SECTION 7.5
Facility Requirements Summary
7. Facility Requirements Analysis

7.5 Facility Requirements Summary

The facility requirements have been summarized in the following text and charts for ease of reference. The following charts were used to provide a summary of facility requirements in a presentation to the Authority board on April 10, 2006.

7.5.1 Airfield

The Airfield facility requirements are listed in the following bullet points. Because the airfield facility requirements cannot be quantified numerically, there are no accompanying charts. Detailed information regarding the Airfield facility requirements is located in Section 7.1 of the Master Plan document.

• Continue implementation of existing Capital Improvement Program (CIP).
• Implement improvements to Taxiway B that will allow Group V aircraft to taxi along its entire length.
• Implement improvements to Taxiway C that will allow Group V aircraft to taxi along its entire length.
• Provide a holding apron at the Runway 27 departure end.
• Construct additional remain-over-night (RON) parking, particularly on south side of airfield in the vicinity of the terminal area.
• Implement improvements to the Runway 9 & 27 precision approaches and continue to explore new and developing technology such as GPS.
• Construct an additional taxiway south of, and parallel to Taxiway B.

7.5.2 Terminal

The Terminal facility requirements are summarized in the following bullet points and in the Charts in Figures 7.5-1 through 7.5-3. Detailed information regarding the Terminal facility requirements is located in Section 7.2 of the Master Plan document.

• Expanded terminal areas are required to provide safe and efficient facilities for passengers.
• Gate requirements are incremental, with additional gates needed each year to accommodate forecast passenger growth through 2015.
• The time frame for facility design, environmental review and construction is a minimum of three years.

7.5.3 Ground Transportation

Ground Transportation facility requirements are summarized in the following bullet points and in Figures 7.5-4 through 7.5-9. Detailed information regarding the Ground Transportation facility requirements is located in Section 7.3 of the Master Plan document.

• The combined requirements for rental car facilities and parking facilities will exceed the available land within the existing airport property when airport support facility requirements are also considered.
• Implementation of new and improved facilities must balance the needs of each facility.
7. Facility Requirements Analysis

7.5.4 Airport Support

Airport Support facility requirements are summarized in the following bullet points and in Figures 7.5-10 through 7.5-13. Detailed information regarding the Airport Support facility requirements is located in Section 7.4 of the Master Plan document.

- The combined requirements for cargo requirements and general aviation requirements exceed the available land within the existing airport property when ground transportation facility requirements are also considered.

- Implementation of new and improved facilities must balance the needs of each facility.
Terminal Space Requirements (square feet)

- **Existing**
  - 2006: 787,425
  - 2015: 787,425
  - 2030: 787,425

- **Additional**
  - 2006: 165,000
  - 2015: 622,755
  - 2030: 910,099

**Figure 7.5-1**

Terminal Space Requirements
Figure 7.5-2

Gate Requirements
(Number of Gates)

Notes:
1. In any given year, real need for gates may vary by one or two
   because of year-to-year variations in airline schedules & operations.
2. Gate requirement estimates do not include spare gates.
Note: In any given year, the real need for gates may vary by one or two because of year-to-year variations in airline schedules and operations.

1+=5 commuter gates/parking positions

2+=3 commuter gates/parking positions
Terminal Area Public Parking Requirements
(Number of Stalls)

<table>
<thead>
<tr>
<th>Year</th>
<th>Additional</th>
<th>Existing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing</td>
<td>1,927</td>
<td>4,085</td>
</tr>
<tr>
<td>2015</td>
<td>4,326</td>
<td>4,085</td>
</tr>
<tr>
<td>2030</td>
<td>6,449</td>
<td>4,085</td>
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</table>

Note: The existing 4,085 stalls includes SAN Park NTC.
Employee Parking Requirements
(Number of Stalls)

<table>
<thead>
<tr>
<th></th>
<th>Existing</th>
<th>2015</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Parking Stalls</td>
<td>1,590</td>
<td>1,590</td>
<td>1,590</td>
</tr>
<tr>
<td>Existing Demand</td>
<td>1,800</td>
<td>2,490</td>
<td>3,250</td>
</tr>
<tr>
<td>Addition</td>
<td>210</td>
<td>900</td>
<td>1,660</td>
</tr>
</tbody>
</table>

Figure 7.5-5

Employee Parking Stalls

Prepared by: HNTB Corporation, 2008

May 2008
Figure 7.5-6

Remote Public Parking Requirements
(Number of Stalls)

<table>
<thead>
<tr>
<th>Stalls</th>
<th>Existing Demand</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9,357</td>
<td>9,357</td>
</tr>
<tr>
<td></td>
<td>9,814</td>
<td>457</td>
</tr>
</tbody>
</table>

Note: Includes SAN Park Harbor Drive and SAN Park Pacific Highway

Remote Long-Term Public Parking
Figure 7.5-7

Terminal Curb Frontage Requirements
(Lineal Feet)

Note: Existing curb front is not evenly distributed among terminals resulting in congestion at Terminal 1 East
Air Cargo Building
(Square Feet)

Square Feet

<table>
<thead>
<tr>
<th>Year</th>
<th>Existing Demand</th>
<th>2015</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>193,258</td>
<td>280,713</td>
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<tr>
<td></td>
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<td>104,982</td>
<td>49,538</td>
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<tr>
<td></td>
<td></td>
<td>18,526</td>
<td>69,750</td>
</tr>
<tr>
<td></td>
<td></td>
<td>69,750</td>
<td>69,750</td>
</tr>
</tbody>
</table>

Note: Belly Cargo Accounts for Approximately 15% of Total Cargo at SDIA
Air Cargo Apron
(Square Feet)

<table>
<thead>
<tr>
<th>Existing Demand</th>
<th>2015</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>696,240</td>
<td>270,000</td>
<td>270,000</td>
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<tr>
<td>1,730,000</td>
<td>270,000</td>
<td>270,000</td>
</tr>
<tr>
<td>3,630,000</td>
<td>270,000</td>
<td>270,000</td>
</tr>
</tbody>
</table>

Additional Demand
- 2015: 1,730,000
- 2030: 3,630,000

Figure 7.5-10

Air Cargo Apron

Prepared by: HNTB Corporation, 2006

May 2008
General Aviation Facilities
(Square Feet)

<table>
<thead>
<tr>
<th>Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>610,000</td>
</tr>
<tr>
<td>510,000</td>
</tr>
<tr>
<td>410,000</td>
</tr>
<tr>
<td>310,000</td>
</tr>
<tr>
<td>210,000</td>
</tr>
<tr>
<td>110,000</td>
</tr>
<tr>
<td>10,000</td>
</tr>
</tbody>
</table>

Existing Demand

- 495,000

2015

- 540,592 (12.4 Acres)
- 45,592

2030

- 540,592 (12.4 Acres)
- 45,592

Figure 7.5-11

General Aviation

Prepared by: HNTB Corporation, 2006

May 2008
Fuel Storage

Existing Demand

2020 - 2025

One Million Gallon Tank

One Million Gallon Tank

One Million Gallon Tank

One Million Gallon Tank

One Million Gallon Tank

Figure 7.5-12

Fuel Storage

Prepared by: HNTB Corporation, 2008

May 2008
Figure 7.5-13

Flight Kitchen
(Square Feet)

Square Feet

Existing Demand 2015 2030

90,000 80,000 70,000 60,000 50,000 40,000 30,000 20,000 10,000

58,300 58,300 58,300

82,180 23,880

Additional Existing

Prepared by: HNTB Corporation, 2006

May 2008