0.1	0.6	2.1	1.8	1.4
Laurel - Hawthorn	68.6	-0.5	0.0	2.2	1.4	1.6	-0.5	-0.1	2.2	1.4	1.6	-0.5	-0.1	2.2	1.4	1.6	-0.5	-0.1	2.2	1.4	1.6	-0.5	-0.1	2.2	1.4	1.6
Hawthorn - Grape	69.3	0.6	1.1	2.2	1.9	2.3	0.6	1.1	2.2	1.9	2.2	0.6	1.1	2.2	1.9	2.3	0.6	1.1	2.2	1.9	2.2	0.6	1.1	2.2	1.9	2.2
Laurel Street																										
Harbor - Pacific	69.1	0.4	0.9	1.2	1.1	0.7	0.3	0.9	1.2	1.1	0.9	0.3	0.9	1.2	1.1	0.9	0.3	0.9	1.2	1.1	0.9	0.3	0.9	1.1	1.1	0.9
Pacific - Kettner	70.2	0.4	1.0	1.2	1.3	1.6	0.3	0.9	1.1	1.3	1.7	0.3	0.9	1.2	1.4	1.7	0.3	0.9	1.1	1.4	1.7	0.3	0.9	1.1	1.3	1.7
Kettner - I-5	72.6	0.4	1.1	1.1	1.3	1.9	0.3	1.0	1.0	1.2	1.9	0.3	1.0	1.0	1.3	1.9	0.3	1.0	1.0	1.2	1.9	0.3	1.0	1.0	1.3	1.9
Nimitz																										

Harbor - Rosecrans	65.4	0.1	0.4	1.1	1.3	2.0	0.0	0.3	1.1	1.4	2.1	0.0	0.3	1.1	1.3	2.1	0.0	0.3	1.1	1.4	2.1	0.0	0.3	1.1	1.3	2.0	
Pacific Highway																											
Sassafras - Palm	72.1	1.1	1.9	2.0	2.2	1.3	1.3	2.0	2.0	2.3	1.3	1.3	2.0	2.0	2.3	1.3	1.3	2.0	2.0	2.3	1.3	1.3	2.0	2.0	2.3	1.3	
Palm - Laurel	72.6	1.1	1.8	1.9	2.0	1.0	0.4	1.2	1.7	2.1	1.5	0.4	1.2	1.7	2.1	1.5	0.4	1.2	1.7	2.1	1.5	0.4	1.2	1.7	2.1	1.5	
Laurel - Hawthorn	71.0	1.5	2.3	2.8	3.2	2.5	2.2	2.9	3.4	3.7	3.2	2.2	2.9	3.4	3.7	3.2	2.2	2.9	3.4	3.7	3.2	2.2	2.9	3.4	3.7	3.2	
Palm Street																											
Pacific - Kettner	71.2	0.0	0.0	-0.1	-0.2	-0.2	0.0	0.0	-0.1	-0.2	-0.2	0.0	0.0	-0.1	-0.2	-0.2	0.0	0.0	-0.1	-0.2	-0.2	0.0	0.0	-0.1	-0.2	-0.2	
Rosecrans																											
Barnett - Sport Arena	72.6	-0.2	0.1	-0.7	-0.6	-0.3	-0.2	0.1	-0.7	-0.6	-0.3	-0.2	0.1	-0.7	-0.6	-0.3	-0.2	0.1	-0.7	-0.6	-0.3	-0.2	0.1	-0.7	-0.6	-0.3	
Nimitz - Barnett	72.1	-0.1	0.0	-0.5	-0.4	-0.3	-0.1	-0.1	-0.5	-0.4	-0.2	-0.1	-0.1	-0.5	-0.4	-0.2	-0.1	-0.1	-0.5	-0.4	-0.2	-0.1	-0.1	-0.5	-0.4	-0.2	
Sassafras Street																											
Pacific - Kettner	70.6	1.4	2.1	2.2	2.6	1.4	1.7	2.4	2.4	2.8	1.8	1.6	2.4	2.4	2.8	1.8	1.7	2.4	2.4	2.8	1.8	1.8	2.4	2.5	2.8	1.8	
Washington Street																											
Pacific - Kettner	71.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Pacific - Kettner	71.1	0.4	2.0	2.5	2.5	1.7	0.4	1.0	1.2	1.3	0.1	0.4	1.0	1.2	2.5	0.1	0.4	1.0	1.2	1.2	0.1	0.4	1.0	1.2	1.2	0.1	
I-8 Freeway																											
Westbound 50 feet from Frontage Road Centerline	71.9	-0.2	-0.2	-0.3	-0.3	-0.4	-0.2	-0.2	-0.3	-0.3	-0.4	-0.2	-0.2	-0.3	-0.3	-0.4	-0.2	-0.2	-0.3	-0.3	-0.4	-0.2	-0.2	-0.3	-0.3	-0.4	
Eastbound: 50 feet from Frontage Road Centerline	72.6	0.1	-0.1	-0.4	-0.4	-0.4	-0.4	-0.1	-0.4	-0.3	-0.4	-0.4	-0.1	-0.4	-0.3	-0.4	-0.4	-0.1	-0.4	-0.3	-0.4	-0.4	-0.1	-0.4	-0.3	-0.4	

Table B-1417
Daily Road Traffic CNEL Increase by Alternative Compared to No Project

Roadways	Increase in CNEL Compared No Project (at 50 Feet to Center Line of Road)																			
	Proposed Project Implementation Plan with Structure					Proposed Project Implementation Plan without Structure					East Terminal Alternative Implementation Plan with Structure					East Terminal Alternative Implementation Plan without Structure				
	2010	2015	2020	2025	2030	2010	2015	2020	2025	2030	2010	2015	2020	2025	2030	2010	2015	2020	2025	2030
North Harbor Drive																				
West of NTC	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
NTC - Spanish Landing	-0.6	-0.6	-0.6	-0.5	-0.5	-0.5	-0.6	-0.6	-0.5	-0.5	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1
Spanish Landing - T2 Access	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.1	0.2	0.2	0.2	0.3
T2 Access - Harbor Island	0.2	0.3	0.4	0.5	0.5	0.2	0.2	0.3	0.3	0.3	0.0	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2
Harbor Island - T1 Access	0.3	0.4	0.6	0.6	0.7	0.3	0.3	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.6	0.4	0.4	0.5	0.5	0.6
T1 Access - Winship	0.1	0.2	0.2	0.2	0.3	0.1	0.1	0.1	0.1	0.2	-0.6	-0.6	-0.6	-0.6	-0.4	-0.6	-0.6	-0.6	-0.6	-0.4
Winship - Rental Car Rd	0.1	0.1	0.1	0.2	0.3	0.1	0.0	0.1	0.1	0.2	-0.5	-0.5	-0.5	-0.4	-0.4	-0.5	-0.5	-0.5	-0.5	-0.4
Rental Car Rd - Laurel	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	-0.1	0.0	0.0	0.0	0.1
Laurel - Hawthorn	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	-0.1	0.0	0.0	0.0	0.1
Hawthorn - Grape	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1
Grape Street																				
Harbor - Pacific	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Pacific - Kettner	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1
Kettner - I-5	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Hawthorne Street																				
Harbor - Pacific	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	-0.1	-0.1	0.0	0.0	0.1	-0.1	-0.1	0.0	0.0	0.1
Pacific - Kettner	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	-0.1	0.0	0.0	0.0	0.1
Kettner - I-5	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
India Street																				
Laurel - Palm	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Palm - Sassafras	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Sassafras - Washington	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1
Kettner Blvd																				
Sassafras - Palm	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Palm - Laurel	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Laurel - Hawthorn	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hawthorn - Grape	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Laurel Street																				
Harbor - Pacific	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	-0.1	0.0	0.0	0.0	0.1
Pacific - Kettner	0.0	0.0	-0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	-0.1	0.0	-0.1	0.0	0.1	-0.1	-0.1	-0.1	-0.1	0.0
Kettner - I-5	-0.1	-0.1	-0.1	-0.1	0.0	-0.1	-0.1	-0.1	0.0	0.1	-0.1	-0.1	-0.1	-0.1	0.0	-0.1	-0.1	-0.1	-0.1	0.0
Nimitz																				
Harbor - Rosecrans	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Pacific Highway																				

Sassafras - Palm	0.2	0.2	0.1	0.0	0.0	0.1	0.2	0.1	0.0	0.0	0.2	0.2	0.1	0.0	0.0	0.2	0.2	0.1	0.0	0.0
Palm - Laurel	-0.7	-0.7	-0.1	0.0	0.4	-0.7	-0.6	-0.1	0.1	0.4	-0.6	-0.6	-0.1	0.0	0.4	-0.6	-0.6	-0.1	0.1	0.4
Laurel - Hawthorn	0.7	0.6	0.6	0.5	0.7	0.7	0.6	0.6	0.5	0.7	0.6	0.6	0.5	0.5	0.7	0.7	0.6	0.6	0.5	0.7
Palm Street																				
Pacific - Kettner	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rosecrans																				
Barnett - Sport Arena	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nimitz - Barnett	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sassafras Street																				
Pacific - Kettner	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.4	0.3	0.2	0.2	0.2	0.4	0.3	0.3	0.3	0.3	0.4
Washington Street																				
Pacific - Kettner	0.0	-1.1	-1.3	-1.3	-1.6	0.0	-1.1	-1.3	0.0	-1.6	0.0	-1.1	-1.3	-1.3	-1.6	0.0	-1.1	-1.3	-1.3	-1.6
I-8 Freeway																				
Westbound 50 feet from Frontage Road Centerline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Eastbound: 50 feet from Frontage Road Centerline	-0.5	0.0	0.0	0.0	0.0	-0.5	0.0	0.0	0.0	0.0	-0.5	0.0	0.0	0.0	0.0	-0.5	0.0	0.0	0.0	0.0

APPENDIX C

SIMMOD Technical Report

San Diego International Airport
Master Plan and Environmental Analysis

Existing and Alternative Airfield
Simulation Assumptions and Results

March 2006

Table of Contents

1	EXISTING AND ALTERNATIVE AIRFIELD SIMULATION ASSUMPTIONS AND RESULTS	1
1.1	AIRFIELD OVERVIEW	1
1.2	General Modeling Assumptions	3
1.2.1	Airspace	3
1.2.2	Aircraft Separations	7
1.2.3	Airfield.....	8
1.2.3.1	West Flow	9
1.2.3.2	East Flow	11
1.3	Simulation Event Files.....	13
1.3.1	Air Operations.....	14
1.3.2	Tug Operations.....	17
1.4	Airfield Configurations.....	18
1.4.1	No Action Case.....	18
1.4.2	North Cargo Area.....	19
1.4.3	T1 East Build	19
1.4.4	T2 West Build.....	21
1.5	Simulation Results	22
1.5.1	Arrival Operations	22
1.5.2	Departure Operations	22
1.5.3	Average Times per Landing-Takeoff Cycle Operation	25

List of Figures

Figure 1: SDIA Airfield Layout.....	2
Figure 2: PDARS Radar Data at SDIA.....	4
Figure 3: Modeled Flight Tracks at SDIA Runway 27.....	5
Figure 4: Modeled Flight Tracks at SDIA Runway 09.....	6
Figure 5: SDIA Airfield Terminals.....	9
Figure 6: SDIA West Flow Departure Taxi Flow.....	10
Figure 7: SDIA West Flow Arrival Taxi Flow.....	11
Figure 8: SDIA East Flow Departure Taxi Flow.....	12
Figure 9: SDIA East Flow Arrival Taxi Flow.....	13
Figure 10: Hourly Demand at SDIA in 2005.....	15
Figure 11: Hourly Demand at SDIA in 2010.....	16
Figure 12: Hourly Demand at SDIA in 2015.....	17
Figure 13: SDIA No Action Case.....	18
Figure 14: SDIA Future North Cargo Area.....	19
Figure 15: SDIA T1 East Build New Terminal.....	20
Figure 16: SDIA T1 East Build Terminal 2 West Addition.....	20
Figure 17: SDIA T2 West Build.....	21

List of Tables

Table 1: SDIA Annual Airport Operations.....	3
Table 2: Minimum Final Approach Visual Separation (NM) at SDIA	8
Table 3: Daily Operation Totals by Aircraft Type at SDIA in 2005	14
Table 4: Daily Operation Totals by Aircraft Type at SDIA in 2010	15
Table 5: Daily Operation Totals by Aircraft Type at SDIA in 2015	16
Table 6: Tug Operations at SDIA	17
Table 7: Average Times per Arrival Operation	23
Table 8: Average Times per Departure Operation.....	24
Table 9: Average Times per Landing-Takeoff Cycle	25

1 EXISTING AND ALTERNATIVE AIRFIELD SIMULATION ASSUMPTIONS AND RESULTS

The following report presents a summary of the simulation work that was performed in support of the San Diego International Airport (SDIA) Master Plan study consisting of an Environmental Analysis (EA) and Environmental Impact Report (EIR). Modeling assumptions and analysis results are presented for the current airfield configuration, or “No Action” case, as well as the proposed East and West Build options in which terminal additions provide for new airline gates. Each of these two terminal additions will allow the airport to accommodate a projected increase in passenger and cargo demand in the years 2010 and 2015. The impact of each of these alternatives was measured using Simmod *PRO!* simulation models for the East and West Build options in comparison to the No Action case at SDIA. The simulation output was used to analyze runway capacity and delay as well as assess the impact of specific constraints imposed by the airfield procedures. Simulation output specific for emission analyses, including delay, idle time, and runway queue time, were provided.

1.1 AIRFIELD OVERVIEW

As shown in [Figure 1](#), the airfield at SDIA consists of a single runway, Runway 09/27, which extends 9,400 feet and is complemented by a full-length parallel taxiway to the south and a partial parallel taxiway to the northeast of the runway. Runway 09 has a displaced threshold of 700 feet and has precision approach capability while the displaced threshold of Runway 27 measures 1,810 feet and does feature precision approach capability. The airport is operated in two distinct modes: westbound with arrivals and departures on Runway 27 exclusively, and eastbound with arrivals on Runway 09 and departures on both Runways 09 and 27.

The mode of operation at SDIA is determined primarily by ceiling and visibility weather conditions. Runway 09 is equipped with an Instrument Landing System (ILS) with weather minima of 400 feet for ceilings and 1 mile for visibility. Runway 27 has a localizer with weather minima of 700 feet for ceilings and 2 miles for visibility. As a result, when the cloud ceiling drops below 700 feet or when visibility drops below 2 miles, Runway 27 is unavailable for arrivals. During those times that low ceilings/visibilities force the use of Runway 09 for arrivals, not all aircraft have sufficient climb performance to utilize Runway 09 for departure, and pilots often request Runway 27 for departure.

1.2 GENERAL MODELING ASSUMPTIONS

This section contains a summary of all general assumptions that were made in the development of the airfield and airspace computer simulation models for SDIA and presents analysis results from these models.

Weather data collected by the National Climatic Data Center between the years 1974 and 2004 was analyzed to determine the use of the runway system at SDIA. For the 2005 Master Plan study, three runway operating configurations were simulated to account for variations in capacity due to wind and weather conditions. **Table 1** presents the occurrence of these current operating conditions at SDIA on an annual basis and summarizes the runway operating configurations that were modeled.

Table 1: SDIA Annual Airport Operations

Operating Conditions	Percent Occurrence
West Flow VFR	73.4%
West Flow IFR	23.3%
East Flow IFR – Runway 09 or 09/27	3.3%

The predominant operating configuration at SDIA is the West flow under Visual Flight Rules (VFR) which uses visual arrival approaches and accounts for 73.4% of the total annual operations. In addition, a more restrictive West flow configuration using the Runway 27 localizer approach is utilized under Instrument Flight Rules (IFR) weather conditions and accounts for 23.3% of all operations. Finally, SDIA operates with the East flow under IFR conditions for approximately 3.3% of the annual airport operations.

Each of these three runway operating conditions was modeled for the No Action case and demand schedule in 2005 as well as for projected demand in the years 2010 and 2015. It should also be noted that SDIA has a noise curfew that prohibits departures between the hours of 11:30PM and 6:30AM. This prevents the operating day at SDIA from expanding into other hours and it was assumed that this curfew will remain in place under all future scenarios.

1.2.1 Airspace

To simulate the movements of aircraft in the model, Simmod *PRO!* utilizes node and link structures to create paths traversed by these aircraft. Ground links, which represent the ground tracks of the aircraft on the airfield, can be accurately modeled since the paths of these aircraft are constrained to existing taxiways and aprons at the airport. Thus duplicating these paths as links would result in a fairly accurate representation of the ground route structures. However, unlike the ground routes, air routes are more difficult to model since no two aircraft trajectories

are identical. Consequently the simulation airspace is designed to capture an approximate air traffic flow of these aircraft.

The airspace and airfield analysis for SDIA considered the typical airspace routes used when operating on Runways 09 and 27. Flight tracks were generated from the FAA's Performance Data Analysis and Reporting System (PDARS) and this information was used to validate assumptions regarding flight paths, aircraft altitudes, aircraft approach speeds, and airspace route assignments. For example, based on an analysis of radar data performed by the FAA, aircraft approaching Runway 09 typically turn onto final approximately 12 nautical miles (NM) from the runway end, while aircraft approaching Runway 27 typically turn onto final approximately 9 NM from the runway end. **Figure 2** presents a graphical representation of the PDARS analysis of SDIA arrivals and departures using Runway 27.

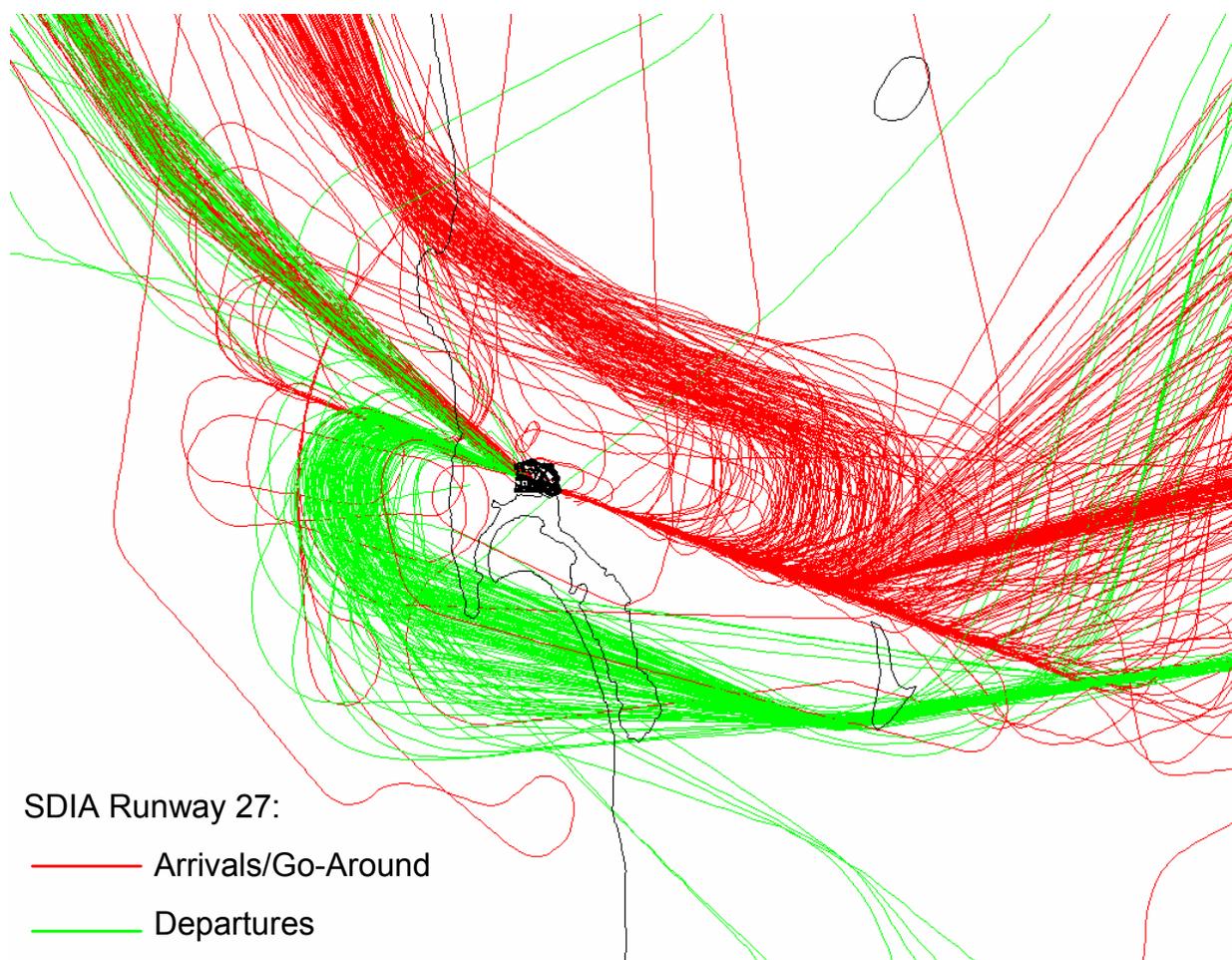


Figure 2: PDARS Radar Data at SDIA

As shown in **Figure 3**, several Standard Terminal Arrival Routes (STARs) and Standard Instrument Departures (SIDs) were used to represent the typical airspace routes followed when operating on Runway 27. A STAR is a pre-planned IFR ATC arrival procedure published for pilot use, while a SID is a similar procedure for departures. Approximately two-thirds of all Runway 27 arrivals use the BARET FOUR arrival procedure which accommodates most aircraft from the Midwest and the East Coast, while one-third use the HUBRD ONE procedure which receives most of the arrivals from California and other West Coast airports. The split is similar for Runway 27 departures, with West Coast departures utilizing the PEBLE THREE departure route and the remaining departures using the BORDER FIVE procedure.

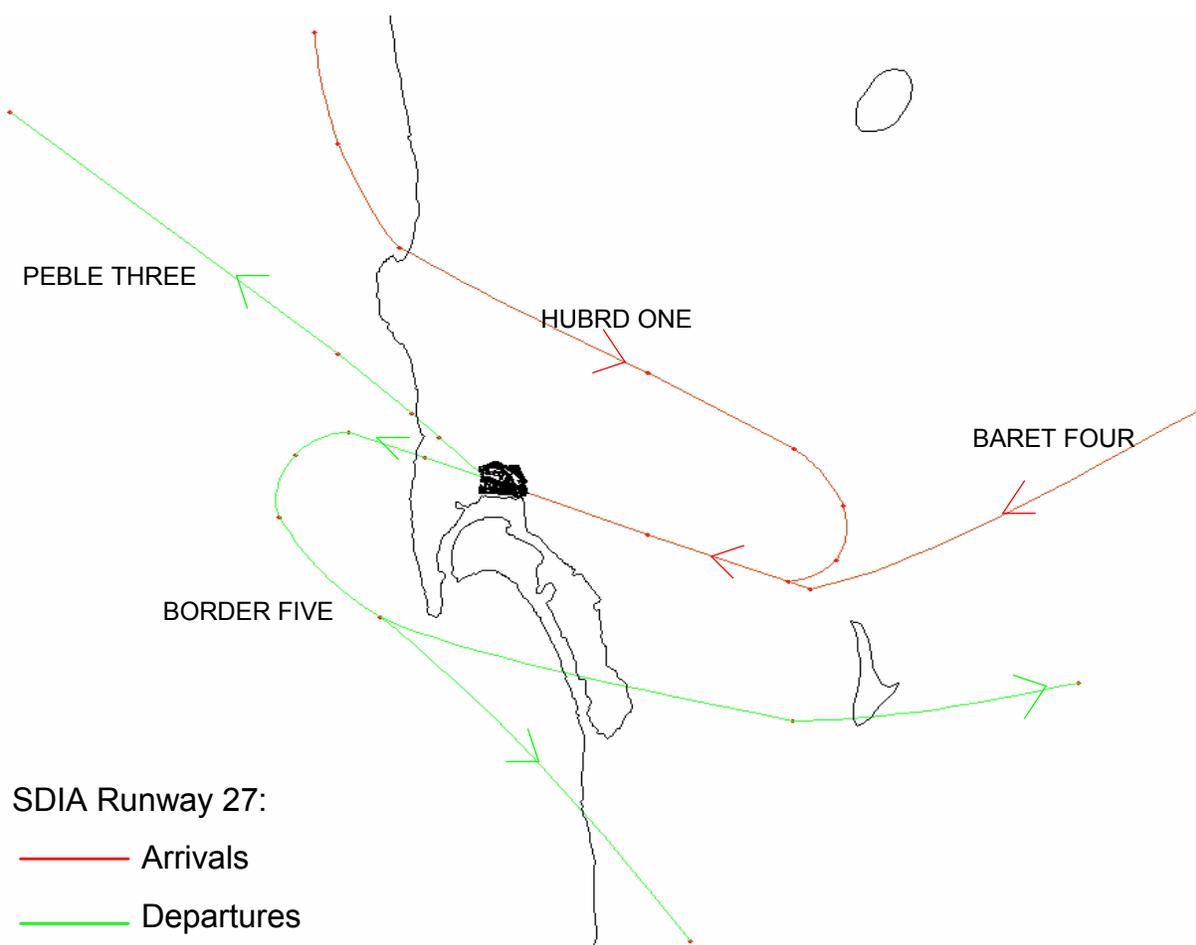


Figure 3: Modeled Flight Tracks at SDIA Runway 27

The modeled STARS and SIDs for Runway 09 are shown in **Figure 4**. Similarly to the West flow, roughly two-thirds of all arrivals use the BARET FOUR procedure which accommodates most aircraft from the Midwest and the East Coast, while one-third approach from the Northwest. Both of these arrival routes intercept a common Initial Approach Fix (IAF) and follow the ILS RWY 09 approach. The arrival route split is similar for Runway 09 departures, with West Coast departures utilizing the LNSAY TWO departure route and the remaining departures using the BORDER FIVE procedure for Midwest and East Coast destinations.

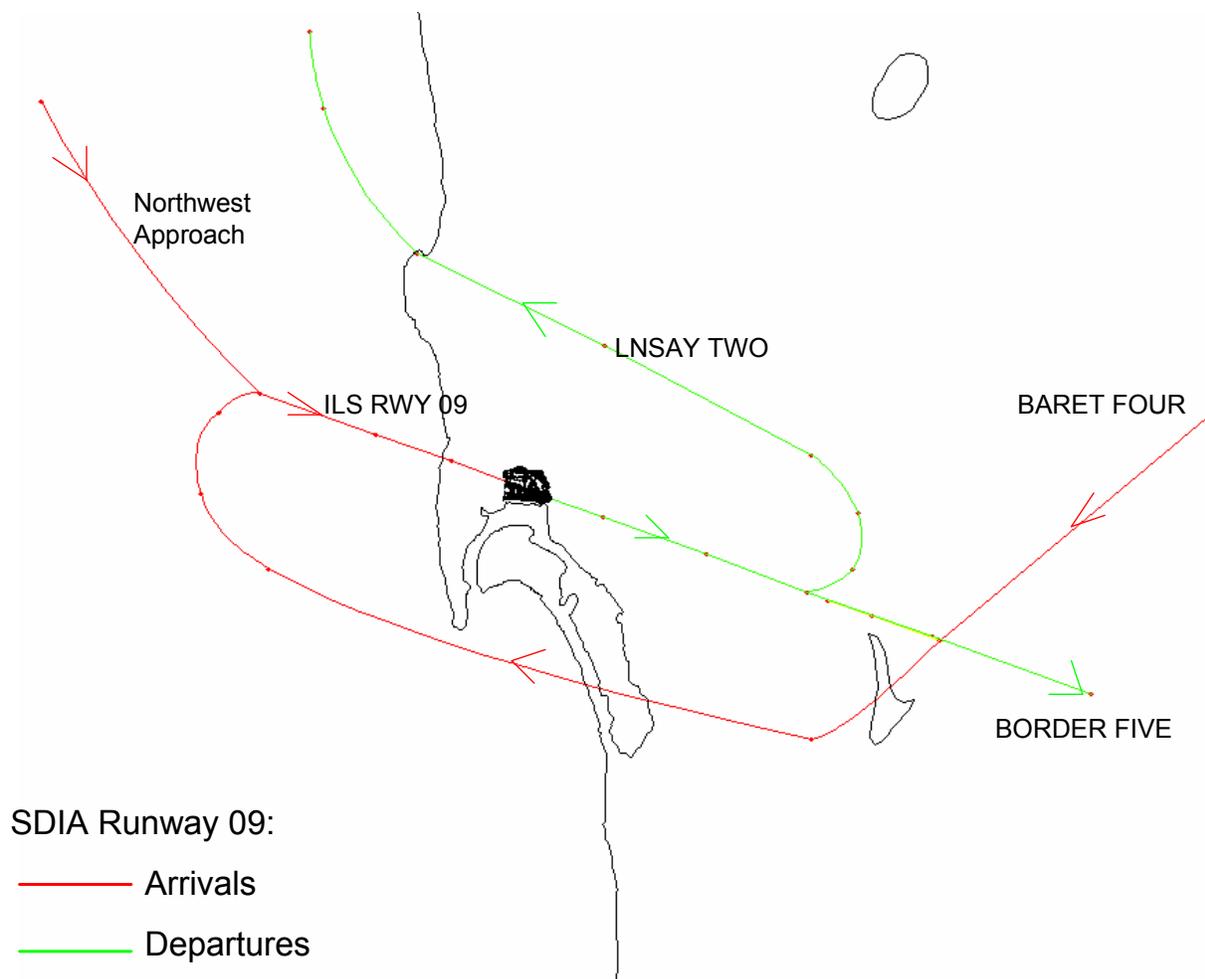


Figure 4: Modeled Flight Tracks at SDIA Runway 09

1.2.2 Aircraft Separations

Standard radar separations applied in this modeling effort conform to the criteria contained in the FAA Order 7110.65P, Air Traffic Control. This document defines the minimum separation requirements between aircraft of different weight classes operating in different sequences: an arrival followed by another arrival, an arrival followed by a departure, and a departure followed by another departure. In addition, buffers were added to the separation requirements to represent the fact that controllers rarely maintain the absolute minimum separation distance, and typically allow additional spacing.

FAA Air Traffic Control (ATC) place aircraft into one of four possible categories as defined below:

- Heavy: Gross weight greater than 255,000 lbs
- B757: Boeing 757 series aircraft
- Large: Gross weight greater than 41,000 lbs but less than 255,000 lbs
- Small: Gross weight less than 41,000 lbs

Based on the aircraft's category, general airspace wake turbulence separations in nautical miles would apply as presented below:

- Heavy behind heavy – 4 miles
- Large/heavy behind B757 – 4 miles
- Small behind B757 – 5 miles
- Small/large behind heavy – 5 miles

Based on the aircraft's category, final approach wake turbulence separations in nautical miles that exist when the lead aircraft is over the landing threshold are shown below:

- Heavy behind heavy – 4 miles
- Large/heavy behind B757 – 4 miles
- Large behind heavy – 5 miles
- Small behind large – 4 miles
- Small behind B757 – 5 miles
- Small behind heavy – 6 miles

During periods when visual separations are allowed at SDIA, ATC uses as little as 2.5 NM separation between aircraft established on the final approach within 10 NM of the landing runway. **Table 2** presents the minimum final approach visual separation values allowed by aircraft category as used in the model. These separation values are derived from the collected radar data encountered during visual weather conditions (VFR).

Table 2: Minimum Final Approach Visual Separation (NM) at SDIA

Lead Aircraft	B757	Trailing Aircraft		
		Heavy	Large	Small
B757	2.9	2.9	2.9	3.7
Heavy	3.6	2.9	3.6	4.5
Large	2.5	2.5	2.5	2.7
Small	2.5	2.5	2.5	2.5

1.2.3 Airfield

Figure 5 shows the layout of the SDIA airfield and airline terminals. The Commuter Terminal features four gates that provide access to the ramp and ten aircraft parking positions. Terminal 1 features twenty gates spread over two rotunda while Terminal 2 features twenty-two gates, thirteen of which are located in the original Terminal 2 East building and nine in the more recent Terminal 2 West addition. For the future 2010 and 2015 scenarios, gate assignments were forecasted and provided by HNTB Corporation. Airlines were assumed to operate from the same terminals as in 2005 but gate assignments were selected to ensure a balanced use of all gates.

The taxiway system at SDIA links the runway to the gate and apron areas. The airport features a single, full-length parallel taxiway, Taxiway B, on the south side of the runway. Due to its proximity to both the runway and the terminals, there is insufficient room for dual taxi lanes.

The runway exits at SDIA and their utilization can impact runway occupancy times and airport capacity significantly. The runway has seven exits on the South side and four exits on the North side, as show in **Figure 5**. Two of these – Exits B5 and B6 – are angled taxiways that serve Runway 27 arrivals and reduce runway occupancy times when operating to the west. They are located approximately 4,500 feet and 5,600 feet from the Runway 27 threshold, respectively.

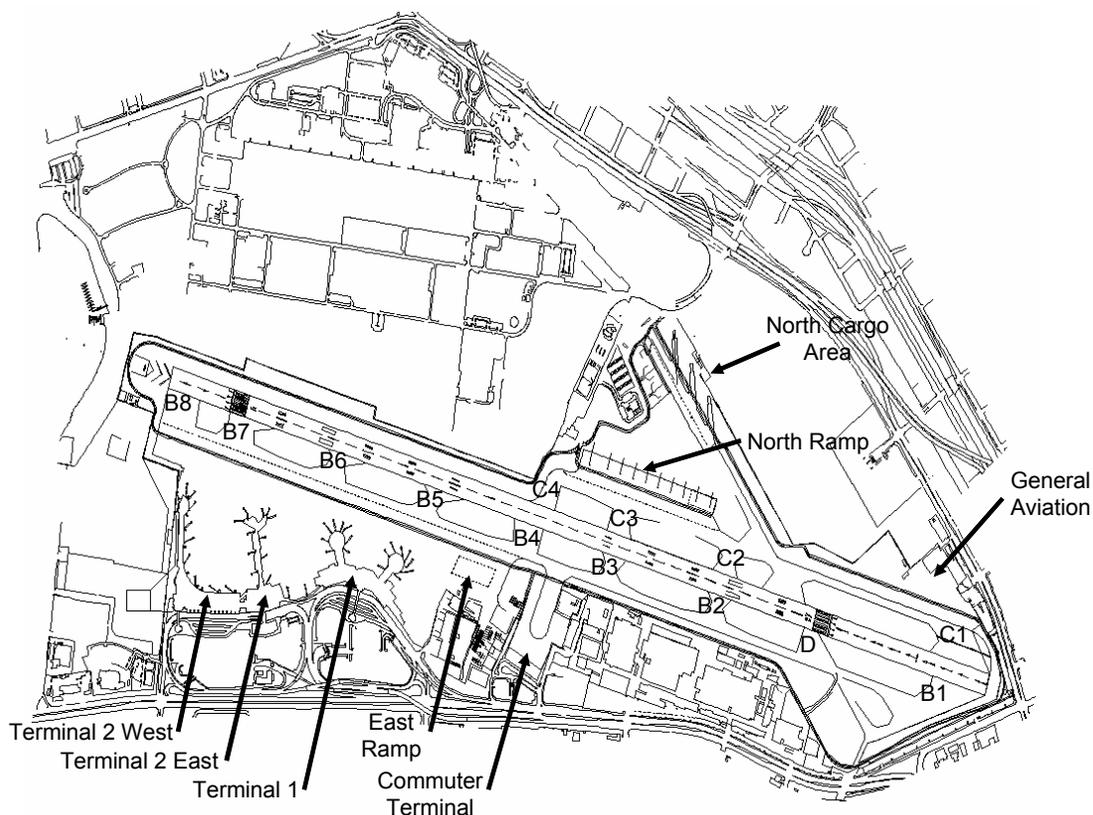


Figure 5: SDIA Airfield Terminals

1.2.3.1 West Flow

The SDIA airfield is typically operated in a westbound mode, with arrivals to and departures from Runway 27. This configuration is the most efficient mode of operation and offers the highest hourly capacity for two primary reasons. First, in terms of arrival capacity, runway exits are more efficient in the westerly direction. Exits B5 and B6 as shown in [Figure 5](#), for example, are angled exits that reduce runway occupancy times for arrivals. Second, in terms of departure capacity, the westerly operation provides diverging departure routes immediately after the runway end. While aircraft following one another on a single route must maintain in-trail separations of three to five miles, an aircraft using a diverging route of 15 degrees or greater requires only one mile of separation from the previous departure (*FAA Order 7110.65P, 5-8-3, 3a*).

Certain flights require an aircraft to tug from a Remain Over Night (RON) parking location such as a departure to an open gate. For departure tug operations from the North Ramp area to Terminals 1 and 2, aircraft are first towed across Taxiway C4, into and out of the East Ramp apron area to allow the passing of aircraft moving in the East direction towards the Commuter Terminal or the departure queue, and then along Taxiway B against regular taxi flow.

Due to obstruction clearance, Group 5 and 6 aircraft are prohibited from operating on Taxiway B between the B4 and D crossings, and on Taxiway C between D and C1. The net result of these

restrictions is that Group 5 and 6 aircraft departing Terminals 1 and 2 must taxi to the departure queue using the following procedure: taxi East via Taxiway B; cross Runway 27 at B4; taxi East via Taxiway C to Taxiway D; cross Runway 27 via Taxiway D; taxi via Taxiway B1 to the Runway 27 departure queue. Departure taxi flow procedures are illustrated in **Figure 6**.

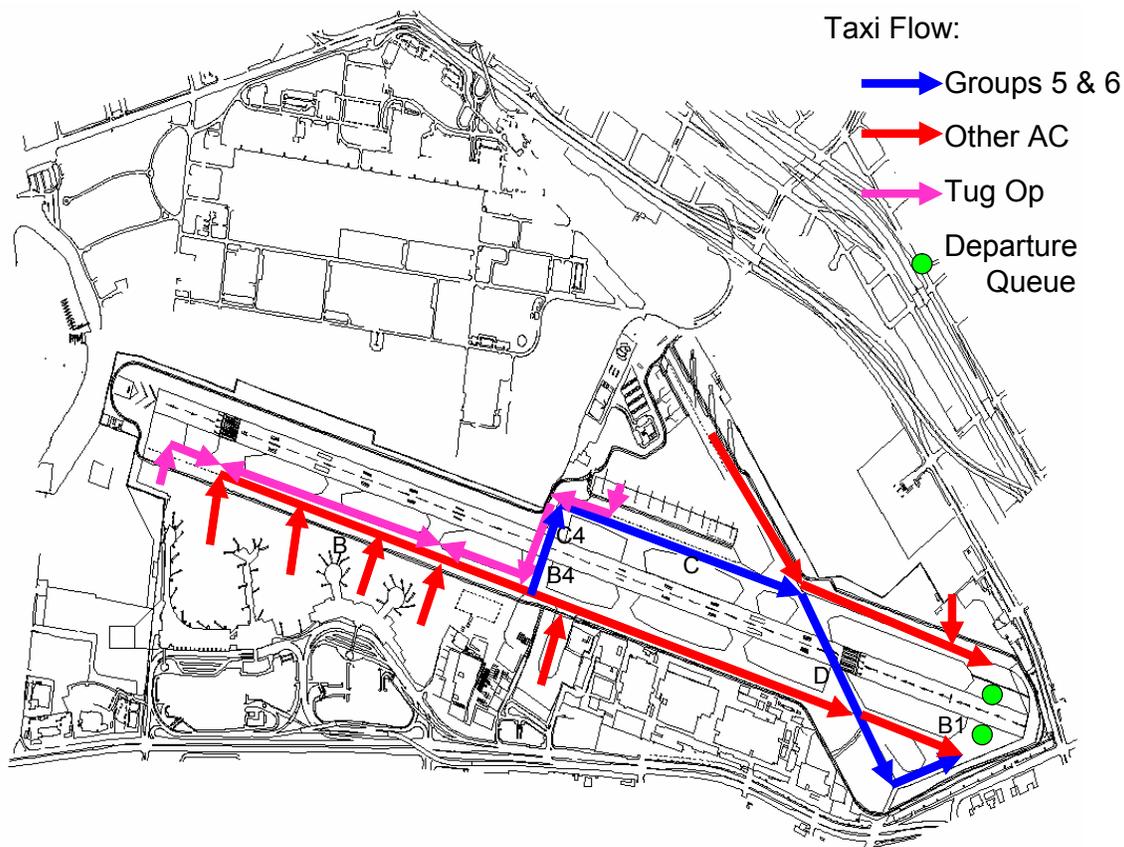


Figure 6: SDIA West Flow Departure Taxi Flow

When operating to the west, the majority of runway arrivals use Exits B4 through B7 with exit utilization dependent upon both aircraft performance and destination terminal. While heavier aircraft generally require greater landing distances and use exits further down the runway, airline terminal locations also have an impact on runway exit choice. In order to reduce taxi conflict, the West flow model was designed such that arriving aircraft exit the runway from a taxi path located to the West of their destination terminal. For example, Southwest Airlines operates from the east rotunda of Terminal One, and therefore frequently uses Exit B5, which is adjacent to their gates. On the other hand, American Airlines operates from Terminal Two and its flights frequently roll further down the runway to Exits B6 and B7, which are closer to its gates. Arrival taxi flow procedures are illustrated in **Figure 7**.

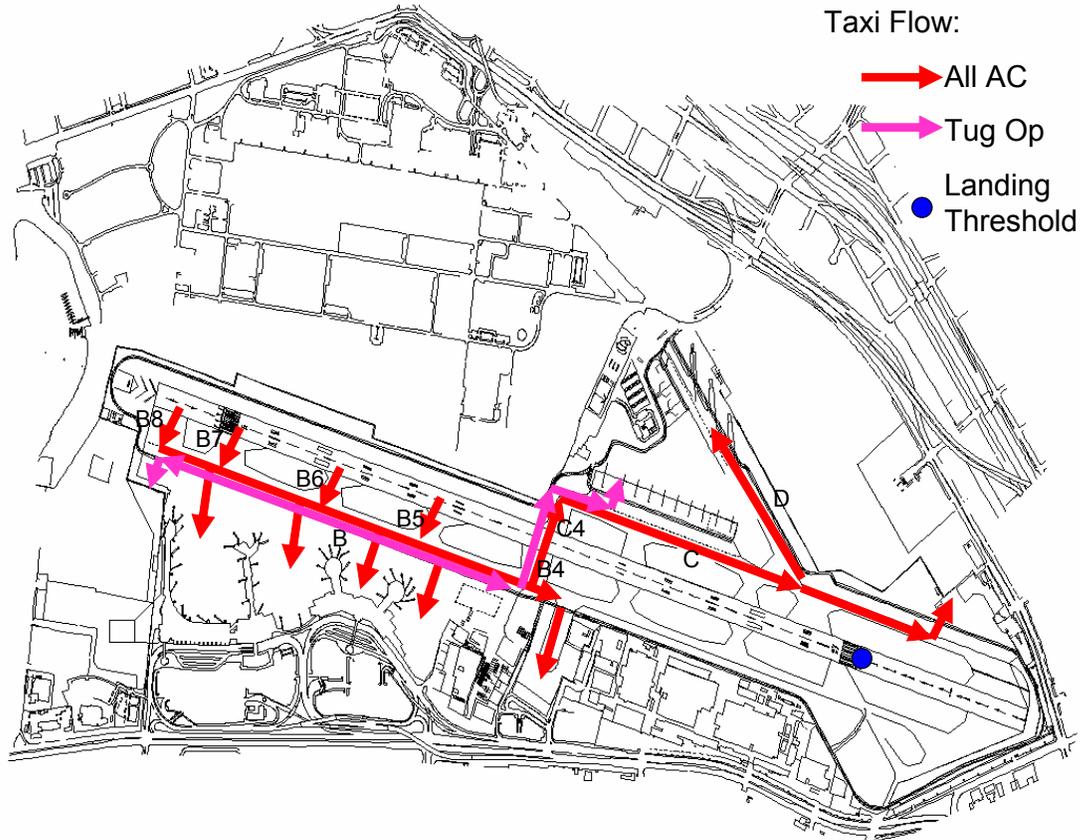


Figure 7: SDIA West Flow Arrival Taxi Flow

1.2.3.2 East Flow

Under the East flow, aircraft taxi westbound along Taxiway B to the departure queue. Aircraft departing from the North airfield areas taxi along Taxiway C, as well as Taxiway D for cargo aircraft, and then cross Runway 09 at C4 to join the aircraft taxi flow along Taxiway B.

Departure taxi flow procedures are illustrated in [Figure 8](#).

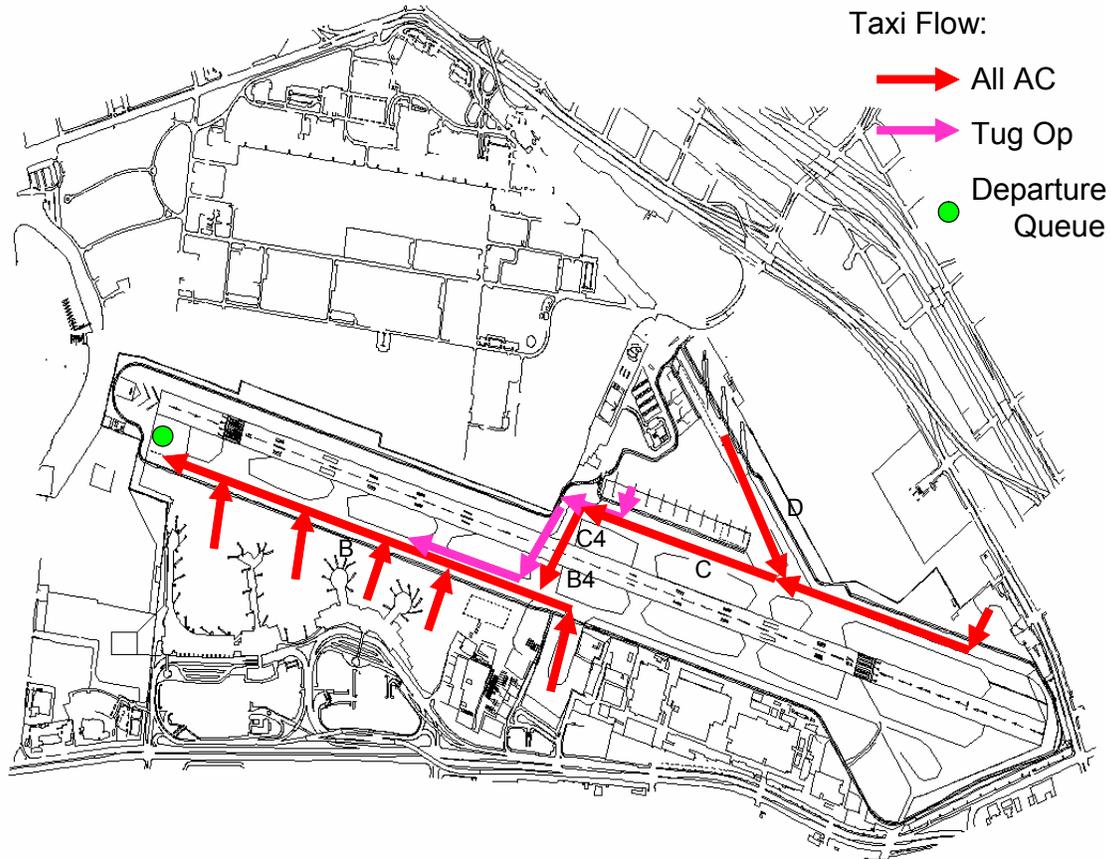


Figure 8: SDIA East Flow Departure Taxi Flow

Arriving aircraft may exit the runway on either side along Taxiway B or Taxiway C.

Arrival taxi flow procedures are illustrated in [Figure 9](#).

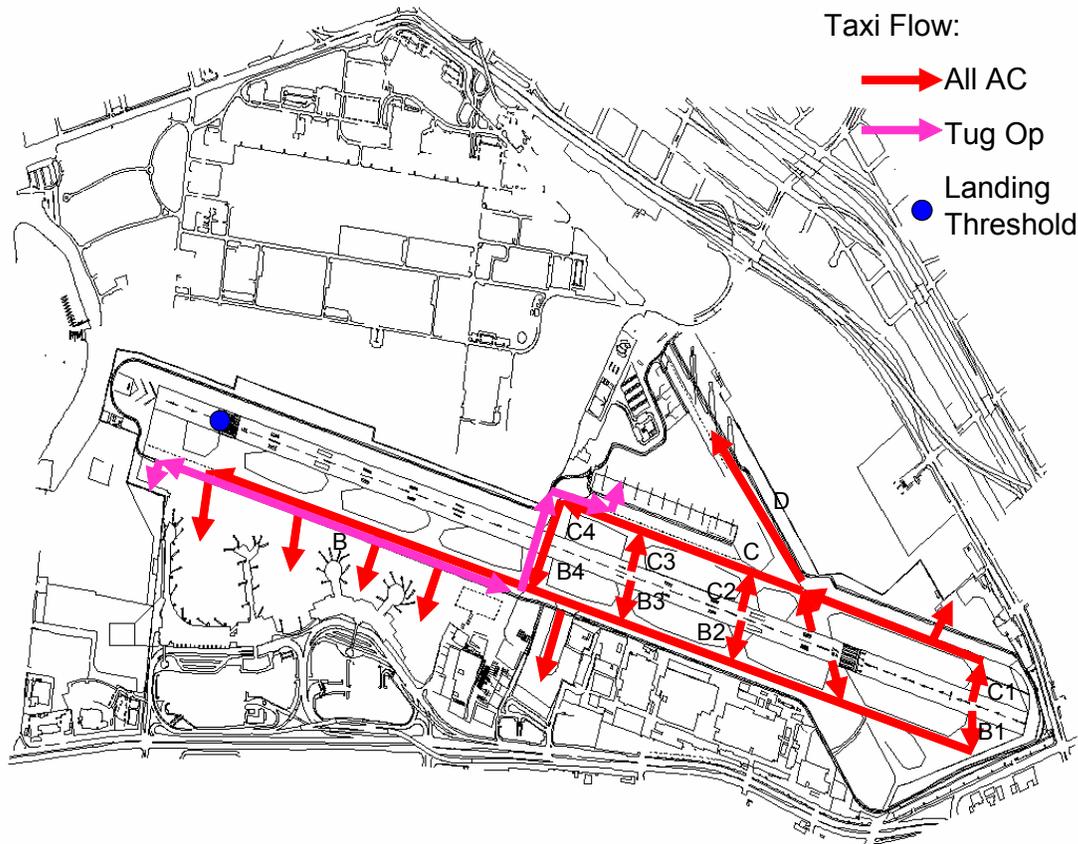


Figure 9: SDIA East Flow Arrival Taxi Flow

1.3 SIMULATION EVENT FILES

The simulation event files are representative of a typical day at SDIA. Aircraft in this demand schedule are grouped into one of eight groups. They are defined as:

- B757 – Boeing 757, all models
- Heavy Jet – Jet aircraft with a maximum gross takeoff weight limit greater than 255,000 pounds (e.g., 777, 747)
- Large Jet – Jet aircraft with a maximum gross takeoff weight limit greater than 41,000 pounds and less than 255,000 pounds (e.g., 727, 737, A320)
- Large Turboprop – Large turbine-propeller and piston-propeller powered aircraft with a maximum gross takeoff weight limit greater than 41,000 pounds (e.g., C130)
- Small Jet – Jet aircraft with a maximum gross takeoff weight limit less than 41,000 pounds (e.g., Learjet 60)

- Small Turboprop – Small turbine-propeller and piston-propeller driven aircraft with a maximum gross takeoff weight limit between 12,000 and 41,000 pounds (e.g., E120)
- Small Twin Piston – Small twin piston-propeller powered aircraft with a maximum gross takeoff weight limit less than 12,000 pounds (e.g., C414)
- Small Single Piston – Small single piston-propeller powered aircraft with a maximum gross takeoff weight limit less than 12,000 pounds (e.g., BE36)

1.3.1 Air Operations

Table 3 illustrates operational counts for a typical day at SDIA by the above defined aircraft groups in the demand schedule year of 2005.

Table 3: Daily Operation Totals by Aircraft Type at SDIA in 2005

Aircraft Type	2005 Event File	
	Arrivals	Departures
Boeing 757's	21	21
Heavy Jet	11	11
Large Jet	206	206
Large Turboprop	19	19
Small Jet	7	7
Small Single-Engine	1	1
Small Turboprop	20	20
Small Twin-Engine	2	2
Total	287	287

Figure 10 presents hourly airport runway demands for all aircraft in the 2005 demand schedule year.

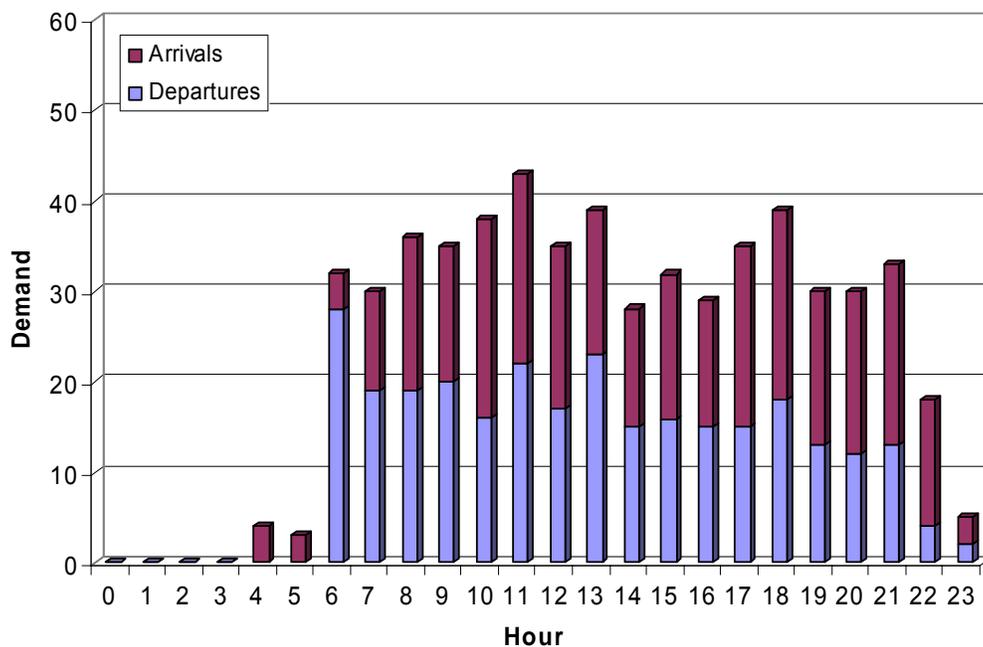


Figure 10: Hourly Demand at SDIA in 2005

Table 4 illustrates operational counts for a typical day at SDIA in the demand schedule year of 2010.

Table 4: Daily Operation Totals by Aircraft Type at SDIA in 2010

Aircraft Type	2010 Event File	
	Arrivals	Departures
Boeing 757's	12	12
Heavy Jet	13	13
Large Jet	275	275
Large Turboprop	0	0
Small Jet	6	6
Small Single-Engine	0	0
Small Turboprop	6	6
Small Twin-Engine	0	0
Total	312	312

Figure 11 presents hourly airport runway demands for all aircraft in the 2010 demand schedule year.

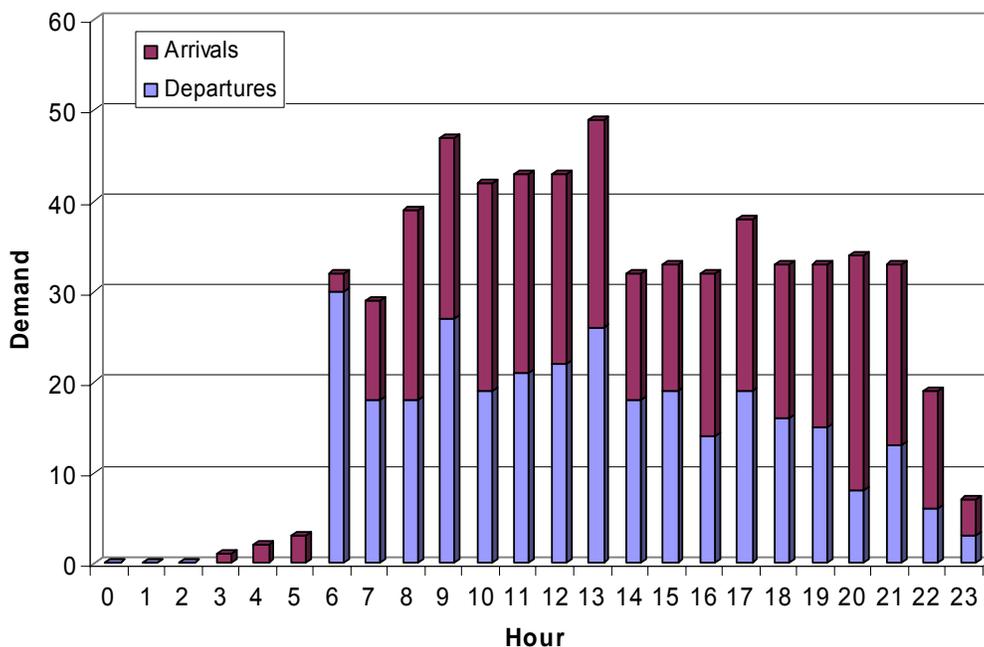


Figure 11: Hourly Demand at SDIA in 2010

Table 5 illustrates operational counts for a typical day at SDIA in the demand schedule year of 2015.

Table 5: Daily Operation Totals by Aircraft Type at SDIA in 2015

Aircraft Type	2015 Event File	
	Arrivals	Departures
Boeing 757's	15	15
Heavy Jet	18	18
Large Jet	312	312
Large Turboprop	0	0
Small Jet	7	7
Small Single-Engine	0	0
Small Turboprop	6	6
Small Twin-Engine	0	0
Total	358	358

Figure 12 presents hourly airport runway demands for all aircraft in the 2015 demand schedule year.

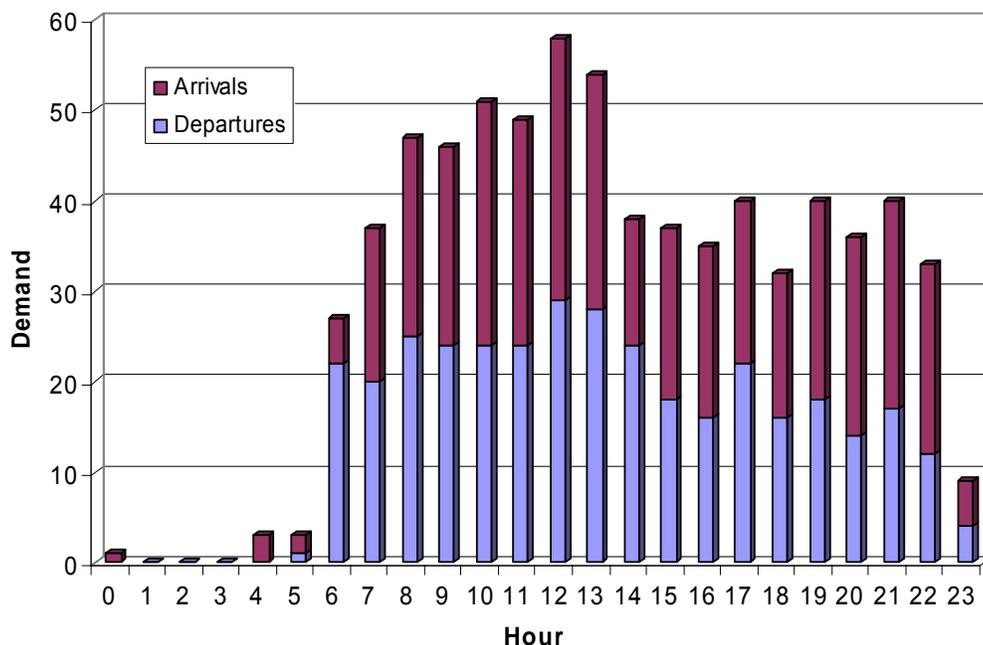


Figure 12: Hourly Demand at SDIA in 2015

1.3.2 Tug Operations

Tug operations were determined from the SDIA demand schedules and gate assignments; they are summarized in [Table 6](#). Tug “Out of Gate” operations refer to arrival flights that are towed from their final destination gate to a RON location while tug “Into Gate” operations refer to departure flights that are towed to the departure gate for boarding.

Table 6: Tug Operations at SDIA

Airport Layout	2005		2010		2015	
	Out of Gate	Into Gate	Out of Gate	Into Gate	Out of Gate	Into Gate
No Action	17	14	16	15	19	22
T1 East Build			15	13	18	11
T2 West Build			15	14	20	22

1.4 AIRFIELD CONFIGURATIONS

1.4.1 No Action Case

The SDIA airfield layout and ground procedures were presented in **Section 1.2.3**. The Simmod *PRO!* ground network for the No Action airfield configuration is presented in **Figure 13**. Included in the figure are the ground links and nodes as well as airline gates.

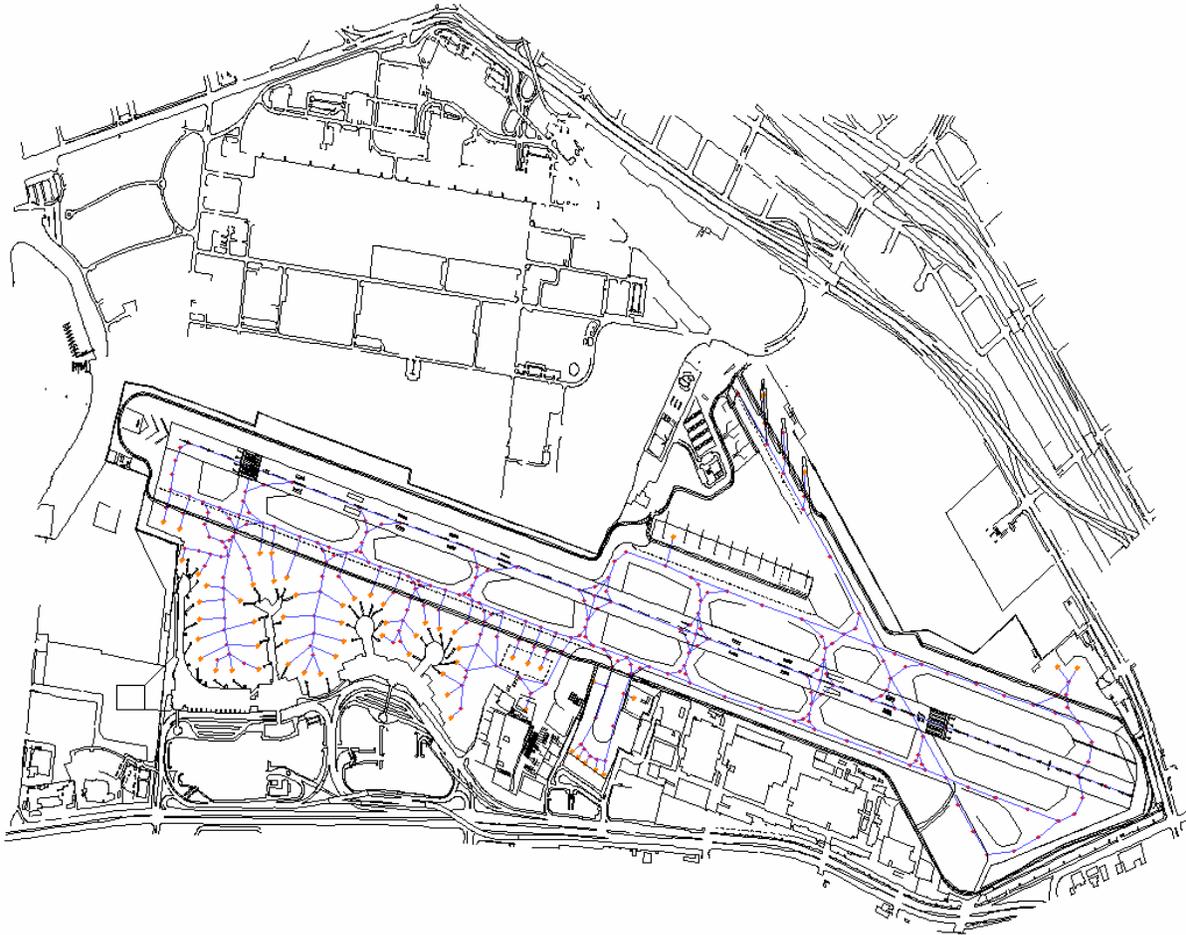


Figure 13: SDIA No Action Case

1.4.2 North Cargo Area

Under the proposed T1 East and T2 West Build options, all cargo aircraft operations at SDIA would take place in the North Cargo area, as shown in **Figure 14**. In addition, General Aviation aircraft are moved further north along the proposed Group V Taxiway.

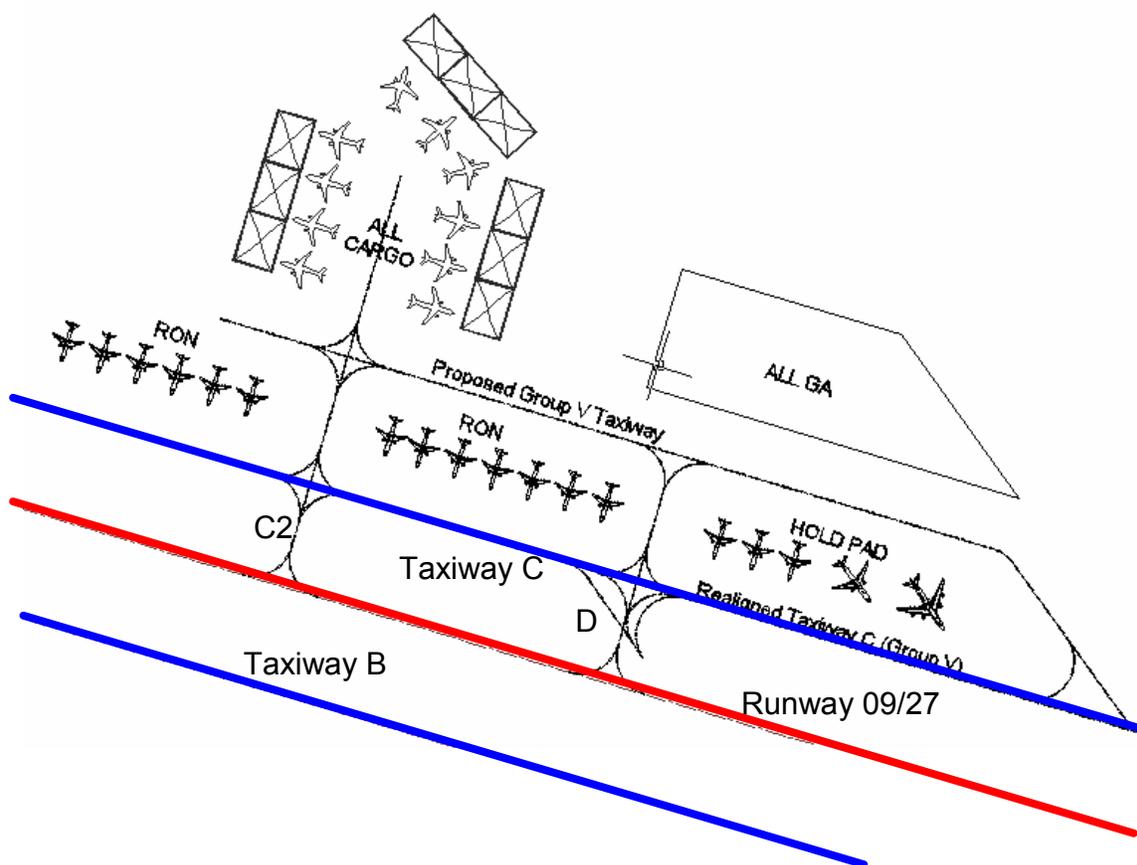


Figure 14: SDIA Future North Cargo Area

1.4.3 T1 East Build

Under the T1 East Build option, a new terminal building is constructed at the current East Ramp area between the East rotunda of Terminal 1 and the Commuter Terminal, as shown in **Figure 15**. Twelve gates are added to the new terminal building and existing Gates 1, 2, and 3 are removed from Terminal 1. In addition, three new gates are added to the West side of Terminal 2 West and another apron area is created to accommodate eight RON aircraft, as shown in **Figure 16**.

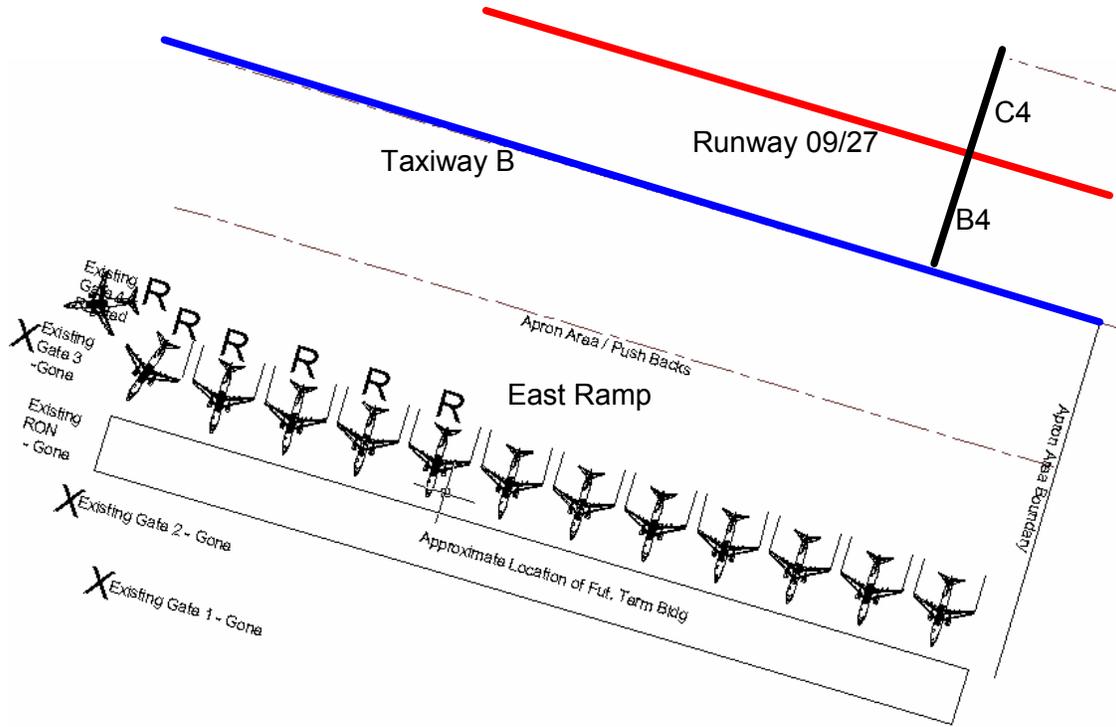


Figure 15: SDIA T1 East Build New Terminal

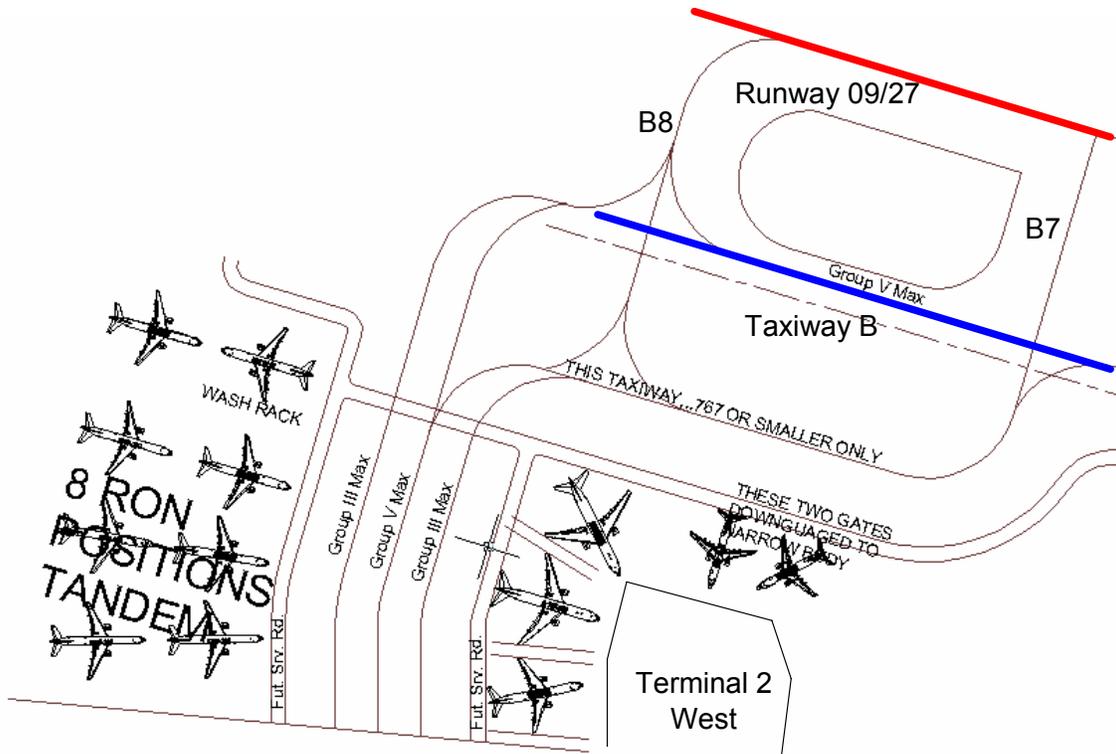


Figure 16: SDIA T1 East Build Terminal 2 West Addition

1.4.4 T2 West Build

Under the T2 West Build option, ten gates are added to the West side of Terminal 2 West and another apron area is created to accommodate twelve RON aircraft, as shown in [Figure 17](#).

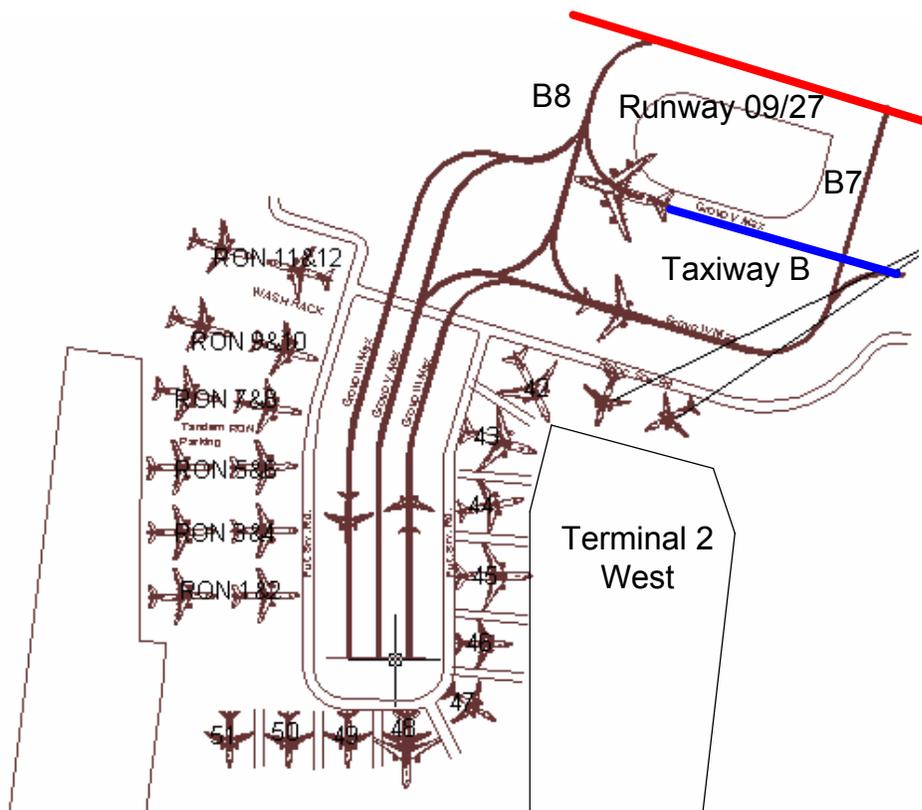


Figure 17: SDIA T2 West Build

1.5 SIMULATION RESULTS

The simulation models for SDIA were developed using the demand forecasts provided by HNTB Corporation. The models represent gated constrained forecasts for SDIA in the years 2005, 2010 and 2015. In each of the three years, the three different airport operational configurations of SDIA were modeled to better reflect the fluid nature of the weather systems and their impact on the airport operations. This section describes various output statistics of the Simmod *PRO!* models under the three different weather conditions, using the three airfield alternatives in the 2010 and 2015 demand years. The No Action alternative was modeled for the 2005 demand year in addition to the 2010 and 2015 demand years.

1.5.1 Arrival Operations

Table 7 presents average arrival times in the simulation under the three operating configurations.

The airspace travel times include time spent on the airspace routes from the injection into the simulation to the runway touchdown point. The times include any airspace delays that occur due to aircraft sequencing. In east flow, arrivals are held outside of the airspace during times that there are departures from Runway 27 resulting in a large amount of average delay and travel time.

For arriving aircraft, the travel taxi times represent ground travel times between runway exit points and the gates. The average delay taxi times include any delays incurred by the aircraft while traveling on the ground routes. Refer to Section 1.2, for the taxi patterns utilized by the aircraft under the various modeling configurations.

Total ground movement time is the average duration that an arrival operation is moving on the ground at SDIA with engines running; it includes travel-taxi and delay-taxi times.

1.5.2 Departure Operations

Table 8 presents average departure times in the simulation under the three operating conditions.

The airspace travel times include time spent on the airspace routes from takeoff to ejection from the simulation airspace structure. Airspace delays are incurred due to aircraft sequencing.

The taxi times for departing aircraft consist of ground travel times between the gates and the departure queues. Delays are incurred by the aircraft while traveling on the ground routes, while waiting at the departure queues, or while waiting for gate pushback. Refer to Section 1.2 for the taxi patterns utilized by the aircraft under the various modeling configurations.

Gate delays occur most often in the East Flow configuration due to departures that request Runway 27. In such cases, Runway 27 departures that need to travel eastbound on Taxiway B must wait until the taxiway is clear of departures and arrivals that are traveling in the normal westbound direction along Taxiway B.

Total ground movement time is the average duration that a departure operation is moving on the ground at SDIA with engines running; it includes travel-taxi, delay-taxi, and delay-queue times.

Table 7: Average Times per Arrival Operation

Year/Alternative	Flow	Weather Condition	Average Time per Arrival Operation (Minutes)							
			Travel			Delay			Gate Time	Total Ground Movement Time
			Air	Taxi	Total	Air	Taxi	Total		
2005										
No Action	West	VFR	10.5	3.6	14.1	0.4	0.6	0.9	43.1	4.1
	West	IFR	10.5	3.6	14.1	0.5	0.6	1.1	43.4	4.2
	East	IFR	15.0	5.2	20.2	16.0	1.0	17.0	29.9	6.2
2010										
No Action	West	VFR	10.3	3.6	13.9	0.5	0.6	1.0	37.3	4.1
	West	IFR	10.3	3.6	13.9	0.6	0.6	1.2	37.1	4.2
	East	IFR	16.5	5.3	21.8	20.6	1.1	21.7	20.0	6.4
T1 East Build	West	VFR	10.3	3.6	13.9	0.4	0.7	1.1	38.4	4.3
	West	IFR	10.3	3.6	13.9	0.7	0.7	1.4	38.6	4.3
	East	IFR	21.0	5.6	26.6	36.6	1.4	38.0	17.9	7.0
T2 West Build	West	VFR	10.3	3.7	14.0	0.4	0.4	0.8	18.0	4.1
	West	IFR	10.3	3.7	14.0	0.7	0.4	1.0	18.0	4.1
	East	IFR	19.5	5.6	25.1	26.8	1.5	28.2	9.4	7.1
2015										
No Action	West	VFR	10.4	3.5	13.9	0.6	0.8	1.4	47.9	4.3
	West	IFR	10.4	3.5	13.9	0.8	0.7	1.5	47.6	4.3
	East	IFR	17.7	5.2	22.9	27.5	1.2	28.7	27.2	6.4
T1 East Build	West	VFR	10.4	3.6	14.0	0.6	0.7	1.3	50.2	4.3
	West	IFR	10.4	3.6	14.0	0.9	0.7	1.6	50.1	4.3
	East	IFR	23.9	5.7	29.6	45.9	2.3	48.2	23.7	8.0
T2 West Build	West	VFR	10.5	3.6	14.1	0.6	0.4	1.0	50.0	4.0
	West	IFR	10.5	3.6	14.1	0.9	0.3	1.2	50.1	4.0
	East	IFR	19.8	5.6	25.5	30.9	2.4	33.3	26.0	8.0

Note: differences may occur due to rounding.

Table 8: Average Times per Departure Operation

Year/ Alternative	Flow	Weather Condition	Average Time per Operation (Minutes)								Total Ground Movement Time
			Travel			Delay					
			Air	Taxi	Total	Air	Taxi	Gate	Queue	Total	
2005											
No Action	West	VFR	7.5	10.6	18.1	0.1	0.3	0.2	1.8	2.4	13.0
	West	IFR	7.5	10.6	18.1	0.1	0.4	0.2	1.9	2.5	13.0
	East	IFR	7.7	10.2	17.9	0.1	5.4	20.6	10.5	36.6	46.7
2010											
No Action	West	VFR	7.9	10.7	18.7	-	0.5	0.3	1.9	2.7	13.4
	West	IFR	7.9	10.7	18.7	-	0.6	0.3	2.0	2.9	13.6
	East	IFR	7.5	10.3	17.8	0.0	8.3	22.2	12.0	42.4	52.7
T1 East Build	West	VFR	7.7	11.5	19.2	-	0.5	0.2	2.0	2.6	14.1
	West	IFR	7.7	11.5	19.2	0.0	0.4	0.2	2.1	2.7	14.2
	East	IFR	7.5	10.5	18.0	0.0	12.9	40.8	12.7	66.4	76.9
T2 West Build	West	VFR	7.7	12.3	20.0	-	0.3	0.3	1.9	2.6	14.9
	West	IFR	7.7	12.3	20.0	-	0.3	0.3	2.2	2.8	15.1
	East	IFR	7.6	10.0	17.5	0.0	9.8	27.7	12.4	49.9	59.9
2015											
No Action	West	VFR	7.9	10.6	18.6	-	0.7	0.9	2.7	4.3	14.9
	West	IFR	7.9	10.6	18.6	-	0.7	0.8	3.0	4.5	15.1
	East	IFR	7.5	10.3	17.8	0.0	1.5	37.2	46.4	85.1	95.4
T1 East Build	West	VFR	7.7	11.5	19.3	-	0.6	0.1	2.8	3.5	15.0
	West	IFR	7.7	11.5	19.3	-	0.6	0.1	3.2	3.8	15.3
	East	IFR	7.6	10.5	18.0	0.0	20.0	45.5	15.4	80.9	91.3
T2 West Build	West	VFR	7.7	12.0	19.7	-	0.5	0.0	2.7	3.2	15.2
	West	IFR	7.7	12.0	19.7	-	0.5	0.0	3.1	3.6	15.6
	East	IFR	7.6	10.0	17.6	0.0	21.7	39.5	15.1	76.3	86.2

Note: differences may occur due to rounding.

1.5.3 Average Times per Landing-Takeoff Cycle Operation

Table 9 presents average annual average times for all aircraft in the simulation based on the three airport operational configurations and at each modeled demand level. The percent occurrence of the each configuration is listed in **Table 1**. The Average Annual Landing-Takeoff Cycle Ground Movement Time represents the weighted average of all arrival and departure operations.

Table 9: Average Times per Landing-Takeoff Cycle

Year/ Alternative	Flow	Weather Condition	Average Time per Operation (Minutes)						Annual Flow Use	Average Annual Landing-Takeoff Cycle Ground Movement Time
			Arrivals		Departures		Total			
			Travel	Delay	Travel	Delay				
2005										
No Action	West	VFR	3.6	0.6	10.6	2.2	17.0	73.4%	17.5	
	West	IFR	3.6	0.6	10.6	2.3	17.1	23.3%		
	East	IFR	5.2	1.0	10.2	16.0	32.4	3.3%		
2010										
No Action	West	VFR	3.6	0.6	10.7	2.4	17.2	73.4%	17.9	
	West	IFR	3.6	0.6	10.7	2.6	17.5	23.3%		
	East	IFR	5.3	1.1	10.3	20.2	36.9	3.3%		
T1 East Build	West	VFR	3.6	0.7	11.5	2.4	18.2	73.4%	19.1	
	West	IFR	3.6	0.7	11.5	2.6	18.3	23.3%		
	East	IFR	5.6	1.4	10.5	25.6	43.1	3.3%		
T2 West Build	West	VFR	3.7	0.4	12.3	2.3	18.6	73.4%	19.4	
	West	IFR	3.7	0.4	12.3	2.5	18.9	23.3%		
	East	IFR	5.6	1.5	10.0	22.2	39.2	3.3%		
2015										
No Action	West	VFR	3.5	0.8	10.6	3.4	18.3	73.4%	19.9	
	West	IFR	3.5	0.7	10.6	3.7	18.6	23.3%		
	East	IFR	5.2	1.2	10.3	47.9	64.6	3.3%		
T1 East Build	West	VFR	3.6	0.7	11.5	3.4	19.2	73.4%	20.4	
	West	IFR	3.6	0.7	11.5	3.7	19.5	23.3%		
	East	IFR	5.7	2.3	10.5	35.4	53.8	3.3%		
T2 West Build	West	VFR	3.6	0.4	12.0	3.2	19.2	73.4%	20.4	
	West	IFR	3.6	0.3	12.0	3.6	19.5	23.3%		
	East	IFR	5.6	2.4	10.0	36.8	54.7	3.3%		

Note: differences may occur due to rounding.

San Diego International Airport
Master Plan and Environmental Analysis

Appendix A

**Additional Simulation Modeling for Demand
Years 2020, 2025, and 2030**

**Existing and Alternative Airfield
Simulation Results**

DRAFT

July 2007

Table of Contents

Appendix A

Supplemental Existing and Alternative Airfield Simulation Assumptions and Results

List of Tables	v
A. Simulation Results	5
1.A.1 Arrival Aircraft – Ground Travel and Delay Times	5
1.A.2 Arrival Aircraft – Airspace Travel and Delay Times	7
1.A.3 Departure Aircraft – Ground Travel and Delay Times	9
1.A.4 Departure Aircraft – Airspace Travel and Delay Times	13
1.A.5 Average Annual Ground Travel and Delay Time	15
1.A.6 Average Annual Delay – Ground and Airspace	16

List of Tables

Table 0.1: SDIA Gated and Constrained Demand Forecast	5
Table 0.2: Average Taxi Time in Minutes for Arriving Aircraft (Delay Included)	6
Table 0.3: Undelayed Average Taxi Time in Minutes for Arriving Aircraft	6
Table 0.4: Average Taxi Delay Incurred in Minutes for Arriving Aircraft.....	7
Table 0.5: Average Airspace Travel Time in Minutes for Arriving Aircraft (Delay Included)	8
Table 0.6: Undelayed Average Airspace Travel Time in Minutes for Arriving Aircraft	8
Table 0.7: Average Airspace Delay Incurred in Minutes for Arriving Aircraft	9
Table 0.8: Average Taxi Time in Minutes for Departing Aircraft (Delay Included)	10
Table 0.9: Undelayed Average Taxi Time in Minutes for Departing Aircraft	10
Table 0.10: Average Taxi Delay Incurred in Minutes for Departing Aircraft.....	11
Table 0.11: Average Taxi and Queue Delay in Minutes for Departing Aircraft	11
Table 0.12: Average Gate Delay in Minutes for Departing Aircraft	12
Table 0.13: Average Airspace Travel Time in Minutes for Departing Aircraft (Delay Included)	13
Table 0.14: Undelayed Average Airspace Travel Time in Minutes for Departing Aircraft.....	14
Table 0.15: Average Airspace Delay Incurred in Minutes for Departing Aircraft.....	14
Table 0.16: Annual Average Taxi Time in Minutes for All Aircraft.....	15
Table 0.17: Annual Average Taxi Delay in Minutes for All Aircraft	15
Table 0.18: Annual Average Delay (Minutes Per Aircraft).....	16
Table 0.19: Annual Average Delay (Minutes Per Aircraft) - West Plan Components Only	16

A. SIMULATION RESULTS

The simulation models for SDIA were developed using demand forecasts provided by HNTB Corporation. The models represent gated constrained forecasts for SDIA in the years 2005, 2010, 2015, 2020, 2025, and 2030. In each of the six years, the three different airport operational configurations of SDIA were modeled to better reflect the fluid nature of the weather systems and their impact on the airport operations. This section describes various output statistics of the Simmod *PRO!* models under the three different weather conditions, using the three airfield alternatives in the 2010, 2015, 2020, 2025, and 2030 demand years. The No Action case was modeled for the 2005 demand year in addition to the 2010, 2015, 2020, 2025, and 2030 demand years. **Table 0.1** presents the daily demand level for the gated and constrained demand forecast prepared by HNTB.

Table 0.1: SDIA Gated and Constrained Demand Forecast

	Demand					
	2005	2010	2015	2020	2025	2030
No Action	574	624	716	768	774	768
T1 East		624	716	768	794	818
T2 West		624	716	768	794	818

It is important to note that these schedules were not intended to derive statistics for overall airport capacity. Simulation output produced from this study is being used as input to an emissions model as part of the environmental analysis. A typical capacity and delay analysis would have used demand files that tested the capacity constraints of the airfield; this type of study would usually use demand schedules produced by forecasting the average day from the peak month of the year. For this study however, the demand schedules represent an average annual day. Because the demand from an average annual delay is lower than the demand from the average day of the peak month of the year, it can therefore be expected that airfield delay would be lower as well.

1.A.1 Arrival Aircraft – Ground Travel and Delay Times

Table 0.2 presents average taxi times in the simulation under the three operating configurations at SDIA for arrivals. For arriving aircraft, the taxi times represent ground travel times between runway exit points and the gates. The average taxi times also include any delays incurred by the aircraft while traveling on the ground routes. Refer to section 1.2, for the taxi patterns utilized by the aircraft under the various modeling configurations.

Table 0.2: Average Taxi Time in Minutes for Arriving Aircraft (Delay Included)**Average Taxi Time in Minutes for Arriving Aircraft (Delay Included)**

	2005	2010	2015	2020	2025	2030
West Plan VFR – Visual Approach						
No Action	4.1	4.1	4.3	5.2	4.6	4.2
T1 East		4.3	4.3	4.0	3.9	3.9
T2 West		4.1	4.0	3.7	3.8	3.8
West Plan IFR						
No Action	4.2	4.2	4.3	5.2	4.7	4.3
T1 East		4.3	4.3	4.0	3.9	3.9
T2 West		4.1	4.0	3.7	3.8	3.8
East Plan IFR – ILS Approach, 09/27 Departures						
No Action	6.2	6.4	6.4	5.8	6.1	5.9
T1 East		7.0	8.0	6.6	6.1	6.2
T2 West		7.1	8.0	6.0	6.1	6.3

Table 0.3 and **Table 0.4** present the two components that make up the average arrival taxi times shown in **Table 0.2**. **Table 0.3** presents the undelayed average taxi times in the simulation under the three operating configurations at SDIA for arrivals. For arriving aircraft, the undelayed taxi times represent ground travel times between runway exit points and the gates without delay caused by aircraft interactions.

Table 0.3: Undelayed Average Taxi Time in Minutes for Arriving Aircraft**Undelayed Average Taxi Time in Minutes for Arriving Aircraft**

	2005	2010	2015	2020	2025	2030
West Plan VFR – Visual Approach						
No Action	3.6	3.6	3.5	3.6	3.5	3.6
T1 East		3.6	3.6	3.6	3.6	3.6
T2 West		3.7	3.6	3.6	3.6	3.6
West Plan IFR						
No Action	3.6	3.6	3.5	3.6	3.5	3.6
T1 East		3.6	3.6	3.6	3.6	3.6
T2 West		3.7	3.6	3.6	3.6	3.6
East Plan IFR – ILS Approach, 09/27 Departures						
No Action	5.2	5.3	5.2	5.2	5.3	5.2
T1 East		5.6	5.7	5.5	5.5	5.5
T2 West		5.6	5.6	5.5	5.6	5.6

Table 0.4 presents average taxi delays incurred in the simulation under the three West Plan operating conditions for arrivals. The taxi delays represent any delays incurred by the aircraft while traveling on the ground routes.

Table 0.4: Average Taxi Delay Incurred in Minutes for Arriving Aircraft

	2005	2010	2015	2020	2025	2030
West Plan VFR – Visual Approach						
No Action	0.6	0.6	0.8	1.6	1.1	0.6
T1 East		0.7	0.7	0.4	0.3	0.3
T2 West		0.4	0.4	0.2	0.2	0.2
West Plan IFR						
No Action	0.6	0.6	0.7	1.6	1.2	0.7
T1 East		0.7	0.7	0.4	0.3	0.3
T2 West		0.4	0.3	0.2	0.2	0.2
East Plan IFR – ILS Approach, 09/27 Departures						
No Action	1.0	1.1	1.2	0.6	0.9	0.6
T1 East		1.4	2.3	1.0	0.7	0.7
T2 West		1.5	2.4	0.4	0.5	0.7

1.A.2 Arrival Aircraft – Airspace Travel and Delay Times

Table 0.5 presents the average airspace travel times incurred in the simulation under the three West Plan operating conditions for arrivals. The airspace travel times include time spent on the airspace routes from the injection into the simulation to the runway touchdown point. The times include any airspace delays that incur due to aircraft sequencing. In the East Plan configurations, arrivals are held outside of the airspace during times that there are departures from Runway 27 resulting in a large amount of average delay and travel time.

Table 0.5: Average Airspace Travel Time in Minutes for Arriving Aircraft (Delay Included)

Average Airspace Travel Time in Minutes for Arriving Aircraft (Delay Included)						
	2005	2010	2015	2020	2025	2030
West Plan VFR – Visual Approach						
No Action	10.9	10.8	11.0	13.4	13.4	13.1
T1 East		10.7	11.0	13.2	13.7	14.0
T2 West		10.8	11.1	13.3	13.9	14.4
West Plan IFR						
No Action	11.1	11.0	11.2	13.6	13.6	13.4
T1 East		11.0	11.3	13.3	13.9	14.0
T2 West		11.0	11.4	13.6	14.3	14.6
East Plan IFR – ILS Approach, 09/27 Departures						
No Action	31.0	37.1	45.2	123.9	144.8	131.8
T1 East		57.6	69.8	141.3	133.4	155.9
T2 West		46.3	50.7	112.6	138.5	161.3

Table 0.6 and **Table 0.7** present the two components that make up the average arrival airspace travel times shown in **Table 0.5**. **Table 0.6** presents the average airspace travel times incurred in the simulation under the three West Plan operating conditions for arrivals without delay sequencing needed for aircraft interactions. The airspace travel times include time spent on the airspace routes from the injection into the simulation to the runway touchdown point.

Table 0.6: Undelayed Average Airspace Travel Time in Minutes for Arriving Aircraft

Undelayed Average Airspace Travel Time in Minutes for Arriving Aircraft						
	2005	2010	2015	2020	2025	2030
West Plan VFR – Visual Approach						
No Action	10.5	10.3	10.4	10.3	10.3	10.3
T1 East		10.3	10.4	10.3	10.3	10.2
T2 West		10.3	10.5	10.3	10.3	10.2
West Plan IFR						
No Action	10.5	10.3	10.4	10.3	10.3	10.3
T1 East		10.3	10.4	10.3	10.3	10.2
T2 West		10.3	10.5	10.3	10.3	10.2
East Plan IFR – ILS Approach, 09/27 Departures						
No Action	15.0	16.5	17.7	38.1	43.2	39.6
T1 East		21.0	23.9	39.9	38.7	47.7
T2 West		19.5	19.8	35.4	43.6	49.4

Table 0.7 presents the average airspace delay times incurred in the simulation under the three West Plan operating conditions for arrivals. The airspace delay times include any delay needed to sequence aircraft from their injection into the simulation to the runway touchdown point.

Table 0.7: Average Airspace Delay Incurred in Minutes for Arriving Aircraft

Average Airspace Delay Incurred in Minutes for Arriving Aircraft						
	2005	2010	2015	2020	2025	2030
West Plan VFR – Visual Approach						
No Action	0.4	0.5	0.6	3.0	3.1	2.9
T1 East		0.4	0.6	2.9	3.4	3.7
T2 West		0.4	0.6	3.0	3.6	4.2
West Plan IFR						
No Action	0.5	0.6	0.8	3.2	3.3	3.1
T1 East		0.7	0.9	3.0	3.7	3.8
T2 West		0.7	0.9	3.3	4.0	4.3
East Plan IFR – ILS Approach, 09/27 Departures						
No Action	16.0	20.6	27.5	85.9	101.6	92.2
T1 East		36.6	45.9	101.4	94.7	108.2
T2 West		26.8	30.9	77.2	94.8	111.9

1.A.3 Departure Aircraft – Ground Travel and Delay Times

Table 0.8 presents average taxi times in the simulation under the three operating conditions for departures. The taxi times for departing aircraft consist of ground travel times between the gates and the departure queues. The average taxi times also include any delays incurred by the aircraft while traveling on the ground routes, while waiting at the departure queues, or while waiting for gate pushback. Gate delays occur most often in the East Plan configuration due to departures that request Runway 27. In such cases, Runway 27 departures that need to travel eastbound on Taxiway B must wait until the taxiway is clear of departures and arrivals that are traveling in the normal westbound direction along Taxiway B. Refer to section 1.2 for the taxi patterns utilized by the aircraft under the various modeling configurations.

Table 0.8: Average Taxi Time in Minutes for Departing Aircraft (Delay Included)

Average Taxi Time in Minutes for Departing Aircraft (Delay Included)						
	2005	2010	2015	2020	2025	2030
West Plan VFR – Visual Approach						
No Action	13.0	13.4	14.9	16.1	16.6	16.4
T1 East		14.1	15.0	17.2	18.0	20.4
T2 West		14.9	15.2	16.0	16.5	17.2
West Plan IFR						
No Action	13.0	13.6	15.1	16.1	16.5	16.4
T1 East		14.2	15.3	17.3	18.1	20.3
T2 West		15.1	15.6	15.9	16.5	17.2
East Plan IFR – ILS Approach, 09/27 Departures						
No Action	46.7	52.7	95.4	64.0	71.9	68.5
T1 East		76.9	91.3	57.7	55.6	59.6
T2 West		59.9	86.2	64.1	68.3	78.9

Table 0.9 presents undelayed average taxi times in the simulation under the three operating conditions for departures. The taxi times for departing aircraft consist of ground travel times between the gates and the departure queues without aircraft interactions.

Table 0.9: Undelayed Average Taxi Time in Minutes for Departing Aircraft

Undelayed Average Taxi Time in Minutes for Departing Aircraft						
	2005	2010	2015	2020	2025	2030
West Plan VFR – Visual Approach						
No Action	10.6	10.7	10.6	10.8	10.8	10.8
T1 East		11.5	11.5	11.4	11.5	11.5
T2 West		12.3	12.0	12.0	12.0	12.1
West Plan IFR						
No Action	10.6	10.7	10.6	10.8	10.8	10.8
T1 East		11.5	11.5	11.4	11.5	11.5
T2 West		12.3	12.0	12.0	12.0	12.1
East Plan IFR – ILS Approach, 09/27 Departures						
No Action	10.2	10.3	10.3	10.4	10.5	10.5
T1 East		10.5	10.5	10.4	10.3	10.3
T2 West		10.0	10.0	9.9	10.0	10.0

Table 0.10 presents average taxi delays incurred in the simulation under the three operating conditions for departures. **Table 0.10** includes any delays incurred by departing aircraft while

traveling on the ground routes, while waiting to depart in the departure queue areas, or delay associated with waiting at a gate for clearance to pushback.

Table 0.10: Average Taxi Delay Incurred in Minutes for Departing Aircraft

Average Taxi Delay Incurred in Minutes for Departing Aircraft						
	2005	2010	2015	2020	2025	2030
West Plan VFR – Visual Approach						
No Action	2.4	2.7	4.3	5.3	5.7	5.6
T1 East		2.6	3.5	5.8	6.6	8.9
T2 West		2.6	3.2	4.1	4.5	5.1
West Plan IFR						
No Action	2.4	2.9	4.5	5.3	5.7	5.6
T1 East		2.7	3.8	5.9	6.7	8.8
T2 West		2.8	3.6	4.0	4.5	5.1
East Plan IFR – ILS Approach, 09/27 Departures						
No Action	36.5	42.4	85.1	53.6	61.3	58.0
T1 East		66.4	80.9	47.3	45.3	49.3
T2 West		49.9	76.3	54.1	58.3	68.9

Table 0.11 shows the average ground and departure queue congestion delays incurred by the departing aircraft in the simulation under the three operating conditions. The average ground delay, combined with the departure queue delay, represent all of the delay associated with the aircraft once it has left the gate until liftoff.

Table 0.11: Average Taxi and Queue Delay in Minutes for Departing Aircraft

Average Taxi and Queue Delay in Minutes for Departing Aircraft						
	2005	2010	2015	2020	2025	2030
West Plan VFR – Visual Approach						
No Action	2.2	2.4	3.4	4.7	5.4	5.1
T1 East		2.4	3.4	5.7	6.3	8.4
T2 West		2.3	3.2	4.0	4.4	5.0
West Plan IFR						
No Action	2.2	2.6	3.7	4.7	5.3	5.1
T1 East		2.5	3.7	5.9	6.4	8.4
T2 West		2.5	3.6	3.9	4.4	5.0
East Plan IFR – ILS Approach, 09/27 Departures						
No Action	15.9	20.2	47.9	17.7	21.2	19.3
T1 East		25.6	35.4	19.4	18.2	18.4
T2 West		22.2	36.7	17.2	19.1	23.3

Table 0.12 shows the average gate delays incurred by the departing aircraft in the simulation under the three operating conditions. The average gate delays for departures are low for the two West Plan configurations and are high in the East Plan configuration due directly to departures that request Runway 27 which is the opposite departure direction during East Plan.

Table 0.12: Average Gate Delay in Minutes for Departing Aircraft

	2005	2010	2015	2020	2025	2030
West Plan VFR – Visual Approach						
No Action	0.2	0.3	0.9	0.6	0.3	0.4
T1 East		0.2	0.1	0.0	0.3	0.5
T2 West		0.3	0.0	0.1	0.1	0.1
West Plan IFR						
No Action	0.2	0.3	0.8	0.6	0.4	0.5
T1 East		0.2	0.1	0.0	0.3	0.5
T2 West		0.3	0.0	0.1	0.1	0.1
East Plan IFR – ILS Approach, 09/27 Departures						
No Action	20.6	22.2	37.2	35.9	40.1	38.7
T1 East		40.8	45.5	27.9	27.0	31.0
T2 West		27.7	39.5	36.9	39.3	45.6

1.A.4 Departure Aircraft – Airspace Travel and Delay Times

Table 0.13 presents the average airspace travel times incurred in the simulation under the three West Plan operating conditions for departures. The airspace travel times include time spent on the airspace routes from liftoff to ejection from the simulation airspace structure. The times include any airspace delays incurred due to aircraft sequencing.

Table 0.13: Average Airspace Travel Time in Minutes for Departing Aircraft (Delay Included)

Average Airspace Travel Time in Minutes for Departing Aircraft (Delay Included)						
	2005	2010	2015	2020	2025	2030
West Plan VFR – Visual Approach						
No Action	7.6	7.9	7.9	7.8	7.9	7.9
T1 East		7.7	7.7	7.8	7.9	8.0
T2 West		7.7	7.7	7.8	7.9	8.0
West Plan IFR						
No Action	7.6	7.9	7.9	7.8	7.9	7.9
T1 East		7.7	7.7	7.8	7.9	8.0
T2 West		7.7	7.7	7.8	7.9	8.0
East Plan IFR – ILS Approach, 09/27 Departures						
No Action	7.8	7.5	7.5	7.7	7.8	7.7
T1 East		7.5	7.6	7.7	7.7	7.8
T2 West		7.6	7.6	7.7	7.8	7.7

Table 0.14 and **Table 0.15** and present the two components that make up the average arrival airspace travel times shown in **Table 0.13**. **Table 0.14** presents the average airspace travel times incurred in the simulation under the three West Plan operating conditions for departures without delay sequencing needed for aircraft interactions. The airspace travel times include time spent on the airspace routes from liftoff to ejection from the simulation airspace structure.

Table 0.14: Undelayed Average Airspace Travel Time in Minutes for Departing Aircraft**Undelayed Average Airspace Travel Time in Minutes for Departing Aircraft**

	2005	2010	2015	2020	2025	2030
West Plan VFR – Visual Approach						
No Action	7.5	7.9	7.9	7.8	7.9	7.9
T1 East		7.7	7.7	7.8	7.9	8.0
T2 West		7.7	7.7	7.8	7.9	8.0
West Plan IFR						
No Action	7.5	7.9	7.9	7.8	7.9	7.9
T1 East		7.7	7.7	7.8	7.9	8.0
T2 West		7.7	7.7	7.8	7.9	8.0
East Plan IFR – ILS Approach, 09/27 Departures						
No Action	7.7	7.5	7.5	7.7	7.8	7.7
T1 East		7.5	7.6	7.7	7.7	7.8
T2 West		7.6	7.6	7.7	7.8	7.7

Table 0.15 presents the average airspace delay times incurred in the simulation under the three West Plan operating conditions for departures. The airspace delay times include any delay needed to sequence aircraft from liftoff to ejection from the simulation airspace structure. Because of the limited airspace structure for these simulation models the vast majority of the delay experienced by departures occurs while the aircraft are on the ground waiting to depart.

Table 0.15: Average Airspace Delay Incurred in Minutes for Departing Aircraft**Average Airspace Delay Incurred in Minutes for Departing Aircraft**

	2005	2010	2015	2020	2025	2030
West Plan VFR – Visual Approach						
No Action	0.1	0.0	0.0	0.0	0.0	0.0
T1 East		0.0	0.0	0.0	0.0	0.0
T2 West		0.0	0.0	0.0	0.0	0.0
West Plan IFR						
No Action	0.1	0.0	0.0	0.0	0.0	0.0
T1 East		0.0	0.0	0.0	0.0	0.0
T2 West		0.0	0.0	0.0	0.0	0.0
East Plan IFR – ILS Approach, 09/27 Departures						
No Action	0.1	0.0	0.0	0.0	0.0	0.0
T1 East		0.0	0.0	0.0	0.0	0.0
T2 West		0.0	0.0	0.0	0.0	0.0

1.A.5 Average Annual Ground Travel and Delay Time

Table 0.16 presents average annual taxi times for all aircraft in the simulation based on the three airport operational configurations and at each modeled demand level. The percent occurrence of the each configuration is listed in Error! Reference source not found.. The total taxi times reflect the weighted average of all arrival and departure operations.

Table 0.16: Annual Average Taxi Time in Minutes for All Aircraft

Annual Average Taxi Time in Minutes for All Aircraft						
	2005	2010	2015	2020	2025	2030
No Action	9.2	9.5	11.1	11.5	11.6	11.2
T1 East		10.4	11.1	11.4	11.7	12.9
T2 West		10.3	11.0	10.7	11.1	11.6

Table 0.17 presents average annual taxi delay times for all aircraft in the simulation based on the three airport operational configurations and at each modeled demand level. The total taxi times reflect the weighted average of the all arrival and departure operations including departure queue delay. Airspace delay is not included in **Table 0.17**.

Table 0.17: Annual Average Taxi Delay in Minutes for All Aircraft

Annual Average Taxi Delay in Minutes for All Aircraft						
	2005	2010	2015	2020	2025	2030
No Action	2.1	2.4	4.0	4.3	4.4	4.0
T1 East		2.8	3.5	3.8	4.1	5.3
T2 West		2.3	3.1	3.0	3.3	3.8

1.A.6 Average Annual Delay – Ground and Airspace

Table 0.18 presents average annual delay times for all aircraft in the simulation based on the three airport operational configurations and at each modeled demand level. The total delay times include delay incurred in the airspace as well as on the ground. The times reflect the weighted average for all arrivals and departures.

Table 0.18: Annual Average Delay (Minutes Per Aircraft)

Annual Average Delay in Minutes for All Aircraft

	2005	2010	2015	2020	2025	2030
No Action	2.6	3.0	4.8	7.3	7.7	7.1
T1 East		3.7	4.6	7.0	7.5	9.0
T2 West		3.0	4.0	5.8	6.7	7.8

Table 0.19 presents average annual delay times for all aircraft in the simulation based on the three airport operational configurations and at each modeled demand level for the two West Plan configurations. The total delay times include delay incurred in the airspace as well as on the ground. The times reflect the weighted average for all arrivals and departures.

Table 0.19: Annual Average Delay (Minutes Per Aircraft) - West Plan Components Only

Annual Average Delay in Minutes for All Aircraft - West Plan Components Only

	2005	2010	2015	2020	2025	2030
No Action	1.6	1.8	2.8	4.8	4.8	4.4
T1 East		1.9	2.4	4.4	5.0	6.2
T2 West		1.7	2.1	3.5	4.0	4.6

APPENDIX D

Traffic and Circulation

APPENDIX D

Table of Contents

APPENDIX D: TRAFFIC AND CIRCULATION.....	1
D.1 General Approach and Methodology.....	1
D.1.1 Study Area.....	2
D.1.2 Traffic Counts and Other Data	2
D.1.3 Traffic Modeling Process.....	3
D.1.4 Air Passenger Forecasts.....	4
D.1.5 Traffic Forecasts.....	5
D.1.6 Airport Trip Generation.....	6
D.1.7 Regional Trip Distribution.....	9
D.1.8 Street Segment Operations.....	12
D.1.9 Intersection Operations	13
D.1.10 Freeway Segment Operations	14
D.1.11 Freeway Ramp Operations	14
D.1.12 Railroad Crossing Operations.....	15
D.1.13 Transit Operations.....	15
D.1.14 Parking Operations	15
D.1.15 Terminal Curbside Operations	16
D.1.16 On-Airport Traffic Circulation.....	16
D.2 Traffic Impacts and Significance Criteria	16
D.2.1 Impact Analysis	18
D.3 Existing Conditions	19
D.3.1 Existing Airport Trip Generation.....	19
D.3.2 Existing Street Segments.....	20
D.3.3 Existing Intersections	22
D.3.4 Existing Freeway Operations	26
D.3.5 Existing Freeway Ramp Operations.....	26
D.3.6 Existing Railroad Crossings	27
D.3.7 Existing Transit.....	28
D.3.8 Existing Terminal Curbside	28
D.3.9 Existing Parking.....	28
D.3.10 Existing On-Airport Traffic Circulation.....	28
D.4 No Project Alternative	30
D.4.1 Assumptions.....	30
D.4.2 Trip Generation and Terminal Distribution	30
D.4.3 Traffic Impacts.....	31

D.5	Proposed Project (Preferred Alternative).....	53
D.5.1	Proposed Airport Implementation Plan (With Parking Structure).....	53
D.5.1.1	Assumptions.....	53
D.5.1.2	Trip Generation and Terminal Distribution	53
D.5.1.3	Traffic Impacts.....	55
D.5.1.3.1	Street Segments.....	55
D.5.1.3.2	Intersections	62
D.5.1.3.3	Freeway Segments	76
D.5.1.3.4	Freeway Ramps	81
D.5.1.3.5	Railroad Crossings.....	81
D.5.1.3.6	Transit.....	83
D.5.1.3.7	Parking	83
D.5.1.3.8	Terminal Curbside.....	84
D.5.1.3.9	On-Airport Traffic Circulation.....	84
D.5.2	Proposed Airport Implementation Plan (Without Parking Structure).....	87
D.5.2.1	Assumptions.....	87
D.5.2.2	Trip Generation and Terminal Distribution	87
D.5.2.3	Traffic Impacts.....	88
D.5.2.3.1	Street Segments.....	88
D.5.2.3.2	Intersections.....	94
D.5.2.3.3	Freeway Segments	108
D.5.2.3.4	Freeway Ramps	108
D.5.2.3.5	Railroad Crossings.....	108
D.5.2.3.6	Transit	110
D.5.2.3.7	Parking	110
D.5.2.3.8	Terminal Curbside.....	110
D.5.2.3.9	On-Airport Traffic Circulation.....	110
D.6	East Terminal Alternative.....	113
D.6.1	Airport Implementation Plan Alternative (With Parking Structure).....	113
D.6.1.1	Assumptions.....	113
D.6.1.2	Trip Generation and Terminal Distribution	113
D.6.1.3	Traffic Impacts.....	115
D.6.2	Airport Implementation Plan Alternative (Without Parking Structure).....	145
D.6.2.1	Assumptions.....	145
D.6.2.2	Trip Generation and Terminal Distribution	145
D.6.2.3	Traffic Impacts.....	146
D.6.2.3.1	Street Segments.....	146
D.6.2.3.2	Intersections	153
D.6.2.3.3	Freeway Segments	167

D.6.2.3.4 Freeway Ramps	167
D.6.2.3.5 Railroad Crossings	167
D.6.2.3.6 Transit	169
D.6.2.3.7 Parking	169
D.6.2.3.8 Terminal Curbside	169
D.6.2.3.9 On-Airport Traffic Circulation	169
D.7 Proposed Airport Land Use Plan	171
D.7.1 Assumptions	171
D.7.2 Trip Generation and Terminal Distribution	172
D.7.3 Traffic Impacts	175
D.7.3.1 Street Segments	176
D.7.3.2 Intersections	182
D.7.3.3 Freeway Segments	195
D.7.3.4 Freeway Ramps	201
D.7.3.5 Railroad Crossings	201
D.7.3.6 Transit	202
D.7.3.7 Parking	203
D.7.3.8 Terminal Curbside	203
D.7.3.9 On-Airport Traffic Circulation	203
D.8 Construction Impacts	205
D.9 Cumulative Impacts	206
D.10 Mitigation Measures	206
D.10.1 Street Segments	208
D.10.1.1 Proposed Airport Implementation Plan (With Parking Structure)	208
D.10.1.2 Proposed Airport Implementation Plan (Without Parking Structure)	216
D.10.1.3 Airport Implementation Plan Alternative (With Parking Structure)	223
D.10.1.4 Airport Implementation Plan Alternative (Without Parking Structure)	229
D.10.1.5 Proposed Airport Land Use Plan	236
D.10.2 Intersections	242
D.10.2.1 Proposed Airport Implementation Plan (With Parking Structure)	242
D.10.3 Freeway Segments	258
D.10.3.1 Proposed Airport Implementation Plan	258
D.10.3.2 Airport Implementation Plan Alternative	258
D.10.3.3 Proposed Airport Land Use Plan	258
D.10.4 Freeway Ramps	263
D.10.4.1 Proposed Airport Implementation Plan	263
D.10.4.2 Airport Implementation Plan Alternative	263
D.10.4.3 Proposed Airport Land Use Plan	263
D.10.5 Railroad Crossings	263

D.10.6	Transit.....	263
D.10.7	Parking	264
D.10.8	Terminal Curbside	264
D.10.9	On-Airport Traffic Circulation.....	264
D.10.10	Construction	264
D.10.11	Level of Significance after Mitigation Measures.....	264

APPENDIX D: TRAFFIC AND CIRCULATION

This appendix presents the Traffic Impact Study (TIS) prepared for the San Diego International Airport (SDIA) Airport Master Plan (AMP). After discussing the TIS approach, assumptions, methodologies and significance criteria in Sections D.1 and D.2, this appendix presents the results of the traffic impact analysis for the following project alternatives:

- Existing Conditions (Section D.3)
- No Project Alternative (Section D.4)
- Proposed Airport Implementation Plan (Section D.5)
 - With Parking Structure (Section D.5.1)
 - Without Parking Structure (Section D.5.2)
- East Terminal Alternative (Section D.6)
 - With Parking Structure (Section D.6.1)
 - Without Parking Structure (Section D.6.2)
- Proposed Airport Land Use Plan (Section D.7)

D.1 General Approach and Methodology

The overall approach used to identify the traffic impacts of a proposed project is based on a comparison of traffic conditions under each project alternative with the No Project Alternative for each analysis year, as shown in [Figure D.1-1](#). The traffic impact analysis followed applicable guidelines from the following documents:

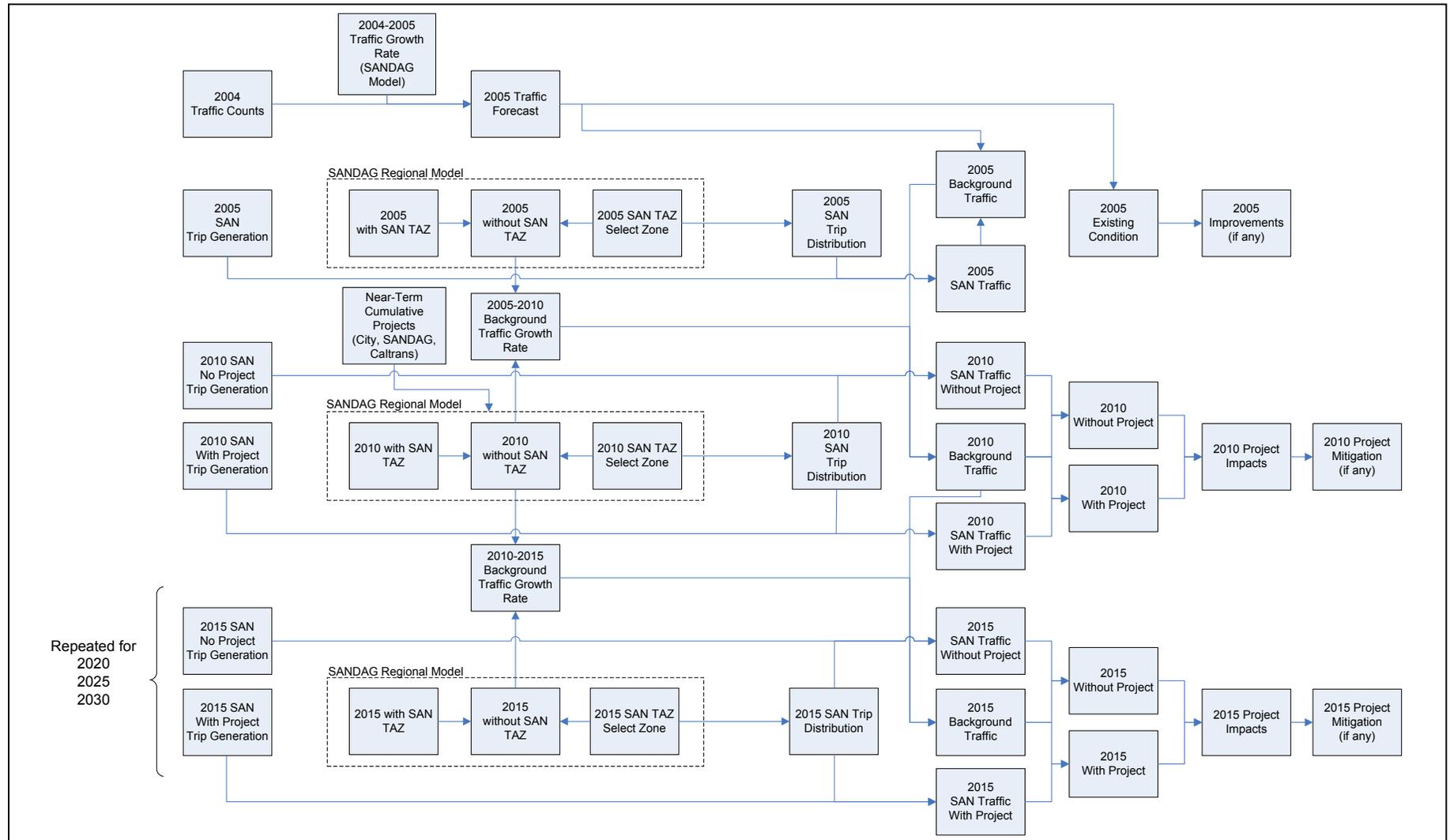
- San Diego Traffic Engineers Council (SANTEC) and Institute of Transportation Engineers (ITE) – California Border Section, [SANTEC/ITE Guidelines for Traffic Impact Studies in the San Diego Region – Final Draft](#), March 2, 2000.
- San Diego Association of Governments (SANDAG), [Traffic Impact Studies Guidelines](#), in [2002 SANDAG Congestion Management Program](#), January 2003.
- California Department of Transportation (Caltrans), [Guide for the Preparation of Traffic Impact Studies](#), December 2002.
- City of San Diego, [Traffic Impact Study Manual and Trip Generation Manual](#), revised May 2003.
- City of San Diego – Development Services Department, [California Environmental Quality Act \(CEQA\), Significance Determination Thresholds](#), January 2007.

The traffic analysis for the ~~DEIR~~ [Final EIR](#) assessed traffic conditions and associated traffic impacts resulting from the project alternatives for the existing (2005), near-term (2010 and 2015) and mid-/long-term or horizon year (2020, 2025, and 2030) conditions. The traffic analysis was conducted for regular AM and PM commute peak hours which overlap with the airport AM and PM peak passenger arrival and departure hours and represent annual average day traffic conditions. This section presents a detailed report, including analysis for existing conditions and years 2010, 2015, 2020, 2025 and 2030.

Coordination meetings with representatives from the City of San Diego, SANDAG, Caltrans, and the SDCRAA were held during preparation of the initial traffic study prepared for the 2006 Draft EIR to coordinate assumptions and analysis. The first meeting was held June 6, 2005 and information was presented concerning the study area, alternatives to be assessed, modeling requirements and methodology, and traffic assumptions. A second meeting was held September 29, 2005 to present trip generation and regional traffic distribution assumptions. Follow-up meetings were held in July and August 2007 to review initial 2006 Draft EIR comments received from the agencies and to receive additional input on study criteria.

For each future analysis year, traffic conditions were determined for the Proposed Project and its alternatives including the No Project Alternative based on an estimate of the regional background traffic (excluding airport and project-related traffic) and traffic related to the airport. SANDAG provided traffic

AIRPORT MASTER PLAN SAN DIEGO INTERNATIONAL AIRPORT



Appendix D.1-1



Traffic Impact Study Flow Chart

Environmental Impact Report

Source: SANDAG and HNTB Corporation
Prepared by: HNTB Corporation, 2007

forecasts generated by the SANDAG [San Diego] regional transportation model¹ for each analysis year. These forecasts include both regional background traffic and estimates of airport-related traffic. However, as discussed in Chapter 2, SDIA completed a new aviation activity forecast in 2004, which is more recent than airport passenger forecasts used in the SANDAG traffic model and reflects recent aviation activity and updated passenger trends at SDIA.

To account for the difference in airport-related traffic included in the SANDAG regional transportation model and airport traffic calculated from the 2004 SDIA passenger forecasts, airport traffic in the SANDAG forecasts were first subtracted out of the total traffic based on daily and peak-hour airport traffic volumes provided by SANDAG for each roadway and freeway segment. This resulted in estimates of regional background traffic. This “background” traffic was added to airport traffic volumes developed based on the 2004 SDIA passenger forecasts, calculated airport passenger and project trip generation rates, airport entrance/exit traffic counts, field surveys and intersection traffic counts, airport passenger mode share and vehicle occupancy data, and other data described in this section.

This section presents the traffic analysis study area; a list of traffic counts and other data collected for the analysis; a description of the traffic model, background and airport traffic; and a summary of passenger trip generation calculations.

D.1.1 Study Area

The traffic analysis study area was chosen by determining the limit of where the Proposed Project or its alternatives would alter the traffic patterns of arriving and departing vehicles. The study area presented in the 2006 Draft EIR was defined as the area immediately surrounding SDIA including North Harbor Drive south of the Terminals and streets to the east providing access to the airport. This area is bound by I-5, North Harbor Drive, Grape Street, Washington Street and the San Diego Bay Channel.

The study area was expanded under this Draft Final EIR to include Nimitz Boulevard and Rosecrans Street west of SDIA, India/San Diego Street east of I-5, and additional mainline freeway segments along I-5 and I-8. These streets and associated intersections were added to the study area due to an increase in airport traffic on these streets under the Proposed Project in later study years. The study area is shown in [Figure D.1-2](#).

D.1.2 Traffic Counts and Other Data

The primary source of traffic data used in the traffic analysis was the Update of Traffic Data for San Diego International Airport prepared for SDCRAA in 2004.² Additional data were collected in 2006 as part of the SDIA NTC Landfill Remediation Traffic Impact Study, and in 2007 as part of this analysis. See [Figure D.1-3](#) for the Traffic Count Locations used in this analysis.

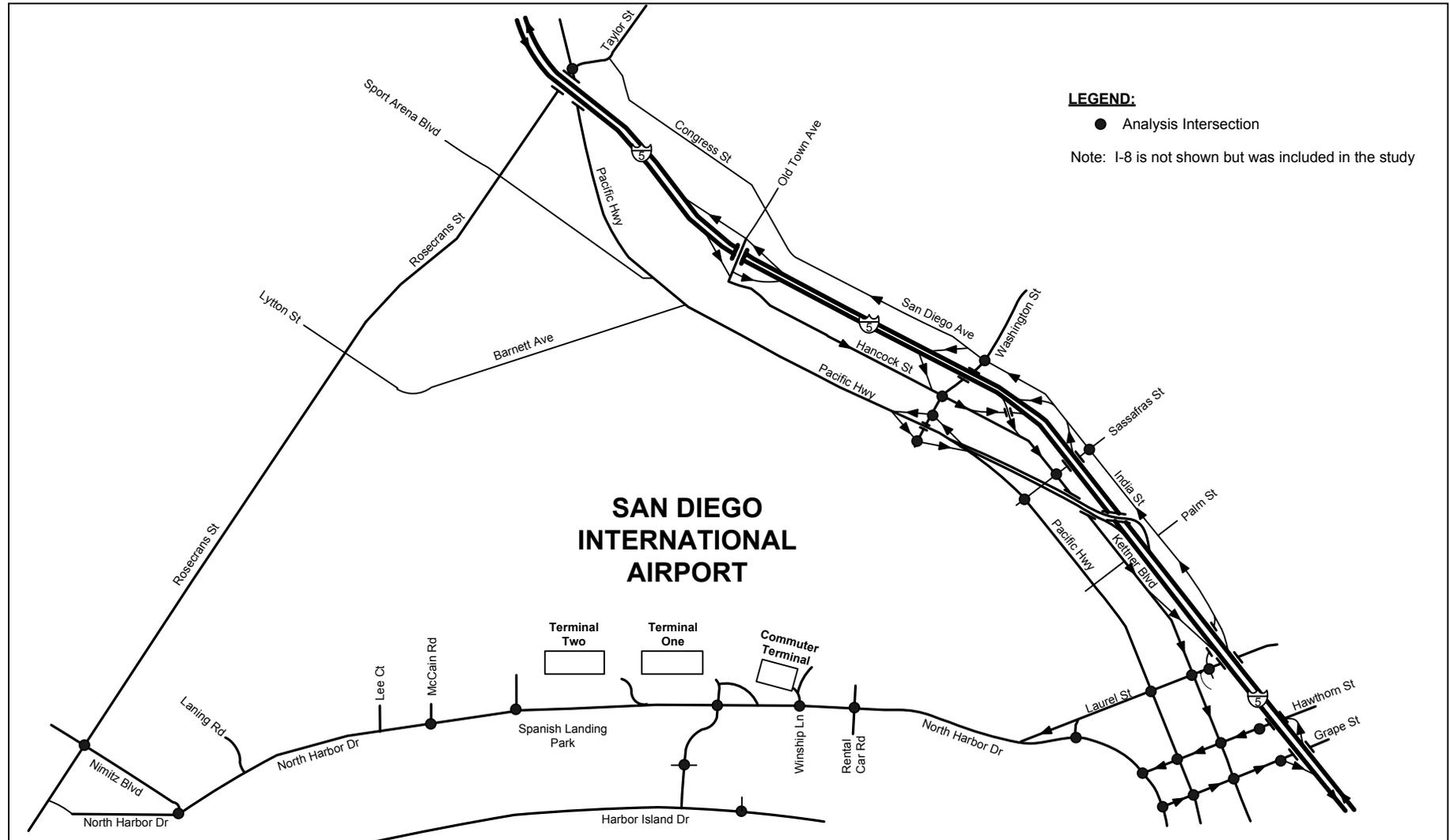
The data collection efforts conducted as part of the 2004 Update of Traffic Data for San Diego International Airport included:

- Average daily traffic (ADT) counts at all entrances and exits to SDIA
- Peak-hour turning volume counts at adjacent SDIA intersections and peak-hour turning volume counts at other selected intersections
- Vehicle occupancy counts at SDIA parking facilities and terminal curbsides
- Vehicle classification surveys at terminal curbsides
- Vehicle dwell time surveys at terminal curbsides
- Rental car company survey of rented and returned vehicles
- Bus passenger boarding and alighting counts at each terminal
- Person counts entering and exiting each terminal

¹ SANDAG Model Runs dated 10/24/04.

² Parsons, Update of Traffic Data for San Diego International Airport, prepared for SDCRAA, July 30, 2004.

AIRPORT MASTER PLAN
SAN DIEGO INTERNATIONAL AIRPORT



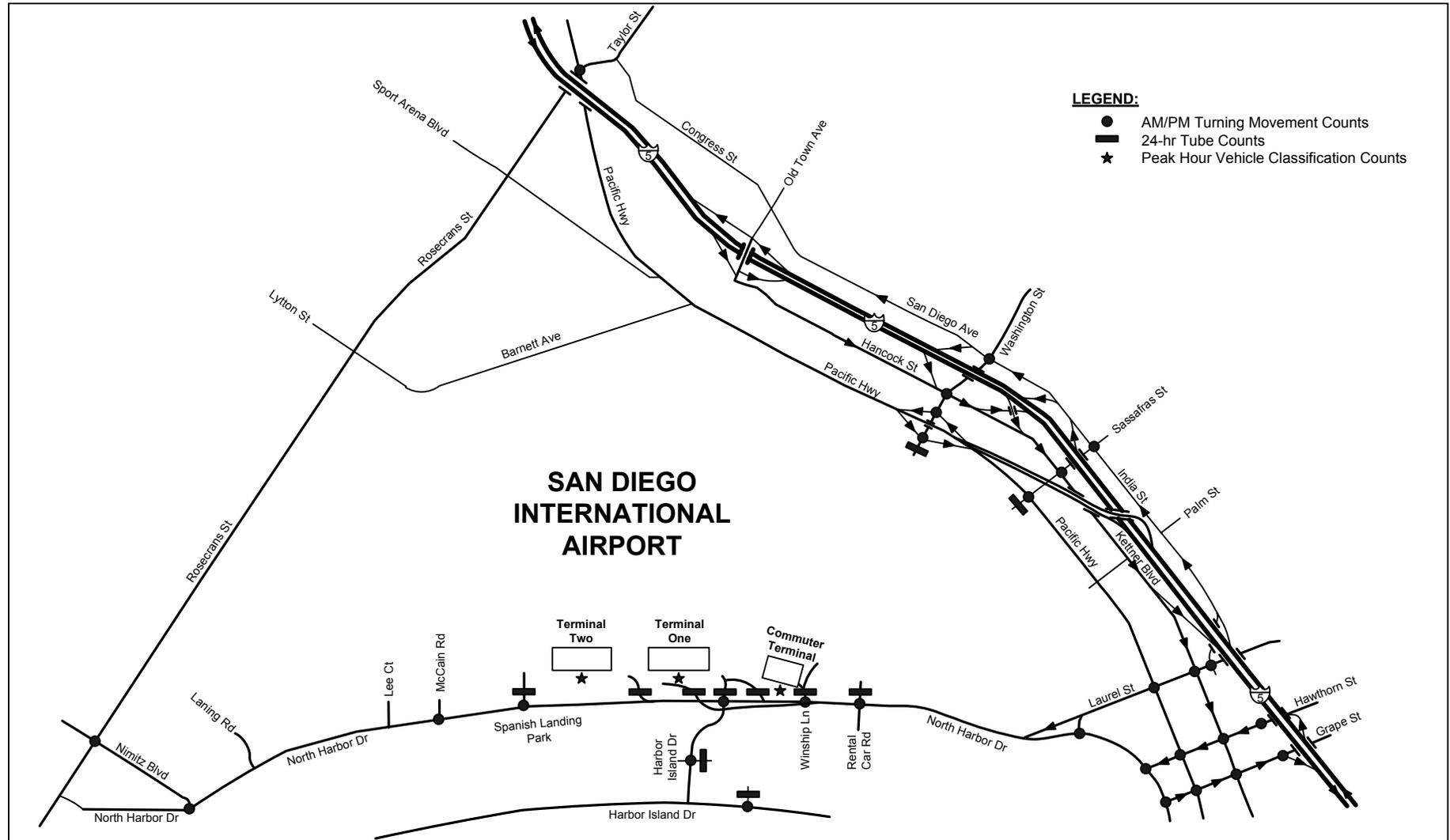
Appendix D.1-2



Study Area

Environmental Impact Report

AIRPORT MASTER PLAN
SAN DIEGO INTERNATIONAL AIRPORT



Appendix D.1-3



Count Locations

- On-Airport public parking facilities occupancy and entrance/exit counts
- Airport employee parking facilities occupancy and entrance/exit counts
- Off-Airport public parking facilities occupancy and entrance/exit counts

Additional information on this data collection effort is included in Section 3.4 *Ground Transportation Facilities of the Airport Master Plan (AMP)*.

The SDCRAA also provided data and statistics related to airport and ground transportation operations, including:

- Parking transactions (both public parking and employee parking)
- Ground transportation Automatic Vehicle Identification (AVI) system operations
- Rental car operations
- Air cargo operations

Traffic counts obtained in 2004 were projected to 2005 based on the following assumptions:

- Regional background (non-airport) traffic was assumed to increase in proportion to the 2005 to 2010 annual growth rate interpolated from the SANDAG traffic forecasts for 2005 and 2010.
- Airport-related traffic was assumed to grow in proportion to the SDIA air passenger forecasts presented in Chapter 2.

Additional traffic counts were collected at intersections added to the study area under this ~~Draft~~ Final EIR which were not part of the 2006 Draft EIR include:

- 2006 SDIA NTC Landfill Remediation Traffic Impact Study traffic counts
- August 2007 supplemental traffic counts conducted under this ~~Draft~~ Final EIR

The 2006 and 2007 traffic counts covered new intersections along with some control intersections that were counted in the 2004 Update of Traffic Data for San Diego International Airport. These control counts were used to compare 2004/2005 traffic volumes to 2006/2007 and adjust the new intersection counts to represent 2004 traffic volumes. The estimated 2004 volumes were adjusted as described previously to reflect 2005 volumes, representing existing conditions for the ~~Draft~~ Final EIR traffic analysis.

D.1.3 Traffic Modeling Process

Future roadway traffic volumes were forecast using the Series 10 [San Diego] Regional Transportation Model, which is maintained and run by SANDAG. The traffic model incorporates forecasted airport growth, immediate surrounding growth and regional growth as reflected in the Series 10 socio-economic input data. SANDAG provided model runs for 2005, 2010, 2015, 2020, 2025, and 2030. For each analysis year, SANDAG provided the 24-hour average daily traffic (ADT) volumes by link as well as AM and PM peak hour link volumes by direction. In addition, SANDAG provided 24-hour select zone runs for traffic analysis zones (TAZs) representing the airport. These select zone runs showed the volume of airport-related traffic on each link in the network.

The SANDAG model runs were post-processed as part of the traffic study to account for two major factors:

- The airport-related trip generation assumed in the Series 10 input data was based on the 2000 Airport Master Plan air passenger forecasts. The current Airport Master Plan uses the FAA approved 2004 SDIA passenger forecasts.
- The distribution of airport-related traffic included in the SANDAG regional transportation model indicates that approximately 70% of traffic entering/exiting the airport terminals is arriving and departing to the east toward Pacific Highway and 30% is arriving and departing to the west toward Nimitz Boulevard (70/30 split). The SANDAG Series 10 model (based on the 2020 RTP) assumed implementation of I-8 widening between I-5 and SR-163. As a result, the model shows that more airport traffic would use I-8 to access the airport via Rosecrans Street and Nimitz Boulevard. However, the 2030 RTP no longer assumes the I-8 widening between I-5 and SR-163. In addition, traffic counts conducted for the Update of Traffic Data for the San Diego International Airport report

as well as data provided by the City of San Diego indicate that the airport trip distribution is approximately 85% east of SDIA and 15% west of SDIA (85/15 split). The 85/15 split is assumed in analysis for this study through 2025.

The 2030 RTP assumes implementation of I-5 / I-8 interchange improvements in 2030 that facilitates freeway-to-freeway movements. As a result, more airport traffic would use I-8 to access the airport via Rosecrans Street and Nimitz Boulevard. Therefore, in the analysis for 2030 a 70/30 split of airport traffic east and west of the terminals was assumed, as discussed in Section D.1.6, *Airport Trip Distribution*.

The modeling effort was run for a non-holiday weekday and accounted for the effects of the surrounding at-grade railroad crossings and assumed no direct connectors between I-5 and SDIA.

During preparation of ~~this~~ the 2007 Draft EIR, SANDAG released Series 11 socio-economic data. However, the modeling procedures required to generate Series 11 traffic forecasts and isolate traffic in the airport TAZs was not available at the same time; and as it requires several months to complete the traffic analysis in addition to the time required by SANDAG to run the sub-area routines required to generate traffic model forecasts specific to the airport, the Series 11 data was not available in time to complete the traffic analysis for ~~this~~ the 2007 Draft EIR. However, based on SANDAG's description of the regional traffic included in the Series 10 and Series 11 models it was determined that using Series 10 traffic estimates would provide a conservative base for regional background traffic, generally higher than the Series 11 traffic estimates. The higher base number corresponds to an increased number of roadways and intersections that currently do or in the future will operate at or near unacceptable levels of service. In turn the higher the background traffic the less additional airport traffic required to cause a roadway to erode to unacceptable levels or exceed significance criteria. Main differences between the Series 10 and 11 models, as described by SANDAG include:

- Series 10 uses year ~~1995~~ 2000 while Series 11 uses year ~~2000~~ 2004 as the base year for population / employment inputs.
- ~~Series 10 overestimated year 2000 population/employment. Series 11 corrects this by using 2000 as base year and lower population/employment growth rates.~~
- ~~Series 11 reflects higher housing and employment in the Central area but lower in outer areas than Series 10.~~
- Series 11 reflects more freeway HOV and toll lanes and fewer GP lanes than the Series 10 model network, representing the 2007 RTP and 2003 RTP, respectively.
- Series 11 was calibrated to year ~~2000~~ 2004 traffic volumes, while Series 10 model was calibrated to ~~1995~~ 2000 volumes.

As Series 11 data was not available, Series 10 forecasts were used.

D.1.4 Air Passenger Forecasts

Vehicular traffic forecasts for the different alternatives were based on air passenger forecasts shown in [Table D-1-4 D-1](#). Air passenger forecasts are the same for all alternatives through 2020. Beyond 2020, air passenger activity is constrained by runway and terminal gate capacity limitations. The No Project Alternative forecasts reflect the terminal gate constraints, resulting in lower forecasts than the two project alternatives. The Proposed Airport Land Use Plan is assumed to have the same passenger forecasts as the Proposed Airport Implementation Plan.

Table D-1

Air Passenger Forecasts

AIRPORT ACTIVITY	2005	2010	2015	2020	2025	2030
No Project Alternative						
Million Annual Passengers (MAP)	17.7	19.5	22.8	25.3	26.5	27.0
Annual Air Cargo Tonnage	187,705	233,284	322,863	436,830	522,327	622,141
Annual GA Operations	13,140	16,790	18,250	18,250	18,250	18,250
Daily O&D Passengers	45,830	51,076	59,768	66,220	69,373	70,793
Preferred Airport Implementation Project						
Million Annual Passengers (MAP)	17.7	19.5	22.8	25.3	26.9	28.3
Annual Air Cargo Tonnage	187,705	233,284	322,863	436,830	522,327	622,141
Annual GA Operations	13,140	16,790	18,250	18,250	18,250	18,250
Daily O&D Passengers	45,830	51,076	59,770	66,220	70,553	74,199
Airport Implementation Project Alternative						
Million Annual Passengers (MAP)	17.7	19.5	22.8	25.3	26.9	28.3
Annual Air Cargo Tonnage	187,705	233,284	322,863	436,830	522,327	622,141
Annual GA Operations	13,140	16,790	18,250	18,250	18,250	18,250
Daily O&D Passengers	45,830	51,076	59,769	66,220	70,553	74,199

Source: HNTB, 2007.

D.1.5 Traffic Forecasts**D.1.5.1 Regional Background Traffic Forecasts**

Regional background traffic for each analysis year was obtained from SANDAG regional transportation model runs for each year (provided by SANDAG). The traffic output for each year includes regional traffic from all traffic analysis zones (TAZs). TAZs represent an area with a homogeneous land use or a combination of related land uses including traffic from proposed development in the area. The regional transportation model divides the entire region (as well as the areas beyond the region) into individual Traffic Analysis Zones (TAZs) including a “zone” for SDIA. Traffic related to the “airport zone” was subtracted based on “select zone” model runs provided by SANDAG. A “select zone” run for the airport TAZ identified airport generated traffic on each roadway and freeway segment in the vicinity of the airport. The resulting traffic represents the non-airport or regional “background” traffic on the roadway network. The forecasts of background traffic for future years include traffic associated with plans and projects accepted by the San Diego City Council and included in SANDAG’s Series 10 forecasts. These projects include, but are not limited to the following:

- Naval Training Center/Liberty Station Precise Plan/EIR (January 2000/September 2001)
- North Embarcadero Visionary Plan Final EIR (April 2000)

The Series 10 forecast does not include the following project EIRs, which had not been accepted by the San Diego City Council at the time of the model runs. However, the Series 10 forecasts assumed development at these locations based on General Plan Zoning that is assumed to be similar or more intense than land uses assumed in the EIRs.

- Old Police Headquarters and Park Project Draft EIR (July 2005) or Final EIR (February 2006)
- Centre City Development Corporation (CCDC) Master Plan Draft EIR (July 2005) or Final EIR (January 2006)
- Woodfin Suites Hotel and Port Master Plan Amendment Project Draft EIR (March 2006)

Background traffic continues to grow in the vicinity of SDIA due to increased development of hotels and other visitor serving development. For example under the NTC/Liberty Station EIR a 650 room Nickelodeon (recreation) hotel and 350 room business hotel are being developed immediately west of SDIA (the EIR reflected a 350 room recreational and 650 room business hotel).

D.1.5.2 Airport Traffic

The regional transportation model divides the entire region (as well as the areas beyond the region) into Traffic Analysis Zones (TAZs). The TAZs typically represent an area with a homogeneous land use or a combination of related land uses.

SANDAG provided select zone runs of the regional transportation model for the analysis years 2005 to 2030. These select zone runs show how airport traffic distributes over the regional roadway network, but the volumes were not used in the traffic analysis. Airport traffic for the analysis was estimated as discussed in Section D.1.6 *Airport Trip Generation*.

D.1.6 Airport Trip Generation

Airport trip generation as used in this analysis represents the total *vehicular* traffic associated with the airport under each alternative. Unless otherwise indicated, trip generation includes both inbound and outbound traffic. For analysis purposes, trip generation is typically estimated for daily (24-hour) and peak hour (AM and PM) conditions. SDIA trip generation rates were estimated by relating traffic counts conducted at the airport entrances and exits to existing air passenger activity levels. Trip generation rates of other land uses that are not driven by passenger demand were based on SANDAG³ and City of San Diego⁴ trip generation rates and are presented in the associated alternatives description in this Appendix.

Although air passenger forecasts through 2020 are the same for all alternatives, the airport trip generation differs among the alternatives because of landside constraints associated with the No Project Alternative (limited terminal parking and curb frontage, among others). Under the No Project Alternative, parking constraints are expected to force passengers to either use off-site parking facilities or switch to alternate modes, including curbside drop-off, taxis, shared ride vans and transit. Passengers diverted to off-site parking facilities are still considered to contribute to and do not reduce the total airport trip generation. Additional shuttles would be required to accommodate these passengers. Diversion of passengers to curbside drop-off or taxis would add to curbside congestion and increase terminal area trips while the diversion of passengers to modes with higher occupancies (e.g., transit and shared ride vans) would result in reduction in total airport trips.

Beyond 2020, trip generation differs for each alternative due to the divergence of air passenger forecasts, as discussed previously.

The Proposed Airport Land Use Plan was assumed to represent a full build-out of proposed Airport Land Uses in 2015. The Proposed Airport Land Use Plan would accommodate the same passengers as the Proposed Airport Implementation Plan with additional traffic generating land uses proposed along North Harbor Drive and Pacific Highway.

Trip generation rates were developed for various airport activity centers (terminal curbside, terminal and remote parking, employee parking, rental car facilities, etc.). The different alternatives would result in different shuttle route configurations. Therefore, shuttle trips were accounted for separately from private vehicle and other unscheduled ground transportation modes. Trip rates were estimated for private vehicle and other modes. For these modes of transportation, the same trip rates were used in the future. Future shuttle trips were assumed to operate with the same headways/schedule as existing shuttles and accommodate passenger growth through increased passenger loading, until a need for additional shuttle trips is warranted.

Table D-2 shows the estimated trip generation for the alternative project scenarios.

The Proposed Airport Land Use Plan was assumed to represent a full build-out of proposed Airport Land Uses in 2015. The Proposed Airport Land Use Plan would accommodate the same passengers as the Proposed Airport Implementation Plan with additional traffic generating land uses proposed along North Harbor Drive and Pacific Highway. Total trip generation for the Land Use Plan is shown in **Table D-3** and specific project related trip generation is shown in the Land Use Plan discussion in Section D.5, *Proposed Project*.

³ SANDAG, *(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002.

⁴ City of San Diego, *Trip Generation Manual*, revised May 2003.

The distribution of passengers (and traffic) among terminals would differ among the alternatives, as shown in [Table D-4](#). The change in passenger distribution between terminals would result in redistribution of traffic at the terminal access driveways along North Harbor Drive. However, the change in passenger distribution would not affect the regional traffic pattern outside of the airport which is assumed to be the same for all alternatives.

Table D-2
Airport Trip Generation

No Project Alternative (includes existing)

Airport Trip Generation (1)	2005	2010	2015	2020	2025	2030
Daily	85,100	94,500	109,350	120,400	126,000	128,750
In	42,600	47,300	54,750	60,250	63,050	64,400
Out	42,500	47,200	54,600	60,150	62,950	64,350
AM Peak Hour	3,180	3,530	4,090	4,500	4,750	4,850
In	1,760	1,955	2,260	2,500	2,600	2,665
Out	1,420	1,575	1,830	2,050	2,150	2,185
PM Peak Hour	3,245	3,610	4,185	4,600	4,850	4,965
In	1,500	1,670	1,940	2,150	2,250	2,310
Out	1,745	1,940	2,245	2,500	2,600	2,655

Proposed Airport Implementation Plan (with Parking Structure)

Airport Trip Generation (1)	2010	2015	2020	2025	2030
Daily	94,600	109,500	120,900	128,500	135,000
In	47,350	54,800	60,500	64,300	67,550
Out	47,250	54,700	60,400	64,200	67,450
AM Peak Hour	3,530	4,095	4,550	4,800	5,070
In	1,955	2,265	2,500	2,650	2,790
Out	1,575	1,830	2,050	2,150	2,280
PM Peak Hour	3,620	4,190	4,650	4,950	5,205
In	1,675	1,940	2,150	2,300	2,415
Out	1,945	2,250	2,500	2,650	2,790

Proposed Airport Implementation Plan (without Parking Structure)

Airport Trip Generation (1)	2010	2015	2020	2025	2030
Daily	94,600	109,500	120,650	128,200	134,600
In	47,350	54,800	60,400	64,150	67,350
Out	47,250	54,700	60,300	64,050	67,250
AM Peak Hour	3,530	4,095	4,500	4,800	5,065
In	1,955	2,265	2,500	2,650	2,785
Out	1,575	1,830	2,050	2,150	2,280
PM Peak Hour	3,620	4,190	4,650	4,950	5,185
In	1,675	1,940	2,150	2,300	2,410
Out	1,945	2,250	2,500	2,650	2,775

Airport Implementation Plan Alternative (with Parking Structure)

Airport Trip Generation (1)	2010	2015	2020	2025	2030
Daily	94,600	109,500	120,800	128,400	134,850
In	47,350	54,800	60,450	64,250	67,500
Out	47,250	54,700	60,350	64,150	67,400
AM Peak Hour	3,530	4,095	4,550	4,800	5,070
In	1,955	2,265	2,500	2,650	2,790
Out	1,575	1,830	2,050	2,150	2,280
PM Peak Hour	3,620	4,190	4,650	4,950	5,195
In	1,675	1,940	2,150	2,300	2,415
Out	1,945	2,250	2,500	2,650	2,780

Airport Implementation Plan Alternative (without Parking Structure)

Airport Trip Generation (1)	2010	2015	2020	2025	2030
Daily	94,600	109,500	120,700	128,250	134,700
In	47,350	54,800	60,400	64,200	67,400
Out	47,250	54,700	60,300	64,100	67,300
AM Peak Hour	3,530	4,095	4,500	4,800	5,065
In	1,955	2,265	2,500	2,650	2,785
Out	1,575	1,830	2,050	2,150	2,280
PM Peak Hour	3,620	4,190	4,650	4,950	5,185
In	1,675	1,940	2,150	2,300	2,410
Out	1,945	2,250	2,500	2,650	2,775

Source: HNTB, 2007.

Notes:

(1) Includes terminals and associated facilities, SAN Park lots, rental car facilities on Rental Car Road, Employee Lot 6 on Harbor Island Drive, and north area. Does not include private vehicle trips to private off-airport parking and rental car facilities, but includes shuttle trips between these facilities and the terminals.

Table D-3

Airport Trip Generation – Proposed Airport Land Use Plan**Land Use Plan**

Airport Trip Generation (1)	2015	2020	2025	2030
Daily	122,600	134,300	142,150	148,450
In	61,450	67,300	71,250	74,400
Out	61,150	67,000	70,900	74,050
AM Peak Hour	4,690	5,140	5,445	5,700
In	2,725	2,990	3,170	3,315
Out	1,965	2,150	2,275	2,385
PM Peak Hour	4,850	5,280	5,570	5,810
In	2,350	2,550	2,690	2,810
Out	2,500	2,730	2,880	3,000

Source: HNTB, 2007.

Numbers may not add due to rounding.

Notes:

(1) Includes terminals and associated facilities, SAN Park lots, rental car facilities on Rental Car Road, Employee Lot 6 on Harbor Island Drive, and north area. Does not include private vehicle trips to private off-airport parking and rental car facilities, but includes shuttle trips between these facilities and the terminals.

Table D-4
Terminal Passenger Distribution

Scenario/Year	Terminal 1	Terminal 1 East *	Terminal 2 East	Terminal 2 West	Commuter Terminal	Total
Existing						
2005	54%	0%	15%	26%	5%	100%
No Project Alternative						
2010	52%	0%	25%	19%	5%	100%
2015	51%	0%	27%	18%	4%	100%
2020	54%	0%	23%	19%	4%	100%
2025	53%	0%	23%	21%	3%	100%
2030	53%	0%	24%	21%	3%	100%
Proposed Airport Implementation Plan						
2010	45%	0%	20%	31%	4%	100%
2015	43%	0%	20%	33%	3%	100%
2020	43%	0%	19%	34%	3%	100%
2025	43%	0%	19%	35%	3%	100%
2030	41%	0%	19%	37%	3%	100%
Airport Implementation Plan Alternative						
2010	20%	36%	25%	18%	0%	100%
2015	20%	36%	25%	20%	0%	100%
2020	23%	35%	23%	19%	0%	100%
2025	23%	34%	23%	20%	0%	100%
2030	24%	32%	23%	20%	0%	100%

Source: HNTB, 2007.

* New unit terminal under Airport Implementation Project Alternative.

D.1.7 Regional Trip Distribution

The SANDAG regional traffic model was used to determine how airport traffic distributes over the regional roadway network. The SANDAG regional traffic model was calibrated using the following transportation surveys conducted throughout the San Diego County in between 1991 and 2000.

- 1991 San Diego Visitor Survey
- 1995 Travel Behavior Survey
- 1995 San Diego Regional Transit Survey
- External Trip Surveys
- Traffic Generation Studies
- 2000 Census Transportation Planning Package

SANDAG also used additional data sources such as traffic counts from Caltrans and local jurisdictions, transit passenger counts from SANDAG's Transit Passenger Counting Program, and SANDAG's Vehicle Occupancy and Classification Study to verify model estimates against independent data.

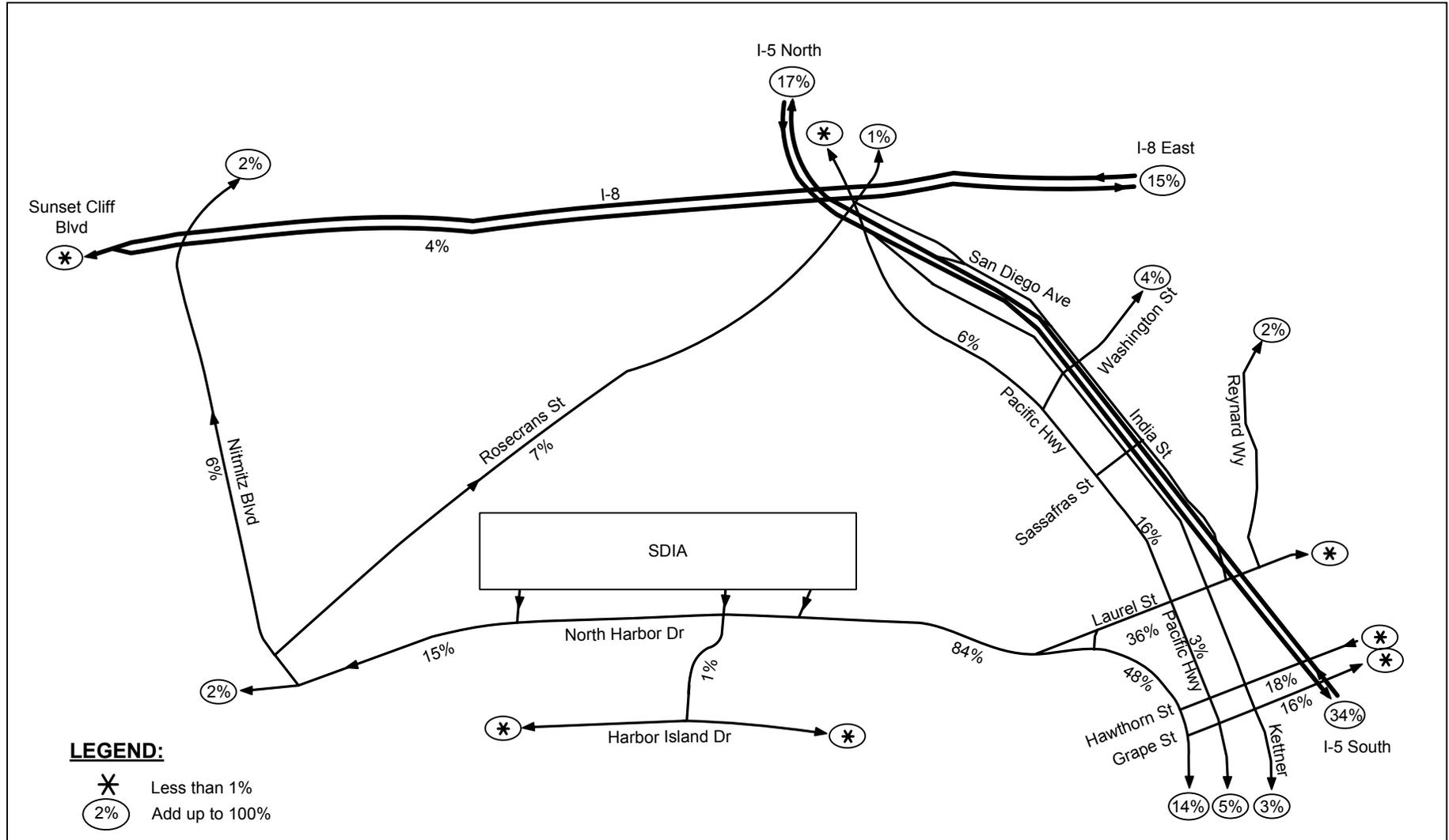
Table D-5 shows the distribution of airport traffic among various cities/planning areas in San Diego County and beyond.⁵ **Figure D.1-4** shows the pattern of airport-related traffic at SDIA.⁶ As shown, approximately 66% of the total airport traffic currently uses the I-5 and I-8 freeways, the remaining 34% uses local streets. Of the freeway users, 34% are oriented towards I-5 south, 17% towards I-5 north, and the remaining 15% towards I-8 east.

As discussed in **Section D.1.3, Traffic Modeling**, based on traffic counts at terminal driveways and traffic counts provided by the City of San Diego along North Harbor Drive, approximately 85% of SDIA terminal traffic is oriented to the east, and the remaining 15% is oriented to the west of SDIA (85/15 split). Traffic

⁵ SANDAG regional transportation model.

⁶ This pattern was derived from a select zone run of the SANDAG regional transportation model. The select zone run specifically identified the Traffic Analysis Zones (TAZs) representing the airport, and determines the volume of traffic on the roadway network associated with the airport TAZs.

AIRPORT MASTER PLAN
SAN DIEGO INTERNATIONAL AIRPORT



Appendix D.1-4



Existing Airport Traffic Pattern

Environmental Impact Report

counts conducted in 2006 and 2007 for this traffic analysis validate the 85/15 assumption and similar traffic volumes at intersections along North Harbor Drive are witnessed in both actual traffic counts and the 2005 traffic analysis calculations based on the SANDAG transportation model background traffic with airport trip generation estimates. For example the following intersections show more traffic east and less traffic west of SDIA in current traffic counts matching traffic analysis using updated SDIA passenger forecasts and the 85/15 split.

North Harbor Drive west of McCain road (west of SDIA):

- DEIR traffic analysis for 2005: 26,400 ADT
- SANDAG model with Airport TAZ and 70/30 split for 2005: 41,700 ADT
- NTC Landfill DEIR 2006 traffic counts: 26,900 ADT

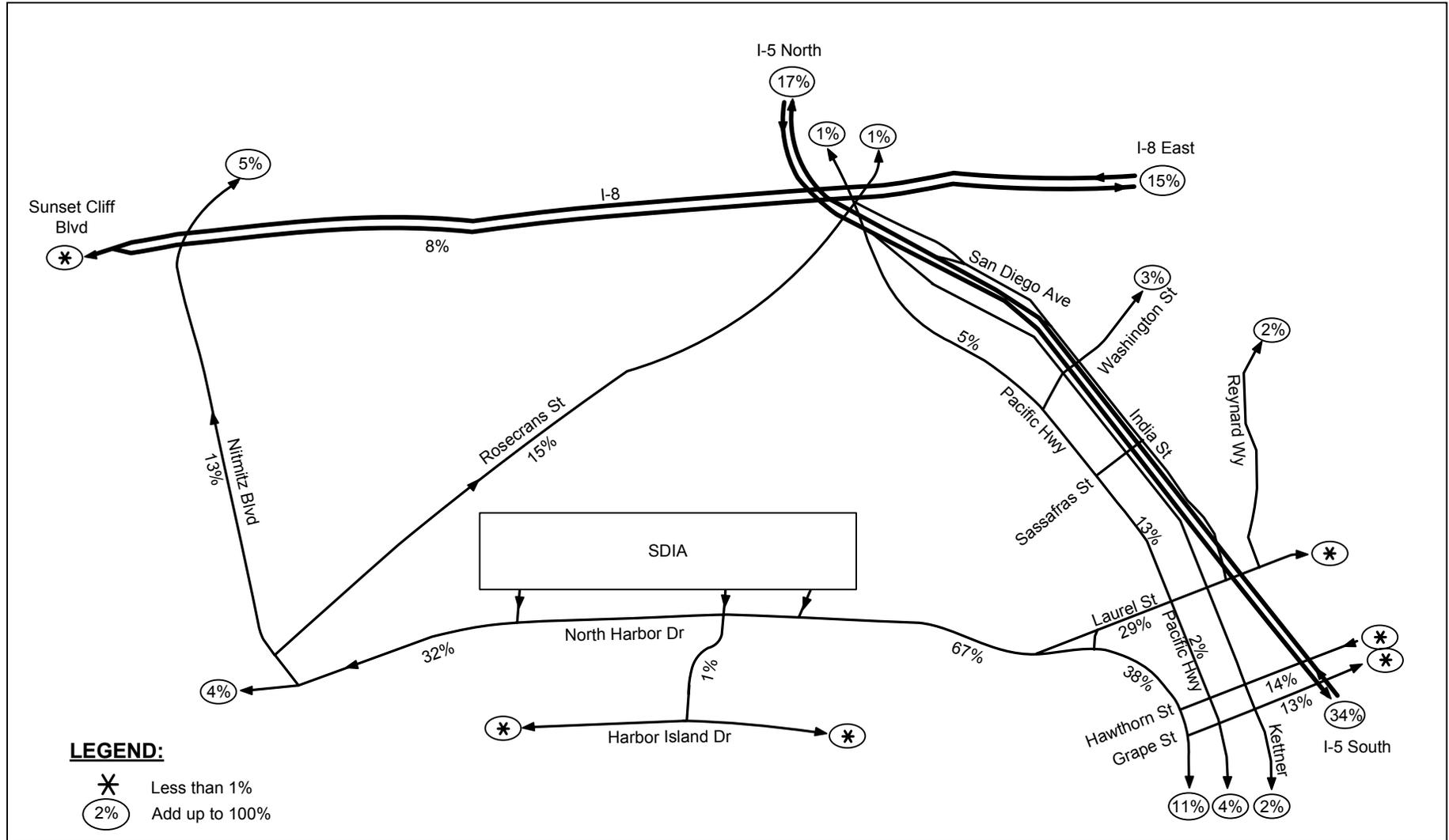
North Harbor Drive between Harbor Island and the Terminal 1 entrance (east of SDIA):

- DEIR traffic analysis for 2005: 36,600 ADT
- SANDAG model with Airport TAZ and 70/30 split: 31,700 ADT
- NTC Landfill DEIR 2006 traffic counts: 35,200 ADT

This pattern was assumed to remain constant through 2025. It is further assumed that this pattern would remain the same among all alternatives analyzed.

