Airport Transit Plan
San Diego International Airport

Prepared for:
Airport Transit / Roadway Committee

Sponsored by:
San Diego County Regional Airport Authority

FINAL
August 2008

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HNTB
In association with:
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The Airport Transit/Roadway Committee was organized by the San Diego County Regional Airport Authority in 2005 to help identify potential enhancements to the transit/transportation system serving San Diego International Airport. The committee is comprised of sister agencies and meets regularly to discuss both transit and road access to San Diego International Airport. The Committee has contributed to the development of this Airport Transit Plan which recommends specific transit improvements to enhance access to San Diego International Airport.

Agencies represented on the Committee include:
- San Diego County Regional Airport Authority
- San Diego Association of Governments (SANDAG)
- Metropolitan Transit System (MTS)
- North Coast Transit District (NCTD)
- Caltrans
- City of San Diego / Centre City Development Corporation (CCDC)
- Port of San Diego
- Federal Aviation Administration
- California Coastal Commission

The Authority, in association with other members of the Committee, has set a goal of increasing airline passenger public transit ridership to between 4 and 6 percent over the next 3 to 5 years. This would bring San Diego close to the national average of 6 percent (the median market share is 5 percent). As discussed in Section 4, current passenger transit ridership at San Diego International Airport is 1.2 percent and public transit service is provided solely by the Airport Flyer (MTS Route 992). Improvement measures recommended in this Plan will benefit both airline passengers and airport employees and ridership levels in both groups will be monitored.

To monitor ridership levels and behavior patterns the Authority, in conjunction with SANDAG, will conduct quarterly Airport Flyer (MTS Route 992) ridership surveys to collect data on airport ridership volumes and annual on-board customer surveys to collect data on airport rider characteristics and opinions. The annual surveys will be conducted through one on one interviews on-board the Flyer buses. As additional transit service is introduced the surveys may be expanded to these new services.

This Plan focuses on publicly operated transit as these are the modes that the members of the Committee have control over. However, the Authority acknowledges that private services such as shared ride vans play an important role in reducing vehicle trips in the airport environs. It is also possible that some services recommended by the study could be provided by private operators or by public-private partnerships.
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1. BACKGROUND

The San Diego County Regional Airport Authority (the Authority) as the operator of the San Diego International Airport (the Airport) adopted the Airport Master Plan (Master Plan) and certified the Final Environmental Impact Report (FEIR) in May 2007. The Airport Master Plan is described in Section 1.1. The Airport Transit Plan has been developed to support those efforts and explore opportunities to improve transit access to the Airport. The Airport Transit Plan focuses on publicly operated transit modes as these are the modes that the members of the Airport Transit/Roadway Committee have control over, services such as shared-ride vans are operated by private companies and the Authority has limited control over their operations. The Authority acknowledges that private services such as shared ride vans play an important role in reducing vehicle trips and it is also possible that some of the recommended improvements could be implemented by private operators or by public-private partnerships.

1.1 AIRPORT MASTER PLAN

The Authority adopted the Airport Master Plan and certified the Final EIR in May 2008. The preferred alternative selected in the Master Plan and evaluated in the FEIR includes construction of 10 additional gates at Terminal 2 West for a net airport total of 51 gates, airfield improvements, new general aviation facilities, relocation and reconfiguration of SAN Park Pacific Highway, a second level roadway serving Terminal 2, a parking structure adjacent to Terminal 2, and improvements to vehicle circulation within the terminal area.

The Airport Master Plan’s Land Use Plan was also evaluated at a programmatic level in the FEIR. The purpose of the Land Use Plan is to insure compatible, shared, and orderly development of Airport facilities. It is a program level planning guide that identifies where each type of land use should be development within the Airport boundary. For analysis purposes in the FEIR, long term development opportunities were identified within the Land Use Plan and build out of the North Area is assumed including expansion of air cargo and general aviation facilities and development of a consolidated rental car (CONRAC) / public parking structure, and transit center. A dedicated transit corridor would link north area development to the terminals in the south and allow CONRAC and transit center shuttles to travel between these two sites without accessing the general purpose lanes on Pacific Highway and North Harbor Drive.

The FEIR evaluates both the Airport Master Plan’s preferred alternative (Implementation Plan) and Land Use Plan. Environmental analysis included a traffic impact study that assessed the roadways, intersections, freeways, freeway ramps, and other transportation facilities in the Airport environs.

1.2 AIRPORT TRANSIT PLAN PURPOSE

Currently, only 1.2 percent of San Diego’s airline passengers use transit to travel to and from the Airport. Service is provided solely by the Airport Flyer (MTS Route 992) which connects the Airport with downtown and Santa Fe Depot. This is well below the national average of 6 percent (the national median is 5 percent). Passengers represent
approximately one third of airport transit riders and the other two thirds are airport / airline employees. In order to provide the best access choices possible to both airline passengers and airport / airline employees, the Authority, in association with other members of the Committee, has set a goal of increasing airline passenger public transit ridership to between 4 and 6 percent over the next 3 to 5 years. Improvement measures recommended in this Plan will benefit both airline passengers and airport employees and ridership levels in both groups will be monitored.

This Plan identifies and evaluates various alternatives for improving existing transit service and providing new service. The alternatives serve to improve passenger level of service, provide increased connectivity between the Airport and the entire San Diego region and increase Airport transit ridership.

1.3 AIRPORT TRANSIT PLAN ORGANIZATION

This Plan describes existing airport specific and regional transit service; highlights planned transit project for the region; evaluates existing and potential airport transit ridership; and identifies, evaluates and recommends alternative transit improvements. This Plan is organized as follows:

Section 1: Background
Section 2: Existing Transit Service
Section 3: Planned Transit Service and Capital Improvements
Section 4: Existing and Potential Transit Access Market Share
Section 5: Alternative Transit Improvements
Appendix A: Recommended Improvement Action Plans (includes cost estimates)

Potential improvement alternatives identified in Section 5 are divided into the following categories:

- **Existing service improvements**: Improvements to existing service intended to improve passenger level of service
- **Marketing strategies**: Targeted marketing strategies that would advertise existing and new transit services
- **Existing route changes**: Changes to existing routes and schedules to capture additional passengers
- **New routes**: Additional routes that would capture new passengers

Each alternative is identified as near-term (within 3 years), mid-term (3 to 5 years) and long-term (beyond 5 years) and the alternatives are divided into three recommendation categories or “study tiers” as follows:

- **Tier 1 Projects**: Implement
- **Tier 2 Projects**: Implement after further study and cost estimating
- **Tier 3 Projects**: Requires link to transit ridership and airport development before implementation
1. **Background**

Tier 1 and Tier 2 projects are described in further detail in Appendix A and each project includes a planning level cost estimate detailing both capital improvements and annual operating costs.

1.4 **Previous transit demand and transit service technical reports**

In 2001, the Port of San Diego (the previous owner and operator of the Airport) and the Metropolitan Transit Development Board completed the Airport Transit Access and Intermodal Transportation Center Site Evaluation Study. The Study included two technical reports: the *Transit Service Technical Report* (URS/BRW, Draft June 2001) and the *Airport Demand Technical Report* (URS/BRW, Draft June 2001). This Airport Transit Plan (Plan) serves as an update to these technical reports and provides a new look at airport transit access opportunities.

The primary recommendations of the previous study in the near- to mid-term timeframes were: (1) incorporating a Trolley Station in a proposed ITC in the North Airport area and (2) enhancing operations of connecting services between the terminals, ITC and Old Town by implementing bus rapid transit (BRT) technology such as transit lanes, signal priority and queue jumps for transit vehicles.

This study was conducted assuming alternatives and recommendations presented in the previous airport master plan, which included development of a terminal in the north area. This north terminal is not included in the current master plan, dated September 2007.
2. EXISTING TRANSIT SERVICE

This section describes existing airport transit and commercial vehicle access, regional transit systems, internal airport circulation, and on-airport transit facilities.

2.1 AIRPORT TRANSIT AND COMMERCIAL VEHICLE ACCESS

2.1.1 Public Transit Service

For the purpose of this Plan public transit is defined as services that are available to the general public, intended to transport multiple passengers, and are publicly operated. Public Transit service to the Airport is described below.

Airport Flyer Route 992 (Public Bus)

The Airport Flyer, MTS Route 992, (the Flyer) is a public transit bus operated by the Metropolitan Transit System (MTS) that connects the Airport terminals to Downtown San Diego. As shown in Figure 2-1, the Flyer makes five stops at the Airport terminals: two each at Terminals 1 and 2 serving both ticketing and baggage claim areas and one at the Commuter Terminal. All Flyer bus stops are located along the inner curbside adjacent to the terminal.

The Flyer route connects with other MTS bus routes downtown and, as shown in Figure 2-2, bus stops near the Santa Fe Depot and America Plaza Station provide an easy transfer to the Coaster, Amtrak, and Trolley. A new Flyer route went into effect in June 2006 serving the Convention Center and Gaslamp Quarter. The route ran east and south from the Airport along North Harbor Drive, continued east along Broadway and turning south on 4th Avenue through the Gaslamp Quarter to the Convention Center.
Figure 2-1

Existing Airport Flyer (Route 992) Terminal Stops
2. Existing Transit Service

Between June 2006 and January 28, 2007, the route did not serve the Gaslamp Quarter or Convention Center after 8:00 pm and instead continued along Broadway to 9th Avenue and north to A Street. The route changes after 8:00 pm were due to (1) significantly increased nighttime traffic congestion in the Gaslamp Quarter south of Market Street and (2) sensitivity to the concerns of area residents about nighttime noise. In January 2007, this route was revised to continuously serve the Gaslamp Quarter and Convention Center no longer serving 9th or 10th Avenues. However, in January 2008 MTS shorted the route to Broadway and 4th Avenue and discontinued service through the Gaslamp Quarter to the Convention Center.

The Flyer operates on 12-minute headways during the day and 15-minute headways at night and on weekends using short city buses equipped with luggage racks. As shown on Table 2-1, the Flyer operates from 5:00 am to 12:30 am for a standard fare of $2.25. The Flyer also provides a free ride/transfer with a Trolley or Coaster ticket.

### Table 2-1 – Airport Flyer Operations

<table>
<thead>
<tr>
<th>Days of Operation</th>
<th>Hours of Operation</th>
<th>Frequency – Day (before 8 pm)</th>
<th>Frequency – Night (after 8 pm)</th>
<th>Fare (standard)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday – Friday</td>
<td>5:00am – 12:36am</td>
<td>12 min</td>
<td>15 min</td>
<td>$2.25</td>
</tr>
<tr>
<td>Saturday – Sunday</td>
<td>4:52am – 12:33am</td>
<td>15 min</td>
<td>15 min</td>
<td>$2.25</td>
</tr>
</tbody>
</table>

2.1.2 Other Commercial Vehicle Service

Other commercial vehicles serving the Airport are described below.

**For-Hire Shared-Ride Shuttles**

For-hire shared-ride shuttle service at the Airport is currently provided by numerous operators. Shared-ride shuttles provide door-to-curb service similar to taxis but accommodate multiple parties who are matched by a dispatcher according to destination. As shown on Figure 2-1, for-hire shared-ride shuttles drop off and pick up passengers at the Terminal 1 transit plaza on the north end of the curb in the first aisle (closest to the terminal building), at the Terminal 2 transit plaza on the north end of the curb in the middle aisle, and at the Commuter Terminal on the curbside adjacent to the terminal building.

