



# **SECTION 3.3** Terminal Facilities





**MAY 2008** 

# 3.3 Terminal Facilities

This section provides an inventory of existing terminal facilities at SDIA. Specific inventory detail is based on the existing terminal building envelope and the overall building systems recorded in August 2004 and further revised in November 2005 for this Airport Master Plan. This inventory, including existing terminal layouts, area take-offs, and gate capacity, provides a baseline for the calculation of future facility requirements. This information is located in Chapter 7, Facility Requirements.

The footprint of SDIA's central terminal area has not changed significantly since completion of the 2001 Master Plan; however, modifications to the terminals' interiors have been made to address recent changes in security requirements. These modifications were primarily focused on security screening checkpoints and included the addition of passenger screening lanes to allow faster passenger processing, resulting in shorter passenger wait times and queues, thus reducing overall passenger processing area requirements. The modifications also affected concession areas, primarily those located in Terminals One and Two East.

In addition, Gates 1 and 2 were renovated and re-opened in summer 2005 providing an additional 10,000 square feet of concessions, baggage claim and holdroom area. The ground level loading bridge positions for Gates 1 and 2 are currently occupied and operated by Southwest Airlines.

Seventeen airlines and three two commuter airlines currently serve SDIA.

# 3.3.1 <u>Terminal One</u>

Terminal One (formerly known as the East Terminal), constructed in 1967, is the oldest terminal at SDIA and is currently the busiest. As part of the 1994 Terminal Upgrade Project, the interior of the terminal was renovated and in 1997 the roof and heating, ventilation, and air conditioning (HVAC) systems were replaced. The terminal is approximately 257,500 square-feet and accommodates 18 active gate positions. **Table 3.3-1** identifies the current Terminal 1 airline tenants.

Sixteen of the 18 active gate positions located in Terminal One are provided in two concourses extending from both the east and west ticket lobbies. Each concourse consists of a short pier extending from the central circulation corridor, adjacent to the east and west ticket lobbies, to a rotunda building comprised of airline holdrooms and concession space. The airline gates are arranged around each rotunda building, and a security checkpoint for each concourse is located in the hallways approaching the rotunda buildings. Both the east and west corridors leading to the rotundas are constrained spaces and cannot be expanded without the loss of aircraft gates. These corridors support security checkpoints, passenger queuing for security screening, and restrooms as well as cross-circulation between restrooms and concession areas. During peak periods these conflicting circulation flows create extreme congestion. Two additional gates are located at the east end of the terminal building, adjacent to the ticketing area.

Landside access to the terminal is provided by a three-lane roadway with a single-level curbside accommodating private vehicle arrival and departure activity adjacent to the terminal. A ground transportation center for commercial vehicles is located adjacent to the private vehicle curbside, and a public surface parking lot is located inside the terminal area roadway loop. A single pedestrian bridge connects the public surface parking lot and ground transportation center to the terminal building, providing a grade separated crossing of the private and commercial vehicle curbsides. A set of escalators provides access from the pedestrian bridge to the main terminal lobby. There are seven curbside check-in positions linked to Explosives Detection System (EDS) equipment to facilitate baggage processing inside the terminal. The use of curbside check-in at SDIA helps alleviate congestion in the existing ticket lobbies.

# AIRPORT MASTER PLAN

#### Table 3.3-1

Airline	Terminal	Gate(s)
Jnited Express	Commuter	Commuter
American Eagle	Commuter	Commuter
Southwest	One	1-10
Jnited	One	11-15
Air Canada	One	15
Alaska	One	16-17
Frontier	One	18
Midwest	One	18
American Airlines	Two East	25-32
Northwest Airlines	Two East	22-24
Aeromexico	Two East	21
Aloha	Two East	22
ontinental	Two West	35-36
Delta	Two West	38-41
Hawaiian	Two West	40
letBlue	Two West	37
Sun Country	Two West	37
JS Airways	Two West	20, 23-34
NestJet (Seasonal)	Two West	37

#### Airline Gate Utilization

#### **Central Area**

The central area of Terminal One, located within the terminal processor between the entrance corridors to the two rotundas, is made up of two primary spaces. One space accommodates a baggage claim area while the other space accommodates a concessions area. Each space is roughly equal in size.