In 2030, the SANDAG model assumed implementation of I-5 / I-8 interchange improvements that facilitates the freeway-to-freeway movement. As a result, the model shows that more airport traffic would use I-8 to access the airport via Rosecrans Street and Nimitz Boulevard. Therefore, for 2030, a 70/30 split was assumed for the airport traffic pattern, as shown in [Figure D.1-5](#).

AIRPORT MASTER PLAN
SAN DIEGO INTERNATIONAL AIRPORT



Appendix D.1-5



2030 Airport Traffic Pattern

Environmental Impact Report

Table D-5

Distribution of SDIA Traffic by Location

Location	Percent	Location	Percent
32nd Street Naval Station	0.1%	Mission Beach	0.4%
Balboa Park	0.0%	Mission Valley	4.1%
Barrio Logan	0.1%	NATIONAL CITY	1.1%
Black Mountain Ranch	0.6%	Navajo	1.2%
CARLSBAD	5.8%	NCFUA Subarea 2	0.0%
Carmel Mountain Ranch	0.5%	Ocean Beach	0.3%
Carmel Valley	0.8%	OCEANSIDE	4.1%
Centre City	8.8%	Old San Diego	0.1%
CHULA VISTA	4.6%	Otay Mesa	1.0%
Clairemont Mesa	1.6%	Otay Mesa-Nestor	0.8%
College Area	0.6%	OUTSIDE SD COUNTY	3.6%
CORONADO	1.1%	Pacific Beach	1.0%
DEL MAR	0.3%	Pacific Highlands Ranch	0.2%
Del Mar Mesa	0.2%	Peninsula	2.2%
East Elliott	0.0%	POWAY	1.3%
EL CAJON	2.4%	Rancho Bernardo	1.4%
ENCINITAS	1.6%	Rancho Encantada	0.0%
ESCONDIDO	2.9%	Rancho Penasquitos	0.8%
Fairbanks Country Club	0.0%	Sabre Springs	0.2%
Flower Hill	0.0%	SAN MARCOS	1.8%
Greater Golden Hill	0.3%	San Pasqual	0.0%
Greater North Park	1.0%	San Ysidro	0.6%
Harbor	0.0%	SANTEE	1.2%
IMPERIAL BEACH	0.4%	Scripps Miramar Ranch	0.5%
Kearny Mesa	1.9%	Serra Mesa	0.4%
La Jolla	1.0%	Skyline-Paradise Hills	0.8%
LA MESA	1.3%	SOLANA BEACH	0.5%
LEMON GROVE	0.5%	Southeastern:Encanto Neighborhoods	0.6%
Linda Vista	0.5%	Southeastern:Southeastern San Diego	0.7%
Lindbergh Field	1.2%	Tierrasanta	0.5%
Mid-City:City Heights	1.0%	Tijuana River Valley	0.0%
Mid-City:Eastern Area	0.7%	Torrey Highlands	0.1%
Mid-City:Kensington-Talmadge	0.3%	Torrey Hills	0.1%
Mid-City:Normal Heights	0.3%	Torrey Pines	0.4%
Midway-Pacific Highway	0.5%	UNINCORPORATED	13.2%
Mira Mesa	3.1%	University	3.0%
Miramar Air Station	0.1%	Uptown	1.2%
Miramar Ranch North	0.4%	Via De La Valle	0.0%
Mission Bay Park	1.5%	VISTA	2.1%
		TOTAL AIRPORT TRIPS	100.0%

Source: SANDAG

D.1.8 Street Segment Operations

The ability of the transportation infrastructure surrounding the airport to carry future regional and airport traffic was measured using analytical tools that quantify operations of various types of transportation facilities. The ability of the transportation infrastructure to carry traffic was quantified using a Level-of-Service (LOS) designation, as set forth in the *Highway Capacity Manual*.⁷ This designation is utilized in the transportation profession to quantify the performance of a facility. Levels of service vary from LOS A (free flow, little delay) to LOS F (heavily congested, breakdowns in vehicular flow) as described below.

- LOS A describes primarily free-flow operations. Average operating speeds at the free-flow speed generally prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.
- LOS B also represents reasonably free flow, and free-flow speeds are generally maintained. The ability to maneuver within the traffic stream is only slightly restricted, and the general level of physical and psychological comfort provided to drivers is still high.
- LOS C provides for flow with speeds still at or near the free-flow speed of the roadway. Freedom to maneuver within the traffic stream is noticeably restricted at LOS C, and lane changes require more vigilance on the part of the driver. The driver now experiences a noticeable increase in tension because of the additional vigilance required for safe operation.
- LOS D is the level at which speeds begin to decline slightly with increasing flows. In this range, density begins to deteriorate somewhat more quickly with increasing flows. Freedom to maneuver within the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort levels.
- LOS E describes operation at capacity. Operations in this level are volatile, because there are virtually no usable gaps in the traffic stream. At capacity, the traffic stream has no ability to dissipate even the most minor disruptions, and any incident can be expected to produce a serious breakdown with extensive queuing.
- LOS F describes breakdowns in vehicular flow. Such conditions generally exist within queues forming behind breakdown points such as traffic incidents and recurring points of congestion. Whenever LOS F conditions exist, there is a potential for them to extend upstream for significant distances.

The ability of the roadway segments to carry traffic was measured using City of San Diego roadway capacity standards as shown in [Table D-6](#).

Roadway segments were assessed by comparing daily roadway volumes to a theoretical daily capacity of the roadway based on City standards. The established City standards were modified, with collaboration and concurrence from City staff, for portions of North Harbor Drive to reflect non-standard (7- to 8-lane) roadway cross sections.

⁷ Transportation Research Board, *Highway Capacity Manual*, 2000.

Table D-6
Street Segment Level of Service Criteria

Classification	Roadway Capacity (vehicles per day)				
	LOS A	LOS B	LOS C	LOS D	LOS E
8-Lane Prime Arterial (North Harbor Drive) ¹	30,000	40,000	60,000	65,000	70,000
7-Lane Prime Arterial (North Harbor Drive) ¹	27,500	37,500	55,000	60,000	65,000
6-Lane Prime Arterial (North Harbor Drive)	25,000	35,000	50,000	55,000	60,000
6-Lane Major Arterial (Pacific Highway)	20,000	28,000	40,000	45,000	50,000
4-Lane Major Arterial (Laurel Street)	15,000	21,000	30,000	35,000	40,000
3-Lane Major Arterial 1-Way (Grape/Hawthorn/Kettner)	10,000	14,000	20,000	22,500	25,000
4-Lane Collector (Laurel/Washington)	10,000	14,000	20,000	25,000	30,000
3-Lane Collector (Sassafras Street)	3,800	5,300	7,500	9,800	12,000
2-Lane Collector (Palm Street)	2,500	3,500	5,000	6,500	8,000

Source: SANTEC / ITE, *Guidelines for Traffic Impact Studies in the San Diego Region*, March 2, 2000.

Prepared by: HNTB Corporation, 2007.

Note:

¹ Roadway capacities for 8- and 7-lane Prime Arterials prorated from 6-lane Prime Arterial capacity based on discussions with the City of San Diego, July 18, 2007.

D.1.9 Intersection Operations

The analysis of key intersections is based on Highway Capacity Manual (HCM) methodologies.⁸ HCM uses control delay (expressed in terms of seconds of delay per vehicle, sec/veh) as the measure of effectiveness for both signalized and unsignalized intersections. Intersection level of service is defined based on the criteria shown in [Table D-7](#). The intersection analysis uses the TRAFFIX traffic analysis program for most of the signalized intersections analyzed and the SYNCHRO program for 5-leg intersections. Both programs implement the HCM intersection analysis methodologies. Delay resulting from railroad crossings at intersections along Washington, Sassafras, Laurel, Palm and Hawthorn and Grape was incorporated into the LOS analysis.

Future intersection volumes were not generated by the forecast model, but through the following steps:

- Using the existing peak hour airport trip generation and trip distribution pattern, existing airport-related turning volumes were estimated.
- Existing airport-related peak hour turning volumes were subtracted from existing intersection counts to obtain the non-airport background turning volumes.
- The background turning volumes were factored up to future analysis years based on traffic growth rates indicated by the SANDAG model runs.
- Future airport-related turning volumes were estimated using future airport trip generation and assumed trip distribution pattern.
- Future intersection volumes were determined by adding the future airport-related turning volumes to the future background traffic.

⁸ Transportation Research Board, *Highway Capacity Manual*, 2000.

Table D-7

Intersection Level of Service Criteria

Level of Service (LOS)	Signalized Intersection Control Delay (sec/veh)	Unsignalized Intersection Control Delay (sec/veh)
A	0 - 10	0 - 10
B	> 10 - 20	> 10 - 15
C	> 20 - 35	> 15 - 25
D	> 35 - 55	> 25 - 35
E	> 55 - 80	> 35 - 50
F	> 80	> 50

Source: HCM 2000.

D.1.10 Freeway Segment Operations

Freeway operations were analyzed based on methods used by Caltrans, as set forth in the Caltrans Guide for the Preparation of Traffic Impact Studies.⁹ Caltrans prescribes the use of HCM¹⁰ operational analysis methodology for freeway segments, which was utilized for this analysis. The HCM uses density to measure freeway segment level of service. Density represents the number of passenger cars (equivalent) per mile per lane (pc/mi/ln). The higher the density, the more vehicles are found on a given stretch of freeway, and the more congested the traffic conditions are. Freeway segment level of service is defined according to [Table D-8](#).

The Caltrans TIS Guide states that “Caltrans endeavors to maintain a target LOS C at the transition between LOS C and LOS D on State highway facilities; however, Caltrans acknowledges that this may not always be feasible. If an existing State highway facility is operating at less than the appropriate target LOS, the existing MOE [measure of effectiveness] should be maintained.”¹¹ All freeway segments within the study area are currently operating at LOS D or less, with the exception of North Bound I-5 between the Pacific Highway viaducts and Washington Street and South Bound I-5 between SR 163 and SR 94. City of San Diego significance criteria interpreted from CEQA guidelines was used to estimate impacts to freeways as discussed in Section D.1.

Table D-8

Freeway Segment Level of Service Criteria

Level of Service (LOS)	Maximum Density (pc/mi/ln)	Minimum Speed (mph)	Maximum v/c	Maximum Service Flow Rate (pc/hr/ln)
A	11	65.0	0.30	710
B	18	65.0	0.50	1,170
C	26	64.6	0.71	1,680
D	35	59.7	0.89	2,090
E	45	52.2	1.00	2,350
F	> 45	< 52.2	> 1.00	NA

Source: HCM 2000.

D.1.11 Freeway Ramp Operations

Freeway on-ramp ramp operations were analyzed based on methods set forth in the SANTEC/ITE Guidelines for Traffic Impact Studies in the San Diego Region.¹² Freeway on-ramp operations were quantified by determining if the maximum ramp meter rates (defined as the maximum number of vehicles

⁹ Caltrans, *Guide for the Preparation of Traffic Impact Studies*, December 2002.

¹⁰ Transportation Research Board, *Highway Capacity Manual*, 2000.

¹¹ Caltrans, *Guide for the Preparation of Traffic Impact Studies*, December 2002.

¹² SANTEC and ITE, SANTEC/ITE Guidelines for Traffic Impact Studies in the San Diego Region, March 2000.

processed each hour) were over or under the forecasted ramp volumes and calculating the minutes of delay if ramp volumes exceeded meter rates. Minutes of delay were calculated by dividing excess vehicle demand (peak hour traffic volume minus the meter rate) by the set meter rate and multiplying by 60 minutes/hour. Queue lengths were estimated by multiplying excess vehicle demand by 29 feet divided by the number of lanes on the ramp, as indicated in Attachment B of the SANTEC/ITE Guidelines.

Ramp meter rates were obtained from Caltrans and the specific on-ramps analyzed within the study area were coordinated with Caltrans staff.

D.1.12 Railroad Crossing Operations

Railroad crossing delays were analyzed in terms of daily vehicle hours of delay (VHD). VHD was calculated based on (1) existing and forecast Trolley, Coaster, and Amtrak schedules, (2) average gate down time for each type of train at each crossing, estimated at 50 seconds for Trolley and Coaster and Amtrak trains and 4 minutes for freight trains, (3) a 40% increase in gate down time (average 70 seconds) for Trolley crossings at Washington Street to account for the proximity of the station, and (4) proportion of crossings occurring during the AM, midday and PM peak hours and late evening/early morning hours.

VHD values were compared to a set of thresholds (**Section D.2.2 D.3.6**) to determine whether grade separation is warranted.

D.1.13 Transit Operations

Existing and future transit routes within the study area were identified. These routes were compared to the alternatives to determine the impact, if any, of the alternative. SDCRAA is also leading a multiple transit agency committee to assess transit demand and to improve public transit access to SDIA.

In addition, the Proposed Airport Land Use Plan designates a ground transportation use along the Pacific Highway corridor and a dedicated transit corridor is proposed to connect the north and south Airport areas.

D.1.14 Parking Operations

The alternatives examined included scenarios with and without parking structure.

As air passenger activity grows in the future, existing terminal parking supply becomes inadequate to accommodate parking demand. If new terminal parking facilities were not constructed as in the No Project Alternative, parking supply constraints would force some air passengers to either park at remote parking facilities or switch to alternate modes of transportation.

To analyze the potential traffic redistribution associated with constrained parking supply (under the No Project Alternative) or new terminal parking facilities (under the Implementation Plan and Implementation Plan Alternative), parking demand was estimated and “excess” parking demand was reallocated as follows:

- Parking demand at each terminal was estimated based on the methodology presented in the Airport Master Plan. That methodology estimates short-term, long-term and economy parking demand based on air passenger forecasts and demand ratios derived from existing operations and represents unconstrained demand.
- Parking demand at each terminal was allocated to available parking areas. Short-term parking demand at each terminal was first allocated to the associated terminal’s parking facility. Long-term parking demand was then allocated to the remaining terminal parking spaces. When space was not available at the designated terminal, excess long-term demand was allocated to available spaces in an adjacent terminal parking facility. If no space remained in the terminal parking facilities, excess long-term demand was allocated to nearby Airport-operated remote parking facilities (SAN Park), privately-operated remote parking facilities or alternative modes (e.g. curbside drop-off/pick-up, taxis, shared-ride vans, transit)
- Economy parking demand, representing price sensitive parkers, was allocated to the nearest Airport-operated SAN Park facility. Excess economy parkers were allocated to privately-operated remote facilities.

Parking demand (prior to reallocation as described above) and supply available under each alternative were compared to determine if the alternative would result in a parking surplus or deficit.

D.1.15 Terminal Curbside Operations

Curb frontage provided by the project/alternative was compared to curb requirements estimated in the AMP to determine if the project/alternative would result in curb frontage surplus or deficit.

D.1.16 On-Airport Traffic Circulation

On-airport (terminal area) traffic circulation was analyzed by comparing peak hour roadway volumes to capacities. On-airport roadways (excluding curb roadways) were assumed to have a per-lane capacity of 900 vehicles per hour per lane.¹³ The HCM does not provide LOS criteria for low speed roadways such as airport roadways, which can typically operate at speeds less than 25 mph. The HCM provides LOS criteria for roadways with design speeds of 25 mph or higher. The volume to capacity ratios used in this study for on-airport roadways were based on extrapolation of HCM criteria to airport roadway conditions. Corresponding on-airport roadway level of service criteria is presented [Table D-9](#).

Table D-9

On-Airport Roadway Level of Service Criteria

Level of Service (LOS)	Volume-to-Capacity Ratio (V/C)
A	0.26
B	0.44
C	0.64
D	0.82
E	1.00
F	> 1.00

Source: HCM 2000 and HNTB analysis.

D.2 Traffic Impacts and Significance Criteria

Traffic impacts of a project alternative were identified by comparing the traffic operations under the project alternative against the No Project Alternative. Any increase in traffic volumes under the project were then compared to the significance criteria presented in this section to determine if the increase results in a significant impact to the associated street, intersection, freeway, on-ramp, etc.

Significance criteria for freeway segments and metered on-ramps, street/roadway segments, intersection parking were derived from the City of San Diego Development Services Department's [CEQA Significance Determination Thresholds](#) guidelines dated January 2007. Based on these guidelines, a significant impact would occur under the following conditions.

- If a freeway, street/roadway segment or intersection operates at LOS D or better without the project, and the project causes the LOS to deteriorate to LOS E or LOS F (regardless of the change in delay, speed or volume-to-capacity ratio), then the impact is considered significant.
- If a freeway, street/roadway segment, or intersection operates at LOS E or F without the project and the project causes an increase in delay or reduction in speed or volume-to-capacity ratio above the thresholds summarized in [Table D-10](#), then the impact is considered significant. If the LOS remains at E or F and any increase in delay or reduction in speed, or volume-to-capacity ratio is within the allowable threshold summarized in [Table D-10](#), then the impact is not significant.
- If a metered freeway ramp experiences delays less than 15 minutes without the project and the project causes delays to exceed 15 minutes the impact is considered significant.
- If a metered freeway ramp experiences delays greater than 15 minutes without the project and

¹³ FHWA and FAA, [Intermodal Ground Access to Airports – A Planning Guide, Final Report](#), December 1996.

the project causes an increase in delay above the threshold summarized in Table D-10 or ramp storage capacities are exceeded then the impact would be considered significant.

- If the project is deficient by more than 10% of the required amount of parking the impact would be considered significant if one of the following occurs:
 - 1) Parking shortfall or displacement of existing parking would substantially affect the availability of parking in an adjacent residential area, including the availability of public parking, or
 - 2) Parking deficiency would severely impede the accessibility of a public parking facility, such as a park or beach.

Table D-10

Traffic Impact Significance Thresholds

Level of Service with Project*	Allowable Change Due to Project Impacts**					
	Freeways		Roadway Segments		Intersections	Ramp Metering
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec.)	Delay (min.)
E (or ramp meter delays above 15 min. see note 1)	0.01	1.0	0.02	1.0	2.0	2.0
F (or ramp meter delays above 15 min. see note 2)	0.005	0.5	0.01	0.5	1.0	1.0

Note 1: The allowable increase in delay at a ramp meter with more than 15 minutes delay and freeway level of service (LOS) E is 2 minutes.

Note 2: The allowable increase in delay at a ramp meter with more than 15 minutes delay and freeway level of service (LOS) F is 1 minute.

* All level of service (LOS) measurements are based upon Highway Capacity Manual (HCM) procedures for peak hour conditions. However, V/C ratios for roadway segments may be estimated on an ADT/24-hour traffic volume basis (using Table 2 of the City's Traffic Impact Study Manual. The acceptable LOS for freeways, roadways and intersections is generally "D" ("C" for undeveloped locations). For metered freeway ramps, LOS does not apply. However, ramp meter delays above 15 minutes are considered excessive.

** If a proposed project's traffic causes the values shown in the table to be exceeded, the impacts are determined to be significant. The project applicant shall then identify feasible improvements (within the Traffic Impact Study) that will restore/and maintain the traffic facility at an acceptable LOS. If the LOS with the proposed project becomes unacceptable (see above * note), or if the project adds a significant amount of peak-hour trips to cause any traffic queues to exceed on- or off-ramp storage capacities, the project applicant shall be responsible for mitigating the project's direct significant and/or cumulatively considerable traffic impacts.

Key:

V/C = Volume to Capacity ratio

Speed = Speed measured in miles per hour

Delay = Average control delay per vehicle measured in seconds for intersections, or minutes for ramp meters

LOS = Level of Service

Source: City of San Diego - Development Services Department, CEQA, Significance Determination Thresholds, January 2007

In addition, significance criteria for railroad crossings were derived from the California Utilities Commission, and best practice management was used to determine significance criteria for transit,

parking, terminal curbsides and on-airport roadways. Specific significance criteria for each analysis category are described in the following sections.

D.2.1 Impact Analysis

Traffic impacts associated with the Proposed Project/Preferred Alternative, the East Terminal Alternative, and the No Project Alternative are reported in this Appendix.

D.2.1.1 Airport Trip Generation and Background Traffic

The Proposed Project/Preferred Alternative and East Terminal Alternative are projected to accommodate the same level of air passenger activity in the future – approximately 19.5 million annual passengers (MAP) in 2010, and approximately 28.2 MAP in 2030 based upon the high growth passenger forecast approved by the FAA. The No Project Alternative would accommodate the same number of passengers through 2020 but only 26.9 MAP in 2030. Consequently, the total traffic generated by each alternative would be similar through 2020 with variations due to shuttles and other mode share changes in the No Project and Project without structure alternatives, as discussed under each alternative.

Airport trip generation rates were calculated based on existing mode shares and adjusted to account for a shift in terminal area parking demand to alternate modes and remote facilities as terminal area facilities become constrained. However, this diversion of passengers does not reduce total trip generation, as discussed in Section D.1.6, because while a diversion of passengers to modes with higher occupancies results in fewer airport trips, the diversion of passengers to modes such as private vehicle curbside drop-off and taxis would result in increased airport trips. Trips from most airport modes were estimated to increase relative to origin and destination passenger growth. However, schedule driven modes such as public buses, and airport operated inter-terminal, employee and public parking shuttles were estimated to grow at a slower rate as many of these shuttles currently operate with excess capacity to maintain a set schedule. This results in a slight decrease in the trip generation rate decreases from 2010 to 2030. This trend has also been demonstrated historically at SDIA. In addition, the following assumptions were made to develop future traffic forecasts:

- SAN Park shuttles were assumed to continue operating at their current schedules in the future. Increase in passenger demand was assumed to be accommodated through increased passenger loadings. The same assumption was also made for the Airport Flyer, Blue Bus (employee), Red Bus (terminal-to-terminal).
- It was assumed that the existing employee parking lots cannot accommodate future growth. Trip generations from these lots were assumed to remain as existing. Future growth in employee parking demand was assumed to be accommodated in the TDY area. New employee shuttle service was assumed to be provided to serve the new employee lot.
- The taxi and shuttle staging area west of T2W terminal was assumed to remain at its current location.
- Parking demand at each terminal by type of parking (short-term, long-term and economy) were estimated based on methodologies described in the AMP. Under the No Project Alternative, existing terminal parking would not be able to accommodate future demand. Without any new terminal parking facilities, excess parking demand was assumed to use remote airport parking (e.g., SAN Park) or private off-airport lots, use the curbs, or shift to other modes. The reallocation of excess parking demand to other modes was based on existing mode share patterns. Excess parking demand allocated to private off-airport lots was assumed to generate new shuttle trips to the terminals.
- Trip generation associated with the existing rental car facilities on North Harbor Drive was assumed to grow proportionately to air passenger growth. This applies to both rental car vehicles and shuttles.

After 2020 the forecasts for the No Project Alternative deviate from the Proposed Project and East Terminal Alternative resulting in a decrease in total airport trips. See Section D.1.3 *Traffic Modeling Process* for further discussion.

While regional background traffic generally increases between 2010 and 2030, the SANDAG regional transportation forecasts showed that the background (non-airport) traffic on several street and freeway segments would decrease from 2010 to 2030. This is primarily due to planned HOV lanes (one in each direction) on I-5 in the vicinity of the airport which would relieve traffic along Kettner Boulevard and India Street, and widening of I-8 between I-5 and SR-163 from 8 to 10 lanes which would relieve traffic along Pacific Highway. These improvements are assumed in the 2020 RTP that was the basis for the SANDAG model used for this analysis. Airport traffic is assumed to grow in all years although certain projects may divert traffic from specific street segments (i.e. the reconfigured exit at Terminal 2 reduces traffic along sections of North Harbor Drive when compared to other alternatives).

D.3 Existing Conditions

This Section presents existing conditions observed in the study area and traffic analysis based upon data collections identified in Section D.1, *Traffic Counts and Other Data*, along with additional data/information obtained from SANDAG, Caltrans, City of San Diego, and SDCRAA.

D.3.1 Existing Airport Trip Generation

Table D-11 shows the existing airport trip generation based on counts conducted at airport access roadways. Airport trip generation includes traffic from terminals and associated facilities, SAN Park lots, rental car facilities on Rental Car Road, Employee Lot 6 on Harbor Island Drive, and north area air cargo and general aviation facilities. It does not include private vehicle trips associated with privately-operated off-airport parking and rental car facilities that were not surveyed, but does include shuttle trips between these facilities and the terminals.

Scheduled shuttle and transit vehicle trips were identified separately from private vehicle and non-scheduled shuttle trips and the trip generation of these scheduled services was based on observed and published schedules. Trip rates were developed for airport activity centers (e.g., terminal curbside, terminal parking, SAN Park parking, employee parking, etc.) by relating the observed trip generations at each facility (after deducting scheduled shuttle / transit trips) to air passenger activity levels. These trip rates were assumed to remain constant in the future; however, as facilities become constrained, vehicles were reallocated to other facilities.

Table D-11
2005 Airport Trip Generation – Existing Conditions

Activity	Year
	2005
Airport Passenger Activity Level	
Million Annual Passengers (MAP)	17.4
Million Annual O&D Passengers	16.7
Daily O&D Passengers	45,830
Airport Trip Generation (1)	
Daily	85,100
In	42,600
Out	42,500
AM Peak Hour	3,180
In	1,760
Out	1,420
PM Peak Hour	3,245
In	1,500
Out	1,745
Trip Rate	
Daily	1.86

O&D = origin and destination

Numbers may not add due to rounding.

Note:

(1) Includes terminals and associated facilities, SAN Park lots, rental car facilities on Rental Car Road, Employee Lot 6 on Harbor Island Drive, and north area. Does not include private vehicle trips to private off-airport parking and rental car facilities, but includes shuttle trips between these facilities and the terminals.

Source: HNTB, 2007.

D.3.2 Existing Street Segments

Existing street segment volumes and operations are summarized on [Table D-12](#) and the ADT for street segments in the study area are depicted on [Figure D.3-1](#). All street segments in the study are within jurisdiction of the City of San Diego and several are classified as San Diego region Congestion Management Program (CMP) Arterials. The purpose of the CMP is to monitor the performance of the transportation system, develop programs to address near-term and long-term congestion, and better integrate transportation and land use planning. SANDAG is the designated Congestion Management Agency for the San Diego region CMP. CMP Arterials are part of the overall CMP system, which includes those roadways that serve the highest level of regional traffic, serve major regional facilities, and provide significant inter-community traffic service and freeway congestion relief. The following street segments in the study area are designated as CMP Arterials:

- North Harbor Drive
- Grape Street
- Hawthorn Street
- Pacific Highway

As shown in [Table D-12](#), the following streets segments currently operate at LOS E or F:

Existing Conditions - LOS E

- Grape Street between Pacific Highway and Kettner Boulevard
- Washington Street between Kettner Boulevard and San Diego Avenue
- Rosecrans Street between Barnett Avenue and Sports Arena Boulevard

Existing Conditions - LOS F

- North Harbor Drive between Rental Car Road and Laurel Street
- Grape Street between Kettner Boulevard and I-5
- Hawthorn Street between Kettner Boulevard and I-5
- Sassafras Street between Kettner Boulevard and India Street
- India Street between Laurel Street and Palm Street
- India Street between Palm Street and Sassafras Street
- India Street between Sassafras Street and Washington Street
- Rosecrans Street between Nimitz Boulevard and Barnett Avenue

Table D-12
2005 Street Segment Operations – Existing Conditions

Roadway	Segment	Classification	Lanes	LOS E ADT Capacity 1000s	Year 2005				
					SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS
North Harbor Drive	West of NTC	6-Lane Prime	6D	60.0	10.7	15.7	26.4	0.44	B
	NTC - Spanish Landing	6-Lane Prime	6D	60.0	12.6	14.3	26.9	0.45	B
	Spanish Landing - T2 Access	6-Lane Prime	6D	60.0	6.6	14.3	20.9	0.35	A
	T2 Access - Harbor Island	6-Lane Prime	4+3	65.0	20.6	14.5	35.1	0.54	B
	Harbor Island - T1 Access	6-Lane Prime	3+4	65.0	19.2	17.4	36.6	0.56	B
	T1 Access - Winship	6-Lane Prime	5+3	70.0	30.8	17.3	48.1	0.69	C
	Winship - Flyover Merge (1)	6-Lane Prime	4+4	70.0	32.8	17.4	50.2	0.72	C
	Rental Car Rd - Laurel	6-Lane Prime	6D	60.0	60.1	19.8	79.9	1.33	F
	Laurel - Hawthorn	6-Lane Prime	6D	60.0	39.9	14.5	54.4	0.91	D
	Hawthorn - Grape	6-Lane Prime	6D	60.0	25.0	13.4	38.4	0.64	C
Grape Street	Harbor - Pacific	3-Lane Major 1-Way	3U	25.0	12.9	6.4	19.3	0.77	C
	Pacific - Kettner	3-Lane Major 1-Way	3U	25.0	12.1	11.5	23.6	0.95	E
	Kettner - I-5	3-Lane Major 1-Way	3U	25.0	12.0	17.9	29.9	1.20	F
Hawthorn Street	Harbor - Pacific	3-Lane Major 1-Way	3U	25.0	15.0	4.6	19.6	0.78	C
	Pacific - Kettner	3-Lane Major 1-Way	3U	25.0	12.2	5.8	18.0	0.72	C
	Kettner - I-5	3-Lane Major 1-Way	3U	25.0	12.2	15.8	28.0	1.12	F
Kettner Blvd	north of Washington	3-Lane Collector 1-Way	3U	25.0	0.1	7.7	7.8	0.31	A
	Washington - Sassafras	3-Lane Major 1-Way	3U	25.0	7.7	7.1	14.8	0.59	C
	Sassafras - Palm	3-Lane Major 1-Way	3U	25.0	7.8	10.9	18.6	0.74	C
	Palm - Laurel	3-Lane Major 1-Way	3U	25.0	7.4	8.3	15.7	0.63	C
	Laurel - Hawthorn	3-Lane Major 1-Way	3U	25.0	0.0	8.1	8.1	0.32	A
Laurel Street	Hawthorn - Grape	3-Lane Major 1-Way	3U	25.0	0.0	13.0	13.0	0.52	B
	Harbor - Pacific	4-Lane Major	4U	40.0	20.2	6.2	26.4	0.66	C
	Pacific - Kettner	4-Lane Collector	4D	30.0	16.3	7.0	23.3	0.78	D
Pacific Highway	Kettner - I-5	4-Lane Collector	4D	30.0	8.9	8.6	17.5	0.58	C
	Washington - Sassafras	6-Lane Prime	6D	50.0	3.7	18.5	22.2	0.44	B
	Sassafras - Palm	6-Lane Prime	6D	50.0	4.7	14.0	18.7	0.37	A
	Palm - Laurel	6-Lane Prime	6D	50.0	4.7	14.6	19.3	0.39	A
	Laurel - Hawthorn	6-Lane Major	6D	50.0	0.6	14.3	14.9	0.30	A
	Hawthorn - Grape	6-Lane Major	6D	50.0	3.3	15.1	18.4	0.37	A
Palm Street	Pacific - Kettner	2-Lane Collector	2U	8.0	0.0	0.9	0.9	0.11	A
Sassafras Street	Pacific - Kettner	3-Lane Collector	3U	12.0	1.4	8.3	9.7	0.81	D
	Kettner-India	2-Lane Collector	2U	8.0	0.7	8.7	9.4	1.17	F
Washington Street	Pacific - Kettner	4-Lane Collector	4U	30.0	3.5	15.2	18.7	0.62	C
	Kettner - San Diego	5-Lane Collector	5D	30.0	3.2	22.4	25.6	0.85	E
	India Street	Laurel - Palm	2-Lane Collector	2U	8.0	7.3	8.2	15.5	1.93
Rosecrans	Palm - Sassafras	3-Lane Collector	3U	12.0	7.3	13.3	20.6	1.72	F
	Sassafras - Washington	3-Lane Collector	3U	12.0	7.7	13.1	20.8	1.73	F
	Barnett - Sport Arena	6-lane Major	6D	50.0	5.0	42.5	47.5	0.95	E
	Nimitz Quimby - Barnett	4-lane Major 5-lane Major	4U-5U	40.0-45.0	5.0	36.8	41.9	1.05-0.93	F-E
	Nimitz - Quimby	4-lane Major	4U	40.0	5.0	36.8	41.9	1.05	F
Nimitz	Harbor - Rosecrans	4-lane Major	4U	40.0	9.2	8.8	18.0	0.45	B

Source: HNTB, 2007.

Note: Existing conditions analysis revised from 2006 DEIR using updated methodology/model.

(1) Does not include traffic on flyover.

MAP = Million Annual Passengers

ADT = Average Daily Traffic

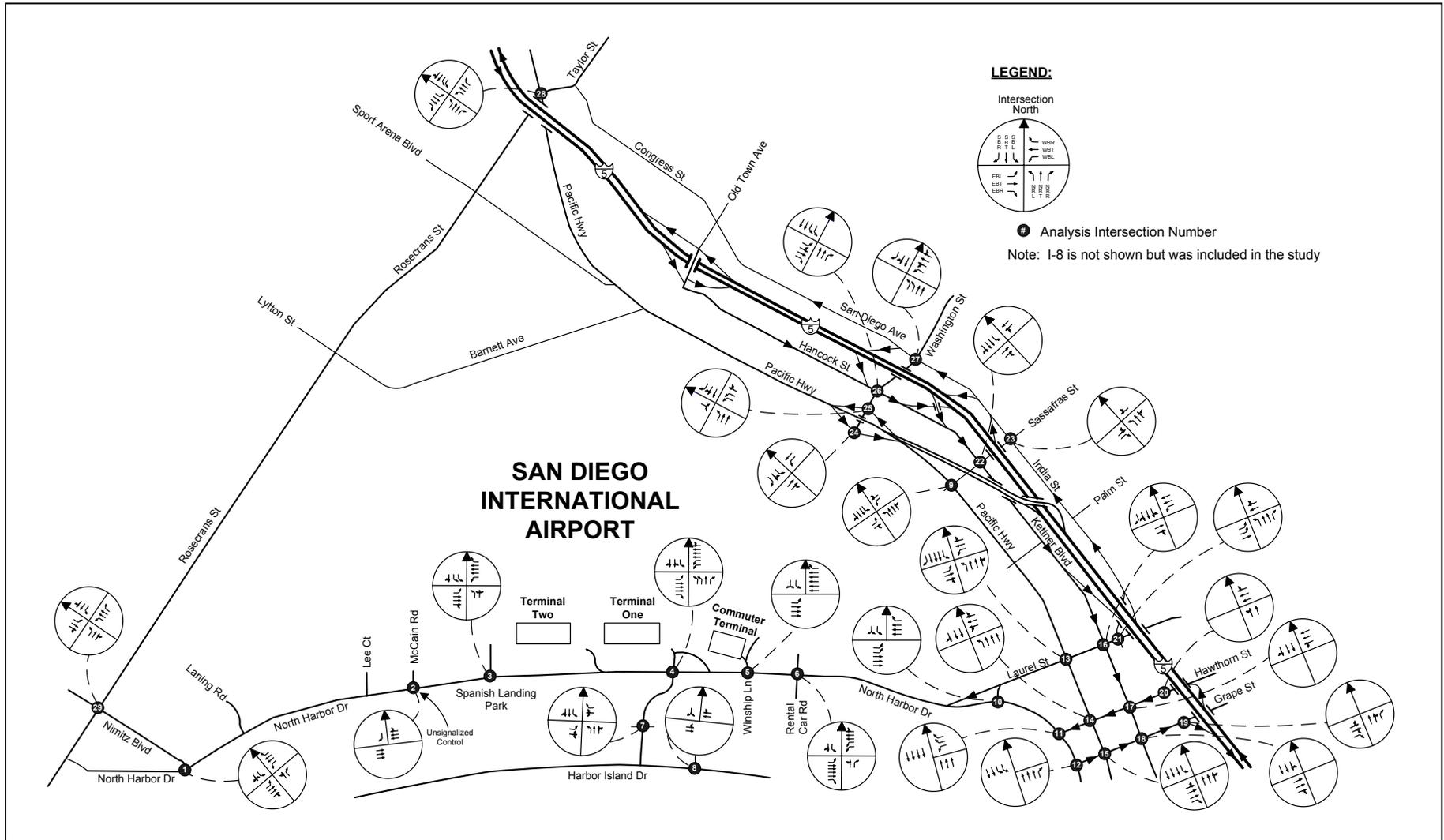
LOS = Level of Service

V/C = volume-to-capacity ratio

D.3.3 Existing Intersections

Figure D.3-2 depicts existing intersection geometry for the analysis intersections included in the study area. Existing intersection peak hour turning volumes used for the analysis are shown on **Tables D-13 and D-14**, and depict total traffic at each intersection. Background and airport traffic are also depicted in this Appendix. The existing intersection operations are summarized in **Table D-15**. All analysis intersections currently operate at LOS D or better.

AIRPORT MASTER PLAN SAN DIEGO INTERNATIONAL AIRPORT



Not to Scale

NOTE: This figure has been updated to reflect response to agency comments following review of the Draft EIR. Each intersection is identified by number and corresponds to Tables D-13 through D-15. The revised graphic depicts the direction of turning movements at each intersection. This information does not represent significant new information and does not affect the significance determinations presented in the Draft EIR.

Source: SANDAG and HNTB Corporation
Prepared by: HNTB Corporation, 2007

Figure D.3-2

Existing 2005 Intersection Lane Configuration

Environmental Impact Report

Table D-13

Existing 2005 Intersection Turning Volumes – AM Peak Hour

Intersection Number		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total
1 North Harbor Drive / Nimitz Blvd	Total	0	0	0	390	0	23	9	368	0	6	522	245	1,563
	Airport	0	0	0	176	0	0	0	30	0	0	23	139	368
	Background	0	0	0	214	0	23	9	338	0	6	499	106	1,195
2 North Harbor Drive / McCain St	Total	0	0	0	0	0	9	0	867	0	0	923	219	2,018
	Airport	0	0	0	0	0	0	0	206	0	0	162	62	430
	Background	0	0	0	0	0	9	0	661	0	0	761	157	1,588
3 North Harbor Drive / Spanish Landing	Total	5	0	18	13	0	104	63	684	4	14	873	0	1,778
	Airport	0	0	0	13	0	104	63	143	0	0	120	0	443
	Background	5	0	18	0	0	0	0	541	4	14	753	0	1,335
4 North Harbor Drive / Harbor Island Drive	Total	39	5	141	19	7	84	80	443	79	230	1,354	0	2,481
	Airport	9	5	38	19	7	84	80	54	22	65	383	0	766
	Background	30	0	103	0	0	0	0	389	57	165	971	0	1,715
5 North Harbor Drive / Winship Lane	Total	0	0	0	107	0	110	58	714	0	0	2,160	203	3,352
	Airport	0	0	0	107	0	110	58	53	0	0	871	203	1,402
	Background	0	0	0	0	0	0	0	661	0	0	1,289	0	1,950
6 North Harbor Drive / Rental Car Road	Total	48	0	39	12	0	2	4	1,322	60	102	2,150	23	3,762
	Airport	48	0	39	12	0	2	4	865	60	102	1,024	23	2,179
	Background	0	0	0	0	0	0	0	457	0	0	1,126	0	1,583
7 Sheraton / Harbor Island Drive	Total	13	239	0	0	325	99	85	6	27	0	0	0	794
	Airport	0	52	0	0	93	0	0	0	0	0	0	0	145
	Background	13	187	0	0	232	99	85	6	27	0	0	0	649
8 Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	81	0	0	58	1	260
	Airport	0	0	0	0	0	38	82	11	0	0	14	1	146
	Background	0	0	0	0	0	0	0	70	0	0	44	0	114
9 Sassafras Street / Pacific Highway	Total	46	405	58	38	451	6	2	34	26	202	85	53	1,406
	Airport	46	56	0	0	73	6	2	34	26	0	85	0	328
	Background	0	349	58	38	378	0	0	0	0	0	202	0	1,078
10 Laurel Street / North Harbor Drive	Total	0	0	0	24	0	4	331	1,033	0	0	1,766	38	3,196
	Airport	0	0	0	0	0	0	312	604	0	0	761	0	1,677
	Background	0	0	0	24	0	4	19	429	0	0	1,005	38	1,519
11 Hawthorn Street / North Harbor Drive	Total	0	265	0	0	974	0	0	0	0	71	0	1,728	3,038
	Airport	0	197	0	0	604	0	0	0	0	4	0	564	1,389
	Background	0	68	0	0	370	0	0	0	0	67	0	1,164	1,649
12 Grape Street / North Harbor Drive	Total	0	207	107	778	457	0	0	0	0	0	0	0	1,549
	Airport	0	197	3	406	202	0	0	0	0	0	0	0	808
	Background	0	10	104	372	255	0	0	0	0	0	0	0	741
13 Laurel Street / Pacific Highway	Total	26	237	64	64	208	288	80	468	2	46	630	57	2,170
	Airport	0	32	0	2	18	78	67	244	0	0	309	3	753
	Background	26	205	64	62	190	210	13	224	2	46	321	54	1,417
14 Hawthorn Street / Pacific Highway	Total	104	152	0	0	114	38	0	0	0	250	1,774	81	2,513
	Airport	104	32	0	0	14	4	0	0	0	0	460	0	614
	Background	0	120	0	0	100	34	0	0	0	250	1,314	81	1,899
15 Grape Street / Pacific Highway	Total	0	426	114	111	610	0	59	752	38	0	0	0	2,110
	Airport	0	133	0	0	13	0	3	368	38	0	0	0	555
	Background	0	293	114	111	597	0	56	384	0	0	0	0	1,555
16 Laurel Street / Kettner Boulevard	Total	0	0	0	225	310	514	0	554	44	39	209	0	1,895
	Airport	0	0	0	0	0	279	0	246	0	0	33	0	558
	Background	0	0	0	225	310	235	0	308	44	39	176	0	1,337
17 Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	169	90	0	0	0	127	2,088	0	2,474
	Airport	0	0	0	0	0	0	0	0	0	0	460	0	460
	Background	0	0	0	0	169	90	0	0	0	127	1,628	0	2,014
18 Grape Street / Kettner Boulevard	Total	0	0	0	80	406	0	0	1,024	64	0	0	0	1,574
	Airport	0	0	0	0	0	0	0	384	4	0	0	0	388
	Background	0	0	0	80	406	0	0	660	60	0	0	0	1,206
19 Grape Street / I-5 Southbound On-Ramp (1)	Total	62	81	69	0	0	0	32	331	877	0	0	0	1,452
	Airport	0	0	0	0	0	0	0	2	362	0	0	0	364
	Background	62	81	69	0	0	0	32	329	515	0	0	0	1,088
20 Hawthorn Street / I-5 Northbound Off-Ramp	Total	39	38	0	0	0	0	0	0	0	0	2,191	69	2,337
	Airport	0	0	0	0	0	0	0	0	0	0	457	0	457
	Background	39	38	0	0	0	0	0	0	0	0	1,734	69	1,880
21 Laurel Street / India Street	Total	37	90	15	0	0	0	445	343	0	0	198	178	1,306
	Airport	0	0	0	0	0	0	221	25	0	0	33	0	279
	Background	37	90	15	0	0	0	224	318	0	0	165	178	1,027
22 Sassafras Street / Kettner Boulevard	Total	0	0	0	113	1,225	339	0	50	42	124	93	0	1,986
	Airport	0	0	0	0	279	42	0	17	17	0	43	0	398
	Background	0	0	0	113	946	297	0	33	25	124	50	0	1,588
23 Sassafras Street / India Street	Total	170	775	11	0	0	0	95	25	52	0	33	21	1,182
	Airport	43	221	0	0	0	0	17	0	0	0	0	0	281
	Background	127	554	11	0	0	0	78	25	52	0	33	21	901
24 Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	161	28	46	0	59	35	135	142	0	606
	Airport	0	0	0	0	0	0	0	23	9	59	21	0	112
	Background	0	0	0	161	28	46	0	36	26	76	121	0	494
25 Washington Street / Pacific Highway NB-Ramps (1)	Total	60	10	108	32	0	18	36	191	0	0	210	249	914
	Airport	6	0	45	0	0	0	0	23	0	0	74	0	148
	Background	54	10	63	32	0	18	36	168	0	0	136	249	766
26 Washington Street / Hancock Street	Total	0	234	94	309	354	0	382	178	138	0	0	0	1,689
	Airport	0	57	11	0	67	0	0	0	7	0	0	0	142
	Background	0	177	83	309	287	0	382	178	131	0	0	0	1,547
27 Washington Street / San Diego Avenue	Total	89	553	0	0	508	510	0	0	0	161	190	7	2,018
	Airport	11	46	0	0	60	0	0	0	0	7	0	0	124
	Background	78	507	0	0	448	510	0	0	0	154	190	7	1,894
28 Rosecrans Street / Pacific Highway	Total	137	103	153	83	122	51	58	170	140	254	123	72	1,466
	Airport	0	2	7	0	2	0	0	1	0	9	1	0	22
	Background	137	101	146	83	120	51	58	169	140	245	122	72	1,444
29 Rosecrans Street / Nimitz Boulevard	Total	48	190	91	229	311	238	178	769	34	103	871	55	3,117
	Airport	0	64	76	0	80	0	0	0	0	96	0	0	316
	Background	48	126	15	229	231	238	178	769	34	7	871	55	2,801

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19	Grape Street / I-5 Southbound On-Ramp	nbt	nbr	nbr2	sbl	sbr2	sbr	ebl	ebt	ebr	wbt	wbr2	wbr
25	Washington Street / Pacific Highway NB-Ramps	nbl+nbl2	nbt	nbr	sbl	sbr2	sbr	ebl	ebt	ebr	wbt	wbr2	wbr

Table D-14
Existing 2005 Intersection Turning Volumes – PM Peak Hour

Intersection Number		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total
1 North Harbor Drive / Nimitz Blvd	Total	0	0	0	424	0	57	31	478	0	13	516	559	2,078
	Airport	0	0	0	147	0	0	0	24	0	0	29	163	363
	Background	0	0	0	277	0	57	31	454	0	13	487	396	1,715
2 North Harbor Drive / McCain St	Total	0	0	0	0	0	79	0	1,118	0	0	844	201	2,242
	Airport	0	0	0	0	0	0	0	171	0	0	191	50	412
	Background	0	0	0	0	0	79	0	947	0	0	653	151	1,830
3 North Harbor Drive / Spanish Landing	Total	7	0	25	12	0	74	42	999	17	5	607	0	1,788
	Airport	0	0	0	12	0	74	42	129	0	0	167	0	424
	Background	7	0	25	0	0	0	0	870	17	5	440	0	1,364
4 North Harbor Drive / Harbor Island Drive	Total	131	6	215	21	8	101	83	815	101	298	577	0	2,356
	Airport	10	6	51	21	8	101	83	39	19	56	293	0	687
	Background	121	0	164	0	0	0	0	776	82	242	284	0	1,669
5 North Harbor Drive / Winship Lane	Total	0	0	0	157	0	131	50	1,160	0	0	1,149	161	2,808
	Airport	0	0	0	157	0	131	50	61	0	0	778	161	1,338
	Background	0	0	0	0	0	0	0	1,099	0	0	371	0	1,470
6 North Harbor Drive / Rental Car Road	Total	66	0	75	70	0	13	6	1,462	67	76	1,351	32	3,218
	Airport	66	0	75	70	0	13	6	917	67	76	860	32	2,182
	Background	0	0	0	0	0	0	0	545	0	0	491	0	1,036
7 Sheraton / Harbor Island Drive	Total	23	382	0	0	386	70	77	2	25	0	0	0	965
	Airport	0	66	0	0	82	0	0	0	0	0	0	0	148
	Background	23	316	0	0	304	70	77	2	25	0	0	0	817
8 Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	55	68	103	0	0	129	1	356
	Airport	0	0	0	0	0	55	68	14	0	0	11	1	149
	Background	0	0	0	0	0	0	0	89	0	0	118	0	207
9 Sassafras Street / Pacific Highway	Total	18	662	91	96	713	1	8	108	55	165	15	39	1,971
	Airport	18	69	15	0	62	1	8	108	55	0	15	0	336
	Background	0	593	91	96	651	0	0	0	0	165	0	39	1,635
10 Laurel Street / North Harbor Drive	Total	0	0	0	70	0	10	626	1,595	0	0	1,122	100	3,523
	Airport	0	0	0	0	0	0	358	704	0	0	638	0	1,700
	Background	0	0	0	70	0	10	268	891	0	0	484	100	1,823
11 Hawthorn Street / North Harbor Drive	Total	0	364	0	0	1,747	0	0	0	0	124	0	758	2,993
	Airport	0	166	0	0	704	0	0	0	0	4	0	472	1,346
	Background	0	198	0	0	1,043	0	0	0	0	120	0	286	1,647
12 Grape Street / North Harbor Drive	Total	0	429	264	1,018	899	0	0	0	0	0	0	0	2,810
	Airport	0	166	5	472	235	0	0	0	0	0	0	0	878
	Background	0	263	259	546	664	0	0	0	0	0	0	0	1,932
13 Laurel Street / Pacific Highway	Total	28	430	108	110	387	232	89	664	2	50	567	71	2,738
	Airport	0	13	0	4	42	71	73	285	0	0	259	1	748
	Background	28	417	108	106	345	161	16	379	2	50	308	70	1,990
14 Hawthorn Street / Pacific Highway	Total	182	377	0	0	355	40	0	0	0	142	699	79	1,874
	Airport	87	13	0	0	38	4	0	0	0	0	385	0	527
	Background	95	364	0	0	317	36	0	0	0	142	314	79	1,347
15 Grape Street / Pacific Highway	Total	0	483	318	182	358	0	52	1,411	41	0	0	0	2,845
	Airport	0	95	0	0	37	0	5	431	41	0	0	0	609
	Background	0	388	318	182	321	0	47	980	0	0	0	0	2,236
16 Laurel Street / Kettner Boulevard	Total	0	0	0	272	541	416	0	835	77	54	224	0	2,419
	Airport	0	0	0	0	0	234	0	289	0	0	26	0	549
	Background	0	0	0	272	541	182	0	546	77	54	198	0	1,870
17 Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	402	79	0	0	0	156	887	0	1,524
	Airport	0	0	0	0	0	0	0	0	0	0	386	0	386
	Background	0	0	0	0	402	79	0	0	0	156	501	0	1,138
18 Grape Street / Kettner Boulevard	Total	0	0	0	155	428	0	0	2,151	67	0	0	0	2,801
	Airport	0	0	0	0	0	0	0	425	6	0	0	0	431
	Background	0	0	0	155	428	0	0	1,726	61	0	0	0	2,370
19 Grape Street / I-5 Southbound On-Ramp (1)	Total	93	177	173	0	0	0	20	410	1,686	0	0	0	2,558
	Airport	0	0	0	0	0	0	0	3	423	0	0	0	426
	Background	93	177	173	0	0	0	20	407	1,263	0	0	0	2,132
20 Hawthorn Street / I-5 Northbound Off-Ramp	Total	32	50	0	0	0	0	0	0	0	0	1,346	53	1,481
	Airport	0	0	0	0	0	0	0	0	0	0	0	0	383
	Background	32	50	0	0	0	0	0	0	0	0	1,346	53	1,098
21 Laurel Street / India Street	Total	37	241	71	0	0	0	639	499	0	0	247	244	1,978
	Airport	0	0	0	0	0	0	258	31	0	0	26	0	315
	Background	37	241	71	0	0	0	381	468	0	0	221	244	1,663
22 Sassafras Street / Kettner Boulevard	Total	0	0	0	186	1,722	232	0	211	97	87	62	0	2,597
	Airport	0	0	0	0	234	7	0	54	54	0	7	0	356
	Background	0	0	0	186	1,488	225	0	157	43	87	55	0	2,241
23 Sassafras Street / India Street	Total	132	1,313	31	0	0	0	271	62	112	0	14	17	1,952
	Airport	0	258	0	0	0	0	54	0	0	0	0	0	319
	Background	125	1,055	31	0	0	0	217	62	112	0	14	17	1,633
24 Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	426	42	8	0	221	49	183	70	0	999
	Airport	0	0	0	0	0	0	0	21	8	46	37	0	112
	Background	0	0	0	426	42	8	0	200	41	137	33	0	887
25 Washington Street / Pacific Highway NB-Ramps (1)	Total	32	23	185	111	0	7	86	535	0	0	221	316	1,519
	Airport	10	0	56	0	0	0	0	21	0	0	72	0	159
	Background	22	23	129	111	0	7	86	514	0	0	149	316	1,360
26 Washington Street / Hancock Street	Total	0	595	142	330	355	0	599	358	162	0	0	0	2,541
	Airport	0	67	10	0	60	0	0	0	12	0	0	0	149
	Background	0	528	132	330	295	0	599	358	150	0	0	0	2,392
27 Washington Street / San Diego Avenue	Total	178	1,102	0	0	537	465	0	0	0	170	257	16	2,725
	Airport	10	57	0	0	47	0	0	0	0	13	0	0	127
	Background	168	1,045	0	0	490	465	0	0	0	157	257	16	2,598
28 Rosecrans Street / Pacific Highway	Total	242	197	439	101	117	56	109	449	167	207	255	108	2,447
	Airport	0	2	9	0	2	0	0	1	0	7	1	0	22
	Background	242	195	430	101	115	56	109	448	167	200	254	108	2,425
29 Rosecrans Street / Nimitz Boulevard	Total	55	421	142	180	266	180	399	977	39	200	894	73	3,826
	Airport	0	74	88	0	67	0	0	0	0	80	0	0	309
	Background	55	347	54	180	199	180	399	977	39	120	894	73	3,517

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19	Grape Street / I-5 Southbound On-Ramp	nbt	nbr	nbr2	sbl	sbr2	sbr	eb1	eb1	eb1	wbt	wbr2	wbr
25	Washington Street / Pacific Highway NB-Ramps	nbl+nbl2	nbt	nbr	sbl	sbr2	sbr	eb1	eb1	eb1	wbt	wbr2	wbr

Table D-15
Existing 2005 Intersection Operations

Intersection Number	Intersection	Peak Hour	Year 2005	
			Delay (Sec.)	LOS
1	North Harbor Drive/ Nimitz Boulevard	AM	19.3	B
		PM	20.8	C
2	North Harbor Drive/ McCain Road	AM	11.6	B
		PM	12.2	B
3	North Harbor Drive/ Spanish Landing	AM	17.3	B
		PM	12.0	B
4	North Harbor Drive/ Harbor Island Drive	AM	19.9	B
		PM	26.4	C
5	North Harbor Drive/ Winship Lane	AM	10.4	B
		PM	14.9	B
6	North Harbor Drive/ Rental Car Road	AM	5.6	A
		PM	9.3	A
7	Sheraton Harbor Island Drive	AM	10.1	B
		PM	8.8	A
8	Employee Lot Harbor Island Drive	AM	9.8	A
		PM	10.1	B
9	Sassafras Street/ Pacific Highway	AM	27.1	C
		PM	26.4	C
10	Laurel Street/ North Harbor Drive	AM	10.6	B
		PM	14.8	B
11	Hawthorn Street/ North Harbor Drive	AM	24.5	C
		PM	19.0	B
12	Grape Street/ North Harbor Drive	AM	8.1	A
		PM	10.1	B
13	Laurel Street/ Pacific Highway	AM	33.0	C
		PM	34.0	C
14	Hawthorn Street/ Pacific Highway	AM	9.7	A
		PM	19.5	B
15	Grape Street/ Pacific Highway	AM	20.0	B
		PM	23.9	C
16	Laurel Street/ Kettner Boulevard	AM	20.3	C
		PM	22.6	C
17	Hawthorn Street/ Kettner Boulevard	AM	7.1	A
		PM	15.1	B
18	Grape Street/ Kettner Boulevard	AM	18.8	B
		PM	16.9	B
19	Grape Street/ I-5 Southbound On-Ramp	AM	13.7	B
		PM	31.3	C
20	Hawthorn Street/ I-5 Northbound Off-Ramp	AM	52.3	D
		PM	20.9	C
21	Laurel Street/ India Street	AM	17.2	B
		PM	20.5	C
22	Sassafras Street/ Kettner Boulevard	AM	10.8	B
		PM	14.4	B
23	Sassafras Street/ India Street	AM	14.2	B
		PM	21.9	C
24	Washington Street/ Pacific Highway SB-Ramps	AM	20.1	C
		PM	24.1	C
25	Washington Street/ Pacific Highway NB-Ramps	AM	34.7	C
		PM	37.0	D
26	Washington Street/ Hancock Street	AM	22.9	C
		PM	26.0	C
27	Washington Street/ San Diego Avenue	AM	12.3	B
		PM	13.3	B
28	Rosecrans Street/ Pacific Highway	AM	30.3	C
		PM	30.4	C
29	Rosecrans Street/ Nimitz Boulevard	AM	28.2	C
		PM	35.6	D

Source: HNTB, 2007

Note: Existing conditions analysis revised from 2006 DEIR using updated methodology/model.

LOS = level of service

D.3.4 Existing Freeway Operations

Table D-16 summarizes the existing freeway mainline operations. All freeway segments in the study area are designated CMP Freeways. As shown, all I-5 freeway segments analyzed currently exceed Caltrans target of LOS C during one or both peak hours, except for the southbound I-5 segment between SR-163 and SR-94.

Table D-16
Existing 2005 Freeway Operations

SB I-5 Freeway		AM			PM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS	Volume (vph)	Density (pc/mi/ln)	LOS
North of I-8	I-8	6,800	34.0	D	8,300	41.3	E
I-8	Old Town Avenue	6,600	32.9	D	6,500	32.6	D
Old Town Avenue	Washington Street	5,800	29.0	D	5,900	29.2	D
Washington Street	Pacific Highway Viaducts	6,200	30.8	D	6,200	30.9	D
Pacific Highway Viaducts	India Street	7,100	35.5	E	7,800	38.9	E
India Street	Hawthorn Street	7,200	35.8	E	7,800	38.7	E
Hawthorn Street	First Avenue	6,100	30.4	D	7,400	37.1	E
First Avenue	SR 163	6,600	32.8	D	9,000	44.7	E
SR 163	SR 94	3,600	17.8	B	5,100	25.5	C

NB I-5 Freeway		AM			PM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS	Volume (vph)	Density (pc/mi/ln)	LOS
SR 94	SR 163	10,900	54.3	F	7,500	37.4	E
SR 163	First Avenue	8,300	41.4	E	7,900	39.2	E
First Avenue	Hawthorn Street	7,000	34.9	D	6,400	31.9	D
Hawthorn Street	India Street	7,100	35.4	E	7,600	37.9	E
India Street	Pacific Highway Viaducts	7,100	35.3	E	7,500	37.4	E
Pacific Highway Viaducts	Washington Street	5,000	25.1	C	6,000	29.8	D
Washington Street	Old Town Avenue	5,300	26.5	D	6,500	32.3	D
Old Town Avenue	I-8	5,600	27.9	D	6,700	33.6	D
I-8	North of I-8	7,600	38.1	E	7,200	36.0	E

I-8 Freeway		AM			PM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS	Volume (vph)	Density (pc/mi/ln)	LOS
I-5	East	5,900	29.4	D	8,100	40.7	E
East	I-5	7,300	36.4	E	7,100	35.2	E

Source:HNTB, 2007

Numbers may not add due to rounding.

Note: Existing conditions analysis revised from 2006 DEIR using updated methodology/model.

vph = vehicles per hour

pc/mi/ln = passenger cars per mile per lane

LOS = level of service

D.3.5 Existing Freeway Ramp Operations

Table D-17 shows the existing freeway ramp operations. Ramp meter rates are set to process vehicles at a rate that allows controlled vehicle entry onto the freeway without slowing mainline freeway traffic by large platoons of vehicles entering at the same time. As shown, all freeway on-ramps located within the study area currently accommodate a lower traffic volume than their set meter rates.

Table D-17

Existing 2005 Freeway Ramp Operations

Location	Peak Hour	Demand (veh/hr)	Maximum Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (minutes)	Queue (feet)
I-5 NB from San Diego	AM	691	1,992	0	0	0
	PM	599	1,992	0	0	0
I-5 NB from India	AM	642	1,992	0	0	0
	PM	957	1,992	0	0	0
I-5 SB from Kettner	AM	55	996	0	0	0
	PM	74	996	0	0	0
I-5 SB from Washington/Hancock	AM	456	1,140	0	0	0
	PM	301	1,140	0	0	0

Source: HNTB, 2007

veh/hr = vehicles per hour

D.3.6 Existing Railroad Crossings

Six at grade railroad crossings are located within the study area. Both trolley and heavy rail train tracks (used by Coaster, Amtrak, and freight trains) cross Washington, Sassafras, and Palm Streets at grade between Pacific Highway and Kettner Boulevard. The Trolley tracks are grade separated at Laurel, Hawthorn and Grape Streets; however, the heavy rail tracks used by Coaster, Amtrak, and freight trains are at grade.

Currently the Coaster operates 11 trains daily in each direction and Amtrak operates 10 trains daily in each direction for a total of 22 and 20 daily trips, respectively. Trolley also operates 160 trips per day along this route and two freight train operations per day were assumed during off-peak, evening hours.

Table D-18 summarizes the railroad crossing delay analysis under existing conditions. As shown, delays at all railroad crossings were estimated to be under the VHD threshold for each street segment in all analysis years.

Table D-18

Existing 2005 Railroad Crossing Operations – Existing Conditions

Crossing	Year 2005				
	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Threshold
Washington Street	150	18,700	4.28	52	No
Sassafras Street	75	9,700	3.09	13	No
Palm Street	75	900	3.09	0	No
Laurel Street	150	23,300	0.74	1	No
Hawthorn Street	150	18,000	0.74	9	No
Grape Street	150	23,600	0.74	13	No

Source: HNTB, 2007

Numbers may not add due to rounding.

Note: Existing conditions analysis revised from 2006 DEIR using updated methodology/model.

VHD = vehicle-hours of delay

ADT = average daily traffic

D.3.7 Existing Transit

Public transit bus service at SDIA is provided by the Airport Flyer Route No. 992, connecting the airport terminals to Downtown San Diego. There are five transit bus stops on terminal roadways and buses operate on 10 minute headways connecting to other MTS bus stops, Trolley, Coaster, and Amtrak Stations. This service is operated by the Metropolitan Transit System (MTS), which is the regional transit provider for San Diego County. In addition, MTS bus Route 923 runs along North Harbor Drive south of the Airport.

D.3.8 Existing Terminal Curbside

SDIA provides approximately 6,630 feet of total curb frontage at the three terminals.

D.3.9 Existing Parking

The Airport currently operates 4,085 on-airport, terminal area public parking spaces including 1,225 spaces at Terminal 1, 1,355 spaces at Terminal 2, 2,225 spaces at the Commuter Terminal and 1,300 spaces west of Terminal 2 known as SAN Park NTC. Of these 4,085 parking spaces 2,755 are located immediately in front of the terminal. As documented in the AMP facility requirements the current demand for 6,000 terminal area spaces exceeds this supply.

SDCRAA also operates several remote parking lots served by shuttles: SAN Park Harbor Drive located east of the commuter terminal along Harbor Drive, and SAN Park Pacific Highway located in the North Area along Pacific Highway. In addition, SAN Park NTC described above provides a shuttle to the terminals. Private operators also operate a number of remote off-airport facilities. The total remote parking including both airport-operated and privately-operated facilities was estimated at 8,630 spaces in November 2004.

D.3.10 Existing On-Airport Traffic Circulation

Access points to the terminal roadways are all located along North Harbor Drive. An access ramp east of Harbor Island Drive provides primary access to Terminal 1 and adjacent public parking Lot 1. An access ramp, west of Harbor Island Drive provides primary access to Terminal 2 and the adjacent public parking Lot 2. Both access ramps are uncontrolled. Access to the Commuter Terminal and adjacent public parking Lot 7 and employee parking Lot 8 is provided via Winship Lane with traffic signals located at North Harbor Drive. The loop road systems for Terminals 1 and 2 are interconnected to form a major loop, allowing recirculation between the two terminals.

Table D-19 depicts the existing peak hour traffic volumes and LOS on terminal area roadways. As shown, all terminal roadways currently operate at LOS B or better during peak hours. Volumes and LOS shown represent throughput capacity of the on-Airport roadways but do not represent specific curbside operations. Please refer to [Figure D.3-3](#) for Link ID Key Map.

Table D-19

2005 On-Airport Roadway Operations – Existing Conditions

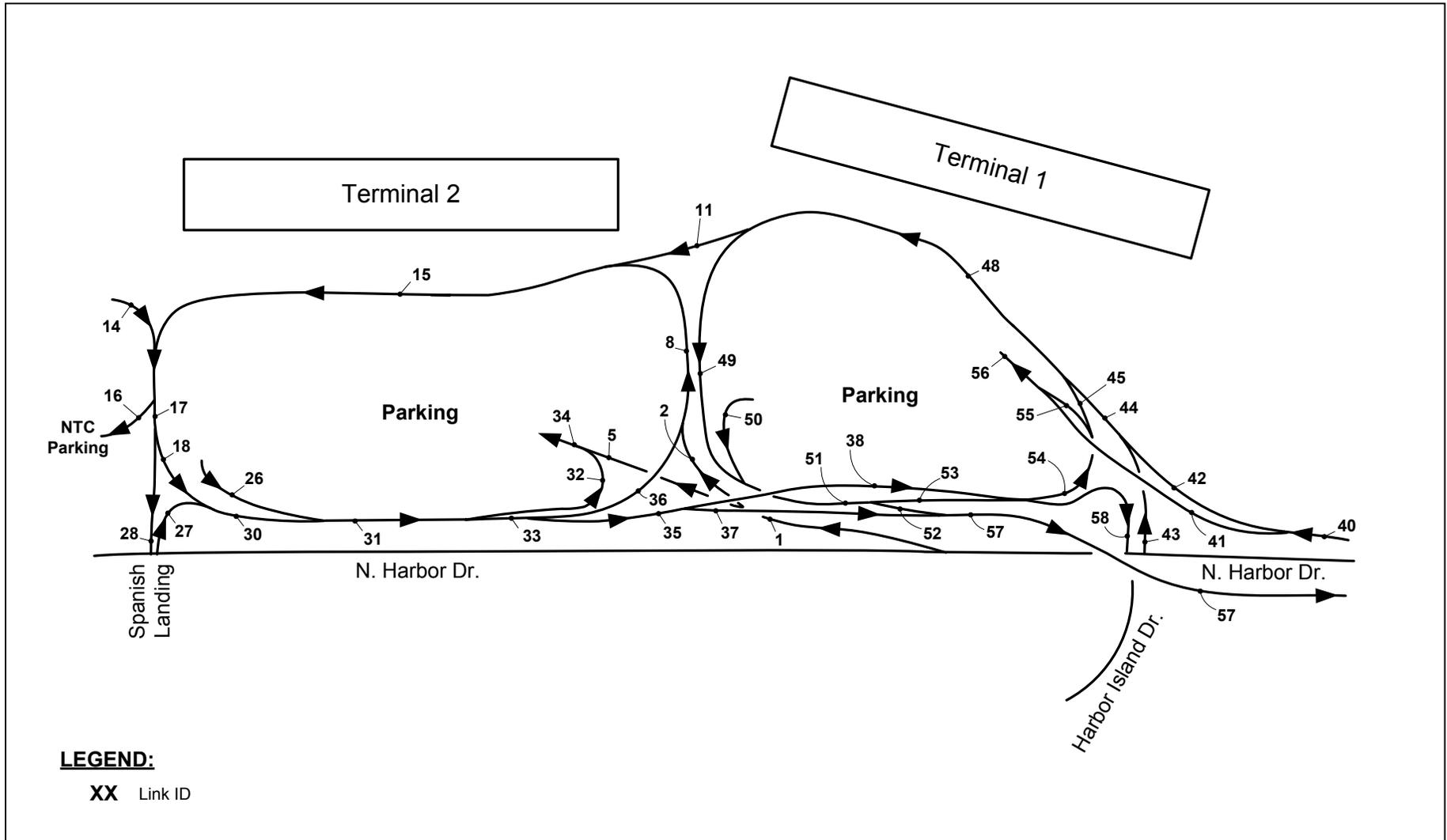
Link ID	Lanes	AM		PM	
		Volume (vph)	LOS	Volume (vph)	LOS
1	2	355	A	236	A
2	2	250	A	145	A
3	Link Not Used				
4	Link Not Used				
5	2	105	A	91	A
6	Link Not Used				
7	Link Not Used				
8	3	322	A	196	A
9	Link Not Used				
10	Link Not Used				
11	1	119	A	125	A
12	Link Not Used				
13	Link Not Used				
14	1	63	A	56	A
15	4	441	A	321	A
16	1	0	A	0	A
17	4	503	A	374	A
18	2	386	A	288	A
19	Link Not Used				
20	Link Not Used				
21	Link Not Used				
22	Link Not Used				
23	Link Not Used				
24	Link Not Used				
25	Link Not Used				
26	1	70	A	112	A
27	2	63	A	42	A
28	3	117	A	86	A
29	Link Not Used				
30	2	449	A	330	A
31	3	519	A	442	A
32	1	19	A	16	A
33	3	500	A	426	A
34	4	124	A	107	A
35	2	427	A	375	A
36	1	73	A	51	A
37	1	363	B	306	B
38	1	64	A	68	A
39	Link Not Used				
40	2	533	B	561	B
41	1	92	A	96	A
42	2	441	A	465	A
43	1	86	A	88	A
44	3	527	A	553	A
45	1	32	A	29	A
46	Link Not Used				
47	Link Not Used				
48	4	559	A	579	A
49	2	440	A	454	A
50	1	62	A	119	A
51	3	502	A	573	A
52	2	406	A	466	A
53	1	96	A	108	A
54	1	50	A	47	A
55	1	18	A	18	A
56	4	110	A	114	A
57	2	770	B	772	B
58	2	110	A	129	A

Source: HNTB Corporation, 2007

vph = vehicles per hour

LOS = level of service

NOTE: Please refer to [Figure D.3-3](#) for link ID key map.



Appendix D.3.3

**2005 On-Airport Roadway Link ID Key Map
Existing Conditions**

Environmental Impact Report

D.4 No Project Alternative

The No Project Alternative is discussed first among the Alternatives because it forms the analytical base against which other Alternatives are compared to when determining project impacts.

D.4.1 Assumptions

- The No Project Alternative assumes that no Airport Land Use Plan would be developed and no projects beyond those currently included in the Airport's Capital Improvement Program (CIP) Project list would be constructed. Forecast passenger activity would be accommodated in the existing terminal and landside facilities.
- Transportation projects included in the CIP include intersection improvements at North Harbor Drive and Winship Lane. This project will improve access in and out of the Commuter Terminal at the intersection of Winship Lane and North Harbor Drive by creating an additional right hand lane to turn onto North Harbor Drive.
- An additional project under the Liberty Station Development is assumed by 2010. This project consists of signalizing the North Harbor Drive and McCain Road intersection, allowing inbound and outbound left turn movements. Currently, the intersection is unsignalized with right-in / right-out movements only.
- No additional parking would be constructed in the terminal area. As a result parking demand would continue to exceed supply within the terminal area maintaining existing constrained parking conditions. It is assumed that a portion of passengers wishing to park in the terminal area would still enter off of North Harbor Drive searching for a parking space before utilizing other remote parking facilities. Other passengers would change travel modes, and convert to curbside trips either by taxi, private vehicle or in parking shuttles from remote parking facilities.

D.4.2 Trip Generation and Terminal Distribution

Table D-20 summarizes the daily and peak hour trip generation associated with future airport passenger activity under the No Project Alternative. As shown, total airport trip generation would increase from approximately ~~94,450~~ 94,500 ADT in 2010 to ~~428,740~~ 128,750 ADT in 2030. This represents a reduction in trip generation of approximately 6,300 ADT or 4.7% from the Airport Implementation Plan in 2030. Trips from most airport modes were estimated to increase relative to origin and destination passenger growth. However, schedule driven modes such as public buses, and airport operated inter-terminal, employee and public parking shuttles were estimated to grow at a slower rate as many of these shuttles currently operate with excess capacity to maintain a set schedule. This results in a slight decrease in the trip generation rate from ~~4.86~~-1.85 to 1.82 in 2010 and 2030, respectively. This has also been demonstrated by a historical downward trend witnessed at SDIA.

The distribution of passengers (and traffic) among terminals would differ among the alternatives, as shown in **Table D-21**. Under existing conditions, the distribution of SDIA passengers among the terminals is approximately 55% at Terminal 1, 40% at Terminal 2 (East and West), and 5% at the Commuter Terminal. Under the No Project Alternative, the passenger split would be approximately 50%, 45%, and 5% at Terminal 1, Terminal 2 (East and West), and the Commuter Terminal, respectively, in 2015.

The change in passenger distribution between terminals would result in redistribution of traffic at the terminal access driveways along North Harbor Drive. However, as shown in **Table D-21** the change in passenger distribution would not affect the traffic pattern outside of the airport which is assumed to be the same for all alternatives.

Table D-20
2010-2030 Airport Trip Generation – No Project Alternative

Activity	Year					
	2005	2010	2015	2020	2025	2030
Airport Passenger Activity Level						
Million Annual Passengers (MAP)	17.4	19.5	22.8	25.1	26.2	26.9
Million Annual O&D Passengers	16.7	18.6	21.8	24.0	25.0	25.7
Daily O&D Passengers	45,830	51,076	59,768	66,220	69,373	70,793
Airport Trip Generation (1)						
Daily	85,100	94,500	109,350	120,400	126,000	128,750
In	42,600	47,300	54,750	60,250	63,050	64,400
Out	42,500	47,200	54,600	60,150	62,950	64,350
AM Peak Hour	3,180	3,530	4,090	4,500	4,750	4,850
In	1,760	1,955	2,260	2,500	2,600	2,665
Out	1,420	1,575	1,830	2,050	2,150	2,185
PM Peak Hour	3,245	3,610	4,185	4,600	4,850	4,965
In	1,500	1,670	1,940	2,150	2,250	2,310
Out	1,745	1,940	2,245	2,500	2,600	2,655
Trip Rate						
Daily	1.86	1.85	1.83	1.82	1.82	1.82

O&D = origin and destination

Notes:

(1) Includes terminals and associated facilities, SAN Park lots, rental car facilities on Rental Car Road, Employee Lot 6 on Harbor Island Drive, and north area. Does not include private vehicle trips to private off-airport parking and rental car facilities, but includes shuttle trips between these facilities and the terminals.

Source: HNTB, 2007.

Table D-21
2010-2030 Terminal Passenger Distribution – No Project Alternative

Scenario/Year	Terminal 1	Terminal 1 East *	Terminal 2 East	Terminal 2 West	Commuter Terminal	Total
Existing						
2005	54%	0%	15%	26%	5%	100%
No Project Alternative						
2010	52%	0%	25%	19%	5%	100%
2015	51%	0%	27%	18%	4%	100%
2020	54%	0%	23%	19%	4%	100%
2025	53%	0%	23%	21%	3%	100%
2030	53%	0%	24%	21%	3%	100%

Source: HNTB, 2007.

* New unit terminal under Airport Implementation Project Alternative.

D.4.3 Traffic Impacts

Impacts to traffic operations on streets, intersections, freeways, and freeway ramps relating to the No Project Alternative are discussed in detail in this section.

D.4.3.1 Street Segments

Table D-22 summarizes the street segment operations for 2010-2030 under the No Project Alternative. As shown, the following roadway segments would operate at unacceptable LOS E or F under the No Project Alternative. The share of airport traffic to total traffic on each street segment is shown.

Table D-22
 2010-2030 Street Segment Operations – No Project Alternative (2010-2020)

Roadway	Segment	Classification	Lanes	LOS E ADT Capacity 1000s	Year 2010					Year 2015					Year 2020				
					SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS	SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS	SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS
North Harbor Drive	West of NTC	6-Lane Prime	6D	60.0	11.2	17.7	28.9	0.48	B	12.9	20.4	33.3	0.56	B	14.2	25.2	39.3	0.66	C
	NTC - Spanish Landing	6-Lane Prime	6D	60.0	15.7	15.1	30.8	0.51	B	17.8	16.3	34.1	0.57	B	19.3	20.7	40.0	0.67	C
	Spanish Landing - T2 Access	6-Lane Prime	6D	60.0	10.7	14.9	25.6	0.43	B	11.8	16.2	28.0	0.47	B	12.8	18.3	31.1	0.52	B
	T2 Access - Harbor Island	6-Lane Prime	4+3	65.0	21.6	15.0	36.6	0.56	B	24.7	16.3	41.0	0.63	C	26.3	18.2	44.5	0.68	C
	Harbor Island - T1 Access	6-Lane Prime	3+4	65.0	19.6	18.3	37.9	0.58	C	22.0	18.4	40.4	0.62	C	22.9	19.1	41.9	0.64	C
	T1 Access - Winship	6-Lane Prime	5+3	70.0	35.0	18.3	53.3	0.76	C	39.6	18.3	57.9	0.83	C	43.0	19.1	62.1	0.89	D
	Winship - Flyover Merge (1)	6-Lane Prime	4+4	70.0	37.0	18.4	55.4	0.79	C	42.6	18.4	61.0	0.87	D	46.3	19.1	65.5	0.94	E
	Rental Car Rd - Laurel	6-Lane Prime	6D	60.0	63.6	20.8	84.4	1.41	F	73.6	20.7	94.3	1.57	F	80.6	22.1	102.8	1.71	F
	Laurel - Hawthorn	6-Lane Prime	6D	60.0	41.1	15.2	56.3	0.94	E	47.5	15.4	62.9	1.05	F	51.9	16.7	68.6	1.14	F
	Hawthorn - Grape	6-Lane Prime	6D	60.0	25.7	14.0	39.7	0.66	C	29.7	13.4	43.1	0.72	C	32.6	14.0	46.5	0.78	C
Grape Street	Harbor - Pacific	3-Lane Major 1-Way	3U	25.0	13.7	6.7	20.4	0.82	D	15.9	7.1	23.0	0.92	E	17.6	8.5	26.1	1.04	F
	Pacific - Kettner	3-Lane Major 1-Way	3U	25.0	12.5	16.4	28.9	1.16	F	14.5	17.1	31.6	1.26	F	15.8	18.5	34.4	1.37	F
	Kettner - I-5	3-Lane Major 1-Way	3U	25.0	12.4	23.3	35.7	1.43	F	14.4	23.7	38.1	1.52	F	15.8	21.1	36.9	1.48	F
Hawthorn Street	Harbor - Pacific	3-Lane Major 1-Way	3U	25.0	15.6	5.1	20.7	0.83	D	18.0	5.4	23.4	0.94	E	19.8	6.7	26.5	1.06	F
	Pacific - Kettner	3-Lane Major 1-Way	3U	25.0	12.6	6.0	18.6	0.75	C	14.7	6.2	20.9	0.83	D	16.1	7.4	23.5	0.94	E
Kettner Blvd	Kettner - I-5	3-Lane Major 1-Way	3U	25.0	12.6	17.2	29.8	1.19	F	14.7	19.2	33.9	1.35	F	16.1	20.4	36.5	1.46	F
	north of Washington	3-Lane Collector 1-Way	3U	25.0	0.2	7.2	7.4	0.29	A	0.2	7.2	7.4	0.30	A	0.3	9.6	9.9	0.39	A
	Washington - Sassafras	3-Lane Major 1-Way	3U	25.0	8.9	13.0	21.9	0.88	D	10.4	13.1	23.5	0.94	E	11.5	16.0	27.5	1.10	F
	Sassafras - Palm	3-Lane Major 1-Way	3U	25.0	9.0	11.0	20.0	0.80	D	10.5	11.9	22.4	0.90	D	11.6	18.7	30.3	1.21	F
	Palm - Laurel	3-Lane Major 1-Way	3U	25.0	7.7	8.6	16.3	0.65	C	8.9	9.5	18.4	0.74	C	9.9	16.0	25.8	1.03	F
Laurel Street	Laurel - Hawthorn	3-Lane Major 1-Way	3U	25.0	0.0	7.2	7.2	0.29	A	0.1	7.9	8.0	0.32	A	0.2	13.3	13.5	0.54	B
	Hawthorn - Grape	3-Lane Major 1-Way	3U	25.0	0.0	14.8	14.8	0.59	C	0.1	16.8	16.9	0.68	C	0.2	21.5	21.7	0.87	D
	Harbor - Pacific	4-Lane Major	4U	40.0	22.5	6.3	28.8	0.72	C	26.1	6.7	32.8	0.82	D	28.8	6.0	34.7	0.87	D
	Pacific - Kettner	4-Lane Collector	4D	30.0	18.2	7.2	25.4	0.85	E	21.4	7.8	29.2	0.97	E	23.8	6.9	30.7	1.02	F
	Kettner - I-5	4-Lane Collector	4D	30.0	10.6	8.5	19.1	0.64	C	12.8	9.6	22.4	0.75	D	14.6	8.0	22.6	0.75	D
Pacific Highway	Washington - Sassafras	6-Lane Prime	6D	50.0	4.1	22.8	26.9	0.54	B	4.8	27.3	32.1	0.64	C	5.4	24.3	29.7	0.59	C
	Sassafras - Palm	6-Lane Prime	6D	50.0	6.6	17.5	24.1	0.48	B	7.7	21.0	28.7	0.57	C	8.5	20.9	29.4	0.59	C
	Palm - Laurel	6-Lane Prime	6D	50.0	6.6	18.1	24.7	0.49	B	7.7	21.7	29.4	0.59	C	8.5	21.0	29.6	0.59	C
	Laurel - Hawthorn	6-Lane Major	6D	50.0	2.0	19.1	21.1	0.42	B	2.5	22.6	25.1	0.50	B	3.1	25.5	28.6	0.57	C
	Hawthorn - Grape	6-Lane Major	6D	50.0	4.7	19.6	24.3	0.49	B	5.6	23.2	28.8	0.58	C	6.3	26.0	32.3	0.65	C
Palm Street	Pacific - Kettner	2-Lane Collector	2U	8.0	0.0	0.9	0.9	0.11	A	0.0	0.9	0.9	0.11	A	0.0	0.3	0.3	0.04	A
	Sassafras Street	3-Lane Collector	3U	12.0	3.1	8.3	11.4	0.95	E	4.0	9.7	13.7	1.14	F	4.7	9.3	14.0	1.17	F
Washington Street	Kettner-India	2-Lane Collector	2U	8.0	1.6	8.5	10.0	1.25	F	2.0	9.7	11.7	1.46	F	2.3	9.4	11.7	1.46	F
	Pacific - Kettner	4-Lane Collector	4U	30.0	3.9	16.5	20.4	0.68	D	4.7	18.6	23.3	0.78	D	5.4	19.1	24.5	0.82	D
	Kettner - San Diego	5-Lane Collector	5D	30.0	3.6	23.3	26.9	0.90	E	4.2	25.5	29.7	0.99	E	4.8	28.6	33.4	1.11	F
India Street	Laurel - Palm	2-Lane Collector	2U	8.0	7.5	8.7	16.2	2.03	F	8.8	10.2	19.0	2.38	F	9.7	7.9	17.6	2.20	F
	Palm - Sassafras	3-Lane Collector	3U	12.0	7.5	13.2	20.8	1.73	F	8.8	15.4	24.1	2.01	F	9.7	12.6	22.3	1.86	F
Rosecrans Street	Sassafras - Washington	3-Lane Collector	3U	12.0	5.4	13.5	18.8	1.57	F	6.9	14.6	21.5	1.79	F	8.0	15.2	23.2	1.93	F
	Barnett - Sport Arena	6-lane Major	6D	50.0	5.2	40.1	45.3	0.91	E	6.0	42.4	48.4	0.97	E	6.5	34.3	40.9	0.82	D
	Nimitz Quimby - Barnett	4-lane Major 5-lane Major	4U-5U	40.0-45.0	5.2	35.9	41.1	1.03-0.91	F-E	6.0	35.4	41.4	1.03-0.92	F-E	6.5	31.1	37.7	0.94-0.84	E-D
Nimitz Boulevard	Nimitz - Quimby	4-lane Major	4U	40.0	5.2	35.9	41.1	1.03	F	6.0	35.4	41.4	1.03	F	6.5	31.1	37.7	0.94	E
	Harbor - Rosecrans	4-lane Major	4U	40.0	9.5	8.7	18.3	0.46	B	11.0	8.5	19.5	0.49	B	12.1	11.2	23.2	0.58	C

Source: HNTB, 2007.
 (1) Does not include traffic on flyover.
 MAP - Million Annual Passengers
 LOS - Level of Service

Table D-22 (continued)

2010-2030 Street Segment Operations – No Project Alternative (2025-2030)

Roadway	Segment	Classification	Lanes	LOS E ADT Capacity 1000s	Year 2025					Year 2030				
					SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS	SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS
North Harbor Drive	West of NTC	6-Lane Prime	6D	60.0	14.8	26.7	41.5	0.69	C	18.8	28.5	47.3	0.79	C
	NTC - Spanish Landing	6-Lane Prime	6D	60.0	20.1	21.8	41.8	0.70	C	23.9	23.3	47.2	0.79	C
	Spanish Landing - T2 Access	6-Lane Prime	6D	60.0	13.1	18.4	31.5	0.53	B	15.4	20.7	36.1	0.60	C
	T2 Access - Harbor Island	6-Lane Prime	4+3	65.0	27.6	18.1	45.7	0.70	C	29.7	19.8	49.5	0.76	C
	Harbor Island - T1 Access	6-Lane Prime	3+4	65.0	23.9	20.4	44.3	0.68	C	24.0	21.1	45.1	0.69	C
	T1 Access - Winship	6-Lane Prime	5+3	70.0	44.9	20.5	65.3	0.93	E	44.5	21.1	65.6	0.94	E
	Winship - Flyover Merge (1)	6-Lane Prime	4+4	70.0	48.0	20.4	68.3	0.98	E	47.0	20.9	67.9	0.97	E
	Rental Car Rd - Laurel	6-Lane Prime	6D	60.0	84.1	20.9	105.0	1.75	F	81.9	21.7	103.6	1.73	F
	Laurel - Hawthorn	6-Lane Prime	6D	60.0	54.1	17.5	71.6	1.19	F	55.0	18.2	73.3	1.22	F
	Hawthorn - Grape	6-Lane Prime	6D	60.0	34.0	14.8	48.7	0.81	C	34.6	14.8	49.5	0.82	C
Grape Street	Harbor - Pacific	3-Lane Major 1-Way	3U	25.0	18.3	9.0	27.3	1.09	F	18.7	9.7	28.4	1.13	F
	Pacific - Kettner	3-Lane Major 1-Way	3U	25.0	16.5	18.8	35.3	1.41	F	16.8	19.8	36.6	1.46	F
	Kettner - I-5	3-Lane Major 1-Way	3U	25.0	16.5	21.8	38.3	1.53	F	16.8	24.7	41.5	1.66	F
Hawthorn Street	Harbor - Pacific	3-Lane Major 1-Way	3U	25.0	20.6	7.0	27.6	1.10	F	21.0	7.9	28.9	1.16	F
	Pacific - Kettner	3-Lane Major 1-Way	3U	25.0	16.8	7.8	24.6	0.98	E	17.1	8.7	25.9	1.03	F
	Kettner - I-5	3-Lane Major 1-Way	3U	25.0	16.8	21.8	38.6	1.54	F	17.1	24.5	41.6	1.66	F
Kettner Blvd	north of Washington	3-Lane Collector 1-Way	3U	25.0	0.3	10.7	11.1	0.44	B	0.4	4.2	4.6	0.18	A
	Washington - Sassafras	3-Lane Major 1-Way	3U	25.0	12.0	14.1	26.1	1.04	F	10.4	17.4	27.8	1.11	F
	Sassafras - Palm	3-Lane Major 1-Way	3U	25.0	12.1	17.2	29.3	1.17	F	10.5	14.2	24.8	0.99	E
	Palm - Laurel	3-Lane Major 1-Way	3U	25.0	10.3	13.7	24.0	0.96	E	8.7	12.6	21.2	0.85	D
	Laurel - Hawthorn	3-Lane Major 1-Way	3U	25.0	0.3	11.0	11.3	0.45	B	0.3	11.4	11.7	0.47	B
	Hawthorn - Grape	3-Lane Major 1-Way	3U	25.0	0.3	19.9	20.2	0.81	D	0.3	21.5	21.8	0.87	D
Laurel Street	Harbor - Pacific	4-Lane Major	4U	40.0	30.1	4.0	34.0	0.85	D	26.9	4.3	31.2	0.78	D
	Pacific - Kettner	4-Lane Collector	4D	30.0	25.0	6.8	31.7	1.06	F	21.9	12.1	34.0	1.13	F
	Kettner - I-5	4-Lane Collector	4D	30.0	15.5	8.1	23.5	0.78	D	14.1	12.9	27.0	0.90	E
Pacific Highway	Washington - Sassafras	6-Lane Prime	6D	50.0	5.7	27.4	33.1	0.66	C	5.8	19.1	24.8	0.50	B
	Sassafras - Palm	6-Lane Prime	6D	50.0	9.0	22.2	31.2	0.62	C	9.1	16.3	25.4	0.51	B
	Palm - Laurel	6-Lane Prime	6D	50.0	9.0	22.0	30.9	0.62	C	9.1	15.4	24.6	0.49	B
	Laurel - Hawthorn	6-Lane Major	6D	50.0	3.3	27.7	31.1	0.62	C	3.5	23.3	26.8	0.54	B
	Hawthorn - Grape	6-Lane Major	6D	50.0	6.6	28.1	34.8	0.70	C	6.8	24.1	30.9	0.62	C
Palm Street	Pacific - Kettner	2-Lane Collector	2U	8.0	0.0	0.1	0.1	0.01	A	0.0	0.1	0.1	0.01	A
Sassafras Street	Pacific - Kettner	3-Lane Collector	3U	12.0	5.0	10.4	15.4	1.28	F	5.2	6.1	11.3	0.94	E
	Kettner-India	2-Lane Collector	2U	8.0	2.5	9.8	12.3	1.53	F	2.6	8.0	10.6	1.32	F
Washington Street	Pacific - Kettner	4-Lane Collector	4U	30.0	5.8	18.9	24.8	0.83	D	6.2	12.7	18.9	0.63	C
	Kettner - San Diego	5-Lane Collector	5D	30.0	5.1	28.1	33.2	1.11	F	5.3	22.5	27.9	0.93	E
	India Street	Laurel - Palm	2-Lane Collector	2U	8.0	10.1	7.9	18.0	2.25	F	8.5	12.6	21.1	2.64
Rosecrans Street	Palm - Sassafras	3-Lane Collector	3U	12.0	10.1	12.5	22.6	1.88	F	8.5	16.5	25.0	2.09	F
	Sassafras - Washington	3-Lane Collector	3U	12.0	8.5	14.7	23.2	1.93	F	7.4	21.5	28.9	2.41	F
	Barnett - Sport Arena	6-lane Major	6D	50.0	6.8	34.6	41.4	0.83	D	10.3	33.7	44.0	0.88	D
Nimitz Boulevard	Nimitz Quimby - Barnett	4-lane Major 5-lane Major	4U-5U	40.0 45.0	6.8	31.3	38.1	0.95	E	10.3	29.0	39.3	0.98	E
	Nimitz - Quimby	4-lane Major	4U	40.0	6.8	31.3	38.1	0.95	E	49.0	29.0	39.3	0.98	E
	Harbor - Rosecrans	4-lane Major	4U	40.0	12.6	11.8	24.4	0.61	C	16.6	11.7	28.3	0.71	C

Source: HNTB, 2007.

(1) Does not include traffic on flyover.

MAP - Million Annual Passengers

LOS - Level of Service

D.4.3.2 Intersections

Tables D-23, D-24, D-25, D-26, D-27, D-28, D-29, D-30, D-31, and D-32 show the intersection turning volumes under the No Project Alternative. Table D-33 summarizes the intersection operations for each analysis year under the No Project Alternative. Intersection configurations were assumed to be the same as existing conditions shown in Figure D.3-2 except for the following changes:

- North Harbor Drive and McCain Road is currently an unsignalized intersection with right-in / right-out movements only. In 2010 as part of the Liberty Station Development, this intersection is assumed to be signalized, allowing left turn movements inbound and outbound.
- In 2010, the intersection of North Harbor Drive and Winship Lane would be improved as part of the SDIA CIP to provide exclusive right turn lanes on both inbound and outbound approaches.

These changes were assumed in future year analysis for all alternatives.

Table D-23

2010 Intersection Turning Volumes – AM Peak Hour – No Project Alternative

Intersection Number		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	551	0	23	11	431	0	7	589	294	1,906
		Airport	0	0	0	192	0	0	0	33	0	0	25	150	400
		Background	0	0	0	359	0	23	11	398	0	7	564	144	1,506
2	North Harbor Drive / McCain St	Total	0	0	0	103	0	31	156	600	0	0	922	433	2,245
		Airport	0	0	0	40	0	7	13	212	0	0	169	143	584
		Background	0	0	0	63	0	24	143	388	0	0	753	290	1,661
3	North Harbor Drive / Spanish Landing	Total	5	0	18	23	0	124	70	692	4	15	1,515	0	2,466
		Airport	0	0	0	23	0	124	70	182	0	0	188	0	587
		Background	5	0	18	0	0	0	0	510	4	15	1,327	0	1,879
4	North Harbor Drive / Harbor Island Drive	Total	41	5	144	19	7	80	79	571	82	238	1,805	0	3,071
		Airport	10	5	38	19	7	80	79	103	22	65	494	0	922
		Background	31	0	106	0	0	0	0	468	60	173	1,311	0	2,149
5	North Harbor Drive / Winship Lane	Total	0	0	0	86	0	188	68	667	0	0	2,463	241	3,693
		Airport	0	0	0	86	0	188	68	93	0	0	979	241	1,635
		Background	0	0	0	0	0	0	0	574	0	0	1,484	0	2,058
6	North Harbor Drive / Rental Car Road	Total	53	0	43	10	0	14	16	1,541	67	113	2,637	19	4,513
		Airport	53	0	43	10	0	14	16	967	67	113	1,153	19	2,455
		Background	0	0	0	0	0	0	0	574	0	0	1,484	0	2,058
7	Sheraton / Harbor Island Drive	Total	13	107	0	0	229	99	85	6	27	0	0	0	566
		Airport	0	54	0	0	95	0	0	0	0	0	0	0	149
		Background	13	53	0	0	134	99	85	6	27	0	0	0	417
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	86	0	0	62	1	269
		Airport	0	0	0	0	0	38	82	12	0	0	16	1	149
		Background	0	0	0	0	0	0	0	74	0	0	46	0	120
9	Sassafra Street / Pacific Highway	Total	60	495	71	47	546	8	4	56	37	202	111	53	1,690
		Airport	60	62	0	0	80	8	4	56	37	0	111	0	418
		Background	0	433	71	47	466	0	0	0	202	0	53	53	1,272
10	Laurel Street / North Harbor Drive	Total	0	0	0	24	0	4	391	1,100	0	0	1,881	40	3,440
		Airport	0	0	0	0	0	0	371	649	0	0	828	0	1,848
		Background	0	0	0	24	0	4	20	451	0	0	1,053	40	1,592
11	Hawthorn Street / North Harbor Drive	Total	0	284	0	0	1,041	0	0	0	0	81	0	1,907	3,313
		Airport	0	213	0	0	649	0	0	0	0	6	0	616	1,484
		Background	0	71	0	0	392	0	0	0	0	75	0	1,291	1,829
12	Grape Street / North Harbor Drive	Total	0	223	111	826	484	0	0	0	0	0	0	0	1,644
		Airport	0	213	4	437	218	0	0	0	0	0	0	0	872
		Background	0	10	107	389	266	0	0	0	0	0	0	0	772
13	Laurel Street / Pacific Highway	Total	35	315	88	80	263	349	88	523	2	48	698	60	2,549
		Airport	0	42	3	3	27	88	75	295	0	1	368	4	906
		Background	35	273	85	77	236	261	13	228	2	47	330	56	1,643
14	Hawthorn Street / Pacific Highway	Total	115	199	0	0	157	52	0	0	0	258	1,861	86	2,728
		Airport	115	43	0	0	21	6	0	0	0	0	501	2	688
		Background	0	156	0	0	136	46	0	0	0	258	1,360	84	2,040
15	Grape Street / Pacific Highway	Total	0	567	161	144	796	0	62	793	40	0	0	0	2,563
		Airport	0	153	0	0	21	0	4	397	40	0	0	0	615
		Background	0	414	161	144	775	0	58	396	0	0	0	0	1,948
16	Laurel Street / Kettner Boulevard	Total	0	0	0	235	321	548	0	618	45	40	242	0	2,049
		Airport	0	0	0	2	0	304	0	301	0	1	69	0	677
		Background	0	0	0	233	321	244	0	317	45	39	173	0	1,372
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	155	82	0	0	0	156	2,505	0	2,898
		Airport	0	0	0	0	1	0	0	0	0	0	503	0	504
		Background	0	0	0	0	154	82	0	0	0	156	2,002	0	2,394
18	Grape Street / Kettner Boulevard	Total	0	0	0	92	462	0	0	1,339	91	0	0	0	1,984
		Airport	0	0	0	1	0	0	0	392	5	0	0	0	398
		Background	0	0	0	91	462	0	0	947	86	0	0	0	1,586
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	65	86	73	0	0	0	42	430	1,060	0	0	0	1,756
		Airport	0	0	0	0	0	0	0	3	391	0	0	0	394
		Background	65	86	73	0	0	0	0	42	427	669	0	0	1,362
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	45	43	0	0	0	0	0	0	0	0	2,464	78	2,630
		Airport	0	0	0	0	0	0	0	0	0	0	0	500	500
		Background	45	43	0	0	0	0	0	0	0	0	1,964	78	2,130
21	Laurel Street / India Street	Total	78	109	19	0	0	0	463	343	37	0	218	195	1,462
		Airport	34	1	0	0	0	0	238	28	37	0	36	0	374
		Background	44	108	19	0	0	0	225	315	0	0	182	195	1,088
22	Sassafra Street / Kettner Boulevard	Total	0	0	0	113	1,256	328	0	48	40	121	80	0	1,986
		Airport	0	0	0	0	306	31	0	15	15	0	31	0	398
		Background	0	0	0	113	950	297	0	33	25	121	49	0	1,588
23	Sassafra Street / India Street	Total	182	793	11	0	0	0	104	24	50	0	33	21	1,218
		Airport	56	239	0	0	0	0	28	0	0	0	0	0	323
		Background	126	554	11	0	0	0	76	24	50	0	33	21	895
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	185	32	53	0	64	37	147	154	0	672
		Airport	0	0	0	0	0	0	0	28	11	65	26	0	130
		Background	0	0	0	185	32	53	0	36	26	82	128	0	542
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	65	11	117	26	6	18	22	0	230	312	143	47	997
		Airport	7	0	49	0	0	0	0	0	28	84	0	0	168
		Background	58	11	68	26	6	18	22	0	202	228	143	47	829
26	Washington Street / Hancock Street	Total	0	258	103	321	375	0	354	165	130	0	0	0	1,706
		Airport	0	64	13	0	75	0	0	0	9	0	0	0	161
		Background	0	194	90	321	300	0	354	165	121	0	0	0	1,545
27	Washington Street / San Diego Avenue	Total	94	579	0	0	538	536	0	0	0	174	204	7	2,132
		Airport	13	51	0	0	66	0	0	0	0	9	0	0	139
		Background	81	528	0	0	472	536	0	0	0	165	204	7	1,993
28	Rosecrans Street / Pacific Highway	Total	200	148	220	99	145	61	60	173	143	301	147	86	1,783
		Airport	0	2	8	0	3	1	0	1	0	10	2	0	27
		Background	200	146	212	99	142	60	60	172	143	291	145	86	1,756
29	Rosecrans Street / Nimitz Boulevard	Total	16	111	87	39	127	40	148	639	28	111	637	40	2,023
		Airport	0	68	82	0	88	0	0	0	0	104	0	0	342
		Background	16	43	5	39	39	40	148	639	28	7	637	40	1,681

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19	Grape Street / I-5 Southbound On-Ramp	nbt	nbr	nbr2	sbl	sbr2	sbr	eb1	ebt	ebr	wbt	wbr2	wbr
25	Washington Street / Pacific Highway NB-Ramps	nbl+nbl2	nbt	nbr	sbl	sbr2	sbr	eb12	eb1	ebt	wbt	wbr2	wbr

Table D-24

2010 Intersection Turning Volumes – PM Peak Hour – No Project Alternative

Intersection #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	457	0	56	36	562	0	14	584	769	2,478
		Airport	0	0	0	153	0	0	0	27	0	0	31	167	378
		Background	0	0	0	304	0	56	36	535	0	14	553	602	2,100
2	North Harbor Drive / McCain St	Total	0	0	0	419	0	156	34	920	0	0	1,051	162	2,742
		Airport	0	0	0	82	0	14	9	171	0	0	184	112	572
		Background	0	0	0	337	0	142	25	749	0	0	867	50	2,170
3	North Harbor Drive / Spanish Landing	Total	7	0	25	23	0	105	58	1,600	18	5	1,152	0	2,993
		Airport	0	0	0	23	0	105	58	196	0	0	191	0	573
		Background	7	0	25	0	0	0	0	1,404	18	5	961	0	2,420
4	North Harbor Drive / Harbor Island Drive	Total	153	4	327	21	7	85	66	1,459	123	463	1,244	0	3,952
		Airport	11	4	52	21	7	85	66	133	21	56	420	0	876
		Background	142	0	275	0	0	0	0	1,326	102	407	824	0	3,076
5	North Harbor Drive / Winship Lane	Total	0	0	0	105	0	198	62	1,744	0	0	2,050	228	4,387
		Airport	0	0	0	105	0	198	62	143	0	0	818	228	1,554
		Background	0	0	0	0	0	0	0	1,601	0	0	1,232	0	2,833
6	North Harbor Drive / Rental Car Road	Total	74	0	83	22	0	16	15	2,637	74	86	2,188	14	5,209
		Airport	74	0	83	22	0	16	15	1,036	74	86	956	14	2,376
		Background	0	0	0	0	0	0	0	1,601	0	0	1,232	0	2,833
7	Sheraton / Harbor Island Drive	Total	23	408	0	0	523	70	77	2	25	0	0	0	1,128
		Airport	0	68	0	0	83	0	0	0	0	0	0	0	151
		Background	23	340	0	0	440	70	77	2	25	0	0	0	977
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	55	68	95	0	0	126	1	345
		Airport	0	0	0	0	0	55	68	15	0	0	13	1	152
		Background	0	0	0	0	0	0	0	80	0	0	113	0	193
9	Sassafra Street / Pacific Highway	Total	56	857	353	125	950	7	11	157	81	165	94	44	2,900
		Airport	56	73	0	0	66	7	11	157	81	0	94	0	545
		Background	0	784	353	125	884	0	0	0	0	165	0	44	2,355
10	Laurel Street / North Harbor Drive	Total	0	0	0	72	0	11	1,117	1,924	0	0	1,615	105	4,844
		Airport	0	0	0	0	0	0	419	723	0	0	664	0	1,806
		Background	0	0	0	72	0	11	698	1,201	0	0	951	105	3,038
11	Hawthorn Street / North Harbor Drive	Total	0	582	0	0	2,095	0	0	0	0	134	0	1,064	3,875
		Airport	0	171	0	0	723	0	0	0	0	6	0	493	1,393
		Background	0	411	0	0	1,372	0	0	0	0	128	0	571	2,482
12	Grape Street / North Harbor Drive	Total	0	641	268	1,154	1,097	0	0	0	0	0	0	0	3,160
		Airport	0	171	7	481	247	0	0	0	0	0	0	0	906
		Background	0	470	261	673	850	0	0	0	0	0	0	0	2,254
13	Laurel Street / Pacific Highway	Total	111	600	147	138	474	369	471	696	58	52	799	77	3,992
		Airport	0	41	2	6	60	82	84	334	0	1	310	4	924
		Background	111	559	145	132	414	287	387	362	58	51	489	73	3,068
14	Hawthorn Street / Pacific Highway	Total	127	588	0	0	551	50	0	0	0	147	1,034	83	2,580
		Airport	92	41	0	0	55	6	0	0	0	0	401	1	596
		Background	35	547	0	0	496	44	0	0	0	147	633	82	1,984
15	Grape Street / Pacific Highway	Total	0	863	448	237	535	0	51	1,595	36	0	0	0	3,565
		Airport	0	126	0	1	54	0	7	445	36	0	0	0	669
		Background	0	537	448	236	481	0	44	1,150	0	0	0	0	2,896
16	Laurel Street / Kettner Boulevard	Total	0	0	0	283	601	580	0	878	79	56	293	0	2,770
		Airport	0	0	0	1	0	243	0	342	0	2	72	0	660
		Background	0	0	0	282	601	337	0	536	79	54	221	0	2,110
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	402	72	0	0	0	192	1,384	0	2,050
		Airport	0	0	0	0	2	0	0	0	0	0	402	0	404
		Background	0	0	0	0	400	72	0	0	0	192	982	0	1,646
18	Grape Street / Kettner Boulevard	Total	0	0	0	223	487	0	0	3,116	87	0	0	0	3,913
		Airport	0	0	0	2	0	0	0	437	8	0	0	0	447
		Background	0	0	0	221	487	0	0	2,679	79	0	0	0	3,466
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	98	187	183	0	0	0	26	532	2,077	0	0	0	3,103
		Airport	0	0	0	0	0	0	0	3	436	0	0	0	439
		Background	98	187	183	0	0	0	26	529	1,641	0	0	0	2,664
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	36	57	0	0	0	0	0	0	0	0	1,490	61	1,644
		Airport	0	0	0	0	0	0	0	0	0	0	399	0	399
		Background	36	57	0	0	0	0	0	0	0	0	1,091	61	1,245
21	Laurel Street / India Street	Total	88	292	86	0	0	0	660	499	44	0	273	267	2,209
		Airport	44	2	0	0	0	0	265	34	44	0	30	0	419
		Background	44	290	86	0	0	0	395	465	0	0	243	267	1,790
22	Sassafra Street / Kettner Boulevard	Total	0	0	0	186	1,739	255	0	208	95	85	84	0	2,652
		Airport	0	0	0	0	244	30	0	51	52	0	30	0	407
		Background	0	0	0	186	1,495	225	0	157	43	85	54	0	2,245
23	Sassafra Street / India Street	Total	171	1,334	31	0	0	0	290	60	110	0	14	17	2,027
		Airport	47	267	0	0	0	0	78	0	0	0	0	0	392
		Background	124	1,067	31	0	0	0	212	60	110	0	14	17	1,635
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	488	49	10	0	223	51	198	80	0	1,099
		Airport	0	0	0	0	0	0	0	27	10	52	46	0	135
		Background	0	0	0	488	49	10	0	196	41	146	34	0	964
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	37	25	198	57	55	7	55	14	592	326	207	59	1,632
		Airport	13	0	60	0	0	0	0	0	27	85	0	0	185
		Background	24	25	138	57	55	7	55	14	565	241	207	59	1,447
26	Washington Street / Hancock Street	Total	0	651	157	343	379	0	555	331	155	0	0	0	2,571
		Airport	0	74	13	0	70	0	0	0	16	0	0	0	173
		Background	0	577	144	343	309	0	555	331	139	0	0	0	2,398
27	Washington Street / San Diego Avenue	Total	187	1,152	0	0	571	489	0	0	0	185	276	17	2,877
		Airport	12	62	0	0	54	0	0	0	0	16	0	0	144
		Background	175	1,090	0	0	517	489	0	0	0	169	276	17	2,733
28	Rosecrans Street / Pacific Highway	Total	351	287	635	120	139	67	111	459	170	246	304	129	3,018
		Airport	0	3	9	0	2	0	0	1	0	8	1	0	24
		Background	351	284	626	120	137	67	111	458	170	238	303	129	2,994
29	Rosecrans Street / Nimitz Boulevard	Total	18	194	111	30	104	30	332	812	33	173	653	53	2,543
		Airport	0	76	91	0	70	0	0	0	0	83	0	0	320
		Background	18	118	20	30	34	30	332	812	33	90	653	53	2,223

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
 25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

Table D-25

2015 Intersection Turning Volumes – AM Peak Hour – No Project Alternative

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total		
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	607	0	22	13	519	0	8	681	343	2,193	
		Airport	0	0	0	221	0	0	0	39	0	0	30	174	464	
		Background	0	0	0	386	0	22	13	480	0	8	651	169	1,729	
2	North Harbor Drive / McCain St	Total	0	0	0	117	0	36	188	660	0	0	890	511	2,402	
		Airport	0	0	0	40	0	7	13	246	0	0	198	155	659	
		Background	0	0	0	77	0	29	175	414	0	0	692	356	1,743	
3	North Harbor Drive / Spanish Landing	Total	5	0	18	24	0	148	82	769	5	16	1,604	0	2,671	
		Airport	0	0	0	24	0	148	82	204	0	0	205	0	663	
		Background	5	0	18	0	0	0	0	565	5	16	1,399	0	2,008	
4	North Harbor Drive / Harbor Island Drive	Total	43	6	149	19	8	91	90	633	88	240	1,950	0	3,317	
		Airport	11	6	40	19	8	91	90	115	23	66	567	0	1,036	
		Background	32	0	109	0	0	0	0	518	65	174	1,383	0	2,281	
5	North Harbor Drive / Winship Lane	Total	0	0	0	106	0	192	75	725	0	0	2,668	295	4,061	
		Airport	0	0	0	106	0	192	75	98	0	0	1,111	295	1,877	
		Background	0	0	0	0	0	0	0	627	0	0	1,557	0	2,184	
6	North Harbor Drive / Rental Car Road	Total	63	0	50	10	0	14	16	1,755	78	133	2,886	19	5,024	
		Airport	63	0	50	10	0	14	16	1,128	78	133	1,329	19	2,840	
		Background	0	0	0	0	0	0	0	627	0	0	1,557	0	2,184	
7	Sheraton / Harbor Island Drive	Total	13	113	0	0	237	99	85	6	27	0	0	0	580	
		Airport	0	56	0	0	97	0	0	0	0	0	0	0	153	
		Background	13	57	0	0	140	99	85	6	27	0	0	0	427	
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	95	0	0	69	1	285	
		Airport	0	0	0	0	0	38	82	15	0	0	19	1	155	
		Background	0	0	0	0	0	0	0	80	0	0	50	0	130	
9	Sassafras Street / Pacific Highway	Total	70	592	86	56	652	9	5	65	43	248	130	65	2,021	
		Airport	70	73	0	0	95	9	5	65	43	0	130	0	490	
		Background	0	519	86	56	557	0	0	0	0	248	0	65	1,531	
10	Laurel Street / North Harbor Drive	Total	0	0	0	26	0	4	455	1,202	0	0	1,976	39	3,702	
		Airport	0	0	0	0	0	0	435	754	0	0	951	0	2,140	
		Background	0	0	0	26	0	4	20	448	0	0	1,025	39	1,562	
11	Hawthorn Street / North Harbor Drive	Total	0	311	0	0	1,134	0	0	0	0	88	0	2,075	3,608	
		Airport	0	243	0	0	754	0	0	0	0	9	0	708	1,714	
		Background	0	68	0	0	380	0	0	0	0	79	0	1,367	1,894	
12	Grape Street / North Harbor Drive	Total	0	253	110	879	510	0	0	0	0	0	0	0	1,752	
		Airport	0	243	7	507	255	0	0	0	0	0	0	0	1,012	
		Background	0	10	103	372	255	0	0	0	0	0	0	0	740	
13	Laurel Street / Pacific Highway	Total	41	374	110	96	317	415	101	590	2	53	785	65	2,949	
		Airport	0	51	9	3	33	102	87	348	0	2	428	5	1,068	
		Background	41	323	101	93	284	313	14	242	2	51	357	60	1,881	
14	Hawthorn Street / Pacific Highway	Total	132	239	0	0	187	64	0	0	0	267	1,981	93	2,963	
		Airport	132	54	0	0	26	9	0	0	0	0	576	6	803	
		Background	0	185	0	0	161	55	0	0	0	267	1,405	87	2,160	
15	Grape Street / Pacific Highway	Total	0	643	182	170	943	0	70	887	46	0	0	0	2,941	
		Airport	0	178	0	0	26	0	7	461	46	0	0	0	718	
		Background	0	465	182	170	917	0	63	426	0	0	0	0	2,223	
16	Laurel Street / Kettner Boulevard	Total	0	0	0	263	355	619	0	703	49	47	281	0	2,317	
		Airport	0	0	0	6	0	350	0	360	0	3	85	0	804	
		Background	0	0	0	257	355	269	0	343	49	44	196	0	1,513	
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	172	90	0	0	0	173	2,800	0	3,235	
		Airport	0	0	0	0	3	0	0	0	0	0	582	0	585	
		Background	0	0	0	0	169	90	0	0	0	173	2,218	0	2,650	
18	Grape Street / Kettner Boulevard	Total	0	0	0	106	524	0	0	1,437	94	0	0	0	2,161	
		Airport	0	0	0	3	0	0	0	456	5	0	0	0	464	
		Background	0	0	0	103	524	0	0	981	89	0	0	0	1,697	
19	Grape Street / I-5 Southbound On-Ramp	Total	77	102	87	0	0	0	43	437	1,136	0	0	0	1,882	
		Airport	0	0	0	0	0	0	0	3	456	0	0	0	459	
		Background	77	102	87	0	0	0	43	434	680	0	0	0	1,423	
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	48	46	0	0	0	0	0	0	0	0	2,529	77	2,700	
		Airport	0	0	0	0	0	0	0	0	0	0	0	578	0	578
		Background	48	46	0	0	0	0	0	0	0	0	1,951	77	2,122	
21	Laurel Street / India Street	Total	100	136	23	0	0	0	528	386	57	0	258	231	1,719	
		Airport	46	3	0	0	0	0	276	33	57	0	42	0	457	
		Background	54	133	23	0	0	0	252	353	0	0	216	231	1,262	
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	115	1,323	343	0	58	50	139	97	0	2,125	
		Airport	0	0	0	0	355	40	0	20	20	0	41	0	476	
		Background	0	0	0	115	968	303	0	38	30	139	56	0	1,649	
23	Sassafras Street / India Street	Total	212	922	12	0	0	0	119	28	58	0	34	22	1,407	
		Airport	65	279	0	0	0	0	32	0	0	0	0	0	376	
		Background	147	643	12	0	0	0	87	28	58	0	34	22	1,031	
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	200	35	57	0	76	42	163	174	0	747	
		Airport	0	0	0	0	0	0	0	39	15	75	36	0	165	
		Background	0	0	0	200	35	57	0	37	27	88	138	0	582	
25	Washington Street / Pacific Highway NB-Ramps	Total	94	16	155	29	7	20	24	0	258	359	162	53	1,177	
		Airport	10	0	57	0	0	0	0	0	39	101	0	0	207	
		Background	84	16	98	29	7	20	24	0	219	258	162	53	970	
26	Washington Street / Hancock Street	Total	0	298	120	352	417	0	358	167	134	0	0	0	1,844	
		Airport	0	77	18	1	89	0	0	0	12	0	0	0	197	
		Background	0	219	102	351	328	0	358	167	122	0	0	0	1,647	
27	Washington Street / San Diego Avenue	Total	107	637	0	0	564	553	0	0	0	194	225	8	2,288	
		Airport	18	59	0	0	77	0	0	0	0	12	0	0	166	
		Background	89	578	0	0	487	553	0	0	0	182	225	8	2,122	
28	Rosecrans Street / Pacific Highway	Total	237	177	261	116	170	72	63	183	151	314	153	89	1,986	
		Airport	0	3	9	0	3	1	0	1	0	12	2	0	31	
		Background	237	174	252	116	167	71	63	182	151	302	151	89	1,955	
29	Rosecrans Street / Nimitz Boulevard	Total	16	123	100	14	115	15	155	671	30	126	627	40	2,032	
		Airport	0	80	95	0	101	0	0	0	0	120	0	0	396	
		Background	16	43	5	14	14	15	155	671	30	6	627	40	1,636	

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19 Grape Street / I-5 Southbound On-Ramp ebl ebt ebr
 25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr eb2 ebl ebt wbt wbr2 wbr

Table D-26

2015 Intersection Turning Volumes – PM Peak Hour – No Project Alternative

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	480	0	55	44	677	0	17	674	899	2,846
		Airport	0	0	0	177	0	0	0	32	0	0	36	193	438
		Background	0	0	0	303	0	55	44	645	0	17	638	706	2,408
2	North Harbor Drive / McCain St	Total	0	0	0	497	0	189	40	968	0	0	1,079	183	2,956
		Airport	0	0	0	83	0	14	9	200	0	0	215	121	642
		Background	0	0	0	414	0	175	31	768	0	0	864	62	2,314
3	North Harbor Drive / Spanish Landing	Total	7	0	25	24	0	125	69	1,789	20	6	1,191	0	3,256
		Airport	0	0	0	24	0	125	69	214	0	0	210	0	642
		Background	7	0	25	0	0	0	0	1,575	20	6	981	0	2,614
4	North Harbor Drive / Harbor Island Drive	Total	159	5	337	21	8	95	75	1,630	132	467	1,329	0	4,258
		Airport	12	5	53	21	8	95	75	141	21	57	489	0	977
		Background	147	0	284	0	0	0	0	1,489	111	410	840	0	3,281
5	Sheraton / Harbor Island Drive	Total	23	423	0	0	537	70	77	2	25	0	0	0	1,157
		Airport	0	70	0	0	86	0	0	0	0	0	0	0	156
		Background	23	353	0	0	451	70	77	2	25	0	0	0	1,001
6	North Harbor Drive / Winship Lane	Total	0	0	0	140	0	229	67	1,921	0	0	2,185	275	4,817
		Airport	0	0	0	140	0	229	67	148	0	0	935	275	1,794
		Background	0	0	0	0	0	0	0	1,773	0	0	1,250	0	3,023
7	North Harbor Drive / Rental Car Road	Total	87	0	97	22	0	16	15	2,973	87	100	2,358	14	5,769
		Airport	87	0	97	22	0	16	15	1,200	87	100	1,108	14	2,746
		Background	0	0	0	0	0	0	0	1,773	0	0	1,250	0	3,023
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	55	68	104	0	0	136	1	364
		Airport	0	0	0	0	0	55	68	18	0	0	15	1	157
		Background	0	0	0	0	0	0	0	86	0	0	121	0	207
9	Sassafras Street / Pacific Highway	Total	65	1,028	424	150	1,137	8	13	178	92	202	112	54	3,463
		Airport	65	87	0	0	78	8	13	178	92	0	112	0	633
		Background	0	941	424	150	1,059	0	0	0	0	202	0	54	2,830
10	Laurel Street / North Harbor Drive	Total	0	0	0	76	0	11	1,182	2,027	0	0	1,691	102	5,089
		Airport	0	0	0	0	0	0	487	832	0	0	765	0	2,084
		Background	0	0	0	76	0	11	695	1,195	0	0	926	102	3,005
11	Hawthorn Street / North Harbor Drive	Total	0	589	0	0	2,161	0	0	0	0	146	0	1,173	4,069
		Airport	0	196	0	0	832	0	0	0	0	0	0	569	1,607
		Background	0	393	0	0	1,329	0	0	0	0	136	0	604	2,462
12	Grape Street / North Harbor Drive	Total	0	649	262	1,199	1,101	0	0	0	0	0	0	0	3,211
		Airport	0	196	11	554	287	0	0	0	0	0	0	0	1,048
		Background	0	453	251	645	814	0	0	0	0	0	0	0	2,163
13	Laurel Street / Pacific Highway	Total	131	713	178	165	566	438	508	775	62	59	892	84	4,571
		Airport	0	51	7	7	69	94	97	390	0	3	363	5	1,086
		Background	131	662	171	158	497	344	411	385	62	56	529	79	3,485
14	Hawthorn Street / Pacific Highway	Total	147	701	0	0	650	62	0	0	0	152	1,116	90	2,918
		Airport	106	53	0	0	63	10	0	0	0	0	462	5	699
		Background	41	648	0	0	587	52	0	0	0	152	654	85	2,219
15	Grape Street / Pacific Highway	Total	0	753	504	280	632	0	58	1,749	42	0	0	0	4,018
		Airport	0	149	0	1	63	0	11	512	42	0	0	0	778
		Background	0	604	504	279	569	0	47	1,237	0	0	0	0	3,240
16	Laurel Street / Kettner Boulevard	Total	0	0	0	315	664	653	0	985	86	68	340	0	3,111
		Airport	0	0	0	4	0	281	0	404	0	7	91	0	787
		Background	0	0	0	311	664	372	0	581	86	61	249	0	2,324
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	448	79	0	0	0	213	1,555	0	2,295
		Airport	0	0	0	0	7	0	0	0	0	0	467	0	474
		Background	0	0	0	0	441	79	0	0	0	213	1,088	0	1,821
18	Grape Street / Kettner Boulevard	Total	0	0	0	257	554	0	0	3,280	91	0	0	0	4,182
		Airport	0	0	0	6	1	0	0	504	9	0	0	0	520
		Background	0	0	0	251	553	0	0	2,776	82	0	0	0	3,662
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	117	223	218	0	0	0	26	541	2,173	0	0	0	3,298
		Airport	0	0	0	0	0	0	0	4	506	0	0	0	510
		Background	117	223	218	0	0	0	26	537	1,667	0	0	0	2,788
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	39	61	0	0	0	0	0	0	0	0	1,547	60	1,707
		Airport	0	0	0	0	0	0	0	0	0	0	0	464	464
		Background	39	61	0	0	0	0	0	0	0	0	0	1,083	60
21	Laurel Street / India Street	Total	117	364	106	0	0	0	747	559	64	0	323	317	2,597
		Airport	63	7	0	0	0	0	305	39	64	0	35	0	513
		Background	54	357	106	0	0	0	442	520	0	0	288	317	2,084
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	189	1,809	267	0	245	113	97	100	0	2,820
		Airport	0	0	0	0	285	38	0	62	63	0	39	0	487
		Background	0	0	0	189	1,524	229	0	183	50	97	61	0	2,333
23	Sassafras Street / India Street	Total	200	1,550	36	0	0	0	332	69	126	0	15	18	2,346
		Airport	56	312	0	0	0	0	89	0	0	0	0	0	457
		Background	144	1,238	36	0	0	0	243	69	126	0	15	18	1,889
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	527	53	12	0	240	56	219	99	0	1,206
		Airport	0	0	0	0	0	1	0	37	14	61	62	0	175
		Background	0	0	0	527	53	11	0	203	42	158	37	0	1,031
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	52	36	269	63	60	8	60	15	649	378	234	66	1,890
		Airport	17	0	69	0	0	0	0	0	37	106	0	0	229
		Background	35	36	200	63	60	8	60	15	612	272	234	66	1,661
26	Washington Street / Hancock Street	Total	0	741	179	376	423	0	562	335	162	0	0	0	2,778
		Airport	0	89	17	0	85	0	0	0	21	0	0	0	212
		Background	0	652	162	376	338	0	562	335	141	0	0	0	2,566
27	Washington Street / San Diego Avenue	Total	208	1,263	0	0	596	504	0	0	0	207	304	19	3,101
		Airport	17	71	0	0	64	0	0	0	0	21	0	1	174
		Background	191	1,192	0	0	532	504	0	0	0	186	304	18	2,927
28	Rosecrans Street / Pacific Highway	Total	418	341	756	141	163	78	119	485	180	257	315	134	3,387
		Airport	0	3	11	0	3	0	1	2	0	10	1	0	31
		Background	418	338	745	141	160	78	118	483	180	247	314	134	3,356
29	Rosecrans Street / Nimitz Boulevard	Total	18	206	125	11	93	11	348	852	34	184	643	52	2,577
		Airport	0	88	105	0	81	0	0	0	0	96	0	0	370
		Background	18	118	20	11	12	11	348	852	34	88	643	52	2,207

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
 25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

Table D-27

2020 Intersection Turning Volumes – AM Peak Hour – No Project Alternative

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total		
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	709	0	30	14	539	0	9	835	396	2,532	
		Airport	0	0	0	240	0	0	0	42	0	0	33	192	507	
		Background	0	0	0	469	0	30	14	497	0	9	802	204	2,025	
2	North Harbor Drive / McCain St	Total	0	0	0	126	0	39	205	736	0	0	913	551	2,570	
		Airport	0	0	0	41	0	7	13	270	0	0	219	162	712	
		Background	0	0	0	85	0	32	192	466	0	0	694	389	1,858	
3	North Harbor Drive / Spanish Landing	Total	5	0	18	24	0	159	86	854	6	18	1,688	0	2,858	
		Airport	0	0	0	24	0	0	159	86	224	0	0	221	0	714
		Background	5	0	18	0	0	0	0	630	6	18	1,467	0	2,144	
4	North Harbor Drive / Harbor Island Drive	Total	44	7	153	19	9	105	104	695	95	247	2,044	0	3,522	
		Airport	11	7	40	19	9	105	104	120	23	66	592	0	1,096	
		Background	33	0	113	0	0	0	0	575	72	181	1,452	0	2,426	
5	North Harbor Drive / Winship Lane	Total	0	0	0	112	0	209	77	791	0	0	2,846	319	4,354	
		Airport	0	0	0	112	0	209	77	102	0	0	1,213	319	2,032	
		Background	0	0	0	0	0	0	0	689	0	0	1,633	0	2,322	
6	North Harbor Drive / Rental Car Road	Total	70	0	56	10	0	14	16	1,935	87	147	3,082	19	5,436	
		Airport	70	0	56	10	0	14	16	1,246	87	147	1,449	19	3,114	
		Background	0	0	0	0	0	0	0	689	0	0	1,633	0	2,322	
7	Sheraton / Harbor Island Drive	Total	13	120	0	0	253	99	85	6	27	0	0	0	603	
		Airport	0	58	0	0	99	0	0	0	0	0	0	0	157	
		Background	13	62	0	0	154	99	85	6	27	0	0	0	446	
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	98	0	0	71	1	290	
		Airport	0	0	0	0	0	38	82	16	0	0	20	1	157	
		Background	0	0	0	0	0	0	0	82	0	0	51	0	133	
9	Sassafras Street / Pacific Highway	Total	76	600	85	50	605	10	5	71	47	233	144	61	1,987	
		Airport	76	83	0	0	108	10	5	71	47	0	144	0	544	
		Background	0	517	85	50	497	0	0	0	0	233	0	61	1,443	
10	Laurel Street / North Harbor Drive	Total	0	0	0	23	0	4	505	1,308	0	0	2,188	44	4,072	
		Airport	0	0	0	0	0	0	484	829	0	0	1,033	0	2,346	
		Background	0	0	0	23	0	4	21	479	0	0	1,155	44	1,726	
11	Hawthorn Street / North Harbor Drive	Total	0	335	0	0	1,251	0	0	0	0	110	0	2,472	4,168	
		Airport	0	264	0	0	829	0	0	0	0	12	0	770	1,875	
		Background	0	71	0	0	422	0	0	0	0	98	0	1,702	2,293	
12	Grape Street / North Harbor Drive	Total	0	273	105	949	545	0	0	0	0	0	0	0	1,872	
		Airport	0	264	11	561	280	0	0	0	0	0	0	0	1,116	
		Background	0	9	94	388	265	0	0	0	0	0	0	0	756	
13	Laurel Street / Pacific Highway	Total	46	423	131	94	315	414	108	603	1	48	786	59	3,028	
		Airport	0	58	17	4	40	110	96	388	0	3	471	6	1,193	
		Background	46	365	114	90	275	304	12	215	1	45	315	53	1,835	
14	Hawthorn Street / Pacific Highway	Total	144	272	0	0	213	74	0	0	0	294	2,172	107	3,276	
		Airport	144	64	0	0	30	12	0	0	0	0	626	11	887	
		Background	0	208	0	0	183	62	0	0	0	294	1,546	96	2,389	
15	Grape Street / Pacific Highway	Total	0	698	195	191	1,060	0	86	1,017	54	0	0	0	3,301	
		Airport	0	197	0	0	30	0	11	507	54	0	0	0	799	
		Background	0	501	195	191	1,030	0	75	510	0	0	0	0	2,502	
16	Laurel Street / Kettner Boulevard	Total	0	0	0	443	597	833	0	711	43	42	263	0	2,932	
		Airport	0	0	0	11	0	380	0	409	0	6	100	0	906	
		Background	0	0	0	432	597	453	0	302	43	36	163	0	2,026	
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	291	152	0	0	0	181	2,960	0	3,584	
		Airport	0	0	0	0	6	0	0	0	0	0	637	0	643	
		Background	0	0	0	0	285	152	0	0	0	181	2,323	0	2,941	
18	Grape Street / Kettner Boulevard	Total	0	0	0	137	672	0	0	1,565	102	0	0	0	2,476	
		Airport	0	0	0	5	1	0	0	502	6	0	0	0	514	
		Background	0	0	0	132	671	0	0	1,063	96	0	0	0	1,962	
19	Grape Street / I-5 Southbound On-Ramp	Total	121	159	136	0	0	0	38	390	1,110	0	0	0	1,954	
		Airport	0	0	0	0	0	0	0	3	504	0	0	0	507	
		Background	121	159	136	0	0	0	38	387	606	0	0	0	1,447	
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	52	49	0	0	0	0	0	0	0	0	2,373	69	2,543	
		Airport	0	0	0	0	0	0	0	0	0	0	0	632	0	632
		Background	52	49	0	0	0	0	0	0	0	0	1,741	69	1,911	
21	Laurel Street / India Street	Total	102	111	18	0	0	0	515	331	79	1	251	219	1,627	
		Airport	59	5	0	0	0	0	304	36	79	1	46	0	530	
		Background	43	106	18	0	0	0	211	295	0	0	205	219	1,097	
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	274	2,703	771	0	59	53	137	103	0	4,100	
		Airport	0	0	0	0	391	48	0	23	24	0	48	0	534	
		Background	0	0	0	274	2,312	723	0	36	29	137	55	0	3,566	
23	Sassafras Street / India Street	Total	192	838	10	0	0	0	121	27	57	0	37	23	1,305	
		Airport	72	310	0	0	0	0	35	0	0	0	0	0	417	
		Background	120	528	10	0	0	0	86	27	57	0	37	23	888	
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	226	40	65	0	93	48	177	198	0	847	
		Airport	0	0	0	0	0	0	0	54	20	82	49	0	205	
		Background	0	0	0	226	40	65	0	39	28	95	149	0	642	
25	Washington Street / Pacific Highway NB-Ramps	Total	70	11	129	31	7	21	27	0	288	381	166	54	1,185	
		Airport	13	0	63	0	0	0	1	0	53	117	0	0	247	
		Background	57	11	66	31	7	21	26	0	235	264	166	54	938	
26	Washington Street / Hancock Street	Total	0	315	129	394	467	0	473	221	179	0	0	0	2,178	
		Airport	0	91	25	1	100	0	0	0	17	0	0	0	234	
		Background	0	224	104	393	367	0	473	221	162	0	0	0	1,944	
27	Washington Street / San Diego Avenue	Total	124	713	0	0	673	668	0	0	0	206	233	9	2,626	
		Airport	25	66	0	0	85	0	0	0	0	17	0	1	194	
		Background	99	647	0	0	588	668	0	0	0	189	233	8	2,432	
28	Rosecrans Street / Pacific Highway	Total	206	154	229	99	146	61	64	182	150	345	168	98	1,902	
		Airport	0	3	10	0	4	1	1	2	0	13	2	0	36	
		Background	206	151	219	99	142	60	63	180	150	332	166	98	1,866	
29	Rosecrans Street / Nimitz Boulevard	Total	20	140	111	35	146	37	124	536	24	136	551	35	1,895	
		Airport	0	88	104	0	110	0	0	0	130	0	0	0	432	
		Background	20	52	7	35	36	37	124	536	24	6	551	35	1,463	

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
 25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

Table D-28

2020 Intersection Turning Volumes – PM Peak Hour – No Project Alternative

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total		
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	585	0	72	45	702	0	20	826	1,055	3,305	
		Airport	0	0	0	194	0	0	35	0	0	40	210	479		
		Background	0	0	0	391	0	72	45	667	0	20	786	845	2,826	
2	North Harbor Drive / McCain St	Total	0	0	0	534	0	205	43	1,090	0	0	1,126	197	3,195	
		Airport	0	0	0	82	0	14	9	220	0	0	235	129	689	
		Background	0	0	0	452	0	191	34	870	0	0	891	68	2,506	
3	North Harbor Drive / Spanish Landing	Total	7	0	25	24	0	137	72	1,979	25	7	1,246	0	3,522	
		Airport	0	0	0	24	0	0	0	72	230	0	0	0	690	
		Background	7	0	25	0	0	0	0	1,749	25	7	1,019	0	2,832	
4	North Harbor Drive / Harbor Island Drive	Total	164	6	347	21	9	107	88	1,795	145	482	1,387	0	4,551	
		Airport	12	6	53	21	9	107	88	145	21	58	514	0	1,034	
		Background	152	0	294	0	0	0	0	1,650	124	424	873	0	3,517	
5	North Harbor Drive / Winship Lane	Total	0	0	0	146	0	249	69	2,095	0	0	2,326	300	5,185	
		Airport	0	0	0	146	0	249	69	150	0	0	1,028	300	1,942	
		Background	0	0	0	0	0	0	0	1,945	0	0	1,298	0	3,243	
6	North Harbor Drive / Rental Car Road	Total	96	0	108	22	0	16	15	3,252	96	111	2,514	13	6,243	
		Airport	96	0	108	22	0	16	15	1,307	96	111	1,216	13	3,000	
		Background	0	0	0	0	0	0	0	1,945	0	0	1,298	0	3,243	
7	Sheraton / Harbor Island Drive	Total	23	441	0	0	566	70	77	2	25	0	0	0	1,204	
		Airport	0	72	0	0	88	0	0	0	0	0	0	0	160	
		Background	23	369	0	0	478	70	77	2	25	0	0	0	1,044	
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	55	68	108	0	0	142	1	374	
		Airport	0	0	0	0	0	55	68	19	0	0	17	1	160	
		Background	0	0	0	0	0	0	0	89	0	0	125	0	214	
9	Sassafraz Street / Pacific Highway	Total	72	1,037	422	134	1,033	9	14	194	100	191	124	51	3,381	
		Airport	72	100	0	0	89	9	14	194	100	0	124	0	702	
		Background	0	937	422	134	944	0	0	0	0	191	0	51	2,679	
10	Laurel Street / North Harbor Drive	Total	0	0	0	68	0	10	1,278	2,179	0	0	1,879	115	5,529	
		Airport	0	0	0	0	0	0	535	902	0	0	835	0	2,272	
		Background	0	0	0	68	0	10	743	1,277	0	0	1,044	115	3,257	
11	Hawthorn Street / North Harbor Drive	Total	0	624	0	0	2,377	0	0	0	0	183	0	1,374	4,558	
		Airport	0	214	0	0	902	0	0	0	0	14	0	621	1,751	
		Background	0	410	0	0	1,475	0	0	0	0	169	0	753	2,807	
12	Grape Street / North Harbor Drive	Total	0	631	246	1,276	1,160	0	0	0	0	0	0	0	3,313	
		Airport	0	214	15	604	312	0	0	0	0	0	0	0	1,145	
		Background	0	417	231	672	848	0	0	0	0	0	0	0	2,168	
13	Laurel Street / Pacific Highway	Total	148	807	205	161	560	437	471	771	55	55	869	75	4,614	
		Airport	0	60	12	8	78	103	106	429	0	6	403	6	1,211	
		Background	148	747	193	153	482	334	365	342	55	49	466	69	3,403	
14	Hawthorn Street / Pacific Highway	Total	162	792	0	0	736	73	0	0	0	167	1,224	101	3,255	
		Airport	116	64	0	0	70	14	0	0	0	0	505	8	777	
		Background	46	728	0	0	666	59	0	0	0	167	719	93	2,478	
15	Grape Street / Pacific Highway	Total	0	814	542	314	709	0	71	2,038	49	0	0	0	4,537	
		Airport	0	165	0	1	70	0	15	555	49	0	0	0	855	
		Background	0	649	542	313	639	0	56	1,483	0	0	0	0	3,682	
16	Laurel Street / Kettner Boulevard	Total	0	0	0	530	1,116	933	0	961	76	63	316	0	3,995	
		Airport	0	0	0	7	0	307	0	449	0	12	108	0	883	
		Background	0	0	0	523	1,116	626	0	512	76	51	208	0	3,112	
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	755	134	0	0	0	223	1,652	0	2,764	
		Airport	0	0	0	0	13	0	0	0	0	0	513	0	526	
		Background	0	0	0	0	742	134	0	0	0	0	223	1,139	0	2,238
18	Grape Street / Kettner Boulevard	Total	0	0	0	332	709	0	0	3,556	97	0	0	0	4,694	
		Airport	0	0	0	11	1	0	0	547	9	0	0	0	568	
		Background	0	0	0	321	708	0	0	3,009	88	0	0	0	4,126	
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	183	348	340	0	0	0	23	483	2,041	0	0	0	3,418	
		Airport	0	0	0	0	0	0	0	4	554	0	0	0	558	
		Background	183	348	340	0	0	0	23	479	1,487	0	0	0	2,860	
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	42	65	0	0	0	0	0	0	0	0	1,476	54	1,637	
		Airport	0	0	0	0	0	0	0	0	0	0	0	509	509	
		Background	42	65	0	0	0	0	0	0	0	0	0	967	54	1,128
21	Laurel Street / India Street	Total	125	297	85	0	0	0	700	478	83	0	312	301	2,381	
		Airport	82	12	1	0	0	0	331	43	83	0	38	0	590	
		Background	43	285	84	0	0	0	369	435	0	0	274	301	1,791	
22	Sassafraz Street / Kettner Boulevard	Total	0	0	0	452	3,953	592	0	246	119	96	106	0	5,564	
		Airport	0	0	0	0	314	44	0	70	71	0	45	0	544	
		Background	0	0	0	452	3,639	548	0	176	48	96	61	0	5,020	
23	Sassafraz Street / India Street	Total	180	1,359	30	0	0	0	336	68	124	0	16	19	2,132	
		Airport	62	343	0	0	0	0	96	0	0	0	0	0	501	
		Background	118	1,016	30	0	0	0	240	68	124	0	16	19	1,631	
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	596	60	13	0	262	63	236	125	0	1,355	
		Airport	0	0	0	0	0	1	0	49	19	66	85	0	220	
		Background	0	0	0	596	60	12	0	213	44	170	40	0	1,135	
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	47	25	211	67	65	8	65	16	707	406	240	68	1,925	
		Airport	24	0	75	0	0	0	1	0	49	128	0	0	277	
		Background	23	25	136	67	65	8	64	16	658	278	240	68	1,648	
26	Washington Street / Hancock Street	Total	0	768	189	422	478	0	742	443	215	0	0	0	3,257	
		Airport	0	101	23	1	99	0	0	29	0	0	0	0	253	
		Background	0	667	166	421	379	0	742	443	186	0	0	0	3,004	
27	Washington Street / San Diego Avenue	Total	237	1,414	0	0	714	609	0	0	0	222	315	20	3,531	
		Airport	23	78	0	0	71	0	0	0	0	0	29	0	1	202
		Background	214	1,336	0	0	643	609	0	0	0	193	315	19	3,329	
28	Rosecrans Street / Pacific Highway	Total	363	297	660	120	139	68	118	482	178	283	348	147	3,203	
		Airport	0	3	12	0	3	1	1	2	0	11	2	0	35	
		Background	363	294	648	120	136	67	117	480	178	272	346	147	3,168	
29	Rosecrans Street / Nimitz Boulevard	Total	22	241	138	28	120	28	278	680	27	183	566	46	2,357	
		Airport	0	96	114	0	89	0	0	0	0	105	0	0	404	
		Background	22	145	24	28	31	28	278	680	27	78	566	46	1,953	

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
 25 Washington Street / Pacific Highway NB-Ramps nbt+nbl2 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

Table D-29

2025 Intersection Turning Volumes – AM Peak Hour – No Project Alternative

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	742	0	31	14	564	0	10	886	415	2,662
		Airport	0	0	0	250	0	0	0	44	0	0	35	200	529
		Background	0	0	0	492	0	31	14	520	0	10	851	215	2,133
2	North Harbor Drive / McCain St	Total	0	0	0	128	0	40	211	743	0	0	988	570	2,680
		Airport	0	0	0	41	0	7	13	281	0	0	229	168	739
		Background	0	0	0	87	0	33	198	462	0	0	759	402	1,941
3	North Harbor Drive / Spanish Landing	Total	5	0	18	24	0	170	92	860	6	18	1,784	0	2,977
		Airport	0	0	0	24	0	170	92	230	0	0	227	0	743
		Background	5	0	18	0	0	0	0	630	6	18	1,557	0	2,234
4	North Harbor Drive / Harbor Island Drive	Total	44	7	154	19	10	109	108	698	95	260	2,168	0	3,672
		Airport	11	7	41	19	10	109	108	122	23	66	626	0	1,142
		Background	33	0	113	0	0	0	0	576	72	194	1,542	0	2,530
5	North Harbor Drive / Winship Lane	Total	0	0	0	107	0	216	77	794	0	0	3,006	325	4,525
		Airport	0	0	0	107	0	216	77	105	0	0	1,270	325	2,100
		Background	0	0	0	0	0	0	0	689	0	0	1,736	0	2,425
6	North Harbor Drive / Rental Car Road	Total	73	0	59	10	0	14	16	1,991	92	154	3,243	19	5,671
		Airport	73	0	59	10	0	14	16	1,302	92	154	1,507	19	3,246
		Background	0	0	0	0	0	0	0	689	0	0	1,736	0	2,425
7	Sheraton / Harbor Island Drive	Total	13	121	0	0	266	99	85	6	27	0	0	0	617
		Airport	13	62	0	0	99	0	0	0	0	0	0	0	158
		Background	0	59	0	0	167	99	85	6	27	0	0	0	459
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	97	0	0	71	1	289
		Airport	0	0	0	0	0	38	82	17	0	0	21	1	159
		Background	0	0	0	0	0	0	0	80	0	0	50	0	130
9	Sassafras Street / Pacific Highway	Total	80	637	91	57	674	11	5	75	49	268	151	70	2,168
		Airport	80	89	0	0	115	11	5	75	49	0	151	0	575
		Background	0	548	91	57	559	0	0	0	0	268	0	70	1,593
10	Laurel Street / North Harbor Drive	Total	0	0	0	15	0	3	527	1,316	0	0	2,288	46	4,195
		Airport	0	0	0	0	0	0	507	864	0	0	1,074	0	2,445
		Background	0	0	0	15	0	3	20	452	0	0	1,214	46	1,750
11	Hawthorn Street / North Harbor Drive	Total	0	349	0	0	1,307	0	0	0	0	117	0	2,569	4,342
		Airport	0	274	0	0	864	0	0	0	0	15	0	800	1,953
		Background	0	75	0	0	443	0	0	0	0	102	0	1,769	2,389
12	Grape Street / North Harbor Drive	Total	0	283	112	994	574	0	0	0	0	0	0	0	1,963
		Airport	0	274	13	584	294	0	0	0	0	0	0	0	1,165
		Background	0	9	99	410	280	0	0	0	0	0	0	0	798
13	Laurel Street / Pacific Highway	Total	50	459	143	99	332	433	108	550	1	47	802	58	3,082
		Airport	0	62	20	5	44	115	100	407	0	3	492	6	1,254
		Background	50	397	123	94	288	318	8	143	1	44	310	52	1,828
14	Hawthorn Street / Pacific Highway	Total	149	296	0	0	231	82	0	0	0	336	2,418	123	3,635
		Airport	149	70	0	0	33	15	0	0	0	0	650	13	930
		Background	0	226	0	0	198	67	0	0	0	336	1,768	110	2,705
15	Grape Street / Pacific Highway	Total	0	736	207	208	1,153	0	91	1,060	56	0	0	0	3,511
		Airport	0	206	0	0	32	0	13	528	56	0	0	0	835
		Background	0	530	207	208	1,121	0	78	532	0	0	0	0	2,676
16	Laurel Street / Kettner Boulevard	Total	0	0	0	383	511	783	0	728	42	44	271	0	2,762
		Airport	0	0	0	13	0	395	0	431	0	7	106	0	952
		Background	0	0	0	370	511	388	0	297	42	37	165	0	1,810
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	243	126	0	0	0	193	3,141	0	3,703
		Airport	0	0	0	0	7	0	0	0	0	0	663	0	670
		Background	0	0	0	0	236	126	0	0	0	193	2,478	0	3,033
18	Grape Street / Kettner Boulevard	Total	0	0	0	128	623	0	0	1,603	103	0	0	0	2,457
		Airport	0	0	0	6	1	0	0	523	5	0	0	0	535
		Background	0	0	0	122	622	0	0	1,080	98	0	0	0	1,922
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	126	166	142	0	0	0	39	403	1,152	0	0	0	2,028
		Airport	0	0	0	0	0	0	0	3	526	0	0	0	529
		Background	126	166	142	0	0	0	39	400	626	0	0	0	1,499
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	714	53	0	0	0	0	0	0	0	0	1,738	69	2,574
		Airport	659	0	0	0	0	0	0	0	0	0	4	0	663
		Background	55	53	0	0	0	0	0	0	0	0	1,734	69	1,911
21	Laurel Street / India Street	Total	110	118	19	0	0	0	530	335	89	1	255	221	1,678
		Airport	65	7	0	0	0	0	317	38	89	1	48	0	565
		Background	45	111	19	0	0	0	213	297	0	0	207	221	1,113
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	243	2,453	691	0	65	57	139	107	0	3,755
		Airport	0	0	0	0	408	51	0	25	25	0	51	0	560
		Background	0	0	0	243	2,045	640	0	40	32	139	56	0	3,195
23	Sassafras Street / India Street	Total	195	846	10	0	0	0	125	28	58	0	40	26	1,328
		Airport	76	324	0	0	0	0	37	0	0	0	0	0	437
		Background	119	522	10	0	0	0	88	28	58	0	40	26	891
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	201	35	58	0	102	51	186	216	0	849
		Airport	0	0	0	0	0	1	0	64	24	85	57	0	231
		Background	0	0	0	201	35	57	0	38	27	101	159	0	618
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	44	5	98	31	7	22	29	0	314	389	165	54	1,158
		Airport	16	0	66	0	0	0	1	0	63	127	0	0	273
		Background	28	5	32	31	7	22	28	0	251	262	165	54	885
26	Washington Street / Hancock Street	Total	0	322	134	388	468	0	531	248	202	0	0	0	2,293
		Airport	0	99	30	1	107	0	0	0	20	0	0	0	257
		Background	0	223	104	387	361	0	531	248	182	0	0	0	2,036
27	Washington Street / San Diego Avenue	Total	128	706	0	0	700	693	0	0	0	202	225	9	2,663
		Airport	30	69	0	0	89	0	0	0	0	20	0	1	209
		Background	98	637	0	0	611	693	0	0	0	182	225	8	2,454
28	Rosecrans Street / Pacific Highway	Total	209	156	233	100	148	62	65	186	152	348	169	98	1,926
		Airport	0	3	10	0	4	1	1	2	0	14	2	0	37
		Background	209	153	223	100	144	61	64	184	152	334	167	98	1,889
29	Rosecrans Street / Nimitz Boulevard	Total	21	146	116	9	124	10	121	524	23	141	554	35	1,824
		Airport	0	92	109	0	114	0	0	0	0	135	0	0	450
		Background	21	54	7	9	10	10	121	524	23	6	554	35	1,374

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
 25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

Table D-30

2025 Intersection Turning Volumes – PM Peak Hour – No Project Alternative

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	616	0	76	47	736	0	22	876	1,109	3,482
		Airport	0	0	0	202	0	0	0	37	0	0	42	218	499
		Background	0	0	0	414	0	76	47	699	0	22	834	891	2,983
2	North Harbor Drive / McCain St	Total	0	0	0	550	0	211	44	1,082	0	0	1,192	202	3,281
		Airport	0	0	0	83	0	14	9	230	0	0	245	132	713
		Background	0	0	0	467	0	197	35	852	0	0	947	70	2,568
3	North Harbor Drive / Spanish Landing	Total	7	0	25	24	0	145	77	1,995	27	7	1,312	0	3,619
		Airport	0	0	0	24	0	145	77	236	0	0	232	0	714
		Background	7	0	25	0	0	0	0	1,759	27	7	1,080	0	2,905
4	North Harbor Drive / Harbor Island Drive	Total	165	6	348	21	10	111	91	1,807	144	513	1,479	0	4,695
		Airport	13	6	54	21	10	111	91	147	21	58	544	0	1,076
		Background	152	0	294	0	0	0	0	1,660	123	455	935	0	3,619
5	North Harbor Drive / Winship Lane	Total	0	0	0	145	0	258	69	2,107	0	0	2,469	308	5,366
		Airport	0	0	0	145	0	258	69	1,953	0	0	1,079	308	2,014
		Background	0	0	0	0	0	0	0	1,954	0	0	1,390	0	3,344
6	North Harbor Drive / Rental Car Road	Total	101	0	113	22	0	16	15	3,315	101	116	2,660	14	6,473
		Airport	101	0	113	22	0	16	15	1,361	101	116	1,270	14	3,129
		Background	0	0	0	0	0	0	0	1,954	0	0	1,390	0	3,344
7	Sheraton / Harbor Island Drive	Total	23	442	0	0	598	70	77	2	25	0	0	0	1,237
		Airport	0	73	0	0	89	0	0	0	0	0	0	0	162
		Background	23	369	0	0	509	70	77	2	25	0	0	0	1,075
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	55	68	106	0	0	139	1	369
		Airport	0	0	0	0	0	55	68	20	0	0	18	1	162
		Background	0	0	0	0	0	0	0	86	0	0	121	0	207
9	Sassafras Street / Pacific Highway	Total	75	1,101	448	151	1,158	9	15	202	103	219	130	58	3,669
		Airport	75	107	0	0	96	9	15	202	103	0	130	0	737
		Background	0	994	448	151	1,062	0	0	0	0	219	0	58	2,932
10	Laurel Street / North Harbor Drive	Total	0	0	0	45	0	7	1,260	2,142	0	0	1,967	121	5,542
		Airport	0	0	0	0	0	0	559	937	0	0	870	0	2,366
		Background	0	0	0	45	0	7	701	1,205	0	0	1,097	121	3,176
11	Hawthorn Street / North Harbor Drive	Total	0	656	0	0	2,485	0	0	0	0	193	0	1,430	4,764
		Airport	0	223	0	0	937	0	0	0	0	17	0	648	1,825
		Background	0	433	0	0	1,548	0	0	0	0	176	0	782	2,939
12	Grape Street / North Harbor Drive	Total	0	662	261	1,338	1,223	0	0	0	0	0	0	0	3,484
		Airport	0	223	18	628	327	0	0	0	0	0	0	0	1,196
		Background	0	439	243	710	896	0	0	0	0	0	0	0	2,288
13	Laurel Street / Pacific Highway	Total	160	877	225	170	590	457	353	676	36	56	881	75	4,556
		Airport	0	65	15	9	84	107	110	449	0	8	423	7	1,277
		Background	160	812	210	161	506	350	243	227	36	48	458	68	3,279
14	Hawthorn Street / Pacific Highway	Total	171	859	0	0	796	80	0	0	0	191	1,350	116	3,563
		Airport	121	70	0	0	75	17	0	0	0	0	527	9	819
		Background	50	789	0	0	721	63	0	0	0	191	823	107	2,744
15	Grape Street / Pacific Highway	Total	0	861	574	342	769	0	77	2,123	51	0	0	0	4,797
		Airport	0	174	0	1	74	0	18	577	51	0	0	0	895
		Background	0	687	574	341	695	0	59	1,546	0	0	0	0	3,902
16	Laurel Street / Kettner Boulevard	Total	0	0	0	457	956	856	0	975	74	66	326	0	3,710
		Airport	0	0	0	9	0	320	0	472	0	15	117	0	933
		Background	0	0	0	448	956	536	0	503	74	51	209	0	2,777
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	631	111	0	0	0	238	1,751	0	2,731
		Airport	0	0	0	0	15	0	0	0	0	0	536	0	551
		Background	0	0	0	0	616	111	0	0	0	238	1,215	0	2,180
18	Grape Street / Kettner Boulevard	Total	0	0	0	312	657	0	0	3,623	99	0	0	0	4,691
		Airport	0	0	0	14	1	0	0	568	9	0	0	0	592
		Background	0	0	0	298	656	0	0	3,055	90	0	0	0	4,099
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	190	363	355	0	0	0	24	499	2,114	0	0	0	3,545
		Airport	0	0	0	0	0	0	0	4	578	0	0	0	582
		Background	190	363	355	0	0	0	24	495	1,536	0	0	0	2,963
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	577	70	0	0	0	0	0	0	0	0	967	53	1,667
		Airport	532	0	0	0	0	0	0	0	0	0	4	0	536
		Background	45	70	0	0	0	0	0	0	0	0	963	53	1,131
21	Laurel Street / India Street	Total	137	313	89	0	0	0	716	484	92	1	316	304	2,452
		Airport	92	15	1	0	0	0	344	45	92	1	40	0	630
		Background	45	298	88	0	0	0	372	439	0	0	276	304	1,822
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	400	3,548	532	0	269	128	98	110	0	5,085
		Airport	0	0	0	0	329	48	0	74	75	0	48	0	574
		Background	0	0	0	400	3,219	484	0	195	53	98	62	0	4,511
23	Sassafras Street / India Street	Total	182	1,363	29	0	0	0	345	70	127	0	17	21	2,154
		Airport	65	359	0	0	0	0	100	0	0	0	0	0	524
		Background	117	1,004	29	0	0	0	245	70	127	0	17	21	1,630
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	529	53	12	0	266	65	251	144	0	1,320
		Airport	0	0	0	0	0	1	0	60	22	69	101	0	253
		Background	0	0	0	529	53	11	0	206	43	182	43	0	1,067
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	39	12	144	69	66	8	69	17	760	419	238	67	1,908
		Airport	28	0	78	0	0	0	1	0	59	142	0	0	308
		Background	11	12	66	69	66	8	68	17	701	277	238	67	1,600
26	Washington Street / Hancock Street	Total	0	772	193	415	480	0	833	498	243	0	0	0	3,434
		Airport	0	109	28	1	108	0	0	0	34	0	0	0	280
		Background	0	663	165	414	372	0	833	498	209	0	0	0	3,154
27	Washington Street / San Diego Avenue	Total	239	1,395	0	0	742	633	0	0	0	222	305	20	3,556
		Airport	28	82	0	0	74	0	0	0	0	35	0	2	221
		Background	211	1,313	0	0	668	633	0	0	0	187	305	18	3,335
28	Rosecrans Street / Pacific Highway	Total	368	302	670	122	142	69	120	490	181	284	350	148	3,246
		Airport	0	4	13	0	3	1	1	2	0	11	2	0	37
		Background	368	298	657	122	139	68	119	488	181	273	348	148	3,209
29	Rosecrans Street / Nimitz Boulevard	Total	23	250	143	7	100	7	272	665	27	188	569	46	2,297
		Airport	0	100	118	0	92	0	0	0	0	110	0	0	420
		Background	23	150	25	7	8	7	272	665	27	78	569	46	1,877

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
 25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

Table D-31

2030 Intersection Turning Volumes – AM Peak Hour – No Project Alternative

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	822	0	31	16	616	0	11	943	492	2,931
		Airport	0	0	0	328	0	0	0	45	0	0	36	264	673
		Background	0	0	0	494	0	31	16	571	0	11	907	228	2,258
2	North Harbor Drive / McCain St	Total	0	0	0	129	0	42	220	869	0	0	1,072	581	2,913
		Airport	0	0	0	39	0	8	16	358	0	0	292	167	880
		Background	0	0	0	90	0	34	204	511	0	0	780	414	2,033
3	North Harbor Drive / Spanish Landing	Total	5	0	18	24	0	196	119	961	7	21	1,866	0	3,217
		Airport	0	0	0	24	0	196	119	277	0	0	263	0	879
		Background	5	0	18	0	0	0	0	684	7	21	1,603	0	2,338
4	North Harbor Drive / Harbor Island Drive	Total	46	7	153	19	10	139	138	762	105	264	2,213	0	3,856
		Airport	13	7	40	19	10	139	138	138	26	64	623	0	1,217
		Background	33	0	113	0	0	0	0	624	79	200	1,590	0	2,639
5	North Harbor Drive / Winship Lane	Total	0	0	0	102	0	224	85	848	0	0	3,030	321	4,610
		Airport	0	0	0	102	0	224	85	111	0	0	1,240	321	2,083
		Background	0	0	0	0	0	0	0	737	0	0	1,790	0	2,527
6	North Harbor Drive / Rental Car Road	Total	77	0	57	10	0	14	17	2,009	100	150	3,259	18	5,711
		Airport	77	0	57	10	0	14	17	1,272	100	150	1,469	18	3,184
		Background	0	0	0	0	0	0	0	737	0	0	1,790	0	2,527
7	Sheraton / Harbor Island Drive	Total	13	122	0	0	279	99	85	6	27	0	0	0	631
		Airport	13	62	0	0	100	0	0	0	0	0	0	0	160
		Background	0	60	0	0	179	99	85	6	27	0	0	0	471
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	95	0	0	70	1	286
		Airport	0	0	0	0	0	38	82	18	0	0	22	1	161
		Background	0	0	0	0	0	0	0	77	0	0	48	0	125
9	Sassafras Street / Pacific Highway	Total	81	493	66	39	508	11	6	77	50	135	154	35	1,655
		Airport	81	91	0	0	119	11	6	77	50	0	154	0	589
		Background	0	402	66	39	389	0	0	0	0	135	0	35	1,066
10	Laurel Street / North Harbor Drive	Total	0	0	0	17	0	3	479	1,350	0	0	2,355	48	4,252
		Airport	0	0	0	0	0	0	458	881	0	0	1,092	0	2,431
		Background	0	0	0	17	0	3	21	469	0	0	1,263	48	1,821
11	Hawthorn Street / North Harbor Drive	Total	0	355	0	0	1,344	0	0	0	0	134	0	2,814	4,647
		Airport	0	279	0	0	881	0	0	0	0	18	0	814	1,992
		Background	0	76	0	0	463	0	0	0	0	116	0	2,000	2,655
12	Grape Street / North Harbor Drive	Total	0	288	111	1,007	585	0	0	0	0	0	0	0	1,991
		Airport	0	279	15	595	303	0	0	0	0	0	0	0	1,192
		Background	0	9	96	412	282	0	0	0	0	0	0	0	799
13	Laurel Street / Pacific Highway	Total	42	399	126	71	251	339	109	515	1	83	983	101	3,020
		Airport	0	66	22	5	48	115	100	358	0	4	429	7	1,154
		Background	42	333	104	66	203	224	9	157	1	79	554	94	1,866
14	Hawthorn Street / Pacific Highway	Total	152	264	0	0	202	75	0	0	0	376	2,641	137	3,847
		Airport	152	74	0	0	35	18	0	0	0	0	662	14	955
		Background	0	190	0	0	167	57	0	0	0	376	1,979	123	2,892
15	Grape Street / Pacific Highway	Total	0	684	184	177	986	0	99	1,108	57	0	0	0	3,295
		Airport	0	211	0	0	34	0	15	538	57	0	0	0	855
		Background	0	473	184	177	952	0	84	570	0	0	0	0	2,440
16	Laurel Street / Kettner Boulevard	Total	0	0	0	354	469	686	0	917	75	65	373	0	2,939
		Airport	0	0	0	14	0	330	0	385	0	7	110	0	846
		Background	0	0	0	340	469	356	0	532	75	58	263	0	2,093
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	254	131	0	0	0	216	3,447	0	4,048
		Airport	0	0	0	0	8	0	0	0	0	0	676	0	684
		Background	0	0	0	0	246	131	0	0	0	216	2,771	0	3,364
18	Grape Street / Kettner Boulevard	Total	0	0	0	139	673	0	0	1,669	108	0	0	0	2,589
		Airport	0	0	0	7	1	0	0	533	5	0	0	0	546
		Background	0	0	0	132	672	0	0	1,136	103	0	0	0	2,043
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	206	272	233	0	0	0	44	457	1,246	0	0	0	2,458
		Airport	0	0	0	0	0	0	0	4	537	0	0	0	541
		Background	206	272	233	0	0	0	44	453	709	0	0	0	1,917
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	62	59	0	0	0	0	0	0	0	0	3,080	95	3,296
		Airport	0	0	0	0	0	0	0	0	0	0	671	0	671
		Background	62	59	0	0	0	0	0	0	0	0	2,409	95	2,625
21	Laurel Street / India Street	Total	105	98	16	0	0	0	606	515	94	1	338	310	2,083
		Airport	68	7	0	0	0	0	266	39	94	1	49	0	524
		Background	37	91	16	0	0	0	340	476	0	0	289	310	1,559
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	242	2,387	692	0	50	45	114	99	0	3,629
		Airport	0	0	0	0	344	53	0	26	26	0	53	0	502
		Background	0	0	0	242	2,043	639	0	24	19	114	46	0	3,127
23	Sassafras Street / India Street	Total	235	964	13	0	0	0	110	23	48	0	43	27	1,463
		Airport	78	273	0	0	0	0	38	0	0	0	0	0	389
		Background	157	691	13	0	0	0	72	23	48	0	43	27	1,074
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	511	90	147	0	115	57	169	197	0	1,286
		Airport	0	0	0	0	0	1	0	76	29	87	69	0	262
		Background	0	0	0	511	90	146	0	39	28	82	128	0	1,024
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	19	0	67	24	6	17	23	0	277	313	111	36	893
		Airport	19	0	67	0	0	0	1	0	75	137	0	0	299
		Background	0	0	0	24	6	17	22	0	202	176	111	36	594
26	Washington Street / Hancock Street	Total	0	256	106	312	402	0	208	97	95	0	0	0	1,476
		Airport	0	106	36	2	113	0	0	0	24	0	0	0	281
		Background	0	150	70	310	289	0	208	97	71	0	0	0	1,195
27	Washington Street / San Diego Avenue	Total	113	581	0	0	677	665	0	0	0	277	313	12	2,638
		Airport	35	71	0	0	91	0	0	0	0	24	0	1	222
		Background	78	510	0	0	586	665	0	0	0	253	313	11	2,416
28	Rosecrans Street / Pacific Highway	Total	207	155	229	144	209	88	61	176	143	312	154	88	1,966
		Airport	0	3	9	0	3	1	1	3	0	12	4	0	36
		Background	207	152	220	144	206	87	60	173	143	300	150	88	1,930
29	Rosecrans Street / Nimitz Boulevard	Total	20	153	171	39	165	41	107	461	20	209	514	32	1,932
		Airport	0	100	164	0	125	0	0	0	0	204	0	0	593
		Background	20	53	7	39	40	41	107	461	20	5	514	32	1,339

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

- 19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
- 25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

Table D-32

2030 Intersection Turning Volumes – PM Peak Hour – No Project Alternative

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	677	0	75	52	805	0	23	932	1,231	3,795
		Airport	0	0	0	266	0	0	0	38	0	0	43	287	634
		Background	0	0	0	411	0	75	52	767	0	23	889	944	3,161
2	North Harbor Drive / McCain St	Total	0	0	0	561	0	221	48	1,254	0	0	1,282	203	3,569
		Airport	0	0	0	80	0	18	12	293	0	0	311	131	845
		Background	0	0	0	481	0	203	36	961	0	0	971	72	2,724
3	North Harbor Drive / Spanish Landing	Total	7	0	25	24	0	167	100	2,166	28	7	1,384	0	3,908
		Airport	0	0	0	24	0	167	100	272	0	0	276	0	839
		Background	7	0	25	0	0	0	0	1,894	28	7	1,108	0	3,069
4	North Harbor Drive / Harbor Island Drive	Total	167	6	346	21	10	141	116	1,941	159	525	1,514	0	4,946
		Airport	15	6	52	21	10	141	116	156	24	56	550	0	1,147
		Background	152	0	294	0	0	0	0	1,785	135	469	964	0	3,799
5	North Harbor Drive / Winship Lane	Total	0	0	0	139	0	270	74	2,234	0	0	2,493	307	5,517
		Airport	0	0	0	139	0	270	74	155	0	0	1,060	307	2,005
		Background	0	0	0	0	0	0	0	2,079	0	0	1,433	0	3,512
6	North Harbor Drive / Rental Car Road	Total	109	0	110	21	0	17	15	3,407	109	113	2,674	14	6,589
		Airport	109	0	110	21	0	17	15	1,328	109	113	1,241	14	3,077
		Background	0	0	0	0	0	0	0	2,079	0	0	1,433	0	3,512
7	Sheraton / Harbor Island Drive	Total	23	442	0	0	623	70	77	2	25	0	0	0	1,262
		Airport	0	73	0	0	89	0	0	0	0	0	0	0	162
		Background	23	369	0	0	534	70	77	2	25	0	0	0	1,100
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	55	68	104	0	0	137	1	365
		Airport	0	0	0	0	0	55	68	21	0	0	19	1	164
		Background	0	0	0	0	0	0	0	83	0	0	118	0	201
9	Sassafras Street / Pacific Highway	Total	77	840	328	105	838	10	15	206	106	110	133	29	2,797
		Airport	77	112	0	0	99	10	15	206	106	0	133	0	758
		Background	0	728	328	105	739	0	0	0	0	110	0	29	2,039
10	Laurel Street / North Harbor Drive	Total	0	0	0	49	0	7	1,233	2,205	0	0	2,028	126	5,648
		Airport	0	0	0	0	0	0	506	954	0	0	887	0	2,347
		Background	0	0	0	49	0	7	727	1,251	0	0	1,141	126	3,301
11	Hawthorn Street / North Harbor Drive	Total	0	662	0	0	2,572	0	0	0	0	219	0	1,544	4,997
		Airport	0	227	0	0	954	0	0	0	0	20	0	660	1,861
		Background	0	435	0	0	1,618	0	0	0	0	199	0	884	3,136
12	Grape Street / North Harbor Drive	Total	0	651	256	1,353	1,236	0	0	0	0	0	0	0	3,496
		Airport	0	227	21	639	335	0	0	0	0	0	0	0	1,222
		Background	0	424	235	714	901	0	0	0	0	0	0	0	2,274
13	Laurel Street / Pacific Highway	Total	135	752	192	122	444	354	377	644	40	94	1,193	129	4,476
		Airport	0	71	16	9	89	108	111	395	0	8	373	7	1,187
		Background	135	681	176	113	355	246	266	249	40	86	820	122	3,289
14	Hawthorn Street / Pacific Highway	Total	166	740	0	0	684	73	0	0	0	214	1,458	129	3,464
		Airport	124	76	0	0	77	20	0	0	0	0	537	10	844
		Background	42	664	0	0	607	53	0	0	0	214	921	119	2,620
15	Grape Street / Pacific Highway	Total	0	792	512	290	667	0	84	2,243	52	0	0	0	4,640
		Airport	0	179	0	1	77	0	21	587	52	0	0	0	917
		Background	0	613	512	289	590	0	63	1,656	0	0	0	0	3,723
16	Laurel Street / Kettner Boulevard	Total	0	0	0	421	877	759	0	1,321	133	98	456	0	4,065
		Airport	0	0	0	10	0	267	0	420	0	16	121	0	834
		Background	0	0	0	411	877	492	0	901	133	82	335	0	3,231
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	656	115	0	0	0	266	1,906	0	2,943
		Airport	0	0	0	0	16	0	0	0	0	0	547	0	563
		Background	0	0	0	0	640	115	0	0	0	266	1,359	0	2,380
18	Grape Street / Kettner Boulevard	Total	0	0	0	337	711	0	0	3,791	103	0	0	0	4,942
		Airport	0	0	0	15	2	0	0	578	9	0	0	0	604
		Background	0	0	0	322	709	0	0	3,213	94	0	0	0	4,338
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	311	593	580	0	0	0	27	564	2,327	0	0	0	4,402
		Airport	0	0	0	0	0	0	0	4	589	0	0	0	593
		Background	311	593	580	0	0	0	27	560	1,738	0	0	0	3,809
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	50	78	0	0	0	0	0	0	0	0	1,881	74	2,083
		Airport	0	0	0	0	0	0	0	0	0	0	543	0	543
		Background	50	78	0	0	0	0	0	0	0	0	1,338	74	1,540
21	Laurel Street / India Street	Total	132	259	73	0	0	0	884	747	96	1	429	425	3,046
		Airport	95	16	1	0	0	0	288	46	96	1	42	0	585
		Background	37	243	72	0	0	0	596	701	0	0	387	425	2,461
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	399	3,493	533	0	191	108	80	100	0	4,904
		Airport	0	0	0	0	277	49	0	75	76	0	49	0	526
		Background	0	0	0	399	3,216	484	0	116	32	80	51	0	4,378
23	Sassafras Street / India Street	Total	222	1,632	39	0	0	0	303	57	104	0	18	22	2,397
		Airport	67	303	0	0	0	0	102	0	0	0	0	0	472
		Background	155	1,329	39	0	0	0	201	57	104	0	18	22	1,925
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	1,347	134	28	0	286	72	217	155	0	2,239
		Airport	0	0	0	0	0	1	0	70	27	71	121	0	290
		Background	0	0	0	1,347	134	27	0	216	45	146	34	0	1,949
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	33	0	80	52	51	6	56	14	635	344	160	45	1,476
		Airport	33	0	80	0	0	0	1	0	70	158	0	0	342
		Background	0	0	0	52	51	6	55	14	565	186	160	45	1,134
26	Washington Street / Hancock Street	Total	0	562	144	333	416	0	326	194	122	0	0	0	2,097
		Airport	0	116	33	1	117	0	0	0	41	0	0	0	308
		Background	0	446	111	332	299	0	326	194	81	0	0	0	1,789
27	Washington Street / San Diego Avenue	Total	202	1,137	0	0	718	607	0	0	0	300	423	28	3,415
		Airport	33	84	0	0	77	0	0	0	0	41	0	2	237
		Background	169	1,053	0	0	641	607	0	0	0	259	423	26	3,178
28	Rosecrans Street / Pacific Highway	Total	364	297	660	174	201	98	113	464	171	256	315	133	3,246
		Airport	0	3	11	0	3	1	1	4	0	10	3	0	36
		Background	364	294	649	174	198	97	112	460	171	246	312	133	3,210
29	Rosecrans Street / Nimitz Boulevard	Total	23	255	203	31	136	31	239	586	24	237	528	43	2,336
		Airport	0	109	178	0	101	0	0	0	0	165	0	0	553
		Background	23	146	25	31	35	31	239	586	24	72	528	43	1,783

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

- 19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
- 25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

Table D-33
2010-2030 Peak Hour Intersection Operations

Intersection Number	Intersection	Peak Hour	Year 2010		Year 2015		Year 2020		Year 2025		Year 2030	
			Delay (Sec.)	LOS	Delay (Sec.)	LOS	Delay (SEC)	LOS	Delay (SEC)	LOS	Delay (Sec.)	LOS
1	North Harbor Drive/ Nimitz Boulevard	AM	20.2	C	20.4	C	20.9	C	21.1	C	21.7	C
		PM	20.7	C	20.4	C	20.9	C	21.1	C	21.6	C
2	North Harbor Drive/ McCain Road	AM	6.7	A	7.2	A	7.4	A	7.6	A	7.6	A
		PM	9.1	A	9.9	A	10.2	B	10.3	B	10.3	B
3	North Harbor Drive/ Spanish Landing	AM	10.1	B	10.9	B	11.2	B	11.7	B	13.1	B
		PM	8.7	A	9.3	A	9.8	A	10.0	A	11.2	B
4	North Harbor Drive/ Harbor Island Drive	AM	20.4	C	20.4	C	20.9	C	20.8	C	21.9	C
		PM	30.8	C	31.4	C	32.8	C	33.3	C	34.9	C
5	North Harbor Drive/ Winship Lane	AM	9.9	A	10.6	B	10.8	B	10.7	B	11.1	B
		PM	9.6	A	10.3	B	10.4	B	10.6	B	10.7	B
6	North Harbor Drive/ Rental Car Road	AM	6.7	A	7.5	A	8.2	A	8.8	A	9.0	A
		PM	7.6	A	8.5	A	9.2	A	9.6	A	10.0	A
7	Sheraton Harbor Island Drive	AM	12.4	B	12.3	B	12.0	B	11.8	B	11.6	B
		PM	7.6	A	7.4	A	7.2	A	7.0	A	6.9	A
8	Employee Lot Harbor Island Drive	AM	9.8	A	9.9	A	9.9	A	9.9	A	9.9	A
		PM	10.1	B	10.1	B	10.2	B	10.2	B	10.1	B
9	Sassafras Street/ Pacific Highway	AM	15.3	B	15.4	B	15.1	B	15.6	B	14.0	B
		PM	14.5	B	16.6	B	16.5	B	18.5	B	14.1	B
10	Laurel Street/ North Harbor Drive	AM	9.2	A	10.1	B	10.8	B	11.3	B	10.5	B
		PM	15.5	B	16.3	B	18.7	B	19.3	B	19.4	B
11	Hawthorn Street/ North Harbor Drive	AM	31.8	C	49.6	D	112.8	F	131.7	F	173.0	F
		PM	23.2	C	25.2	C	33.7	C	40.7	D	55.9	E
12	Grape Street/ North Harbor Drive	AM	8.2	A	8.4	A	8.3	A	8.4	A	8.3	A
		PM	10.9	B	11.0	B	10.7	B	11.0	B	10.9	B
13	Laurel Street/ Pacific Highway	AM	32.1	C	33.7	C	33.9	C	34.4	C	33.7	C
		PM	49.0	D	62.4	E	59.5	E	53.1	D	60.4	E
14	Hawthorn Street/ Pacific Highway	AM	12.6	B	14.3	B	15.8	B	17.7	B	18.9	B
		PM	21.0	C	22.0	C	22.9	C	23.8	C	23.3	C
15	Grape Street/ Pacific Highway	AM	18.5	B	19.0	B	19.9	B	20.3	C	20.2	C
		PM	26.2	C	32.8	C	53.1	D	68.6	E	56.5	E
16	Laurel Street/ Kettner Boulevard	AM	18.9	B	19.6	B	19.8	B	19.9	B	21.9	C
		PM	21.4	C	22.9	C	25.9	C	24.8	C	31.9	C
17	Hawthorn Street/ Kettner Boulevard	AM	5.5	A	6.2	A	10.3	B	9.6	A	13.0	B
		PM	10.9	B	11.3	B	15.6	B	13.9	B	14.2	B
18	Grape Street/ Kettner Boulevard	AM	12.4	B	13.1	B	14.8	B	14.2	B	14.8	B
		PM	16.7	B	22.8	C	55.3	E	54.0	D	77.1	E
19	Grape Street/ I-5 Southbound On-Ramp	AM	11.1	B	8.9	A	11.6	B	11.5	B	15.1	B
		PM	28.6	C	35.2	D	32.9	C	38.6	D	87.1	F
20	Hawthorn Street/ I-5 Northbound Off-Ramp	AM	11.1	B	10.6	B	10.8	B	19.6	B	15.3	B
		PM	11.8	B	12.0	B	12.1	B	16.4	B	11.0	B
21	Laurel Street/ India Street	AM	18.5	B	19.4	B	22.6	C	22.9	C	23.0	C
		PM	21.4	C	22.9	C	22.1	C	26.8	C	32.4	C
22	Sassafras Street/ Kettner Boulevard	AM	8.3	A	9.2	A	19.4	B	11.9	B	9.6	A
		PM	11.1	B	12.5	B	121.5	F	82.1	F	62.5	E
23	Sassafras Street/ India Street	AM	8.1	A	8.2	A	8.7	A	9.0	A	8.0	A
		PM	13.5	B	17.3	B	15.3	B	15.7	B	16.6	B
24	Washington Street/ Pacific Highway SB-Ramps	AM	12.6	B	12.7	B	13.0	B	12.8	B	12.4	B
		PM	14.9	B	15.1	B	15.3	B	15.5	B	17.4	B
25	Washington Street/ Pacific Highway NB-Ramps	AM	33.5	C	46.7	D	56.0	E	59.8	E	31.1	C
		PM	67.7	E	107.8	F	130.2	F	156.4	F	79.3	E
26	Washington Street/ Hancock Street	AM	27.8	C	28.1	C	28.7	C	28.8	C	25.9	C
		PM	30.2	C	30.8	C	32.4	C	32.7	C	28.0	C
27	Washington Street/ San Diego Avenue	AM	12.5	B	13.1	B	12.7	B	12.5	B	15.0	B
		PM	13.6	B	14.1	B	14.1	B	14.0	B	16.8	B
28	Rosecrans Street/ Pacific Highway	AM	36.1	D	36.4	D	36.1	D	36.2	D	37.3	D
		PM	39.1	D	44.8	D	41.3	D	41.9	D	42.9	D
29	Rosecrans Street/ Nimitz Boulevard	AM	21.8	C	21.8	C	24.3	C	23.6	C	26.8	C
		PM	25.0	C	25.3	C	26.7	C	26.5	C	28.9	C

Source: HNTB, 2007
LOS = level of service

D.4.3.3 Freeway Segments

Table D-34 summarizes the mainline freeway operations for each analysis year under the No Project Alternative. As shown, all I-5 freeway segments analyzed are projected to exceed Caltrans target of LOS C in 2010 to 2030.

