EVALUATION OF NEAR-TERM AIRPORT CONNECTIVITY CONCEPTS

TECHNICAL MEMORANDUM

SAN DIEGO GRAND CENTRAL STATION & AIRPORT CONNECTIVITY STUDY

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INTRODUCTION

TRANSIT CONNECTIONS

New Bus Service from Old Town Transit Center
Enhanced Bus Service from Downtown/Santa Fe Depot

ITS & PARKING STRATEGIES

Adaptive Traffic Signal Management (ATSM)
Parking Pricing Management

DISTRIBUTING TRAFFIC DEMAND TO AN ALTERNATE LOCATION

Tolling of Airport Driveways
Repositioning Taxis/TNCs to Alternate Drop-Off/Pick-Up Location

TABLES

TABLE 1: DFW AUTOMOBILE TOLL RATES, MAY 2019
TABLE 2: SDIA TRAFFIC PROFILE, APRIL 2019
TABLE 3: EVALUATION OF POTENTIAL INTERIM SITES FOR SECOND LOCATION

FIGURES

FIGURE 1: NEW BUS SERVICE FROM OLD TOWN TRANSIT CENTER
FIGURE 2: ENHANCED BUS SERVICE FROM DOWNTOWN/SANTA FE DEPOT
FIGURE 3: ONTARIO INTERNATIONAL AIRPORT RESERVATION SYSTEM
FIGURE 4: DFW TOLL PLAZA
FIGURE 5: DFW TOLL PLAZAS & SURROUNDING HIGHWAY NETWORK
FIGURE 6: LAX INTERMODAL TRANSPORTATION FACILITY-WEST
FIGURE 7: PHX SKY TRAIN SERVICE TO SECOND LOCATION
FIGURE 8: TNC DIVERSION TO SFO CENTRAL PARKING FACILITY
FIGURE 9: ACCESS TO/FROM SDIA INTERIM EMPLOYEE PARKING LOT
FIGURE 10: TEMPORARY TRANSBAY BUS TERMINAL IN SAN FRANCISCO
1 INTRODUCTION

This memo evaluates potential near-term concepts to enhance regional connectivity to San Diego International Airport (SDIA). Key drivers of airport travel demand include regional growth as well as the Airport Development Plan vision to construct a new, larger Terminal 1. The development and evaluation of connectivity concepts is also informed by the Unified Port of San Diego’s forthcoming Port Master Plan Update and the City of San Diego’s ongoing efforts to manage local traffic and community impacts.

This memo evaluates the following potential near-term concepts:

- **Transit Connections**
  - New bus service from Old Town Transit Center
  - Enhanced bus service from Downtown/Santa Fe Depot
- **Intelligent Transportation Systems (ITS) & Parking Strategies**
  - Adaptive traffic signal management at airport and surrounding roadways
  - Parking pricing management
- **Distributing Traffic Demand to an Alternate Location**
  - Tolling of airport driveways
  - Repositioning taxis/transportation network companies (TNCs) to an alternate drop-off/pick-up location
2 TRANSIT CONNECTIONS

2.1 NEW BUS SERVICE FROM OLD TOWN TRANSIT CENTER

A potential near-term improvement is a new bus route connecting Old Town Transit Center to the SDIA terminals, as shown in Figure 1. This service is currently under development by the San Diego County Regional Airport Authority (SDCRAA) in partnership with the San Diego Metropolitan Transit System (MTS) and planned to open in 2020.

Figure 1: New Bus Service from Old Town Transit Center

Source: WSP, Google

ALIGNMENT OPTIONS

Prior to the completion of the ADP's planned repurposing of Laurel Street as an airport access road, this new service could follow two potential alignments in the existing roadway network:

- The route could follow Pacific Highway, Laurel Street and Harbor Drive. The intersection of Pacific Highway and Laurel Street presents an operational challenge. This intersection has high traffic volumes. It may not be possible to implement transit signal priority measures at this intersection. The route could experience delay and unreliable trip time.
— Alternatively, the route could follow Admiral Boland Way and the existing on-airport road currently used by Rental Car Center shuttle buses. However, route frequencies could make sharing this roadway infeasible.

Upon completion of the planned repurposing of Laurel Street as an airport access road, the route would follow Pacific Highway and then use this new roadway.