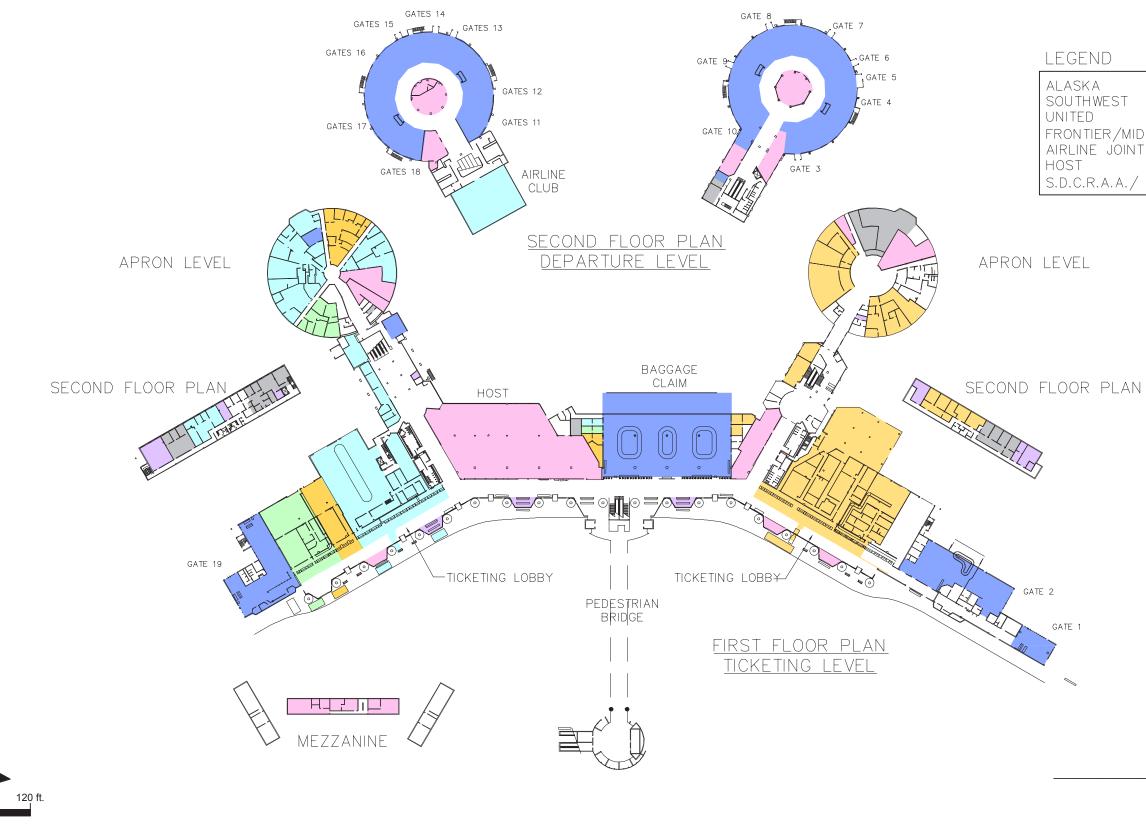
The baggage claim area for all Terminals One airlines is located in the east half of the central area of the terminal. This 12,500-square-foot area has three baggage carousel units with an oversize belt located on the north wall. Baggage service offices for Terminal 1 airlines are located within the baggage claim area. There is also an information desk located adjacent to the escalators across from baggage claim.

The central concession area is located on west side of the central area. The concession area features four fast food restaurants, a common dining area, a newsstand, and a bookstore, and a coffee shop.

#### **Terminal One - East Side**

As depicted in **Figure 3.3-1**, Southwest Airlines operations are located solely on the east side of Terminal One. Southwest's ticketing facilities in this area includes twelve dual-position counters and ten self check-in positions. The depth of the ticket lobby is 28 feet, measured from the face of ticket counter to the face of the exterior wall, and the passenger queue area is approximately 660 square feet. Two concession nodes, extending from the exterior wall to toward the curbside, are located in front of the ticket lobby. One node accommodates a 300-square-foot news/gift shop and the other contains a 300-square-foot food and beverage stand. During peak hours, queues at the concessionaires sometimes overflow into the passenger circulation corridor, creating congestion.

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LEGEND

ALASKA	
SOUTHWEST	
UNITED	
FRONTIER/MIDWEST	
AIRLINE JOINT USE	
HOST	
S.D.C.R.A.A./ MISC.	



