

SAN DIEGO

International Airport



AIRPORT MASTER PLAN
SAN DIEGO INTERNATIONAL AIRPORT

CHAPTER 9

Concept Evaluation and Refinement

9. CONCEPT EVALUATION AND REFINEMENT

Five concepts for development of facilities at San Diego International Airport (SDIA) were presented in Chapter 8, Preliminary Concept Development. The five concepts addressed the existing facilities, the identified facility requirements for meeting the forecast aviation demand through 2030, and the goal and objectives set forth at the outset of the Master Plan.

The implementation of improvements at SDIA requires the selection of one concept or components of multiple concepts for refinement and final analysis. Chapter 9, Concept Evaluation and Refinement, presents the process undertaken by the Master Plan team to identify a concise set of alternatives for implementation at SDIA.

Each of the five concepts was evaluated by Authority staff and the consultant team to determine which was most appropriate and feasible for meeting the forecast facility requirements, while best meeting the master plan goals and objectives. Upon selection of an alternative, the Authority will implement the preferred plan, including environmental review and analysis and cost analysis.

The outcome of the evaluation process yielded two build alternatives (in addition to the no-build alternative required for environmental analysis), which act as the foundation for preparing an Environmental Review of Master Plan Improvements.

9.1 Evaluation of Concepts

The evaluation of the preliminary concepts was completed with the consultant team and the Authority during the first quarter of 2005. Each concept is an amalgamation of components which meet the facility requirements in the land use categories within the Master Plan, including Airside, Terminal, Ground Transportation, and Airport Support. Each component was developed as an independent solution allowing it to be combined with components from other concepts to present a refined alternative for development. Therefore, the concepts should not be considered unalterable development plans; instead, the concepts are guidelines that identify the general direction of facility improvement development.

Identifying a general direction for future development at SDIA is the first step in the evaluation of these concepts. To arrive at a consensus, a process of concept refinement was identified for consideration of the proposed development alternatives.

Evaluation Criteria

Each concept is primarily evaluated based on a single criterion: the ability of each concept to meet the goal and objectives established for the Master Plan. However, additional criteria were considered to better identify the strengths and weaknesses of each concept and to prepare a well-conceived alternative for implementation.

In particular, the evaluation is based on answers to two key questions, in addition to the goal and objectives:

1. Should the Authority develop a new terminal area in the north, along Pacific Highway or continue to develop terminal infrastructure in the south along North Harbor Drive?
2. How can the Authority best prepare the Airport for meeting the short-term facility requirements while addressing the long-term uncertainty of the regional airport site?

It should be noted that the concepts developed as part of this Master Plan proposed that the Authority continue to develop terminal facilities on the South Side of the airport along North Harbor Drive. However, the previously developed preferred Alternative, Concept F, was carried over to present one plan for the development of terminal facilities in the north.

9. Concept Evaluation and Refinement

The influence of the Airport Site Selection Program (ASSP) on the Master Plan primarily resulted in the concept refinement process taking a pragmatic approach to facilities improvements primarily centered on meeting the short term facility requirements while avoiding incompatibility with the long term uncertainty at the existing airport site. Each concept was evaluated for its compatibility with a short term solution for the region prior to a potential closure of the existing airport.

9.2 Overall Concept Evaluation

As stated above in Evaluation Criteria, a key decision for the Authority and consultant team to make was whether to begin development of terminal facilities in the north area of the airport along Pacific Highway. The previous Master Plan for SDIA presented a preferred alternative that would construct a new unit terminal in the north and begin initial infrastructure development for a second runway. The previous Master Plan assumed that the Marine Corps Recruit Depot (MCRD) property, which is adjacent to SDIA, would become available at an undetermined, but relatively near-term, date.

The feasibility of developing new terminal facilities in the north was influenced by the potential for acquisition and development of MCRD. At the current time, the potential for acquisition and development of MCRD is not considered to be feasible. Without acquisition and development of MCRD, development of terminal facilities on the north would require that terminal operations be split between the existing infrastructure in the south and new infrastructure in the north. In general, the splitting of terminal infrastructure between two locations would add to the cost and complexity since it will require the duplication of many infrastructure components.

Overall, two fatal flaws were identified that led the team to reject development of terminal facilities in the north without a definitive plan for acquisition of MCRD:

- Development of new terminal facilities in the north would fail to utilize any existing terminal infrastructure, which would lead to higher development costs for a new terminal that would require new roadway circulation and utilities.
- Splitting terminals to two locations without a common access point would be inefficient and complicated for both airline tenants, who would be separated into two different facilities, and airport passengers.