To be as time-competitive as possible, the route would employ operational improvements at intersections (e.g. transit signal priority, queue jumps) and dedicated right-of-way where feasible.

**SERVICE, FARES, PARKING & VEHICLES**

**Service Frequency:** The service should be as frequent as possible to serve the time-sensitive needs of airport travelers and employees, with a preferred frequency of 10 minutes or less during airport demand peaks and no greater than 15 minutes throughout the day. While still in development, the anticipated service frequency for the new route is every 10 to 15 minutes.

**Hours of Operation:** The regional transit system’s hours of service—roughly 5 a.m. to midnight—begin too late to capture SDIA’s early-morning demand peak, which requires many passengers and employees to arrive at the airport before 5 a.m. Similarly, with SDIA operations often extending beyond 11 p.m., many passengers and employees require transportation after midnight. This limited span of service discourages the use of transit for airport access.

Extended service hours must be addressed at the systemwide level to be effective. Ideally, the transit system would run 24 hours per day like in other large cities, with less-frequent “owl” service during overnight hours. The most important routes for increased hours of operation are the Trolley lines; Rapid routes 215, 225, and 235; and local bus routes 3, 4, 6, 11, and 901. (On the Trolley Blue Line south of Downtown, bus service will need to substitute for rail service due to the required temporal separation with overnight freight rail operations.) Finally, at least one southbound COASTER commuter train should arrive at Old Town Transit Center prior to 5:15 a.m.

If 24-hour operations are infeasible, the next-highest priority is serving SDIA’s early-morning peak period with these key routes, which would require transit operations to begin around 3 a.m.

**Fares:** SDCRAA and MTS are evaluating the potential for this route to be a free service, to encourage use by SDIA passengers and employees. However, this is likely to induce substantial demand, which could quickly overwhelm the existing supply of free parking at Old Town Transit Center. A parking management plan will be required to evaluate parking needs at this critical regional transit hub. Potential strategies to limit impacts to parking supply include:

— Strictly enforce current MTS policy limiting station parking to 24 hours. This timeframe is too short for most airport travelers.

— Consider parking fees at Old Town Transit Center. This will discourage use of the airport shuttle by passengers driving to the station, rather than biking, walking, or transferring from other transit modes. However, this may also discourage other (non-airport) transit riders who choose to access the transit system by driving to Old Town Transit Center.

— Implement a standard local bus fare ($2.25) or other discounted fare on the airport shuttle. Like parking fees, this will discourage some drivers from using the airport shuttle, but it may discourage other riders as well.
**Vehicles:** All airport routes, including this as well as the proposed enhanced route from Downtown, could employ new or rebranded vehicles to help promote the service and enhance the passenger experience. If possible, the vehicles should be low-emission or zero emission to limit potential impacts from GHG and pollutants.

**SUMMARY OF OPPORTUNITIES**
- Improves airport access from regional transit system, Midway-Pacific Highway and Old Town San Diego communities.
- Provides non-auto, low or zero emission alternative to accessing SDIA.

**SUMMARY OF CONSTRAINTS**
- Potential congestion-related delays at Pacific Highway/Laurel Street intersection, along Laurel Street and along Harbor Drive.
- Free service is likely to induce substantial demand, straining the parking supply at Old Town Transit Center. A parking management plan including stronger policies and enforcement measures would likely be needed.
- Regional transit system hours of operation do not accommodate all employee & passenger schedules, particularly the early-morning peak.
2.2 ENHANCED BUS SERVICE FROM DOWNTOWN/SANTA FE DEPOT

Near-term enhancements to existing MTS Route 992, shown in Figure 2, will improve access to the SDIA from Downtown San Diego including connectivity to existing Trolley lines, Rapid services, and COASTER and Amtrak rail services at Santa Fe Depot. These enhancements were included in the Port of San Diego’s North Harbor Drive Mobility & Access Study.

Figure 2: Enhanced Bus Service from Downtown/Santa Fe Depot

Source: WSP, Google

ALIGNMENT OPTIONS

Like the existing Route 992, the enhanced service to SDIA would use Broadway and Harbor Drive. In the near term, this would follow the current alignment in mixed traffic on Harbor Drive. In the long term, the route would run in transit-only lanes envisioned in the Port Master Plan Update—part of a larger effort to transform Harbor Drive into the “next great waterfront” street, in conjunction with the ADP’s repurposing of Laurel Street as an airport access road.