Table D-34
 2010-2030 Freeway Segment Operations (2010-2020)

SB I-5 Freeway		2010						2015						2020					
		AM			PM			AM			PM			AM			PM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS															
North of I-8	I-8	7,000	34.7	D	8,600	42.7	E	7,200	35.8	E	8,400	41.8	E	7,000	34.8	D	9,600	48.0	F
I-8	Old Town Avenue	7,100	35.4	E	7,400	37.1	E	7,300	36.4	E	7,400	36.9	E	6,900	34.5	D	8,900	44.6	E
Old Town Avenue	Washington Street	5,800	29.1	D	6,200	30.7	D	6,000	29.9	D	6,200	31.1	D	5,200	25.7	C	6,400	31.9	D
Washington Street	Pacific Highway Viaducts	6,200	31.2	D	6,500	32.4	D	6,400	32.1	D	6,600	33.1	D	5,700	28.5	D	7,500	37.6	E
Pacific Highway Viaducts	India Street	7,200	35.8	E	8,200	41.1	E	7,300	36.7	E	8,400	41.9	E	6,200	30.9	D	8,400	41.9	E
India Street	Hawthorn Street	7,300	36.3	E	8,400	41.9	E	7,500	37.4	E	8,400	41.7	E	6,500	32.5	D	8,800	44.0	E
Hawthorn Street	First Avenue	6,100	30.5	D	7,500	37.4	E	6,300	31.4	D	7,400	36.8	E	5,400	26.8	D	7,600	37.9	E
First Avenue	SR 163	6,500	32.3	D	9,300	46.5	F	6,600	33.1	D	9,400	46.8	F	5,800	28.8	D	9,500	47.6	F
SR 163	SR 94	3,700	18.4	C	5,300	26.3	D	3,900	19.4	C	5,400	26.7	D	3,400	17.2	B	5,400	27.1	D
NB I-5 Freeway		2010						2015						2020					
		AM			PM			AM			PM			AM			PM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS															
SR 94	SR 163	10,900	54.4	F	7,700	38.4	E	11,400	56.7	F	7,900	39.5	E	10,700	53.6	F	7,000	34.8	D
SR 163	First Avenue	8,400	41.7	E	7,800	39.0	E	8,600	42.7	E	7,900	39.3	E	8,300	41.2	E	7,600	37.9	E
First Avenue	Hawthorn Street	7,000	35.0	D	6,500	32.2	D	7,100	35.4	E	6,500	32.3	D	6,600	33.1	D	5,800	29.0	D
Hawthorn Street	India Street	7,200	35.9	E	7,700	38.5	E	7,300	36.3	E	7,700	38.5	E	7,000	35.1	E	7,300	36.5	E
India Street	Pacific Highway Viaducts	7,200	35.7	E	7,600	37.7	E	7,200	36.1	E	7,600	37.8	E	6,900	34.6	D	6,900	34.4	D
Pacific Highway Viaducts	Washington Street	5,300	26.4	D	6,500	32.2	D	5,100	25.2	C	6,100	30.6	D	4,800	24.0	C	5,600	28.1	D
Washington Street	Old Town Avenue	6,000	29.8	D	7,100	35.5	E	6,100	30.5	D	7,200	35.7	E	6,000	29.9	D	7,100	35.3	E
Old Town Avenue	I-8	5,900	29.2	D	7,300	36.4	E	6,100	30.2	D	7,400	36.8	E	5,800	28.8	D	6,900	34.6	D
I-8	North of I-8	7,400	36.7	E	7,500	37.2	E	7,400	37.1	E	7,700	38.2	E	7,400	37.1	E	7,800	39.1	E
I-8 Freeway		2010						2015						2020					
		AM			PM			AM			PM			AM			PM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS															
I-5	East	5,800	29.1	D	7,900	39.2	E	5,900	29.4	D	7,800	38.9	E	5,000	25.2	C	7,600	38.0	E
East	I-5	7,100	35.6	E	7,200	36.1	E	7,200	35.7	E	7,600	37.8	E	6,700	33.5	D	7,100	35.6	E

Source:HNTB, 2007

Notes: vph = vehicles per hour
 pc/mi/ln = passenger cars per mile per lane
 LOS = level of service

Table D-34 (continued)
2010-2030 Freeway Segment Operations (2025-2030)

SB I-5 Freeway		2025						2030					
		AM			PM			AM			PM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS									
North of I-8	I-8	7,100	35.6	E	9,500	47.2	F	7,600	38.0	E	9,200	45.9	F
I-8	Old Town Avenue	7,100	35.4	E	8,800	44.1	E	7,500	37.5	E	8,400	42.0	E
Old Town Avenue	Washington Street	5,300	26.5	D	6,400	32.0	D	5,500	27.6	D	6,400	31.7	D
Washington Street	Pacific Highway Viaducts	6,000	29.8	D	7,600	38.0	E	6,100	30.4	D	7,000	34.8	D
Pacific Highway Viaducts	India Street	6,400	32.2	D	8,500	42.2	E	6,700	33.4	D	8,300	41.3	E
India Street	Hawthorn Street	6,700	33.7	D	8,900	44.5	E	6,900	34.5	D	8,600	42.7	E
Hawthorn Street	First Avenue	5,600	27.8	D	7,800	38.7	E	5,600	28.0	D	7,800	38.8	E
First Avenue	SR 163	6,000	30.1	D	9,700	48.5	F	6,100	30.4	D	9,800	48.9	F
SR 163	SR 94	3,600	17.8	B	5,600	28.0	D	3,600	18.2	C	5,500	27.2	D
NB I-5 Freeway		2025						2030					
		AM			PM			AM			PM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS									
SR 94	SR 163	10,900	54.3	F	7,100	35.4	E	10,700	53.4	F	7,500	37.2	E
SR 163	First Avenue	8,400	41.8	E	7,700	38.5	E	8,100	40.3	E	7,600	38.0	E
First Avenue	Hawthorn Street	6,500	32.6	D	5,800	29.1	D	6,300	31.3	D	6,100	30.6	D
Hawthorn Street	India Street	6,900	34.6	D	7,400	36.8	E	6,400	31.9	D	7,900	39.5	E
India Street	Pacific Highway Viaducts	6,800	34.2	D	7,000	34.8	D	6,400	31.7	D	7,200	35.8	E
Pacific Highway Viaducts	Washington Street	4,700	23.4	C	5,600	28.0	D	4,400	21.8	C	5,900	29.6	D
Washington Street	Old Town Avenue	5,900	29.3	D	7,100	35.3	E	5,600	27.8	D	7,100	35.4	E
Old Town Avenue	I-8	5,600	28.2	D	6,900	34.2	D	5,300	26.5	D	7,200	35.7	E
I-8	North of I-8	7,500	37.2	E	7,800	39.1	E	7,500	37.4	E	8,600	42.9	E
I-8 Freeway		2025						2030					
		AM			PM			AM			PM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS									
I-5	East	5,100	25.3	C	7,600	37.8	E	4,900	24.4	C	7,400	37.1	E
East	I-5	7,000	34.7	D	7,200	36.1	E	7,300	36.2	E	7,100	35.4	E

Source:HNTB, 2007

Notes: vph = vehicles per hour
pc/mi/ln = passenger cars per mile per lane
LOS = level of service

D.4.3.4 Freeway Ramp Operations

Table D-35 summarizes the freeway ramp operations for each analysis year under the No Project Alternative. As shown, all study freeway ramps were estimated to accommodate a lower traffic volume than their set meter rates and, therefore, would have no adverse traffic impact.

Table D-35

2010-2030 Freeway Ramp Operations – No Project Alternative

Location	Peak Hour	2010					2015				
		Demand (veh/hr)	Maximum Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (minutes)	Queue (feet)	Demand (veh/hr)	Maximum Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (minutes)	Queue (feet)
I-5 NB from San Diego	AM	799	1,992	0	0	0	525	1,992	0	0	0
	PM	871	1,992	0	0	0	505	1,992	0	0	0
I-5 NB from India	AM	763	1,992	0	0	0	1,039	1,992	0	0	0
	PM	824	1,992	0	0	0	1,113	1,992	0	0	0
I-5 SB from Kettner	AM	101	996	0	0	0	119	996	0	0	0
	PM	178	996	0	0	0	125	996	0	0	0
I-5 SB from Washington/Hancock	AM	476	1,140	0	0	0	481	1,140	0	0	0
	PM	276	1,140	0	0	0	289	1,140	0	0	0

Location	Peak Hour	2020					2025				
		Demand (veh/hr)	Maximum Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (minutes)	Queue (feet)	Demand (veh/hr)	Maximum Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (minutes)	Queue (feet)
I-5 NB from San Diego	AM	760	1,992	0	0	0	791	1,992	0	0	0
	PM	889	1,992	0	0	0	670	1,992	0	0	0
I-5 NB from India	AM	865	1,992	0	0	0	695	1,992	0	0	0
	PM	1,081	1,992	0	0	0	1,051	1,992	0	0	0
I-5 SB from Kettner	AM	134	996	0	0	0	133	996	0	0	0
	PM	231	996	0	0	0	243	996	0	0	0
I-5 SB from Washington/Hancock	AM	524	1,140	0	0	0	570	1,140	0	0	0
	PM	919	1,140	0	0	0	896	1,140	0	0	0

Location	Peak Hour	2030				
		Demand (veh/hr)	Maximum Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (minutes)	Queue (feet)
I-5 NB from San Diego	AM	890	1,992	0	0	0
	PM	707	1,992	0	0	0
I-5 NB from India	AM	1,319	1,992	0	0	0
	PM	1,648	1,992	0	0	0
I-5 SB from Kettner	AM	87	996	0	0	0
	PM	165	996	0	0	0
I-5 SB from Grape	AM	1,023	1,992	0	0	0
	PM	1,900	1,992	0	0	0
I-5 SB from Washington/Hancock	AM	594	1,140	0	0	0
	PM	477	1,140	0	0	0

Source: HNTB, 2007
veh/hr = vehicles per hour

D.4.3.5 Railroad Crossings

Forecasts of future train operations were obtained from the San Diego 2030 RTP (Mobility 2030), the 2007 LOSSAN Strategic Business Plan, and the 2000 San Diego International Airport Master Plan Preferred Concept Alternatives Roadway Analysis¹⁴ report. Mobility 2030 projects that the headways for the Coaster Service will decrease from 36 minutes to 20 minutes during peak hours and from 120 minutes to 60 minutes during off-peak hours by 2030. That translates to a 44% increase in frequency during peak hours by 2030. The LOSSAN Strategic Business Plan projects that Coaster service would increase from existing 22 trains per day to 54 trains per day in 2025, consistent with the above. The LOSSAN Strategic Business Plan also projects that Amtrak Pacific Surfliner service between Los Angeles and San Diego would increase from existing 22 trips per day in 2005/2006 to 26 trains in 2015 and 32 trains in 2025. Mobility 2030 also projects that headways for the trolley Blue Line service that passes through the study area would decrease from 15 minutes to 7.5 minutes during off-peak hours by 2030. Estimated daily train operations in 2030 include 36 Amtrak trips, 78 Coaster trips, and 384 Trolley trips.

¹⁴ Linscott, Law & Greenspan Engineers March 3, 2000 San Diego International Airport Master Plan Preferred Concept Alternatives Roadway Analysis.

For the analysis, freight train operations were estimated to increase to four trains per day.

Table D-36 summarizes the railroad crossing delay analysis for each analysis year under the No Project Alternative. As shown, delays at all railroad crossings were estimated to be under the VHD threshold for each street segment in 2010, 2015 and 2030. Washington Street railroad crossings exceeded the threshold of VHD in 2020 and 2025. However, due to shifts in regional background traffic described in Section D.2.1.1 *Airport Trip Generation and Background Traffic* total traffic on Washington Street in 2030 decreased causing in the VHD to decrease to a level of insignificance.

Table D-36

2010-2030 Railroad Crossing Operations – No Project Alternative

Crossing	Year 2010				
	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	20,400	4.76	64	No
Sassafras Street	75	13,500	3.44	22	No
Palm Street	75	900	3.44	0	No
Laurel Street	300	25,400	0.77	1	No
Hawthorn Street	150	18,600	0.77	10	No
Grape Street	300	28,900	0.77	18	No

Crossing	Year 2015				
	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	23,300	8.53	134	No
Sassafras Street	150	15,700	6.13	46	No
Palm Street	75	900	6.13	0	No
Laurel Street	300	29,200	0.80	1	No
Hawthorn Street	150	20,900	0.80	13	No
Grape Street	300	31,600	0.80	22	No

Crossing	Year 2020				
	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	24,500	8.94	152	Yes
Sassafras Street	150	16,000	6.46	50	No
Palm Street	75	300	6.46	0	No
Laurel Street	300	30,700	1.13	1	No
Hawthorn Street	150	23,500	1.13	24	No
Grape Street	300	34,400	1.13	43	No

Crossing	Year 2025				
	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	24,800	9.41	164	Yes
Sassafras Street	150	17,400	6.79	59	No
Palm Street	75	100	6.79	0	No
Laurel Street	300	31,700	1.46	0	No
Hawthorn Street	150	24,600	1.46	31	No
Grape Street	300	35,300	1.46	58	No

Crossing	Year 2030				
	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	18,900	9.95	124	No
Sassafras Street	75	13,300	7.18	45	No
Palm Street	75	100	7.18	0	No
Laurel Street	300	34,000	1.85	0	No
Hawthorn Street	300	25,900	1.85	42	No
Grape Street	300	36,600	1.85	78	No

Source: HNTB, 2007

VHD = vehicle-hours of delay
ADT = average daily traffic

D.4.3.6 Transit

Under the No Project Alternative no existing or planned transit routes would be modified. Therefore, no adverse impacts would occur to transit operations.

D.4.3.7 Parking

The No Project Alternative would not remove any parking lots designated for public use. Passenger terminals also are not located close to commercial or residential areas. However, as documented in the AMP facility requirements the demand for terminal area parking spaces (8,400 in 2015 and 10,500 in 2030) will continue to exceed the supply of 4,085 spaces, resulting in a deficit of approximately 4,300 spaces in 2015 and 6,400 in 2030.

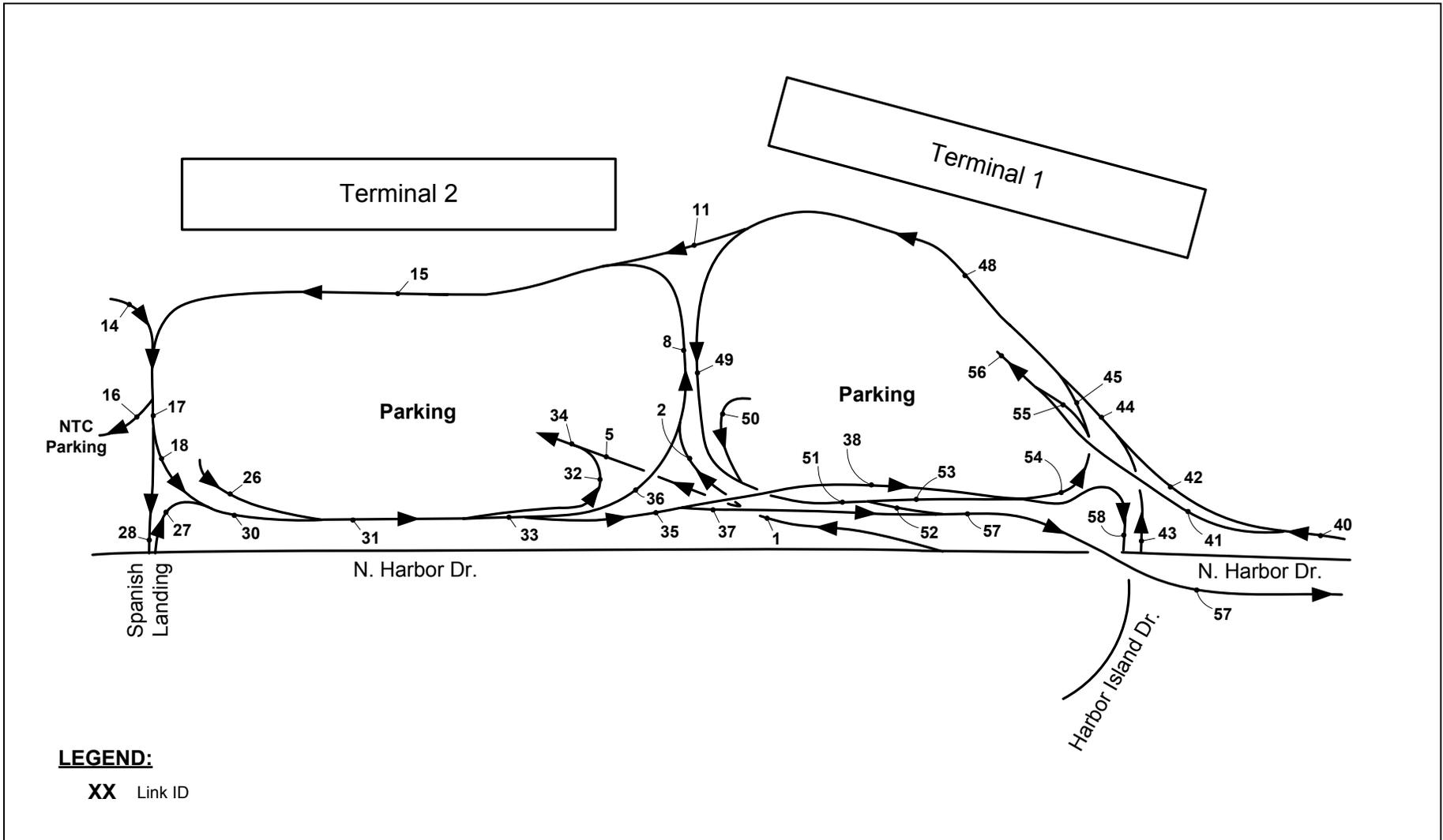
D.4.3.8 Terminal Curbside

7,250 linear feet of curbside is required at Terminals 1 and 2 and the Commuter Terminal to accommodate private and commercial vehicle demand in 2015. Currently 6,630 linear feet of curbside is available between all three terminals. Under the No Project Alternative no new curbside would be provided and there would be an airport-wide deficiency of 620 linear feet in 2015.

D.4.3.9 On-Airport Traffic Circulation

Table D-37 shows the on-airport roadway peak hour traffic volumes and operation (see **Figure D.4-1**) for each analysis year under the No Project Alternative. As shown, all terminal roadways would operate at acceptable LOS D or better during peak hours under the No Project Alternative.

Volumes and LOS shown represent throughput capacity of the on-Airport roadways but do not represent specific curbside operations.



Appendix D.4-1



Not to Scale

On-Airport Roadway Link ID Key Map
No Project Alternative

Environmental Impact Report

Table D-37 (continued on next page)

2010-2030 On-Airport Roadway Peak Hour Operations – No Project Alternative

Link ID	Lanes	2010				2015				2020			
		AM	LOS	PM	LOS	AM	LOS	PM	LOS	AM	LOS	PM	LOS
1	2	396	A	326	A	464	A	386	A	487	B	407	A
2	2	319	A	272	A	388	A	332	A	411	A	353	A
3		Link Not Used				Link Not Used				Link Not Used			
4		Link Not Used				Link Not Used				Link Not Used			
5	2	76	A	54	A	76	A	54	A	76	A	53	A
6		Link Not Used				Link Not Used				Link Not Used			
7		Link Not Used				Link Not Used				Link Not Used			
8	3	407	A	347	A	494	A	422	A	525	A	451	A
9		Link Not Used				Link Not Used				Link Not Used			
10		Link Not Used				Link Not Used				Link Not Used			
11	1	185	A	206	A	210	A	234	A	230	A	257	B
12		Link Not Used				Link Not Used				Link Not Used			
13		Link Not Used				Link Not Used				Link Not Used			
14	1	79	A	69	A	91	A	79	A	99	A	86	A
15	4	593	A	553	A	704	A	656	A	755	A	708	A
16	1	12	A	12	A	12	A	12	A	12	A	12	A
17	4	660	A	610	A	783	A	723	A	841	A	782	A
18	2	513	B	482	B	611	B	574	B	658	B	622	B
19		Link Not Used				Link Not Used				Link Not Used			
20		Link Not Used				Link Not Used				Link Not Used			
21		Link Not Used				Link Not Used				Link Not Used			
22		Link Not Used				Link Not Used				Link Not Used			
23		Link Not Used				Link Not Used				Link Not Used			
24		Link Not Used				Link Not Used				Link Not Used			
25		Link Not Used				Link Not Used				Link Not Used			
26	1	46	A	99	A	46	A	99	A	46	A	98	A
27	2	70	A	58	A	82	A	69	A	86	A	72	A
28	3	147	A	128	A	171	A	149	A	183	A	160	A
29		Link Not Used				Link Not Used				Link Not Used			
30	2	583	B	540	B	693	B	643	B	744	B	694	B
31	3	629	A	639	A	740	B	742	B	790	B	792	B
32	1	14	A	10	A	13	A	10	A	13	A	10	A
33	3	615	A	629	A	727	B	732	B	777	B	782	B
34	4	90	A	64	A	89	A	64	A	89	A	63	A
35	2	527	B	554	B	621	B	642	B	663	B	685	B
36	1	88	A	75	A	106	A	90	A	114	A	97	A
37	1	463	C	486	C	550	C	568	C	589	D	607	D
38	1	64	A	69	A	71	A	74	A	75	A	78	A
39		Link Not Used				Link Not Used				Link Not Used			
40	2	589	B	541	B	670	B	618	B	764	B	706	B
41	1	68	A	49	A	68	A	48	A	68	A	48	A
42	2	521	B	492	B	602	B	570	B	696	B	658	B
43	1	84	A	70	A	96	A	80	A	111	A	93	A
44	3	605	A	562	A	698	A	650	A	807	B	751	B
45	1	36	A	30	A	42	A	35	A	46	A	39	A
46		Link Not Used				Link Not Used				Link Not Used			
47		Link Not Used				Link Not Used				Link Not Used			
48	4	641	A	592	A	740	A	685	A	853	A	790	A
49	2	456	A	386	A	530	B	451	A	623	B	533	B
50	1	42	A	90	A	41	A	89	A	41	A	89	A
51	3	498	A	476	A	571	A	540	A	664	A	622	A
52	2	407	A	392	A	468	A	446	A	546	B	514	B
53	1	91	A	84	A	103	A	95	A	118	A	108	A
54	1	49	A	39	A	55	A	44	A	59	A	48	A
55	1	13	A	9	A	13	A	9	A	13	A	9	A
56	4	81	A	58	A	81	A	57	A	81	A	57	A
57	2	870	B	877	B	1,018	B	1,014	B	1,135	C	1,122	C
58	2	106	A	114	A	119	A	124	A	134	A	138	A

Source: HNTB, 2007
LOS = Level of service

NOTE: Please refer to [Figure D.4-1](#) for link ID key map.

Table D-37 (continued)

2010-2030 On-Airport Roadway Peak Hour Operations – No Project Alternative

Link ID	Lanes	2025				2030			
		AM	LOS	PM	LOS	AM	LOS	PM	LOS
1	2	520	B	436	A	512	B	430	A
2	2	443	A	381	A	439	A	378	A
3		Link Not Used				Link Not Used			
4		Link Not Used				Link Not Used			
5	2	76	A	54	A	73	A	52	A
6		Link Not Used				Link Not Used			
7		Link Not Used				Link Not Used			
8	3	565	A	485	A	585	A	503	A
9		0	A	0	A	Link Not Used			
10		0	A	0	A	Link Not Used			
11	1	240	B	268	B	244	B	274	B
12		Link Not Used				Link Not Used			
13		Link Not Used				Link Not Used			
14	1	103	A	89	A	105	A	91	A
15	4	805	A	753	A	829	A	777	A
16	1	12	A	12	A	12	A	12	A
17	4	897	A	830	A	922	A	856	A
18	2	703	B	662	B	703	B	665	B
19		Link Not Used				Link Not Used			
20		Link Not Used				Link Not Used			
21		Link Not Used				Link Not Used			
22		Link Not Used				Link Not Used			
23		Link Not Used				Link Not Used			
24		Link Not Used				Link Not Used			
25		Link Not Used				Link Not Used			
26	1	46	A	99	A	46	A	99	A
27	2	92	A	77	A	119	A	100	A
28	3	194	A	168	A	219	A	191	A
29		Link Not Used				Link Not Used			
30	2	795	C	739	B	822	C	765	B
31	3	841	B	838	B	868	B	865	B
32	1	14	A	10	A	17	A	12	A
33	3	827	B	828	B	851	B	853	B
34	4	90	A	64	A	90	A	64	A
35	2	706	B	725	B	705	B	727	B
36	1	121	A	104	A	146	A	125	A
37	1	629	D	645	D	625	D	642	D
38	1	77	A	80	A	80	A	85	A
39		Link Not Used				Link Not Used			
40	2	794	C	735	B	777	B	724	B
41	1	68	A	49	A	65	A	46	A
42	2	726	B	686	B	712	B	677	B
43	1	115	A	97	A	145	A	122	A
44	3	841	B	783	B	857	B	800	B
45	1	48	A	41	A	49	A	42	A
46		Link Not Used				Link Not Used			
47		Link Not Used				Link Not Used			
48	4	889	A	824	A	906	A	842	A
49	2	649	B	556	B	662	B	568	B
50	1	41	A	89	A	41	A	89	A
51	3	690	A	645	A	703	B	657	A
52	2	568	B	534	B	550	B	516	B
53	1	122	A	112	A	153	A	140	A
54	1	61	A	50	A	65	A	54	A
55	1	13	A	9	A	16	A	12	A
56	4	81	A	58	A	81	A	58	A
57	2	1,197	C	1,179	C	1,175	C	1,159	C
58	2	138	A	141	A	168	A	172	A

Source: HNTB, 2007

LOS = Level of service

NOTE: Please refer to [Figure D.4-1](#) for link ID key map.

D.5 Proposed Project (Preferred Alternative)

The Proposed Project includes the Proposed Airport Land Use Plan and the Proposed Airport Implementation Plan. Both are described in Section 4.1, *Proposed Project (Preferred Alternative)*. The Proposed Airport Land Use Plan designates airfield, terminal, ground transportation, and airport support uses, including a future planning area. In areas designated for future development or in the north area, land uses were chosen to provide a feasible worst case for traffic generation and traffic impact analysis. The type of use chosen does not mean that SDCRAA proposes to develop in this manner or intensity. In the event that a project was proposed in a future planning area, further planning and environmental impact analysis would be required.

Proposed Airport Implementation Plan

The Proposed Airport Implementation Plan is the Airport Master Plan and will be hereinafter referred to in this section (Section D.5) as the “Implementation Plan” unless otherwise indicated. Under the Proposed Airport Implementation Plan two scenarios are examined:

- Proposed Airport Implementation Plan (With Parking Structure) (Section D.5.1)
- Proposed Airport Implementation Plan (Without Parking Structure) (Section D.5.2)

D.5.1 Proposed Airport Implementation Plan (With Parking Structure)

This scenario assumes all components of the Proposed Airport Implementation Plan are constructed as described in the Assumptions below, including a parking structure in front of Terminal 2. The proposed Terminal 2 West roadways and parking facilities are shown in [Figure D.5-1](#).

D.5.1.1 Assumptions

- Projects assumed in the Implementation Plan are consistent with the Airport Master Plan and are discussed in the Alternatives section of the EIR. These projects include:
 - Expand existing Terminal 2 West with 10 new aircraft gates.
 - Construct new second-level curb/road and vehicle circulation serving Terminal 2. This will reduce the SAN Park NTC lot by approximately 130 spaces.
 - Construct new five-level parking structure with approximately 5,000 spaces and associated vehicle circulation serving Terminal 2.
 - Relocate and reconfigure SAN Park Pacific Highway with 500 additional parking spaces.
 - Construct new/replacement general aviation facilities including access in the North Area.
 - Construct a new access road from Sassafra Street/Pacific Highway intersection providing access to general aviation and parking facilities in the North Area.
- Trip generation associated with development in the North Area is assumed to come from other facilities located within the study area and does not represent new demand generated from the development. As a result these trips would not add demand to freeway segments or ramps.
- The regional trip distribution of airport traffic under the Implementation Plan is assumed to be the same as the No Project Alternative, as discussed in [Section D.1.7](#).

The Implementation Plan would have a different gate distribution from the No Project Alternative. The Implementation Plan would add 10 new gates at Terminal 2 West. This would consequently shift the passenger and traffic distribution among terminals. This is discussed further in the next section (Section D.5.1.2 Trip Generation and Terminal Distribution).

D.5.1.2 Trip Generation and Terminal Distribution

Total Airport trip generation associated with the Implementation Plan is summarized in [Table D-38](#). As shown, total airport trip generation would increase from approximately 94,600 ADT in 2010 to 135,000 ADT in 2030. This corresponds to an increase in air passenger forecast of 19.5 million annual passengers

(MAP) in 2010 to 28.2 MAP in 2030. This represents an increase in trip generation of approximately 6,300 ADT or 4.7% from the No Project Alternative in 2030. Trips from most airport modes were estimated to increase relative to origin and destination passenger growth. However, schedule driven modes such as public buses, and airport operated inter-terminal, employee and public parking shuttles were estimated to grow at a slower rate as many of these shuttles currently operate with excess capacity to maintain a set schedule. This results in a slight decrease in the trip generation rate from 1.86 to 1.82 in 2010 and 2030, respectively. This has also been demonstrated by a historical downward trend witnessed at SDIA.

Table D-38
**2010-2030 Airport Trip Generation – Proposed Airport Implementation Plan
 (With Parking Structure)**

Activity	Year					
	2005	2010	2015	2020	2025	2030
Airport Passenger Activity Level						
Million Annual Passengers (MAP)	17.4	19.5	22.8	25.1	26.6	28.2
Million Annual O&D Passengers	16.7	18.6	21.8	24.0	25.4	27.0
Daily O&D Passengers	45,830	51,076	59,770	66,220	70,553	74,199
Airport Trip Generation (1)						
Daily	85,100	94,600	0 109,500	120,900	128,500	135,000
In	42,600	47,350	0 54,800	60,500	64,300	67,550
Out	42,500	47,250	54,700	60,400	64,200	67,450
AM Peak Hour	3,180	3,530	4,095	4,550	4,800	5,070
In	1,760	1,955	2,265	2,500	2,650	2,790
Out	1,420	1,575	1,830	2,050	2,150	2,280
PM Peak Hour	3,245	3,620	4,190	4,650	4,950	5,205
In	1,500	1,675	1,940	2,150	2,300	2,415
Out	1,745	1,945	2,250	2,500	2,650	2,790
Trip Rate						
Daily	1.86	1.85	1.83	1.83	1.82	1.82

O&D = origin and destination

Numbers may not add due to rounding.

(1) Includes terminals and associated facilities, SAN Park lots, rental car facilities on Rental Car Road, Employee Lot 6 on Harbor Island Drive, and north area. Does not include private vehicle trips to private off-airport parking and rental car facilities, but includes shuttle trips between these facilities and the terminals.

Source: HNTB, 2007.

Under existing conditions, Terminal 1 accommodates approximately 54% of the passenger activity. The Implementation Plan would shift passenger activity to Terminal 2 (East and West) accommodating 51% of passenger activity in 2010, and up to 56% in 2030, as shown in [Table D-39](#). The distribution of passengers (and traffic) among terminals would differ among the alternatives, as shown in [Table D-4-2](#) [Table D-4](#). Under existing conditions, the distribution of SDIA passengers among the terminals is approximately 55% at Terminal 1, 40% at Terminal 2 (East and West), and 5% at the Commuter Terminal. Under the No Project Alternative, the passenger split would be approximately 50%, 45%, and 5% at Terminal 1, Terminal 2 (East and West), and the Commuter Terminal, respectively, in 2015.

The change in passenger distribution between terminals would result in redistribution of traffic at the terminal access driveways along North Harbor Drive. However, the change in passenger distribution would not affect the traffic pattern outside of the study area which is assumed to be the same as the No Project Alternative.

Table D-39

**2010-2030 Terminal Passenger Distribution – Proposed Airport Implementation Plan
(With Parking Structure)**

Scenario/Year	Terminal 1	Terminal 1 East *	Terminal 2 East	Terminal 2 West	Commuter Terminal	Total
Existing						
2005	54%	0%	15%	26%	5%	100%
Proposed Airport Implementation Plan						
2010	45%	0%	20%	31%	4%	100%
2015	43%	0%	20%	33%	3%	100%
2020	43%	0%	19%	34%	3%	100%
2025	43%	0%	19%	35%	3%	100%
2030	41%	0%	19%	37%	3%	100%

Source: HNTB, 2007.

* New unit terminal under Airport Implementation Project Alternative.

D.5.1.3 Traffic Impacts

Traffic impacts were identified by comparing traffic conditions under the Implementation Plan (With Parking Structure) against traffic conditions under the No Project Alternative. Specific impact categories are discussed in this section.

D.5.1.3.1 Street Segments

Table D-40 summarizes the street segment operations for each analysis year under the Implementation Plan (With Parking Structure).

Table D-40

2010-2030 Street Segment Operations – Proposed Airport Implementation Plan (With Parking Structure, 2010-2020)

Roadway	Segment	Classification	Lanes	Year 2010						Year 2015					Year 2020				
				LOS E ADT Capacity 1000s	SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS	SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS	SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS
North Harbor Drive	West of NTC	6-Lane Prime	6D	60.0	11.1	17.7	28.8	0.48	B	12.9	20.4	33.3	0.55	B	14.2	25.2	39.3	0.66	C
	NTC - Spanish Landing	6-Lane Prime	6D	60.0	12.0	15.1	27.1	0.45	B	13.4	16.3	29.7	0.49	B	14.4	20.7	35.1	0.59	C
	Spanish Landing - T2 Access	6-Lane Prime	6D	60.0	11.2	14.9	26.1	0.43	B	12.4	16.2	28.6	0.48	B	13.4	18.3	31.8	0.53	B
	T2 Access - Harbor Island	6-Lane Prime	4+3	65.0	23.6	15.0	38.6	0.59	C	27.9	16.3	44.2	0.68	C	30.9	18.2	49.1	0.75	C
	Harbor Island - T1 Access	6-Lane Prime	3+4	65.0	22.3	18.3	40.6	0.63	C	26.2	18.4	44.6	0.69	C	28.8	19.1	47.8	0.74	C
	T1 Access - Winship	6-Lane Prime	5+3	70.0	36.4	18.3	54.7	0.78	C	41.8	18.3	60.1	0.86	D	45.9	19.1	65.0	0.93	D
	Winship - Flyover Merge (1)	6-Lane Prime	4+4	70.0	37.9	18.4	56.3	0.80	C	43.7	18.4	62.0	0.89	D	47.9	19.1	67.1	0.96	E
	Rental Car Rd - Laurel	6-Lane Prime	6D	60.0	63.0	20.8	83.8	1.40	F	73.1	20.7	93.8	1.56	F	80.5	22.1	102.6	1.71	F
	Laurel - Hawthorn	6-Lane Prime	6D	60.0	40.8	15.2	56.0	0.93	E	47.2	15.4	62.6	1.04	F	51.9	16.7	68.6	1.14	F
	Hawthorn - Grape	6-Lane Prime	6D	60.0	25.5	14.0	39.5	0.66	C	29.6	13.4	43.0	0.72	C	32.6	14.0	46.6	0.78	C
Grape Street	Harbor - Pacific	3-Lane Major 1-Way	3U	25.0	13.6	6.7	20.3	0.81	D	15.8	7.1	22.9	0.92	E	17.5	8.5	26.0	1.04	F
	Pacific - Kettner	3-Lane Major 1-Way	3U	25.0	12.5	16.4	28.9	1.15	F	14.4	17.1	31.5	1.26	F	15.9	18.5	34.4	1.38	F
	Kettner - I-5	3-Lane Major 1-Way	3U	25.0	12.2	23.3	35.5	1.42	F	14.2	23.7	37.9	1.52	F	15.7	21.1	36.8	1.47	F
Hawthorn Street	Harbor - Pacific	3-Lane Major 1-Way	3U	25.0	15.4	5.1	20.5	0.82	D	17.9	5.4	23.3	0.93	E	19.7	6.7	26.4	1.06	F
	Pacific - Kettner	3-Lane Major 1-Way	3U	25.0	12.5	6.0	18.5	0.74	C	14.5	6.2	20.7	0.83	D	16.0	7.4	23.4	0.94	E
Kettner Blvd	Kettner - I-5	3-Lane Major 1-Way	3U	25.0	12.5	17.2	29.7	1.19	F	14.5	19.2	33.7	1.35	F	16.0	20.4	36.4	1.46	F
	north of Washington	3-Lane Collector 1-Way	3U	25.0	0.2	7.2	7.4	0.29	A	0.2	7.2	7.4	0.30	A	0.3	9.6	9.9	0.39	A
	Washington - Sassafras	3-Lane Major 1-Way	3U	25.0	9.0	13.0	22.0	0.88	D	10.5	13.1	23.6	0.94	E	11.6	16.0	27.6	1.10	F
	Sassafras - Palm	3-Lane Major 1-Way	3U	25.0	9.1	11.0	20.1	0.81	D	10.6	11.9	22.5	0.90	E	11.7	18.7	30.4	1.22	F
	Palm - Laurel	3-Lane Major 1-Way	3U	25.0	7.6	8.6	16.2	0.65	C	8.8	9.5	18.3	0.73	C	9.8	16.0	25.7	1.03	F
	Laurel - Hawthorn	3-Lane Major 1-Way	3U	25.0	0.0	7.2	7.2	0.29	A	0.1	7.9	8.0	0.32	A	0.1	13.3	13.4	0.54	B
	Hawthorn - Grape	3-Lane Major 1-Way	3U	25.0	0.0	14.8	14.8	0.59	C	0.1	16.8	16.9	0.67	C	0.1	21.5	21.6	0.86	D
Laurel Street	Harbor - Pacific	4-Lane Major	4U	40.0	22.2	6.3	28.5	0.71	C	25.9	6.7	32.6	0.81	D	28.6	6.0	34.5	0.86	D
	Pacific - Kettner	4-Lane Collector	4D	30.0	17.9	7.2	25.1	0.84	E	21.1	7.8	28.9	0.96	E	23.4	6.9	30.3	1.01	F
	Kettner - I-5	4-Lane Collector	4D	30.0	10.4	8.5	18.9	0.63	C	12.4	9.6	22.0	0.73	D	14.0	8.0	22.0	0.73	D
Pacific Highway	Washington - Sassafras	6-Lane Prime	6D	50.0	4.1	22.8	26.9	0.54	B	4.9	27.3	32.2	0.64	C	5.4	24.3	29.8	0.60	C
	Sassafras - Palm	6-Lane Prime	6D	50.0	6.9	17.5	24.4	0.49	B	8.0	21.0	29.0	0.58	C	8.9	20.9	29.8	0.60	C
	Palm - Laurel	6-Lane Prime	6D	50.0	6.9	18.1	25.0	0.50	B	8.0	21.7	29.7	0.59	C	8.9	21.0	29.9	0.60	C
	Laurel - Hawthorn	6-Lane Major	6D	50.0	2.2	19.1	21.3	0.43	B	2.7	22.6	25.3	0.51	B	3.1	25.5	28.7	0.57	C
	Hawthorn - Grape	6-Lane Major	6D	50.0	4.9	19.6	24.5	0.49	B	5.8	23.2	29.0	0.58	C	6.5	26.0	32.5	0.65	C
Palm Street	Pacific - Kettner	2-Lane Collector	2U	8.0	0.0	0.9	0.9	0.11	A	0.0	0.9	0.9	0.11	A	0.0	0.3	0.3	0.04	A
Sassafras Street	Pacific - Kettner	3-Lane Collector	3U	12.0	3.4	8.3	11.7	0.97	E	4.3	9.7	14.0	1.17	F	5.0	9.3	14.3	1.19	F
	Kettner-India	2-Lane Collector	2U	8.0	1.7	8.5	10.2	1.27	F	2.2	9.7	11.9	1.48	F	2.5	9.4	11.9	1.48	F
Washington Street	Pacific - Kettner	4-Lane Collector	4U	30.0	3.9	16.5	20.4	0.68	D	4.7	18.6	23.3	0.78	D	5.4	19.1	24.5	0.82	D
	Kettner - San Diego	5-Lane Collector	5D	30.0	3.6	23.3	26.9	0.90	E	4.3	25.5	29.8	0.99	E	4.8	28.6	33.4	1.11	F
India Street	Laurel - Palm	2-Lane Collector	2U	8.0	7.4	8.7	16.1	2.01	F	8.7	10.2	18.9	2.36	F	9.6	7.9	17.5	2.19	F
	Palm - Sassafras	3-Lane Collector	3U	12.0	7.4	13.2	20.7	1.72	F	8.7	15.4	24.0	2.00	F	9.6	12.6	22.2	1.85	F
Rosecrans	Sassafras - Washington	3-Lane Collector	3U	12.0	5.1	13.5	18.6	1.55	F	6.5	14.6	21.1	1.76	F	7.6	15.2	22.7	1.90	F
	Barnett - Sport Arena	6-lane Major	6D	50.0	5.1	40.1	45.3	0.91	E	6.0	42.4	48.4	0.97	E	6.6	34.3	40.9	0.82	D
	Nimitz Quimby - Barnett	4-lane Major/5-lane Major	4U/5U	40.0/45.0	5.1	35.9	41.1	1.03/0.91	F/E	6.0	35.4	41.4	1.03/0.92	F/E	6.6	31.1	37.7	0.94/0.84	E-D
Nimitz	Nimitz - Quimby	4-lane Major	4U	40.0	5.1	35.9	41.1	1.03	F	6.0	35.4	41.4	1.03	F	6.6	31.1	37.7	0.94	E
	Harbor - Rosecrans	4-lane Major	4U	40.0	9.5	8.7	18.2	0.45	B	11.0	8.5	19.4	0.49	B	12.1	11.2	23.2	0.58	C

Source: HNTB, 2007.
 (1) Does not include traffic on flyover.

MAP = Million Annual Passengers
 ADT = Average Daily Traffic
 LOS = Level of Service
 V/C = volume-to-capacity ratio

Table D-40 (continued)

2010-2030 Street Segment Operations – Proposed Airport Implementation Plan (With Parking Structure, 2025-2030)

Roadway	Segment	Classification	Lanes	LOS E ADT Capacity 1000s	Year 2025					Year 2030				
					SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS	SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS
North Harbor Drive	West of NTC	6-Lane Prime	6D	60.0	15.1	26.7	41.8	0.70	C	19.7	28.5	48.2	0.80	C
	NTC - Spanish Landing	6-Lane Prime	6D	60.0	15.1	21.8	36.9	0.61	C	18.5	23.3	41.8	0.70	C
	Spanish Landing - T2 Access	6-Lane Prime	6D	60.0	14.1	18.4	32.5	0.54	B	16.1	20.7	36.8	0.61	C
	T2 Access - Harbor Island	6-Lane Prime	4+3	65.0	33.1	18.1	51.1	0.79	C	35.9	19.8	55.7	0.86	D
	Harbor Island - T1 Access	6-Lane Prime	3+4	65.0	30.7	20.4	51.1	0.79	C	31.9	21.1	53.0	0.82	C
	T1 Access - Winship	6-Lane Prime	5+3	70.0	48.6	20.5	69.1	0.99	E	49.5	21.1	70.6	1.01	F
	Winship - Flyover Merge (1)	6-Lane Prime	4+4	70.0	50.7	20.4	71.0	1.01	F	51.1	20.9	71.9	1.03	F
	Rental Car Rd - Laurel	6-Lane Prime	6D	60.0	85.5	20.9	106.4	1.77	F	85.8	21.7	107.5	1.79	F
	Laurel - Hawthorn	6-Lane Prime	6D	60.0	55.1	17.5	72.6	1.21	F	57.8	18.2	76.0	1.27	F
	Hawthorn - Grape	6-Lane Prime	6D	60.0	34.6	14.8	49.4	0.82	C	36.3	14.8	51.2	0.85	D
Grape Street	Harbor - Pacific	3-Lane Major 1-Way	3U	25.0	18.6	9.0	27.5	1.10	F	19.5	9.7	29.2	1.17	F
	Pacific - Kettner	3-Lane Major 1-Way	3U	25.0	16.9	18.8	35.7	1.43	F	17.7	19.8	37.5	1.50	F
	Kettner - I-5	3-Lane Major 1-Way	3U	25.0	16.7	21.8	38.5	1.54	F	17.6	24.7	42.2	1.69	F
Hawthorn Street	Harbor - Pacific	3-Lane Major 1-Way	3U	25.0	20.9	7.0	27.9	1.12	F	22.0	7.9	29.9	1.20	F
	Pacific - Kettner	3-Lane Major 1-Way	3U	25.0	17.0	7.8	24.8	0.99	E	17.9	8.7	26.6	1.06	F
	Kettner - I-5	3-Lane Major 1-Way	3U	25.0	17.0	21.8	38.8	1.55	F	17.9	24.5	42.4	1.69	F
Kettner Blvd	north of Washington	3-Lane Collector 1-Way	3U	25.0	0.3	10.7	11.1	0.44	B	0.4	4.2	4.6	0.18	A
	Washington - Sassafras	3-Lane Major 1-Way	3U	25.0	12.3	14.1	26.4	1.06	F	11.0	17.4	28.4	1.14	F
	Sassafras - Palm	3-Lane Major 1-Way	3U	25.0	12.5	17.2	29.6	1.19	F	11.2	14.2	25.4	1.02	F
	Palm - Laurel	3-Lane Major 1-Way	3U	25.0	10.4	13.7	24.1	0.96	E	9.0	12.6	21.5	0.86	D
	Laurel - Hawthorn	3-Lane Major 1-Way	3U	25.0	0.2	11.0	11.2	0.45	B	0.2	11.4	11.6	0.47	B
Laurel Street	Hawthorn - Grape	3-Lane Major 1-Way	3U	25.0	0.2	19.9	20.1	0.80	D	0.2	21.5	21.7	0.87	D
	Harbor - Pacific	4-Lane Major	4U	40.0	30.4	4.0	34.4	0.86	D	28.0	4.3	32.3	0.81	D
	Pacific - Kettner	4-Lane Collector	4D	30.0	25.0	6.8	31.8	1.06	F	22.5	12.1	34.6	1.15	F
	Kettner - I-5	4-Lane Collector	4D	30.0	15.1	8.1	23.2	0.77	D	14.1	12.9	27.0	0.90	E
	Washington - Sassafras	6-Lane Prime	6D	50.0	5.8	27.4	33.2	0.66	C	6.1	19.1	25.1	0.50	B
Pacific Highway	Sassafras - Palm	6-Lane Prime	6D	50.0	9.5	22.2	31.7	0.63	C	9.9	16.3	26.1	0.52	B
	Palm - Laurel	6-Lane Prime	6D	50.0	9.5	22.0	31.5	0.63	C	9.9	15.4	25.3	0.51	B
	Laurel - Hawthorn	6-Lane Major	6D	50.0	3.5	27.7	31.2	0.62	C	3.7	23.3	27.0	0.54	B
	Hawthorn - Grape	6-Lane Major	6D	50.0	6.9	28.1	35.0	0.70	C	7.3	24.1	31.4	0.63	C
	Pacific - Kettner	2-Lane Collector	2U	8.0	0.0	0.1	0.1	0.01	A	0.0	0.1	0.1	0.01	A
Sassafras Street	Pacific - Kettner	3-Lane Collector	3U	12.0	5.4	10.4	15.8	1.32	F	5.8	6.1	11.9	0.99	E
	Kettner-India	2-Lane Collector	2U	8.0	2.7	9.8	12.5	1.56	F	2.9	8.0	10.9	1.36	F
	Pacific - Kettner	4-Lane Collector	4U	30.0	6.0	18.9	24.9	0.83	D	6.5	12.7	19.2	0.64	C
Washington Street	Kettner - San Diego	5-Lane Collector	5D	30.0	5.2	28.1	33.3	1.11	F	5.6	22.5	28.1	0.94	E
	Laurel - Palm	2-Lane Collector	2U	8.0	10.2	7.9	18.1	2.26	F	8.9	12.6	21.4	2.68	F
	Palm - Sassafras	3-Lane Collector	3U	12.0	10.2	12.5	22.7	1.89	F	8.9	16.5	25.3	2.11	F
Rosecrans	Sassafras - Washington	3-Lane Collector	3U	12.0	8.3	14.7	22.9	1.91	F	7.6	21.5	29.1	2.42	F
	Barnett - Sport Arena	6-lane Major	6D	50.0	7.0	34.6	41.5	0.83	D	10.8	33.7	44.5	0.89	D
	Nimitz Quimby - Barnett	4-lane Major-5-lane Major	4U-5U	40.0-45.0	7.0	31.3	38.3	0.96-0.85	E-D	10.8	29.0	39.8	1.00-0.88	E-D
Nimitz	Nimitz - Quimby	4-lane Major	4U	40.0	7.0	31.3	38.3	0.96	E	10.8	29.0	39.8	1.00	E
	Harbor - Rosecrans	4-lane Major	4U	40.0	12.8	11.8	24.7	0.62	C	17.4	11.7	29.1	0.73	C

Source: HNTB, 2007.

(1) Does not include traffic on flyover.

MAP = Million Annual Passengers
 ADT = Average Daily Traffic
 LOS = Level of Service
 V/C = volume-to-capacity ratio

Table D-41 compares the street segment volume to capacity (v/c) ratios under the Implementation Plan (With Parking Structure) against the No Project Alternative to identify traffic impacts based on significance criteria identified in **Section D.2, Traffic Impacts and Significance Criteria**, measured by an increase to LOS E or F or an increase in volume to capacity ratio of greater than 0.02 for streets operating at LOS E and 0.01 for streets operating at LOS F under the No Project. The following roadway segments would have potentially significant traffic impacts:

Street Segments with Significant Traffic Impacts

Year 2010

- Sassafras Street between Pacific Highway and Kettner Boulevard, which operates at LOS E under both the Implementation Plan (with Parking Structure) and No Project Alternative and experiences an increase in volume to capacity (v/c) ratio of over 0.02 under the Implementation Plan compared to the No Project Alternative.
- Sassafras Street between Kettner Boulevard and India Street, which operates at LOS F under both the Implementation Plan (with Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan compared to the No Project Alternative.

Sassafras Street provides a major east-west connection between Pacific Highway and Kettner Boulevard with direct access to southbound I-5 and India Street with direct access to northbound I-5. Sassafras has limited total capacity with three lanes and capacity of 12,000 ADT between Pacific Highway and Kettner Boulevard and only two lanes and a capacity of 8,000 ADT between Kettner Boulevard and India Street. Under existing conditions the segment between Pacific Highway and Kettner Boulevard has 9,700~~0~~ ADT and operates at LOS D and the segment between Kettner Boulevard and India Street has 9,400 ADT (1,400~~0~~ ADT over capacity) and operates at LOS F.

Once the segment of Sassafras Street between Pacific Highway and India Street is operating at LOS F as it is under both the existing and 2010 and beyond No Project conditions it only requires 80 additional daily vehicle trips from the project to trigger a significant impact. Similarly once the segment of Sassafras Street between Pacific Highway and Kettner Boulevard is operating at LOS E as it is under the 2010 and beyond No Project conditions it only requires 240 additional daily vehicle trips from the project to trigger a significant impact.

Year 2015

- All locations identified in Year 2010.
- Kettner Boulevard between Sassafras and Palm Street, which increased from LOS D under the No Project Alternative to LOS E under the Implementation Plan (with Parking Structure).

Year 2020

- All locations identified in Year 2015, except Kettner Boulevard between Sassafras Street and Palm Street which is LOS F under both No Project and Implementation Plan (with Parking Structure) but has an increase in volume to capacity ration of less than 0.02.
- North Harbor Drive between Winship Lane and the Flyover Merge, which operates at LOS E under both the Implementation Plan (with Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.02 under the Implementation Plan compared to the No Project Alternative.

Year 2025

- All locations identified in Year 2020.
- North Harbor Drive between Terminal 1 Access and Hawthorn Street, which operates at LOS E and F under both the Implementation Plan (with Parking Structure) and No Project Alternative and experience an increase in the v/c ratio of over 0.01 under the Implementation Plan compared to the No Project Alternative.

- Grape Street between North Harbor Drive and Kettner Boulevard, which operates at LOS F under both the Implementation Plan (with Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan compared to the No Project Alternative.
- Hawthorn Street between North Harbor Drive and Pacific Highway, which operates at LOS F under both the Implementation Plan (with Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan compared to the No Project Alternative.
- Kettner Boulevard between Washington Street and Palm Street, which operates at LOS F under both the Implementation Plan (with Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan compared to the No Project Alternative.
- India Street between Laurel Street and Palm Street, which operates at LOS F under both the Implementation Plan (with Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan compared to the No Project Alternative.

Year 2030

- All locations identified in Year ~~2010 and 2015~~ 2025
- Grape Street between Kettner Boulevard and I-5, which operates at LOS F under both the Implementation Plan (with Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan compared to the No Project Alternative.
- Hawthorn Street between Pacific Highway and I-5, which operates at LOS F under both the Implementation Plan (with Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan compared to the No Project Alternative.
- Laurel Street between Pacific Highway and Kettner Boulevard, which operates at LOS F under both the Implementation Plan (with Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan compared to the No Project Alternative.
- India Street between Palm Street and Washington Street, which operates at LOS F under both the Implementation Plan (with Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan compared to the No Project Alternative.

Table D-41

2010-2030 Street Segment Impacts – Proposed Airport Implementation Plan (With Parking Structure)

Roadway	Segment	Year 2010					Year 2015					Year 2020				
		No Proj V/C	No Proj LOS	Proj V/C	Proj LOS	Diff V/C	No Proj V/C	No Proj LOS	Proj V/C	Proj LOS	Diff V/C	No Proj V/C	No Proj LOS	Proj V/C	Proj LOS	Diff V/C
North Harbor Drive	West of NTC	0.48	B	0.48	B	0.00	0.56	B	0.55	B	0.00	0.66	C	0.66	C	0.00
	NTC - Spanish Landing	0.51	B	0.45	B	-0.06	0.57	B	0.49	B	-0.07	0.67	C	0.59	C	-0.08
	Spanish Landing - T2 Access	0.43	B	0.43	B	0.01	0.47	B	0.48	B	0.01	0.52	B	0.53	B	0.01
	T2 Access - Harbor Island	0.56	B	0.59	C	0.03	0.63	C	0.68	C	0.05	0.68	C	0.75	C	0.07
	Harbor Island - T1 Access	0.58	C	0.63	C	0.04	0.62	C	0.69	C	0.06	0.64	C	0.74	C	0.09
	T1 Access - Winship	0.76	C	0.78	C	0.02	0.83	C	0.86	D	0.03	0.89	D	0.93	D	0.04
	Winship - Flyover Merge	0.79	C	0.80	C	0.01	0.87	D	0.89	D	0.01	0.935	E	0.958	E	0.023
	Rental Car Rd - Laurel	1.41	F	1.40	F	-0.01	1.57	F	1.56	F	-0.01	1.71	F	1.71	F	0.00
	Laurel - Hawthorn	0.94	E	0.93	E	-0.01	1.05	F	1.04	F	0.00	1.14	F	1.14	F	0.00
	Hawthorn - Grape	0.66	C	0.66	C	0.00	0.72	C	0.72	C	0.00	0.78	C	0.78	C	0.00
Grape Street	Harbor - Pacific	0.82	D	0.81	D	0.00	0.92	E	0.92	E	0.00	1.04	F	1.04	F	0.00
	Pacific - Kettner	1.16	F	1.15	F	0.00	1.26	F	1.26	F	0.00	1.37	F	1.38	F	0.00
	Kettner - I-5	1.43	F	1.42	F	-0.01	1.52	F	1.52	F	-0.01	1.48	F	1.47	F	0.00
Hawthorn Street	Harbor - Pacific	0.83	D	0.82	D	-0.01	0.94	E	0.93	E	-0.01	1.06	F	1.06	F	0.00
	Pacific - Kettner	0.75	C	0.74	C	-0.01	0.83	D	0.83	D	-0.01	0.94	E	0.94	E	0.00
	Kettner - I-5	1.19	F	1.19	F	-0.01	1.35	F	1.35	F	-0.01	1.46	F	1.46	F	0.00
Kettner Blvd	north of Washington	0.29	A	0.29	A	0.00	0.30	A	0.30	A	0.00	0.39	A	0.39	A	0.00
	Washington - Sassafras	0.88	D	0.88	D	0.00	0.94	E	0.94	E	0.00	1.10	F	1.10	F	0.005
	Sassafras - Palm	0.80	D	0.81	D	0.00	0.897	D	0.901	E	0.005	1.21	F	1.22	F	0.006
	Palm - Laurel	0.65	C	0.65	C	0.00	0.74	C	0.73	C	0.00	1.03	F	1.03	F	0.00
Laurel Street	Laurel - Hawthorn	0.29	A	0.29	A	0.00	0.32	A	0.32	A	0.00	0.54	B	0.54	B	0.00
	Hawthorn - Grape	0.59	C	0.59	C	0.00	0.68	C	0.67	C	0.00	0.87	D	0.86	D	0.00
	Harbor - Pacific	0.72	C	0.71	C	-0.01	0.82	D	0.81	D	-0.01	0.87	D	0.86	D	0.00
Pacific Highway	Pacific - Kettner	0.85	E	0.84	E	-0.01	0.97	E	0.96	E	-0.01	1.02	F	1.01	F	-0.01
	Kettner - I-5	0.64	C	0.63	C	-0.01	0.75	D	0.73	D	-0.01	0.75	D	0.73	D	-0.02
	Washington - Sassafras	0.54	B	0.54	B	0.00	0.64	C	0.64	C	0.00	0.59	C	0.60	C	0.00
	Sassafras - Palm	0.48	B	0.49	B	0.01	0.57	C	0.58	C	0.01	0.59	C	0.60	C	0.01
	Palm - Laurel	0.49	B	0.50	B	0.01	0.59	C	0.59	C	0.01	0.59	C	0.60	C	0.01
Palm Street	Laurel - Hawthorn	0.42	B	0.43	B	0.00	0.50	B	0.51	B	0.00	0.57	C	0.57	C	0.00
	Hawthorn - Grape	0.49	B	0.49	B	0.00	0.58	C	0.58	C	0.00	0.65	C	0.65	C	0.00
	Pacific - Kettner	0.11	A	0.11	A	0.00	0.11	A	0.11	A	0.00	0.04	A	0.04	A	0.00
Sassafras Street	Pacific - Kettner	0.95	E	0.97	E	0.021	1.14	F	1.17	F	0.02	1.17	F	1.19	F	0.02
	Kettner-India	1.25	F	1.27	F	0.02	1.46	F	1.48	F	0.02	1.46	F	1.48	F	0.02
Washington Street	Pacific - Kettner	0.68	D	0.68	D	0.001	0.78	D	0.78	D	0.00	0.82	D	0.82	D	0.00
	Kettner - San Diego	0.90	E	0.90	E	0.00	0.99	E	0.99	E	0.00	1.11	F	1.11	F	0.00
India Street	Laurel - Palm	2.03	F	2.01	F	-0.01	2.38	F	2.36	F	-0.01	2.20	F	2.19	F	-0.01
	Palm - Sassafras	1.73	F	1.72	F	-0.01	2.01	F	2.00	F	-0.01	1.86	F	1.85	F	-0.01
	Sassafras - Washington	1.57	F	1.55	F	-0.02	1.79	F	1.76	F	-0.03	1.93	F	1.90	F	-0.03
Rosecrans	Barnett - Sport Arena	0.91	E	0.91	E	0.00	0.97	E	0.97	E	0.00	0.82	D	0.82	D	0.00
	Nimitz Quimby - Barnett	1.03 0.91	F E	1.03 0.91	F E	0.00	1.03 0.92	F E	1.03 0.92	F E	0.00	0.94 0.84	E D	0.94 0.84	E D	0.00
Nimitz	Nimitz - Quimby	1.03	E	1.03	E	0.00	1.03	E	1.03	E	0.00	0.94	E	0.94	E	0.00
	Harbor - Rosecrans	0.46	B	0.45	B	0.00	0.49	B	0.49	B	0.00	0.58	C	0.58	C	0.00

Source: HNTB, 2007.

V/C = Volume to capacity ratio

LOS = Level of service

Legend:

- LOS E
- LOS F
- Significant Impact

Table D-41 (continued)

2010-2030 Street Segment Impacts – Proposed Airport Implementation Plan (With Parking Structure)

Roadway	Segment	Year 2025					Year 2030				
		No Proj V/C	No Proj LOS	Proj V/C	Proj LOS	Diff V/C	No Proj V/C	No Proj LOS	Proj V/C	Proj LOS	Diff V/C
North Harbor Drive	West of NTC	0.69	C	0.70	C	0.00	0.79	C	0.80	C	0.02
	NTC - Spanish Landing	0.70	C	0.61	C	-0.08	0.79	C	0.70	C	-0.09
	Spanish Landing - T2 Access	0.53	B	0.54	B	0.02	0.60	C	0.61	C	0.01
	T2 Access - Harbor Island	0.70	C	0.79	C	0.08	0.76	C	0.86	D	0.10
	Harbor Island - T1 Access	0.68	C	0.79	C	0.10	0.69	C	0.82	C	0.12
	T1 Access - Winship	0.93	E	0.99	E	0.05	0.94	E	1.01	F	0.07
	Winship - Flyover Merge	0.98	E	1.01	F	0.04	0.97	E	1.03	F	0.06
	Rental Car Rd - Laurel	1.750	F	1.773	F	0.023	1.73	F	1.79	F	0.06
	Laurel - Hawthorn	1.193	F	1.210	F	0.017	1.22	F	1.27	F	0.05
	Hawthorn - Grape	0.81	C	0.82	C	0.01	0.82	C	0.85	D	0.03
Grape Street	Harbor - Pacific	1.09	F	1.10	F	0.0102	1.13	F	1.17	F	0.03
	Pacific - Kettner	1.412	F	1.428	F	0.016	1.46	F	1.50	F	0.04
Hawthorn Street	Kettner - I-5	1.53	F	1.54	F	0.009	1.66	F	1.69	F	0.03
	Harbor - Pacific	1.10	F	1.12	F	0.012	1.16	F	1.20	F	0.04
	Pacific - Kettner	0.98	E	0.99	E	0.01	1.03	F	1.06	F	0.03
Kettner Blvd	Kettner - I-5	1.54	F	1.55	F	0.009	1.66	F	1.69	F	0.03
	north of Washington	0.44	B	0.44	B	0.00	0.18	A	0.18	A	0.00
	Washington - Sassafras	1.04	F	1.06	F	0.014	1.11	F	1.14	F	0.03
	Sassafras - Palm	1.17	F	1.19	F	0.014	0.99	E	1.02	F	0.03
	Palm - Laurel	0.96	E	0.96	E	0.00	0.85	D	0.86	D	0.01
	Laurel - Hawthorn	0.45	B	0.45	B	0.00	0.47	B	0.47	B	0.00
Laurel Street	Hawthorn - Grape	0.81	D	0.80	D	0.00	0.87	D	0.87	D	0.00
	Harbor - Pacific	0.85	D	0.86	D	0.01	0.78	D	0.81	D	0.03
	Pacific - Kettner	1.06	F	1.06	F	0.00	1.133	F	1.154	F	0.02
	Kettner - I-5	0.78	D	0.77	D	-0.01	0.90	E	0.90	E	0.00
Pacific Highway	Washington - Sassafras	0.66	C	0.66	C	0.00	0.50	B	0.50	B	0.01
	Sassafras - Palm	0.62	C	0.63	C	0.01	0.51	B	0.52	B	0.02
	Palm - Laurel	0.62	C	0.63	C	0.01	0.49	B	0.51	B	0.02
	Laurel - Hawthorn	0.62	C	0.62	C	0.00	0.54	B	0.54	B	0.00
	Hawthorn - Grape	0.70	C	0.70	C	0.01	0.62	C	0.63	C	0.01
Palm Street	Pacific - Kettner	0.01	A	0.01	A	0.00	0.01	A	0.01	A	0.00
Sassafras Street	Pacific - Kettner	1.28	F	1.32	F	0.03	0.94	E	0.99	E	0.05
	Kettner-India	1.53	F	1.56	F	0.03	1.32	F	1.36	F	0.04
Washington Street	Pacific - Kettner	0.83	D	0.83	D	0.00	0.63	C	0.64	C	0.01
	Kettner - San Diego	1.11	F	1.11	F	0.00	0.93	E	0.94	E	0.01
India Street	Laurel - Palm	2.25	F	2.26	F	0.011	2.64	F	2.68	F	0.04
	Palm - Sassafras	1.88	F	1.89	F	0.007	2.09	F	2.11	F	0.03
Rosecrans	Sassafras - Washington	1.93	F	1.91	F	-0.02	2.41	F	2.42	F	0.011
	Barnett - Sport Arena	0.83	D	0.83	D	0.00	0.88	D	0.89	D	0.01
	Nimitz Quimby - Barnett	0.95-0.85	E-D	0.96-0.85	E-D	0.00	0.98-0.87	E-D	1.00-0.88	E-D	0.01
Nimitz	Nimitz - Quimby	0.95	E	0.96	E	0.00	0.98	E	1.00	E	0.01
	Harbor - Rosecrans	0.61	C	0.62	C	0.01	0.71	C	0.73	C	0.02

Source: HNTB, 2007.

V/C = Volume to capacity ratio

LOS = Level of service

Legend:

- LOS E
- LOS F
- Significant Impact

D.5.1.3.2 Intersections

Tables [D-42](#), [D-43](#), [D-44](#), [D-45](#), [D-46](#), [D-47](#), [D-48](#), [D-49](#), [D-50](#), and [D-51](#) show the intersection turning volumes under the Implementation Plan (With Parking Structure) for years 2010 through 2030. [Table D-52](#) shows the resulting intersection operations. ~~Future intersection lane configurations are assumed to remain the same under all alternatives and are shown on Figure D.5-1~~ [Figure D.1-5](#). ~~Intersection configurations were assumed to be the same as existing conditions shown in Figure D.3-2 except for the following changes:~~

- North Harbor Drive and McCain Road is currently an unsignalized intersection with right-in / right-out movements only. In 2010 as part of the Liberty Station Development, this intersection is assumed to be signalized, allowing left turn movements inbound and outbound.
- In 2010, the intersection of North Harbor Drive and Winship Lane would be improved as part of the SDIA CIP to provided exclusive right turn lanes on both inbound and outbound approaches.

Table D-42
2010 Intersection Turning Volumes – AM Peak Hour – Implementation Plan

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	549	0	23	11	431	0	7	589	293	1,903
		Airport	0	0	0	190	0	0	0	33	0	0	25	149	397
		Background	0	0	0	359	0	23	11	398	0	7	564	144	1,506
2	North Harbor Drive / McCain St	Total	0	0	0	121	0	96	155	600	0	0	856	359	2,187
		Airport	0	0	0	58	0	72	12	212	0	0	103	69	526
		Background	0	0	0	63	0	24	143	388	0	0	753	290	1,661
3	North Harbor Drive / Spanish Landing	Total	5	0	18	42	0	7	80	700	4	15	1,492	0	2,363
		Airport	0	0	0	42	0	7	80	190	0	0	165	0	484
		Background	5	0	18	0	0	0	510	4	15	1,327	0	1,879	
4	North Harbor Drive / Harbor Island Drive	Total	41	5	145	19	9	65	71	608	81	238	1,850	0	3,132
		Airport	10	5	39	19	9	65	71	140	21	65	539	0	983
		Background	31	0	106	0	0	0	0	468	60	173	1,311	0	2,149
5	North Harbor Drive / Winship Lane	Total	0	0	0	79	0	165	66	705	0	0	2,463	229	3,707
		Airport	0	0	0	79	0	165	66	131	0	0	979	229	1,649
		Background	0	0	0	0	0	0	0	574	0	0	1,484	0	2,058
6	North Harbor Drive / Rental Car Road	Total	53	0	43	10	0	14	16	1,533	67	113	2,625	19	4,493
		Airport	53	0	43	10	0	14	16	959	67	113	1,141	19	2,435
		Background	0	0	0	0	0	0	574	0	0	1,484	0	2,058	
7	Sheraton / Harbor Island Drive	Total	13	107	0	0	229	99	85	6	27	0	0	0	566
		Airport	0	54	0	0	95	0	0	0	0	0	0	0	149
		Background	13	53	0	0	134	99	85	6	27	0	0	0	417
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	86	0	0	62	1	269
		Airport	0	0	0	0	0	38	82	12	0	0	16	1	149
		Background	0	0	0	0	0	0	74	0	0	46	0	120	
9	Sassafras Street / Pacific Highway	Total	68	494	71	47	546	9	5	65	41	202	130	53	1,731
		Airport	68	61	0	0	80	9	5	65	41	0	130	0	459
		Background	0	433	71	47	466	0	0	0	0	202	0	53	1,272
10	Laurel Street / North Harbor Drive	Total	0	0	0	24	0	4	387	1,096	0	0	1,875	40	3,426
		Airport	0	0	0	0	0	0	367	645	0	0	822	0	1,834
		Background	0	0	0	24	0	4	20	451	0	0	1,053	40	1,592
11	Hawthorn Street / North Harbor Drive	Total	0	282	0	0	1,037	0	0	0	0	80	0	1,901	3,300
		Airport	0	211	0	0	645	0	0	0	0	5	0	610	1,471
		Background	0	71	0	0	392	0	0	0	0	75	0	1,291	1,829
12	Grape Street / North Harbor Drive	Total	0	221	111	822	483	0	0	0	0	0	0	0	1,637
		Airport	0	211	4	433	217	0	0	0	0	0	0	0	865
		Background	0	10	107	389	266	0	0	0	0	0	0	0	772
13	Laurel Street / Pacific Highway	Total	35	321	85	80	266	349	89	519	2	47	694	61	2,548
		Airport	0	48	0	3	30	88	76	291	0	0	364	5	905
		Background	35	273	85	77	236	261	13	228	2	47	330	56	1,643
14	Hawthorn Street / Pacific Highway	Total	113	204	0	0	160	51	0	0	0	258	1,857	84	2,727
		Airport	113	48	0	0	24	5	0	0	0	0	497	0	687
		Background	0	156	0	0	136	46	0	0	0	258	1,360	84	2,040
15	Grape Street / Pacific Highway	Total	0	572	161	144	799	0	62	791	38	0	0	0	2,567
		Airport	0	158	0	0	24	0	4	395	38	0	0	0	619
		Background	0	414	161	144	775	0	58	396	0	0	0	0	1,948
16	Laurel Street / Kettner Boulevard	Total	0	0	0	233	321	546	0	611	45	39	240	0	2,035
		Airport	0	0	0	0	0	302	0	294	0	0	67	0	663
		Background	0	0	0	233	321	244	0	317	45	39	173	0	1,372
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	154	82	0	0	0	156	2,499	0	2,891
		Airport	0	0	0	0	0	0	0	0	0	0	497	0	497
		Background	0	0	0	0	154	82	0	0	0	156	2,002	0	2,394
18	Grape Street / Kettner Boulevard	Total	0	0	0	91	462	0	0	1,336	92	0	0	0	1,981
		Airport	0	0	0	0	0	0	0	389	6	0	0	0	395
		Background	0	0	0	91	462	0	0	947	86	0	0	0	1,586
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	65	86	73	0	0	0	42	430	1,056	0	0	0	1,752
		Airport	0	0	0	0	0	0	0	3	387	0	0	0	390
		Background	65	86	73	0	0	0	42	427	669	0	0	0	1,362
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	45	43	0	0	0	0	0	0	0	0	2,458	78	2,624
		Airport	0	0	0	0	0	0	0	0	0	0	0	494	494
		Background	45	43	0	0	0	0	0	0	0	0	1,964	78	2,130
21	Laurel Street / India Street	Total	74	108	19	0	0	0	461	343	30	0	219	195	1,449
		Airport	30	0	0	0	0	0	236	28	30	0	37	0	361
		Background	44	108	19	0	0	0	225	315	0	0	182	195	1,088
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	113	1,252	331	0	50	42	121	83	0	1,992
		Airport	0	0	0	0	302	34	0	17	17	0	34	0	404
		Background	0	0	0	113	950	297	0	33	25	121	49	0	1,588
23	Sassafras Street / India Street	Total	191	790	11	0	0	0	108	24	50	0	33	21	1,228
		Airport	65	236	0	0	0	0	32	0	0	0	0	0	333
		Background	126	554	11	0	0	0	76	24	50	0	33	21	895
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	185	32	53	0	64	37	148	154	0	673
		Airport	0	0	0	0	0	0	0	28	11	66	26	0	131
		Background	0	0	0	185	32	53	0	36	26	82	128	0	542
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	65	11	117	26	6	18	22	0	230	312	143	47	997
		Airport	7	0	49	0	0	0	0	0	28	84	0	0	168
		Background	58	11	68	26	6	18	22	0	202	228	143	47	829
26	Washington Street / Hancock Street	Total	0	258	103	321	376	0	354	165	130	0	0	0	1,707
		Airport	0	64	13	0	76	0	0	0	9	0	0	0	162
		Background	0	194	90	321	300	0	354	165	121	0	0	0	1,545
27	Washington Street / San Diego Avenue	Total	94	579	0	0	539	536	0	0	0	174	204	7	2,133
		Airport	13	51	0	0	67	0	0	0	0	9	0	0	140
		Background	81	528	0	0	472	536	0	0	0	165	204	7	1,993
28	Rosecrans Street / Pacific Highway	Total	200	148	220	99	145	61	60	173	143	301	147	86	1,783
		Airport	0	2	8	0	3	1	0	1	0	10	2	0	27
		Background	200	146	212	99	142	60	60	172	143	291	145	86	1,756
29	Rosecrans Street / Nimitz Boulevard	Total	16	111	86	39	126	40	148	639	28	110	637	40	2,020
		Airport	0	68	81	0	87	0	0	0	0	103	0	0	339
		Background	16	43	5	39	39	40	148	639	28	7	637	40	1,681

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

Table D-43
 2010 Intersection Turning Volumes – PM Peak Hour – Implementation Plan

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	456	0	56	36	562	0	14	584	767	2,475
		Airport	0	0	0	152	0	0	0	27	0	0	31	165	375
		Background	0	0	0	304	0	56	36	535	0	14	553	602	2,100
2	North Harbor Drive / McCain St	Total	0	0	0	433	0	211	33	920	0	0	995	99	2,691
		Airport	0	0	0	96	0	69	8	171	0	0	128	49	521
		Background	0	0	0	337	0	142	25	749	0	0	867	50	2,170
3	North Harbor Drive / Spanish Landing	Total	7	0	25	90	0	16	66	1,605	18	5	1,122	0	2,954
		Airport	0	0	0	90	0	16	66	201	0	0	161	0	534
		Background	7	0	25	0	0	0	0	1,404	18	5	961	0	2,420
4	North Harbor Drive / Harbor Island Drive	Total	154	4	327	21	8	63	58	1,539	122	463	1,281	0	4,040
		Airport	12	4	52	21	8	63	58	213	20	56	457	0	964
		Background	142	0	275	0	0	0	0	1,326	102	407	824	0	3,076
5	Sheraton / Harbor Island Drive	Total	23	408	0	0	524	70	77	2	25	0	0	0	1,129
		Airport	0	68	0	0	84	0	0	0	0	0	0	0	152
		Background	23	340	0	0	440	70	77	2	25	0	0	0	977
6	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	55	68	95	0	0	126	1	345
		Airport	0	0	0	0	0	55	68	15	0	0	13	1	152
		Background	0	0	0	0	0	0	0	80	0	0	113	0	193
7	North Harbor Drive / Winship Lane	Total	0	0	0	96	0	195	61	1,826	0	0	2,048	218	4,444
		Airport	0	0	0	96	0	195	61	225	0	0	816	218	1,611
		Background	0	0	0	0	0	0	0	1,601	0	0	1,232	0	2,833
8	North Harbor Drive / Rental Car Road	Total	74	0	83	22	0	16	15	2,625	74	86	2,176	14	5,185
		Airport	74	0	83	22	0	16	15	1,024	74	86	944	14	2,352
		Background	0	0	0	0	0	0	0	1,601	0	0	1,232	0	2,833
9	Sassafras Street / Pacific Highway	Total	62	857	353	125	949	8	13	178	90	165	108	44	2,952
		Airport	62	73	0	0	65	8	13	178	90	0	108	0	597
		Background	0	784	353	125	884	0	0	0	0	165	0	44	2,355
10	Laurel Street / North Harbor Drive	Total	0	0	0	72	0	11	1,111	1,916	0	0	1,607	105	4,822
		Airport	0	0	0	0	0	0	413	715	0	0	656	0	1,784
		Background	0	0	0	72	0	11	698	1,201	0	0	951	105	3,038
11	Hawthorn Street / North Harbor Drive	Total	0	580	0	0	2,087	0	0	0	0	133	0	1,058	3,858
		Airport	0	169	0	0	715	0	0	0	0	5	0	487	1,376
		Background	0	411	0	0	1,372	0	0	0	0	128	0	571	2,482
12	Grape Street / North Harbor Drive	Total	0	639	267	1,154	1,090	0	0	0	0	0	0	0	3,150
		Airport	0	169	6	481	240	0	0	0	0	0	0	0	896
		Background	0	470	261	673	850	0	0	0	0	0	0	0	2,254
13	Laurel Street / Pacific Highway	Total	111	605	145	139	480	369	471	691	58	51	794	78	3,992
		Airport	0	46	0	7	66	82	84	329	0	0	305	5	924
		Background	111	559	145	132	414	287	387	362	58	51	489	73	3,068
14	Hawthorn Street / Pacific Highway	Total	126	592	0	0	557	49	0	0	0	147	1,029	82	2,582
		Airport	91	45	0	0	61	5	0	0	0	0	396	0	598
		Background	35	547	0	0	496	44	0	0	0	147	633	82	1,984
15	Grape Street / Pacific Highway	Total	0	666	448	237	542	0	50	1,593	38	0	0	0	3,574
		Airport	0	129	0	1	61	0	6	443	38	0	0	0	678
		Background	0	537	448	236	481	0	44	1,150	0	0	0	0	2,896
16	Laurel Street / Kettner Boulevard	Total	0	0	0	282	601	578	0	872	79	54	290	0	2,756
		Airport	0	0	0	0	0	241	0	336	0	0	69	0	646
		Background	0	0	0	282	601	337	0	536	79	54	221	0	2,110
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	400	72	0	0	0	192	1,379	0	2,043
		Airport	0	0	0	0	0	0	0	0	0	0	397	0	397
		Background	0	0	0	0	400	72	0	0	0	192	982	0	1,646
18	Grape Street / Kettner Boulevard	Total	0	0	0	221	487	0	0	3,112	90	0	0	0	3,910
		Airport	0	0	0	0	0	0	0	433	11	0	0	0	444
		Background	0	0	0	221	487	0	0	2,679	79	0	0	0	3,466
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	98	187	183	0	0	0	26	532	2,071	0	0	0	3,097
		Airport	0	0	0	0	0	0	0	3	430	0	0	0	433
		Background	98	187	183	0	0	0	26	529	1,641	0	0	0	2,664
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	36	57	0	0	0	0	0	0	0	0	1,485	61	1,639
		Airport	0	0	0	0	0	0	0	0	0	0	394	0	394
		Background	36	57	0	0	0	0	0	0	0	0	1,091	61	1,245
21	Laurel Street / India Street	Total	83	290	86	0	0	0	657	499	39	0	273	267	2,194
		Airport	39	0	0	0	0	0	262	34	39	0	30	0	404
		Background	44	290	86	0	0	0	395	465	0	0	243	267	1,790
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	186	1,736	257	0	212	99	85	86	0	2,661
		Airport	0	0	0	0	241	32	0	55	56	0	32	0	416
		Background	0	0	0	186	1,495	225	0	157	43	85	54	0	2,245
23	Sassafras Street / India Street	Total	178	1,329	31	0	0	0	301	60	110	0	14	17	2,040
		Airport	54	262	0	0	0	0	89	0	0	0	0	0	405
		Background	124	1,067	31	0	0	0	212	60	110	0	14	17	1,635
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	488	49	10	0	223	51	199	80	0	1,100
		Airport	0	0	0	0	0	0	0	27	10	53	46	0	136
		Background	0	0	0	488	49	10	0	196	41	146	34	0	964
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	37	25	199	57	55	7	55	14	592	327	207	59	1,634
		Airport	13	0	61	0	0	0	0	0	27	86	0	0	187
		Background	24	25	138	57	55	7	55	14	565	241	207	59	1,447
26	Washington Street / Hancock Street	Total	0	652	157	343	379	0	555	331	155	0	0	0	2,572
		Airport	0	75	13	0	70	0	0	0	16	0	0	0	174
		Background	0	577	144	343	309	0	555	331	139	0	0	0	2,398
27	Washington Street / San Diego Avenue	Total	187	1,153	0	0	572	489	0	0	0	185	276	17	2,879
		Airport	12	63	0	0	55	0	0	0	0	16	0	0	146
		Background	175	1,090	0	0	517	489	0	0	0	169	276	17	2,733
28	Rosecrans Street / Pacific Highway	Total	351	287	636	120	139	67	111	459	170	246	304	129	3,019
		Airport	0	3	10	0	2	0	0	1	0	8	1	0	25
		Background	351	284	626	120	137	67	111	458	170	238	303	129	2,994
29	Rosecrans Street / Nimitz Boulevard	Total	18	193	110	30	103	30	332	812	33	172	653	53	2,539
		Airport	0	75	90	0	69	0	0	0	0	82	0	0	316
		Background	18	118	20	30	34	30	332	812	33	90	653	53	2,223

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
 25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

Table D-44
 2015 Intersection Turning Volumes – AM Peak Hour – Implementation Plan

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total		
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	605	0	22	13	519	0	8	681	342	2,190	
		Airport	0	0	0	219	0	0	0	39	0	0	30	173	461	
		Background	0	0	0	386	0	22	13	480	0	8	651	169	1,729	
2	North Harbor Drive / McCain St	Total	0	0	0	134	0	116	187	660	0	0	808	425	2,330	
		Airport	0	0	0	57	0	87	12	246	0	0	116	69	587	
		Background	0	0	0	77	0	29	175	414	0	0	692	356	1,743	
3	North Harbor Drive / Spanish Landing	Total	5	0	18	56	0	10	100	769	5	16	1,574	0	2,553	
		Airport	0	0	0	56	0	10	100	204	0	0	175	0	545	
		Background	5	0	18	0	0	0	565	5	16	1,399	0	2,008		
4	North Harbor Drive / Harbor Island Drive	Total	44	5	148	19	10	72	78	678	86	240	2,037	0	3,417	
		Airport	12	5	39	19	10	72	78	160	21	66	654	0	1,136	
		Background	32	0	109	0	0	0	518	65	174	1,383	0	2,281		
5	North Harbor Drive / Winship Lane	Total	0	0	0	84	0	184	69	777	0	0	2,693	257	4,064	
		Airport	0	0	0	84	0	184	69	150	0	0	1,136	257	1,880	
		Background	0	0	0	0	0	0	627	0	0	1,557	0	2,184		
6	North Harbor Drive / Rental Car Road	Total	63	0	50	10	0	14	16	1,743	78	133	2,873	19	4,999	
		Airport	63	0	50	10	0	14	16	1,116	78	133	1,316	19	2,815	
		Background	0	0	0	0	0	0	627	0	0	1,557	0	2,184		
7	Sheraton / Harbor Island Drive	Total	13	113	0	0	237	99	85	6	27	0	0	0	580	
		Airport	0	56	0	0	97	0	0	0	0	0	0	0	153	
		Background	13	57	0	0	140	99	85	6	27	0	0	0	427	
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	95	0	0	69	1	285	
		Airport	0	0	0	0	0	38	82	15	0	0	19	1	155	
		Background	0	0	0	0	0	0	80	0	0	0	50	0	130	
9	Sassafras Street / Pacific Highway	Total	78	592	86	56	651	11	5	76	48	248	152	65	2,068	
		Airport	78	73	0	0	94	11	5	76	48	0	152	0	537	
		Background	0	519	86	56	557	0	0	0	248	0	65	65	1,531	
10	Laurel Street / North Harbor Drive	Total	0	0	0	26	0	4	449	1,195	0	0	1,970	39	3,683	
		Airport	0	0	0	0	0	0	429	747	0	0	945	0	2,121	
		Background	0	0	0	26	0	4	20	448	0	0	1,025	39	1,562	
11	Hawthorn Street / North Harbor Drive	Total	0	311	0	0	1,127	0	0	0	0	87	0	2,069	3,594	
		Airport	0	243	0	0	747	0	0	0	0	8	0	702	1,700	
		Background	0	68	0	0	380	0	0	0	0	79	0	1,367	1,894	
12	Grape Street / North Harbor Drive	Total	0	253	109	874	509	0	0	0	0	0	0	0	1,745	
		Airport	0	243	6	502	254	0	0	0	0	0	0	0	1,005	
		Background	0	10	103	372	255	0	0	0	0	0	0	0	740	
13	Laurel Street / Pacific Highway	Total	41	381	106	97	321	415	102	584	2	52	779	66	2,946	
		Airport	0	58	5	4	37	102	88	342	0	1	422	6	1,065	
		Background	41	323	101	93	284	313	14	242	2	51	357	60	1,881	
14	Hawthorn Street / Pacific Highway	Total	130	244	0	0	190	63	0	0	0	267	1,977	91	2,962	
		Airport	130	59	0	0	29	8	0	0	0	0	572	4	802	
		Background	0	185	0	0	161	55	0	0	0	267	1,405	87	2,160	
15	Grape Street / Pacific Highway	Total	0	648	182	170	946	0	69	885	43	0	0	0	2,943	
		Airport	0	183	0	0	29	0	6	459	43	0	0	0	720	
		Background	0	465	182	170	917	0	63	426	0	0	0	0	2,223	
16	Laurel Street / Kettner Boulevard	Total	0	0	0	260	355	616	0	693	49	46	278	0	2,297	
		Airport	0	0	0	3	0	347	0	350	0	2	82	0	784	
		Background	0	0	0	257	355	269	0	343	49	44	196	0	1,513	
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	171	90	0	0	0	173	2,793	0	3,227	
		Airport	0	0	0	0	2	0	0	0	0	0	575	0	577	
		Background	0	0	0	0	169	90	0	0	0	173	2,218	0	2,650	
18	Grape Street / Kettner Boulevard	Total	0	0	0	105	524	0	0	1,433	96	0	0	0	2,158	
		Airport	0	0	0	2	0	0	0	452	7	0	0	0	461	
		Background	0	0	0	103	524	0	0	981	89	0	0	0	1,697	
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	77	102	87	0	0	0	43	437	1,131	0	0	0	1,877	
		Airport	0	0	0	0	0	0	0	3	451	0	0	0	454	
		Background	77	102	87	0	0	0	43	434	680	0	0	0	1,423	
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	48	46	0	0	0	0	0	0	0	0	2,523	77	2,694	
		Airport	0	0	0	0	0	0	0	0	0	0	0	572	0	572
		Background	48	46	0	0	0	0	0	0	0	0	1,951	77	2,122	
21	Laurel Street / India Street	Total	95	135	23	0	0	0	526	386	47	0	259	231	1,702	
		Airport	41	2	0	0	0	0	274	33	47	0	43	0	440	
		Background	54	133	23	0	0	0	252	353	0	0	216	231	1,262	
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	115	1,318	347	0	60	52	139	101	0	2,132	
		Airport	0	0	0	0	350	44	0	22	22	0	45	0	483	
		Background	0	0	0	115	968	303	0	38	30	139	56	0	1,649	
23	Sassafras Street / India Street	Total	223	919	12	0	0	0	125	28	58	0	34	22	1,421	
		Airport	76	276	0	0	0	0	38	0	0	0	0	0	390	
		Background	147	643	12	0	0	0	87	28	58	0	34	22	1,031	
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	200	35	57	0	76	42	164	174	0	748	
		Airport	0	0	0	0	0	0	0	39	15	76	36	0	166	
		Background	0	0	0	200	35	57	0	37	27	88	138	0	582	
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	94	16	155	29	7	20	24	0	258	360	162	53	1,178	
		Airport	10	0	57	0	0	0	0	0	39	102	0	0	208	
		Background	84	16	98	29	7	20	24	0	219	258	162	53	970	
26	Washington Street / Hancock Street	Total	0	297	120	351	418	0	358	167	134	0	0	0	1,845	
		Airport	0	78	18	0	90	0	0	0	12	0	0	0	198	
		Background	0	219	102	351	328	0	358	167	122	0	0	0	1,647	
27	Washington Street / San Diego Avenue	Total	107	637	0	0	565	553	0	0	0	194	225	8	2,289	
		Airport	18	59	0	0	78	0	0	0	0	12	0	0	167	
		Background	89	578	0	0	487	553	0	0	0	182	225	8	2,122	
28	Rosecrans Street / Pacific Highway	Total	237	177	261	116	170	72	63	183	151	314	153	89	1,986	
		Airport	0	3	9	0	3	1	0	1	0	12	2	0	31	
		Background	237	174	252	116	167	71	63	182	151	302	151	89	1,955	
29	Rosecrans Street / Nimitz Boulevard	Total	16	122	99	14	114	15	155	671	30	125	627	40	2,028	
		Airport	0	79	94	0	100	0	0	0	0	119	0	0	392	
		Background	16	43	5	14	14	15	155	671	30	6	627	40	1,636	

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19	Grape Street / I-5 Southbound On-Ramp	nbt	nbr	nbr2	eb1	ebt	ebr						
25	Washington Street / Pacific Highway NB-Ramps	nbl+nbl2	nbt	nbr	sbl	sbr2	sbr	eb12	eb1	ebt	wbt	wbr2	wbr

Table D-45
2015 Intersection Turning Volumes – PM Peak Hour – Implementation Plan

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	478	0	55	44	677	0	17	674	897	2,842
	Airport	0	0	0	175	0	0	0	32	0	0	0	36	191	434
	Background	0	0	0	303	0	55	44	645	0	17	638	706	2,408	
2	North Harbor Drive / McCain St	Total	0	0	0	510	0	257	39	967	0	0	1,010	111	2,894
	Airport	0	0	0	96	0	82	8	199	0	0	0	146	49	580
	Background	0	0	0	414	0	175	31	768	0	0	0	864	62	2,314
3	North Harbor Drive / Spanish Landing	Total	7	0	25	121	0	21	83	1,788	20	6	1,155	0	3,226
	Airport	0	0	0	121	0	21	83	213	0	0	0	174	0	612
	Background	7	0	25	0	0	0	0	1,575	20	6	981	0	2,614	
4	North Harbor Drive / Harbor Island Drive	Total	160	4	337	21	9	70	65	1,737	131	467	1,395	0	4,396
	Airport	13	4	53	21	9	70	65	248	20	57	555	0	1,115	
	Background	147	0	284	0	0	0	0	1,489	111	410	840	0	3,281	
5	North Harbor Drive / Winship Lane	Total	0	0	0	103	0	219	62	2,032	0	0	2,202	246	4,864
	Airport	0	0	0	103	0	219	62	259	0	0	0	952	246	1,841
	Background	0	0	0	0	0	0	0	1,773	0	0	1,250	0	3,023	
6	North Harbor Drive / Rental Car Road	Total	87	0	97	22	0	16	15	2,959	87	100	2,345	14	5,742
	Airport	87	0	97	22	0	16	15	1,186	87	100	1,095	14	2,719	
	Background	0	0	0	0	0	0	0	1,773	0	0	1,250	0	3,023	
7	Sheraton / Harbor Island Drive	Total	23	423	0	0	537	70	77	2	25	0	0	0	1,157
	Airport	0	70	0	0	86	0	0	0	0	0	0	0	0	156
	Background	23	353	0	0	451	70	77	2	25	0	0	0	0	1,001
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	55	68	104	0	0	136	1	364
	Airport	0	0	0	0	0	0	55	68	18	0	0	15	1	157
	Background	0	0	0	0	0	0	0	86	0	0	0	121	0	207
9	Sassafras Street / Pacific Highway	Total	72	1,028	424	150	1,137	9	15	203	102	202	127	54	3,523
	Airport	72	87	0	0	78	9	15	203	102	0	127	0	693	
	Background	0	941	424	150	1,059	0	0	0	0	202	0	54	2,830	
10	Laurel Street / North Harbor Drive	Total	0	0	0	76	0	11	1,176	2,019	0	0	1,684	102	5,068
	Airport	0	0	0	0	0	0	481	824	0	0	0	758	0	2,063
	Background	0	0	0	76	0	11	695	1,195	0	0	926	102	3,005	
11	Hawthorn Street / North Harbor Drive	Total	0	588	0	0	2,153	0	0	0	0	145	0	1,167	4,053
	Airport	0	195	0	0	824	0	0	0	0	9	0	563	1,591	
	Background	0	393	0	0	1,329	0	0	0	0	136	0	604	2,462	
12	Grape Street / North Harbor Drive	Total	0	648	261	1,200	1,092	0	0	0	0	0	0	0	3,201
	Airport	0	195	10	555	278	0	0	0	0	0	0	0	0	1,038
	Background	0	453	251	645	814	0	0	0	0	0	0	0	0	2,163
13	Laurel Street / Pacific Highway	Total	131	718	174	166	574	438	508	769	62	58	886	85	4,569
	Airport	0	56	3	8	77	94	97	384	0	2	357	6	1,084	
	Background	131	662	171	158	497	344	411	385	62	56	529	79	3,485	
14	Hawthorn Street / Pacific Highway	Total	145	705	0	0	658	61	0	0	0	152	1,112	88	2,921
	Airport	104	57	0	0	71	9	0	0	0	0	458	3	702	
	Background	41	648	0	0	587	52	0	0	0	152	654	85	2,219	
15	Grape Street / Pacific Highway	Total	0	755	504	280	639	0	57	1,748	44	0	0	0	4,027
	Airport	0	151	0	1	70	0	10	511	44	0	0	0	787	
	Background	0	604	504	279	569	0	47	1,237	0	0	0	0	3,240	
16	Laurel Street / Kettner Boulevard	Total	0	0	0	313	664	650	0	976	86	65	335	0	3,089
	Airport	0	0	0	2	0	278	0	395	0	4	86	0	765	
	Background	0	0	0	311	664	372	0	581	86	61	249	0	2,324	
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	445	79	0	0	0	213	1,549	0	2,286
	Airport	0	0	0	0	4	0	0	0	0	0	461	0	465	
	Background	0	0	0	0	441	79	0	0	0	213	1,088	0	1,821	
18	Grape Street / Kettner Boulevard	Total	0	0	0	254	554	0	0	3,275	95	0	0	0	4,178
	Airport	0	0	0	3	1	0	0	499	13	0	0	0	516	
	Background	0	0	0	251	553	0	0	2,776	82	0	0	0	3,662	
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	117	223	218	0	0	0	26	541	2,166	0	0	0	3,291
	Airport	0	0	0	0	0	0	0	4	499	0	0	0	503	
	Background	117	223	218	0	0	0	26	537	1,667	0	0	0	2,788	
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	39	61	0	0	0	0	0	0	0	0	1,541	60	1,701
	Airport	0	0	0	0	0	0	0	0	0	0	0	458	0	458
	Background	39	61	0	0	0	0	0	0	0	0	1,083	60	1,243	
21	Laurel Street / India Street	Total	109	361	106	0	0	0	745	560	55	0	323	317	2,576
	Airport	55	4	0	0	0	0	303	40	55	0	35	0	492	
	Background	54	357	106	0	0	0	442	520	0	0	288	317	2,084	
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	189	1,804	270	0	249	117	97	102	0	2,828
	Airport	0	0	0	0	280	41	0	66	67	0	41	0	495	
	Background	0	0	0	189	1,524	229	0	183	50	97	61	0	2,333	
23	Sassafras Street / India Street	Total	208	1,544	36	0	0	0	344	69	126	0	15	18	2,360
	Airport	64	306	0	0	0	0	101	0	0	0	0	0	471	
	Background	144	1,238	36	0	0	0	243	69	126	0	15	18	1,889	
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	527	53	12	0	240	56	219	99	0	1,206
	Airport	0	0	0	0	0	1	0	37	14	61	62	0	175	
	Background	0	0	0	527	53	11	0	203	42	158	37	0	1,031	
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	52	36	270	63	60	8	60	15	649	378	234	66	1,891
	Airport	17	0	70	0	0	0	0	37	106	0	0	0	230	
	Background	35	36	200	63	60	8	60	15	612	272	234	66	1,661	
26	Washington Street / Hancock Street	Total	0	742	179	376	423	0	562	335	162	0	0	0	2,779
	Airport	0	90	17	0	85	0	0	0	21	0	0	0	213	
	Background	0	652	162	376	338	0	562	335	141	0	0	0	2,566	
27	Washington Street / San Diego Avenue	Total	208	1,264	0	0	596	504	0	0	0	207	304	18	3,101
	Airport	17	72	0	0	64	0	0	0	0	21	0	0	174	
	Background	191	1,192	0	0	532	504	0	0	0	186	304	18	2,927	
28	Rosecrans Street / Pacific Highway	Total	418	341	756	141	163	78	119	485	180	257	315	134	3,387
	Airport	0	3	11	0	3	0	1	2	0	10	1	0	31	
	Background	418	338	745	141	160	78	118	483	180	247	314	134	3,356	
29	Rosecrans Street / Nimitz Boulevard	Total	18	205	124	11	92	11	348	852	34	183	643	52	2,573
	Airport	0	87	104	0	80	0	0	0	0	95	0	0	366	
	Background	18	118	20	11	12	11	348	852	34	88	643	52	2,207	

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

Table D-46
2020 Intersection Turning Volumes – AM Peak Hour – Implementation Plan

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	710	0	30	14	540	0	9	835	395	2,533
		Airport	0	0	0	241	0	0	0	43	0	0	33	191	508
		Background	0	0	0	469	0	30	14	497	0	9	802	204	2,025
2	North Harbor Drive / McCain St	Total	0	0	0	144	0	129	204	738	0	0	822	458	2,495
		Airport	0	0	0	59	0	97	12	272	0	0	128	69	637
		Background	0	0	0	85	0	32	192	466	0	0	694	389	1,858
3	North Harbor Drive / Spanish Landing	Total	5	0	18	65	0	12	113	847	6	18	1,653	0	2,737
		Airport	0	0	0	65	0	12	113	217	0	0	186	0	593
		Background	5	0	18	0	0	0	0	630	6	18	1,467	0	2,144
4	North Harbor Drive / Harbor Island Drive	Total	46	6	153	19	11	80	86	751	93	247	2,182	0	3,674
		Airport	13	6	40	19	11	80	86	176	21	66	730	0	1,248
		Background	33	0	113	0	0	0	0	575	72	181	1,452	0	2,426
5	North Harbor Drive / Winship Lane	Total	0	0	0	91	0	200	71	853	0	0	2,886	280	4,381
		Airport	0	0	0	91	0	200	71	164	0	0	1,253	280	2,059
		Background	0	0	0	0	0	0	0	689	0	0	1,633	0	2,322
6	North Harbor Drive / Rental Car Road	Total	70	0	56	10	0	14	16	1,927	87	147	3,082	19	5,428
		Airport	70	0	56	10	0	14	16	1,238	87	147	1,449	19	3,106
		Background	0	0	0	0	0	0	0	689	0	0	1,633	0	2,322
7	Sheraton / Harbor Island Drive	Total	13	120	0	0	253	99	85	6	27	0	0	0	603
		Airport	0	58	0	0	99	0	0	0	0	0	0	0	157
		Background	13	62	0	0	154	99	85	6	27	0	0	0	446
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	98	0	0	72	1	291
		Airport	0	0	0	0	0	38	82	16	0	0	21	1	158
		Background	0	0	0	0	0	0	0	82	0	0	51	0	133
9	Sassafra Street / Pacific Highway	Total	85	600	85	50	605	12	6	83	51	233	166	61	2,037
		Airport	85	83	0	0	108	12	6	83	51	0	166	0	594
		Background	0	517	85	50	497	0	0	0	0	233	0	61	1,443
10	Laurel Street / North Harbor Drive	Total	0	0	0	23	0	4	499	1,306	0	0	2,192	44	4,068
		Airport	0	0	0	0	0	0	478	827	0	0	1,037	0	2,342
		Background	0	0	0	23	0	4	21	479	0	0	1,155	44	1,726
11	Hawthorn Street / North Harbor Drive	Total	0	338	0	0	1,249	0	0	0	0	109	0	2,472	4,168
		Airport	0	267	0	0	827	0	0	0	0	11	0	770	1,875
		Background	0	71	0	0	422	0	0	0	0	98	0	1,702	2,293
12	Grape Street / North Harbor Drive	Total	0	276	103	944	547	0	0	0	0	0	0	0	1,870
		Airport	0	267	9	556	282	0	0	0	0	0	0	0	1,114
		Background	0	9	94	388	265	0	0	0	0	0	0	0	756
13	Laurel Street / Pacific Highway	Total	46	430	124	94	318	415	108	596	1	47	782	59	3,020
		Airport	0	65	10	4	43	111	96	381	0	2	467	6	1,185
		Background	46	365	114	90	275	304	12	215	1	45	315	53	1,835
14	Hawthorn Street / Pacific Highway	Total	142	276	0	0	216	73	0	0	0	294	2,174	102	3,277
		Airport	142	68	0	0	33	11	0	0	0	0	628	6	888
		Background	0	208	0	0	183	62	0	0	0	294	1,546	96	2,389
15	Grape Street / Pacific Highway	Total	0	703	195	191	1,063	0	84	1,018	48	0	0	0	3,302
		Airport	0	202	0	0	33	0	9	508	48	0	0	0	800
		Background	0	501	195	191	1,030	0	75	510	0	0	0	0	2,502
16	Laurel Street / Kettner Boulevard	Total	0	0	0	438	597	834	0	697	43	39	257	0	2,905
		Airport	0	0	0	6	0	381	0	395	0	3	94	0	879
		Background	0	0	0	432	597	453	0	302	43	36	163	0	2,026
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	288	152	0	0	0	181	2,957	0	3,578
		Airport	0	0	0	0	3	0	0	0	0	0	634	0	637
		Background	0	0	0	0	285	152	0	0	0	181	2,323	0	2,941
18	Grape Street / Kettner Boulevard	Total	0	0	0	135	671	0	0	1,563	104	0	0	0	2,473
		Airport	0	0	0	3	0	0	0	500	8	0	0	0	511
		Background	0	0	0	132	671	0	0	1,063	96	0	0	0	1,962
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	121	159	136	0	0	0	38	390	1,106	0	0	0	1,950
		Airport	0	0	0	0	0	0	0	3	500	0	0	0	503
		Background	121	159	136	0	0	0	38	387	606	0	0	0	1,447
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	52	49	0	0	0	0	0	0	0	0	2,371	69	2,541
		Airport	0	0	0	0	0	0	0	0	0	0	0	630	630
		Background	52	49	0	0	0	0	0	0	0	0	1,741	69	1,911
21	Laurel Street / India Street	Total	93	109	18	0	0	0	514	331	62	0	252	219	1,598
		Airport	50	3	0	0	0	0	303	36	62	0	47	0	501
		Background	43	106	18	0	0	0	211	295	0	0	205	219	1,097
22	Sassafra Street / Kettner Boulevard	Total	0	0	0	274	2,699	774	0	61	55	137	107	0	4,107
		Airport	0	0	0	0	387	51	0	25	26	0	52	0	541
		Background	0	0	0	274	2,312	723	0	36	29	137	55	0	3,566
23	Sassafra Street / India Street	Total	203	834	10	0	0	0	127	27	57	0	37	23	1,318
		Airport	83	306	0	0	0	0	41	0	0	0	0	0	430
		Background	120	528	10	0	0	0	86	27	57	0	37	23	888
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	226	40	65	0	93	48	178	198	0	848
		Airport	0	0	0	0	0	0	0	54	20	83	49	0	206
		Background	0	0	0	226	40	65	0	39	28	95	149	0	642
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	70	11	129	31	7	21	27	0	288	382	166	54	1,186
		Airport	13	0	63	0	0	0	1	0	53	118	0	0	248
		Background	57	11	66	31	7	21	26	0	235	264	166	54	938
26	Washington Street / Hancock Street	Total	0	315	129	394	469	0	473	221	179	0	0	0	2,180
		Airport	0	91	25	1	102	0	0	0	17	0	0	0	236
		Background	0	224	104	393	367	0	473	221	162	0	0	0	1,944
27	Washington Street / San Diego Avenue	Total	124	713	0	0	674	668	0	0	0	206	233	8	2,626
		Airport	25	66	0	0	86	0	0	0	0	17	0	0	194
		Background	99	647	0	0	588	668	0	0	0	189	233	8	2,432
28	Rosecrans Street / Pacific Highway	Total	206	154	229	99	146	61	64	182	150	345	168	98	1,902
		Airport	0	3	10	0	4	1	1	2	0	13	2	0	36
		Background	206	151	219	99	142	60	63	180	150	332	166	98	1,866
29	Rosecrans Street / Nimitz Boulevard	Total	20	139	111	35	146	37	124	536	24	137	551	35	1,895
		Airport	0	87	104	0	110	0	0	0	0	131	0	0	432
		Background	20	52	7	35	36	37	124	536	24	6	551	35	1,463

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
 25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

Table D-48
2025 Intersection Turning Volumes – AM Peak Hour – Implementation Plan

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	747	0	31	14	566	0	10	887	418	2,673
		Airport	0	0	0	255	0	0	0	46	0	0	36	203	540
		Background	0	0	0	492	0	31	14	520	0	10	851	215	2,133
2	North Harbor Drive / McCain St	Total	0	0	0	146	0	137	210	751	0	0	894	472	2,610
		Airport	0	0	0	59	0	104	12	289	0	0	135	70	669
		Background	0	0	0	87	0	33	198	462	0	0	759	402	1,941
3	North Harbor Drive / Spanish Landing	Total	5	0	18	71	0	13	123	854	6	18	1,749	0	2,857
		Airport	0	0	0	71	0	13	123	224	0	0	192	0	623
		Background	5	0	18	0	0	0	0	630	6	18	1,557	0	2,234
4	North Harbor Drive / Harbor Island Drive	Total	46	6	154	19	12	84	90	760	93	260	2,330	0	3,854
		Airport	13	6	41	19	12	84	90	184	21	66	788	0	1,324
		Background	33	0	113	0	0	0	0	576	72	194	1,542	0	2,530
5	North Harbor Drive / Winship Lane	Total	0	0	0	91	0	210	71	862	0	0	3,070	292	4,596
		Airport	0	0	0	91	0	210	71	173	0	0	1,334	292	2,171
		Background	0	0	0	0	0	0	0	689	0	0	1,736	0	2,425
6	North Harbor Drive / Rental Car Road	Total	74	0	60	10	0	14	16	2,007	93	157	3,273	19	5,723
		Airport	74	0	60	10	0	14	16	1,318	93	157	1,537	19	3,298
		Background	0	0	0	0	0	0	0	689	0	0	1,736	0	2,425
7	Sheraton / Harbor Island Drive	Total	13	122	0	0	267	99	85	6	27	0	0	0	619
		Airport	0	60	0	0	100	0	0	0	0	0	0	0	160
		Background	13	62	0	0	167	99	85	6	27	0	0	0	459
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	98	0	0	72	1	291
		Airport	0	0	0	0	0	38	82	18	0	0	22	1	161
		Background	0	0	0	0	0	0	0	80	0	0	50	0	130
9	Sassafras Street / Pacific Highway	Total	90	638	91	57	676	13	6	88	55	268	176	70	2,228
		Airport	90	90	0	0	117	13	6	88	55	0	176	0	635
		Background	0	548	91	57	559	0	0	0	0	268	0	70	1,593
10	Laurel Street / North Harbor Drive	Total	0	0	0	15	0	3	530	1,330	0	0	2,312	46	4,236
		Airport	0	0	0	0	0	0	510	878	0	0	1,098	0	2,486
		Background	0	0	0	15	0	3	20	452	0	0	1,214	46	1,750
11	Hawthorn Street / North Harbor Drive	Total	0	357	0	0	1,321	0	0	0	0	116	0	2,585	4,379
		Airport	0	282	0	0	878	0	0	0	0	14	0	816	1,990
		Background	0	75	0	0	443	0	0	0	0	102	0	1,769	2,389
12	Grape Street / North Harbor Drive	Total	0	291	110	1,000	582	0	0	0	0	0	0	0	1,983
		Airport	0	282	11	590	302	0	0	0	0	0	0	0	1,185
		Background	0	9	99	410	280	0	0	0	0	0	0	0	798
13	Laurel Street / Pacific Highway	Total	50	468	135	99	336	436	110	551	1	46	807	59	3,098
		Airport	0	71	12	5	48	118	102	408	0	2	497	7	1,270
		Background	50	397	123	94	288	318	8	143	1	44	310	52	1,828
14	Hawthorn Street / Pacific Highway	Total	151	301	0	0	235	81	0	0	0	336	2,433	118	3,655
		Airport	151	75	0	0	37	14	0	0	0	0	665	8	950
		Background	0	226	0	0	198	67	0	0	0	336	1,768	110	2,705
15	Grape Street / Pacific Highway	Total	0	744	207	208	1,157	0	89	1,071	51	0	0	0	3,527
		Airport	0	214	0	0	36	0	11	539	51	0	0	0	851
		Background	0	530	207	208	1,121	0	78	532	0	0	0	0	2,676
16	Laurel Street / Kettner Boulevard	Total	0	0	0	378	511	792	0	722	42	41	267	0	2,753
		Airport	0	0	0	8	0	404	0	425	0	4	102	0	943
		Background	0	0	0	370	511	388	0	297	42	37	165	0	1,810
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	240	126	0	0	0	193	3,151	0	3,710
		Airport	0	0	0	0	4	0	0	0	0	0	673	0	677
		Background	0	0	0	0	236	126	0	0	0	193	2,478	0	3,033
18	Grape Street / Kettner Boulevard	Total	0	0	0	126	622	0	0	1,612	106	0	0	0	2,466
		Airport	0	0	0	4	0	0	0	532	8	0	0	0	544
		Background	0	0	0	122	622	0	0	1,080	98	0	0	0	1,922
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	126	166	142	0	0	0	39	404	1,158	0	0	0	2,035
		Airport	0	0	0	0	0	0	0	4	532	0	0	0	536
		Background	126	166	142	0	0	0	39	400	626	0	0	0	1,499
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	55	53	0	0	0	0	0	0	0	0	2,403	69	2,580
		Airport	0	0	0	0	0	0	0	0	0	0	0	669	669
		Background	55	53	0	0	0	0	0	0	0	0	1,734	69	1,911
21	Laurel Street / India Street	Total	102	115	19	0	0	0	535	336	72	0	257	221	1,657
		Airport	57	4	0	0	0	0	322	39	72	0	50	0	544
		Background	45	111	19	0	0	0	213	297	0	0	207	221	1,113
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	243	2,457	696	0	68	60	139	112	0	3,775
		Airport	0	0	0	0	412	56	0	28	28	0	56	0	580
		Background	0	0	0	243	2,045	640	0	40	32	139	56	0	3,195
23	Sassafras Street / India Street	Total	207	848	10	0	0	0	132	28	58	0	40	26	1,349
		Airport	88	326	0	0	0	0	44	0	0	0	0	0	458
		Background	119	522	10	0	0	0	88	28	58	0	40	26	891
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	201	35	58	0	102	51	189	216	0	852
		Airport	0	0	0	0	0	1	0	64	24	88	57	0	234
		Background	0	0	0	201	35	57	0	38	27	101	159	0	618
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	44	5	99	31	7	22	29	0	314	392	165	54	1,162
		Airport	16	0	67	0	0	0	1	0	63	130	0	0	277
		Background	28	5	32	31	7	22	28	0	251	262	165	54	885
26	Washington Street / Hancock Street	Total	0	323	134	388	471	0	531	248	202	0	0	0	2,297
		Airport	0	100	30	1	110	0	0	0	20	0	0	0	261
		Background	0	223	104	387	361	0	531	248	182	0	0	0	2,036
27	Washington Street / San Diego Avenue	Total	128	708	0	0	702	693	0	0	0	202	225	8	2,666
		Airport	30	71	0	0	91	0	0	0	0	20	0	0	212
		Background	98	637	0	0	611	693	0	0	0	182	225	8	2,454
28	Rosecrans Street / Pacific Highway	Total	209	156	234	100	148	62	65	186	152	348	169	98	1,927
		Airport	0	3	11	0	4	1	1	2	0	14	2	0	38
		Background	209	153	223	100	144	61	64	184	152	334	167	98	1,889
29	Rosecrans Street / Nimitz Boulevard	Total	21	147	118	9	127	10	121	524	23	144	554	35	1,833
		Airport	0	93	111	0	117	0	0	0	0	138	0	0	459
		Background	21	54	7	9	10	10	121	524	23	6	554	35	1,374

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
 25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

Table D-49
2025 Intersection Turning Volumes – PM Peak Hour – Implementation Plan

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	619	0	76	47	737	0	22	877	1,114	3,492
	Airport	0	0	0	205	0	0	0	38	0	0	43	223	509	
	Background	0	0	0	414	0	76	47	699	0	22	834	891	2,983	
2	North Harbor Drive / McCain St	Total	0	0	0	564	0	294	43	1,087	0	0	1,116	120	3,224
	Airport	0	0	0	97	0	97	8	235	0	0	169	50	656	
	Background	0	0	0	467	0	197	35	852	0	0	947	70	2,568	
3	North Harbor Drive / Spanish Landing	Total	7	0	25	155	0	27	102	1,990	27	7	1,271	0	3,611
	Airport	0	0	0	155	0	27	102	231	0	0	191	0	706	
	Background	7	0	25	0	0	0	0	1,759	27	7	1,080	0	2,905	
4	North Harbor Drive / Harbor Island Drive	Total	166	5	348	21	11	80	75	1,949	144	513	1,604	0	4,916
	Airport	14	5	54	21	11	80	75	289	21	58	669	0	1,297	
	Background	152	0	294	0	0	0	0	1,660	123	455	935	0	3,619	
5	North Harbor Drive / Winship Lane	Total	0	0	0	112	0	250	65	2,253	0	0	2,511	284	5,475
	Airport	0	0	0	112	0	250	65	299	0	0	1,121	284	2,131	
	Background	0	0	0	0	0	0	0	1,954	0	0	1,390	0	3,344	
6	North Harbor Drive / Rental Car Road	Total	102	0	115	22	0	16	15	3,343	103	118	2,676	14	6,524
	Airport	102	0	115	22	0	16	15	1,389	103	118	1,286	14	3,180	
	Background	0	0	0	0	0	0	0	1,954	0	0	1,390	0	3,344	
7	Sheraton / Harbor Island Drive	Total	23	442	0	0	598	70	77	2	25	0	0	0	1,237
	Airport	0	73	0	0	89	0	0	0	0	0	0	0	162	
	Background	23	369	0	0	509	70	77	2	25	0	0	0	1,075	
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	55	68	107	0	0	139	1	370
	Airport	0	0	0	0	0	0	55	68	21	0	0	18	1	163
	Background	0	0	0	0	0	0	0	86	0	0	0	121	0	207
9	Sassafras Street / Pacific Highway	Total	83	1,103	448	151	1,159	11	17	230	116	219	149	58	3,744
	Airport	83	109	0	0	97	11	17	230	116	0	149	0	812	
	Background	0	994	448	151	1,062	0	0	0	0	219	0	58	2,932	
10	Laurel Street / North Harbor Drive	Total	0	0	0	45	0	7	1,268	2,164	0	0	1,982	121	5,587
	Airport	0	0	0	0	0	0	567	959	0	0	885	0	2,411	
	Background	0	0	0	45	0	7	701	1,205	0	0	1,097	121	3,176	
11	Hawthorn Street / North Harbor Drive	Total	0	661	0	0	2,507	0	0	0	191	0	1,439	4,798	
	Airport	0	228	0	0	959	0	0	0	0	15	0	657	1,859	
	Background	0	433	0	0	1,548	0	0	0	0	176	0	782	2,939	
12	Grape Street / North Harbor Drive	Total	0	667	259	1,357	1,223	0	0	0	0	0	0	0	3,506
	Airport	0	228	16	647	327	0	0	0	0	0	0	0	0	1,218
	Background	0	439	243	710	896	0	0	0	0	0	0	0	0	2,288
13	Laurel Street / Pacific Highway	Total	160	883	218	170	599	460	356	681	36	53	882	75	4,573
	Airport	0	71	8	9	93	110	113	454	0	5	424	7	1,294	
	Background	160	812	210	161	506	350	243	227	36	48	458	68	3,279	
14	Hawthorn Street / Pacific Highway	Total	172	863	0	0	804	78	0	0	191	1,359	113	3,580	
	Airport	122	74	0	0	83	15	0	0	0	0	536	6	836	
	Background	50	789	0	0	721	63	0	0	0	191	823	107	2,744	
15	Grape Street / Pacific Highway	Total	0	867	574	342	777	0	75	2,141	52	0	0	0	4,828
	Airport	0	180	0	1	82	0	16	595	52	0	0	0	926	
	Background	0	687	574	341	695	0	59	1,546	0	0	0	0	3,902	
16	Laurel Street / Kettner Boulevard	Total	0	0	0	453	956	861	0	974	74	60	319	0	3,697
	Airport	0	0	0	5	0	325	0	471	0	9	110	0	920	
	Background	0	0	0	448	956	536	0	503	74	51	209	0	2,777	
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	625	111	0	0	0	238	1,756	0	2,730
	Airport	0	0	0	0	9	0	0	0	0	0	541	0	550	
	Background	0	0	0	0	616	111	0	0	0	238	1,215	0	2,180	
18	Grape Street / Kettner Boulevard	Total	0	0	0	306	657	0	0	3,637	104	0	0	0	4,704
	Airport	0	0	0	8	1	0	0	582	14	0	0	0	605	
	Background	0	0	0	298	656	0	0	3,055	90	0	0	0	4,099	
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	190	363	355	0	0	0	24	499	2,121	0	0	0	3,552
	Airport	0	0	0	0	0	0	0	4	585	0	0	0	589	
	Background	190	363	355	0	0	0	24	495	1,536	0	0	0	2,963	
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	45	70	0	0	0	0	0	0	0	1,501	53	1,669	
	Airport	0	0	0	0	0	0	0	0	0	0	538	0	538	
	Background	45	70	0	0	0	0	0	0	0	0	963	53	1,131	
21	Laurel Street / India Street	Total	123	307	89	0	0	0	724	486	78	0	318	304	2,429
	Airport	78	9	1	0	0	0	352	47	78	0	42	0	607	
	Background	45	298	88	0	0	0	372	439	0	0	276	304	1,822	
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	400	3,549	536	0	275	133	98	114	0	5,105
	Airport	0	0	0	0	330	52	0	80	80	0	52	0	594	
	Background	0	0	0	400	3,219	484	0	195	53	98	62	0	4,511	
23	Sassafras Street / India Street	Total	192	1,365	29	0	0	0	359	70	127	0	17	21	2,180
	Airport	75	361	0	0	0	0	114	0	0	0	0	0	550	
	Background	117	1,004	29	0	0	0	245	70	127	0	17	21	1,630	
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	529	53	12	0	266	65	253	144	0	1,322
	Airport	0	0	0	0	0	1	0	60	22	71	101	0	255	
	Background	0	0	0	529	53	11	0	206	43	182	43	0	1,067	
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	39	12	147	69	66	8	69	17	760	422	238	67	1,914
	Airport	28	0	81	0	0	0	1	0	59	145	0	0	314	
	Background	11	12	66	69	66	8	68	17	701	277	238	67	1,600	
26	Washington Street / Hancock Street	Total	0	775	193	415	482	0	833	498	243	0	0	0	3,439
	Airport	0	112	28	1	110	0	0	0	34	0	0	0	285	
	Background	0	663	165	414	372	0	833	498	209	0	0	0	3,154	
27	Washington Street / San Diego Avenue	Total	239	1,398	0	0	744	633	0	0	0	222	305	19	3,560
	Airport	28	85	0	0	76	0	0	0	0	35	0	1	225	
	Background	211	1,313	0	0	668	633	0	0	0	187	305	18	3,335	
28	Rosecrans Street / Pacific Highway	Total	368	302	670	122	142	69	120	490	181	285	350	148	3,247
	Airport	0	4	13	0	3	1	1	2	0	12	2	0	38	
	Background	368	298	657	122	139	68	119	488	181	273	348	148	3,209	
29	Rosecrans Street / Nimitz Boulevard	Total	23	252	146	7	102	7	272	665	27	189	569	46	2,305
	Airport	0	102	121	0	94	0	0	0	0	111	0	0	428	
	Background	23	150	25	7	8	7	272	665	27	78	569	46	1,877	

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

Table D-50
2030 Intersection Turning Volumes – AM Peak Hour – Implementation Plan

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	839	0	31	16	619	0	11	945	504	2,965
		Airport	0	0	0	345	0	0	0	48	0	0	38	276	707
		Background	0	0	0	494	0	31	16	571	0	11	907	228	2,258
2	North Harbor Drive / McCain St	Total	0	0	0	147	0	177	219	890	0	0	952	481	2,866
		Airport	0	0	0	57	0	143	15	379	0	0	172	67	833
		Background	0	0	0	90	0	34	204	511	0	0	780	414	2,033
3	North Harbor Drive / Spanish Landing	Total	5	0	18	74	0	17	169	951	7	21	1,825	0	3,087
		Airport	0	0	0	74	0	17	169	267	0	0	222	0	749
		Background	5	0	18	0	0	0	684	7	21	1,603	0	2,338	
4	North Harbor Drive / Harbor Island Drive	Total	48	6	153	19	13	107	114	827	103	264	2,412	0	4,066
		Airport	15	6	40	19	13	107	114	203	24	64	822	0	1,427
		Background	33	0	113	0	0	0	0	624	79	200	1,590	0	2,639
5	North Harbor Drive / Winship Lane	Total	0	0	0	86	0	221	78	920	0	0	3,133	293	4,731
		Airport	0	0	0	86	0	221	78	183	0	0	1,343	293	2,204
		Background	0	0	0	0	0	0	0	737	0	0	1,790	0	2,527
6	North Harbor Drive / Rental Car Road	Total	81	0	60	10	0	14	17	2,063	105	157	3,331	18	5,856
		Airport	81	0	60	10	0	14	17	1,326	105	157	1,541	18	3,329
		Background	0	0	0	0	0	0	0	737	0	0	1,790	0	2,527
7	Sheraton / Harbor Island Drive	Total	13	123	0	0	280	99	85	6	27	0	0	0	633
		Airport	0	61	0	0	101	0	0	0	0	0	0	0	162
		Background	13	62	0	0	179	99	85	6	27	0	0	0	471
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	96	0	0	71	1	288
		Airport	0	0	0	0	0	38	82	19	0	0	23	1	163
		Background	0	0	0	0	0	0	0	77	0	0	48	0	125
9	Sassafra Street / Pacific Highway	Total	95	497	66	39	512	13	7	92	57	135	184	35	1,732
		Airport	95	95	0	0	123	13	7	92	57	0	184	0	666
		Background	0	402	66	39	389	0	0	0	0	135	0	35	1,066
10	Laurel Street / North Harbor Drive	Total	0	0	0	17	0	3	495	1,391	0	0	2,412	48	4,366
		Airport	0	0	0	0	0	0	474	922	0	0	1,149	0	2,545
		Background	0	0	0	17	0	3	21	469	0	0	1,263	48	1,821
11	Hawthorn Street / North Harbor Drive	Total	0	371	0	0	1,385	0	0	0	0	133	0	2,854	4,743
		Airport	0	295	0	0	922	0	0	0	0	17	0	854	2,088
		Background	0	76	0	0	463	0	0	0	0	116	0	2,000	2,655
12	Grape Street / North Harbor Drive	Total	0	304	109	1,030	602	0	0	0	0	0	0	0	2,045
		Airport	0	295	13	618	320	0	0	0	0	0	0	0	1,246
		Background	0	9	96	412	282	0	0	0	0	0	0	0	799
13	Laurel Street / Pacific Highway	Total	42	409	119	72	256	345	115	525	1	81	999	102	3,066
		Airport	0	76	15	6	53	121	106	368	0	2	445	8	1,200
		Background	42	333	104	66	203	224	9	157	1	79	554	94	1,866
14	Hawthorn Street / Pacific Highway	Total	158	271	0	0	206	74	0	0	0	376	2,675	133	3,893
		Airport	158	81	0	0	39	17	0	0	0	0	696	10	1,001
		Background	0	190	0	0	167	57	0	0	0	376	1,979	123	2,892
15	Grape Street / Pacific Highway	Total	0	698	184	177	991	0	97	1,136	52	0	0	0	3,335
		Airport	0	225	0	0	39	0	13	566	52	0	0	0	895
		Background	0	473	184	177	952	0	84	570	0	0	0	0	2,440
16	Laurel Street / Kettner Boulevard	Total	0	0	0	349	469	703	0	920	75	63	371	0	2,950
		Airport	0	0	0	9	0	347	0	388	0	5	108	0	857
		Background	0	0	0	340	469	356	0	532	75	58	263	0	2,093
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	251	131	0	0	0	216	3,477	0	4,075
		Airport	0	0	0	0	5	0	0	0	0	0	706	0	711
		Background	0	0	0	0	246	131	0	0	0	216	2,771	0	3,364
18	Grape Street / Kettner Boulevard	Total	0	0	0	136	673	0	0	1,694	111	0	0	0	2,614
		Airport	0	0	0	4	1	0	0	558	8	0	0	0	571
		Background	0	0	0	132	672	0	0	1,136	103	0	0	0	2,043
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	206	272	233	0	0	0	44	457	1,268	0	0	0	2,480
		Airport	0	0	0	0	0	0	0	4	559	0	0	0	563
		Background	206	272	233	0	0	0	44	453	709	0	0	0	1,917
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	62	59	0	0	0	0	0	0	0	0	3,110	95	3,326
		Airport	0	0	0	0	0	0	0	0	0	0	0	701	0
		Background	62	59	0	0	0	0	0	0	0	0	2,409	95	2,625
21	Laurel Street / India Street	Total	98	96	16	0	0	0	618	517	78	1	341	310	2,075
		Airport	61	5	0	0	0	0	278	41	78	1	52	0	516
		Background	37	91	16	0	0	0	340	476	0	0	289	310	1,559
22	Sassafra Street / Kettner Boulevard	Total	0	0	0	242	2,399	699	0	53	49	114	106	0	3,662
		Airport	0	0	0	0	356	60	0	29	30	0	60	0	535
		Background	0	0	0	242	2,043	639	0	24	19	114	46	0	3,127
23	Sassafra Street / India Street	Total	249	974	13	0	0	0	117	23	48	0	43	27	1,494
		Airport	92	283	0	0	0	0	45	0	0	0	0	0	420
		Background	157	691	13	0	0	0	72	23	48	0	43	27	1,074
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	511	90	147	0	115	57	174	197	0	1,291
		Airport	0	0	0	0	0	1	0	76	29	92	69	0	267
		Background	0	0	0	511	90	146	0	39	28	82	128	0	1,024
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	19	0	71	0	0	0	1	0	75	143	0	0	309
		Airport	19	0	71	0	0	0	1	0	75	143	0	0	309
		Background	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Washington Street / Hancock Street	Total	0	260	106	311	408	0	208	97	95	0	0	0	1,485
		Airport	0	110	36	1	119	0	0	0	24	0	0	0	290
		Background	0	150	70	310	289	0	208	97	71	0	0	0	1,195
27	Washington Street / San Diego Avenue	Total	113	585	0	0	682	665	0	0	0	277	313	12	2,647
		Airport	35	75	0	0	96	0	0	0	0	24	0	1	231
		Background	78	510	0	0	586	665	0	0	0	253	313	11	2,416
28	Rosecrans Street / Pacific Highway	Total	207	155	230	144	209	88	61	176	143	313	154	88	1,968
		Airport	0	3	10	0	3	1	1	3	0	13	4	0	38
		Background	207	152	220	144	206	87	60	173	143	300	150	88	1,930
29	Rosecrans Street / Nimitz Boulevard	Total	20	158	179	39	171	41	107	461	20	219	514	32	1,961
		Airport	0	105	172	0	131	0	0	0	0	214	0	0	622
		Background	20	53	7	39	40	41	107	461	20	5	514	32	1,339

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
 25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

Table D-51
2030 Intersection Turning Volumes – PM Peak Hour – Implementation Plan

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	690	0	75	52	807	0	23	934	1,246	3,827
		Airport	0	0	0	279	0	0	0	40	0	0	45	302	666
		Background	0	0	0	411	0	75	52	767	0	23	889	944	3,161
2	North Harbor Drive / McCain St	Total	0	0	0	575	0	335	46	1,269	0	0	1,186	120	3,531
		Airport	0	0	0	94	0	132	10	308	0	0	215	48	807
		Background	0	0	0	481	0	203	36	961	0	0	971	72	2,724
3	North Harbor Drive / Spanish Landing	Total	7	0	25	160	0	37	140	2,157	28	7	1,334	0	3,895
		Airport	0	0	0	160	0	37	140	263	0	0	226	0	826
		Background	7	0	25	0	0	0	1,894	28	7	1,108	0	3,069	
4	North Harbor Drive / Harbor Island Drive	Total	169	5	346	21	11	102	96	2,089	158	525	1,669	0	5,191
		Airport	17	5	52	21	11	102	96	304	23	56	705	0	1,392
		Background	152	0	294	0	0	0	0	1,785	135	469	964	0	3,799
5	North Harbor Drive / Winship Lane	Total	0	0	0	106	0	264	69	2,387	0	0	2,569	288	5,683
		Airport	0	0	0	106	0	264	69	308	0	0	1,136	288	2,171
		Background	0	0	0	0	0	0	0	2,079	0	0	1,433	0	3,512
6	North Harbor Drive / Rental Car Road	Total	114	0	115	21	0	17	15	3,475	114	119	2,726	14	6,730
		Airport	114	0	115	21	0	17	15	1,396	114	119	1,293	14	3,218
		Background	0	0	0	0	0	0	0	2,079	0	0	1,433	0	3,512
7	Sheraton / Harbor Island Drive	Total	23	443	0	0	625	70	77	2	25	0	0	0	1,265
		Airport	0	74	0	0	91	0	0	0	0	0	0	0	165
		Background	23	369	0	0	534	70	77	2	25	0	0	0	1,100
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	55	68	105	0	0	138	1	367
		Airport	0	0	0	0	0	55	68	22	0	0	20	1	166
		Background	0	0	0	0	0	0	0	83	0	0	118	0	201
9	Sassafras Street / Pacific Highway	Total	87	844	328	105	842	11	17	239	120	110	156	29	2,888
		Airport	87	116	0	0	103	11	17	239	120	0	156	0	849
		Background	0	728	328	105	739	0	0	0	0	110	0	29	2,039
10	Laurel Street / North Harbor Drive	Total	0	0	0	49	0	7	1,253	2,256	0	0	2,069	126	5,760
		Airport	0	0	0	0	0	0	526	1,005	0	0	928	0	2,459
		Background	0	0	0	49	0	7	727	1,251	0	0	1,141	126	3,301
11	Hawthorn Street / North Harbor Drive	Total	0	674	0	0	2,623	0	0	0	0	217	0	1,574	5,088
		Airport	0	239	0	0	1,005	0	0	0	0	18	0	690	1,952
		Background	0	435	0	0	1,618	0	0	0	0	199	0	884	3,136
12	Grape Street / North Harbor Drive	Total	0	663	255	1,391	1,247	0	0	0	0	0	0	0	3,556
		Airport	0	239	20	677	346	0	0	0	0	0	0	0	1,282
		Background	0	424	235	714	901	0	0	0	0	0	0	0	2,274
13	Laurel Street / Pacific Highway	Total	135	759	186	123	454	359	383	658	40	92	1,204	130	4,523
		Airport	0	78	10	10	99	113	117	409	0	6	384	8	1,234
		Background	135	681	176	113	355	246	266	249	40	86	820	122	3,289
14	Hawthorn Street / Pacific Highway	Total	170	745	0	0	694	71	0	0	0	214	1,483	126	3,503
		Airport	128	81	0	0	87	18	0	0	0	0	562	7	883
		Background	42	664	0	0	607	53	0	0	0	214	921	119	2,620
15	Grape Street / Pacific Highway	Total	0	802	512	290	676	0	83	2,280	53	0	0	0	4,696
		Airport	0	189	0	1	86	0	20	624	53	0	0	0	973
		Background	0	613	512	289	590	0	63	1,656	0	0	0	0	3,723
16	Laurel Street / Kettner Boulevard	Total	0	0	0	417	877	772	0	1,331	133	93	452	0	4,075
		Airport	0	0	0	6	0	280	0	430	0	11	117	0	844
		Background	0	0	0	411	877	492	0	901	133	82	335	0	3,231
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	651	115	0	0	0	266	1,928	0	2,960
		Airport	0	0	0	0	11	0	0	0	0	0	569	0	580
		Background	0	0	0	0	640	115	0	0	0	266	1,359	0	2,380
18	Grape Street / Kettner Boulevard	Total	0	0	0	332	710	0	0	3,823	109	0	0	0	4,974
		Airport	0	0	0	10	1	0	0	610	15	0	0	0	636
		Background	0	0	0	322	709	0	0	3,213	94	0	0	0	4,338
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	311	593	580	0	0	0	27	565	2,353	0	0	0	4,429
		Airport	0	0	0	0	0	0	0	5	615	0	0	0	620
		Background	311	593	580	0	0	0	27	560	1,738	0	0	0	3,809
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	50	78	0	0	0	0	0	0	0	0	1,903	74	2,105
		Airport	0	0	0	0	0	0	0	0	0	0	0	565	0
		Background	50	78	0	0	0	0	0	0	0	0	1,338	74	1,540
21	Laurel Street / India Street	Total	121	254	73	0	0	0	899	750	84	0	431	425	3,037
		Airport	84	11	1	0	0	0	303	49	84	0	44	0	576
		Background	37	243	72	0	0	0	596	701	0	0	387	425	2,461
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	399	3,502	539	0	200	117	80	106	0	4,943
		Airport	0	0	0	0	286	55	0	84	85	0	55	0	565
		Background	0	0	0	399	3,216	484	0	116	32	80	51	0	4,378
23	Sassafras Street / India Street	Total	233	1,643	39	0	0	0	320	57	104	0	18	22	2,436
		Airport	78	314	0	0	0	0	119	0	0	0	0	0	511
		Background	155	1,329	39	0	0	0	201	57	104	0	18	22	1,925
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	1,347	134	28	0	286	72	221	155	0	2,243
		Airport	0	0	0	0	0	1	0	70	27	75	121	0	294
		Background	0	0	0	1,347	134	27	0	216	45	146	34	0	1,949
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	33	0	85	52	51	6	56	14	635	348	160	45	1,485
		Airport	33	0	85	0	0	0	1	0	70	162	0	0	351
		Background	0	0	0	52	51	6	55	14	565	186	160	45	1,134
26	Washington Street / Hancock Street	Total	0	568	144	333	420	0	326	194	122	0	0	0	2,107
		Airport	0	122	33	1	121	0	0	0	41	0	0	0	318
		Background	0	446	111	332	299	0	326	194	81	0	0	0	1,789
27	Washington Street / San Diego Avenue	Total	202	1,142	0	0	722	607	0	0	0	300	423	27	3,423
		Airport	33	89	0	0	81	0	0	0	0	41	0	1	245
		Background	169	1,053	0	0	641	607	0	0	0	259	423	26	3,178
28	Rosecrans Street / Pacific Highway	Total	364	297	661	174	201	98	113	464	171	257	315	133	3,248
		Airport	0	3	12	0	3	1	1	4	0	11	3	0	38
		Background	364	294	649	174	198	97	112	460	171	246	312	133	3,210
29	Rosecrans Street / Nimitz Boulevard	Total	23	261	212	31	141	31	239	586	24	245	528	43	2,364
		Airport	0	115	187	0	106	0	0	0	0	173	0	0	581
		Background	23	146	25	31	35	31	239	586	24	72	528	43	1,783

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

Table D-52
2010-2030 Peak Hour Intersection Operations – Implementation Plan

Intersection Number	Intersection	Peak Hour	Year 2010		Year 2015		Year 2020		Year 2025		Year 2030	
			Delay (Sec.)	LOS	Delay (Sec.)	LOS	Delay (SEC)	LOS	Delay (SEC)	LOS	Delay (Sec.)	LOS
1	North Harbor Drive/ Nimitz Boulevard	AM	20.2	C	20.3	C	20.9	C	21.1	C	21.9	C
		PM	20.7	C	20.3	C	20.9	C	21.1	C	21.7	C
2	North Harbor Drive/ McCain Road	AM	8.4	A	9.2	A	9.5	A	9.8	A	10.7	B
		PM	9.8	A	10.7	B	11.1	B	11.2	B	11.8	B
3	North Harbor Drive/ Spanish Landing	AM	7.8	A	8.4	A	8.7	A	9.0	A	10.0	A
		PM	7.3	A	7.7	A	8.1	A	8.2	A	8.8	A
4	North Harbor Drive/ Harbor Island Drive	AM	19.7	B	19.3	B	19.4	B	19.3	B	20.1	C
		PM	30.5	C	31.0	C	32.4	C	33.2	C	35.2	D
5	North Harbor Drive/ Winship Lane	AM	9.5	A	9.7	A	9.8	A	9.8	A	10.2	B
		PM	9.1	A	9.3	A	9.4	A	9.6	A	9.7	A
6	North Harbor Drive/ Rental Car Road	AM	6.7	A	7.5	A	8.2	A	9.0	A	9.6	A
		PM	7.6	A	8.5	A	9.2	A	9.7	A	10.5	B
7	Sheraton Harbor Island Drive	AM	12.4	B	12.3	B	12.0	B	11.7	B	11.6	B
		PM	7.6	A	7.4	A	7.2	A	7.0	A	6.9	A
8	Employee Lot Harbor Island Drive	AM	9.8	A	9.9	A	9.9	A	9.9	A	9.9	A
		PM	10.1	B	10.1	B	10.2	B	10.2	B	10.2	B
9	Sassafras Street/ Pacific Highway	AM	15.3	B	15.5	B	15.2	B	15.7	B	14.1	B
		PM	14.9	B	17.4	B	17.2	B	19.8	B	14.8	B
10	Laurel Street/ North Harbor Drive	AM	9.1	A	10.0	A	10.8	B	11.4	B	10.8	B
		PM	15.4	B	16.2	B	18.6	B	19.7	B	20.3	C
11	Hawthorn Street/ North Harbor Drive	AM	31.3	C	48.6	D	112.6	F	135.1	F	182.2	F
		PM	23.1	C	25.1	C	33.7	C	42.2	D	62.3	E
12	Grape Street/ North Harbor Drive	AM	8.2	A	8.4	A	8.3	A	8.4	A	8.5	A
		PM	10.9	B	11.0	B	10.8	B	11.1	B	11.0	B
13	Laurel Street/ Pacific Highway	AM	32.1	C	33.7	C	33.9	C	34.5	C	34.0	C
		PM	48.9	D	62.2	E	59.4	E	53.4	D	61.8	E
14	Hawthorn Street/ Pacific Highway	AM	12.6	B	14.3	B	15.8	B	18.0	B	19.8	B
		PM	21.0	C	21.9	C	22.9	C	23.9	C	23.5	C
15	Grape Street/ Pacific Highway	AM	18.5	B	19.0	B	19.9	B	20.4	C	20.3	C
		PM	26.1	C	32.8	C	53.4	D	69.6	E	58.5	E
16	Laurel Street/ Kettner Boulevard	AM	18.8	B	19.5	B	19.5	B	19.8	B	21.9	C
		PM	21.3	C	22.7	C	25.5	C	24.5	C	31.9	C
17	Hawthorn Street/ Kettner Boulevard	AM	5.5	A	6.2	A	10.3	B	9.5	A	13.4	B
		PM	10.9	B	11.2	B	15.5	B	13.8	B	14.2	B
18	Grape Street/ Kettner Boulevard	AM	12.4	B	13.1	B	14.8	B	14.1	B	14.7	B
		PM	16.6	B	22.6	C	55.3	E	55.0	D	80.0	E
19	Grape Street/ I-5 Southbound On-Ramp	AM	11.1	B	10.8	B	11.5	B	11.6	B	15.3	B
		PM	28.3	C	34.7	C	32.8	C	39.1	D	90.1	F
20	Hawthorn Street/ I-5 Northbound Off-Ramp	AM	11.0	B	10.6	B	10.8	B	10.3	B	16.0	B
		PM	11.8	B	12.0	B	12.1	B	11.5	B	11.1	B
21	Laurel Street/ India Street	AM	18.4	B	19.3	B	19.1	B	19.5	B	22.8	C
		PM	21.3	C	22.9	C	22.0	C	22.3	C	22.1	C
22	Sassafras Street/ Kettner Boulevard	AM	8.6	A	9.5	A	19.3	B	12.1	B	9.8	A
		PM	11.6	B	13.1	B	123.2	F	84.8	F	66.7	E
23	Sassafras Street/ India Street	AM	8.2	A	8.3	A	8.8	A	9.1	A	8.1	A
		PM	13.7	B	17.8	B	15.6	B	16.1	B	17.7	B
24	Washington Street/ Pacific Highway SB-Ramps	AM	12.6	B	12.7	B	13.0	B	12.8	B	12.5	B
		PM	14.9	B	15.1	B	15.3	B	15.5	B	17.6	B
25	Washington Street/ Pacific Highway NB-Ramps	AM	33.5	C	46.9	D	56.3	E	60.9	E	21.2	C
		PM	68.5	E	100.5	F	130.4	F	157.0	F	79.8	E
26	Washington Street/ Hancock Street	AM	27.8	C	28.1	C	28.7	C	28.8	C	25.9	C
		PM	30.2	C	30.8	C	32.3	C	32.7	C	28.0	C
27	Washington Street/ San Diego Avenue	AM	12.5	B	13.1	B	12.7	B	12.5	B	14.9	B
		PM	13.6	B	14.1	B	14.1	B	14.0	B	16.8	B
28	Rosecrans Street/ Pacific Highway	AM	36.1	D	36.4	D	36.1	D	36.2	D	37.3	D
		PM	39.1	D	44.8	D	41.3	D	41.9	D	43.0	D
29	Rosecrans Street/ Nimitz Boulevard	AM	21.8	C	21.7	C	24.3	C	23.8	C	27.0	C
		PM	25.0	C	25.2	C	26.7	C	26.6	C	29.2	C

Source: HNTB, 2007

LOS = level of service

Table D-53 compares the intersection delay under the Airport Implementation Plan (With Parking Structure) against the No Project Alternative to identify intersection impacts based on significance criteria identified in Section D.2, measured by an increase to LOS E or F or an increase in vehicle delay of greater than 2 seconds for streets operating at LOS E and greater than 1 second for streets operating at LOS F under the No Project Alternative. The following intersections would have potentially significant traffic impacts due to the project:

Intersections with Potential Significant Traffic Impacts

Year 2010 and 2015

- No potentially significant impacts to intersections in the Study Area are anticipated to occur under the Implementation Plan (with Parking Structure) compared to the No Project Alternative in 2010 and ~~2020~~ 2015.

Year 2020

- Sassafras Street and Kettner Boulevard (PM), which operates at LOS F in the PM peak hour under both the Implementation Plan (with Parking Structure) and No Project Alternative and would experience an increase in delay greater than 1 second under the Implementation Plan compared to the No Project Alternative.

Year 2025

- All locations identified in Year 2020
- Hawthorn Street and North Harbor Drive (AM), which operates at LOS F under both the Implementation Plan (with Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan compared to the No Project Alternative.

Year 2030

- All locations identified in Year 2025
- Hawthorn Street and North Harbor Drive (AM), which operates at LOS F in the PM peak hour under both the Implementation Plan (with Parking Structure) and No Project Alternative and would experience an increase in delay greater than 1 second under the Implementation Plan compared to the No Project Alternative.
- Grape Street and Kettner Boulevard (PM), which operates at LOS F in the PM peak hour under both the Implementation Plan and No Project Alternative and would experience an increase in delay greater than 1 second (with Parking Structure) under the Implementation Plan compared to the No Project Alternative.
- Grape Street and I-5 Southbound On-Ramp (PM), which operates at LOS F in the PM peak hour under both the Implementation Plan (with Parking Structure) and No Project Alternative and would experience an increase in delay greater than 1 second under the Implementation Plan compared to the No Project Alternative.