Because Concept F would result in the development of new terminal facilities in the north, it was eliminated from further consideration. Concept F would have required development of new infrastructure without maximizing utilization of existing airport infrastructure in addition to complicating both the airside and landside operation at the airport. Further, the existing north-side land area is not sufficient to develop a terminal facility that would meet the 2015 facility requirements for more than 50 airline gates including the required airfield, and ground-transportation facilities.

The remaining concepts, A, B, C, and the Minimal Build Concept were developed to maximize use of existing terminal infrastructure. Each development concept shares a similar layout for airport support and ground transportation facilities in the north area. New and expanded Cargo and General Aviation facilities as well as the potential for additional parking and a consolidated rental car facility and transit center are considered. Each concept was evaluated on its approach to the following: the construction of terminal facilities and roadways to the Airport. Concepts A, B, C, and the Minimal Build Concept are evaluated below:

9.2.1 Concept A Evaluation

In developing Concept A (Figure 8-1), the overall need for gates and terminal facilities would be accomplished by expanding existing Terminal 2 West, which would provide 10 additional contact jet gates and new passenger processing facilities. The additional passenger processing facilities would be located in a westward expansion of the existing Terminal 2 West terminal building.

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Concept A was developed to capitalize on the existing investments the Authority has made at Terminal 2 West and through acquisition of the former Naval Training Center (NTC) property. The approximately 52 Acre former NTC site presents opportunities for development of airport related uses including terminal, airfield apron (including gates and Remain Over Night aircraft parking positions) as well as ground transportation improvements including structured and surface parking.

Development of facilities on the former NTC site would likely require the Authority to complete the remediation of the former landfill present on the site. Remediation of the landfill on the former NTC site is considered to be a positive impact associated with Concept A.

A drawback of Concept A is the existing facilities at Terminal One remain essentially unchanged. Terminal One is the oldest existing terminal and has the greatest overall deficiencies among the existing terminal infrastructure. However, the development of Terminal 2 West would potentially relocate traffic and flights to the new facility allowing greater flexibility within Terminal One resulting from reduced demand for space.

Another disadvantage of the concept is the lack of additional curb frontage in front of Terminal 2 West. Terminal 2 West has a single at grade departures and arrivals curb. The addition of ten gates will require analysis of alternative methods to increasing the length of curb for both private and commercial vehicles. This is something that is not easily accomplished. While the existing curb would be able to absorb the increase in activity it is likely the overall level of service would be compromised.

The development of all concepts required a conceptual analysis of how improvements to meet the 2015 requirements could be expanded on to meet requirements to 2030. The 2030 plan for Concept A (Figure 8-2) contemplates creating a continuous linear flight line and single processor to replace both Terminal One and the Commuter Terminal. This terminal would have improved access off of Harbor Drive and surface or structured parking across from the terminal.

The long range plan for Concept A on the north includes the eventual replacement and or re-build of the fixed base operator and a cargo module parallel to the existing runway to maximize cargo opportunities. The development of the north would also include ground transportation improvements including surface parking, a RAC structure, and potential transit center.

9.2.2 Concept B Evaluation

In developing Concept B (Figure 8-3), meeting the overall need for gates and terminal facilities would be accomplished by completing the a partial build out of T2 West, providing 4 additional contact jet gates and new passenger processing facilities as well as a new unit terminal between Terminal 1 and the Commuter Terminal which would provide 6 additional contact gates and new passenger processing facilities. The passenger processing facilities would be primarily located in a smaller expansion of the existing Terminal 2 West processor and the development of a first phase unit terminal adjacent to terminal 1.

The advantage initially of proposing concept B was to balance overall airside activity as well as to provide additional passenger processing capabilities in close proximity to terminal One. Currently Terminal 1 is the most deficient facility in overall square footage needs.

The development of the NTC property was not anticipated to be complete in Concept B within the 2015 timeframe.

The 2030 plan for Concept B (Figure 8-4) would result in a continuous linear flight line and single processor to replace both Terminal One and the Commuter Terminal similar to Concept A. This terminal would have improved access off of Harbor Drive and surface or structured parking across from the terminal.

The long range plan for Concept B on the north includes the eventual replacement and or re-build of the fixed base operator and a cargo module parallel to the existing runway to maximize cargo opportunities.

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The development of the north would also include ground transportation improvements including surface parking, a RAC structure, and potential transit center.

A drawback of Concept B is the fragmentation resulting from adding gates at two locations. Neither development would create a critical mass of new infrastructure which may benefit a single existing carrier more than new entrants, which would provide increased competition and service to new markets.

9.2.3 Concept C Evaluation

Concept C presents a plan to address the facility requirements that includes a more ambitious schedule for replacement of existing facilities. The concept features a new linear terminal facility that would replace the east rotunda of Terminal 1.