**Taxicabs**

Taxi service at the Airport is provided by multiple operators and taxis provide door-to-curb service to single passengers or parties. Taxis drop off departing passengers at the curbside adjacent to each terminal building and pick up arriving passengers at the Terminals 1 and 2 transit plazas and Commuter Terminal curbside. A transportation coordinator at the taxi transit plaza directs passengers to the first available taxi.
2. Existing Transit Service

**Courtesy Shuttles**
Hotels and motels, remote parking operators (both Authority operated and privately operated) and rental car companies provide courtesy shuttles to transport passengers between the Airport and their facilities. Courtesy shuttles pick up and drop off passengers at the transit plaza in front of each terminal. At Terminal 1, courtesy vehicles operate on the third aisle of the transit plaza (farthest from the terminal). At Terminal 2, the courtesy vehicles operate on the first aisle of the transit plaza (nearest to the terminal).

2.2 **Regional Transit Access**

**Public Bus**
In addition to the Flyer, MTS Route 923 serves the Airport with a bus stop along North Harbor Drive adjacent to the Airport. The route serves Ocean Beach to the west and downtown to the southeast and operates with 25 to 35 minutes headways along Harbor Drive. Currently, Route 923 does not enter the terminal area. However, MTS is considering changes that would provide stops within the terminal area after implementation of proposed Master Plan Improvements, which include realignment of roadways at Terminal 2.

In addition, passengers on all public bus routes serving Downtown San Diego can connect with the Flyer at the Santa Fe Depot/America Plaza Station or Horton Plaza (4th Avenue and Broadway).

**San Diego Trolley**
The San Diego Trolley, operated by MTS, provides light rail transit service throughout the San Diego area but does not serve the Airport directly. Instead, the Flyer provides a connection between the Airport and the America Plaza Station, which serves both the Blue and Orange Trolley Lines. The Old Town extension of the Blue Line Trolley runs approximately 1.5 miles east of the Airport terminal buildings and connects downtown San Diego to Old Town. As shown on Figure 2-2, two stations are located along this line northeast of the Airport between Pacific Highway and Kettner Boulevard: the Palm Avenue Station in Middletown and the Washington Street Station located at the Mission Brewery Plaza building. All downtown trolley stations are shown on Figure 2-2.
2. Existing Transit Service

In July 2005, MTS completed a 6-mile extension of the Trolley (the Green Line) connecting Old Town, Mission Valley and San Diego State University (SDSU), to La Mesa. The Blue Line Trolley connects Old Town to downtown and continues south to the US-Mexican border providing access to Tijuana. The Orange Line connects downtown and La Mesa. These routes are shown on Figure 2-3.

Future plans include a northern extension (to be served by either trolley or bus rapid transit), which will connect Old Town to the University of California, San Diego (UCSD)/University Towne Centre area. Operation of this extension is anticipated begin in 2014.

Longer term plans also call for a continuation of the Green Line Trolley to the Santa Fe Depot. These plans are contingent on station modifications at the Palm Avenue and Washington Street Stations and the Santa Fe Depot to accommodate the low floor Trolley cars that operate on the Green Line.

The Trolley operates every 15 minutes Monday through Saturday until 9:30 PM and every 30 minutes after 9:30 PM and on Sundays between the America Plaza station in Downtown San Diego and the Old Town Station. During weekday peak hours, 6:15 am to 7:45 am and 3:45 pm and 5:15 pm, the headways are 8 minutes. As shown in Table 2-2, the Trolley operates between 5:40 am and 1:55 am Monday through Saturday for a fare ranging from $1.50 to $3.00 depending on the zones. A Trolley fare allows a free transfer to the Flyer (Route 992) from the Santa Fe Depot/America Plaza station to the Airport.

Table 2-2 – Trolley Operations

<table>
<thead>
<tr>
<th>Days of Operation</th>
<th>Hours of Operation</th>
<th>Frequency – Day (before 9:30 pm)</th>
<th>Frequency – Peak Hour (6:15 – 7:45 am) (3:45 – 5:15 pm)</th>
<th>Frequency – Night (after 9:30 pm)</th>
<th>Fare (standard)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday – Friday</td>
<td>5:40am – 1:55am</td>
<td>15 min</td>
<td>8 min</td>
<td>30 min</td>
<td>$1.50 - $3.00</td>
</tr>
<tr>
<td>Saturday</td>
<td>5:40am – 1:55am</td>
<td>15 min</td>
<td>15 min</td>
<td>30 min</td>
<td>$1.50 - $3.00</td>
</tr>
<tr>
<td>Sunday</td>
<td>4:55am – 1:55am</td>
<td>30 min</td>
<td>30 min</td>
<td>30 min</td>
<td>$1.50 - $3.00</td>
</tr>
</tbody>
</table>

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<th>Frequency – Night (after 9:30 pm)</th>
<th>Fare (standard)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday – Friday</td>
<td>5:40am – 1:55am</td>
<td>15 min</td>
<td>8 min</td>
<td>30 min</td>
<td>$1.50 - $3.00</td>
</tr>
<tr>
<td>Saturday</td>
<td>5:40am – 1:55am</td>
<td>15 min</td>
<td>15 min</td>
<td>30 min</td>
<td>$1.50 - $3.00</td>
</tr>
<tr>
<td>Sunday</td>
<td>4:55am – 1:55am</td>
<td>30 min</td>
<td>30 min</td>
<td>30 min</td>
<td>$1.50 - $3.00</td>
</tr>
</tbody>
</table>
Regional Transit Map
Existing Services

Source: 2001 Thomas Bros. Maps and San Diego County Regional Transit Map, September 2005
Prepared by: HNTB Corporation, 2005

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FINAL
2. Existing Transit Service

Coaster

The Coaster, operated by the North County Transit District (NCTD), provides regional rail service for commuters and travelers between the Cities of Oceanside and San Diego. The Coaster offers eleven weekday-only round trips serving eight stations. As described in Table 2-3, there are only four round trips on Saturdays and none on Sundays. The Coaster Schedule is shown on Table 2-4.

Coaster stations, depicted on Figure 2-3, are located in Oceanside, Carlsbad (the Village and Poinsettia Stations), Encinitas, Solana Beach, Sorrento Valley, Old Town, and the Santa Fe Depot in Downtown San Diego. The terminus at the Santa Fe Depot provides connections with the Airport Flyer, Amtrak trains, the San Diego Trolley, and city buses. Old Town and Santa Fe Depot are the closest stations to the Airport. The Coaster trains operate along the same right-of-way as the San Diego Trolley and Amtrak between downtown and I-8.

As shown on Table 2-3, fares range between $4.00 and $5.50. Similar to the Trolley, a Coaster fare allows a free transfer to the Flyer (Route 992) from the Santa Fe Depot/America Plaza station to the Airport.

Table 2-3 – Coaster Operations

<table>
<thead>
<tr>
<th>Days of Operation</th>
<th>Hours of Operation (southbound)</th>
<th>Hours of Operation (northbound)</th>
<th>Daily Trips</th>
<th>Fare (standard)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday – Friday</td>
<td>5:18am – 5:30pm</td>
<td>6:33am – 6:45pm</td>
<td>11 round trips</td>
<td>$4.00 - $5.50</td>
</tr>
<tr>
<td></td>
<td>9:45am – 6:05pm</td>
<td>11:15am – 7:25pm</td>
<td>4 round trips</td>
<td>$4.00 - $5.50</td>
</tr>
<tr>
<td>Saturday</td>
<td>NO SERVICE</td>
<td>NO SERVICE</td>
<td>NO SERVICE</td>
<td>--</td>
</tr>
<tr>
<td>Sunday</td>
<td>NO SERVICE</td>
<td>NO SERVICE</td>
<td>NO SERVICE</td>
<td>--</td>
</tr>
</tbody>
</table>
2. Existing Transit Service

Table 2-4 – Coaster Schedule

Amtrak provides regional, statewide, and interstate passenger rail service. The Pacific Surfliner departs the Santa Fe Depot for Los Angeles (continuing to Santa Barbara and Paso Robles) with stops in Solana Beach and Oceanside. From Los Angeles, trains are available providing intra- and inter-state travel. As described on Table 2-5, Amtrak operates

Source: NCTD website, August 2008.
2. Existing Transit Service

roundtrip service from the Santa Fe Depot 11 times daily on Monday through Thursday and 12 times daily on Friday through Sunday. Fares range from $12.00 to $14.00, depending on the season, for service between the Santa Fe Depot and Oceanside, shown on Table 2-5. The November 2007 schedule is depicted on Table 2-6. As shown, trains make limited stops at the Old Town Station.

Table 2-5 – Amtrak Operations

<table>
<thead>
<tr>
<th>Days of Operation</th>
<th>Hours of Operation (outbound)</th>
<th>Hours of Operation (inbound)</th>
<th>Daily Trips</th>
<th>Fare to Oceanside (standard)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday – Thursday</td>
<td>6:10am – 8:20pm</td>
<td>7:57 am – 11:56 pm</td>
<td>11 round trips</td>
<td>$12.00 - $14.00</td>
</tr>
<tr>
<td>Friday</td>
<td>6:10 am – 9:15 pm</td>
<td>7:57 am – 11:56 pm</td>
<td>12 round trips</td>
<td>$12.00 - $14.00</td>
</tr>
<tr>
<td>Saturday – Sunday</td>
<td>6:10 am – 9:15 pm</td>
<td>9:14 am – 11:56 pm</td>
<td>12 round trips</td>
<td>$12.00 - $14.00</td>
</tr>
</tbody>
</table>

Table 2-6 – Amtrak Schedule

The SPRINTER on NCTD website

The SPRINTER is a light rail line which runs 22 miles between Oceanside and Escondido along the Highway 78 Corridor in North San Diego County. Fifteen stations are located along the route including stops at Oceanside Transit Center, Palomar College, California State San Marcos, and the Escondido Transit Center. Connections are provided with the local bus service, The BREEZE, along the entire alignment. At the Oceanside Transit Center a connection with commuter and regional rail services allows passengers to transfer to Amtrak’s Pacific Surfliner or The Coaster. The SPRINTER is operated by the North County Transit District and began service in early 2008. SPRINTER ridership has been generally increasing since opening and nearly reached 8,000 daily passengers in early June 2008, according to the North County Transit District.
2. Existing Transit Service

2.3 Internal Airport Circulation

Red Bus
The Airport operates a free shuttle service, known as the Red Bus, connecting Terminals 1, 2 and the Commuter Terminal. The Red Buses operate on maximum 10-minute average headway and pick up and drop off passengers at four designated stops on terminal curbside roadways. The Red Buses are small cutaway buses that can accommodate up to 26 passengers.

Employee Shuttle
The employee shuttle connects the employee parking lot along Harbor Island Drive with the terminals. Service is provided throughout the day with extra trips during peak periods. Employee shuttles pick up and drop off passengers at four designated stops on terminal curbside roadways. The shuttles are small cutaway buses that can accommodate up to 26 passengers.

2.4 On-Airport Transit, Commercial Vehicle, and Pedestrian Facilities

Flyer Bus Stops
Five bus stops for the Airport Flyer are provided adjacent to Terminal 1, Terminal 2 and the Commuter Terminal. These stops are located on the private vehicle curbside and provide a high level of service to Flyer riders as they are located adjacent to major doors in / out of the Terminals. Walking distances to ticketing, baggage claim and security functions are short and do not require grade changes. Two of the stops, one at Terminal 1 and one at Terminal 2, have bus shelters.

Transit Plazas
Two transit plazas accommodating commercial vehicle passenger pick up and drop off activity are located across the inner private vehicle roadways from Terminal 1 and Terminal 2 West. The Plazas are divided into three roadways separated by 18-foot to 20-foot raised islands that serve as pedestrian waiting / loading / unloading areas.

At Terminal 1, a pedestrian bridge traverses the middle of the transit plaza connecting the Terminal to the plaza. Two pedestrian crosswalks are provided across the transit plaza roadways on each side of the pedestrian bridge. The first aisle closest to the terminal loop roadway accommodates for-hire shuttles on the north curb and taxis on the south curb and provides one travel lane in between. The middle aisle accommodates taxis and provides sufficient width for one parking and one through lane. The farthest aisle is allocated for courtesy vehicles and provides sufficient width for one parking lane and one through lane.