Table D-53
 2010-2030 Intersection Impacts – Proposed Airport Implementation Plan (With Parking Structure)

Intersection Number	Intersection	Peak Hour	Year 2010			Year 2015			Year 2020			Year 2025			Year 2030		
			No Proj	No Project	Diff.	No Proj	No Project	Diff.	No Proj	No-Project	Diff.	No Proj	No Project	Diff.	No Proj	No Project	Diff.
			Delay (Sec.)														
1	North Harbor Drive/ Nimitz Boulevard	AM	20.2	20.2	0.0	20.4	20.3	-0.1	20.9	20.9	0.0	21.1	21.1	0.0	21.7	21.9	0.2
		PM	20.7	20.7	0.0	20.4	20.3	-0.1	20.9	20.9	0.0	21.1	21.1	0.0	21.6	21.7	0.1
2	North Harbor Drive/ McCain Road	AM	6.7	8.4	-1.7	7.2	9.2	2.0	7.4	9.5	2.1	7.6	9.8	2.2	7.6	10.7	3.1
		PM	9.1	9.8	-0.7	9.9	10.7	0.8	10.2	11.1	0.9	10.3	11.2	0.9	10.3	11.8	1.5
3	North Harbor Drive/ Spanish Landing	AM	10.1	7.8	2.3	10.9	8.4	-2.5	11.2	8.7	-2.5	11.7	9.0	-2.7	13.1	10.0	-3.1
		PM	8.7	7.3	1.4	9.3	7.7	-1.6	9.8	8.1	-1.7	10.0	8.2	-1.8	11.2	8.8	-2.4
4	North Harbor Drive/ Harbor Island Drive	AM	20.4	19.7	0.7	20.4	19.3	-1.1	20.9	19.4	-1.5	20.8	19.3	-1.5	21.9	20.1	-1.8
		PM	30.8	30.5	0.3	31.4	31.0	-0.4	32.8	32.4	-0.4	33.3	33.2	-0.1	34.9	35.2	0.3
5	North Harbor Drive/ Winship Lane	AM	9.9	9.5	0.4	10.6	9.7	-0.9	10.8	9.8	-1.0	10.7	9.8	-0.9	11.1	10.2	-0.9
		PM	9.6	9.1	0.5	10.3	9.3	-1.0	10.4	9.4	-1.0	10.6	9.6	-1.0	10.7	9.7	-1.0
6	North Harbor Drive/ Rental Car Road	AM	6.7	6.7	0.0	7.5	7.5	0.0	8.2	8.2	0.0	8.8	9.0	0.2	9.0	9.6	0.6
		PM	7.6	7.6	0.0	8.5	8.5	0.0	9.2	9.2	0.0	9.6	9.7	0.1	10.0	10.5	0.5
7	Sheraton Harbor Island Drive	AM	12.4	12.4	0.0	12.3	12.3	0.0	12.0	12.0	0.0	11.8	11.7	-0.1	11.6	11.6	0.0
		PM	7.6	7.6	0.0	7.4	7.4	0.0	7.2	7.2	0.0	7.0	7.0	0.0	6.9	6.9	0.0
8	Employee Lot Harbor Island Drive	AM	9.8	9.8	0.0	9.9	9.9	0.0	9.9	9.9	0.0	9.9	9.9	0.0	9.9	9.9	0.0
		PM	10.1	10.1	0.0	10.1	10.1	0.0	10.2	10.2	0.0	10.2	10.2	0.0	10.1	10.2	0.1
9	Sassafras Street/ Pacific Highway	AM	15.3	15.3	0.0	15.4	15.5	0.1	15.1	15.2	0.1	15.6	15.7	0.1	14.0	14.1	0.1
		PM	14.5	14.9	-0.4	16.6	17.4	0.8	16.5	17.2	0.7	18.5	19.8	1.3	14.1	14.8	0.7
10	Laurel Street/ North Harbor Drive	AM	9.2	9.1	0.1	10.1	10.0	-0.1	10.8	10.8	0.0	11.3	11.4	0.1	10.5	10.8	0.3
		PM	15.5	15.4	0.1	16.3	16.2	-0.1	18.7	18.6	-0.1	19.3	19.7	0.4	19.4	20.3	0.9
11	Hawthorn Street/ North Harbor Drive	AM	31.8	31.3	0.5	49.6	48.6	-1.0	112.8	112.6	-0.2	131.7	135.1	3.4	173.0	182.2	9.2
		PM	23.2	23.1	0.1	25.2	25.1	-0.1	33.7	33.7	0.0	40.7	42.2	1.5	55.9	62.3	6.4
12	Grape Street/ North Harbor Drive	AM	8.2	8.2	0.0	8.4	8.4	0.0	8.3	8.3	0.0	8.4	8.4	0.0	8.3	8.5	0.2
		PM	10.9	10.9	0.0	11.0	11.0	0.0	10.7	10.8	0.1	11.0	11.1	0.1	10.9	11.0	0.1
13	Laurel Street/ Pacific Highway	AM	32.1	32.1	0.0	33.7	33.7	0.0	33.9	33.9	0.0	34.4	34.5	0.1	33.7	34.0	0.3
		PM	49.0	48.9	0.1	62.4	62.2	-0.2	59.5	59.4	-0.1	53.1	53.4	0.3	60.4	61.8	1.4
14	Hawthorn Street/ Pacific Highway	AM	12.6	12.6	0.0	14.3	14.3	0.0	15.8	15.8	0.0	17.7	18.0	0.3	18.9	19.8	0.9
		PM	21.0	21.0	0.0	22.0	21.9	-0.1	22.9	22.9	0.0	23.8	23.9	0.1	23.3	23.5	0.2
15	Grape Street/ Pacific Highway	AM	18.5	18.5	0.0	19.0	19.0	0.0	19.9	19.9	0.0	20.3	20.4	0.1	20.2	20.3	0.1
		PM	26.2	26.1	0.1	32.8	32.8	0.0	53.1	53.4	0.3	68.6	69.6	1.0	56.5	58.5	2.0
16	Laurel Street/ Kettner Boulevard	AM	18.9	18.8	0.1	19.6	19.5	-0.1	19.8	19.5	-0.3	19.9	19.8	-0.1	21.9	21.9	0.0
		PM	21.4	21.3	0.1	22.9	22.7	-0.2	25.9	25.5	-0.4	24.8	24.5	-0.3	31.9	31.9	0.0
17	Hawthorn Street/ Kettner Boulevard	AM	5.5	5.5	0.0	6.2	6.2	0.0	10.3	10.3	0.0	9.6	9.5	-0.1	13.0	13.4	0.4
		PM	10.9	10.9	0.0	11.3	11.2	-0.1	15.6	15.5	-0.1	13.9	13.8	-0.1	14.2	14.2	0.0
18	Grape Street/ Kettner Boulevard	AM	12.4	12.4	0.0	13.1	13.1	0.0	14.8	14.8	0.0	14.2	14.1	-0.1	14.8	14.7	-0.1
		PM	16.7	16.6	0.1	22.8	22.6	-0.2	55.3	55.3	0.0	54.0	55.0	1.0	77.1	80.0	2.9
19	Grape Street/ I-5 Southbound On-Ramp	AM	11.1	11.1	0.0	8.9	10.8	1.9	11.6	11.5	-0.1	11.5	11.6	0.1	15.1	15.3	0.2
		PM	28.6	28.3	0.3	35.2	34.7	-0.5	32.9	32.8	-0.1	38.6	39.1	0.5	87.1	90.1	3.0
20	Hawthorn Street/ I-5 Northbound Off-Ramp	AM	11.1	11.0	0.1	10.6	10.6	0.0	10.8	10.8	0.0	19.6	10.3	-9.3	15.3	16.0	0.7
		PM	11.8	11.8	0.0	12.0	12.0	0.0	12.1	12.1	0.0	16.4	11.5	-4.9	11.0	11.1	0.1
21	Laurel Street/ India Street	AM	18.5	18.4	0.1	19.4	19.3	-0.1	22.6	19.1	-3.5	22.9	19.5	-3.4	23.0	22.8	-0.2
		PM	21.4	21.3	0.1	22.9	22.9	0.0	22.1	22.0	-0.1	26.8	22.3	-4.5	32.4	22.1	-10.3
22	Sassafras Street/ Kettner Boulevard	AM	8.3	8.6	-0.3	9.2	9.5	0.3	19.4	19.3	-0.1	11.9	12.1	0.2	9.6	9.8	0.2
		PM	11.1	11.6	-0.5	12.5	13.1	0.6	121.5	123.2	1.7	82.1	84.8	2.7	62.5	66.7	4.2
23	Sassafras Street/ India Street	AM	8.1	8.2	-0.1	8.2	8.3	0.1	8.7	8.8	0.1	9.0	9.1	0.1	8.0	8.1	0.1
		PM	13.5	13.7	-0.2	17.3	17.8	0.5	15.3	15.6	0.3	15.7	16.1	0.4	16.6	17.7	1.1
24	Washington Street/ Pacific Highway SB-Ramps	AM	12.6	12.6	0.0	12.7	12.7	0.0	13.0	13.0	0.0	12.8	12.8	0.0	12.4	12.5	0.1
		PM	14.9	14.9	0.0	15.1	15.1	0.0	15.3	15.3	0.0	15.5	15.5	0.0	17.4	17.6	0.2
25	Washington Street/ Pacific Highway NB-Ramps	AM	33.5	33.5	0.0	46.7	46.9	0.2	56.0	56.3	0.3	59.8	60.9	1.1	31.1	21.2	-9.9
		PM	67.7	68.5	-0.8	107.8	100.5	-7.3	130.2	130.4	0.2	156.4	157.0	0.6	79.3	79.8	0.5
26	Washington Street/ Hancock Street	AM	27.8	27.8	0.0	28.1	28.1	0.0	28.7	28.7	0.0	28.8	28.8	0.0	25.9	25.9	0.0
		PM	30.2	30.2	0.0	30.8	30.8	0.0	32.4	32.3	-0.1	32.7	32.7	0.0	28.0	28.0	0.0
27	Washington Street/ San Diego Avenue	AM	12.5	12.5	0.0	13.1	13.1	0.0	12.7	12.7	0.0	12.5	12.5	0.0	15.0	14.9	-0.1
		PM	13.6	13.6	0.0	14.1	14.1	0.0	14.1	14.1	0.0	14.0	14.0	0.0	16.8	16.8	0.0
28	Rosecrans Street/ Pacific Highway	AM	36.1	36.1	0.0	36.4	36.4	0.0	36.1	36.1	0.0	36.2	36.2	0.0	37.3	37.3	0.0
		PM	39.1	39.1	0.0	44.8	44.8	0.0	41.3	41.3	0.0	41.9	41.9	0.0	42.9	43.0	0.1
29	Rosecrans Street/ Nimitz Boulevard	AM	21.8	21.8	0.0	21.8	21.7	-0.1	24.3	24.3	0.0	23.6	23.8	0.2	26.8	27.0	0.2
		PM	25.0	25.0	0.0	25.3	25.2	-0.1	26.7	26.7	0.0	26.5	26.6	0.1	28.9	29.2	0.3

Source: HNTB, 2007

Legend:
 LOS E
 LOS F
 Significant Impact

D.5.1.3.3 Freeway Segments

Table D-54 shows the freeway segment operations for each analysis year under the Implementation Plan (With Parking Structure). As shown, all freeway segments would operate at LOS D, E or F under the Implementation Plan during either AM or PM peak hours or both.

Table D-55 compares the freeway segment densities under the Implementation Plan (With Parking Structure) against the No Project Alternative to identify freeway segment impacts based on significance criteria identified in Section D.2, *Traffic Impacts and Significance Criteria*, measured by an increase to LOS E or F or an increase in volume to capacity ratio of greater than 0.01 for freeways operating at LOS E and .005 for freeways operating at LOS F under the No Project Alternative. It was assumed that an increase in volume to capacity ratio of 0.01 and 0.005 is equivalent to an increase in density of 1% and 0.5%, respectively. As shown, none of the freeway segments analyzed would be significantly impacted by the project.

Table D-54

2010-2030 Freeway Segment Operations – Proposed Airport Implementation Plan (With Parking Structure, 2010-2020)

SB I-5 Freeway		2010						2015						2020					
		AM			PM			AM			PM			AM			PM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS															
North of I-8	I-8	7,000	34.7	D	8,600	42.7	E	7,200	35.8	E	8,400	41.8	E	7,000	34.8	D	9,600	48.0	F
I-8	Old Town Avenue	7,100	35.4	E	7,400	37.1	E	7,300	36.4	E	7,400	36.9	E	6,900	34.6	D	8,900	44.6	E
Old Town Avenue	Washington Street	5,800	29.2	D	6,200	30.8	D	6,000	29.9	D	6,200	31.1	D	5,200	25.8	C	6,400	31.9	D
Washington Street	Pacific Highway Viaducts	6,200	31.2	D	6,500	32.4	D	6,400	32.1	D	6,600	33.1	D	5,700	28.5	D	7,500	37.6	E
Pacific Highway Viaducts	India Street	7,200	35.8	E	8,200	41.1	E	7,400	36.7	E	8,400	42.0	E	6,200	30.9	D	8,400	41.9	E
India Street	Hawthorn Street	7,300	36.3	E	8,400	42.0	E	7,500	37.4	E	8,400	41.8	E	6,500	32.5	D	8,800	44.1	E
Hawthorn Street	First Avenue	6,100	30.5	D	7,500	37.4	E	6,300	31.4	D	7,400	36.9	E	5,400	26.8	D	7,600	37.9	E
First Avenue	SR 163	6,500	32.3	D	9,300	46.5	F	6,600	33.1	D	9,400	46.9	F	5,800	28.8	D	9,500	47.6	F
SR 163	SR 94	3,700	18.4	C	5,300	26.3	D	3,900	19.4	C	5,400	26.7	D	3,400	17.2	B	5,500	27.2	D
NB I-5 Freeway		2010						2015						2020					
		AM			PM			AM			PM			AM			AM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS															
SR 94	SR 163	10,900	54.4	F	7,700	38.4	E	11,400	56.7	F	7,900	39.5	E	10,700	53.6	F	7,000	34.8	D
SR 163	First Avenue	8,400	41.7	E	7,800	39.0	E	8,600	42.8	E	7,900	39.3	E	8,300	41.2	E	7,600	37.9	E
First Avenue	Hawthorn Street	7,000	35.0	E	6,500	32.2	D	7,100	35.4	E	6,500	32.3	D	6,600	33.1	D	5,800	29.0	D
Hawthorn Street	India Street	7,200	36.0	E	7,700	38.5	E	7,300	36.3	E	7,700	38.6	E	7,000	35.1	E	7,300	36.6	E
India Street	Pacific Highway Viaducts	7,200	35.7	E	7,600	37.7	E	7,200	36.1	E	7,600	37.8	E	6,900	34.6	D	6,900	34.4	D
Pacific Highway Viaducts	Washington Street	5,300	26.4	D	6,500	32.2	D	5,100	25.2	C	6,100	30.6	D	4,800	24.0	C	5,600	28.1	D
Washington Street	Old Town Avenue	6,000	29.8	D	7,100	35.5	E	6,100	30.5	D	7,200	35.8	E	6,000	29.9	D	7,100	35.3	E
Old Town Avenue	I-8	5,900	29.2	D	7,300	36.4	E	6,100	30.2	D	7,400	36.8	E	5,800	28.8	D	7,000	34.7	D
I-8	North of I-8	7,400	36.7	E	7,500	37.2	E	7,400	37.1	E	7,700	38.2	E	7,400	37.1	E	7,800	39.2	E
I-8 Freeway		2010						2015						2020					
		AM			PM			AM			PM			AM			AM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS															
I-5	East	5,800	29.1	D	7,900	39.2	E	5,900	29.4	D	7,800	38.9	E	5,000	25.2	C	7,600	38.0	E
East	I-5	7,100	35.6	E	7,200	36.1	E	7,200	35.7	E	7,600	37.8	E	6,700	33.5	D	7,100	35.6	E

Source: HNTB, 2007
 Numbers may not add due to rounding.

vph = vehicles per hour
 pc/mi/ln = passenger cars per mile per lane
 LOS = level of service

Table D-54 (continued)

2010-2030 Freeway Segment Operations – Proposed Airport Implementation Plan (With Parking Structure, 2025-2030)

SB I-5 Freeway		2025						2030					
		AM			PM			AM			PM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS									
North of I-8	I-8	7,100	35.6	E	9,500	47.3	F	7,600	38.1	E	9,200	46.0	F
I-8	Old Town Avenue	7,100	35.5	E	8,900	44.2	E	7,600	37.7	E	8,400	42.1	E
Old Town Avenue	Washington Street	5,300	26.5	D	6,400	32.0	D	5,600	27.7	D	6,400	31.8	D
Washington Street	Pacific Highway Viaducts	6,000	29.8	D	7,600	38.0	E	6,100	30.4	D	7,000	34.8	D
Pacific Highway Viaducts	India Street	6,500	32.2	D	8,500	42.3	E	6,700	33.4	D	8,300	41.4	E
India Street	Hawthorn Street	6,800	33.7	D	8,900	44.5	E	6,900	34.6	D	8,600	42.8	E
Hawthorn Street	First Avenue	5,600	27.9	D	7,800	38.8	E	5,600	28.1	D	7,800	39.0	E
First Avenue	SR 163	6,100	30.2	D	9,700	48.6	F	6,100	30.5	D	9,800	49.1	F
SR 163	SR 94	3,600	17.9	B	5,600	28.1	D	3,700	18.3	C	5,500	27.4	D

NB I-5 Freeway		2030											
		AM			AM			AM			PM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS									
SR 94	SR 163	10,900	54.4	F	7,100	35.5	E	10,700	53.6	F	7,500	37.3	E
SR 163	First Avenue	8,400	41.9	E	7,700	38.5	E	8,100	40.5	E	7,700	38.2	E
First Avenue	Hawthorn Street	6,600	32.7	D	5,900	29.2	D	6,300	31.5	D	6,200	30.7	D
Hawthorn Street	India Street	7,000	34.7	D	7,400	36.9	E	6,400	32.0	D	7,900	39.6	E
India Street	Pacific Highway Viaducts	6,800	34.2	D	7,000	34.8	D	6,400	31.7	D	7,200	35.8	E
Pacific Highway Viaducts	Washington Street	4,700	23.4	C	5,600	28.0	D	4,400	21.8	C	5,900	29.6	D
Washington Street	Old Town Avenue	5,900	29.4	D	7,100	35.4	E	5,600	27.9	D	7,100	35.5	E
Old Town Avenue	I-8	5,700	28.2	D	6,900	34.3	D	5,300	26.6	D	7,200	35.8	E
I-8	North of I-8	7,500	37.2	E	7,900	39.2	E	7,500	37.5	E	8,600	43.0	E

I-8 Freeway		2030											
		AM			AM			AM			PM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS									
I-5	East	5,100	25.3	C	7,600	37.8	E	4,900	24.4	C	7,500	37.2	E
East	I-5	7,000	34.7	D	7,200	36.1	E	7,300	36.3	E	7,100	35.5	E

Source: HNTB, 2007

Numbers may not add due to rounding.

vph = vehicles per hour

pc/mi/ln = passenger cars per mile per lane

LOS = level of service

Table D-55

2010-2030 Freeway Segment Impacts – Proposed Airport Implementation Plan (With Parking Structure) – AM Peak Hour

AM Peak Hour																
SB I-5 Freeway		Year 2010			Year 2015			Year 2020			Year 2025			Year 2030		
From	To	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase
North of I-8	I-8	34.7	34.7	0.0%	35.8	35.8	0.0%	34.8	34.8	0.1%	35.6	35.6	0.2%	38.0	38.1	0.3%
I-8	Old Town Avenue	35.4	35.4	0.1%	36.4	36.4	0.1%	34.5	34.6	0.1%	35.4	35.5	0.2%	37.5	37.7	0.4%
Old Town Avenue	Washington Street	29.1	29.2	0.1%	29.9	29.9	0.1%	25.7	25.8	0.2%	26.5	26.5	0.3%	27.6	27.7	0.5%
Washington Street	Pacific Highway Viaducts	31.2	31.2	0.0%	32.1	32.1	0.0%	28.5	28.5	0.0%	29.8	29.8	0.0%	30.4	30.4	0.0%
Pacific Highway Viaducts	India Street	35.8	35.8	0.1%	36.7	36.7	0.1%	30.9	30.9	0.1%	32.2	32.2	0.1%	33.4	33.4	0.1%
India Street	Hawthorn Street	36.3	36.3	0.1%	37.4	37.4	0.1%	32.5	32.5	0.1%	33.7	33.7	0.1%	34.5	34.6	0.1%
Hawthorn Street	First Avenue	30.5	30.5	0.0%	31.4	31.4	0.0%	26.8	26.8	0.0%	27.8	27.9	0.2%	28.0	28.1	0.5%
First Avenue	SR 163	32.3	32.3	0.0%	33.1	33.1	0.0%	28.8	28.8	0.0%	30.1	30.2	0.2%	30.4	30.5	0.5%
SR 163	SR 94	18.4	18.4	0.0%	19.4	19.4	0.0%	17.2	17.2	0.1%	17.8	17.9	0.4%	18.2	18.3	0.8%
NB I-5 Freeway																
From	To	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase
SR 94	SR 163	54.4	54.4	0.0%	56.7	56.7	0.0%	53.6	53.6	0.1%	54.3	54.4	0.2%	53.4	53.6	0.4%
SR 163	First Avenue	41.7	41.7	0.0%	42.7	42.8	0.0%	41.2	41.2	0.1%	41.8	41.9	0.3%	40.3	40.5	0.6%
First Avenue	Hawthorn Street	35.0	35.0	0.1%	35.4	35.4	0.1%	33.1	33.1	0.1%	32.6	32.7	0.4%	31.3	31.5	0.7%
Hawthorn Street	India Street	35.9	36.0	0.1%	36.3	36.3	0.1%	35.1	35.1	0.2%	34.6	34.7	0.2%	31.9	32.0	0.2%
India Street	Pacific Highway Viaducts	35.7	35.7	0.0%	36.1	36.1	0.0%	34.6	34.6	0.0%	34.2	34.2	0.0%	31.7	31.7	0.0%
Pacific Highway Viaducts	Washington Street	26.4	26.4	0.0%	25.2	25.2	0.0%	24.0	24.0	0.0%	23.4	23.4	0.0%	21.8	21.8	0.0%
Washington Street	Old Town Avenue	29.8	29.8	0.1%	30.5	30.5	0.0%	29.9	29.9	0.1%	29.3	29.4	0.2%	27.8	27.9	0.3%
Old Town Avenue	I-8	29.2	29.2	0.1%	30.2	30.2	0.0%	28.8	28.8	0.1%	28.2	28.2	0.2%	26.5	26.6	0.3%
I-8	North of I-8	36.7	36.7	0.0%	37.1	37.1	0.0%	37.1	37.1	0.0%	37.2	37.2	0.1%	37.4	37.5	0.2%
I-8 Freeway																
From	To	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase
I-5	East	29.1	29.1	0.0%	29.4	29.4	0.0%	25.2	25.2	0.0%	25.3	25.3	0.1%	24.4	24.4	0.3%
East	I-5	35.6	35.6	0.0%	35.7	35.7	0.0%	33.5	33.5	0.0%	34.7	34.7	0.1%	36.2	36.3	0.3%

Source: HNTB, 2007

Notes: vph = vehicles per hour
 pc/mi/ln = passenger cars per mile per lane
 LOS = level of service

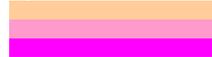
Legend:

 LOS E
 LOS F
 Significant Impact

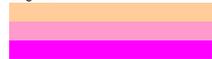
Table D-55 (continued)

2010-2030 Freeway Segment Impacts – Proposed Airport Implementation Plan (With Parking Structure) – PM Peak Hour

PM Peak Hour																
SB I-5 Freeway		Year 2010			Year 2015			Year 2020			Year 2025			Year 2030		
From	To	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase
North of I-8	I-8	42.7	42.7	0.0%	41.8	41.8	0.0%	48.0	48.0	0.0%	47.2	47.3	0.1%	45.9	46.0	0.2%
I-8	Old Town Avenue	37.1	37.1	0.0%	36.9	36.9	0.0%	44.6	44.6	0.1%	44.1	44.2	0.1%	42.0	42.1	0.2%
Old Town Avenue	Washington Street	30.7	30.8	0.0%	31.1	31.1	0.0%	31.9	31.9	0.1%	32.0	32.0	0.2%	31.7	31.8	0.3%
Washington Street	Pacific Highway Viaducts	32.4	32.4	0.0%	33.1	33.1	0.0%	37.6	37.6	0.0%	38.0	38.0	0.0%	34.8	34.8	0.0%
Pacific Highway Viaducts	India Street	41.1	41.1	0.1%	41.9	42.0	0.1%	41.9	41.9	0.2%	42.2	42.3	0.2%	41.3	41.4	0.2%
India Street	Hawthorn Street	41.9	42.0	0.1%	41.7	41.8	0.1%	44.0	44.1	0.1%	44.5	44.5	0.2%	42.7	42.8	0.2%
Hawthorn Street	First Avenue	37.4	37.4	0.1%	36.8	36.9	0.1%	37.9	37.9	0.1%	38.7	38.8	0.3%	38.8	39.0	0.6%
First Avenue	SR 163	46.5	46.5	0.1%	46.8	46.9	0.1%	47.6	47.6	0.1%	48.5	48.6	0.2%	48.9	49.1	0.4%
SR 163	SR 94	26.3	26.3	0.1%	26.7	26.7	0.1%	27.1	27.2	0.2%	28.0	28.1	0.4%	27.2	27.4	0.8%
NB I-5 Freeway																
From	To	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase
SR 94	SR 163	38.4	38.4	0.0%	39.5	39.5	0.0%	34.8	34.8	0.1%	35.4	35.5	0.2%	37.2	37.3	0.4%
SR 163	First Avenue	39.0	39.0	0.0%	39.3	39.3	0.0%	37.9	37.9	0.1%	38.5	38.5	0.2%	38.0	38.2	0.4%
First Avenue	Hawthorn Street	32.2	32.2	0.0%	32.3	32.3	0.0%	29.0	29.0	0.1%	29.1	29.2	0.3%	30.6	30.7	0.5%
Hawthorn Street	India Street	38.5	38.5	0.1%	38.5	38.6	0.1%	36.5	36.6	0.1%	36.8	36.9	0.1%	39.5	39.6	0.2%
India Street	Pacific Highway Viaducts	37.7	37.7	0.0%	37.8	37.8	0.0%	34.4	34.4	0.0%	34.8	34.8	0.0%	35.8	35.8	0.0%
Pacific Highway Viaducts	Washington Street	32.2	32.2	0.0%	30.6	30.6	0.0%	28.1	28.1	0.0%	28.0	28.0	0.0%	29.6	29.6	0.0%
Washington Street	Old Town Avenue	35.5	35.5	0.1%	35.7	35.8	0.1%	35.3	35.3	0.1%	35.3	35.4	0.2%	35.4	35.5	0.4%
Old Town Avenue	I-8	36.4	36.4	0.1%	36.8	36.8	0.1%	34.6	34.7	0.1%	34.2	34.3	0.2%	35.7	35.8	0.4%
I-8	North of I-8	37.2	37.2	0.0%	38.2	38.2	0.0%	39.1	39.2	0.1%	39.1	39.2	0.1%	42.9	43.0	0.3%
I-8 Freeway																
From	To	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase
I-5	East	39.2	39.2	0.0%	38.9	38.9	0.0%	38.0	38.0	0.1%	37.8	37.8	0.1%	37.1	37.2	0.2%
East	I-5	36.1	36.1	0.0%	37.8	37.8	0.0%	35.6	35.6	0.0%	36.1	36.1	0.1%	35.4	35.5	0.2%

Source: HNTB, 2007

Notes: vph = vehicles per hour
 pc/mi/ln = passenger cars per mile per lane
 LOS = level of service

Legend:

 LOS E
 LOS F
 Significant Impact

D.5.1.3.4 Freeway Ramps

Table D-56 summarizes the freeway ramp metering operations for each analysis year under the Implementation Plan (With Parking Structure). As shown, all freeway ramps in the study area were estimated to accommodate a lower traffic volume than their set meter rates and, therefore, would have no significant traffic impact.

Table D-56

2010-2030 Freeway Ramp Operations – Proposed Airport Implementation Plan (With Parking Structure)

Location	Peak Hour	Year 2010					Year 2015				
		Demand (veh/hr)	Maximum Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (minutes)	Queue (feet)	Demand (veh/hr)	Maximum Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (minutes)	Queue (feet)
I-5 NB from San Diego	AM	799	1,992	0	0	0	525	1,992	0	0	0
	PM	871	1,992	0	0	0	505	1,992	0	0	0
I-5 NB from India	AM	766	1,992	0	0	0	1,042	1,992	0	0	0
	PM	830	1,992	0	0	0	1,120	1,992	0	0	0
I-5 SB from Kettner	AM	106	996	0	0	0	124	996	0	0	0
	PM	188	996	0	0	0	138	996	0	0	0
I-5 SB from Washington/Hancock	AM	476	1,140	0	0	0	481	1,140	0	0	0
	PM	276	1,140	0	0	0	289	1,140	0	0	0

Location	Peak Hour	Year 2020					Year 2025				
		Demand (veh/hr)	Maximum Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (minutes)	Queue (feet)	Demand (veh/hr)	Maximum Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (minutes)	Queue (feet)
I-5 NB from San Diego	AM	760	1,992	0	0	0	791	1,992	0	0	0
	PM	889	1,992	0	0	0	670	1,992	0	0	0
I-5 NB from India	AM	868	1,992	0	0	0	705	1,992	0	0	0
	PM	1,090	1,992	0	0	0	1,068	1,992	0	0	0
I-5 SB from Kettner	AM	139	996	0	0	0	139	996	0	0	0
	PM	243	996	0	0	0	257	996	0	0	0
I-5 SB from Grape	AM	876	1,992	0	0	0	987	1,992	0	0	0
	PM	1,708	1,992	0	0	0	1,818	1,992	0	0	0
I-5 SB from Washington/Hancock	AM	524	1,140	0	0	0	570	1,140	0	0	0
	PM	919	1,140	0	0	0	896	1,140	0	0	0

Location	Peak Hour	Year 2030				
		Demand (veh/hr)	Maximum Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (minutes)	Queue (feet)
I-5 NB from San Diego	AM	890	1,992	0	0	0
	PM	707	1,992	0	0	0
I-5 NB from India	AM	1,337	1,992	0	0	0
	PM	1,675	1,992	0	0	0
I-5 SB from Kettner	AM	95	996	0	0	0
	PM	182	996	0	0	0
I-5 SB from Grape	AM	1,045	1,992	0	0	0
	PM	1,926	1,992	0	0	0
I-5 SB from Washington/Hancock	AM	594	1,140	0	0	0
	PM	477	1,140	0	0	0

Source: HNTB, 2007
veh/hr = vehicles per hour

D.5.1.3.5 Railroad Crossings

Forecasts of future train operations were obtained from the San Diego 2030 RTP (Mobility 2030), the 2007 LOSSAN Strategic Business Plan, and the 2000 San Diego International Airport Master Plan Preferred Concept Alternatives Roadway Analysis¹⁵ report. Mobility 2030 projects that the headways for the Coaster Service will decrease from 36 minutes to 20 minutes during peak hours and from 120 minutes to 60 minutes during off-peak hours by 2030. That translates to a 44% increase in frequency during peak hours by 2030. The LOSSAN Strategic Business Plan projects that Coaster service would increase from existing 22 trains per day to 54 trains per day in 2025, consistent with the above. The LOSSAN Strategic Business Plan also projects that Amtrak Pacific Surfliner service between Los Angeles and San Diego would increase from existing 22 trips per day in 2005/2006 to 26 trains in 2015 and 32

¹⁵ Linscott, Law & Greenspan Engineers March 3, 2000 San Diego International Airport Master Plan Preferred Concept Alternatives Roadway Analysis.

trains in 2025. Mobility 2030 also projects that headways for the trolley Blue Line service that passes through the study area would decrease from 15 minutes to 7.5 minutes during off-peak hours by 2030. Estimated daily train operations in 2030 include 36 Amtrak trips, 78 Coaster trips, and 384 Trolley trips. For the analysis, freight train operations were estimated to increase to four trains per day.

Table D-57 summarizes the railroad crossing delay analysis for each analysis year under the Implementation Plan (with Parking Structure). As shown, delays at all railroad crossings were estimated to be under the VHD threshold for each street segment in 2010, 2015 and 2030. Washington Street railroad crossings exceeded the threshold of VHD in 2020 and 2025. However, due to shifts in regional background traffic described in Section D.2.1.1 *Airport Trip Generation and Background Traffic*, total traffic on Washington Street in 2030 decreased causing the VHD to decrease to a level of insignificance.

Table D-57

**2010-2030 Railroad Crossing Operations – Proposed Airport Implementation Plan
(With Parking Structure)**

Crossing	Year 2010				
	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	20,400	4.76	64	No
Sassafras Street	75	14,200	3.44	23	No
Palm Street	75	900	3.44	0	No
Laurel Street	300	25,100	0.77	1	No
Hawthorn Street	150	18,500	0.77	10	No
Grape Street	300	28,900	0.77	18	No

Crossing	Year 2015				
	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	23,300	8.53	135	No
Sassafras Street	150	16,600	6.13	49	No
Palm Street	75	900	6.13	0	No
Laurel Street	300	28,900	0.80	1	No
Hawthorn Street	150	20,700	0.80	12	No
Grape Street	300	31,500	0.80	22	No

Crossing	Year 2020				
	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	24,500	8.94	166	Yes
Sassafras Street	150	16,900	6.46	60	No
Palm Street	75	300	6.46	0	No
Laurel Street	300	30,300	1.13	1	No
Hawthorn Street	150	23,400	1.13	23	No
Grape Street	300	34,400	1.13	44	No

Crossing	Year 2025				
	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	24,900	9.41	180	Yes
Sassafras Street	150	18,400	6.79	71	No
Palm Street	75	100	6.79	0	No
Laurel Street	300	31,800	1.46	0	No
Hawthorn Street	150	24,800	1.46	31	No
Grape Street	300	35,700	1.46	59	No

Crossing	Year 2030				
	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	19,200	9.95	138	No
Sassafras Street	75	14,600	7.18	56	No
Palm Street	75	100	7.18	0	No
Laurel Street	300	34,600	1.85	0	No
Hawthorn Street	300	26,600	1.85	44	No
Grape Street	300	37,500	1.85	82	No

Source: HNTB, 2007

Numbers may not add due to rounding.

VHD = vehicle-hours of delay

ADT = average daily traffic

D.5.1.3.6 Transit

Under the Implementation Plan (With Parking Structure) no existing or planned transit routes would be modified. Therefore, no significant impact would occur to transit operations and no mitigation is required.

D.5.1.3.7 Parking

The Implementation Plan (With Parking Structure) would not remove any parking lots designated for public use. Passenger terminals also are not located close to commercial or residential areas. In addition, the Implementation Plan (With Parking Structure) would provide additional airport public parking

spaces (as previously discussed in **Section D.5.1**) that would address the projected parking shortfall under the No Project Alternative. This is considered as a favorable parking impact of the Implementation Plan (With Parking Structure) compared to the No Project Alternative.

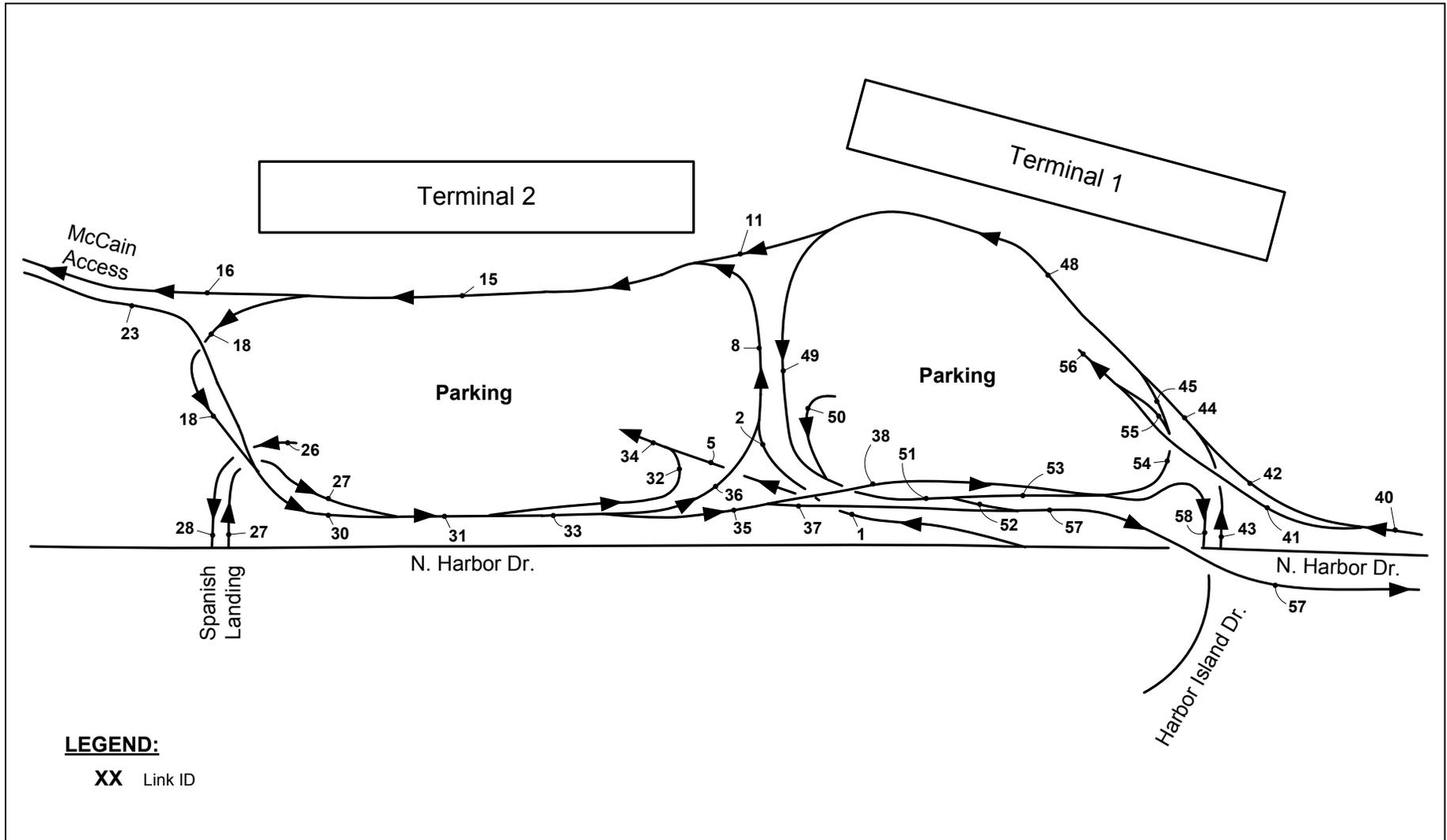
D.5.1.3.8 Terminal Curbside

Currently 6,630 linear feet of curbside is available between all three terminals. In 2015 under the Implementation Plan (with Parking Structure), 7,150 linear feet of curbside is required at all terminals to accommodate private and commercial vehicle demand. Out of that total 3,660 feet of private and commercial vehicle curbside is required at Terminal 2 to accommodate demand associated with passengers at the new and existing aircraft gates. Currently Terminal 2 has 2,820 linear feet of curbside which is 840 feet short of the 2015 requirement. The No Project Alternative would maintain the existing curbside supply, which would result in a curbside deficit of 520 linear feet. Under the Implementation Plan (With Parking Structure) an additional 1,370 linear feet of curbside would be provided at Terminal 2 for a total of 8,000 linear feet, providing an airport-wide surplus of 760 linear feet in 2015. Therefore, the Implementation Plan (With Parking Structure) would result in favorable curbside impact compared to the No Project Alternative.

D.5.1.3.9 On-Airport Traffic Circulation

Table D-58 shows the on-airport roadway operations for each analysis year under the Implementation Plan (With Parking Structure). Please refer to **Figure D.5-2** for link ID key map. As shown, all terminal roadways would operate at LOS D or better during peak hours under the Implementation Plan (With Parking Structure). Therefore, there would be no significant on-airport traffic circulation impact under the Implementation Plan (With Parking Structure) compared to the No Project Alternative, and no mitigation is required.

AIRPORT MASTER PLAN
SAN DIEGO INTERNATIONAL AIRPORT



Appendix D.5-2



On-Airport Roadway Link ID Key Map
Proposed Airport Implementation Plan (with Parking Structure)

Environmental Impact Report

Source: SANDAG and HNTB Corporation
Prepared by: HNTB Corporation, 2007

Table D-58
2010-2030 On-Airport Roadway Peak Hour Operations – Proposed Airport Implementation Plan

Link ID	Lanes	2010				2015				2020			
		AM	LOS	PM	LOS	AM	LOS	PM	LOS	AM	LOS	PM	LOS
1	2	450	A	371	A	563	B	464	A	637	B	526	B
2	2	369	A	313	A	454	A	387	A	509	B	435	A
3		Link Not Used				Link Not Used				Link Not Used			
4		Link Not Used				Link Not Used				Link Not Used			
5	2	82	A	58	A	109	A	77	A	127	A	91	A
6		Link Not Used				Link Not Used				Link Not Used			
7		Link Not Used				Link Not Used				Link Not Used			
8	4	470	A	399	A	577	A	491	A	646	A	551	A
9		Link Not Used				Link Not Used				Link Not Used			
10		Link Not Used				Link Not Used				Link Not Used			
11	1	179	A	201	A	202	A	227	A	220	A	248	B
12		Link Not Used				Link Not Used				Link Not Used			
13		Link Not Used				Link Not Used				Link Not Used			
14		Link Not Used				Link Not Used				Link Not Used			
15	8	649	A	600	A	779	A	718	A	866	A	799	A
16	2	153	A	134	A	181	A	156	A	198	A	172	A
17		Link Not Used				Link Not Used				Link Not Used			
18	2	495	B	466	A	598	B	562	B	667	B	627	B
19		Link Not Used				Link Not Used				Link Not Used			
20		Link Not Used				Link Not Used				Link Not Used			
21		Link Not Used				Link Not Used				Link Not Used			
22		Link Not Used				Link Not Used				Link Not Used			
23	2	67	A	57	A	79	A	66	A	86	A	74	A
24		Link Not Used				Link Not Used				Link Not Used			
25		Link Not Used				Link Not Used				Link Not Used			
26	2	49	A	106	A	66	A	142	A	77	A	166	A
27	1	80	A	66	A	100	A	83	A	113	A	93	A
28	2	49	A	106	A	66	A	142	A	77	A	166	A
29		Link Not Used				Link Not Used				Link Not Used			
30	2	562	B	523	B	677	B	628	B	754	B	701	B
31	3	642	A	589	A	777	B	711	B	867	B	794	B
32	1	14	A	10	A	19	A	14	A	23	A	16	A
33	3	628	A	579	A	758	B	697	A	844	B	778	B
34	4	96	A	68	A	128	A	91	A	150	A	107	A
35	2	526	B	493	B	635	B	593	B	708	B	661	B
36	1	101	A	86	A	123	A	104	A	136	A	117	A
37	1	471	C	442	C	574	C	537	C	642	D	601	D
38	1	55	A	51	A	61	A	57	A	66	A	61	A
39		Link Not Used				Link Not Used				Link Not Used			
40	2	540	B	498	B	601	B	559	B	656	B	612	B
41	1	68	A	49	A	68	A	48	A	68	A	49	A
42	2	472	B	449	A	533	B	511	B	589	B	564	B
43	1	75	A	62	A	84	A	69	A	92	A	77	A
44	3	547	A	511	A	617	A	580	A	680	A	640	A
45	1	32	A	27	A	37	A	31	A	41	A	35	A
46		Link Not Used				Link Not Used				Link Not Used			
47		Link Not Used				Link Not Used				Link Not Used			
48	4	579	A	538	A	654	A	611	A	721	A	675	A
49	2	400	A	337	A	452	A	384	A	501	B	427	A
50	1	42	A	90	A	41	A	89	A	41	A	89	A
51	3	442	A	427	A	493	A	473	A	542	A	516	A
52	2	360	A	351	A	403	A	389	A	444	A	425	A
53	1	82	A	77	A	90	A	84	A	98	A	91	A
54	1	45	A	36	A	50	A	40	A	54	A	44	A
55	1	13	A	9	A	13	A	9	A	13	A	9	A
56	4	81	A	58	A	81	A	57	A	81	A	58	A
57	2	831	B	792	B	977	B	926	B	1,086	C	1,026	B
58	2	92	A	92	A	101	A	101	A	110	A	108	A

Source: HNTB, 2007
LOS = Level of service

NOTE: Please refer to [Figure D.5-2](#) – Proposed Airport Implementation Plan

Table D-58 (continued)
2010-2030 On-Airport Roadway Peak Hour Operations – Proposed Airport Implementation Plan

Link ID	Lanes	2025				2030			
		AM	LOS	PM	LOS	AM	LOS	PM	LOS
1	2	694	B	572	B	722	B	597	B
2	2	554	B	473	B	578	B	495	B
3		Link Not Used				Link Not Used			
4		Link Not Used				Link Not Used			
5	2	140	A	99	A	144	A	103	A
6		Link Not Used				Link Not Used			
7		Link Not Used				Link Not Used			
8	4	701	A	599	A	765	A	654	A
9		0	A	0	A	Link Not Used			
10		0	A	0	A	Link Not Used			
11	1	232	A	262	B	241	B	273	B
12		Link Not Used				Link Not Used			
13		Link Not Used				Link Not Used			
14		Link Not Used				Link Not Used			
15	8	933	A	861	A	1,006	A	927	A
16	2	211	A	184	A	253	A	219	A
17		Link Not Used				Link Not Used			
18	2	722	B	677	B	753	B	708	B
19		Link Not Used				Link Not Used			
20		Link Not Used				Link Not Used			
21		Link Not Used				Link Not Used			
22		Link Not Used				Link Not Used			
23	2	92	A	79	A	97	A	83	A
24		Link Not Used				Link Not Used			
25		Link Not Used				Link Not Used			
26	2	84	A	182	A	91	A	197	A
27	1	123	A	102	A	169	A	140	A
28	2	84	A	182	A	91	A	197	A
29		Link Not Used				Link Not Used			
30	2	814	C	756	B	850	C	790	B
31	3	937	B	857	B	1,019	B	930	B
32	1	25	A	18	A	34	A	24	A
33	3	912	B	839	B	985	B	906	B
34	4	165	A	117	A	178	A	127	A
35	2	765	B	714	B	798	C	746	B
36	1	147	A	126	A	186	A	159	A
37	1	696	D	650	D	727	D	680	D
38	1	69	A	63	A	72	A	66	A
39		Link Not Used				Link Not Used			
40	2	689	B	644	B	679	B	639	B
41	1	68	A	49	A	65	A	46	A
42	2	621	B	595	B	614	B	593	B
43	1	96	A	80	A	120	A	101	A
44	3	717	B	675	A	734	B	694	A
45	1	43	A	37	A	45	A	39	A
46		Link Not Used				Link Not Used			
47		Link Not Used				Link Not Used			
48	4	760	A	712	A	779	A	733	A
49	2	528	B	450	A	538	B	460	A
50	1	42	A	90	A	42	A	90	A
51	3	570	A	540	A	580	A	550	A
52	2	467	A	446	A	452	A	431	A
53	1	103	A	95	A	129	A	119	A
54	1	56	A	46	A	61	A	51	A
55	1	13	A	9	A	16	A	12	A
56	4	81	A	58	A	81	A	58	A
57	2	1,164	C	1,096	C	1,178	C	1,111	C
58	2	116	A	112	A	138	A	134	A

Source: HNTB, 2007

LOS = Level of service

NOTE: Please refer to [Figure D.5-2](#) – Proposed Airport Implementation Plan

D.5.2 Proposed Airport Implementation Plan (Without Parking Structure)

For this variation of the Preferred Alternative all elements of the Proposed Airport Implementation Plan are the same as described in Section D.5.1, *Proposed Airport Implementation Plan (with Parking Structure)* except that no parking structure will be constructed. The existing Terminal Two parking lot will be maintained.

D.5.2.1 Assumptions

Except for the parking structure, this scenario shares most of the assumptions used for the Proposed Implementation Plan (With Parking Structure), including construction of a second level roadway/curbside at Terminal 2 independent of the parking structure to serve curbside demand. Assumptions that differ from previous discussion include:

- Excess parking demand will be served by remote parking facilities, both Airport operated SAN Park facilities and privately owned facilities, and alternate modes of transportation.

D.5.2.2 Trip Generation and Terminal Distribution

Total trip generation associated with the Implementation Plan (Without Parking Structure) is summarized in [Table D-59](#). As shown, total airport trip generation would increase from approximately 94,600 ADT in 2010 to 134,600 ADT in 2030. This corresponds to an increase in air passenger forecast of 19.5 million annual passengers (MAP) in 2010 to 28.2 MAP in 2030. This represents an increase in trip generation of approximately 5,900 ADT or 4.4% from the No Project Alternative in 2030. Trips from most airport modes increase in relation to passenger growth, however, schedule driven modes such as public buses, and airport operated inter-terminal, employee parking and public parking shuttles grow at a slower rate as many of these shuttles currently operate with excess capacity to maintain a set schedule. This results in a slight decrease in the trip generation rate from ~~1.86~~ 1.85 to 1.81 in 2010 and 2030, respectively. The total trip generation rate for the Implementation Plan (without Parking Structure) also decreases slightly from the Implementation Plan (With Parking Structure) in 2030, 1.81 versus 1.82 respectively. This is the result of severely constrained parking conditions in 2030, however, much of the benefit gained from passengers switching to higher occupancy vehicles is offset by increased curbside trips in private vehicles and taxicabs which produce more trips per passenger than terminal parking.

Terminal passenger distribution is assumed to be the same under the Implementation Plan with and without parking structure and is discussed in Section D.5.1.2, *Proposed Airport Implementation Plan*. Therefore, the terminal passenger distribution for the Implementation Plan (Without Parking Structure) would be the same as for the Proposed Airport Implementation Plan (With Parking Structure), as shown previously in [Table D-39](#).

Table D-59

**2010-2030 Airport Trip Generation – Proposed Airport Implementation Plan
(Without Parking Structure)**

Activity	Year					
	2005	2010	2015	2020	2025	2030
Airport Passenger Activity Level						
Million Annual Passengers (MAP)	17.4	19.5	22.8	25.1	26.6	28.2
Million Annual O&D Passengers	16.7	18.6	21.8	24.0	25.4	27.0
Daily O&D Passengers	45,830	51,076	59,770	66,220	70,553	74,199
Airport Trip Generation (1)						
Daily	85,100	94,600	109,500	120,650	128,200	134,600
In	42,600	47,350	54,800	60,400	64,150	67,350
Out	42,500	47,250	54,700	60,300	64,050	67,250
AM Peak Hour	3,180	3,530	4,095	4,500	4,800	5,065
In	1,760	1,955	2,265	2,500	2,650	2,785
Out	1,420	1,575	1,830	2,050	2,150	2,280
PM Peak Hour	3,245	3,620	4,190	4,650	4,950	5,185
In	1,500	1,675	1,940	2,150	2,300	2,410
Out	1,745	1,945	2,250	2,500	2,650	2,775
Trip Rate						
Daily	1.86	1.85	1.83	1.82	1.82	1.81

O&D = origin and destination

Notes:

(1) Includes terminals and associated facilities, SAN Park lots, rental car facilities on Rental Car Road, Employee Lot 6 on Harbor Island Drive, and north area. Does not include private vehicle trips to private off-airport parking and rental car facilities, but includes shuttle trips between these facilities and the terminals.

Source: HNTB, 2007.

D.5.2.3 Traffic Impacts

Traffic impacts of the Implementation Plan (Without Parking Structure) would be primarily the same as under the Implementation Plan (With Parking Structure) except for the on-airport (terminal) roadways, street segments and intersections along North Harbor Drive directly serving Terminals 1 and 2. Specific impact categories are discussed in this section.

D.5.2.3.1 Street Segments

Table D-60 summarizes the street segment operations for each analysis year under the Implementation Plan (Without Parking Structure).

Table D-61 compares the street segment volume to capacity (v/c) ratios under the Implementation Plan (Without Parking Structure) against the No Project Alternative to identify traffic impacts based on significance criteria identified in Section D.2, *Traffic Impacts and Significance Criteria* measured by an increase to LOS E or F or an increase in volume to capacity ratio of greater than 0.02 for streets operating at LOS E and 0.01 for streets operating at LOS F under the No Project Alternative. The following roadway segments would have potentially significant traffic impacts:

Street Segments with Significant Traffic Impacts

Year 2010

- Sassafra Street between Kettner Boulevard and India Street, which operates at LOS F under both the Implementation Plan (without Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan (without Parking Structure) compared to the No Project Alternative

See Section D.5.1.3.1 for a description of Sassafras Street.

Year 2015

- All locations identified in Year 2010
- Sassafras Street between Pacific Highway and Kettner Boulevard, which operates at LOS F under both the Implementation Plan (without Parking Structure) and No Project Alternative and experiences an increase in volume to capacity (v/c) ratio of over 0.01 under the Implementation Plan (without Parking Structure) compared to the No Project Alternative.
- Kettner Boulevard between Sassafras Street and Palm Street, which increased from LOS D under the No Project Alternative to LOS E under the Implementation Plan (without Parking Structure).

Year 2020

- All locations identified in Year 2015, except Kettner Boulevard between Sassafras Street and Palm Street (LOS F under both No Project and Implementation Plan (without Parking Structure) but the increase in volume to capacity ratio is less than 0.02.

Year 2025

- All locations identified in Year 2020
- North Harbor Drive between Terminal 1 Access and Laurel Street, which operates at LOS E and F under both the Implementation Plan (without Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.02 under the Implementation Plan compared to the No Project Alternative.
- Kettner Boulevard between Washington Street and Palm Street, which operates at LOS F under both the Implementation Plan (without Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan compared to the No Project Alternative.

Year 2030

- All locations identified in Year 2025
- North Harbor Drive between Laurel Street and Hawthorn Street, which operates at LOS F under both the Implementation Plan (without Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan compared to the No Project Alternative.
- Grape Street between North Harbor Drive and I-5, which operates at LOS F under both the Implementation Plan (without Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan (without Parking Structure) compared to the No Project Alternative.
- Hawthorn Street between North Harbor Drive and I-5, which operates at LOS F under both the Implementation Plan (without Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan (without Parking Structure) compared to the No Project Alternative.
- Laurel Street between Pacific Highway and Kettner Boulevard, which operates at LOS F under both the Implementation Plan and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan (without Parking Structure) compared to the No Project Alternative.
- India Street between Laurel Street and Sassafras Street, which operates at LOS F under both the Implementation Plan (without Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan (without Parking Structure) compared to the No Project Alternative.

Table D-60

2010-2030 Street Segment Operations – Proposed Airport Implementation Plan (Without Parking Structure, 2010-2020)

Roadway	Segment	Classification	Lanes	LOS E ADT Capacity 1000s	Year 2010					Year 2015					Year 2020				
					SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS	SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS	SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS
North Harbor Drive	West of NTC	6-Lane Prime	6D	60.0	11.1	17.7	28.8	0.48	B	12.8	20.4	33.2	0.55	B	14.1	25.2	39.3	0.65	C
	NTC - Spanish Landing	6-Lane Prime	6D	60.0	12.3	15.1	27.4	0.46	B	13.5	16.3	29.8	0.50	B	14.5	20.7	35.2	0.59	C
	Spanish Landing - T2 Access	6-Lane Prime	6D	60.0	11.4	14.9	26.3	0.44	B	12.2	16.2	28.4	0.47	B	12.9	18.3	31.2	0.52	B
	T2 Access - Harbor Island	6-Lane Prime	4+3	65.0	23.7	15.0	38.7	0.60	C	27.0	16.3	43.3	0.67	C	29.4	18.2	47.6	0.73	C
	Harbor Island - T1 Access	6-Lane Prime	3+4	65.0	22.4	18.3	40.7	0.63	C	25.3	18.4	43.7	0.67	C	27.3	19.1	46.4	0.71	C
	T1 Access - Winship	6-Lane Prime	5+3	70.0	36.5	18.3	54.8	0.78	C	41.0	18.3	59.3	0.85	C	44.5	19.1	63.6	0.91	D
	Winship - Flyover Merge (1)	6-Lane Prime	4+4	70.0	38.1	18.4	56.5	0.81	C	43.3	18.4	61.7	0.88	D	47.3	19.1	66.4	0.95	E
	Rental Car Rd - Laurel	6-Lane Prime	6D	60.0	63.2	20.8	84.0	1.40	F	72.8	20.7	93.5	1.56	F	80.1	22.1	102.2	1.70	F
	Laurel - Hawthorn	6-Lane Prime	6D	60.0	40.9	15.2	56.1	0.93	E	47.0	15.4	62.4	1.04	F	51.6	16.7	68.2	1.14	F
	Hawthorn - Grape	6-Lane Prime	6D	60.0	25.6	14.0	39.6	0.66	C	29.4	13.4	42.8	0.71	C	32.3	14.0	46.3	0.77	C
Grape Street	Harbor - Pacific	3-Lane Major 1-Way	3U	25.0	13.7	6.7	20.4	0.81	D	15.7	7.1	22.8	0.91	E	17.3	8.5	25.8	1.03	F
	Pacific - Kettner	3-Lane Major 1-Way	3U	25.0	12.5	16.4	28.9	1.16	F	14.4	17.1	31.5	1.26	F	15.8	18.5	34.3	1.37	F
	Kettner - I-5	3-Lane Major 1-Way	3U	25.0	12.3	23.3	35.6	1.42	F	14.2	23.7	37.9	1.52	F	15.7	21.1	36.8	1.47	F
Hawthorn Street	Harbor - Pacific	3-Lane Major 1-Way	3U	25.0	15.5	5.1	20.6	0.82	D	17.8	5.4	23.2	0.93	E	19.6	6.7	26.3	1.05	F
	Pacific - Kettner	3-Lane Major 1-Way	3U	25.0	12.5	6.0	18.5	0.74	C	14.5	6.2	20.7	0.83	D	15.9	7.4	23.4	0.93	E
	Kettner - I-5	3-Lane Major 1-Way	3U	25.0	12.5	17.2	29.7	1.19	F	14.5	19.2	33.7	1.35	F	15.9	20.4	36.4	1.46	F
Kettner Blvd	north of Washington	3-Lane Collector 1-Way	3U	25.0	0.2	7.2	7.4	0.29	A	0.2	7.2	7.4	0.30	A	0.3	9.6	9.9	0.39	A
	Washington - Sassafras	3-Lane Major 1-Way	3U	25.0	9.0	13.0	22.0	0.88	D	10.5	13.1	23.6	0.94	E	11.6	16.0	27.6	1.10	F
	Sassafras - Palm	3-Lane Major 1-Way	3U	25.0	9.1	11.0	20.1	0.81	D	10.6	11.9	22.5	0.90	E	11.7	18.7	30.4	1.22	F
	Palm - Laurel	3-Lane Major 1-Way	3U	25.0	7.6	8.6	16.2	0.65	C	8.8	9.5	18.3	0.73	C	9.7	16.0	25.7	1.03	F
	Laurel - Hawthorn	3-Lane Major 1-Way	3U	25.0	0.0	7.2	7.2	0.29	A	0.1	7.9	8.0	0.32	A	0.2	13.3	13.5	0.54	B
Laurel Street	Hawthorn - Grape	3-Lane Major 1-Way	3U	25.0	0.0	14.8	14.8	0.59	C	0.1	16.8	16.9	0.68	C	0.2	21.5	21.7	0.87	D
	Harbor - Pacific	4-Lane Major	4U	40.0	22.3	6.3	28.6	0.71	C	25.8	6.7	32.5	0.81	D	28.5	6.0	34.5	0.86	D
	Pacific - Kettner	4-Lane Collector	4D	30.0	18.0	7.2	25.2	0.84	E	21.1	7.8	28.9	0.96	E	23.5	6.9	30.3	1.01	F
	Kettner - I-5	4-Lane Collector	4D	30.0	10.4	8.5	18.9	0.63	C	12.6	9.6	22.2	0.74	D	14.2	8.0	22.2	0.74	D
	Washington - Sassafras	6-Lane Prime	6D	50.0	4.1	22.8	26.9	0.54	B	4.8	27.3	32.1	0.64	C	5.4	24.3	29.8	0.60	C
Pacific Highway	Sassafras - Palm	6-Lane Prime	6D	50.0	6.9	17.5	24.4	0.49	B	8.0	21.0	29.0	0.58	C	8.9	20.9	29.8	0.60	C
	Palm - Laurel	6-Lane Prime	6D	50.0	6.9	18.1	25.0	0.50	B	8.0	21.7	29.7	0.59	C	8.9	21.0	29.9	0.60	C
	Laurel - Hawthorn	6-Lane Major	6D	50.0	2.1	19.1	21.2	0.42	B	2.8	22.6	25.4	0.51	B	3.2	25.5	28.7	0.57	C
	Hawthorn - Grape	6-Lane Major	6D	50.0	4.9	19.6	24.5	0.49	B	5.8	23.2	29.0	0.58	C	6.5	26.0	32.5	0.65	C
	Pacific - Kettner	2-Lane Collector	2U	8.0	0.0	0.9	0.9	0.11	A	0.0	0.9	0.9	0.11	A	0.0	0.3	0.3	0.04	A
Sassafras Street	Pacific - Kettner	3-Lane Collector	3U	12.0	3.3	8.3	11.6	0.97	E	4.3	9.7	14.0	1.17	F	5.0	9.3	14.3	1.19	F
	Kettner-India	2-Lane Collector	2U	8.0	1.7	8.5	10.1	1.27	F	2.2	9.7	11.9	1.48	F	2.5	9.4	11.9	1.48	F
	Pacific - Kettner	4-Lane Collector	4U	30.0	3.9	16.5	20.4	0.68	D	4.7	18.6	23.3	0.78	D	5.4	19.1	24.5	0.82	D
Washington Street	Kettner - San Diego	5-Lane Collector	5D	30.0	3.6	23.3	26.9	0.90	E	4.3	25.5	29.8	0.99	E	4.8	28.6	33.4	1.11	F
	Laurel - Palm	2-Lane Collector	2U	8.0	7.4	8.7	16.1	2.02	F	8.6	10.2	18.9	2.36	F	9.6	7.9	17.5	2.19	F
	Palm - Sassafras	3-Lane Collector	3U	12.0	7.4	13.2	20.7	1.72	F	8.6	15.4	24.0	2.00	F	9.6	12.6	22.2	1.85	F
Rosecrans	Sassafras - Washington	3-Lane Collector	3U	12.0	5.1	13.5	18.6	1.55	F	6.5	14.6	21.1	1.76	F	7.6	15.2	22.7	1.89	F
	Barnett - Sport Arena	6-lane Major	6D	50.0	5.2	40.1	45.3	0.91	E	5.9	42.4	48.3	0.97	E	6.5	34.3	40.8	0.82	D
	Nimitz Quimby - Barnett	4-lane Major 5-lane Major	4U 5U	40.0-45.0	5.2	35.9	41.1	1.03-0.91	F-E	5.9	35.4	41.3	1.03-0.92	F-E	6.5	31.1	37.6	0.94-0.84	E-D
Nimitz	Nimitz - Quimby	4-lane Major	4U	40.0	5.2	35.9	41.1	1.03	F	5.9	35.4	41.3	1.03	F	6.5	31.1	37.6	0.94	E
	Harbor - Rosecrans	4-lane Major	4U	40.0	9.5	8.7	18.2	0.45	B	10.9	8.5	19.4	0.49	B	12.0	11.2	23.1	0.58	C

Source: HNTB, 2007.

Notes:
(1) Does not include traffic on flyover.MAP = Million Annual Passengers
ADT = Average Daily Traffic
LOS = Level of Service
V/C = volume-to-capacity ratio

Table D-60 (continued)

2010-2030 Street Segment Operations – Proposed Airport Implementation Plan (Without Parking Structure, 2025-2030)

Roadway	Segment	Classification	Lanes	LOS E ADT Capacity 1000s	Year 2025					Year 2030				
					SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS	SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS
North Harbor Drive	West of NTC	6-Lane Prime	6D	60.0	14.9	26.7	41.6	0.69	C	19.5	28.5	48.0	0.80	C
	NTC - Spanish Landing	6-Lane Prime	6D	60.0	15.2	21.8	36.9	0.62	C	18.4	23.3	41.7	0.70	C
	Spanish Landing - T2 Access	6-Lane Prime	6D	60.0	13.3	18.4	31.7	0.53	B	15.2	20.7	35.9	0.60	C
	T2 Access - Harbor Island	6-Lane Prime	4+3	65.0	31.2	18.1	49.3	0.76	C	33.8	19.8	53.6	0.82	C
	Harbor Island - T1 Access	6-Lane Prime	3+4	65.0	28.8	20.4	49.3	0.76	C	29.8	21.1	50.9	0.78	C
	T1 Access - Winship	6-Lane Prime	5+3	70.0	46.9	20.5	67.3	0.96	E	47.6	21.1	68.7	0.98	E
	Winship - Flyover Merge (1)	6-Lane Prime	4+4	70.0	49.7	20.4	70.1	1.00	F	49.9	20.9	70.8	1.01	F
	Rental Car Rd - Laurel	6-Lane Prime	6D	60.0	84.9	20.9	105.7	1.76	F	85.0	21.7	106.7	1.78	F
Grape Street	Laurel - Hawthorn	6-Lane Prime	6D	60.0	54.6	17.5	72.1	1.20	F	57.1	18.2	75.3	1.26	F
	Hawthorn - Grape	6-Lane Prime	6D	60.0	34.3	14.8	49.0	0.82	C	35.9	14.8	50.7	0.85	D
Hawthorn Street	Harbor - Pacific	3-Lane Major 1-Way	3U	25.0	18.3	9.0	27.3	1.09	F	19.2	9.7	28.9	1.15	F
	Pacific - Kettner	3-Lane Major 1-Way	3U	25.0	16.7	18.8	35.5	1.42	F	17.5	19.8	37.2	1.49	F
	Kettner - I-5	3-Lane Major 1-Way	3U	25.0	16.6	21.8	38.4	1.54	F	17.4	24.7	42.1	1.68	F
Kettner Blvd	Harbor - Pacific	3-Lane Major 1-Way	3U	25.0	20.8	7.0	27.8	1.11	F	21.8	7.9	29.7	1.19	F
	Pacific - Kettner	3-Lane Major 1-Way	3U	25.0	16.9	7.8	24.7	0.99	E	17.7	8.7	26.5	1.06	F
	Kettner - I-5	3-Lane Major 1-Way	3U	25.0	16.9	21.8	38.7	1.55	F	17.7	24.5	42.2	1.69	F
Laurel Street	north of Washington	3-Lane Collector 1-Way	3U	25.0	0.3	10.7	11.1	0.44	B	0.4	4.2	4.6	0.18	A
	Washington - Sassafras	3-Lane Major 1-Way	3U	25.0	12.3	14.1	26.4	1.06	F	11.0	17.4	28.4	1.14	F
	Sassafras - Palm	3-Lane Major 1-Way	3U	25.0	12.4	17.2	29.6	1.18	F	11.2	14.2	25.4	1.02	F
	Palm - Laurel	3-Lane Major 1-Way	3U	25.0	10.4	13.7	24.0	0.96	E	9.0	12.6	21.5	0.86	D
	Laurel - Hawthorn	3-Lane Major 1-Way	3U	25.0	0.2	11.0	11.3	0.45	B	0.3	11.4	11.7	0.47	B
	Hawthorn - Grape	3-Lane Major 1-Way	3U	25.0	0.2	19.9	20.2	0.81	D	0.3	21.5	21.8	0.87	D
Pacific Highway	Harbor - Pacific	4-Lane Major	4U	40.0	30.3	4.0	34.3	0.86	D	27.9	4.3	32.3	0.81	D
	Pacific - Kettner	4-Lane Collector	4D	30.0	25.1	6.8	31.8	1.06	F	22.7	12.1	34.8	1.16	F
	Kettner - I-5	4-Lane Collector	4D	30.0	15.4	8.1	23.5	0.78	D	14.5	12.9	27.4	0.91	E
	Washington - Sassafras	6-Lane Prime	6D	50.0	5.8	27.4	33.2	0.66	C	6.0	19.1	25.1	0.50	B
Palm Street	Sassafras - Palm	6-Lane Prime	6D	50.0	9.4	22.2	31.6	0.63	C	9.8	16.3	26.1	0.52	B
	Palm - Laurel	6-Lane Prime	6D	50.0	9.4	22.0	31.4	0.63	C	9.8	15.4	25.3	0.51	B
	Laurel - Hawthorn	6-Lane Major	6D	50.0	3.6	27.7	31.3	0.63	C	3.9	23.3	27.2	0.54	B
	Hawthorn - Grape	6-Lane Major	6D	50.0	7.0	28.1	35.1	0.70	C	7.4	24.1	31.4	0.63	C
Sassafras Street	Pacific - Kettner	2-Lane Collector	2U	8.0	0.0	0.1	0.1	0.01	A	0.0	0.1	0.1	0.01	A
Washington Street	Pacific - Kettner	3-Lane Collector	3U	12.0	5.4	10.4	15.8	1.32	F	5.8	6.1	11.9	0.99	E
	Kettner-India	2-Lane Collector	2U	8.0	2.7	9.8	12.5	1.56	F	2.9	8.0	10.9	1.36	F
	Pacific - Kettner	4-Lane Collector	4U	30.0	5.9	18.9	24.9	0.83	D	6.4	12.7	19.1	0.64	C
India Street	Kettner - San Diego	5-Lane Collector	5D	30.0	5.2	28.1	33.3	1.11	F	5.6	22.5	28.1	0.94	E
	Laurel - Palm	2-Lane Collector	2U	8.0	10.2	7.9	18.1	2.26	F	8.8	12.6	21.4	2.68	F
Rosecrans	Palm - Sassafras	3-Lane Collector	3U	12.0	10.2	12.5	22.6	1.89	F	8.8	16.5	25.3	2.11	F
	Sassafras - Washington	3-Lane Collector	3U	12.0	8.3	14.7	22.9	1.91	F	7.6	21.5	29.1	2.42	F
	Barnett - Sport Arena	6-lane Major	6D	50.0	6.9	34.6	41.5	0.83	D	10.7	33.7	44.4	0.89	D
Nimitz	Nimitz Quimby - Barnett	4-lane Major 5-lane Major	4U 5U	40.0 45.0	6.9	31.3	38.2	0.95 0.85	E D	10.7	29.0	39.7	0.99 0.88	E D
	Nimitz - Quimby	4-lane Major	4U	40.0	6.9	31.3	38.2	0.95	E	10.7	29.0	39.7	0.99	E
Harbor - Rosecrans	4-lane Major	4U	40.0	12.7	11.8	24.5	0.61	C	17.2	11.7	28.9	0.72	C	

Source: HNTB, 2007.

Notes:

(1) Does not include traffic on flyover.

MAP = Million Annual Passengers

ADT = Average Daily Traffic

LOS = Level of Service

V/C = volume-to-capacity ratio

Table D-61

2010-2030 Street Segment Impacts – Proposed Airport Implementation Plan (Without Parking Structure, 2010-2020)

Roadway	Segment	Year 2010					Year 2015					Year 2020				
		No Proj V/C	No Proj LOS	Proj V/C	Proj LOS	Diff V/C	No Proj V/C	No Proj LOS	Proj V/C	Proj LOS	Diff V/C	No Proj V/C	No Proj LOS	Proj V/C	Proj LOS	Diff V/C
North Harbor Drive	West of NTC	0.48	B	0.48	B	0.00	0.56	B	0.55	B	0.00	0.66	C	0.65	C	0.00
	NTC - Spanish Landing	0.51	B	0.46	B	-0.06	0.57	B	0.50	B	-0.07	0.67	C	0.59	C	-0.08
	Spanish Landing - T2 Access	0.43	B	0.44	B	0.01	0.47	B	0.47	B	0.01	0.52	B	0.52	B	0.00
	T2 Access - Harbor Island	0.56	B	0.60	C	0.03	0.63	C	0.67	C	0.04	0.68	C	0.73	C	0.05
	Harbor Island - T1 Access	0.58	C	0.63	C	0.04	0.62	C	0.67	C	0.05	0.64	C	0.71	C	0.07
	T1 Access - Winship	0.76	C	0.78	C	0.02	0.83	C	0.85	C	0.02	0.89	D	0.91	D	0.02
	Winship - Rental Car Rd	0.79	C	0.81	C	0.02	0.87	D	0.88	D	0.01	0.94	E	0.95	E	0.01
	Rental Car Rd - Laurel	1.41	F	1.40	F	-0.01	1.57	F	1.56	F	-0.01	1.71	F	1.70	F	-0.01
	Laurel - Hawthorn	0.94	E	0.93	E	0.00	1.05	F	1.04	F	-0.01	1.14	F	1.14	F	-0.01
	Hawthorn - Grape	0.66	C	0.66	C	0.00	0.72	C	0.71	C	-0.01	0.78	C	0.77	C	0.00
Grape Street	Harbor - Pacific	0.82	D	0.81	D	0.00	0.92	E	0.91	E	-0.01	1.04	F	1.03	F	-0.01
	Pacific - Kettner	1.16	F	1.16	F	0.00	1.26	F	1.26	F	0.00	1.37	F	1.37	F	0.00
	Kettner - I-5	1.43	F	1.42	F	0.00	1.52	F	1.52	F	-0.01	1.48	F	1.47	F	-0.01
Hawthorn Street	Harbor - Pacific	0.83	D	0.82	D	0.00	0.94	E	0.93	E	-0.01	1.06	F	1.05	F	-0.01
	Pacific - Kettner	0.75	C	0.74	C	0.00	0.83	D	0.83	D	-0.01	0.94	E	0.93	E	-0.01
Kettner Blvd	Kettner - I-5	1.19	F	1.19	F	0.00	1.35	F	1.35	F	-0.01	1.46	F	1.46	F	-0.01
	north of Washington	0.29	A	0.29	A	0.00	0.30	A	0.30	A	0.00	0.39	A	0.39	A	0.00
	Washington - Sassafras	0.88	D	0.88	D	0.00	0.94	E	0.94	E	0.00	1.10	F	1.10	F	0.00
	Sassafras - Palm	0.80	D	0.81	D	0.00	0.897	D	0.901	E	0.004	1.21	F	1.22	F	0.00
	Palm - Laurel	0.65	C	0.65	C	0.00	0.74	C	0.73	C	0.00	1.03	F	1.03	F	0.00
Laurel Street	Laurel - Hawthorn	0.29	A	0.29	A	0.00	0.32	A	0.32	A	0.00	0.54	B	0.54	B	0.00
	Hawthorn - Grape	0.59	C	0.59	C	0.00	0.68	C	0.68	C	0.00	0.87	D	0.87	D	0.00
	Harbor - Pacific	0.72	C	0.71	C	0.00	0.82	D	0.81	D	-0.01	0.87	D	0.86	D	-0.01
	Pacific - Kettner	0.85	E	0.84	E	-0.01	0.97	E	0.96	E	-0.01	1.02	F	1.01	F	-0.01
Pacific Highway	Kettner - I-5	0.64	C	0.63	C	-0.01	0.75	D	0.74	D	-0.01	0.75	D	0.74	D	-0.01
	Washington - Sassafras	0.54	B	0.54	B	0.00	0.64	C	0.64	C	0.00	0.59	C	0.60	C	0.00
	Sassafras - Palm	0.48	B	0.49	B	0.00	0.57	C	0.58	C	0.01	0.59	C	0.60	C	0.01
	Palm - Laurel	0.49	B	0.50	B	0.00	0.59	C	0.59	C	0.01	0.59	C	0.60	C	0.01
	Laurel - Hawthorn	0.42	B	0.42	B	0.00	0.50	B	0.51	B	0.00	0.57	C	0.57	C	0.00
	Hawthorn - Grape	0.49	B	0.49	B	0.00	0.58	C	0.58	C	0.00	0.65	C	0.65	C	0.00
	Palm Street	Pacific - Kettner	0.11	A	0.11	A	0.00	0.11	A	0.11	A	0.00	0.04	A	0.04	A
Sassafras Street	Pacific - Kettner	0.95	E	0.97	E	0.018	1.14	F	1.17	F	0.02	1.17	F	1.19	F	0.02
	Kettner-India	1.25	F	1.27	F	0.013	1.46	F	1.48	F	0.02	1.46	F	1.48	F	0.02
	Pacific - Kettner	0.68	D	0.68	D	0.00	0.78	D	0.78	D	0.00	0.82	D	0.82	D	0.00
Washington Street	Kettner - San Diego	0.90	E	0.90	E	0.00	0.99	E	0.99	E	0.00	1.11	F	1.11	F	0.00
	Laurel - Palm	2.03	F	2.02	F	-0.01	2.38	F	2.36	F	-0.02	2.20	F	2.19	F	-0.01
India Street	Palm - Sassafras	1.73	F	1.72	F	-0.01	2.01	F	2.00	F	-0.01	1.86	F	1.85	F	-0.01
	Sassafras - Washington	1.57	F	1.55	F	-0.02	1.79	F	1.76	F	-0.03	1.93	F	1.89	F	-0.04
	Barnett - Sport Arena	0.91	E	0.91	E	0.00	0.97	E	0.97	E	0.00	0.82	D	0.82	D	0.00
Rosecrans	Nimitz Quimby - Barnett	4.03 0.91	F E	4.03 0.91	F E	0.00	4.03 0.92	F E	4.03 0.92	F E	0.00	0.94 0.84	E D	0.94 0.84	E D	0.00
Nimitz	Nimitz - Quimby	1.03	F	1.03	F	0.00	1.03	F	1.03	F	0.00	0.94	E	0.94	E	0.00
	Harbor - Rosecrans	0.46	B	0.45	B	0.00	0.49	B	0.49	B	0.00	0.58	C	0.58	C	0.00

Source: HNTB, 2007.

V/C = Volume to capacity ratio
 LOS = Level of service

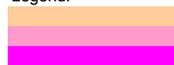
Legend:

 LOS E
 LOS F
 Significant Impact

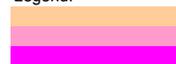
Table D-61 (continued)

2010-2030 Street Segment Impacts – Proposed Airport Implementation Plan (Without Parking Structure, 2025-2030)

Roadway	Segment	Year 2025					Year 2030				
		No Proj V/C	No Proj LOS	Proj V/C	Proj LOS	Diff V/C	No Proj V/C	No Proj LOS	Proj V/C	Proj LOS	Diff V/C
North Harbor Drive	West of NTC	0.69	C	0.69	C	0.00	0.79	C	0.80	C	0.01
	NTC - Spanish Landing	0.70	C	0.62	C	-0.08	0.79	C	0.70	C	-0.09
	Spanish Landing - T2 Access	0.53	B	0.53	B	0.00	0.60	C	0.60	C	0.00
	T2 Access - Harbor Island	0.70	C	0.76	C	0.06	0.76	C	0.82	C	0.06
	Harbor Island - T1 Access	0.68	C	0.76	C	0.08	0.69	C	0.78	C	0.09
	T1 Access - Winship	0.93	E	0.96	E	0.03	0.94	E	0.98	E	0.04
	Winship - Rental Car Rd	0.98	E	1.00	F	0.03	0.97	E	1.01	F	0.04
	Rental Car Rd - Laurel	1.75	F	1.76	F	0.012	1.73	F	1.78	F	0.05
	Laurel - Hawthorn	1.19	F	1.20	F	0.008	1.22	F	1.26	F	0.03
	Hawthorn - Grape	0.81	C	0.82	C	0.00	0.82	C	0.85	D	0.02
Grape Street	Harbor - Pacific	1.09	F	1.09	F	0.00	1.13	F	1.15	F	0.019
	Pacific - Kettner	1.41	F	1.42	F	0.008	1.46	F	1.49	F	0.03
	Kettner - I-5	1.53	F	1.54	F	0.00	1.66	F	1.68	F	0.02
Hawthorn Street	Harbor - Pacific	1.10	F	1.11	F	0.007	1.16	F	1.19	F	0.03
	Pacific - Kettner	0.98	E	0.99	E	0.00	1.03	F	1.06	F	0.02
Kettner Blvd	Kettner - I-5	1.54	F	1.55	F	0.00	1.66	F	1.69	F	0.02
	north of Washington	0.44	B	0.44	B	0.00	0.18	A	0.18	A	0.00
	Washington - Sassafras	1.04	F	1.06	F	0.012	1.11	F	1.14	F	0.02
	Sassafras - Palm	1.17	F	1.18	F	0.013	0.99	E	1.02	F	0.02
Laurel Street	Palm - Laurel	0.96	E	0.96	E	0.00	0.85	D	0.86	D	0.01
	Laurel - Hawthorn	0.45	B	0.45	B	0.00	0.47	B	0.47	B	0.00
	Hawthorn - Grape	0.81	D	0.81	D	0.00	0.87	D	0.87	D	0.00
	Harbor - Pacific	0.85	D	0.86	D	0.01	0.78	D	0.81	D	0.03
Pacific Highway	Pacific - Kettner	1.06	F	1.06	F	0.00	1.13	F	1.16	F	0.03
	Kettner - I-5	0.78	D	0.78	D	0.00	0.90	E	0.91	E	0.015
	Washington - Sassafras	0.66	C	0.66	C	0.00	0.50	B	0.50	B	0.01
	Sassafras - Palm	0.62	C	0.63	C	0.01	0.51	B	0.52	B	0.01
Palm Street	Palm - Laurel	0.62	C	0.63	C	0.01	0.49	B	0.51	B	0.01
	Laurel - Hawthorn	0.62	C	0.63	C	0.01	0.54	B	0.54	B	0.01
	Hawthorn - Grape	0.70	C	0.70	C	0.01	0.62	C	0.63	C	0.01
	Pacific - Kettner	0.01	A	0.01	A	0.00	0.01	A	0.01	A	0.00
Sassafras Street	Pacific - Kettner	1.28	F	1.32	F	0.03	0.94	E	0.99	E	0.05
	Kettner-India	1.53	F	1.56	F	0.03	1.32	F	1.36	F	0.04
Washington Street	Pacific - Kettner	0.83	D	0.83	D	0.00	0.63	C	0.64	C	0.01
	Kettner - San Diego	1.11	F	1.11	F	0.00	0.93	E	0.94	E	0.01
India Street	Laurel - Palm	2.25	F	2.26	F	0.007	2.64	F	2.68	F	0.04
	Palm - Sassafras	1.88	F	1.89	F	0.00	2.09	F	2.11	F	0.03
	Sassafras - Washington	1.93	F	1.91	F	-0.02	2.411	F	2.421	F	0.0099
Rosecrans	Barnett - Sport Arena	0.83	D	0.83	D	0.00	0.88	D	0.89	D	0.01
	Nimitz Quimby - Barnett	0.95-0.85	E-D	0.95-0.85	E-D	0.00	0.98-0.87	E-D	0.99-0.88	E-D	0.01
Nimitz	Nimitz - Quimby	0.95	E	0.95	E	0.00	0.98	E	0.99	E	0.01
	Harbor - Rosecrans	0.61	C	0.61	C	0.00	0.71	C	0.72	C	0.02

Source: HNTB, 2007.

V/C = Volume to capacity ratio
 LOS = Level of service

Legend:

 LOS E
 LOS F
 Significant Impact

D.5.2.3.2 Intersections

Tables [D-62](#), [D-63](#), [D-64](#), [D-65](#), [D-66](#), [D-67](#), [D-68](#), [D-69](#), [D-70](#), and [D-71](#) show the intersection turning volumes under the Implementation Plan (Without Parking Structure) for each analysis year. [Table D-72](#) shows the resulting intersection operations. ~~Future intersection lane configurations are assumed to remain the same under all alternatives and are shown previously on Figure D.5-1~~ Intersection configurations were assumed to be the same as existing conditions shown in [Figure D.3-2](#) except for the following changes:

- North Harbor Drive and McCain Road is currently an unsignalized intersection with right-in / right-out movements only. In 2010 as part of the Liberty Station Development, this intersection is assumed to be signalized, allowing left turn movements inbound and outbound.
- In 2010, the intersection of North Harbor Drive and Winship Lane would be improved as part of the SDIA CIP to provided exclusive right turn lanes on both inbound and outbound approaches.

[Table D-73](#) compares the intersection operations under the Airport Implementation Plan (Without Parking Structure) against the No Project Alternative to identify intersection impacts based on significance criteria identified in Section D.2, *Traffic Impacts and Significance Criteria*, measured by an increase to LOS E or F or an increase in vehicle delay of greater than 2 seconds for streets operating at LOS E and greater than 1 second for streets operating at LOS F under the No Project Alternative. The following intersections would have potentially significant traffic impacts due to the project:

Intersections with Potentially Significant Traffic Impacts

Year 2010 and 2015

- No potentially significant impacts to intersections in the Study Area are anticipated to occur under the Implementation Plan (without Parking Structure) compared to the No Project Alternative in 2010 and ~~2020~~ 2015.

Year 2020

- Sassafras Street and Kettner Boulevard (PM), which operates at LOS F in the AM peak hour under both the Implementation Plan (without Parking Structure) and No Project Alternative and would experience an increase in delay greater than 1 second under the Implementation Plan compared to the No Project Alternative.

Year 2025

- All locations identified in Year 2020
- Hawthorn Street and North Harbor Drive (AM), which operates at LOS F in the AM peak hour and LOS F in the PM peak hour under both the Implementation Plan (without Parking Structure) and No Project Alternative and would experience an increase in delay greater than 1 seconds under the Implementation Plan compared to the No Project Alternative.

Year 2030

- All locations identified in Year 2025
- Hawthorn Street and North Harbor Drive (AM and PM), which operates at LOS F in the AM peak hour and LOS E in the PM peak hour under both the Implementation Plan (without Parking Structure) and No Project Alternative and would experience an increase in delay greater than 2 seconds under the Implementation Plan compared to the No Project Alternative.
- Grape Street and I-5 Southbound On-Ramp (PM), which operates at LOS F in the PM peak hour under both the Implementation Plan (without Parking Structure) and No Project Alternative and would

experience an increase in delay greater than 1 second under the Implementation Plan compared to the No Project Alternative.

**Table D-62
2010 Intersection Turning Volumes – AM Peak Hour - Proposed Airport Implementation Plan
(Without Parking Structure)**

Int #			NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	550	0	23	11	431	0	7	589	293	1,904
		Airport	0	0	0	191	0	0	0	33	0	0	25	149	398
		Background	0	0	0	359	0	23	11	398	0	7	564	144	1,506
2	North Harbor Drive / McCain St	Total	0	0	0	124	0	96	156	599	0	0	856	366	2,197
		Airport	0	0	0	61	0	72	13	211	0	0	103	76	536
		Background	0	0	0	63	0	24	143	388	0	0	753	290	1,661
3	North Harbor Drive / Spanish Landing	Total	5	0	18	39	0	7	79	703	4	15	1,498	0	2,368
		Airport	0	0	0	39	0	7	79	193	0	0	171	0	489
		Background	5	0	18	0	0	0	0	510	4	15	1,327	0	1,879
4	North Harbor Drive / Harbor Island Drive	Total	41	5	145	19	9	65	71	609	81	238	1,852	0	3,135
		Airport	10	5	39	19	9	65	71	141	21	65	541	0	986
		Background	31	0	106	0	0	0	0	468	60	173	1,311	0	2,149
5	North Harbor Drive / Winship Lane	Total	0	0	0	80	0	165	66	706	0	0	2,465	230	3,712
		Airport	0	0	0	80	0	165	66	132	0	0	981	230	1,654
		Background	0	0	0	0	0	0	0	574	0	0	1,484	0	2,058
6	North Harbor Drive / Rental Car Road	Total	53	0	43	10	0	14	16	1,534	67	113	2,628	19	4,497
		Airport	53	0	43	10	0	14	16	960	67	113	1,144	19	2,439
		Background	0	0	0	0	0	0	0	574	0	0	1,484	0	2,058
7	Sheraton / Harbor Island Drive	Total	13	107	0	0	229	99	85	6	27	0	0	0	566
		Airport	0	54	0	0	95	0	0	0	0	0	0	0	149
		Background	13	53	0	0	134	99	85	6	27	0	0	0	417
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	86	0	0	62	1	269
		Airport	0	0	0	0	0	38	82	12	0	0	16	1	149
		Background	0	0	0	0	0	0	0	74	0	0	46	0	120
9	Sassafras Street / Pacific Highway	Total	66	494	71	47	546	9	5	64	41	202	127	53	1,725
		Airport	66	61	0	0	80	9	5	64	41	0	127	0	453
		Background	0	433	71	47	466	0	0	0	0	202	0	53	1,272
10	Laurel Street / North Harbor Drive	Total	0	0	0	24	0	4	387	1,097	0	0	1,877	40	3,429
		Airport	0	0	0	0	0	0	367	646	0	0	824	0	1,837
		Background	0	0	0	24	0	4	20	451	0	0	1,053	40	1,592
11	Hawthorn Street / North Harbor Drive	Total	0	283	0	0	1,038	0	0	0	0	80	0	1,903	3,304
		Airport	0	212	0	0	646	0	0	0	0	5	0	612	1,475
		Background	0	71	0	0	392	0	0	0	0	75	0	1,291	1,829
12	Grape Street / North Harbor Drive	Total	0	222	111	823	483	0	0	0	0	0	0	0	1,639
		Airport	0	212	4	434	217	0	0	0	0	0	0	0	867
		Background	0	10	107	389	266	0	0	0	0	0	0	0	772
13	Laurel Street / Pacific Highway	Total	35	320	85	80	265	349	89	520	2	47	694	61	2,547
		Airport	0	47	0	3	29	88	76	292	0	0	364	5	904
		Background	35	273	85	77	236	261	13	228	2	47	330	56	1,643
14	Hawthorn Street / Pacific Highway	Total	114	203	0	0	160	51	0	0	0	258	1,858	84	2,728
		Airport	114	47	0	0	24	5	0	0	0	0	498	0	688
		Background	0	156	0	0	136	46	0	0	0	258	1,360	84	2,040
15	Grape Street / Pacific Highway	Total	0	571	161	144	799	0	62	792	38	0	0	0	2,567
		Airport	0	157	0	0	24	0	4	396	38	0	0	0	619
		Background	0	414	161	144	775	0	58	396	0	0	0	0	1,948
16	Laurel Street / Kettner Boulevard	Total	0	0	0	233	321	546	0	612	45	39	240	0	2,036
		Airport	0	0	0	0	302	0	295	0	0	0	67	0	664
		Background	0	0	0	233	321	244	0	317	45	39	173	0	1,372
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	154	82	0	0	0	156	2,501	0	2,893
		Airport	0	0	0	0	0	0	0	0	0	0	499	0	499
		Background	0	0	0	0	154	82	0	0	0	156	2,002	0	2,394
18	Grape Street / Kettner Boulevard	Total	0	0	0	91	462	0	0	1,337	92	0	0	0	1,982
		Airport	0	0	0	0	0	0	0	390	6	0	0	0	396
		Background	0	0	0	91	462	0	0	947	86	0	0	0	1,586
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	65	86	73	0	0	0	42	430	1,057	0	0	0	1,753
		Airport	0	0	0	0	0	0	0	3	388	0	0	0	391
		Background	65	86	73	0	0	0	42	427	669	0	0	0	1,362
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	45	43	0	0	0	0	0	0	0	0	2,459	78	2,625
		Airport	45	43	0	0	0	0	0	0	0	0	495	0	495
		Background	0	0	0	0	0	0	0	0	0	0	1,964	78	2,130
21	Laurel Street / India Street	Total	74	108	19	0	0	0	462	343	30	0	219	195	1,450
		Airport	30	0	0	0	0	0	237	28	30	0	37	0	362
		Background	44	108	19	0	0	0	225	315	0	0	182	195	1,088
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	113	1,252	330	0	50	42	121	83	0	1,991
		Airport	0	0	0	0	302	33	0	17	17	0	34	0	403
		Background	0	0	0	113	950	297	0	33	25	121	49	0	1,588
23	Sassafras Street / India Street	Total	190	791	11	0	0	0	108	24	50	0	33	21	1,228
		Airport	64	237	0	0	0	0	32	0	0	0	0	0	333
		Background	126	554	11	0	0	0	76	24	50	0	33	21	895
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	185	32	53	0	64	37	148	154	0	673
		Airport	0	0	0	0	0	0	28	11	66	26	0	0	131
		Background	0	0	0	185	32	53	0	36	26	82	128	0	542
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	65	11	117	26	6	18	22	0	230	312	143	47	997
		Airport	7	0	49	0	0	0	0	0	28	84	0	0	168
		Background	58	11	68	26	6	18	22	0	202	228	143	47	829
26	Washington Street / Hancock Street	Total	0	258	103	321	376	0	354	165	130	0	0	0	1,707
		Airport	0	84	13	0	76	0	0	0	9	0	0	0	162
		Background	0	194	90	321	300	0	354	165	121	0	0	0	1,545
27	Washington Street / San Diego Avenue	Total	94	579	0	0	539	536	0	0	0	174	204	7	2,133
		Airport	13	51	0	0	67	0	0	0	0	9	0	0	140
		Background	81	528	0	0	472	536	0	0	0	165	204	7	1,993
28	Rosecrans Street / Pacific Highway	Total	200	148	220	99	145	61	60	173	143	301	147	86	1,783
		Airport	0	2	8	0	3	1	0	1	0	10	2	0	27
		Background	200	146	212	99	142	60	60	172	143	291	145	86	1,756
29	Rosecrans Street / Nimitz Boulevard	Total	16	111	86	39	126	40	148	639	28	111	637	40	2,021
		Airport	0	68	81	0	87	0	0	0	0	104	0	0	340
		Background	16	43	5	39	39	40	148	639	28	7	637	40	1,681

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19	Grape Street / I-5 Southbound On-Ramp	nbt	nbr	nbr2	sbl	sbr2	sbr	eb1	eb2	ebr	wbt	wbr2	wbr
25	Washington Street / Pacific Highway NB-Ramps	nbl+nbl2	nbt	nbr	sbl	sbr2	sbr	eb12	eb1	ebt	wbt	wbr2	wbr

**Table D-63
2010 Intersection Turning Volumes – PM Peak Hour - Proposed Airport Implementation Plan
(Without Parking Structure)**

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	456	0	56	36	562	0	14	584	768	2,476
		Airport	0	0	0	152	0	0	0	27	0	0	31	166	376
		Background	0	0	0	304	0	56	36	535	0	14	553	602	2,100
2	North Harbor Drive / McCain St	Total	0	0	0	441	0	212	34	919	0	0	994	104	2,704
		Airport	0	0	0	104	0	70	9	170	0	0	127	54	534
		Background	0	0	0	337	0	142	25	749	0	0	867	50	2,170
3	North Harbor Drive / Spanish Landing	Total	7	0	25	84	0	15	65	1,613	18	5	1,127	0	2,959
		Airport	0	0	0	84	0	15	65	209	0	0	166	0	539
		Background	7	0	25	0	0	0	0	1,404	18	5	961	0	2,420
4	North Harbor Drive / Harbor Island Drive	Total	154	4	327	21	8	63	58	1,541	122	463	1,283	0	4,044
		Airport	12	4	52	21	8	63	58	215	20	56	459	0	968
		Background	142	0	275	0	0	0	0	1,326	102	407	824	0	3,076
5	North Harbor Drive / Winship Lane	Total	0	0	0	97	0	195	61	1,828	0	0	2,050	218	4,449
		Airport	0	0	0	97	0	195	61	227	0	0	818	218	1,616
		Background	0	0	0	0	0	0	0	1,601	0	0	1,232	0	2,833
6	North Harbor Drive / Rental Car Road	Total	74	0	83	22	0	16	15	2,628	74	86	2,178	14	5,190
		Airport	74	0	83	22	0	16	15	1,027	74	86	946	14	2,357
		Background	0	0	0	0	0	0	0	1,601	0	0	1,232	0	2,833
7	Sheraton / Harbor Island Drive	Total	23	408	0	0	524	70	77	2	25	0	0	0	1,129
		Airport	0	68	0	0	84	0	0	0	0	0	0	0	152
		Background	23	340	0	0	440	70	77	2	25	0	0	0	977
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	55	68	95	0	0	126	1	345
		Airport	0	0	0	0	0	55	68	15	0	0	13	1	152
		Background	0	0	0	0	0	0	0	80	0	0	113	0	193
9	Sassafras Street / Pacific Highway	Total	61	857	353	125	949	8	13	175	88	165	106	44	2,944
		Airport	61	73	0	0	65	8	13	175	88	0	106	0	589
		Background	0	784	353	125	884	0	0	0	0	165	0	44	2,355
10	Laurel Street / North Harbor Drive	Total	0	0	0	72	0	11	1,112	1,919	0	0	1,609	105	4,828
		Airport	0	0	0	0	0	0	414	718	0	0	658	0	1,790
		Background	0	0	0	72	0	11	698	1,201	0	0	951	105	3,038
11	Hawthorn Street / North Harbor Drive	Total	0	581	0	0	2,090	0	0	0	0	133	0	1,059	3,863
		Airport	0	170	0	0	718	0	0	0	0	5	0	488	1,381
		Background	0	411	0	0	1,372	0	0	0	0	128	0	571	2,482
12	Grape Street / North Harbor Drive	Total	0	640	267	1,155	1,091	0	0	0	0	0	0	0	3,153
		Airport	0	170	6	482	241	0	0	0	0	0	0	0	899
		Background	0	470	261	673	850	0	0	0	0	0	0	0	2,254
13	Laurel Street / Pacific Highway	Total	111	604	145	138	479	369	471	692	58	51	795	77	3,990
		Airport	111	559	145	132	414	287	387	362	58	51	489	73	3,068
		Background	126	591	0	0	556	49	0	0	0	147	1,030	82	2,581
14	Hawthorn Street / Pacific Highway	Total	91	44	0	0	60	5	0	0	0	0	397	0	597
		Airport	35	547	0	0	496	44	0	0	0	147	633	82	1,984
		Background	0	666	448	237	541	0	50	1,595	37	0	0	0	3,574
15	Grape Street / Pacific Highway	Total	0	129	0	1	60	0	6	445	37	0	0	0	678
		Airport	0	537	448	236	481	0	44	1,150	0	0	0	0	2,896
		Background	0	0	0	282	601	578	0	873	79	54	290	0	2,757
16	Laurel Street / Kettner Boulevard	Total	0	0	0	0	241	0	337	0	0	69	0	647	
		Airport	0	0	0	282	601	337	0	536	79	54	221	0	2,110
		Background	0	0	0	400	72	0	0	192	1,380	0	2,044		
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	0	0	0	0	0	398	0	398	
		Airport	0	0	0	0	400	72	0	0	0	192	982	0	1,646
		Background	0	0	0	221	487	0	0	3,113	90	0	0	0	3,911
18	Grape Street / Kettner Boulevard	Total	0	0	0	0	0	0	434	11	0	0	0	445	
		Airport	0	0	0	221	487	0	0	2,679	79	0	0	0	3,466
		Background	0	0	0	0	0	0	26	532	2,072	0	0	0	3,098
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	98	187	183	0	0	0	26	532	2,072	0	0	0	3,098
		Airport	0	0	0	0	0	0	0	3	431	0	0	0	434
		Background	98	187	183	0	0	0	26	529	1,641	0	0	0	2,664
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	36	57	0	0	0	0	0	0	0	0	1,486	61	1,640
		Airport	0	0	0	0	0	0	0	0	0	0	395	0	395
		Background	36	57	0	0	0	0	0	0	0	0	1,091	61	1,245
21	Laurel Street / India Street	Total	83	290	86	0	0	0	658	499	39	0	273	267	2,195
		Airport	39	0	0	0	0	0	263	34	39	0	30	0	405
		Background	44	290	86	0	0	0	395	465	0	0	243	267	1,790
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	186	1,736	257	0	211	98	85	86	0	2,659
		Airport	0	0	0	0	241	32	0	54	55	0	32	0	414
		Background	0	0	0	186	1,495	225	0	157	43	85	54	0	2,245
23	Sassafras Street / India Street	Total	177	1,330	31	0	0	0	299	60	110	0	14	17	2,038
		Airport	53	263	0	0	0	0	87	0	0	0	0	0	403
		Background	124	1,067	31	0	0	0	212	60	110	0	14	17	1,635
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	488	49	10	0	223	51	199	80	0	1,100
		Airport	0	0	0	0	0	0	0	27	10	53	46	0	136
		Background	0	0	0	488	49	10	0	196	41	146	34	0	964
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	37	25	199	57	55	7	55	14	592	327	207	59	1,634
		Airport	13	0	61	0	0	0	0	0	27	86	0	0	187
		Background	24	25	138	57	55	7	55	14	565	241	207	59	1,447
26	Washington Street / Hancock Street	Total	0	652	157	343	379	0	555	331	155	0	0	0	2,572
		Airport	0	75	13	0	70	0	0	16	0	0	0	0	174
		Background	0	577	144	343	309	0	555	331	139	0	0	0	2,398
27	Washington Street / San Diego Avenue	Total	187	1,153	0	0	572	489	0	0	0	185	276	17	2,879
		Airport	12	63	0	0	55	0	0	0	0	16	0	0	146
		Background	175	1,090	0	0	517	489	0	0	0	169	276	17	2,733
28	Rosecrans Street / Pacific Highway	Total	351	287	636	120	139	67	111	459	170	246	304	129	3,019
		Airport	0	3	10	0	2	0	0	1	0	8	1	0	25
		Background	351	284	626	120	137	67	111	458	170	238	303	129	2,994
29	Rosecrans Street / Nimitz Boulevard	Total	18	194	110	30	103	30	332	812	33	173	653	53	2,541
		Airport	0	76	90	0	69	0	0	0	0	83	0	0	318
		Background	18	118	20	30	34	30	332	812	33	90	653	53	2,223

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. *2* represents the 5th leg / on-ramp.

19	Grape Street / I-5 Southbound On-Ramp	nbt	nbr	nbr2	eb1	ebt	ebr	wbt	wbr2	wbr
25	Washington Street / Pacific Highway NB-Ramps	nbl+nbl2	nbt	nbr	sbl	sbr2	sbr	eb12	eb1	ebt

**Table D-64
2015 Intersection Turning Volumes – AM Peak Hour - Proposed Airport Implementation Plan
(Without Parking Structure)**

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	604	0	22	13	519	0	8	681	342	2,189
		Airport	0	0	0	218	0	0	39	0	0	30	173	460	
		Background	0	0	0	386	0	22	13	480	0	8	651	169	1,729
2	North Harbor Drive / McCain St	Total	0	0	0	139	0	117	188	658	0	0	807	432	2,341
		Airport	0	0	0	62	0	88	13	244	0	0	115	76	598
		Background	0	0	0	77	0	29	175	414	0	0	692	356	1,743
3	North Harbor Drive / Spanish Landing	Total	5	0	18	39	0	7	95	776	5	16	1,583	0	2,544
		Airport	0	0	0	39	0	7	95	211	0	0	184	0	536
		Background	5	0	18	0	0	0	0	565	5	16	1,399	0	2,008
4	North Harbor Drive / Harbor Island Drive	Total	44	5	149	19	10	73	79	668	86	240	2,016	0	3,389
		Airport	12	5	40	19	10	73	79	150	21	66	633	0	1,108
		Background	32	0	109	0	0	0	0	518	65	174	1,383	0	2,281
5	North Harbor Drive / Winship Lane	Total	0	0	0	92	0	187	71	764	0	0	2,671	273	4,058
		Airport	0	0	0	92	0	187	71	137	0	0	1,114	273	1,874
		Background	0	0	0	0	0	0	0	627	0	0	1,557	0	2,184
6	North Harbor Drive / Rental Car Road	Total	63	0	50	10	0	14	16	1,744	78	133	2,868	19	4,995
		Airport	63	0	50	10	0	14	16	1,117	78	133	1,311	19	2,811
		Background	0	0	0	0	0	0	0	627	0	0	1,557	0	2,184
7	Sheraton / Harbor Island Drive	Total	13	113	0	0	237	99	85	6	27	0	0	0	580
		Airport	0	56	0	0	97	0	0	0	0	0	0	0	153
		Background	13	57	0	0	140	99	85	6	27	0	0	0	427
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	95	0	0	69	1	285
		Airport	0	0	0	0	0	38	82	15	0	0	19	1	155
		Background	0	0	0	0	0	0	0	80	0	0	50	0	130
9	Sassafras Street / Pacific Highway	Total	78	592	86	56	651	11	5	76	48	248	152	65	2,068
		Airport	78	73	0	0	94	11	5	76	48	0	152	0	537
		Background	0	519	86	56	557	0	0	0	248	0	65	65	1,531
10	Laurel Street / North Harbor Drive	Total	0	0	0	26	0	4	450	1,195	0	0	1,965	39	3,679
		Airport	0	0	0	0	0	0	430	747	0	0	940	0	2,117
		Background	0	0	0	26	0	4	20	448	0	0	1,025	39	1,562
11	Hawthorn Street / North Harbor Drive	Total	0	309	0	0	1,127	0	0	0	0	87	0	2,067	3,590
		Airport	0	241	0	0	747	0	0	0	0	8	0	700	1,696
		Background	0	68	0	0	380	0	0	0	0	79	0	1,367	1,894
12	Grape Street / North Harbor Drive	Total	0	251	110	872	510	0	0	0	0	0	0	0	1,743
		Airport	0	241	7	500	255	0	0	0	0	0	0	0	1,003
		Background	0	10	103	372	255	0	0	0	0	0	0	0	740
13	Laurel Street / Pacific Highway	Total	41	381	108	97	321	414	102	585	2	52	778	66	2,947
		Airport	0	58	7	4	37	101	88	343	0	1	421	6	1,066
		Background	41	323	101	93	284	313	14	242	2	51	357	60	1,881
14	Hawthorn Street / Pacific Highway	Total	130	245	0	0	190	63	0	0	0	267	1,974	92	2,961
		Airport	130	60	0	0	29	8	0	0	0	0	569	5	801
		Background	0	185	0	0	161	55	0	0	0	267	1,405	87	2,160
15	Grape Street / Pacific Highway	Total	0	649	182	170	946	0	70	884	42	0	0	0	2,943
		Airport	0	184	0	0	29	0	7	458	42	0	0	0	720
		Background	0	465	182	170	917	0	63	426	0	0	0	0	2,223
16	Laurel Street / Kettner Boulevard	Total	0	0	0	261	355	614	0	696	49	46	279	0	2,300
		Airport	0	0	0	4	0	345	0	353	0	2	83	0	787
		Background	0	0	0	257	355	269	0	343	49	44	196	0	1,513
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	171	90	0	0	0	173	2,792	0	3,226
		Airport	0	0	0	0	2	0	0	0	0	0	574	0	576
		Background	0	0	0	0	169	90	0	0	0	173	2,218	0	2,650
18	Grape Street / Kettner Boulevard	Total	0	0	0	105	524	0	0	1,433	95	0	0	0	2,157
		Airport	0	0	0	2	0	0	0	452	6	0	0	0	460
		Background	0	0	0	103	524	0	0	981	89	0	0	0	1,697
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	77	102	87	0	0	0	43	437	1,131	0	0	0	1,877
		Airport	0	0	0	0	0	0	0	3	451	0	0	0	454
		Background	77	102	87	0	0	0	43	434	680	0	0	0	1,423
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	48	46	0	0	0	0	0	0	0	0	2,521	77	2,692
		Airport	0	0	0	0	0	0	0	0	0	0	0	570	570
		Background	48	46	0	0	0	0	0	0	0	0	1,951	77	2,122
21	Laurel Street / India Street	Total	97	135	23	0	0	0	526	386	51	0	258	231	1,707
		Airport	43	2	0	0	0	0	274	33	51	0	42	0	445
		Background	54	133	23	0	0	0	252	353	0	0	216	231	1,262
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	115	1,318	347	0	60	52	139	101	0	2,132
		Airport	0	0	0	0	350	44	0	22	22	0	45	0	483
		Background	0	0	0	115	968	303	0	38	30	139	56	0	1,649
23	Sassafras Street / India Street	Total	223	919	12	0	0	0	125	28	58	0	34	22	1,421
		Airport	76	276	0	0	0	0	38	0	0	0	0	0	390
		Background	147	643	12	0	0	0	87	28	58	0	34	22	1,031
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	200	35	57	0	76	42	164	174	0	748
		Airport	0	0	0	0	0	0	0	39	15	76	36	0	166
		Background	0	0	0	200	35	57	0	37	27	88	138	0	582
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	94	16	155	29	7	20	24	0	258	359	162	53	1,177
		Airport	10	0	57	0	0	0	0	0	39	101	0	0	207
		Background	84	16	98	29	7	20	24	0	219	258	162	53	970
26	Washington Street / Hancock Street	Total	0	297	120	351	417	0	358	167	134	0	0	0	1,844
		Airport	0	78	18	0	89	0	0	0	12	0	0	0	197
		Background	0	219	102	351	328	0	358	167	122	0	0	0	1,647
27	Washington Street / San Diego Avenue	Total	107	637	0	0	564	553	0	0	0	194	225	8	2,288
		Airport	18	59	0	0	77	0	0	0	0	12	0	0	166
		Background	89	578	0	0	487	553	0	0	0	182	225	8	2,122
28	Rosecrans Street / Pacific Highway	Total	237	177	261	116	170	72	63	183	151	314	153	89	1,986
		Airport	0	3	9	0	3	1	0	1	0	12	2	0	31
		Background	237	174	252	116	167	71	63	182	151	302	151	89	1,955
29	Rosecrans Street / Nimitz Boulevard	Total	16	122	99	14	114	15	155	671	30	124	627	40	2,027
		Airport	0	79	94	0	100	0	0	0	0	118	0	0	391
		Background	16	43	5	14	14	15	155	671	30	6	627	40	1,636

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19	Grape Street / I-5 Southbound On-Ramp	nbt	nbr	nbr2				eb1	ebt	ebr				
25	Washington Street / Pacific Highway NB-Ramps	nbl+nbl2	nbt	nbr	sbl	sbr2	sbr	eb12	eb1	ebt	wbt	wbr2	wbr	

**Table D-65
2015 Intersection Turning Volumes – PM Peak Hour - Proposed Airport Implementation Plan
(Without Parking Structure)**

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	478	0	55	44	677	0	17	674	896	2,841
		Airport	0	0	0	175	0	0	0	32	0	0	36	190	433
		Background	0	0	0	303	0	55	44	645	0	17	638	706	2,408
2	North Harbor Drive / McCain St	Total	0	0	0	518	0	259	40	966	0	0	1,006	117	2,906
		Airport	0	0	0	104	0	84	9	198	0	0	142	55	592
		Background	0	0	0	414	0	175	31	768	0	0	864	62	2,314
3	North Harbor Drive / Spanish Landing	Total	7	0	25	84	0	15	79	1,798	20	6	1,163	0	3,197
		Airport	0	0	0	84	0	15	79	223	0	0	182	0	583
		Background	7	0	25	0	0	0	0	1,575	20	6	981	0	2,614
4	North Harbor Drive / Harbor Island Drive	Total	160	4	337	21	9	70	65	1,711	131	467	1,383	0	4,358
		Airport	13	4	53	21	9	70	65	222	20	57	543	0	1,077
		Background	147	0	284	0	0	0	0	1,489	111	410	840	0	3,281
5	North Harbor Drive / Winship Lane	Total	0	0	0	119	0	223	64	2,004	0	0	2,189	257	4,856
		Airport	0	0	0	119	0	223	64	231	0	0	939	257	1,833
		Background	0	0	0	0	0	0	0	1,773	0	0	1,250	0	3,023
6	North Harbor Drive / Rental Car Road	Total	87	0	97	22	0	16	15	2,952	87	100	2,343	14	5,733
		Airport	87	0	97	22	0	16	15	1,179	87	100	1,093	14	2,710
		Background	0	0	0	0	0	0	0	1,773	0	0	1,250	0	3,023
7	Sheraton / Harbor Island Drive	Total	23	423	0	0	537	70	77	2	25	0	0	0	1,157
		Airport	0	70	0	0	86	0	0	0	0	0	0	0	156
		Background	23	353	0	0	451	70	77	2	25	0	0	0	1,001
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	55	68	104	0	0	136	1	364
		Airport	0	0	0	0	0	55	68	18	0	0	15	1	157
		Background	0	0	0	0	0	0	0	86	0	0	121	0	207
9	Sassafras Street / Pacific Highway	Total	72	1,027	424	150	1,137	9	15	203	102	202	127	54	3,522
		Airport	72	86	0	0	78	9	15	203	102	0	127	0	692
		Background	0	941	424	150	1,059	0	0	0	0	202	0	54	2,830
10	Laurel Street / North Harbor Drive	Total	0	0	0	76	0	11	1,174	2,014	0	0	1,682	102	5,059
		Airport	0	0	0	0	0	0	479	819	0	0	756	0	2,054
		Background	0	0	0	76	0	11	695	1,195	0	0	926	102	3,005
11	Hawthorn Street / North Harbor Drive	Total	0	587	0	0	2,148	0	0	0	0	145	0	1,166	4,046
		Airport	0	194	0	0	819	0	0	0	0	9	0	562	1,584
		Background	0	393	0	0	1,329	0	0	0	0	136	0	604	2,462
12	Grape Street / North Harbor Drive	Total	0	647	261	1,194	1,093	0	0	0	0	0	0	0	3,195
		Airport	0	194	10	549	279	0	0	0	0	0	0	0	1,032
		Background	0	453	251	645	814	0	0	0	0	0	0	0	2,163
13	Laurel Street / Pacific Highway	Total	131	718	176	166	574	438	507	768	62	59	886	85	4,570
		Airport	0	56	5	8	77	94	96	383	0	3	357	6	1,085
		Background	131	662	171	158	497	344	411	385	62	56	529	79	3,485
14	Hawthorn Street / Pacific Highway	Total	146	705	0	0	658	61	0	0	0	152	1,111	89	2,922
		Airport	105	57	0	0	71	9	0	0	0	0	457	4	703
		Background	41	648	0	0	587	52	0	0	0	152	654	85	2,219
15	Grape Street / Pacific Highway	Total	0	756	504	280	639	0	57	1,744	42	0	0	0	4,022
		Airport	0	152	0	1	70	0	10	507	42	0	0	0	782
		Background	0	604	504	279	569	0	47	1,237	0	0	0	0	3,240
16	Laurel Street / Kettner Boulevard	Total	0	0	0	314	664	649	0	977	86	66	337	0	3,093
		Airport	0	0	0	3	0	277	0	396	0	5	88	0	769
		Background	0	0	0	311	664	372	0	581	86	61	249	0	2,324
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	446	79	0	0	0	213	1,548	0	2,286
		Airport	0	0	0	0	5	0	0	0	0	0	460	0	465
		Background	0	0	0	0	441	79	0	0	0	213	1,088	0	1,821
18	Grape Street / Kettner Boulevard	Total	0	0	0	256	554	0	0	3,272	94	0	0	0	4,176
		Airport	0	0	0	5	1	0	0	496	12	0	0	0	514
		Background	0	0	0	251	553	0	0	2,776	82	0	0	0	3,662
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	117	223	218	0	0	0	26	541	2,164	0	0	0	3,289
		Airport	0	0	0	0	0	0	0	4	497	0	0	0	501
		Background	117	223	218	0	0	0	26	537	1,667	0	0	0	2,788
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	39	61	0	0	0	0	0	0	0	0	1,540	60	1,700
		Airport	0	0	0	0	0	0	0	0	0	0	0	457	457
		Background	39	61	0	0	0	0	0	0	0	0	0	1,083	60
21	Laurel Street / India Street	Total	113	362	106	0	0	0	743	560	59	0	323	317	2,583
		Airport	59	5	0	0	0	0	301	40	59	0	35	0	499
		Background	54	357	106	0	0	0	442	520	0	0	288	317	2,084
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	189	1,804	270	0	249	117	97	102	0	2,828
		Airport	0	0	0	0	280	41	0	66	67	0	41	0	495
		Background	0	0	0	189	1,524	229	0	183	50	97	61	0	2,333
23	Sassafras Street / India Street	Total	208	1,544	36	0	0	0	344	69	126	0	15	18	2,360
		Airport	64	306	0	0	0	0	101	0	0	0	0	0	471
		Background	144	1,238	36	0	0	0	243	69	126	0	15	18	1,889
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	527	53	12	0	240	56	219	99	0	1,206
		Airport	0	0	0	0	0	1	0	37	14	61	62	0	175
		Background	0	0	0	527	53	11	0	203	42	158	37	0	1,031
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	52	36	270	63	60	8	60	15	649	378	234	66	1,891
		Airport	17	0	70	0	0	0	0	0	37	106	0	0	230
		Background	35	36	200	63	60	8	60	15	612	272	234	66	1,661
26	Washington Street / Hancock Street	Total	0	741	179	376	423	0	562	335	162	0	0	0	2,778
		Airport	0	89	17	0	85	0	0	0	21	0	0	0	212
		Background	0	652	162	376	338	0	562	335	141	0	0	0	2,566
27	Washington Street / San Diego Avenue	Total	208	1,264	0	0	596	504	0	0	0	207	304	19	3,102
		Airport	17	72	0	0	84	0	0	0	0	21	0	1	175
		Background	191	1,192	0	0	532	504	0	0	0	186	304	18	2,927
28	Rosecrans Street / Pacific Highway	Total	418	341	756	141	163	78	119	485	180	257	315	134	3,387
		Airport	0	3	11	0	3	0	1	2	0	10	1	0	31
		Background	418	338	745	141	160	78	118	483	180	247	314	134	3,356
29	Rosecrans Street / Nimitz Boulevard	Total	18	205	123	11	92	11	348	852	34	183	643	52	2,572
		Airport	0	87	103	0	80	0	0	0	0	95	0	0	365
		Background	18	118	20	11	12	11	348	852	34	88	643	52	2,207

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. *2* represents the 5th leg / on-ramp.

19	Grape Street / I-5 Southbound On-Ramp	nbt	nbr	nbr2		eb1	ebt	ebr	wbt	wbr2	wbr
25	Washington Street / Pacific Highway NB-Ramps	nbl+nbl2	nbt	nbr	sbl	sbr2	sbr	eb12	eb1	ebt	wbr

**Table D-66
2020 Intersection Turning Volumes – AM Peak Hour - Proposed Airport Implementation Plan
(Without Parking Structure)**

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	707	0	30	14	540	0	9	835	395	2,530
		Airport	0	0	0	238	0	0	0	43	0	0	33	191	505
		Background	0	0	0	469	0	30	14	497	0	9	802	204	2,025
2	North Harbor Drive / McCain St	Total	0	0	0	147	0	130	205	734	0	0	820	466	2,502
		Airport	0	0	0	62	0	98	13	268	0	0	126	77	644
		Background	0	0	0	85	0	32	192	466	0	0	694	389	1,858
3	North Harbor Drive / Spanish Landing	Total	5	0	18	39	0	7	105	855	6	18	1,663	0	2,716
		Airport	0	0	0	39	0	7	105	225	0	0	196	0	572
		Background	5	0	18	0	0	0	0	630	6	18	1,467	0	2,144
4	North Harbor Drive / Harbor Island Drive	Total	45	6	153	19	11	80	86	732	93	247	2,146	0	3,618
		Airport	12	6	40	19	11	80	86	157	21	66	694	0	1,192
		Background	33	0	113	0	0	0	0	575	72	181	1,452	0	2,426
5	North Harbor Drive / Winship Lane	Total	0	0	0	102	0	204	75	831	0	0	2,848	305	4,365
		Airport	0	0	0	102	0	204	75	142	0	0	1,215	305	2,043
		Background	0	0	0	0	0	0	0	689	0	0	1,633	0	2,322
6	North Harbor Drive / Rental Car Road	Total	70	0	56	10	0	14	16	1,924	87	147	3,069	19	5,412
		Airport	70	0	56	10	0	14	16	1,235	87	147	1,436	19	3,090
		Background	0	0	0	0	0	0	0	689	0	0	1,633	0	2,322
7	Sheraton / Harbor Island Drive	Total	13	120	0	0	253	99	85	6	27	0	0	0	603
		Airport	0	58	0	0	99	0	0	0	0	0	0	0	157
		Background	13	62	0	0	154	99	85	6	27	0	0	0	446
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	98	0	0	72	1	291
		Airport	0	0	0	0	0	38	82	16	0	0	21	1	158
		Background	0	0	0	0	0	0	0	82	0	0	51	0	133
9	Sassafras Street / Pacific Highway	Total	85	600	85	50	604	12	6	83	51	233	166	61	2,036
		Airport	85	83	0	0	107	12	6	83	51	0	166	0	593
		Background	0	517	85	50	497	0	0	0	0	233	0	61	1,443
10	Laurel Street / North Harbor Drive	Total	0	0	0	23	0	4	499	1,302	0	0	2,182	44	4,054
		Airport	0	0	0	0	0	0	478	823	0	0	1,027	0	2,328
		Background	0	0	0	23	0	4	21	479	0	0	1,155	44	1,726
11	Hawthorn Street / North Harbor Drive	Total	0	333	0	0	1,245	0	0	0	0	110	0	2,467	4,155
		Airport	0	262	0	0	823	0	0	0	0	12	0	765	1,862
		Background	0	71	0	0	422	0	0	0	0	98	0	1,702	2,293
12	Grape Street / North Harbor Drive	Total	0	271	104	939	549	0	0	0	0	0	0	0	1,863
		Airport	0	262	10	551	284	0	0	0	0	0	0	0	1,107
		Background	0	9	94	388	265	0	0	0	0	0	0	0	756
13	Laurel Street / Pacific Highway	Total	46	430	127	95	318	414	108	597	1	47	780	59	3,022
		Airport	0	65	13	5	43	110	96	382	0	2	465	6	1,187
		Background	46	365	114	90	275	304	12	215	1	45	315	53	1,835
14	Hawthorn Street / Pacific Highway	Total	143	278	0	0	217	74	0	0	0	294	2,168	104	3,278
		Airport	143	70	0	0	34	12	0	0	0	0	622	8	889
		Background	0	208	0	0	183	62	0	0	0	294	1,546	96	2,389
15	Grape Street / Pacific Highway	Total	0	703	195	191	1,063	0	85	1,014	47	0	0	0	3,298
		Airport	0	202	0	0	33	0	10	504	47	0	0	0	796
		Background	0	501	195	191	1,030	0	75	510	0	0	0	0	2,502
16	Laurel Street / Kettner Boulevard	Total	0	0	0	440	597	830	0	702	43	40	259	0	2,911
		Airport	0	0	0	8	0	377	0	400	0	4	96	0	885
		Background	0	0	0	432	597	453	0	302	43	36	163	0	2,026
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	290	152	0	0	0	181	2,953	0	3,576
		Airport	0	0	0	0	5	0	0	0	0	0	630	0	635
		Background	0	0	0	0	285	152	0	0	0	181	2,323	0	2,941
18	Grape Street / Kettner Boulevard	Total	0	0	0	136	671	0	0	1,561	103	0	0	0	2,471
		Airport	0	0	0	4	0	0	0	498	7	0	0	0	509
		Background	0	0	0	132	671	0	0	1,063	96	0	0	0	1,962
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	121	159	136	0	0	0	38	390	1,105	0	0	0	1,949
		Airport	0	0	0	0	0	0	0	3	499	0	0	0	502
		Background	121	159	136	0	0	0	38	387	606	0	0	0	1,447
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	52	49	0	0	0	0	0	0	0	0	2,367	69	2,537
		Airport	0	0	0	0	0	0	0	0	0	0	0	626	626
		Background	52	49	0	0	0	0	0	0	0	0	1,741	69	1,911
21	Laurel Street / India Street	Total	97	110	18	0	0	0	513	331	69	1	251	219	1,609
		Airport	54	4	0	0	0	0	302	36	69	1	46	0	512
		Background	43	106	18	0	0	0	211	295	0	0	205	219	1,097
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	274	2,698	774	0	61	55	137	107	0	4,106
		Airport	0	0	0	0	386	51	0	25	26	0	52	0	540
		Background	0	0	0	274	2,312	723	0	36	29	137	55	0	3,566
23	Sassafras Street / India Street	Total	203	834	10	0	0	0	127	27	57	0	37	23	1,318
		Airport	83	306	0	0	0	0	41	0	0	0	0	0	430
		Background	120	528	10	0	0	0	86	27	57	0	37	23	888
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	226	40	65	0	93	48	178	198	0	848
		Airport	0	0	0	0	0	0	0	54	20	83	49	0	206
		Background	0	0	0	226	40	65	0	39	28	95	149	0	642
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	70	11	129	31	7	21	27	0	288	382	166	54	1,186
		Airport	13	0	63	0	0	0	1	0	53	118	0	0	248
		Background	57	11	66	31	7	21	26	0	235	264	166	54	938
26	Washington Street / Hancock Street	Total	0	315	129	394	468	0	473	221	179	0	0	0	2,179
		Airport	0	91	25	1	101	0	0	0	17	0	0	0	235
		Background	0	224	104	393	367	0	473	221	162	0	0	0	1,944
27	Washington Street / San Diego Avenue	Total	124	713	0	0	673	668	0	0	0	206	233	8	2,625
		Airport	25	66	0	0	85	0	0	0	0	17	0	0	193
		Background	99	647	0	0	588	668	0	0	0	189	233	8	2,432
28	Rosecrans Street / Pacific Highway	Total	206	154	229	99	146	61	64	182	150	345	168	98	1,902
		Airport	0	3	10	0	4	1	1	2	0	13	2	0	36
		Background	206	151	219	99	142	60	63	180	150	332	166	98	1,866
29	Rosecrans Street / Nimitz Boulevard	Total	20	139	111	35	145	37	124	536	24	135	551	35	1,892
		Airport	0	87	104	0	109	0	0	0	0	129	0	0	429
		Background	20	52	7	35	36	37	124	536	24	6	551	35	1,463

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

- 19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
- 25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr ebl ebl2 ebl ebt ebr wbt wbr2 wbr

**Table D-68
2025 Intersection Turning Volumes – AM Peak Hour - Proposed Airport Implementation Plan
(Without Parking Structure)**

Int #			NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	744	0	31	14	565	0	10	887	418	2,669	
		Airport	0	0	0	252	0	0	0	45	0	0	36	203	536	
		Background	0	0	0	492	0	31	14	520	0	10	851	215	2,133	
2	North Harbor Drive / McCain St	Total	0	0	0	149	0	139	211	746	0	0	891	479	2,615	
		Airport	0	0	0	62	0	106	13	284	0	0	132	77	674	
		Background	0	0	0	87	0	33	198	462	0	0	759	402	1,941	
3	North Harbor Drive / Spanish Landing	Total	5	0	18	39	0	7	113	863	6	18	1,759	0	2,828	
		Airport	0	0	0	39	0	7	113	233	0	0	202	0	594	
		Background	5	0	18	0	0	0	0	630	6	18	1,557	0	2,234	
4	North Harbor Drive / Harbor Island Drive	Total	46	6	154	19	12	84	90	737	93	260	2,284	0	3,785	
		Airport	13	6	41	19	12	84	90	161	21	66	742	0	1,255	
		Background	33	0	113	0	0	0	0	576	72	194	1,542	0	2,530	
5	North Harbor Drive / Winship Lane	Total	0	0	0	103	0	216	76	834	0	0	3,023	319	4,571	
		Airport	0	0	0	103	0	216	76	145	0	0	1,287	319	2,146	
		Background	0	0	0	0	0	0	0	689	0	0	1,736	0	2,425	
6	North Harbor Drive / Rental Car Road	Total	74	0	60	10	0	14	16	2,004	93	157	3,254	19	5,701	
		Airport	74	0	60	10	0	14	16	1,315	93	157	1,518	19	3,276	
		Background	0	0	0	0	0	0	0	689	0	0	1,736	0	2,425	
7	Sheraton / Harbor Island Drive	Total	13	122	0	0	267	99	85	6	27	0	0	0	619	
		Airport	0	60	0	0	100	0	0	0	0	0	0	0	160	
		Background	13	62	0	0	167	99	85	6	27	0	0	0	459	
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	97	0	0	72	1	290	
		Airport	0	0	0	0	0	38	82	17	0	0	22	1	160	
		Background	0	0	0	0	0	0	0	80	0	0	50	0	130	
9	Sassafras Street / Pacific Highway	Total	90	637	91	57	675	13	6	88	55	268	176	70	2,226	
		Airport	90	89	0	0	116	13	6	88	55	0	176	0	633	
		Background	0	548	91	57	559	0	0	0	268	0	70	70	1,593	
10	Laurel Street / North Harbor Drive	Total	0	0	0	15	0	3	531	1,325	0	0	2,297	46	4,217	
		Airport	0	0	0	0	0	0	511	873	0	0	1,083	0	2,467	
		Background	0	0	0	15	0	3	20	452	0	0	1,214	46	1,750	
11	Hawthorn Street / North Harbor Drive	Total	0	351	0	0	1,316	0	0	0	0	117	0	2,576	4,360	
		Airport	0	276	0	0	873	0	0	0	0	15	0	807	1,971	
		Background	0	75	0	0	443	0	0	0	0	102	0	1,769	2,389	
12	Grape Street / North Harbor Drive	Total	0	276	111	994	584	0	0	0	0	0	0	0	1,974	
		Airport	0	276	12	584	304	0	0	0	0	0	0	0	1,176	
		Background	0	9	99	410	280	0	0	0	0	0	0	0	798	
13	Laurel Street / Pacific Highway	Total	50	468	140	99	336	435	110	552	1	47	804	59	3,101	
		Airport	0	71	17	5	48	117	102	409	0	3	494	7	1,273	
		Background	50	397	123	94	288	318	8	143	1	44	310	52	1,828	
14	Hawthorn Street / Pacific Highway	Total	151	303	0	0	235	82	0	0	0	336	2,424	121	3,652	
		Airport	151	77	0	0	37	15	0	0	0	0	656	11	947	
		Background	0	226	0	0	198	67	0	0	0	336	1,768	110	2,705	
15	Grape Street / Pacific Highway	Total	0	745	207	208	1,157	0	90	1,067	49	0	0	0	3,523	
		Airport	0	215	0	0	36	0	12	535	49	0	0	0	847	
		Background	0	530	207	208	1,121	0	78	532	0	0	0	0	2,676	
16	Laurel Street / Kettner Boulevard	Total	0	0	0	381	511	786	0	729	42	43	271	0	2,763	
		Airport	0	0	0	11	0	398	0	432	0	6	106	0	953	
		Background	0	0	0	370	511	388	0	297	42	37	165	0	1,810	
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	242	126	0	0	0	193	3,145	0	3,706	
		Airport	0	0	0	0	6	0	0	0	0	0	667	0	673	
		Background	0	0	0	0	236	126	0	0	0	193	2,478	0	3,033	
18	Grape Street / Kettner Boulevard	Total	0	0	0	127	623	0	0	1,609	105	0	0	0	2,464	
		Airport	0	0	0	5	1	0	0	529	7	0	0	0	542	
		Background	0	0	0	122	622	0	0	1,080	98	0	0	0	1,922	
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	126	166	142	0	0	0	39	404	1,157	0	0	0	2,034	
		Airport	0	0	0	0	0	0	0	4	531	0	0	0	535	
		Background	126	166	142	0	0	0	39	400	626	0	0	0	1,499	
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	55	53	0	0	0	0	0	0	0	0	2,397	69	2,574	
		Airport	0	0	0	0	0	0	0	0	0	0	0	663	0	663
		Background	55	53	0	0	0	0	0	0	0	0	1,734	69	1,911	
21	Laurel Street / India Street	Total	108	117	19	0	0	0	534	336	83	1	256	221	1,675	
		Airport	63	6	0	0	0	0	321	39	83	1	49	0	562	
		Background	45	111	19	0	0	0	213	297	0	0	207	221	1,113	
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	243	2,454	696	0	68	60	139	112	0	3,772	
		Airport	0	0	0	0	409	56	0	28	28	0	56	0	577	
		Background	0	0	0	243	2,045	640	0	40	32	139	56	0	3,195	
23	Sassafras Street / India Street	Total	207	848	10	0	0	0	132	28	58	0	40	26	1,349	
		Airport	88	326	0	0	0	0	44	0	0	0	0	0	458	
		Background	119	522	10	0	0	0	88	28	58	0	40	26	891	
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	201	35	58	0	102	51	188	216	0	851	
		Airport	0	0	0	0	0	1	0	64	24	87	57	0	233	
		Background	0	0	0	201	35	57	0	38	27	101	159	0	618	
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	44	5	99	31	7	22	29	0	314	391	165	54	1,161	
		Airport	16	0	67	0	0	0	1	0	63	129	0	0	276	
		Background	28	5	32	31	7	22	28	0	251	262	165	54	885	
26	Washington Street / Hancock Street	Total	0	323	134	388	470	0	531	248	202	0	0	0	2,296	
		Airport	0	100	30	1	109	0	0	0	20	0	0	0	260	
		Background	0	223	104	387	361	0	531	248	182	0	0	0	2,036	
27	Washington Street / San Diego Avenue	Total	128	708	0	0	702	693	0	0	0	202	225	9	2,667	
		Airport	30	71	0	0	91	0	0	0	0	20	0	1	213	
		Background	98	637	0	0	611	693	0	0	0	182	225	8	2,454	
28	Rosecrans Street / Pacific Highway	Total	209	156	234	100	148	62	65	186	152	348	169	98	1,927	
		Airport	0	3	11	0	4	1	1	2	0	14	2	0	38	
		Background	209	153	223	100	144	61	64	184	152	334	167	98	1,889	
29	Rosecrans Street / Nimitz Boulevard	Total	21	147	117	9	125	10	121	524	23	142	554	35	1,828	
		Airport	0	93	110	0	115	0	0	0	0	136	0	0	454	
		Background	21	54	7	9	10	10	121	524	23	6	554	35	1,374	

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19	Grape Street / I-5 Southbound On-Ramp	nbt	nbr	nbr2					ebt	ebt	ebr				
25	Washington Street / Pacific Highway NB-Ramps	nbl+nbl2	nbt	nbr	sbl	sbr2	sbr	ebt2	ebt	ebt	wbt	wbr2	wbr		

**Table D-69
2025 Intersection Turning Volumes – PM Peak Hour - Proposed Airport Implementation Plan
(Without Parking Structure)**

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	618	0	76	47	737	0	22	876	1,110	3,486
		Airport	0	0	0	204	0	0	0	38	0	0	42	219	503
		Background	0	0	0	414	0	76	47	699	0	22	834	891	2,983
2	North Harbor Drive / McCain St	Total	0	0	0	572	0	297	44	1,084	0	0	1,109	125	3,231
		Airport	0	0	0	105	0	100	9	232	0	0	162	55	663
		Background	0	0	0	467	0	197	35	852	0	0	947	70	2,568
3	North Harbor Drive / Spanish Landing	Total	7	0	25	84	0	15	95	2,001	27	7	1,282	0	3,543
		Airport	0	0	0	84	0	15	95	242	0	0	202	0	638
		Background	7	0	25	0	0	0	0	1,759	27	7	1,080	0	2,905
4	North Harbor Drive / Harbor Island Drive	Total	166	5	348	21	11	81	76	1,890	143	513	1,578	0	4,832
		Airport	14	5	54	21	11	81	76	230	20	58	643	0	1,213
		Background	152	0	294	0	0	0	0	1,660	123	455	935	0	3,619
5	North Harbor Drive / Winship Lane	Total	0	0	0	138	0	258	68	2,192	0	0	2,483	303	5,442
		Airport	0	0	0	138	0	258	68	238	0	0	1,093	303	2,098
		Background	0	0	0	0	0	0	0	1,954	0	0	1,390	0	3,344
6	North Harbor Drive / Rental Car Road	Total	102	0	115	22	0	16	15	3,323	103	118	2,668	14	6,496
		Airport	102	0	115	22	0	16	15	1,369	103	118	1,278	14	3,152
		Background	0	0	0	0	0	0	0	1,954	0	0	1,390	0	3,344
7	Sheraton / Harbor Island Drive	Total	23	442	0	0	598	70	77	2	25	0	0	0	1,237
		Airport	0	73	0	0	89	0	0	0	0	0	0	0	162
		Background	23	369	0	0	509	70	77	2	25	0	0	0	1,075
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	55	68	107	0	0	139	1	370
		Airport	0	0	0	0	0	55	68	21	0	0	18	1	163
		Background	0	0	0	0	0	0	0	86	0	0	121	0	207
9	Sassafras Street / Pacific Highway	Total	83	1,101	448	151	1,159	11	17	230	116	219	149	58	3,742
		Airport	83	107	0	0	97	11	17	230	116	0	149	0	810
		Background	0	994	448	151	1,062	0	0	0	0	219	0	58	2,932
10	Laurel Street / North Harbor Drive	Total	0	0	0	45	0	7	1,263	2,148	0	0	1,974	121	5,558
		Airport	0	0	0	0	0	0	562	943	0	0	877	0	2,382
		Background	0	0	0	45	0	7	701	1,205	0	0	1,097	121	3,176
11	Hawthorn Street / North Harbor Drive	Total	0	657	0	0	2,491	0	0	0	0	192	0	1,435	4,775
		Airport	0	224	0	0	943	0	0	0	0	16	0	653	1,836
		Background	0	433	0	0	1,548	0	0	0	0	176	0	782	2,939
12	Grape Street / North Harbor Drive	Total	0	663	260	1,341	1,224	0	0	0	0	0	0	0	3,488
		Airport	0	224	17	631	328	0	0	0	0	0	0	0	1,200
		Background	0	439	243	710	896	0	0	0	0	0	0	0	2,288
13	Laurel Street / Pacific Highway	Total	160	883	222	170	599	459	355	677	36	54	882	75	4,572
		Airport	0	71	12	9	93	109	112	450	0	6	424	7	1,293
		Background	160	812	210	161	506	350	243	227	36	48	458	68	3,279
14	Hawthorn Street / Pacific Highway	Total	172	865	0	0	804	79	0	0	0	191	1,354	115	3,580
		Airport	122	76	0	0	83	16	0	0	0	0	531	8	836
		Background	50	789	0	0	721	63	0	0	0	191	823	107	2,744
15	Grape Street / Pacific Highway	Total	0	868	574	342	778	0	76	2,129	48	0	0	0	4,815
		Airport	0	181	0	1	83	0	17	583	48	0	0	0	913
		Background	0	687	574	341	695	0	59	1,546	0	0	0	0	3,902
16	Laurel Street / Kettner Boulevard	Total	0	0	0	456	956	858	0	975	74	64	324	0	3,707
		Airport	0	0	0	8	0	322	0	472	0	13	115	0	930
		Background	0	0	0	448	956	536	0	503	74	51	209	0	2,777
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	629	111	0	0	0	238	1,754	0	2,732
		Airport	0	0	0	0	13	0	0	0	0	0	539	0	552
		Background	0	0	0	0	616	111	0	0	0	238	1,215	0	2,180
18	Grape Street / Kettner Boulevard	Total	0	0	0	310	657	0	0	3,627	102	0	0	0	4,696
		Airport	0	0	0	12	1	0	0	572	12	0	0	0	597
		Background	0	0	0	298	656	0	0	3,055	90	0	0	0	4,099
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	190	363	355	0	0	0	24	499	2,115	0	0	0	3,546
		Airport	0	0	0	0	0	0	0	4	579	0	0	0	583
		Background	190	363	355	0	0	0	24	495	1,536	0	0	0	2,963
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	45	70	0	0	0	0	0	0	0	0	1,498	53	1,666
		Airport	0	0	0	0	0	0	0	0	0	0	0	535	535
		Background	45	70	0	0	0	0	0	0	0	0	0	963	53
21	Laurel Street / India Street	Total	132	310	89	0	0	0	718	485	88	0	317	304	2,443
		Airport	87	12	1	0	0	0	346	46	88	0	41	0	621
		Background	45	298	88	0	0	0	372	439	0	0	276	304	1,822
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	400	3,549	536	0	275	133	98	114	0	5,105
		Airport	0	0	0	0	330	52	0	80	80	0	52	0	594
		Background	0	0	0	400	3,219	484	0	195	53	98	62	0	4,511
23	Sassafras Street / India Street	Total	192	1,363	29	0	0	0	359	70	127	0	17	21	2,178
		Airport	75	359	0	0	0	0	114	0	0	0	0	0	548
		Background	117	1,004	29	0	0	0	245	70	127	0	17	21	1,630
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	529	53	12	0	266	65	253	144	0	1,322
		Airport	0	0	0	0	0	1	0	60	22	71	101	0	255
		Background	0	0	0	529	53	11	0	206	43	182	43	0	1,067
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	39	12	146	69	66	8	69	17	760	421	238	67	1,912
		Airport	28	0	80	0	0	0	1	0	59	144	0	0	312
		Background	11	12	66	69	66	8	68	17	701	277	238	67	1,600
26	Washington Street / Hancock Street	Total	0	774	193	415	482	0	833	498	243	0	0	0	3,438
		Airport	0	111	28	1	110	0	0	34	0	0	0	0	284
		Background	0	663	165	414	372	0	833	498	209	0	0	0	3,154
27	Washington Street / San Diego Avenue	Total	239	1,397	0	0	744	633	0	0	0	222	305	19	3,559
		Airport	28	84	0	0	76	0	0	0	0	35	0	1	224
		Background	211	1,313	0	0	668	633	0	0	0	187	305	18	3,335
28	Rosecrans Street / Pacific Highway	Total	368	302	670	122	142	69	120	490	181	285	350	148	3,247
		Airport	0	4	13	0	3	1	1	2	0	12	2	0	38
		Background	368	298	657	122	139	68	119	488	181	273	348	148	3,209
29	Rosecrans Street / Nimitz Boulevard	Total	23	250	144	7	101	7	272	665	27	188	569	46	2,299
		Airport	0	100	119	0	93	0	0	0	0	110	0	0	422
		Background	23	150	25	7	8	7	272	665	27	78	569	46	1,877

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19	Grape Street / I-5 Southbound On-Ramp	nbt	nbr	nbr2	sbl	sbr2	sbr	eb1	ebt	ebr	wbt	wbr2	wbr
25	Washington Street / Pacific Highway NB-Ramps	nbl+nbl2	nbt	nbr	sbl	sbr2	sbr	eb1	ebt	ebr	wbt	wbr2	wbr

**Table D-70
2030 Intersection Turning Volumes – AM Peak Hour - Proposed Airport Implementation Plan
(Without Parking Structure)**

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	834	0	31	16	619	0	11	945	503	2,959
		Airport	0	0	0	340	0	0	0	48	0	0	38	275	701
		Background	0	0	0	494	0	31	16	571	0	11	907	228	2,258
2	North Harbor Drive / McCain St	Total	0	0	0	151	0	179	220	882	0	0	947	488	2,867
		Airport	0	0	0	61	0	145	16	371	0	0	167	74	834
		Background	0	0	0	90	0	34	204	511	0	0	780	414	2,033
3	North Harbor Drive / Spanish Landing	Total	5	0	18	37	0	9	154	962	7	21	1,835	0	3,048
		Airport	0	0	0	37	0	9	154	278	0	0	232	0	710
		Background	5	0	18	0	0	0	0	684	7	21	1,603	0	2,338
4	North Harbor Drive / Harbor Island Drive	Total	47	6	153	19	13	107	115	801	103	264	2,360	0	3,988
		Airport	14	6	40	19	13	107	115	177	24	64	770	0	1,349
		Background	33	0	113	0	0	0	0	624	79	200	1,590	0	2,639
5	North Harbor Drive / Winship Lane	Total	0	0	0	99	0	230	85	888	0	0	3,080	324	4,706
		Airport	0	0	0	99	0	230	85	151	0	0	1,290	324	2,179
		Background	0	0	0	0	0	0	0	737	0	0	1,790	0	2,527
6	North Harbor Drive / Rental Car Road	Total	81	0	60	10	0	14	17	2,060	105	157	3,309	18	5,831
		Airport	81	0	60	10	0	14	17	1,323	105	157	1,519	18	3,304
		Background	0	0	0	0	0	0	0	737	0	0	1,790	0	2,527
7	Sheraton / Harbor Island Drive	Total	13	123	0	0	280	99	85	6	27	0	0	0	633
		Airport	0	61	0	0	101	0	0	0	0	0	0	0	162
		Background	13	62	0	0	179	99	85	6	27	0	0	0	471
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	96	0	0	71	1	288
		Airport	0	0	0	0	0	38	82	19	0	0	23	1	163
		Background	0	0	0	0	0	0	0	77	0	0	48	0	125
9	Sassafras Street / Pacific Highway	Total	95	496	66	39	511	13	7	92	57	135	184	35	1,730
		Airport	95	94	0	0	122	13	7	92	57	0	184	0	664
		Background	0	402	66	39	389	0	0	0	0	135	0	35	1,066
10	Laurel Street / North Harbor Drive	Total	0	0	0	17	0	3	498	1,384	0	0	2,393	48	4,343
		Airport	0	0	0	0	0	0	477	915	0	0	1,130	0	2,522
		Background	0	0	0	17	0	3	21	469	0	0	1,263	48	1,821
11	Hawthorn Street / North Harbor Drive	Total	0	364	0	0	1,378	0	0	0	0	133	0	2,842	4,717
		Airport	0	288	0	0	915	0	0	0	0	17	0	842	2,062
		Background	0	76	0	0	463	0	0	0	0	116	0	2,000	2,655
12	Grape Street / North Harbor Drive	Total	0	297	111	1,023	604	0	0	0	0	0	0	0	2,035
		Airport	0	288	15	611	322	0	0	0	0	0	0	0	1,236
		Background	0	9	96	412	282	0	0	0	0	0	0	0	799
13	Laurel Street / Pacific Highway	Total	42	409	125	72	256	344	114	529	1	83	998	102	3,075
		Airport	0	76	21	6	53	120	105	372	0	4	444	8	1,209
		Background	42	333	104	66	203	224	9	157	1	79	554	94	1,866
14	Hawthorn Street / Pacific Highway	Total	157	274	0	0	206	74	0	0	0	376	2,664	137	3,888
		Airport	157	84	0	0	39	17	0	0	0	0	685	14	996
		Background	0	190	0	0	167	57	0	0	0	376	1,979	123	2,892
15	Grape Street / Pacific Highway	Total	0	699	184	177	991	0	99	1,131	50	0	0	0	3,331
		Airport	0	226	0	0	39	0	15	561	50	0	0	0	891
		Background	0	473	184	177	952	0	84	570	0	0	0	0	2,440
16	Laurel Street / Kettner Boulevard	Total	0	0	0	354	469	697	0	931	75	65	377	0	2,968
		Airport	0	0	0	14	0	341	0	399	0	7	114	0	875
		Background	0	0	0	340	469	356	0	532	75	58	263	0	2,093
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	253	131	0	0	0	216	3,469	0	4,069
		Airport	0	0	0	0	7	0	0	0	0	0	698	0	705
		Background	0	0	0	0	246	131	0	0	0	216	2,771	0	3,364
18	Grape Street / Kettner Boulevard	Total	0	0	0	138	673	0	0	1,691	110	0	0	0	2,612
		Airport	0	0	0	6	1	0	0	555	7	0	0	0	569
		Background	0	0	0	132	672	0	0	1,136	103	0	0	0	2,043
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	206	272	233	0	0	0	44	457	1,266	0	0	0	2,478
		Airport	0	0	0	0	0	0	0	4	557	0	0	0	561
		Background	206	272	233	0	0	0	44	453	709	0	0	0	1,917
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	62	59	0	0	0	0	0	0	0	0	3,103	95	3,319
		Airport	0	0	0	0	0	0	0	0	0	0	0	694	694
		Background	62	59	0	0	0	0	0	0	0	0	2,409	95	2,625
21	Laurel Street / India Street	Total	107	98	16	0	0	0	616	517	95	1	341	310	2,101
		Airport	70	7	0	0	0	0	276	41	95	1	52	0	542
		Background	37	91	16	0	0	0	340	476	0	0	289	310	1,559
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	242	2,398	699	0	53	49	114	107	0	3,662
		Airport	0	0	0	0	355	60	0	29	30	0	61	0	535
		Background	0	0	0	242	2,043	639	0	24	19	114	46	0	3,127
23	Sassafras Street / India Street	Total	249	974	13	0	0	0	117	23	48	0	43	27	1,494
		Airport	92	283	0	0	0	0	45	0	0	0	0	0	420
		Background	157	691	13	0	0	0	72	23	48	0	43	27	1,074
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	511	90	147	0	115	57	173	197	0	1,290
		Airport	0	0	0	0	0	1	0	76	29	91	69	0	266
		Background	0	0	0	511	90	146	0	39	28	82	128	0	1,024
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	19	0	70	24	6	17	23	0	277	317	111	36	900
		Airport	19	0	70	0	0	0	1	0	75	141	0	0	306
		Background	0	0	0	24	6	17	22	0	202	176	111	36	594
26	Washington Street / Hancock Street	Total	0	260	106	312	407	0	208	97	95	0	0	0	1,485
		Airport	0	110	36	2	118	0	0	0	24	0	0	0	290
		Background	0	150	70	310	289	0	208	97	71	0	0	0	1,195
27	Washington Street / San Diego Avenue	Total	113	584	0	0	681	665	0	0	0	277	313	12	2,645
		Airport	35	74	0	0	95	0	0	0	0	24	0	1	229
		Background	78	510	0	0	586	665	0	0	0	253	313	11	2,416
28	Rosecrans Street / Pacific Highway	Total	207	155	230	144	209	88	61	176	143	312	154	88	1,967
		Airport	0	3	10	0	3	1	1	3	0	12	4	0	37
		Background	207	152	220	144	206	87	60	173	143	300	150	88	1,930
29	Rosecrans Street / Nimitz Boulevard	Total	20	157	178	39	169	41	107	461	20	216	514	32	1,954
		Airport	0	104	171	0	129	0	0	0	0	211	0	0	615
		Background	20	53	7	39	40	41	107	461	20	5	514	32	1,339

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19	Grape Street / I-5 Southbound On-Ramp	nbt	nbr	nbr2	ebt	ebt	ebr						
25	Washington Street / Pacific Highway NB-Ramps	nbl+nbl2	nbt	nbr	sbl	sbr2	sbr	ebt2	ebt	ebt	wbt	wbr2	wbr

**Table D-71
2030 Intersection Turning Volumes – PM Peak Hour - Proposed Airport Implementation Plan
(Without Parking Structure)**

Int #			NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	687	0	75	52	807	0	23	934	1,240	3,818	
		Airport	0	0	0	276	0	0	0	40	0	0	0	45	296	657
		Background	0	0	0	411	0	75	52	767	0	23	889	944	1,316	3,161
2	North Harbor Drive / McCain St	Total	0	0	0	582	0	339	48	1,265	0	0	1,176	125	3,535	
		Airport	0	0	0	101	0	136	12	304	0	0	205	53	811	
		Background	0	0	0	481	0	203	36	961	0	0	971	72	2,724	
3	North Harbor Drive / Spanish Landing	Total	7	0	25	80	0	19	130	2,170	28	7	1,347	0	3,813	
		Airport	0	0	0	80	0	19	130	276	0	0	239	0	744	
		Background	7	0	25	0	0	0	0	1,894	28	7	1,108	0	3,069	
4	North Harbor Drive / Harbor Island Drive	Total	168	5	347	21	12	102	96	2,022	157	525	1,641	0	5,096	
		Airport	16	5	53	21	12	102	96	237	22	56	677	0	1,297	
		Background	152	0	294	0	0	0	0	1,785	135	469	964	0	3,799	
5	North Harbor Drive / Winship Lane	Total	0	0	0	135	0	276	74	2,316	0	0	2,537	311	5,649	
		Airport	0	0	0	135	0	276	74	237	0	0	1,104	311	2,137	
		Background	0	0	0	0	0	0	0	2,079	0	0	1,433	0	3,512	
6	North Harbor Drive / Rental Car Road	Total	114	0	115	21	0	17	15	3,450	114	119	2,718	14	6,697	
		Airport	114	0	115	21	0	17	15	1,371	114	119	1,285	14	3,185	
		Background	0	0	0	0	0	0	0	2,079	0	0	1,433	0	3,512	
7	Sheraton / Harbor Island Drive	Total	23	443	0	0	624	70	77	2	25	0	0	0	1,264	
		Airport	0	74	0	0	90	0	0	0	0	0	0	0	164	
		Background	23	369	0	0	534	70	77	2	25	0	0	0	1,100	
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	55	68	105	0	0	137	1	366	
		Airport	0	0	0	0	0	55	68	22	0	0	19	1	165	
		Background	0	0	0	0	0	0	0	83	0	0	118	0	201	
9	Sassafra Street / Pacific Highway	Total	87	842	328	105	841	11	17	239	120	110	156	29	2,885	
		Airport	87	114	0	0	102	11	17	239	120	0	156	0	846	
		Background	0	728	328	105	739	0	0	0	0	110	0	29	2,039	
10	Laurel Street / North Harbor Drive	Total	0	0	0	49	0	7	1,250	2,236	0	0	2,059	126	5,727	
		Airport	0	0	0	0	0	0	523	985	0	0	918	0	2,426	
		Background	0	0	0	49	0	7	727	1,251	0	0	1,141	126	3,301	
11	Hawthorn Street / North Harbor Drive	Total	0	669	0	0	2,603	0	0	0	0	218	0	1,568	5,058	
		Airport	0	234	0	0	985	0	0	0	0	19	0	684	1,922	
		Background	0	435	0	0	1,618	0	0	0	0	199	0	884	3,136	
12	Grape Street / North Harbor Drive	Total	0	658	256	1,371	1,248	0	0	0	0	0	0	0	3,533	
		Airport	0	234	21	657	347	0	0	0	0	0	0	0	1,259	
		Background	0	424	235	714	901	0	0	0	0	0	0	0	2,274	
13	Laurel Street / Pacific Highway	Total	135	759	191	123	454	359	381	657	40	94	1,206	130	4,529	
		Airport	0	78	15	10	99	113	115	408	0	8	386	8	1,240	
		Background	135	681	176	113	355	246	266	249	40	86	820	122	3,289	
14	Hawthorn Street / Pacific Highway	Total	170	747	0	0	695	72	0	0	0	214	1,477	129	3,504	
		Airport	128	83	0	0	88	19	0	0	0	0	556	10	884	
		Background	42	664	0	0	607	53	0	0	0	214	921	119	2,620	
15	Grape Street / Pacific Highway	Total	0	804	512	290	677	0	84	2,264	49	0	0	0	4,680	
		Airport	0	191	0	1	87	0	21	608	49	0	0	0	957	
		Background	0	613	512	289	590	0	63	1,656	0	0	0	0	3,723	
16	Laurel Street / Kettner Boulevard	Total	0	0	0	421	877	769	0	1,334	133	98	460	0	4,092	
		Airport	0	0	0	10	0	277	0	433	0	16	125	0	861	
		Background	0	0	0	411	877	492	0	901	133	82	335	0	3,231	
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	656	115	0	0	0	266	1,925	0	2,962	
		Airport	0	0	0	0	16	0	0	0	0	0	566	0	582	
		Background	0	0	0	0	640	115	0	0	0	266	1,359	0	2,380	
18	Grape Street / Kettner Boulevard	Total	0	0	0	336	711	0	0	3,810	106	0	0	0	4,963	
		Airport	0	0	0	14	2	0	0	597	12	0	0	0	625	
		Background	0	0	0	322	709	0	0	3,213	94	0	0	0	4,338	
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	311	593	580	0	0	0	27	564	2,345	0	0	0	4,420	
		Airport	0	0	0	0	0	0	0	4	607	0	0	0	611	
		Background	311	593	580	0	0	0	27	560	1,738	0	0	0	3,809	
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	50	78	0	0	0	0	0	0	0	0	1,900	74	2,102	
		Airport	0	0	0	0	0	0	0	0	0	0	0	562	562	
		Background	50	78	0	0	0	0	0	0	0	0	1,338	74	1,540	
21	Laurel Street / India Street	Total	134	258	73	0	0	0	893	749	97	1	430	425	3,060	
		Airport	97	15	1	0	0	0	297	48	97	1	43	0	599	
		Background	37	243	72	0	0	0	596	701	0	0	387	425	2,461	
22	Sassafra Street / Kettner Boulevard	Total	0	0	0	399	3,503	539	0	200	117	80	106	0	4,944	
		Airport	0	0	0	0	287	55	0	84	85	0	55	0	566	
		Background	0	0	0	399	3,216	484	0	116	32	80	51	0	4,378	
23	Sassafra Street / India Street	Total	233	1,641	39	0	0	0	320	57	104	0	18	22	2,434	
		Airport	78	312	0	0	0	0	119	0	0	0	0	0	509	
		Background	155	1,329	39	0	0	0	201	57	104	0	18	22	1,925	
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	1,347	134	28	0	286	72	220	155	0	2,242	
		Airport	0	0	0	0	0	1	0	70	27	74	121	0	293	
		Background	0	0	0	1,347	134	27	0	216	45	146	34	0	1,949	
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	33	0	84	52	51	6	56	14	635	348	160	45	1,484	
		Airport	33	0	84	0	0	0	1	0	70	162	0	0	350	
		Background	0	0	0	52	51	6	55	14	565	186	160	45	1,134	
26	Washington Street / Hancock Street	Total	0	566	144	333	420	0	326	194	122	0	0	0	2,105	
		Airport	0	120	33	1	121	0	0	0	41	0	0	0	316	
		Background	0	446	111	332	299	0	326	194	81	0	0	0	1,789	
27	Washington Street / San Diego Avenue	Total	202	1,141	0	0	721	607	0	0	0	300	423	28	3,422	
		Airport	33	88	0	0	80	0	0	0	0	41	0	2	244	
		Background	169	1,053	0	0	641	607	0	0	0	259	423	26	3,178	
28	Rosecrans Street / Pacific Highway	Total	364	297	661	174	201	98	113	464	171	257	315	133	3,248	
		Airport	0	3	12	0	3	1	1	4	0	11	3	0	38	
		Background	364	294	649	174	198	97	112	460	171	246	312	133	3,210	
29	Rosecrans Street / Nimitz Boulevard	Total	23	258	208	31	140	31	239	586	24	243	528	43	2,354	
		Airport	0	112	183	0	105	0	0	0	0	171	0	0	571	
		Background	23	146	25	31	35	31	239	586	24	72	528	43	1,783	

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

- 19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
- 25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

Table D-72

2010-2030 Peak Hour Intersection Operations – Implementation Plan (Without Structure)

Intersection Number	Intersection	Peak Hour	Year 2010		Year 2015		Year 2020		Year 2025		Year 2030	
			Delay (Sec.)	LOS	Delay (Sec.)	LOS	Delay (SEC)	LOS	Delay (SEC)	LOS	Delay (Sec.)	LOS
1	North Harbor Drive/ Nimitz Boulevard	AM	20.2	C	20.3	C	20.9	C	21.1	C	21.8	C
		PM	20.7	C	20.3	C	20.9	C	21.1	C	21.7	C
2	North Harbor Drive/ McCain Road	AM	8.4	A	9.2	A	9.5	A	9.9	A	10.7	B
		PM	9.9	A	10.8	B	11.1	B	11.3	B	11.9	B
3	North Harbor Drive/ Spanish Landing	AM	7.8	A	8.1	A	8.2	A	8.4	A	9.4	A
		PM	7.2	A	7.4	A	7.6	A	7.6	A	8.0	A
4	North Harbor Drive/ Harbor Island Drive	AM	19.7	B	19.5	B	19.6	B	19.5	B	20.3	C
		PM	30.5	C	31.0	C	32.3	C	32.9	C	34.6	C
5	North Harbor Drive/ Winship Lane	AM	9.5	A	10.0	A	10.4	B	10.5	B	11.1	B
		PM	9.2	A	9.7	A	10.0	A	10.3	B	10.6	B
6	North Harbor Drive/ Rental Car Road	AM	6.7	A	7.5	A	8.2	A	9.0	A	9.5	A
		PM	7.6	A	8.5	A	9.2	A	9.7	A	10.5	B
7	Sheraton Harbor Island Drive	AM	12.4	B	12.3	B	12.0	B	11.7	B	11.6	B
		PM	7.6	A	7.4	A	7.2	A	7.0	A	6.9	A
8	Employee Lot Harbor Island Drive	AM	9.8	A	9.9	A	9.9	A	9.9	A	9.9	A
		PM	10.1	B	10.1	B	10.2	B	10.2	B	10.2	B
9	Sassafras Street/ Pacific Highway	AM	15.3	B	15.5	B	15.2	B	15.7	B	14.1	B
		PM	14.8	B	17.4	B	17.2	B	19.8	B	14.8	B
10	Laurel Street/ North Harbor Drive	AM	9.1	A	10.0	A	10.7	B	11.4	B	10.9	B
		PM	15.4	B	16.2	B	18.6	B	19.5	B	20.1	C
11	Hawthorn Street/ North Harbor Drive	AM	31.5	C	48.4	D	111.6	F	133.4	F	179.9	F
		PM	23.1	C	25.0	C	33.4	C	41.3	D	60.5	E
12	Grape Street/ North Harbor Drive	AM	8.2	A	8.4	A	8.3	A	8.3	A	8.4	A
		PM	10.9	B	11.0	B	10.7	B	11.0	B	11.0	B
13	Laurel Street/ Pacific Highway	AM	32.1	C	33.7	C	33.9	C	34.5	C	34.0	C
		PM	48.9	D	62.2	E	59.3	E	53.3	D	61.7	E
14	Hawthorn Street/ Pacific Highway	AM	12.6	B	14.3	B	15.9	B	18.0	B	19.6	B
		PM	21.0	C	22.0	C	22.9	C	23.9	C	23.5	C
15	Grape Street/ Pacific Highway	AM	18.5	B	19.0	B	19.9	B	20.3	C	20.3	C
		PM	26.1	C	32.7	C	53.0	D	68.9	E	57.6	E
16	Laurel Street/ Kettner Boulevard	AM	18.8	B	19.5	B	19.6	B	19.9	B	22.0	C
		PM	21.3	C	22.8	C	25.6	C	24.7	C	32.5	C
17	Hawthorn Street/ Kettner Boulevard	AM	5.5	A	6.2	A	10.3	B	9.6	A	13.3	B
		PM	10.9	B	11.2	B	15.5	B	13.8	B	14.2	B
18	Grape Street/ Kettner Boulevard	AM	12.4	B	13.1	B	14.8	B	14.2	B	14.8	B
		PM	16.7	B	22.6	C	55.1	E	54.4	D	79.0	E
19	Grape Street/ I-5 Southbound On-Ramp	AM	11.1	B	10.8	B	11.5	B	11.6	B	15.3	B
		PM	28.3	C	34.6	C	32.6	C	38.7	D	124.0	F
20	Hawthorn Street/ I-5 Northbound Off-Ramp	AM	11.0	B	10.6	B	10.8	B	11.0	B	15.8	B
		PM	11.8	B	12.0	B	12.1	B	11.5	B	11.1	B
21	Laurel Street/ India Street	AM	18.4	B	19.3	B	22.5	C	22.8	C	23.2	C
		PM	21.3	C	22.9	C	22.0	C	22.4	C	32.5	C
22	Sassafras Street/ Kettner Boulevard	AM	8.5	A	9.5	A	19.3	B	12.0	B	9.8	A
		PM	11.5	B	13.1	B	123.1	F	84.8	F	66.8	E
23	Sassafras Street/ India Street	AM	8.2	A	8.3	A	8.8	A	9.1	A	8.1	A
		PM	13.7	B	17.8	B	15.6	B	16.1	B	17.6	B
24	Washington Street/ Pacific Highway SB-Ramps	AM	12.6	B	12.7	B	13.0	B	12.8	B	12.5	B
		PM	14.9	B	15.1	B	15.3	B	15.5	B	17.6	B
25	Washington Street/ Pacific Highway NB-Ramps	AM	33.5	C	46.7	D	56.3	E	60.5	E	31.5	C
		PM	68.5	E	100.5	F	130.5	F	156.8	F	79.8	E
26	Washington Street/ Hancock Street	AM	27.8	C	28.1	C	28.7	C	28.8	C	25.9	C
		PM	30.2	C	30.8	C	32.4	C	32.7	C	28.0	C
27	Washington Street/ San Diego Avenue	AM	12.5	B	13.1	B	12.7	B	12.5	B	14.9	B
		PM	13.6	B	14.1	B	14.1	B	14.0	B	16.8	B
28	Rosecrans Street/ Pacific Highway	AM	36.1	D	36.4	D	36.1	D	36.2	D	37.3	D
		PM	39.1	D	44.8	D	41.3	D	41.9	D	43.0	D
29	Rosecrans Street/ Nimitz Boulevard	AM	21.8	C	21.7	C	24.3	C	23.7	C	27.0	C
		PM	25.0	C	25.2	C	26.7	C	26.5	C	29.1	C

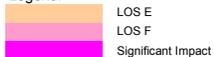
Source: HNTB, 2007

LOS = level of service

Table D-73
 2010-2030 Intersection Impacts – Proposed Airport Implementation Plan (Without Parking Structure)

Intersection Number	Intersection	Peak Hour	Year 2010			Year 2015			Year 2020			Year 2025			Year 2030		
			No Proj	No Project	Diff.												
			Delay (Sec.)														
1	North Harbor Drive/ Nimitz Boulevard	AM	20.2	20.2	0.0	20.4	20.3	-0.1	20.9	20.9	0.0	21.1	21.1	0.0	21.7	21.8	0.1
		PM	20.7	20.7	0.0	20.4	20.3	-0.1	20.9	20.9	0.0	21.1	21.1	0.0	21.6	21.7	0.1
2	North Harbor Drive/ McCain Road	AM	6.7	8.4	-1.7	7.2	9.2	2.0	7.4	9.5	2.1	7.6	9.9	2.3	7.6	10.7	3.1
		PM	9.1	9.9	-0.8	9.9	10.8	0.9	10.2	11.1	0.9	10.3	11.3	1.0	10.3	11.9	1.6
3	North Harbor Drive/ Spanish Landing	AM	10.1	7.8	2.3	10.9	8.1	-2.8	11.2	8.2	-3.0	11.7	8.4	-3.3	13.1	9.4	-3.7
		PM	8.7	7.2	1.5	9.3	7.4	-1.9	9.8	7.6	-2.2	10.0	7.6	-2.4	11.2	8.0	-3.2
4	North Harbor Drive/ Harbor Island Drive	AM	20.4	19.7	0.7	20.4	19.5	-0.9	20.9	19.6	-1.3	20.8	19.5	-1.3	21.9	20.3	-1.6
		PM	30.8	30.5	0.3	31.4	31.0	-0.4	32.8	32.3	-0.5	33.3	32.9	-0.4	34.9	34.6	-0.3
5	North Harbor Drive/ Winship Lane	AM	9.9	9.5	0.4	10.6	10.0	-0.6	10.8	10.4	-0.4	10.7	10.5	-0.2	11.1	11.1	0.0
		PM	9.6	9.2	0.4	10.3	9.7	-0.6	10.4	10.0	-0.4	10.6	10.3	-0.3	10.7	10.6	-0.1
6	North Harbor Drive/ Rental Car Road	AM	6.7	6.7	0.0	7.5	7.5	0.0	8.2	8.2	0.0	8.8	9.0	0.2	9.0	9.5	0.5
		PM	7.6	7.6	0.0	8.5	8.5	0.0	9.2	9.2	0.0	9.6	9.7	0.1	10.0	10.5	0.5
7	Sheraton Harbor Island Drive	AM	12.4	12.4	0.0	12.3	12.3	0.0	12.0	12.0	0.0	11.8	11.7	-0.1	11.6	11.6	0.0
		PM	7.6	7.6	0.0	7.4	7.4	0.0	7.2	7.2	0.0	7.0	7.0	0.0	6.9	6.9	0.0
8	Employee Lot Harbor Island Drive	AM	9.8	9.8	0.0	9.9	9.9	0.0	9.9	9.9	0.0	9.9	9.9	0.0	9.9	9.9	0.0
		PM	10.1	10.1	0.0	10.1	10.1	0.0	10.2	10.2	0.0	10.2	10.2	0.0	10.1	10.2	0.1
9	Sassafras Street/ Pacific Highway	AM	15.3	15.3	0.0	15.4	15.5	0.1	15.1	15.2	0.1	15.6	15.7	0.1	14.0	14.1	0.1
		PM	14.5	14.8	-0.3	16.6	17.4	0.8	16.5	17.2	0.7	18.5	19.8	1.3	14.1	14.8	0.7
10	Laurel Street/ North Harbor Drive	AM	9.2	9.1	0.1	10.1	10.0	-0.1	10.8	10.7	-0.1	11.3	11.4	0.1	10.5	10.9	0.4
		PM	15.5	15.4	0.1	16.3	16.2	-0.1	18.7	18.6	-0.1	19.3	19.5	0.2	19.4	20.1	0.7
11	Hawthorn Street/ North Harbor Drive	AM	31.8	31.5	0.3	49.6	48.4	-1.2	112.8	111.6	-1.2	131.7	133.4	1.7	173.0	179.9	6.9
		PM	23.2	23.1	0.1	25.2	25.0	-0.2	33.7	33.4	-0.3	40.7	41.3	0.6	55.9	60.5	4.6
12	Grape Street/ North Harbor Drive	AM	8.2	8.2	0.0	8.4	8.4	0.0	8.3	8.3	0.0	8.4	8.3	-0.1	8.3	8.4	0.1
		PM	10.9	10.9	0.0	11.0	11.0	0.0	10.7	10.7	0.0	11.0	11.0	0.0	10.9	11.0	0.1
13	Laurel Street/ Pacific Highway	AM	32.1	32.1	0.0	33.7	33.7	0.0	33.9	33.9	0.0	34.4	34.5	0.1	33.7	34.0	0.3
		PM	49.0	48.9	0.1	62.4	62.2	-0.2	59.5	59.3	-0.2	53.1	53.3	0.2	60.4	61.7	1.3
14	Hawthorn Street/ Pacific Highway	AM	12.6	12.6	0.0	14.3	14.3	0.0	15.8	15.9	0.1	17.7	18.0	0.3	18.9	19.6	0.7
		PM	21.0	21.0	0.0	22.0	22.0	0.0	22.9	22.9	0.0	23.8	23.9	0.1	23.3	23.5	0.2
15	Grape Street/ Pacific Highway	AM	18.5	18.5	0.0	19.0	19.0	0.0	19.9	19.9	0.0	20.3	20.3	0.0	20.2	20.3	0.1
		PM	26.2	26.1	0.1	32.8	32.7	-0.1	53.1	53.0	-0.1	68.6	68.9	0.3	56.5	57.6	1.1
16	Laurel Street/ Kettner Boulevard	AM	18.9	18.8	0.1	19.6	19.5	-0.1	19.8	19.6	-0.2	19.9	19.9	0.0	21.9	22.0	0.1
		PM	21.4	21.3	0.1	22.9	22.8	-0.1	25.9	25.6	-0.3	24.8	24.7	-0.1	31.9	32.5	0.6
17	Hawthorn Street/ Kettner Boulevard	AM	5.5	5.5	0.0	6.2	6.2	0.0	10.3	10.3	0.0	9.6	9.6	0.0	13.0	13.3	0.3
		PM	10.9	10.9	0.0	11.3	11.2	-0.1	15.6	15.5	-0.1	13.9	13.8	-0.1	14.2	14.2	0.0
18	Grape Street/ Kettner Boulevard	AM	12.4	12.4	0.0	13.1	13.1	0.0	14.8	14.8	0.0	14.2	14.2	0.0	14.8	14.8	0.0
		PM	16.7	16.7	0.0	22.8	22.6	-0.2	55.3	55.1	-0.2	54.0	54.4	0.4	77.1	79.0	1.9
19	Grape Street/ I-5 Southbound On-Ramp	AM	11.1	11.1	0.0	8.9	10.8	1.9	11.6	11.5	-0.1	11.5	11.6	0.1	15.1	15.3	0.2
		PM	28.6	28.3	0.3	35.2	34.6	-0.6	32.9	32.6	-0.3	38.6	38.7	0.1	87.1	124.0	36.9
20	Hawthorn Street/ I-5 Northbound Off-Ramp	AM	11.1	11.0	0.1	10.6	10.6	0.0	10.8	10.8	0.0	19.6	11.0	-8.6	15.3	15.8	0.5
		PM	11.8	11.8	0.0	12.0	12.0	0.0	12.1	12.1	0.0	16.4	11.5	-4.9	11.0	11.1	0.1
21	Laurel Street/ India Street	AM	18.5	18.4	0.1	19.4	19.3	-0.1	22.6	22.5	-0.1	22.9	22.8	-0.1	23.0	23.2	0.2
		PM	21.4	21.3	0.1	22.9	22.9	0.0	22.1	22.0	-0.1	26.8	22.4	-4.4	32.4	32.5	0.1
22	Sassafras Street/ Kettner Boulevard	AM	8.3	8.5	-0.2	9.2	9.5	0.3	19.4	19.3	-0.1	11.9	12.0	0.1	9.6	9.8	0.2
		PM	11.1	11.5	-0.4	12.5	13.1	0.6	121.5	123.1	1.6	82.1	84.8	2.7	62.5	66.8	4.3
23	Sassafras Street/ India Street	AM	8.1	8.2	-0.1	8.2	8.3	0.1	8.7	8.8	0.1	9.0	9.1	0.1	8.0	8.1	0.1
		PM	13.5	13.7	-0.2	17.3	17.8	0.5	15.3	15.6	0.3	15.7	16.1	0.4	16.6	17.6	1.0
24	Washington Street/ Pacific Highway SB-Ramps	AM	12.6	12.6	0.0	12.7	12.7	0.0	13.0	13.0	0.0	12.8	12.8	0.0	12.4	12.5	0.1
		PM	14.9	14.9	0.0	15.1	15.1	0.0	15.3	15.3	0.0	15.5	15.5	0.0	17.4	17.6	0.2
25	Washington Street/ Pacific Highway NB-Ramps	AM	33.5	33.5	0.0	46.7	46.7	0.0	56.0	56.3	0.3	59.8	60.5	0.7	31.1	31.5	0.4
		PM	67.7	68.5	-0.8	107.8	100.5	-7.3	130.2	130.5	0.3	156.4	156.8	0.4	79.3	79.8	0.5
26	Washington Street/ Hancock Street	AM	27.8	27.8	0.0	28.1	28.1	0.0	28.7	28.7	0.0	28.8	28.8	0.0	25.9	25.9	0.0
		PM	30.2	30.2	0.0	30.8	30.8	0.0	32.4	32.4	0.0	32.7	32.7	0.0	28.0	28.0	0.0
27	Washington Street/ San Diego Avenue	AM	12.5	12.5	0.0	13.1	13.1	0.0	12.7	12.7	0.0	12.5	12.5	0.0	15.0	14.9	-0.1
		PM	13.6	13.6	0.0	14.1	14.1	0.0	14.1	14.1	0.0	14.0	14.0	0.0	16.8	16.8	0.0
28	Rosecrans Street/ Pacific Highway	AM	36.1	36.1	0.0	36.4	36.4	0.0	36.1	36.1	0.0	36.2	36.2	0.0	37.3	37.3	0.0
		PM	39.1	39.1	0.0	44.8	44.8	0.0	41.3	41.3	0.0	41.9	41.9	0.0	42.9	43.0	0.1
29	Rosecrans Street/ Nimitz Boulevard	AM	21.8	21.8	0.0	21.8	21.7	-0.1	24.3	24.3	0.0	23.6	23.7	0.1	26.8	27.0	0.2
		PM	25.0	25.0	0.0	25.3	25.2	-0.1	26.7	26.7	0.0	26.5	26.5	0.0	28.9	29.1	0.2

Source: HNTB, 2007

Legend:

 LOS E
 LOS F
 Significant Impact

D.5.2.3.3 Freeway Segments

The traffic forecasts on freeway segments for the Implementation Plan (Without Parking Structure) would be the same as for the Implementation Plan (With Parking Structure). As discussed in Section [D.5.1.4.2 D.5.1.3.3](#), the Implementation Plan would not result in any significant freeway impacts.