Figure 3.3-1

### **Terminal One**

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Adjacent to the self check-in counter is a 20 foot-wide, non-secure corridor that leads to the east concourse pier, providing access to Gates 3 through 10. A security checkpoint is located at the end of the corridor, and enplaning passengers queue in the center of the corridor before proceeding through one of five security screening lanes. Recent modifications to the security checkpoints have added an additional lane, for a total of five, and the adjacent concessions have been reconfigured to accommodate this lane. After exiting the security screening area, passengers ascend escalators into a 50-foot-long concourse that connects to a circular holdroom area, the aforementioned rotunda. Food service concessions are located on the east and west ends of the concourse and in the center of the rotunda building. Deplaning passengers proceed back through the main concourse corridor to the main terminal lobby and baggage claim area.

A portion of Terminal One was renovated in 2005 to provide improvements to 10,000 square feet of holdroom, concession, and restroom facilities at Gates 1 and 2. The gates were reconfigured to accommodate ground level loading bridges and two new security lanes were added to process passengers departing out of these gates.

Airside operations are located on the apron level of the east portion of the terminal. As depicted in **Figure 3.3-1**, there are 30,000 square feet of exclusive airline space.

### Terminal One - West Side

United, Alaska, Frontier, and Midwest operate from the west side of Terminal One. The United ticket counter includes 13 self check-in positions adjacent to a non-secure corridor and eight dual-position counters for a total ticket counter length of approximately 67 feet. The United Airlines passenger queuing area is approximately 1,400 square feet adjacent to the ticket counter. United also operates a total of 26,000 square feet of exclusive space as a combination of operations space and outbound baggage sort areas within the west side of Terminal One.

Frontier and Midwest share approximately 18 linear feet of ticket counter with two dual-position counters, one single-position counter (equal to five linear feet of length), and four self check-in positions. They also operate 5,500 square feet of exclusive space primarily as airline ticket offices.

Alaska ticketing is located at the west end of the Terminal One lobby serving passengers with three dualposition counters equal to 24 linear feet of counter and six self check-in stations. Alaska Airlines operates within 7,200 square feet of exclusive airline space including airline ticket offices and operations space.

Two 300-square foot concession nodes, extending from the exterior terminal wall toward the curbside, are located in the Terminal One ticket lobby. One concession offers in-flight movie rentals, and the other is a news/gift shop.

Adjacent to the central concession area, a 20-foot-wide, non-secure corridor provides access to Gates 11 through 18 located in the west rotunda. Procedures for enplaning and deplaning passengers are similar to those conducted at the east side of the terminal, with enplaning passengers passing through the security screening checkpoint and deplaning passengers passing through an exit lane prior to entering the non-secure circulation corridor.

United Airlines leases and operates the 4,200-square-foot airline club within Terminal One located on the south end of the west rotunda.

# 3.3.2 <u>Terminal Two East</u>

Terminal Two East (formerly known as West Passenger Terminal), was constructed in 1979 and is a twostory, 225,700-square-foot facility. In 1997, as part of the 1994 Terminal Upgrade Project, the roof and HVAC systems were replaced. The terminal accommodates Aero México, American Airlines, and

### <u>AIRPORT MASTER PLAN</u>

Northwest Airlines facilities including twelve active gates. Aloha utilizes this terminal for nonstop service between SDIA and Kahului Maui, Hawaii.

Landside access to the terminal is provided by a three-lane roadway with a single-level curbside accommodating private vehicle arrival and departure activity adjacent to the terminal. A short-term public surface parking lot is located inside the terminal area roadway loop. A single pedestrian bridge connects the public surface parking lot and ground transportation center to the ticketing level of the terminal building, providing a grade separated crossing of the curbside. Departing passengers dropped off at the curbside ascend escalators located at the center of main terminal lobby to the second level where ticketing and the security checkpoint are located.

Once serving as baggage claim for the terminal, the ground level now accommodates the United Service Organizations (USO), Authority offices, and restrooms. Currently baggage claim for Terminal Two East arriving passengers is located at Terminal Two West.

Terminal Two East's food service concessions are located on the west end of the ticket lobby, and retail concessions are located on the east end of the ticket lobby. The food court area comprises 7,400 square feet, and the retail space encompasses 4,000 square feet.