The transit plaza at Terminal 2 West is also divided into three aisles. The at-grade pedestrian crosswalk from Terminal 2 West traverses the middle of the transit plaza. The aisle allocation for the Terminal 2 West transit plaza is in reverse order to the Terminal 1 transit plaza. The aisle nearest the terminal roadway is allocated for
2. Existing Transit Service

courtesy vehicles. The middle aisle accommodates for-hire shuttles on the north curb and taxis on the south curb. The farthest aisle is reserved for taxis.

Pedestrian Facilities

The most significant pedestrian facilities at the Airport are the pedestrian bridges or sky bridges that link Terminals 1 and 2 to the transit plazas and parking lots. The pedestrian bridges are located in the middle of Terminal 1, in the middle of Terminal 2 East, and near the west end of Terminal 2 West. Each pedestrian bridge is approximately 20 feet wide with escalators and elevators located at the terminal and transit plaza.

At-grade pedestrian crosswalks are provided in front of Terminal 2 West and the Commuter Terminal. Terminal 2 West’s pedestrian crosswalk is controlled by a traffic signal and consists of two 12-foot striped lanes across the terminal roadway continuing as one 12-foot lane across the transit plaza. Pedestrian crosswalks also connect the transit plaza medians.

The islands in the transit plazas that divide lanes of traffic and provide a place to pick up and drop off passengers serve as pedestrian walkways and waiting areas. The islands are approximately 20 feet wide and are equipped with protective roofing, benches, baggage carts and other pedestrian amenities.

2.5 Existing Airport Transit Characteristics

2.5.1 Travel Times

As discussed below, San Diego’s regional transit system is focused on downtown commuters. Figure 2-4 depicts the areas that can be reached from downtown San Diego in 30 minutes or less by both transit and auto. Downtown is located approximately 3.5 miles from the Airport, and anyone riding transit to or from the Airport must travel through downtown on the Flyer. The Flyer takes approximately 16 minutes to travel from Broadway and 4th downtown to Terminal 1 equating to a 45 minute trip from the areas shown on Figure 4-1 to the Airport.

2.5.2 Existing Transit Access - Issues

The Airport Flyer (Route 992) provides the only public transit service directly to the Airport terminals (MTS Route 923 provides service to North Harbor Drive, a longer walk to the Terminals). The Airport Flyer connects with the San Diego regional transit system in Downtown San Diego at the Santa Fe Depot/America Plaza station and at the Broadway/3rd and 4th Avenue stops.

The regional transit system provides limited options for Airport passengers because the system is: (1) focused on downtown San Diego commuters, (2) provides limited
2. Existing Transit Service

frequency and (3) requires multiple mode changes to reach many destinations. The issues with the specific Airport service and the regional system as it relates to airline passenger and employee needs are described below.

Airport Service

- **Exact Fare Required**: The Flyer requires payment of the exact fare of $2.25 upon boarding. Many travelers do not carry change or have exact fare readily available. For unfamiliar users this can make the boarding process awkward and discourage use.

- **‘City Bus’ Operation**: Flyer buses are City Buses and must maintain a fixed schedule on a fixed route with multiple stops. This prevents the Flyer from waiting for arriving trains or riders debarking those trains. If the Trolley arrive at Santa Fe Depot at the same time as a Flyer bus arrives the Trolley riders will have to wait 12 minutes until the next Flyer bus arrives and they are on the curb. In addition, buses often depart the bus stops before passengers have a chance to load luggage onto the luggage racks (based on observations of buses at the Airport curbside and Santa Fe Depot stops).
Figure 2-4
Travel Time Contours
Downtown in 30 min

Source: SANDAG’s MOBILITY 2030, 2003
Prepared by: HNTB Corporation, 2006

August 2008
FINAL
2. Existing Transit Service

- **Low Visibility**: Flyer stops at the Airport are marked by a small MTS bus sign with a tiny service schedule. Directional signage in the terminals says simply ‘City Bus’. The limited signage and directions make finding the stop difficult for riders who are not already knowledgeable about the service. However, even for those that are knowledgeable the lack of legible bus schedule and actual arrival information makes it difficult for riders to know if they will catch the next Coaster or other connecting service.

**Regional Service**

- **Downtown/Commuter Focus**: The San Diego regional transit system is focused on downtown San Diego and is set up for commuters with the Trolley, Coaster and Amtrak converging at the Santa Fe Depot downtown. This provides a good level of service for downtown commuters but airline passengers and Airport employees must transfer to the Flyer adding 15 minutes to the trip to the Airport.

- **Limited Frequency**: The frequency of regional service is limited, for example there is no Coaster Service at night or on Sundays and although some passengers may substitute the Amtrak train, it only stops at Solana Beach and Oceanside and provides limited service to Old Town. Airline passengers who have flights late at night, early in the morning or on weekends have fewer options for accessing or departing the Airport on transit. The Trolley frequency is also every 15 minutes throughout most of the day Monday through Saturday and 30 minutes on Sunday. Waiting the full period for both the Flyer and Trolley would add 27 minutes to a trip.

- **Multiple Mode Changes**: Multiple mode changes are required to reach most destinations from the Airport. All trips start with the Flyer and many require transferring to the Trolley or Coaster with a potential second transfer to the Green Line or other bus service. As illustrated on Figure 2-5, Airport Authority staff made a trip between the Airport and SDSU which required two transfers and a 45 minute travel time (not including wait time for the Flyer). First staff traveled on the Flyer to the America Plaza Station, then took the Blue Line Trolley to Old Town and transferred to the Green Line Trolley ending the trip at SDSU. However, according to the MTS website trip planner this trip typically takes a little over 1 hour versus 15 to 30 minutes in a private vehicle.

Improvement options that address these and other Impediments to existing service are discussed in Section 5 and Appendix A.

### 2.5.3 Existing Transit Access – Positives

In addition to the issues and impediments listed previously there are some positive aspects of the current Airport transit service that are discussed below.

- **Downtown / Transit Connection**: Downtown is a popular residential and visitor destination with new residential development, numerous hotels and the convention center located within 15 minutes of the Airport. The proximity of the Airport to downtown allows a quick connection to many attractions and makes transit an easy travel option.
Board Flyer at Airport  
Transfer at Santa Fe Depot/American Plaza  
Transfer at Old Town Transit Center  
Ride Trolley to San Diego State University Transit Center  
Total Travel Time = 45 minutes  
Two Transfers  

Figure 2-5  
Transit Trip from Airport to SDSU
2. Existing Transit Service

- **New Flyer Buses:** Until September 2007, the buses operating on the Flyer route had three tall steep steps that passengers had to climb with their luggage. In September new low floor CNG buses were put into service on the Airport Flyer route. However, in October and November both the new low floor and old three step buses were running on the route. New low floor buses should be used exclusively to accommodate airline passenger needs.

- **Front Door Service:** The Airport Flyer stops are located adjacent to major terminal doors on the first curb. This first curb is located immediately adjacent to the building and provides convenient access to ticketing, security and baggage claim areas with short walking distances.
3. Planned Transit Service and Capital Improvements

3. PLANNED TRANSIT SERVICE AND CAPITAL IMPROVEMENTS

This section summarizes recent studies that address improvements to the Airport and regional transit system. Near-term regional transportation projects that are scheduled for implementation within the next 10 years are also discussed.

3.1 AIRPORT MASTER PLAN AND TRANSIT PLANNING

As discussed in Section 1.1, the Authority recently adopted a Master Plan and FEIR recommending development required to meet forecast passenger demand through 2015. The Airport Master Plan also includes a Land Use Plan that designates land uses that will guide longer term development at the Airport. The Land Use Plan evaluated in the FEIR assumes development of the following transportation components:

- Consolidated rental car (CONRAC) facility
- Transit center in the north area adjacent to Pacific Highway
- Dedicated transit corridor

The CONRAC and transit center would be in the North Area along Pacific Highway and be connected to the terminals in the south with a dedicated transit corridor. The CONRAC facility would accommodate all rental car companies that operate at the airport and provide a consolidated shuttle to the terminals. Currently the rental car companies are spread out along Rental Car Road and Pacific Highway and each operates individual shuttle service. The CONRAC would reduce the number of rental car shuttle trips as individual company shuttles would be replaced by a consolidated shuttle serving all companies. The transit center would provide a pedestrian corridor connecting to the Washington Street Trolley station and allow buses running along Pacific Highway to add an Airport stop to their route. A kiss and ride facility allowing passenger drop off and pick up outside of the terminal area and enabling vehicles to avoid traversing North Harbor Drive.

A dedicated transit corridor would link north area development to the terminals in the south and allow CONRAC and transit center shuttles to travel between these two sites without accessing the general purpose lanes on Pacific Highway and North Harbor Drive.

In addition, this Airport Transit Plan is being conducted to identify additional near and mid term measures that can be undertaken to improve transit access to the Airport.

3.2 SANDAG TRANSPORTATION STUDIES

Comprehensive Operational Analysis (COA)

Between June 2006 and January 2007, MTS conducted a Comprehensive Operational Analysis (COA) or in-depth study, described on the MTS COA website, to address: (1) MTS markets and their travel needs, (2) what is working in the current system and what isn’t, and (3) how these markets can best be served within current financial and operational abilities.

The COA covers all public transit services provided by MTS and its operators, including fixed route bus, paratransit, and trolley services. North County Transit District services,
3. Planned Transit Service and Capital Improvements

including the Coaster and Breeze bus services, are not included. Results of the study include new and revised bus routes and revised bus and Trolley schedules to better serve MTS markets.

Recommendations listed on the MTS COA website in September 2006, which affect bus service to or adjacent to the Airport, include the following recent changes:

- Implementation of the New Flyer (Route 992) route serving the Gaslamp Quarter and Convention Center. **This service was discontinued in January 2008.**

- Changing the number on Route 908 to Route 10 and making minor changes to routing and schedule. On the west end, Route 10 will travel between Washington Street and Old Town on Pacific Highway only. There will be no service on Route 10 to Midway Drive Service to Midway Drive is provided at Rosecrans Street on Routes 28 and 35. On the east end, Route 10 is extended from Highland Avenue to College Avenue between Park Boulevard and College Avenue; Route 10 will serve limited stops, stopping only at selected major stops and transfer points. Weekend service is increased to operate every 15 minutes through most of the day.

- Elimination of Route 922 along North Harbor Drive and Route 908 along Pacific Highway. Routes 923 and 992 were retained.

Recommendations listed on the MTS COA website that indirectly affect the Airport include the following changes to Trolley service in September 2006:

- Late night Green Line service will be extended between the Old Town Transit Center and San Diego State University (SDSU) 7 days/week. Current 30-minute service will be extended until 1:00 a.m., with the last eastbound departure arriving at SDSU at 1:22 a.m. The last westbound train departs SDSU at 1:32 a.m. and arrives at Old Town at 1:55 a.m.

- Blue Line weekday rush hour service between Old Town and Qualcomm Stadium will be discontinued. Peak period service will continue between Old Town and San Ysidro. Affected passengers traveling to/from destinations in Mission Valley should transfer to/from a Green Line train at Old Town for the Mission Valley portion of their trip.

- Eastbound Trolleys departing the Imperial/12th Transit Center after 10:45 p.m. will discontinue service between El Cajon Transit Center and Gillespie Field Station, Monday through Saturday.