D.5.2.3.4 Freeway Ramps

The traffic forecasts on freeway ramps for the Implementation Plan (Without Parking Structure) would be the same as for the Implementation Plan (With Parking Structure). As discussed in Section [D.5.1.4.3 D.5.1.3.4](#), the Implementation Plan would not result in any significant freeway ramp impacts.

D.5.2.3.5 Railroad Crossings

Forecasts of future train operations were obtained from the San Diego 2030 RTP (Mobility 2030), the 2007 LOSSAN Strategic Business Plan, and the 2000 [San Diego International Airport Master Plan Preferred Concept Alternatives Roadway Analysis](#)¹⁶ report. Mobility 2030 projects that the headways for the Coaster Service will decrease from 36 minutes to 20 minutes during peak hours and from 120 minutes to 60 minutes during off-peak hours by 2030. That translates to a 44% increase in frequency during peak hours by 2030. The LOSSAN Strategic Business Plan projects that Coaster service would increase from existing 22 trains per day to 54 trains per day in 2025, consistent with the above. The LOSSAN Strategic Business Plan also projects that Amtrak Pacific Surfliner service between Los Angeles and San Diego would increase from existing 22 trips per day in 2005/2006 to 26 trains in 2015 and 32 trains in 2025. Mobility 2030 also projects that headways for the trolley Blue Line service that passes through the study area would decrease from 15 minutes to 7.5 minutes during off-peak hours by 2030. Estimated daily train operations in 2030 include 36 Amtrak trips, 78 Coaster trips, and 384 Trolley trips. For the analysis, freight train operations were estimated to increase to four trains per day.

Table D-74 summarizes the railroad crossing delay analysis for each analysis year under the Implementation Plan (without parking structure). As shown, delays at all railroad crossings were estimated to be under the VHD threshold for each street segment in 2010, 2015 and 2030. Washington Street railroad crossings exceeded the threshold of VHD in 2020 and 2025. However, due to shifts in regional background traffic described in Section [D.2.1.1 Airport Trip Generation and Background Traffic](#) total traffic on Washington Street in 2030 decreased, causing the VHD to decrease to a level of insignificance.

¹⁶ Linscott, Law & Greenspan Engineers March 3, 2000 [San Diego International Airport Master Plan Preferred Concept Alternatives Roadway Analysis](#).

Table D-74

**2010-2030 Railroad Crossing Operations – Proposed Airport Implementation Plan
(Without Parking Structure)**

Year 2010					
Crossing	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	20,400	4.76	64	No
Sassafras Street	75	14,100	3.44	23	No
Palm Street	75	900	3.44	0	No
Laurel Street	300	25,200	0.77	1	No
Hawthorn Street	150	18,500	0.77	10	No
Grape Street	300	28,900	0.77	18	No

Year 2015					
Crossing	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	23,300	8.53	134	No
Sassafras Street	150	16,600	6.13	49	No
Palm Street	75	900	6.13	0	No
Laurel Street	300	28,900	0.80	1	No
Hawthorn Street	150	20,700	0.80	12	No
Grape Street	300	31,500	0.80	22	No

Year 2020					
Crossing	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	24,500	8.94	166	Yes
Sassafras Street	150	16,900	6.46	60	No
Palm Street	75	300	6.46	0	No
Laurel Street	300	30,300	1.13	1	No
Hawthorn Street	150	23,400	1.13	24	No
Grape Street	300	34,300	1.13	43	No

Year 2025					
Crossing	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	24,900	9.41	180	Yes
Sassafras Street	150	18,400	6.79	71	No
Palm Street	75	100	6.79	0	No
Laurel Street	300	31,800	1.46	0	No
Hawthorn Street	150	24,700	1.46	31	No
Grape Street	300	35,500	1.46	59	No

Year 2030					
Crossing	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	19,100	9.95	137	No
Sassafras Street	75	14,600	7.18	56	No
Palm Street	75	100	7.18	0	No
Laurel Street	300	34,800	1.85	0	No
Hawthorn Street	300	26,500	1.85	44	No
Grape Street	300	37,200	1.85	81	No

Source: HNTB, 2007

VHD = vehicle-hours of delay
ADT = average daily traffic

D.5.2.3.6 Transit

Under the Implementation Plan (Without Parking Structure) no existing or planned transit routes would be modified. Therefore, no significant impact would occur to transit operations and no mitigation would be required.

D.5.2.3.7 Parking

The Implementation Plan (Without Parking Structure) would not remove any parking lots designated for public use. Passenger terminals also are not located close to commercial or residential areas. In addition, the Implementation Plan (Without Parking Structure) would provide 500 additional airport public parking spaces at SAN Park Pacific Highway and Terminal 2 roadway/curbside construction would eliminate 130 spaces at SAN Park NTC (as previously discussed in Section [D.5.1.2](#) [D.5.1.1](#)) for a net parking increase of 370 spaces compared to the No Project Alternative. However, demand for terminal area spaces (8,400 spaces in 2015 and 10,500 spaces in 2030, as documented in the AMP facility requirements) would continue to exceed the supply of 3,955 spaces (4,085 less 130 SAN Park NTC spaces), resulting in a deficit of approximately 4,445 spaces in 2015 and 6,545 in 2030.

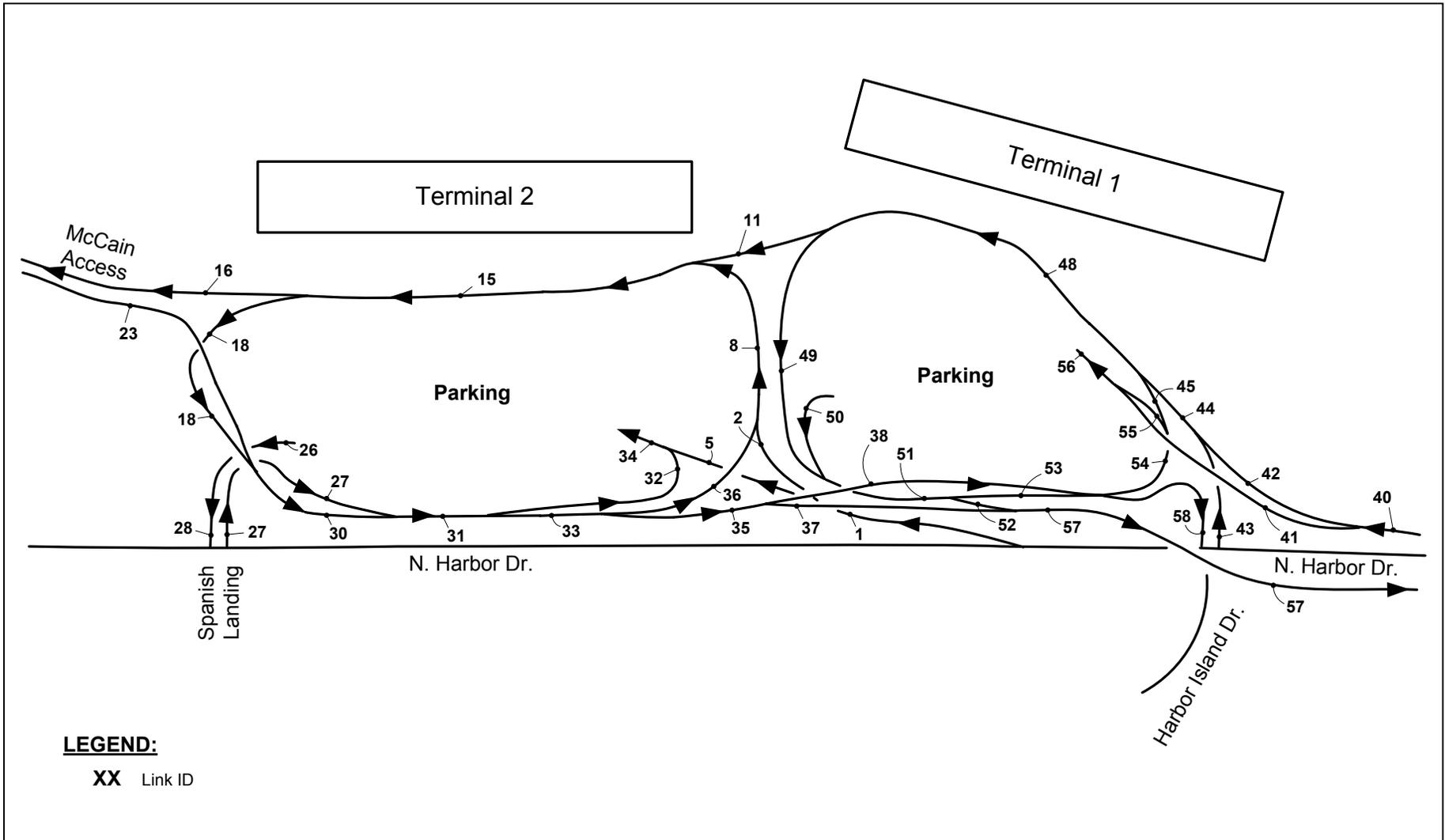
D.5.2.3.8 Terminal Curbside

Currently 6,630 linear feet of curbside is available between all three terminals. In 2015 under the Implementation Plan (without Parking Structure), 7,150 linear feet of curbside is required at all terminals to accommodate private and commercial vehicle demand. Out of that total 3,660 feet of private and commercial vehicle curbside is required at Terminal 2 to accommodate demand associated with passengers at the new and existing aircraft gates. Currently Terminal 2 has 2,820 linear feet of curbside which is 840 feet short of the 2015 requirement. The No Project Alternative would maintain the existing curbside supply, which would result in a total curbside deficit of 520 linear feet. Under the Implementation Plan (Without Parking Structure) an additional 1,370 linear feet of curbside would be provided at Terminal 2 for a total of 8,000 linear feet, providing an airport-wide surplus of 760 linear feet in 2015. Therefore, the Implementation Plan (Without Parking Structure) would result in favorable curbside impact compared to the No Project Alternative.

D.5.2.3.9 On-Airport Traffic Circulation

[Table D-75](#) shows the AM and PM peak hour traffic volumes and LOS on terminal roadways under the Implementation Plan (Without Parking Structure) (please refer to [Figure D.5-3](#) for link ID key map). As shown, all terminal roadways would operate at LOS D or better during peak hours under the Implementation Plan (Without Parking Structure), except segment 37 (the exit from Terminal 2 to eastbound North Harbor Drive), which operates at LOS E in 2030.

AIRPORT MASTER PLAN
SAN DIEGO INTERNATIONAL AIRPORT



LEGEND:

XX Link ID



Not to Scale

Appendix D.5-3

On-Airport Roadway Link ID Key Map
Proposed Airport Implementation Plan (without Parking Structure)

Environmental Impact Report

**Table D-75
2010-2030 On-Airport Roadway Operations – Proposed Airport Implementation Plan
(Without Parking Structure)**

Link ID	Lanes	2010				2015				2020			
		AM	LOS	PM	LOS	AM	LOS	PM	LOS	AM	LOS	PM	LOS
1	2	445	A	368	A	532	B	444	A	590	B	495	B
2	2	369	A	313	A	457	A	390	A	515	B	441	A
3		Link Not Used				Link Not Used				Link Not Used			
4		Link Not Used				Link Not Used				Link Not Used			
5	2	76	A	54	A	76	A	54	A	76	A	54	A
6		Link Not Used				Link Not Used				Link Not Used			
7		Link Not Used				Link Not Used				Link Not Used			
8	4	470	A	399	A	580	A	494	A	652	A	558	A
9		Link Not Used				Link Not Used				Link Not Used			
10		Link Not Used				Link Not Used				Link Not Used			
11	1	179	A	201	A	203	A	228	A	222	A	250	B
12		Link Not Used				Link Not Used				Link Not Used			
13		Link Not Used				Link Not Used				Link Not Used			
14		Link Not Used				Link Not Used				Link Not Used			
15	8	649	A	600	A	783	A	722	A	874	A	808	A
16	2	153	A	134	A	181	A	156	A	198	A	173	A
17		Link Not Used				Link Not Used				Link Not Used			
18	2	495	B	466	A	602	B	566	B	675	B	635	B
19		Link Not Used				Link Not Used				Link Not Used			
20		Link Not Used				Link Not Used				Link Not Used			
21		Link Not Used				Link Not Used				Link Not Used			
22		Link Not Used				Link Not Used				Link Not Used			
23	2	67	A	57	A	79	A	66	A	86	A	74	A
24		Link Not Used				Link Not Used				Link Not Used			
25		Link Not Used				Link Not Used				Link Not Used			
26	2	46	A	99	A	46	A	99	A	46	A	99	A
27	1	79	A	65	A	95	A	79	A	105	A	88	A
28	2	46	A	99	A	46	A	99	A	46	A	99	A
29		Link Not Used				Link Not Used				Link Not Used			
30	2	562	B	523	B	681	B	632	B	761	B	709	B
31	3	641	A	588	A	775	B	711	B	866	B	797	B
32	1	14	A	10	A	13	A	10	A	13	A	10	A
33	3	627	A	578	A	762	B	701	A	853	B	787	B
34	4	90	A	64	A	89	A	64	A	89	A	64	A
35	2	526	B	493	B	639	B	597	B	715	B	669	B
36	1	101	A	86	A	123	A	104	A	137	A	118	A
37	1	471	C	442	C	577	D	540	C	650	D	609	D
38	1	55	A	51	A	61	A	57	A	66	A	61	A
39		Link Not Used				Link Not Used				Link Not Used			
40	2	540	B	498	B	603	B	561	B	659	B	615	B
41	1	68	A	49	A	68	A	49	A	68	A	49	A
42	2	472	B	449	A	535	B	513	B	591	B	567	B
43	1	75	A	62	A	84	A	70	A	92	A	77	A
44	3	547	A	511	A	619	A	582	A	683	A	643	A
45	1	32	A	27	A	37	A	31	A	41	A	35	A
46		Link Not Used				Link Not Used				Link Not Used			
47		Link Not Used				Link Not Used				Link Not Used			
48	4	579	A	538	A	656	A	613	A	724	A	678	A
49	2	400	A	337	A	453	A	385	A	502	B	428	A
50	1	42	A	90	A	41	A	89	A	41	A	89	A
51	3	442	A	427	A	494	A	474	A	543	A	517	A
52	2	360	A	351	A	404	A	390	A	445	A	426	A
53	1	82	A	77	A	90	A	84	A	98	A	91	A
54	1	45	A	36	A	50	A	40	A	54	A	44	A
55	1	13	A	9	A	13	A	9	A	13	A	9	A
56	4	81	A	58	A	81	A	58	A	81	A	58	A
57	2	831	B	792	B	981	B	930	B	1,094	C	1,035	B
58	2	92	A	92	A	101	A	101	A	110	A	108	A

Source: HNTB, 2007
LOS = Level of service

NOTE: Please refer to [Figure D.5-3](#) for link ID key map.

Table D-75 (continued)
**2010-2030 On-Airport Roadway Operations – Proposed Airport Implementation Plan
(Without Parking Structure)**

Link ID	Lanes	2025				2030			
		AM	LOS	PM	LOS	AM	LOS	PM	LOS
1	2	638	B	536	B	660	B	557	B
2	2	561	B	481	B	587	B	505	B
3		Link Not Used				Link Not Used			
4		Link Not Used				Link Not Used			
5	2	76	A	54	A	73	A	52	A
6		Link Not Used				Link Not Used			
7		Link Not Used				Link Not Used			
8	4	710	A	609	A	776	A	667	A
9		Link Not Used				Link Not Used			
10		Link Not Used				Link Not Used			
11	1	235	B	265	B	246	B	278	B
12		Link Not Used				Link Not Used			
13		Link Not Used				Link Not Used			
14		Link Not Used				Link Not Used			
15	8	945	A	874	A	1,022	A	945	A
16	2	213	A	186	A	255	A	222	A
17		Link Not Used				Link Not Used			
18	2	732	B	688	B	767	B	723	B
19		Link Not Used				Link Not Used			
20		Link Not Used				Link Not Used			
21		Link Not Used				Link Not Used			
22		Link Not Used				Link Not Used			
23	2	92	A	79	A	97	A	83	A
24		Link Not Used				Link Not Used			
25		Link Not Used				Link Not Used			
26	2	46	A	99	A	46	A	99	A
27	1	113	A	95	A	154	A	130	A
28	2	46	A	99	A	46	A	99	A
29		Link Not Used				Link Not Used			
30	2	824	C	767	B	864	C	806	C
31	3	938	B	862	B	1,018	B	936	B
32	1	14	A	10	A	17	A	12	A
33	3	924	B	852	B	1,001	B	924	B
34	4	90	A	64	A	90	A	64	A
35	2	775	B	725	B	812	C	762	B
36	1	149	A	127	A	189	A	162	A
37	1	707	D	662	D	741	E	696	D
38	1	69	A	64	A	72	A	66	A
39		Link Not Used				Link Not Used			
40	2	694	B	649	B	685	B	647	B
41	1	68	A	49	A	65	A	46	A
42	2	626	B	601	B	621	B	600	B
43	1	96	A	81	A	121	A	101	A
44	3	722	B	681	A	741	B	702	A
45	1	43	A	37	A	45	A	39	A
46		Link Not Used				Link Not Used			
47		Link Not Used				Link Not Used			
48	4	765	A	718	A	786	A	741	A
49	2	530	B	453	A	540	B	463	A
50	1	42	A	90	A	42	A	90	A
51	3	572	A	543	A	582	A	553	A
52	2	469	B	448	A	453	A	433	A
53	1	103	A	95	A	129	A	119	A
54	1	56	A	46	A	61	A	51	A
55	1	13	A	9	A	16	A	12	A
56	4	81	A	58	A	81	A	58	A
57	2	1,176	C	1,110	C	1,194	C	1,129	C
58	2	116	A	113	A	139	A	135	A

Source: HNTB, 2007

LOS = Level of service

NOTE: Please refer to [Figure D.5-3](#) for link ID key map.

D.6 East Terminal Alternative

Under the Airport Implementation Plan Alternative, two scenarios are examined:

- Airport Implementation Plan Alternative (With Parking Structure) (Section D.6.1)
- Airport Implementation Plan Alternative (Without Parking Structure) (Section D.6.2)

D.6.1 Airport Implementation Plan Alternative (With Parking Structure)

This scenario assumes all components of the Implementation Plan Alternative are constructed as described in the Assumptions below, including a parking structure in front of the new Terminal 1 East Unit Terminal.

D.6.1.1 Assumptions

- Projects assumed in the Implementation Plan Alternative are discussed in the Alternatives section of the EIR. These projects include:
 - Construct new unit terminal east of Terminal 1 with 7 new aircraft gates and five replacement aircraft gates and expand Terminal 2 West with 3 new aircraft gates.
 - Construct new surface and structured parking, second level curbside, and vehicle circulation at Terminal 1 and New Unit Terminal, including six story parking structure with approximately 3,000 spaces in front of the New Unit Terminal. Primary access to T1E would be provided in the vicinity of Winship Lane, with an access ramp similar to the one currently serving Terminal 1 from westbound North Harbor Drive. The T1E roadway would have a connection to the existing T1 roadway.
 - Construct new surface parking and vehicle circulation west of Terminal 2 West with approximately 2,000 parking spaces.
 - Relocate and reconfigure SAN Park Pacific Highway with 500 additional parking spaces in the North Area
 - Construct new/replacement general aviation facilities including access in the North Area.
 - Construct a new access road from the Sassafras Street/Pacific Highway intersection providing access to general aviation and parking facilities in the North Area.
- As discussed previously, the Implementation Plan Alternative would accommodate the same volume of air passengers as the No Project Alternative and the Proposed Airport Implementation Plan through 2020. Therefore, total terminal traffic generation under the Implementation Plan Alternative would be the same as under the No Project Alternative and Proposed Airport Implementation Plan through 2020. After 2020 the Implementation Plan Alternative would begin to accommodate more passengers than the No Project Alternative.
- The regional trip distribution of airport traffic under the Implementation Plan Alternative is assumed to be the same as the No Project Alternative, as discussed in Section D.1.7.
- The Implementation Plan Alternative would have a different gate distribution from the No Project Alternative and the Proposed Implementation Plan. The Implementation Plan Alternative would construct a new unit terminal east of Terminal 1 with five replacement gates and seven new jet gates, expand existing Terminal 2 West with three new jet gates, and relocate commuter operations to Terminals 1 and 2. This would consequently shift the passenger and traffic distribution among terminals. This is discussed further in the next section (Section D.6.1.2 Trip Generation and Terminal Distribution).

D.6.1.2 Trip Generation and Terminal Distribution

Trip generation associated with the Implementation Plan Alternative is summarized in [Table D-](#)

76. As shown, total airport trip generation would increase from approximately 94,600 ADT in 2010 to ~~134,900~~ 134,850 ADT in 2030. This corresponds to an increase in air passenger forecast of 19.5 million annual passengers (MAP) in 2010 to 28.2 MAP in 2030. This represents an increase in trip generation of approximately 6,200 ADT or 4.6% from the No Project Alternative in 2030. Trips from most airport modes were estimated to increase relative to origin and destination passenger growth. However, schedule driven modes such as public buses, and airport operated inter-terminal, employee and public parking shuttles were estimated to grow at a slower rate as many of these shuttles currently operate with excess capacity to maintain a set schedule. This results in a slight decrease in the trip generation rate from ~~4.86~~ 1.85 to 1.82 in 2010 and 2030, respectively. This has also been demonstrated by a historical downward trend witnessed at SDIA.

Under existing conditions, Terminal 1 accommodates approximately 54% of the passenger activity. The Implementation Plan Alternative would shift passenger activity to the new unit Terminal 1 East accommodating 36% of passenger activity in 2010, decreasing to 32% in 2030, as shown in [Table D-77](#).

The change in passenger distribution between terminals would result in redistribution of traffic at the terminal access driveways along North Harbor Drive. However, the change in passenger distribution would not affect the traffic pattern outside of the study area which is assumed to be the same as the No Project Alternative.

Table D-76

**2010-2030 Airport Trip Generation - Airport Implementation Plan Alternative
(With Parking Structure)**

Activity	Year					
	2005	2010	2015	2020	2025	2030
Airport Passenger Activity Level						
Million Annual Passengers (MAP)	17.4	19.5	22.8	25.1	26.6	28.2
Million Annual O&D Passengers	16.7	18.6	21.8	24.0	25.4	27.0
Daily O&D Passengers	45,830	51,076	59,769	66,220	70,553	74,199
Airport Trip Generation (1)						
Daily	85,100	94,600	109,500	120,800	128,400	134,850
In	42,600	47,350	54,800	60,450	64,250	67,500
Out	42,500	47,250	54,700	60,350	64,150	67,400
AM Peak Hour	3,180	3,530	4,095	4,550	4,800	5,070
In	1,760	1,955	2,265	2,500	2,650	2,790
Out	1,420	1,575	1,830	2,050	2,150	2,280
PM Peak Hour	3,245	3,620	4,190	4,650	4,950	5,195
In	1,500	1,675	1,940	2,150	2,300	2,415
Out	1,745	1,945	2,250	2,500	2,650	2,780
Trip Rate						
Daily	1.86	1.85	1.83	1.82	1.82	1.82

O&D = origin and destination

Notes:

(1) Includes terminals and associated facilities, SAN Park lots, rental car facilities on Rental Car Road, Employee Lot 6 on Harbor Island Drive, and north area. Does not include private vehicle trips to private off-airport parking and rental car facilities, but includes shuttle trips between these facilities and the terminals.

Source: HNTB, 2007.

O&D = origin and destination

Table D-77

2010-2030 Terminal Passenger Distribution –Airport Implementation Plan Alternative (With Parking Structure)

Scenario/Year	Terminal 1	Terminal 1 East *	Terminal 2 East	Terminal 2 West	Commuter Terminal	Total
Existing						
2005	54%	0%	15%	26%	5%	100%
Airport Implementation Plan Alternative						
2010	20%	36%	25%	18%	0%	100%
2015	20%	36%	25%	20%	0%	100%
2020	23%	35%	23%	19%	0%	100%
2025	23%	34%	23%	20%	0%	100%
2030	24%	32%	23%	20%	0%	100%

Source: HNTB, 2007.

* New unit terminal under Airport Implementation Project Alternative.

D.6.1.3 Traffic Impacts

Traffic impacts were identified by comparing traffic conditions under the Implementation Plan Alternative (With Parking Structure) against traffic conditions under the No Project Alternative. Specific impact categories are discussed below.

D.6.1.3.1 Street Segments

Table D-78 summarizes the street segment operations for each analysis year under the Implementation Plan (With Parking Structure).

Table D-79 compares the street segment volume to capacity (v/c) ratios under the Implementation Plan (With Parking Structure) against the No Project Alternative to identify traffic impacts based on significance criteria identified in **Section D.2, Traffic Impacts and Significance Criteria**, measured by an increase to LOS E or F or an increase in volume to capacity ratio of greater than 0.02 for streets operating at LOS E and 0.01 for streets operating at LOS F under the No Project. The following roadway segments would have potentially significant traffic impacts:

Street Segments with Significant Traffic Impacts

Year 2010

- Sassafras Street between Pacific Highway and Kettner Boulevard, , which operates at LOS E under both the Implementation Plan Alternative (with Parking Structure) and No Project Alternative and experiences an increase in volume to capacity (v/c) ratio of over 0.02 under the Implementation Plan Alternative compared to the No Project Alternative.
- Sassafras Street between Kettner Boulevard and India Street, which operates at LOS F under both the Implementation Plan Alternative (with Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan Alternative compared to the No Project Alternative.

See Section D.5.1.3.1 for a description of Sassafras Street.

Year 2015

- All locations identified in Year 2010
- Kettner Boulevard between Sassafras Street and Palm Street, which increased from LOS D under the No Project Alternative (with Parking Structure) to LOS E under the Implementation Plan Alternative.

Year 2020

- All locations identified in Year 2015
- Grape Street between Pacific Highway and Kettner Boulevard, which operates at LOS F under both the Implementation Plan Alternative (with Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan Alternative compared to the No Project Alternative.

Year 2025

- All locations identified in year 2020
- North Harbor Drive between Rental Car Road and Hawthorn Street, which operates at LOS F under both the Implementation Plan Alternative (with Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan Alternative compared to the No Project Alternative.
- Kettner Boulevard between Washington Street and Palm Street, which operates at LOS F under both the Implementation Plan Alternative (with Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan Alternative compared to the No Project Alternative.

Year 2030

- All locations identified in Year 2025
- Grape Street between North Harbor Drive and Pacific Highway, which operates at LOS F under both the Implementation Plan Alternative (with Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan Alternative compared to the No Project Alternative.
- Grape Street between Kettner Boulevard and I-5, which operates at LOS F under both the Implementation Plan Alternative (with Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan Alternative compared to the No Project Alternative.
- Hawthorn Street between North Harbor Drive and I-5, which operates at LOS F under both the Implementation Plan Alternative (with Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan Alternative compared to the No Project Alternative.
- Laurel Street between Pacific Highway and Kettner Boulevard, which operates at LOS F under both the Implementation Plan Alternative (with Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan Alternative compared to the No Project Alternative.
- India Street between Laurel Street and Washington Street, which operates at LOS F under both the Implementation Plan Alternative (with Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan Alternative compared to the No Project Alternative.

Table D-78
 2010-2030 Street Segment Operations – Airport Implementation Plan Alternative (With Parking Structure, 2010-2020)

Roadway	Segment	Classification	Lanes	LOS E ADT Capacity 1000s	Year 2010					Year 2015					Year 2020				
					SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS	SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS	SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS
North Harbor Drive	West of NTC	6-Lane Prime	6D	60.0	11.0	17.7	28.7	0.48	B	12.8	20.4	33.2	0.55	B	14.1	25.2	39.3	0.65	C
	NTC - Spanish Landing	6-Lane Prime	6D	60.0	15.7	15.1	30.8	0.51	B	17.9	16.3	34.2	0.57	B	19.6	20.7	40.3	0.67	C
	Spanish Landing - T2 Access	6-Lane Prime	6D	60.0	11.4	14.9	26.3	0.44	B	12.8	18.2	29.0	0.48	B	14.0	18.3	32.3	0.54	B
	T2 Access - Harbor Island	6-Lane Prime	4+3	65.0	22.0	15.0	37.0	0.57	B	25.4	16.3	41.7	0.64	C	27.3	18.2	45.5	0.70	C
	Harbor Island - T1 Access	6-Lane Prime	3+4	65.0	22.8	18.3	41.1	0.63	C	25.9	18.4	44.3	0.68	C	27.2	19.1	46.3	0.71	C
	T1 Access - Winship	6-Lane Prime	5+3	70.0	27.8	18.3	46.1	0.66	C	31.7	18.3	50.0	0.71	C	34.8	19.1	53.9	0.77	C
	Winship - Flyover Merge (1)	6-Lane Prime	4+4	70.0	31.0	18.4	49.4	0.71	C	35.6	18.4	54.0	0.77	C	39.0	19.1	58.2	0.83	C
	Rental Car Rd - Laurel	6-Lane Prime	6D	60.0	62.8	20.8	83.6	1.39	F	72.9	20.7	93.6	1.56	F	80.4	22.1	102.5	1.71	F
	Laurel - Hawthorn	6-Lane Prime	6D	60.0	40.6	15.2	55.8	0.93	E	47.0	15.4	62.4	1.04	F	51.8	16.7	68.5	1.14	F
	Hawthorn - Grape	6-Lane Prime	6D	60.0	25.5	14.0	39.5	0.66	C	29.6	13.4	43.0	0.72	C	32.6	14.0	46.6	0.78	C
Grape Street	Harbor - Pacific	3-Lane Major 1-Way	3U	25.0	13.6	6.7	20.3	0.81	D	15.8	7.1	22.9	0.91	E	17.5	8.5	26.0	1.04	F
	Pacific - Kettner	3-Lane Major 1-Way	3U	25.0	12.6	16.4	29.0	1.16	F	14.6	17.1	31.7	1.27	F	16.1	18.5	34.6	1.38	F
	Kettner - I-5	3-Lane Major 1-Way	3U	25.0	12.2	23.3	35.5	1.42	F	14.2	23.7	37.9	1.52	F	15.7	21.1	36.8	1.47	F
Hawthorn Street	Harbor - Pacific	3-Lane Major 1-Way	3U	25.0	15.3	5.1	20.4	0.81	D	17.7	5.4	23.1	0.92	E	19.6	6.7	26.3	1.05	F
	Pacific - Kettner	3-Lane Major 1-Way	3U	25.0	12.5	6.0	18.5	0.74	C	14.5	6.2	20.7	0.83	D	16.0	7.4	23.4	0.94	E
	Kettner - I-5	3-Lane Major 1-Way	3U	25.0	12.5	17.2	29.7	1.19	F	14.5	19.2	33.7	1.35	F	16.0	20.4	36.4	1.46	F
Kettner Blvd	north of Washington	3-Lane Collector 1-Way	3U	25.0	0.2	7.2	7.4	0.29	A	0.2	7.2	7.4	0.30	A	0.3	9.6	9.9	0.39	A
	Washington - Sassafras	3-Lane Major 1-Way	3U	25.0	9.0	13.0	22.0	0.88	D	10.5	13.1	23.6	0.94	E	11.6	16.0	27.6	1.10	F
	Sassafras - Palm	3-Lane Major 1-Way	3U	25.0	9.2	11.0	20.2	0.81	D	10.6	11.9	22.5	0.90	E	11.7	18.7	30.4	1.22	F
	Palm - Laurel	3-Lane Major 1-Way	3U	25.0	7.6	8.6	16.2	0.65	C	8.8	9.5	18.3	0.73	C	9.8	16.0	25.7	1.03	F
	Laurel - Hawthorn	3-Lane Major 1-Way	3U	25.0	0.0	7.2	7.2	0.29	A	0.1	7.9	8.0	0.32	A	0.1	13.3	13.4	0.54	B
	Hawthorn - Grape	3-Lane Major 1-Way	3U	25.0	0.0	14.8	14.8	0.59	C	0.1	16.8	16.9	0.68	C	0.1	21.5	21.6	0.87	D
Laurel Street	Harbor - Pacific	4-Lane Major	4U	40.0	22.2	6.3	28.5	0.71	C	25.8	6.7	32.5	0.81	D	28.6	6.0	34.5	0.86	D
	Pacific - Kettner	4-Lane Collector	4D	30.0	17.9	7.2	25.1	0.84	E	21.1	7.8	28.9	0.96	E	23.5	6.9	30.3	1.01	F
	Kettner - I-5	4-Lane Collector	4D	30.0	10.4	8.5	18.9	0.63	C	12.5	9.6	22.1	0.74	D	14.1	8.0	22.1	0.74	D
Pacific Highway	Washington - Sassafras	6-Lane Prime	6D	50.0	4.1	22.8	26.9	0.54	B	4.8	27.3	32.1	0.64	C	5.4	24.3	29.8	0.60	C
	Sassafras - Palm	6-Lane Prime	6D	50.0	6.9	17.5	24.4	0.49	B	8.0	21.0	29.0	0.58	C	8.9	20.9	29.8	0.60	C
	Palm - Laurel	6-Lane Prime	6D	50.0	6.9	18.1	25.0	0.50	B	8.0	21.7	29.7	0.59	C	8.9	21.0	29.9	0.60	C
	Laurel - Hawthorn	6-Lane Major	6D	50.0	2.2	19.1	21.3	0.43	B	2.7	22.6	25.3	0.51	B	3.2	25.5	28.7	0.57	C
	Hawthorn - Grape	6-Lane Major	6D	50.0	4.9	19.6	24.5	0.49	B	5.7	23.2	28.9	0.58	C	6.4	26.0	32.4	0.65	C
Palm Street	Pacific - Kettner	2-Lane Collector	2U	8.0	0.0	0.9	0.9	0.11	A	0.0	0.9	0.9	0.11	A	0.0	0.3	0.3	0.04	A
Sassafras Street	Pacific - Kettner	3-Lane Collector	3U	12.0	3.4	8.3	11.7	0.98	E	5.2	9.7	14.9	1.25	F	5.0	9.3	14.3	1.19	F
	Kettner-India	2-Lane Collector	2U	8.0	1.7	8.5	10.2	1.27	F	2.6	9.7	12.3	1.54	F	2.5	9.4	11.9	1.48	F
Washington Street	Pacific - Kettner	4-Lane Collector	4U	30.0	3.9	16.5	20.4	0.68	D	4.7	18.6	23.3	0.78	D	5.4	19.1	24.5	0.82	D
	Kettner - San Diego	5-Lane Collector	5D	30.0	3.6	23.3	26.9	0.90	E	4.3	25.5	29.8	0.99	E	4.8	28.6	33.4	1.11	F
India Street	Laurel - Palm	2-Lane Collector	2U	8.0	7.4	8.7	16.1	2.01	F	8.7	10.2	18.9	2.36	F	9.6	7.9	17.5	2.19	F
	Palm - Sassafras	3-Lane Collector	3U	12.0	7.4	13.2	20.6	1.72	F	8.7	15.4	24.0	2.00	F	9.6	12.6	22.2	1.85	F
	Sassafras - Washington	3-Lane Collector	3U	12.0	5.1	13.5	18.5	1.54	F	6.5	14.6	21.1	1.76	F	7.6	15.2	22.8	1.90	F
Rosecrans	Barnett - Sport Arena	6-lane Major	6D	50.0	5.1	40.1	45.2	0.90	E	5.9	42.4	48.3	0.97	E	6.5	34.3	40.9	0.82	D
	Nimitz Quimby - Barnett	4-lane-Major 5-lane Major	4+5U	40.0-45.0	5.1	35.9	41.1	1.03-0.91	F-E	5.9	35.4	41.3	1.03-0.92	F-E	6.5	31.1	37.7	0.94-0.84	E-D
	Nimitz - Quimby	4-lane Major	4U	40.0	5.1	35.9	41.1	1.03	F	5.9	35.4	41.3	1.03	F	6.5	31.1	37.7	0.94	E
Nimitz	Harbor - Rosecrans	4-lane Major	4U	40.0	9.4	8.7	18.1	0.45	B	10.9	8.5	19.4	0.48	B	12.0	11.2	23.1	0.58	C

Source: HNTB, 2007.

Notes:

(1) Does not include traffic on flyover.

MAP = Million Annual Passengers

ADT = Average Daily Traffic

LOS = Level of Service

V/C = volume-to-capacity ratio

Table D-78 (continued)
2010-2030 Street Segment Operations – Airport Implementation Plan Alternative (With Parking Structure, 2025-2030)

Roadway	Segment	Classification	Lanes	LOS E ADT Capacity 1000s	Year 2025					Year 2030				
					SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS	SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS
North Harbor Drive	West of NTC	6-Lane Prime	6D	60.0	15.0	26.7	41.7	0.69	C	19.6	28.5	48.1	0.80	C
	NTC - Spanish Landing	6-Lane Prime	6D	60.0	20.7	21.8	42.5	0.71	C	25.4	23.3	48.7	0.81	C
	Spanish Landing - T2 Access	6-Lane Prime	6D	60.0	14.7	18.4	33.2	0.55	B	17.6	20.7	38.3	0.64	C
	T2 Access - Harbor Island	6-Lane Prime	4+3	65.0	28.9	18.1	47.0	0.72	C	32.2	19.8	52.0	0.80	C
	Harbor Island - T1 Access	6-Lane Prime	3+4	65.0	28.6	20.4	49.1	0.76	C	30.5	21.1	51.6	0.79	C
	T1 Access - Winship	6-Lane Prime	5+3	70.0	36.8	20.5	57.2	0.82	C	39.0	21.1	60.0	0.86	D
	Winship - Flyover Merge (1)	6-Lane Prime	4+4	70.0	41.3	20.4	61.7	0.88	D	41.7	20.9	62.5	0.89	D
	Rental Car Rd - Laurel	6-Lane Prime	6D	60.0	85.4	20.9	106.2	1.77	F	85.5	21.7	107.2	1.79	F
Laurel - Hawthorn	Laurel - Hawthorn	6-Lane Prime	6D	60.0	55.0	17.5	72.5	1.21	F	57.5	18.2	75.8	1.26	F
	Hawthorn - Grape	6-Lane Prime	6D	60.0	34.7	14.8	49.4	0.82	C	36.3	14.8	51.1	0.85	D
Grape Street	Harbor - Pacific	3-Lane Major 1-Way	3U	25.0	18.6	9.0	27.6	1.10	F	19.5	9.7	29.2	1.17	F
	Pacific - Kettner	3-Lane Major 1-Way	3U	25.0	17.1	18.8	35.9	1.44	F	17.9	19.8	37.7	1.51	F
Hawthorn Street	Kettner - I-5	3-Lane Major 1-Way	3U	25.0	16.7	21.8	38.5	1.54	F	17.5	24.7	42.2	1.69	F
	Harbor - Pacific	3-Lane Major 1-Way	3U	25.0	20.8	7.0	27.8	1.11	F	21.8	7.9	29.7	1.19	F
	Pacific - Kettner	3-Lane Major 1-Way	3U	25.0	17.0	7.8	24.8	0.99	E	17.8	8.7	26.6	1.06	F
	Kettner - I-5	3-Lane Major 1-Way	3U	25.0	17.0	21.8	38.8	1.55	F	17.8	24.5	42.3	1.69	F
Kettner Blvd	north of Washington	3-Lane Collector 1-Way	3U	25.0	0.3	10.7	11.1	0.44	B	0.4	4.2	4.6	0.18	A
	Washington - Sassafras	3-Lane Major 1-Way	3U	25.0	12.3	14.1	26.4	1.06	F	11.0	17.4	28.4	1.14	F
Sassafras - Palm	Sassafras - Palm	3-Lane Major 1-Way	3U	25.0	12.5	17.2	29.6	1.19	F	11.2	14.2	25.4	1.02	F
	Palm - Laurel	3-Lane Major 1-Way	3U	25.0	10.4	13.7	24.1	0.96	E	9.0	12.6	21.5	0.86	D
Laurel - Hawthorn	Laurel - Hawthorn	3-Lane Major 1-Way	3U	25.0	0.2	11.0	11.2	0.45	B	0.2	11.4	11.7	0.47	B
	Hawthorn - Grape	3-Lane Major 1-Way	3U	25.0	0.2	19.9	20.1	0.80	D	0.2	21.5	21.8	0.87	D
Laurel Street	Harbor - Pacific	4-Lane Major	4U	40.0	30.4	4.0	34.3	0.86	D	28.0	4.3	32.3	0.81	D
	Pacific - Kettner	4-Lane Collector	4D	30.0	25.0	6.8	31.8	1.06	F	22.6	12.1	34.7	1.16	F
Pacific Highway	Kettner - I-5	4-Lane Collector	4D	30.0	15.2	8.1	23.2	0.77	D	14.3	12.9	27.1	0.90	E
	Washington - Sassafras	6-Lane Prime	6D	50.0	5.8	27.4	33.2	0.66	C	6.1	19.1	25.1	0.50	B
Sassafras - Palm	Sassafras - Palm	6-Lane Prime	6D	50.0	9.5	22.2	31.6	0.63	C	9.9	16.3	26.1	0.52	B
	Palm - Laurel	6-Lane Prime	6D	50.0	9.5	22.0	31.4	0.63	C	9.9	15.4	25.3	0.51	B
Laurel - Hawthorn	Laurel - Hawthorn	6-Lane Major	6D	50.0	3.5	27.7	31.2	0.62	C	3.8	23.3	27.1	0.54	B
	Hawthorn - Grape	6-Lane Major	6D	50.0	6.8	28.1	34.9	0.70	C	7.2	24.1	31.3	0.63	C
Palm Street	Pacific - Kettner	2-Lane Collector	2U	8.0	0.0	0.1	0.1	0.01	A	0.0	0.1	0.1	0.01	A
Sassafras Street	Pacific - Kettner	3-Lane Collector	3U	12.0	5.4	10.4	15.8	1.32	F	5.8	6.1	11.9	0.99	E
	Kettner-India	2-Lane Collector	2U	8.0	2.7	9.8	12.5	1.56	F	2.9	8.0	10.9	1.36	F
Washington Street	Pacific - Kettner	4-Lane Collector	4U	30.0	5.9	18.9	24.9	0.83	D	6.5	12.7	19.2	0.64	C
	Kettner - San Diego	5-Lane Collector	5D	30.0	5.2	28.1	33.3	1.11	F	5.6	22.5	28.1	0.94	E
India Street	Laurel - Palm	2-Lane Collector	2U	8.0	10.2	7.9	18.1	2.26	F	8.8	12.6	21.4	2.68	F
	Palm - Sassafras	3-Lane Collector	3U	12.0	10.2	12.5	22.7	1.89	F	8.8	16.5	25.3	2.11	F
Sassafras - Washington	Sassafras - Washington	3-Lane Collector	3U	12.0	8.3	14.7	22.9	1.91	F	7.6	21.5	29.1	2.42	F
	Barnett - Sport Arena	6-lane Major	6D	50.0	6.9	34.6	41.5	0.83	D	10.7	33.7	44.5	0.89	D
Rosecrans	Nimitz Quimby - Barnett	4-lane Major 5-lane Major	4U 5U	40.0 45.0	6.9	31.3	38.2	0.96 0.85	E D	10.7	29.0	39.8	0.99 0.88	E D
	Nimitz - Quimby	4-lane Major	4U	40.0	6.9	31.3	38.2	0.96	E	10.7	29.0	39.8	0.99	E
Nimitz	Harbor - Rosecrans	4-lane Major	4U	40.0	12.7	11.8	24.6	0.61	C	17.3	11.7	28.9	0.72	C

Source: HNTB, 2007.

Notes:

(1) Does not include traffic on flyover.

MAP = Million Annual Passengers

ADT = Average Daily Traffic

LOS = Level of Service

V/C = volume-to-capacity ratio

Table D-79
 2010-2030 Street Segment Impacts –Airport Implementation Plan Alternative (With Parking Structure, 2010-2020)

Roadway	Segment	Year 2010					Year 2015					Year 2020				
		No Proj V/C	No Proj LOS	Proj V/C	Proj LOS	Diff V/C	No Proj V/C	No Proj LOS	Proj V/C	Proj LOS	Diff V/C	No Proj V/C	No Proj LOS	Proj V/C	Proj LOS	Diff V/C
North Harbor Drive	West of NTC	0.48	B	0.48	B	0.00	0.56	B	0.55	B	0.00	0.66	C	0.65	C	0.00
	NTC - Spanish Landing	0.51	B	0.51	B	0.00	0.57	B	0.57	B	0.00	0.67	C	0.67	C	0.00
	Spanish Landing - T2 Access	0.43	B	0.44	B	0.01	0.47	B	0.48	B	0.02	0.52	B	0.54	B	0.02
	T2 Access - Harbor Island	0.56	B	0.57	B	0.01	0.63	C	0.64	C	0.01	0.68	C	0.70	C	0.02
	Harbor Island - T1 Access	0.58	C	0.63	C	0.05	0.62	C	0.68	C	0.06	0.64	C	0.71	C	0.07
Grape Street	T1 Access - Winship	0.76	C	0.66	C	-0.10	0.83	C	0.71	C	-0.11	0.89	D	0.77	C	-0.12
	Winship - Rental Car Rd	0.79	C	0.71	C	-0.09	0.87	D	0.77	C	-0.10	0.94	E	0.83	C	-0.10
	Rental Car Rd - Laurel	1.41	F	1.39	F	-0.01	1.57	F	1.56	F	-0.01	1.71	F	1.71	F	0.00
	Laurel - Hawthorn	0.94	E	0.93	E	-0.01	1.05	F	1.04	F	-0.01	1.14	F	1.14	F	0.00
	Hawthorn - Grape	0.66	C	0.66	C	0.00	0.72	C	0.72	C	0.00	0.78	C	0.78	C	0.00
Hawthorn Street	Harbor - Pacific	0.82	D	0.81	D	-0.01	0.92	E	0.91	E	-0.01	1.04	F	1.04	F	0.00
	Pacific - Kettner	1.16	F	1.16	F	0.00	1.26	F	1.27	F	0.005	1.37	F	1.38	F	0.011
Kettner Blvd	Kettner - I-5	1.43	F	1.42	F	-0.01	1.52	F	1.52	F	0.00	1.48	F	1.47	F	0.00
	Harbor - Pacific	0.83	D	0.81	D	-0.01	0.94	E	0.92	E	-0.01	1.06	F	1.05	F	-0.01
	Pacific - Kettner	0.75	C	0.74	C	-0.01	0.83	D	0.83	D	-0.01	0.94	E	0.94	E	0.00
	Kettner - I-5	1.19	F	1.19	F	-0.01	1.35	F	1.35	F	-0.01	1.46	F	1.46	F	0.00
	north of Washington	0.29	A	0.29	A	0.00	0.30	A	0.30	A	0.00	0.39	A	0.39	A	0.00
Laurel Street	Washington - Sassafras	0.88	D	0.88	D	0.00	0.94	E	0.94	E	0.00	1.10	F	1.10	F	0.00
	Sassafras - Palm	0.80	D	0.81	D	0.00	0.897	D	0.901	E	0.004	1.21	F	1.22	F	0.005
	Palm - Laurel	0.65	C	0.65	C	0.00	0.74	C	0.73	C	0.00	1.03	F	1.03	F	0.00
	Laurel - Hawthorn	0.29	A	0.29	A	0.00	0.32	A	0.32	A	0.00	0.54	B	0.54	B	0.00
	Hawthorn - Grape	0.59	C	0.59	C	0.00	0.68	C	0.68	C	0.00	0.87	D	0.87	D	0.00
Pacific Highway	Harbor - Pacific	0.72	C	0.71	C	-0.01	0.82	D	0.81	D	-0.01	0.87	D	0.86	D	0.00
	Pacific - Kettner	0.85	E	0.84	E	-0.01	0.97	E	0.96	E	-0.01	1.02	F	1.01	F	-0.01
	Kettner - I-5	0.64	C	0.63	C	-0.01	0.75	D	0.74	D	-0.01	0.75	D	0.74	D	-0.02
	Washington - Sassafras	0.54	B	0.54	B	0.00	0.64	C	0.64	C	0.00	0.59	C	0.60	C	0.00
	Sassafras - Palm	0.48	B	0.49	B	0.01	0.57	C	0.58	C	0.01	0.59	C	0.60	C	0.01
Palm Street	Palm - Laurel	0.49	B	0.50	B	0.01	0.59	C	0.59	C	0.01	0.59	C	0.60	C	0.01
	Laurel - Hawthorn	0.42	B	0.43	B	0.00	0.50	B	0.51	B	0.00	0.57	C	0.57	C	0.00
	Hawthorn - Grape	0.49	B	0.49	B	0.00	0.58	C	0.58	C	0.00	0.65	C	0.65	C	0.00
	Pacific - Kettner	0.11	A	0.11	A	0.00	0.11	A	0.11	A	0.00	0.04	A	0.04	A	0.00
	Sassafras Street	0.95	E	0.98	E	0.024	1.14	F	1.25	F	0.102	1.17	F	1.19	F	0.02
Washington Street	Kettner-India	1.25	F	1.27	F	0.018	1.46	F	1.54	F	0.08	1.46	F	1.48	F	0.02
	Pacific - Kettner	0.68	D	0.68	D	0.00	0.78	D	0.78	D	0.00	0.82	D	0.82	D	0.00
	Kettner - San Diego	0.90	E	0.90	E	0.00	0.99	E	0.99	E	0.00	1.11	F	1.11	F	0.00
India Street	Laurel - Palm	2.03	F	2.01	F	-0.02	2.38	F	2.36	F	-0.01	2.20	F	2.19	F	-0.01
	Palm - Sassafras	1.73	F	1.72	F	-0.01	2.01	F	2.00	F	-0.01	1.86	F	1.85	F	-0.01
	Sassafras - Washington	1.57	F	1.54	F	-0.02	1.79	F	1.76	F	-0.03	1.93	F	1.90	F	-0.03
Rosecrans	Barnett - Sport Arena	0.91	E	0.90	E	0.00	0.97	E	0.97	E	0.00	0.82	D	0.82	D	0.00
	Nimitz Quimby - Barnett	4.03-0.91	F-E	4.03-0.91	F-E	0.00	4.03-0.92	F-E	4.03-0.92	F-E	0.00	0.94-0.84	E-D	0.94-0.84	E-D	0.00
	Nimitz - Quimby	1.03	F	1.03	F	0.00	1.03	F	1.03	F	0.00	0.94	E	0.94	E	0.00
Nimitz	Harbor - Rosecrans	0.46	B	0.45	B	0.00	0.49	B	0.48	B	0.00	0.58	C	0.58	C	0.00

Source: HNTB, 2007.

V/C = Volume to capacity ratio
 LOS = Level of service

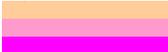
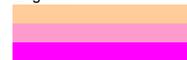
Legend:

 LOS E
 LOS F
 Significant Impact

Table D-79 (continued)
 2010-2030 Street Segment Impacts –Airport Implementation Plan Alternative (With Parking Structure, 2025-2030)

Roadway	Segment	Year 2025					Year 2030				
		No Proj V/C	No Proj LOS	Proj V/C	Proj LOS	Diff V/C	No Proj V/C	No Proj LOS	Proj V/C	Proj LOS	Diff V/C
North Harbor Drive	West of NTC	0.69	C	0.69	C	0.00	0.79	C	0.80	C	0.01
	NTC - Spanish Landing	0.70	C	0.71	C	0.01	0.79	C	0.81	C	0.03
	Spanish Landing - T2 Access	0.53	B	0.55	B	0.03	0.60	C	0.64	C	0.04
	T2 Access - Harbor Island	0.70	C	0.72	C	0.02	0.76	C	0.80	C	0.04
	Harbor Island - T1 Access	0.68	C	0.76	C	0.07	0.69	C	0.79	C	0.10
	T1 Access - Winship	0.93	E	0.82	C	-0.12	0.94	E	0.86	D	-0.08
	Winship - Rental Car Rd	0.98	E	0.88	D	-0.10	0.97	E	0.89	D	-0.08
	Rental Car Rd - Laurel	1.75	F	1.77	F	0.021	1.73	F	1.79	F	0.06
	Laurel - Hawthorn	1.19	F	1.21	F	0.015	1.22	F	1.26	F	0.04
	Hawthorn - Grape	0.81	C	0.82	C	0.01	0.82	C	0.85	D	0.03
Grape Street	Harbor - Pacific	1.09	F	1.10	F	0.010	1.13	F	1.17	F	0.03
	Pacific - Kettner	1.41	F	1.44	F	0.024	1.46	F	1.51	F	0.04
	Kettner - I-5	1.53	F	1.54	F	0.008	1.66	F	1.69	F	0.03
	Harbor - Pacific	1.10	F	1.11	F	0.006	1.16	F	1.19	F	0.03
Hawthorn Street	Pacific - Kettner	0.98	E	0.99	E	0.01	1.03	F	1.06	F	0.03
	Kettner - I-5	1.54	F	1.55	F	0.008	1.66	F	1.69	F	0.03
Kettner Blvd	north of Washington	0.44	B	0.44	B	0.00	0.18	A	0.18	A	0.00
	Washington - Sassafras	1.04	F	1.06	F	0.013	1.11	F	1.14	F	0.03
	Sassafras - Palm	1.17	F	1.19	F	0.013	0.99	E	1.02	F	0.03
	Palm - Laurel	0.96	E	0.96	E	0.00	0.85	D	0.86	D	0.01
	Laurel - Hawthorn	0.45	B	0.45	B	0.00	0.47	B	0.47	B	0.00
	Hawthorn - Grape	0.81	D	0.80	D	0.00	0.87	D	0.87	D	0.00
Laurel Street	Harbor - Pacific	0.85	D	0.86	D	0.01	0.78	D	0.81	D	0.03
	Pacific - Kettner	1.06	F	1.06	F	0.00	1.13	F	1.16	F	0.023
	Kettner - I-5	0.78	D	0.77	D	-0.01	0.90	E	0.90	E	0.01
	Washington - Sassafras	0.66	C	0.66	C	0.00	0.50	B	0.50	B	0.01
Pacific Highway	Sassafras - Palm	0.62	C	0.63	C	0.01	0.51	B	0.52	B	0.01
	Palm - Laurel	0.62	C	0.63	C	0.01	0.49	B	0.51	B	0.01
	Laurel - Hawthorn	0.62	C	0.62	C	0.00	0.54	B	0.54	B	0.01
	Hawthorn - Grape	0.70	C	0.70	C	0.00	0.62	C	0.63	C	0.01
Palm Street	Pacific - Kettner	0.01	A	0.01	A	0.00	0.01	A	0.01	A	0.00
Sassafras Street	Pacific - Kettner	1.28	F	1.32	F	0.03	0.94	E	0.99	E	0.05
	Kettner-India	1.53	F	1.56	F	0.03	1.32	F	1.36	F	0.04
Washington Street	Pacific - Kettner	0.83	D	0.83	D	0.00	0.63	C	0.64	C	0.01
	Kettner - San Diego	1.11	F	1.11	F	0.00	0.93	E	0.94	E	0.01
India Street	Laurel - Palm	2.25	F	2.26	F	0.0099	2.64	F	2.68	F	0.04
	Palm - Sassafras	1.88	F	1.89	F	0.007	2.09	F	2.11	F	0.03
	Sassafras - Washington	1.93	F	1.91	F	-0.02	2.41	F	2.42	F	0.011
	Barnett - Sport Arena	0.83	D	0.83	D	0.00	0.88	D	0.89	D	0.01
Rosecrans	Nimitz Quimby - Barnett	0.95 0.85	E-D	0.96 0.85	E-D	0.00	0.98 0.87	E-D	0.99 0.88	E-D	0.01
	Nimitz - Quimby	0.95	E	0.96	E	0.00	0.98	E	0.99	E	0.01
Nimitz	Harbor - Rosecrans	0.61	C	0.61	C	0.00	0.71	C	0.72	C	0.02

Source: HNTB, 2007.

V/C = Volume to capacity ratio
 LOS = Level of service

Legend:

 LOS E
 LOS F
 Significant Impact

D.6.1.3.2 Intersections

[Tables D-80, D-81, D-82, D-83, D-84, D-85, D-86, D-87, D-88, and D-89](#) show the intersection turning volumes under the Implementation Plan Alternative (With Parking Structure) for each analysis year. [Table D-90](#) shows the resulting intersection operations. ~~Future intersection lane configurations are assumed to remain the same under all alternatives and are shown on Figure D.5-4.~~ Intersection configurations were assumed to be the same as existing conditions shown in [Figure D.3-2](#) except for the following changes:

- North Harbor Drive and McCain Road is currently an unsignalized intersection with right-in / right-out movements only. In 2010 as part of the Liberty Station Development, this intersection is assumed to be signalized, allowing left turn movements inbound and outbound.
- In 2010, the intersection of North Harbor Drive and Winship Lane would be improved as part of the SDIA CIP to provided exclusive right turn lanes on both inbound and outbound approaches.

[Table D-91](#) compares the intersection operations under the Airport Implementation Plan Alternative (With Parking Structure) against the No Project Alternative to identify intersection impacts based on significance criteria identified in Section D.2, *Traffic Impacts and Significance Criteria*, , measured by an increase to LOS E or F or an increase in vehicle delay of greater than 2 seconds for streets operating at LOS E and greater than 1 second for streets operating at LOS F under the No Project Alternative. The following intersections would have potentially significant traffic impacts due to the project:

Intersections with Significant Traffic Impacts

Year 2020

- Sassafras Street and Kettner Boulevard (PM), which operates at LOS E and F in the PM peak hour under both the Implementation Plan Alternative (With Parking Structure) and No Project Alternative and would experience an increase in delay greater than 1 second under the Implementation Plan Alternative compared to the No Project Alternative.

Year 2025

- All locations identified in Year 2020
- Hawthorn Street and North Harbor Drive (AM), which operates at LOS F in the AM and LOS E in the PM peak hours under both the Implementation Plan Alternative (With Parking Structure) and No Project Alternative and would experience an increase in delay greater than 1 second under the Implementation Plan Alternative compared to the No Project Alternative.

Year 2030

- All locations identified in Year 2025
- Hawthorn Street and North Harbor Drive (PM), which operates at LOS F in the AM and LOS E in the PM peak hours under both the Implementation Plan Alternative (with Parking Structure) and No Project Alternative and would experience an increase in delay greater than 1 second under the Implementation Plan Alternative (With Parking Structure) compared to the No Project Alternative.
- Grape Street and Pacific Highway (PM), which operates at LOS E in the PM peak hour under both the Implementation Plan Alternative (With Parking Structure) and No Project Alternative and would experience an increase in delay greater than 2 seconds under the Implementation Plan Alternative compared to the No Project Alternative.

- Grape Street and Kettner Boulevard (PM), which operates at LOS E in the PM peak hour under both the Implementation Plan Alternative (With Parking Structure) and No Project Alternative and would experience an increase in delay greater than 2 seconds under the Implementation Plan Alternative compared to the No Project Alternative.
- Grape Street and I-5 Southbound On-Ramp (PM), which operates at LOS F in the PM peak hour under both the Implementation Plan Alternative (With Parking Structure) and No Project Alternative and would experience an increase in delay greater than 1 second under the Implementation Plan Alternative compared to the No Project Alternative.

**Table D-80
2010 Intersection Turning Volumes – AM Peak Hour - Airport Implementation Plan
Alternative (With Parking Structure)**

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total		
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	547	0	23	11	431	0	7	589	292	1,900	
		Airport	0	0	0	188	0	0	0	33	0	0	25	148	394	
		Background	0	0	0	359	0	23	11	398	0	7	564	144	1,506	
2	North Harbor Drive / McCain St	Total	0	0	0	118	0	29	153	599	0	0	921	418	2,238	
		Airport	0	0	0	55	0	5	10	211	0	0	168	128	577	
		Background	0	0	0	63	0	24	143	388	0	0	753	290	1,661	
3	North Harbor Drive / Spanish Landing	Total	5	0	18	23	0	101	68	708	4	15	1,522	0	2,464	
		Airport	0	0	0	23	0	101	68	198	0	0	195	0	585	
		Background	5	0	18	0	0	0	510	4	15	1,327	0	1,879		
4	North Harbor Drive / Harbor Island Drive	Total	41	2	148	19	4	35	32	634	82	241	1,842	0	3,080	
		Airport	10	2	42	19	4	35	32	166	22	68	531	0	931	
		Background	31	0	106	0	0	0	0	468	60	173	1,311	0	2,149	
5	North Harbor Drive / Winship Lane	Total	0	0	0	310	0	85	134	667	0	0	2,178	0	3,374	
		Airport	0	0	0	310	0	85	134	93	0	0	694	0	1,316	
		Background	0	0	0	0	0	0	0	574	0	0	1,484	0	2,058	
6	North Harbor Drive / Rental Car Road	Total	53	0	43	35	0	18	23	1,503	67	113	2,571	65	4,491	
		Airport	53	0	43	35	0	18	23	929	67	113	1,087	65	2,433	
		Background	0	0	0	0	0	0	0	574	0	0	1,484	0	2,058	
7	Sheraton / Harbor Island Drive	Total	13	107	0	0	229	99	85	6	27	0	0	0	566	
		Airport	0	54	0	0	95	0	0	0	0	0	0	0	149	
		Background	13	53	0	0	134	99	85	6	27	0	0	0	417	
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	86	0	0	62	1	269	
		Airport	0	0	0	0	0	38	82	12	0	0	16	1	149	
		Background	0	0	0	0	0	0	0	74	0	0	46	0	120	
9	Sassafra Street / Pacific Highway	Total	69	494	71	47	545	10	5	67	42	202	133	53	1,738	
		Airport	69	61	0	0	79	10	5	67	42	0	133	0	466	
		Background	0	433	71	47	466	0	0	0	0	202	0	53	1,272	
10	Laurel Street / North Harbor Drive	Total	0	0	0	24	0	4	386	1,093	0	0	1,870	40	3,417	
		Airport	0	0	0	0	0	0	366	642	0	0	817	0	1,825	
		Background	0	0	0	24	0	4	20	451	0	0	1,053	40	1,592	
11	Hawthorn Street / North Harbor Drive	Total	0	286	0	0	1,034	0	0	0	0	81	0	1,893	3,294	
		Airport	0	215	0	0	642	0	0	0	0	6	0	602	1,465	
		Background	0	71	0	0	392	0	0	0	0	75	0	1,291	1,829	
12	Grape Street / North Harbor Drive	Total	0	225	111	821	482	0	0	0	0	0	0	0	1,639	
		Airport	0	215	4	432	216	0	0	0	0	0	0	0	867	
		Background	0	10	107	389	266	0	0	0	0	0	0	0	772	
13	Laurel Street / Pacific Highway	Total	35	322	86	80	267	349	89	518	2	47	692	61	2,548	
		Airport	0	49	1	3	31	88	76	290	0	0	362	5	905	
		Background	35	273	85	77	236	261	13	228	2	47	330	56	1,643	
14	Hawthorn Street / Pacific Highway	Total	108	205	0	0	161	52	0	0	0	258	1,854	85	2,723	
		Airport	108	49	0	0	25	6	0	0	0	0	494	1	683	
		Background	0	156	0	0	136	46	0	0	0	258	1,360	84	2,040	
15	Grape Street / Pacific Highway	Total	0	567	161	144	800	0	62	796	32	0	0	0	2,562	
		Airport	0	153	0	0	25	0	4	400	32	0	0	0	614	
		Background	0	414	161	144	775	0	58	396	0	0	0	0	1,948	
16	Laurel Street / Kettner Boulevard	Total	0	0	0	233	321	544	0	611	45	39	240	0	2,033	
		Airport	0	0	0	0	300	0	294	0	0	67	0	0	661	
		Background	0	0	0	233	321	244	0	317	45	39	173	0	1,372	
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	154	82	0	0	0	0	156	2,497	0	2,889
		Airport	0	0	0	0	0	0	0	0	0	0	0	495	0	495
		Background	0	0	0	0	154	82	0	0	0	0	156	2,002	0	2,394
18	Grape Street / Kettner Boulevard	Total	0	0	0	91	462	0	0	1,335	99	0	0	0	1,987	
		Airport	0	0	0	0	0	0	0	388	13	0	0	0	401	
		Background	0	0	0	91	462	0	0	947	86	0	0	0	1,586	
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	65	86	73	0	0	0	42	430	1,055	0	0	0	1,751	
		Airport	0	0	0	0	0	0	0	3	386	0	0	0	389	
		Background	65	86	73	0	0	0	42	427	669	0	0	0	1,362	
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	45	43	0	0	0	0	0	0	0	0	2,455	78	2,621	
		Airport	0	0	0	0	0	0	0	0	0	0	0	491	0	491
		Background	45	43	0	0	0	0	0	0	0	0	0	1,964	78	2,130
21	Laurel Street / India Street	Total	75	108	19	0	0	0	460	343	31	0	219	195	1,450	
		Airport	31	0	0	0	0	0	235	28	31	0	37	0	362	
		Background	44	108	19	0	0	0	225	315	0	0	182	195	1,088	
22	Sassafra Street / Kettner Boulevard	Total	0	0	0	113	1,250	331	0	50	42	121	84	0	1,991	
		Airport	0	0	0	0	300	34	0	17	17	0	35	0	403	
		Background	0	0	0	113	950	297	0	33	25	121	49	0	1,588	
23	Sassafra Street / India Street	Total	193	790	11	0	0	0	109	24	50	0	33	21	1,231	
		Airport	67	236	0	0	0	0	33	0	0	0	0	0	336	
		Background	126	554	11	0	0	0	76	24	50	0	33	21	895	
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	185	32	53	0	64	37	148	154	0	673	
		Airport	0	0	0	0	0	0	0	28	11	66	26	0	131	
		Background	0	0	0	185	32	53	0	36	26	82	128	0	542	
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	65	11	117	26	6	18	22	0	230	312	143	47	997	
		Airport	7	0	49	0	0	0	0	0	28	84	0	0	168	
		Background	58	11	68	26	6	18	22	0	202	228	143	47	829	
26	Washington Street / Hancock Street	Total	0	258	103	321	375	0	354	165	130	0	0	0	1,706	
		Airport	0	64	13	0	75	0	0	0	9	0	0	0	161	
		Background	0	194	90	321	300	0	354	165	121	0	0	0	1,545	
27	Washington Street / San Diego Avenue	Total	94	579	0	0	539	536	0	0	0	174	204	7	2,133	
		Airport	13	51	0	0	67	0	0	0	0	9	0	0	140	
		Background	81	528	0	0	472	536	0	0	0	165	204	7	1,993	
28	Rosecrans Street / Pacific Highway	Total	200	148	220	99	145	61	60	173	143	301	147	86	1,783	
		Airport	0	2	8	0	3	1	0	1	0	10	2	0	27	
		Background	200	146	212	99	142	60	60	172	143	291	145	86	1,756	
29	Rosecrans Street / Nimitz Boulevard	Total	16	110	86	39	124	40	148	639	28	110	637	40	2,017	
		Airport	0	67	81	0	85	0	0	0	0	103	0	0	336	
		Background	16	43	5	39	39	40	148	639	28	7	637	40	1,681	

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19	Grape Street / I-5 Southbound On-Ramp	nbt	nbr	nbr2		ebt	ebt	ebr						
25	Washington Street / Pacific Highway NB-Ramps	nbl+nbl2	nbt	nbr	sbl	sbr2	sbr	ebt2	ebt	ebt	wbt	wbr2	wbr	

**Table D-81
2010 Intersection Turning Volumes – PM Peak Hour - Airport Implementation Plan
Alternative (With Parking Structure)**

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	454	0	56	36	562	0	14	584	765	2,471
		Airport	0	0	0	150	0	0	0	27	0	0	31	163	371
		Background	0	0	0	304	0	56	36	535	0	14	553	602	2,100
2	North Harbor Drive / McCain St	Total	0	0	0	421	0	153	32	919	0	0	1,050	151	2,726
		Airport	0	0	0	84	0	11	7	170	0	0	183	101	556
		Background	0	0	0	337	0	142	25	749	0	0	867	50	2,170
3	North Harbor Drive / Spanish Landing	Total	7	0	25	23	0	85	56	1,603	18	5	1,159	0	2,981
		Airport	0	0	0	23	0	85	56	199	0	0	198	0	561
		Background	7	0	25	0	0	0	1,404	18	5	961	0	2,420	
4	North Harbor Drive / Harbor Island Drive	Total	153	2	330	21	4	42	27	1,501	122	466	1,284	0	3,952
		Airport	11	2	55	21	4	42	27	175	20	59	460	0	876
		Background	142	0	275	0	0	0	1,326	102	407	824	0	3,076	
5	North Harbor Drive / Winship Lane	Total	0	0	0	314	0	81	119	1,733	0	0	1,817	0	4,064
		Airport	0	0	0	314	0	81	119	132	0	0	585	0	1,231
		Background	0	0	0	0	0	0	0	1,601	0	0	1,232	0	2,833
6	North Harbor Drive / Rental Car Road	Total	74	0	83	56	0	22	20	2,581	74	86	2,142	44	5,182
		Airport	74	0	83	56	0	22	20	980	74	86	910	44	2,349
		Background	0	0	0	0	0	0	0	1,601	0	0	1,232	0	2,833
7	Sheraton / Harbor Island Drive	Total	23	408	0	0	524	70	77	2	25	0	0	0	1,129
		Airport	0	68	0	0	84	0	0	0	0	0	0	0	152
		Background	23	340	0	0	440	70	77	2	25	0	0	0	977
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	55	68	95	0	0	126	1	345
		Airport	0	0	0	0	0	55	68	15	0	0	13	1	152
		Background	0	0	0	0	0	0	0	80	0	0	113	0	193
9	Sassafra Street / Pacific Highway	Total	63	856	353	125	949	8	13	182	91	165	110	44	2,959
		Airport	63	72	0	0	65	8	13	182	91	0	110	0	604
		Background	0	784	353	125	884	0	0	0	0	165	0	44	2,355
10	Laurel Street / North Harbor Drive	Total	0	0	0	72	0	11	1,109	1,910	0	0	1,605	105	4,812
		Airport	0	0	0	0	0	0	411	709	0	0	654	0	1,774
		Background	0	0	0	72	0	11	698	1,201	0	0	951	105	3,038
11	Hawthorn Street / North Harbor Drive	Total	0	583	0	0	2,081	0	0	0	0	133	0	1,053	3,850
		Airport	0	172	0	0	709	0	0	0	0	5	0	482	1,368
		Background	0	411	0	0	1,372	0	0	0	0	128	0	571	2,482
12	Grape Street / North Harbor Drive	Total	0	642	268	1,144	1,094	0	0	0	0	0	0	0	3,148
		Airport	0	172	7	471	244	0	0	0	0	0	0	0	894
		Background	0	470	261	673	850	0	0	0	0	0	0	0	2,254
13	Laurel Street / Pacific Highway	Total	111	605	146	139	481	369	471	689	58	51	793	78	3,991
		Airport	0	46	1	7	67	82	84	327	0	0	304	5	923
		Background	111	559	145	132	414	287	387	362	58	51	489	73	3,068
14	Hawthorn Street / Pacific Highway	Total	122	593	0	0	558	49	0	0	0	147	1,028	83	2,580
		Airport	87	46	0	0	62	5	0	0	0	0	395	1	596
		Background	35	547	0	0	496	44	0	0	0	147	633	82	1,984
15	Grape Street / Pacific Highway	Total	0	663	448	237	543	0	51	1,593	28	0	0	0	3,563
		Airport	0	126	0	1	62	0	7	443	28	0	0	0	667
		Background	0	537	448	236	481	0	44	1,150	0	0	0	0	2,896
16	Laurel Street / Kettner Boulevard	Total	0	0	0	282	601	577	0	870	79	54	290	0	2,753
		Airport	0	0	0	0	240	0	334	0	0	0	69	0	643
		Background	0	0	0	282	601	337	0	536	79	54	221	0	2,110
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	401	72	0	0	0	0	192	1,378	0	2,043
		Airport	0	0	0	0	1	0	0	0	0	0	396	0	397
		Background	0	0	0	400	72	0	0	0	0	192	982	0	1,646
18	Grape Street / Kettner Boulevard	Total	0	0	0	221	487	0	0	3,108	93	0	0	0	3,909
		Airport	0	0	0	0	0	0	0	429	14	0	0	0	443
		Background	0	0	0	221	487	0	0	2,679	79	0	0	0	3,466
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	98	187	183	0	0	0	26	532	2,067	0	0	0	3,093
		Airport	0	0	0	0	0	0	0	3	426	0	0	0	429
		Background	98	187	183	0	0	0	26	529	1,641	0	0	0	2,664
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	36	57	0	0	0	0	0	0	0	0	1,484	61	1,638
		Airport	0	0	0	0	0	0	0	0	0	0	393	0	393
		Background	36	57	0	0	0	0	0	0	0	0	1,091	61	1,245
21	Laurel Street / India Street	Total	84	290	86	0	0	0	655	499	40	0	273	267	2,194
		Airport	40	0	0	0	0	0	260	34	40	0	30	0	404
		Background	44	290	86	0	0	0	395	465	0	0	243	267	1,790
22	Sassafra Street / Kettner Boulevard	Total	0	0	0	186	1,735	257	0	213	99	85	87	0	2,662
		Airport	0	0	0	0	240	32	0	56	56	0	33	0	417
		Background	0	0	0	186	1,495	225	0	157	43	85	54	0	2,245
23	Sassafra Street / India Street	Total	179	1,327	31	0	0	0	302	60	110	0	14	17	2,040
		Airport	55	260	0	0	0	0	90	0	0	0	0	0	405
		Background	124	1,067	31	0	0	0	212	60	110	0	14	17	1,635
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	488	49	10	0	223	51	199	80	0	1,100
		Airport	0	0	0	0	0	0	0	27	10	53	46	0	136
		Background	0	0	0	488	49	10	0	196	41	146	34	0	964
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	37	25	199	57	55	7	55	14	592	327	207	59	1,634
		Airport	13	0	61	0	0	0	0	0	27	86	0	0	187
		Background	24	25	138	57	55	7	55	14	565	241	207	59	1,447
26	Washington Street / Hancock Street	Total	0	652	157	343	379	0	555	331	155	0	0	0	2,572
		Airport	0	75	13	0	70	0	0	0	16	0	0	0	174
		Background	0	577	144	343	309	0	555	331	139	0	0	0	2,398
27	Washington Street / San Diego Avenue	Total	187	1,152	0	0	572	489	0	0	0	185	276	17	2,878
		Airport	12	62	0	0	55	0	0	0	0	16	0	0	145
		Background	175	1,090	0	0	517	489	0	0	0	169	276	17	2,733
28	Rosecrans Street / Pacific Highway	Total	351	287	636	120	139	67	111	459	170	246	304	129	3,019
		Airport	0	3	10	0	2	0	0	1	0	8	1	0	25
		Background	351	284	626	120	137	67	111	458	170	238	303	129	2,994
29	Rosecrans Street / Nimitz Boulevard	Total	18	192	109	30	102	30	332	812	33	172	653	53	2,536
		Airport	0	74	89	0	68	0	0	0	0	82	0	0	313
		Background	18	118	20	30	34	30	332	812	33	90	653	53	2,223

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19	Grape Street / I-5 Southbound On-Ramp	nbt	nbr	nbr2		ebt	ebt	ebr	wbt	wbr2	wbr		
25	Washington Street / Pacific Highway NB-Ramps	nbl+nbl2	nbt	nbr	sbl	sbr2	sbr	ebt2	ebt	ebt	wbt	wbr2	wbr

**Table D-82
2015 Intersection Turning Volumes – AM Peak Hour - Airport Implementation Plan
Alternative (With Parking Structure)**

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	603	0	22	13	519	0	8	681	341	2,187
		Airport	0	0	0	217	0	0	0	39	0	0	30	172	458
		Background	0	0	0	386	0	22	13	480	0	8	651	169	1,729
2	North Harbor Drive / McCain St	Total	0	0	0	136	0	34	185	659	0	0	889	496	2,399
		Airport	0	0	0	59	0	5	10	245	0	0	197	140	656
		Background	0	0	0	77	0	29	175	414	0	0	692	356	1,743
3	North Harbor Drive / Spanish Landing	Total	5	0	18	23	0	120	81	788	5	16	1,616	0	2,672
		Airport	0	0	0	23	0	120	81	223	0	0	217	0	664
		Background	5	0	18	0	0	0	0	565	5	16	1,399	0	2,008
4	North Harbor Drive / Harbor Island Drive	Total	42	3	152	19	5	41	38	704	88	243	2,003	0	3,338
		Airport	10	3	43	19	5	41	38	186	23	69	620	0	1,057
		Background	32	0	109	0	0	0	0	518	65	174	1,383	0	2,281
5	North Harbor Drive / Winship Lane	Total	0	0	0	359	0	98	148	727	0	0	2,359	0	3,691
		Airport	0	0	0	359	0	98	148	100	0	0	802	0	1,507
		Background	0	0	0	0	0	0	0	627	0	0	1,557	0	2,184
6	North Harbor Drive / Rental Car Road	Total	63	0	50	39	0	19	25	1,714	78	133	2,815	74	5,010
		Airport	63	0	50	39	0	19	25	1,087	78	133	1,258	74	2,826
		Background	0	0	0	0	0	0	0	627	0	0	1,557	0	2,184
7	Sheraton / Harbor Island Drive	Total	13	113	0	0	237	99	85	6	27	0	0	0	580
		Airport	0	56	0	0	97	0	0	0	0	0	0	0	153
		Background	13	57	0	0	140	99	85	6	27	0	0	0	427
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	95	0	0	69	1	285
		Airport	0	0	0	0	0	38	82	15	0	0	19	1	155
		Background	0	0	0	0	0	0	0	80	0	0	50	0	130
9	Sassafra Street / Pacific Highway	Total	78	592	86	56	651	11	5	76	48	248	152	65	2,068
		Airport	78	73	0	0	94	11	5	76	48	0	152	0	537
		Background	0	519	86	56	557	0	0	0	0	248	0	65	1,531
10	Laurel Street / North Harbor Drive	Total	0	0	0	26	0	4	450	1,195	0	0	1,966	39	3,880
		Airport	0	0	0	0	0	0	430	747	0	0	941	0	2,118
		Background	0	0	0	26	0	4	20	448	0	0	1,025	39	1,562
11	Hawthorn Street / North Harbor Drive	Total	0	315	0	0	1,127	0	0	0	0	87	0	2,061	3,590
		Airport	0	247	0	0	747	0	0	0	0	8	0	694	1,696
		Background	0	68	0	0	380	0	0	0	0	79	0	1,367	1,894
12	Grape Street / North Harbor Drive	Total	0	257	110	875	508	0	0	0	0	0	0	0	1,750
		Airport	0	247	7	503	253	0	0	0	0	0	0	0	1,010
		Background	0	10	103	372	255	0	0	0	0	0	0	0	740
13	Laurel Street / Pacific Highway	Total	41	381	107	97	321	414	102	585	2	52	779	66	2,947
		Airport	0	58	6	4	37	101	88	343	0	1	422	6	1,066
		Background	41	323	101	93	284	313	14	242	2	51	357	60	1,881
14	Hawthorn Street / Pacific Highway	Total	124	245	0	0	190	63	0	0	0	267	1,975	91	2,955
		Airport	124	60	0	0	29	8	0	0	0	0	570	4	795
		Background	0	185	0	0	161	55	0	0	0	267	1,405	87	2,160
15	Grape Street / Pacific Highway	Total	0	642	182	170	946	0	70	892	37	0	0	0	2,939
		Airport	0	177	0	0	29	0	7	466	37	0	0	0	716
		Background	0	465	182	170	917	0	63	426	0	0	0	0	2,223
16	Laurel Street / Kettner Boulevard	Total	0	0	0	261	355	615	0	695	49	46	279	0	2,300
		Airport	0	0	0	4	0	346	0	352	0	2	83	0	787
		Background	0	0	0	257	355	269	0	343	49	44	196	0	1,513
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	171	90	0	0	0	173	2,792	0	3,226
		Airport	0	0	0	0	2	0	0	0	0	0	574	0	576
		Background	0	0	0	0	169	90	0	0	0	173	2,218	0	2,650
18	Grape Street / Kettner Boulevard	Total	0	0	0	105	524	0	0	1,433	104	0	0	0	2,166
		Airport	0	0	0	2	0	0	0	452	15	0	0	0	469
		Background	0	0	0	103	524	0	0	981	89	0	0	0	1,697
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	77	102	87	0	0	0	43	437	1,131	0	0	0	1,877
		Airport	0	0	0	0	0	0	0	3	451	0	0	0	454
		Background	77	102	87	0	0	0	43	434	680	0	0	0	1,423
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	48	46	0	0	0	0	0	0	0	0	2,521	77	2,692
		Airport	0	0	0	0	0	0	0	0	0	0	0	570	570
		Background	48	46	0	0	0	0	0	0	0	0	1,951	77	2,122
21	Laurel Street / India Street	Total	97	135	23	0	0	0	526	386	50	0	258	231	1,706
		Airport	43	2	0	0	0	0	274	33	50	0	42	0	444
		Background	54	133	23	0	0	0	252	353	0	0	216	231	1,262
22	Sassafra Street / Kettner Boulevard	Total	0	0	0	115	1,318	347	0	60	52	139	101	0	2,132
		Airport	0	0	0	0	350	44	0	22	22	0	45	0	483
		Background	0	0	0	115	968	303	0	38	30	139	56	0	1,649
23	Sassafra Street / India Street	Total	223	919	12	0	0	0	125	28	58	0	34	22	1,421
		Airport	76	276	0	0	0	0	38	0	0	0	0	0	390
		Background	147	643	12	0	0	0	87	28	58	0	34	22	1,031
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	200	35	57	0	76	42	164	174	0	748
		Airport	0	0	0	0	0	0	0	39	15	76	36	0	166
		Background	0	0	0	200	35	57	0	37	27	88	138	0	582
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	94	16	155	29	7	20	24	0	258	359	162	53	1,177
		Airport	10	0	57	0	0	0	0	0	39	101	0	0	207
		Background	84	16	98	29	7	20	24	0	219	258	162	53	970
26	Washington Street / Hancock Street	Total	0	297	120	351	417	0	358	167	134	0	0	0	1,844
		Airport	0	78	18	0	89	0	0	0	12	0	0	0	197
		Background	0	219	102	351	328	0	358	167	122	0	0	0	1,647
27	Washington Street / San Diego Avenue	Total	107	637	0	0	564	553	0	0	0	182	225	8	2,288
		Airport	18	59	0	0	77	0	0	0	0	12	0	0	166
		Background	89	578	0	0	487	553	0	0	0	170	225	8	2,122
28	Rosecrans Street / Pacific Highway	Total	237	177	261	116	170	72	63	183	151	314	153	89	1,986
		Airport	0	3	9	0	3	1	0	1	0	12	2	0	31
		Background	237	174	252	116	167	71	63	182	151	302	151	89	1,955
29	Rosecrans Street / Nimitz Boulevard	Total	16	121	99	14	112	15	155	671	30	125	627	40	2,025
		Airport	0	78	94	0	98	0	0	0	0	119	0	0	389
		Background	16	43	5	14	14	15	155	671	30	6	627	40	1,636

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19	Grape Street / I-5 Southbound On-Ramp	nbt	nbr	nbr2		ebl	ebt	ebr	wbt	wbr2	wbr		
25	Washington Street / Pacific Highway NB-Ramps	nbl+nbl2	nbt	nbr	sbl	sbr2	sbr	ebl2	ebl	ebt	wbt	wbr2	wbr

**Table D-83
2015 Intersection Turning Volumes – PM Peak Hour - Airport Implementation Plan
Alternative (With Parking Structure)**

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	477	0	55	44	677	0	17	674	895	2,839
		Airport	0	0	0	174	0	0	0	32	0	0	36	189	431
		Background	0	0	0	303	0	55	44	645	0	17	638	706	2,408
2	North Harbor Drive / McCain St	Total	0	0	0	502	0	186	38	967	0	0	1,078	172	2,943
		Airport	0	0	0	88	0	11	7	199	0	0	214	110	629
		Background	0	0	0	414	0	175	31	768	0	0	864	62	2,314
3	North Harbor Drive / Spanish Landing	Total	7	0	25	23	0	102	67	1,795	20	6	1,203	0	3,248
		Airport	0	0	0	23	0	102	67	220	0	0	222	0	634
		Background	7	0	25	0	0	0	0	1,575	20	6	981	0	2,614
4	North Harbor Drive / Harbor Island Drive	Total	159	2	340	21	5	49	31	1,680	132	470	1,379	0	4,268
		Airport	12	2	56	21	5	49	31	191	21	60	539	0	987
		Background	147	0	284	0	0	0	0	1,489	111	410	840	0	3,281
5	North Harbor Drive / Winship Lane	Total	0	0	0	363	0	94	131	1,910	0	0	1,929	0	4,427
		Airport	0	0	0	363	0	94	131	137	0	0	679	0	1,404
		Background	0	0	0	0	0	0	0	1,773	0	0	1,250	0	3,023
6	North Harbor Drive / Rental Car Road	Total	87	0	97	62	0	23	21	2,913	87	100	2,308	50	5,748
		Airport	87	0	97	62	0	23	21	1,140	87	100	1,058	50	2,725
		Background	0	0	0	0	0	0	0	1,773	0	0	1,250	0	3,023
7	Sheraton / Harbor Island Drive	Total	23	423	0	0	537	70	77	2	25	0	0	0	1,157
		Airport	0	70	0	0	86	0	0	0	0	0	0	0	156
		Background	23	353	0	0	451	70	77	2	25	0	0	0	1,001
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	55	68	104	0	0	136	1	364
		Airport	0	0	0	0	0	55	68	18	0	0	15	1	157
		Background	0	0	0	0	0	0	0	86	0	0	121	0	207
9	Sassafra Street / Pacific Highway	Total	72	1,027	424	150	1,137	9	15	203	102	202	127	54	3,522
		Airport	72	86	0	0	78	9	15	203	102	0	127	0	692
		Background	0	941	424	150	1,059	0	0	0	0	202	0	54	2,830
10	Laurel Street / North Harbor Drive	Total	0	0	0	76	0	11	1,175	2,015	0	0	1,682	102	5,061
		Airport	0	0	0	0	0	0	480	820	0	0	756	0	2,056
		Background	0	0	0	76	0	11	695	1,195	0	0	926	102	3,005
11	Hawthorn Street / North Harbor Drive	Total	0	592	0	0	2,149	0	0	0	0	145	0	1,161	4,047
		Airport	0	199	0	0	820	0	0	0	0	9	0	557	1,585
		Background	0	393	0	0	1,329	0	0	0	0	136	0	604	2,462
12	Grape Street / North Harbor Drive	Total	0	652	261	1,190	1,098	0	0	0	0	0	0	0	3,201
		Airport	0	199	10	545	284	0	0	0	0	0	0	0	1,038
		Background	0	453	251	645	814	0	0	0	0	0	0	0	2,163
13	Laurel Street / Pacific Highway	Total	131	718	175	166	574	438	508	768	62	58	886	85	4,569
		Airport	0	56	4	8	77	94	97	383	0	2	357	6	1,084
		Background	131	662	171	158	497	344	411	385	62	56	529	79	3,485
14	Hawthorn Street / Pacific Highway	Total	141	705	0	0	658	61	0	0	0	152	1,111	88	2,916
		Airport	100	57	0	0	71	9	0	0	0	0	457	3	697
		Background	41	648	0	0	587	52	0	0	0	152	654	85	2,219
15	Grape Street / Pacific Highway	Total	0	751	504	280	639	0	57	1,749	32	0	0	0	4,012
		Airport	0	147	0	1	70	0	10	512	32	0	0	0	772
		Background	0	604	504	279	569	0	47	1,237	0	0	0	0	3,240
16	Laurel Street / Kettner Boulevard	Total	0	0	0	314	664	649	0	977	86	66	337	0	3,093
		Airport	0	0	0	3	0	277	0	396	0	5	88	0	769
		Background	0	0	0	311	664	372	0	581	86	61	249	0	2,324
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	446	79	0	0	0	213	1,548	0	2,286
		Airport	0	0	0	0	5	0	0	0	0	0	460	0	465
		Background	0	0	0	0	441	79	0	0	0	213	1,088	0	1,821
18	Grape Street / Kettner Boulevard	Total	0	0	0	255	554	0	0	3,273	98	0	0	0	4,180
		Airport	0	0	0	4	1	0	0	497	18	0	0	0	518
		Background	0	0	0	251	553	0	0	2,776	82	0	0	0	3,662
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	117	223	218	0	0	0	26	541	2,164	0	0	0	3,289
		Airport	0	0	0	0	0	0	0	4	497	0	0	0	501
		Background	117	223	218	0	0	0	26	537	1,667	0	0	0	2,788
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	39	61	0	0	0	0	0	0	0	0	1,540	60	1,700
		Airport	0	0	0	0	0	0	0	0	0	0	457	0	457
		Background	39	61	0	0	0	0	0	0	0	0	1,083	60	1,243
21	Laurel Street / India Street	Total	112	362	106	0	0	0	743	560	58	0	323	317	2,581
		Airport	58	5	0	0	0	0	301	40	58	0	35	0	497
		Background	54	357	106	0	0	0	442	520	0	0	288	317	2,084
22	Sassafra Street / Kettner Boulevard	Total	0	0	0	189	1,804	270	0	249	117	97	102	0	2,828
		Airport	0	0	0	0	280	41	0	86	67	0	41	0	495
		Background	0	0	0	189	1,524	229	0	183	50	97	61	0	2,333
23	Sassafra Street / India Street	Total	208	1,544	36	0	0	0	344	69	126	0	15	18	2,360
		Airport	64	306	0	0	0	0	101	0	0	0	0	0	471
		Background	144	1,238	36	0	0	0	243	69	126	0	15	18	1,889
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	527	53	12	0	240	56	219	99	0	1,206
		Airport	0	0	0	0	0	1	0	37	14	61	62	0	175
		Background	0	0	0	527	53	11	0	203	42	158	37	0	1,031
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	52	36	270	63	60	8	60	15	649	378	234	66	1,891
		Airport	17	0	70	0	0	0	0	0	37	106	0	0	230
		Background	35	36	200	63	60	8	60	15	612	272	234	66	1,661
26	Washington Street / Hancock Street	Total	0	741	179	376	423	0	562	335	162	0	0	0	2,778
		Airport	0	89	17	0	85	0	0	0	21	0	0	0	212
		Background	0	652	162	376	338	0	562	335	141	0	0	0	2,566
27	Washington Street / San Diego Avenue	Total	208	1,264	0	0	596	504	0	0	0	207	304	19	3,102
		Airport	17	72	0	0	64	0	0	0	0	21	0	1	175
		Background	191	1,192	0	0	532	504	0	0	0	186	304	18	2,927
28	Rosecrans Street / Pacific Highway	Total	418	341	756	141	163	78	119	485	180	257	315	134	3,387
		Airport	0	3	11	0	3	0	1	2	0	10	1	0	31
		Background	418	338	745	141	160	78	118	483	180	247	314	134	3,356
29	Rosecrans Street / Nimitz Boulevard	Total	18	204	123	11	91	11	348	852	34	183	643	52	2,570
		Airport	0	86	103	0	79	0	0	0	0	95	0	0	363
		Background	18	118	20	11	12	11	348	852	34	88	643	52	2,207

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19	Grape Street / I-5 Southbound On-Ramp	nbt	nbr	nbr2		ebl	ebt	ebr	wbt	wbr2	wbr		
25	Washington Street / Pacific Highway NB-Ramps	nbl+nbl2	nbt	nbr	sbl	sbr2	sbr	ebl2	ebl	ebt	wbt	wbr2	wbr

**Table D-84
2020 Intersection Turning Volumes – AM Peak Hour - Airport Implementation Plan
Alternative (With Parking Structure)**

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	707	0	30	14	540	0	9	835	395	2,530
		Airport	0	0	0	238	0	0	0	43	0	0	33	191	505
		Background	0	0	0	469	0	30	14	497	0	9	802	204	2,025
2	North Harbor Drive / McCain St	Total	0	0	0	147	0	37	202	737	0	0	913	537	2,573
		Airport	0	0	0	62	0	5	10	271	0	0	219	148	715
		Background	0	0	0	85	0	32	192	466	0	0	694	389	1,858
3	North Harbor Drive / Spanish Landing	Total	5	0	18	24	0	129	85	878	6	18	1,704	0	2,867
		Airport	0	0	0	24	0	129	85	248	0	0	237	0	723
		Background	5	0	18	0	0	0	630	6	18	1,467	0	0	2,144
4	North Harbor Drive / Harbor Island Drive	Total	44	3	157	19	6	52	49	774	95	251	2,105	0	3,555
		Airport	11	3	44	19	6	52	49	199	23	70	653	0	1,129
		Background	33	0	113	0	0	0	575	72	181	1,452	0	0	2,426
5	North Harbor Drive / Winship Lane	Total	0	0	0	389	0	107	157	794	0	0	2,524	0	3,971
		Airport	0	0	0	389	0	107	157	105	0	0	891	0	1,649
		Background	0	0	0	0	0	0	689	0	0	1,633	0	0	2,322
6	North Harbor Drive / Rental Car Road	Total	70	0	56	43	0	19	26	1,895	87	147	3,018	80	5,441
		Airport	70	0	56	43	0	19	26	1,206	87	147	1,385	80	3,119
		Background	0	0	0	0	0	0	689	0	0	1,633	0	0	2,322
7	Sheraton / Harbor Island Drive	Total	13	120	0	0	253	99	85	6	27	0	0	0	603
		Airport	0	58	0	0	99	0	0	0	0	0	0	0	157
		Background	13	62	0	0	154	99	85	6	27	0	0	0	0
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	98	0	0	72	1	291
		Airport	0	0	0	0	0	38	82	16	0	0	21	1	158
		Background	0	0	0	0	0	0	82	0	0	0	51	0	133
9	Sassafra Street / Pacific Highway	Total	85	600	85	50	805	12	6	83	51	233	166	61	2,037
		Airport	85	83	0	0	108	12	6	83	51	0	166	0	594
		Background	0	517	85	50	497	0	0	0	233	0	61	61	1,443
10	Laurel Street / North Harbor Drive	Total	0	0	0	23	0	4	500	1,305	0	0	2,189	44	4,065
		Airport	0	0	0	0	0	0	479	826	0	0	1,034	0	2,339
		Background	0	0	0	23	0	4	21	479	0	0	1,155	44	1,726
11	Hawthorn Street / North Harbor Drive	Total	0	342	0	0	1,248	0	0	0	0	110	0	2,465	4,165
		Airport	0	271	0	0	826	0	0	0	0	12	0	763	1,872
		Background	0	71	0	0	422	0	0	0	0	98	0	1,702	2,293
12	Grape Street / North Harbor Drive	Total	0	280	104	946	545	0	0	0	0	0	0	0	1,875
		Airport	0	271	10	558	280	0	0	0	0	0	0	0	1,119
		Background	0	9	94	388	265	0	0	0	0	0	0	0	0
13	Laurel Street / Pacific Highway	Total	46	430	125	94	318	415	108	597	1	47	782	59	3,022
		Airport	0	65	11	4	43	111	96	382	0	2	467	6	1,187
		Background	46	365	114	90	275	304	12	215	1	45	315	53	1,835
14	Hawthorn Street / Pacific Highway	Total	137	277	0	0	217	74	0	0	0	294	2,172	103	3,274
		Airport	137	69	0	0	34	12	0	0	0	0	626	7	885
		Background	0	208	0	0	183	62	0	0	294	1,546	96	2,389	
15	Grape Street / Pacific Highway	Total	0	697	195	191	1,063	0	85	1,025	43	0	0	0	3,299
		Airport	0	196	0	0	33	0	10	515	43	0	0	0	797
		Background	0	501	195	191	1,030	0	75	510	0	0	0	0	2,502
16	Laurel Street / Kettner Boulevard	Total	0	0	0	439	597	833	0	699	43	40	258	0	2,909
		Airport	0	0	0	7	0	380	0	397	0	4	95	0	883
		Background	0	0	0	432	597	453	0	302	43	36	163	0	2,026
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	289	152	0	0	0	181	2,956	0	3,578
		Airport	0	0	0	0	4	0	0	0	0	0	633	0	637
		Background	0	0	0	0	285	152	0	0	0	181	2,323	0	2,941
18	Grape Street / Kettner Boulevard	Total	0	0	0	135	671	0	0	1,563	112	0	0	0	2,481
		Airport	0	0	0	3	0	0	0	500	16	0	0	0	519
		Background	0	0	0	132	671	0	0	1,063	96	0	0	0	1,962
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	121	159	136	0	0	0	38	390	1,106	0	0	0	1,950
		Airport	0	0	0	0	0	0	0	3	500	0	0	0	503
		Background	121	159	136	0	0	0	38	387	606	0	0	0	1,447
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	52	49	0	0	0	0	0	0	0	0	2,370	69	2,540
		Airport	0	0	0	0	0	0	0	0	0	0	629	0	629
		Background	52	49	0	0	0	0	0	0	0	0	1,741	69	1,911
21	Laurel Street / India Street	Total	95	110	18	0	0	0	514	331	65	0	252	219	1,604
		Airport	52	4	0	0	0	0	303	36	65	0	47	0	507
		Background	43	106	18	0	0	0	211	295	0	0	205	219	1,097
22	Sassafra Street / Kettner Boulevard	Total	0	0	0	115	1,318	347	0	60	52	139	101	0	2,132
		Airport	0	0	0	0	350	44	0	22	22	0	45	0	483
		Background	0	0	0	115	968	303	0	38	30	139	56	0	1,649
23	Sassafra Street / India Street	Total	203	835	10	0	0	0	127	27	57	0	37	23	1,319
		Airport	83	307	0	0	0	0	41	0	0	0	0	0	431
		Background	120	528	10	0	0	0	86	27	57	0	37	23	888
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	226	40	65	0	93	48	178	198	0	848
		Airport	0	0	0	0	0	0	0	54	20	83	49	0	206
		Background	0	0	0	226	40	65	0	39	28	95	149	0	642
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	70	11	129	31	7	21	27	0	288	382	166	54	1,186
		Airport	13	0	63	0	0	0	1	0	53	118	0	0	248
		Background	57	11	66	31	7	21	26	0	235	264	166	54	938
26	Washington Street / Hancock Street	Total	0	315	129	394	469	0	473	221	179	0	0	0	2,180
		Airport	0	91	25	1	102	0	0	0	17	0	0	0	236
		Background	0	224	104	393	367	0	473	221	162	0	0	0	1,944
27	Washington Street / San Diego Avenue	Total	124	713	0	0	674	668	0	0	0	206	233	8	2,626
		Airport	25	66	0	0	86	0	0	0	0	17	0	0	194
		Background	99	647	0	0	588	668	0	0	0	189	233	8	2,432
28	Rosecrans Street / Pacific Highway	Total	206	154	229	99	146	61	64	182	150	345	168	98	1,902
		Airport	0	3	10	0	4	1	1	2	0	13	2	0	36
		Background	206	151	219	99	142	60	63	180	150	332	166	98	1,866
29	Rosecrans Street / Nimitz Boulevard	Total	20	139	111	35	144	37	124	536	24	136	551	35	1,892
		Airport	0	87	104	0	108	0	0	0	0	130	0	0	429
		Background	20	52	7	35	36	37	124	536	24	6	551	35	1,463

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19	Grape Street / I-5 Southbound On-Ramp	nbt	nbr	nbr2	sbl	sbr2	sbr	eb1	ebt	ebr	wbt	wbr2	wbr
25	Washington Street / Pacific Highway NB-Ramps	nbl+nbl2	nbt	nbr	sbl	sbr2	sbr	eb12	eb1	ebt	wbt	wbr2	wbr

**Table D-85
2020 Intersection Turning Volumes – PM Peak Hour - Airport Implementation Plan
Alternative (With Parking Structure)**

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	583	0	72	45	703	0	20	826	1,053	3,302
		Airport	0	0	0	192	0	0	0	36	0	0	40	208	476
		Background	0	0	0	391	0	72	45	667	0	20	786	845	2,826
2	North Harbor Drive / McCain St	Total	0	0	0	542	0	202	41	1,090	0	0	1,128	186	3,189
		Airport	0	0	0	90	0	11	7	220	0	0	237	118	683
		Background	0	0	0	452	0	191	34	870	0	0	891	68	2,506
3	North Harbor Drive / Spanish Landing	Total	7	0	25	23	0	111	71	1,989	25	7	1,263	0	3,521
		Airport	0	0	0	23	0	111	71	240	0	0	244	0	689
		Background	7	0	25	0	0	0	0	1,749	25	7	1,019	0	2,832
4	North Harbor Drive / Harbor Island Drive	Total	164	3	351	21	6	59	41	1,851	145	485	1,444	0	4,570
		Airport	12	3	57	21	6	59	41	201	21	61	571	0	1,053
		Background	152	0	294	0	0	0	0	1,650	124	424	873	0	3,517
5	North Harbor Drive / Winship Lane	Total	0	0	0	392	0	103	139	2,085	0	0	2,055	0	4,774
		Airport	0	0	0	392	0	103	139	140	0	0	757	0	1,531
		Background	0	0	0	0	0	0	0	1,945	0	0	1,298	0	3,243
6	North Harbor Drive / Rental Car Road	Total	96	0	108	66	0	24	21	3,202	96	111	2,466	53	6,243
		Airport	96	0	108	66	0	24	21	1,257	96	111	1,168	53	3,000
		Background	0	0	0	0	0	0	0	1,945	0	0	1,298	0	3,243
7	Sheraton / Harbor Island Drive	Total	23	441	0	0	566	70	77	2	25	0	0	0	1,204
		Airport	0	72	0	0	88	0	0	0	0	0	0	0	160
		Background	23	369	0	0	478	70	77	2	25	0	0	0	1,044
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	55	68	109	0	0	142	1	375
		Airport	0	0	0	0	0	55	68	20	0	0	17	1	161
		Background	0	0	0	0	0	0	0	89	0	0	125	0	214
9	Sassafra Street / Pacific Highway	Total	78	1,037	422	134	1,033	10	16	218	110	191	139	51	3,439
		Airport	78	100	0	0	89	10	16	218	110	0	139	0	760
		Background	0	937	422	134	944	0	0	0	0	191	0	51	2,679
10	Laurel Street / North Harbor Drive	Total	0	0	0	68	0	10	1,273	2,178	0	0	1,876	115	5,520
		Airport	0	0	0	0	0	0	530	901	0	0	832	0	2,263
		Background	0	0	0	68	0	10	743	1,277	0	0	1,044	115	3,257
11	Hawthorn Street / North Harbor Drive	Total	0	628	0	0	2,376	0	0	0	0	181	0	1,367	4,552
		Airport	0	218	0	0	901	0	0	0	0	12	0	614	1,745
		Background	0	410	0	0	1,475	0	0	0	0	169	0	753	2,807
12	Grape Street / North Harbor Drive	Total	0	635	245	1,273	1,161	0	0	0	0	0	0	0	3,314
		Airport	0	218	14	601	313	0	0	0	0	0	0	0	1,146
		Background	0	417	231	672	848	0	0	0	0	0	0	0	2,168
13	Laurel Street / Pacific Highway	Total	148	812	200	162	568	438	472	766	55	53	862	75	4,611
		Airport	0	65	7	9	86	104	107	424	0	4	396	6	1,208
		Background	148	747	193	153	482	334	365	342	55	49	466	69	3,403
14	Hawthorn Street / Pacific Highway	Total	157	795	0	0	744	71	0	0	0	167	1,222	98	3,254
		Airport	111	67	0	0	78	12	0	0	0	0	503	5	776
		Background	46	728	0	0	666	59	0	0	0	167	719	93	2,478
15	Grape Street / Pacific Highway	Total	0	813	542	314	716	0	70	2,046	38	0	0	0	4,539
		Airport	0	164	0	1	77	0	14	563	38	0	0	0	857
		Background	0	649	542	313	639	0	56	1,483	0	0	0	0	3,682
16	Laurel Street / Kettner Boulevard	Total	0	0	0	528	1,116	932	0	952	76	59	309	0	3,972
		Airport	0	0	0	5	0	306	0	440	0	8	101	0	860
		Background	0	0	0	523	1,116	626	0	512	76	51	208	0	3,112
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	750	134	0	0	0	223	1,647	0	2,754
		Airport	0	0	0	0	8	0	0	0	0	0	508	0	516
		Background	0	0	0	0	742	134	0	0	0	223	1,139	0	2,238
18	Grape Street / Kettner Boulevard	Total	0	0	0	328	709	0	0	3,555	105	0	0	0	4,697
		Airport	0	0	0	7	1	0	0	548	17	0	0	0	571
		Background	0	0	0	321	708	0	0	3,009	88	0	0	0	4,126
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	121	159	136	0	0	0	38	391	1,155	0	0	0	2,000
		Airport	0	0	0	0	0	0	0	4	549	0	0	0	553
		Background	121	159	136	0	0	0	38	387	606	0	0	0	1,447
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	52	49	0	0	0	0	0	0	0	0	2,246	69	2,416
		Airport	0	0	0	0	0	0	0	0	0	0	505	0	505
		Background	52	49	0	0	0	0	0	0	0	0	1,741	69	1,911
21	Laurel Street / India Street	Total	113	293	84	0	0	0	700	479	70	0	313	301	2,353
		Airport	70	8	0	0	0	0	331	44	70	0	39	0	562
		Background	43	285	84	0	0	0	369	435	0	0	274	301	1,791
22	Sassafra Street / Kettner Boulevard	Total	0	0	0	452	3,949	595	0	250	123	96	109	0	5,574
		Airport	0	0	0	0	310	47	0	74	75	0	48	0	554
		Background	0	0	0	452	3,639	548	0	176	48	96	61	0	5,020
23	Sassafra Street / India Street	Total	188	1,355	30	0	0	0	348	68	124	0	16	19	2,148
		Airport	70	339	0	0	0	0	108	0	0	0	0	0	517
		Background	118	1,016	30	0	0	0	240	68	124	0	16	19	1,631
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	596	60	13	0	262	63	237	125	0	1,356
		Airport	0	0	0	0	1	0	0	49	19	67	85	0	221
		Background	0	0	0	596	60	12	0	213	44	170	40	0	1,135
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	81	11	143	31	7	21	27	0	284	393	166	54	1,218
		Airport	24	0	77	0	0	0	1	0	49	129	0	0	280
		Background	57	11	66	31	7	21	26	0	235	264	166	54	938
26	Washington Street / Hancock Street	Total	0	769	189	422	479	0	742	443	215	0	0	0	3,259
		Airport	0	102	23	1	100	0	0	0	29	0	0	0	255
		Background	0	667	166	421	379	0	742	443	186	0	0	0	3,004
27	Washington Street / San Diego Avenue	Total	237	1,415	0	0	714	609	0	0	0	222	315	20	3,532
		Airport	23	79	0	0	71	0	0	0	0	29	0	1	203
		Background	214	1,336	0	0	643	609	0	0	0	193	315	19	3,329
28	Rosecrans Street / Pacific Highway	Total	363	297	660	120	139	68	118	482	178	283	348	147	3,203
		Airport	0	3	12	0	3	1	1	2	0	11	2	0	35
		Background	363	294	648	120	136	67	117	480	178	272	346	147	3,168
29	Rosecrans Street / Nimitz Boulevard	Total	22	239	138	28	118	28	278	680	27	183	566	46	2,353
		Airport	0	94	114	0	87	0	0	0	0	105	0	0	400
		Background	22	145	24	28	31	28	278	680	27	78	566	46	1,953

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19	Grape Street / I-5 Southbound On-Ramp	nbt	nbr	nbr2		ebt	ebt	ebr	wbt	wbr2	wbr		
25	Washington Street / Pacific Highway NB-Ramps	nbl+nbl2	nbt	nbr	sbl	sbr2	sbr	ebt2	ebt	ebt	wbt	wbr2	wbr

**Table D-86
2025 Intersection Turning Volumes – AM Peak Hour - Airport Implementation Plan
Alternative (With Parking Structure)**

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	745	0	31	14	566	0	10	887	417	2,670
		Airport	0	0	0	253	0	0	0	46	0	0	36	202	537
		Background	0	0	0	492	0	31	14	520	0	10	851	215	2,133
2	North Harbor Drive / McCain St	Total	0	0	0	151	0	38	208	750	0	0	992	556	2,695
		Airport	0	0	0	64	0	5	10	288	0	0	233	154	754
		Background	0	0	0	87	0	33	198	462	0	0	759	402	1,941
3	North Harbor Drive / Spanish Landing	Total	5	0	18	24	0	139	91	891	6	18	1,805	0	2,997
		Airport	0	0	0	24	0	139	91	261	0	0	248	0	763
		Background	5	0	18	0	0	0	630	6	18	1,557	0	2,234	
4	North Harbor Drive / Harbor Island Drive	Total	44	4	158	19	6	55	54	784	95	265	2,234	0	3,718
		Airport	11	4	45	19	6	55	54	208	23	71	692	0	1,188
		Background	33	0	113	0	0	0	0	576	72	194	1,542	0	2,530
5	North Harbor Drive / Winship Lane	Total	0	0	0	410	0	113	164	798	0	0	2,684	0	4,169
		Airport	0	0	0	410	0	113	164	109	0	0	948	0	1,744
		Background	0	0	0	0	0	0	0	689	0	0	1,736	0	2,425
6	North Harbor Drive / Rental Car Road	Total	74	0	60	44	0	20	26	1,973	93	157	3,205	83	5,735
		Airport	74	0	60	44	0	20	26	1,284	93	157	1,469	83	3,310
		Background	0	0	0	0	0	0	0	689	0	0	1,736	0	2,425
7	Sheraton / Harbor Island Drive	Total	13	122	0	0	267	99	85	6	27	0	0	0	619
		Airport	0	60	0	0	100	0	0	0	0	0	0	0	160
		Background	13	62	0	0	167	99	85	6	27	0	0	0	459
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	98	0	0	72	1	291
		Airport	0	0	0	0	0	38	82	18	0	0	22	1	161
		Background	0	0	0	0	0	0	0	80	0	0	50	0	130
9	Sassafra Street / Pacific Highway	Total	90	638	91	57	676	13	6	87	54	268	176	70	2,226
		Airport	90	90	0	0	117	13	6	87	54	0	176	0	633
		Background	0	548	91	57	559	0	0	0	0	268	0	70	1,593
10	Laurel Street / North Harbor Drive	Total	0	0	0	15	0	3	531	1,329	0	0	2,309	46	4,233
		Airport	0	0	0	0	0	0	511	877	0	0	1,095	0	2,483
		Background	0	0	0	15	0	3	20	452	0	0	1,214	46	1,750
11	Hawthorn Street / North Harbor Drive	Total	0	361	0	0	1,320	0	0	0	0	116	0	2,577	4,374
		Airport	0	286	0	0	877	0	0	0	0	14	0	808	1,985
		Background	0	75	0	0	443	0	0	0	0	102	0	1,769	2,389
12	Grape Street / North Harbor Drive	Total	0	295	110	1,003	579	0	0	0	0	0	0	0	1,987
		Airport	0	286	11	593	299	0	0	0	0	0	0	0	1,189
		Background	0	9	99	410	280	0	0	0	0	0	0	0	798
13	Laurel Street / Pacific Highway	Total	50	468	136	99	336	436	110	551	1	46	807	59	3,099
		Airport	0	71	13	5	48	118	102	408	0	2	497	7	1,271
		Background	50	397	123	94	288	318	8	143	1	44	310	52	1,828
14	Hawthorn Street / Pacific Highway	Total	145	301	0	0	234	81	0	0	0	336	2,431	119	3,647
		Airport	145	75	0	0	36	14	0	0	0	0	663	9	942
		Background	0	226	0	0	198	67	0	0	0	336	1,768	110	2,705
15	Grape Street / Pacific Highway	Total	0	739	207	208	1,157	0	89	1,079	45	0	0	0	3,524
		Airport	0	209	0	0	36	0	11	547	45	0	0	0	848
		Background	0	530	207	208	1,121	0	78	532	0	0	0	0	2,676
16	Laurel Street / Kettner Boulevard	Total	0	0	0	379	511	790	0	724	42	41	269	0	2,756
		Airport	0	0	0	9	0	402	0	427	0	4	104	0	946
		Background	0	0	0	370	511	388	0	297	42	37	165	0	1,810
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	241	126	0	0	0	193	3,150	0	3,710
		Airport	0	0	0	0	5	0	0	0	0	0	672	0	677
		Background	0	0	0	0	236	126	0	0	0	193	2,478	0	3,033
18	Grape Street / Kettner Boulevard	Total	0	0	0	126	622	0	0	1,611	114	0	0	0	2,473
		Airport	0	0	0	4	0	0	0	531	16	0	0	0	551
		Background	0	0	0	122	622	0	0	1,080	98	0	0	0	1,922
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	126	166	142	0	0	0	39	404	1,158	0	0	0	2,035
		Airport	0	0	0	0	0	0	0	4	532	0	0	0	536
		Background	126	166	142	0	0	0	39	400	626	0	0	0	1,499
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	55	53	0	0	0	0	0	0	0	0	2,401	69	2,578
		Airport	0	0	0	0	0	0	0	0	0	0	667	0	667
		Background	55	53	0	0	0	0	0	0	0	0	1,734	69	1,911
21	Laurel Street / India Street	Total	103	115	19	0	0	0	535	336	74	1	257	221	1,661
		Airport	58	4	0	0	0	0	322	39	74	1	50	0	548
		Background	45	111	19	0	0	0	213	297	0	0	207	221	1,113
22	Sassafra Street / Kettner Boulevard	Total	0	0	0	243	2,456	696	0	68	60	139	112	0	3,774
		Airport	0	0	0	0	411	56	0	28	28	0	56	0	579
		Background	0	0	0	243	2,045	640	0	40	32	139	56	0	3,195
23	Sassafra Street / India Street	Total	207	848	10	0	0	0	131	28	58	0	40	26	1,348
		Airport	88	326	0	0	0	0	43	0	0	0	0	0	457
		Background	119	522	10	0	0	0	88	28	58	0	40	26	891
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	201	35	58	0	102	51	189	216	0	852
		Airport	0	0	0	0	0	1	0	64	24	88	57	0	234
		Background	0	0	0	201	35	57	0	38	27	101	159	0	618
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	44	5	99	31	7	22	29	0	314	392	165	54	1,162
		Airport	16	0	67	0	0	0	1	0	63	130	0	0	277
		Background	28	5	32	31	7	22	28	0	251	262	165	54	885
26	Washington Street / Hancock Street	Total	0	323	134	388	471	0	531	248	202	0	0	0	2,297
		Airport	0	100	30	1	110	0	0	0	20	0	0	0	261
		Background	0	223	104	387	361	0	531	248	182	0	0	0	2,036
27	Washington Street / San Diego Avenue	Total	128	708	0	0	702	693	0	0	0	202	225	8	2,666
		Airport	30	71	0	0	91	0	0	0	0	20	0	0	212
		Background	98	637	0	0	611	693	0	0	0	182	225	8	2,454
28	Rosecrans Street / Pacific Highway	Total	209	156	234	100	148	62	65	186	152	348	169	98	1,927
		Airport	0	3	11	0	4	1	1	2	0	14	2	0	38
		Background	209	153	223	100	144	61	64	184	152	334	167	98	1,889
29	Rosecrans Street / Nimitz Boulevard	Total	21	146	117	9	125	10	121	524	23	144	554	35	1,829
		Airport	0	92	110	0	115	0	0	0	0	138	0	0	455
		Background	21	54	7	9	10	10	121	524	23	6	554	35	1,374

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19	Grape Street / I-5 Southbound On-Ramp	nbt	nbr	nbr2		ebt	ebt	ebr	wbt	wbr2	wbr	
25	Washington Street / Pacific Highway NB-Ramps	nbl+nbl2	nbt	nbr	sbl	sbr2	sbr	ebt2	ebt	ebt	wbt	wbr

**Table D-87
2025 Intersection Turning Volumes – PM Peak Hour - Airport Implementation Plan
Alternative (With Parking Structure)**

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	618	0	76	47	737	0	22	877	1,112	3,489
		Airport	0	0	0	204	0	0	0	38	0	0	43	221	506
		Background	0	0	0	414	0	76	47	699	0	22	834	891	2,983
2	North Harbor Drive / McCain St	Total	0	0	0	560	0	208	42	1,087	0	0	1,199	193	3,289
		Airport	0	0	0	93	0	11	7	235	0	0	252	123	721
		Background	0	0	0	467	0	197	35	852	0	0	947	70	2,568
3	North Harbor Drive / Spanish Landing	Total	7	0	25	24	0	118	76	2,011	27	7	1,336	0	3,631
		Airport	0	0	0	24	0	118	76	252	0	0	256	0	726
		Background	7	0	25	0	0	0	0	1,759	27	7	1,080	0	2,905
4	North Harbor Drive / Harbor Island Drive	Total	164	3	352	21	6	64	44	1,870	144	517	1,541	0	4,726
		Airport	12	3	58	21	6	64	44	210	21	62	606	0	1,107
		Background	152	0	294	0	0	0	0	1,660	123	455	935	0	3,619
5	North Harbor Drive / Winship Lane	Total	0	0	0	413	0	109	144	2,098	0	0	2,196	0	4,960
		Airport	0	0	0	413	0	109	144	144	0	0	806	0	1,616
		Background	0	0	0	0	0	0	0	1,954	0	0	1,390	0	3,344
6	North Harbor Drive / Rental Car Road	Total	102	0	115	69	0	24	22	3,292	103	118	2,633	56	6,534
		Airport	102	0	115	69	0	24	22	1,338	103	118	1,243	56	3,190
		Background	0	0	0	0	0	0	0	1,954	0	0	1,390	0	3,344
7	Sheraton / Harbor Island Drive	Total	23	442	0	0	598	70	77	2	25	0	0	0	1,237
		Airport	0	73	0	0	89	0	0	0	0	0	0	0	162
		Background	23	369	0	0	509	70	77	2	25	0	0	0	1,075
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	55	68	107	0	0	139	1	370
		Airport	0	0	0	0	0	55	68	21	0	0	18	1	163
		Background	0	0	0	0	0	0	0	86	0	0	121	0	207
9	Sassafra Street / Pacific Highway	Total	83	1,102	448	151	1,159	11	17	229	115	219	148	58	3,740
		Airport	83	108	0	0	97	11	17	229	115	0	148	0	808
		Background	0	994	448	151	1,062	0	0	0	0	219	0	58	2,932
10	Laurel Street / North Harbor Drive	Total	0	0	0	45	0	7	1,267	2,160	0	0	1,980	121	5,580
		Airport	0	0	0	0	0	0	566	955	0	0	883	0	2,404
		Background	0	0	0	45	0	7	701	1,205	0	0	1,097	121	3,176
11	Hawthorn Street / North Harbor Drive	Total	0	664	0	0	2,503	0	0	0	0	191	0	1,434	4,792
		Airport	0	231	0	0	955	0	0	0	0	15	0	652	1,853
		Background	0	433	0	0	1,548	0	0	0	0	176	0	782	2,939
12	Grape Street / North Harbor Drive	Total	0	670	260	1,347	1,230	0	0	0	0	0	0	0	3,507
		Airport	0	231	17	637	334	0	0	0	0	0	0	0	1,219
		Background	0	439	243	710	896	0	0	0	0	0	0	0	2,288
13	Laurel Street / Pacific Highway	Total	160	883	220	170	599	460	356	680	36	53	882	75	4,574
		Airport	0	71	10	9	93	110	113	453	0	5	424	7	1,295
		Background	160	812	210	161	506	350	243	227	36	48	458	68	3,279
14	Hawthorn Street / Pacific Highway	Total	168	863	0	0	804	78	0	0	0	191	1,358	113	3,575
		Airport	118	74	0	0	83	15	0	0	0	0	535	6	831
		Background	50	789	0	0	721	63	0	0	0	191	823	107	2,744
15	Grape Street / Pacific Highway	Total	0	863	574	342	777	0	76	2,143	40	0	0	0	4,815
		Airport	0	176	0	1	82	0	17	597	40	0	0	0	913
		Background	0	687	574	341	695	0	59	1,546	0	0	0	0	3,902
16	Laurel Street / Kettner Boulevard	Total	0	0	0	454	956	860	0	975	74	61	321	0	3,701
		Airport	0	0	0	6	0	324	0	472	0	10	112	0	924
		Background	0	0	0	448	956	536	0	503	74	51	209	0	2,777
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	626	111	0	0	0	238	1,756	0	2,731
		Airport	0	0	0	0	10	0	0	0	0	0	541	0	551
		Background	0	0	0	0	616	111	0	0	0	238	1,215	0	2,180
18	Grape Street / Kettner Boulevard	Total	0	0	0	307	657	0	0	3,634	108	0	0	0	4,706
		Airport	0	0	0	9	1	0	0	579	18	0	0	0	607
		Background	0	0	0	298	656	0	0	3,055	90	0	0	0	4,099
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	190	363	355	0	0	0	24	499	2,120	0	0	0	3,551
		Airport	0	0	0	0	0	0	0	4	584	0	0	0	588
		Background	190	363	355	0	0	0	24	495	1,536	0	0	0	2,963
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	45	70	0	0	0	0	0	0	0	0	1,500	53	1,668
		Airport	0	0	0	0	0	0	0	0	0	0	0	537	537
		Background	45	70	0	0	0	0	0	0	0	0	0	963	53
21	Laurel Street / India Street	Total	125	307	89	0	0	0	723	485	81	0	317	304	2,431
		Airport	80	9	1	0	0	0	351	46	81	0	41	0	609
		Background	45	298	88	0	0	0	372	439	0	0	276	304	1,822
22	Sassafra Street / Kettner Boulevard	Total	0	0	0	400	3,549	536	0	274	133	98	114	0	5,104
		Airport	0	0	0	0	330	52	0	79	80	0	52	0	593
		Background	0	0	0	400	3,219	484	0	195	53	98	62	0	4,511
23	Sassafra Street / India Street	Total	191	1,364	29	0	0	0	359	70	127	0	17	21	2,178
		Airport	74	360	0	0	0	0	114	0	0	0	0	0	548
		Background	117	1,004	29	0	0	0	245	70	127	0	17	21	1,630
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	529	53	12	0	266	65	253	144	0	1,322
		Airport	0	0	0	0	0	1	0	60	22	71	101	0	255
		Background	0	0	0	529	53	11	0	206	43	182	43	0	1,067
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	39	12	147	69	66	8	69	17	760	421	238	67	1,913
		Airport	28	0	81	0	0	0	1	0	59	144	0	0	313
		Background	11	12	66	69	66	8	68	17	701	277	238	67	1,600
26	Washington Street / Hancock Street	Total	0	775	193	415	482	0	833	498	243	0	0	0	3,439
		Airport	0	112	28	1	110	0	0	0	34	0	0	0	285
		Background	0	663	165	414	372	0	833	498	209	0	0	0	3,154
27	Washington Street / San Diego Avenue	Total	239	1,397	0	0	744	633	0	0	0	222	305	19	3,559
		Airport	28	84	0	0	76	0	0	0	0	35	0	1	224
		Background	211	1,313	0	0	668	633	0	0	0	187	305	18	3,335
28	Rosecrans Street / Pacific Highway	Total	368	302	670	122	142	69	120	490	181	285	350	148	3,247
		Airport	0	4	13	0	3	1	1	2	0	12	2	0	38
		Background	368	298	657	122	139	68	119	488	181	273	348	148	3,209
29	Rosecrans Street / Nimitz Boulevard	Total	23	250	145	7	101	7	272	665	27	189	569	46	2,301
		Airport	0	100	120	0	93	0	0	0	0	111	0	0	424
		Background	23	150	25	7	8	7	272	665	27	78	569	46	1,877

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19	Grape Street / I-5 Southbound On-Ramp	nbt	nbr	nbr2		ebt	ebt	ebr	wbt	wbr2	wbr		
25	Washington Street / Pacific Highway NB-Ramps	nbl+nbl2	nbt	nbr	sbl	sbr2	sbr	ebt2	ebt	ebt	wbt	wbr2	wbr

**Table D-88
2030 Intersection Turning Volumes – AM Peak Hour - Airport Implementation Plan
Alternative (With Parking Structure)**

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	836	0	31	16	619	0	11	945	503	2,961
		Airport	0	0	0	342	0	0	0	48	0	0	38	275	703
		Background	0	0	0	494	0	31	16	571	0	11	907	228	2,258
2	North Harbor Drive / McCain St	Total	0	0	0	155	0	41	217	887	0	0	1,086	572	2,958
		Airport	0	0	0	65	0	7	13	376	0	0	306	158	925
		Background	0	0	0	90	0	34	204	511	0	0	780	414	2,033
3	North Harbor Drive / Spanish Landing	Total	5	0	18	24	0	169	122	1,004	7	21	1,897	0	3,267
		Airport	0	0	0	24	0	169	122	320	0	0	294	0	929
		Background	5	0	18	0	0	0	0	684	7	21	1,603	0	2,338
4	North Harbor Drive / Harbor Island Drive	Total	46	4	157	19	7	75	73	869	105	268	2,318	0	3,941
		Airport	13	4	44	19	7	75	73	245	26	68	728	0	1,302
		Background	33	0	113	0	0	0	0	624	79	200	1,590	0	2,639
5	North Harbor Drive / Winship Lane	Total	0	0	0	389	0	133	187	859	0	0	2,761	0	4,329
		Airport	0	0	0	389	0	133	187	122	0	0	971	0	1,802
		Background	0	0	0	0	0	0	0	737	0	0	1,790	0	2,527
6	North Harbor Drive / Rental Car Road	Total	81	0	60	44	0	22	31	2,028	105	157	3,259	82	5,869
		Airport	81	0	60	44	0	22	31	1,291	105	157	1,469	82	3,342
		Background	0	0	0	0	0	0	0	737	0	0	1,790	0	2,527
7	Sheraton / Harbor Island Drive	Total	13	123	0	0	280	99	85	6	27	0	0	0	633
		Airport	0	61	0	0	101	0	0	0	0	0	0	0	162
		Background	13	62	0	0	179	99	85	6	27	0	0	0	471
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	96	0	0	71	1	288
		Airport	0	0	0	0	0	38	82	19	0	0	23	1	163
		Background	0	0	0	0	0	0	0	77	0	0	48	0	125
9	Sassafra Street / Pacific Highway	Total	95	496	66	39	512	13	7	92	57	135	184	35	1,731
		Airport	95	94	0	0	123	13	7	92	57	0	184	0	665
		Background	0	402	66	39	389	0	0	0	0	135	0	35	1,066
10	Laurel Street / North Harbor Drive	Total	0	0	0	17	0	3	496	1,389	0	0	2,405	48	4,358
		Airport	0	0	0	0	0	0	475	920	0	0	1,142	0	2,537
		Background	0	0	0	17	0	3	21	469	0	0	1,263	48	1,821
11	Hawthorn Street / North Harbor Drive	Total	0	374	0	0	1,383	0	0	0	0	133	0	2,844	4,734
		Airport	0	298	0	0	920	0	0	0	0	17	0	844	2,079
		Background	0	76	0	0	463	0	0	0	0	116	0	2,000	2,655
12	Grape Street / North Harbor Drive	Total	0	307	110	1,033	598	0	0	0	0	0	0	0	2,048
		Airport	0	298	14	621	316	0	0	0	0	0	0	0	1,249
		Background	0	9	96	412	282	0	0	0	0	0	0	0	799
13	Laurel Street / Pacific Highway	Total	42	409	121	72	256	345	115	527	1	82	999	102	3,071
		Airport	0	76	17	6	53	121	106	370	0	3	445	8	1,205
		Background	42	333	104	66	203	224	9	157	1	79	554	94	1,866
14	Hawthorn Street / Pacific Highway	Total	152	272	0	0	206	74	0	0	0	376	2,671	134	3,885
		Airport	152	82	0	0	39	17	0	0	0	0	692	11	993
		Background	0	190	0	0	167	57	0	0	0	376	1,979	123	2,892
15	Grape Street / Pacific Highway	Total	0	693	184	177	991	0	98	1,143	47	0	0	0	3,333
		Airport	0	220	0	0	39	0	14	573	47	0	0	0	893
		Background	0	473	184	177	952	0	84	570	0	0	0	0	2,440
16	Laurel Street / Kettner Boulevard	Total	0	0	0	351	469	701	0	924	75	64	374	0	2,958
		Airport	0	0	0	11	0	345	0	392	0	6	111	0	865
		Background	0	0	0	340	469	356	0	532	75	58	263	0	2,093
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	252	131	0	0	0	216	3,474	0	4,073
		Airport	0	0	0	0	6	0	0	0	0	0	703	0	709
		Background	0	0	0	0	246	131	0	0	0	216	2,771	0	3,364
18	Grape Street / Kettner Boulevard	Total	0	0	0	137	673	0	0	1,693	120	0	0	0	2,623
		Airport	0	0	0	5	1	0	0	557	17	0	0	0	580
		Background	0	0	0	132	672	0	0	1,136	103	0	0	0	2,043
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	206	272	233	0	0	0	44	457	1,268	0	0	0	2,480
		Airport	0	0	0	0	0	0	0	4	559	0	0	0	563
		Background	206	272	233	0	0	0	44	453	709	0	0	0	1,917
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	62	59	0	0	0	0	0	0	0	0	3,107	95	3,323
		Airport	0	0	0	0	0	0	0	0	0	0	698	0	698
		Background	62	59	0	0	0	0	0	0	0	0	2,409	95	2,625
21	Laurel Street / India Street	Total	101	96	16	0	0	0	617	517	84	1	341	310	2,083
		Airport	64	5	0	0	0	0	277	41	84	1	52	0	524
		Background	37	91	16	0	0	0	340	476	0	0	289	310	1,559
22	Sassafra Street / Kettner Boulevard	Total	0	0	0	242	2,399	699	0	53	49	114	107	0	3,663
		Airport	0	0	0	0	356	60	0	29	30	0	61	0	536
		Background	0	0	0	242	2,043	639	0	24	19	114	46	0	3,127
23	Sassafra Street / India Street	Total	249	974	13	0	0	0	117	23	48	0	43	27	1,494
		Airport	92	283	0	0	0	0	45	0	0	0	0	0	420
		Background	157	691	13	0	0	0	72	23	48	0	43	27	1,074
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	511	90	147	0	115	57	174	197	0	1,291
		Airport	0	0	0	0	0	1	0	76	29	92	69	0	267
		Background	0	0	0	511	90	146	0	39	28	82	128	0	1,024
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	19	0	71	24	6	17	23	0	277	318	111	36	902
		Airport	19	0	71	0	0	0	1	0	75	142	0	0	308
		Background	0	0	0	24	6	17	22	0	202	176	111	36	594
26	Washington Street / Hancock Street	Total	0	260	106	311	407	0	208	97	95	0	0	0	1,484
		Airport	0	110	36	1	118	0	0	0	24	0	0	0	289
		Background	0	150	70	310	289	0	208	97	71	0	0	0	1,195
27	Washington Street / San Diego Avenue	Total	113	585	0	0	682	665	0	0	0	277	313	12	2,647
		Airport	35	75	0	0	96	0	0	0	0	24	0	1	231
		Background	78	510	0	0	586	665	0	0	0	253	313	11	2,416
28	Rosecrans Street / Pacific Highway	Total	207	155	230	144	209	88	61	176	143	313	154	88	1,968
		Airport	0	3	10	0	3	1	1	3	0	13	4	0	38
		Background	207	152	220	144	206	87	60	173	143	300	150	88	1,930
29	Rosecrans Street / Nimitz Boulevard	Total	20	157	178	39	168	41	107	461	20	218	514	32	1,955
		Airport	0	104	171	0	128	0	0	0	0	0	213	0	616
		Background	20	53	7	39	40	41	107	461	20	5	514	32	1,339

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19	Grape Street / I-5 Southbound On-Ramp	nbt	nbr	nbr2		ebl	ebt	ebr	wbt	wbr2	wbr		
25	Washington Street / Pacific Highway NB-Ramps	nbl+nbl2	nbt	nbr	sbl	sbr2	sbr	ebl2	ebl	ebt	wbt	wbr2	wbr

**Table D-89
2030 Intersection Turning Volumes – PM Peak Hour - Airport Implementation Plan
Alternative (With Parking Structure)**

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	688	0	75	52	807	0	23	934	1,243	3,822
		Airport	0	0	0	277	0	0	0	40	0	0	45	299	661
		Background	0	0	0	411	0	75	52	767	0	23	889	944	3,161
2	North Harbor Drive / McCain St	Total	0	0	0	574	0	218	45	1,268	0	0	1,300	199	3,604
		Airport	0	0	0	93	0	15	9	307	0	0	329	127	880
		Background	0	0	0	481	0	203	36	961	0	0	971	72	2,724
3	North Harbor Drive / Spanish Landing	Total	7	0	25	24	0	145	102	2,192	28	7	1,419	0	3,949
		Airport	0	0	0	24	0	145	102	298	0	0	311	0	880
		Background	7	0	25	0	0	0	1,894	28	7	1,108	0	0	3,069
4	North Harbor Drive / Harbor Island Drive	Total	167	3	350	21	7	85	61	2,023	158	529	1,611	0	5,015
		Airport	15	3	56	21	7	85	61	238	23	60	647	0	1,216
		Background	152	0	294	0	0	0	1,785	135	469	964	0	0	3,799
5	North Harbor Drive / Winship Lane	Total	0	0	0	394	0	129	163	2,231	0	0	2,268	0	5,185
		Airport	0	0	0	394	0	129	163	152	0	0	835	0	1,673
		Background	0	0	0	0	0	0	2,079	0	0	1,433	0	0	3,512
6	North Harbor Drive / Rental Car Road	Total	114	0	115	68	0	28	25	3,419	114	119	2,682	56	6,740
		Airport	114	0	115	68	0	28	25	1,340	114	119	1,249	56	3,228
		Background	0	0	0	0	0	0	2,079	0	0	1,433	0	0	3,512
7	Sheraton / Harbor Island Drive	Total	23	443	0	0	624	70	77	2	25	0	0	0	1,264
		Airport	0	74	0	0	90	0	0	0	0	0	0	0	164
		Background	23	369	0	0	534	70	77	2	25	0	0	0	1,100
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	55	68	105	0	0	138	1	367
		Airport	0	0	0	0	0	55	68	22	0	0	20	1	166
		Background	0	0	0	0	0	0	83	0	0	118	0	0	201
9	Sassafras Street / Pacific Highway	Total	87	843	328	105	842	11	17	239	120	110	155	29	2,886
		Airport	87	115	0	0	103	11	17	239	120	0	155	0	847
		Background	0	728	328	105	739	0	0	0	0	110	0	29	2,039
10	Laurel Street / North Harbor Drive	Total	0	0	0	49	0	7	1,252	2,249	0	0	2,067	126	5,750
		Airport	0	0	0	0	0	0	525	998	0	0	926	0	2,449
		Background	0	0	0	49	0	7	727	1,251	0	0	1,141	126	3,301
11	Hawthorn Street / North Harbor Drive	Total	0	676	0	0	2,616	0	0	0	0	217	0	1,568	5,077
		Airport	0	241	0	0	998	0	0	0	0	18	0	684	1,941
		Background	0	435	0	0	1,618	0	0	0	0	199	0	884	3,136
12	Grape Street / North Harbor Drive	Total	0	665	255	1,379	1,252	0	0	0	0	0	0	0	3,551
		Airport	0	241	20	665	351	0	0	0	0	0	0	0	1,277
		Background	0	424	235	714	901	0	0	0	0	0	0	0	2,274
13	Laurel Street / Pacific Highway	Total	135	759	188	123	454	359	382	658	40	92	1,205	130	4,525
		Airport	0	78	12	10	99	113	116	409	0	6	385	8	1,238
		Background	135	681	176	113	355	246	266	249	40	86	820	122	3,289
14	Hawthorn Street / Pacific Highway	Total	166	746	0	0	695	71	0	0	0	214	1,481	127	3,500
		Airport	124	82	0	0	88	18	0	0	0	0	560	8	880
		Background	42	664	0	0	607	53	0	0	0	214	921	119	2,620
15	Grape Street / Pacific Highway	Total	0	799	512	290	677	0	83	2,279	42	0	0	0	4,682
		Airport	0	186	0	1	87	0	20	623	42	0	0	0	959
		Background	0	613	512	289	590	0	63	1,656	0	0	0	0	3,723
16	Laurel Street / Kettner Boulevard	Total	0	0	0	418	877	771	0	1,332	133	94	455	0	4,080
		Airport	0	0	0	7	0	279	0	431	0	12	120	0	849
		Background	0	0	0	411	877	492	0	901	133	82	335	0	3,231
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	653	115	0	0	0	266	1,927	0	2,961
		Airport	0	0	0	0	13	0	0	0	0	0	568	0	581
		Background	0	0	0	0	640	115	0	0	0	266	1,359	0	2,380
18	Grape Street / Kettner Boulevard	Total	0	0	0	333	710	0	0	3,818	113	0	0	0	4,974
		Airport	0	0	0	11	1	0	0	605	19	0	0	0	636
		Background	0	0	0	322	709	0	0	3,213	94	0	0	0	4,338
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	311	593	580	0	0	0	27	564	2,350	0	0	0	4,425
		Airport	0	0	0	0	0	0	0	4	612	0	0	0	616
		Background	311	593	580	0	0	0	27	560	1,738	0	0	0	3,809
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	50	78	0	0	0	0	0	0	0	0	1,902	74	2,104
		Airport	0	0	0	0	0	0	0	0	0	0	0	564	564
		Background	50	78	0	0	0	0	0	0	0	0	1,338	74	1,540
21	Laurel Street / India Street	Total	125	255	73	0	0	0	897	750	89	0	431	425	3,045
		Airport	88	12	1	0	0	0	301	49	89	0	44	0	584
		Background	37	243	72	0	0	0	596	701	0	0	387	425	2,461
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	399	3,503	539	0	200	117	80	106	0	4,944
		Airport	0	0	0	0	287	55	0	84	85	0	55	0	566
		Background	0	0	0	399	3,216	484	0	116	32	80	51	0	4,378
23	Sassafras Street / India Street	Total	233	1,642	39	0	0	0	320	57	104	0	18	22	2,435
		Airport	78	313	0	0	0	0	119	0	0	0	0	0	510
		Background	155	1,329	39	0	0	0	201	57	104	0	18	22	1,925
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	1,347	134	28	0	286	72	221	155	0	2,243
		Airport	0	0	0	0	0	1	0	70	27	75	121	0	294
		Background	0	0	0	1,347	134	27	0	216	45	146	34	0	1,949
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	33	0	85	52	51	6	56	14	635	348	160	45	1,485
		Airport	33	0	85	0	0	0	1	0	70	162	0	0	351
		Background	0	0	0	52	51	6	55	14	565	186	160	45	1,134
26	Washington Street / Hancock Street	Total	0	567	144	333	420	0	326	194	122	0	0	0	2,106
		Airport	0	121	33	1	121	0	0	0	41	0	0	0	317
		Background	0	446	111	332	299	0	326	194	81	0	0	0	1,789
27	Washington Street / San Diego Avenue	Total	202	1,142	0	0	721	607	0	0	0	300	423	27	3,422
		Airport	33	89	0	0	80	0	0	0	0	41	0	1	244
		Background	169	1,053	0	0	641	607	0	0	0	259	423	26	3,178
28	Rosecrans Street / Pacific Highway	Total	364	297	661	174	201	98	113	464	171	257	315	133	3,248
		Airport	0	3	12	0	3	1	1	4	0	11	3	0	38
		Background	364	294	649	174	198	97	112	460	171	246	312	133	3,210
29	Rosecrans Street / Nimitz Boulevard	Total	23	259	211	31	139	31	239	586	24	244	528	43	2,358
		Airport	0	113	186	0	104	0	0	0	0	172	0	0	575
		Background	23	146	25	31	35	31	239	586	24	72	528	43	1,783

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19	Grape Street / I-5 Southbound On-Ramp	nbt	nbr	nbr2	eb1	ebt	ebr	wbt	wbr2	wbr			
25	Washington Street / Pacific Highway NB-Ramps	nbl+nbl2	nbt	nbr	sbl	sbr2	sbr	eb12	eb1	ebt	wbt	wbr2	wbr

Table D-90

**2010-2030 Peak Hour Intersection Operations – Airport Implementation Plan Alternative
(With Parking Structure)**

Intersection Number	Intersection	Peak Hour	Year 2010		Year 2015		Year 2020		Year 2025		Year 2030	
			Delay (Sec.)	LOS	Delay (Sec.)	LOS	Delay (SEC)	LOS	Delay (SEC)	LOS	Delay (Sec.)	LOS
1	North Harbor Drive/ Nimitz Boulevard	AM	20.2	C	20.3	C	20.9	C	21.1	C	21.8	C
		PM	20.6	C	20.3	C	20.9	C	21.1	C	21.7	C
2	North Harbor Drive/ McCain Road	AM	6.8	A	7.3	A	7.6	A	7.8	A	7.8	A
		PM	9.1	A	10.0	A	10.3	B	10.4	B	10.4	B
3	North Harbor Drive/ Spanish Landing	AM	9.3	A	10.0	A	10.2	B	10.6	B	12.3	B
		PM	7.9	A	8.5	A	8.8	A	9.1	A	10.4	B
4	North Harbor Drive/ Harbor Island Drive	AM	18.0	B	17.7	B	18.2	B	18.2	B	18.7	B
		PM	30.4	C	30.8	C	32.1	C	32.7	C	34.2	C
5	North Harbor Drive/ Winship Lane	AM	17.3	B	18.5	B	19.0	B	19.4	B	19.8	B
		PM	14.5	B	15.5	B	15.8	B	16.4	B	16.5	B
6	North Harbor Drive/ Rental Car Road	AM	7.3	A	8.2	A	9.2	A	10.1	B	10.7	B
		PM	8.3	A	9.2	A	10.0	A	10.7	B	11.4	B
7	Sheraton Harbor Island Drive	AM	12.4	B	12.3	B	12.0	B	11.7	B	11.6	B
		PM	7.6	A	7.4	A	7.2	A	7.0	A	6.9	A
8	Employee Lot Harbor Island Drive	AM	9.8	A	9.9	A	9.9	A	9.9	A	9.9	A
		PM	10.1	B	10.1	B	10.2	B	10.2	B	10.2	B
9	Sassafras Street/ Pacific Highway	AM	15.3	B	15.5	B	15.2	B	15.7	B	14.1	B
		PM	15.0	B	17.4	B	17.2	B	19.8	B	14.8	B
10	Laurel Street/ North Harbor Drive	AM	9.1	A	10.0	A	10.8	B	11.4	B	10.8	B
		PM	15.4	B	16.2	B	18.6	B	19.6	B	20.3	C
11	Hawthorn Street/ North Harbor Drive	AM	30.8	C	47.8	D	111.4	F	133.7	F	180.3	F
		PM	23.0	C	24.9	C	33.3	C	41.6	D	61.1	E
12	Grape Street/ North Harbor Drive	AM	8.2	A	8.4	A	8.4	A	8.5	A	8.5	A
		PM	10.9	B	11.0	B	10.7	B	11.1	B	11.0	B
13	Laurel Street/ Pacific Highway	AM	32.1	C	33.7	C	33.9	C	34.5	C	34.0	C
		PM	48.9	D	62.3	E	59.4	E	53.5	D	61.7	E
14	Hawthorn Street/ Pacific Highway	AM	12.5	B	14.1	B	15.7	B	17.6	B	19.3	B
		PM	20.9	C	21.9	C	22.8	C	23.8	C	23.4	C
15	Grape Street/ Pacific Highway	AM	18.5	B	19.1	B	19.9	B	20.4	C	20.3	C
		PM	26.1	C	32.8	C	53.6	D	69.9	E	58.6	E
16	Laurel Street/ Kettner Boulevard	AM	18.8	B	19.5	B	19.6	B	19.8	B	21.9	C
		PM	21.3	C	22.8	C	25.5	C	24.5	C	32.0	C
17	Hawthorn Street/ Kettner Boulevard	AM	5.5	A	6.2	A	10.3	B	9.6	A	13.4	B
		PM	10.9	B	11.2	B	15.5	B	13.8	B	14.2	B
18	Grape Street/ Kettner Boulevard	AM	12.4	B	13.1	B	14.8	B	14.1	B	14.7	B
		PM	16.6	B	22.7	C	55.4	E	55.2	E	80.0	E
19	Grape Street/ I-5 Southbound On-Ramp	AM	11.1	B	10.8	B	11.5	B	11.6	B	15.3	B
		PM	28.0	C	34.6	C	11.4	B	38.9	D	89.6	F
20	Hawthorn Street/ I-5 Northbound Off-Ramp	AM	11.0	B	10.6	B	10.8	B	10.3	B	15.9	B
		PM	11.8	B	12.0	B	10.7	B	11.5	B	11.1	B
21	Laurel Street/ India Street	AM	18.4	B	19.3	B	19.2	B	22.7	C	22.9	C
		PM	21.3	C	22.9	C	22.0	C	22.3	C	22.2	C
22	Sassafras Street/ Kettner Boulevard	AM	8.6	A	9.5	A	19.3	B	12.0	B	9.8	A
		PM	11.6	B	13.1	B	123.1	F	84.6	F	66.8	E
23	Sassafras Street/ India Street	AM	8.2	A	8.3	A	8.8	A	9.1	A	8.1	A
		PM	13.8	B	17.8	B	15.6	B	16.1	B	17.7	B
24	Washington Street/ Pacific Highway SB-Ramps	AM	12.6	B	12.7	B	13.0	B	12.8	B	12.5	B
		PM	14.9	B	15.1	B	15.3	B	15.5	B	17.6	B
25	Washington Street/ Pacific Highway NB-Ramps	AM	33.5	C	46.7	D	56.3	E	60.9	E	31.6	C
		PM	68.5	E	100.5	F	59.3	E	156.7	F	79.8	E
26	Washington Street/ Hancock Street	AM	27.8	C	28.1	C	28.7	C	28.8	C	25.9	C
		PM	30.2	C	30.8	C	32.4	C	32.7	C	28.0	C
27	Washington Street/ San Diego Avenue	AM	12.5	B	13.1	B	12.7	B	12.5	B	14.9	B
		PM	13.6	B	14.1	B	14.1	B	14.0	B	16.8	B
28	Rosecrans Street/ Pacific Highway	AM	36.1	D	36.4	D	36.1	D	36.2	D	37.3	D
		PM	39.1	D	44.8	D	41.3	D	41.9	D	43.0	D
29	Rosecrans Street/ Nimitz Boulevard	AM	21.7	C	21.7	C	24.3	C	23.7	C	27.0	C
		PM	24.9	C	25.2	C	26.7	C	26.5	C	29.1	C

Source: HNTB, 2007

LOS = level of service

Table D-91
 2010-2030 Intersection Impacts – Airport Implementation Plan Alternative (With Parking Structure)

Intersection Number	Intersection	Peak Hour	Year 2010			Year 2015			Year 2020			Year 2025			Year 2030		
			No Proj	No-Project	Diff.												
			Delay (Sec.)														
1	North Harbor Drive/ Nimitz Boulevard	AM	20.2	20.2	0.0	20.4	20.3	-0.1	20.9	20.9	0.0	21.1	21.1	0.0	21.7	21.8	0.1
		PM	20.7	20.6	0.1	20.4	20.3	-0.1	20.9	20.9	0.0	21.1	21.1	0.0	21.6	21.7	0.1
2	North Harbor Drive/ McCain Road	AM	6.7	6.8	-0.1	7.2	7.3	0.1	7.4	7.6	0.2	7.6	7.8	0.2	7.6	7.8	0.2
		PM	9.1	9.1	0.0	9.9	10.0	0.1	10.2	10.3	0.1	10.3	10.4	0.1	10.3	10.4	0.1
3	North Harbor Drive/ Spanish Landing	AM	10.1	9.3	0.8	10.9	10.0	-0.9	11.2	10.2	-1.0	11.7	10.6	-1.1	13.1	12.3	-0.8
		PM	8.7	7.9	0.8	9.3	8.5	-0.8	9.8	8.8	-1.0	10.0	9.1	-0.9	11.2	10.4	-0.8
4	North Harbor Drive/ Harbor Island Drive	AM	20.4	18.0	2.4	20.4	17.7	-2.7	20.9	18.2	-2.7	20.8	18.2	-2.6	21.9	18.7	-3.2
		PM	30.8	30.4	0.4	31.4	30.8	-0.6	32.8	32.1	-0.7	33.3	32.7	-0.6	34.9	34.2	-0.7
5	North Harbor Drive/ Winship Lane	AM	9.9	17.3	-7.4	10.6	18.5	-7.9	10.8	19.0	-8.2	10.7	19.4	-8.7	11.1	19.8	-8.7
		PM	9.6	14.5	-4.9	10.3	15.5	-5.2	10.4	15.8	-5.4	10.6	16.4	-5.8	10.7	16.5	-5.8
6	North Harbor Drive/ Rental Car Road	AM	6.7	7.3	-0.6	7.5	8.2	0.7	8.2	9.2	1.0	8.8	10.1	1.3	9.0	10.7	1.7
		PM	7.6	8.3	-0.7	8.5	9.2	0.7	9.2	10.0	0.8	9.6	10.7	1.1	10.0	11.4	1.4
7	Sheraton Harbor Island Drive	AM	12.4	12.4	0.0	12.3	12.3	0.0	12.0	12.0	0.0	11.8	11.7	-0.1	11.6	11.6	0.0
		PM	7.6	7.6	0.0	7.4	7.4	0.0	7.2	7.2	0.0	7.0	7.0	0.0	6.9	6.9	0.0
8	Employee Lot Harbor Island Drive	AM	9.8	9.8	0.0	9.9	9.9	0.0	9.9	9.9	0.0	9.9	9.9	0.0	9.9	9.9	0.0
		PM	10.1	10.1	0.0	10.1	10.1	0.0	10.2	10.2	0.0	10.2	10.2	0.0	10.1	10.2	0.1
9	Sassafras Street/ Pacific Highway	AM	15.3	15.3	0.0	15.4	15.5	0.1	15.1	15.2	0.1	15.6	15.7	0.1	14.0	14.1	0.1
		PM	14.5	15.0	-0.5	16.6	17.4	0.8	16.5	17.2	0.7	18.5	19.8	1.3	14.1	14.8	0.7
10	Laurel Street/ North Harbor Drive	AM	9.2	9.1	0.1	10.1	10.0	-0.1	10.8	10.8	0.0	11.3	11.4	0.1	10.5	10.8	0.3
		PM	15.5	15.4	0.1	16.3	16.2	-0.1	18.7	18.6	-0.1	19.3	19.6	0.3	19.4	20.3	0.9
11	Hawthorn Street/ North Harbor Drive	AM	31.8	30.8	1.0	49.6	47.8	-1.8	112.8	111.4	-1.4	131.7	133.7	2.0	173.0	180.3	7.3
		PM	23.2	23.0	0.2	25.2	24.9	-0.3	33.7	33.3	-0.4	40.7	41.6	0.9	55.9	61.1	5.2
12	Grape Street/ North Harbor Drive	AM	8.2	8.2	0.0	8.4	8.4	0.0	8.3	8.4	0.1	8.4	8.5	0.1	8.3	8.5	0.2
		PM	10.9	10.9	0.0	11.0	11.0	0.0	10.7	10.7	0.0	11.0	11.1	0.1	10.9	11.0	0.1
13	Laurel Street/ Pacific Highway	AM	32.1	32.1	0.0	33.7	33.7	0.0	33.9	33.9	0.0	34.4	34.5	0.1	33.7	34.0	0.3
		PM	49.0	48.9	0.1	62.4	62.3	-0.1	59.5	59.4	-0.1	53.1	53.5	0.4	60.4	61.7	1.3
14	Hawthorn Street/ Pacific Highway	AM	12.6	12.5	0.1	14.3	14.1	-0.2	15.8	15.7	-0.1	17.7	17.6	-0.1	18.9	19.3	0.4
		PM	21.0	20.9	0.1	22.0	21.9	-0.1	22.9	22.8	-0.1	23.8	23.8	0.0	23.3	23.4	0.1
15	Grape Street/ Pacific Highway	AM	18.5	18.5	0.0	19.0	19.1	0.1	19.9	19.9	0.0	20.3	20.4	0.1	20.2	20.3	0.1
		PM	26.2	26.1	0.1	32.8	32.8	0.0	53.1	53.6	0.5	68.6	69.9	1.3	56.5	58.6	2.1
16	Laurel Street/ Kettner Boulevard	AM	18.9	18.8	0.1	19.6	19.5	-0.1	19.8	19.6	-0.2	19.9	19.8	-0.1	21.9	21.9	0.0
		PM	21.4	21.3	0.1	22.9	22.8	-0.1	25.9	25.5	-0.4	24.8	24.5	-0.3	31.9	32.0	0.1
17	Hawthorn Street/ Kettner Boulevard	AM	5.5	5.5	0.0	6.2	6.2	0.0	10.3	10.3	0.0	9.6	9.6	0.0	13.0	13.4	0.4
		PM	10.9	10.9	0.0	11.3	11.2	-0.1	15.6	15.5	-0.1	13.9	13.8	-0.1	14.2	14.2	0.0
18	Grape Street/ Kettner Boulevard	AM	12.4	12.4	0.0	13.1	13.1	0.0	14.8	14.8	0.0	14.2	14.1	-0.1	14.8	14.7	-0.1
		PM	16.7	16.6	0.1	22.8	22.7	-0.1	55.3	55.4	0.1	54.0	55.2	1.2	77.1	80.0	2.9
19	Grape Street/ I-5 Southbound On-Ramp	AM	11.1	11.1	0.0	8.9	10.8	1.9	11.6	11.5	-0.1	11.5	11.6	0.1	15.1	15.3	0.2
		PM	28.6	28.0	0.6	35.2	34.6	-0.6	32.9	11.4	-21.5	38.6	38.9	0.3	87.1	89.6	2.5
20	Hawthorn Street/ I-5 Northbound Off-Ramp	AM	11.1	11.0	0.1	10.6	10.6	0.0	10.8	10.8	0.0	19.6	10.3	-9.3	15.3	15.9	0.6
		PM	11.8	11.8	0.0	12.0	12.0	0.0	12.1	10.7	-1.4	16.4	11.5	-4.9	11.0	11.1	0.1
21	Laurel Street/ India Street	AM	18.5	18.4	0.1	19.4	19.3	-0.1	22.6	19.2	-3.4	22.9	22.7	-0.2	23.0	22.9	-0.1
		PM	21.4	21.3	0.1	22.9	22.9	0.0	22.1	22.0	-0.1	26.8	22.3	-4.5	32.4	22.2	-10.2
22	Sassafras Street/ Kettner Boulevard	AM	8.3	8.6	-0.3	9.2	9.5	0.3	19.4	19.3	-0.1	11.9	12.0	0.1	9.6	9.8	0.2
		PM	11.1	11.6	-0.5	12.5	13.1	0.6	121.5	123.1	1.6	82.1	84.6	2.5	62.5	66.8	4.3
23	Sassafras Street/ India Street	AM	8.1	8.2	-0.1	8.2	8.3	0.1	8.7	8.8	0.1	9.0	9.1	0.1	8.0	8.1	0.1
		PM	13.5	13.8	-0.3	17.3	17.8	0.5	15.3	15.6	0.3	15.7	16.1	0.4	16.6	17.7	1.1
24	Washington Street/ Pacific Highway SB-Ramps	AM	12.6	12.6	0.0	12.7	12.7	0.0	13.0	13.0	0.0	12.8	12.8	0.0	12.4	12.5	0.1
		PM	14.9	14.9	0.0	15.1	15.1	0.0	15.3	15.3	0.0	15.5	15.5	0.0	17.4	17.6	0.2
25	Washington Street/ Pacific Highway NB-Ramps	AM	33.5	33.5	0.0	46.7	46.7	0.0	56.0	56.3	0.3	59.8	60.9	1.1	31.1	31.6	0.5
		PM	67.7	68.5	-0.8	107.8	100.5	-7.3	130.2	59.3	-70.9	156.4	156.7	0.3	79.3	79.8	0.5
26	Washington Street/ Hancock Street	AM	27.8	27.8	0.0	28.1	28.1	0.0	28.7	28.7	0.0	28.8	28.8	0.0	25.9	25.9	0.0
		PM	30.2	30.2	0.0	30.8	30.8	0.0	32.4	32.4	0.0	32.7	32.7	0.0	28.0	28.0	0.0
27	Washington Street/ San Diego Avenue	AM	12.5	12.5	0.0	13.1	13.1	0.0	12.7	12.7	0.0	12.5	12.5	0.0	15.0	14.9	-0.1
		PM	13.6	13.6	0.0	14.1	14.1	0.0	14.1	14.1	0.0	14.0	14.0	0.0	16.8	16.8	0.0
28	Rosecrans Street/ Pacific Highway	AM	36.1	36.1	0.0	36.4	36.4	0.0	36.1	36.1	0.0	36.2	36.2	0.0	37.3	37.3	0.0
		PM	39.1	39.1	0.0	44.8	44.8	0.0	41.3	41.3	0.0	41.9	41.9	0.0	42.9	43.0	0.1
29	Rosecrans Street/ Nimitz Boulevard	AM	21.8	21.7	0.1	21.8	21.7	-0.1	24.3	24.3	0.0	23.6	23.7	0.1	26.8	27.0	0.2
		PM	25.0	24.9	0.1	25.3	25.2	-0.1	26.7	26.7	0.0	26.5	26.5	0.0	28.9	29.1	0.2

Source: HNTB, 2007

Legend:
 LOS E
 LOS F
 Significant Impact

D.6.1.3.3 Freeway Segments

Table D-92 shows the freeway segment operations for each analysis year under the Implementation Plan Alternative (With Parking Structure). As shown, all freeway segments would operate at LOS D, E or F under the Implementation Plan Alternative (With Parking Structure) during either AM or PM peak hours or both.