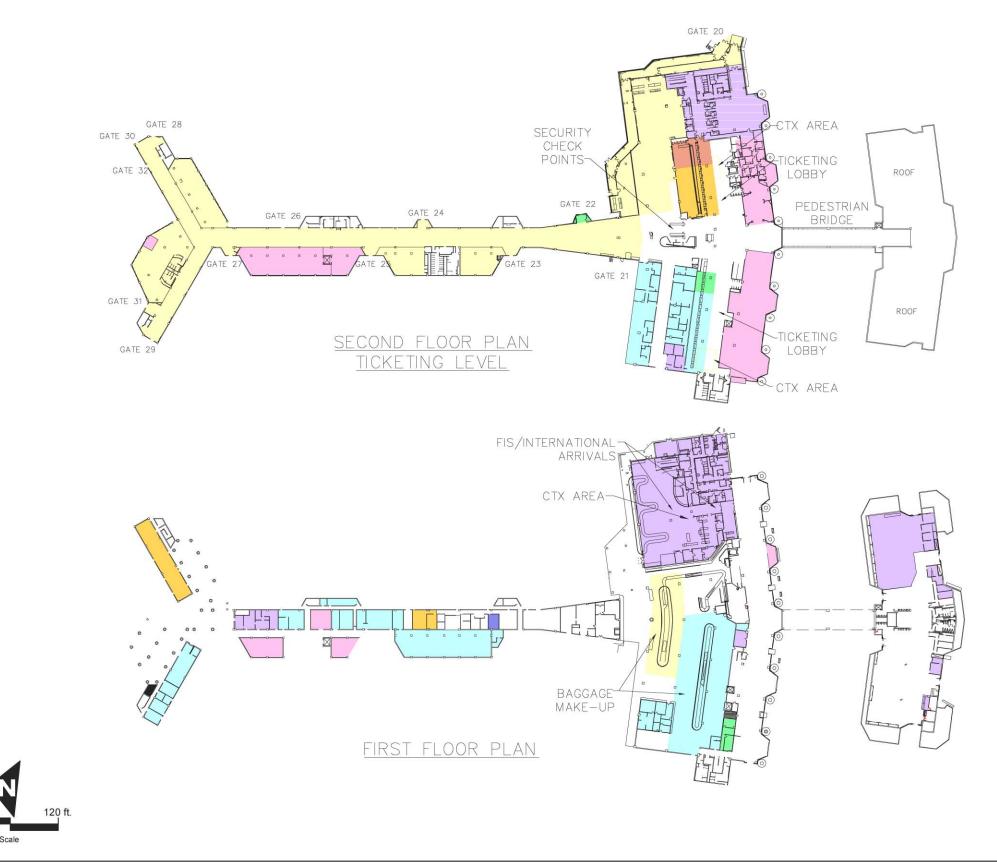
Ticketing for Aero México and Northwest Airlines are located on the second floor on the east side of Terminal Two East lobby. Aero México operates three dual-position counters. Northwest Airlines operates six dual-position counters and eight self check-in stations. As depicted in **Figure 3.3-2**, the Transportation Security Administration (TSA) is currently operating one CTX machine in the lobby, located between Northwest Airlines and Aero México. American Airlines is located on the west end of the ticketing lobby. The airline operates six dual agent counter positions and eight self-service stations. As presented in **Figure 3.3-2**, the TSA operates one baggage screening machine located on the far west end of the building. American Airlines utilizes 1,680 square feet of queuing area in front of their ticket counters.

Enplaning passengers queue for security in the central part of the Terminal Two East. There are four security check lanes for processing. This area, recently reconfigured, provides additional area for passenger queuing and TSA space. Beyond the ticketing area, there are twelve joint-use boarding gates. Restrooms are located on the west side midway into the concourse, and north of the restrooms is a 5,000-square-foot concession node. Holdroom space within the terminal is limited, and the majority of the secure corridor acts as holdroom with seating along the east and west walls of the concourse. There are no specific holdrooms associated with Gates 22 through 27 in Terminal Two East. The lack of adequate holdroom space within Terminal 2 East creates congestion within the concourse during peak periods and leads to a lower level of service.

International arrivals and Federal Inspection Services (FIS) are located on the first level of Terminal Two East. The FIS facilities currently serve flights arriving from Mexico. No restrooms are available for passengers to use after leaving Passport Control. Arriving International passengers must clear customs and exit the FIS facility before they will be able to access additional restrooms. Terminating passengers utilize the lower level lobby of the terminal as the International Meeter/Greeter Hall.

Flights arriving SDIA from Canada do not require the use of FIS facilities due to the fact that passengers pre-clear US Customs in Canadian airports. This is true for air passengers at all US airports arriving from Canada.

American Airlines utilizes 27,900 square feet of exclusive space, and Northwest Airlines occupies 10,650 square feet of exclusive space.