**Central I-5 Corridor Study**

As part of SANDAG’s Central I-5 Corridor Study, dated June 2003, airport access was assessed as it related to the 2001 Airport Master Plan. Recommendations included new interstate ramps from I-5 to Pacific Highway serving the Airport’s North Area where terminal development was previously recommended. The current 2008 Airport Master Plan focuses on maximizing terminal development in its existing location and does not recommend terminal development in the North Area.
3. Planned Transit Service and Capital Improvements

Transit related recommendations include development of a dedicated HOV/bus lane along Pacific Highway between the I-5 over crossing and Laurel Street. This would provide improved HOV and bus access to the Old Town Transit Center and could be expanded to include North Harbor Drive into the Airport. Additional transit recommendations include improving transit service frequencies along existing routes, providing new express bus and Bus Rapid Transit routes and improving station facilities.

2004 Regional Transportation Improvement Program

SANDAG, as the Metropolitan Planning Organization (MPO), is required by state and federal laws to develop and adopt a Regional Transportation Improvement Program (RTIP) every two years. The RTIP is a multi-year program comprised of major highway, arterial, transit, and nonmotorized projects. Transit projects included in the most recent RTIP include:

- Mission Valley East Light Rail Project (completed)
- Oceanside-Escondido Rail Extension
- I-15 Bus Rapid Transit (Rolling Stock/Stations)
- Mid-Coast Corridor Project
- Regional Fare Technology
- Bus/Rail Vehicles Purchase
- Bus/Rail Infrastructure

MOBILITY 2030: The Transportation Plan for the San Diego Region

The 2004 RTIP incrementally develops the Regional Transportation Plan (RTP) or MOBILITY 2030, completed in November 2007. This is the long-range transportation plan for the San Diego region and sets the vision for future transportation in the region. Projects that were recommended in the 2007 RTP include:

- Mission Valley East Trolley Extension
- Oceanside to Escondido Rail
- Sorrento Mesa Transitway
- Kearny Mesa Transitway
- Mid-Coast Light Rail
- Oceanside-Escondido Rail Double Tracking and North County Fair Extension
- Coastal Rail Double Tracking and Other Improvements
- Coastal Rail Tunnels at University City and Del Mar
- Regional Light Rail Grade Separations
- Early Action Project Funding
- Improved/New Major Transit Stations and Centers
3. Planned Transit Service and Capital Improvements

- Direct Access Ramps to Managed/HOV Lanes
- Vehicles for New Regional and Corridor Transit Services
- Arterial Transit Priority Improvements

MOBILITY 2030 acknowledges specific projects identified in the I-5 Corridor Study to improve Airport access and also recommends adding HOV lanes to I-5 in the vicinity of the Airport.

3.3 Near Term Planned Transit Improvements

The projects listed below are near-term improvements, listed as current projects on SANDAG’s website, which will impact the current San Diego region transit network. Each project is identified on Figure 3-1 and described below.

**Mid-Coast Trolley Extension**

As shown on Figure 3-1, the Mid-Coast extension will connect Old Town to the University City area by extending Trolley service 11 miles north from the Old Town Transit Center to the UCSD / University Towne Centre area. The University City area is comprised of major activity and employment centers such as the UCSD campus and University Towne Centre (UTC) shopping center. SANDAG is currently evaluating the use of either Trolley or BRT technology in the field corridor.

If developed as a Trolley line, the route would start at the Old Town Transit Center and run north parallel with I-5 to Gilman Drive. Three stations are proposed in this section and would be located at Tecolote road, Clairemont Drive, and Balboa Avenue. The line would then extend north to the UCSD West campus and continue east to its terminus at the UTC Transit Center located in the UTC shopping center. Five stations are proposed in this segment and would be located at University Lane, UCSD West, UCSD East, Executive Drive and the UTC Transit Center. Potential routes for BRT service are under development.

Operation of the Mid-Coast extension is anticipated to begin in 2014.

**Mid-Coast Super Loop**

The Super Loop is a two-way circular bus route that will connect to the Mid-Coast Trolley Extension and serve North University City. Super Loop improvements will include priority traffic treatments such as signal prioritization, queue jumper lanes, and street improvements that will allow Super Loop vehicles to move through traffic more rapidly than traditional buses. Super loop buses will run on frequent headways and will operate with low emission vehicles.

Construction is expected to begin in early 2008 with operation beginning in late 2008. The general location of the Super Loop is depicted on Figure 3-1.
3. Planned Transit Service and Capital Improvements

I-15 Managed Lanes and Bus Rapid Transit Corridor

Beginning in approximately 2012, Bus Rapid Transit (BRT) services will operate on the I-15 Managed Lanes between Escondido (SR 78) and SR 163, a distance of approximately 20 miles. These BRT services will access downtown San Diego via I-15 through the Mid City area and SR 94. BRT services will also be provided between Escondido and Sorrento Mesa via I-15 and Mira Mesa Boulevard.

The 20 mile Managed Lanes facility will consist of four lanes in the median of I-15 for public transit, car and van pools, and Fastrakers (solo drivers that pay a user fee). The Managed Lanes will include a moveable barrier (similar to those on the San Diego-Coronado Bridge), multiple access points to the general purpose lanes, and direct access ramps for public transit buses to access transit stations along the facility.

The Managed Lanes corridor and BRT station locations are shown on Figure 3-2. Park and ride facilities will be developed at the five northernmost stations: Escondido, Del Lago, Rancho Bernardo, Sabre Springs / Penasquitos, and Mira Mesa.

SR-52 HOV/Managed Lanes

The SR-52 HOV and Managed Lanes Corridor will provide a Managed Lanes facility between Santee and I-15, as shown on Figure 3-1. The SR-52 project has two components: (1) the SR 52 East project which will extend SR 52 from SR 125 east to SR 67 and (2) the SR 52 West project which will add one general purpose freeway lane in each direction and two reversible managed lanes from I-15 to SR 125.

According to Keepsandiegomoving.com, the SR 52 East project is anticipated to open in 2010 and the SR 52 West project in 2012.

I-805 (South Bay) Bus Rapid Transit Corridor

The South Bay Bus Rapid Transit (BRT) project will provide high-speed transit connections between downtown San Diego and the Otay Mesa border crossing, as shown on Figure 3-1. This new BRT service will provide access to regional employment centers in downtown San Diego, the Otay Mesa Business Park, and the future Eastern Urban Center, while also serving residential communities in Chula Vista and National City.

In the long-term, BRT service will operate on SR 94 HOV lanes and the I-805 Managed Lanes with direct access ramps allowing public transit buses to access transit stations along the route. The BRT corridor will exit I-805 at Palomar Street in Chula Vista and travel on a dedicated right-of-way with stations in the Otay Ranch transit-oriented villages of Heritage, Lomas Verde and Santa Venetia. From there the corridor will continue southbound with stations at Otay Ranch Town Center, Eastern Urban Center and a future Village 9 / University station. The BRT service will terminate at the Otay Mesa border crossing. Prior to construction of Managed Lanes along I-805, the service may operate in converted freeway shoulder lanes on both SR 94 and I-805.

The South Bay BRT Route and station locations are shown on Figure 3-3. Park and ride facilities along I-805 are proposed at Plaza Boulevard in National City, H Street in Chula Vista, and Palomar Street in Chula Vista.
Figure 3-2
I-15 Managed Lanes Corridor
BRT Station Locations

LEGEND
- Managed Lanes Corridor
- BRT Station
- BRT Park & Ride Station
Figure 3-3

SOUTH BAY BUS RAPID TRANSIT ROUTE

LEGEND
- Proposed Station
- Station Under Study
- On-Line Freeway Station
- Freeway Station with Direct Access Ramp (DAR)
- Freeway
- Bus Rapid Transit Freeway Running Route
- Bus Rapid Transit Street Running Route
- Future Service Route
- Pending New Development

Source: SANDAG staff, November 2007
Prepared by: SANDAG, November 2007
3. Planned Transit Service and Capital Improvements

The first phase of the project, between downtown San Diego and the Eastern Urban Center Station is scheduled to be completed by 2011. Phase Two continuing to the Otay Mesa Border crossing is scheduled to be completed by 2015.

**TransNet**

In November 2004, voters approved 40-year extension of *TransNet*, a half-cent sales tax that funds local transportation projects. Since its introduction in 1988, the tax has been instrumental in expanding the transportation system and reducing traffic congestion. During the 40-year extension, major highway projects along Interstates 5, 8, 15, and 805 as well as numerous State Routes will receive funding. In addition *TransNet* will support public transit projects, an environmental mitigation program and a smart growth incentive program.

**Compass Card**

The Compass Card is a “smart card” designed to streamline and expedite fare collection on MTS and NCTD bus, Trolley and train services. The Compass Card will provide a universal, regional fare collection system and will allow the area’s transit operators to collect enhanced ridership and revenue data.

The embedded “smart card” technology will allow riders to have their fares validated simply by touching the card to a specially designed ticket vending machine or fare box. According to SANDAG’s website, the Compass Card is schedule for public launch in 2007.
4. EXISTING AND POTENTIAL AIRPORT TRANSIT RIDERSHIP

Existing Airport access market share, transit rider characteristics, market share at other airports and future transit travel demand estimates are presented in this section.

4.1 EXISTING AIRPORT ACCESS MARKET SHARE

Existing Airport access market share (mode shares), or the relative proportion of air passengers using each of the available transportation modes were estimated from airport passenger survey data provided by the Authority. Origin and destination (O&D) passengers (passengers beginning or ending their air travel at the Airport) were assumed to have the same mode shares. Table 4-1 shows the estimated market or mode share for San Diego International Airport O&D passengers.

The Authority conducts a quarterly customer satisfaction survey to track customer satisfaction and behavior. The survey is conducted on a random sampling of airline passengers and surveyors collect data from approximately 200 passengers per quarter for a total of approximately 800 passengers per year. Results of the Airport access mode question included in the 2005 SDIA quarterly customer satisfaction surveys are shown along with the 1994 survey data. The 1994 survey was the most recent comprehensive passenger survey prior to implementation of the quarterly customer satisfaction surveys and data from this survey has been used in prior planning studies. According to the 2005 survey, 1.2 percent of O&D passengers use public transit (the Airport Flyer). This is similar to the 1 percent public transit use reported in the 1994 survey. Major changes in transportation market share since 1994 include the reduction of shared-ride van market share which dropped from 9.5 percent to 3 percent between 1994 and 2005, and an increase in taxi market share from 7.3 percent in 1994 to 12.8 percent in 2005.

In 2005 there were 45,830 daily O&D passengers at the Airport. As shown on Table 4-1, that translates to 550 passengers arriving and departing the Airport by bus each day.

Table 4-1 –Existing Airport Access Market Share

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Vehicle (curbside or terminal area parking)</td>
<td>45.0%</td>
<td>51.2%</td>
<td>23,460</td>
</tr>
<tr>
<td>Private Vehicle (remote parking shuttle)</td>
<td>10.0%</td>
<td>6.3%</td>
<td>2,887</td>
</tr>
<tr>
<td>Rental Car</td>
<td>19.1%</td>
<td>14.9%</td>
<td>6,829</td>
</tr>
<tr>
<td>Taxi</td>
<td>7.3%</td>
<td>12.8%</td>
<td>3,866</td>
</tr>
<tr>
<td>Limousine/Executive Town Car</td>
<td>1.3%</td>
<td>0.6%</td>
<td>275</td>
</tr>
<tr>
<td>Shared-Ride Van</td>
<td>9.5%</td>
<td>3.0%</td>
<td>1,375</td>
</tr>
<tr>
<td>Hotel/Motel Shuttle</td>
<td>5.8%</td>
<td>9.6%</td>
<td>4,400</td>
</tr>
<tr>
<td>Public Bus/Trolley/Coaster (Flyer bus)</td>
<td>1.0%</td>
<td>1.2%</td>
<td>560</td>
</tr>
<tr>
<td>Charter/Tour Bus</td>
<td>1.0%</td>
<td>0.4%</td>
<td>163</td>
</tr>
</tbody>
</table>

Note: Daily passengers includes originating and terminating passengers (does not include connecting passengers).