Table D-93 compares the freeway segment densities under the Implementation Plan Alternative (With Parking Structure) against the No Project Alternative to identify freeway segment impacts based on significance criteria identified in Section D.2, measured by an increase in volume to capacity ratio of 0.01. It was assumed that an increase in volume to capacity ratio of 0.01 is equivalent to an increase in density of 1%. As shown, none of the freeway segments analyzed would be significantly impacted by the project.

Table D-92

2010-2030 Freeway Segment Operations – Airport Implementation Plan Alternative (With Parking Structure), 2010-2020

SB I-5 Freeway		2010						2015						2020					
		AM			PM			AM			PM			AM			PM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS															
North of I-8	I-8	7,000	34.7	D	8,600	42.7	E	7,200	35.8	E	8,400	41.8	E	7,000	34.8	D	9,600	48.0	F
I-8	Old Town Avenue	7,100	35.4	E	7,400	37.1	E	7,300	36.4	E	7,400	36.9	E	6,900	34.6	D	8,900	44.6	E
Old Town Avenue	Washington Street	5,800	29.2	D	6,200	30.8	D	6,000	29.9	D	6,200	31.1	D	5,200	25.8	C	6,400	31.9	D
Washington Street	Pacific Highway Viaducts	6,200	31.2	D	6,500	32.4	D	6,400	32.1	D	6,600	33.1	D	5,700	28.5	D	7,500	37.6	E
Pacific Highway Viaducts	India Street	7,200	35.8	E	8,200	41.1	E	7,400	36.7	E	8,400	42.0	E	6,200	30.9	D	8,400	41.9	E
India Street	Hawthorn Street	7,300	36.3	E	8,400	42.0	E	7,500	37.4	E	8,400	41.8	E	6,500	32.5	D	8,800	44.1	E
Hawthorn Street	First Avenue	6,100	30.5	D	7,500	37.4	E	6,300	31.4	D	7,400	36.9	E	5,400	26.8	D	7,600	37.9	E
First Avenue	SR 163	6,500	32.3	D	9,300	46.5	F	6,800	33.1	D	9,400	46.9	F	5,800	28.8	D	9,500	47.6	F
SR 163	SR 94	3,700	18.4	C	5,300	26.3	D	3,900	19.4	C	5,400	26.7	D	3,500	17.2	B	5,400	27.2	D
NB I-5 Freeway		2010						2015						2020					
		AM			PM			AM			PM			AM			AM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS															
SR 94	SR 163	10,900	54.4	F	7,700	38.4	E	11,400	56.7	F	7,900	39.5	E	10,700	53.6	F	7,000	34.8	D
SR 163	First Avenue	8,400	41.7	E	7,800	39.0	E	8,600	42.8	E	7,900	39.3	E	8,300	41.2	E	7,600	37.9	E
First Avenue	Hawthorn Street	7,000	35.0	E	6,500	32.2	D	7,100	35.4	E	6,500	32.3	D	6,600	33.1	D	5,800	29.0	D
Hawthorn Street	India Street	7,200	36.0	E	7,700	38.5	E	7,300	36.3	E	7,700	38.6	E	7,000	35.1	E	7,300	36.6	E
India Street	Pacific Highway Viaducts	7,200	35.7	E	7,600	37.7	E	7,200	36.1	E	7,600	37.8	E	6,900	34.6	D	6,900	34.4	D
Pacific Highway Viaducts	Washington Street	5,300	26.4	D	6,500	32.2	D	5,100	25.2	C	6,100	30.6	D	4,800	24.0	C	5,600	28.1	D
Washington Street	Old Town Avenue	6,000	29.8	D	7,100	35.5	E	6,100	30.5	D	7,200	35.7	E	6,000	29.9	D	7,100	35.3	E
Old Town Avenue	I-8	5,900	29.2	D	7,300	36.4	E	6,100	30.2	D	7,400	36.8	E	5,800	28.8	D	7,000	34.7	D
I-8	North of I-8	7,400	36.7	E	7,500	37.2	E	7,400	37.1	E	7,700	38.2	E	7,400	37.1	E	7,800	39.1	E
I-8 Freeway		2010						2015						2020					
		AM			PM			AM			PM			AM			AM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS															
I-5	East	5,800	29.1	D	7,900	39.2	E	5,900	29.4	D	7,800	38.9	E	5,000	25.2	C	7,600	38.0	E
East	I-5	7,100	35.6	E	7,200	36.1	E	7,200	35.7	E	7,600	37.8	E	6,700	33.5	D	7,100	35.6	E

Source: HNTB, 2007

Notes: vph = vehicles per hour
 pc/mi/ln = passenger cars per mile per lane
 LOS = level of service

Table D-92 (continued)

2010-2030 Freeway Segment Operations – Airport Implementation Plan Alternative (With Parking Structure), 2025-2030

SB I-5 Freeway		2025						2030					
		AM			PM			AM			PM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS									
North of I-8	I-8	7,100	35.6	E	9,500	47.3	F	7,600	38.1	E	9,200	46.0	F
I-8	Old Town Avenue	7,100	35.5	E	8,900	44.2	E	7,600	37.7	E	8,400	42.1	E
Old Town Avenue	Washington Street	5,300	26.5	D	6,400	32.0	D	5,600	27.7	D	6,400	31.8	D
Washington Street	Pacific Highway Viaducts	6,000	29.8	D	7,600	38.0	E	6,100	30.4	D	7,000	34.8	D
Pacific Highway Viaducts	India Street	6,500	32.2	D	8,500	42.3	E	6,700	33.4	D	8,300	41.4	E
India Street	Hawthorn Street	6,800	33.7	D	8,900	44.5	E	6,900	34.6	D	8,600	42.8	E
Hawthorn Street	First Avenue	5,600	27.9	D	7,800	38.8	E	5,600	28.1	D	7,800	39.0	E
First Avenue	SR 163	6,100	30.2	D	9,700	48.6	F	6,100	30.5	D	9,800	49.1	F
SR 163	SR 94	3,600	17.9	B	5,600	28.1	D	3,700	18.3	C	5,500	27.4	D
NB I-5 Freeway		2025						2030					
		AM			AM			AM			PM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS									
SR 94	SR 163	10,900	54.4	F	7,100	35.5	E	10,700	53.6	F	7,500	37.3	E
SR 163	First Avenue	8,400	41.9	E	7,700	38.5	E	8,100	40.5	E	7,700	38.2	E
First Avenue	Hawthorn Street	6,600	32.7	D	5,900	29.2	D	6,300	31.5	D	6,200	30.7	D
Hawthorn Street	India Street	7,000	34.7	D	7,400	36.9	E	6,400	32.0	D	7,900	39.6	E
India Street	Pacific Highway Viaducts	6,800	34.2	D	7,000	34.8	D	6,400	31.7	D	7,200	35.8	E
Pacific Highway Viaducts	Washington Street	4,700	23.4	C	5,600	28.0	D	4,400	21.8	C	5,900	29.6	D
Washington Street	Old Town Avenue	5,900	29.4	D	7,100	35.4	E	5,600	27.9	D	7,100	35.5	E
Old Town Avenue	I-8	5,700	28.2	D	6,900	34.3	D	5,300	26.6	D	7,200	35.8	E
I-8	North of I-8	7,500	37.2	E	7,900	39.2	E	7,500	37.5	E	8,600	43.0	E
I-8 Freeway		2025						2030					
		AM			AM			AM			PM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS									
I-5	East	5,100	25.3	C	7,600	37.8	E	4,900	24.4	C	7,500	37.2	E
East	I-5	7,000	34.7	D	7,200	36.1	E	7,300	36.3	E	7,100	35.4	E

Source: HNTB, 2007

Notes: vph = vehicles per hour
 pc/mi/ln = passenger cars per mile per lane
 LOS = level of service

Table D-93

2010-2030 Freeway Segment Impacts – AM Peak Hour – Airport Implementation Plan Alternative (With Parking Structure)

AM Peak Hour SB I-5 Freeway		Year 2010			Year 2015			Year 2020			Year 2025			Year 2030		
From	To	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase												
North of I-8	I-8	34.7	34.7	0.0%	35.8	35.8	0.0%	34.8	34.8	0.0%	35.6	35.6	0.2%	38.0	38.1	0.3%
I-8	Old Town Avenue	35.4	35.4	0.1%	36.4	36.4	0.1%	34.5	34.6	0.1%	35.4	35.5	0.2%	37.5	37.7	0.4%
Old Town Avenue	Washington Street	29.1	29.2	0.1%	29.9	29.9	0.1%	25.7	25.8	0.2%	26.5	26.5	0.3%	27.6	27.7	0.5%
Washington Street	Pacific Highway Viaducts	31.2	31.2	0.0%	32.1	32.1	0.0%	28.5	28.5	0.0%	29.8	29.8	0.0%	30.4	30.4	0.0%
Pacific Highway Viaducts	India Street	35.8	35.8	0.1%	36.7	36.7	0.1%	30.9	30.9	0.1%	32.2	32.2	0.1%	33.4	33.4	0.1%
India Street	Hawthorn Street	36.3	36.3	0.1%	37.4	37.4	0.1%	32.5	32.5	0.1%	33.7	33.7	0.1%	34.5	34.6	0.1%
Hawthorn Street	First Avenue	30.5	30.5	0.0%	31.4	31.4	0.0%	26.8	26.8	0.1%	27.8	27.9	0.2%	28.0	28.1	0.5%
First Avenue	SR 163	32.3	32.3	0.0%	33.1	33.1	0.0%	28.8	28.8	0.1%	30.1	30.2	0.2%	30.4	30.5	0.5%
SR 163	SR 94	18.4	18.4	0.0%	19.4	19.4	0.0%	17.2	17.2	0.1%	17.8	17.9	0.4%	18.2	18.3	0.8%
NB I-5 Freeway		Year 2010			Year 2015			Year 2020			Year 2025			Year 2030		
From	To	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase												
SR 94	SR 163	54.4	54.4	0.0%	56.7	56.7	0.0%	53.6	53.6	0.1%	54.3	54.4	0.2%	53.4	53.6	0.4%
SR 163	First Avenue	41.7	41.7	0.0%	42.7	42.8	0.0%	41.2	41.2	0.1%	41.8	41.9	0.3%	40.3	40.5	0.5%
First Avenue	Hawthorn Street	35.0	35.0	0.0%	35.4	35.4	0.0%	33.1	33.1	0.1%	32.6	32.7	0.3%	31.3	31.5	0.7%
Hawthorn Street	India Street	35.9	36.0	0.1%	36.3	36.3	0.1%	35.1	35.1	0.2%	34.6	34.7	0.2%	31.9	32.0	0.2%
India Street	Pacific Highway Viaducts	35.7	35.7	0.0%	36.1	36.1	0.0%	34.6	34.6	0.0%	34.2	34.2	0.0%	31.7	31.7	0.0%
Pacific Highway Viaducts	Washington Street	26.4	26.4	0.0%	25.2	25.2	0.0%	24.0	24.0	0.0%	23.4	23.4	0.0%	21.8	21.8	0.0%
Washington Street	Old Town Avenue	29.8	29.8	0.1%	30.5	30.5	0.0%	29.9	29.9	0.1%	29.3	29.4	0.2%	27.8	27.9	0.3%
Old Town Avenue	I-8	29.2	29.2	0.1%	30.2	30.2	0.0%	28.8	28.8	0.1%	28.2	28.2	0.2%	26.5	26.6	0.3%
I-8	North of I-8	36.7	36.7	0.0%	37.1	37.1	0.0%	37.1	37.1	0.0%	37.2	37.2	0.1%	37.4	37.5	0.2%
I-8 Freeway		Year 2010			Year 2015			Year 2020			Year 2025			Year 2030		
From	To	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase												
I-5	East	29.1	29.1	0.0%	29.4	29.4	0.0%	25.2	25.2	0.0%	25.3	25.3	0.1%	24.4	24.4	0.3%
East	I-5	35.6	35.6	0.0%	35.7	35.7	0.0%	33.5	33.5	0.0%	34.7	34.7	0.1%	36.2	36.3	0.2%

Source: HNTB, 2007

pc/mi/ln = passenger cars per mile per lane

Legend:

- LOS E
- LOS F
- Significant Impact

Table D-93 (continued)

2010-2030 Freeway Segment Impacts – PM Peak Hour – Airport Implementation Plan Alternative (With Parking Structure)

PM Peak Hour SB I-5 Freeway		Year 2010			Year 2015			Year 2020			Year 2025			Year 2030		
From	To	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase												
North of I-8	I-8	42.7	42.7	0.0%	41.8	41.8	0.0%	48.0	48.0	0.0%	47.2	47.3	0.1%	45.9	46.0	0.2%
I-8	Old Town Avenue	37.1	37.1	0.1%	36.9	36.9	0.0%	44.6	44.6	0.0%	44.1	44.2	0.1%	42.0	42.1	0.2%
Old Town Avenue	Washington Street	30.7	30.8	0.1%	31.1	31.1	0.0%	31.9	31.9	0.1%	32.0	32.0	0.2%	31.7	31.8	0.3%
Washington Street	Pacific Highway Viaducts	32.4	32.4	0.0%	33.1	33.1	0.0%	37.6	37.6	0.0%	38.0	38.0	0.0%	34.8	34.8	0.0%
Pacific Highway Viaducts	India Street	41.1	41.1	0.2%	41.9	42.0	0.1%	41.9	41.9	0.1%	42.2	42.3	0.2%	41.3	41.4	0.2%
India Street	Hawthorn Street	41.9	42.0	0.2%	41.7	41.8	0.1%	44.0	44.1	0.1%	44.5	44.5	0.2%	42.7	42.8	0.2%
Hawthorn Street	First Avenue	37.4	37.4	0.0%	36.8	36.9	0.0%	37.9	37.9	0.1%	38.7	38.8	0.3%	38.8	39.0	0.5%
First Avenue	SR 163	46.5	46.5	0.0%	46.8	46.9	0.0%	47.6	47.6	0.1%	48.5	48.6	0.2%	48.9	49.1	0.4%
SR 163	SR 94	26.3	26.3	0.1%	26.7	26.7	0.1%	27.1	27.2	0.1%	28.0	28.1	0.4%	27.2	27.4	0.7%
NB I-5 Freeway																
From	To	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase												
SR 94	SR 163	38.4	38.4	0.0%	39.5	39.5	0.0%	34.8	34.8	0.0%	35.4	35.5	0.2%	37.2	37.3	0.4%
SR 163	First Avenue	39.0	39.0	0.0%	39.3	39.3	0.0%	37.9	37.9	0.0%	38.5	38.5	0.2%	38.0	38.2	0.4%
First Avenue	Hawthorn Street	32.2	32.2	0.0%	32.3	32.3	0.0%	29.0	29.0	0.1%	29.1	29.2	0.2%	30.6	30.7	0.5%
Hawthorn Street	India Street	38.5	38.5	0.1%	38.5	38.6	0.1%	36.5	36.6	0.1%	36.8	36.9	0.1%	39.5	39.6	0.1%
India Street	Pacific Highway Viaducts	37.7	37.7	0.0%	37.8	37.8	0.0%	34.4	34.4	0.0%	34.8	34.8	0.0%	35.8	35.8	0.0%
Pacific Highway Viaducts	Washington Street	32.2	32.2	0.0%	30.6	30.6	0.0%	28.1	28.1	0.0%	28.0	28.0	0.0%	29.6	29.6	0.0%
Washington Street	Old Town Avenue	35.5	35.5	0.1%	35.7	35.7	0.1%	35.3	35.3	0.1%	35.3	35.4	0.2%	35.4	35.5	0.4%
Old Town Avenue	I-8	36.4	36.4	0.1%	36.8	36.8	0.1%	34.6	34.7	0.1%	34.2	34.3	0.2%	35.7	35.8	0.4%
I-8	North of I-8	37.2	37.2	0.0%	38.2	38.2	0.0%	39.1	39.1	0.1%	39.1	39.2	0.1%	42.9	43.0	0.2%
I-8 Freeway																
From	To	No Project (pc/mi/ln)	Project (pc/mi/ln)	Percent Increase												
I-5	East	39.2	39.2	0.0%	38.9	38.9	0.0%	38.0	38.0	0.0%	37.8	37.8	0.1%	37.1	37.2	0.2%
East	I-5	36.1	36.1	0.0%	37.8	37.8	0.0%	35.6	35.6	0.0%	36.1	36.1	0.1%	35.4	35.4	0.2%

Source: HNTB, 2007

pc/mi/ln = passenger cars per mile per lane

Legend:

	LOS E
	LOS F
	Significant Impact

D.6.1.3.4 Freeway Ramps

Table D-94 summarizes the freeway ramp metering operations for each analysis year under the Implementation Plan Alternative (With Parking Structure). As shown, all freeway ramps in the study area were estimated to accommodate a lower traffic volume than their set meter rates and, therefore, would have no significant traffic impact.

Table D-94

2010-2030 Freeway Ramp Operations – Airport Implementation Plan Alternative (With Parking Structure)

Location	Peak Hour	2010					2015				
		Demand (veh/hr)	Maximum Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (minutes)	Queue (feet)	Demand (veh/hr)	Maximum Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (minutes)	Queue (feet)
I-5 NB from San Diego	AM	799	1,992	0	0	0	525	1,992	0	0	0
	PM	871	1,992	0	0	0	505	1,992	0	0	0
I-5 NB from India	AM	766	1,992	0	0	0	1,042	1,992	0	0	0
	PM	830	1,992	0	0	0	1,119	1,992	0	0	0
I-5 SB from Kettner	AM	107	996	0	0	0	124	996	0	0	0
	PM	190	996	0	0	0	138	996	0	0	0
I-5 SB from Washington/Hancock	AM	476	1,140	0	0	0	481	1,140	0	0	0
	PM	276	1,140	0	0	0	289	1,140	0	0	0

Location	Peak Hour	2020					2025				
		Demand (veh/hr)	Maximum Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (minutes)	Queue (feet)	Demand (veh/hr)	Maximum Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (minutes)	Queue (feet)
I-5 NB from San Diego	AM	760	1,992	0	0	0	791	1,992	0	0	0
	PM	889	1,992	0	0	0	670	1,992	0	0	0
I-5 NB from India	AM	869	1,992	0	0	0	704	1,992	0	0	0
	PM	1,089	1,992	0	0	0	1,067	1,992	0	0	0
I-5 SB from Kettner	AM	139	996	0	0	0	139	996	0	0	0
	PM	243	996	0	0	0	257	996	0	0	0
I-5 SB from Grape	AM	876	1,992	0	0	0	987	1,992	0	0	0
	PM	1,706	1,992	0	0	0	1,817	1,992	0	0	0
I-5 SB from Washington/Hancock	AM	524	1,140	0	0	0	570	1,140	0	0	0
	PM	919	1,140	0	0	0	896	1,140	0	0	0

Location	Peak Hour	2030				
		Demand (veh/hr)	Maximum Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (minutes)	Queue (feet)
I-5 NB from San Diego	AM	890	1,992	0	0	0
	PM	707	1,992	0	0	0
I-5 NB from India	AM	1,337	1,992	0	0	0
	PM	1,674	1,992	0	0	0
I-5 SB from Kettner	AM	95	996	0	0	0
	PM	182	996	0	0	0
I-5 SB from Grape	AM	1,045	1,992	0	0	0
	PM	1,923	1,992	0	0	0
I-5 SB from Washington/Hancock	AM	594	1,140	0	0	0
	PM	477	1,140	0	0	0

Source: HNTB, 2007

veh/hr = vehicles per hour

D.6.1.3.5 Railroad Crossings

Forecasts of future train operations were obtained from the San Diego 2030 RTP (Mobility 2030), the 2007 LOSSAN Strategic Business Plan, and the 2000 San Diego International Airport Master Plan Preferred Concept Alternatives Roadway Analysis¹⁷ report. Mobility 2030 projects that the headways for the Coaster Service will decrease from 36 minutes to 20 minutes during peak hours and from 120 minutes to 60 minutes during off-peak hours by 2030. That translates to a 44%

¹⁷ Linscott, Law & Greenspan Engineers March 3, 2000 San Diego International Airport Master Plan Preferred Concept Alternatives Roadway Analysis.

increase in frequency during peak hours by 2030. The LOSSAN Strategic Business Plan projects that Coaster service would increase from existing 22 trains per day to 54 trains per day in 2025, consistent with the above. The LOSSAN Strategic Business Plan also projects that Amtrak Pacific Surfliner service between Los Angeles and San Diego would increase from existing 22 trips per day in 2005/2006 to 26 trips in 2015 and 32 trains in 2025. Mobility 2030 also projects that headways for the trolley Blue Line service that passes through the study area would decrease from 15 minutes to 7.5 minutes during off-peak hours by 2030. Estimated daily train operations in 2030 include 36 Amtrak trips, 78 Coaster trips, and 384 Trolley trips. For the analysis, freight train operations were estimated to increase to four trains per day.

Table D-95 summarizes the railroad crossing delay analysis for each analysis year under the Airport Implementation Plan Alternative (with Parking Structure). As shown, delays at all railroad crossings were estimated to be under the VHD threshold for each street segment in 2010, 2015 and 2030. Washington Street railroad crossings exceeded the threshold of VHD in 2020 and 2025. However, due to shifts in regional background traffic described in Section D.2.1.1 *Airport Trip Generation and Background Traffic*, total traffic on Washington Street in 2030 decreased, causing in the VHD to decrease to a level of insignificance.

Table D-95

**2010-2030 Railroad Crossing Operations –Airport Implementation Plan Alternative
(With Parking Structure)**

Crossing	Year 2010				
	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	20,400	4.76	64	No
Sassafras Street	75	14,400	3.44	23	No
Palm Street	75	900	3.44	0	No
Laurel Street	300	25,100	0.77	1	No
Hawthorn Street	150	18,500	0.77	10	No
Grape Street	300	29,000	0.77	18	No

Crossing	Year 2015				
	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	23,300	8.53	134	No
Sassafras Street	150	16,600	6.13	49	No
Palm Street	75	900	6.13	0	No
Laurel Street	300	28,900	0.80	1	No
Hawthorn Street	150	20,700	0.80	12	No
Grape Street	300	31,700	0.80	22	No

Crossing	Year 2020				
	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	24,500	8.94	152	Yes
Sassafras Street	150	16,900	6.46	54	No
Palm Street	75	300	6.46	0	No
Laurel Street	300	30,300	1.13	1	No
Hawthorn Street	150	23,400	1.13	24	No
Grape Street	300	34,600	1.13	44	No

Crossing	Year 2025				
	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	24,900	9.41	165	Yes
Sassafras Street	150	18,400	6.79	64	No
Palm Street	75	100	6.79	0	No
Laurel Street	300	31,800	1.46	0	No
Hawthorn Street	150	24,800	1.46	31	No
Grape Street	300	35,900	1.46	60	No

Crossing	Year 2030				
	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	19,200	9.95	126	No
Sassafras Street	75	14,600	7.18	51	No
Palm Street	75	100	7.18	0	No
Laurel Street	300	34,700	1.85	0	No
Hawthorn Street	300	26,600	1.85	44	No
Grape Street	300	37,700	1.85	83	No

Source: HNTB, 2007

VHD = vehicle-hours of delay

ADT = average daily traffic

D.6.1.3.6 Transit

Under the Implementation Plan Alternative no existing or planned transit routes would be modified. Therefore, no adverse impacts would occur to transit operations and no mitigation is required.

D.6.1.3.7 Parking

The Implementation Plan Alternative would not remove any parking lots designated for public use. Passenger terminals also are not located close to commercial or residential areas. In addition, the Implementation Plan Alternative (With Parking Structure) would provide additional airport public parking spaces (as previously discussed in Section D.6.1) that would address the projected parking shortfall under the No Project Alternative. This is considered as a favorable parking impact of the Implementation Plan Alternative compared to the No Project Alternative.

The East Terminal Alternative would replace the existing Commuter Terminal public and employee lots (Lot 7 and 8) with a parking structure. The new parking structure was assumed to accommodate displaced parkers from both of these lots.

D.6.1.3.8 Terminal Curbside

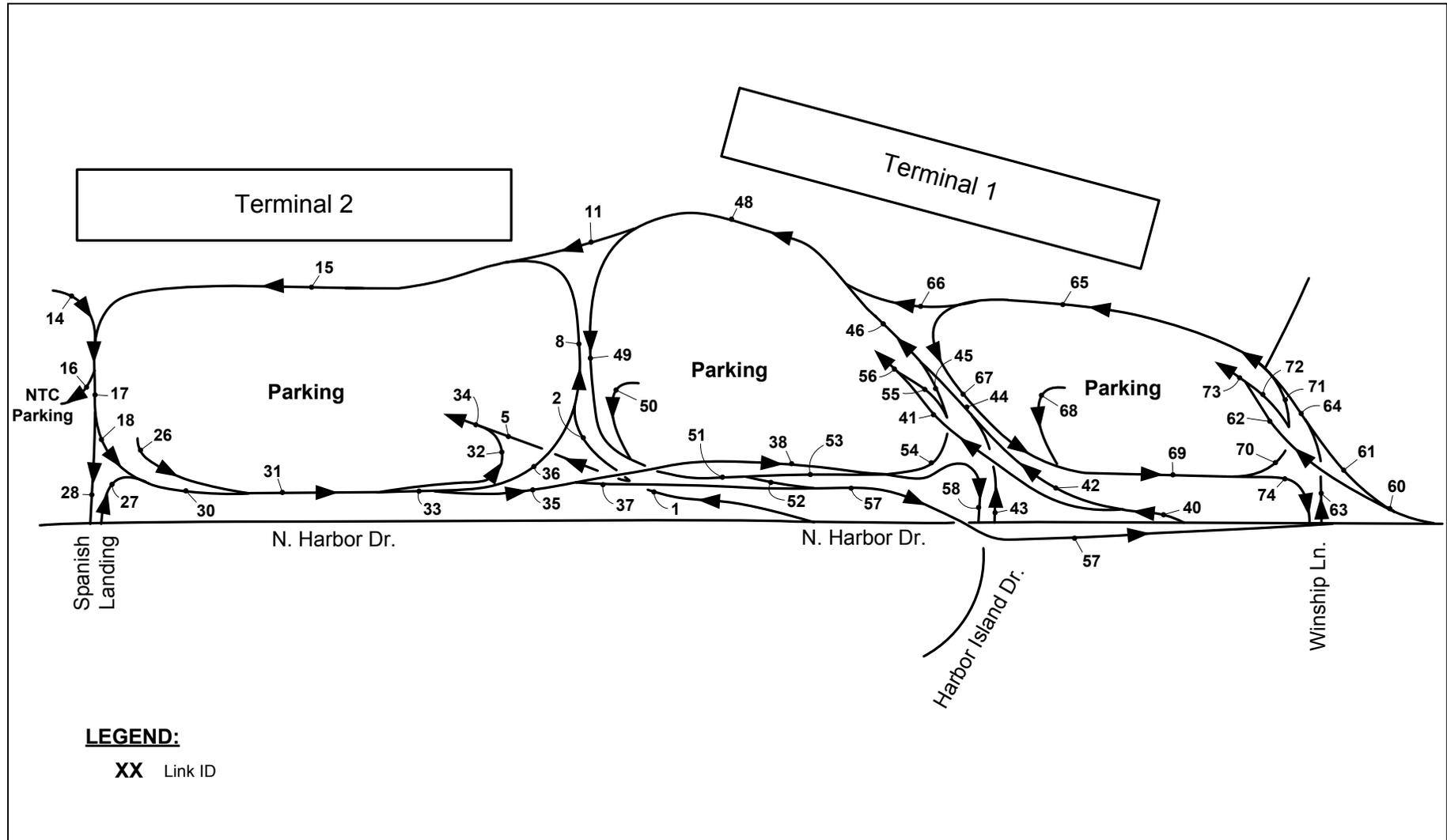
Currently 6,630 linear feet of curbside is available between all three terminals. In 2015, 7,240 linear feet of curbside is required at Terminals 1 and 2 and the Commuter Terminal to accommodate private and commercial vehicle demand. The No Project Alternative would maintain the existing curbside supply, which would result in a curbside deficit of 610 linear feet. Under the Implementation Plan Alternative approximately 1,000 additional linear feet of curbside would be provided on a second level at Terminal 1.

East and there would be an airport-wide surplus of 380 linear feet in 2015. Therefore, the Implementation Plan Alternative would result in favorable curbside impact compared to the No Project Alternative.

D.6.1.3.9 On-Airport Traffic Circulation

Under the Airport Implementation Plan Alternative, new on-airport roadways and curbs would be constructed to serve the new T1E unit terminal and parking structure. It is assumed that primary access to T1E would be provided in the vicinity of Winship Lane, with an access ramp similar to the one currently serving Terminal 1 from westbound North Harbor Drive. The T1E roadway would have a connection to the existing T1 roadway, so that shuttles could go from T1E to T1 without exiting to North Harbor Drive.

Table D-96 shows the on-airport roadway operations for each analysis year under the Implementation Plan Alternative (With Parking Structure). Refer to [Figure D.6-1](#) for Link ID Key Map. As shown, all terminal roadways would operate at LOS D or better during peak hours under the Implementation Plan Alternative. Therefore, the Implementation Plan Alternative would have no adverse on-airport traffic circulation impacts compared to the No Project Alternative, and no mitigation is required.



Appendix D.6-1



On-Airport Roadway Link ID Key Map
Airport Implementation Plan Alternative (with Parking Structure)

Environmental Impact Report

Table D-96
 2010-2030 On-Airport Roadway Peak Hour Operations – Airport Implementation Plan Alternative (With Parking Structure)

Link ID	Lanes	2010				2015				2020				2025				2030			
		AM	LOS	PM	LOS																
1	2	381	A	315	A	455	A	378	A	478	B	398	A	510	B	425	A	520	B	436	A
2	2	315	A	267	A	379	A	324	A	402	A	345	A	434	A	371	A	448	A	384	A
3		Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used			
4		Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used			
5	2	66	A	48	A	76	A	54	A	76	A	53	A	76	A	54	A	73	A	52	A
6		Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used			
7		Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used			
8	3	402	A	341	A	482	A	411	A	514	A	440	A	553	A	473	A	596	A	512	A
9		Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used			
10		Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used			
11	1	161	A	186	A	182	A	211	A	198	A	228	A	209	A	242	B	218	A	253	B
12		Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used			
13		Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used			
14	1	57	A	50	A	65	A	57	A	70	A	62	A	74	A	65	A	77	A	67	A
15	4	563	A	527	A	664	A	622	A	712	A	668	A	762	A	715	A	814	A	765	A
16	1	12	A	12	A																
17	4	608	A	565	A	717	A	667	A	769	A	718	A	824	A	768	A	879	A	820	A
18	2	484	B	457	A	574	B	542	B	617	B	584	B	662	B	626	B	686	B	652	B
19		Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used			
20		Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used			
21		Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used			
22		Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used			
23		Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used			
24		Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used			
25		Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used			
26	1	40	A	86	A	46	A	99	A	46	A	98	A	46	A	99	A	46	A	99	A
27	2	68	A	56	A	81	A	67	A	85	A	71	A	91	A	76	A	122	A	102	A
28	3	124	A	108	A	143	A	125	A	153	A	134	A	162	A	142	A	193	A	169	A
29		Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used			
30	2	552	B	513	B	655	B	609	B	702	B	655	B	753	B	702	B	808	C	754	B
31	3	592	A	599	A	701	A	708	B	748	B	753	B	798	B	801	B	854	B	853	B
32	1	12	A	8	A	14	A	10	A	13	A	10	A	14	A	10	A	17	A	12	A
33	3	580	A	591	A	687	A	698	A	735	B	743	B	784	B	791	B	837	B	841	B
34	4	78	A	56	A	90	A	64	A	89	A	63	A	90	A	64	A	90	A	64	A
35	2	493	B	517	B	584	B	610	B	623	B	648	B	666	B	689	B	688	B	713	B
36	1	87	A	73	A	103	A	88	A	111	A	95	A	119	A	102	A	149	A	128	A
37	1	452	C	468	C	539	C	558	C	576	C	594	D	617	D	634	D	637	D	653	D
38	1	41	A	48	A	45	A	53	A	47	A	54	A	48	A	56	A	51	A	60	A
39		Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used			
40	2	180	A	148	A	211	A	175	A	275	A	227	A	298	A	247	A	309	A	256	A
41	1	33	A	23	A	39	A	28	A	55	A	39	A	62	A	44	A	62	A	44	A
42	2	147	A	124	A	172	A	147	A	220	A	188	A	236	A	202	A	247	A	212	A
43	1	34	A	28	A	41	A	33	A	53	A	44	A	57	A	47	A	77	A	64	A
44	3	181	A	153	A	213	A	180	A	273	A	232	A	293	A	250	A	324	A	278	A
45	1	14	A	12	A	16	A	14	A	18	A	15	A	19	A	16	A	20	A	17	A
46	3	195	A	164	A	229	A	194	A	291	A	247	A	312	A	266	A	345	A	293	A
47		Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used			
48	4	342	A	339	A	395	A	391	A	471	A	460	A	502	A	492	A	542	A	529	A
49	2	181	A	153	A	213	A	180	A	273	A	232	A	293	A	250	A	324	A	276	A
50	1	20	A	43	A	24	A	51	A	34	A	72	A	38	A	82	A	40	A	85	A
51	3	201	A	198	A	237	A	231	A	307	A	304	A	331	A	332	A	364	A	361	A
52	2	164	A	160	A	192	A	190	A	248	A	248	A	268	A	271	A	279	A	280	A
53	1	38	A	35	A	44	A	42	A	58	A	55	A	63	A	60	A	85	A	81	A
54	1	20	A	17	A	24	A	19	A	29	A	23	A	31	A	25	A	35	A	28	A
55	1	6	A	5	A	8	A	5	A	11	A	8	A	12	A	9	A	15	A	11	A
56	2	39	A	28	A	47	A	33	A	66	A	47	A	74	A	53	A	77	A	55	A
57	2	616	A	629	B	731	B	747	B	825	B	842	B	885	B	905	B	916	B	933	B
58	2	58	A	67	A	66	A	75	A	77	A	87	A	80	A	91	A	101	A	113	A
59		Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used			
60	2	464	A	421	A	537	B	488	B	583	B	531	B	616	B	563	B	601	B	556	B
61	2	408	A	380	A	470	B	440	A	510	B	479	B	539	B	509	B	528	B	504	B
62	1	56	A	40	A	67	A	48	A	73	A	52	A	76	A	55	A	73	A	52	A
63	1	134	A	119	A	148	A	131	A	157	A	139	A	164	A	144	A	187	A	163	A
64	3	542	A	499	A	618	A	571	A	667	A	618	A	703	B	653	A	714	B	667	A
65	3	519	A	503	A	595	A	575	A	644	A	622	A	680	A	657	A	691	A	671	A
66	1	147	A	174	A	166	A	197	A	180	A	213	A	190	A	226	A	198	A	236	B
67	2	372	A	329	A	429	A	378	A	464	A	409	A	490	B	431	A	493	B	435	A
68	1	34	A	74	A	41	A	89	A	45	A	96	A	47	A	101	A	47	A	101	A
69	2	395	A	395	A	458	A	458	A	495	B	495	B	523	B	522	B	522	B	523	B
70	1	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A
71	1	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A
72	1	11	A	8	A	13	A	9	A	14	A	10	A	15	A	10	A	18	A	13	A
73	2	67	A	48	A	80	A	57	A	87	A	62	A	91	A	65	A	91	A	65	A
74	2	395	A	395	A	458	A	458	A	495	B	495	B	523	B	522	B	522	B	523	B

Source: HNTB, 2007
 NOTE: Please refer to Figure D.6-1 for link ID key map.

LOS = Level of service

D.6.2 Airport Implementation Plan Alternative (Without Parking Structure)

For this variation of the East Terminal Alternative, all elements of the Airport Implementation Plan Alternative are the same as described in section D.6.1, *Airport Implementation Plan Alternative (with Parking Structure)* except that no parking structure will be constructed.

D.6.2.1 Assumptions

Except for the parking structure, this scenario shares most of the assumptions used for the Implementation Plan Alternative (With Parking Structure). Assumptions that differ from previous discussion include:

- A surface parking lot will be developed in front of the new Terminal 1 East Unit Terminal providing approximately 1,000 public parking spaces.
- Excess terminal area parking demand will be served by remote Airport and privately operated parking facilities and alternate modes of transportation.

D.6.2.2 Trip Generation and Terminal Distribution

Trip generation associated with the Implementation Plan Alternative (Without Parking Structure) is summarized in [Table D-97](#). As shown, total airport trip generation would increase from approximately 94,600 ADT in 2010 to 134,700 ADT in 2030. This corresponds to an increase in air passenger forecast of 19.5 million annual passengers (MAP) in 2010 to 28.2 MAP in 2030. This represents an increase in trip generation of approximately 6,000 ADT or 4.5% from the No Project Alternative in 2030. Trips from most airport modes were estimated to increase relative to origin and destination passenger growth. However, schedule driven modes such as public buses, and airport operated inter-terminal, employee and public parking shuttles were estimated to grow at a slower rate as many of these shuttles currently operate with excess capacity to maintain a set schedule. This results in a slight decrease in the trip generation rate from ~~1.86~~ 1.85 to 1.82 in 2010 and 2030, respectively. This has also been demonstrated by a historical downward trend witnessed at SDIA.

Table D-97

**2010-2030 Airport Trip Generation – Airport Implementation Plan Alternative
(Without Parking Structure)**

Activity	Year					
	2005	2010	2015	2020	2025	2030
Airport Passenger Activity Level						
Million Annual Passengers (MAP)	17.4	19.5	22.8	25.1	26.6	28.2
Million Annual O&D Passengers	16.7	18.6	21.8	24.0	25.4	27.0
Daily O&D Passengers	45,830	51,076	59,769	66,220	70,553	74,199
Airport Trip Generation (1)						
Daily	85,100	94,600	109,500	120,700	128,250	134,700
In	42,600	47,350	54,800	60,400	64,200	67,400
Out	42,500	47,250	54,700	60,300	64,100	67,300
AM Peak Hour	3,180	3,530	4,095	4,500	4,800	5,065
In	1,760	1,955	2,265	2,500	2,650	2,785
Out	1,420	1,575	1,830	2,050	2,150	2,280
PM Peak Hour	3,245	3,620	4,190	4,650	4,950	5,185
In	1,500	1,675	1,940	2,150	2,300	2,410
Out	1,745	1,945	2,250	2,500	2,650	2,775
Trip Rate						
Daily	1.86	1.85	1.83	1.82	1.82	1.82

O&D = origin and destination

Notes:

(1) Includes terminals and associated facilities, SAN Park lots, rental car facilities on Rental Car Road, Employee Lot 6 on Harbor Island Drive, and north area. Does not include private vehicle trips to private off-airport parking and rental car facilities, but includes shuttle trips between these facilities and the terminals.

Source: HNTB, 2007.

D.6.2.3 Traffic Impacts

Traffic impacts of the Implementation Plan Alternative (Without Parking Structure) would be similar to under the Implementation Plan (With Parking Structure) except for the on-airport (terminal) roadways, street segments and intersections along North Harbor Drive directly serving Terminals 1 and 2. Specific impact categories are discussed below.

D.6.2.3.1 Street Segments

Table D-98 summarizes the street segment operations for each analysis year under the Implementation Plan Alternative (Without Parking Structure).

Table D-99 compares the street segment volume to capacity (v/c) ratios under the Implementation Plan Alternative (Without Parking Structure) against the No Project Alternative to identify traffic impacts based on significance criteria identified in Section D.2, measured by an increase to LOS E or F or an increase in volume to capacity ratio of greater than 0.02 for streets operating at LOS E and 0.01 for streets operating at LOS F under the No Project. The following roadway segments would have potentially significant traffic impacts:

Street Segments with Significant Traffic Impacts

Year 2010

- Sassafra Street between Pacific Highway and India Street, which operates at LOS E and F under both the Implementation Plan Alternative (without Parking Structure) and No Project Alternative and experience an increase in the v/c ratio of over 0.01 under the Implementation Plan Alternative (without Parking Structure) compared to the No Project Alternative.
 - Sassafra Street between Kettner Boulevard and India Street.

See Section D.5.1.3.1 for a description of Sassafras Street.

Year 2015

- All locations identified in Year 2010
- Kettner Boulevard between Sassafras Street and Palm Street, which increased from LOS D under No Project to LOS E with Implementation Plan Alternative (without Parking Structure)

Year 2020

- All locations identified in Year 2015, except no Kettner Boulevard between Sassafras Street and Palm Street, which deteriorated to LOS F under the No Project Alternative due to an increase in background traffic

Year 2025

- All locations identified in Year 2020
- North Harbor Drive between Rental Car Road and Laurel Street, which operates at LOS F under both the Implementation Plan Alternative (without Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan Alternative (without Parking Structure) compared to the No Project Alternative.
- Grape Street between Pacific highway and Kettner Boulevard, which operates at LOS F under both the Implementation Plan Alternative (without Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan Alternative (without Parking Structure) compared to the No Project Alternative.
- Kettner Boulevard between Washington Street and Palm Street, which operates at LOS E and F under both the Implementation Plan Alternative (without Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan Alternative (without Parking Structure) compared to the No Project Alternative.

Year 2030

- All locations identified in Year 2025
- North Harbor Drive between Laurel Street and Hawthorn Street, which operates at LOS F under both the Implementation Plan Alternative (without Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan Alternative (without Parking Structure) compared to the No Project Alternative.
- Grape Street between North Harbor Drive and Pacific Highway, which operates at LOS F under both the Implementation Plan Alternative (without Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan Alternative (without Parking Structure) compared to the No Project Alternative.
- Grape Street between Kettner Boulevard and I-5, which operates at LOS F under both the Implementation Plan Alternative (without Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan Alternative (without Parking Structure) compared to the No Project Alternative.
- Hawthorn Street between North Harbor Drive and I-5, which operates at LOS F under both the Implementation Plan Alternative (without Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan Alternative (without Parking Structure) compared to the No Project Alternative.
- Laurel Street between Pacific Highway to Kettner Street, which operates at LOS F under both the Implementation Plan Alternative (without Parking Structure) and No Project Alternative

and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan Alternative (without Parking Structure) compared to the No Project Alternative.

- India Street between Laurel Street and Sassafras Street, which operates at LOS F under both the Implementation Plan Alternative (without Parking Structure) and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Implementation Plan Alternative (without Parking Structure) compared to the No Project Alternative.

Table D-98
2010-2030 Street Segment Operations – Airport Implementation Plan Alternative (Without Parking Structure, 2010-2020)

Roadway	Segment	Classification	Lanes	Year 2010						Year 2015						Year 2020					
				LOS E ADT Capacity 1000s	SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS	SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS	SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS		
North Harbor Drive	West of NTC	6-Lane Prime	6D	60.0	11.0	17.7	28.7	0.48	B	12.7	20.4	33.1	0.55	B	14.0	25.2	39.2	0.65	C		
	NTC - Spanish Landing	6-Lane Prime	6D	60.0	15.7	15.1	30.8	0.51	B	18.0	16.3	34.3	0.57	B	19.8	20.7	40.5	0.67	C		
	Spanish Landing - T2 Access	6-Lane Prime	6D	60.0	11.5	14.9	26.4	0.44	B	12.8	16.2	29.0	0.48	B	14.2	18.3	32.5	0.54	B		
	T2 Access - Harbor Island	6-Lane Prime	4+3	65.0	22.1	15.0	37.1	0.57	B	25.5	16.3	41.8	0.64	C	27.6	18.2	45.7	0.70	C		
	Harbor Island - T1 Access	6-Lane Prime	3+4	65.0	22.9	18.3	41.2	0.63	C	26.0	18.4	44.4	0.68	C	27.5	19.1	46.6	0.72	C		
	T1 Access - Winship	6-Lane Prime	5+3	70.0	27.8	18.3	46.1	0.66	C	31.8	18.3	50.1	0.72	C	34.9	19.1	54.0	0.77	C		
	Winship - Flyover Merge (1)	6-Lane Prime	4+4	70.0	31.0	18.4	49.4	0.71	C	35.5	18.4	53.9	0.77	C	39.0	19.1	58.1	0.83	C		
	Rental Car Rd - Laurel	6-Lane Prime	6D	60.0	62.6	20.8	83.4	1.39	F	72.6	20.7	93.3	1.55	F	80.0	22.1	102.1	1.70	F		
	Laurel - Hawthorn	6-Lane Prime	6D	60.0	40.5	15.2	55.7	0.93	E	46.8	15.4	62.2	1.04	F	51.5	16.7	68.2	1.14	F		
	Hawthorn - Grape	6-Lane Prime	6D	60.0	25.4	14.0	39.4	0.66	C	29.4	13.4	42.8	0.71	C	32.4	14.0	46.4	0.77	C		
Grape Street	Harbor - Pacific	3-Lane Major 1-Way	3U	25.0	13.5	6.7	20.2	0.81	D	15.7	7.1	22.8	0.91	E	17.4	8.5	25.9	1.04	F		
	Pacific - Kettner	3-Lane Major 1-Way	3U	25.0	12.6	16.4	29.0	1.16	F	14.5	17.1	31.6	1.27	F	16.0	18.5	34.5	1.38	F		
	Kettner - I-5	3-Lane Major 1-Way	3U	25.0	12.1	23.3	35.4	1.42	F	14.1	23.7	37.8	1.51	F	15.6	21.1	36.7	1.47	F		
Hawthorn Street	Harbor - Pacific	3-Lane Major 1-Way	3U	25.0	15.2	5.1	20.3	0.81	D	17.7	5.4	23.1	0.92	E	19.5	6.7	26.2	1.05	F		
	Pacific - Kettner	3-Lane Major 1-Way	3U	25.0	12.4	6.0	18.4	0.74	C	14.4	6.2	20.6	0.83	D	15.9	7.4	23.3	0.93	E		
	Kettner - I-5	3-Lane Major 1-Way	3U	25.0	12.4	17.2	29.6	1.18	F	14.4	19.2	33.6	1.35	F	15.9	20.4	36.4	1.45	F		
Kettner Blvd	north of Washington	3-Lane Collector 1-Way	3U	25.0	0.2	7.2	7.4	0.29	A	0.2	7.2	7.4	0.30	A	0.3	9.6	9.9	0.39	A		
	Washington - Sassafras	3-Lane Major 1-Way	3U	25.0	9.0	13.0	22.0	0.88	D	10.5	13.1	23.6	0.94	E	11.6	16.0	27.6	1.10	F		
	Sassafras - Palm	3-Lane Major 1-Way	3U	25.0	9.2	11.0	20.2	0.81	D	10.6	11.9	22.5	0.90	E	11.7	18.7	30.4	1.22	F		
	Palm - Laurel	3-Lane Major 1-Way	3U	25.0	7.5	8.6	16.2	0.65	C	8.8	9.5	18.2	0.73	C	9.7	16.0	25.7	1.03	F		
	Laurel - Hawthorn	3-Lane Major 1-Way	3U	25.0	0.0	7.2	7.2	0.29	A	0.1	7.9	8.0	0.32	A	0.2	13.3	13.5	0.54	B		
	Hawthorn - Grape	3-Lane Major 1-Way	3U	25.0	0.0	14.8	14.8	0.59	C	0.1	16.8	16.9	0.68	C	0.2	21.5	21.7	0.87	D		
Laurel Street	Harbor - Pacific	4-Lane Major	4U	40.0	22.1	6.3	28.4	0.71	C	25.8	6.7	32.5	0.81	D	28.5	6.0	34.4	0.86	D		
	Pacific - Kettner	4-Lane Collector	4D	30.0	17.9	7.2	25.1	0.84	E	21.0	7.8	28.8	0.96	E	23.4	6.9	30.3	1.01	F		
	Kettner - I-5	4-Lane Collector	4D	30.0	10.4	8.5	18.9	0.63	C	12.5	9.6	22.1	0.74	D	14.2	8.0	22.2	0.74	D		
Pacific Highway	Washington - Sassafras	6-Lane Prime	6D	50.0	4.1	22.8	26.9	0.54	B	4.8	27.3	32.1	0.64	C	5.4	24.3	29.8	0.60	C		
	Sassafras - Palm	6-Lane Prime	6D	50.0	7.0	17.5	24.5	0.49	B	8.1	21.0	29.1	0.58	C	8.9	20.9	29.8	0.60	C		
	Palm - Laurel	6-Lane Prime	6D	50.0	7.0	18.1	25.1	0.50	B	8.1	21.7	29.8	0.60	C	8.9	21.0	30.0	0.60	C		
	Laurel - Hawthorn	6-Lane Major	6D	50.0	2.3	19.1	21.4	0.43	B	2.8	22.6	25.4	0.51	B	3.3	25.5	28.8	0.58	C		
	Hawthorn - Grape	6-Lane Major	6D	50.0	4.9	19.6	24.5	0.49	B	5.8	23.2	29.0	0.58	C	6.4	26.0	32.5	0.65	C		
Palm Street	Pacific - Kettner	2-Lane Collector	2U	8.0	0.0	0.9	0.9	0.11	A	0.0	0.9	0.9	0.11	A	0.0	0.3	0.3	0.04	A		
Sassafras Street	Pacific - Kettner	3-Lane Collector	3U	12.0	3.5	8.3	11.8	0.98	E	4.4	9.7	14.1	1.17	F	5.0	9.3	14.4	1.20	F		
	Kettner-India	2-Lane Collector	2U	8.0	1.7	8.5	10.2	1.27	F	2.2	9.7	11.9	1.49	F	2.5	9.4	11.9	1.49	F		
	Pacific - Kettner	4-Lane Collector	4U	30.0	3.9	16.5	20.4	0.68	D	4.7	18.6	23.3	0.78	D	5.4	19.1	24.5	0.82	D		
Washington Street	Kettner - San Diego	5-Lane Collector	5D	30.0	3.6	23.3	26.9	0.90	E	4.3	25.5	29.8	0.99	E	4.8	28.6	33.4	1.11	F		
	Laurel - Palm	2-Lane Collector	2U	8.0	7.4	8.7	16.1	2.01	F	8.6	10.2	18.9	2.36	F	9.5	7.9	17.5	2.19	F		
	Palm - Sassafras	3-Lane Collector	3U	12.0	7.4	13.2	20.6	1.72	F	8.6	15.4	24.0	2.00	F	9.5	12.6	22.2	1.85	F		
Rosecrans	Sassafras - Washington	3-Lane Collector	3U	12.0	5.0	13.5	18.5	1.54	F	6.4	14.6	21.1	1.76	F	7.5	15.2	22.7	1.89	F		
	Barnett - Sport Arena	6-lane Major	6D	50.0	5.1	40.1	45.2	0.90	E	5.9	42.4	48.3	0.97	E	6.5	34.3	40.8	0.82	D		
	Nimitz Quimby - Barnett	4-lane Major-5-lane Major	4U 5U	40.0 45.0	5.1	35.9	41.0	1.03	F	5.9	35.4	41.3	1.03	F	6.5	31.1	37.6	0.94-0.84	E D		
	Nimitz - Quimby	4-lane Major	4U	40.0	5.1	35.9	41.0	1.03	F	5.9	35.4	41.3	1.03	F	6.5	31.1	37.6	0.94-0.84	E D		
Nimitz	Harbor - Rosecrans	4-lane Major	4U	40.0	9.4	8.7	18.1	0.45	B	10.8	8.5	19.3	0.48	B	11.9	11.2	23.1	0.58	C		

Source: HNTB, 2007.

Notes:

(1) Does not include traffic on flyover.

MAP = Million Annual Passengers

ADT = Average Daily Traffic

LOS = Level of Service

V/C = volume-to-capacity ratio

Table D-98 (continued)
2010-2030 Street Segment Operations – Airport Implementation Plan Alternative (Without Parking Structure, 2025-2030)

Roadway	Segment	Classification	Lanes	LOS E ADT Capacity 1000s	Year 2025					Year 2030				
					SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS	SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS
North Harbor Drive	West of NTC	6-Lane Prime	6D	60.0	14.9	26.7	41.6	0.69	C	19.5	28.5	48.0	0.80	C
	NTC - Spanish Landing	6-Lane Prime	6D	60.0	20.8	21.8	42.6	0.71	C	25.5	23.3	48.8	0.81	C
	Spanish Landing - T2 Access	6-Lane Prime	6D	60.0	14.8	18.4	33.2	0.55	B	17.7	20.7	38.3	0.64	C
	T2 Access - Harbor Island	6-Lane Prime	4+3	65.0	29.1	18.1	47.2	0.73	C	32.3	19.8	52.1	0.80	C
	Harbor Island - T1 Access	6-Lane Prime	3+4	65.0	28.9	20.4	49.3	0.76	C	30.7	21.1	51.8	0.80	C
	T1 Access - Winship	6-Lane Prime	5+3	70.0	36.8	20.5	57.3	0.82	C	39.0	21.1	60.1	0.86	D
	Winship - Flyover Merge (1)	6-Lane Prime	4+4	70.0	41.1	20.4	61.5	0.88	D	41.5	20.9	62.4	0.89	D
	Rental Car Rd - Laurel	6-Lane Prime	6D	60.0	84.9	20.9	105.7	1.76	F	85.1	21.7	106.7	1.78	F
	Laurel - Hawthorn	6-Lane Prime	6D	60.0	54.6	17.5	72.1	1.20	F	57.2	18.2	75.4	1.26	F
	Hawthorn - Grape	6-Lane Prime	6D	60.0	34.4	14.8	49.1	0.82	C	36.0	14.8	50.9	0.85	D
Grape Street	Harbor - Pacific	3-Lane Major 1-Way	3U	25.0	18.5	9.0	27.5	1.10	F	19.4	9.7	29.1	1.16	F
	Pacific - Kettner	3-Lane Major 1-Way	3U	25.0	17.0	18.8	35.8	1.43	F	17.8	19.8	37.5	1.50	F
	Kettner - I-5	3-Lane Major 1-Way	3U	25.0	16.6	21.8	38.4	1.54	F	17.4	24.7	42.1	1.68	F
Hawthorn Street	Harbor - Pacific	3-Lane Major 1-Way	3U	25.0	20.7	7.0	27.7	1.11	F	21.7	7.9	29.6	1.18	F
	Pacific - Kettner	3-Lane Major 1-Way	3U	25.0	16.9	7.8	24.7	0.99	E	17.7	8.7	26.5	1.06	F
Kettner Blvd	Kettner - I-5	3-Lane Major 1-Way	3U	25.0	16.9	21.8	38.7	1.55	F	17.7	24.5	42.2	1.69	F
	north of Washington	3-Lane Collector 1-Way	3U	25.0	0.3	10.7	11.1	0.44	B	0.4	4.2	4.6	0.18	A
	Washington - Sassafras	3-Lane Major 1-Way	3U	25.0	12.3	14.1	26.4	1.06	F	11.0	17.4	28.4	1.14	F
Sassafras - Palm	Sassafras - Palm	3-Lane Major 1-Way	3U	25.0	12.5	17.2	29.6	1.19	F	11.2	14.2	25.4	1.02	F
	Palm - Laurel	3-Lane Major 1-Way	3U	25.0	10.3	13.7	24.0	0.96	E	9.0	12.6	21.5	0.86	D
	Laurel - Hawthorn	3-Lane Major 1-Way	3U	25.0	0.2	11.0	11.2	0.45	B	0.3	11.4	11.7	0.47	B
	Hawthorn - Grape	3-Lane Major 1-Way	3U	25.0	0.2	19.9	20.1	0.81	D	0.3	21.5	21.8	0.87	D
	Laurel Street	Harbor - Pacific	4-Lane Major	4U	40.0	30.3	4.0	34.2	0.86	D	27.9	4.3	32.2	0.81
Pacific Highway	Pacific - Kettner	4-Lane Collector	4D	30.0	25.0	6.8	31.8	1.06	F	22.6	12.1	34.7	1.16	F
	Kettner - I-5	4-Lane Collector	4D	30.0	15.3	8.1	23.4	0.78	D	14.4	12.9	27.3	0.91	E
	Washington - Sassafras	6-Lane Prime	6D	50.0	5.8	27.4	33.2	0.66	C	6.0	19.1	25.1	0.50	B
Palm Street	Sassafras - Palm	6-Lane Prime	6D	50.0	9.5	22.2	31.7	0.63	C	9.9	16.3	26.1	0.52	B
	Palm - Laurel	6-Lane Prime	6D	50.0	9.5	22.0	31.5	0.63	C	9.9	15.4	25.3	0.51	B
	Laurel - Hawthorn	6-Lane Major	6D	50.0	3.6	27.7	31.3	0.63	C	3.9	23.3	27.2	0.54	B
	Hawthorn - Grape	6-Lane Major	6D	50.0	6.9	28.1	35.0	0.70	C	7.3	24.1	31.4	0.63	C
Sassafras Street	Pacific - Kettner	2-Lane Collector	2U	8.0	0.0	0.1	0.1	0.01	A	0.0	0.1	0.1	0.01	A
	Kettner-India	2-Lane Collector	2U	8.0	2.7	9.8	12.5	1.56	F	2.9	8.0	10.9	1.37	F
Washington Street	Pacific - Kettner	4-Lane Collector	4U	30.0	5.9	18.9	24.9	0.83	D	6.4	12.7	19.2	0.64	C
	Kettner - San Diego	5-Lane Collector	5D	30.0	5.2	28.1	33.3	1.11	F	5.6	22.5	28.1	0.94	E
India Street	Laurel - Palm	2-Lane Collector	2U	8.0	10.2	7.9	18.1	2.26	F	8.8	12.6	21.4	2.68	F
	Palm - Sassafras	3-Lane Collector	3U	12.0	10.2	12.5	22.6	1.88	F	8.8	16.5	25.3	2.11	F
	Sassafras - Washington	3-Lane Collector	3U	12.0	8.2	14.7	22.9	1.90	F	7.5	21.5	29.0	2.42	F
Rosecrans	Barnett - Sport Arena	6-lane Major	6D	50.0	6.9	34.6	41.5	0.83	D	10.7	33.7	44.4	0.89	D
	Nimitz Quimby - Barnett	4-lane Major-5-lane Major	4U 5U	40.0 45.0	6.9	31.3	38.2	0.95 0.85	E-D	10.7	29.0	39.7	0.99 0.88	E-D
Nimitz	Nimitz - Quimby	4-lane Major	4U	40.0	6.9	31.3	38.2	0.95	E	10.7	29.0	39.7	0.99	E
	Harbor - Rosecrans	4-lane Major	4U	40.0	12.6	11.8	24.5	0.61	C	17.1	11.7	28.8	0.72	C

Source: HNTB, 2007.

Notes:

(1) Does not include traffic on flyover.

MAP = Million Annual Passengers
 ADT = Average Daily Traffic
 LOS = Level of Service
 V/C = volume-to-capacity ratio

Table D-99

2010-2030 Street Segment Impacts – Airport Implementation Plan Alternative (Without Parking Structure, 2010-2020)

Roadway	Segment	Year 2010					Year 2015					Year 2020				
		No Proj V/C	No Proj LOS	Proj V/C	Proj LOS	Diff V/C	No Proj V/C	No Proj LOS	Proj V/C	Proj LOS	Diff V/C	No Proj V/C	No Proj LOS	Proj V/C	Proj LOS	Diff V/C
North Harbor Drive	West of NTC	0.48	B	0.48	B	0.00	0.56	B	0.55	B	0.00	0.66	C	0.65	C	0.00
	NTC - Spanish Landing	0.51	B	0.51	B	0.00	0.57	B	0.57	B	0.00	0.67	C	0.67	C	0.01
	Spanish Landing - T2 Access	0.43	B	0.44	B	0.01	0.47	B	0.48	B	0.02	0.52	B	0.54	B	0.02
	T2 Access - Harbor Island	0.56	B	0.57	B	0.01	0.63	C	0.64	C	0.01	0.68	C	0.70	C	0.02
	Harbor Island - T1 Access	0.58	C	0.63	C	0.05	0.62	C	0.68	C	0.06	0.64	C	0.72	C	0.07
	T1 Access - Winship	0.76	C	0.66	C	-0.10	0.83	C	0.72	C	-0.11	0.89	D	0.77	C	-0.12
	Winship - Rental Car Rd	0.79	C	0.71	C	-0.09	0.87	D	0.77	C	-0.10	0.94	E	0.83	C	-0.11
	Rental Car Rd - Laurel	1.41	F	1.39	F	-0.02	1.57	F	1.55	F	-0.02	1.71	F	1.70	F	-0.01
	Laurel - Hawthorn	0.94	E	0.93	E	-0.01	1.05	F	1.04	F	-0.01	1.14	F	1.14	F	-0.01
	Hawthorn - Grape	0.66	C	0.66	C	-0.01	0.72	C	0.71	C	-0.01	0.78	C	0.77	C	0.00
Grape Street	Harbor - Pacific	0.82	D	0.81	D	-0.01	0.92	E	0.91	E	-0.01	1.04	F	1.04	F	-0.01
	Pacific - Kettner	1.16	F	1.16	F	0.00	1.26	F	1.27	F	0.00	1.37	F	1.38	F	0.007
	Kettner - I-5	1.43	F	1.42	F	-0.01	1.52	F	1.51	F	-0.01	1.48	F	1.47	F	-0.01
Hawthorn Street	Harbor - Pacific	0.83	D	0.81	D	-0.01	0.94	E	0.92	E	-0.01	1.06	F	1.05	F	-0.01
	Pacific - Kettner	0.75	C	0.74	C	-0.01	0.83	D	0.83	D	0.00	0.94	E	0.93	E	-0.01
	Kettner - I-5	1.19	F	1.18	F	-0.01	1.35	F	1.35	F	-0.01	1.46	F	1.45	F	-0.01
Kettner Blvd	north of Washington	0.29	A	0.29	A	0.00	0.30	A	0.30	A	0.00	0.39	A	0.39	A	0.00
	Washington - Sassafras	0.88	D	0.88	D	0.00	0.94	E	0.94	E	0.00	1.10	F	1.10	F	0.005
	Sassafras - Palm	0.80	D	0.81	D	0.00	0.90	D	0.90	E	0.00	1.21	F	1.22	F	0.005
	Palm - Laurel	0.65	C	0.65	C	-0.01	0.74	C	0.73	C	-0.01	1.03	F	1.03	F	-0.01
	Laurel - Hawthorn	0.29	A	0.29	A	0.00	0.32	A	0.32	A	0.00	0.54	B	0.54	B	0.00
	Hawthorn - Grape	0.59	C	0.59	C	0.00	0.68	C	0.68	C	0.00	0.87	D	0.87	D	0.00
Laurel Street	Harbor - Pacific	0.72	C	0.71	C	-0.01	0.82	D	0.81	D	-0.01	0.87	D	0.86	D	-0.01
	Pacific - Kettner	0.85	E	0.84	E	-0.01	0.97	E	0.96	E	-0.01	1.02	F	1.01	F	-0.01
	Kettner - I-5	0.64	C	0.63	C	-0.01	0.75	D	0.74	D	-0.01	0.75	D	0.74	D	-0.02
Pacific Highway	Washington - Sassafras	0.54	B	0.54	B	0.00	0.64	C	0.64	C	0.00	0.59	C	0.60	C	0.00
	Sassafras - Palm	0.48	B	0.49	B	0.01	0.57	C	0.58	C	0.01	0.59	C	0.60	C	0.01
	Palm - Laurel	0.49	B	0.50	B	0.01	0.59	C	0.60	C	0.01	0.59	C	0.60	C	0.01
	Laurel - Hawthorn	0.42	B	0.43	B	0.01	0.50	B	0.51	B	0.01	0.57	C	0.58	C	0.00
	Hawthorn - Grape	0.49	B	0.49	B	0.00	0.58	C	0.58	C	0.00	0.65	C	0.65	C	0.00
Palm Street	Pacific - Kettner	0.11	A	0.11	A	0.00	0.11	A	0.11	A	0.00	0.04	A	0.04	A	0.00
Sassafras Street	Pacific - Kettner	0.95	E	0.98	E	0.03	1.14	F	1.17	F	0.03	1.17	F	1.20	F	0.03
	Kettner-India	1.25	F	1.27	F	0.02	1.46	F	1.49	F	0.02	1.46	F	1.49	F	0.02
Washington Street	Pacific - Kettner	0.68	D	0.68	D	0.00	0.78	D	0.78	D	0.00	0.82	D	0.82	D	0.00
	Kettner - San Diego	0.90	E	0.90	E	0.00	0.99	E	0.99	E	0.00	1.11	F	1.11	F	0.00
India Street	Laurel - Palm	2.03	F	2.01	F	-0.02	2.38	F	2.36	F	-0.02	2.20	F	2.19	F	-0.02
	Palm - Sassafras	1.73	F	1.72	F	-0.01	2.01	F	2.00	F	-0.01	1.86	F	1.85	F	-0.01
	Sassafras - Washington	1.57	F	1.54	F	-0.03	1.79	F	1.76	F	-0.04	1.93	F	1.89	F	-0.04
Rosecrans	Barnett - Sport Arena	0.91	E	0.90	E	0.00	0.97	E	0.97	E	0.00	0.82	D	0.82	D	0.00
	Nimitz Quimby - Barnett	4.03-0.91	F-E	4.03-0.91	F-E	0.00	4.03-0.92	F-E	4.03-0.92	F-E	0.00	0.94-0.84	E-D	0.94-0.84	E-D	0.00
	Nimitz - Quimby	1.03	F	1.03	F	0.00	1.03	F	1.03	F	0.00	0.94	E	0.94	E	0.00
Nimitz	Harbor - Rosecrans	0.46	B	0.45	B	0.00	0.49	B	0.48	B	0.00	0.58	C	0.58	C	0.00

Source: HNTB, 2007.

V/C = Volume to capacity ratio
 LOS = Level of service

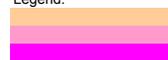
Legend:

 LOS E
 LOS F
 Significant Impact

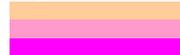
Table D-99 (continued)

2010-2030 Street Segment Impacts – Airport Implementation Plan Alternative (Without Parking Structure, 2025-2030)

Roadway	Segment	Year 2025					Year 2030				
		No Proj V/C	No Proj LOS	Proj V/C	Proj LOS	Diff V/C	No Proj V/C	No Proj LOS	Proj V/C	Proj LOS	Diff V/C
North Harbor Drive	West of NTC	0.69	C	0.69	C	0.00	0.79	C	0.80	C	0.01
	NTC - Spanish Landing	0.70	C	0.71	C	0.01	0.79	C	0.81	C	0.03
	Spanish Landing - T2 Access	0.53	B	0.55	B	0.03	0.60	C	0.64	C	0.04
	T2 Access - Harbor Island	0.70	C	0.73	C	0.02	0.76	C	0.80	C	0.04
	Harbor Island - T1 Access	0.68	C	0.76	C	0.08	0.69	C	0.80	C	0.10
	T1 Access - Winship	0.93	E	0.82	C	-0.11	0.94	E	0.86	D	-0.08
	Winship - Rental Car Rd	0.98	E	0.88	D	-0.10	0.97	E	0.89	D	-0.08
	Rental Car Rd - Laurel	1.75	F	1.76	F	0.012	1.73	F	1.78	F	0.05
	Laurel - Hawthorn	1.19	F	1.20	F	0.009	1.22	F	1.26	F	0.04
	Hawthorn - Grape	0.81	C	0.82	C	0.01	0.82	C	0.85	D	0.02
Grape Street	Harbor - Pacific	1.09	F	1.10	F	0.006	1.13	F	1.16	F	0.03
	Pacific - Kettner	1.41	F	1.43	F	0.019	1.46	F	1.50	F	0.04
	Kettner - I-5	1.53	F	1.54	F	0.00	1.66	F	1.68	F	0.02
Hawthorn Street	Harbor - Pacific	1.10	F	1.11	F	0.00	1.16	F	1.18	F	0.03
	Pacific - Kettner	0.98	E	0.99	E	0.00	1.03	F	1.06	F	0.03
	Kettner - I-5	1.54	F	1.55	F	0.00	1.66	F	1.69	F	0.02
Kettner Blvd	north of Washington	0.44	B	0.44	B	0.00	0.18	A	0.18	A	0.00
	Washington - Sassafras	1.04	F	1.06	F	0.013	1.11	F	1.14	F	0.03
	Sassafras - Palm	1.17	F	1.19	F	0.014	0.99	E	1.02	F	0.03
	Palm - Laurel	0.96	E	0.96	E	0.00	0.85	D	0.86	D	0.01
	Laurel - Hawthorn	0.45	B	0.45	B	0.00	0.47	B	0.47	B	0.00
	Hawthorn - Grape	0.81	D	0.81	D	0.00	0.87	D	0.87	D	0.00
Laurel Street	Harbor - Pacific	0.85	D	0.86	D	0.01	0.78	D	0.81	D	0.03
	Pacific - Kettner	1.06	F	1.06	F	0.00	1.13	F	1.16	F	0.02
	Kettner - I-5	0.78	D	0.78	D	-0.01	0.90	E	0.91	E	0.01
Pacific Highway	Washington - Sassafras	0.66	C	0.66	C	0.00	0.50	B	0.50	B	0.01
	Sassafras - Palm	0.62	C	0.63	C	0.01	0.51	B	0.52	B	0.02
	Palm - Laurel	0.62	C	0.63	C	0.01	0.49	B	0.51	B	0.02
	Laurel - Hawthorn	0.62	C	0.63	C	0.01	0.54	B	0.54	B	0.01
	Hawthorn - Grape	0.70	C	0.70	C	0.01	0.62	C	0.63	C	0.01
Palm Street	Pacific - Kettner	0.01	A	0.01	A	0.00	0.01	A	0.01	A	0.00
Sassafras Street	Pacific - Kettner	1.28	F	1.32	F	0.04	0.94	E	1.00	E	0.057
	Kettner-India	1.53	F	1.56	F	0.03	1.32	F	1.37	F	0.043
Washington Street	Pacific - Kettner	0.83	D	0.83	D	0.00	0.63	C	0.64	C	0.008
	Kettner - San Diego	1.11	F	1.11	F	0.00	0.93	E	0.94	E	0.008
India Street	Laurel - Palm	2.25	F	2.26	F	0.00	2.64	F	2.68	F	0.036
	Palm - Sassafras	1.88	F	1.88	F	0.00	2.09	F	2.11	F	0.024
	Sassafras - Washington	1.93	F	1.90	F	-0.03	2.411	F	2.417	F	0.006
Rosecrans	Barnett - Sport Arena	0.83	D	0.83	D	0.00	0.88	D	0.89	D	0.008
	Nimitz Quimby - Barnett	0.95 0.85	E-D	0.95 0.85	E-D	0.00	0.98 0.87	E-D	0.99 0.88	E-D	0.010
	Nimitz - Quimby	0.95	E	0.95	E	0.00	0.98	E	0.99	E	0.010
Nimitz	Harbor - Rosecrans	0.61	C	0.61	C	0.00	0.71	C	0.72	C	0.015

Source: HNTB, 2007.

V/C = Volume to capacity ratio
LOS = Level of service

Legend:

LOS E
LOS F
Significant Impact

D.6.2.3.2 Intersections

[Table D-100, D-101, D-102, D-103, D-104, D-105, D-106, D-107, D-108, and D-109](#) show the intersection turning volumes under the Implementation Plan Alternative (Without Parking Structure) for each analysis year. [Table D-110](#) shows the resulting intersection operations. ~~Future intersection lane configurations are assumed to remain the same under all alternatives and are shown on Figure D.5-4.~~ Intersection configurations were assumed to be the same as existing conditions shown in [Figure D.3-2](#) except for the following changes:

- North Harbor Drive and McCain Road is currently an unsignalized intersection with right-in / right-out movements only. In 2010 as part of the Liberty Station Development, this intersection is assumed to be signalized, allowing left turn movements inbound and outbound.
- In 2010, the intersection of North Harbor Drive and Winship Lane would be improved as part of the SDIA CIP to provided exclusive right turn lanes on both inbound and outbound approaches.

**Table D-102
2015 Intersection Turning Volumes – AM Peak Hour – Airport Implementation Plan
Alternative (Without Parking Structure)**

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	601	0	22	13	519	0	8	681	340	2,184
		Airport	0	0	0	215	0	0	0	39	0	0	30	171	455
		Background	0	0	0	386	0	22	13	480	0	8	651	169	1,729
2	North Harbor Drive / McCain St	Total	0	0	0	138	0	35	186	657	0	0	888	500	2,404
		Airport	0	0	0	61	0	6	11	243	0	0	196	144	661
		Background	0	0	0	77	0	29	175	414	0	0	692	356	1,743
3	North Harbor Drive / Spanish Landing	Total	5	0	18	23	0	120	81	787	5	16	1,619	0	2,674
		Airport	0	0	0	23	0	120	81	222	0	0	220	0	866
		Background	5	0	18	0	0	0	565	5	16	1,399	0	2,008	
4	North Harbor Drive / Harbor Island Drive	Total	43	2	152	19	5	41	38	703	88	243	2,009	0	3,343
		Airport	11	2	43	19	5	41	38	185	23	69	626	0	1,052
		Background	32	0	109	0	0	0	0	518	65	174	1,383	0	2,281
5	North Harbor Drive / Winship Lane	Total	0	0	0	352	0	97	145	729	0	0	2,364	0	3,687
		Airport	0	0	0	352	0	97	145	102	0	0	807	0	1,503
		Background	0	0	0	0	0	0	0	627	0	0	1,557	0	2,184
6	North Harbor Drive / Rental Car Road	Total	63	0	50	39	0	19	25	1,711	78	133	2,806	75	4,999
		Airport	63	0	50	39	0	19	25	1,084	78	133	1,249	75	2,815
		Background	0	0	0	0	0	0	0	627	0	0	1,557	0	2,184
7	Sheraton / Harbor Island Drive	Total	13	113	0	0	237	99	85	6	27	0	0	0	580
		Airport	0	56	0	0	97	0	0	0	0	0	0	0	153
		Background	13	57	0	0	140	99	85	6	27	0	0	0	427
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	95	0	0	69	1	285
		Airport	0	0	0	0	0	38	82	15	0	0	19	1	155
		Background	0	0	0	0	0	0	0	80	0	0	50	0	130
9	Sassafras Street / Pacific Highway	Total	80	591	86	56	651	11	6	79	49	248	156	65	2,078
		Airport	80	72	0	0	94	11	6	79	49	0	156	0	547
		Background	0	519	86	56	557	0	0	0	248	0	65	65	1,531
10	Laurel Street / North Harbor Drive	Total	0	0	0	26	0	4	450	1,191	0	0	1,960	39	3,670
		Airport	0	0	0	0	0	0	430	743	0	0	935	0	2,108
		Background	0	0	0	26	0	4	20	448	0	0	1,025	39	1,562
11	Hawthorn Street / North Harbor Drive	Total	0	312	0	0	1,123	0	0	0	0	87	0	2,058	3,580
		Airport	0	244	0	0	743	0	0	0	0	8	0	691	1,686
		Background	0	68	0	0	380	0	0	0	0	79	0	1,367	1,894
12	Grape Street / North Harbor Drive	Total	0	254	110	873	506	0	0	0	0	0	0	0	1,743
		Airport	0	244	7	501	251	0	0	0	0	0	0	0	1,003
		Background	0	10	103	372	255	0	0	0	0	0	0	0	740
13	Laurel Street / Pacific Highway	Total	41	382	108	97	322	414	102	584	2	52	777	66	2,947
		Airport	0	59	7	4	38	101	88	342	0	1	420	6	1,066
		Background	41	323	101	93	284	313	14	242	2	51	357	60	1,881
14	Hawthorn Street / Pacific Highway	Total	125	247	0	0	191	63	0	0	0	267	1,971	92	2,956
		Airport	125	62	0	0	30	8	0	0	0	0	566	5	796
		Background	0	185	0	0	161	55	0	0	0	267	1,405	87	2,160
15	Grape Street / Pacific Highway	Total	0	644	182	170	947	0	70	890	37	0	0	0	2,940
		Airport	0	179	0	0	30	0	7	464	37	0	0	0	717
		Background	0	465	182	170	917	0	63	426	0	0	0	0	2,223
16	Laurel Street / Kettner Boulevard	Total	0	0	0	262	355	612	0	696	49	46	280	0	2,300
		Airport	0	0	0	5	0	343	0	353	0	2	84	0	787
		Background	0	0	0	257	355	269	0	343	49	44	196	0	1,513
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	171	90	0	0	0	173	2,789	0	3,223
		Airport	0	0	0	0	2	0	0	0	0	0	571	0	573
		Background	0	0	0	0	169	90	0	0	0	173	2,218	0	2,650
18	Grape Street / Kettner Boulevard	Total	0	0	0	105	524	0	0	1,431	104	0	0	0	2,164
		Airport	0	0	0	2	0	0	0	450	15	0	0	0	467
		Background	0	0	0	103	524	0	0	981	89	0	0	0	1,697
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	77	102	87	0	0	0	43	437	1,129	0	0	0	1,875
		Airport	0	0	0	0	0	0	0	3	449	0	0	0	452
		Background	77	102	87	0	0	0	43	434	680	0	0	0	1,423
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	48	46	0	0	0	0	0	0	0	0	2,518	77	2,689
		Airport	0	0	0	0	0	0	0	0	0	0	0	567	567
		Background	48	46	0	0	0	0	0	0	0	0	1,951	77	2,122
21	Laurel Street / India Street	Total	98	135	23	0	0	0	525	386	53	0	258	231	1,709
		Airport	44	2	0	0	0	0	273	33	53	0	42	0	447
		Background	54	133	23	0	0	0	252	353	0	0	216	231	1,262
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	115	1,316	348	0	60	53	139	102	0	2,133
		Airport	0	0	0	0	348	45	0	22	23	0	46	0	484
		Background	0	0	0	115	968	303	0	38	30	139	56	0	1,649
23	Sassafras Street / India Street	Total	226	918	12	0	0	0	126	28	58	0	34	22	1,424
		Airport	79	275	0	0	0	0	39	0	0	0	0	0	393
		Background	147	643	12	0	0	0	87	28	58	0	34	22	1,031
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	200	35	57	0	76	42	163	174	0	747
		Airport	0	0	0	0	0	0	0	39	15	75	36	0	165
		Background	0	0	0	200	35	57	0	37	27	88	138	0	582
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	94	16	155	29	7	20	24	0	258	359	162	53	1,177
		Airport	10	0	57	0	0	0	0	0	39	101	0	0	207
		Background	84	16	98	29	7	20	24	0	219	258	162	53	970
26	Washington Street / Hancock Street	Total	0	297	120	352	417	0	358	167	134	0	0	0	1,845
		Airport	0	78	18	1	89	0	0	12	0	0	0	0	198
		Background	0	219	102	351	328	0	358	167	122	0	0	0	1,647
27	Washington Street / San Diego Avenue	Total	107	637	0	0	564	553	0	0	0	194	225	8	2,288
		Airport	18	59	0	0	77	0	0	0	0	12	0	0	166
		Background	89	578	0	0	487	553	0	0	0	182	225	8	2,122
28	Rosecrans Street / Pacific Highway	Total	237	177	261	116	170	72	63	183	151	314	153	89	1,986
		Airport	0	3	9	0	3	1	0	1	0	12	2	0	31
		Background	237	174	252	116	167	71	63	182	151	302	151	89	1,955
29	Rosecrans Street / Nimitz Boulevard	Total	16	121	99	14	112	15	155	671	30	124	627	40	2,024
		Airport	0	78	94	0	98	0	0	0	118	0	0	0	388
		Background	16	43	5	14	14	15	155	671	30	6	627	40	1,636

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19	Grape Street / I-5 Southbound On-Ramp	nbt	nbr	nbr2	ebt	ebr							
25	Washington Street / Pacific Highway NB-Ramps	nbl+nbl2	nbt	nbr	sbl	sbr2	sbr	ebt2	ebt	ebt	wbt	wbr2	wbr

**Table D-103
2015 Intersection Turning Volumes – PM Peak Hour – Airport Implementation Plan
Alternative (Without Parking Structure)**

Int #			NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	476	0	55	44	67	0	17	674	893	2,836	
		Airport	0	0	0	173	0	0	0	32	0	0	36	187	428	
		Background	0	0	0	303	0	55	44	645	0	17	638	706	2,408	
2	North Harbor Drive / McCain St	Total	0	0	0	506	0	187	39	965	0	0	1,076	175	2,948	
		Airport	0	0	0	92	0	12	8	197	0	0	212	113	634	
		Background	0	0	0	414	0	175	31	768	0	0	864	62	2,314	
3	North Harbor Drive / Spanish Landing	Total	7	0	25	23	0	102	68	1,797	20	6	1,204	0	3,252	
		Airport	0	0	0	23	0	102	68	222	0	0	223	0	638	
		Background	7	0	25	0	0	0	0	1,575	20	6	981	0	2,614	
4	North Harbor Drive / Harbor Island Drive	Total	159	2	340	21	5	49	31	1,682	132	470	1,383	0	4,274	
		Airport	12	2	56	21	5	49	31	193	21	60	543	0	993	
		Background	147	0	284	0	0	0	0	1,489	111	410	840	0	3,281	
5	North Harbor Drive / Winship Lane	Total	0	0	0	347	0	91	129	1,915	0	0	1,935	0	4,417	
		Airport	0	0	0	347	0	91	129	142	0	0	685	0	1,394	
		Background	0	0	0	0	0	0	0	1,773	0	0	1,250	0	3,023	
6	North Harbor Drive / Rental Car Road	Total	87	0	97	63	0	23	21	2,903	87	100	2,303	50	5,734	
		Airport	87	0	97	63	0	23	21	1,130	87	100	1,053	50	2,711	
		Background	0	0	0	0	0	0	0	1,773	0	0	1,250	0	3,023	
7	Sheraton / Harbor Island Drive	Total	23	423	0	0	537	70	77	2	25	0	0	0	1,157	
		Airport	0	70	0	0	86	0	0	0	0	0	0	0	156	
		Background	23	353	0	0	451	70	77	2	25	0	0	0	1,001	
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	55	68	104	0	0	136	1	364	
		Airport	0	0	0	0	0	55	68	18	0	0	15	1	167	
		Background	0	0	0	0	0	0	86	0	0	0	121	0	207	
9	Sassafras Street / Pacific Highway	Total	73	1,027	424	150	1,136	9	15	207	104	202	131	54	3,532	
		Airport	73	86	0	0	77	9	15	207	104	0	131	0	702	
		Background	0	941	424	150	1,059	0	0	0	0	202	0	54	2,830	
10	Laurel Street / North Harbor Drive	Total	0	0	0	76	0	11	1,172	2,008	0	0	1,678	102	5,047	
		Airport	0	0	0	0	0	0	477	813	0	0	752	0	2,042	
		Background	0	0	0	76	0	11	695	1,195	0	0	926	102	3,005	
11	Hawthorn Street / North Harbor Drive	Total	0	590	0	0	2,142	0	0	0	0	145	0	1,160	4,037	
		Airport	0	197	0	0	813	0	0	0	0	9	0	556	1,575	
		Background	0	393	0	0	1,329	0	0	0	0	136	0	604	2,462	
12	Grape Street / North Harbor Drive	Total	0	650	261	1,186	1,096	0	0	0	0	0	0	0	3,193	
		Airport	0	197	10	541	282	0	0	0	0	0	0	0	1,030	
		Background	0	453	251	645	814	0	0	0	0	0	0	0	2,163	
13	Laurel Street / Pacific Highway	Total	131	719	176	166	576	438	507	766	62	59	885	85	4,570	
		Airport	0	57	5	8	79	94	96	381	0	3	356	6	1,085	
		Background	131	662	171	158	497	344	411	385	62	56	529	79	3,485	
14	Hawthorn Street / Pacific Highway	Total	142	706	0	0	660	61	0	0	0	152	1,109	89	2,919	
		Airport	101	58	0	0	73	9	0	0	0	0	455	4	700	
		Background	41	648	0	0	587	52	0	0	0	152	654	85	2,219	
15	Grape Street / Pacific Highway	Total	0	753	504	280	641	0	57	1,745	32	0	0	0	4,012	
		Airport	0	149	0	1	72	0	10	508	32	0	0	0	772	
		Background	0	604	504	279	569	0	47	1,237	0	0	0	0	3,240	
16	Laurel Street / Kettner Boulevard	Total	0	0	0	314	664	648	0	975	86	66	337	0	3,090	
		Airport	0	0	0	3	0	276	0	394	0	5	88	0	766	
		Background	0	0	0	311	664	372	0	581	86	61	249	0	2,324	
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	446	79	0	0	0	213	1,546	0	2,284	
		Airport	0	0	0	0	5	0	0	0	0	0	458	0	463	
		Background	0	0	0	0	441	79	0	0	0	213	1,088	0	1,821	
18	Grape Street / Kettner Boulevard	Total	0	0	0	256	554	0	0	3,269	99	0	0	0	4,178	
		Airport	0	0	0	5	1	0	0	493	17	0	0	0	516	
		Background	0	0	0	251	553	0	0	2,776	82	0	0	0	3,662	
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	117	223	218	0	0	0	26	541	2,161	0	0	0	3,286	
		Airport	0	0	0	0	0	0	0	4	494	0	0	0	498	
		Background	117	223	218	0	0	0	26	537	1,667	0	0	0	2,788	
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	39	61	0	0	0	0	0	0	0	0	1,538	60	1,698	
		Airport	0	0	0	0	0	0	0	0	0	0	455	0	455	
		Background	39	61	0	0	0	0	0	0	0	0	1,083	60	1,243	
21	Laurel Street / India Street	Total	113	362	106	0	0	0	740	559	59	0	323	317	2,579	
		Airport	59	5	0	0	0	0	298	39	59	0	35	0	495	
		Background	54	357	106	0	0	0	442	520	0	0	288	317	2,084	
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	189	1,803	270	0	250	118	97	103	0	2,830	
		Airport	0	0	0	0	279	41	0	67	68	0	42	0	497	
		Background	0	0	0	189	1,524	229	0	183	50	97	61	0	2,333	
23	Sassafras Street / India Street	Total	210	1,542	36	0	0	0	346	69	126	0	15	18	2,362	
		Airport	66	304	0	0	0	0	103	0	0	0	0	0	473	
		Background	144	1,238	36	0	0	0	243	69	126	0	15	18	1,889	
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	527	53	12	0	240	56	219	99	0	1,206	
		Airport	0	0	0	0	0	1	0	37	14	61	62	0	175	
		Background	0	0	0	527	53	11	0	203	42	158	37	0	1,031	
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	52	36	270	63	60	8	60	15	649	378	234	66	1,891	
		Airport	17	0	70	0	0	0	0	0	37	106	0	0	230	
		Background	35	36	200	63	60	8	60	15	612	272	234	66	1,661	
26	Washington Street / Hancock Street	Total	0	741	179	376	423	0	562	335	162	0	0	0	2,778	
		Airport	0	89	17	0	85	0	0	21	0	0	0	0	212	
		Background	0	652	162	376	338	0	562	335	141	0	0	0	2,566	
27	Washington Street / San Diego Avenue	Total	208	1,264	0	0	596	504	0	0	0	207	304	19	3,102	
		Airport	17	72	0	0	64	0	0	0	0	21	0	1	175	
		Background	191	1,192	0	0	532	504	0	0	0	186	304	18	2,927	
28	Rosecrans Street / Pacific Highway	Total	418	341	756	141	163	78	119	485	180	257	315	134	3,387	
		Airport	0	3	11	0	3	0	1	2	0	10	1	0	31	
		Background	418	338	745	141	160	78	118	483	180	247	314	134	3,356	
29	Rosecrans Street / Nimitz Boulevard	Total	18	203	122	11	91	11	348	852	34	183	643	52	2,568	
		Airport	0	85	102	0	79	0	0	0	0	95	0	0	361	
		Background	18	118	20	11	12	11	348	852	34	88	643	52	2,207	

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19	Grape Street / I-5 Southbound On-Ramp	nbt	nbr	nbr2	eb1	ebt	ebr						
25	Washington Street / Pacific Highway NB-Ramps	nbl+nbl2	nbt	nbr	sbl	sbr2	sbr	eb12	eb1	ebt	wbt	wbr2	wbr

**Table D-104
2020 Intersection Turning Volumes – AM Peak Hour – Airport Implementation Plan
Alternative (Without Parking Structure)**

Int #		Total	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	706	0	30	14	540	0	9	835	394	2,528
		Airport	0	0	0	237	0	0	0	43	0	0	33	190	503
		Background	0	0	0	469	0	30	14	497	0	9	802	204	2,025
2	North Harbor Drive / McCain St	Total	0	0	0	150	0	38	203	734	0	0	911	544	2,580
		Airport	0	0	0	65	0	6	11	268	0	0	217	155	722
		Background	0	0	0	85	0	32	192	466	0	0	694	389	1,858
3	North Harbor Drive / Spanish Landing	Total	5	0	18	24	0	129	86	877	6	18	1,709	0	2,872
		Airport	0	0	0	24	0	129	86	247	0	0	242	0	728
		Background	5	0	18	0	0	0	630	6	18	1,467	0	2,144	
4	North Harbor Drive / Harbor Island Drive	Total	44	3	157	19	6	51	48	775	95	251	2,115	0	3,564
		Airport	11	3	44	19	6	51	48	200	23	70	663	0	1,138
		Background	33	0	113	0	0	0	0	575	72	181	1,452	0	2,426
5	North Harbor Drive / Winship Lane	Total	0	0	0	380	0	105	154	798	0	0	2,528	0	3,965
		Airport	0	0	0	380	0	105	154	109	0	0	895	0	1,643
		Background	0	0	0	0	0	0	689	0	0	1,633	0	2,322	
6	North Harbor Drive / Rental Car Road	Total	70	0	56	43	0	19	26	1,890	87	147	3,007	81	5,426
		Airport	70	0	56	43	0	19	26	1,201	87	147	1,374	81	3,104
		Background	0	0	0	0	0	0	0	689	0	0	1,633	0	2,322
7	Sheraton / Harbor Island Drive	Total	13	120	0	0	253	99	85	6	27	0	0	0	603
		Airport	0	58	0	0	99	0	0	0	0	0	0	0	157
		Background	13	62	0	0	154	99	85	6	27	0	0	0	446
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	98	0	0	72	1	291
		Airport	0	0	0	0	0	38	82	16	0	0	21	1	158
		Background	0	0	0	0	0	0	82	82	0	0	51	0	133
9	Sassafra Street / Pacific Highway	Total	87	600	85	50	604	12	6	85	52	233	170	61	2,045
		Airport	87	83	0	0	107	12	6	85	52	0	170	0	602
		Background	0	517	85	50	497	0	0	0	0	233	0	61	1,443
10	Laurel Street / North Harbor Drive	Total	0	0	0	23	0	4	499	1,301	0	0	2,181	44	4,052
		Airport	0	0	0	0	0	4	478	822	0	0	1,026	0	2,326
		Background	0	0	0	23	0	4	21	479	0	0	1,155	44	1,726
11	Hawthorn Street / North Harbor Drive	Total	0	339	0	0	1,244	0	0	0	0	110	0	2,461	4,154
		Airport	0	268	0	0	822	0	0	0	0	12	0	759	1,861
		Background	0	71	0	0	422	0	0	0	0	98	0	1,702	2,293
12	Grape Street / North Harbor Drive	Total	0	277	104	944	543	0	0	0	0	0	0	0	1,868
		Airport	0	268	10	556	278	0	0	0	0	0	0	0	1,112
		Background	0	9	94	388	265	0	0	0	0	0	0	0	756
13	Laurel Street / Pacific Highway	Total	46	432	126	95	319	414	108	597	1	47	780	60	3,025
		Airport	0	67	12	5	44	110	96	382	0	2	465	7	1,190
		Background	46	365	114	90	275	304	12	215	1	45	315	53	1,835
14	Hawthorn Street / Pacific Highway	Total	137	279	0	0	217	74	0	0	0	294	2,167	104	3,272
		Airport	137	71	0	0	34	12	0	0	0	0	621	8	883
		Background	0	208	0	0	183	62	0	0	0	294	1,546	96	2,389
15	Grape Street / Pacific Highway	Total	0	699	195	191	1,064	0	85	1,023	43	0	0	0	3,300
		Airport	0	198	0	0	34	0	10	513	43	0	0	0	798
		Background	0	501	195	191	1,030	0	75	510	0	0	0	0	2,502
16	Laurel Street / Kettner Boulevard	Total	0	0	0	439	597	830	0	700	43	40	259	0	2,908
		Airport	0	0	0	7	0	377	0	398	0	4	96	0	882
		Background	0	0	0	432	597	453	0	302	43	36	163	0	2,026
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	289	152	0	0	0	181	2,952	0	3,574
		Airport	0	0	0	0	4	0	0	0	0	0	629	0	633
		Background	0	0	0	0	285	152	0	0	0	181	2,323	0	2,941
18	Grape Street / Kettner Boulevard	Total	0	0	0	136	671	0	0	1,561	112	0	0	0	2,480
		Airport	0	0	0	4	0	0	0	498	16	0	0	0	519
		Background	0	0	0	132	671	0	0	1,063	96	0	0	0	1,962
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	121	159	136	0	0	0	38	390	1,104	0	0	0	1,948
		Airport	0	0	0	0	0	0	0	3	498	0	0	0	501
		Background	121	159	136	0	0	0	38	387	606	0	0	0	1,447
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	52	49	0	0	0	0	0	0	0	0	2,366	69	2,536
		Airport	0	0	0	0	0	0	0	0	0	0	0	625	625
		Background	52	49	0	0	0	0	0	0	0	0	1,741	69	1,911
21	Laurel Street / India Street	Total	97	110	18	0	0	0	513	331	68	0	252	219	1,608
		Airport	54	4	0	0	0	0	302	36	68	0	47	0	511
		Background	43	106	18	0	0	0	211	295	0	0	205	219	1,097
22	Sassafra Street / Kettner Boulevard	Total	0	0	0	274	2,697	775	0	62	55	137	107	0	4,107
		Airport	0	0	0	0	385	52	0	26	26	0	52	0	541
		Background	0	0	0	274	2,312	723	0	36	29	137	55	0	3,566
23	Sassafra Street / India Street	Total	205	834	10	0	0	0	128	27	57	0	37	23	1,321
		Airport	85	306	0	0	0	0	42	0	0	0	0	0	433
		Background	120	528	10	0	0	0	86	27	57	0	37	23	888
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	226	40	65	0	93	48	178	198	0	848
		Airport	0	0	0	0	0	0	0	54	20	83	49	0	206
		Background	0	0	0	226	40	65	0	39	28	95	149	0	642
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	70	11	129	31	7	21	27	0	288	382	166	54	1,186
		Airport	13	0	63	0	0	0	1	0	53	118	0	0	248
		Background	57	11	66	31	7	21	26	0	235	264	166	54	938
26	Washington Street / Hancock Street	Total	0	315	129	394	468	0	473	221	179	0	0	0	2,179
		Airport	0	91	25	1	101	0	0	0	17	0	0	0	235
		Background	0	224	104	393	367	0	473	221	162	0	0	0	1,944
27	Washington Street / San Diego Avenue	Total	124	713	0	0	674	668	0	0	0	206	233	8	2,626
		Airport	25	66	0	0	86	0	0	0	0	17	0	0	194
		Background	99	647	0	0	588	668	0	0	0	189	233	8	2,432
28	Rosecrans Street / Pacific Highway	Total	206	154	229	99	146	61	64	182	150	345	168	98	1,902
		Airport	0	3	10	0	4	1	1	2	0	13	2	0	36
		Background	206	151	219	99	142	60	63	180	150	332	166	98	1,866
29	Rosecrans Street / Nimitz Boulevard	Total	20	138	110	35	143	37	124	536	24	135	551	35	1,888
		Airport	0	86	103	0	107	0	0	0	0	129	0	0	425
		Background	20	52	7	35	36	37	124	536	24	6	551	35	1,463

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19	Grape Street / I-5 Southbound On-Ramp	nbt	nbr	nbr2	eb1	ebt	ebr	wbt	wbr2	wbr			
25	Washington Street / Pacific Highway NB-Ramps	nbl+nbl2	nbt	nbr	sbl	sbr2	sbr	eb12	eb1	ebt	wbt	wbr2	wbr

Table D-105

**2020 Intersection Turning Volumes – PM Peak Hour – Airport Implementation Plan
Alternative (Without Parking Structure)**

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	582	0	72	45	702	0	20	826	1,051	3,298
		Airport	0	0	0	191	0	0	0	35	0	0	40	206	472
		Background	0	0	0	391	0	72	45	667	0	20	786	845	2,826
2	North Harbor Drive / McCain St	Total	0	0	0	551	0	204	42	1,088	0	0	1,125	191	3,201
		Airport	0	0	0	99	0	13	8	218	0	0	234	123	695
		Background	0	0	0	452	0	191	34	870	0	0	891	68	2,506
3	North Harbor Drive / Spanish Landing	Total	7	0	25	24	0	111	71	1,994	25	7	1,265	0	3,529
		Airport	0	0	0	24	0	0	111	71	245	0	0	246	697
		Background	7	0	25	0	0	0	0	1,749	25	7	1,019	0	2,832
4	North Harbor Drive / Harbor Island Drive	Total	164	3	351	21	6	59	40	1,858	145	485	1,449	0	4,581
		Airport	12	3	57	21	6	59	40	208	21	61	576	0	1,064
		Background	152	0	294	0	0	0	0	1,650	124	424	873	0	3,517
5	North Harbor Drive / Winship Lane	Total	0	0	0	374	0	99	137	2,094	0	0	2,058	0	4,762
		Airport	0	0	0	374	0	99	137	149	0	0	760	0	1,519
		Background	0	0	0	0	0	0	0	1,945	0	0	1,298	0	3,243
6	North Harbor Drive / Rental Car Road	Total	96	0	108	67	0	24	21	3,192	96	111	2,460	54	6,229
		Airport	96	0	108	67	0	24	21	1,247	96	111	1,162	54	2,986
		Background	0	0	0	0	0	0	0	1,945	0	0	1,298	0	3,243
7	Sheraton / Harbor Island Drive	Total	23	441	0	0	566	70	77	2	25	0	0	0	1,204
		Airport	0	72	0	0	85	0	0	0	0	0	0	0	160
		Background	23	369	0	0	478	70	77	2	25	0	0	0	1,044
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	55	68	109	0	0	142	1	375
		Airport	0	0	0	0	0	55	68	20	0	0	17	1	161
		Background	0	0	0	0	0	0	89	0	0	0	125	0	214
9	Sassafra Street / Pacific Highway	Total	80	1,036	422	134	1,032	10	16	222	112	191	142	51	3,448
		Airport	80	99	0	0	88	10	16	222	112	0	142	0	769
		Background	0	937	422	134	944	0	0	0	0	191	0	51	2,679
10	Laurel Street / North Harbor Drive	Total	0	0	0	68	0	10	1,272	2,171	0	0	1,871	115	5,507
		Airport	0	0	0	0	0	0	529	894	0	0	827	0	2,250
		Background	0	0	0	68	0	10	743	1,277	0	0	1,044	115	3,257
11	Hawthorn Street / North Harbor Drive	Total	0	626	0	0	2,369	0	0	0	0	182	0	1,365	4,542
		Airport	0	216	0	0	894	0	0	0	0	13	0	612	1,735
		Background	0	410	0	0	1,475	0	0	0	0	169	0	753	2,807
12	Grape Street / North Harbor Drive	Total	0	633	245	1,268	1,158	0	0	0	0	0	0	0	3,304
		Airport	0	216	14	596	310	0	0	0	0	0	0	0	1,136
		Background	0	417	231	672	848	0	0	0	0	0	0	0	2,168
13	Laurel Street / Pacific Highway	Total	148	813	201	162	570	438	471	765	55	54	862	76	4,615
		Airport	0	66	8	9	88	104	106	423	0	5	396	7	1,212
		Background	148	747	193	153	482	334	365	342	55	49	466	69	3,403
14	Hawthorn Street / Pacific Highway	Total	157	796	0	0	745	72	0	0	0	167	1,219	99	3,255
		Airport	111	68	0	0	79	13	0	0	0	0	500	6	777
		Background	46	728	0	0	666	59	0	0	0	167	719	93	2,478
15	Grape Street / Pacific Highway	Total	0	815	542	314	718	0	70	2,042	38	0	0	0	4,539
		Airport	0	166	0	1	79	0	14	559	38	0	0	0	857
		Background	0	649	542	313	639	0	56	1,483	0	0	0	0	3,682
16	Laurel Street / Kettner Boulevard	Total	0	0	0	528	1,116	930	0	952	76	60	312	0	3,974
		Airport	0	0	0	5	0	304	0	440	0	9	104	0	862
		Background	0	0	0	523	1,116	626	0	512	76	51	208	0	3,112
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	751	134	0	0	0	223	1,645	0	2,753
		Airport	0	0	0	0	9	0	0	0	0	0	506	0	515
		Background	0	0	0	0	742	134	0	0	0	223	1,139	0	2,238
18	Grape Street / Kettner Boulevard	Total	0	0	0	329	709	0	0	3,550	106	0	0	0	4,694
		Airport	0	0	0	8	1	0	0	541	18	0	0	0	568
		Background	0	0	0	321	708	0	0	3,009	88	0	0	0	4,126
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	183	348	340	0	0	0	23	483	2,033	0	0	0	3,410
		Airport	0	0	0	0	0	0	0	4	546	0	0	0	550
		Background	183	348	340	0	0	0	23	479	1,487	0	0	0	2,860
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	42	65	0	0	0	0	0	0	0	0	1,470	54	1,631
		Airport	0	0	0	0	0	0	0	0	0	0	503	0	503
		Background	42	65	0	0	0	0	0	0	0	0	967	54	1,128
21	Laurel Street / India Street	Total	117	294	85	0	0	0	697	478	74	0	313	301	2,359
		Airport	74	9	1	0	0	0	328	43	74	0	39	0	568
		Background	43	285	84	0	0	0	369	435	0	0	274	301	1,791
22	Sassafra Street / Kettner Boulevard	Total	0	0	0	452	3,948	596	0	250	123	96	109	0	5,574
		Airport	0	0	0	0	309	48	0	74	75	0	48	0	554
		Background	0	0	0	452	3,639	548	0	176	48	96	61	0	5,020
23	Sassafra Street / India Street	Total	189	1,353	30	0	0	0	351	68	124	0	16	19	2,150
		Airport	71	337	0	0	0	0	111	0	0	0	0	0	519
		Background	118	1,016	30	0	0	0	240	68	124	0	16	19	1,631
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	596	60	13	0	262	63	237	125	0	1,356
		Airport	0	0	0	0	0	1	0	49	19	67	85	0	221
		Background	0	0	0	596	60	12	0	213	44	170	40	0	1,135
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	47	25	212	67	65	8	65	16	707	407	240	68	1,927
		Airport	24	0	76	0	0	0	1	0	49	129	0	0	279
		Background	23	25	136	67	65	8	64	16	658	278	240	68	1,648
26	Washington Street / Hancock Street	Total	0	769	189	422	479	0	742	443	215	0	0	0	3,259
		Airport	0	102	23	1	100	0	0	0	29	0	0	0	255
		Background	0	667	166	421	379	0	742	443	186	0	0	0	3,004
27	Washington Street / San Diego Avenue	Total	237	1,415	0	0	714	609	0	0	0	222	315	20	3,532
		Airport	23	79	0	0	71	0	0	0	0	29	0	1	203
		Background	214	1,336	0	0	643	609	0	0	0	193	315	19	3,329
28	Rosecrans Street / Pacific Highway	Total	363	297	660	120	139	68	118	482	178	283	348	147	3,203
		Airport	0	3	12	0	3	1	1	2	0	11	2	0	35
		Background	363	294	648	120	136	67	117	480	178	272	346	147	3,168
29	Rosecrans Street / Nimitz Boulevard	Total	22	239	137	28	118	28	278	680	27	182	566	46	2,351
		Airport	0	94	113	0	87	0	0	0	0	104	0	0	398
		Background	22	145	24	28	31	28	278	680	27	78	566	46	1,953

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19	Grape Street / I-5 Southbound On-Ramp	nbt	nbr	nbr2	eb1	ebt	ebr						
25	Washington Street / Pacific Highway NB-Ramps	nbl+nbl2	nbt	nbr	sbl	sbr2	sbr	eb12	eb1	ebt	wbt	wbr2	wbr

Table D-106

**2025 Intersection Turning Volumes – AM Peak Hour – Airport Implementation Plan
Alternative (Without Parking Structure)**

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total		
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	742	0	31	14	565	0	10	887	416	2,665	
		Airport	0	0	0	250	0	0	0	45	0	0	36	201	532	
		Background	0	0	0	492	0	31	14	520	0	10	851	215	2,133	
2	North Harbor Drive / McCain St	Total	0	0	0	154	0	39	209	746	0	0	990	562	2,700	
		Airport	0	0	0	67	0	6	11	284	0	0	231	160	759	
		Background	0	0	0	87	0	33	198	462	0	0	759	402	1,941	
3	North Harbor Drive / Spanish Landing	Total	5	0	18	24	0	139	91	889	6	18	1,809	0	2,999	
		Airport	0	0	0	24	0	139	91	259	0	0	252	0	765	
		Background	5	0	18	0	0	0	0	630	6	18	1,557	0	2,234	
4	North Harbor Drive / Harbor Island Drive	Total	44	3	158	19	6	54	52	784	95	264	2,243	0	3,722	
		Airport	11	3	45	19	6	54	52	208	23	70	701	0	1,192	
		Background	33	0	113	0	0	0	0	576	72	194	1,542	0	2,530	
5	North Harbor Drive / Winship Lane	Total	0	0	0	401	0	111	161	801	0	0	2,684	0	4,158	
		Airport	0	0	0	401	0	111	161	112	0	0	948	0	1,733	
		Background	0	0	0	0	0	0	0	689	0	0	1,736	0	2,425	
6	North Harbor Drive / Rental Car Road	Total	74	0	60	44	0	20	26	1,967	93	157	3,190	84	5,715	
		Airport	74	0	60	44	0	20	26	1,278	93	157	1,454	84	3,290	
		Background	0	0	0	0	0	0	0	689	0	0	1,736	0	2,425	
7	Sheraton / Harbor Island Drive	Total	13	122	0	0	267	99	85	6	27	0	0	0	619	
		Airport	0	60	0	0	100	0	0	0	0	0	0	0	160	
		Background	13	62	0	0	167	99	85	6	27	0	0	0	459	
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	97	0	0	72	1	290	
		Airport	0	0	0	0	0	38	82	17	0	0	22	1	160	
		Background	0	0	0	0	0	0	0	80	0	0	50	0	130	
9	Sassafras Street / Pacific Highway	Total	92	637	91	57	675	13	7	90	55	268	180	70	2,235	
		Airport	92	89	0	0	116	13	7	90	55	0	180	0	642	
		Background	0	548	91	57	559	0	0	0	0	268	0	70	1,593	
10	Laurel Street / North Harbor Drive	Total	0	0	0	15	0	3	530	1,324	0	0	2,298	46	4,216	
		Airport	0	0	0	0	0	0	510	872	0	0	1,084	0	2,466	
		Background	0	0	0	15	0	3	20	452	0	0	1,214	46	1,750	
11	Hawthorn Street / North Harbor Drive	Total	0	357	0	0	1,315	0	0	0	0	116	0	2,571	4,359	
		Airport	0	282	0	0	872	0	0	0	0	14	0	802	1,970	
		Background	0	75	0	0	443	0	0	0	0	102	0	1,769	2,389	
12	Grape Street / North Harbor Drive	Total	0	291	111	1,000	577	0	0	0	0	0	0	0	1,979	
		Airport	0	282	12	590	297	0	0	0	0	0	0	0	1,181	
		Background	0	9	99	410	280	0	0	0	0	0	0	0	798	
13	Laurel Street / Pacific Highway	Total	50	469	139	99	337	435	110	551	1	47	803	59	3,100	
		Airport	0	72	16	5	49	117	102	408	0	3	493	7	1,272	
		Background	50	397	123	94	288	318	8	143	1	44	310	52	1,828	
14	Hawthorn Street / Pacific Highway	Total	145	303	0	0	235	81	0	0	0	0	336	2,425	120	3,645
		Airport	145	77	0	0	37	14	0	0	0	0	0	657	10	940
		Background	0	226	0	0	198	67	0	0	0	0	336	1,768	110	2,705
15	Grape Street / Pacific Highway	Total	0	741	207	208	1,158	0	90	1,076	46	0	0	0	3,526	
		Airport	0	211	0	0	37	0	12	544	46	0	0	0	850	
		Background	0	530	207	208	1,121	0	78	532	0	0	0	0	2,676	
16	Laurel Street / Kettner Boulevard	Total	0	0	0	380	511	786	0	725	42	43	270	0	2,757	
		Airport	0	0	0	10	0	398	0	428	0	6	105	0	947	
		Background	0	0	0	370	511	388	0	297	42	37	165	0	1,810	
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	242	126	0	0	0	193	3,145	0	3,706	
		Airport	0	0	0	0	6	0	0	0	0	0	667	0	673	
		Background	0	0	0	0	236	126	0	0	0	193	2,478	0	3,033	
18	Grape Street / Kettner Boulevard	Total	0	0	0	127	623	0	0	1,608	115	0	0	0	2,473	
		Airport	0	0	0	5	1	0	0	528	17	0	0	0	551	
		Background	0	0	0	122	622	0	0	1,080	98	0	0	0	1,922	
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	126	166	142	0	0	0	39	404	1,156	0	0	0	2,033	
		Airport	0	0	0	0	0	0	0	4	530	0	0	0	534	
		Background	126	166	142	0	0	0	39	400	626	0	0	0	1,499	
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	55	53	0	0	0	0	0	0	0	0	2,396	69	2,573	
		Airport	0	0	0	0	0	0	0	0	0	0	0	662	0	662
		Background	55	53	0	0	0	0	0	0	0	0	1,734	69	1,911	
21	Laurel Street / India Street	Total	106	116	19	0	0	0	533	336	79	1	256	221	1,667	
		Airport	61	5	0	0	0	0	320	39	79	1	49	0	554	
		Background	45	111	19	0	0	0	213	297	0	0	207	221	1,113	
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	243	2,453	697	0	68	60	139	113	0	3,773	
		Airport	0	0	0	0	408	57	0	28	28	0	57	0	578	
		Background	0	0	0	243	2,045	640	0	40	32	139	56	0	3,195	
23	Sassafras Street / India Street	Total	209	848	10	0	0	0	133	28	58	0	40	26	1,352	
		Airport	90	326	0	0	0	0	45	0	0	0	0	0	461	
		Background	119	522	10	0	0	0	88	28	58	0	40	26	891	
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	201	35	58	0	102	51	188	216	0	851	
		Airport	0	0	0	0	0	1	0	64	24	87	57	0	233	
		Background	0	0	0	201	35	57	0	38	27	101	159	0	618	
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	44	5	99	31	7	22	29	0	314	391	165	54	1,161	
		Airport	16	0	67	0	0	0	1	0	63	129	0	0	276	
		Background	28	5	32	31	7	22	28	0	251	262	165	54	885	
26	Washington Street / Hancock Street	Total	0	323	134	388	470	0	531	248	202	0	0	0	2,296	
		Airport	0	100	30	1	109	0	0	0	20	0	0	0	260	
		Background	0	223	104	387	361	0	531	248	182	0	0	0	2,036	
27	Washington Street / San Diego Avenue	Total	128	708	0	0	702	693	0	0	0	202	225	9	2,667	
		Airport	30	71	0	0	91	0	0	0	0	20	0	1	213	
		Background	98	637	0	0	611	693	0	0	0	182	225	8	2,454	
28	Rosecrans Street / Pacific Highway	Total	209	156	234	100	148	62	65	186	152	348	169	98	1,927	
		Airport	0	3	11	0	4	1	2	0	14	2	0	0	38	
		Background	209	153	223	100	144	61	64	184	152	334	167	98	1,889	
29	Rosecrans Street / Nimitz Boulevard	Total	21	146	117	9	124	10	121	524	23	143	554	35	1,827	
		Airport	0	92	110	0	114	0	0	0	137	0	0	0	453	
		Background	21	54	7	9	10	10	121	524	23	143	554	35	1,374	

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
 25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

Table D-108

**2030 Intersection Turning Volumes – AM Peak Hour – Airport Implementation Plan
Alternative (Without Parking Structure)**

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	833	0	31	16	619	0	11	945	502	2,957
		Airport	0	0	0	339	0	0	0	48	0	0	38	274	699
		Background	0	0	0	494	0	31	16	571	0	11	907	228	2,258
2	North Harbor Drive / McCain St	Total	0	0	0	158	0	41	219	883	0	0	1,084	577	2,962
		Airport	0	0	0	68	0	7	15	372	0	0	304	163	929
		Background	0	0	0	90	0	34	204	511	0	0	780	414	2,033
3	North Harbor Drive / Spanish Landing	Total	5	0	18	24	0	170	123	1,001	7	21	1,901	0	3,270
		Airport	0	0	0	24	0	170	123	317	0	0	298	0	932
		Background	5	0	18	0	0	0	684	7	21	1,603	0	2,338	
4	North Harbor Drive / Harbor Island Drive	Total	46	4	157	19	7	74	71	868	105	268	2,326	0	3,945
		Airport	13	4	44	19	7	74	71	244	26	68	736	0	1,306
		Background	33	0	113	0	0	0	0	624	79	200	1,590	0	2,639
5	North Harbor Drive / Winship Lane	Total	0	0	0	381	0	131	182	862	0	0	2,764	0	4,320
		Airport	0	0	0	381	0	131	182	125	0	0	974	0	1,793
		Background	0	0	0	0	0	0	737	0	0	1,790	0	2,527	
6	North Harbor Drive / Rental Car Road	Total	81	0	60	44	0	22	31	2,024	105	157	3,247	83	5,854
		Airport	81	0	60	44	0	22	31	1,287	105	157	1,457	83	3,327
		Background	0	0	0	0	0	0	0	737	0	0	1,790	0	2,527
7	Sheraton / Harbor Island Drive	Total	13	123	0	0	280	99	85	6	27	0	0	0	633
		Airport	0	61	0	0	101	0	0	0	0	0	0	0	162
		Background	13	62	0	0	179	99	85	6	27	0	0	0	471
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	96	0	0	71	1	288
		Airport	0	0	0	0	0	38	82	19	0	0	23	1	163
		Background	0	0	0	0	0	0	77	0	0	0	48	0	125
9	Sassafra Street / Pacific Highway	Total	96	496	66	39	511	14	7	93	57	135	187	35	1,736
		Airport	96	94	0	0	122	14	7	93	57	0	187	0	670
		Background	0	402	66	39	389	0	0	0	0	135	0	35	1,066
10	Laurel Street / North Harbor Drive	Total	0	0	0	17	0	3	497	1,384	0	0	2,396	48	4,345
		Airport	0	0	0	0	0	0	476	915	0	0	1,133	0	2,524
		Background	0	0	0	17	0	3	21	469	0	0	1,263	48	1,821
11	Hawthorn Street / North Harbor Drive	Total	0	370	0	0	1,378	0	0	0	0	133	0	2,839	4,720
		Airport	0	294	0	0	915	0	0	0	0	17	0	839	2,065
		Background	0	76	0	0	463	0	0	0	0	116	0	2,000	2,655
12	Grape Street / North Harbor Drive	Total	0	303	111	1,030	596	0	0	0	0	0	0	0	2,040
		Airport	0	294	15	618	314	0	0	0	0	0	0	0	1,241
		Background	0	9	96	412	282	0	0	0	0	0	0	0	799
13	Laurel Street / Pacific Highway	Total	42	410	124	72	257	344	114	528	1	82	998	102	3,074
		Airport	0	77	20	6	54	120	105	371	0	3	444	8	1,208
		Background	42	333	104	66	203	224	9	157	1	79	554	94	1,866
14	Hawthorn Street / Pacific Highway	Total	152	274	0	0	207	74	0	0	0	376	2,665	136	3,884
		Airport	152	84	0	0	40	17	0	0	0	0	686	13	992
		Background	0	190	0	0	167	57	0	0	0	376	1,979	123	2,892
15	Grape Street / Pacific Highway	Total	0	694	184	177	991	0	99	1,141	48	0	0	0	3,334
		Airport	0	221	0	0	39	0	15	571	48	0	0	0	894
		Background	0	473	184	177	952	0	84	570	0	0	0	0	2,440
16	Laurel Street / Kettner Boulevard	Total	0	0	0	352	469	698	0	928	75	65	376	0	2,963
		Airport	0	0	0	12	0	342	0	396	0	7	113	0	870
		Background	0	0	0	340	469	356	0	532	75	58	263	0	2,093
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	253	131	0	0	0	216	3,470	0	4,070
		Airport	0	0	0	0	7	0	0	0	0	0	699	0	706
		Background	0	0	0	0	246	131	0	0	0	216	2,771	0	3,364
18	Grape Street / Kettner Boulevard	Total	0	0	0	138	673	0	0	1,691	120	0	0	0	2,622
		Airport	0	0	0	6	1	0	0	555	17	0	0	0	579
		Background	0	0	0	132	672	0	0	1,136	103	0	0	0	2,043
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	206	272	233	0	0	0	44	457	1,266	0	0	0	2,478
		Airport	0	0	0	0	0	0	0	4	557	0	0	0	561
		Background	206	272	233	0	0	0	44	453	709	0	0	0	1,917
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	62	59	0	0	0	0	0	0	0	0	3,103	95	3,319
		Airport	0	0	0	0	0	0	0	0	0	0	0	694	0
		Background	62	59	0	0	0	0	0	0	0	0	2,409	95	2,625
21	Laurel Street / India Street	Total	105	98	16	0	0	0	616	517	91	1	341	310	2,095
		Airport	68	7	0	0	0	0	276	41	91	1	52	0	536
		Background	37	91	16	0	0	0	340	476	0	0	289	310	1,559
22	Sassafra Street / Kettner Boulevard	Total	0	0	0	242	2,398	700	0	54	49	114	107	0	3,664
		Airport	0	0	0	0	355	61	0	30	30	0	61	0	537
		Background	0	0	0	242	2,043	639	0	24	19	114	46	0	3,127
23	Sassafra Street / India Street	Total	251	974	13	0	0	0	118	23	48	0	43	27	1,497
		Airport	94	283	0	0	0	0	46	0	0	0	0	0	423
		Background	157	691	13	0	0	0	72	23	48	0	43	27	1,074
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	511	90	147	0	115	57	173	197	0	1,290
		Airport	0	0	0	0	0	1	0	76	29	91	69	0	266
		Background	0	0	0	511	90	146	0	39	28	82	128	0	1,024
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	19	0	70	24	6	17	23	0	277	318	111	36	901
		Airport	19	0	70	0	0	0	1	0	75	142	0	0	307
		Background	0	0	0	24	6	17	22	0	202	176	111	36	594
26	Washington Street / Hancock Street	Total	0	260	106	311	407	0	208	97	95	0	0	0	1,484
		Airport	0	110	36	1	118	0	0	0	24	0	0	0	289
		Background	0	150	70	310	289	0	208	97	71	0	0	0	1,195
27	Washington Street / San Diego Avenue	Total	113	584	0	0	682	665	0	0	0	277	313	12	2,646
		Airport	35	74	0	0	96	0	0	0	0	24	0	1	230
		Background	78	510	0	0	586	665	0	0	0	253	313	11	2,416
28	Rosecrans Street / Pacific Highway	Total	207	155	230	144	209	88	61	176	143	312	154	88	1,967
		Airport	0	3	10	0	3	1	1	3	0	12	4	0	37
		Background	207	152	220	144	206	87	60	173	143	300	150	88	1,930
29	Rosecrans Street / Nimitz Boulevard	Total	20	156	178	39	167	41	107	461	20	216	514	32	1,951
		Airport	0	103	171	0	127	0	0	0	0	211	0	0	612
		Background	20	53	7	39	40	41	107	461	20	5	514	32	1,339

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19	Grape Street / I-5 Southbound On-Ramp	nbt	nbr	nbr2	eb1	ebt	ebr	wbt	wbr2	wbr			
25	Washington Street / Pacific Highway NB-Ramps	nbl+nbl2	nbt	nbr	sbl	sbr2	sbr	eb12	eb1	ebt	wbt	wbr2	wbr

Table D-109

2030 Intersection Turning Volumes – PM Peak Hour – Airport Implementation Plan Alternative (Without Parking Structure)

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total		
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	686	0	75	52	807	0	23	934	1,239	3,816	
		Airport	0	0	0	275	0	0	0	40	0	0	45	295	655	
		Background	0	0	0	411	0	75	52	767	0	23	889	944	3,161	
2	North Harbor Drive / McCain St	Total	0	0	0	580	0	219	46	1,265	0	0	1,295	203	3,608	
		Airport	0	0	0	99	0	16	10	304	0	0	324	131	884	
		Background	0	0	0	481	0	203	36	961	0	0	971	72	2,724	
3	North Harbor Drive / Spanish Landing	Total	7	0	25	24	0	145	103	2,195	28	7	1,417	0	3,951	
		Airport	0	0	0	24	0	145	103	301	0	0	309	0	882	
		Background	7	0	25	0	0	0	0	1,894	28	7	1,108	0	3,069	
4	North Harbor Drive / Harbor Island Drive	Total	167	3	350	21	7	83	59	2,027	159	529	1,614	0	5,019	
		Airport	15	3	56	21	7	83	59	242	24	60	650	0	1,220	
		Background	152	0	294	0	0	0	0	1,785	135	469	964	0	3,799	
5	North Harbor Drive / Winship Lane	Total	0	0	0	375	0	124	160	2,238	0	0	2,270	0	5,167	
		Airport	0	0	0	375	0	124	160	159	0	0	837	0	1,655	
		Background	0	0	0	0	0	0	0	2,079	0	0	1,433	0	3,512	
6	North Harbor Drive / Rental Car Road	Total	114	0	115	69	0	28	25	3,404	114	119	2,675	56	6,719	
		Airport	114	0	115	69	0	28	25	1,325	114	119	1,242	56	3,207	
		Background	0	0	0	0	0	0	0	2,079	0	0	1,433	0	3,512	
7	Sheraton / Harbor Island Drive	Total	23	443	0	0	624	70	77	2	25	0	0	0	1,264	
		Airport	0	74	0	0	90	0	0	0	0	0	0	0	164	
		Background	23	369	0	0	534	70	77	2	25	0	0	0	1,100	
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	55	68	105	0	0	137	1	366	
		Airport	0	0	0	0	0	55	68	22	0	0	19	1	165	
		Background	0	0	0	0	0	0	83	83	0	0	118	0	201	
9	Sassafras Street / Pacific Highway	Total	88	842	328	105	841	11	17	242	122	110	158	29	2,893	
		Airport	88	114	0	0	102	11	17	242	122	0	158	0	854	
		Background	0	728	328	105	739	0	0	0	0	110	0	29	2,039	
10	Laurel Street / North Harbor Drive	Total	0	0	0	49	0	7	1,250	2,237	0	0	2,060	126	5,729	
		Airport	0	0	0	0	0	0	523	986	0	0	919	0	2,428	
		Background	0	0	0	49	0	7	727	1,251	0	0	1,141	126	3,301	
11	Hawthorn Street / North Harbor Drive	Total	0	674	0	0	2,604	0	0	0	0	218	0	1,564	5,060	
		Airport	0	239	0	0	986	0	0	0	0	19	0	680	1,924	
		Background	0	435	0	0	1,618	0	0	0	0	199	0	884	3,136	
12	Grape Street / North Harbor Drive	Total	0	663	256	1,372	1,248	0	0	0	0	0	0	0	3,539	
		Airport	0	239	21	658	347	0	0	0	0	0	0	0	1,265	
		Background	0	424	235	714	901	0	0	0	0	0	0	0	2,274	
13	Laurel Street / Pacific Highway	Total	135	760	190	123	456	359	381	656	40	93	1,205	130	4,528	
		Airport	0	79	14	10	101	113	115	407	0	7	385	8	1,239	
		Background	135	681	176	113	355	246	266	249	40	86	820	122	3,289	
14	Hawthorn Street / Pacific Highway	Total	166	748	0	0	696	72	0	0	0	214	1,477	128	3,501	
		Airport	124	84	0	0	89	19	0	0	0	0	556	9	881	
		Background	42	664	0	0	607	53	0	0	0	214	921	119	2,620	
15	Grape Street / Pacific Highway	Total	0	800	512	290	678	0	84	2,272	42	0	0	0	4,678	
		Airport	0	187	0	1	88	0	21	616	42	0	0	0	955	
		Background	0	613	512	289	590	0	63	1,656	0	0	0	0	3,723	
16	Laurel Street / Kettner Boulevard	Total	0	0	0	420	877	769	0	1,333	133	96	458	0	4,086	
		Airport	0	0	0	9	0	277	0	432	0	14	123	0	855	
		Background	0	0	0	411	877	492	0	901	133	82	335	0	3,231	
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	654	115	0	0	0	266	1,924	0	2,959	
		Airport	0	0	0	0	14	0	0	0	0	0	565	0	579	
		Background	0	0	0	0	640	115	0	0	0	266	1,359	0	2,380	
18	Grape Street / Kettner Boulevard	Total	0	0	0	335	710	0	0	3,811	113	0	0	0	4,969	
		Airport	0	0	0	13	1	0	0	598	19	0	0	0	631	
		Background	0	0	0	322	709	0	0	3,213	94	0	0	0	4,338	
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	311	593	580	0	0	0	27	564	2,345	0	0	0	4,420	
		Airport	0	0	0	0	0	0	0	4	607	0	0	0	611	
		Background	311	593	580	0	0	0	27	560	1,738	0	0	0	3,809	
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	50	78	0	0	0	0	0	0	0	0	1,899	74	2,101	
		Airport	0	0	0	0	0	0	0	0	0	0	0	561	0	561
		Background	50	78	0	0	0	0	0	0	0	0	1,338	74	1,540	
21	Laurel Street / India Street	Total	130	257	73	0	0	0	894	749	94	1	431	425	3,054	
		Airport	93	14	1	0	0	0	298	48	94	1	44	0	593	
		Background	37	243	72	0	0	0	596	701	0	0	387	425	2,461	
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	399	3,502	539	0	200	117	80	107	0	4,944	
		Airport	0	0	0	0	286	55	0	84	85	0	56	0	566	
		Background	0	0	0	399	3,216	484	0	116	32	80	51	0	4,378	
23	Sassafras Street / India Street	Total	234	1,640	39	0	0	0	321	57	104	0	18	22	2,435	
		Airport	79	311	0	0	0	0	120	0	0	0	0	0	510	
		Background	155	1,329	39	0	0	0	201	57	104	0	18	22	1,925	
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	1,347	134	28	0	286	72	220	155	0	2,242	
		Airport	0	0	0	0	0	1	0	70	27	74	121	0	293	
		Background	0	0	0	1,347	134	27	0	216	45	146	34	0	1,949	
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	33	0	84	52	51	6	56	14	635	348	160	45	1,484	
		Airport	33	0	84	0	0	0	1	0	70	162	0	0	350	
		Background	0	0	0	52	51	6	55	14	565	186	160	45	1,134	
26	Washington Street / Hancock Street	Total	0	567	144	333	420	0	326	194	122	0	0	0	2,106	
		Airport	0	121	33	1	121	0	0	0	41	0	0	0	317	
		Background	0	446	111	332	299	0	326	194	81	0	0	0	1,789	
27	Washington Street / San Diego Avenue	Total	202	1,141	0	0	721	607	0	0	0	300	423	28	3,422	
		Airport	33	88	0	0	80	0	0	0	0	41	0	2	244	
		Background	169	1,053	0	0	641	607	0	0	0	259	423	26	3,178	
28	Rosecrans Street / Pacific Highway	Total	364	297	661	174	201	98	113	464	171	257	315	133	3,248	
		Airport	0	3	12	0	3	1	1	4	0	11	3	0	38	
		Background	364	294	649	174	198	97	112	460	171	246	312	133	3,210	
29	Rosecrans Street / Nimitz Boulevard	Total	23	257	209	31	138	31	239	586	24	243	528	43	2,352	
		Airport	0	111	184	0	103	0	0	0	171	0	0	0	569	
		Background	23	146	25	31	35	31	239	586	24	72	528	43	1,783	

Source: HNTB, 2007

Note:

(1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.

19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
 25 Washington Street / Pacific Highway NB-Ramps nbl+nb12 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

Table D-110
2010-2030 Peak Hour Intersection Operations – Airport Implementation Plan Alternative
(Without Parking Structure)

Intersection Number	Intersection	Peak Hour	Year 2010		Year 2015		Year 2020		Year 2025		Year 2030	
			Delay (Sec.)	LOS	Delay (Sec.)	LOS	Delay (SEC)	LOS	Delay (SEC)	LOS	Delay (Sec.)	LOS
1	North Harbor Drive/ Nimitz Boulevard	AM	20.3	C	20.3	C	20.9	C	21.1	C	21.8	C
		PM	20.6	C	20.3	C	20.9	C	21.1	C	21.7	C
2	North Harbor Drive/ McCain Road	AM	6.8	A	7.4	A	7.7	A	7.8	A	7.9	A
		PM	9.2	A	10.0	A	10.4	B	10.5	B	10.5	B
3	North Harbor Drive/ Spanish Landing	AM	9.3	A	10.0	A	10.2	B	10.6	B	12.3	B
		PM	7.9	A	8.5	A	8.9	A	9.1	A	10.4	B
4	North Harbor Drive/ Harbor Island Drive	AM	18.0	B	17.7	B	18.1	B	18.0	B	18.6	B
		PM	30.4	C	30.8	C	32.1	C	32.7	C	34.2	C
5	North Harbor Drive/ Winship Lane	AM	17.0	B	18.1	B	18.6	B	19.1	B	19.4	B
		PM	14.0	B	15.0	B	15.3	B	15.9	B	15.9	B
6	North Harbor Drive/ Rental Car Road	AM	7.3	A	8.2	A	9.2	A	10.1	B	10.7	B
		PM	8.4	A	9.3	A	10.1	B	10.8	B	11.4	B
7	Sheraton Harbor Island Drive	AM	12.4	B	12.3	B	12.0	B	11.7	B	11.6	B
		PM	7.6	A	7.4	A	7.2	A	7.0	A	6.9	A
8	Employee Lot Harbor Island Drive	AM	9.8	A	9.9	A	9.9	A	9.9	A	9.9	A
		PM	10.1	B	10.1	B	10.2	B	10.2	B	10.2	B
9	Sassafras Street/ Pacific Highway	AM	15.3	B	15.5	B	15.2	B	15.7	B	14.2	B
		PM	15.1	B	17.5	B	17.3	B	20.0	B	14.8	B
10	Laurel Street/ North Harbor Drive	AM	9.1	A	10.0	A	10.7	B	11.4	B	10.8	B
		PM	15.4	B	16.1	B	18.5	B	19.5	B	20.1	C
11	Hawthorn Street/ North Harbor Drive	AM	30.7	C	47.3	D	110.5	F	132.4	F	179.2	F
		PM	23.0	C	24.9	C	33.0	C	41.0	D	60.0	E
12	Grape Street/ North Harbor Drive	AM	8.2	A	8.4	A	8.4	A	8.4	A	8.5	A
		PM	10.9	B	11.0	B	10.7	B	11.0	B	11.0	B
13	Laurel Street/ Pacific Highway	AM	32.1	C	33.7	C	33.9	C	34.5	C	33.9	C
		PM	48.9	D	62.1	E	59.3	E	53.4	D	61.7	E
14	Hawthorn Street/ Pacific Highway	AM	12.5	B	14.1	B	15.7	B	17.7	B	19.3	B
		PM	20.9	C	21.9	C	22.8	C	23.8	C	23.4	C
15	Grape Street/ Pacific Highway	AM	18.5	B	19.1	B	19.9	B	20.4	C	20.3	C
		PM	26.1	C	32.7	C	53.3	D	69.4	E	58.2	E
16	Laurel Street/ Kettner Boulevard	AM	18.8	B	19.5	B	19.6	B	19.8	B	22.0	E
		PM	21.2	C	22.8	C	25.6	C	24.6	C	32.2	E
17	Hawthorn Street/ Kettner Boulevard	AM	5.5	A	6.2	A	10.3	B	9.6	A	13.4	E
		PM	10.9	B	11.2	B	15.5	B	13.8	B	14.2	E
18	Grape Street/ Kettner Boulevard	AM	12.4	B	13.1	B	14.8	B	14.2	B	14.7	E
		PM	16.6	B	22.7	C	55.3	E	54.9	D	79.6	E
19	Grape Street/ I-5 Southbound On-Ramp	AM	11.1	B	10.8	B	11.5	B	13.7	B	15.3	E
		PM	27.9	C	34.5	C	32.5	C	38.7	D	89.1	E
20	Hawthorn Street/ I-5 Northbound Off-Ramp	AM	11.0	B	10.6	B	10.8	B	11.0	B	15.8	E
		PM	11.8	B	12.0	B	12.1	B	11.5	B	11.1	E
21	Laurel Street/ India Street	AM	18.4	B	19.3	B	19.2	B	22.8	C	23.1	E
		PM	21.3	C	22.9	C	22.0	C	22.4	C	32.3	E
22	Sassafras Street/ Kettner Boulevard	AM	8.7	A	9.6	A	19.3	B	12.0	B	9.8	A
		PM	11.7	B	13.2	B	123.1	F	84.8	F	66.7	E
23	Sassafras Street/ India Street	AM	8.3	A	8.4	A	8.8	A	9.1	A	8.1	E
		PM	13.8	B	17.9	B	15.7	B	16.2	B	17.7	E
24	Washington Street/ Pacific Highway SB-Ramps	AM	12.6	B	12.7	B	13.0	B	12.8	B	12.5	E
		PM	14.9	B	15.1	B	15.3	B	15.5	B	17.6	E
25	Washington Street/ Pacific Highway NB-Ramps	AM	33.5	C	46.7	D	56.3	E	60.5	E	31.6	E
		PM	68.5	E	100.5	F	130.5	F	156.7	F	79.8	E
26	Washington Street/ Hancock Street	AM	27.8	C	28.1	C	28.7	C	28.8	C	25.9	E
		PM	30.2	C	30.8	C	32.4	C	32.7	C	28.0	E
27	Washington Street/ San Diego Avenue	AM	12.5	B	13.1	B	12.7	B	12.5	B	14.9	E
		PM	13.6	B	14.1	B	14.1	B	14.0	B	16.8	E
28	Rosecrans Street/ Pacific Highway	AM	36.1	D	36.4	D	36.1	D	36.2	D	37.3	E
		PM	39.1	D	44.8	D	41.3	D	41.9	D	43.0	E
29	Rosecrans Street/ Nimitz Boulevard	AM	21.7	C	21.6	C	24.2	C	23.7	C	27.0	E
		PM	24.9	C	25.1	C	26.6	C	26.5	C	29.1	E

Source: HNTB, 2007

LOS = level of service

Table D-111 compares the intersection delay under the Implementation Plan Alternative (Without Parking Structure) against the No Project Alternative to identify intersection impacts based on significance criteria identified in Section D.2, *Traffic Impacts and Significance Criteria*, measured by an increase to LOS E or F or an increase in vehicle delay of greater than 2 seconds for intersections operating at LOS E and greater than 1 second for intersections operating at LOS F under the No Project Alternative. The following intersections would have potentially significant traffic impacts due to the project:

Intersections with Significant Traffic Impacts

Years 2010 and 2015

No potentially significant impacts, per the City of San Diego's guidelines, are anticipated to occur to intersections in the Study Area in 2010 and 2015.

Year 2020

- Sassafras Street and Kettner Boulevard (PM), which operates at LOS E in the PM peak hour under both the Implementation Plan Alternative (without Parking Structure) and No Project Alternative and would experience an increase in delay greater than 1 second under the Implementation Plan Alternative (without Parking Structure) compared to the No Project Alternative.

Year 2025

- All locations identified in Year 2020

Year 2030

- All locations identified in Year 2025
- Hawthorn Street and North Harbor Drive (AM & PM), which operates at LOS F in the AM and LOS F in the PM peak hours under both the Implementation Plan Alternative (without Parking Structure) and No Project Alternative and would experience an increase in delay greater than 2 seconds under the Implementation Plan Alternative (without Parking Structure) compared to the No Project Alternative.
- Grape Street and Kettner Boulevard (PM), which operates at LOS E in the PM peak hour under both the Implementation Plan Alternative (without Parking Structure) and No Project Alternative and would experience an increase in delay greater than 2 seconds under the Implementation Plan Alternative (without Parking Structure) compared to the No Project Alternative.
- Grape Street and I-5 Southbound On-Ramp (PM), which operates at F in the PM peak hours under both the Implementation Plan Alternative (without Parking Structure) and No Project Alternative and would experience an increase in delay greater than 1 second under the Implementation Plan Alternative (without Parking Structure) compared to the No Project Alternative.

Table D-111
 2010-2030 Intersection Impacts – Airport Implementation Plan Alternative (Without Parking Structure)

Intersection Number	Intersection	Peak Hour	Year 2010			Year 2015			Year 2020			Year 2025			Year 2030		
			No Proj	No Project	Diff.												
			Delay (Sec.)														
1	North Harbor Drive/ Nimitz Boulevard	AM	20.2	20.3	-0.1	20.4	20.3	-0.1	20.9	20.9	0.0	21.1	21.1	0.0	21.7	21.8	0.1
		PM	20.7	20.6	0.1	20.4	20.3	-0.1	20.9	20.9	0.0	21.1	21.1	0.0	21.6	21.7	0.1
2	North Harbor Drive/ McCain Road	AM	6.7	6.8	-0.1	7.2	7.4	0.2	7.4	7.7	0.3	7.6	7.8	0.2	7.6	7.9	0.3
		PM	9.1	9.2	-0.1	9.9	10.0	0.1	10.2	10.4	0.2	10.3	10.5	0.2	10.3	10.5	0.2
3	North Harbor Drive/ Spanish Landing	AM	10.1	9.3	0.8	10.9	10.0	-0.9	11.2	10.2	-1.0	11.7	10.6	-1.1	13.1	12.3	-0.8
		PM	8.7	7.9	0.8	9.3	8.5	-0.8	9.8	8.9	-0.9	10.0	9.1	-0.9	11.2	10.4	-0.8
4	North Harbor Drive/ Harbor Island Drive	AM	20.4	18.0	2.4	20.4	17.7	-2.7	20.9	18.1	-2.8	20.8	18.0	-2.8	21.9	18.6	-3.3
		PM	30.8	30.4	0.4	31.4	30.8	-0.6	32.8	32.1	-0.7	33.3	32.7	-0.6	34.9	34.2	-0.7
5	North Harbor Drive/ Winship Lane	AM	9.9	17.0	-7.1	10.6	18.1	7.5	10.8	18.6	7.8	10.7	19.1	8.4	11.1	19.4	8.3
		PM	9.6	14.0	-4.4	10.3	15.0	4.7	10.4	15.3	4.9	10.6	15.9	5.3	10.7	15.9	5.2
6	North Harbor Drive/ Rental Car Road	AM	6.7	7.3	-0.6	7.5	8.2	0.7	8.2	9.2	1.0	8.8	10.1	1.3	9.0	10.7	1.7
		PM	7.6	8.4	-0.8	8.5	9.3	0.8	9.2	10.1	0.9	9.6	10.8	1.2	10.0	11.4	1.4
7	Sheraton Harbor Island Drive	AM	12.4	12.4	0.0	12.3	12.3	0.0	12.0	12.0	0.0	11.8	11.7	-0.1	11.6	11.6	0.0
		PM	7.6	7.6	0.0	7.4	7.4	0.0	7.2	7.2	0.0	7.0	7.0	0.0	6.9	6.9	0.0
8	Employee Lot Harbor Island Drive	AM	9.8	9.8	0.0	9.9	9.9	0.0	9.9	9.9	0.0	9.9	9.9	0.0	9.9	9.9	0.0
		PM	10.1	10.1	0.0	10.1	10.1	0.0	10.2	10.2	0.0	10.2	10.2	0.0	10.1	10.2	0.1
9	Sassafras Street/ Pacific Highway	AM	15.3	15.3	0.0	15.4	15.5	0.1	15.1	15.2	0.1	15.6	15.7	0.1	14.0	14.2	0.2
		PM	14.5	15.1	-0.6	16.6	17.5	0.9	16.5	17.3	0.8	18.5	20.0	1.5	14.1	14.8	0.7
10	Laurel Street/ North Harbor Drive	AM	9.2	9.1	0.1	10.1	10.0	-0.1	10.8	10.7	-0.1	11.3	11.4	0.1	10.5	10.8	0.3
		PM	15.5	15.4	0.1	16.3	16.1	-0.2	18.7	18.5	-0.2	19.3	19.5	0.2	19.4	20.1	0.7
11	Hawthorn Street/ North Harbor Drive	AM	31.8	30.7	1.1	49.6	47.3	-2.3	112.8	110.5	-2.3	131.7	132.4	0.7	173.0	179.2	6.2
		PM	23.2	23.0	0.2	25.2	24.9	-0.3	33.7	33.0	-0.7	40.7	41.0	0.3	55.9	60.0	4.1
12	Grape Street/ North Harbor Drive	AM	8.2	8.2	0.0	8.4	8.4	0.0	8.3	8.4	0.1	8.4	8.4	0.0	8.3	8.5	0.2
		PM	10.9	10.9	0.0	11.0	11.0	0.0	10.7	10.7	0.0	11.0	11.0	0.0	10.9	11.0	0.1
13	Laurel Street/ Pacific Highway	AM	32.1	32.1	0.0	33.7	33.7	0.0	33.9	33.9	0.0	34.4	34.5	0.1	33.7	33.9	0.2
		PM	49.0	48.9	0.1	62.4	62.1	-0.3	59.5	59.3	-0.2	53.1	53.4	0.3	60.4	61.7	1.3
14	Hawthorn Street/ Pacific Highway	AM	12.6	12.5	0.1	14.3	14.1	-0.2	15.8	15.7	-0.1	17.7	17.7	0.0	18.9	19.3	0.4
		PM	21.0	20.9	0.1	22.0	21.9	-0.1	22.9	22.8	-0.1	23.8	23.8	0.0	23.3	23.4	0.1
15	Grape Street/ Pacific Highway	AM	18.5	18.5	0.0	19.0	19.1	0.1	19.9	19.9	0.0	20.3	20.4	0.1	20.2	20.3	0.1
		PM	26.2	26.1	0.1	32.8	32.7	-0.1	53.1	53.3	0.2	68.6	69.4	0.8	56.5	58.2	1.7
16	Laurel Street/ Kettner Boulevard	AM	18.9	18.8	0.1	19.6	19.5	-0.1	19.8	19.6	-0.2	19.9	19.8	-0.1	21.9	22.0	0.1
		PM	21.4	21.2	0.2	22.9	22.8	-0.1	25.9	25.6	-0.3	24.8	24.6	-0.2	31.9	32.2	0.3
17	Hawthorn Street/ Kettner Boulevard	AM	5.5	5.5	0.0	6.2	6.2	0.0	10.3	10.3	0.0	9.6	9.6	0.0	13.0	13.4	0.4
		PM	10.9	10.9	0.0	11.3	11.2	-0.1	15.6	15.5	-0.1	13.9	13.8	-0.1	14.2	14.2	0.0
18	Grape Street/ Kettner Boulevard	AM	12.4	12.4	0.0	13.1	13.1	0.0	14.8	14.8	0.0	14.2	14.2	0.0	14.8	14.7	-0.1
		PM	16.7	16.6	0.1	22.8	22.7	-0.1	55.3	55.3	0.0	54.0	54.9	0.9	77.1	79.6	2.5
19	Grape Street/ I-5 Southbound On-Ramp	AM	11.1	11.1	0.0	8.9	10.8	1.9	11.6	11.5	-0.1	11.5	13.7	2.2	15.1	15.3	0.2
		PM	28.6	27.9	0.7	35.2	34.5	-0.7	32.9	32.5	-0.4	38.6	38.7	0.1	87.1	89.1	2.0
20	Hawthorn Street/ I-5 Northbound Off-Ramp	AM	11.1	11.0	0.1	10.6	10.6	0.0	10.8	10.8	0.0	19.6	11.0	-8.6	15.3	15.8	0.5
		PM	11.8	11.8	0.0	12.0	12.0	0.0	12.1	12.1	0.0	16.4	11.5	-4.9	11.0	11.1	0.1
21	Laurel Street/ India Street	AM	18.5	18.4	0.1	19.4	19.3	-0.1	22.6	19.2	-3.4	22.9	22.8	-0.1	23.0	23.1	0.1
		PM	21.4	21.3	0.1	22.9	22.9	0.0	22.1	22.0	-0.1	26.8	22.4	-4.4	32.4	32.3	-0.1
22	Sassafras Street/ Kettner Boulevard	AM	8.3	8.7	-0.4	9.2	9.6	0.4	19.4	19.3	-0.1	11.9	12.0	0.1	9.6	9.8	0.2
		PM	11.1	11.7	-0.6	12.5	13.2	0.7	121.5	123.1	1.6	82.1	84.8	2.7	62.5	66.7	4.2
23	Sassafras Street/ India Street	AM	8.1	8.3	-0.2	8.2	8.4	0.2	8.7	8.8	0.1	9.0	9.1	0.1	8.0	8.1	0.1
		PM	13.5	13.8	-0.3	17.3	17.9	0.6	15.3	15.7	0.4	15.7	16.2	0.5	16.6	17.7	1.1
24	Washington Street/ Pacific Highway SB-Ramps	AM	12.6	12.6	0.0	12.7	12.7	0.0	13.0	13.0	0.0	12.8	12.8	0.0	12.4	12.5	0.1
		PM	14.9	14.9	0.0	15.1	15.1	0.0	15.3	15.3	0.0	15.5	15.5	0.0	17.4	17.6	0.2
25	Washington Street/ Pacific Highway NB-Ramps	AM	33.5	33.5	0.0	46.7	46.7	0.0	56.0	56.3	0.3	59.8	60.5	0.7	31.1	31.6	0.5
		PM	67.7	68.5	-0.8	107.8	100.5	-7.3	130.2	130.5	0.3	156.4	156.7	0.3	79.3	79.8	0.5
26	Washington Street/ Hancock Street	AM	27.8	27.8	0.0	28.1	28.1	0.0	28.7	28.7	0.0	28.8	28.8	0.0	25.9	25.9	0.0
		PM	30.2	30.2	0.0	30.8	30.8	0.0	32.4	32.4	0.0	32.7	32.7	0.0	28.0	28.0	0.0
27	Washington Street/ San Diego Avenue	AM	12.5	12.5	0.0	13.1	13.1	0.0	12.7	12.7	0.0	12.5	12.5	0.0	15.0	14.9	-0.1
		PM	13.6	13.6	0.0	14.1	14.1	0.0	14.1	14.1	0.0	14.0	14.0	0.0	16.8	16.8	0.0
28	Rosecrans Street/ Pacific Highway	AM	36.1	36.1	0.0	36.4	36.4	0.0	36.1	36.1	0.0	36.2	36.2	0.0	37.3	37.3	0.0
		PM	39.1	39.1	0.0	44.8	44.8	0.0	41.3	41.3	0.0	41.9	41.9	0.0	42.9	43.0	0.1
29	Rosecrans Street/ Nimitz Boulevard	AM	21.8	21.7	0.1	21.8	21.6	-0.2	24.3	24.2	-0.1	23.6	23.7	0.1	26.8	27.0	0.2
		PM	25.0	24.9	0.1	25.3	25.1	-0.2	26.7	26.6	-0.1	26.5	26.5	0.0	28.9	29.1	0.2

Source: HNTB, 2007

Legend:
 LOS E
 LOS F
 Significant Impact

D.6.2.3.3 Freeway Segments

The traffic forecasts on freeway segments for the Implementation Plan Alternative (Without Parking Structure) would be the same as for the Implementation Plan Alternative (With Parking Structure). Therefore, operations of freeway segments in the study area would be the same for the Implementation Plan (With or Without Parking Structure). As discussed in Section D.6.1.3.3, the Implementation Plan Alternative would not have any significant freeway impacts.

D.6.2.3.4 Freeway Ramps

The traffic forecasts on freeway ramps for the Implementation Plan Alternative (Without Parking Structure) would be the same as for the Implementation Plan Alternative (With Parking Structure). Therefore, ramp operations would be the same under the Implementation Plan Alternative with and without parking structure. As discussed in Section D.6.1, the Implementation Plan Alternative would not have any significant freeway ramp impacts.

D.6.2.3.5 Railroad Crossings

Forecasts of future train operations were obtained from the San Diego 2030 RTP (Mobility 2030), the 2007 LOSSAN Strategic Business Plan, and the 2000 San Diego International Airport Master Plan Preferred Concept Alternatives Roadway Analysis¹⁸ report. Mobility 2030 projects that the headways for the Coaster Service will decrease from 36 minutes to 20 minutes during peak hours and from 120 minutes to 60 minutes during off-peak hours by 2030. That translates to a 44% increase in frequency during peak hours by 2030. The LOSSAN Strategic Business Plan projects that Coaster service would increase from existing 22 trains per day to 54 trains per day in 2025, consistent with the above. The LOSSAN Strategic Business Plan also projects that Amtrak Pacific Surfliner service between Los Angeles and San Diego would increase from existing 22 trips per day in 2005/2006 to 26 trains in 2015 and 32 trains in 2025. Mobility 2030 also projects that headways for the trolley Blue Line service that passes through the study area would decrease from 15 minutes to 7.5 minutes during off-peak hours by 2030. Estimated daily train operations in 2030 include 36 Amtrak trips, 78 Coaster trips, and 384 Trolley trips. For the analysis, freight train operations were estimated to increase to four trains per day.

Table D-112 summarizes the railroad crossing delay analysis for each analysis year under the Airport Implementation Plan Alternative. As shown, delays at all railroad crossings were estimated to be under the VHD threshold for each street segment in 2010, 2015 and 2030. Washington Street railroad crossings exceeded the threshold of VHD in 2020 and 2025. However, due to shifts in regional background traffic described in Section D.2.1.1 *Airport Trip Generation and Background Traffic* total traffic on Washington Street in 2030 decreased causing in the VHD to decrease to a level of insignificance.

¹⁸ Linscott, Law & Greenspan Engineers March 3, 2000 San Diego International Airport Master Plan Preferred Concept Alternatives Roadway Analysis.

Table D-112

**2010-2030 Railroad Crossing Operations – Airport Implementation Plan Alternative
(Without Parking Structure)**

Crossing	Year 2010				
	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	20,400	4.76	64	No
Sassafras Street	75	14,500	3.44	24	No
Palm Street	75	900	3.44	0	No
Laurel Street	300	25,100	0.77	1	No
Hawthorn Street	150	18,400	0.77	10	No
Grape Street	300	29,000	0.77	18	No

Crossing	Year 2015				
	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	23,300	8.53	134	No
Sassafras Street	150	16,800	6.13	50	No
Palm Street	75	900	6.13	0	No
Laurel Street	300	28,800	0.80	1	No
Hawthorn Street	150	20,600	0.80	12	No
Grape Street	300	31,600	0.80	22	No

Crossing	Year 2020				
	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	24,500	8.94	152	Yes
Sassafras Street	150	17,100	6.46	54	No
Palm Street	75	300	6.46	0	No
Laurel Street	300	30,300	1.13	1	No
Hawthorn Street	150	23,300	1.13	23	No
Grape Street	300	34,500	1.13	44	No

Crossing	Year 2025				
	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	24,900	9.41	165	Yes
Sassafras Street	150	18,600	6.79	65	No
Palm Street	75	100	6.79	0	No
Laurel Street	300	31,800	1.46	0	No
Hawthorn Street	150	24,700	1.46	31	No
Grape Street	300	35,800	1.46	59	No

Crossing	Year 2030				
	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	19,200	9.95	126	No
Sassafras Street	75	14,700	7.18	51	No
Palm Street	75	100	7.18	0	No
Laurel Street	300	34,700	1.85	0	No
Hawthorn Street	300	26,500	1.85	44	No
Grape Street	300	37,500	1.85	83	No

Source: HNTB, 2007

VHD = vehicle-hours of delay
ADT = average daily traffic

D.6.2.3.6 Transit

Under the Implementation Plan Alternative no existing or planned transit routes would be modified. Therefore, no adverse impacts would occur to transit operations and no mitigation is required.

D.6.2.3.7 Parking

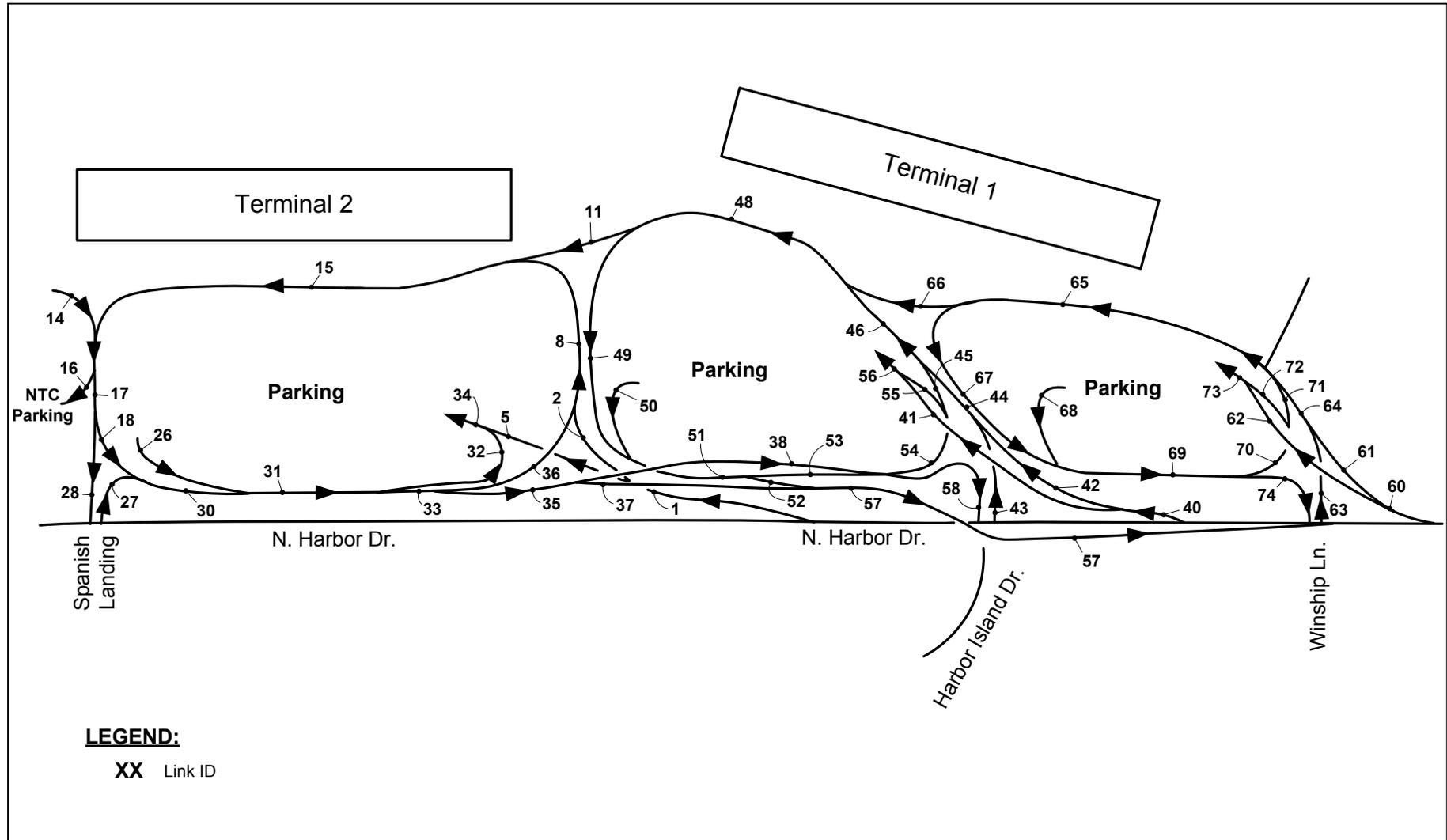
The Implementation Plan Alternative (Without Parking Structure) would not remove any parking lots designated for public use. Passenger terminals also are not located close to commercial or residential areas. In addition, the Implementation Plan Alternative (Without Parking Structure) would provide 500 additional airport public parking spaces at SAN Park Pacific Highway. However, demand for terminal area parking (8,400 spaces in 2015 and 10,500 spaces in 2030, as documented in the AMP facility requirements) would continue to exceed the supply of 6,880 (4,085 plus 2,795 additional spaces in an expanded surface lot adjacent to the new unit terminal and west of Terminal 2 West) under the Implementation Plan Alternative (Without Parking Structure), resulting in a deficiency of 1,520 spaces in 2015 and 3,620 in 2030.