The 2015 Terminal facility requirements would be met by constructing a new ten gate expansion to Terminal 2 West (Figure 8-5) including a terminal processor and new ground transportation. Commuter flights would be relocated from the existing Commuter Terminal to a portion of existing Terminal One. The East Rotunda of terminal One would be demolished and replaced with a new linear terminal extending east from Terminal One past the Commuter Terminal. The ten additional gates would be met through construction of the Terminal 2 West expansion. However, Concept C would address the space and efficiency constraints in Terminal 1 are replacing ten to twelve of those gates with a new processor and terminal concourse.

Terminal 1 is the most deficient facility in overall square footage needs and Concept C addresses this deficiency in the near term, as opposed to maintaining these facilities during the first phase of development at the existing airport.

Similar to Concepts A and B, the 2030 plan for Concept C (Figure 8.6) would result in a linear flight line and single processor to replace both Terminal One and the Commuter Terminal. The terminal would have improved access off of North Harbor Drive and surface or structured parking across from the terminal.

The long range plan for Concept C on the north includes the relocation and possible expansion of the general aviation facilities and improved and expanded cargo facilities. The development of the north would also include ground transportation improvements including surface parking, a consolidated rental car facility and, potentially, transit center.

There are two primary drawbacks inherent in Concept C. First, fragmentation results from adding gates at two locations, Terminal 2 West, and Terminal 1. Secondly, Concept C would require an increased capital expenditure early in the development process. Though the second phase of development may be less costly, Concept C is less sensitive to the uncertainty associated with the existing airport's future.

9.2.4 Minimal Build Concept Evaluation

Concept development typically presents an opportunity for planners and airport operators to develop sensible but ambitious plans for new facilities. However, the Master Plan team faced a unique challenge – the existing airport might not serve as the region's air transportation center beyond 2015. This fact influenced the development of a minimal build concept and the team's sensitivity to creating a viable option for development in the short term. The existing facilities are already deficient for meeting the passenger demand. These deficiencies will continue to grow regardless of the outcome of the ASSP. The Minimal Build Concept presents an opportunity for the Authority to construct necessary facility improvements that will meet the forecast demand for air service. The Minimal Build concept is also sensitive to the financial implications of facility development and was conceived to minimize the cost and complication of developing improved facilities. Because the Minimal Build Concept strictly addresses the short term facility requirements through 2015, there is no long term Minimal Build Concept for development through 2030.

9. Concept Evaluation and Refinement

The proposed improvements are based on the first phase of development proposed in Concepts A, B, and C. However the Minimal Build Concept proposal strives to retain the greatest practical degree of flexibility so that the Authority may maintain a broad range of alternatives for further development at the existing airport.

As shown in Figure 8-9 and Figure 8-10, meeting the overall need for gates and terminal facilities would be accomplished by completing the concourse build out of T2 West, but limit the improvement of passenger processing and convenience with the additional gates by serving them with a ground level, temporary terminal processor to serve the airlines and passengers in the interim period.

The implementation of improvements to the former General Dynamics site would occur in a consistent manner with Concepts A, B, and C in order to meet the need for additional passenger parking at the airport. In addition, other intended improvements to this property or the former Teledyne Ryan property would be necessary to meet the requirements of cargo through the year 2015. The fixed based operator in the Minimal Build Concept would remain largely in their current location with the potential for expansion.

The Minimal Build Concept has a variety of components which meet the needs of the airport in a financially conservative way; however, the concept fails by allowing this approach to drive the need to meet facility requirements.

The addition of 10 new contact gates will require adequate passenger processing space and support space such as concessions and parking to help offset the overall cost of the improvements.

9.3 Concept Summary

Table 9-1 summarizes the components associated with each concept.