## LEGEND

AEROMEXICO	
AMERICAN	
HAWAIIAN	
NORTH WEST	
AIRLINE JOINT USE	
HOST	
SDCRAA / MISC.	
ALOHA ,	

Figure 3.3-2

**Terminal Two East** 

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# 3.3.3 <u>Terminal Two West</u>

Terminal Two West was constructed in 1997. This two-story facility provides 326,600 gross square feet and serves Continental Airlines, US Airways, Delta Airlines, Hawaiian Airlines, jetBlue, and Sun Country Airlines. The terminal is also connected to Terminal Two East through both secure and non-secure corridors. This portion of the terminal provides interconnectivity for passengers between the two facilities.

The three-lane, single-level roadway extends from Terminal Two East to the front of Terminal Two West providing the same access to the terminal. A pedestrian bridge connects the public parking lot to the ticketing level of the terminal building allowing pedestrians a grade separated crossing.

The first level of the terminal accommodates a 39,000-square-foot baggage claim area and six baggage claim carousels. These units process baggage for both Terminal Two East and West. This facility can also accommodate two additional carousels within the baggage claim area.

A set of escalators located in the center of the second level circulates deplaning passengers down to baggage claim on the first level of Terminal Two West.

As depicted in **Figure 3.3-3**, airline ticket offices are located on the first level of the terminal. US Airways occupies 266 square feet of space. Continental Airlines utilizes 390 square feet; Delta Airlines utilizes 634 square feet; and jetBlue utilizes 538 square feet. The TSA operates one CTX machine on the south side of the lobby at the lower level of the terminal across from the airline ticket offices. This machine is used to screen primarily all checked bags that have been tagged by sky-cap personnel at the curbfront.

As shown in **Figure 3.3-3**, the ticketing level is located on the second floor of the terminal. At the terminal's west end, escalators located in the rotunda provide access to the upper level accommodating ticketing and access to the security screening areas which lead to the secure concourse. Continental Airlines operates four dual-position counters and seven self check-in positions. US Airways has one dual-position counter and eight self check-in stations, and jetBlue operates two dual-position counters. Frontier Airlines operates two dual-position counters, and Hawaiian Airlines has two dual-position counters. Delta Airlines operates one dual-position counter and eight self check-in stations. The TSA currently operates two CTX machines located within the outbound baggage room for manual screening of all bags at T2 West.

There are currently four security check lanes located in the west end of the lobby. One lane was recently added on the other side of the fixed art wall, dividing the checkpoint from the reverse flow of passengers, who typically exit without claiming bags. To the north of security is a circular area with food and retail concessions. From the center of this location, passengers can walk north to Gates 36 through 41 or walk east to Gates 35 through 33.

Airline operations are located on the apron level of the north concourse of Terminal Two West. US Airways occupies 11,600 square feet of space, JetBlue utilizes 2,800 square feet, Hawaiian Airlines occupies 260 square feet, and Delta Airlines occupies 20,700 square feet. Continental Airlines utilizes 8,000 square feet.

# 3.3.4 <u>Commuter Terminal</u>

The Commuter Terminal was formerly an aircraft maintenance hangar. This converted structure provides 133,000 square feet of building area on three levels. The third floor accommodates the Authority offices. The second floor was recently constructed for additional office spaces with new fenestration and is presently unoccupied. The ground floor of the facility is comprised of 40,850 square feet and includes a ticket lobby, concessions, and holdrooms. Currently, United Express and American Eagle are the only two commuter airlines in this facility. See **Figure 3.3-4**.