D.6.2.3.8 Terminal Curbside

Currently 6,630 linear feet of curbside is available between all three terminals. In 2015, 7,240 linear feet of curbside is required at Terminals 1 and 2 and the Commuter Terminal to accommodate private and commercial vehicle demand. The No Project Alternative would maintain the existing curbside supply, which would result in a curbside deficit of 610 linear feet. Under the Implementation Plan Alternative (Without Parking Structure) approximately 1,000 additional linear feet of curbside would be provided on a second level at Terminal 1 East and there would be an airport-wide surplus of 380 linear feet in 2015. Therefore, the Implementation Plan Alternative would result in favorable curbside impact compared to the No Project Alternative.

D.6.2.3.9 On-Airport Traffic Circulation

Table D-113 shows the AM and PM peak hour traffic volumes and LOS on terminal roadways under the Implementation Plan Alternative (Without Parking Structure) (please refer to **Figure D.6-2** for link ID key map). As shown, all terminal roadways would operate at LOS D or better during peak hours under the Implementation Plan Alternative. Therefore, the Implementation Plan Alternative (Without Parking Structure) would have no adverse on-airport traffic circulation impacts compared to the No Project Alternative, and no mitigation is required.



LEGEND:

XX Link ID



Appendix D.6-2

On-Airport Roadway Link ID Key Map
Airport Implementation Plan Alternative (without Parking Structure)

Environmental Impact Report

Table D-113

2010-2030 On-Airport Roadway Peak Hour Operations – Implementation Plan Alternative (Without Structure)

Link ID	Lanes	2010				2015				2020				2025				2030			
		AM	LOS	PM	LOS																
1	2	384	A	317	A	459	A	381	A	483	B	402	A	515	B	431	A	525	B	439	A
2	2	315	A	267	A	380	A	324	A	404	A	346	A	436	A	374	A	450	A	386	A
3			Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used		
4			Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used		
5	2	69	A	49	A	79	A	57	A	79	A	56	A	79	A	57	A	75	A	54	A
6			Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used		
7			Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used		
8	3	402	A	341	A	483	A	412	A	516	A	441	A	555	A	476	A	599	A	514	A
9			Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used		
10			Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used		
11	1	161	A	187	A	183	A	211	A	199	A	230	A	210	A	243	B	220	A	255	B
12			Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used		
13			Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used		
14	1	57	A	50	A	65	A	57	A	70	A	62	A	74	A	65	A	77	A	67	A
15	4	563	A	528	A	666	A	623	A	715	A	671	A	765	A	719	A	819	A	769	A
16	1	12	A	12	A																
17	4	608	A	566	A	719	A	668	A	772	A	721	A	827	A	772	A	884	A	824	A
18	2	484	B	458	A	576	B	543	B	619	B	587	B	664	B	630	B	691	B	656	B
19			Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used		
20			Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used		
21			Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used		
22			Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used		
23			Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used		
24			Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used		
25			Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used		
26	1	41	A	89	A	48	A	103	A	48	A	103	A	48	A	103	A	47	A	102	A
27	2	88	A	56	A	81	A	68	A	86	A	71	A	91	A	76	A	123	A	103	A
28	3	124	A	108	A	143	A	125	A	153	A	134	A	163	A	143	A	194	A	169	A
29			Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used		
30	2	552	B	514	B	657	B	611	B	705	B	658	B	755	B	706	B	814	C	759	B
31	3	593	A	603	A	705	B	713	B	753	B	761	B	804	B	809	B	860	B	860	B
32	1	12	A	9	A	14	A	10	A	14	A	10	A	14	A	10	A	18	A	12	A
33	3	581	A	594	A	691	A	703	B	739	B	751	B	790	B	799	B	842	B	848	B
34	4	81	A	58	A	93	A	67	A	93	A	66	A	93	A	67	A	93	A	66	A
35	2	494	B	521	B	588	B	615	B	628	B	656	B	670	B	697	B	693	B	720	B
36	1	87	A	73	A	104	A	88	A	111	A	95	A	120	A	102	A	150	A	128	A
37	1	453	C	472	C	542	C	562	C	581	D	601	D	622	D	641	D	642	D	659	D
38	1	41	A	49	A	45	A	53	A	47	A	55	A	48	A	56	A	51	A	61	A
39			Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used		
40	2	180	A	149	A	209	A	173	A	267	A	222	A	288	A	239	A	301	A	251	A
41	1	34	A	24	A	37	A	26	A	46	A	33	A	51	A	36	A	53	A	38	A
42	2	147	A	124	A	172	A	147	A	221	A	189	A	237	A	203	A	248	A	213	A
43	1	35	A	28	A	40	A	33	A	51	A	42	A	55	A	46	A	75	A	62	A
44	3	181	A	153	A	212	A	180	A	272	A	231	A	292	A	249	A	323	A	275	A
45	1	14	A	12	A	16	A	14	A	18	A	15	A	19	A	16	A	20	A	17	A
46	3	195	A	164	A	228	A	194	A	290	A	247	A	311	A	265	A	343	A	293	A
47			Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used		
48	4	342	A	340	A	395	A	391	A	471	A	461	A	502	A	492	A	543	A	530	A
49	2	181	A	153	A	212	A	180	A	272	A	231	A	292	A	249	A	323	A	275	A
50	1	21	A	45	A	22	A	48	A	28	A	61	A	31	A	67	A	34	A	73	A
51	3	202	A	198	A	234	A	228	A	300	A	292	A	323	A	316	A	357	A	348	A
52	2	164	A	162	A	190	A	187	A	244	A	240	A	263	A	259	A	275	A	271	A
53	1	38	A	36	A	44	A	41	A	56	A	52	A	60	A	57	A	82	A	77	A
54	1	20	A	17	A	23	A	19	A	27	A	21	A	29	A	23	A	33	A	26	A
55	1	6	A	5	A	7	A	5	A	9	A	6	A	10	A	7	A	13	A	9	A
56	2	40	A	29	A	44	A	31	A	55	A	39	A	61	A	43	A	66	A	47	A
57	2	617	A	634	B	733	B	749	B	825	B	841	B	884	B	900	B	917	B	930	B
58	2	59	A	68	A	66	A	75	A	76	A	86	A	79	A	90	A	100	A	112	A
59			Link Not Used				Link Not Used				Link Not Used				Link Not Used				Link Not Used		
60	2	454	A	413	A	523	B	478	B	568	B	522	B	600	B	553	B	586	B	547	B
61	2	408	A	381	A	471	B	441	A	512	B	483	B	542	B	512	B	532	B	507	B
62	1	45	A	32	A	52	A	37	A	56	A	39	A	58	A	41	A	54	A	39	A
63	1	132	A	117	A	145	A	129	A	154	A	137	A	161	A	142	A	182	A	160	A
64	3	540	A	498	A	616	A	570	A	666	A	619	A	703	B	654	A	714	B	668	A
65	3	517	A	502	A	593	A	574	A	643	A	623	A	680	A	658	A	691	A	672	A
66	1	147	A	175	A	167	A	197	A	181	A	215	A	191	A	227	A	200	A	238	B
67	2	370	A	327	A	426	A	377	A	462	A	408	A	489	B	431	A	491	B	434	A
68	1	27	A	59	A	32	A	68	A	34	A	73	A	35	A	76	A	35	A	75	A
69	2	388	A	380	A	449	A	438	A	485	B	474	B	513	B	500	B	512	B	499	B
70	1	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A
71	1	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A
72	1	9	A	6	A	10	A	7	A	11	A	8	A	11	A	8	A	14	A	10	A
73	2	54	A	38	A	62	A	44	A	67	A	47	A	69	A	49	A	68	A	49	A
74	2	388	A	380	A	449	A	438	A	485	B	474	B	513	B	500	B	512	B	499	B

Source: HNTB, 2007
 NOTE: Please refer to Figure D.6-2 for Link ID Key map.

LOS = Level of service

D.7 Proposed Airport Land Use Plan

The Proposed Airport Land Use Plan will be hereinafter referred to in this section (Section D.7) as the “Land Use Plan” unless otherwise indicated.

D.7.1 Assumptions

- Projects assumed in the Land Use Plan are discussed in the Alternatives section of the EIR and include all projects in the Proposed Airport Implementation Plan (With Parking Structure) with additional development in the North Area and the former Teledyne Ryan Property (TDY site). Additional projects included in the Land Use Plan (not included in the Proposed Airport Implementation Plan) include:
 - Development of the TDY site providing 3,000 new surface parking spaces, 11 acres of general aviation and 11 acres of SDCRAA office and maintenance space. Trip generation associated with these projects is discussed in the next section. It is assumed the Rental Car Road, north of North Harbor Drive, would provide access to this site.
 - Development of the North Area providing new cargo facilities and a 6-level rental car and public parking structure with 9,000 ready, return, and storage rental car spaces and 2,170 public parking spaces. For this study it was assumed that the rental car companies located along Rental Car Road south of North Harbor Drive along with the off-Airport rental car companies located along Pacific Highway would relocate to the 9,000 space Consolidated Rental Car (CONRAC) Facility in the north area. The provision of 9,000 rental car spaces is based upon 2015 rental car requirements discussed in Section 7.3 Ground Transportation Requirements of the AMP document. As rental car demand grows past 2015, it is assumed that public parking in the structure will be displaced in favor of rental car spaces. The public parking demand will be relocated to the TDY site adjacent to the Commuter Terminal.
 - Development of an Airport Transit Center in the north area between Pacific Highway and the north access road. The Transit Center would be integrated with, or immediately adjacent to, the Consolidated Rental Car (CONRAC) / public parking structure. A pedestrian connection would also be provided between the Transit Center and Washington Street Trolley station.
 - Extension of the North Area access road (proposed in the Implementation Plan) connecting to Sassafras Street would be extended providing access to the west portion of the North Area site.
 - A dedicated transit corridor connecting the north CONRAC / Transit Center and south terminal areas. A consolidated shuttle serving all rental car companies, public parking and the Transit Center would replace the individual rental car company shuttles operating between the current Harbor Island and Pacific Highway rental car operations.
- The Land Use Plan would accommodate the same volume of air passengers as the Proposed Airport Implementation Plan. However, the replacement of the individual rental car company shuttles with a consolidated shuttle operating on a dedicated transit corridor would reduce *terminal* trip generation under the Land Use Plan. Trip generation associated with additional non-terminal area development is discussed in the next section and would increase total airport trip generation.
- The trip distribution of airport traffic under the Land Use Plan is assumed to be the same as the No Project Alternative, as discussed in Section D.4.2.
- The Land Use Plan would have the same gate distribution as the Proposed Airport Implementation Plan, as 10 new gates would be provided at Terminal 2 West in both

alternatives. Therefore, terminal passenger distribution for the Land Use Plan would be the same as for the Proposed Airport Implementation Plan and is shown in [Table D-39](#).

- The Land Use Plan was assumed to be a long-term forecast of potential projects and therefore, was only analyzed for 2015 and beyond. It was assumed that none of the additional projects included in the Land Use Plan would be constructed by 2010 and the earliest most could be constructed would be between 2015 and 2020.
- The Airport Land Use Plan is a planning guide to ensure that airport facilities are planned with foresight to serve the greatest number of airport users. The Airport Land Use Plan groups similar airport uses to insure compatible, shared and orderly development of future airport facilities. Where specific types of airport uses are contemplated in the future, transportation and circulation impacts associated with such uses can be assessed. Specific projects to be developed, constructed and operated are proposed in the Airport Implementation Plan. Any future projects to be developed that are not included in the Proposed Airport Implementation Plan will be 1) evaluated to ensure consistency with the Airport Land Use Plan and 2) reviewed at a project level to determine environmental impacts and incorporate the mitigation measures required by the Airport Land Use Plan.

D.7.2 Trip Generation and Terminal Distribution

Total trip generation associated with the Land Use Plan is summarized in [Table D-114](#). As shown, total airport trip generation would increase from approximately 122,600 ADT in 2015 to 148,450 ADT in 2030. This corresponds to an increase in air passenger forecast of 22.8 million annual passengers (MAP) in 2015 to 28.2 MAP in 2030. This total trip generation takes into account airport traffic generated by passenger activity, including terminal trip generation, along with new non-terminal area traffic that may attract additional trips to the airport. Terminal trip generation would decrease under the Land Use Plan compared to the Implementation Plan and No Project Alternative due to the consolidation of rental car shuttles; however, total trip generation increases due to new trip generating projects and in-fill development in the existing rental car area along North Harbor Drive. Specific project specific trip generation associated with projects in the North Area, TDY property, and vacated rental car area on Harbor Island is shown in [Table D-115](#) and described below.

North Area

- The CONRAC facility would be developed with 9,000 ready, return, and storage spaces to accommodate rental car demand through 2015. The 2,170 parking spaces at the SAN Park Pacific Highway provided in the Implementation Plan would also be accommodated in this structure. However, as rental car demand grows past 2015 requirements it is assumed that rental car functions will begin to replace public parking functions in the north area structure. By 2030, it is assumed that all 2,170 public parking spaces in the North Area would be converted to rental car use. This phase-out of the North Area public parking would be offset by the new 3,000 parking spaces at TDY, which is assumed to capture the public parking demand previously accommodated in the SAN Park Pacific Highway facility.

The new consolidated rental car facility in the North Area was also assumed to accommodate the off-airport rental car facilities located along Pacific Highway. All existing rental car shuttles from the Rental Car Road and Pacific Highway facilities would be replaced by a consolidated shuttle service with less total terminal area trips than the individual shuttles. The consolidated shuttle would also serve the north area Transit Center and would use a dedicated transit corridor connecting the North Area and the South Terminal Area. This corridor would allow shuttles to travel in a dedicated lane/roadway separate from public traffic.

Trip generation associated with the rental car companies was calculated for a 9,000 space facility as shown in [Table D-115](#), however, a portion of the traffic generated at this facility would be relocated from the Harbor Island rental car facilities.

- In 2015, the same amount of public parking provided in the SAN Park Pacific Highway facility under the Implementation Plan, approximately 2,170 spaces, would be accommodated in the north area structure. As in the Implementation plan this parking would not generate new trips but would accommodate increased parking demand. As rental car demand grows through 2030 public parking in this facility would be displaced and parking demand would be relocated to the 3,000 space TDY parking facility. By 2030 it is assumed that the entire structure would be required to accommodate rental car demand and no public parking would be provided.
- The new cargo facilities would not increase the amount of air cargo accommodated at SDIA, but instead would allow cargo operators to sort cargo on-site as opposed to sorting off site and trucking loaded containers to the airport to load onto airplanes. Trip generation rates were adjusted to reflect this operation and were derived from similar domestic air cargo facilities at LAX. The new trip generation rate is assumed to be 2.31. Air cargo activity was assumed to grow from approximately 187,700 annual tons in 2005 to approximately 622,100 annual tons in 2030. Cargo vehicular traffic to and from the site was estimated based on the new trip rate.

South Area

- SDCRAA office and maintenance facilities were assumed to be developed on approximately 11 acres of the TDY site. In order to assess a “worst case” scenario, trips associated with the 11-acre SDCRAA office/maintenance area were estimated based on the trip generation rate for an office building. It was assumed that if a portion of the 11 acres were used for a SDCRAA maintenance facility peak hour trips would be less than those analyzed because a maintenance facility would have fewer employees per square foot than an office building. Trip generation associated with this development is shown in [Table D-115](#).
- Development of additional general aviation facilities were assumed on 11 acres of the TDY site. Trip generation associated with this development is shown in [Table D-115](#).
- A 3,000 space parking facility developed on the TDY site would accommodate demand for public (economy) and employee parking. Employee parking demand that is accommodated in the north area under the Implementation Plan would be displaced by development of the CONRAC structure and was assumed to move to the TDY site. In addition, unaccommodated public economy parking and public parking displaced by growing rental car demand would be accommodated here. Traffic would be relocated from other facilities and no new trip generation is assumed.

Existing Rental Car Area – Port of San Diego, Harbor Island East

- The existing rental car facilities on Rental Car Road, adjacent to North Harbor Drive, were assumed to be relocated to a consolidated facility in the North Area. Although this property is controlled by the Port of San Diego and not SDCRAA, in order to estimate worst case traffic conditions under the land use plan, it was assumed, after discussions with Port of San Diego staff, that new visitor-serving commercial (with hotel, convention facilities, restaurants) would replace the vacated rental car area along Rental Car Road. Alternate land uses may ultimately be developed in this area however the daily trip generation rate associated with visitor-serving commercial uses was used to estimate a high utilization of that site. Trip generation for the new development was based on trip rates from the City of San Diego Trip Generation Manual. The trip generation rate, 300 daily, 18 AM peak hour and 24 PM peak hour ADT per acre, for visitor-serving commercial is higher than the rental car facilities that it replaces and traffic from this development is accounted for as project related airport traffic under the Land Use Plan. The existing rental car site is estimated to be 33.1 acres generating 9,930 daily trips under the new land use assumptions.

Terminal passenger distribution under the Land Use Plan would be the same as under the Proposed Airport Implementation Plan and is shown again in [Table D-116](#).

Table D-114

2010-2030 Airport Trip Generation – Proposed Airport Land Use Plan

Activity	Year				
	2005	2015	2020	2025	2030
Airport Passenger Activity Level					
Million Annual Passengers (MAP)	17.4	22.8	25.1	26.6	28.2
Million Annual O&D Passengers	16.7	21.8	24.0	25.4	27.0
Daily O&D Passengers	45,830	59,770	66,220	70,553	74,199
Airport Trip Generation (1)					
Daily	85,100	122,600	134,300	142,150	148,450
In	42,600	61,450	67,300	71,250	74,400
Out	42,500	61,150	67,000	70,900	74,050
AM Peak Hour	3,180	4,690	5,140	5,445	5,700
In	1,760	2,725	2,990	3,170	3,315
Out	1,420	1,965	2,150	2,275	2,385
PM Peak Hour	3,245	4,850	5,280	5,570	5,810
In	1,500	2,350	2,550	2,690	2,810
Out	1,745	2,500	2,730	2,880	3,000
Trip Rate					
Daily	1.86	2.05	2.03	2.01	2.00

O&D = origin and destination

Notes:

(1) Includes terminals and associated facilities, SAN Park lots, rental car facilities on Rental Car Road, Employee Lot 6 on Harbor Island Drive, and north area. Does not include private vehicle trips to private off-airport parking and rental car facilities, but includes shuttle trips between these facilities and the terminals.

Source: HNTB, 2007.

O&D = origin and destination

Table D-115

North Area and TDY Trip Generation – Proposed Airport Land Use Plan

Land Use	Trip Rate	Unit	2015	2020	2025	2030
Rental Car/Parking Garage (North Area)						
CONRAC/ITC						
Number of Spaces			9,000	9,900	10,800	11,700
Trip Generation						
Average Daily Traffic (ADT)	(1)		9,104	10,086	10,746	11,301
AM Peak Hour	(1)		384	425	453	477
PM Peak Hour	(1)		409	453	483	508
Public Parking Spaces						
Number of Spaces			2,170	1,447	723	0
Trip Generation						
Average Daily Traffic (ADT)	(2)		178	1,410	1,929	0
AM Peak Hour	(2)		7	53	73	0
PM Peak Hour	(2)		8	64	87	0
TDY Site						
Authority Office Space						
Area (acres)			11	11	11	11
Square feet of building floor area (1,000 sf)			192	192	192	192
Trip Generation						
Average Daily Traffic (ADT)	14	ADT/1,000 sf	2,683	2,683	2,683	2,683
AM Peak Hour	0.15	vph/1,000 sf	29	29	29	29
PM Peak Hour	0.15	vph/1,000 sf	29	29	29	29
General Aviation						
Area		Acres	11	11	11	11
Trip Generation						
Average Daily Traffic (ADT)	6	ADT/acre	66	66	66	66
AM Peak Hour	0.54	vph/acre	6	6	6	6
PM Peak Hour	0.90	vph/acre	10	10	10	10

Sources:

SH&E, San Diego International Airport Aviation Activity Forecasts, February 2004, and HNTB analysis.

ITE - Institute of Transportation Engineers, Trip Generation 6th Edition, 1997.

City of San Diego, Trip Generation Manual, May 2003.

SANDAG, (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002.

Notes:

- (1) CONRAC trip generation based on observed trip generation at existing rental car area, projected into future years based on air passenger growth, then prorated to accommodate 100% demand.
- (2) Public parking trip generation based on observed terminal and SAN Park trip generation, projected into future years based on air passenger growth, then reallocated to various parking facilities based on capacity.

Table D-116

Terminal Passenger Distribution – Proposed Airport Land Use Plan

Scenario/Year	Terminal 1	Terminal 1 East *	Terminal 2 East	Terminal 2 West	Commuter Terminal	Total
Existing						
2005	54%	0%	15%	26%	5%	100%
Proposed Airport Implementation Plan						
2010	45%	0%	20%	31%	4%	100%
2015	43%	0%	20%	33%	3%	100%
2020	43%	0%	19%	34%	3%	100%
2025	43%	0%	19%	35%	3%	100%
2030	41%	0%	19%	37%	3%	100%

Source: HNTB, 2007.

* New unit terminal under Airport Implementation Project Alternative.

D.7.3 Traffic Impacts

The proposed Airport Land Use Plan includes existing and future airport uses. The future airport uses for the transportation and circulation analysis purposes including those specific project components identified in the Proposed Airport Implementation Plan as well as future uses in the

North Area and the future planning areas on the former Teledyne Ryan site. Specific impact categories as they relate to the Proposed Airport Land Use Plan are discussed below. The future airport uses describe a maximum development scenario accommodating regional growth at SDIA. This analysis is provided to inform the public and agencies responsible for traffic and circulation of the effects accommodating regional growth. Future projects will be 1) evaluated to ensure consistency with the adopted Airport Land Use Plan and 2) reviewed at a project level to determine if any potential significant impacts to traffic and circulation may occur and incorporate the mitigation measures required by the Airport Land Use Plan. This will require coordination between the SDCRAA and the agency responsible for the transportation facilities (i.e. the City of San Diego for city-dedicated streets) in order to mitigate any potential significant impacts.

D.7.3.1 Street Segments

Table D-117 summarizes the street segment operations for each analysis year under the Land Use Plan.

Table D-117
2015 – 2030 Street Segment Operations – Proposed Airport Land Use Plan (2010 2015 – 2020)

Roadway	Segment	Classification	Lanes	LOS E ADT Capacity 1000s	Year 2015					Year 2020				
					SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS	SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS
North Harbor Drive	West of NTC	6-Lane Prime	6D	60.0	15.6	20.4	36.0	0.60	C	17.0	25.2	42.1	0.70	C
	NTC - Spanish Landing	6-Lane Prime	6D	60.0	16.1	16.3	32.4	0.54	B	17.2	20.7	37.9	0.63	C
	Spanish Landing - T2 Access	6-Lane Prime	6D	60.0	15.2	16.2	31.4	0.52	B	16.3	18.3	34.6	0.58	B
	T2 Access - Harbor Island	6-Lane Prime	4+3	65.0	30.6	16.3	46.9	0.72	C	33.6	18.2	51.7	0.80	C
	Harbor Island - T1 Access	6-Lane Prime	3+4	65.0	29.6	18.4	48.0	0.74	C	32.3	19.1	51.3	0.79	C
	T1 Access - Winship	6-Lane Prime	5+3	70.0	43.9	18.3	62.2	0.89	D	47.7	19.1	66.8	0.95	E
	Winship - Flyover Merge (1)	6-Lane Prime	4+4	70.0	44.7	18.4	63.1	0.90	D	48.7	19.1	67.8	0.97	E
	Rental Car Rd - Laurel	6-Lane Prime	6D	60.0	86.8	20.7	107.5	1.79	F	93.9	22.1	116.1	1.93	F
	Laurel - Hawthorn	6-Lane Prime	6D	60.0	57.5	15.4	72.9	1.22	F	62.3	16.7	79.0	1.32	F
	Hawthorn - Grape	6-Lane Prime	6D	60.0	36.2	13.4	49.6	0.83	C	39.2	14.0	53.1	0.89	D
Grape Street	Harbor - Pacific	3-Lane Major 1-Way	3U	25.0	19.2	7.1	26.3	1.05	F	20.8	8.5	29.3	1.17	F
	Pacific - Kettner	3-Lane Major 1-Way	3U	25.0	17.8	17.1	34.9	1.40	F	19.2	18.5	37.8	1.51	F
Hawthorn Street	Kettner - I-5	3-Lane Major 1-Way	3U	25.0	17.4	23.7	41.1	1.64	F	18.8	19.1	37.9	1.52	F
	Harbor - Pacific	3-Lane Major 1-Way	3U	25.0	21.7	5.4	27.1	1.08	F	23.5	6.7	30.2	1.21	F
	Pacific - Kettner	3-Lane Major 1-Way	3U	25.0	17.5	6.2	23.7	0.95	E	19.0	7.4	26.4	1.06	F
Kettner Blvd	Kettner - I-5	3-Lane Major 1-Way	3U	25.0	17.5	19.2	36.7	1.47	F	19.0	16.1	35.1	1.40	F
	north of Washington	3-Lane Collector 1-Way	3U	25.0	0.3	7.2	7.5	0.30	A	0.5	9.6	10.0	0.40	B
	Washington - Sassafras	3-Lane Major 1-Way	3U	25.0	12.2	13.1	25.3	1.01	F	13.5	16.0	29.5	1.18	F
	Sassafras - Palm	3-Lane Major 1-Way	3U	25.0	12.2	11.9	24.1	0.96	E	13.5	18.7	32.2	1.29	F
	Palm - Laurel	3-Lane Major 1-Way	3U	25.0	10.6	9.5	20.1	0.80	D	11.5	16.0	27.5	1.10	F
Laurel Street	Laurel - Hawthorn	3-Lane Major 1-Way	3U	25.0	0.0	7.9	7.9	0.32	A	0.0	13.3	13.3	0.53	B
	Hawthorn - Grape	3-Lane Major 1-Way	3U	25.0	0.0	16.8	16.8	0.67	C	0.0	21.5	21.5	0.86	D
	Harbor - Pacific	4-Lane Major	4U	40.0	29.2	6.7	35.9	0.90	E	31.6	6.0	37.6	0.94	E
	Pacific - Kettner	4-Lane Collector	4D	30.0	23.7	7.8	31.5	1.05	F	25.7	6.9	32.6	1.09	F
Pacific Highway	Kettner - I-5	4-Lane Collector	4D	30.0	13.1	9.6	22.7	0.76	D	14.2	8.0	22.2	0.74	D
	Washington - Sassafras	6-Lane Major	6D	50.0	5.9	27.3	33.2	0.66	C	6.6	24.3	30.9	0.62	C
	Sassafras - Palm	6-Lane Major	6D	50.0	8.6	21.0	29.6	0.59	C	9.8	20.9	30.7	0.61	C
	Palm - Laurel	6-Lane Major	6D	50.0	8.6	21.7	30.3	0.61	C	9.8	21.0	30.8	0.62	C
	Laurel - Hawthorn	6-Lane Major	6D	50.0	2.5	22.6	25.1	0.50	B	3.2	25.5	28.7	0.57	C
Palm Street	Hawthorn - Grape	6-Lane Major	6D	50.0	6.4	23.2	29.6	0.59	C	7.3	26.0	33.4	0.67	C
	Pacific - Kettner	2-Lane Collector	2U	8.0	0.0	0.9	0.9	0.11	A	0.0	0.3	0.3	0.04	A
	Sassafras Street	Pacific - Kettner	3-Lane Collector	3U	12.0	6.3	9.7	16.0	1.33	F	7.2	9.3	16.5	1.38
Washington Street	Kettner-India	2-Lane Collector	2U	8.0	3.1	9.7	12.8	1.60	F	3.6	9.4	13.0	1.62	F
	Pacific - Kettner	4-Lane Collector	4U	30.0	5.9	18.6	24.5	0.82	D	6.9	19.1	25.9	0.86	E
	Kettner - San Diego	5-Lane Collector	5D	30.0	5.2	25.5	30.7	1.02	F	5.9	28.6	34.5	1.15	F
India Street	Laurel - Palm	2-Lane Collector	2U	8.0	10.6	10.2	20.8	2.60	F	11.4	7.9	19.4	2.42	F
	Palm - Sassafras	3-Lane Collector	3U	12.0	10.6	15.4	25.9	2.16	F	11.4	12.6	24.0	2.00	F
	Sassafras - Washington	3-Lane Collector	3U	12.0	12.0	14.6	26.6	2.22	F	12.3	15.2	27.5	2.29	F
Rosecrans	Barnett - Sport Arena	6-lane Major	6D	50.0	7.3	42.4	49.7	0.99	E	7.9	34.3	42.2	0.84	D
	Nimitz Quimby - Barnett	4-lane Major 5-lane Major	4U 5U	40.0 45.0	7.3	35.4	42.7	1.07 0.95	F E	7.9	31.1	39.0	0.97-0.87	E-D
	Nimitz - Quimby	4-lane Major	4U	40.0	7.3	35.4	42.7	1.07	F	7.9	31.1	39.0	0.97	E
Nimitz	Harbor - Rosecrans	4-lane Major	4U	40.0	13.4	8.5	21.9	0.55	C	14.5	11.2	25.6	0.64	C

Source: HNTB, 2007.

Notes:

(1) Does not include traffic on flyover.

MAP = Million Annual Passengers

ADT = Average Daily Traffic

LOS = Level of Service

V/C = volume-to-capacity ratio

Table D-117 (continued)
2015 – 2030 Street Segment Operations – Proposed Airport Land Use Plan (2025-2030)

Roadway	Segment	Classification	Lanes	LOS E ADT Capacity 1000s	Year 2025					Year 2030				
					SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS	SDIA ADT 1000s	Non-SDIA ADT 1000s	Total ADT 1000s	V/C	LOS
North Harbor Drive	West of NTC	6-Lane Prime	6D	60.0	17.9	26.7	44.6	0.74	C	23.4	28.5	51.9	0.87	D
	NTC - Spanish Landing	6-Lane Prime	6D	60.0	17.9	21.8	39.7	0.66	C	22.2	23.3	45.5	0.76	C
	Spanish Landing - T2 Access	6-Lane Prime	6D	60.0	16.9	18.4	35.4	0.59	C	19.8	20.7	40.5	0.67	C
	T2 Access - Harbor Island	6-Lane Prime	4+3	65.0	35.7	18.1	53.8	0.83	C	39.5	19.8	59.3	0.91	D
	Harbor Island - T1 Access	6-Lane Prime	3+4	65.0	34.2	20.4	54.7	0.84	C	36.4	21.1	57.5	0.88	D
	T1 Access - Winship	6-Lane Prime	5+3	70.0	50.4	20.5	70.8	1.01	F	52.4	21.1	73.5	1.05	F
	Winship - Flyover Merge (1)	6-Lane Prime	4+4	70.0	51.3	20.4	71.6	1.02	F	52.7	20.9	73.6	1.05	F
	Rental Car Rd - Laurel	6-Lane Prime	6D	60.0	98.9	20.9	119.7	2.00	F	99.2	21.7	120.9	2.01	F
	Laurel - Hawthorn	6-Lane Prime	6D	60.0	65.5	17.5	83.1	1.38	F	68.7	18.2	87.0	1.45	F
	Hawthorn - Grape	6-Lane Prime	6D	60.0	41.2	14.8	56.0	0.93	E	43.3	14.8	58.2	0.97	E
Grape Street	Harbor - Pacific	3-Lane Major 1-Way	3U	25.0	21.9	9.0	30.9	1.24	F	23.1	9.7	32.8	1.31	F
	Pacific - Kettner	3-Lane Major 1-Way	3U	25.0	20.2	18.8	39.1	1.56	F	21.2	19.8	41.0	1.64	F
Hawthorn Street	Kettner - I-5	3-Lane Major 1-Way	3U	25.0	19.8	21.8	41.6	1.67	F	20.9	24.7	45.6	1.82	F
	Harbor - Pacific	3-Lane Major 1-Way	3U	25.0	24.8	7.0	31.8	1.27	F	26.1	7.9	34.0	1.36	F
	Pacific - Kettner	3-Lane Major 1-Way	3U	25.0	20.0	7.8	27.8	1.11	F	21.1	8.7	29.8	1.19	F
Kettner Blvd	Kettner - I-5	3-Lane Major 1-Way	3U	25.0	20.0	17.2	37.2	1.49	F	21.1	19.2	40.3	1.61	F
	north of Washington	3-Lane Collector 1-Way	3U	25.0	0.6	10.7	11.3	0.45	B	0.7	4.2	4.9	0.19	A
	Washington - Sassafras	3-Lane Major 1-Way	3U	25.0	14.3	14.1	28.4	1.14	F	12.5	17.4	29.9	1.20	F
	Sassafras - Palm	3-Lane Major 1-Way	3U	25.0	14.3	17.2	31.4	1.26	F	12.5	14.2	26.7	1.07	F
	Palm - Laurel	3-Lane Major 1-Way	3U	25.0	12.1	13.7	25.8	1.03	F	10.6	12.6	23.1	0.92	E
Laurel Street	Laurel - Hawthorn	3-Lane Major 1-Way	3U	25.0	0.0	11.0	11.0	0.44	B	0.1	11.4	11.6	0.46	B
	Hawthorn - Grape	3-Lane Major 1-Way	3U	25.0	0.0	19.9	19.9	0.80	C	0.1	21.5	21.7	0.87	D
	Harbor - Pacific	4-Lane Major	4U	40.0	33.3	4.0	37.3	0.93	E	30.5	4.3	34.8	0.87	D
	Pacific - Kettner	4-Lane Collector	4D	30.0	27.1	6.8	33.9	1.13	F	24.4	12.1	36.5	1.22	F
Pacific Highway	Kettner - I-5	4-Lane Collector	4D	30.0	15.0	8.1	23.1	0.77	D	14.2	12.9	27.1	0.90	E
	Washington - Sassafras	6-Lane Major	6D	50.0	7.1	27.4	34.5	0.69	C	7.3	19.1	26.3	0.53	B
	Sassafras - Palm	6-Lane Major	6D	50.0	10.5	22.2	32.7	0.65	C	10.4	16.3	26.7	0.53	B
	Palm - Laurel	6-Lane Major	6D	50.0	10.5	22.0	32.5	0.65	C	10.4	15.4	25.9	0.52	B
	Laurel - Hawthorn	6-Lane Major	6D	50.0	3.6	27.7	31.3	0.63	C	3.7	23.3	26.9	0.54	B
	Hawthorn - Grape	6-Lane Major	6D	50.0	7.9	28.1	36.0	0.72	C	8.0	24.1	32.1	0.64	C
Palm Street	Pacific - Kettner	2-Lane Collector	2U	8.0	0.0	0.1	0.1	0.01	A	0.0	-0.6	-0.6	-0.08	A
Sassafras Street	Pacific - Kettner	3-Lane Collector	3U	12.0	7.8	10.4	18.1	1.51	F	7.7	6.1	13.8	1.15	F
	Kettner-India	2-Lane Collector	2U	8.0	3.9	9.8	13.6	1.71	F	3.9	8.0	11.9	1.48	F
Washington Street	Pacific - Kettner	4-Lane Collector	4U	30.0	7.5	18.9	26.5	0.88	E	8.2	12.7	20.9	0.70	D
	Kettner - San Diego	5-Lane Collector	5D	30.0	6.4	28.1	34.5	1.15	F	6.8	22.5	29.4	0.98	E
India Street	Laurel - Palm	2-Lane Collector	2U	8.0	12.0	7.9	19.9	2.49	F	10.5	12.6	23.1	2.89	F
	Palm - Sassafras	3-Lane Collector	3U	12.0	12.0	12.5	24.5	2.04	F	10.5	16.5	27.0	2.25	F
	Sassafras - Washington	3-Lane Collector	3U	12.0	12.7	14.7	27.4	2.28	F	12.4	21.5	33.9	2.82	F
Rosecrans	Barnett - Sport Arena	6-lane Major	6D	50.0	8.3	34.6	42.9	0.86	D	12.8	33.7	46.6	0.93	E
	Nimitz Quimby - Barnett	4-lane Major 5-lane Major	4U 5U	40.0 45.0	8.3	31.3	39.6	0.99 0.88	E-D	12.8	29.0	41.9	1.05 0.93	F E
	Nimitz - Quimby	4-lane Major	4U	40.0	8.3	31.3	39.6	0.99	E	12.8	29.0	41.9	1.05	F
Nimitz	Harbor - Rosecrans	4-lane Major	4U	40.0	15.2	11.8	27.1	0.68	C	20.7	11.7	32.4	0.81	D

Source: HNTB, 2007.

Notes:

(1) Does not include traffic on flyover.

MAP = Million Annual Passengers

ADT = Average Daily Traffic

LOS = Level of Service

V/C = volume-to-capacity ratio

Table D-118 compares the street segment volume to capacity (v/c) ratios under the Land Use Plan against the No Project Alternative to identify traffic impacts based on significance criteria identified in Section D.2 *Traffic Impacts and Significance Criteria*, measured by an increase to LOS E or F or an increase in volume to capacity ratio of greater than 0.02 for streets operating at LOS E and 0.01 for streets operating at LOS F under the No Project Alternative. The following roadway segments would have potentially significant traffic impacts:

Street Segments with Significant Traffic Impacts

Year 2015

- North Harbor Drive between Rental Car Road and Hawthorn Street, which operates at LOS F under both the Land Use Plan and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Land Use Plan compared to the No Project Alternative.
- Grape Street between North Harbor Drive and I-5, which operates at LOS E and F under both the Land Use Plan and No Project Alternative and experience an increase in the v/c ratio of over 0.01 under the Land Use Plan compared to the No Project Alternative.
- Hawthorn Street between North Harbor Drive and Pacific Highway, which operates at LOS E and F under both the Land Use Plan and No Project Alternative and experience an increase in the v/c ratio of over 0.01 under the Land Use Plan compared to the No Project Alternative.
- Hawthorn Street between Pacific Highway and Kettner Boulevard, which increased from LOS D under the No Project Alternative to LOS E under the Land Use Plan.
- Hawthorn Street between Kettner Boulevard and I-5, which operates at LOS F under both the Land Use Plan and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Land Use Plan compared to the No Project Alternative.
- Kettner Boulevard between Washington Street and Sassafras Street, which operates at LOS E and F under both the Land Use Plan and No Project Alternative and experience an increase in the v/c ratio of over 0.01 under the Land Use Plan compared to the No Project Alternative.
- Kettner Boulevard between Sassafras Street and Palm Street, which increased from LOS D under the No Project Alternative to LOS E under the Land Use Plan.
- Laurel Street between North Harbor Drive and Pacific Highway, which increased from LOS D under the No Project Alternative to LOS E under the Land Use Plan.
- Laurel Street between Pacific Highway and Kettner Boulevard, which operates at LOS E and F under both the Land Use Plan and No Project Alternative and experience an increase in the v/c ratio of over 0.01 under the Land Use Plan compared to the No Project Alternative.
- Sassafras Street between Pacific Highway and India Street, which operates at LOS F under both the Land Use Plan and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Land Use Plan compared to the No Project Alternative.
- Washington Street between Kettner Boulevard and San Diego Street, which operates at LOS E and F under both the Land Use Plan and No Project Alternative and experience an increase in the v/c ratio of over 0.01 under the Land Use Plan compared to the No Project Alternative.
- India Street between Laurel Street and Washington Street, which operates at LOS F under both the Land Use Plan and No Project Alternative and experiences an increase in v/c ratio of over 0.01 under the Land Use Plan compared to the No Project Alternative.

- Rosecrans Avenue between Barnett Avenue and Nimitz Boulevard, which operates at LOS E and F under both the Land Use Plan and No Project Alternative and experience an increase in the v/c ratio of over 0.01 under the Land Use Plan compared to the No Project Alternative.

Year 2020

- All locations identified in Year 2015, except:
 - Rosecrans Avenue between ~~Barnett~~ Quimby Avenue and Sports Arena Drive, which ~~increased~~ decreased to LOS D under both the No Project Alternative and Land Use Plan due to a decrease in regional background traffic reported in the SANDAG traffic model.
 - Hawthorn Street between Kettner Boulevard and I-5, which operates at LOS F under both the Land Use Plan and No Project Alternative but the impact decreased to a level of insignificance due to a decrease in background traffic and shift in regional distribution.
- North Harbor Drive between Terminal 1 Access and Rental Car Road, which increased from LOS D under the No Project Alternative to LOS E under the Land Use Plan.
- Kettner Boulevard between Palm Street and Laurel Street, which increased from LOS D under the No Project Alternative to LOS E under the Land Use Plan.
- Washington Street between Pacific Highway and Kettner Boulevard, which increased from LOS D under the No Project Alternative to LOS E under the Land Use Plan.

Year 2025

- All locations identified in Year 2020
- North Harbor Drive between Hawthorn Street and Grape Street, which increased from LOS D under the No Project Alternative to LOS E under the Land Use Plan.

Year 2030

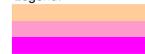
- All locations identified in Year 2025 above, except:
 - Laurel Street between North Harbor Drive and Pacific Highway, which improved from LOS E under the Land Use Plan in 2025 to LOS D under the Land Use Plan in 2030 due to a decrease in background traffic and shift in regional distribution.
 - Washington Street between Pacific Highway and Kettner Boulevard, which improved from LOS E under the Land Use Plan in 2025 to LOS D under the Land Use Plan in 2030 due to a decrease in background traffic and shift in regional distribution.
 - Rosecrans Avenue between Quimby Avenue and Sparts Arena Drive, which increased from LOS D under the No Project to LOS E under the Land Use Plan.

Table D-118
2015-2030 Street Segment Impacts – Proposed Airport Land Use Plan

Roadway	Segment	Year 2015					Year 2020					Year 2025					Year 2030					
		No Proj V/C	No Proj LOS	Proj V/C	Proj LOS	Diff V/C	No Proj V/C	No Proj LOS	Proj V/C	Proj LOS	Diff V/C	No Proj V/C	No Proj LOS	Proj V/C	Proj LOS	Diff V/C	No Proj V/C	No Proj LOS	Proj V/C	Proj LOS	Diff V/C	
North Harbor Drive	West of NTC	0.56	B	0.60	C	0.05	0.66	C	0.70	C	0.05	0.69	C	0.74	C	0.05	0.79	C	0.87	D	0.08	
	NTC - Spanish Landing	0.57	B	0.54	B	-0.03	0.67	C	0.63	C	-0.03	0.70	C	0.66	C	-0.04	0.79	C	0.76	C	-0.03	
Grape Street	Spanish Landing - T2 Access	0.47	B	0.52	B	0.06	0.52	B	0.58	B	0.06	0.53	B	0.59	C	0.06	0.60	C	0.67	C	0.07	
	T2 Access - Harbor Island	0.63	C	0.72	C	0.09	0.68	C	0.80	C	0.11	0.70	C	0.83	C	0.13	0.76	C	0.91	D	0.15	
	Harbor Island - T1 Access	0.62	C	0.74	C	0.12	0.64	C	0.79	C	0.14	0.68	C	0.84	C	0.16	0.69	C	0.88	D	0.19	
	T1 Access - Winship	0.83	C	0.89	D	0.06	0.89	D	0.95	E	0.07	0.93	E	1.01	F	0.08	0.94	E	1.05	F	0.11	
	Winship - Rental Car Rd	0.87	D	0.90	D	0.03	0.94	E	0.97	E	0.03	0.98	E	1.02	F	0.05	0.97	E	1.05	F	0.08	
	Rental Car Rd - Laurel	1.57	F	1.79	F	0.22	1.71	F	1.93	F	0.22	1.75	F	2.00	F	0.25	1.73	F	2.01	F	0.29	
	Laurel - Hawthorn	1.05	F	1.22	F	0.17	1.14	F	1.32	F	0.17	1.19	F	1.38	F	0.19	1.22	F	1.45	F	0.23	
	Hawthorn - Grape	0.72	C	0.83	C	0.11	0.78	C	0.89	D	0.11	0.81	C	0.93	E	0.12	0.82	C	0.97	E	0.15	
	Harbor - Pacific	0.92	E	1.05	F	0.13	1.04	F	1.17	F	0.13	1.09	F	1.24	F	0.14	1.13	F	1.31	F	0.18	
	Pacific - Kettner	1.26	F	1.40	F	0.13	1.37	F	1.51	F	0.14	1.41	F	1.56	F	0.15	1.46	F	1.64	F	0.18	
Hawthorn Street	Kettner - I-5	1.52	F	1.64	F	0.12	1.48	F	1.52	F	0.04	1.53	F	1.67	F	0.13	1.66	F	1.82	F	0.16	
	Harbor - Pacific	0.94	E	1.08	F	0.15	1.06	F	1.21	F	0.15	1.10	F	1.27	F	0.17	1.16	F	1.36	F	0.20	
Kettner Blvd	Pacific - Kettner	0.83	D	0.95	E	0.11	0.94	E	1.06	F	0.12	0.98	E	1.11	F	0.13	1.03	F	1.19	F	0.16	
	Kettner - I-5	1.35	F	1.47	F	0.11	1.46	F	1.40	F	-0.06	1.54	F	1.49	F	-0.06	1.66	F	1.61	F	-0.05	
Laurel Street	north of Washington	0.30	A	0.30	A	0.01	0.39	A	0.40	B	0.01	0.44	B	0.45	B	0.01	0.18	A	0.19	A	0.01	
	Washington - Sassafras	0.94	E	1.01	F	0.07	1.10	F	1.18	F	0.08	1.04	F	1.14	F	0.09	1.11	F	1.20	F	0.08	
	Sassafras - Palm	0.90	D	0.96	E	0.07	1.21	F	1.29	F	0.07	1.17	F	1.26	F	0.09	0.99	E	1.07	F	0.08	
	Palm - Laurel	0.74	C	0.80	D	0.07	1.03	F	1.10	F	0.07	0.96	E	1.03	F	0.07	0.85	D	0.92	E	0.08	
Pacific Highway	Laurel - Hawthorn	0.32	A	0.32	A	0.00	0.54	B	0.53	B	-0.01	0.45	B	0.44	B	-0.01	0.47	B	0.46	B	-0.01	
	Hawthorn - Grape	0.68	C	0.67	C	-0.01	0.87	D	0.86	D	-0.01	0.81	D	0.80	C	-0.01	0.87	D	0.87	D	-0.01	
Washington Street	Harbor - Pacific	0.82	D	0.90	E	0.08	0.87	D	0.94	E	0.07	0.85	D	0.93	E	0.08	0.78	D	0.87	D	0.09	
	Pacific - Kettner	0.97	E	1.05	F	0.08	1.02	F	1.09	F	0.06	1.06	F	1.13	F	0.07	1.13	F	1.22	F	0.08	
India Street	Kettner - I-5	0.75	D	0.76	D	0.01	0.75	D	0.74	D	-0.01	0.78	D	0.77	D	-0.01	0.90	E	0.90	E	0.01	
	Washington - Sassafras	0.64	C	0.66	C	0.02	0.59	C	0.62	C	0.02	0.66	C	0.69	C	0.03	0.50	B	0.53	B	0.03	
	Sassafras - Palm	0.57	C	0.59	C	0.02	0.59	C	0.61	C	0.02	0.62	C	0.65	C	0.03	0.51	B	0.53	B	0.03	
	Palm - Laurel	0.59	C	0.61	C	0.02	0.59	C	0.62	C	0.02	0.62	C	0.65	C	0.03	0.49	B	0.52	B	0.03	
	Laurel - Hawthorn	0.50	B	0.50	B	0.00	0.57	C	0.57	C	0.00	0.62	C	0.63	C	0.01	0.54	B	0.54	B	0.00	
	Hawthorn - Grape	0.58	C	0.59	C	0.02	0.65	C	0.67	C	0.02	0.70	C	0.72	C	0.03	0.62	C	0.64	C	0.02	
	Palm Street	Pacific - Kettner	0.11	A	0.11	A	0.00	0.04	A	0.04	A	0.00	0.01	A	0.01	A	0.00	0.01	A	-0.08	A	-0.09
	Rosecrans	Sassafras Street	1.14	F	1.33	F	0.19	1.17	F	1.38	F	0.21	1.28	F	1.51	F	0.23	0.94	E	1.15	F	0.21
		Kettner-India	1.46	F	1.60	F	0.14	1.46	F	1.62	F	0.16	1.53	F	1.71	F	0.17	1.32	F	1.48	F	0.16
	Nimitz	Pacific - Kettner	0.78	D	0.82	D	0.04	0.82	D	0.86	E	0.05	0.83	D	0.88	E	0.06	0.63	C	0.70	D	0.07
Kettner - San Diego		0.99	E	1.02	F	0.03	1.11	F	1.15	F	0.04	1.11	F	1.15	F	0.04	0.93	E	0.98	E	0.05	
Nimitz	Laurel - Palm	2.38	F	2.60	F	0.22	2.20	F	2.42	F	0.22	2.25	F	2.49	F	0.24	2.64	F	2.89	F	0.25	
	Palm - Sassafras	2.01	F	2.16	F	0.15	1.86	F	2.00	F	0.15	1.88	F	2.04	F	0.16	2.09	F	2.25	F	0.16	
Nimitz	Sassafras - Washington	1.79	F	2.22	F	0.42	1.93	F	2.29	F	0.36	1.93	F	2.28	F	0.35	2.41	F	2.82	F	0.41	
	Barnett - Sport Arena	0.97	E	0.99	E	0.03	0.82	D	0.84	D	0.03	0.83	D	0.86	D	0.03	0.88	D	0.93	E	0.05	
Nimitz	Nimitz Quimby - Barnett	1.03	F	1.07	F	0.03	0.94	E	0.97	E	0.03	0.95	E	0.99	E	0.04	0.98	E	1.05	F	0.06	
	Nimitz - Quimby	1.03	F	1.07	F	0.03	0.94	E	0.97	E	0.03	0.95	E	0.99	E	0.04	0.98	E	1.05	F	0.06	
Nimitz	Harbor - Rosecrans	0.49	B	0.55	C	0.06	0.58	C	0.64	C	0.06	0.61	C	0.68	C	0.07	0.71	C	0.81	D	0.10	

Source: HNTB, 2007.

V/C = Volume to capacity ratio
LOS = Level of service

Legend:

 LOS E
 LOS F
 Significant Impact

D.7.3.2 Intersections

[Tables D-119, D-120, D-121, D-122, D-123, D-124, D-125, and D-126](#) show the intersection turning volumes under the ~~Implementation Plan (With Parking Structure)~~ Proposed Airport Land Use Plan for each analysis year. ~~Intersection lane configurations under the No Project Alternative were assumed to remain the same under the Implementation Plan (With Parking Structure) Proposed Airport Land Use Plan.~~ [Table D-127](#) shows the resulting intersection operations. ~~Intersection configurations were assumed to be the same as existing conditions shown in [Figure D.3-2](#) except for the following changes:~~

- North Harbor Drive and McCain Road is currently an unsignalized intersection with right-in / right-out movements only. In 2010 as part of the Liberty Station Development, this intersection is assumed to be signalized, allowing left turn movements inbound and outbound.
- In 2010, the intersection of North Harbor Drive and Winship Lane would be improved as part of the SDIA CIP to provided exclusive right turn lanes on both inbound and outbound approaches.

[Table D-128](#) compares the intersection delay under the Land Use Plan against the No Project Alternative to identify intersection impacts based on significance criteria identified in Section D.2, measured by an increase to LOS E or F or an increase in vehicle delay of greater than 2 seconds for streets operating at LOS E and greater than 1 second for streets operating at LOS F under the No Project Alternative. The following intersections would have potentially significant traffic impacts due to the project. The following intersections would have significant traffic impacts due to the project:

Intersections with Significant Traffic Impacts

Year 2015

- Hawthorn Street and North Harbor Drive (AM), which deteriorated to LOS F in the AM peak hour under the Land Use Plan.
- Laurel Street and Pacific Highway (PM), which operates at LOS E in the PM peak hour under both the Land Use Plan and No Project Alternative and would experience an increase in delay greater than 2 seconds under the Land Use Plan compared to the No Project Alternative.
- Washington Street and Pacific Highway NB Ramps (AM), which deteriorated to LOS E in the AM peak hour under the Land Use Plan.

Year 2020

- All of the locations identified in year 2015
- Hawthorn Street and North Harbor Drive (PM), which operates at LOS E or F in the AM and PM peak hours under both the Land Use Plan and No Project Alternative and would experience an increase in delay greater than 1 second under the Land Use Plan compared to the No Project Alternative.
- Grape Street and Pacific Highway (PM), which operates at LOS E in the PM peak hour under both the Land Use Plan and No Project Alternative and would experience an increase in delay greater than 2 seconds under the Land Use Plan compared to the No Project Alternative.
- Grape Street and Kettner Boulevard (PM), which operates at LOS E in the PM peak hour under both the Land Use Plan and No Project Alternative and would experience an increase

in delay greater than 2 seconds under the Land Use Plan compared to the No Project Alternative.

- Sassafras Street and Kettner Boulevard (PM), which operates at LOS F in the PM peak hour under both the Land Use Plan and No Project Alternative and would experience an increase in delay greater than 1 second under the Land Use Plan compared to the No Project Alternative.
- Washington Street and Pacific Highway NB Ramps (PM), which operates at LOS E F in the PM peak hour under both the Land Use Plan and No Project Alternative and would experience an increase in delay greater than 1 second under the Land Use Plan compared to the No Project Alternative.

Year 2025

- All of the locations identified in Year 2020

Year 2030

- All locations identified in Year 2025, except:
 - Washington Street and Pacific Highway NB Ramps (AM), which increased to LOS D in the AM Peak hour under both the No Project Alternative and Land Use Plan due to a decrease in regional background traffic as reported in the SANDAG traffic mode.
- Grape Street and I-5 Southbound On-Ramp (PM), which operates at LOS F in the PM peak hour under both the Land Use Plan and No Project Alternative and would experience an increase in delay greater than 1 second under the Land Use Plan compared to the No Project Alternative.

Table D-119
2015 Intersection Turning Volumes – AM Peak Hour – Proposed Airport Land Use Plan

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	666	0	22	13	531	0	8	687	381	2,308
		Airport	0	0	0	280	0	0	0	51	0	0	36	212	579
		Background	0	0	0	386	0	22	13	480	0	8	651	169	1,729
2	North Harbor Drive / McCain St	Total	0	0	0	134	0	115	187	733	0	0	854	425	2,448
		Airport	0	0	0	57	0	86	12	319	0	0	162	69	705
		Background	0	0	0	77	0	29	175	414	0	0	692	356	1,743
3	North Harbor Drive / Spanish Landing	Total	5	0	18	56	0	10	99	842	5	16	1,619	0	2,670
		Airport	0	0	0	56	0	10	99	277	0	0	220	0	662
		Background	5	0	18	0	0	0	0	565	5	16	1,399	0	2,008
4	North Harbor Drive / Harbor Island Drive	Total	44	5	154	40	10	72	78	752	86	243	2,079	0	3,563
		Airport	12	5	45	40	10	72	78	234	21	69	696	0	1,282
		Background	32	0	109	0	0	0	0	518	65	174	1,383	0	2,281
5	North Harbor Drive / Winship Lane	Total	0	0	0	84	0	114	90	857	0	0	2,734	166	4,045
		Airport	0	0	0	84	0	114	90	230	0	0	1,177	166	1,861
		Background	0	0	0	0	0	0	0	627	0	0	1,557	0	2,184
6	North Harbor Drive / Rental Car Road	Total	38	0	200	118	0	40	65	1,695	57	300	2,822	253	5,588
		Airport	38	0	200	118	0	40	65	1,068	57	300	1,265	253	3,404
		Background	0	0	0	0	0	0	0	627	0	0	1,557	0	2,184
7	Sheraton / Harbor Island Drive	Total	13	119	0	0	240	99	85	6	27	0	0	0	589
		Airport	0	62	0	0	100	0	0	0	0	0	0	0	162
		Background	13	57	0	0	140	99	85	6	27	0	0	0	427
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	98	0	0	75	1	294
		Airport	0	0	0	0	0	38	82	18	0	0	25	1	164
		Background	0	0	0	0	0	0	0	80	0	0	50	0	130
9	Sassafras Street / Pacific Highway	Total	90	624	86	56	672	14	6	79	44	248	194	65	2,178
		Airport	90	105	0	0	115	14	6	79	44	0	194	0	647
		Background	0	519	86	56	557	0	0	0	0	248	0	65	1,531
10	Laurel Street / North Harbor Drive	Total	0	0	0	26	0	4	492	1,362	0	0	2,232	39	4,155
		Airport	0	0	0	0	0	0	472	914	0	0	1,207	0	2,593
		Background	0	0	0	26	0	4	20	448	0	0	1,025	39	1,562
11	Hawthorn Street / North Harbor Drive	Total	0	376	0	0	1,294	0	0	0	0	86	0	2,266	4,022
		Airport	0	308	0	0	914	0	0	0	0	7	0	899	2,128
		Background	0	68	0	0	380	0	0	0	0	79	0	1,367	1,894
12	Grape Street / North Harbor Drive	Total	0	318	117	981	568	0	0	0	0	0	0	0	1,984
		Airport	0	308	14	609	313	0	0	0	0	0	0	0	1,244
		Background	0	10	103	372	255	0	0	0	0	0	0	0	740
13	Laurel Street / Pacific Highway	Total	41	409	101	97	321	432	115	613	2	51	848	69	3,099
		Airport	0	86	0	4	37	119	101	371	0	0	491	9	1,218
		Background	41	323	101	93	284	313	14	242	2	51	357	60	1,881
14	Hawthorn Street / Pacific Highway	Total	167	270	0	0	191	62	0	0	0	267	2,137	88	3,182
		Airport	167	85	0	0	30	7	0	0	0	0	732	1	1,022
		Background	0	185	0	0	161	55	0	0	0	267	1,405	87	2,160
15	Grape Street / Pacific Highway	Total	0	703	182	170	946	0	77	992	43	0	0	0	3,113
		Airport	0	238	0	0	29	0	14	566	43	0	0	0	890
		Background	0	465	182	170	917	0	63	426	0	0	0	0	2,223
16	Laurel Street / Kettner Boulevard	Total	0	0	0	257	355	713	0	718	49	44	252	0	2,388
		Airport	0	0	0	0	0	444	0	375	0	0	56	0	875
		Background	0	0	0	257	355	269	0	343	49	44	196	0	1,513
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	169	90	0	0	0	173	2,950	0	3,382
		Airport	0	0	0	0	0	0	0	0	0	0	732	0	732
		Background	0	0	0	0	169	90	0	0	0	173	2,218	0	2,650
18	Grape Street / Kettner Boulevard	Total	0	0	0	103	524	0	0	1,535	101	0	0	0	2,263
		Airport	0	0	0	0	0	0	0	554	12	0	0	0	566
		Background	0	0	0	103	524	0	0	981	89	0	0	0	1,697
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	77	102	87	0	0	0	43	438	1,230	0	0	0	1,977
		Airport	0	0	0	0	0	0	0	4	550	0	0	0	554
		Background	77	102	87	0	0	0	43	434	680	0	0	0	1,423
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	48	46	0	0	0	0	0	0	0	0	0	0	2,678
		Airport	0	0	0	0	0	0	0	0	0	0	0	0	727
		Background	48	46	0	0	0	0	0	0	0	0	0	0	1,951
21	Laurel Street / India Street	Total	54	133	23	0	0	0	588	392	0	0	272	231	1,693
		Airport	0	0	0	0	0	0	336	39	0	0	56	0	431
		Background	54	133	23	0	0	0	252	353	0	0	216	231	1,262
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	115	1,412	399	0	77	70	139	153	0	2,365
		Airport	0	0	0	0	444	96	0	39	40	0	97	0	716
		Background	0	0	0	115	968	303	0	38	30	139	56	0	1,649
23	Sassafras Street / India Street	Total	244	979	12	0	0	0	126	28	58	0	34	22	1,503
		Airport	97	336	0	0	0	0	39	0	0	0	0	0	472
		Background	147	643	12	0	0	0	87	28	58	0	34	22	1,031
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	200	35	58	0	73	41	185	238	0	830
		Airport	0	0	0	0	0	1	0	36	14	97	100	0	248
		Background	0	0	0	200	35	57	0	37	27	88	138	0	582
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	112	16	167	29	7	20	24	0	255	427	162	53	1,272
		Airport	28	0	69	0	0	0	0	0	36	169	0	0	302
		Background	84	16	98	29	7	20	24	0	219	258	162	53	970
26	Washington Street / Hancock Street	Total	0	307	119	351	463	0	358	167	156	0	0	0	1,921
		Airport	0	88	17	0	135	0	0	0	34	0	0	0	274
		Background	0	219	102	351	328	0	358	167	122	0	0	0	1,647
27	Washington Street / San Diego Avenue	Total	106	649	0	0	588	553	0	0	0	216	225	8	2,345
		Airport	17	71	0	0	101	0	0	0	0	34	0	0	223
		Background	89	578	0	0	487	553	0	0	0	182	225	8	2,122
28	Rosecrans Street / Pacific Highway	Total	237	177	263	116	171	72	64	184	151	317	153	89	1,994
		Airport	0	3	11	0	4	1	1	2	0	15	2	0	39
		Background	237	174	252	116	167	71	63	182	151	302	151	89	1,955
29	Rosecrans Street / Nimitz Boulevard	Total	16	140	120	14	142	15	155	671	30	158	627	40	2,128
		Airport	0	97	115	0	128	0	0	0	152	0	0	0	492
		Background	16	43	5	14	14	15	155	671	30	6	627	40	1,636

Source: HNTB, 2007

Note:

- (1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.
- 19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
- 25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

Table D-120
2015 Intersection Turning Volumes – PM Peak Hour – Proposed Airport Land Use Plan

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	552	0	55	44	689	0	17	683	968	3,008
		Airport	0	0	0	249	0	0	44	0	0	0	45	262	600
		Background	0	0	0	303	0	55	44	645	0	17	638	706	2,408
2	North Harbor Drive / McCain St	Total	0	0	0	510	0	256	39	1,052	0	0	1,090	111	3,058
		Airport	0	0	0	96	0	81	8	284	0	0	226	49	744
		Background	0	0	0	414	0	175	31	768	0	0	864	62	2,314
3	North Harbor Drive / Spanish Landing	Total	7	0	25	120	0	21	82	1,873	20	6	1,235	0	3,389
		Airport	0	0	0	120	0	21	82	298	0	0	254	0	775
		Background	7	0	25	0	0	0	0	1,575	20	6	981	0	2,614
4	North Harbor Drive / Harbor Island Drive	Total	160	4	343	44	9	69	64	1,822	131	471	1,472	0	4,589
		Airport	13	4	59	44	9	69	64	333	20	61	632	0	1,308
		Background	147	0	284	0	0	0	0	1,489	111	410	840	0	3,281
5	North Harbor Drive / Winship Lane	Total	0	0	0	103	0	125	85	2,124	0	0	2,279	129	4,845
		Airport	0	0	0	103	0	125	85	351	0	0	1,029	129	1,822
		Background	0	0	0	0	0	0	0	1,773	0	0	1,250	0	3,023
6	North Harbor Drive / Rental Car Road	Total	51	0	267	318	0	81	57	2,892	77	400	2,276	193	6,612
		Airport	51	0	267	318	0	81	57	1,119	77	400	1,026	193	3,589
		Background	0	0	0	0	0	0	0	1,773	0	0	1,250	0	3,023
7	Sheraton / Harbor Island Drive	Total	23	429	0	0	541	70	77	2	25	0	0	0	1,167
		Airport	0	76	0	0	90	0	0	0	0	0	0	0	166
		Background	23	353	0	0	451	70	77	2	25	0	0	0	1,001
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	55	68	108	0	0	142	1	374
		Airport	0	0	0	0	0	55	68	22	0	0	21	1	167
		Background	0	0	0	0	0	0	0	86	0	0	121	0	207
9	Sassafras Street / Pacific Highway	Total	71	1,056	424	150	1,160	11	11	146	71	202	147	54	3,503
		Airport	71	115	0	0	101	11	11	146	71	0	147	0	673
		Background	0	941	424	150	1,059	0	0	0	0	202	0	54	2,830
10	Laurel Street / North Harbor Drive	Total	0	0	0	76	0	11	1,270	2,324	0	0	1,999	102	5,782
		Airport	0	0	0	0	0	0	575	1,129	0	0	1,073	0	2,777
		Background	0	0	0	76	0	11	695	1,195	0	0	926	102	3,005
11	Hawthorn Street / North Harbor Drive	Total	0	667	0	0	2,458	0	0	0	0	141	0	1,403	4,669
		Airport	0	274	0	0	1,129	0	0	0	0	5	0	799	2,207
		Background	0	393	0	0	1,329	0	0	0	0	136	0	604	2,462
12	Grape Street / North Harbor Drive	Total	0	727	261	1,392	1,202	0	0	0	0	0	0	0	3,582
		Airport	0	274	10	747	385	0	0	0	0	0	0	0	1,419
		Background	0	453	251	645	814	0	0	0	0	0	0	0	2,163
13	Laurel Street / Pacific Highway	Total	131	726	171	164	553	454	527	844	62	56	965	85	4,738
		Airport	0	64	0	6	56	110	116	459	0	0	436	6	1,253
		Background	131	662	171	158	497	344	411	385	62	56	529	79	3,485
14	Hawthorn Street / Pacific Highway	Total	190	712	0	0	638	57	0	0	0	152	1,304	86	3,139
		Airport	149	64	0	0	51	5	0	0	0	0	650	1	920
		Background	41	648	0	0	587	52	0	0	0	152	654	85	2,219
15	Grape Street / Pacific Highway	Total	0	807	504	280	619	0	57	1,940	43	0	0	0	4,250
		Airport	0	203	0	1	50	0	10	703	43	0	0	0	1,010
		Background	0	604	504	279	569	0	47	1,237	0	0	0	0	3,240
16	Laurel Street / Kettner Boulevard	Total	0	0	0	311	664	766	0	1,046	86	61	297	0	3,231
		Airport	0	0	0	0	0	394	0	465	0	0	48	0	907
		Background	0	0	0	311	664	372	0	581	86	61	249	0	2,324
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	441	79	0	0	0	213	1,738	0	2,471
		Airport	0	0	0	0	0	0	0	0	0	0	650	0	650
		Background	0	0	0	0	441	79	0	0	0	213	1,088	0	1,821
18	Grape Street / Kettner Boulevard	Total	0	0	0	251	553	0	0	3,461	101	0	0	0	4,366
		Airport	0	0	0	0	0	0	0	685	19	0	0	0	704
		Background	0	0	0	251	553	0	0	2,776	82	0	0	0	3,662
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	117	223	218	0	0	0	26	542	2,347	0	0	0	3,473
		Airport	0	0	0	0	0	0	0	5	680	0	0	0	685
		Background	117	223	218	0	0	0	26	537	1,667	0	0	0	2,788
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	39	61	0	0	0	0	0	0	0	0	1,729	60	1,889
		Airport	0	0	0	0	0	0	0	0	0	0	0	646	646
		Background	39	61	0	0	0	0	0	0	0	0	0	1,083	60
21	Laurel Street / India Street	Total	54	357	106	0	0	0	857	570	0	0	336	317	2,597
		Airport	0	0	0	0	0	0	415	50	0	0	48	0	513
		Background	54	357	106	0	0	0	442	520	0	0	288	317	2,084
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	189	1,918	302	0	256	124	97	135	0	3,021
		Airport	0	0	0	0	394	73	0	73	74	0	74	0	688
		Background	0	0	0	189	1,524	229	0	183	50	97	61	0	2,333
23	Sassafras Street / India Street	Total	218	1,653	36	0	0	0	316	69	126	0	15	18	2,451
		Airport	74	415	0	0	0	0	73	0	0	0	0	0	562
		Background	144	1,238	36	0	0	0	243	69	126	0	15	18	1,889
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	527	53	12	0	231	53	243	109	0	1,228
		Airport	0	0	0	0	0	1	0	28	11	85	72	0	197
		Background	0	0	0	527	53	11	0	203	42	158	37	0	1,031
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	55	36	289	63	60	8	60	15	640	409	234	66	1,935
		Airport	20	0	89	0	0	0	0	28	137	0	0	0	274
		Background	35	36	200	63	60	8	60	15	612	272	234	66	1,661
26	Washington Street / Hancock Street	Total	0	755	175	376	450	0	562	335	166	0	0	0	2,819
		Airport	0	103	13	0	112	0	0	0	25	0	0	0	253
		Background	0	652	162	376	338	0	562	335	141	0	0	0	2,566
27	Washington Street / San Diego Avenue	Total	204	1,282	0	0	620	504	0	0	0	211	304	18	3,143
		Airport	13	90	0	0	88	0	0	0	0	25	0	0	216
		Background	191	1,192	0	0	532	504	0	0	0	186	304	18	2,927
28	Rosecrans Street / Pacific Highway	Total	418	342	759	141	164	79	119	485	180	260	316	134	3,397
		Airport	0	4	14	0	4	1	1	2	0	13	2	0	41
		Background	418	338	745	141	160	78	118	483	180	247	314	134	3,356
29	Rosecrans Street / Nimitz Boulevard	Total	18	237	162	11	125	11	348	852	34	223	643	52	2,716
		Airport	0	119	142	0	113	0	0	0	0	135	0	0	509
		Background	18	118	20	11	12	11	348	852	34	88	643	52	2,207

Source: HNTB, 2007

Note:

- (1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.
- 19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
- 25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

**Table D-121
2020 Intersection Turning Volumes – AM Peak Hour – Proposed Airport Land Use Plan**

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total		
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	770	0	30	14	553	0	9	841	433	2,650	
		Airport	0	0	0	301	0	0	0	56	0	0	39	229	625	
		Background	0	0	0	469	0	30	14	497	0	9	802	204	2,025	
2	North Harbor Drive / McCain St	Total	0	0	0	144	0	127	204	811	0	0	867	458	2,611	
		Airport	0	0	0	59	0	95	12	345	0	0	173	69	753	
		Background	0	0	0	85	0	32	192	466	0	0	694	389	1,858	
3	North Harbor Drive / Spanish Landing	Total	5	0	18	65	0	12	112	921	6	18	1,698	0	2,855	
		Airport	0	0	0	65	0	12	112	291	0	0	231	0	711	
		Background	5	0	18	0	0	0	630	6	18	1,467	0	2,144		
4	North Harbor Drive / Harbor Island Drive	Total	46	6	160	43	11	78	84	826	93	250	2,222	0	3,819	
		Airport	13	6	47	43	11	78	84	251	21	69	770	0	1,393	
		Background	33	0	113	0	0	0	0	575	72	181	1,452	0	2,426	
5	North Harbor Drive / Winship Lane	Total	0	0	0	89	0	120	94	935	0	0	2,920	175	4,333	
		Airport	0	0	0	89	0	120	94	246	0	0	1,287	175	2,011	
		Background	0	0	0	0	0	0	0	689	0	0	1,633	0	2,322	
6	North Harbor Drive / Rental Car Road	Total	38	0	200	127	0	42	70	1,864	57	300	3,015	270	5,983	
		Airport	38	0	200	127	0	42	70	1,175	57	300	1,382	270	3,661	
		Background	0	0	0	0	0	0	0	689	0	0	1,633	0	2,322	
7	Sheraton / Harbor Island Drive	Total	13	127	0	0	256	99	85	6	27	0	0	0	613	
		Airport	0	65	0	0	102	0	0	0	0	0	0	0	167	
		Background	13	62	0	0	154	99	85	6	27	0	0	0	446	
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	101	0	0	78	1	300	
		Airport	0	0	0	0	0	38	82	19	0	0	27	1	167	
		Background	0	0	0	0	0	0	0	82	0	0	51	0	133	
9	Sassafras Street / Pacific Highway	Total	107	638	85	50	625	17	7	98	51	233	234	61	2,206	
		Airport	107	121	0	0	128	17	7	98	51	0	234	0	763	
		Background	0	517	85	50	497	0	0	0	0	233	0	61	1,443	
10	Laurel Street / North Harbor Drive	Total	0	0	0	23	0	4	533	1,469	0	0	2,451	44	4,524	
		Airport	0	0	0	0	0	0	512	990	0	0	1,296	0	2,798	
		Background	0	0	0	23	0	4	21	479	0	0	1,155	44	1,726	
11	Hawthorn Street / North Harbor Drive	Total	0	402	0	0	1,412	0	0	0	0	108	0	2,667	4,589	
		Airport	0	331	0	0	990	0	0	0	0	10	0	965	2,296	
		Background	0	71	0	0	422	0	0	0	0	98	0	1,702	2,293	
12	Grape Street / North Harbor Drive	Total	0	340	113	1,047	605	0	0	0	0	0	0	0	2,105	
		Airport	0	331	19	659	340	0	0	0	0	0	0	0	1,349	
		Background	0	9	94	388	265	0	0	0	0	0	0	0	756	
13	Laurel Street / Pacific Highway	Total	46	472	114	95	322	432	122	617	1	45	843	64	3,173	
		Airport	0	107	0	5	47	128	110	402	0	0	528	11	1,338	
		Background	46	365	114	90	275	304	12	215	1	45	315	53	1,835	
14	Hawthorn Street / Pacific Highway	Total	179	314	0	0	220	72	0	0	0	294	2,332	97	3,508	
		Airport	179	106	0	0	37	10	0	0	0	786	1	1,119		
		Background	0	208	0	0	183	62	0	0	0	294	1,546	96	2,389	
15	Grape Street / Pacific Highway	Total	0	767	195	191	1,067	0	94	1,122	47	0	0	0	3,483	
		Airport	0	266	0	0	37	0	19	612	47	0	0	0	981	
		Background	0	501	195	191	1,030	0	75	510	0	0	0	0	2,502	
16	Laurel Street / Kettner Boulevard	Total	0	0	0	432	597	930	0	709	43	36	224	0	2,971	
		Airport	0	0	0	0	0	477	0	407	0	0	61	0	945	
		Background	0	0	0	432	597	453	0	302	43	36	163	0	2,026	
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	285	152	0	0	0	181	3,110	0	3,728	
		Airport	0	0	0	0	0	0	0	0	0	0	787	0	787	
		Background	0	0	0	0	285	152	0	0	0	181	2,323	0	2,941	
18	Grape Street / Kettner Boulevard	Total	0	0	0	132	671	0	0	1,663	109	0	0	0	2,575	
		Airport	0	0	0	0	0	0	0	600	13	0	0	0	613	
		Background	0	0	0	132	671	0	0	1,063	96	0	0	0	1,962	
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	121	159	136	0	0	0	38	391	1,202	0	0	0	2,047	
		Airport	0	0	0	0	0	0	0	4	596	0	0	0	600	
		Background	121	159	136	0	0	0	38	387	606	0	0	0	1,447	
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	52	49	0	0	0	0	0	0	0	0	0	2,522	69	2,692
		Airport	0	0	0	0	0	0	0	0	0	0	0	781	0	781
		Background	52	49	0	0	0	0	0	0	0	0	0	1,741	69	1,911
21	Laurel Street / India Street	Total	43	106	18	0	0	0	575	338	0	0	266	219	1,565	
		Airport	0	0	0	0	0	0	364	43	0	0	61	0	468	
		Background	43	106	18	0	0	0	211	295	0	0	205	219	1,097	
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	274	2,789	832	0	80	74	137	165	0	4,351	
		Airport	0	0	0	0	477	109	0	44	45	0	110	0	785	
		Background	0	0	0	274	2,312	723	0	36	29	137	55	0	3,566	
23	Sassafras Street / India Street	Total	238	892	10	0	0	0	135	27	57	0	37	23	1,419	
		Airport	118	364	0	0	0	0	49	0	0	0	0	0	531	
		Background	120	528	10	0	0	0	86	27	57	0	37	23	888	
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	226	40	66	0	88	47	201	285	0	953	
		Airport	0	0	0	0	0	1	0	49	19	106	136	0	311	
		Background	0	0	0	226	40	65	0	39	28	95	149	0	642	
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	95	11	142	31	7	21	27	0	284	468	166	54	1,306	
		Airport	38	0	76	0	0	0	1	0	49	204	0	0	368	
		Background	57	11	66	31	7	21	26	0	235	264	166	54	938	
26	Washington Street / Hancock Street	Total	0	325	127	393	525	0	473	221	208	0	0	0	2,272	
		Airport	0	101	23	0	158	0	0	0	46	0	0	0	328	
		Background	0	224	104	393	367	0	473	221	162	0	0	0	1,944	
27	Washington Street / San Diego Avenue	Total	122	726	0	0	699	668	0	0	0	236	233	8	2,692	
		Airport	23	79	0	0	111	0	0	0	0	47	0	0	260	
		Background	99	647	0	0	588	668	0	0	0	189	233	8	2,432	
28	Rosecrans Street / Pacific Highway	Total	206	154	231	99	147	61	64	182	150	349	168	98	1,909	
		Airport	0	3	12	0	5	1	1	2	0	17	2	0	43	
		Background	206	151	219	99	142	60	63	180	150	332	166	98	1,866	
29	Rosecrans Street / Nimitz Boulevard	Total	20	157	132	35	173	37	124	536	24	170	551	35	1,994	
		Airport	0	105	125	0	137	0	0	0	0	164	0	0	531	
		Background	20	52	7	35	36	37	124	536	24	6	551	35	1,463	

Source: HNTB, 2007

Note:

- (1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.
- 19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
- 25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

Table D-122
 2020 Intersection Turning Volumes – PM Peak Hour – Proposed Airport Land Use Plan

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total			
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	657	0	72	45	715	0	20	835	1,126	3,470		
		Airport	0	0	0	266	0	0	0	48	0	0	49	281	644		
		Background	0	0	0	391	0	72	45	667	0	20	786	845	2,826		
2	North Harbor Drive / McCain St	Total	0	0	0	548	0	280	42	1,175	0	0	1,133	118	3,296		
		Airport	0	0	0	96	0	89	8	305	0	0	242	50	790		
		Background	0	0	0	452	0	191	34	870	0	0	891	68	2,506		
3	North Harbor Drive / Spanish Landing	Total	7	0	25	141	0	25	92	2,059	25	7	1,285	0	3,666		
		Airport	0	0	0	141	0	25	92	310	0	0	266	0	834		
		Background	7	0	25	0	0	0	0	1,749	25	7	1,019	0	2,832		
4	North Harbor Drive / Harbor Island Drive	Total	166	5	354	46	10	75	70	2,010	145	486	1,569	0	4,936		
		Airport	14	5	60	46	10	75	70	360	21	62	696	0	1,419		
		Background	152	0	294	0	0	0	0	1,650	124	424	873	0	3,517		
5	North Harbor Drive / Winship Lane	Total	0	0	0	110	0	130	89	2,322	0	0	2,422	137	5,210		
		Airport	0	0	0	110	0	130	89	377	0	0	1,124	137	1,967		
		Background	0	0	0	0	0	0	0	1,945	0	0	1,298	0	3,243		
6	North Harbor Drive / Rental Car Road	Total	51	0	267	338	0	87	62	3,169	77	400	2,421	208	7,080		
		Airport	51	0	267	338	0	87	62	1,224	77	400	1,123	208	3,837		
		Background	0	0	0	0	0	0	0	1,945	0	0	1,298	0	3,243		
7	Sheraton / Harbor Island Drive	Total	23	447	0	0	571	70	77	2	25	0	0	0	1,215		
		Airport	0	78	0	0	93	0	0	0	0	0	0	0	171		
		Background	23	369	0	0	478	70	77	2	25	0	0	0	1,044		
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	55	68	113	0	0	148	1	385		
		Airport	0	0	0	0	0	55	68	24	0	0	23	1	171		
		Background	0	0	0	0	0	0	0	89	0	0	125	0	214		
9	Sassafras Street / Pacific Highway	Total	84	1,066	422	134	1,055	13	13	184	86	191	177	51	3,476		
		Airport	84	129	0	0	111	13	13	184	86	0	177	0	797		
		Background	0	937	422	134	944	0	0	0	0	191	0	51	2,679		
10	Laurel Street / North Harbor Drive	Total	0	0	0	68	0	10	1,361	2,489	0	0	2,190	115	6,233		
		Airport	0	0	0	0	0	0	0	618	1,212	0	0	1,146	0	2,976	
		Background	0	0	0	68	0	10	743	1,277	0	0	1,044	115	3,257		
11	Hawthorn Street / North Harbor Drive	Total	0	703	0	0	2,687	0	0	0	0	176	0	1,607	5,173		
		Airport	0	293	0	0	1,212	0	0	0	0	7	0	854	2,366		
		Background	0	410	0	0	1,475	0	0	0	0	169	0	753	2,807		
12	Grape Street / North Harbor Drive	Total	0	710	245	1,474	1,265	0	0	0	0	0	0	0	3,694		
		Airport	0	293	14	802	417	0	0	0	0	0	0	0	1,526		
		Background	0	417	231	672	848	0	0	0	0	0	0	0	2,168		
13	Laurel Street / Pacific Highway	Total	148	827	193	160	554	452	490	835	55	49	932	77	4,772		
		Airport	0	80	0	7	72	118	125	493	0	0	466	8	1,369		
		Background	148	747	193	153	482	334	365	342	55	49	466	69	3,403		
14	Hawthorn Street / Pacific Highway	Total	205	807	0	0	730	66	0	0	0	167	1,414	94	3,483		
		Airport	159	79	0	0	64	7	0	0	0	0	695	1	1,005		
		Background	46	728	0	0	666	59	0	0	0	167	719	93	2,478		
15	Grape Street / Pacific Highway	Total	0	874	542	314	703	0	70	2,237	48	0	0	0	4,788		
		Airport	0	225	0	1	64	0	14	754	48	0	0	0	1,106		
		Background	0	649	542	313	639	0	56	1,483	0	0	0	0	3,682		
16	Laurel Street / Kettner Boulevard	Total	0	0	0	523	1,116	1,048	0	1,012	76	51	261	0	4,087		
		Airport	0	0	0	0	0	422	0	500	0	0	53	0	975		
		Background	0	0	0	523	1,116	626	0	512	76	51	208	0	3,112		
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	742	134	0	0	0	223	1,834	0	2,933		
		Airport	0	0	0	0	0	0	0	0	0	0	695	0	695		
		Background	0	0	0	0	742	134	0	0	0	223	1,139	0	2,238		
18	Grape Street / Kettner Boulevard	Total	0	0	0	321	708	0	0	3,744	108	0	0	0	4,881		
		Airport	0	0	0	0	0	0	0	735	20	0	0	0	755		
		Background	0	0	0	321	708	0	0	3,009	88	0	0	0	4,126		
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	183	348	340	0	0	0	23	484	2,217	0	0	0	3,595		
		Airport	0	0	0	0	0	0	0	5	730	0	0	0	735		
		Background	183	348	340	0	0	0	23	479	1,487	0	0	0	2,860		
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	42	65	0	0	0	0	0	0	0	0	0	1,658	54	1,819	
		Airport	0	0	0	0	0	0	0	0	0	0	0	0	691	0	691
		Background	42	65	0	0	0	0	0	0	0	0	0	0	967	54	1,128
21	Laurel Street / India Street	Total	43	285	84	0	0	0	815	489	0	0	327	301	2,344		
		Airport	0	0	0	0	0	0	446	54	0	0	53	0	553		
		Background	43	285	84	0	0	0	369	435	0	0	274	301	1,791		
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	452	4,061	631	0	259	132	96	145	0	5,776		
		Airport	0	0	0	0	422	83	0	83	84	0	84	0	756		
		Background	0	0	0	452	3,639	548	0	176	48	96	61	0	5,020		
23	Sassafras Street / India Street	Total	207	1,462	30	0	0	0	332	68	124	0	16	19	2,258		
		Airport	89	446	0	0	0	0	92	0	0	0	0	0	627		
		Background	118	1,016	30	0	0	0	240	68	124	0	16	19	1,631		
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	596	60	13	0	251	59	262	138	0	1,379		
		Airport	0	0	0	0	0	1	0	38	15	92	98	0	244		
		Background	0	0	0	596	60	12	0	213	44	170	40	0	1,135		
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	50	25	233	67	65	8	64	16	696	441	240	68	1,973		
		Airport	27	0	97	0	0	0	0	38	163	0	0	0	325		
		Background	23	25	136	67	65	8	64	16	658	278	240	68	1,648		
26	Washington Street / Hancock Street	Total	0	784	184	421	508	0	742	443	219	0	0	0	3,301		
		Airport	0	117	18	0	129	0	0	0	33	0	0	0	297		
		Background	0	667	166	421	379	0	742	443	186	0	0	0	3,004		
27	Washington Street / San Diego Avenue	Total	232	1,435	0	0	739	609	0	0	0	227	315	19	3,576		
		Airport	18	99	0	0	96	0	0	0	0	34	0	0	247		
		Background	214	1,336	0	0	643	609	0	0	0	193	315	19	3,329		
28	Rosecrans Street / Pacific Highway	Total	363	298	663	120	140	68	118	482	178	287	348	147	3,212		
		Airport	0	4	15	0	4	1	1	2	0	15	2	0	44		
		Background	363	294	648	120	136	67	117	480	178	272	346	147	3,168		
29	Rosecrans Street / Nimitz Boulevard	Total	22	273	177	28	152	28	278	680	27	223	566	46	2,500		
		Airport	0	128	153	0	121	0	0	0	0	145	0	0	547		
		Background	22	145	24	28	31	28	278	680	27	78	566	46	1,953		

Source: HNTB, 2007

Note:

- (1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.
- 19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
- 25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

**Table D-123
2025 Intersection Turning Volumes – AM Peak Hour – Proposed Airport Land Use Plan**

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total		
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	307	0	31	14	579	0	10	893	456	2,790	
		Airport	0	0	0	315	0	0	0	59	0	0	42	241	657	
		Background	0	0	0	492	0	31	14	520	0	10	851	215	2,133	
2	North Harbor Drive / McCain St	Total	0	0	0	146	0	136	210	824	0	0	939	472	2,727	
		Airport	0	0	0	59	0	103	12	362	0	0	180	70	786	
		Background	0	0	0	87	0	33	198	462	0	0	759	402	1,941	
3	North Harbor Drive / Spanish Landing	Total	5	0	18	71	0	13	122	929	6	18	1,795	0	2,977	
		Airport	0	0	0	71	0	13	122	299	0	0	238	0	743	
		Background	5	0	18	0	0	0	630	6	18	1,557	0	2,234		
4	North Harbor Drive / Harbor Island Drive	Total	46	6	160	44	12	82	88	837	93	264	2,370	0	4,002	
		Airport	13	6	47	44	12	82	88	261	21	70	828	0	1,472	
		Background	33	0	113	0	0	0	576	72	194	1,542	0	2,530		
5	North Harbor Drive / Winship Lane	Total	0	0	0	90	0	123	96	945	0	0	3,103	179	4,536	
		Airport	0	0	0	90	0	123	96	256	0	0	1,367	179	2,111	
		Background	0	0	0	0	0	0	689	0	0	1,736	0	2,425		
6	North Harbor Drive / Rental Car Road	Total	38	0	200	133	0	45	73	1,938	57	300	3,199	283	6,266	
		Airport	38	0	200	133	0	45	73	1,249	57	300	1,463	283	3,841	
		Background	0	0	0	0	0	0	689	0	0	1,736	0	2,425		
7	Sheraton / Harbor Island Drive	Total	13	128	0	0	270	99	85	6	27	0	0	0	628	
		Airport	0	66	0	0	103	0	0	0	0	0	0	0	169	
		Background	13	62	0	0	167	99	85	6	27	0	0	0	459	
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	101	0	0	79	1	301	
		Airport	0	0	0	0	0	38	82	21	0	0	29	1	171	
		Background	0	0	0	0	0	0	80	0	0	0	50	0	130	
9	Sassafras Street / Pacific Highway	Total	116	681	91	57	696	19	8	108	55	268	257	70	2,426	
		Airport	116	133	0	0	137	19	8	108	55	0	257	0	833	
		Background	0	548	91	57	559	0	0	0	0	268	0	70	1,593	
10	Laurel Street / North Harbor Drive	Total	0	0	0	15	0	3	561	1,494	0	0	2,572	46	4,691	
		Airport	0	0	0	0	0	0	541	1,042	0	0	1,358	0	2,941	
		Background	0	0	0	15	0	3	20	452	0	0	1,214	46	1,750	
11	Hawthorn Street / North Harbor Drive	Total	0	422	0	0	1,485	0	0	0	0	113	0	2,780	4,800	
		Airport	0	347	0	0	1,042	0	0	0	0	11	0	1,011	2,411	
		Background	0	75	0	0	443	0	0	0	0	102	0	1,769	2,389	
12	Grape Street / North Harbor Drive	Total	0	356	122	1,104	640	0	0	0	0	0	0	0	2,222	
		Airport	0	347	23	694	360	0	0	0	0	0	0	0	1,424	
		Background	0	9	99	410	280	0	0	0	0	0	0	0	798	
13	Laurel Street / Pacific Highway	Total	50	518	124	99	341	452	124	568	1	44	864	64	3,249	
		Airport	0	121	1	5	53	134	116	425	0	0	554	12	1,421	
		Background	50	397	123	94	288	318	8	143	1	44	310	52	1,828	
14	Hawthorn Street / Pacific Highway	Total	188	346	0	0	240	78	0	0	0	0	336	2,591	112	3,891
		Airport	188	120	0	0	42	11	0	0	0	0	823	2	1,186	
		Background	0	226	0	0	198	67	0	0	0	336	1,768	110	2,705	
15	Grape Street / Pacific Highway	Total	0	814	207	208	1,162	0	101	1,176	50	0	0	0	3,718	
		Airport	0	284	0	0	41	0	23	644	50	0	0	0	1,042	
		Background	0	530	207	208	1,121	0	78	532	0	0	0	0	2,676	
16	Laurel Street / Kettner Boulevard	Total	0	0	0	371	511	888	0	728	42	37	231	0	2,808	
		Airport	0	0	0	1	0	500	0	431	0	0	66	0	998	
		Background	0	0	0	370	511	388	0	297	42	37	165	0	1,810	
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	236	126	0	0	0	193	3,303	0	3,858	
		Airport	0	0	0	0	0	0	0	0	0	0	825	0	825	
		Background	0	0	0	0	236	126	0	0	0	193	2,478	0	3,033	
18	Grape Street / Kettner Boulevard	Total	0	0	0	122	622	0	0	1,711	111	0	0	0	2,566	
		Airport	0	0	0	0	0	0	0	631	13	0	0	0	644	
		Background	0	0	0	122	622	0	0	1,080	98	0	0	0	1,922	
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	126	166	142	0	0	0	39	404	1,254	0	0	0	2,131	
		Airport	0	0	0	0	0	0	0	4	628	0	0	0	632	
		Background	126	166	142	0	0	0	39	400	626	0	0	0	1,499	
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	55	53	0	0	0	0	0	0	0	0	0	2,553	69	2,730
		Airport	0	0	0	0	0	0	0	0	0	0	0	819	0	819
		Background	55	53	0	0	0	0	0	0	0	0	0	1,734	69	1,911
21	Laurel Street / India Street	Total	47	111	19	0	0	0	596	343	3	0	272	221	1,612	
		Airport	2	0	0	0	0	0	383	46	3	0	65	0	499	
		Background	45	111	19	0	0	0	213	297	0	0	207	221	1,113	
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	243	2,545	757	0	88	81	139	174	0	4,027	
		Airport	0	0	0	0	500	117	0	48	49	0	118	0	832	
		Background	0	0	0	243	2,045	640	0	40	32	139	56	0	3,195	
23	Sassafras Street / India Street	Total	248	905	10	0	0	0	142	28	58	0	40	26	1,457	
		Airport	129	383	0	0	0	0	54	0	0	0	0	0	566	
		Background	119	522	10	0	0	0	88	28	58	0	40	26	891	
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	201	35	58	0	97	49	212	322	0	974	
		Airport	0	0	0	0	0	1	0	59	22	111	163	0	356	
		Background	0	0	0	201	35	57	0	38	27	101	159	0	618	
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	73	5	112	31	7	22	29	0	309	491	165	54	1,298	
		Airport	45	0	80	0	0	0	1	0	58	229	0	0	413	
		Background	28	5	32	31	7	22	28	0	251	262	165	54	885	
26	Washington Street / Hancock Street	Total	0	334	132	387	535	0	531	248	237	0	0	0	2,404	
		Airport	0	111	28	0	174	0	0	0	55	0	0	0	368	
		Background	0	223	104	387	361	0	531	248	182	0	0	0	2,036	
27	Washington Street / San Diego Avenue	Total	125	720	0	0	729	693	0	0	0	236	225	8	2,738	
		Airport	27	83	0	0	118	0	0	0	0	56	0	0	284	
		Background	98	637	0	0	611	693	0	0	0	182	225	8	2,454	
28	Rosecrans Street / Pacific Highway	Total	209	157	236	100	149	62	65	186	152	352	170	98	1,936	
		Airport	0	4	13	0	5	1	1	2	0	18	3	0	47	
		Background	209	153	223	100	144	61	64	184	152	334	167	98	1,889	
29	Rosecrans Street / Nimitz Boulevard	Total	21	164	138	9	154	10	121	524	23	177	554	35	1,930	
		Airport	0	110	131	0	144	0	0	0	0	171	0	0	556	
		Background	21	54	7	9	10	10	121	524	23	6	554	35	1,374	

Source: HNTB, 2007

Note:

- (1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.
- 19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
- 25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

Table D-124
2025 Intersection Turning Volumes – PM Peak Hour – Proposed Airport Land Use Plan

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	692	0	76	47	750	0	22	886	1,185	3,658
		Airport	0	0	0	278	0	0	0	51	0	0	52	294	675
		Background	0	0	0	414	0	76	47	699	0	22	834	891	2,983
2	North Harbor Drive / McCain St	Total	0	0	0	564	0	292	43	1,172	0	0	1,198	120	3,389
		Airport	0	0	0	97	0	95	8	320	0	0	251	50	821
		Background	0	0	0	467	0	197	35	852	0	0	947	70	2,568
3	North Harbor Drive / Spanish Landing	Total	7	0	25	155	0	27	100	2,076	27	7	1,354	0	3,778
		Airport	0	0	0	155	0	27	100	317	0	0	274	0	873
		Background	7	0	25	0	0	0	0	1,759	27	7	1,080	0	2,905
4	North Harbor Drive / Harbor Island Drive	Total	166	5	354	48	11	78	73	2,038	144	518	1,679	0	5,114
		Airport	14	5	60	48	11	78	73	378	21	63	744	0	1,495
		Background	152	0	294	0	0	0	0	1,660	123	455	935	0	3,619
5	North Harbor Drive / Winship Lane	Total	0	0	0	111	0	135	91	2,349	0	0	2,580	141	5,407
		Airport	0	0	0	111	0	135	91	395	0	0	1,190	141	2,063
		Background	0	0	0	0	0	0	0	1,954	0	0	1,390	0	3,344
6	North Harbor Drive / Rental Car Road	Total	51	0	267	352	0	91	65	3,250	77	400	2,579	220	7,352
		Airport	51	0	267	352	0	91	65	1,296	77	400	1,189	220	4,008
		Background	0	0	0	0	0	0	0	1,954	0	0	1,390	0	3,344
7	Sheraton / Harbor Island Drive	Total	23	448	0	0	603	70	77	2	25	0	0	0	1,248
		Airport	0	79	0	0	94	0	0	0	0	0	0	0	173
		Background	23	369	0	0	509	70	77	2	25	0	0	0	1,075
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	55	68	112	0	0	146	1	382
		Airport	0	0	0	0	0	55	68	26	0	0	25	1	175
		Background	0	0	0	0	0	0	0	86	0	0	121	0	207
9	Sassafras Street / Pacific Highway	Total	90	1,133	448	151	1,180	14	15	204	94	219	193	58	3,799
		Airport	90	139	0	0	118	14	15	204	94	0	193	0	867
		Background	0	994	448	151	1,062	0	0	0	0	219	0	58	2,932
10	Laurel Street / North Harbor Drive	Total	0	0	0	45	0	7	1,349	2,473	0	0	2,294	121	6,289
		Airport	0	0	0	0	0	0	648	1,268	0	0	1,197	0	3,113
		Background	0	0	0	45	0	7	701	1,205	0	0	1,097	121	3,176
11	Hawthorn Street / North Harbor Drive	Total	0	738	0	0	2,816	0	0	0	0	185	0	1,674	5,413
		Airport	0	305	0	0	1,268	0	0	0	0	9	0	892	2,474
		Background	0	433	0	0	1,548	0	0	0	0	176	0	782	2,939
12	Grape Street / North Harbor Drive	Total	0	744	260	1,550	1,333	0	0	0	0	0	0	0	3,887
		Airport	0	305	17	840	437	0	0	0	0	0	0	0	1,599
		Background	0	439	243	710	896	0	0	0	0	0	0	0	2,288
13	Laurel Street / Pacific Highway	Total	160	901	211	169	587	474	374	744	36	48	946	77	4,727
		Airport	0	89	1	8	81	124	131	517	0	0	488	9	1,448
		Background	160	812	210	161	506	350	243	227	36	48	458	68	3,279
14	Hawthorn Street / Pacific Highway	Total	216	878	0	0	793	72	0	0	0	191	1,548	108	3,806
		Airport	166	89	0	0	72	9	0	0	0	725	1	1,062	
		Background	50	789	0	0	721	63	0	0	0	191	823	107	2,744
15	Grape Street / Pacific Highway	Total	0	925	574	342	766	0	76	2,335	51	0	0	0	5,069
		Airport	0	238	0	1	71	0	17	789	51	0	0	0	1,167
		Background	0	687	574	341	695	0	59	1,546	0	0	0	0	3,902
16	Laurel Street / Kettner Boulevard	Total	0	0	0	448	956	976	0	1,028	74	52	266	0	3,800
		Airport	0	0	0	0	0	440	0	525	0	1	57	0	1,023
		Background	0	0	0	448	956	536	0	503	74	51	209	0	2,777
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	617	111	0	0	0	238	1,942	0	2,908
		Airport	0	0	0	0	1	0	0	0	0	0	727	0	728
		Background	0	0	0	0	616	111	0	0	0	238	1,215	0	2,180
18	Grape Street / Kettner Boulevard	Total	0	0	0	299	656	0	0	3,824	111	0	0	0	4,890
		Airport	0	0	0	1	0	0	0	769	21	0	0	0	791
		Background	0	0	0	298	656	0	0	3,055	90	0	0	0	4,099
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	190	363	355	0	0	0	24	500	2,301	0	0	0	3,733
		Airport	0	0	0	0	0	0	0	5	765	0	0	0	770
		Background	190	363	355	0	0	0	24	495	1,536	0	0	0	2,963
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	45	70	0	0	0	0	0	0	0	0	1,684	53	1,852
		Airport	0	0	0	0	0	0	0	0	0	0	0	721	721
		Background	45	70	0	0	0	0	0	0	0	0	0	963	53
21	Laurel Street / India Street	Total	47	299	88	0	0	0	838	496	2	0	332	304	2,406
		Airport	2	1	0	0	0	0	466	57	2	0	56	0	584
		Background	45	298	88	0	0	0	372	439	0	0	276	304	1,822
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	400	3,660	573	0	285	144	98	151	0	5,311
		Airport	0	0	0	0	441	89	0	90	91	0	89	0	800
		Background	0	0	0	400	3,219	484	0	195	53	98	62	0	4,511
23	Sassafras Street / India Street	Total	214	1,471	29	0	0	0	346	70	127	0	17	21	2,295
		Airport	97	467	0	0	0	0	101	0	0	0	0	0	665
		Background	117	1,004	29	0	0	0	245	70	127	0	17	21	1,630
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	529	53	12	0	252	61	278	160	0	1,345
		Airport	0	0	0	0	0	1	0	46	18	96	117	0	278
		Background	0	0	0	529	53	11	0	206	43	182	43	0	1,067
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	43	12	168	69	66	8	69	17	747	458	238	67	1,962
		Airport	32	0	102	0	0	0	1	0	46	181	0	0	362
		Background	11	12	66	69	66	8	68	17	701	277	238	67	1,600
26	Washington Street / Hancock Street	Total	0	789	187	414	513	0	833	498	249	0	0	0	3,483
		Airport	0	126	22	0	141	0	0	0	40	0	0	0	329
		Background	0	663	165	414	372	0	833	498	209	0	0	0	3,154
27	Washington Street / San Diego Avenue	Total	233	1,417	0	0	769	633	0	0	0	227	305	18	3,602
		Airport	22	104	0	0	101	0	0	0	0	40	0	0	267
		Background	211	1,313	0	0	668	633	0	0	0	187	305	18	3,335
28	Rosecrans Street / Pacific Highway	Total	368	302	673	122	143	69	120	490	181	288	350	148	3,254
		Airport	0	4	16	0	4	1	1	2	0	15	2	0	45
		Background	368	298	657	122	139	68	119	488	181	273	348	148	3,209
29	Rosecrans Street / Nimitz Boulevard	Total	23	284	185	7	135	7	272	665	27	229	569	46	2,449
		Airport	0	134	160	0	127	0	0	0	0	151	0	0	572
		Background	23	150	25	7	8	7	272	665	27	78	569	46	1,877

Source: HNTB, 2007

Note:

- (1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.
- 19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
- 25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

Table D-125
2030 Intersection Turning Volumes – AM Peak Hour – Proposed Airport Land Use Plan

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	920	0	31	16	632	0	11	951	556	3,117
		Airport	0	0	0	426	0	0	0	61	0	0	44	328	859
		Background	0	0	0	494	0	31	16	571	0	11	907	228	2,258
2	North Harbor Drive / McCain St	Total	0	0	0	147	0	176	219	984	0	0	1,010	481	3,017
		Airport	0	0	0	57	0	142	15	473	0	0	230	67	984
		Background	0	0	0	90	0	34	204	511	0	0	780	414	2,033
3	North Harbor Drive / Spanish Landing	Total	5	0	18	74	0	17	168	1,046	7	21	1,883	0	3,239
		Airport	0	0	0	74	0	17	168	362	0	0	280	0	901
		Background	5	0	18	0	0	0	684	7	21	1,603	0	2,338	
4	North Harbor Drive / Harbor Island Drive	Total	48	6	160	45	13	106	113	923	103	267	2,467	0	4,251
		Airport	15	6	47	45	13	106	113	299	24	67	877	0	1,612
		Background	33	0	113	0	0	0	0	624	79	200	1,590	0	2,639
5	North Harbor Drive / Winship Lane	Total	0	0	0	86	0	135	104	1,023	0	0	3,188	181	4,717
		Airport	0	0	0	86	0	135	104	286	0	0	1,398	181	2,190
		Background	0	0	0	0	0	0	0	737	0	0	1,790	0	2,527
6	North Harbor Drive / Rental Car Road	Total	47	0	191	131	0	53	90	2,007	71	286	3,268	279	6,423
		Airport	47	0	191	131	0	53	90	1,270	71	286	1,478	279	3,896
		Background	0	0	0	0	0	0	0	737	0	0	1,790	0	2,527
7	Sheraton / Harbor Island Drive	Total	13	130	0	0	283	99	85	6	27	0	0	0	643
		Airport	0	68	0	0	104	0	0	0	0	0	0	0	172
		Background	13	62	0	0	179	99	85	6	27	0	0	0	471
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	38	82	99	0	0	78	1	298
		Airport	0	0	0	0	0	38	82	22	0	0	30	1	173
		Background	0	0	0	0	0	0	0	77	0	0	48	0	125
9	Sassafras Street / Pacific Highway	Total	107	545	66	39	532	17	7	96	51	135	235	35	1,865
		Airport	107	143	0	0	143	17	7	96	51	0	235	0	799
		Background	0	402	66	39	389	0	0	0	0	135	0	35	1,066
10	Laurel Street / North Harbor Drive	Total	0	0	0	17	0	3	519	1,563	0	0	2,680	48	4,830
		Airport	0	0	0	0	0	0	498	1,094	0	0	1,417	0	3,009
		Background	0	0	0	17	0	3	21	469	0	0	1,263	48	1,821
11	Hawthorn Street / North Harbor Drive	Total	0	438	0	0	1,557	0	0	0	0	131	0	3,055	5,181
		Airport	0	362	0	0	1,094	0	0	0	0	15	0	1,055	2,526
		Background	0	76	0	0	463	0	0	0	0	116	0	2,000	2,655
12	Grape Street / North Harbor Drive	Total	0	371	126	1,139	663	0	0	0	0	0	0	0	2,299
		Airport	0	362	30	727	381	0	0	0	0	0	0	0	1,500
		Background	0	9	96	412	282	0	0	0	0	0	0	0	799
13	Laurel Street / Pacific Highway	Total	42	453	114	71	256	359	127	538	1	81	1,045	106	3,193
		Airport	0	120	10	5	53	135	118	381	0	2	491	12	1,327
		Background	42	333	104	66	203	224	9	157	1	79	554	94	1,866
14	Hawthorn Street / Pacific Highway	Total	196	313	0	0	207	72	0	0	0	376	2,838	130	4,132
		Airport	196	123	0	0	40	15	0	0	0	0	859	7	1,240
		Background	0	190	0	0	167	57	0	0	0	376	1,979	123	2,892
15	Grape Street / Pacific Highway	Total	0	762	184	177	991	0	114	1,245	52	0	0	0	3,525
		Airport	0	289	0	0	39	0	30	675	52	0	0	0	1,085
		Background	0	473	184	177	952	0	84	570	0	0	0	0	2,440
16	Laurel Street / Kettner Boulevard	Total	0	0	0	346	469	784	0	928	75	61	339	0	3,002
		Airport	0	0	0	6	0	428	0	396	0	3	76	0	909
		Background	0	0	0	340	469	356	0	532	75	58	263	0	2,093
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	249	131	0	0	0	216	3,638	0	4,234
		Airport	0	0	0	0	3	0	0	0	0	0	867	0	870
		Background	0	0	0	0	246	131	0	0	0	216	2,771	0	3,364
18	Grape Street / Kettner Boulevard	Total	0	0	0	135	672	0	0	1,799	116	0	0	0	2,722
		Airport	0	0	0	3	0	0	0	663	13	0	0	0	679
		Background	0	0	0	132	672	0	0	1,136	103	0	0	0	2,043
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	206	272	233	0	0	0	44	457	1,371	0	0	0	2,583
		Airport	0	0	0	0	0	0	0	4	662	0	0	0	666
		Background	206	272	233	0	0	0	44	453	709	0	0	0	1,917
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	62	59	0	0	0	0	0	0	0	0	3,270	95	3,486
		Airport	0	0	0	0	0	0	0	0	0	0	0	861	861
		Background	62	59	0	0	0	0	0	0	0	0	0	2,409	95
21	Laurel Street / India Street	Total	50	94	16	0	0	0	670	524	25	0	356	310	2,045
		Airport	13	3	0	0	0	0	330	48	25	0	67	0	486
		Background	37	91	16	0	0	0	340	476	0	0	289	310	1,559
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	242	2,478	756	0	72	67	114	164	0	3,893
		Airport	0	0	0	0	435	117	0	48	48	0	118	0	766
		Background	0	0	0	242	2,043	639	0	24	19	114	46	0	3,127
23	Sassafras Street / India Street	Total	275	1,024	13	0	0	0	120	23	48	0	43	27	1,573
		Airport	118	333	0	0	0	0	48	0	0	0	0	0	499
		Background	157	691	13	0	0	0	72	23	48	0	43	27	1,074
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	511	90	148	0	109	54	196	321	0	1,429
		Airport	0	0	0	0	0	2	0	70	26	114	193	0	405
		Background	0	0	0	511	90	146	0	39	28	82	128	0	1,024
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	53	0	83	24	6	17	23	0	271	430	111	36	1,054
		Airport	53	0	83	0	0	0	1	0	69	254	0	0	460
		Background	0	0	0	24	6	17	22	0	202	176	111	36	594
26	Washington Street / Hancock Street	Total	0	269	103	311	478	0	208	97	137	0	0	0	1,603
		Airport	0	119	33	1	189	0	0	0	66	0	0	0	408
		Background	0	150	70	310	289	0	208	97	71	0	0	0	1,195
27	Washington Street / San Diego Avenue	Total	110	597	0	0	709	665	0	0	0	319	313	11	2,724
		Airport	32	87	0	0	123	0	0	0	0	66	0	0	308
		Background	78	510	0	0	586	665	0	0	0	253	313	11	2,416
28	Rosecrans Street / Pacific Highway	Total	207	155	231	144	210	89	61	177	143	316	155	88	1,976
		Airport	0	3	11	0	4	2	1	4	0	16	5	0	46
		Background	207	152	220	144	206	87	60	173	143	300	150	88	1,930
29	Rosecrans Street / Nimitz Boulevard	Total	20	177	211	39	201	41	107	461	20	270	514	32	2,093
		Airport	0	124	204	0	161	0	0	0	0	265	0	0	754
		Background	20	53	7	39	40	41	107	461	20	5	514	32	1,339

Source: HNTB, 2007

Note:

- (1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.
- 19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
- 25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

Table D-126
2030 Intersection Turning Volumes – PM Peak Hour – Proposed Airport Land Use Plan

Int #		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	
1	North Harbor Drive / Nimitz Blvd	Total	0	0	0	786	0	75	52	820	0	23	943	1,342	4,041
		Airport	0	0	0	375	0	0	0	53	0	0	54	398	880
		Background	0	0	0	411	0	75	52	767	0	23	889	944	3,161
2	North Harbor Drive / McCain St	Total	0	0	0	575	0	334	46	1,379	0	0	1,292	120	3,746
		Airport	0	0	0	94	0	131	10	418	0	0	321	48	1,022
		Background	0	0	0	481	0	203	36	961	0	0	971	72	2,724
3	North Harbor Drive / Spanish Landing	Total	7	0	25	159	0	37	138	2,267	28	7	1,440	0	4,108
		Airport	0	0	0	159	0	37	138	373	0	0	332	0	1,039
		Background	7	0	25	0	0	0	0	1,894	28	7	1,108	0	3,069
4	North Harbor Drive / Harbor Island Drive	Total	169	5	353	49	11	101	95	2,199	158	529	1,771	0	5,440
		Airport	17	5	59	49	11	101	95	414	23	60	807	0	1,641
		Background	152	0	294	0	0	0	0	1,785	135	469	964	0	3,799
5	North Harbor Drive / Winship Lane	Total	0	0	0	106	0	148	97	2,504	0	0	2,672	143	5,670
		Airport	0	0	0	106	0	148	97	425	0	0	1,239	143	2,158
		Background	0	0	0	0	0	0	0	2,079	0	0	1,433	0	3,512
6	North Harbor Drive / Rental Car Road	Total	63	0	255	347	0	110	78	3,395	95	382	2,642	218	7,585
		Airport	63	0	255	347	0	110	78	1,316	95	382	1,209	218	4,073
		Background	0	0	0	0	0	0	0	2,079	0	0	1,433	0	3,512
7	Sheraton / Harbor Island Drive	Total	23	449	0	0	629	70	77	2	25	0	0	0	1,175
		Airport	0	80	0	0	95	0	0	0	0	0	0	0	175
		Background	23	369	0	0	534	70	77	2	25	0	0	0	1,100
8	Employee Lot / Harbor Island Drive	Total	0	0	0	0	0	55	68	110	0	0	144	1	378
		Airport	0	0	0	0	0	55	68	27	0	0	26	1	177
		Background	0	0	0	0	0	0	0	83	0	0	118	0	201
9	Sassafras Street / Pacific Highway	Total	84	875	328	105	862	13	13	176	83	110	179	29	2,857
		Airport	84	147	0	0	123	13	13	176	83	0	179	0	818
		Background	0	728	328	105	739	0	0	0	0	110	0	29	2,039
10	Laurel Street / North Harbor Drive	Total	0	0	0	49	0	7	1,319	2,576	0	0	2,391	126	6,468
		Airport	0	0	0	0	0	0	592	1,325	0	0	1,250	0	3,167
		Background	0	0	0	49	0	7	727	1,251	0	0	1,141	126	3,301
11	Hawthorn Street / North Harbor Drive	Total	0	754	0	0	2,943	0	0	0	0	212	0	1,815	5,724
		Airport	0	319	0	0	1,325	0	0	0	0	13	0	931	2,588
		Background	0	435	0	0	1,618	0	0	0	0	199	0	884	3,136
12	Grape Street / North Harbor Drive	Total	0	743	257	1,591	1,362	0	0	0	0	0	0	0	3,953
		Airport	0	319	22	877	461	0	0	0	0	0	0	0	1,679
		Background	0	424	235	714	901	0	0	0	0	0	0	0	2,274
13	Laurel Street / Pacific Highway	Total	135	771	183	121	429	370	399	709	40	90	1,254	131	4,632
		Airport	0	90	7	8	74	124	133	460	0	4	434	9	1,343
		Background	135	681	176	113	355	246	266	249	40	86	820	122	3,289
14	Hawthorn Street / Pacific Highway	Total	215	756	0	0	672	66	0	0	0	214	1,679	124	3,726
		Airport	173	92	0	0	65	13	0	0	0	0	758	5	1,106
		Background	42	664	0	0	607	53	0	0	0	214	921	119	2,620
15	Grape Street / Pacific Highway	Total	0	857	512	290	654	0	85	2,480	53	0	0	0	4,931
		Airport	0	244	0	1	64	0	22	824	53	0	0	0	1,208
		Background	0	613	512	289	590	0	63	1,656	0	0	0	0	3,723
16	Laurel Street / Kettner Boulevard	Total	0	0	0	416	877	870	0	1,376	133	89	404	0	4,165
		Airport	0	0	0	5	0	378	0	475	0	7	69	0	934
		Background	0	0	0	411	877	492	0	901	133	82	335	0	3,231
17	Hawthorn Street / Kettner Boulevard	Total	0	0	0	0	648	115	0	0	0	266	2,122	0	3,151
		Airport	0	0	0	0	8	0	0	0	0	0	763	0	771
		Background	0	0	0	0	640	115	0	0	0	266	1,359	0	2,380
18	Grape Street / Kettner Boulevard	Total	0	0	0	329	710	0	0	4,017	115	0	0	0	5,171
		Airport	0	0	0	7	1	0	0	804	21	0	0	0	833
		Background	0	0	0	322	709	0	0	3,213	94	0	0	0	4,338
19	Grape Street / I-5 Southbound On-Ramp (1)	Total	311	593	580	0	0	0	27	565	2,543	0	0	0	4,619
		Airport	0	0	0	0	0	0	0	5	805	0	0	0	810
		Background	311	593	580	0	0	0	27	560	1,738	0	0	0	3,809
20	Hawthorn Street / I-5 Northbound Off-Ramp	Total	50	78	0	0	0	0	0	0	0	0	0	0	2,298
		Airport	0	0	0	0	0	0	0	0	0	0	0	0	758
		Background	50	78	0	0	0	0	0	0	0	0	0	0	1,540
21	Laurel Street / India Street	Total	56	250	72	0	0	0	996	760	20	0	445	425	3,024
		Airport	19	7	0	0	0	0	400	59	20	0	58	0	563
		Background	37	243	72	0	0	0	596	701	0	0	387	425	2,461
22	Sassafras Street / Kettner Boulevard	Total	0	0	0	399	3,598	573	0	204	121	80	141	0	5,116
		Airport	0	0	0	0	382	89	0	88	89	0	90	0	738
		Background	0	0	0	399	3,216	484	0	116	32	80	51	0	4,378
23	Sassafras Street / India Street	Total	245	1,737	39	0	0	0	289	57	104	0	18	22	2,511
		Airport	90	408	0	0	0	0	88	0	0	0	0	0	586
		Background	155	1,329	39	0	0	0	201	57	104	0	18	22	1,925
24	Washington Street / Pacific Highway SB-Ramps	Total	0	0	0	1,347	134	28	0	271	66	245	174	0	2,265
		Airport	0	0	0	0	1	0	55	21	99	140	0	0	316
		Background	0	0	0	1,347	134	27	0	216	45	146	34	0	1,949
25	Washington Street / Pacific Highway NB-Ramps (1)	Total	39	0	104	52	51	6	56	14	619	386	160	45	1,532
		Airport	39	0	104	0	0	1	0	54	200	0	0	0	398
		Background	0	0	0	52	51	6	55	14	565	186	160	45	1,134
26	Washington Street / Hancock Street	Total	0	579	137	333	452	0	326	194	129	0	0	0	2,150
		Airport	0	133	26	1	153	0	0	0	48	0	0	0	361
		Background	0	446	111	332	299	0	326	194	81	0	0	0	1,789
27	Washington Street / San Diego Avenue	Total	195	1,160	0	0	746	607	0	0	0	307	423	27	3,465
		Airport	26	107	0	0	105	0	0	0	0	48	0	1	287
		Background	169	1,053	0	0	641	607	0	0	0	259	423	26	3,178
28	Rosecrans Street / Pacific Highway	Total	364	298	663	174	202	98	114	465	171	260	317	133	3,259
		Airport	0	4	14	0	4	1	2	5	0	14	5	0	49
		Background	364	294	649	174	198	97	112	460	171	246	312	133	3,210
29	Rosecrans Street / Nimitz Boulevard	Total	23	297	272	31	177	31	239	586	24	305	528	43	2,556
		Airport	0	151	247	0	142	0	0	0	0	233	0	0	773
		Background	23	146	25	31	35	31	239	586	24	72	528	43	1,783

Source: HNTB, 2007

Note:

- (1) The numbers above for the following 5-leg intersections represent the volumes for the following movements. "2" represents the 5th leg / on-ramp.
- 19 Grape Street / I-5 Southbound On-Ramp nbt nbr nbr2 ebl ebt ebr
- 25 Washington Street / Pacific Highway NB-Ramps nbl+nbl2 nbt nbr sbl sbr2 sbr ebl2 ebl ebt wbt wbr2 wbr

Table D-127

2015-2030 Peak Hour Intersection Operations – Proposed Airport Land Use Plan

Intersection Number	Intersection	Peak Hour	Year 2015		Year 2020		Year 2025		Year 2030	
			Delay (Sec.)	LOS	Delay (SEC)	LOS	Delay (SEC)	LOS	Delay (Sec.)	LOS
1	North Harbor Drive/ Nimitz Boulevard	AM	20.7	C	21.3	C	21.6	C	22.5	C
		PM	21.0	C	21.5	C	21.8	C	22.6	C
2	North Harbor Drive/ McCain Road	AM	9.0	A	9.3	A	9.7	A	10.4	B
		PM	10.6	B	10.9	B	11.1	B	11.7	B
3	North Harbor Drive/ Spanish Landing	AM	8.2	A	8.5	A	8.8	A	9.9	A
		PM	7.7	A	8.1	A	8.3	A	8.9	A
4	North Harbor Drive/ Harbor Island Drive	AM	19.6	B	19.7	B	19.6	B	20.3	C
		PM	31.5	C	33.5	C	34.4	C	37.4	D
5	North Harbor Drive/ Winship Lane	AM	8.3	A	8.3	A	8.2	A	8.6	A
		PM	7.2	A	7.2	A	7.3	A	7.5	A
6	North Harbor Drive/ Rental Car Road	AM	20.2	C	21.9	C	25.2	C	27.7	C
		PM	32.5	C	37.0	D	42.6	D	47.8	D
7	Sheraton Harbor Island Drive	AM	12.1	B	11.8	B	11.6	B	11.5	B
		PM	7.4	A	7.1	A	6.9	A	6.8	A
8	Employee Lot Harbor Island Drive	AM	9.9	A	9.9	A	9.9	A	9.9	A
		PM	10.2	B	10.2	B	10.2	B	10.2	B
9	Sassafras Street/ Pacific Highway	AM	15.7	B	15.1	B	15.7	B	14.5	B
		PM	15.7	B	16.1	B	18.5	B	13.4	B
10	Laurel Street/ North Harbor Drive	AM	10.6	B	11.5	B	12.3	B	11.8	B
		PM	19.6	B	26.7	C	29.8	C	31.3	C
11	Hawthorn Street/ North Harbor Drive	AM	84.4	F	154.1	F	176.9	F	225.9	F
		PM	37.7	D	70.4	E	87.1	F	115.4	F
12	Grape Street/ North Harbor Drive	AM	8.9	A	8.9	A	9.0	A	9.1	A
		PM	11.7	B	11.5	B	11.9	B	11.9	B
13	Laurel Street/ Pacific Highway	AM	34.5	C	34.7	C	35.4	D	34.8	C
		PM	69.3	E	65.0	E	58.4	E	66.6	E
14	Hawthorn Street/ Pacific Highway	AM	15.9	B	18.1	B	21.6	C	26.1	C
		PM	23.0	C	24.2	C	25.4	C	24.9	C
15	Grape Street/ Pacific Highway	AM	19.6	B	20.5	C	21.0	C	20.9	C
		PM	38.4	D	64.7	E	83.0	F	72.2	E
16	Laurel Street/ Kettner Boulevard	AM	19.5	B	19.7	B	19.8	B	22.1	C
		PM	23.7	C	27.6	C	25.7	C	35.2	D
17	Hawthorn Street/ Kettner Boulevard	AM	6.4	A	10.9	B	10.4	B	16.9	B
		PM	10.9	B	15.5	B	13.6	B	14.2	B
18	Grape Street/ Kettner Boulevard	AM	12.8	B	14.7	B	14.0	B	14.7	B
		PM	29.6	C	71.2	E	70.9	E	98.3	F
19	Grape Street/ I-5 Southbound On-Ramp	AM	10.4	B	11.6	B	11.3	B	15.4	B
		PM	48.9	D	43.6	D	52.3	D	113.0	F
20	Hawthorn Street/ I-5 Northbound Off-Ramp	AM	21.4	C	10.3	B	10.5	B	22.5	C
		PM	18.3	B	11.8	B	11.2	B	10.8	B
21	Laurel Street/ India Street	AM	18.4	B	17.9	B	18.1	B	16.9	B
		PM	23.2	C	22.1	C	22.4	C	22.1	C
22	Sassafras Street/ Kettner Boulevard	AM	9.6	A	30.7	C	16.8	B	13.2	B
		PM	12.4	B	140.8	F	102.7	F	80.9	F
23	Sassafras Street/ India Street	AM	8.2	A	8.7	A	9.1	A	8.0	A
		PM	18.2	B	16.0	B	16.7	B	17.6	B
24	Washington Street/ Pacific Highway SB-Ramps	AM	12.2	B	12.3	B	11.9	B	12.8	B
		PM	15.3	B	15.4	B	15.5	B	18.1	B
25	Washington Street/ Pacific Highway NB-Ramps	AM	69.3	E	89.3	F	101.2	F	54.6	D
		PM	106.8	F	136.9	F	162.3	F	81.9	F
26	Washington Street/ Hancock Street	AM	27.8	C	28.5	C	28.6	C	26.0	C
		PM	30.6	C	32.3	C	32.7	C	27.7	C
27	Washington Street/ San Diego Avenue	AM	13.3	B	13.0	B	12.9	B	15.2	B
		PM	14.0	B	14.0	B	13.9	B	16.6	B
28	Rosecrans Street/ Pacific Highway	AM	36.4	D	36.2	D	36.2	D	37.3	D
		PM	45.0	D	41.4	D	42.1	D	43.2	D
29	Rosecrans Street/ Nimitz Boulevard	AM	23.5	C	25.4	C	25.0	C	27.8	C
		PM	27.5	C	28.4	C	28.3	C	30.7	C

Source: HNTB, 2007

LOS = Level of service

Table D-128
2015-2030 Intersection Impacts – Proposed Airport Land Use Plan, 2015-2020

Intersection Number	Intersection	Peak Hour	Year 2015			Year 2020		
			No Proj.	No Project	Diff.	No Proj.	No Project	Diff.
			Delay (Sec.)					
1	North Harbor Drive/ Nimitz Boulevard	AM	20.4	20.7	0.3	20.9	21.3	0.4
		PM	20.4	21.0	0.6	20.9	21.5	0.6
2	North Harbor Drive/ McCain Road	AM	7.2	9.0	1.8	7.4	9.3	1.9
		PM	9.9	10.6	0.7	10.2	10.9	0.7
3	North Harbor Drive/ Spanish Landing	AM	10.9	8.2	-2.7	11.2	8.5	-2.7
		PM	9.3	7.7	-1.6	9.8	8.1	-1.7
4	North Harbor Drive/ Harbor Island Drive	AM	20.4	19.6	-0.8	20.9	19.7	-1.2
		PM	31.4	31.5	0.1	32.8	33.5	0.7
5	North Harbor Drive/ Winship Lane	AM	10.6	8.3	-2.3	10.8	8.3	-2.5
		PM	10.3	7.2	-3.1	10.4	7.2	-3.2
6	North Harbor Drive/ Rental Car Road	AM	7.5	20.2	12.7	8.2	21.9	13.7
		PM	8.5	32.5	24.0	9.2	37.0	27.8
7	Sheraton Harbor Island Drive	AM	12.3	12.1	-0.2	12.0	11.8	-0.2
		PM	7.4	7.4	0.0	7.2	7.1	-0.1
8	Employee Lot Harbor Island Drive	AM	9.9	9.9	0.0	9.9	9.9	0.0
		PM	10.1	10.2	0.1	10.2	10.2	0.0
9	Sassafras Street/ Pacific Highway	AM	15.4	15.7	0.3	15.1	15.1	0.0
		PM	16.6	15.7	-0.9	16.5	16.1	-0.4
10	Laurel Street/ North Harbor Drive	AM	10.1	10.6	0.5	10.8	11.5	0.7
		PM	16.3	19.6	3.3	18.7	26.7	8.0
11	Hawthorn Street/ North Harbor Drive	AM	49.6	84.4	34.8	112.8	154.1	41.3
		PM	25.2	37.7	12.5	33.7	70.4	36.7
12	Grape Street/ North Harbor Drive	AM	8.4	8.9	0.5	8.3	8.9	0.6
		PM	11.0	11.7	0.7	10.7	11.5	0.8
13	Laurel Street/ Pacific Highway	AM	33.7	34.5	0.8	33.9	34.7	0.8
		PM	62.4	69.3	6.9	59.5	65.0	5.5
14	Hawthorn Street/ Pacific Highway	AM	14.3	15.9	1.6	15.8	18.1	2.3
		PM	22.0	23.0	1.0	22.9	24.2	1.3
15	Grape Street/ Pacific Highway	AM	19.0	19.6	0.6	19.9	20.5	0.6
		PM	32.8	38.4	5.6	53.1	64.7	11.6
16	Laurel Street/ Kettner Boulevard	AM	19.6	19.5	-0.1	19.8	19.7	-0.1
		PM	22.9	23.7	0.8	25.9	27.6	1.7
17	Hawthorn Street/ Kettner Boulevard	AM	6.2	6.4	0.2	10.3	10.9	0.6
		PM	11.3	10.9	-0.4	15.6	15.5	-0.1
18	Grape Street/ Kettner Boulevard	AM	13.1	12.8	-0.3	14.8	14.7	-0.1
		PM	22.8	29.6	6.8	55.3	71.2	15.9
19	Grape Street/ I-5 Southbound On-Ramp	AM	8.9	10.4	1.5	11.6	11.6	0.0
		PM	35.2	48.9	13.7	32.9	43.6	10.7
20	Hawthorn Street/ I-5 Northbound Off-Ramp	AM	10.6	21.4	10.8	10.8	10.3	-0.5
		PM	12.0	18.3	6.3	12.1	11.8	-0.3
21	Laurel Street/ India Street	AM	19.4	18.4	-1.0	22.6	17.9	-4.7
		PM	22.9	23.2	0.3	22.1	22.1	0.0
22	Sassafras Street/ Kettner Boulevard	AM	9.2	9.6	0.4	19.4	30.7	11.3
		PM	12.5	12.4	-0.1	121.5	140.8	19.3
23	Sassafras Street/ India Street	AM	8.2	8.2	0.0	8.7	8.7	0.0
		PM	17.3	18.2	0.9	15.3	16.0	0.7
24	Washington Street/ Pacific Highway SB-Ramps	AM	12.7	12.2	-0.5	13.0	12.3	-0.7
		PM	15.1	15.3	0.2	15.3	15.4	0.1
25	Washington Street/ Pacific Highway NB-Ramps	AM	46.7	69.3	22.6	56.0	89.3	33.3
		PM	107.8	106.8	-1.0	130.2	136.9	6.7
26	Washington Street/ Hancock Street	AM	28.1	27.8	-0.3	28.7	28.5	-0.2
		PM	30.8	30.6	-0.2	32.4	32.3	-0.1
27	Washington Street/ San Diego Avenue	AM	13.1	13.3	0.2	12.7	13.0	0.3
		PM	14.1	14.0	-0.1	14.1	14.0	-0.1
28	Rosecrans Street/ Pacific Highway	AM	36.4	36.4	0.0	36.1	36.2	0.1
		PM	44.8	45.0	0.2	41.3	41.4	0.1
29	Rosecrans Street/ Nimitz Boulevard	AM	21.8	23.5	1.7	24.3	25.4	1.1
		PM	25.3	27.5	2.2	26.7	28.4	1.7

Source: HNTB, 2007

	LOS E
	LOS F
	Significant Impact

NOTE: Table D-128 was shown as one table in the 2007 Draft EIR. In this Final EIR, it is shown as two tables (2015-2020 and 2025-2030) due to table size.

Table D-128 (continued)
2015-2030 Intersection Impacts – Proposed Airport Land Use Plan, 2025-2030

Intersection Number	Intersection	Peak Hour	Year 2025			Year 2030		
			No Proj.	No Project	Diff.	No Proj.	No Project	Diff.
			Delay (Sec.)					
1	North Harbor Drive/ Nimitz Boulevard	AM	21.1	21.6	0.5	21.7	22.5	0.8
		PM	21.1	21.8	0.7	21.6	22.6	1.0
2	North Harbor Drive/ McCain Road	AM	7.6	9.7	2.1	7.6	10.4	2.8
		PM	10.3	11.1	0.8	10.3	11.7	1.4
3	North Harbor Drive/ Spanish Landing	AM	11.7	8.8	-2.9	13.1	9.9	-3.2
		PM	10.0	8.3	-1.7	11.2	8.9	-2.3
4	North Harbor Drive/ Harbor Island Drive	AM	20.8	19.6	-1.2	21.9	20.3	-1.6
		PM	33.3	34.4	1.1	34.9	37.4	2.5
5	North Harbor Drive/ Winship Lane	AM	10.7	8.2	-2.5	11.1	8.6	-2.5
		PM	10.6	7.3	-3.3	10.7	7.5	-3.2
6	North Harbor Drive/ Rental Car Road	AM	8.8	25.2	16.4	9.0	27.7	18.7
		PM	9.6	42.6	33.0	10.0	47.8	37.8
7	Sheraton Harbor Island Drive	AM	11.8	11.6	-0.2	11.6	11.5	-0.1
		PM	7.0	6.9	-0.1	6.9	6.8	-0.1
8	Employee Lot Harbor Island Drive	AM	9.9	9.9	0.0	9.9	9.9	0.0
		PM	10.2	10.2	0.0	10.1	10.2	0.1
9	Sassafras Street/ Pacific Highway	AM	15.6	15.7	0.1	14.0	14.5	0.5
		PM	18.5	18.5	0.0	14.1	13.4	-0.7
10	Laurel Street/ North Harbor Drive	AM	11.3	12.3	1.0	10.5	11.8	1.3
		PM	19.3	29.8	10.5	19.4	31.3	11.9
11	Hawthorn Street/ North Harbor Drive	AM	131.7	176.9	45.2	173.0	225.9	52.9
		PM	40.7	87.1	46.4	55.9	115.4	59.5
12	Grape Street/ North Harbor Drive	AM	8.4	9.0	0.6	8.3	9.1	0.8
		PM	11.0	11.9	0.9	10.9	11.9	1.0
13	Laurel Street/ Pacific Highway	AM	34.4	35.4	1.0	33.7	34.8	1.1
		PM	53.1	58.4	5.3	60.4	66.6	6.2
14	Hawthorn Street/ Pacific Highway	AM	17.7	21.6	3.9	18.9	26.1	7.2
		PM	23.8	25.4	1.6	23.3	24.9	1.6
15	Grape Street/ Pacific Highway	AM	20.3	21.0	0.7	20.2	20.9	0.7
		PM	68.6	83.0	14.4	56.5	72.2	15.7
16	Laurel Street/ Kettner Boulevard	AM	19.9	19.8	-0.1	21.9	22.1	0.2
		PM	24.8	25.7	0.9	31.9	35.2	3.3
17	Hawthorn Street/ Kettner Boulevard	AM	9.6	10.4	0.8	13.0	16.9	3.9
		PM	13.9	13.6	-0.3	14.2	14.2	0.0
18	Grape Street/ Kettner Boulevard	AM	14.2	14.0	-0.2	14.8	14.7	-0.1
		PM	54.0	70.9	16.9	77.1	98.3	21.2
19	Grape Street/ I-5 Southbound On-Ramp	AM	11.5	11.3	-0.2	15.1	15.4	0.3
		PM	38.6	52.3	13.7	87.1	113.0	25.9
20	Hawthorn Street/ I-5 Northbound Off-Ramp	AM	19.6	10.5	-9.1	15.3	22.5	7.2
		PM	16.4	11.2	-5.2	11.0	10.8	-0.2
21	Laurel Street/ India Street	AM	22.9	18.1	-4.8	23.0	16.9	-6.1
		PM	26.8	22.4	-4.4	32.4	22.1	-10.3
22	Sassafras Street/ Kettner Boulevard	AM	11.9	16.8	4.9	9.6	13.2	3.6
		PM	82.1	102.7	20.6	62.5	80.9	18.4
23	Sassafras Street/ India Street	AM	9.0	9.1	0.1	8.0	8.0	0.0
		PM	15.7	16.7	1.0	16.6	17.6	1.0
24	Washington Street/ Pacific Highway SB-Ramps	AM	12.8	11.9	-0.9	12.4	12.8	0.4
		PM	15.5	15.5	0.0	17.4	18.1	0.7
25	Washington Street/ Pacific Highway NB-Ramps	AM	59.8	101.2	41.4	31.1	54.6	23.5
		PM	156.4	162.3	5.9	79.3	81.9	2.6
26	Washington Street/ Hancock Street	AM	28.8	28.6	-0.2	25.9	26.0	0.1
		PM	32.7	32.7	0.0	28.0	27.7	-0.3
27	Washington Street/ San Diego Avenue	AM	12.5	12.9	0.4	15.0	15.2	0.2
		PM	14.0	13.9	-0.1	16.8	16.6	-0.2
28	Rosecrans Street/ Pacific Highway	AM	36.2	36.2	0.0	37.3	37.3	0.0
		PM	41.9	42.1	0.2	42.9	43.2	0.3
29	Rosecrans Street/ Nimitz Boulevard	AM	23.6	25.0	1.4	26.8	27.8	1.0
		PM	26.5	28.3	1.8	28.9	30.7	1.8

Source: HNTB, 2007

Legend:

	LOS E
	LOS F
	Significant Impact

D.7.3.3 Freeway Segments

Table D-129 shows the freeway segment operations for each analysis year under the Land Use Plan. As shown, all freeway segments would operate at LOS D, E or F under the Land Use Plan during either AM or PM peak hours or both.

Table D-129
2015-2030 Freeway Segment Operations – Proposed Airport Land Use Plan (2015-2020)

SB I-5 Freeway		2015						2020					
		AM			PM			AM			PM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS									
North of I-8	I-8	7,300	36.3	E	8,500	42.3	E	7,100	35.3	E	9,700	48.5	F
I-8	Old Town Avenue	7,400	37.0	E	7,500	37.6	E	7,100	35.2	E	9,100	45.2	F
Old Town Avenue	Washington Street	6,100	30.5	D	6,400	31.7	D	5,300	26.4	D	6,500	32.6	D
Washington Street	Pacific Highway Viaducts	6,400	32.1	D	6,600	33.1	D	5,700	28.5	D	7,500	37.6	E
Pacific Highway Viaducts	India Street	7,400	36.7	E	8,400	41.8	E	6,200	30.9	D	8,400	41.8	E
India Street	Hawthorn Street	7,500	37.4	E	8,300	41.6	E	6,500	32.5	D	8,800	44.0	E
Hawthorn Street	First Avenue	6,400	31.9	D	7,500	37.6	E	5,500	27.3	D	7,800	38.7	E
First Avenue	SR 163	6,700	33.6	D	9,500	47.6	F	5,900	29.3	D	9,700	48.4	F
SR 163	SR 94	4,000	19.9	C	5,500	27.5	D	3,600	17.7	B	5,600	28.0	D
NB I-5 Freeway		2015						2020					
		AM			PM			AM			AM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS									
SR 94	SR 163	11,600	57.7	F	8,100	40.5	E	11,000	54.7	F	7,200	35.8	E
SR 163	First Avenue	8,800	43.8	E	8,100	40.4	E	8,500	42.3	E	7,800	38.9	E
First Avenue	Hawthorn Street	7,300	36.4	E	6,700	33.3	D	6,900	34.2	D	6,000	30.0	D
Hawthorn Street	India Street	7,300	36.5	E	7,700	38.6	E	7,100	35.4	E	7,400	36.7	E
India Street	Pacific Highway Viaducts	7,300	36.3	E	7,600	37.9	E	7,000	34.7	D	6,900	34.4	D
Pacific Highway Viaducts	Washington Street	5,100	25.4	C	6,100	30.6	D	4,800	24.1	C	5,600	28.1	D
Washington Street	Old Town Avenue	6,200	30.8	D	7,200	36.1	E	6,100	30.2	D	7,200	35.8	E
Old Town Avenue	I-8	6,100	30.5	D	7,500	37.2	E	5,800	29.1	D	7,000	35.1	E
I-8	North of I-8	7,500	37.3	E	7,700	38.6	E	7,500	37.4	E	7,900	39.5	E
I-8 Freeway		2015						2020					
		AM			PM			AM			AM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS									
I-5	East	5,900	29.6	D	7,900	39.3	E	5,100	25.4	C	7,700	38.3	E
East	I-5	7,200	36.1	E	7,700	38.2	E	6,800	34.0	D	7,200	36.1	E

Source: HNTB, 2007

Notes: vph = vehicles per hour
 pc/mi/ln = passenger cars per mile per lane
 LOS = level of service

Table D-129 (continued)
2015-2030 Freeway Segment Operations – Proposed Airport Land Use Plan (2025-2030)

SB I-5 Freeway		2025						2030					
		AM			PM			AM			PM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS									
North of I-8	I-8	7,300	36.2	E	9,600	47.8	F	7,800	38.7	E	9,300	46.5	F
I-8	Old Town Avenue	7,200	36.1	E	9,000	44.9	E	7,700	38.2	E	8,500	42.6	E
Old Town Avenue	Washington Street	5,400	27.2	D	6,600	32.7	D	5,700	28.3	D	6,500	32.4	D
Washington Street	Pacific Highway Viaducts	6,000	29.8	D	7,600	38.0	E	6,100	30.4	D	7,000	34.7	D
Pacific Highway Viaducts	India Street	6,500	32.2	D	8,500	42.2	E	6,700	33.4	D	8,300	41.2	E
India Street	Hawthorn Street	6,800	33.7	D	8,900	44.4	E	6,900	34.6	D	8,500	42.6	E
Hawthorn Street	First Avenue	5,700	28.4	D	7,900	39.6	E	5,700	28.6	D	8,000	39.7	E
First Avenue	SR 163	6,200	30.7	D	9,900	49.4	F	6,200	31.0	D	10,000	49.8	F
SR 163	SR 94	3,700	18.4	C	5,800	28.9	D	3,800	18.9	C	5,700	28.2	D

NB I-5 Freeway		2025						2030					
		AM			AM			AM			PM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS									
SR 94	SR 163	11,100	55.6	F	7,300	36.6	E	11,000	54.7	F	7,700	38.4	E
SR 163	First Avenue	8,600	43.0	E	7,900	39.6	E	8,300	41.6	E	7,900	39.3	E
First Avenue	Hawthorn Street	6,800	33.9	D	6,100	30.3	D	6,500	32.7	D	6,400	31.8	D
Hawthorn Street	India Street	7,000	35.1	E	7,400	37.0	E	6,500	32.3	D	8,000	39.7	E
India Street	Pacific Highway Viaducts	6,900	34.3	D	7,000	34.8	D	6,400	31.9	D	7,200	35.9	E
Pacific Highway Viaducts	Washington Street	4,700	23.6	C	5,600	28.0	D	4,400	22.0	C	5,900	29.6	D
Washington Street	Old Town Avenue	5,900	29.7	D	7,200	35.9	E	5,600	28.1	D	7,200	35.8	E
Old Town Avenue	I-8	5,700	28.5	D	7,000	34.7	D	5,400	26.9	D	7,200	36.1	E
I-8	North of I-8	7,500	37.5	E	7,900	39.6	E	7,600	37.7	E	8,700	43.4	E

I-8 Freeway		2025						2030					
		AM			AM			AM			PM		
From	To	Volume (vph)	Density (pc/mi/ln)	LOS									
I-5	East	5,100	25.5	C	7,700	38.2	E	4,900	24.6	C	7,500	37.5	E
East	I-5	7,100	35.2	E	7,300	36.6	E	7,400	36.8	E	7,200	35.9	E

Source: HNTB, 2007

Notes: vph = vehicles per hour
 pc/mi/ln = passenger cars per mile per lane
 LOS = level of service

Table D-130 compares the freeway segment densities under the ~~Proposed Airport Implementation Plan (With Parking Structure)~~ Proposed Airport Land Use Plan against the No Project Alternative to identify freeway segment impacts based on significance criteria identified in Section D.2, *Traffic Impacts and Significance Criteria*, measured by an increase to LOS E or F or an increase in volume to capacity ratio of greater than 0.01 for freeways operating at LOS E and .005 for freeways operating at LOS F under the No Project Alternative. It was assumed that an increase in volume to capacity ratio of 0.01 and 0.005 is equivalent to an increase in density of 1% and 0.5%, respectively. As shown, the following freeway segments would potentially be significantly impacted by the project:

Freeway Segments with Significant Traffic Impacts

Year 2015

- I-5 (northbound and southbound segments, AM and PM peak hours)
 - ~~n~~North of I-8 (AM and PM – southbound segment only)
 - I-8 to Old Town Avenue (AM – southbound segment only; PM – both directions)
 - Old Town Avenue to Washington Street (PM – northbound segment only)
 - Hawthorn Street to First Avenue (AM – northbound segment only; PM – southbound segment only)
 - First Avenue to SR-163 (AM – northbound segment only; PM – both directions)
 - SR-163 to SR-94 (AM and PM – northbound segment only)
- I-8 East of I-5 (westbound segment only, AM and PM)

Year 2020

- All segments identified in Year 2015 above (except for I-5 NB between First Avenue and Hawthorn Street which improved to LOS D during the AM peak hour), plus the following:
- Northbound I-5 between Hawthorn Street and India Street (AM)
- Northbound I-5 north of I-8 (PM)

Year 2025

- All segments identified in Year 2020 above (except for I-5 NB between Old Town Avenue and I-8 which improved to LOS D during the PM peak hour), plus the following:
- I-8 East of I-5 (eastbound segment, ~~AM and~~ PM)

Year 2030

- All segments identified in Year 2025 above (except for I-5 NB between Hawthorn Street and India Street which improved to LOS D during the AM peak hour), plus the following:
- Northbound I-5 between I-8 and Old Town Avenue (PM) ~~Pacific Highway Viaduct and Washington Street (AM)~~

Table D-130
 2015-2030 Freeway Segment Impacts – Proposed Airport Land Use Plan – AM Peak Hour

AM Peak Hour		Year 2015			Year 2020			Year 2025			Year 2030		
SB I-5 Freeway		No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation
From	To												
North of I-8	I-8	35.8	36.3	1.4%	34.8	35.3	1.6%	35.6	36.2	1.8%	38.0	38.7	1.8%
I-8	Old Town Avenue	36.4	37.0	1.7%	34.5	35.2	1.9%	35.4	36.1	2.1%	37.5	38.2	1.8%
Old Town Avenue	Washington Street	29.9	30.5	2.0%	25.7	26.4	2.6%	26.5	27.2	2.8%	27.6	28.3	2.4%
Washington Street	Pacific Highway Viaducts	32.1	32.1	0.0%	28.5	28.5	0.0%	29.8	29.8	0.0%	30.4	30.4	0.0%
Pacific Highway Viaducts	India Street	36.7	36.7	0.1%	30.9	30.9	0.2%	32.2	32.2	0.2%	33.4	33.4	0.1%
India Street	Hawthorn Street	37.4	37.4	0.1%	32.5	32.5	0.2%	33.7	33.7	0.2%	34.5	34.6	0.1%
Hawthorn Street	First Avenue	31.4	31.9	1.6%	26.8	27.3	1.9%	27.8	28.4	2.1%	28.0	28.6	2.4%
First Avenue	SR 163	33.1	33.6	1.5%	28.8	29.3	1.8%	30.1	30.7	1.9%	30.4	31.0	2.2%
SR 163	SR 94	19.4	19.9	2.6%	17.2	17.7	3.0%	17.8	18.4	3.2%	18.2	18.9	3.6%
NB I-5 Freeway													
From	To	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation
SR 94	SR 163	56.7	57.7	1.8%	53.6	54.7	2.1%	54.3	55.6	2.3%	53.4	54.7	2.6%
SR 163	First Avenue	42.7	43.8	2.4%	41.2	42.3	2.7%	41.8	43.0	3.0%	40.3	41.6	3.4%
First Avenue	Hawthorn Street	35.4	36.4	2.9%	33.1	34.2	3.4%	32.6	33.9	3.8%	31.3	32.7	4.4%
Hawthorn Street	India Street	36.3	36.5	0.7%	35.1	35.4	1.1%	34.6	35.1	1.3%	31.9	32.3	1.3%
India Street	Pacific Highway Viaducts	36.1	36.3	0.3%	34.6	34.7	0.4%	34.2	34.3	0.5%	31.7	31.9	0.7%
Pacific Highway Viaducts	Washington Street	25.2	25.4	0.4%	24.0	24.1	0.6%	23.4	23.6	0.8%	21.8	22.0	1.0%
Washington Street	Old Town Avenue	30.5	30.8	1.0%	29.9	30.2	1.1%	29.3	29.7	1.3%	27.8	28.1	1.2%
Old Town Avenue	I-8	30.2	30.5	1.0%	28.8	29.1	1.1%	28.2	28.5	1.3%	26.5	26.9	1.3%
I-8	North of I-8	37.1	37.3	0.7%	37.1	37.4	0.7%	37.2	37.5	0.8%	37.4	37.7	0.9%

NOTE: Bold/Shading = Freeway segment calculated to operate at Percent Increase D, E or F exceeding Caltrans target Percent Increase C.

I-8 Freeway		No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation
From	To												
I-5	East	29.4	29.6	0.7%	25.2	25.4	0.9%	25.3	25.5	1.0%	24.4	24.6	1.2%
East	I-5	35.7	36.1	1.2%	33.5	34.0	1.4%	34.7	35.2	1.5%	36.2	36.8	1.6%

Source: HNTB, 2007

Notes: vph = vehicles per hour

pc/mi/ln = passenger cars per mile per lane

LOS = level of service

Legend:

	LOS E
	LOS F
	Significant Impact

Table D-130 (continued)
2015-2030 Freeway Segment Impacts – Proposed Airport Land Use Plan – PM Peak Hour

PM Peak Hour													
SB I-5 Freeway		Year 2015			Year 2020			Year 2025			Year 2030		
From	To	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation
North of I-8	I-8	41.8	42.3	1.2%	48.0	48.5	1.1%	47.2	47.8	1.2%	45.9	46.5	1.3%
I-8	Old Town Avenue	36.9	37.6	1.7%	44.6	45.2	1.5%	44.1	44.9	1.6%	42.0	42.6	1.5%
Old Town Avenue	Washington Street	31.1	31.7	2.0%	31.9	32.6	2.1%	32.0	32.7	2.2%	31.7	32.4	2.0%
Washington Street	Pacific Highway Viaducts	33.1	33.1	-0.1%	37.6	37.6	-0.1%	38.0	38.0	-0.1%	34.8	34.7	-0.1%
Pacific Highway Viaducts	India Street	41.9	41.8	-0.2%	41.9	41.8	-0.1%	42.2	42.2	-0.1%	41.3	41.2	-0.3%
India Street	Hawthorn Street	41.7	41.6	-0.2%	44.0	44.0	-0.1%	44.5	44.4	-0.1%	42.7	42.6	-0.3%
Hawthorn Street	First Avenue	36.8	37.6	2.1%	37.9	38.7	2.2%	38.7	39.6	2.3%	38.8	39.7	2.5%
First Avenue	SR 163	46.8	47.6	1.6%	47.6	48.4	1.7%	48.5	49.4	1.9%	48.9	49.8	2.0%
SR 163	SR 94	26.7	27.5	2.9%	27.1	28.0	3.1%	28.0	28.9	3.2%	27.2	28.2	3.6%
NB I-5 Freeway													
From	To	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation
SR 94	SR 163	39.5	40.5	2.6%	34.8	35.8	3.0%	35.4	36.6	3.2%	37.2	38.4	3.3%
SR 163	First Avenue	39.3	40.4	2.6%	37.9	38.9	2.8%	38.5	39.6	2.9%	38.0	39.3	3.2%
First Avenue	Hawthorn Street	32.3	33.3	3.1%	29.0	30.0	3.6%	29.1	30.3	3.9%	30.6	31.8	4.0%
Hawthorn Street	India Street	38.5	38.6	0.3%	36.5	36.7	0.4%	36.8	37.0	0.5%	39.5	39.7	0.4%
India Street	Pacific Highway Viaducts	37.8	37.9	0.1%	34.4	34.4	0.1%	34.8	34.8	0.1%	35.8	35.9	0.1%
Pacific Highway Viaducts	Washington Street	30.6	30.6	0.1%	28.1	28.1	0.1%	28.0	28.0	0.1%	29.6	29.6	0.1%
Washington Street	Old Town Avenue	35.7	36.1	1.2%	35.3	35.8	1.3%	35.3	35.9	1.5%	35.4	35.8	1.2%
Old Town Avenue	I-8	36.8	37.2	1.1%	34.6	35.1	1.4%	34.2	34.7	1.5%	35.7	36.1	1.2%
I-8	North of I-8	38.2	38.6	0.992%	39.1	39.5	1.1%	39.1	39.6	1.2%	42.9	43.4	1.1%
I-8 Freeway													
From	To	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation
I-5	East	38.9	39.3	0.8%	38.0	38.3	0.9%	37.8	38.2	1.03%	37.1	37.5	1.1%
East	I-5	37.8	38.2	1.1%	35.6	36.1	1.3%	36.1	36.6	1.3%	35.4	35.9	1.5%

NOTE: Bold/Shading = Freeway segment calculated to operate at Percent Increase D, E or F exceeding Caltrans target Percent Increase C.

Source: HNTB, 2007

Notes: vph = vehicles per hour

pc/mi/ln = passenger cars per mile per lane

LOS = level of service

Legend:

	LOS E
	LOS F
	Significant Impact

D.7.3.4 Freeway Ramps

Table D-131 summarizes the freeway ramp operations under the Land Use Plan. No ramp volumes exceed the ramp meter rates and therefore no significant impacts occur.

Table D-131

2015-2030 Freeway Ramp Operations – Proposed Airport Land Use Plan

Location	Peak Hour	2015					2020				
		Demand (veh/hr)	Maximum Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (minutes)	Queue (feet)	Demand (veh/hr)	Maximum Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (minutes)	Queue (feet)
I-5 NB from San Diego	AM	524	1,992	0	0	0	758	1,992	0	0	0
	PM	501	1,992	0	0	0	884	1,992	0	0	0
I-5 NB from India	AM	1,103	1,992	0	0	0	933	1,992	0	0	0
	PM	1,201	1,992	0	0	0	1,180	1,992	0	0	0
I-5 SB from Kettner	AM	125	996	0	0	0	147	996	0	0	0
	PM	109	996	0	0	0	226	996	0	0	0
I-5 SB from Washington/Hancock	AM	480	1,140	0	0	0	522	1,140	0	0	0
	PM	285	1,140	0	0	0	914	1,140	0	0	0

Location	Peak Hour	2025					2030				
		Demand (veh/hr)	Maximum Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (minutes)	Queue (feet)	Demand (veh/hr)	Maximum Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (minutes)	Queue (feet)
I-5 NB from San Diego	AM	788	1,992	0	0	0	887	1,992	0	0	0
	PM	664	1,992	0	0	0	700	1,992	0	0	0
I-5 NB from India	AM	772	1,992	0	0	0	1,390	1,992	0	0	0
	PM	1,162	1,992	0	0	0	1,738	1,992	0	0	0
I-5 SB from Kettner	AM	149	996	0	0	0	97	996	0	0	0
	PM	244	996	0	0	0	150	996	0	0	0
I-5 SB from Grape	AM	1,083	1,992	0	0	0	1,148	1,992	0	0	0
	PM	1,998	1,992	6	0	184	2,116	1,992	124	4	3,602
I-5 SB from Washington/Hancock	AM	568	1,140	0	0	0	591	1,140	0	0	0
	PM	890	1,140	0	0	0	470	1,140	0	0	0

Source: HNTB, 2007

veh/hr = vehicles per hour

D.7.3.5 Railroad Crossings

Forecasts of future train operations were obtained from the San Diego 2030 RTP (Mobility 2030), the 2007 LOSSAN Strategic Business Plan, and the 2000 San Diego International Airport Master Plan Preferred Concept Alternatives Roadway Analysis¹⁹ report. Mobility 2030 projects that the headways for the Coaster Service will decrease from 36 minutes to 20 minutes during peak hours and from 120 minutes to 60 minutes during off-peak hours by 2030. That translates to a 44% increase in frequency during peak hours by 2030. The LOSSAN Strategic Business Plan projects that Coaster service would increase from existing 22 trains per day to 54 trains per day in 2025, consistent with the above. The LOSSAN Strategic Business Plan also projects that Amtrak Pacific Surfliner service between Los Angeles and San Diego would increase from existing 22 trips per day in 2005/2006 to 26 trains in 2015 and 32 trains in 2025. Mobility 2030 also projects that headways for the trolley Blue Line service that passes through the study area would decrease from 15 minutes to 7.5 minutes during off-peak hours by 2030. Estimated daily train operations in 2030 include 36 Amtrak trips, 78 Coaster trips, and 384 Trolley trips. For the analysis, freight train operations were estimated to increase to four trains per day.

Table D-132 summarizes the railroad crossing delay analysis for each analysis year under the Airport Land Use Plan. As shown, delays at all railroad crossings were estimated to be under the

¹⁹ Linscott, Law & Greenspan Engineers March 3, 2000 San Diego International Airport Master Plan Preferred Concept Alternatives Roadway Analysis.

VHD threshold for each street segment in all analysis years. Therefore, no mitigation is required at any railroad crossing.

Table D-132

2015-2030 Railroad Crossing Operations – Proposed Airport Land Use Plan

Crossing	Year 2015				
	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	24,500	8.53	144	No
Sassafras Street	150	16,100	6.13	47	No
Palm Street	75	900	6.13	0	No
Laurel Street	300	31,500	0.80	1	No
Hawthorn Street	150	23,700	0.80	14	No
Grape Street	300	34,900	0.80	26	No

Crossing	Year 2020				
	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	300	25,900	8.94	164	No
Sassafras Street	150	17,200	6.46	55	No
Palm Street	75	300	6.46	0	No
Laurel Street	300	32,600	1.13	1	No
Hawthorn Street	300	26,400	1.13	26	No
Grape Street	300	37,800	1.13	52	No

Crossing	Year 2025				
	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	300	26,500	9.41	180	No
Sassafras Street	150	19,000	6.79	67	No
Palm Street	75	100	6.79	0	No
Laurel Street	300	33,900	1.46	0	No
Hawthorn Street	300	27,800	1.46	34	No
Grape Street	300	39,100	1.46	71	No

Crossing	Year 2030				
	VHD Threshold	ADT Volume	Total gate down time per day (hours)	VHD	Exceeds VHD Limit
Washington Street	150	20,900	9.95	141	No
Sassafras Street	75	13,800	7.18	47	No
Palm Street	75	100	7.18	0	No
Laurel Street	300	36,500	1.85	0	No
Hawthorn Street	300	29,800	1.85	47	No
Grape Street	300	41,000	1.85	102	No

Source: HNTB, 2007

VHD = vehicle-hours of delay

ADT = average daily traffic

D.7.3.6 Transit

Under the Land Use Plan, no existing or planned transit routes would be modified. However, MTS bus routes along Pacific Highway could be rerouted into the Airport Transit Center off Pacific

Highway. Changes to the bus routes are not part of this EIR but could be coordinated between MTS and SDCRAA. No significant impact would occur to transit operations under the Land Use Plan.

D.7.3.7 Parking

The Land Use Plan would not remove any parking lots designated for public use. Passenger terminals also are not located close to commercial or residential areas. In addition, the Land Use Plan would provide additional airport public parking spaces (as previously discussed in Section D.7.1) that would address the projected parking shortfall under the No Project Alternative. This is a favorable parking impact of the Land Use Plan compared to the No Project Alternative.

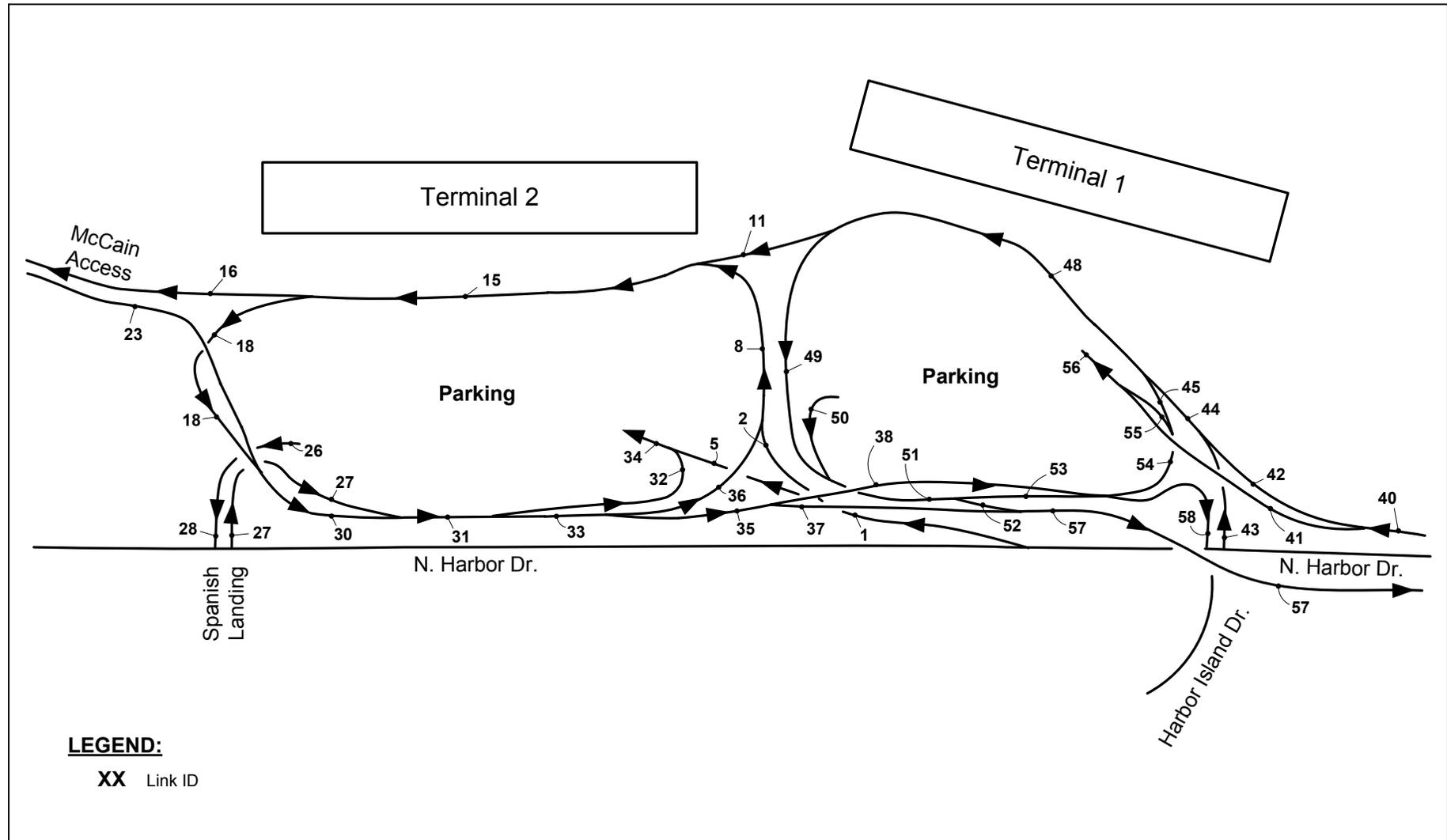
D.7.3.8 Terminal Curbside

Currently 6,630 linear feet of curbside is available between all three terminals. In 2015, 7,240 linear feet of curbside is required at Terminals 1 and 2 and the Commuter Terminal to accommodate private and commercial vehicle demand. The No Project Alternative would maintain the existing curbside supply, which would result in a curbside deficit of 610 linear feet. Under the ~~Implementation Plan (With Parking Structure)~~ Proposed Airport Land Use Plan, an additional 1,370 linear feet of curbside would be provided at Terminal 2 for a total of 8,000 linear feet, providing an airport-wide surplus of 760 linear feet in 2015. Therefore, the ~~Implementation Plan (With Parking Structure)~~ Proposed Airport Land Use Plan, would result in favorable curbside impact compared to the No Project Alternative.