Table 9-1

Concept Component Summary

Concept	Airfield	Terminal	Ground Transportation	Airport Support
Minimal Build	<ul style="list-style-type: none"> • Taxiway B - Group V Upgrade • Additional RON Positions • Partial Dual Parallel Taxiway B • Possible Taxiway C Extension 	<ul style="list-style-type: none"> • Enhance Concession • T2 West Build Out & Processor - 8 to 10 Additional Gates • T1 East Expansion & Processor up to 2 additional Gates 	<ul style="list-style-type: none"> • Expanded Surface Parking • Expanded Rental Car Facilities 	<ul style="list-style-type: none"> • Expanded and Improved Cargo Facilities on TDY and GD Sites • Potential for FBO Expansion
A	<ul style="list-style-type: none"> • Taxiway B - Group V Upgrade • Additional RON Positions • Full Dual Parallel Taxiway B • Taxiway C Extension 	<ul style="list-style-type: none"> • Phase 1: T2 West Build Out & Processor • Phase 2: T1 Replacement with Linear Concourse • Up to 63 Gates Total 	<ul style="list-style-type: none"> • Expanded Surface & Structured Parking • Expanded Rental Car Facilities • Improved Airport Road Entrance 	<ul style="list-style-type: none"> • Expanded and Improved Cargo Facilities • Potential for FBO Expansion • Possible Hydrant Fueling
B	<ul style="list-style-type: none"> • Taxiway B - Group V Upgrade • Additional RON Positions • Half Dual Parallel Taxiway B • Taxiway C Extension 	<ul style="list-style-type: none"> • Phase 1: T2 West Build Out & Processor + New East Terminal • Phase 2: Full Replacement of T1 with Linear Concourse • Up to 60 Gates Total 	<ul style="list-style-type: none"> • Expanded Rental Car Facilities Possible Structures • Expanded Surface Parking in Terminal Area • Improved Airport Road Entrance 	<ul style="list-style-type: none"> • Expanded and Improved Cargo Facilities • Potential for FBO Expansion • Possible Hydrant Fueling
C	<ul style="list-style-type: none"> • Taxiway B - Group V Upgrade • Additional RON Positions • Half Dual Parallel Taxiway B • Taxiway C Extension 	<ul style="list-style-type: none"> • Phase 1: T2 West Build out + Replacement of T1 East with Linear Concourse • Phase 2: Replace T1 West • Up to 60 Gates Total 	<ul style="list-style-type: none"> • Expanded Rental Car Facilities Possible Structures • Expanded Surface Parking in Terminal Area • Improved Airport Road Entrance 	<ul style="list-style-type: none"> • Expanded and Improved Cargo Facilities • Potential for FBO Expansion • Possible Hydrant Fueling

9. Concept Evaluation and Refinement

Table 9-1

Concept Component Summary

Concept	Airfield	Terminal	Ground Transportation	Airport Support
F	<ul style="list-style-type: none"> Major Airfield Improvements Second Runway Improvements to all Taxiways 	<ul style="list-style-type: none"> New and Expanded Terminal System Potential North Terminal 	<ul style="list-style-type: none"> Potential for North & South Access for Passengers if Dual Terminal Parking/Rental Car Structures 	<ul style="list-style-type: none"> New and Expanded Cargo Facilities Relocation ATCT Expanded ARFF Facility Flight Kitchen Expansion

Source: Compiled by HNTB, 2005.

9.4 Development of Alternatives

The evaluation of concepts determined the following based on the identified evaluation criteria:

1. The Authority should plan efficient and flexible improvements until the fate of the existing airport site is determined.
2. The Authority can best meet this goal by developing terminal facilities on the south side of the airport where existing infrastructure can best be utilized.
3. Developing a practical short-term solution that remains flexible and utilizes existing terminal infrastructure as much as possible will best meet the established goal and objectives of the Master Plan.

Ultimately, providing the Authority with flexibility became the primary factor in determining what direction the Authority must take in developing facilities to meet the forecast demand for air service through 2015.

The minimal build concept was selected for refinement. However, components from Concepts A, B, and C were selected for further development and to identify two distinct alternatives for the Authority:

1. Alternative A (Terminal 2 West Build Out)
2. Alternative B (New Unit Terminal East of Terminal 1)

The initial development of these alternative were closely based on the Minimal Build Alternative and included terminal improvements in the west, at Terminal 2 West and east, east of Terminal 1. **Figures 9.1** and **9.2** illustrate the initial development alternatives.

Order of magnitude cost estimates (see **Appendix A**) were developed based on the initial development of the build alternatives for the terminal facilities. The two alternatives were roughly equal in cost as shown in **Table 9-2**.

Table 9-2

Terminal Alternatives Cost Comparison (2005 Dollars)

Alternative	Order of Magnitude Cost Estimate
Terminal 2 West	\$536 Million
New Unit Terminal East of T1	\$576 Million

Source: Order of Magnitude Cost Estimate – Appendix A.