### 3. Inventory of Existing Conditions

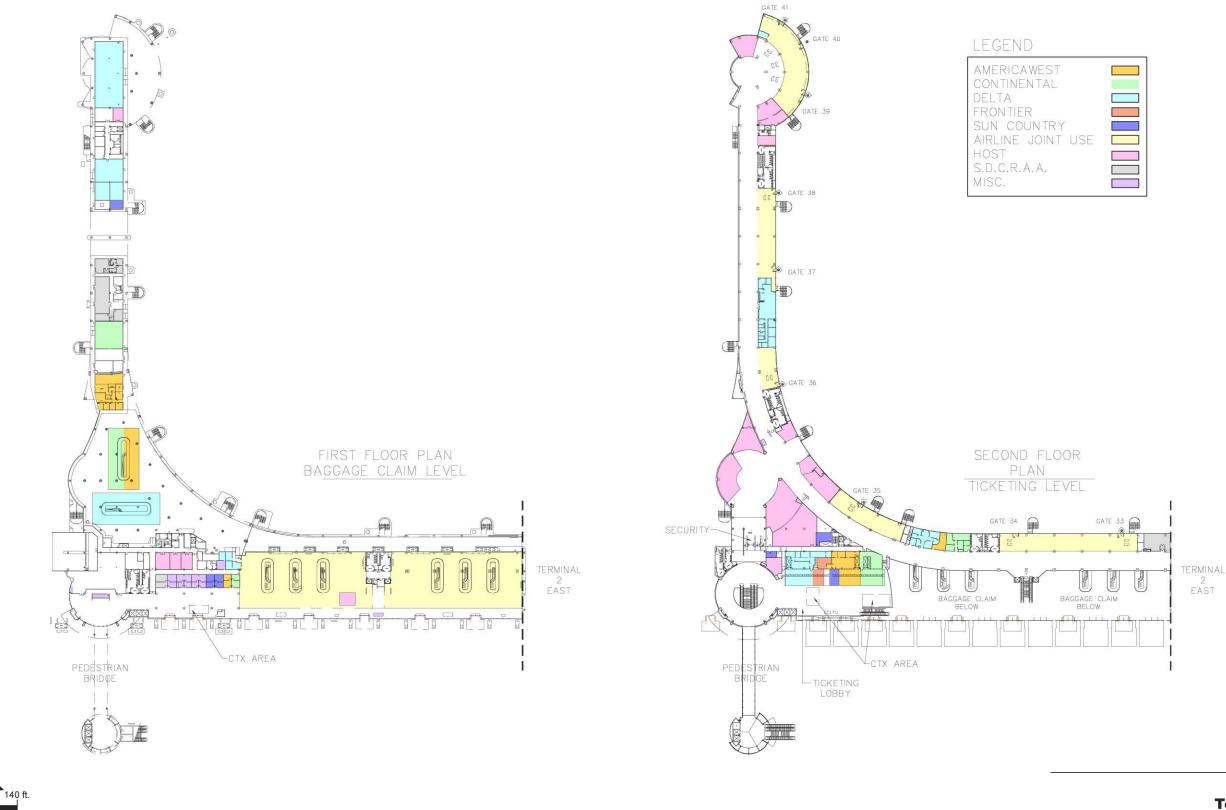
American Eagle operates four dual-position counters, and United Express operates six dual-position counters. One security lane is located adjacent to the circulation core. Additional queue space added to the east side of the security checkpoint allows staging of passengers and bags during peak periods. A 1,900-square-foot concession area is located adjacent to security. There are no non-secure concessions within the Commuter Terminal. The TSA currently operates two CTX machines located behind ticketing in the outbound baggage area, one for United Express and the other for American Eagle. Currently all outbound bags are screened manually by TSA personnel.

# 3.3.5 <u>Central Plant</u>

In 1996, a 21,000-square-foot central plant was constructed to provide electrical power, hot water, heating, and cooling for Terminals One and Two. Modifications have been made to the central plant to provide services to the new Terminal Two West. The central plant is located on the short-term parking lot area, south of Terminal 2 East.