Source: SDIA Quarterly Customer Satisfaction Survey and Air Traffic Reports along with HNTB analysis.
4. Existing and Potential Airport Transit Ridership

4.2 Existing Airport and Regional Transit Ridership

Existing Flyer Ridership

SANDAG maintains a database of transit ridership statistics and conducts an annual survey of daily ridership along MTS routes including daily boarding and alightings at each stop. Data for each route is collected for one representative day per year. MTS provided 2005 through 2007 ridership numbers for the Airport Flyer (Route 992) and Route 923 that runs along North Harbor Drive. As shown on Table 4-2, there were approximately 1,330 daily Airport specific riders, both Airport employees and airline passengers, out of 1,654 total riders on the Flyer in 2007.

As shown previously on Table 4-1, public transit only accounted for 1.2 percent of arriving and departing passengers’ travel choice, approximately 550 daily passengers, in 2005. However, airline employees typically account for a large portion of public transit ridership at Airports. SANDAG’s 2005 on board survey of airport riders on board the Flyer indicated that approximately 65 percent of the riders were airport employees (approximately 900 employees daily) and 35 percent were airline passengers (approximately 500 airline passengers daily). The split between airline passengers and employees was not available for 2007.

In addition to the Flyer, MTS Route 923 serves the Airport with stops along North Harbor Drive. In 2007 there were approximately 75 daily airport riders on Route 923.

Table 4-2 – Daily Flyer (Route 992) and Route 923 Riders

<table>
<thead>
<tr>
<th></th>
<th>Total Daily Ridership</th>
<th>Daily Airport Ridership (on and off)</th>
<th>Riders On</th>
<th>Riders Off</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flyer (MTS Route 992)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>1,394</td>
<td>1,141</td>
<td>567</td>
<td>574</td>
</tr>
<tr>
<td>2006</td>
<td>1,654</td>
<td>1,384</td>
<td>672</td>
<td>712</td>
</tr>
<tr>
<td>2007</td>
<td>1,624</td>
<td>1,330</td>
<td>645</td>
<td>685</td>
</tr>
<tr>
<td>MTS Route 923</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>n.a.</td>
<td>75</td>
<td>26</td>
<td>49</td>
</tr>
</tbody>
</table>

n.a. = not applicable


Historic Flyer ridership and vehicle statistics through 2006 were presented by MTS staff at the September 14, 2006 Airport Advisory Committee meeting and 2007 statistics were provided by MTS staff in November 2007. These statistics are summarized on Table 4-3.
4. Existing and Potential Airport Transit Ridership

Table 4-3 – Historic Daily Flyer Statistics

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily Passengers</td>
<td>1,429</td>
<td>1,595</td>
<td>1,442</td>
<td>1,203</td>
<td>1,311</td>
<td>1,429</td>
<td>1,394</td>
<td>1,654</td>
<td>1,624</td>
</tr>
</tbody>
</table>

Source: MTS staff presentation to Airport Advisory Committee, September 14, 2006 and MTS staff November 2007.

Regional Transit Ridership

Currently the Flyer provides the only transit connection between the Airport and downtown San Diego and the Santa Fe Depot / America Plaza transit stations. The Santa Fe Depot station is where Trolley, Coaster and Amtrak passengers traveling to the Airport transfer to the Flyer. Trolley riders on the Orange Line may also transfer at America Plaza located one stop east of the Santa Fe Depot. Green Line Trolley passengers must transfer to the Blue Line Trolley at the Old Town Transit Center to connect to the Santa Fe Depot.

Table 4-4 summarizes number of daily riders boarding and alighting the Trolley and Coaster at the two stations that provide connections to the Flyer. The daily Trolley riders boarding and alighting at the Old Town Transit Center are also shown as stated previously the Green Line riders must transfer here to the Blue Line.

Table 4-4 – Daily Old Town, Santa Fe Depot, America Plaza Riders

<table>
<thead>
<tr>
<th></th>
<th>2007 Trolley Riders</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Daily Station Counts</td>
<td>Riders On</td>
<td>Riders Off</td>
</tr>
<tr>
<td>Old Town</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blue</td>
<td>12,737</td>
<td>6,398</td>
<td>6,339</td>
</tr>
<tr>
<td>Green</td>
<td>9,009</td>
<td>4,612</td>
<td>4,397</td>
</tr>
<tr>
<td>Santa Fe Depot</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blue</td>
<td>1,698</td>
<td>879</td>
<td>819</td>
</tr>
<tr>
<td>COASTER</td>
<td>2,651</td>
<td>1,315</td>
<td>1,336</td>
</tr>
<tr>
<td>America Plaza</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blue</td>
<td>4,864</td>
<td>2,381</td>
<td>2,483</td>
</tr>
<tr>
<td>Orange</td>
<td>2,177</td>
<td>1,093</td>
<td>1,084</td>
</tr>
</tbody>
</table>


Commute characteristics can typically be linked to the According to the 2000 Census, 3.4 percent of San Diego County commuters and 4.2 percent of San Diego City commuters used transit, while 75 percent of each used private autos to commute to work. The 2004 Census (a smaller sample size) reported 2.8 percent of regional commuters used transit.
4. Existing and Potential Airport Transit Ridership

However, as presented on SANDAG’s website, SANDAG’s surveys of transit ridership characteristics on the newly opened Green Trolley Line conducted in late 2005 indicate that the Green Line has succeeded in attracting new transit passengers and addressing unmet transit needs in the region. It has generated about 18,500 daily trips, 7,200 of which are by new riders. The Green Line is also relieving congestion on the roadways by diverting 4,600 daily trips from automobile to transit, and reducing parking demand at SDSU by 2,000 cars per day. Survey data was obtained via onboard passenger surveys, online surveys of SDSU students, and passenger counts at the SDSU Transit Center. In addition, nearly 40 percent of Green Line riders did not use transit during the previous year. Before the Green Line’s opening, about 53 percent used transit five to seven days per week compared to 63 percent after opening.

According to the survey, passengers’ reasons for using the trolley service include:

- No car
- Avoid traffic congestion
- Cost of driving
- Parking hassles;
- Environmental benefits
- Faster than a bus
- More time to read and relax
- Easier than driving

4.3 Airport Passenger and Employee Characteristics

According to the 2005 quarterly customer satisfaction survey, 37 percent of passengers in 2005 were traveling for business while 50 percent were traveling for leisure/vacation (shown on Table 4-5).

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leisure/vacation</td>
<td>50.3%</td>
</tr>
<tr>
<td>Business</td>
<td>37.0%</td>
</tr>
<tr>
<td>Business and non-business</td>
<td>10.6%</td>
</tr>
<tr>
<td>Other</td>
<td>1.7%</td>
</tr>
<tr>
<td>School related</td>
<td>0.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: San Diego International Airport Customer Satisfaction Survey 1st Qtr. 2006

The survey also reported that 47 percent of travelers were from the San Diego region, and of the 53 percent who are visitors, 27 percent were attending a convention (13 percent of the total sample) and 2 percent took a cruise (1 percent of the total sample).
There are approximately 4,900 total employees working at the Airport. The majority of Airport employees are not employed by the Authority but work for a number of employers including airlines, concessionaires, support service providers, the Transportation Security Administration, cargo operators, general aviation operators, and rental car companies. Many of these employees work shifts that require them to arrive at the Airport an hour or more prior to the first aircraft departure in the morning and after the last scheduled arrival at night. If a flight is delayed some employees may be required to stay until the flight arrives. The Authority employees approximately 300 of the 4,900 total Airport employees.

San Diego resident passengers and Airport employees are the easiest Airport user to target transit services to, as they are typically the most frequent users of the Airport and generally develop a preferred method to reach the Airport. These users also may be set in their ways and need special incentives to try transit. However, they are well suited to use services such as remote terminal/parking facilities near their homes. Airport visitors, especially business travelers and others who are traveling downtown or make frequent trips to San Diego would benefit greatly by increased visibility of transit options and the connectivity to downtown. As discussed in Section 5, targeted marketing campaigns can help identify specific ways to capture both resident and visitor riders.

4.4 Potential Airport Transit Ridership

Transit Market Share at Other Airports

As shown on Table 4-6, data reported in the 2002 Transit Cooperative Research Program (TCRP) Report 83, Strategies for Improving Public Transportation Access to Large Airports, transit access to airports across the US in 1999 varies from 17 percent of O&D passengers to less than 1 percent. Transit access (e.g. bus and rail, no shared-ride vans) accounted for 17 percent of passenger access at Boston-Logan and 16 percent at Washington National and New Orleans in 1999. High transit ridership at these airports is generally attributable to the large number of passengers with trip ends in downtown locations and services such as the Logan Express which provides park and ride facilities with express bus service from the Boston metropolitan area to Boston-Logan International Airport. The average transit market share among all the airports surveyed was 6 percent and the median market share was 5 percent.

The number of airport-operated parking spaces per million annual originating passengers is also shown on Table 4-6 and ranges from 704 at New York La Guardia Airport to 3,729 at Denver International Airport. The parking inventory shown in the Table was reported in the 2000 Airports Council International (ACI)-North America parking survey, except where noted. The calculation of parking spaces per million annual originating passengers allows airports of all sizes to be compared equally. La Guardia with the lowest number of parking spaces per million annual originating passengers ranked 19th out of 33 airports in transit ridership. As reported in 2005 survey data, San Diego International Airport had 714 parking spaces per million originating passengers and also ranked 25th out of 33 airports in transit ridership with 1.2 percent of passengers riding transit. When the ACI parking survey was completed
in 2000 San Diego International Airport reported 443 parking spaces per million originating passengers and 1 percent of passengers riding transit.

The regional propensity of residents to ride transit and the availability of a rail station within walking distance of airport terminal buildings or express bus service from a regional park and ride facility (located outside of the immediate airport vicinity), minimizing the number of required mode changes, also affects airport passenger’s use of public transit to access airports. Table 4-6 shows the percent of each city’s regional commuters (defined by the urban area each city is located in) that use public transit as reported in the 2000 U.S. Census and indicates if each airport had a rail station within walking distance to the terminals at the time of the survey. Several airports have added direct rail service since the data was reported. The percent of San Diego region commuters that used public transit was reported as 3.5 percent in 2000. Boston-Logan which had the highest airport transit ridership in the survey reported a regional commuter transit ridership of 12.3 percent.