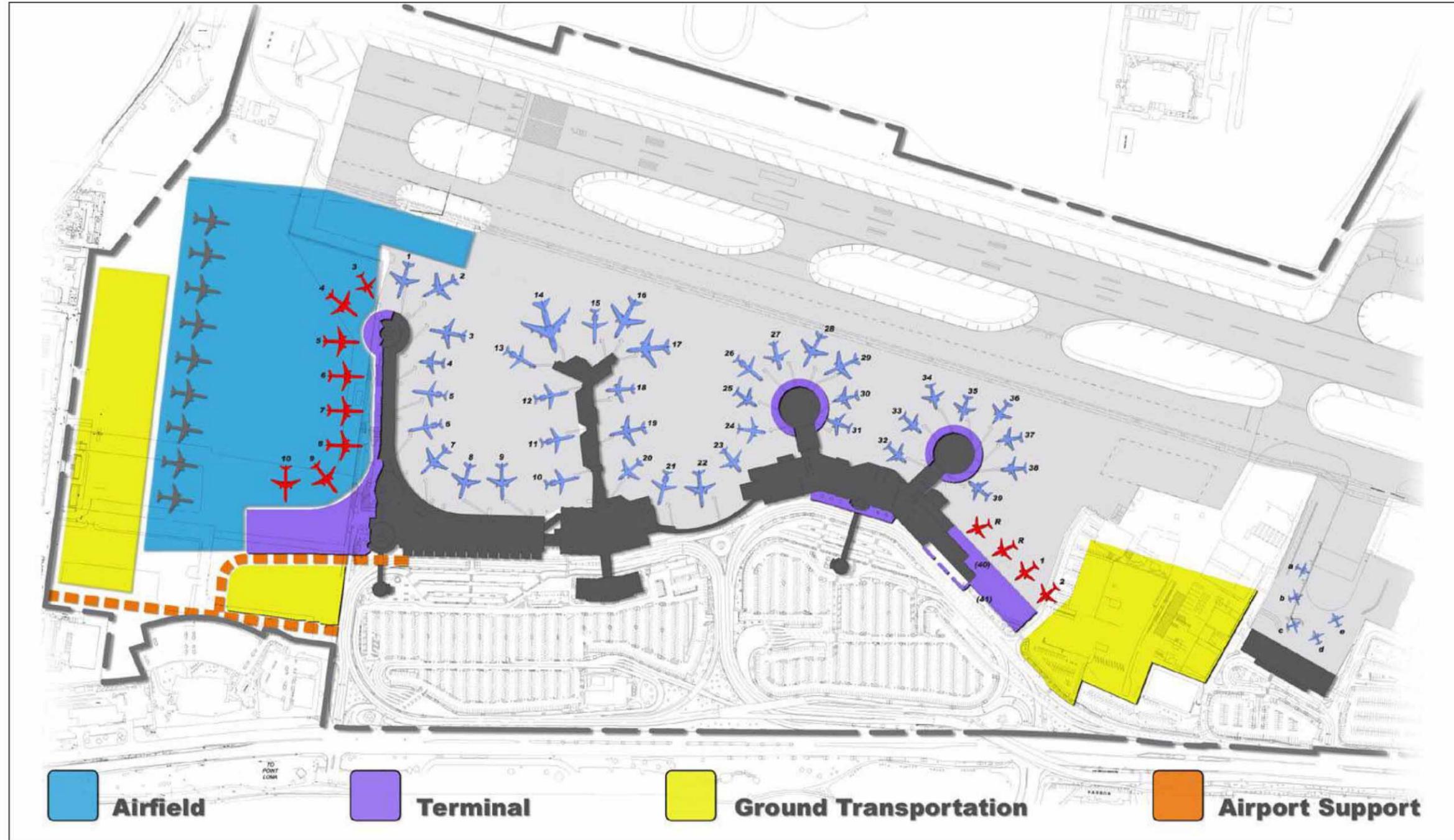


Figure 9-1

Alternative A
Terminal 2 West Build-Out





Figure 9-2

Alternative B
New Unit Terminal East of Terminal 1



9.4.1 Evaluation of Alternatives

Authority staff presented an evaluation of the two build alternatives to the Authority Board in May of 2005. The evaluation matrix is presented in **Table 9-3**.

Table 9-3

Build Alternatives Evaluation Matrix

Considerations	Terminal 2 West Build Out	Terminal 1 East Unit Terminal
Airfield Operations		+
Passenger Throughput	=	=
Construction/Disruption of Service	+	
Concessions Revenue	=	=
Capitalize on Existing Investments	+	
Balance Passenger Activity	+	
Future Phasing	=	=

Source: HNTB, 2005.

The Authority staff recommended that the Terminal 2 West Build Out alternative be implemented and that the Terminal 1 East Unit Terminal be carried through the environmental analysis as the official alternative development option.