3-48







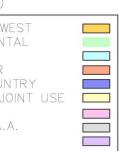
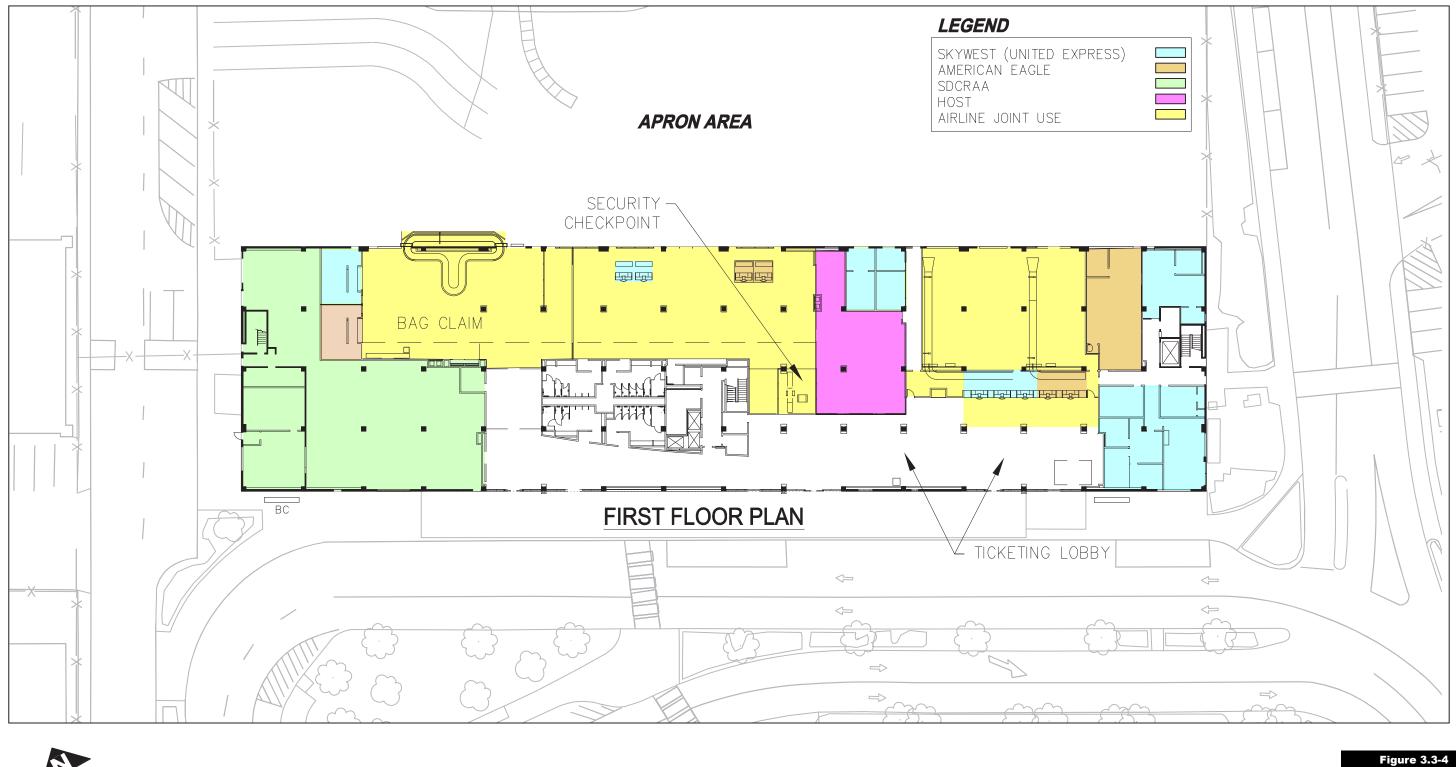
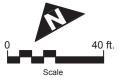


Figure 3.3-3

### **Terminal Two West**

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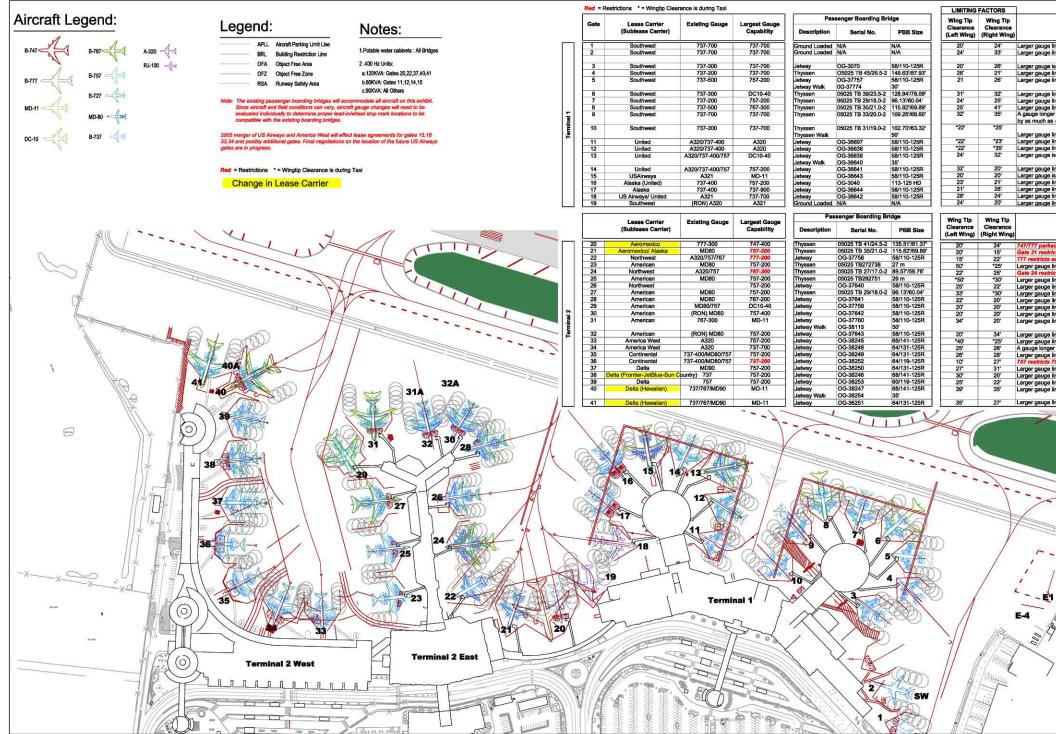