To be as time-competitive as possible, this enhanced service to SDIA also would employ operational improvements at intersections (e.g. transit signal priority, queue jumps).
EVALUATION OF NEAR-TERM AIRPORT CONNECTIVITY CONCEPTS
SAN DIEGO GRAND CENTRAL STATION & AIRPORT CONNECTIVITY STUDY

SERVICE, FARES & VEHICLES

Service Frequency: Frequency is the main constraint. The service should be as frequent as possible to serve the time-sensitive needs of airport travelers and employees, with a preferred frequency of 10 minutes or less during airport demand peaks and no greater than 15 minutes throughout the day. Route 992 currently operates at 15-20-minute headways in the morning, 15-minute headways midday and in the afternoon, and 30 minutes in the evening. While still in development by MTS, the anticipated service frequency for the enhanced route is every 10 to 15 minutes in each direction.

Hours of Operation: The regional transit system’s hours of service—roughly 5 a.m. to midnight—begin too late to capture SDIA’s early-morning demand peak, which requires many passengers and employees to arrive at the airport before 5 a.m. Similarly, with SDIA operations often extending beyond 11 p.m., many passengers and employees require transportation after midnight. This limited span of service discourages the use of transit for airport access.

Extended service hours must be addressed at the systemwide level to be effective. Ideally, the transit system would run 24 hours per day like in other large cities, with less-frequent “owl” service during overnight hours. The most important routes for increased hours of operation are the Trolley lines; Rapid routes 215, 225, and 235; and local bus routes 3, 4, 6, 11, and 901. (On the Trolley Blue Line south of Downtown, bus service will need to substitute for rail service due to the required temporal separation with overnight freight rail operations.) Finally, at least one southbound COASTER commuter train should arrive at Old Town Transit Center prior to 5:15 a.m.

If 24-hour operations are infeasible, the next-highest priority is serving SDIA’s early-morning peak period with these key routes, which would require transit operations to begin around 3 a.m.

Fares: Although the existing Route 992 is part of the regular MTS fare structure, MTS should evaluate the potential for this enhanced route to be a free service, to encourage use by SDIA passengers and employees. If not deemed viable, fares would be consistent with the rest of the MTS system.

Vehicles: All airport routes, including this as well as the proposed new transit route from Old Town Transit Center, could employ new or rebranded vehicles to help promote the service and enhance the passenger experience. If possible, the vehicles should be low-emission or zero emission to limit potential impacts from GHG and pollutants.

SUMMARY OF OPPORTUNITIES

- Improves airport access from Downtown.
- Provides improved non-auto, low or zero emission alternative to accessing SDIA.

SUMMARY OF CONSTRAINTS

- High traffic volumes at Grape Street, Hawthorn Street, Laurel Street and the SDIA driveways may limit the feasibility of transit priority measures.
- Regional transit system hours of operation do not accommodate all employee & passenger schedules, particularly the early-morning peak.
3 ITS & PARKING STRATEGIES

3.1 ADAPTIVE TRAFFIC SIGNAL MANAGEMENT (ATSM)

This concept would implement adaptive traffic signal management (ATSM) on roadways leading to and from SDIA to improve the efficiency of traffic operations and reduce travel times.

ATSM is a managed system of enhanced traffic signals that adapt their timing in real-time to the changing conditions of congestion. This real-time adjustment of signal timing allows for improved operations and a reduction in travel time through the managed area, including the number of stops vehicles need to make along a given corridor. Real-time management would focus on the overlapping peak periods for both SDIA and the regional transportation system.

The City of San Diego has been actively implementing ATSM along some of its most congested corridors. Currently, adaptive traffic signals are installed along Friars Road, La Jolla Parkway, Lusk Boulevard, Mira Mesa Boulevard, Vista Sorrento Parkway, and Rosecrans Street. Generally, they have yielded very positive results in reducing travel times and increasing traffic efficiency along these corridors. The City has plans to continue this implementation in other key corridors.