Each Alternative provides the following facilities in a package designed for implementation by 2010 - 2015:

- 10 new contact jet gates
- New terminal and passenger processing facilities
- New short term terminal area public parking
- On airport roadway improvements including additional curb front
- Relocated and expanded general aviation facilities
- Improved airside circulation
- New and expanded cargo facilities
- Additional surface parking

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9.4.2 Refinement of Alternatives

Throughout the remainder of 2005, the build alternatives were refined to better identify the specific components that each alternative would retain for environmental analysis. Two changes of note were made:

1. The Terminal 2 West build out alternative initially included an expansion of Terminal 1 to provide two additional gates on the eastern most portion of the facility. It was determined that this expansion was unnecessary due to the likelihood of relocation of carriers with a ten gate expansion of Terminal 2 West. Therefore, the Terminal 2 West Build Out alternative includes ten new jet gates, all of which would be constructed at the Terminal 2 West location.
2. Development of facilities in the north area (area north of Runway 9-27) was further refined and the realignment of Taxiway C was prioritized in order to provide a safe and efficient hold apron for Runway 27 departures.

A full description of each refined build alternative, as it will be analyzed within the Environmental Impact Report, is included below.

Alternative A - Terminal 2 West Build Out

Terminal

Alternative A includes the construction of an addition to existing Terminal 2 West that would include approximately 430,000 square feet of new space, 10 additional aircraft gates, and a new 1,050 linear foot second level vehicle curb, and an expanded 1,200 linear foot lower level vehicle curb front (**see Figure 9-3**). The new and reconfigured terminal space would be expanded on two main levels for passenger processing facilities including airline ticketing, security screening, departure holdrooms, restrooms, concessions, public circulation, and outbound baggage areas, while additional utilities and passenger support could be accommodated on additional levels. 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).

Airfield

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

New apron and aircraft taxilane 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 new proposed gates. This 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.