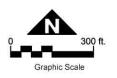


Prepared by: HNTB Corporation, 2006



### **Commuter Terminal**

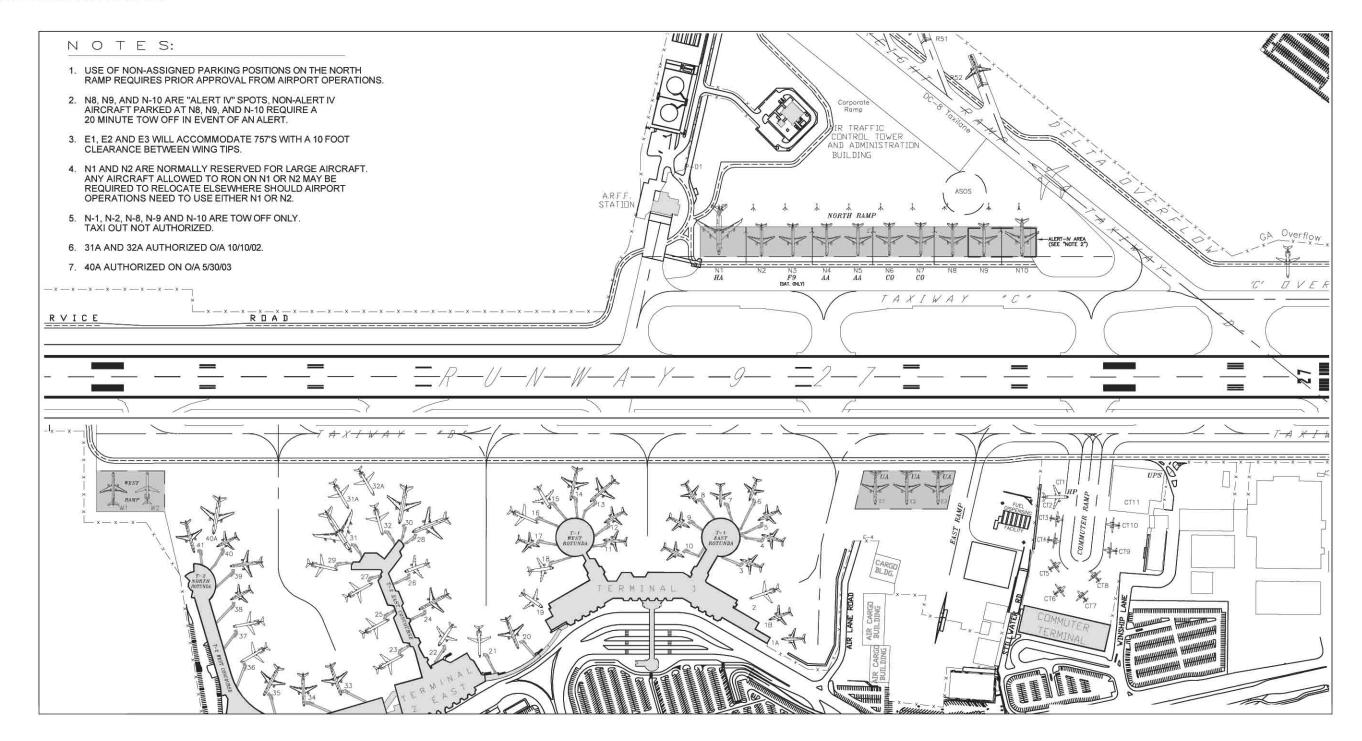






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#### **Existing Gate Allocation 2005**



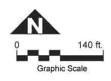




Figure 3.3-6

#### **Remain Overnight Parking Plan**