Closer to SDIA, the City also has installed advanced traffic cameras that may be able to improve operations along Harbor Drive, such as adjusting the timing for left turns based on the volume of traffic coming out of the airport driveways.

SUMMARY OF OPPORTUNITIES

- Increases roadway capacity, efficiency, and throughput, and potentially reduces congestion at key intersections and chokepoints.
- The City of San Diego has already implemented ATSM and similar technology along key corridors, which provides a local model for implementation and operation.

SUMMARY OF CONSTRAINTS

- Interagency agreements will be required to implement ATSM near SDIA, to ensure the planned improvements align with the infrastructure visions of the ADP, Port Master Plan Update, and other key plans and policies.
- Coordination with Caltrans will be required to ensure integration with freeway ramp signals.
3.2 PARKING PRICING MANAGEMENT

Airport parking is a crucial part of the customer experience and an essential source of revenue in airport budgets. New technology has enabled significant improvements—both to airports’ ability to provide and manage parking, as well as consumers’ ability to find and pay for it.

DYNAMIC PRICING

Dynamic pricing of parking—like dynamic tolling of roadways—adjusts the facility price in real time based on demand levels. This has multiple potential benefits, including reduced congestion during peak periods, optimization of parking resources (such as selling excess capacity at a discount during off-peak periods), and potential increases in revenue.

Several airports have begun using dynamic pricing for prepaid parking reservations made online, including Dallas-Fort Worth International Airport (DFW) and Ontario International Airport (Figure 3).

However, airports have thus far shied away from dynamic pricing for drive-up customers, instead relying on more traditional fixed-rate pricing. The concept is under discussion at many locations and likely to be implemented in the coming years.

EFFECTS OF OFF-AIRPORT PRIVATE PARKING

For parking pricing management to reduce congestion around an airport, the pricing scheme must be in effect across the entire local market. Any nearby parking areas that do not follow the dynamic pricing scheme—most notably, by undercutting prices during peak times—will distort the economic incentives that drive congestion reduction. DFW, for example, controls all parking facilities near its terminals due to the airport’s large footprint and relatively isolated setting.

This is a key constraint for SDIA, with its urban setting surrounded by many private parking lots that set prices independently. SDCRAA, the City of San Diego, and other partner agencies do not have authority to manage the pricing of these facilities, many of which are close enough to the terminals to be competitive alternatives to on-airport parking.

This constraint likely makes parking pricing management infeasible as a method to reduce traffic congestion around SDIA. Successful implementation would require most or all private operators to join the dynamic pricing scheme, via complex cooperative agreements that likely would require revenue-sharing and other constraining provisions. One incentive that could entice participants—if SDIA implements the tolling of airport driveways and creation of a new drop-off/pick-up location (Section 4)—is permission for these parking shuttles to access the SDIA terminals directly, rather than being routed to the alternate location.
SUMMARY OF OPPORTUNITIES

- Improved passenger experience at terminals through reduced congestion, real-time information, and convenient payment options.
- Less congestion and improved traffic flow in airport roadways and parking facilities.
- Optimization of airport parking resources based on market demand.
- Potential increases in parking revenue.

SUMMARY OF CONSTRAINTS

- Absent complex special agreements, the many private parking facilities near SDIA would not be part of the dynamic pricing system, which would undermine the incentives of dynamic pricing and decrease the potential for congestion reduction.
- Potential for higher cost of parking at certain times based on market conditions.
- Potential political opposition to changes to parking rates. Benchmark analysis required to assess rates elsewhere in the country and local market conditions before determining what may be feasible and acceptable at SDIA.
4 DISTRIBUTING TRAFFIC DEMAND TO AN ALTERNATE LOCATION

The creation of a high-frequency, free transit connection to the SDIA terminals—an automated people mover (APM), Trolley extension, or frequent bus service—also creates the option to implement two key policy tools to further manage traffic flows:

- Tolling of airport driveways
- Repositioning taxis/TNCs to an alternate drop-off/pick-up location

**Key Assumption**: Any tolling or vehicle diversion at SDIA would require a free, alternative transit option for passengers to access the terminals.

4.1 TOLLING OF AIRPORT DRIVEWAYS

Tolling vehicles for airport access can help manage congestion at the terminals and parking areas. Like highway managed lanes, the toll amount could vary by hour, day, or season to control congestion and optimize vehicle throughput.