D.7.3.9 On-Airport Traffic Circulation

Table D-133 shows the on-airport roadway operations for each analysis year under the Land Use Plan. Please refer to **Figure D.7-1** for link ID key map. As shown, all terminal roadways would operate at LOS D or better during peak hours under the Land Use Plan. Therefore, there would be no significant on-airport traffic circulation impact under the Land Use Plan compared to the No Project Alternative, and no mitigation is required.

AIRPORT MASTER PLAN
SAN DIEGO INTERNATIONAL AIRPORT



Appendix D.7-1

**On-Airport Roadway Link ID Key Map
Proposed Airport Land Use Plan**

Environmental Impact Report

Table D-133
2015-2030 On-Airport Roadway Operations – Proposed Airport Land Use Plan

Link ID	Lanes	2015				2020				2025				2030			
		AM		PM		AM		PM		AM		PM		AM		PM	
		Volume (vph)	LOS	Volume (vph)	LOS	Volume (vph)	LOS	Volume (vph)	LOS	Volume (vph)	LOS	Volume (vph)	LOS	Volume (vph)	LOS	Volume (vph)	LOS
1	2	559	B	459	A	630	B	518	B	686	B	563	B	718	B	593	B
2	2	450	A	382	A	503	B	427	A	546	B	464	A	575	B	490	B
3		Link Not Used				Link Not Used				Link Not Used				Link Not Used			
4		Link Not Used				Link Not Used				Link Not Used				Link Not Used			
5	2	109	A	77	A	127	A	91	A	140	A	99	A	143	A	102	A
6		Link Not Used				Link Not Used				Link Not Used				Link Not Used			
7		Link Not Used				Link Not Used				Link Not Used				Link Not Used			
8	4	572	A	485	A	638	A	542	A	692	A	588	A	761	A	649	A
9		Link Not Used				Link Not Used				Link Not Used				Link Not Used			
10		Link Not Used				Link Not Used				Link Not Used				Link Not Used			
11	1	132	A	133	A	140	A	141	A	145	A	147	A	155	A	157	A
12		Link Not Used				Link Not Used				Link Not Used				Link Not Used			
13		Link Not Used				Link Not Used				Link Not Used				Link Not Used			
14		Link Not Used				Link Not Used				Link Not Used				Link Not Used			
15	8	704	A	618	A	777	A	683	A	837	A	735	A	916	A	806	A
16	2	180	A	155	A	196	A	171	A	210	A	182	A	252	A	219	A
17		Link Not Used				Link Not Used				Link Not Used				Link Not Used			
18	2	524	B	463	A	581	B	512	B	627	B	553	B	664	B	587	B
19		Link Not Used				Link Not Used				Link Not Used				Link Not Used			
20		Link Not Used				Link Not Used				Link Not Used				Link Not Used			
21		Link Not Used				Link Not Used				Link Not Used				Link Not Used			
22		Link Not Used				Link Not Used				Link Not Used				Link Not Used			
23	2	79	A	66	A	86	A	74	A	92	A	79	A	97	A	83	A
24		Link Not Used				Link Not Used				Link Not Used				Link Not Used			
25		Link Not Used				Link Not Used				Link Not Used				Link Not Used			
26	2	66	A	141	A	77	A	166	A	84	A	182	A	91	A	196	A
27	1	99	A	82	A	112	A	92	A	122	A	100	A	168	A	138	A
28	2	66	A	141	A	77	A	166	A	84	A	182	A	91	A	196	A
29		Link Not Used				Link Not Used				Link Not Used				Link Not Used			
30	2	603	B	529	B	667	B	586	B	719	B	631	B	761	B	670	B
31	3	702	A	611	A	779	B	678	A	841	B	731	B	928	B	808	B
32	1	19	A	14	A	23	A	16	A	25	A	18	A	34	A	24	A
33	3	683	A	597	A	756	B	662	A	816	B	713	B	894	B	784	B
34	4	128	A	91	A	150	A	107	A	165	A	117	A	177	A	126	A
35	2	561	B	494	B	621	B	547	B	670	B	590	B	709	B	626	B
36	1	122	A	103	A	135	A	115	A	146	A	124	A	186	A	158	A
37	1	479	C	415	C	532	C	461	C	577	D	499	C	612	D	532	C
38	1	82	A	80	A	89	A	86	A	94	A	90	A	98	A	94	A
39		Link Not Used				Link Not Used				Link Not Used				Link Not Used			
40	2	527	B	460	A	568	B	495	B	592	B	517	B	589	B	519	B
41	1	68	A	49	A	68	A	49	A	68	A	49	A	65	A	46	A
42	2	459	A	412	A	500	B	447	A	524	B	468	A	524	B	473	B
43	1	83	A	69	A	90	A	75	A	94	A	78	A	119	A	100	A
44	3	542	A	480	A	590	A	521	A	618	A	546	A	643	A	573	A
45	1	37	A	31	A	41	A	35	A	43	A	37	A	45	A	39	A
46		Link Not Used				Link Not Used				Link Not Used				Link Not Used			
47		Link Not Used				Link Not Used				Link Not Used				Link Not Used			
48	4	579	A	511	A	631	A	556	A	661	A	583	A	688	A	612	A
49	2	447	A	378	A	491	B	415	A	516	B	436	A	533	B	455	A
50	1	41	A	89	A	41	A	89	A	42	A	90	A	42	A	90	A
51	3	488	A	467	A	532	A	504	A	558	A	526	A	575	A	545	A
52	2	399	A	384	A	436	A	415	A	457	A	434	A	448	A	427	A
53	1	89	A	83	A	97	A	89	A	101	A	92	A	128	A	118	A
54	1	50	A	40	A	54	A	44	A	56	A	46	A	61	A	51	A
55	1	13	A	9	A	13	A	9	A	13	A	9	A	16	A	12	A
56	4	81	A	58	A												
57	2	877	B	799	B	967	B	876	B	1,034	B	933	B	1,059	C	959	B
58	2	121	A	123	A	132	A	131	A	138	A	136	A	163	A	161	A

Source: HNTB Corporation, 2007

LOS = Level of service

NOTE: Please refer to [Figure D.7-1](#) for link ID key map.

D.8 Construction Impacts

Any major construction at SDIA creates increases in traffic volumes on project area roadways from trucks hauling materials and equipment, and construction workers commuting to and from SDIA. In order to minimize disruption to travelers and neighbors and in recognition of potential impacts from construction activities, SDIA has committed to the following two activities in order to mitigate construction activities on the surrounding environment.

Establish a Construction Coordination Office within the Ground Transportation Department. This office would operate during the life of the Proposed Airport Implementation Plan construction period to coordinate deliveries, monitor traffic conditions, advise motorists about detours, congested areas, and alternative parking areas, and monitor and enforce delivery times and routes. SDIA will periodically analyze traffic conditions on designated routes during construction to evaluate and optimize the transportation system during the construction period.

This office will undertake a variety of duties, including but not limited to:

- Inform motorists about detours, alternative parking, and congestion by use of static or changeable message signs, media announcements, airport website, airport information roadway radio station, etc;
- Work with police to enforce delivery times and routes, including specified truck routes;
- Establish staging areas;
- Coordinate with emergency response agencies to maintain emergency access and response times;
- Coordinate Caltrans, and city roadway projects with SDIA projects so as to minimize impacts to travel;
- Monitor and coordinate deliveries;
- Establish detour routes;
- Work with neighbors to address their concerns regarding construction activity traffic;
- Analyze traffic conditions to determine the need for additional traffic controls, communication, signal modifications, lane re-striping, rerouting, etc.

Require Orientation for Construction Personnel. All construction personnel will be required through contractual means to participate in an SDIA project specific orientation that includes where to park, where staging areas are located, construction policies, delivery routes, detours, airport construction area driving protocol, etc., in addition to airport safety and security issues training.

There would be a temporary and unavoidable increase in traffic volumes on project area roadways during construction of the Proposed Airport Implementation Plan due to traffic generated by trucks hauling materials and equipment, and construction workers commuting to and from SDIA. Construction worker and truck trips were estimated by the San Diego International Airport Program Study Construction Schedule Estimation. Equipment, crews and activity durations were provided in a conceptual schedule to show how the SDCRAA would most likely complete project elements and the program in the required sequence to maintain an operating airport. This construction schedule was produced for this EIR primarily to analyze impacts to air quality from construction activities, but is also used also to analyze impacts to traffic and circulation.

The critical issue relating to project construction involves maintenance of traffic in the immediate construction zone, and handling the additional traffic related to transportation of construction

materials and crews. No construction traffic would be expected to use residential streets to access SDIA.

Construction workers would be expected to generate few peak hour trips because their work shifts typically start before the morning peak and end before the evening peak. All workers would be expected to park on-site at SDIA. Construction-related truck trips that would occur while the peak numbers of employees are present would be minimal, with construction materials and equipment being hauled during off-peak hours. There would be some circumstances, for instance when concrete pours are being made to construct the parking structure, there would be up to one truck every seven minutes from 7:00 AM to 4:00 PM, or eight to nine truck trip per hour during the AM peak hour. Because these impacts are temporary, no potential significant impacts are anticipated and no mitigation measures are required. It should be noted, however, that the contractor will prepare a traffic control plan as part of construction contract in order to ensure that construction worker and truck trip are minimized during AM peak hours and will not use residential streets to access SDIA.

Because construction is a short-term activity and would be expected to follow plans and rules that minimize affects, no potential significant impacts to traffic and circulation are expected.

D.9 Cumulative Impacts

All traffic analysis presented in this appendix was conducted using data from the Regional Transportation Model maintained by SANDAG (excluding airport traffic). SANDAG provided existing and forecast traffic for 2005, 2010, and 2015. This “background” traffic was added to forecasts of SDIA generated traffic associated with the airport and specific projects alternatives. SANDAG traffic forecasts include traffic associated with all approved plans and projects incorporated in SANDAG’s model.

Traffic forecasts for future years include traffic associated with approved plans/projects included in SANDAG’s Series 10 forecasts including but not limited to:

- Naval Training Center/Liberty Station Precise Plan/EIR (January 2000/September 2001)
- North Embarcadero Visionary Plan Final EIR (April 2000)

The Series 10 forecast does not include the following projects, which had not been accepted by the San Diego City Council at the time of the model run. However, the Series 10 forecasts assumed development at these locations based on General Plan Zoning that is assumed to be similar or more intense than land uses assumed in the following EIRs:

- Old Police Headquarters and Park Project Draft EIR (July 2005) or Final EIR (February 2006)
- Centre City Development Corporation (CCDC) Master Plan Draft EIR (July 2005) or Final EIR (January 2006)
- Woodfin Suites Hotel and Port Master Plan Amendment Project Draft EIR (March 2006)

Since SANDAG forecasts account for all approved plan and projects within the region, all traffic estimates used in the study account for cumulative traffic. Therefore, traffic impacts presented in this study represent cumulative impacts anticipated in the study area under each alternative. In addition the implementation of the Airport Land Use Plan describe a maximum development scenario accommodating regional growth at SDIA and represent a worst case development impact scenario for SDIA. Mitigation measures for these impacts are presented in Section D.10.

D.10 Mitigation Measures/Other Improvements

All potential significant impacts resulting from implementation of the Proposed Project that includes the Proposed Airport Implementation Plan and Proposed Airport Land Use Plan, and the

proposed Alternative that includes the Airport Implementation Plan Alternative, and Proposed Airport Land Use Plan are identified in previous sections. For each significant impact, mitigation measures are provided below.

Implementation of all alternatives would result in potentially significant impacts to traffic and circulation including under the Proposed Land Use Plan by 2030. The future airport uses describe a maximum development scenario accommodating regional growth at SDIA and represent a worst case development impact scenario. This analysis is provided to inform the public and agencies responsible for traffic and circulation of the effects of accommodating regional growth. Future projects developed under the Airport Land Use Plan and not included in the Implementation Plan will be 1) evaluated to ensure consistency with the adopted Airport Land Use Plan and 2) reviewed at a project level to determine if any potential significant impacts to traffic and circulation may occur and incorporate the mitigation measures required by the Airport Land Use Plan. Implementation of any proposed mitigation measures will require coordination between the SDCRAA and the agency responsible for the transportation facilities (i.e. the City of San Diego for city-dedicated streets) in order to mitigate any potential significant impacts.

Roadway segments, intersections and arterial roadways in the project area are within the responsibility and jurisdiction of the City and not SDCRAA. Freeway ramps and operations in the project area are within the responsibility and jurisdiction of Caltrans and not the SDCRAA. Although the SDCRAA does not have the authority to impose mitigation measures affecting transportation and circulation facilities within the responsibility and jurisdiction of another public agency, SDCRAA would coordinate with the City and Caltrans in implementing necessary mitigation measures and recommends that the following mitigation measures ~~be considered as results of future regional growth to mitigate the Proposed Project's traffic impacts.~~ While the Airport Authority operates under strict provisions required by certain FAA grant assurances that restrict the use of airport funds outside of the airport boundaries, the FAA has indicated that they are willing to consider whether or not the use of airport revenue may be permitted for funding certain off-airport transportation mitigation measures that provide direct access to the airport. However, the FAA's determination will not be known until a final, approved mitigation package is available for discussion with the FAA.

The mitigation measures identified below would reduce traffic impacts to a level of less than significant. However, the roadway segments, intersection, arterial roadways, and freeway ramps and operations are within the legal authority, responsibility and jurisdiction of the City or Caltrans, not SDCRAA. As such, SDCRAA lacks the legal authority to ensure that these other agencies will implement the mitigation measures necessary to render the traffic impacts less than significant. Thus, if these agencies do not implement the mitigation measures identified and adopted by SDCRAA, it is possible that the traffic impacts of the Project will remain significant after Project implementation.

As described in Section D.2, *Traffic Impacts and Significance Criteria*, significance criteria used to determine potentially significant impacts for freeway segments and metered on-ramps, street/roadway segments, intersections and parking were derived from the City of San Diego Development Services Department's CEQA Significance Determination Thresholds guidelines dated January 2007; significance criteria for railroad crossings were derived from the California Utilities Commission, and best practice management was used to determine significance criteria for transit, parking, terminal curbsides and on-airport roadways. ~~Mitigation measures are proposed in this section for each potentially significant impact. Per Section O, Transportation/Circulation and Parking, of the City of San Diego's CEQA Significance Determination Thresholds dated January 2007 (described in Section D.2 of this DEIR FEIR), mitigation measures have been identified to (1) restore/and maintain the traffic facility to an acceptable level of service defined by the City of San Diego to be LOS D or better and (2) mitigate the project's direct significant and/or cumulatively considerable traffic impacts. In many cases these proposed mitigation measures are the same. Per Section O, Transportation/Circulation and Parking, of the City of San Diego's CEQA Significance Determination Thresholds dated January 2007, traffic mitigation measures are required to reduce the project's direct significant and/or cumulatively considerable traffic impacts. Where the~~

Proposed Project causes a significant traffic impact, as defined under the CEQA Significance Determination Thresholds, the following identifies mitigation measures which reduce that level below the applicable threshold. In addition, while not required by CEQA or San Diego's significance guidelines, as a matter of policy, the EIR identifies other traffic improvement measures aimed at restoring traffic caused by general regional growth to LOS D or better. These improvement measures are identified for informational purposes only. Sometimes the mitigation measure aimed at reducing the Project's direct or cumulative impact to less than significant also achieves the effect of restoring traffic to acceptable levels (defined by San Diego as LOS D or better); however, in other instances, additional traffic improvement measures are identified to restore traffic caused by regional growth to acceptable levels (defined by San Diego as LOS D or better). While mitigation measures reduce all impacts of the Proposed Project to a level of less than significant, in some instances, no practicable traffic improvements were identified to restore traffic caused by general regional growth to LOS D or better. In such instances, because the traffic is not caused by the Proposed Project, but rather by general regional growth, this is not considered a significant and unavoidable impact.

The sections that follow differentiate between measures which are "mitigation" required under CEQA because they reduce a Project impact, and "other improvements" which are aimed at reducing traffic caused by regional growth and restoring traffic to acceptable levels (defined as LOS D). Measures which are aimed at reducing the impact of the Proposed Project are labeled "Mitigation" and the verb "to mitigate" is used. Measures which are aimed at going beyond mitigation required by CEQA and restoring traffic caused by general regional growth to LOS D or better are referred to as "Other Improvements" and the term "mitigation" is not used.

D.10.1 Street Segments

Any potentially significant impacts to street segment in the study area resulting from implementation of each alternative compared to the No Project Alternative are identified below along with potential mitigation measures. Subsequent to implementation of any required mitigation a peak hour roadway analysis would be conducted as part of a mitigation feasibility study to determine specific mitigation including direction of lanes to be added. Street segments in the study area are within the jurisdiction of the City of San Diego.

D.10.1.1 Proposed Airport Implementation Plan (With Parking Structure)

The following mitigation described below is were identified to mitigate potentially significant Project impacts for street segments and to restore traffic conditions to No Project levels with potentially significant traffic impacts. In addition, as requested by the city of San Diego, W where mitigation to No Project remains below LOS D conditions and acceptable LOS conditions (defined by the City of San Diego to be LOS D) differs, separate mitigation measures potential improvements are identified. Operations after implementation of proposed mitigation compared to No Project conditions is shown in Tables D-134 and D-135 and improvements to LOS D conditions is shown in Tables D-136 and D-137 for informational purposes only.

Year 2010

- Sassafra Street between Pacific Highway and Kettner Boulevard:
 - Mitigation: Provide one additional eastbound travel lane for a total of two westbound and two eastbound travel lanes to mitigate to No Project conditions.
 - Other Improvements: This improvement will also improve the segment mitigate to an acceptable level of service C through 2030.
- Sassafra Street between Kettner Boulevard and India Street:

- Mitigation: Provide one additional eastbound travel lane for a total of one westbound and two eastbound travel lanes to mitigate to No Project conditions.
- Other Improvements: Provide one additional eastbound and one additional westbound travel lane for a total of two westbound and two eastbound to ~~mitigate~~ improve to LOS B through 2030.

Sassafras Street provides a major east-west connection between Pacific Highway and Kettner Boulevard with direct access to southbound I-5 and India Street with direct access to northbound I-5. Sassafras has limited total capacity with three lanes and capacity of 12,000 ADT between Pacific Highway and Kettner Boulevard and only two lanes and a capacity of 8,000 ADT between Kettner Boulevard and India Street. Under existing conditions the segment between Pacific Highway and Kettner Boulevard has 9,700~~0~~ ADT and operates at LOS D and the segment between Kettner Boulevard and India Street has 9,400 ADT (1,400~~0~~ ADT over capacity) and operates at LOS F.

Once the segment of Sassafras Street between Pacific Highway and India Street is operating at LOS F as it is under both the existing and 2010 and beyond No Project conditions it only requires 80 additional daily vehicle trips from the project to trigger a significant impact. Similarly once the segment of Sassafras Street between Pacific Highway and Kettner Boulevard is operating at LOS E as it is under the 2010 and beyond No Project conditions it only requires 240 additional daily vehicle trips from the project to trigger a significant impact.

Year 2015

- All mitigation identified in Year 2010
- Kettner Boulevard between Sassafras Street and Palm Street which increased from LOS D under No Project to LOS E with Project:
 - Mitigation: Provide one additional travel lane for a total of four travel lanes one-way to mitigate to No Project conditions.
 - Other Improvements: This improvement will also ~~mitigate~~ improve the segment to an acceptable level of service C through 2015.

Year 2020

- All locations identified in Year 2015 above except Kettner Boulevard between Sassafras Street and Palm Street which deteriorated to LOS F under both No Project and with Project but with an increase in volume to capacity ratio of less than 0.02, plus the following:
- North Harbor Drive between Winship Lane and Rental Car Road:
 - Mitigation: Provide one additional travel lane for a total of nine travel lanes to mitigate to No Project conditions through 2030. This segment is currently a maximum eight-lane configuration per City's roadway classification for Primary Arterial. A new roadway classification (9-lane Primary Arterial) would be required and corresponding capacity values defined to analyze the impact of the added lane.
 - Other Improvements: This improvement would ~~mitigate~~ improve the segment the street segment to LOS D or better through 2020.
 - Other Improvements: Two additional travel lanes for a total of ten travel lanes, 10-lane Prime configuration, would be required in 2025 and 2030 to ~~mitigate~~ improve the segment to LOS D conditions.

Year 2025

- All locations identified in Year 2020
- North Harbor Drive between Terminal 1 Access and Winship Lane:

- Mitigation: Provide one additional travel lane for a total of nine travel lanes to mitigate to No Project conditions through 2030. This segment is currently a maximum eight-lane configuration per City's roadway classification for Primary Arterial. A new roadway classification (9-lane Primary Arterial) would be required and corresponding capacity values defined to analyze the impact of the added lane.
- Other Improvements: This improvement will also ~~mitigate~~ improve the segment to LOS D or better through 2025.
- Improvement: Two additional travel lanes for a total of ten travel lanes would be required in 2030 to ~~mitigate~~ improve the segment to LOS D conditions.
- North Harbor Drive between Rental Car Road and Laurel Street:
 - Mitigation: Provide one additional travel lane for a total of 7 lanes to mitigate to No Project conditions through 2030.
 - Other Improvements: A 10-lane Prime configuration (4 additional travel lanes) is not adequate to ~~mitigate~~ improve the segment to LOS D or better in 2025 and ~~no feasible mitigation is available to mitigate to LOS D conditions~~ practicable traffic improvement is available. However, because the Project is not the cause of the traffic levels being below LOS D, no mitigation is required and this is not a significant traffic impact.
- North Harbor Drive between Laurel Street and Hawthorn Street:
 - Mitigation: Provide one additional travel lane for a total of 7 lanes to mitigate to No Project conditions through 2030
 - Other Improvements: 10-lane Prime configuration is required (4 additional travel lanes) to ~~mitigate~~ improve the segment to LOS D or better in 2025.
- Hawthorn Street between North Harbor Drive and Pacific Highway:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes, which would require prohibiting parking on one side of Hawthorn, to mitigate to No Project conditions.
 - Other Improvements: A 4-lane Major classification would be required to ~~mitigate~~ improve the segment from North Harbor Drive to Pacific Highway to LOS C through 2030.
- Grape Street between North Harbor Drive and Kettner Boulevard:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes, which would require prohibiting parking on one side of Grape, to mitigate to No Project conditions through 2030.
 - Other Improvements: This improvement would ~~mitigate~~ improve the segment between North Harbor Drive and Pacific Highway to LOS D through 2030.
 - Other Improvements: Two additional travel lanes for a total of 5 lanes (5-lane Major configuration) would be required between Pacific Highway and Kettner to ~~mitigate~~ improve the segment to LOS D through 2030.
- Kettner Boulevard between Washington Street and Sassafras Street:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes one-way to mitigate to No Project conditions.
 - Other Improvements: This improvement would also ~~mitigate~~ improve the segment to LOS C through 2030.
- Kettner Boulevard between Sassafras Street and Palm Street:

- Mitigation: Provide one additional travel lane for a total of 4 lanes one-way to mitigate to No Project conditions.
- Other Improvements: This improvement would also ~~mitigate~~ improve the segment to LOS C through 2030.

Year 2030

- All mitigation identified in Year 2025
- North Harbor Drive between Laurel Street and Hawthorn Street:
 - Mitigation: Provide one additional travel lane for a total of 7 lanes to mitigate to No Project conditions through 2030.
 - Other Improvements: A 10-lane Prime configuration (4 additional travel lanes) is not adequate to ~~mitigate~~ improve to LOS D or better in 2030 and no feasible ~~mitigation-improvement~~ is available to ~~mitigate~~ improve to LOS D conditions.
- Hawthorn Street between North Harbor Drive and I-5:
 - Other Improvements: Three additional lanes (6-lane Major one-way) would be required between Kettner Boulevard and I-5 to ~~mitigate~~ improve to LOS D conditions in 2030.
- Grape Street between Kettner Boulevard and I-5:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes, which would require prohibiting parking on one side of Grape, to mitigate to No Project conditions through 2030.
 - Other Improvements: Three additional travel lanes for a total of 6 lanes (6-lane Major) would be required between Kettner and I-5 to ~~mitigate~~ improve the segment to LOS D conditions.
- Laurel Street between Pacific Highway and Kettner Boulevard:
 - Mitigation: Reclassify from 4-Lane Collector to 4-Lane Major to mitigate to No Project conditions.
 - Other Improvements: This improvement would also ~~mitigate~~ improve the segment to LOS D.
- India Street between Laurel Street and Palm Street:
 - Mitigation: Provide one additional travel lane for a total of 3 lanes one-way which would require prohibiting on-street parking to mitigate to No Project conditions.
 - Other Improvements: A 4-lane Collector configuration would be required to ~~mitigate~~ improve the segment to LOS D or better through 2030.
- India Street between Palm Street and Washington Street:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes one-way which would require prohibiting on-street parking to mitigate to No Project conditions.
 - Other Improvements: This segment is currently classified as a 3-lane collector; a re-classification and widening to 4-lane major would be required to ~~mitigate~~ improve the segment to LOS D conditions.

Table D-134

**Street Segment Operations with Mitigation (2010 – 2020)
Proposed Implementation Plan (with Parking Structure)**

Mitigate to No Project Condition

Roadway	Segment		Year 2010		Year 2015		Year 2020	
			V/C	LOS	V/C	LOS	V/C	LOS
North Harbor Drive	Winship - Rental Car Rd	No Project					0.94	E
		Project - No Mitigation					0.96	E
		Project - With Mitigation	0.75		0.83		0.89	D
Kettner Blvd	Sassafras - Palm	No Project			0.897	D		
		Project - No Mitigation			0.901	E		
		Project - With Mitigation	0.67		0.751	D	1.01	
Sassafras Street	Pacific - Kettner	No Project	0.95	E	1.14	F	1.17	F
		Project - No Mitigation	0.97	E	1.17	F	1.19	F
		Project - With Mitigation	0.39	B	0.47	C	0.48	C
	Kettner-India	No Project	1.25	F	1.46	F	1.46	F
		Project - No Mitigation	1.27	F	1.48	F	1.48	F
		Project - With Mitigation	0.85	E	0.99	E	0.99	E

Source: HNTB, 2007.

Table D-135

**Street Segment Operations with Mitigation (2025 – 2030)
Proposed Implementation Plan (with Parking Structure)**

Mitigate to No Project Condition

Roadway	Segment		Year 2025		Year 2030	
			V/C	LOS	V/C	LOS
North Harbor Drive	T1 Access - Winship	No Project	0.93	E	0.94	E
		Project - No Mitigation	0.99	E	1.01	F
		Project - With Mitigation	0.92	D	0.94	E
	Winship - Rental Car Rd	No Project	0.98	E	0.97	E
		Project - No Mitigation	1.01	F	1.03	F
		Project - With Mitigation	0.95	E	0.96	E
	Rental Car Rd - Laurel	No Project	1.75	F	1.73	F
		Project - No Mitigation	1.77	F	1.79	F
		Project - With Mitigation	1.64	F	1.65	F
	Laurel - Hawthorn	No Project	1.19	F	1.22	F
		Project - No Mitigation	1.21	F	1.27	F
		Project - With Mitigation	0.91	D	0.95	E
Grape Street	Harbor - Pacific	No Project	1.09	F	1.13	F
		Project - No Mitigation	1.10	F	1.17	F
		Project - With Mitigation	0.92	E	0.97	E
	Pacific - Kettner	No Project	1.41	F	1.46	F
		Project - No Mitigation	1.43	F	1.50	F
		Project - With Mitigation	1.19	F	1.25	F
	Kettner - I-5	No Project			1.66	F
		Project - No Mitigation			1.69	F
		Project - With Mitigation			1.41	F
Hawthorn Street	Harbor - Pacific	No Project	1.10	F	1.16	F
		Project - No Mitigation	1.12	F	1.20	F
		Project - With Mitigation	0.93	E	1.00	E
	Pacific - Kettner	No Project			1.03	F
		Project - No Mitigation			1.06	F
		Project - With Mitigation			0.89	E
	Kettner - I-5	No Project			1.66	F
		Project - No Mitigation			1.69	F
		Project - With Mitigation			1.41	F
Kettner Blvd	Washington - Sassafras	No Project	1.04	F	1.11	F
		Project - No Mitigation	1.06	F	1.14	F
		Project - With Mitigation	0.88	E	0.95	E
	Sassafras - Palm	No Project	1.17	F	0.99	E
		Project - No Mitigation	1.19	F	1.02	F
		Project - With Mitigation	0.99	E	0.85	E
Laurel Street	Pacific - Kettner	No Project			1.13	F
		Project - No Mitigation			1.15	F
		Project - With Mitigation			0.87	D
Sassafras Street	Pacific - Kettner	No Project	1.28	F	0.94	E
		Project - No Mitigation	1.32	F	0.99	E
		Project - With Mitigation	0.53	C	0.40	B
	Kettner-India	No Project	1.53	F	1.32	F
		Project - No Mitigation	1.56	F	1.36	F
		Project - With Mitigation	1.04	F	0.91	E
India Street	Laurel - Palm	No Project	2.25	F	2.64	F
		Project - No Mitigation	2.26	F	2.68	F
		Project - With Mitigation	1.51	F	1.79	F
	Palm - Sassafras	No Project			2.09	F
		Project - No Mitigation			2.11	F
		Project - With Mitigation			0.84	E
	Sassafras - Washington	No Project			2.41	F
		Project - No Mitigation			2.42	F
		Project - With Mitigation			0.97	E

Source: HNTB, 2007.

Table D-136

Mitigate Improve to LOS D Condition (2010 – 2020)
Proposed Airport Implementation Plan (with Parking Structure)

Mitigation-Improvements assessed in this table will bring the street segment to an acceptable level of service C or D as defined by the City of San Diego and is provided for Informational Purposes ONLY.

Roadway	Segment		Year 2010		Year 2015		Year 2020	
			V/C	LOS	V/C	LOS	V/C	LOS
North Harbor Drive	Winship - Rental Car Rd	No Project					0.94	E
		Project - No Mitigation-Improvement					0.96	E
		Project - With Mitigation-Improvement					0.84	C
Kettner Blvd	Sassafra - Palm	No Project			0.90	D		
		Project - No Mitigation-Improvement			0.90	E		
		Project - With Mitigation-Improvement			0.75	D		
Sassafra Street	Pacific - Kettner	No Project	0.95	E	1.14	F	1.17	F
		Project - No Mitigation-Improvement	0.97	E	1.17	F	1.19	F
		Project - With Mitigation-Improvement	0.39	B	0.47	C	0.48	C
	Kettner-India	No Project	1.25	F	1.46	F	1.46	F
		Project - No Mitigation-Improvement	1.27	F	1.48	F	1.48	F
		Project - With Mitigation-Improvement	0.34	B	0.40	B	0.40	B

Source: HNTB, 2007.

Table D-137

Mitigate Improve to LOS D Condition (2025 – 2030)
Proposed Airport Implementation Plan (with Parking Structure)

Mitigation-Improvements assessed in this table will bring the street segment to an acceptable level of service C or D as defined by the City of San Diego and is provided for Informational Purposes ONLY.

Roadway	Segment		Year 2025		Year 2030	
			V/C	LOS	V/C	LOS
North Harbor Drive	T1 Access - Winship	No Project	0.93	E	0.94	E
		Project - No Mitigation Improvement	0.99	E	1.01	F
		Project - With Mitigation-Improvement	0.86	C	0.88	D
	Winship - Rental Car Rd	No Project	0.98	E	0.97	E
		Project - No Mitigation Improvement	1.01	F	1.03	F
		Project - With Mitigation-Improvement	0.89	D	0.90	D
	Rental Car Rd - Laurel	No Project	1.75	F	1.73	F
		Project - No Mitigation Improvement	1.77	F	1.79	F
		Project - With Mitigation-Improvement	1.33	F	1.34	F
	Laurel - Hawthorn	No Project	1.19	F	1.22	F
		Project - No Mitigation Improvement	1.21	F	1.27	F
		Project - With Mitigation-Improvement	0.91	D	0.95	E
Grape Street	Harbor - Pacific	No Project	1.09	F	1.13	F
		Project - No Mitigation Improvement	1.10	F	1.17	F
		Project - With Mitigation-Improvement	0.69	C	0.73	C
	Pacific - Kettner	No Project	1.41	F	1.46	F
		Project - No Mitigation Improvement	1.43	F	1.50	F
		Project - With Mitigation-Improvement	0.79	D	0.83	D
	Kettner - I-5	No Project			1.66	F
		Project - No Mitigation Improvement			1.69	F
		Project - With Mitigation-Improvement	0.77	C	0.84	D
Hawthorn Street	Harbor - Pacific	No Project	1.10	F	1.16	F
		Project - No Mitigation Improvement	1.12	F	1.20	F
		Project - With Mitigation-Improvement	0.70	C	0.75	C
	Pacific - Kettner	No Project			1.03	F
		Project - No Mitigation Improvement			1.06	F
		Project - With Mitigation-Improvement	0.62	C	0.67	C
	Kettner - I-5	No Project			1.66	F
		Project - No Mitigation Improvement			1.69	F
		Project - With Mitigation-Improvement	0.78	C	0.85	D
Kettner Blvd	Washington - Sassafras	No Project	1.04	F	1.11	F
		Project - No Mitigation Improvement	1.06	F	1.14	F
		Project - With Mitigation-Improvement	0.66	C	0.71	C
	Sassafras - Palm	No Project	1.17	F	0.99	E
		Project - No Mitigation Improvement	1.19	F	1.02	F
		Project - With Mitigation-Improvement	0.74	C	0.64	C
Laurel Street	Pacific - Kettner	No Project			1.13	F
		Project - No Mitigation Improvement			1.15	F
		Project - With Mitigation-Improvement	0.79	D	0.87	D
Sassafras Street	Pacific - Kettner	No Project	1.28	F	0.94	E
		Project - No Mitigation Improvement	1.32	F	0.99	E
		Project - With Mitigation-Improvement	0.53	C	0.40	B
	Kettner-India	No Project	1.53	F	1.32	F
		Project - No Mitigation Improvement	1.56	F	1.36	F
		Project - With Mitigation-Improvement	0.42	B	0.36	B
India Street	Laurel - Palm	No Project	2.25	F	2.64	F
		Project - No Mitigation Improvement	2.26	F	2.68	F
		Project - With Mitigation-Improvement	0.60	C	0.71	D
	Palm - Sassafras	No Project			2.09	F
		Project - No Mitigation Improvement			2.11	F
		Project - With Mitigation-Improvement	0.57	C	0.63	C
	Sassafras - Washington	No Project			2.41	F
		Project - No Mitigation Improvement			2.42	F
		Project - With Mitigation-Improvement	0.57	C	0.73	C

Source: HNTB, 2007.

D.10.1.2 Proposed Airport Implementation Plan (Without Parking Structure)

The following mitigation described below is were identified to mitigate potentially significant Project impacts for street segments and to restore traffic conditions to No Project levels with potentially significant traffic impacts. In addition, as requested by the city of San Diego, W where mitigation to No Project remains below LOS D conditions and acceptable LOS conditions (defined by the City of San Diego to be LOS D) differs, separate mitigation measures potential improvements are identified. Operations after implementation of proposed mitigation compared to No Project conditions is shown in [Tables D-138 and D-139](#) and improvements to LOS D conditions is shown in [Tables D-140 and D-141](#) for informational purposes only.

Year 2010

- **Sassafras Street between Kettner Boulevard and India Street:**
 - **Mitigation:** Provide one additional eastbound travel lane for a total of one westbound and two eastbound travel lanes to mitigate to No Project conditions.
 - **Other Improvements:** Provide one additional eastbound and one additional westbound travel lanes for a total of two westbound and two eastbound to mitigate improve to LOS B through 2030.

See Section 10.1.1 for a description of Sassafras Street.

Year 2015

- All locations identified in Year 2010 above, plus the following:
- **Kettner Boulevard between Sassafras Street and Palm Street** which increased from LOS D under No Project to LOS E with Project:
 - **Mitigation:** Provide one additional travel lane for a total of four travel lanes one-way to mitigate to No Project conditions which is also provides LOS D through 2030.
- **Sassafras Street between Pacific Highway and Kettner Boulevard:**
 - **Mitigation:** Provide one additional eastbound travel lane for a total of two westbound and two eastbound travel lanes to mitigate to No Project conditions.
 - **Other Improvements:** This improvement will also mitigate improve the segment to an acceptable level of service C through 2030.

Year 2020

- All locations identified in Year 2015 above except Kettner Boulevard between Sassafras Street and Palm Street (LOS F under both No Project and with Project but with an increase in volume to capacity ratio of less than 0.02)

Year 2025

- All locations identified in Year 2020 above, plus the following:
- **North Harbor Drive between Terminal 1 Access and Winship Lane:**
 - **Mitigation:** Provide one additional travel lane for a total of nine lanes to mitigate to No Project conditions. This segment is currently a maximum eight-lane configuration per City's roadway classification for Primary Arterial. A new roadway classification (9-lane Primary Arterial) would be required and

- corresponding capacity values defined to analyze the impact of the added lane.
- Other Improvements: This improvement would also ~~mitigate~~ improve the segment to LOS D conditions.
 - North Harbor Drive between Winship Lane and Rental Car Access Road:
 - Mitigation: Provide one additional travel lane for a total of nine lanes to mitigate to No Project conditions. This segment is already at maximum eight-lane configuration per City's roadway classification for Primary Arterial. A new roadway classification (9-lane Primary Arterial) would be required and corresponding capacity values defined to be able to analyze the impact of the added lane.
 - Other Improvements: 10 lanes would be required to ~~mitigate~~ improve the segment to LOS D through 2030.
 - Kettner Boulevard between Washington Street and Sassafras Street:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes one-way to mitigate to No Project conditions.
 - Other Improvements: This improvement would also ~~mitigate~~ improve the segment to LOS D through 2030.
 - Kettner Boulevard between Sassafras Street and Palm Street:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes one-way to mitigate to No Project conditions.
 - Other Improvements: This improvement would also ~~mitigate~~ improve the segment to LOS D through 2030.

Year 2030

- All locations identified in Year 2025 above plus the following:
- North Harbor Drive between Rental Car Access Road and Laurel Street:
 - Mitigation: Provide one additional travel lane for a total of 7 lanes to mitigate to No Project conditions through 2030.
 - Other Improvements: A 10-lane Prime configuration (4 additional travel lanes) is not adequate to ~~mitigate improve the segment~~ to LOS D or better in 2025 and 2030 and no ~~feasible mitigation practicable~~ traffic improvement is available. However, because the Project is not the cause of the traffic levels being below LOS D, no mitigation is required and this is not a significant impact.
- North Harbor Drive between Laurel Street and Hawthorn Street:
 - Mitigation: Provide one additional travel lane for a total of 7 lanes to mitigate to No Project conditions until 2030, and to LOS D or better in 2010.
 - Other Improvements: A 10-lane Prime configuration (4 additional travel lanes) is not adequate to ~~mitigate improve the segment~~ to LOS D or better in 2025 and 2030 and no ~~feasible mitigation practicable~~ traffic improvement is available. However, because the Project is not the cause of the traffic levels being below LOS D, no mitigation is required and this is not a significant impact.
- Grape Street between North Harbor Drive and I-5:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes, which would require prohibiting parking on one side of Grape Street, to mitigate to No Project conditions through 2030.

- Other Improvements: Two additional travel lanes for a total of 5 lanes (5-lane Major configuration) would be required between North Harbor Drive and Kettner Boulevard to ~~mitigate~~ improve the segment to LOS C and D through 2030.
- Other Improvements: Three additional travel lanes for a total of 6 lanes (6 lane Major configuration) would be required between Kettner and I-5 to ~~mitigate~~ improve the segment to LOS D conditions.
- Hawthorn Street between North Harbor Drive and I-5:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes, which would require prohibiting parking on one side of Hawthorn, to mitigate to No Project conditions.
 - Other Improvements: A 4-lane Major classification would be required to ~~mitigate~~ improve the segment from North Harbor Drive to Kettner Boulevard to LOS C in 2030.
 - Other Improvements: Three additional lanes (6-lane Major one-way) would be required to ~~mitigate~~ improve the segment between Kettner Boulevard and I-5 to LOS D conditions in 2030.
- Laurel Street between Pacific Highway and Kettner Boulevard:
 - Mitigation: Reclassify from 4-Lane Collector to 4-Lane Major to mitigate to No Project conditions.
 - Other Improvements: This improvement would also ~~mitigate~~ improve the segment to LOS D.
- India Street between Laurel Street and Palm Street:
 - Mitigation: Provide one additional travel lane for a total of 3 lanes one-way which would require prohibiting on-street parking to mitigate to No Project conditions.
 - Other Improvements: A 4-lane configuration would be required to ~~mitigate~~ improve the segment to LOS D in 2030.
- India Street between Palm Street and Sassafras Street:
 - Mitigation: Provide one additional travel lane for a total of four lanes one-way; would require removal on-street parking to widen India Street to mitigate to No Project conditions.
 - Other Improvements: A 4-lane Major configuration/reclassification is required to ~~mitigate~~ improve the segment to LOS D or better in 2030.

Table D-138

**Street Segment Operations with Mitigation (2010 – 2020)
Proposed Implementation Plan (without Parking Structure)**

Mitigate to No Project Condition

Roadway	Segment	Scenario	Year 2010		Year 2015		Year 2020	
			V/C	LOS	V/C	LOS	V/C	LOS
Kettner Blvd	Sassafras - Palm	No Project			0.90	D		
		Project - No Mitigation			0.90	E		
		Project - With Mitigation			0.56	C		
Sassafras Street	Pacific - Kettner	No Project			1.14	F	1.17	F
		Project - No Mitigation			1.17	F	1.19	F
		Project - With Mitigation			0.47	C	0.48	C
	Kettner-India	No Project	1.25	F	1.46	F	1.46	F
		Project - No Mitigation	1.27	F	1.48	F	1.48	F
		Project - With Mitigation	0.84	E	0.99	E	0.99	E

Source: HNTB, 2007.

Table D-139

**Street Segment Operations with Mitigation (2025 – 2030)
Proposed Implementation Plan (without Parking Structure)**

Mitigate to No Project Condition

Roadway	Segment	Scenario	Year 2025		Year 2030	
			V/C	LOS	V/C	LOS
North Harbor Drive	T1 Access - Winship	No Project	0.93	E	0.94	E
		Project - No Mitigation	0.96	E	0.98	E
		Project - With Mitigation	0.90	D	0.92	D
	Winship - Rental Car Rd	No Project	0.98	E	0.97	E
		Project - No Mitigation	1.00	F	1.01	F
		Project - With Mitigation	0.93	E	0.94	E
	Rental Car Rd - Laurel	No Project	1.75	F	1.73	F
		Project - No Mitigation	1.76	F	1.78	F
		Project - With Mitigation	1.63	F	1.64	F
Laurel - Hawthorn	No Project			1.22	F	
	Project - No Mitigation			1.26	F	
	Project - With Mitigation			1.16	F	
Grape Street	Harbor - Pacific	No Project			1.13	F
		Project - No Mitigation			1.15	F
		Project - With Mitigation			1.15	F
Grape Street	Pacific - Kettner	No Project			1.46	F
		Project - No Mitigation			1.49	F
		Project - With Mitigation			1.24	F
	Kettner - I-5	No Project			1.66	F
Project - No Mitigation				1.68	F	
Project - With Mitigation				1.40	F	
Hawthorn Street	Harbor - Pacific	No Project			1.16	F
		Project - No Mitigation			1.19	F
		Project - With Mitigation			0.99	E
	Pacific - Kettner	No Project			1.03	F
		Project - No Mitigation			1.06	F
		Project - With Mitigation			0.88	E
	Kettner - I-5	No Project			1.66	F
		Project - No Mitigation			1.69	F
Project - With Mitigation				1.41	F	
Kettner Blvd	Washington - Sassafras	No Project	1.04	F	1.11	F
		Project - No Mitigation	1.06	F	1.14	F
		Project - With Mitigation	0.66	C	0.71	C
	Sassafras - Palm	No Project	1.17	F	0.99	E
		Project - No Mitigation	1.18	F	1.02	F
		Project - With Mitigation	0.74	C	0.64	C
Laurel Street	Pacific - Kettner	No Project			1.13	F
		Project - No Mitigation			1.16	F
		Project - With Mitigation			0.87	D
Sassafras Street	Pacific - Kettner	No Project	1.28	F	0.94	E
		Project - No Mitigation	1.32	F	0.99	E
		Project - With Mitigation	0.53	C	0.40	B
	Kettner-India	No Project	1.53	F	1.32	F
		Project - No Mitigation	1.56	F	1.36	F
		Project - With Mitigation	1.04	F	0.91	E
India Street	Laurel - Palm	No Project			2.64	F
		Project - No Mitigation			2.68	F
		Project - With Mitigation			1.79	F
	Palm - Sassafras	No Project			2.09	F
		Project - No Mitigation			2.11	F
		Project - With Mitigation			0.84	E

Source: HNTB, 2007.

Table D-140

Mitigate Improve to LOS D Condition (2010 – 2020)
Proposed Airport Implementation Plan (without Parking Structure)

Mitigation-Improvements assessed in this table will bring the street segment to an acceptable level of service C or D as defined by the City of San Diego and is provided for Informational Purposes ONLY.

Roadway	Segment	Scenario	Year 2010		Year 2015		Year 2020	
			V/C	LOS	V/C	LOS	V/C	LOS
Kettner Blvd	Sassafras - Palm	No Project			0.897	D		
		Project - No Mitigation Improvement			0.901	E		
		Project - With Mitigation-Improvement			0.563	C	0.76	
Sassafras Street	Pacific - Kettner	No Project			1.14	F	1.17	F
		Project - No Mitigation Improvement			1.17	F	1.19	F
		Project - With Mitigation-Improvement			0.47	C	0.48	C
	Kettner-India	No Project	1.25	F	1.46	F	1.46	F
		Project - No Mitigation Improvement	1.27	F	1.48	F	1.48	F
		Project - With Mitigation-Improvement	0.34	B	0.40	B	0.40	B

Source: HNTB, 2007.

Table D-141

Mitigate Improve to LOS D Condition (2010 – 2020)
Proposed Airport Implementation Plan (without Parking Structure)

Mitigation-Improvements assessed in this table will bring the street segment to an acceptable level of service C or D as defined by the City of San Diego and is provided for Informational Purposes ONLY.

Roadway	Segment	Scenario	Year 2025		Year 2030	
			V/C	LOS	V/C	LOS
North Harbor Drive	T1 Access - Winship	No Project	0.93	E	0.94	E
		Project - No Mitigation Improvement	0.96	E	0.98	E
		Project - With Mitigation-Improvement	0.90	D	0.92	D
	Winship - Rental Car Rd	No Project	0.98	E	0.97	E
		Project - No Mitigation Improvement	1.00	F	1.01	F
		Project - With Mitigation-Improvement	0.88	D	0.88	D
	Rental Car Rd - Laurel	No Project	1.75	F	1.73	F
		Project - No Mitigation Improvement	1.76	F	1.78	F
		Project - With Mitigation-Improvement	1.32	F	1.33	F
	Laurel - Hawthorn	No Project			1.22	F
		Project - No Mitigation Improvement			1.26	F
		Project - With Mitigation-Improvement	0.90	D	0.94	E
Grape Street	Harbor - Pacific	No Project			1.13	F
		Project - No Mitigation Improvement			1.15	F
		Project - With Mitigation-Improvement	0.68	C	0.72	C
	Pacific - Kettner	No Project			1.46	F
		Project - No Mitigation Improvement			1.49	F
		Project - With Mitigation-Improvement	0.79	D	0.83	D
	Kettner - I-5	No Project			1.66	F
		Project - No Mitigation Improvement			1.68	F
		Project - With Mitigation-Improvement	0.77	D	0.84	D
Hawthorn Street	Harbor - Pacific	No Project			1.16	F
		Project - No Mitigation Improvement			1.19	F
		Project - With Mitigation-Improvement	0.69	C	0.74	C
	Pacific - Kettner	No Project			1.03	F
		Project - No Mitigation Improvement			1.06	F
		Project - With Mitigation-Improvement	0.62	C	0.66	C
	Kettner - I-5	No Project			1.66	F
		Project - No Mitigation Improvement			1.69	F
		Project - With Mitigation-Improvement	0.77	D	0.84	D
Kettner Blvd	Washington - Sassafras	No Project	1.04	F	1.11	F
		Project - No Mitigation Improvement	1.06	F	1.14	F
		Project - With Mitigation-Improvement	0.66	C	0.71	C
	Sassafras - Palm	No Project	1.17	F	0.99	E
		Project - No Mitigation Improvement	1.18	F	1.02	F
		Project - With Mitigation-Improvement	0.74	C	0.64	C
Laurel Street	Pacific - Kettner	No Project			1.13	F
		Project - No Mitigation Improvement			1.16	F
		Project - With Mitigation-Improvement	0.80	D	0.87	D
Sassafras Street	Pacific - Kettner	No Project	1.28	F	0.94	E
		Project - No Mitigation Improvement	1.32	F	0.99	E
		Project - With Mitigation-Improvement	0.53	C	0.40	B
	Kettner-India	No Project	1.53	F	1.32	F
		Project - No Mitigation Improvement	1.56	F	1.36	F
		Project - With Mitigation-Improvement	0.42	B	0.36	B
India Street	Laurel - Palm	No Project			2.64	F
		Project - No Mitigation Improvement			2.68	F
		Project - With Mitigation-Improvement	0.60	C	0.71	D
	Palm - Sassafras	No Project			2.09	F
		Project - No Mitigation Improvement			2.11	F
		Project - With Mitigation-Improvement	0.57	C	0.63	C

Source: HNTB, 2007.

D.10.1.3 Airport Implementation Plan Alternative (With Parking Structure)

The following mitigation described below is were identified to mitigate potentially significant Project impacts for street segments and to restore traffic conditions to No Project levels with potentially significant traffic impacts. In addition, as requested by the city of San Diego, ~~W~~ where mitigation to No Project remains below LOS D conditions and acceptable LOS conditions (defined by the City of San Diego to be LOS D) differs, separate mitigation measures potential improvements are identified. Operations after implementation of proposed mitigation compared to No Project conditions is shown in [Tables D-142 and D-143](#) and improvements to LOS D conditions is shown in [Tables D-144 and D-145](#) for informational purposes only.

Year 2010

- **Sassafras Street between Pacific Highway and Kettner Boulevard:**
 - Mitigation: Provide one additional eastbound travel lane for a total of two westbound and two eastbound travel lanes to mitigate to No Project conditions.
 - Other Improvements: This improvement would also ~~mitigate~~ improve the segment to LOS B or C conditions.
- **Sassafras Street between Kettner Boulevard and India Street:**
 - Mitigation: Provide one additional eastbound travel lane for a total of one westbound and two eastbound travel lanes to mitigate to No Project conditions.
 - Other Improvements: Provide one additional eastbound and one additional westbound travel lanes for a total of two westbound and two eastbound to ~~mitigate~~ improve the segment to LOS B conditions through 2030.

See Section D.10.1.1 for a description of Sassafras Street.

Year 2015

- All mitigation identified in Year 2010
- **Kettner Boulevard between Sassafras Street and Palm Street** which increased from LOS D under No Project to LOS E with Project:
 - Mitigation: Provide one additional travel lane for a total of four travel lanes one-way to mitigate to No Project conditions.
 - Other Improvements: This improvement will also ~~mitigate~~ improve the segment to an acceptable level of service C through 2015.

Year 2020

- All locations identified in Year 2015 above except Kettner Boulevard between Sassafras Street and Palm Street (LOS F under both No Project and with Project but with an increase in volume to capacity ratio of less than 0.02)
- **Grape Street between Pacific Highway and Kettner Boulevard:**
 - Mitigation: Provide one additional travel lane for a total of 4 lanes, which would require prohibiting parking on one side of Grape, to mitigate to No Project conditions through 2030.
 - Other Improvements: Two additional travel lanes for a total of 5 lanes (5-lane Major configuration) would be required between Pacific Highway and Kettner Boulevard to ~~mitigate~~ improve the segment to LOS C and D through 2030.

Year 2025

- All locations identified in Year 2020 above, plus the following:
- North Harbor Drive between Rental Car Access Road and Laurel Street:
 - Mitigation: Provide one additional travel lane for a total of 7 lanes to mitigate to No Project conditions through 2030.
 - Other Improvements: A 10-lane Prime configuration (4 additional travel lanes) is not adequate to ~~mitigate~~ improve the segment to LOS D or better in 2025 and 2030 and no ~~feasible mitigation~~ practicable traffic improvement is available in 2030. However, because the Project is not the cause of the traffic levels being below LOS D, no mitigation is required and this is not a significant impact.
- North Harbor Drive between Laurel Street and Hawthorn Street:
 - Mitigation: Provide one additional travel lane for a total of 7 lanes to mitigate to No Project conditions through 2030.
 - Other Improvements: 10-lane Prime configuration is required (4 additional travel lanes) to ~~mitigate~~ improve the segment to LOS D or better in 2025.
 - Other Improvements: A 10-lane Prime configuration (4 additional travel lanes) is not adequate to ~~mitigate~~ improve the segment to LOS D or better in 2030 and no ~~feasible mitigation~~ practicable traffic improvement is available in 2030. However, because the Project is not the cause of the traffic levels being below LOS D, no mitigation is required and this is not a significant impact.
- Grape Street between North Harbor Drive and Pacific Highway:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes, which would require prohibiting parking on one side of Grape, to mitigate to No Project conditions through 2030.
 - Other Improvements: This improvement would also ~~mitigate~~ improve the segment between North Harbor Drive and Pacific Highway to LOS C through 2030.
- Kettner Boulevard between Washington Street and Sassafras Street:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes one-way to mitigate to No Project conditions.
 - Other Improvements: This improvement would also ~~mitigate~~ improve the segment to LOS C through 2030.
- Kettner Boulevard between Sassafras Street and Palm Street:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes one-way to mitigate to No Project conditions.
 - Other Improvements: This improvement would also ~~mitigate~~ improve the segment to LOS C or D through 2030.

Year 2030

- All locations identified in Year 2025 above plus the following:
 - North Harbor Drive between Laurel Street and Hawthorn Street:
 - Mitigation: Provide one additional travel lane for a total of 7 lanes to mitigate to No Project conditions through 2030.
 - Other Improvements: 10-lane Prime configuration is required (4 additional travel

- lanes) to ~~mitigate~~ improve the segment to LOS D or better in 2025.
- Other Improvements: A 10-lane Prime configuration (4 additional travel lanes) is not adequate to ~~mitigate~~ improve the segment to LOS D or better in 2030 and no ~~feasible mitigation~~ practicable traffic improvement is available in 2030. However, because the Project is not the cause of the traffic levels being below LOS D, no mitigation is required and this is not a significant impact.
 - Grape Street between Kettner Boulevard and I-5:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes, which would require prohibiting parking on one side of Grape, to mitigate to No Project conditions through 2030.
 - Other Improvements: Three additional travel lanes for a total of 6 lanes (6-lane Major) would be required between Kettner and I-5 to ~~mitigate~~ improve the segment to LOS D conditions.
 - Hawthorn Street between North Harbor Drive and I-5:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes, which would require prohibiting parking on one side of Hawthorn, to mitigate to No Project conditions.
 - Other Improvements: This improvement would ~~mitigate~~ improve the segment between North Harbor Drive and Kettner Boulevard to LOS C through 2030.
 - Other Improvements: Two additional lanes for a total of 5 lanes would be required between Kettner Boulevard and I-5 to ~~mitigate~~ improve the segment to LOS D through 2025.
 - Other Improvements: Three additional lanes (6-lane Major one-way) would be required between Kettner Boulevard and I-5 to ~~mitigate~~ improve the segment to LOS D conditions in 2030.
 - Laurel Street between Pacific Highway and Kettner Boulevard:
 - Mitigation: Reclassify from 4-Lane Collector to 4-Lane Major to mitigate to No Project conditions.
 - Other Improvements: This improvement would also ~~mitigate~~ improve the segment to LOS D.
 - India Street between Laurel Street and Palm Street:
 - Mitigation: Provide one additional travel lane for a total of 3 lanes one-way which would require prohibiting on-street parking to mitigate to No Project conditions.
 - Other Improvements: Provide 2 additional travel lanes for a total of 4 lanes one-way to ~~mitigate~~ improve the segment to LOS D.
 - India Street between Palm Street and Washington Street:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes one-way which would require prohibiting on-street parking to mitigate to No Project conditions.
 - Other Improvements: This segment is currently classified as a 3-lane collector and a re-classification and widening to 4-lane major would be required to ~~mitigate~~ improve the segment to LOS D conditions.

Table D-142

Street Segment Operations with Mitigation (2010 – 2020)

Proposed Airport Implementation Plan Alternative (with Parking Structure)

Mitigate to No Project Condition

Roadway	Segment		Year 2010		Year 2015		Year 2020	
			V/C	LOS	V/C	LOS	V/C	LOS
Grape Street	Pacific - Kettner	No Project					1.37	F
		Project - No Mitigation					1.38	F
		Project - With Mitigation					1.15	F
Kettner Blvd	Sassafras - Palm	No Project			0.90	D		
		Project - No Mitigation			0.90	E		
		Project - With Mitigation			0.56	C		
Sassafras Street	Pacific - Kettner	No Project	0.95	E	1.14	F	1.17	F
		Project - No Mitigation	0.98	E	1.25	F	1.19	F
		Project - With Mitigation	0.39	B	0.50	C	0.48	C
	Kettner-India	No Project	1.25	F	1.46	F	1.46	F
		Project - No Mitigation	1.27	F	1.54	F	1.48	F
		Project - With Mitigation	0.85	E	1.03	F	0.99	E

Source: HNTB, 2007.

Table D-143

Street Segment Operations with Mitigation (2025 – 2030)
Proposed Airport Implementation Plan Alternative (with Parking Structure)

Mitigate to No Project Condition

Roadway	Segment		Year 2025		Year 2030	
			V/C	LOS	V/C	LOS
North Harbor Drive	Rental Car Rd - Laurel	No Project	1.75	F	1.73	F
		Project - No Mitigation	1.77	F	1.79	F
		Project - With Mitigation	1.63	F	1.65	F
	Laurel - Hawthorn	No Project			1.22	F
		Project - No Mitigation			1.26	F
		Project - With Mitigation			1.17	F
Grape Street	Harbor - Pacific	No Project			1.13	F
		Project - No Mitigation			1.17	F
		Project - With Mitigation			0.97	E
	Pacific - Kettner	No Project	1.41	F	1.46	F
		Project - No Mitigation	1.44	F	1.51	F
		Project - With Mitigation	1.20	F	1.26	F
	Kettner - I-5	No Project			1.66	F
		Project - No Mitigation			1.69	F
		Project - With Mitigation			1.41	F
Hawthorn Street	Harbor - Pacific	No Project			1.16	F
		Project - No Mitigation			1.19	F
		Project - With Mitigation			0.99	E
	Pacific - Kettner	No Project			1.03	F
		Project - No Mitigation			1.06	F
		Project - With Mitigation			0.89	E
	Kettner - I-5	No Project			1.66	F
		Project - No Mitigation			1.69	F
		Project - With Mitigation			1.41	F
Kettner Blvd	Washington - Sassafras	No Project			1.11	F
		Project - No Mitigation			1.14	F
		Project - With Mitigation			0.71	C
	Sassafras - Palm	No Project			0.99	E
		Project - No Mitigation			1.02	F
		Project - With Mitigation			0.64	C
Laurel Street	Pacific - Kettner	No Project			1.13	F
		Project - No Mitigation			1.16	F
		Project - With Mitigation			0.87	D
Sassafras Street	Pacific - Kettner	No Project	1.28	F	0.94	E
		Project - No Mitigation	1.32	F	0.99	E
		Project - With Mitigation	0.53	C	0.40	B
	Kettner-India	No Project	1.53	F	1.32	F
		Project - No Mitigation	1.56	F	1.36	F
		Project - With Mitigation	1.04	F	0.91	E
India Street	Laurel - Palm	No Project			2.64	F
		Project - No Mitigation			2.68	F
		Project - With Mitigation			1.79	F
	Palm - Sassafras	No Project			2.09	F
		Project - No Mitigation			2.11	F
		Project - With Mitigation			0.84	E
	Sassafras - Washington	No Project	1.93	F	2.41	F
		Project - No Mitigation	1.91	F	2.42	F
		Project - With Mitigation	0.76	D	0.97	E

Source: HNTB, 2007.

Table D-144

**Mitigate Improve to LOS D Condition (2010 – 2020)
Proposed Airport Implementation Plan Alternative (with Parking Structure)**

Mitigation-Improvements assessed in this table will bring the street segment to an acceptable level of service C or D as defined by the City of San Diego and is provided for Informational Purposes ONLY.

Roadway	Segment		Year 2010		Year 2015		Year 2020	
			V/C	LOS	V/C	LOS	V/C	LOS
Grape Street	Pacific - Kettner	No Project					1.37	F
		Project - No Mitigation Improvement					1.38	F
		Project - With Mitigation Improvement					0.87	D
Kettner Blvd	Sassafras - Palm	No Project			0.90	D		
		Project - No Mitigation Improvement			0.90	E		
		Project - With Mitigation Improvement			0.56	C		
Sassafras Street	Pacific - Kettner	No Project	0.95	E	1.14	F	1.17	F
		Project - No Mitigation Improvement	0.98	E	1.25	F	1.19	F
		Project - With Mitigation Improvement	0.39	B	0.50	C	0.48	C
	Kettner-India	No Project	1.25	F	1.46	F	1.46	F
		Project - No Mitigation Improvement	1.27	F	1.54	F	1.48	F
		Project - With Mitigation Improvement	0.34	B	0.41	B	0.40	B

Source: HNTB, 2007.

Table D-145

**Mitigate Improve to LOS D Condition (2025 – 2030)
Proposed Airport Implementation Plan Alternative (with Parking Structure)**

Mitigation-Improvements assessed in this table will bring the street segment to an acceptable level of service C or D as defined by the City of San Diego and is provided for Informational Purposes ONLY.

Roadway	Segment		Year 2025		Year 2030	
			V/C	LOS	V/C	LOS
North Harbor Drive	Rental Car Rd - Laurel	No Project	1.75	F	1.73	F
		Project - No Mitigation Improvement	1.77	F	1.79	F
		Project - With Mitigation Improvement	1.33	F	1.34	F
	Laurel - Hawthorn	No Project	1.19	F	1.22	F
		Project - No Mitigation Improvement	1.21	F	1.26	F
		Project - With Mitigation Improvement	0.91	D	0.95	E
Grape Street	Harbor - Pacific	No Project			1.13	F
		Project - No Mitigation Improvement			1.17	F
		Project - With Mitigation Improvement	0.69	C	0.73	C
	Pacific - Kettner	No Project	1.41	F	1.46	F
		Project - No Mitigation Improvement	1.44	F	1.51	F
		Project - With Mitigation Improvement	0.80	D	0.84	D
	Kettner - I-5	No Project			1.66	F
		Project - No Mitigation Improvement			1.69	F
		Project - With Mitigation Improvement	0.77	C	0.84	D
Hawthorn Street	Harbor - Pacific	No Project			1.16	F
		Project - No Mitigation Improvement			1.19	F
		Project - With Mitigation Improvement	0.69	C	0.74	C
	Pacific - Kettner	No Project			1.03	F
		Project - No Mitigation Improvement			1.06	F
		Project - With Mitigation Improvement	0.62	C	0.66	C
	Kettner - I-5	No Project			1.66	F
		Project - No Mitigation Improvement			1.69	F
		Project - With Mitigation Improvement	0.78	C	0.85	D
Kettner Blvd	Washington - Sassafras	No Project	1.04	F	1.11	F
		Project - No Mitigation Improvement	1.06	F	1.14	F
		Project - With Mitigation Improvement	0.66	C	0.71	C
	Sassafras - Palm	No Project	1.17	F	0.99	E
		Project - No Mitigation Improvement	1.19	F	1.02	F
		Project - With Mitigation Improvement	0.74	C	0.64	C
Laurel Street	Pacific - Kettner	No Project			1.13	F
		Project - No Mitigation Improvement			1.16	F
		Project - With Mitigation Improvement	0.79	D	0.87	D
Sassafras Street	Pacific - Kettner	No Project	1.28	F	0.94	E
		Project - No Mitigation Improvement	1.32	F	0.99	E
		Project - With Mitigation Improvement	0.53	C	0.40	B
	Kettner-India	No Project	1.53	F	1.32	F
		Project - No Mitigation Improvement	1.56	F	1.36	F
		Project - With Mitigation Improvement	0.42	B	0.36	B
India Street	Laurel - Palm	No Project			2.64	F
		Project - No Mitigation Improvement			2.68	F
		Project - With Mitigation Improvement	0.60	C	0.71	D
	Palm - Sassafras	No Project			2.09	F
		Project - No Mitigation Improvement			2.11	F
		Project - With Mitigation Improvement	0.57	C	0.63	C
	Sassafras - Washington	No Project			2.41	F
		Project - No Mitigation Improvement			2.42	F
		Project - With Mitigation Improvement	0.57	C	0.73	C

Source: HNTB, 2007.

D.10.1.4 Airport Implementation Plan Alternative (Without Parking Structure)

The following mitigation described below is were identified to mitigate potentially significant Project impacts for street segments and to restore traffic conditions to No Project levels with potentially significant traffic impacts. In addition, as requested by the city of San Diego, where mitigation to No Project remains below LOS D conditions and acceptable LOS conditions (defined by the City of San Diego to be LOS D) differs, separate mitigation measures potential improvements are identified. Operations after implementation of proposed mitigation compared

to No Project conditions is shown in [Tables D-146 and D-147](#) and improvements to LOS D conditions is shown in [Tables D-148 and D-149](#) for informational purposes only.

Year 2010

- Sassafra Street between Pacific Highway and Kettner Boulevard:
 - Mitigation: Provide one additional eastbound travel lane for a total of two westbound and two eastbound travel lanes to mitigate to No Project conditions.
 - Other Improvements: This improvement will also ~~mitigate~~ improve the segment to LOS D conditions.
- Sassafra Street between Kettner Boulevard and India Street:
 - Mitigation: Provide one additional eastbound travel lane for a total of one westbound and two eastbound travel lanes to mitigate to No Project conditions.
 - Other Improvements: Provide one additional eastbound and one additional westbound travel lanes for a total of two westbound and two eastbound to ~~mitigate~~ improve the segment to LOS B conditions through 2030.

See Section D.10.1.1 for a description of Sassafra Street.

Year 2015

- All mitigation identified in Year 2010
- Kettner Boulevard between Sassafra Street and Palm Street which increased from LOS D under No Project to LOS E with Project:
 - Mitigation: Provide one additional travel lane for a total of four travel lanes one-way to mitigate to No Project conditions which is also LOS D conditions.

Year 2020

- All locations identified in Year 2015 above except Kettner Boulevard between Sassafra Street and Palm Street (LOS F under both No Project and with Project but with an increase in volume to capacity ratio of less than 0.02).

Year 2025

- All locations identified in Year 2020 above, plus the following:
- North Harbor Drive between Rental Car Access Road and Laurel Street:
 - Mitigation: Provide one additional travel lane for a total of 7 lanes to mitigate to No Project conditions through 2030.
 - Other Improvements: A 10-lane Prime configuration (4 additional travel lanes) is not adequate to ~~mitigate~~ improve the segment to LOS D or better in 2025 and 2030 and no ~~feasible mitigation~~ practicable traffic improvement is available in 2030. However, because the Project is not the cause of the traffic levels being below LOS D, no mitigation is required and this is not a significant impact.
- Grape Street between Pacific Highway and Kettner Boulevard:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes, which would require prohibiting parking on one side of Grape, to mitigate to No Project conditions through 2030.
 - Other Improvements: Two additional travel lanes for a total of 5 lanes (5-lane Major configuration) would be required between Pacific Highway and Kettner Boulevard to ~~mitigate~~ improve the segment to LOS D through 2030.

- Kettner Boulevard between Washington Street and Sassafras Street:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes one-way to mitigate to No Project conditions.
 - Other Improvements: This improvement would also ~~mitigate~~ improve the segment to LOS C through 2030.
- Kettner Boulevard between Sassafras Street and Palm Street:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes one-way to mitigate to No Project conditions and to LOS D through 2030.

Year 2030

- All locations identified in Year 2025 above, plus the following:
- North Harbor Drive between Laurel Street and Hawthorn Street:
 - Mitigation: Provide one additional travel lane for a total of 7 lanes to mitigate to No Project conditions until 2030.
 - Other Improvements: This improvement would also ~~mitigate~~ improve the segment to LOS D or better in 2010.
 - Other Improvements: A 10-lane Prime configuration (4 additional travel lanes) is not adequate to ~~mitigate~~ improve the segment to LOS D or better in 2030 and no ~~feasible mitigation~~ practicable traffic improvement is available. However, because the Project is not the cause of the traffic levels being below LOS D, no mitigation is required and this is not a significant impact.
- Grape Street between North Harbor Drive and Pacific Highway:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes, which would require prohibiting parking on one side of Grape, to mitigate to No Project conditions through 2030.
 - Other Improvements: This improvement would also ~~mitigate~~ improve the segment between North Harbor Drive and Pacific Highway to LOS D.
- Grape Street between Kettner Boulevard and I-5:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes, which would require prohibiting parking on one side of Grape, to mitigate to No Project conditions through 2030.
 - Other Improvements: Three additional travel lanes for a total of 6 lanes (6 lane Major configuration) would be required between Kettner and I-5 to ~~mitigate~~ improve the segment to LOS D conditions.
- Hawthorn Street between North Harbor Drive and I-5:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes, which would require prohibiting parking on one side of Hawthorn, to mitigate to No Project conditions.
 - Other Improvements: This improvement would also ~~mitigate~~ improve the segment between North Harbor Drive and Kettner Boulevard to LOS D.
 - Other Improvements: Three additional lanes (6-lane Major one-way) would be required between Kettner Boulevard and I-5 to ~~mitigate~~ improve the segment to LOS D conditions.
- Laurel Street between Pacific Highway and Kettner Boulevard:

- Mitigation: Reclassify from 4-Lane Collector to 4-Lane Major to mitigate to No Project conditions.
- Other Improvements: This improvement would also ~~mitigate~~ improve the segment to LOS D.
- India Street between Laurel Street and Palm Street:
 - Mitigation: Provide one additional travel lane for a total of 3 lanes one-way by prohibiting on-street parking to mitigate to No Project conditions.
 - Other Improvements: Provide two additional travel lanes for a total of 4 lanes to ~~mitigate~~ improve the segment to LOS D conditions.
- India Street between Palm Street and Sassafras Street:
 - Mitigation: Provide one additional travel lane for a total of four lanes one-way; would require removal of on-street parking to widen India Street to mitigate to No Project conditions.
 - Other Improvements: A 4-lane Major configuration/reclassification is required to ~~mitigate~~ improve the segment to LOS C in 2030.

Table D-146

Street Segment Operations with Mitigation (2010 – 2020)
Proposed Airport Implementation Plan Alternative (without Parking Structure)

Mitigate to No Project Condition

Roadway	Segment		Year 2010		Year 2015		Year 2020	
			V/C	LOS	V/C	LOS	V/C	LOS
Kettner Blvd	Sassafras - Palm	No Project			0.897	D		
		Project - No Mitigation			0.902	E		
		Project - With Mitigation			0.56	C		
Sassafras Street	Pacific - Kettner	No Project	0.95	E	1.14	F	1.17	F
		Project - No Mitigation	0.98	E	1.17	F	1.20	F
		Project - With Mitigation	0.39	B	0.47	C	0.48	C
Kettner-India	Kettner-India	No Project	1.25	F	1.46	F	1.46	F
		Project - No Mitigation	1.27	F	1.49	F	1.49	F
		Project - With Mitigation	0.85	E	0.99	E	0.99	E

Source: HNTB, 2007.

Table D-147

Street Segment Operations with Mitigation (2025 – 2030)
Proposed Airport Implementation Plan Alternative (without Parking Structure)

Mitigate to No Project Condition

Roadway	Segment		Year 2025		Year 2030	
			V/C	LOS	V/C	LOS
North Harbor Drive	Rental Car Rd - Laurel	No Project	1.75	F	1.73	F
		Project - No Mitigation	1.76	F	1.78	F
		Project - With Mitigation	1.63	F	1.64	F
	Laurel - Hawthorn	No Project			1.22	F
		Project - No Mitigation			1.26	F
		Project - With Mitigation			1.16	F
Grape Street	Harbor - Pacific	No Project			1.13	F
		Project - No Mitigation			1.16	F
		Project - With Mitigation			0.97	E
	Pacific - Kettner	No Project	1.41	F	1.46	F
		Project - No Mitigation	1.43	F	1.50	F
		Project - With Mitigation	1.19	F	1.25	F
	Kettner - I-5	No Project			1.66	F
		Project - No Mitigation			1.68	F
		Project - With Mitigation			1.40	F
Hawthorn Street	Harbor - Pacific	No Project			1.16	F
		Project - No Mitigation			1.18	F
		Project - With Mitigation			0.99	E
	Pacific - Kettner	No Project			1.03	F
		Project - No Mitigation			1.06	F
		Project - With Mitigation			0.88	E
	Kettner - I-5	No Project			1.66	F
		Project - No Mitigation			1.69	F
		Project - With Mitigation			1.41	F
Kettner Blvd	Washington - Sassafras	No Project	1.04	F	1.11	F
		Project - No Mitigation	1.06	F	1.14	F
		Project - With Mitigation	0.66	C	0.71	C
	Sassafras - Palm	No Project	1.17	F	0.99	E
		Project - No Mitigation	1.19	F	1.02	F
		Project - With Mitigation	0.74	C	0.64	C
Laurel Street	Pacific - Kettner	No Project			1.13	F
		Project - No Mitigation			1.16	F
		Project - With Mitigation			0.87	D
Sassafras Street	Pacific - Kettner	No Project	1.28	F	0.94	E
		Project - No Mitigation	1.21	F	0.91	E
		Project - With Mitigation	0.48	C	0.37	B
	Kettner-India	No Project	1.53	F	1.32	F
		Project - No Mitigation	1.48	F	1.30	F
		Project - With Mitigation	0.99	E	0.87	E
India Street	Laurel - Palm	No Project			2.64	F
		Project - No Mitigation			2.68	F
		Project - With Mitigation			1.78	F
	Palm - Sassafras	No Project			2.09	F
		Project - No Mitigation			2.11	F
		Project - With Mitigation			0.84	E

Source: HNTB, 2007.

Table D-148

**Mitigate Improve to LOS D Condition (2010 – 2020)
Proposed Airport Implementation Plan Alternative (without Parking Structure)**

Mitigation Improvements assessed in this table will bring the street segment to an acceptable level of service C or D as defined by the City of San Diego and is provided for Informational Purposes ONLY.

Roadway	Segment		Year 2010		Year 2015		Year 2020	
			V/C	LOS	V/C	LOS	V/C	LOS
Kettner Blvd	Sassafras - Palm	No Project			0.90	D		
		Project - No Mitigation-Improvement			0.90	E		
		Project - With Mitigation-Improvement			0.56	C		
Sassafras Street	Pacific - Kettner	No Project	0.95	E	1.14	F	1.17	F
		Project - No Mitigation-Improvement	0.98	E	1.17	F	1.20	F
		Project - With Mitigation-Improvement	0.39	B	0.47	C	0.48	C
	Kettner-India	No Project	1.25	F	1.46	F	1.46	F
		Project - No Mitigation-Improvement	1.27	F	1.49	F	1.49	F
		Project - With Mitigation-Improvement	0.34	B	0.40	B	0.40	B

Source: HNTB, 2007.

Table D-149

Mitigate Improve to LOS D Condition (2025 – 2030)
Proposed Airport Implementation Plan Alternative (without Parking Structure)

Mitigation Improvements assessed in this table will bring the street segment to an acceptable level of service C or D as defined by the City of San Diego and is provided for Informational Purposes ONLY.

Roadway	Segment		Year 2025		Year 2030	
			V/C	LOS	V/C	LOS
North Harbor Drive	Rental Car Rd - Laurel	No Project	1.75	F	1.73	F
		Project - No Mitigation Improvement	1.76	F	1.78	F
		Project - With Mitigation Improvement	1.32	F	1.33	F
Laurel - Hawthorn		No Project			1.22	F
		Project - No Mitigation Improvement			1.26	F
		Project - With Mitigation Improvement	0.90	D	0.94	E
Grape Street	Harbor - Pacific	No Project			1.13	F
		Project - No Mitigation Improvement			1.16	F
		Project - With Mitigation Improvement	0.69	C	0.73	C
Pacific - Kettner		No Project	1.41	F	1.46	F
		Project - No Mitigation Improvement	1.43	F	1.50	F
		Project - With Mitigation Improvement	0.80	D	0.83	D
Kettner - I-5		No Project			1.66	F
		Project - No Mitigation Improvement			1.68	F
		Project - With Mitigation Improvement	0.77	C	0.84	D
Hawthorn Street	Harbor - Pacific	No Project			1.16	F
		Project - No Mitigation Improvement			1.18	F
		Project - With Mitigation Improvement	0.69	C	0.74	C
Pacific - Kettner		No Project			1.03	F
		Project - No Mitigation Improvement			1.06	F
		Project - With Mitigation Improvement	0.62	C	0.66	C
Kettner - I-5		No Project			1.66	F
		Project - No Mitigation Improvement			1.69	F
		Project - With Mitigation Improvement	0.77	C	0.84	D
Kettner Blvd	Washington - Sassafras	No Project	1.04	F	1.11	F
		Project - No Mitigation Improvement	1.06	F	1.14	F
		Project - With Mitigation Improvement	0.66	C	0.71	C
Sassafras - Palm		No Project	1.17	F	0.99	E
		Project - No Mitigation Improvement	1.19	F	1.02	F
		Project - With Mitigation Improvement	0.74	C	0.64	C
Laurel Street	Pacific - Kettner	No Project			1.13	F
		Project - No Mitigation Improvement			1.16	F
		Project - With Mitigation Improvement	0.79	D	0.87	D
Sassafras Street	Pacific - Kettner	No Project	1.28	F	0.94	E
		Project - No Mitigation Improvement	1.32	F	1.00	E
		Project - With Mitigation Improvement	0.53	C	0.40	B
Kettner-India		No Project	1.53	F	1.32	F
		Project - No Mitigation Improvement	1.56	F	1.37	F
		Project - With Mitigation Improvement	0.42	B	0.36	B
India Street	Laurel - Palm	No Project			2.64	F
		Project - No Mitigation Improvement			2.68	F
		Project - With Mitigation Improvement	0.60	C	0.71	D
Palm - Sassafras		No Project			2.09	F
		Project - No Mitigation Improvement			2.11	F
		Project - With Mitigation Improvement	0.57	C	0.63	C

Source: HNTB, 2007.

D.10.1.5 Proposed Airport Land Use Plan

The following mitigation ~~described below~~ ~~is~~ ~~were~~ ~~identified~~ ~~to~~ ~~mitigate~~ ~~potentially~~ ~~significant~~ ~~Project~~ ~~impacts~~ ~~for~~ ~~street~~ ~~segments~~ ~~and~~ ~~to~~ ~~restore~~ ~~traffic~~ ~~conditions~~ ~~to~~ ~~No~~ ~~Project~~ ~~levels~~ ~~with~~ ~~potentially~~ ~~significant~~ ~~traffic~~ ~~impacts~~. In addition, as requested by the city of San Diego, ~~where~~ ~~mitigation~~ ~~to~~ ~~No~~ ~~Project~~ ~~remains~~ ~~below~~ ~~LOS~~ ~~D~~ ~~conditions~~ ~~and~~ ~~acceptable~~ ~~LOS~~ ~~conditions~~ ~~(defined~~ ~~by~~ ~~the~~ ~~City~~ ~~of~~ ~~San~~ ~~Diego~~ ~~to~~ ~~be~~ ~~LOS~~ ~~D)~~ ~~differs~~, separate ~~mitigation~~ ~~measures~~ ~~potential~~ ~~improvements~~ are identified. Operations after implementation of proposed mitigation ~~compared~~ ~~to~~ ~~No~~ ~~Project~~ ~~conditions~~ is shown in [Table D-150](#) and ~~improvements~~ ~~to~~ ~~LOS~~ ~~D~~ ~~conditions~~ are shown in [Table D-151](#) ~~for~~ ~~informational~~ ~~purposes~~ ~~only~~.

Year 2015

- North Harbor Drive between Rental Car Access Road and Laurel Street:
 - Mitigation: Provide 4 additional travel lanes for a total of 10 lanes (5 westbound + 5 eastbound) to mitigate to No Project conditions
 - Other Improvements: A 10-lane Prime configuration (4 additional travel lanes) is not adequate to ~~mitigate~~ improve the segment to LOS D or better in 2015 and 2030 and no ~~feasible~~ ~~mitigation~~ practicable traffic improvement is available. However, because the Project is not the cause of the traffic levels being below LOS D, no mitigation is required and this is not a significant impact.
- North Harbor Drive between Laurel Street and Hawthorn Street:
 - Mitigation: Provide 4 additional travel lanes for a total of 10 lanes to mitigate to No Project conditions through 2030 and to LOS D in 2015.
 - Other Improvements: 10 lanes not adequate to ~~mitigate~~ improve the segment to LOS D in 2020 through 2030 and no ~~feasible~~ ~~mitigation~~ practicable traffic improvement is available. However, because the Project is not the cause of the traffic levels being below LOS D, no mitigation is required and this is not a significant traffic impact.
- Grape Street between North Harbor Drive and Pacific Highway:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes by prohibiting parking on one side to mitigate to No Project conditions and to LOS D through 2030
- Grape Street between Pacific Highway and Kettner Boulevard:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes by prohibiting parking on one side to mitigate to No Project conditions through 2030.
 - Other Improvements: 5 lanes required to ~~mitigate~~ improve the segment to LOS D through 2025.
 - Other Improvements: 6 lanes required to ~~mitigate~~ improve the segment to LOS D in 2030
- Grape Street between Kettner Boulevard and I-5:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes by prohibiting parking on one side to mitigate to No Project conditions.
 - Other Improvements: 6-lane Major configuration required to ~~mitigate~~ improve the segment to LOS D through 2025.
 - Other Improvements: Reclassification to 6-lane Prime is required to ~~mitigate~~ improve the segment to LOS D in 2030.

- Hawthorn Street between North Harbor Drive and Pacific Highway:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes by prohibiting parking on one side to mitigate to No Project conditions.
 - Other Improvements: This would also improve the road segment and to LOS D conditions through 2030
- Hawthorn Street between Pacific Highway and Kettner Boulevard:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes by prohibiting parking on one side to mitigate to No Project conditions.
 - Other Improvements: This would also improve the road segment and to LOS D or better through 2030.
- Hawthorn Street between Kettner Boulevard and I-5:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes by prohibiting parking on one side to mitigate to No Project conditions.
 - Other Improvements: 5 lanes required to ~~mitigate~~ improve the segment to LOS D or better in 2015 to 2025.
 - Other Improvements: 6 lanes required to ~~mitigate~~ improve the segment to LOS D or better in 2030.
- Kettner Boulevard between Washington Street and Sassafras Street:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes to mitigate to No Project conditions.
 - Other Improvements: This would also improve the road segment to and LOS D conditions through 2030.
- Kettner Boulevard between Sassafras Street and Palm Street:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes to mitigate to No Project conditions.
 - Other Improvements: This improvement would also ~~mitigate~~ improve the segment to LOS D through 2030.
- Laurel Street between North Harbor Drive and Pacific Highway:
 - Mitigation: Provide one additional travel lane for a total of 5 lanes to mitigate to No Project conditions.
 - Other Improvements: This improvement would also ~~mitigate~~ improve the segment to LOS D through 2025.
 - In 2030 background traffic decreased and no potential significant impacts were witnessed.
- Laurel Street between Pacific Highway and Kettner Boulevard:
 - Mitigation: Reclassify from 4-Lane Collector to 4-Lane Major Arterial to mitigate to No Project conditions.
 - Other Improvements: This improvement would also improve and to LOS D through 2025.
 - Improvement: One additional lane (5-Lane Major) required to ~~mitigate~~ improve the segment to LOS D in 2030.
- Sassafras Street between Pacific Highway and Kettner Boulevard:

- Mitigation: Provide one additional eastbound travel lane to have two westbound and two eastbound travel lanes to mitigate to No Project conditions.
- Other Improvements: This improvement would also improve the road segment and to LOS B and C through 2030.
- Sassafras Street between Kettner Boulevard and India Street:
 - Mitigation: Provide one additional eastbound travel lane to have one westbound and two eastbound travel lanes to mitigate to No Project conditions.
 - Other Improvements: 4 lanes required to ~~mitigate~~ improve the segment to LOS D or better through 2030.
- Washington Street between Kettner Boulevard and San Diego Street:
 - Mitigation: Reclassify from 4-lane Collector to 4-lane Major to mitigate to No Project conditions.
 - Other Improvements: The proposed implementation will ~~mitigate~~ improve the segment to LOS D through 2030.
- India Street between Laurel Street and Palm Street:
 - Mitigation: Provide one additional travel lane for a total of 3 lanes one-way by prohibiting on-street parking to mitigate to No Project conditions.
 - Other Improvements: 4 lanes required to ~~mitigate~~ improve the segment to LOS D through 2030.
- India Street between Palm Street and Sassafras Street:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes one-way by prohibiting on-street parking to mitigate to No Project conditions.
 - Other Improvements: Reclassify to 4-lane Major to ~~mitigate~~ improve the segment to LOS D through 2030.
- India Street between Sassafras Street and Washington Street:
 - Mitigation: Provide one additional travel lane for a total of 4 lanes one-way by prohibiting on-street parking to mitigate to No Project conditions.
 - Other Improvements: Reclassify to 4-lane Major to ~~mitigate~~ improve the segment to LOS D or better until 2030.
- Rosecrans Avenue between Barnett and Sports Arena:
 - Mitigation: Reclassify from 6-Lane Major Arterial to 6-Lane Prime Arterial to mitigate to No Project conditions.
 - Other Improvements: The proposed improvements ~~mitigate~~ improve the segment to LOS C or better through 2030.
- Rosecrans Avenue between Nimitz Quimby and Barnett:
 - Mitigation: Provide one additional lane for a total of ~~5~~ 6 lanes to mitigate to No Project conditions.
 - Other Improvements: The proposed improvements improve the segment to LOS D or better through 2030. Along portions of this segment sufficient right-of-way may not be available to add a 6th lane.
 - ~~6 lanes required to mitigate to LOS D or better through 2030.~~
- Rosecrans Avenue between Nimitz and Quimby:

- Mitigation: Provide one additional lane for a total of 5 lanes to mitigate to No Project conditions
- Other Improvements: 6 lanes required to improve to LOS D or better through 2030.

Year 2020

- All locations identified in Year 2010 above, except for Rosecrans between ~~Barnett~~ Quimby and Sport Arena which improved to LOS D under both No Project and with Project, and Hawthorn Street between Kettner Boulevard and I-5 which experienced an insignificant change in the volume to capacity ratio, plus the following:
 - North Harbor Drive between Terminal 1 Access and Winship Lane:
 - Mitigation: Provide 2 additional travel lanes for a total of 10 lanes to mitigate to No Project conditions.
 - Other Improvements: The proposed improvement would also ~~mitigate~~ improve the segment to LOS D through 2030.
 - North Harbor Drive between Winship Lane and Rental Car Access Road:
 - Mitigation: Provide 2 additional travel lanes for a total of 10 lanes to mitigate to No Project conditions.
 - Other Improvements: The proposed improvement would also ~~mitigate~~ improve the segment to LOS D through 2030.
 - Kettner Boulevard between Palm Street and Laurel Street – Provide one additional travel lane for a total of 4 lanes one-way. This improvement would also ~~mitigate~~ improve the segment to LOS D through 2030.
 - Washington Street between Pacific Highway and Kettner Boulevard – Reclassify from 4-lane collector to 4-lane major to mitigate to No Project and LOS D conditions through 2030.

Year 2025

- All locations identified in Year 2020 above, plus the following:
 - North Harbor Drive between Hawthorn Street and Grape Street:
 - Mitigation: Provide one additional lane for a total of 7 lanes to mitigate to No Project conditions.
 - Other Improvements: The proposed improvement would also ~~mitigate~~ improve the segment to LOS D through 2030.

Year 2030

- All locations identified in Year 2025 above, except Washington Street between Pacific Highway and Kettner Boulevard which improved to LOS C and D under No Project and Project alternatives, respectively, and Laurel Street between North Harbor Drive and Pacific Highway which improved to LOS D under both the No Project and with Project alternatives.
- Rosecrans Avenue between Quimby Avenue and Sports Arena Drive:
 - Mitigation: Provide one additional lane for a total of 6 lanes to mitigate to No Project conditions.
 - Other Improvements: This proposed improvement improves the segment to LOS D or better. Along portions of this segment sufficient right-of-way may not be available to add a 6th lane.

Table D-150

Street Segment Operations with Mitigation (2015 – 2030)
Airport Land Use Plan - Mitigate to No Project Condition

Roadway	Segment		Year 2015		Year 2020		Year 2025		Year 2030	
			V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS
North Harbor Drive	T1 Access - Winship	No Project			0.89	D	0.93	E	0.94	E
		Project - No Mitigation			0.95	E	1.01	F	1.05	F
		Project - With Mitigation			0.84	C	0.89	D	0.92	D
Winship - Rental Car Rd		No Project			0.94	E	0.98	E	0.97	E
		Project - No Mitigation			0.97	E	1.02	F	1.05	F
		Project - With Mitigation			0.85	C	0.90	D	0.92	D
Rental Car Rd - Laurel		No Project	1.57	F	1.71	F	1.75	F	1.73	F
		Project - No Mitigation	1.79	F	1.93	F	2.00	F	2.01	F
		Project - With Mitigation	1.34	F	1.45	F	1.50	F	1.51	F
Laurel - Hawthorn		No Project			1.14	F	1.19	F	1.22	F
		Project - No Mitigation			1.32	F	1.38	F	1.45	F
		Project - With Mitigation			0.99	E	1.04	F	1.09	F
Hawthorn - Grape		No Project					0.81	C	0.82	C
		Project - No Mitigation					0.93	E	0.97	E
		Project - With Mitigation					0.86	D	0.90	D
Grape Street	Harbor - Pacific	No Project	0.92	E	1.04	F	1.09	F	1.13	F
		Project - No Mitigation	1.05	F	1.17	F	1.24	F	1.31	F
		Project - With Mitigation	0.88	E	0.98	E	1.03	F	1.09	F
Pacific - Kettner		No Project	1.26	F	1.37	F	1.41	F	1.46	F
		Project - No Mitigation	1.40	F	1.51	F	1.56	F	1.64	F
		Project - With Mitigation	1.16	F	1.26	F	1.30	F	1.37	F
Kettner - I-5		No Project	1.52	F	1.48	F	1.53	F	1.66	F
		Project - No Mitigation	1.64	F	1.62	F	1.67	F	1.82	F
		Project - With Mitigation	1.37	F	1.26	F	1.39	F	1.52	F
Hawthorn Street	Harbor - Pacific	No Project	0.94	E	1.06	F	1.10	F	1.16	F
		Project - No Mitigation	1.08	F	1.21	F	1.27	F	1.36	F
		Project - With Mitigation	0.90	E	1.01	F	1.06	F	1.13	F
Pacific - Kettner		No Project	0.83	D	0.94	E	0.98	E	1.03	F
		Project - No Mitigation	0.95	E	1.06	F	1.11	F	1.19	F
		Project - With Mitigation	0.79	D	0.88	E	0.93	E	0.99	E
Kettner - I-5		No Project	1.35	F					1.66	F
		Project - No Mitigation	1.47	F					1.61	F
		Project - With Mitigation	1.22	F					1.34	F
Kettner Blvd	Washington - Sassafras	No Project	0.94	E	1.10	F	1.04	F	1.11	F
		Project - No Mitigation	1.01	F	1.18	F	1.14	F	1.20	F
		Project - With Mitigation	0.63	C	0.74	C	0.71	C	0.75	C
Sassafras - Palm		No Project	0.90	D	1.21	F	1.17	F	0.99	E
		Project - No Mitigation	0.96	E	1.29	F	1.26	F	1.07	F
		Project - With Mitigation	0.60	C	0.80	D	0.79	D	0.87	C
Palm - Laurel		No Project			1.03	F	0.96	E	0.85	D
		Project - No Mitigation			1.10	F	1.03	F	0.92	E
		Project - With Mitigation			0.92	E	0.86	E	0.77	D
Laurel Street	Harbor - Pacific	No Project	0.82	D	0.87	D	0.85	D		
		Project - No Mitigation	0.90	E	0.94	E	0.93	E		
		Project - With Mitigation	0.80	D	0.84	D	0.83	D		
Pacific - Kettner		No Project	0.97	E	1.02	F	1.06	F	1.13	F
		Project - No Mitigation	1.05	F	1.09	F	1.13	F	1.22	F
		Project - With Mitigation	0.79	D	0.81	D	0.85	D	0.91	E
Sassafras Street	Pacific - Kettner	No Project	1.14	F	1.17	F	1.28	F	0.94	E
		Project - No Mitigation	1.33	F	1.38	F	1.51	F	1.04	F
		Project - With Mitigation	0.53	C	0.55	C	0.60	C	0.42	B
Kettner-India		No Project			1.46	F	1.53	F	1.32	F
		Project - No Mitigation			1.62	F	1.71	F	1.40	F
		Project - With Mitigation			1.08	F	1.14	F	0.93	E
Washington Street	Pacific - Kettner	No Project			0.82	D	0.83	D		
		Project - No Mitigation			0.86	E	0.88	E		
		Project - With Mitigation			0.65	C	0.66	C		
Kettner - San Diego		No Project	0.99	E	1.11	F	1.11	F	0.93	E
		Project - No Mitigation	1.02	F	1.15	F	1.15	F	0.98	E
		Project - With Mitigation	0.77	D	0.86	D	0.86	D	0.73	C
India Street	Laurel - Palm	No Project	2.38	F	2.20	F	2.25	F	2.64	F
		Project - No Mitigation	2.60	F	2.42	F	2.49	F	2.89	F
		Project - With Mitigation	1.73	F	1.61	F	1.66	F	1.92	F
Palm - Sassafras		No Project	2.01	F	1.86	F	1.88	F	2.09	F
		Project - No Mitigation	2.16	F	2.00	F	2.04	F	2.25	F
		Project - With Mitigation	0.86	E	0.80	D	0.82	D	0.90	E
Sassafras - Washington		No Project	1.79	F	1.93	F	1.93	F	2.41	F
		Project - No Mitigation	2.22	F	2.29	F	2.28	F	2.82	F
		Project - With Mitigation	0.89	E	0.92	E	0.91	E	1.13	F
Rosecrans	Barnett - Sport Arena	No Project	0.97	E					0.88	D
		Project - No Mitigation	0.99	E					0.93	E
		Project - With Mitigation	0.83	C					0.78	C
Nimitz Quimby - Barnett		No Project	1.03	F	0.94	E	0.96	E	0.98	E
		Project - No Mitigation	1.07	F	0.97	E	0.99	E	1.05	F
		Project - With Mitigation	0.96	E	0.87	D	0.88	D	0.93	E
Nimitz - Quimby		No Project	1.03	F	0.94	E	0.95	E	0.98	E
		Project - No Mitigation	1.07	F	0.97	E	0.99	E	1.05	F
		Project - With Mitigation	0.95	E	0.87	D	0.88	D	0.93	E

Source: HNTB, 2007.

Tables D-151

Street Segment Operations with Mitigation (2015 – 2030)
Airport Land Use Plan - Mitigate Improve to LOS D Condition

Mitigation Improvements assessed in this table will bring the street segment to an acceptable level of service C or D as defined by the City of San Diego and is provided for Informational Purposes ONLY.

Roadway	Segment		Year 2015		Year 2020		Year 2025		Year 2030	
			V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS
North Harbor Drive	T1 Access - Winship	No Project			0.89	D	0.93	E	0.94	E
		Project - No Mitigation Improvement			0.95	E	1.01	F	1.05	F
		Project - With Mitigation Improvement			0.84	C	0.89	D	0.92	D
	Winship - Rental Car Rd	No Project			0.94	E	0.98	E	0.97	E
		Project - No Mitigation Improvement			0.97	E	1.02	F	1.05	F
		Project - With Mitigation Improvement			0.85	C	0.90	D	0.92	D
	Rental Car Rd - Laurel	No Project	1.57	F	1.71	F	1.75	F	1.73	F
		Project - No Mitigation Improvement	1.79	F	1.93	F	2.00	F	2.01	F
		Project - With Mitigation Improvement	1.34	F	1.45	F	1.50	F	1.51	F
	Laurel - Hawthorn	No Project	1.05	F	1.14	F	1.19	F	1.22	F
		Project - No Mitigation Improvement	1.22	F	1.32	F	1.38	F	1.45	F
		Project - With Mitigation Improvement	0.91	D	0.99	E	1.04	F	1.09	F
	Hawthorn - Grape	No Project					0.81	C	0.82	C
		Project - No Mitigation Improvement					0.93	E	0.97	E
		Project - With Mitigation Improvement					0.86	D	0.90	D
Grape Street	Harbor - Pacific	No Project	0.92	E	1.04	F	1.09	F	1.13	F
		Project - No Mitigation Improvement	1.05	F	1.17	F	1.24	F	1.31	F
		Project - With Mitigation Improvement	0.66	C	0.73	C	0.77	D	0.82	D
	Pacific - Kettner	No Project	1.26	F	1.37	F	1.41	F	1.46	F
		Project - No Mitigation Improvement	1.40	F	1.51	F	1.56	F	1.64	F
		Project - With Mitigation Improvement	0.87	D	0.84	D	0.87	D	0.68	C
	Kettner - I-5	No Project	1.52	F	1.48	F	1.53	F	1.66	F
		Project - No Mitigation Improvement	1.64	F	1.52	F	1.67	F	1.82	F
		Project - With Mitigation Improvement	0.82	D	0.78	C	0.83	D	0.76	C
Hawthorn Street	Harbor - Pacific	No Project	0.94	E	1.06	F	1.10	F	1.16	F
		Project - No Mitigation Improvement	1.08	F	1.21	F	1.27	F	1.36	F
		Project - With Mitigation Improvement	0.68	C	0.76	D	0.79	D	0.85	D
	Pacific - Kettner	No Project	0.83	D	0.94	E	0.98	E	1.03	F
		Project - No Mitigation Improvement	0.95	E	1.06	F	1.11	F	1.19	F
		Project - With Mitigation Improvement	0.59	C	0.66	C	0.69	C	0.75	C
	Kettner - I-5	No Project	1.35	F						
		Project - No Mitigation Improvement	1.47	F						
		Project - With Mitigation Improvement	0.82	D						
Kettner Blvd	Washington - Sassafras	No Project	0.94	E	1.10	F	1.04	F	1.11	F
		Project - No Mitigation Improvement	1.01	F	1.18	F	1.14	F	1.20	F
		Project - With Mitigation Improvement	0.63	C	0.74	C	0.71	C	0.75	C
	Sassafras - Palm	No Project	0.90	D	1.21	F	1.17	F	0.99	E
		Project - No Mitigation Improvement	0.96	E	1.29	F	1.26	F	1.07	F
		Project - With Mitigation Improvement	0.60	C	0.80	D	0.79	D	0.67	C
	Palm - Laurel	No Project			1.03	F	0.96	E	0.85	D
		Project - No Mitigation Improvement			1.10	F	1.03	F	0.92	E
		Project - With Mitigation Improvement			0.69	C	0.65	C	0.58	C
Laurel Street	Harbor - Pacific	No Project	0.82	D	0.87	D	0.85	D		
		Project - No Mitigation Improvement	0.90	E	0.94	E	0.93	E		
		Project - With Mitigation Improvement	0.80	D	0.84	D	0.83	D		
	Pacific - Kettner	No Project	0.97	E	1.02	F	1.06	F	1.13	F
		Project - No Mitigation Improvement	1.05	F	1.09	F	1.13	F	1.22	F
		Project - With Mitigation Improvement	0.79	D	0.81	D	0.85	D	0.81	D
Sassafras Street	Pacific - Kettner	No Project	1.14	F	1.17	F	1.28	F	0.94	E
		Project - No Mitigation Improvement	1.33	F	1.38	F	1.51	F	1.15	F
		Project - With Mitigation Improvement	0.83	C	0.85	C	0.80	C	0.46	B
	Kettner-India	No Project	1.46	F	1.46	F	1.53	F	1.32	F
		Project - No Mitigation Improvement	1.60	F	1.62	F	1.71	F	1.48	F
		Project - With Mitigation Improvement	0.43	B	0.43	B	0.45	B	0.40	B
	Kettner - San Diego	No Project	0.99	E	1.11	F	1.11	F	0.93	E
		Project - No Mitigation Improvement	1.02	F	1.15	F	1.15	F	0.98	E
		Project - With Mitigation Improvement	0.77	D	0.86	D	0.86	D	0.73	C
India Street	Laurel - Palm	No Project	2.38	F	2.20	F	2.25	F	2.64	F
		Project - No Mitigation Improvement	2.60	F	2.42	F	2.49	F	2.89	F
		Project - With Mitigation Improvement	0.69	D	0.65	C	0.66	C	0.77	D
	Palm - Sassafras	No Project	2.01	F	1.86	F	1.88	F	2.09	F
		Project - No Mitigation Improvement	2.16	F	2.00	F	2.04	F	2.25	F
		Project - With Mitigation Improvement	0.85	C	0.80	C	0.81	C	0.67	C
	Sassafras - Washington	No Project	1.79	F	1.93	F	1.93	F	2.41	F
		Project - No Mitigation Improvement	2.22	F	2.29	F	2.28	F	2.82	F
		Project - With Mitigation Improvement	0.66	C	0.69	C	0.69	C	0.85	D
Rosecrans	Barnett - Sport Arena	No Project	0.97	E					0.88	D
		Project - No Mitigation Improvement	0.99	E					0.93	E
		Project - With Mitigation Improvement	0.83	C					0.78	C
	Nimitz Quimby - Barnett	No Project	4.03-0.92	F, E	0.94	E	0.95	E	0.98-0.87	E, D
		Project - No Mitigation Improvement	4.07-0.95	F, E	0.97	E	0.99	E	1.06-0.93	F, E
		Project - With Mitigation Improvement	0.85	D	0.78	C	0.79	C	0.84	D
	Nimitz - Quimby	No Project	1.03	F	0.94	E	0.95	E	0.98	E
		Project - No Mitigation Improvement	1.07	F	0.97	E	0.99	E	1.05	F
		Project - With Mitigation Improvement	0.85	D	0.78	C	0.79	C	0.84	D

Source: HNTB, 2007.

D.10.2 Intersections

Any potentially significant impacts to intersections in the study area resulting from implementation of each alternative compared to the No Project Alternative are identified below along with potential mitigation measures. Subsequent to implementation of any required mitigation a peak hour roadway analysis would be conducted as part of a mitigation feasibility study to determine specific mitigation to be implemented. Intersections in the study area are within the jurisdiction of the City of San Diego.

D.10.2.1 **Proposed Airport Implementation Plan (With Parking Structure)**

The following mitigation is identified for intersections with potentially significant traffic impacts. Where mitigation to No Project conditions and improvements to acceptable LOS D conditions (defined by the City of San Diego to be LOS D) differs, separate mitigation measures and improvements are identified. Operations after implementation of proposed mitigation to No Project conditions are shown on [Table D-152](#) and improvements to LOS D conditions are shown on [Table D-153](#) for informational purposes only.

Years 2010 & 2015

No significant traffic impacts occur in 2010 and 2015 and therefore no mitigation is required.

Year 2020

- **Sassafras Street and Kettner Boulevard (PM)**
 - Mitigation: Change cycle length from 70 sec to 90 sec to mitigate to No Project conditions
 - Other Improvements: Add an exclusive southbound right turn lane to ~~mitigate~~ improve to LOS D or better through 2030

Year 2025

- **Hawthorn Street and North Harbor Drive (AM):**
 - Mitigation: Restripe westbound lane to shared left and right to mitigate to No Project conditions.
 - Other Improvements: This would also ~~mitigate~~ improve the road intersection to LOS D conditions.
- **Sassafras Street and Kettner Boulevard (PM):**
 - Mitigation: Change cycle length from 70 sec to 90 sec to mitigate to No Project conditions
 - Other Improvements: Add an exclusive southbound right turn lane to ~~mitigate~~ improve the road intersection to LOS D or better through 2030

Year 2030

- **Hawthorn Street and North Harbor Drive (AM & PM):**
 - Mitigation: Restripe westbound lane to a shared left and right to mitigate to No Project conditions.
 - Other Improvements: This would also ~~mitigate~~ improve the intersection to LOS D conditions.
- **Grape Street and Kettner Boulevard (PM):**

- Mitigation: Add an exclusive southbound left turn lane to mitigate to No Project conditions
- Other Improvements: Add a second southbound left turn lane to ~~mitigate~~ improve the intersection to LOS D or better conditions
- **Sassafras Street and Kettner Boulevard (PM):**
 - Mitigation: Change cycle length from 70 sec to 90 sec to mitigate to No Project conditions
 - Other Improvements: Add an exclusive southbound right turn lane to ~~mitigate~~ improve the intersection to LOS D or better through 2030.
- **Grape Street and I-5 Southbound On-Ramp (PM):**
 - Mitigation: Signal timing optimization to mitigate to No Project conditions
 - Other Improvements: Add an exclusive eastbound right turn lane (would result in 3-lane on-ramp) to improve the intersection to LOS D or better through 2030.

Table D-152

**Intersection Operations with Mitigation Measures
Implementation Plan (with Parking Structure)**

Mitigate to No Project Conditions

Intersection	Scenario		2020		2025		2030	
			Delay	LOS	Delay	LOS	Delay	LOS
Hawthorn Street/ North Harbor Drive	No Project	AM			131.7	F	173.0	F
		PM			40.7	D	55.9	E
	Project Without Mitigation	AM			135.1	F	182.2	F
		PM			42.2	D	62.3	E
	Project With Mitigation	AM			31.9	C	50.6	D
		PM			42.2	D	36.3	D
Grape Street/ Kettner Boulevard	No Project	AM					14.8	B
		PM					77.1	E
	Project Without Mitigation	AM					14.7	B
		PM					80.0	E
	Project With Mitigation	AM					14.7	B
		PM					68.7	E
Sassafras Street/ Kettner Boulevard	No Project	AM	19.4	B	11.9	B	9.6	A
		PM	121.5	F	82.1	F	62.5	E
	Project Without Mitigation	AM	21.3	C	13.2	B	11.1	B
		PM	136.8	F	98.2	F	80.4	F
	Project With Mitigation	AM	8.1	A	7.9	A	6.7	A
		PM	52.9	D	29.5	C	19.0	B
Grape Street/ I-5 Southbound On-Ramp	No Project	AM					15.1	B
		PM					87.1	F
	Project Without Mitigation	AM					15.3	B
		PM					90.1	F
	Project With Mitigation	AM					15.3	B
		PM					84.2	F

Source: HNTB, 2007.

Table D-153

**Intersection Operations with Mitigation Measures
Proposed Airport Implementation Plan (with Parking Structure)**

Mitigate Improve to LOS D

Mitigation Improvements assessed in this table will bring the street segment to an acceptable level of service C or D as defined by the City of San Diego and is provided for Informational Purposes ONLY.

Intersection	Scenario		2020		2025		2030	
			Delay	LOS	Delay	LOS	Delay	LOS
Hawthorn Street/ North Harbor Drive	No Project	AM			131.7	F	173.0	F
		PM			40.7	D	55.9	E
	Project Without Mitigation- Improvement	AM			135.1	F	182.2	F
		PM			42.2	D	62.3	E
	Project With Mitigation- Improvement	AM			31.9	C	50.6	D
		PM			42.2	D	36.3	D
Grape Street/ Kettner Boulevard	No Project	AM					14.8	B
		PM					77.1	E
	Project Without Mitigation- Improvement	AM					14.7	B
		PM					80.0	E
	Project With Mitigation- Improvement	AM					14.7	B
		PM					43.0	D
Sassafras Street/ Kettner Boulevard	No Project	AM	19.4	B	11.9	B	9.6	A
		PM	121.5	F	82.1	F	62.5	E
	Project Without Mitigation- Improvement	AM	21.3	C	13.2	B	11.1	B
		PM	136.8	F	98.2	F	80.4	F
	Project With Mitigation- Improvement	AM	8.1	A	7.9	A	6.7	A
		PM	52.9	D	29.5	C	19.0	B
Grape Street/ I-5 Southbound On-Ramp	No Project	AM					15.1	B
		PM					87.1	F
	Project Without Mitigation- Improvement	AM					15.3	B
		PM					90.1	F
	Project With Mitigation- Improvement	AM					15.3	B
		PM					45.9	D

Source: HNTB, 2007.

D.10.2.2 Proposed Airport Implementation Plan (Without Parking Structure)

The following mitigation is identified for intersections with potentially significant traffic impacts. Where mitigation to No Project conditions and improvements to acceptable LOS D conditions (defined by the City of San Diego to be LOS D) differs, separate mitigation measures and improvements are identified. Operations after implementation of proposed mitigation to No Project conditions is shown in [Table D-154](#) and improvements to LOS D conditions is shown in [Table D-155](#).

Years 2010 & 2015

No significant traffic impacts occur in 2010 and 2015 and therefore no mitigation is required

Year 2020

- Sassafra Street and Kettner Boulevard (PM):
 - Mitigation: Change cycle length from 70 sec to 90 sec to mitigate to No Project conditions
 - Other Improvements: Add exclusive southbound right SBR lane (to ~~mitigate~~ improve the intersection to LOS D up to 2030)

Year 2025

- Hawthorn Street and North Harbor Drive (AM):
 - Mitigation: Restripe westbound left turn lane to shared left and right turn lane to mitigate to No Project conditions.
 - Other Improvements: This would also ~~mitigate~~ improve the intersection to LOS D conditions.
- Sassafra Street and Kettner Boulevard (PM):
 - Mitigation: Change cycle length from 70 sec to 90 sec to mitigate to No Project conditions
 - Other Improvements: Add an exclusive southbound right turn lane to ~~mitigate~~ improve the intersection to LOS D or better through 2030

Year 2030

- Hawthorn Street and North Harbor Drive (AM):
 - Mitigation: Restripe westbound left turn lane to shared left and right turn lane to mitigate to No Project conditions.
 - Other Improvements: This would also ~~mitigate~~ improve the intersection to LOS D conditions.
- Sassafra Street and Kettner Boulevard (PM):
 - Mitigation: Change cycle length from 70 sec to 90 sec to mitigate to No Project conditions
 - Other Improvements: Add an exclusive southbound right turn lane to ~~mitigate~~ improve the intersection to LOS D or better through 2030
- Grape Street and I-5 Southbound On-Ramp (PM):
 - Mitigation: Signal timing optimization to mitigate to No Project conditions
 - Other Improvements: Add an exclusive eastbound right turn lane and a northbound through lane, resulting in 3-lane on-ramp, to ~~mitigate~~ improve the intersection to LOS D.

Table D-154

**Intersection Operations with Mitigation Measures
Airport Implementation Plan (without Parking Structure)**

Mitigate to No Project Conditions

Intersection	Scenario		2020		2025		2030	
			Delay	LOS	Delay	LOS	Delay	LOS
Hawthorn Street/ North Harbor Drive	No Project	AM			131.7	F	173.0	F
		PM			40.7	D	55.9	E
	Project Without Mitigation	AM			133.4	F	179.9	F
		PM			41.3	D	60.5	E
Project With Mitigation	AM			31.5	C	49.3	D	
	PM			41.3	D	35.7	D	
SassafRAS Street/ Kettner Boulevard	No Project	AM	19.4	B	11.9	B	9.6	A
		PM	121.5	F	82.1	F	62.5	E
	Project Without Mitigation	AM	21.3	C	13.2	B	11.0	B
		PM	136.7	F	98.2	F	80.5	F
Project With Mitigation	AM	8.1	A	7.9	A	6.7	A	
	PM	52.9	D	29.5	C	19.1	B	
Grape Street/ I-5 Southbound On-Ramp	No Project	AM					15.1	B
		PM					87.1	F
	Project Without Mitigation	AM					15.3	B
		PM					124.0	F
Project With Mitigation	AM					15.3	B	
	PM					124.0	F	

Source: HNTB, 2007.

Table D-155

**Intersection Operations with Mitigation Measures
Airport Implementation Plan (without Parking Structure)**

Mitigate Improve to LOS D

Mitigation Improvements assessed in this table will bring the street segment to an acceptable level of service C or D as defined by the City of San Diego and is provided for Informational Purposes ONLY.

Intersection	Scenario		2020		2025		2030	
			Delay	LOS	Delay	LOS	Delay	LOS
Hawthorn Street/ North Harbor Drive	No Project	AM			131.7	F	173.0	F
		PM			40.7	D	55.9	E
	Project Without Mitigation- Improvement	AM			133.4	F	179.9	F
		PM			41.3	D	60.5	E
Project With Mitigation- Improvement	AM			31.5	C	49.3	D	
	PM			41.3	D	35.7	D	
SassafRAS Street/ Kettner Boulevard	No Project	AM	19.4	B	11.9	B	9.6	A
		PM	121.5	F	82.1	F	62.5	E
	Project Without Mitigation- Improvement	AM	21.3	C	13.2	B	11.0	B
		PM	136.7	F	98.2	F	80.5	F
Project With Mitigation- Improvement	AM	8.1	A	7.9	A	6.7	A	
	PM	52.9	D	29.5	C	19.1	B	
Grape Street/ I-5 Southbound On-Ramp	No Project	AM					15.1	B
		PM					87.1	F
	Project Without Mitigation- Improvement	AM					15.3	B
		PM					124.0	F
Project With Mitigation- Improvement	AM					15.3	B	
	PM					39.1	D	

Source: HNTB, 2007.

D.10.2.3 Airport Implementation Plan Alternative (With Parking Structure)

The following mitigation is identified for intersections with potentially significant traffic impacts. Where mitigation to No Project conditions and improvements to acceptable LOS D conditions (defined by the City of San Diego to be LOS D) differs, separate mitigation measures and improvements are identified. Operations after implementation of proposed mitigation to No Project conditions are shown on [Table D-156](#) and improvements to LOS D conditions are shown on [Table D-157](#).

Years 2010 & 2015

No significant traffic impacts occur in 2010 and 2015 and therefore no mitigation is required

Year 2020

- Sassafra Street and Kettner Boulevard (PM):
 - Mitigation: Change cycle length from 70 sec to 90 sec to mitigate to No Project conditions
 - Other Improvements: Add exclusive southbound right SBR lane (to ~~mitigate~~ improve to LOS D up to 2030)

Year 2025

- Hawthorn Street and North Harbor Drive (AM):
 - Mitigation: Restripe westbound left turn lane to shared left and right turn lane to mitigate to No Project conditions.
 - Other Improvements: This would also ~~mitigate~~ improve the intersection to LOS D conditions.
- Sassafra Street and Kettner Boulevard (PM):
 - Mitigation: Change cycle length from 70 sec to 90 sec to mitigate to No Project conditions
 - Other Improvements: Add an exclusive southbound right turn lane to ~~mitigate~~ improve the intersection to LOS D or better through 2030

Year 2030

- Hawthorn Street and North Harbor Drive (AM & PM):
 - Mitigation: Restripe the westbound left turn lane to a shared left and right to mitigate to No Project conditions.
 - Other Improvements: This improvement would also ~~mitigate~~ improve the intersection to LOS D.
- Grape Street and Pacific Highway (PM):
 - Mitigation: Add an exclusive northbound right turn lane to mitigate to No Project conditions.
 - Other Improvements: This improvement would also ~~mitigate~~ improve the intersection to and LOS C.
- Grape Street and Kettner Boulevard (PM):

- Mitigation: Add an exclusive southbound left turn lane to mitigate to No Project conditions.
- Other Improvements: Add a second southbound left turn lane to mitigate improve the intersection to LOS D.
- **Sassafras Street and Kettner Boulevard (PM)**:
 - Mitigation: Change cycle length from 70 sec to 90 sec to mitigate to No Project conditions.
 - Other Improvements: Add exclusive southbound right turn lane to mitigate improve the intersection to LOS B.
- **Grape Street and I-5 Southbound On-Ramp (PM)**:
 - Mitigation: Signal timing optimization would mitigate to No Project conditions.
 - Other Improvements: Add an exclusive eastbound right turn lane, resulting in 3-lane on-ramp, to mitigate improve the intersection to LOS D.

Table D-156

**Intersection Operations with Mitigation Measures
Implementation Plan Alternative (with Parking Structure)**

Mitigate to No Project Conditions

Intersection	Scenario		2020		2025		2030	
			Delay	LOS	Delay	LOS	Delay	LOS
Hawthorn Street/ North Harbor Drive	No Project	AM			131.7	F	173.0	F
		PM			40.7	D	55.9	E
	Project Without Mitigation	AM			133.7	F	180.3	F
		PM			41.6	D	61.1	E
Grape Street/ Pacific Highway	Project With Mitigation	AM			31.6	C	49.7	D
		PM			41.6	D	35.9	D
	No Project	AM					20.2	C
		PM					56.5	E
Grape Street/ Kettner Boulevard	Project Without Mitigation	AM					20.3	C
		PM					58.6	E
	Project With Mitigation	AM					20.3	C
		PM					34.8	C
Sassafras Street/ Kettner Boulevard	No Project	AM					14.8	B
		PM					77.1	E
	Project Without Mitigation	AM					14.7	B
		PM					80.0	E
Grape Street/ I-5 Southbound On-Ramp	Project With Mitigation	AM					14.7	B
		PM					69.1	E
	No Project	AM	19.4	B	11.9	B	9.6	A
		PM	121.5	F	82.1	F	62.5	E
Sassafras Street/ Kettner Boulevard	Project Without Mitigation	AM	21.3	C	13.2	B	11.1	B
		PM	136.3	F	98.0	F	80.4	F
	Project With Mitigation	AM	8.1	A	7.9	A	6.7	A
		PM	52.9	D	29.4	C	19.1	B
Grape Street/ I-5 Southbound On-Ramp	No Project	AM					15.1	B
		PM					87.1	F
	Project Without Mitigation	AM					15.3	B
		PM					89.6	F
Grape Street/ I-5 Southbound On-Ramp	Project With Mitigation	AM					15.3	B
		PM					83.9	F

Source: HNTB, 2007.

Table D-157

**Intersection Operations with Mitigation Measures
Implementation Plan Alternative (with Parking Structure)**

Mitigate Improve to LOS D

Mitigation Improvements assessed in this table will bring the street segment to an acceptable level of service C or D as defined by the City of San Diego and is provided for Informational Purposes ONLY.

Intersection	Scenario		2020		2025		2030	
			Delay	LOS	Delay	LOS	Delay	LOS
Hawthorn Street/ North Harbor Drive	No Project	AM			131.7	F	173.0	F
		PM			40.7	D	55.9	E
	Project Without Mitigation- Improvement	AM			133.7	F	180.3	F
		PM			41.6	D	61.1	E
	Project With Mitigation- Improvement	AM			31.6	C	49.7	D
		PM			41.6	D	35.9	D
Grape Street/ Pacific Highway	No Project	AM					20.2	C
		PM					56.5	E
	Project Without Mitigation- Improvement	AM					20.3	C
		PM					58.6	E
	Project With Mitigation- Improvement	AM					20.3	C
		PM					34.8	C
Grape Street/ Kettner Boulevard	No Project	AM					14.8	B
		PM					77.1	E
	Project Without Mitigation- Improvement	AM					14.7	B
		PM					80.0	E
	Project With Mitigation- Improvement	AM					13.7	B
		PM					42.9	D
Sassafra Street/ Kettner Boulevard	No Project	AM	19.4	B	11.9	B	9.6	A
		PM	121.5	F	82.1	F	62.5	E
	Project Without Mitigation- Improvement	AM	21.3	C	13.2	B	11.1	B
		PM	136.3	F	98.0	F	80.4	F
	Project With Mitigation- Improvement	AM	8.1	A	7.9	A	6.7	A
		PM	52.9	D	29.4	C	19.1	B
Grape Street/ I-5 Southbound On-Ramp	No Project	AM					15.1	B
		PM					87.1	F
	Project Without Mitigation- Improvement	AM					15.3	B
		PM					89.6	F
	Project With Mitigation- Improvement	AM					15.3	B
		PM					45.9	D

Source: HNTB, 2007.

D.10.2.4 Airport Implementation Plan Alternative (Without Parking Structure)

The following mitigation is identified for intersections with potentially significant traffic impacts. Where mitigation to No Project conditions and improvements to acceptable LOS D conditions (defined by the City of San Diego to be LOS D) differs, separate mitigation measures and improvements are identified. Operations after implementation of proposed mitigation to No Project conditions are shown in [Table D-158](#) and improvements to LOS D conditions are shown in [Table D-159](#).

Years 2010 & 2015

No significant traffic impacts occur in 2010 and 2015 and therefore no mitigation is required

Year 2020

- Sassafra Street and Kettner Boulevard (PM):
 - Mitigation: Change cycle length from 70 sec to 90 sec to mitigate to No Project conditions
 - Other Improvements: Add exclusive southbound right SBR lane (to ~~mitigate~~ improve intersection to LOS D up to 2030)

Year 2025

- Sassafra Street and Kettner Boulevard (PM):
 - Mitigation: Change cycle length from 70 sec to 90 sec to mitigate to No Project conditions
 - Other Improvements: Add exclusive southbound right SBR lane (to ~~mitigate~~ improve to LOS D up to 2030)

Year 2030

- Hawthorn Street and North Harbor Drive (AM & PM):
 - Mitigation: Restripe the westbound left turn lane to a shared left and right to mitigate to No Project conditions.
 - Other Improvements: This improvement would also ~~mitigate~~ improve the intersection to LOS D.
- Grape Street and Kettner Boulevard (PM):
 - Mitigation: Add an exclusive southbound left turn lane to mitigate to No Project conditions.
 - Other Improvements: Convert one southbound through lane to a shared through and left turn lane to ~~mitigate~~ improve to LOS D.
- Grape Street and I-5 Southbound On-Ramp (PM):
 - Mitigation: Signal timing optimization to mitigate to No Project conditions.
 - Other Improvements: Add an exclusive eastbound right turn lane and a northbound through lane, resulting in 3-lane on-ramp, to ~~mitigate~~ improve the intersection to LOS D.
- Sassafra Street and Kettner Boulevard (PM):
 - Mitigation: Change cycle length from 70 sec to 90 sec to mitigate to No Project conditions.
 - Other Improvements: Add exclusive southbound right turn lane to ~~mitigate~~ improve the intersection to LOS B.

Table D-158

**Intersection Operations with Mitigation Measures
Implementation Plan Alternative (without Parking Structure)**

Mitigate to No Project Conditions

Intersection	Scenario		2020		2025		2030	
			Delay	LOS	Delay	LOS	Delay	LOS
Hawthorn Street/ North Harbor Drive	No Project	AM					173.0	F
		PM					55.9	E
	Project Without Mitigation	AM					179.2	F
		PM					60.0	E
Project With Mitigation	AM	110.5	F	132.4	F	49.1	D	
	PM	33.0	C	41.0	D	35.5	D	
Grape Street/ Kettner Boulevard	No Project	AM					14.8	B
		PM					77.1	E
	Project Without Mitigation	AM					14.7	B
		PM					79.6	E
Project With Mitigation	AM	14.8	B	14.2	B	14.7	B	
	PM	55.3	E	54.9	D	69.0	E	
Sassafras Street/ Kettner Boulevard	No Project	AM	19.4	B	11.9	B	9.6	A
		PM	121.5	F	82.1	F	62.5	E
	Project Without Mitigation	AM	21.7	C	13.3	B	11.1	B
		PM	137.4	F	98.8	F	80.9	F
Project With Mitigation	AM	8.1	A	7.9	A	6.8	A	
	PM	52.8	D	29.6	C	19.0	B	
Grape Street/ I-5 Southbound On-Ramp	No Project	AM					15.1	B
		PM					87.1	F
	Project Without Mitigation	AM					15.3	B
		PM					89.1	F
Project With Mitigation	AM	11.5	B	13.7	B	15.3	B	
	PM	32.5	C	38.7	D	89.1	F	

Source: HNTB, 2007.

Table D-159

**Intersection Operations with Mitigation Measures
Implementation Plan Alternative (without Parking Structure)**

Mitigate Improve to LOS D

Mitigation Improvements assessed in this table will bring the street segment to an acceptable level of service C or D as defined by the City of San Diego and is provided for Informational Purposes ONLY.

Intersection	Scenario		2020		2025		2030	
			Delay	LOS	Delay	LOS	Delay	LOS
Hawthorn Street/ North Harbor Drive	No Project	AM					173.0	F
		PM					55.9	E
	Project Without Mitigation- Improvement	AM					179.2	F
		PM					60.0	E
	Project With Mitigation- Improvement	AM	110.5	F	132.4	F	49.1	D
		PM	33.0	C	41.0	D	35.5	D
Grape Street/ Kettner Boulevard	No Project	AM					14.8	B
		PM					77.1	E
	Project Without Mitigation- Improvement	AM					14.7	B
		PM					79.6	E
	Project With Mitigation- Improvement	AM	14.8	B	14.2	B	13.9	B
		PM	55.3	E	54.9	D	53.4	D
Sassafras Street/ Kettner Boulevard	No Project	AM	19.4	B	11.9	B	9.6	A
		PM	121.5	F	82.1	F	62.5	E
	Project Without Mitigation- Improvement	AM	21.7	C	13.3	B	11.1	B
		PM	137.4	F	98.8	F	80.9	F
	Project With Mitigation- Improvement	AM	8.1	A	7.9	A	6.8	A
		PM	52.8	D	29.6	C	19.0	B
Grape Street/ I-5 Southbound On-Ramp	No Project	AM					15.1	B
		PM					87.1	F
	Project Without Mitigation- Improvement	AM					15.3	B
		PM					89.1	F
	Project With Mitigation- Improvement	AM	11.5	B	13.7	B	15.3	B
		PM	32.5	C	38.7	D	36.0	D

Source: HNTB, 2007.

D.10.2.5 Proposed Airport Land Use Plan

The following mitigation is identified for intersections with potentially significant traffic impacts. Where mitigation to No Project conditions and improvements to acceptable LOS D conditions (defined by the City of San Diego to be LOS D) differs, separate mitigation measures and improvements are identified. Operations after implementation of proposed mitigation to No Project conditions are shown on [Table D-160](#) and improvements to LOS D conditions are shown on [Table D-161](#).

Year 2015

- Hawthorn Street and North Harbor Drive (AM & PM):
 - Mitigation: Restripe the westbound left turn lane to a shared left and right to mitigate to No Project conditions.

- Other Improvements: This improvement would also ~~mitigate~~ improve the intersection to LOS C in the AM and D in the PM peak hours.
- Laurel Street and Pacific Highway (PM):
 - Mitigation: Provide southbound right turn overlap to mitigate to No Project conditions.
 - Other Improvements: This improvement would also ~~mitigate~~ improve the intersection to LOS D.
- Washington Street and Pacific Highway NB Ramps (AM & PM):
 - Mitigation: Optimize the signal timing by changing the cycle length to 80 sec. to mitigate to No Project conditions.
 - Other Improvements: This improvement would also ~~mitigate~~ improve the intersection to LOS D.

Year 2020

- Hawthorn Street and North Harbor Drive (AM & PM):
 - Mitigation: Restripe westbound left turn lane to a shared left and right turn lane to mitigate to No Project conditions.
 - Other Improvements: This would also ~~mitigate~~ improve the intersection to LOS D conditions.
- Laurel Street and Pacific Highway (PM):
 - Mitigation: Provide southbound right turn overlap to mitigate to No Project conditions.
 - Other Improvements: This would also ~~mitigate~~ improve the intersection to LOS D conditions.
- Grape Street and Pacific Highway (PM):
 - Mitigation: Add exclusive northbound right turn lane to mitigate to No Project conditions.
 - Other Improvements: This would also ~~mitigate~~ improve the intersection to LOS D conditions.
- Grape Street and Kettner Boulevard (PM):
 - Mitigation: Add an exclusive southbound left turn lane to mitigate to No Project conditions.
 - Other Improvements: This would also ~~mitigate~~ improve the intersection to LOS D conditions.
- Sassafras Street and Kettner Boulevard (PM):
 - Mitigation: Add an exclusive southbound right turn lane to mitigate to No Project conditions.
 - Other Improvements: In addition to an exclusive southbound right turn lane, add an exclusive eastbound right turn lane to ~~mitigate~~ improve to LOS D conditions.
- Washington Street and Pacific Highway NB Ramps (AM & PM):
 - Mitigation: Optimize signal timing by increasing the cycle length to 90 seconds to mitigate to No Project conditions.

- Other Improvements: This would also ~~mitigate~~ improve the intersection to LOS D conditions.

Year 2025

- Hawthorn Street and North Harbor Drive (AM & PM):
 - Mitigation: Restripe westbound left turn lane to a shared left and right turn lane to mitigate to No Project conditions.
 - Other Improvements: This would also ~~mitigate~~ improve the intersection to LOS D conditions.
- Laurel Street and Pacific Highway (PM):
 - Mitigation: Provide southbound right turn overlap to mitigate to No Project conditions.
 - Other Improvements: This would also ~~mitigate~~ improve the intersection to LOS D conditions.
- Grape Street and Pacific Highway (PM):
 - Mitigation: Add exclusive northbound right turn lane to mitigate to No Project conditions. NBR.
 - Other Improvements: This would also ~~mitigate~~ improve the intersection to LOS D conditions.
- Grape Street and Kettner Boulevard (PM):
 - Mitigation: Add an exclusive southbound left turn lane to mitigate to No Project conditions.
 - Other Improvements: This would also ~~mitigate~~ improve the intersection to LOS D conditions.
- Sassafras Street and Kettner Boulevard (PM):
 - Mitigation: Add an exclusive southbound right turn lane to mitigate to No Project conditions.
 - Other Improvements: This would also ~~mitigate~~ improve the intersection to LOS D conditions.
- Washington Street and Pacific Highway NB Ramps (AM & PM):
 - Mitigation: Optimize signal timing by increasing the cycle length to 100 seconds to mitigate to No Project conditions.
 - Other Improvements: This would also ~~mitigate~~ improve the intersection to LOS D conditions.

Year 2030

- Hawthorn Street and North Harbor Drive (AM & PM):
 - Mitigation: Restripe westbound left turn lane to a shared left and right to mitigate to No Project conditions.
 - Mitigation: Add an exclusive westbound left turn lane to mitigate to LOS E.
 - Mitigation: Providing additional lanes on the westbound approach may require widening of North Harbor Drive.
- Laurel Street and Pacific Highway (PM):

- Mitigation: Provide southbound right turn overlap to mitigate to No Project conditions.
- Other Improvements: Optimize signal timing (cycle length = 120 or less) to mitigate to LOS D.
- Grape Street and Pacific Highway (PM):
 - Mitigation: Add an exclusive northbound right turn lane to mitigate to No Project conditions.
 - Other Improvements: This improvement would also ~~mitigate~~ improve the intersection to LOS D conditions.
- Grape Street and Kettner Boulevard (PM):
 - Mitigation: Add exclusive southbound left turn lane to mitigate to No Project conditions.
 - Other Improvements: Add a fourth eastbound through lane to ~~mitigate~~ improve the intersection to LOS B.
- Sassafras Street and Kettner Boulevard (PM):
 - Mitigation: Add an exclusive southbound right turn lane to mitigate to No Project conditions.
 - Other Improvements: This improvement would also ~~mitigate~~ improve the intersection to LOS C conditions.
- Grape Street and I-5 Southbound On-Ramp (PM):
 - Mitigation: Optimize signal timing to mitigate to No Project conditions.
 - Other Improvements: Add another exclusive eastbound right turn lane to ~~mitigate~~ improve the intersection to LOS D and would result in a 3-lane on-ramp.
- Washington Street and Pacific Highway NB Ramps (AM & PM):
 - Mitigation: Optimize signal timing (increase cycle length to 90) to mitigate to No Project conditions.
 - Other Improvements: This improvement would also ~~mitigate~~ improve the intersection to LOS D conditions.

Table D-160

**Intersection Operations with Mitigation Measures
Airport Land Use Plan**

Mitigate to No Project Conditions

Intersection	Scenario		2015		2020		2025		2030	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Hawthorn Street/ North Harbor Drive	No Project	AM	49.6	D	112.8	F	131.7	F	173.0	F
		PM	25.2	C	33.7	C	40.7	D	55.9	E
	Project Without Mitigation	AM	84.4	F	154.1	F	176.9	F	225.9	F
		PM	37.7	D	70.4	E	87.1	F	115.4	F
	Project With Mitigation	AM	23.9	C	37.8	D	48.7	D	79.3	E
		PM	37.7	D	35.1	D	43.5	D	61.9	E
Laurel Street/ Pacific Highway	No Project	AM	33.7	C	33.9	C	34.4	C	33.7	C
		PM	62.4	E	59.5	E	53.1	D	60.4	E
	Project Without Mitigation	AM	34.5	C	34.7	C	35.4	D	34.8	C
		PM	69.3	E	65.0	E	58.4	E	66.6	E
	Project With Mitigation	AM	34.5	C	34.7	C	35.4	D	34.8	C
		PM	54.5	D	53.2	D	49.2	D	57.4	E
Grape Street/ Pacific Highway	No Project	AM			19.9	B	20.3	C	20.2	C
		PM			53.1	D	68.6	E	56.5	E
	Project Without Mitigation	AM			20.5	C	21.0	C	20.9	C
		PM			64.7	E	83.0	F	72.2	E
	Project With Mitigation	AM	49.6	B	20.5	C	21.0	C	20.9	C
		PM	38.4	D	38.4	D	50.6	D	44.7	D
Grape Street/ Kettner Boulevard	No Project	AM			14.8	B	14.2	B	14.8	B
		PM			55.3	E	54.0	D	77.1	E
	Project Without Mitigation	AM			14.7	B	14.0	B	14.7	B
		PM			71.2	E	70.9	E	98.3	F
	Project With Mitigation	AM	12.8	B	14.7	B	14.0	B	14.7	B
		PM	29.6	C	46.4	D	47.5	D	71.1	E
Sassafras Street/ Kettner Boulevard	No Project	AM			19.4	B	11.9	B	9.6	A
		PM			121.5	F	82.1	F	62.5	E
	Project Without Mitigation	AM			32.6	C	18.1	B	13.2	B
		PM			144.2	F	107.6	F	80.9	F
	Project With Mitigation	AM	9.6	A	9.6	A	9.6	A	8.3	A
		PM	12.4	B	49.7	D	40.2	D	24.3	C
Grape Street/ I-5 Southbound On-Ramp	No Project	AM							15.1	B
		PM							87.1	F
	Project Without Mitigation	AM							15.4	B
		PM							113.0	F
	Project With Mitigation	AM	9.6	A					15.4	B
		PM	12.4	B					100.0	F
Washington Street/ Pacific Highway NB-Ramps	No Project	AM	46.7	D	56.0	E	59.8	E	31.1	C
		PM	107.8	F	130.2	F	156.4	F	79.3	E
	Project Without Mitigation	AM	69.3	E	89.3	F	101.2	F	54.6	D
		PM	106.8	F	136.9	F	162.3	F	81.9	F
	Project With Mitigation	AM	42.1	D	30.5	C	31.8	C	54.6	D
		PM	38.5	D	49.7	D	59.6	E	45.6	D

Source: HNTB, 2007.

Table D-161

**Intersection Operations with Mitigation Measures
Airport Land Use Plan**

Mitigate Improve to LOS D

Mitigation Improvements assessed in this table will bring the street segment to an acceptable level of service C or D as defined by the City of San Diego and is provided for Informational Purposes ONLY.

Intersection	Scenario		2015		2020		2025		2030	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Hawthorn Street/ North Harbor Drive	No Project	AM	49.6	D	112.8	F	131.7	F	173.0	F
		PM	25.2	C	33.7	C	40.7	D	55.9	E
	Project Without Mitigation- Improvement	AM	84.4	F	154.1	F	176.9	F	225.9	F
		PM	37.7	D	70.4	E	87.1	F	115.4	F
	Project With Mitigation- Improvement	AM	23.9	C	37.8	D	48.7	D	79.3	E
		PM	37.7	D	35.1	D	43.5	D	61.9	E
Laurel Street/ Pacific Highway	No Project	AM	33.7	C	33.9	C	34.4	C	33.7	C
		PM	62.4	E	59.5	E	53.1	D	60.4	E
	Project Without Mitigation- Improvement	AM	34.5	C	34.7	C	35.4	D	34.8	C
		PM	69.3	E	65.0	E	58.4	E	66.6	E
	Project With Mitigation- Improvement	AM	34.5	C	34.7	C	35.4	D	29.9	C
		PM	54.5	D	53.2	D	49.2	D	54.9	D
Grape Street/ Pacific Highway	No Project	AM			19.9	B	20.3	C	20.2	C
		PM			53.1	D	68.6	E	56.5	E
	Project Without Mitigation- Improvement	AM			20.5	C	21.0	C	20.9	C
		PM			64.7	E	83.0	F	72.2	E
	Project With Mitigation- Improvement	AM			20.5	C	21.0	C	20.9	C
		PM			38.4	D	50.6	D	44.7	D
Grape Street/ Kettner Boulevard	No Project	AM			14.8	B	14.2	B	14.8	B
		PM			55.3	E	54.0	D	77.1	E
	Project Without Mitigation- Improvement	AM			14.7	B	14.0	B	14.7	B
		PM			71.2	E	70.9	E	98.3	F
	Project With Mitigation- Improvement	AM			14.7	B	14.0	B	13.2	B
		PM			46.4	D	47.5	D	16.5	B
Sassafras Street/ Kettner Boulevard	No Project	AM			19.4	B	11.9	B	9.6	A
		PM			121.5	F	82.1	F	62.5	E
	Project Without Mitigation- Improvement	AM			32.6	C	18.1	B	13.2	B
		PM			144.2	F	107.6	F	80.9	F
	Project With Mitigation- Improvement	AM			9.6	A	9.6	A	8.3	A
		PM			49.7	D	40.2	D	24.3	C
Grape Street/ I-5 Southbound On-Ramp	No Project	AM						15.1	B	
		PM						87.1	F	
	Project Without Mitigation- Improvement	AM						15.4	B	
		PM						113.0	F	
	Project With Mitigation- Improvement	AM						15.4	B	
		PM						46.6	D	
Washington Street/ Pacific Highway NB-Ramps	No Project	AM	46.7	D	56.0	E	59.8	E	31.1	C
		PM	107.8	F	130.2	F	156.4	F	79.3	E
	Project Without Mitigation- Improvement	AM	69.3	E	89.3	F	101.2	F	54.6	D
		PM	106.8	F	136.9	F	162.3	F	81.9	F
	Project With Mitigation- Improvement	AM	42.1	D	30.5	C	31.8	C	54.6	D
		PM	38.5	D	49.7	D	47.7	D	45.6	D

Source: HNTB, 2007.

D.10.3 Freeway Segments

D.10.3.1 Proposed Airport Implementation Plan

No potential significant impacts to freeway segments would result from development of the Proposed Airport Implementation Plan and no mitigation measures are required.

D.10.3.2 Airport Implementation Plan Alternative

No potential significant impacts to freeway segments would result from development of the Airport Implementation Plan Alternative and no mitigation measures are required.

D.10.3.3 Proposed Airport Land Use Plan

The Proposed Airport Land Use Plan would have potential significant impacts to the following freeway segments:

Freeway Segments with Significant Traffic Impacts

Year 2015

- I-5 (~~northbound and southbound segments, AM and PM peak hours~~)
 - ~~n~~North of I-8 (AM and PM – southbound segment only)
 - I-8 to Old Town Avenue (AM – southbound segment only; PM – both directions)
 - Old Town Avenue to Washington Street (PM – northbound segment only)
 - Hawthorn Street to First Avenue (AM – northbound segment only; PM – southbound segment only)
 - First Avenue to SR-163 (AM – northbound segment only; PM – both directions)
 - SR-163 to SR-94 (AM and PM – northbound segment only)
- I-8 East of I-5 (westbound segment only, AM and PM)

Year 2020

- All segments identified in Year 2015 above, (except for I-5 NB between First Avenue and Hawthorn Street which improved to LOS D during the AM peak hour), plus the following:
- Northbound I-5 between Hawthorn Street and India Street (AM)
- Northbound I-5 north of I-8 (PM)

Year 2025

- All segments identified in Year 2020 above, (except for I-5 NB between Old Town Avenue and I-8 which improved to LOS D during the PM peak hour) plus the following:
- I-8 East of I-5 (eastbound segment, ~~AM and~~ PM)

Year 2030

- All segments identified in Year 2025 above, (except for I-5 NB between Hawthorn Street and India Street which improved to LOS D during the AM peak hour) plus the following:
- ~~Northbound I-5 northbound~~ between ~~Pacific Highway Viaduct and Washington Street~~ (~~AM~~) I-8 and Old Town Avenue (PM)

The Proposed Airport Land Use Plan would impact the freeway segments identified above by increasing densities by approximately 1% to 5% compared to No Project conditions. However, widening the freeway by one lane in one direction could reduce densities by as much as 20%, as

shown in **Table D-162**. Freeway widening is therefore more than necessary to mitigate the freeway impacts associated with the Proposed Airport Land Use Plan. As stated previously, because the Airport Land Use Plan is considered on a program level in this EIR, the SDCRAA will undertake additional environmental review on specific projects generalized in the Airport Land Use Plan as those projects are moved forward for planning and design.

Table D-162
Freeway Operations with One Lane Freeway Widening
 (For illustration purposes only)

AM Peak Hour SB I-5 Freeway		Year 2015			Year 2020		
From	To	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation
North of I-8	I-8	35.8	29.0	-18.9%	34.8	28.3	-18.7%
I-8	Old Town Avenue	36.4	29.6	-18.7%	34.5	28.2	-18.5%
Old Town Avenue	Washington Street	29.9	24.4	-18.4%	25.7	21.1	-17.9%
Washington Street	Pacific Highway Viaducts	32.1	25.7	-20.0%	28.5	22.8	-20.0%
Pacific Highway Viaducts	India Street	36.7	29.3	-19.9%	30.9	24.7	-19.9%
India Street	Hawthorn Street	37.4	29.9	-19.9%	32.5	26.0	-19.9%
Hawthorn Street	First Avenue	31.4	25.5	-18.7%	26.8	21.9	-18.5%
First Avenue	SR 163	33.1	26.9	-18.8%	28.8	23.4	-18.6%
SR 163	SR 94	19.4	15.9	-17.9%	17.2	14.2	-17.6%

AM Peak Hour SB I-5 Freeway		Year 2025			Year 2030		
From	To	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation
North of I-8	I-8	35.6	29.0	-18.6%	38.0	30.9	-18.6%
I-8	Old Town Avenue	35.4	28.9	-18.3%	37.5	30.6	-18.6%
Old Town Avenue	Washington Street	26.5	21.7	-17.8%	27.6	22.6	-18.1%
Washington Street	Pacific Highway Viaducts	29.8	23.8	-20.0%	30.4	24.3	-20.0%
Pacific Highway Viaducts	India Street	32.2	25.8	-19.8%	33.4	26.7	-19.9%
India Street	Hawthorn Street	33.7	27.0	-19.8%	34.5	27.7	-19.9%
Hawthorn Street	First Avenue	27.8	22.7	-18.3%	28.0	22.9	-18.1%
First Avenue	SR 163	30.1	24.6	-18.5%	30.4	24.8	-18.3%
SR 163	SR 94	17.8	14.7	-17.4%	18.2	15.1	-17.1%

NOTE: Bold/Shading = Freeway segment calculated to operate at Percent Increase D, E or F exceeding Caltrans target Percent Increase C.
 Source: HNTB, 2007.

Significant Impact

The range of impacts associated with the Land Use Plan could potentially be addressed by Transportation Demand Management (TDM) measures. These measures, used in combination, could result in employee vehicle trip reduction of as much as 10%.²⁰ Employee trips make up approximately 8% of daily airport trips,²¹ and a 10% reduction would result in a 1% reduction in overall airport trips. Although TDM measures are typically addressed to employees to reduce commute trips, measures could be tailored to encourage air passengers to use high occupancy vehicles instead of using private vehicles, however the resulting benefit would be limited.

Conclusion

While it is understood that the widening of I-5 would fully mitigate all impacts to the freeway segments under the Airport Land Use Plan, the SDCRAA acknowledges that freeway widening is complex and is not in the region’s long-range transportation plan. Further, as with other traffic mitigation measures, freeway widening is within the responsibility and jurisdiction of Caltrans so SDCRAA is unable to determine the likelihood or feasibility of freeway widening as a mitigation measure. As a result, SDCRAA cannot ensure that the impact will be reduced to less than significant and alternative mitigation and potential benefits have been identified.

²⁰ Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), *Effectiveness Overview of Travel Transportation Demand Management (TDM) Measures*, xxx Final Report, January 1994.

²¹ Parsons, *Update of Traffic Data for SDIA*, 2004.

The 2003 Central I-5 Corridor Study's Recommended Improvement Alternative E, direct freeway ramps from Old Town to Pacific Highway, was evaluated as a potential mitigation measure. The northbound and southbound sections of I-5 between Washington Street and Old Town Avenue would benefit from this improvement measure. Implementation of this measure would mitigate the potentially significant impact under the Land Use Plan to the northbound freeway segment during the PM peak hour, such that No Project conditions would be restored. While the southbound AM and PM and northbound AM operations would be improved, these segments are not identified as having potentially significant impacts. As such, implementation of 2003 Central I-5 Corridor Study's Recommended Improvement Alternative E, direct freeway ramps from Old Town to Pacific Highway, would result in the reduction of significant impacts to the segment of I-5 between Washington Street and Old Town Avenue. The implementation of this measure would not reduce the freeway impacts on southbound I-5 between I-8 and Old Town Avenue and between Hawthorn Street and SR 163, on northbound I-5 between India Street and SR 94 and between Old Town Avenue and I-8, on eastbound and westbound I-8. Again, because the responsibility and jurisdiction over the direct freeway ramps lies with Caltrans, SDCRAA cannot ensure that such mitigation will be implemented and thus it is possible that significant impacts will remain after Project implementation. SDCRAA will cooperate with all responsible agencies for such measures and encourage their implementation.

[Table D-163](#) illustrates alternative mitigation to improve freeway segments.

Table D-163

**Freeway Operations with Ramps from I-5 to Pacific Highway at Old Town Avenue – AM Peak Hour
(Central I-5 Corridor Study Recommended Improvement E)**

AM Peak Hour SB I-5 Freeway		Year 2015			Year 2020			Year 2025			Year 2030		
From	To	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation
North of I-8	I-8	35.8	36.3	1.4%	34.8	35.3	1.6%	35.6	36.2	1.8%	38.0	38.7	1.8%
I-8	Old Town Avenue	36.4	37.0	1.7%	34.5	35.2	1.9%	35.4	36.1	2.1%	37.5	38.2	1.8%
Old Town Avenue	Washington Street	29.9	29.9	0.0%	25.7	25.7	0.0%	26.5	26.5	0.0%	27.6	27.6	0.0%
Washington Street	Pacific Highway Viaducts	32.1	32.1	0.0%	28.5	28.5	0.0%	29.8	29.8	0.0%	30.4	30.4	0.0%
Pacific Highway Viaducts	India Street	36.7	36.7	0.1%	30.9	30.9	0.2%	32.2	32.2	0.2%	33.4	33.4	0.1%
India Street	Hawthorn Street	37.4	37.4	0.1%	32.5	32.5	0.2%	33.7	33.7	0.2%	34.5	34.6	0.1%
Hawthorn Street	First Avenue	31.4	31.9	1.6%	26.8	27.3	1.9%	27.8	28.4	2.1%	28.0	28.6	2.4%
First Avenue	SR 163	33.1	33.6	1.5%	28.8	29.3	1.8%	30.1	30.7	1.9%	30.4	31.0	2.2%
SR 163	SR 94	19.4	19.9	2.6%	17.2	17.7	3.0%	17.8	18.4	3.2%	18.2	18.9	3.6%
NB I-5 Freeway		Year 2015			Year 2020			Year 2025			Year 2030		
From	To	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation
SR 94	SR 163	56.7	57.7	1.8%	53.6	54.7	2.1%	54.3	55.6	2.3%	53.4	54.7	2.6%
SR 163	First Avenue	42.7	43.8	2.4%	41.2	42.3	2.7%	41.8	43.0	3.0%	40.3	41.6	3.4%
First Avenue	Hawthorn Street	35.4	36.4	2.9%	33.1	34.2	3.4%	32.6	33.9	3.8%	31.3	32.7	4.4%
Hawthorn Street	India Street	36.3	36.5	0.7%	35.1	35.4	1.1%	34.6	35.1	1.3%	31.9	32.3	1.3%
India Street	Pacific Highway Viaducts	36.1	36.3	0.3%	34.6	34.7	0.4%	34.2	34.3	0.5%	31.7	31.9	0.7%
Pacific Highway Viaducts	Washington Street	25.2	25.4	0.4%	24.0	24.1	0.6%	23.4	23.6	0.8%	21.8	22.0	1.0%
Washington Street	Old Town Avenue	30.5	30.5	0.0%	29.9	29.9	0.0%	29.3	29.3	0.0%	27.8	27.8	0.0%
Old Town Avenue	I-8	30.2	30.5	1.0%	28.8	29.1	1.1%	28.2	28.5	1.3%	26.5	26.9	1.3%
I-8	North of I-8	37.1	37.3	0.7%	37.1	37.4	0.7%	37.2	37.5	0.8%	37.4	37.7	0.9%
I-8 Freeway		Year 2015			Year 2020			Year 2025			Year 2030		
From	To	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation
I-5	East	29.4	29.6	0.7%	25.2	25.4	0.9%	25.3	25.5	1.0%	24.4	24.6	1.2%
East	I-5	35.7	36.1	1.2%	33.5	34.0	1.4%	34.7	35.2	1.5%	36.2	36.8	1.6%

NOTE: This table was not included in the Draft EIR. It does not represent significant new information and does not affect the significance determinations presented in the Draft EIR.

Table D-163

**Freeway Operations with Ramps from I-5 to Pacific Highway at Old Town Avenue – PM Peak Hour
(Central I-5 Corridor Study Recommended Improvement E)**

PM Peak Hour SB I-5 Freeway													
From	To	Year 2015			Year 2020			Year 2025			Year 2030		
		No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation
North of I-8	I-8	41.8	42.3	1.2%	48.0	48.5	1.1%	47.2	47.8	1.2%	45.9	46.5	1.3%
I-8	Old Town Avenue	36.9	37.6	1.7%	44.6	45.2	1.5%	44.1	44.9	1.6%	42.0	42.6	1.5%
Old Town Avenue	Washington Street	31.1	31.1	0.0%	31.9	31.9	0.0%	32.0	32.0	0.0%	31.7	31.7	0.0%
Washington Street	Pacific Highway Viaducts	33.1	33.1	-0.1%	37.6	37.6	-0.1%	38.0	38.0	-0.1%	34.8	34.7	-0.1%
Pacific Highway Viaducts	India Street	41.9	41.8	-0.2%	41.9	41.8	-0.1%	42.2	42.2	-0.1%	41.3	41.2	-0.3%
India Street	Hawthorn Street	41.7	41.6	-0.2%	44.0	44.0	-0.1%	44.5	44.4	-0.1%	42.7	42.6	-0.3%
Hawthorn Street	First Avenue	36.8	37.6	2.1%	37.9	38.7	2.2%	38.7	39.6	2.3%	38.8	39.7	2.5%
First Avenue	SR 163	46.8	47.6	1.6%	47.6	48.4	1.7%	48.5	49.4	1.9%	48.9	49.8	2.0%
SR 163	SR 94	26.7	27.5	2.9%	27.1	28.0	3.1%	28.0	28.9	3.2%	27.2	28.2	3.6%
NB I-5 Freeway													
From	To	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation
SR 94	SR 163	39.5	40.5	2.6%	34.8	35.8	3.0%	35.4	36.6	3.2%	37.2	38.4	3.3%
SR 163	First Avenue	39.3	40.4	2.6%	37.9	38.9	2.8%	38.5	39.6	2.9%	38.0	39.3	3.2%
First Avenue	Hawthorn Street	32.3	33.3	3.1%	29.0	30.0	3.6%	29.1	30.3	3.9%	30.6	31.8	4.0%
Hawthorn Street	India Street	38.5	38.6	0.3%	36.5	36.7	0.4%	36.8	37.0	0.5%	39.5	39.7	0.4%
India Street	Pacific Highway Viaducts	37.8	37.9	0.1%	34.4	34.4	0.1%	34.8	34.8	0.1%	35.8	35.9	0.1%
Pacific Highway Viaducts	Washington Street	30.6	30.6	0.1%	28.1	28.1	0.1%	28.0	28.0	0.1%	29.6	29.6	0.1%
Washington Street	Old Town Avenue	35.7	35.7	0.0%	35.3	35.3	0.0%	35.3	35.3	0.0%	35.4	35.4	0.0%
Old Town Avenue	I-8	36.8	37.2	1.1%	34.6	35.1	1.4%	34.2	34.7	1.5%	35.7	36.1	1.2%
I-8	North of I-8	38.2	38.6	0.992%	39.1	39.5	1.1%	39.1	39.6	1.2%	42.9	43.4	1.1%
I-8 Freeway													
From	To	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation	No Project (pc/mi/ln)	Project with Mitigation (pc/mi/ln)	Percent Increase/ Decrease with Mitigation
I-5	East	38.9	39.3	0.8%	38.0	38.3	0.9%	37.8	38.2	1.03%	37.1	37.5	1.1%
East	I-5	37.8	38.2	1.1%	35.6	36.1	1.3%	36.1	36.6	1.3%	35.4	35.9	1.5%

Source: HNTB, 2007

Legend:

	LOS E
	LOS F
	Significant Impact
	Operation with Ramps
	Significant Impact Mitigated

NOTE: This table was not included in the Draft EIR. It does not represent significant new information and does not affect the significance determinations presented in the Draft EIR.

D.10.4 Freeway Ramps

Mitigation for freeway ramps is within the jurisdiction of Caltrans and mitigation for metered freeway ramps would require increasing ramp metering rates.

D.10.4.1 Proposed Airport Implementation Plan

No potential significant impacts to metered freeway ramps would result from development of the Proposed Airport Implementation Plan and no mitigation measures are required.

D.10.4.2 Airport Implementation Plan Alternative

No potential significant impacts to metered freeway ramps would result from development of the Airport Implementation Plan Alternative and no mitigation measures are required.

D.10.4.3 Proposed Airport Land Use Plan

No potential significant impacts to metered freeway ramps would result from development of the Proposed Airport Land Use Plan Alternative and no mitigation measures are required.

D.10.5 Railroad Crossings

Under the No Project Alternative, Proposed Airport Implementation Plan, and Airport Implementation Plan Alternative, total vehicle delay at all railroad crossings were estimated to be under the VHD threshold for each street segment except for Washington Street which exceeds the VHD threshold in 2020 and 2025. Since the condition occurs even under the No Project Alternative, the Proposed Airport Implementation Plan and Implementation Plan Alternative would not result in significant railroad crossing impact and no mitigation measures are required.

Under the Proposed Airport Land Use Plan, the higher volumes at Washington Street raised the VHD threshold, consequently resulting in no impacts at Washington Street in any year. Therefore, the Proposed Airport Land Use Plan would not result in significant railroad crossing impact and no mitigation measures are required.

D.10.6 Transit

Under the No Project Alternative, Proposed Airport Implementation Plan, Airport Implementation Plan Alternative, and Proposed Airport Land Use Plan no existing or planned transit routes would be modified. Therefore, the Proposed Airport Implementation Plan, Airport Implementation Plan Alternative, and Proposed Airport Land Use Plan would not result in significant transit impact and no mitigation measures are required.

SDCRAA is aware of SANDAG's most recent Regional Transportation Plan which calls for development of a Bus Rapid Transit system to accompany the existing Trolley and Coaster service and is leading a multiple agency committee to identify ways to improve public transit access to SDIA.

The Airport Authority supports improvements to Airport transit service and is developing policies and programs to encourage and increase transit use by airport users comprised of passengers and employees. The Authority is committed to increasing transit ridership to SDIA and has led a multi-agency Airport Transit/Roadway Committee which developed a Draft Airport Transit Plan for SDIA identifying opportunities to improve transit access. The main goal of the Airport Transit Plan and the Authority is to increase the airport passenger transit ridership from the existing 1.2 percent to the national average of 5 percent over the next 3 to 5 years. Recommendations of this Plan are presented in [Table 2-21](#) within Section 2.4.1, *Airport Transit Plan*, of the FEIR for the San Diego International Airport Master Plan.

In addition, the Proposed Airport Land Use Plan designates Ground Transportation land uses in the North Area that may include an intermodal transit center and a proposed transit corridor

connecting to the South Area. Further analysis of an intermodal transit center will be coordinated with the regional transportation agencies.

D.10.7 Parking

No alternative would remove any parking lots designated for public use and passenger terminals also are not located close to commercial or residential areas. The Proposed Airport Implementation Plan, Airport Implementation Plan Alternative, and Proposed Airport Land Use Plan would provide additional parking compared to the No Project Alternative and would not result in significant parking impact. Therefore, no mitigation is required.

D.10.8 Terminal Curbside

Under the No Project Alternative no new curbside would be provided and there would be an airport-wide deficiency of 610 linear feet in 2015 and ~~4,650~~ 1,650 linear feet in 2030.

Under the Proposed Airport Implementation Plan, Airport Implementation Plan Alternative, and Proposed Airport Land Use Plan sufficient curb length is provided to meet future requirements through 2015. Therefore, the Proposed Airport Implementation Plan, Airport Implementation Plan Alternative, and Proposed Airport Land Use Plan would result in positive curbside impacts and therefore, no mitigation measures are required.

D.10.9 On-Airport Traffic Circulation

Under the No Project Alternative, Proposed Airport Implementation Plan, Airport Implementation Plan Alternative, and Proposed Airport Land Use Plan all terminal roadways would operate at LOS D or better during peak hours. In addition, all alternatives would provide adequate site ingress and egress and would not affect public street operations. No roadways would be designed to cause traffic hazards to motor vehicles, bicyclists or pedestrians. Therefore, the Proposed Airport Implementation Plan, Airport Implementation Plan Alternative, and Proposed Airport Land Use Plan would have no significant on-airport traffic circulation impact and no mitigation measures are required.

D.10.10 Construction

Two traffic and circulation construction measures described in Section D.8 *Construction Impacts* will be implemented as additional actions undertaken by the SDCRAA. The measures are entitled:

- MM5.3-3 ▪ Establish a Construction Coordination Office within the Ground Transportation Department
- MM5.3-4 ▪ Require Orientation for Construction Personnel

D.10.11 Level of Significance after Mitigation Measures

As described in Section D.2, *Traffic Impacts and Significance Criteria*, significance criteria used to determine potentially significant impacts for freeway segments and metered on-ramps, street/roadway segments, intersections and parking were derived from the City of San Diego Development Services Department's CEQA Significance Determination Thresholds guidelines dated January 2007; significance criteria for railroad crossings were derived from the California Utilities Commission, and best practice management was used to determine significance criteria for transit, parking, terminal curbsides and on-airport roadways.

Per Section O, *Transportation/Circulation and Parking*, of the City of San Diego's CEQA Significance Determination Thresholds dated January 2007 (described in Section D.2 of this DEIR FEIR), mitigation measures have been identified to ~~(1) restore and maintain the traffic facility to an acceptable Level of Service defined by the City of San Diego to be LOS D or better~~

~~and (2) mitigate the project's direct significant and/or cumulatively considerable traffic impacts. In many cases these proposed mitigation measures are the same. For informational purposes only, additional actions that would be necessary to improve the LOS to D or better were also provided.~~

Mitigation measures were identified in this section for each potentially significant impact per the City's guidelines. ~~After mitigation, each potentially significant impact caused by the Project will be reduced to less than significant. In addition, W-when possible mitigation was additional actions were identified to improve the level of service of the transportation facility to within the City's acceptable guidelines, LOS D or better, and even though the Project will not cause the traffic condition. In many instances the mitigation-traffic improvement mitigation measures identified to mitigate a potentially significant impact to insignificant conditions also improved the LOS of the facility to LOS D or better. In some instances no feasible mitigation practicable traffic improvement measure could be identified to mitigate improve the transportation facility to LOS D or better. However, because CEQA only requires mitigation for impacts caused by the Project, the lack of traffic improvement measures in such instances is not considered a significant impact. As a result, after mitigation, all traffic related impacts are reduced to less than significant.~~

~~Although the mitigation measures identified would reduce traffic impacts to a level of less than significant, the roadway segments, intersection, arterial roadways, and freeway ramps and operations are within the legal authority, responsibility and jurisdiction of the City of San Diego or Caltrans, not SDCRAA. As such, SDCRAA lacks the legal authority to ensure that these other agencies will implement the mitigation measures necessary to render the traffic impacts less than significant. If these agencies do not implement the mitigation measures identified and adopted by SDCRAA, it is possible that the traffic impacts of the Project will remain significant after Project implementation.~~

Subsequent to implementation of any required mitigation a peak hour roadway analysis would be conducted as part of a mitigation feasibility study to determine specific mitigation measures to be implemented.