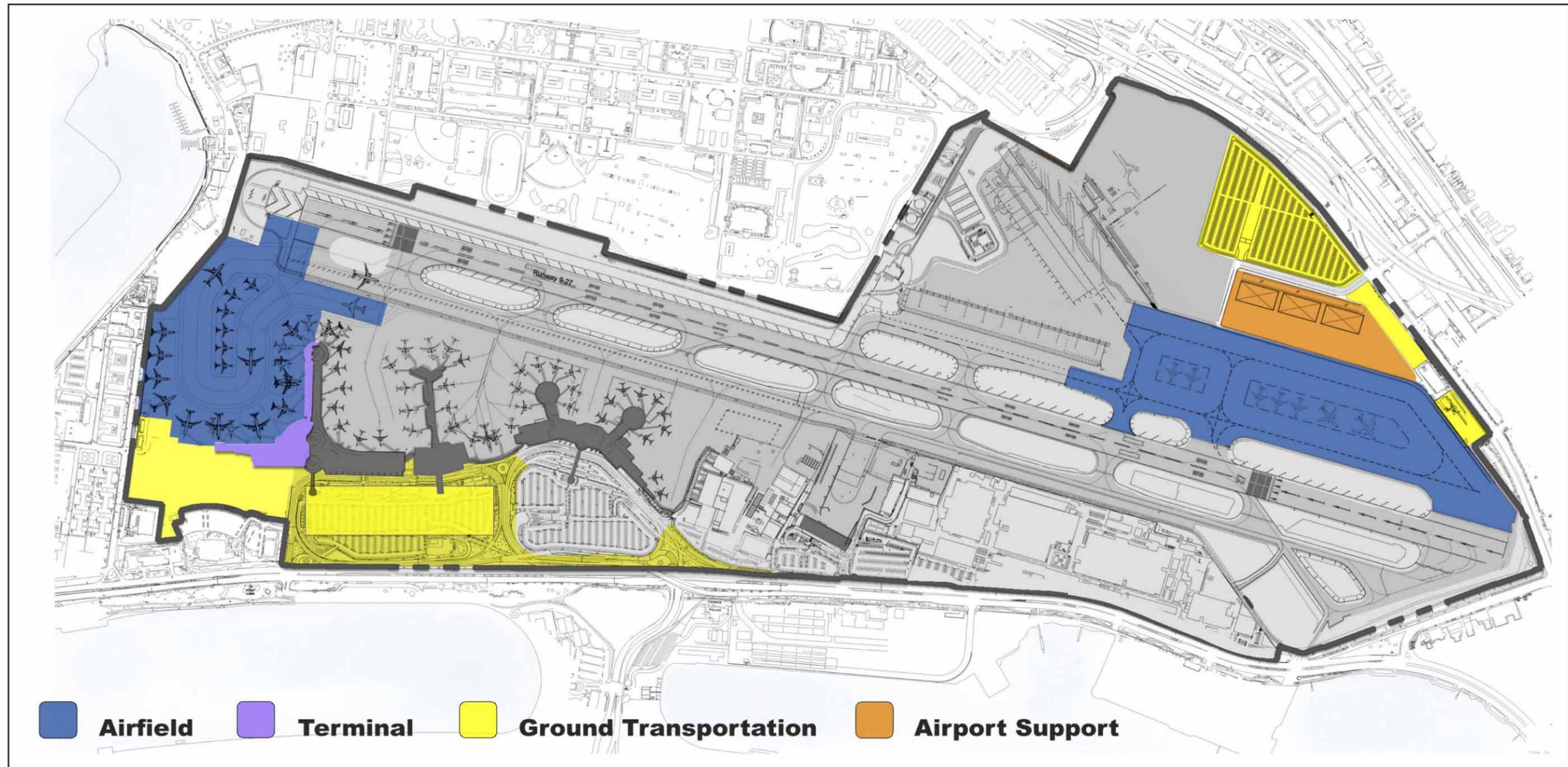


Figure 9-3

Alternative A Refined
Terminal 2 West Build-Out



Not to Scale

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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.

The existing Taxiway C pavement would be rehabilitated and the centerline established 400 feet north of the Runway to accommodate the movement of Group V commercial aircraft. A new 195-foot wide aircraft apron 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 aircraft movement in the North Area by allowing aircraft to bypass those on the apron and also provide airfield access to the relocated general aviation facilities.

Ground Transportation

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 up to five levels with parking, departure curb and a transit center accommodating shuttles, buses, taxis, and circulation lanes.

In the North Area, the existing SAN Park Pacific Highway parking facility, approximately 1,670 public parking spaces, would be partially relocated and reconfigured to the north of the existing location to accommodate construction of new general aviation facilities and taxiway. The site would be bounded by Pacific Highway to the east and a new North Area 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.

A new access road would be constructed to provide access from Pacific Highway and Sassafras Street to North Area facilities including, SAN Park Pacific Highway and new general aviation facilities. The access road would intersect Pacific Highway at the Pacific Highway/Sassafras Street intersection and would utilize the existing traffic signal. Underground utilities required for development of the North Area including, water, electric, sanitary sewer, and storm drains, would be constructed in conjunction with the access road and connect with existing utilities located along Pacific Highway or other portions of the North Area.

Airport Support

New general aviation facilities would be constructed on a 12.4 acre site to accommodate forecast general aviation operations through 2015 and construction of a new taxiway and adjacent apron. The new general aviation facilities would be located immediately north of the new taxiway and landside access would be provided from the new North Area access road. Facilities would include vehicle access and parking, terminals, and aircraft parking aprons and hangars.

Demolish the existing general aviation facilities to accommodate construction of a new taxiway and apron north of existing Taxiway C. Any necessary site remediation, including removal of existing underground storage tanks, would be included in this project.

Alternative B - New Unit Terminal East of Terminal 1

Terminal

Alternative B would include the construction of a new unit terminal, east of Terminal 1. The facility would have approximately 400,000 square feet of new space, seven new aircraft gates plus five replacement

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gates, holdrooms, ticketing area, baggage claim, security screening, concessions, and walkway (see **Figure 9-4**). 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.

Terminal 2 West would also be expanded with three new jet gates. The expansion of the north end of the Terminal 2 West passenger concourse would include approximately 30,000 square feet to accommodate three new gates and associated holdrooms. The total new gates for this build alternative would be ten new gates, the same as the Alternative A.

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

Airfield

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 taxiway. RON aircraft would be moved to gates in the morning to resume flight routing.

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 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.

The existing Taxiway C pavement would be rehabilitated and the centerline established 400 feet north of the Runway to accommodate the movement of Group V commercial aircraft. A new 195-foot wide aircraft apron would be constructed north of Taxiway C and east of Taxiway D to allow aircraft to hold for extended periods while awaiting departure from Runway 27 while 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 aircraft movement in the North Area by allowing aircraft to bypass those on the apron and also provide airfield access to the new general aviation facilities.

Ground Transportation

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.

In the North Area, the existing SAN Park Pacific Highway parking facility, approximately 1,670 public parking spaces, would be reconfigured and expanded to approximately 2,100 spaces to the north of the existing location to accommodate construction of new general aviation facilities and taxiway. The site would be bounded by Pacific Highway to the east and a new North Area 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.