As shown in Table 4-6, airport transit ridership is more closely linked to regional transit ridership and commute patterns than to the quantity of airport parking. This is in part because airport parking accommodates a range of needs. Many terminal area parkers are parking for less than 2 hours and are picking up or dropping off passengers and others are business travelers parking for one or two days and are willing to pay high prices. While commute patterns tend to be related to the extent and robustness of the regional transit system.
### 4. Existing and Potential Airport Transit Ridership

#### Table 4-6: Transit Market Share at Other US Airports (1999-2000 Survey Data except where noted)

<table>
<thead>
<tr>
<th>Airport</th>
<th>Airport Transit (bus and rail) Market Share (1999 except where noted) (a)</th>
<th>Total Originating Passengers (b)</th>
<th>Airport operated public parking spaces (c)</th>
<th>Parking spaces per million originating passengers (c)</th>
<th>Percent of regional commuters using transit (d)</th>
<th>Airports with direct rail connection (e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boston-Logan (f)</td>
<td>17%</td>
<td>9,659,050</td>
<td>11,785</td>
<td>1,216</td>
<td>12.3%</td>
<td>X</td>
</tr>
<tr>
<td>Washington National (g)</td>
<td>16%</td>
<td>5,724,290</td>
<td>7,855</td>
<td>1,337</td>
<td>13.4%</td>
<td>X</td>
</tr>
<tr>
<td>New Orleans (h)</td>
<td>16%</td>
<td>4,065,620</td>
<td>3,810</td>
<td>937</td>
<td>7.3%</td>
<td>X</td>
</tr>
<tr>
<td>Denver</td>
<td>11%</td>
<td>8,497,650</td>
<td>31,687</td>
<td>3,729</td>
<td>4.8%</td>
<td>X</td>
</tr>
<tr>
<td>Chicago Midway (g)</td>
<td>11%</td>
<td>5,303,930</td>
<td>7,171</td>
<td>1,362</td>
<td>12.6%</td>
<td>X</td>
</tr>
<tr>
<td>San Francisco</td>
<td>9%</td>
<td>11,173,430</td>
<td>10,860</td>
<td>903</td>
<td>16.2%</td>
<td>X</td>
</tr>
<tr>
<td>Chicago O’Hare</td>
<td>9%</td>
<td>13,397,460</td>
<td>23,001</td>
<td>1,718</td>
<td>12.6%</td>
<td>X</td>
</tr>
<tr>
<td>Indianapolis</td>
<td>8.6%</td>
<td>3,341,820</td>
<td>10,900</td>
<td>3,262</td>
<td>1.6%</td>
<td>X</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>8%</td>
<td>16,883,650</td>
<td>20,189</td>
<td>1,210</td>
<td>5.6%</td>
<td>X</td>
</tr>
<tr>
<td>New York John F Kennedy</td>
<td>7.5%</td>
<td>4,744,950</td>
<td>13,182</td>
<td>2,779</td>
<td>29.0%</td>
<td>X</td>
</tr>
<tr>
<td>Atlanta</td>
<td>7.5%</td>
<td>12,883,530</td>
<td>30,828</td>
<td>2,374</td>
<td>4.2%</td>
<td>X</td>
</tr>
<tr>
<td>Seattle</td>
<td>7%</td>
<td>9,305,080</td>
<td>10,000</td>
<td>1,075</td>
<td>7.6%</td>
<td>X</td>
</tr>
<tr>
<td>Oakland (i)</td>
<td>7%</td>
<td>4,674,112</td>
<td>7,430</td>
<td>1,590</td>
<td>16.2%</td>
<td>X</td>
</tr>
<tr>
<td>Baltimore-Washington</td>
<td>7%</td>
<td>6,945,900</td>
<td>19,600</td>
<td>2,822</td>
<td>7.8%</td>
<td>X</td>
</tr>
<tr>
<td>Newark</td>
<td>7%</td>
<td>9,860,530</td>
<td>13,305</td>
<td>1,349</td>
<td>29.0%</td>
<td>X</td>
</tr>
<tr>
<td>Cleveland</td>
<td>6%</td>
<td>4,017,910</td>
<td>6,575</td>
<td>1,638</td>
<td>4.9%</td>
<td>X</td>
</tr>
<tr>
<td>Washington Dulles</td>
<td>5%</td>
<td>4,867,800</td>
<td>20,497</td>
<td>4,194</td>
<td>13.4%</td>
<td>X</td>
</tr>
<tr>
<td>St. Louis</td>
<td>5%</td>
<td>5,290,030</td>
<td>7,085</td>
<td>1,455</td>
<td>2.9%</td>
<td>X</td>
</tr>
<tr>
<td>New York La Guardia</td>
<td>5%</td>
<td>10,157,200</td>
<td>7,155</td>
<td>704</td>
<td>29.0%</td>
<td>X</td>
</tr>
<tr>
<td>Portland</td>
<td>4%</td>
<td>5,178,670</td>
<td>11,700</td>
<td>2,259</td>
<td>7.4%</td>
<td>X</td>
</tr>
<tr>
<td>Kansas City</td>
<td>3%</td>
<td>4,757,590</td>
<td>17,400</td>
<td>3,073</td>
<td>1.9%</td>
<td>X</td>
</tr>
<tr>
<td>Minneapolis-St. Paul</td>
<td>3%</td>
<td>6,365,600</td>
<td>12,366</td>
<td>1,945</td>
<td>5.4%</td>
<td>X</td>
</tr>
<tr>
<td>San Jose (g)</td>
<td>2.5%</td>
<td>5,142,040</td>
<td>6,953</td>
<td>1,352</td>
<td>3.5%</td>
<td>X</td>
</tr>
<tr>
<td>Philadelphia (g)</td>
<td>2%</td>
<td>6,433,940</td>
<td>18,000</td>
<td>2,796</td>
<td>9.9%</td>
<td>X</td>
</tr>
<tr>
<td>Phoenix</td>
<td>1%</td>
<td>10,227,800</td>
<td>15,622</td>
<td>1,627</td>
<td>2.2%</td>
<td>X</td>
</tr>
<tr>
<td>Miami</td>
<td>1%</td>
<td>4,656,700</td>
<td>7,300</td>
<td>1,503</td>
<td>3.3%</td>
<td>X</td>
</tr>
<tr>
<td>San Diego (i)</td>
<td>1.2%</td>
<td>8,362,515</td>
<td>5,979</td>
<td>714</td>
<td>3.5%</td>
<td>X</td>
</tr>
<tr>
<td>Tampa</td>
<td>0.5%</td>
<td>6,524,310</td>
<td>11,300</td>
<td>1,732</td>
<td>1.5%</td>
<td>X</td>
</tr>
<tr>
<td>Salt Lake City</td>
<td>0.5%</td>
<td>4,401,050</td>
<td>10,561</td>
<td>2,400</td>
<td>3.5%</td>
<td>X</td>
</tr>
<tr>
<td>Las Vegas</td>
<td>neg.</td>
<td>11,889,500</td>
<td>11,950</td>
<td>1,005</td>
<td>4.5%</td>
<td>X</td>
</tr>
<tr>
<td>Orlando</td>
<td>neg.</td>
<td>11,002,020</td>
<td>15,700</td>
<td>1,427</td>
<td>2.0%</td>
<td>X</td>
</tr>
<tr>
<td>Dallas-Fort Worth</td>
<td>neg.</td>
<td>9,833,780</td>
<td>33,170</td>
<td>3,373</td>
<td>2.2%</td>
<td>X</td>
</tr>
<tr>
<td>Sacramento</td>
<td>neg.</td>
<td>3,605,340</td>
<td>13,410</td>
<td>3,719</td>
<td>2.9%</td>
<td>X</td>
</tr>
</tbody>
</table>

neg. = negligible

(b) USDOT data for scheduled domestic originating passengers only for 1999.
(c) Data provided from 2000 Airports Council International (ACI) - North America Parking Survey, except where noted.
(d) According to the 2000 U.S. Census data.
(e) Airports indicated in the table had direct rail service (i.e., with stations at or within walking distance of the terminal building) in 2000 when other data in the table was collected. Minneapolis and San Francisco have since added a rail station at the Airport and John F. Kennedy and Newark have added Automated People Mover systems to connect to regional rail services.
(f) Currently adding approximately 2,900 parking spaces.
(h) Constructed a new 2,500 space public parking garage for a total of 5,500 airport parking spaces.
(i) Historic Oakland International Airport parking data provided by Port of Oakland staff.
(j) San Diego transit market share, originating passengers, and public parking spaces based on historic 2005 Airport data.

Source: HNTB Corporation 2006, based upon data as indicated in footnotes.
4. Existing and Potential Airport Transit Ridership

Potential Transit Ridership at San Diego International Airport
As discussed in the previous section, the median transit market share at US airports surveyed is 5 percent, more than quadruple San Diego’s existing market share. The Authority, in association with other members of the Airport Transit/Roadway Committee, has set a goal of increasing airport passenger public transit ridership to between 4 and 6 percent (or greater) over the next 3 to 5 years, bringing San Diego up to the national average. As discussed in Section 1, the focus of this report is on publicly operated transit modes. The next section identifies opportunities to increase ridership on these modes.

According to the baseline forecast prepared by Simat Helliesen & Eichner, Inc. (SH&E), in 2010 there will be an average of 51,076 daily airline passengers at the Airport. If the transit market share increases to 4 percent, 2,050 airline passengers would be riding transit to the Airport and at 6 percent market share 3,060 passengers would be riding transit compared to 610 if the market share remains at 1.2 percent. This equates to 1,430 new transit riders (2,040 less 610) with 4 percent market share and 2,450 new transit riders (3,060 less 610) with 6 percent market share. Table 4-6 depicts the distribution of new transit riders between the four most likely transportation modes that they will be diverted from: private vehicle curbside drop off/pick up, private vehicle parking, taxi, and shared-ride van. If the distribution is even this equates to approximately 358 passengers from each mode with 4 percent market share and approximately 613 passengers from each mode with 6 percent market share.

Table 4-6 – Potential Shift in Transit Demand (2010)

<table>
<thead>
<tr>
<th>Transportation to Terminal</th>
<th>Percent of new transit riders switching from each mode</th>
<th>Number of new transit riders switching (4% market share)</th>
<th>Number of new transit riders switching (6% market share)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Vehicle Curbside</td>
<td>25%</td>
<td>358</td>
<td>613</td>
</tr>
<tr>
<td>Private Vehicle Parking</td>
<td>25%</td>
<td>358</td>
<td>613</td>
</tr>
<tr>
<td>Taxi</td>
<td>25%</td>
<td>358</td>
<td>613</td>
</tr>
<tr>
<td>Shared-Ride Van</td>
<td>25%</td>
<td>358</td>
<td>613</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>1,430</td>
<td>2,450</td>
</tr>
</tbody>
</table>
5. ALTERNATIVE TRANSIT IMPROVEMENTS

Alternative transit improvements intended to increase airline passenger and airport employee awareness and use of public transit are discussed in this section. Currently only 1.2 percent of airline passengers utilize public transit to access the Airport. However, the Authority has set a goal of increasing this to 4 to 6 percent in the next 3 to 5 years. The preliminary list of alternatives, shown on Table 5-1, is grouped into the following categories:

- Existing service improvement
- Marketing strategies
- Existing route changes
- New routes

The table also identifies each alternative as near-term (less than 3 years), mid-term (3 to 5 years), or long-term (over 5 years) and identifies if the primary purpose of the alternative is to improve passenger level of service, reduce vehicle trips, or increase ridership demand.

5.1 NEAR TERM

The following alternatives are potential improvements which could be implemented within the next 3 years.

5.1.1 Changes to Existing Service

This set of improvements focuses on improving passenger service to retain existing riders and may not induce a significant increase in ridership. However, when provided together a number of small changes to the level of service may remove impediments that prevented some riders from using the service.

**Low Floor Buses (Implemented)**

Unlike typical commuters, airline passengers generally have luggage that they must carry on and off of transit buses and there is generally limited space in the aisles to accommodate this luggage (Flyer buses are equipped with luggage racks). Prior to September 2007, boarding a Flyer bus required ascending 3 steep narrow steps while carrying luggage. Figure 5-1 depicts a passenger boarding the Flyer with luggage and an MTS low floor bus at the Old Town Transit Center. Some rental car and parking courtesy shuttles have steps but drivers typically load and unload passenger's luggage.

Utilizing low floor buses that require fewer steps to carry luggage up and down and providing luggage racks so bags do not block aisles will make buses much more accommodating to airline passengers.