**CASE STUDY: UNIVERSAL TOLLING AT DALLAS/FORT WORTH**

DFW is the only major U.S. airport with mandatory tolls for automobile access. The airport is surrounded by several regional highways, with a four-lane airport access highway—International Parkway—bisecting the airport complex from north to south. Plazas on each end of International Parkway require all traffic entering the airport complex to pay the toll, either via paper ticket or electronic transponder (Figure 4, Figure 5).

Unlike other tolled highways in the Dallas/Fort Worth area, which are managed by a regional agency, the tolling of International Parkway is managed by the airport’s board of directors. (However, DFW uses the same TollTag transponders and payment system as the rest of the regional system, providing convenience to consumers.) The toll revenues, estimated at $164 million in fiscal year 2018, help fund DFW’s operating budget and capital improvements.

*Figure 4: DFW Toll Plaza*

![DFW Toll Plaza](Source: DFW)
DFW toll rates vary based on the time each vehicle spends in the airport complex, regardless of whether the vehicle is parking, transferring passengers, or just passing through (Table 1). This broad cordon pricing reduces airport congestion, creates simplicity for drivers, and increases efficiency in terminal parking structures.

### Table 1: DFW Automobile Toll Rates, May 2019

<table>
<thead>
<tr>
<th>Time in Airport Complex</th>
<th>Toll</th>
<th>Time in Airport Complex</th>
<th>Toll</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 8 mins</td>
<td>$4</td>
<td>2 – 4 hours</td>
<td>$9</td>
</tr>
<tr>
<td>8 – 30 mins</td>
<td>$2</td>
<td>4 – 6 hours</td>
<td>$10</td>
</tr>
<tr>
<td>30 mins – 2 hours</td>
<td>$3</td>
<td>2 – 4 hours</td>
<td>$24</td>
</tr>
</tbody>
</table>

The initial higher price—$4 for 0-8 minutes, which then drops to $2 for 8-30 minutes—is intended to discourage non-airport traffic from using International Parkway as a “cut-through” link in the regional highway system. This need to limit “cut-through” traffic is mainly the result of International Parkway having two links to the highway network, rather than the more typical arrangement of a spur highway terminating at the airport.

Customers may also prepay online for parking at DFW’s terminals and airport-managed remote lots, a service that uses dynamic pricing to optimize capacity (Section 3.2).
CASE STUDIES: TOLLING PLUS FREE ALTERNATIVE ROADWAYS

Many other airports are served by tolled roadways as optional routes, which generally provide more direct and/or less-congested access than free alternative roads. Some examples include:

**George Bush Intercontinental Airport (Houston):** The Hardy Toll Road provides direct access to Houston’s primary airport. Motorists can avoid the toll by using a combination of freeways (including I-45 from the west or I-69 from the east) and local arterials.

**Orlando International Airport:** Florida State Road 528 is a tolled highway and primary airport access route, providing connections to central Orlando and tourist resort areas. Motorists can avoid the toll by using a combination of freeways (including State Road 417) and local arterials.

**Denver International Airport:** Toll highway E-470 serves as a “beltway” for the eastern Denver area, passing by the airport’s western border with a large interchange at Peña Boulevard, the free airport access highway. Motorists can avoid the toll by using a combination of freeways (including I-70 and Peña Boulevard) and local arterials.

**Washington-Dulles International Airport:** Virginia State Route (SR) 267 consists of two end-to-end toll roads that converge at the airport entrance:

- Extending to the east toward Washington, D.C., SR 267 contains both free and tolled facilities: the Dulles Access Road provides a free connection to the airport, while the Dulles Toll Road contains local exits and is intended to serve non-airport traffic.
- Extending to the west, SR 267 becomes the privately-owned Dulles Greenway, a tolled highway providing access to and from western suburbs. Motorists can avoid the toll by using a combination of freeways (including SR 28) and local arterials.

**SUMMARY OF OPPORTUNITIES**

- Decreased traffic congestion at the terminals, airport roadways, and parking areas.
- Improved customer experience from free-flow travel, uncongested curbs, and elimination of parking queues.
- Ability to dynamically manage toll rates to optimize operations under a wide range of demand scenarios.
- New revenue stream to fund airport operations or infrastructure improvements.