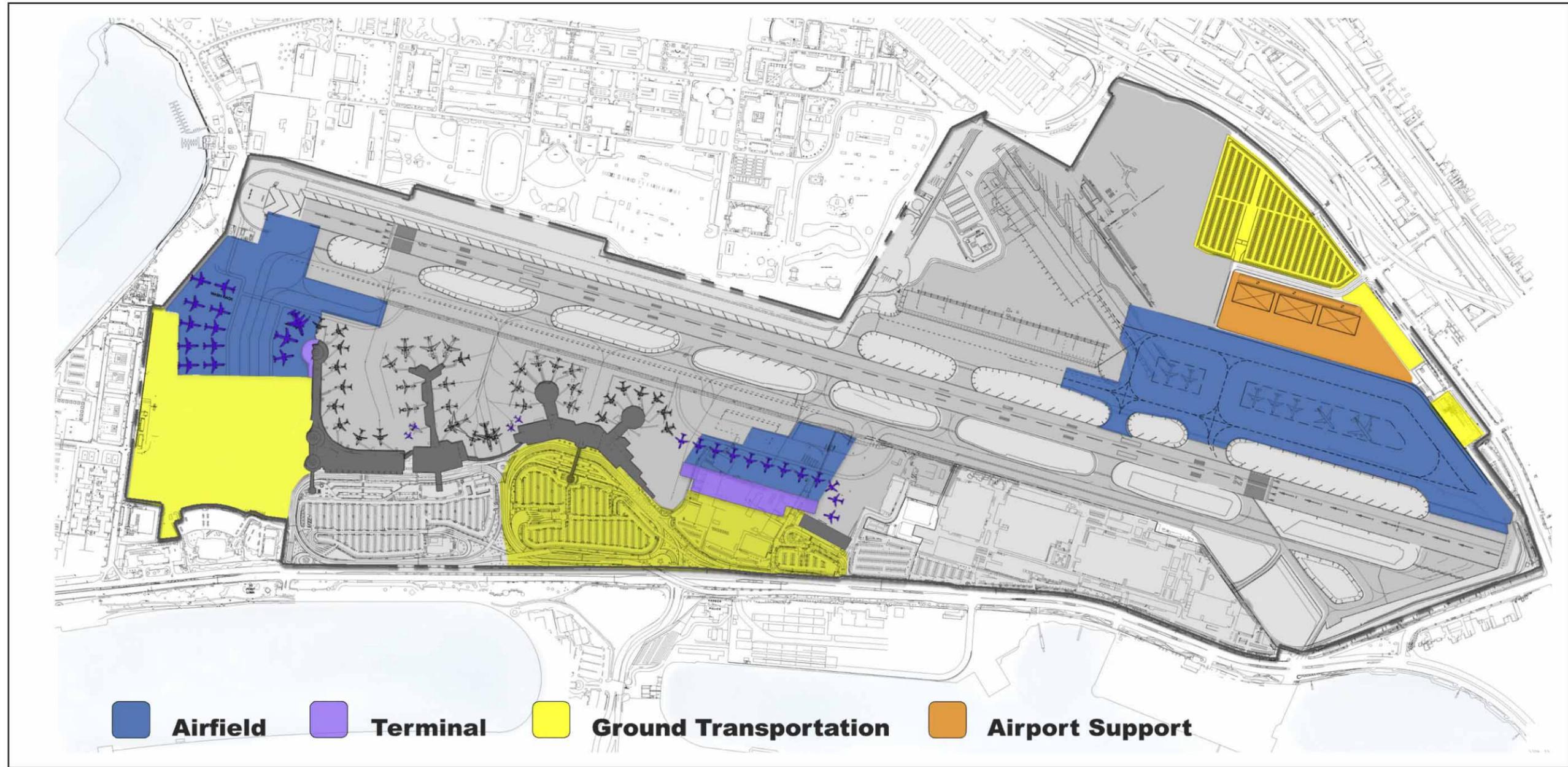


Figure 9-4

Alternative B Refined
New Unit Terminal East of Terminal 1



Not to Scale

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A new access road would be constructed to provide access from Pacific Highway and Sassafras Street to North Area facilities including, SAN Park Pacific Highway and new general aviation facilities. The access road would intersect Pacific Highway at the Pacific Highway/Sassafras Street intersection and would utilize the existing traffic signal. Underground utilities required for development of the North Area including, water, electric, sanitary sewer, and storm drains, would be constructed in conjunction with the access road and connect with existing utilities located along Pacific Highway or other portions of the North Area.

Airport Support

New general aviation facilities would be constructed on a 12.4 acre site to accommodate forecast general aviation operations through 2015 and construction of a new taxiway and adjacent apron. The new general aviation facilities would be located immediately north of the new taxiway and landside access would be provided from the new North Area access road. Facilities would include vehicle access and parking, terminals, and aircraft parking aprons and hangars.

The existing general aviation facilities would be demolished to accommodate construction of a new taxiway and apron north of existing Taxiway C. Any necessary site remediation, including removal of existing underground storage tanks, would be included in this project.

9.5 Implementation Plan

The Implementation Plan is the Authority's plan for implementation of the preferred alternative, the build out of Terminal 2 West. Additional refinement and planning has allowed for additional scrutiny of the alternative and a more detailed plan for environmental evaluation. The results of the detailed planning and analysis of the preferred alternative are described in Chapter 10.

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