In September 2007, MTS rolled out low-floor CNG buses on the Airport Flyer route.
<table>
<thead>
<tr>
<th>Improvement Alternative</th>
<th>Timeframe for Implementation</th>
<th>Potential Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Near-term (1-3 years)</td>
<td>Mid-term (3 to 5 years)</td>
</tr>
<tr>
<td><strong>Existing Service Improvement</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Floor Buses (2 steps)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Customer Service Training for Drivers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install Transit Ticket Machines at Airport</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Free Ride for Arriving Airport Passengers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install and Activate Next Arrival Signs (NextBus installed in 2004)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Terminal / Curbside Transit Information Improvements</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Airport Employee Transit Incentive Program</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Transit Priority Measures (bus lane, signal priority, queue jumper lanes)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>Marketing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Target Residents (existing transit users)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Target Visitors (high density visitor areas - Downtown, Mission Valley)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Target Residents (new transit users)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>Existing Route Change</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extend Convention Center Flyer Route Hours</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Capture Additional Hotels/Residences</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Reduce Flyer Headways (less than 12-minutes)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Add Coaster Service (nights and weekends)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>New Route</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hotel Circle Route</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Harbor Island Route</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Combine Hotel Shuttles</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Express Bus to Cruise Ship Terminals</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Express Bus to Transit Station</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Remote Parking/Terminals (Flyaway)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Consolidated Bus to CONRAC Facility</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>APM to Transit Center</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>APM to CONRAC Facility</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Trolley Connection to Airport Terminals</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
Customer Service Training for Drivers

Bus drivers who understand the specific needs of airport passengers can help reduce passenger anxiety by relaying specific airport information such as which terminals serve which airlines. Also, by allowing passengers to load baggage onto luggage racks before the bus departs the curb or bus stop a passenger is afforded a more positive experience. Currently to stay on schedule many buses depart as soon as riders are aboard and before they have a chance to secure luggage in the rack.

By providing specific customer service training to drivers on the Flyer Route, a higher level of passenger service will be achieved and passengers can ride to their destination in comfort. On-board announcements (i.e. for specific airlines when approaching each terminal) could be provided by the driver or recordings. An increase in the level of customer service provided by drivers will ensure that passengers begin or end their airport trip with in a friendly, helpful and positive environment.

Install Transit Ticket Machines at Airport

Currently Flyer (Route 992) riders are required to have exact change ($2.25) or a transit pass to board the bus. Passengers who are unfamiliar with the Airport and local transit are more likely to pay for the bus with cash, as opposed to transit passes, and not know the exact fare or have it available. By providing ticket machines at the curbside transit riders would be able to pay without exact change while also expediting the boarding process. The transit ticket machine could also allow passengers to purchase Trolley and Coaster tickets.

Free Ride for Arriving Airport Passengers

Currently the fare for the Flyer (Route 992) is $2.25 paid by the passenger upon boarding the bus. To expedite the boarding process at the Airport and to provide a higher level of customer service, a free ride could be provided between the Airport and downtown for passengers arriving on flights at the Airport. Currently, the Flyer is free for passengers traveling to the Airport after transferring from the Coaster and Trolley downtown. Passengers could either be granted uncontrolled access to the buses or receive a voucher in the baggage claim area that would allow free access to the bus. However, passengers would still have to purchase tickets for the Trolley, Coaster or other bus routes when transferring downtown.

Install and Activate Next Arrival Signs

NextBus signs that display when the next Flyer bus will arrive at that stop were installed by MTS at two Airport Flyer stops outside Terminals 1 and 2 in 2004 but were never activated. SANDAG and MTS are now using new technology. Installing and activating these signs at each of the Flyer stops at the Terminals and Santa Fe Depot will let passengers know how soon the next bus will arrive at the curb and afford them a level of comfort that a bus is on its way.
Terminal / Curbside Transit Information Improvements

Currently, terminal area Flyer stops are located in prime spots on the first curbside adjacent to the main doors of each terminal. Walking distances to ticketing, baggage claim and security is very short; however, visibility of the Flyer stops is low. Updating terminal and curbside signage to highlight Flyer service along with advertising the easy connection to downtown, the Trolley, and Coaster will help direct passengers to the stops. This could include replacing the words “City Bus” on directional signage with “Flyer to Downtown/Transit”. Benches, shelters and more prominent signs at the stops will help increase visibility and Airport Ambassadors and employees can be trained to help promote service and raise awareness.

In addition, self service transportation kiosks could be placed in the baggage claim areas. These kiosks would allow passengers to identify transportation options to their selected destination and possibly purchase fare media.

Airport Employee Transit Incentive Program

There are approximately 4,900 people, 300 employed by the Authority, working at the Airport and they comprise 2/3 of the Airport Flyer riders. While most transit improvement alternatives will benefit both airline passengers and employees, Airport employees typically have special needs. Many work on shifts and arrive early in the morning, before the first flight departs, while others work late at night until after the last flight arrives. There are numerous employers including airlines, concessionaires, rental car companies and the Transportation Security Administration; however, these are the most frequent airport users as they come to the airport almost everyday.

Developing an incentive program targeted specifically for employees could encourage more to utilize transit and serve to change commute habits. The program could include a transit benefit program with pre-tax or subsidized transit passes, carpool incentives, a carshare program or other potential benefits.

5.1.2 Marketing Strategies

This set of improvements focuses on attracting new ridership through targeted marketing programs. There are three main markets described below that should be targeted through a larger marketing campaign.

Target Residents (existing transit users)

San Diego residents who currently use transit for commuting or other regular activities represent the easiest market to target. These riders are already knowledgeable about transit and are probably the most willing to try taking transit to the Airport if they are aware of the services provided. These riders can be reached with simple on-board advertisements including signs or flyers, placed on buses, Trolley and Coaster cars. Airport and transit agency websites could also be used to actively promote transit to the Airport.
**Target Residents (new transit users)**
San Diego residents who are not currently regular transit riders must be targeted with broader aspects of a marketing campaign. These people may be reached through local media such as advertisements on radio, television, and newsprint, along with the Airport website.

**Target Visitors**
Visitors to the San Diego area require a specialized marketing campaign to target specific places and resources that visitors use when traveling or making travel arrangements. The Airport website and the Convention and Visitors Bureau could be utilized to advertise transit options. The marketing campaign should target high density visitor locations (e.g. downtown, Mission Valley) along with hotels and convention venues. In addition, to capture potential riders who may not have made a transportation decision before arriving at the Airport, transit stops on the curbside and transit information in the terminal baggage claim areas should be highly visible. The Voluntary Airport Ambassadors (VAAs) who provide Airport passenger information in the terminals and on the curbsides could be utilized to promote and explain transit options to arriving passengers.

**5.1.3 Existing Route Changes**
This set of improvements focuses on potential changes to existing transit routes that could potentially enhance service and capture a larger market. By making small changes to existing routes additional riders may be attracted.

**Extend Convention Center Flyer Route Hours [Implemented]**
Extending the hours that the Flyer operates along 4th and 5th Avenue in the Gaslamp Quarter and Convention Center area would allow additional hotel visitors and residents to use the Flyer and reduce confusion about the hours of operation. Prior to January 28, 2007, the Flyer did not serve this area after 8:00 pm due to (1) significantly increased nighttime traffic congestion in the Gaslamp Quarter south of Market Street and (2) sensitivity to the concerns of area residents about nighttime noise. As of January 2007, this route has been revised to continuously serve the Gaslamp Quarter and Convention Center and no longer serves 9th or 10th Avenues.

This improvement was implemented in January 2007; however, in January 2008 the route was shortened to Broadway and 4th Avenue and service along 4th and 5th Avenues to and from the Convention Center was discontinued.

**Capture Additional Hotels**
As shown on Figure 5-2, there are additional pockets of hotels that the Flyer could capture by operating a slightly longer route. A route change could capture additional riders but would likely increase the length of the route and thus the passenger travel time.
5. Alternative Transit Improvements

Reduce Flyer Headways (less than 12 minutes)

The Flyer currently operates on 12 minute headways during the day and 15 minutes at night. Reducing those headways by 2 to 5 minutes would improve Flyer level of service by shortening passenger wait times. For instance, after 8:00 pm buses arrive every 15 minutes instead of every 12 minutes; however, many flights arrive after 8:00 pm and many employees work past 8:00. Continuing the 12 minute headways past 8:00 pm would provide an increased level of service to those passengers and employees.

In addition, by reducing the headways from 12 minutes to 10 minutes one additional bus would stop at each station every hour.

Add Coaster Service

Currently, the Coaster operates primarily during commute hours, does not operate after 7:00 pm except on Fridays, provides limited Saturday (4 roundtrips) and no Sunday service. This makes it difficult for an airport passenger to rely on the Coaster to get to and from the Airport. If a passenger residing in Carlsbad has an outbound flight mid-day on Friday and a return flight on Sunday, the Coaster would only allow the passenger to access the Airport on Friday but other arrangements would have to be made to get home on Sunday. Expanding the Coaster schedule would make it more attractive to Airport, as well as non-airport, passengers.

5.1.4 New Routes

This set of improvements focuses on adding new transit routes to supplement the existing Flyer Route. These routes would not replace the existing Flyer service but would try to capture additional passengers and/or reduce courtesy shuttles on the Airport roadways.

Hotel Circle Route

Adding a bus route to serve the strip of hotels along Hotel Circle would reduce or eliminate the individual shuttles that serve those hotels and consolidate trips achieving higher passenger occupancies. To ensure that passenger level of service is not compromised the number of stops along the route should be limited to allow a reasonable travel time between the hotels and the Airport. Hotels, similar to rental car companies, use branded shuttles as moving advertisements and consolidating shuttles would remove perceived advantages so this could be a difficult alternative to implement.

Figure 5-2 shows the cluster of hotels located along Hotel Circle.

Harbor Island Route

Adding a bus route along Harbor Island could eliminate individual shuttles that serve facilities located there and would consolidated trips achieving higher passenger occupancies. In addition to hotels and parking facilities a consolidated bus could provide airport employees access to establishments located along Harbor Island. However, the limited number of hotels on Harbor Island would only provide a nominal reduction in vehicle trips. Figure 5-2 shows the location of hotels along Harbor Island.
5. Alternative Transit Improvements

Combine Hotel Shuttle

In addition to the Hotel Circle and Harbor Island routes discussed previously, consolidating downtown or other individual airport hotel shuttles and providing stops at multiple hotels would reduce the number of shuttles on the airport roadways and achieve higher passenger occupancies in the shuttles. However, hotel shuttles are already high occupancy vehicles serving multiple passengers and the consolidated shuttles are unlikely to attract new passengers. In addition, hotels, similar to rental car companies, use branded shuttles as moving advertisements and consolidating shuttles would remove perceived advantages.

Express Bus to Cruise Ship Terminal

An express bus directly between the cruise ship terminal and the Airport could serve the specific needs of these cruise ship passengers. Cruise ship passengers generally have a lot of luggage and arrive in large groups. Accommodating these passengers takes more time than a city bus on a fixed schedule can afford.

A dedicated express service is currently provided by cruise ship operators and the Airport Authority has plans to provide dedicated parking spaces for these buses at the terminals. In addition, the Flyer (Route 992) makes a stop adjacent to the cruise ship terminal along North Harbor Drive and provides cruise ship passengers access to the Airport and downtown town San Diego.

Express Bus to Transit Station

Express bus service between the Airport and a transit station would improve the connection between regional transit services and the Airport. This service would only stop at the transit station and airport terminals providing a dedicated express airport service. A range of airport/airline specific amenities could also be added such as e-ticket kiosks and baggage check-in/transport. With a dedicated express service, measures could be taken to ensure a more seamless connection between the buses and Trolley and Coaster schedules. Buses could stage at the transit station and wait for arriving trains prior to departing, drivers would be instructed to allow passengers to stow luggage prior to departing, and depending on contractual agreements with drivers they could potentially help passengers with luggage.