**SUMMARY OF CONSTRAINTS**

- Opposition to tolling option.
- Desire to pair with a free, fast transit alternative for passenger access to the terminals.
4.2 REPOSITIONING TAXIS/TNCS TO ALTERNATE DROP-OFF/PICK-UP LOCATION

Providing a second location for vehicle drop-offs and pick-ups, if accompanied by a fast and convenient transit connection to the terminals, can improve passenger mobility and help to relieve airport congestion. Many airports around the nation and world—including Los Angeles and Phoenix, discussed below—are connecting their APMs to these new sites to increase pick-up/drop-off capacity and provide options to avoid congestion.

Airport policies can further increase use of these alternate drop-off/pick-up locations. Beyond tolling the airport driveways (Section 4.1), airport authorities also can reposition taxi and/or TNC operations to these alternate locations. In San Francisco, also discussed below, TNC operations are being moved from the terminal curbs to a central parking facility to address severe congestion.

CASE STUDIES: LOS ANGELES, PHOENIX, SAN FRANCISCO

Los Angeles International Airport (LAX): The LAX Intermodal Transportation Facility-West, currently under construction, is a 4,700-stall parking structure that will provide a new drop-off/pick-up location with a direct connection to the airport’s new APM, also under construction (Figure 6). It will provide an airport-like experience with wide curbs, parking, and passenger amenities.

Figure 6: LAX Intermodal Transportation Facility-West

Source: Los Angeles World Airports
Phoenix Sky Harbor (PHX): PHX provides a second drop-off/pick-up location at the terminus of its free Sky Train APM (Figure 7). The facility also connects to a regional light rail station operated by Valley Metro Rail and contains a “cell phone” parking lot.

Figure 7: PHX Sky Train Service to Second Location

San Francisco International Airport (SFO): Facing extreme congestion from the popularity of TNCs, SFO recently repositioned TNC operations to its central parking facility (Figure 8). This policy, which went into effect on June 3, 2019, is part of the airport’s goal to divert at least 45% of TNC activity away from terminal roadways to keep average speeds around 15 mph.

Figure 8: TNC Diversion to SFO Central Parking Facility
PHASED POLICY IMPLEMENTATION

At SDIA, 25% of existing traffic is generated by taxis and TNCs (Table 2). This provides flexibility for potential phased implementation of vehicle diversion policies as traffic congestion reaches certain thresholds.

Table 2: SDIA Traffic Profile, April 2019

<table>
<thead>
<tr>
<th>Vehicle Type</th>
<th>Share of Traffic</th>
<th>Special Considerations for Diversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxis</td>
<td>9%</td>
<td>Likely requires relocation of taxi staging area (3-5 acres)</td>
</tr>
<tr>
<td>TNCs</td>
<td>16%</td>
<td></td>
</tr>
<tr>
<td>Private Vehicles</td>
<td>36%</td>
<td>Not necessary in near term</td>
</tr>
</tbody>
</table>

Source: SDCRAA

SUMMARY OF OPPORTUNITIES

— Decreased traffic congestion at terminals, airport roadways, and curbs.
— Improved customer experience through uncongested roadways and curbs plus a new option for a fast, free transit connection.
— Increased development opportunities on SDIA property resulting from the removal of taxi/TNC curb space at the terminals, as well as the potential relocations of the existing taxi staging area and “cell phone” waiting lot.

SUMMARY OF CONSTRAINTS

— Potential for increased end-to-end passenger travel time.
— Opposition due to the potential for increased travel times and changes to parking.
POTENTIAL INTERIM SITES FOR DROP-OFF/PICK-UP LOCATION

Table 3 summarizes the evaluation of five potential interim sites for the diversion of airport traffic.