Photos of AirBART, the express bus that operates between the Oakland International Airport and the nearest San Francisco Bay Area Rapid Transit (BART) station are shown in Figure 5-3. AirBART provides a direct, non-stop connection between Oakland International Airport and BART’s Oakland Coliseum station with specially equipped and branded buses. AirBART transports approximately 3,900 passengers daily or 8 percent of Oakland International Airport’s passengers for $3.00 a trip.
Figure 5-3

AirBART Low Floor Bus

Coliseum Station

Airport Station

Airport Station

Oakland International Airport - AirBART
5. Alternative Transit Improvements

Potential locations for the transit centers include:

- **Old Town Transit Center**: The Old Town Transit Center serves Coaster, Green and Blue Line Trolley routes and currently operates as a transit center with bus plazas located on either side of the train platforms serving numerous bus routes. The Old Town Station is also located north of the Airport allowing Coaster and Green Line Trolley passengers to transfer to an Airport bound bus or APM before trains pass the Airport, preventing them from doubling back to Airport from Santa Fe Depot. Any improvements proposed at the Old Town Transit Center would include coordination with Old Town San Diego State Historic Park and completion of a parking management plan.

- **Santa Fe Depot**: The Santa Fe Depot serves the current Flyer stop along Broadway and currently provides a connection to Coaster, Amtrak, and Blue and Orange Line Trolley lines. The Flyer operates on a busy street, with multiple stops and a rigid schedule and is, therefore, not able to wait for arriving rail passengers. Express buses could serve the Santa Fe Depot with a stop in front of the station on Kettner Boulevard, adjacent to taxicabs and shuttle loading zones. This would allow buses to stage while waiting for arriving train passengers and allow the express bus schedules to be coordinated with Trolley, Coaster and Amtrak schedules. If selected for further study, any impacts to traffic along Kettner Boulevard would be analyzed before this alternative is recommended.

- **North Airport Area**: An intermodal transit center could be developed in the north area either in conjunction with a future consolidated rental car facility or at the Middletown or Washington Street Trolley Stations. The stop would accommodate trolley passengers; however, as Coaster and Amtrak trains do not currently stop at these stations, either a Coaster and/or Amtrak stop would be added or those passengers would continue to utilize the Flyer at Santa Fe Depot. Walkways could be provided connecting the Middletown and/or Washington Street station to a site on the North Area southwest of Pacific Highway. Ticketing kiosks, baggage check-in services and kiss-and-ride facilities could be provided at this location.
5. Alternative Transit Improvements

The Airport Master Plan and FEIR identify a dedicated transit corridor as part of the Airport Land Use Plan, shown on Figure 5-4, and buses could operate along this corridor to connect passengers between the ITC and south terminal area.

5.2 MID TERM

The following alternatives are potential improvements which could be implemented within the next 3 to 5 years.

5.2.1 Changes to Existing Service

Implement Transit Priority Measures

As described in Section 3, SANDAG, MTS, and NCTD are working together to implement Transit First strategies to enhance bus service throughout the San Diego region. This set of improvements focuses on implementing some of the Transit First strategies to improve travel times on existing and new Airport bus routes. Currently, buses traveling to the Airport face the same traffic as private vehicles and there is no perceived advantage associated with riding a bus over driving a passenger car. Individual transit priority measures are described below; however, these measures work best when implemented together to provide relatively unimpeded traffic flow by allowing transit vehicles traveling in special lanes to move to the front of the intersection queue and quickly through the intersection.

- **Develop dedicated transit lanes:** Developing dedicated transit lanes on roadways around the Airport such as Pacific Highway and North Harbor Drive would allow transit vehicles to avoid road congestion and reduce travel times. These transit lanes could link with the regional HOV lanes planned for I-5 in the vicinity of the Airport, as described under the RTP’s Reasonably Expected Revenue scenario. Additional right-of-way may be required along Pacific Highway and/or North Harbor Drive to accommodate an additional travel lane for transit vehicles.

The Airport Master Plan’s Airport Land Use Plan identifies a transit corridor, depicted on Figure 5-4, around the east end of Airport property. This corridor connects future north area development with the terminals but could also be extended beyond the Airport to serve an express bus from the Old Town Transit Center or other transit center.

- **Implement signal priority:** Implementing transit signal priorities at intersections would allow buses to quickly pass through congested intersections thus reducing travel times on transit routes. These improvements are most effective when implemented with dedicated transit lanes.

- **Implement queue jumper lanes at congested intersections:** Implementing queue jumper lanes along bus routes with congested intersections would allow buses to move to the front of the queue of cars at each intersection.
5. Alternative Transit Improvements

5.2.2 New Routes

Remote Parking/Terminals (Flyaways)
A remote terminal and/or parking lot would capture airline passengers and airport employees before they drive all the way to the Airport by providing a park and ride facility prior to any freeway congestion. Generally, once a passenger has made a commitment to drive a private automobile and has already driven through highly congested areas he/she will continue to the airport, not wanting to make a mode shift close to the airport. By providing remote parking or terminals prior to highly congested areas, it is possible to capture the passenger before the commitment to driving all the way to the airport is made. In order to capture passengers, the bus should take no more time and preferably less time than driving. An express bus with priority traffic treatments traveling on HOV lanes and making no additional stops could make the trip faster than a private vehicle and deliver the passenger directly to the airport terminal. Remote parking lots or terminals could be as simple as a surface parking lot with a bus shelter, or could include a range of terminal facilities such as e-ticket kiosks, vending machines, news/coffee stands, baggage check/transport. Locations for these remote facilities should be at the point that captures the largest number of passengers, where traffic congestion begins to occur and near HOV or Managed Lanes facilities such as the I-15 Managed Lanes and I-805 BRT corridors.

Los Angeles International Airport (LAX) operates a remote terminal in Van Nuys (Van Nuys Flyaway) located 45 minutes from LAX. Buses from the Van Nuys Flyaway transport approximately 2,100 passengers a day. This facility, shown on Figure 5-5, provides airline check-in, baggage check-in, and an express coach bus operating 24-hours a day with 15-minute headways from Van Nuys to the airport between 4:30 am and 9:30 am and 30-minute headways throughout the day. The Van Nuys Flyaway also provides overnight parking for $4.00 a day and the express bus is $4.00 each way. Additional Flyaway service is operated between LAX and Union Station, providing a connection to the regional transit system and Westwood/University of California, Los Angeles (UCLA).

Specific locations for a remote parking or terminal facility should be studied in a feasibility analysis but potential locations include:

- **North County (I-5)**
- **Escondido/Poway (I-15)**
- **Miramar/Mira Mesa**
- **El Cajon/La Mesa (I-8)**
5. Alternative Transit Improvements

5.3 LONG TERM
The following alternatives are potential improvements that could be implemented beyond 5 years. Implementation of these alternatives requires a link to increased transit riderhip. Improvements such as automated people movers could be implemented after bus ridership along a similar route increases to levels that could support rail service (e.g. Oakland International Airport’s proposed BART connector).

5.3.1 New Routes

Consolidated Rental Car Bus (to Consolidated Rental Car Facility)
Consolidating the rental car shuttle trips would reduce or eliminate the individual shuttles running between each rental car agency and the Airport. Headways would have to be very short (less than 5 minutes) to accommodate passengers who are used to demand driven service. However, rental car companies use branded shuttles as moving advertisements and may feel a loss of advantage by putting passengers in a shuttle with competitors. Therefore, implementation of a consolidated rental car route is only recommended with construction of a consolidated rental car facility (CONRAC). As part of a CONRAC a consolidated rental car shuttle can help rental car companies reduce shuttle costs.

Automated People Mover to Consolidated Rental Car Facility
An Automated People Mover (APM) could be built to connect the Consolidated Rental Car Facility to the Airport. The connection with an APM would provide a high passenger level of service by providing a shorter trip time and greater reliability than a bus. However, this is expensive and a cost-benefit analysis should be conducted prior to consideration.

Automated People Mover to Transit Center
When ridership levels are high enough on an express bus from an identified transit center such as Old Town or Santa Fe Depot, an Automated People Mover (APM) could be built to connect the transit center to the Airport. The connection with an APM would provide a high passenger level of service by providing a shorter trip time and greater reliability than a bus. An APM could operate with shorter headways than regional rail vehicles because the system would be dedicated to transporting Airport passengers. However, an APM would require dedicated right-of-way and/or grade separation.

Direct Trolley Connection to Airport Terminals
A direct Trolley connection to the terminals would provide the most seamless transit connection, eliminating a transfer for some Trolley passengers. However, Coaster, Amtrak, bus and Trolley passengers on a line that does not continue to the Airport would still have to transfer to the Trolley line that does serve the Airport. It is also possible that trains would have longer headways than buses serving the same route. Both Portland and San Francisco International Airports have rail lines that connect to the airport. San Francisco BART trains depart the airport every 15 minutes on weekdays and every 20 minutes on weekends. Portland’s Tri-Met Metropolitan Area...
Express (MAX) light rail trains depart the airport every 15 minutes on weekdays and weekends.

Additional opportunities include: realignment of the Trolley tracks between Old Town and Santa Fe Depot to serve proposed Airport development in the North Area along Pacific Highway, development of an intermodal transit center in the North Area connecting to the existing Washington Street Station with pedestrian walkways (as described in the Express Bus to Transit Station discussion, Section 5.1.4), or realignment of the existing Washington Street or Palm Street stations to better serve the North Area and a connection to the terminals.

The Metropolitan Transit Development Board (MTDB) began studying potential light rail/Airport connections in the 1977 Guideway Planning Project - Phase I: Evaluation of Candidate Corridor Alignments Study. In May 1985, for planning purposes, the MTDB Board of Directors adopted two basic alignments, which are known as the Airport/Point Loma Line. One alignment runs along North Harbor Drive connecting with the existing Trolley alignment near Laurel Street and the other crosses Airport property north of the terminal connecting to the Washington Street Trolley station. Both alignments continue past the terminals and terminate at Rosecrans Street and Nimitz Boulevard. Since the study was completed and adopted in 1985, there has been little activity on the design and implementation of the project.

5.4 **RECOMMENDED IMPROVEMENTS**

The following near- and mid-term improvements were recommended for implementation or further study and refinement.

**Existing Service Improvements**

- Low Floor Buses (Implemented)
- Customer Service Training for Drivers
- Install Transit Ticket Machines at Airport
- Free Ride for Arriving Airport Passengers
- Install and Activate Next Arrival Signs
- Terminal / Curbside Transit Information Improvements
- Airport Employee Transit Incentive Program
- Implement Transit Priority Measures

**Marketing Strategies**

- Target Residents (existing transit users)
- Target Residents (new transit users)
- Target Visitors
5. Alternative Transit Improvements

Existing Route Changes
- Extend Convention Center Flyer Route Hours [Implemented]
- Reduce Flyer Headways
- Add Coaster Service

New Routes
- Express Bus to Transit Station
- Remote Parking / Terminals (Flyaway)

Action Plans, identifying detail needed for refinement or implementation, were developed for these projects and are provided in Appendix A. Each Action Plan identifies a primary agency responsible for additional feasibility analysis and other responsible agencies, a high level timeline for implementation, next steps and additional studies required, and a planning level cost estimate identifying both capital improvement and annual operating costs. The potential benefit including any anticipated increases in transit ridership were estimated for each improvement and estimates presented in Appendix A are based on a percentage of San Diego International Airport originating and terminating passengers and are based on professional judgment and experience at similar airports.

Long-term improvements will be explored in greater detail as increases in transit ridership or proposed Airport development warrant but for now no Action Plans have been prepared.

- Consolidated Bus to CONRAC Facility
- APM to CONRAC Facility
- APM to Transit Center
- Trolley connection to Airport Terminal

The following near- and mid-term improvements were not recommended for further development at this time. Although courtesy shuttles could operate with higher occupancies if they were consolidated there these modes already operate at higher occupancies than private vehicles. Also cruise ship operators are currently operating express bus service from the cruise ship terminal to the Airport. These improvements may be explored in greater detail when conditions warrant.

- Capture Additional Hotels/Residences
- New Hotel Circle Route
- New Harbor Island Route
- Express Bus to Cruise Ship Terminal