**Table 3: Evaluation of Potential Interim Sites for Second Location**

<table>
<thead>
<tr>
<th>Location</th>
<th>Site Opportunity</th>
<th>Access</th>
<th>Interim Transit Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Old Town Transit Center</strong></td>
<td>Too constrained in land area. Not feasible.</td>
<td>Poor access due to capacity constraints at existing interchanges (Sea World Drive/Tecolote Road, Rosecrans Street, Taylor Street, Old Town Avenue) and congestion on local roads.</td>
<td>New bus service from Old Town Transit Center (Section 2.1).</td>
</tr>
<tr>
<td><strong>SPAWAR/Naval Base Point Loma Old Town Complex</strong></td>
<td>Several potential locations on SPAWAR parcels potentially reserving land on SPAWAR for ultimate Grand Central Station. High land cost.</td>
<td>Poor access due to capacity constraints at existing interchanges (Sea World Drive/Tecolote Road, Rosecrans Street, Taylor Street, Old Town Avenue) and congestion on local roads. Future development may include improvements.</td>
<td>Potentially extend Rental Car Center bus service with dedicated lanes on Pacific Highway between SPAWAR and Washington Street/Admiral Boland Way.</td>
</tr>
<tr>
<td><strong>SDIA Interim Employee Parking Lot</strong></td>
<td>Provides parking for SDIA employees on an interim basis. Would require solution to replace current employee parking on a one-to-one basis. Potential to replace on structure at site or nearby surface lots in ITC area.</td>
<td>Good existing access. Several existing access points serve the site well and allow for traffic distribution onto multiple freeway ramps, including Washington Street and Pacific Highway. Access may be easily improved by minor ramp and intersection improvements.</td>
<td>Increase Rental Car Center bus service via on-airport road.</td>
</tr>
<tr>
<td><strong>Intermodal Transportation Center (ITC) Site</strong></td>
<td>ITC site physically suitable but would need to be purchased or leased for interim use.</td>
<td>Fair existing access. Not direct. One-way streets make access more challenging, but several existing access points reasonably serve the site.</td>
<td>Increase Rental Car Center bus service via on-airport road. May require pedestrian bridge over Pacific Highway extending passenger walk to Rental Car Center bus stop, adding distance and trip time.</td>
</tr>
<tr>
<td><strong>Santa Fe Depot</strong></td>
<td>The Depot itself lacks the acreage to accommodate the needed facilities. The adjacent lot is very small with a high cost. Not feasible.</td>
<td>Poor existing access due to constrained Downtown interchanges and local roadways.</td>
<td>Enhanced bus; however, this would route traffic to SDIA via either Harbor Drive or Pacific Hwy/Laurel Street, requiring transit vehicles to cross airport traffic using the repurposed Laurel Street airport-only access road.</td>
</tr>
</tbody>
</table>
SDIA INTERIM EMPLOYEE PARKING LOT

The most viable option for a second location in the near term is the SDIA Interim Employee Parking Lot site. It is shown in Figure 9 with potential access routes from I-5.

Site Opportunities:

- Best physical opportunity containing approximately 17 acres, which is sufficient to accept significant traffic redirection from Harbor Drive and Laurel Street.
- Land is already in public ownership.
- Proximity to Terminal 1, Terminal 2 and Rental Car Center.
- Proximity to existing Rental Car Center bus service utilizing on-airport road to reduce trip duration.
- Good existing access to freeway system, with multiple points of distribution both north and south.

Site Constraints:

- Temporary relocation of employee parking while new structure is being built
- Two new roadway ramps required, increasing cost

Figure 9: Access to/from SDIA Interim Employee Parking Lot

Source: WSP, Google
OPTIMIZING SITE FOR INTERIM OPERATIONS

This concept could be developed in a similar fashion as the Temporary Terminal in San Francisco (Figure 10). The Temporary Terminal provided temporary bus terminal facilities during the construction of the new Transbay Transit Center, with enough space for eight transit providers to provide service to more than 20,000 people daily over the course of eight years.

Although temporary in nature, the temporary facility was thoughtfully designed and landscaped to be an attractive and welcoming gateway to San Francisco. The Temporary Terminal’s white canopies and clusters of palm trees provide an inviting and refreshing environment in the heart of the Transit Center District neighborhood. It also has interwoven beautiful, landscaped areas with necessary components of a modern transit facility bus terminal, such as real-time transit information signs and fare vending machines. Similar design treatments could be applied to the off-site taxi/TNC location to make it an efficient yet inviting location for passengers.

Figure 10: Temporary Transbay Bus Terminal in San Francisco

Source: Fehr & Peers