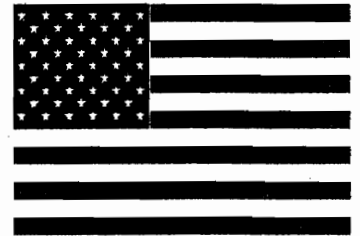
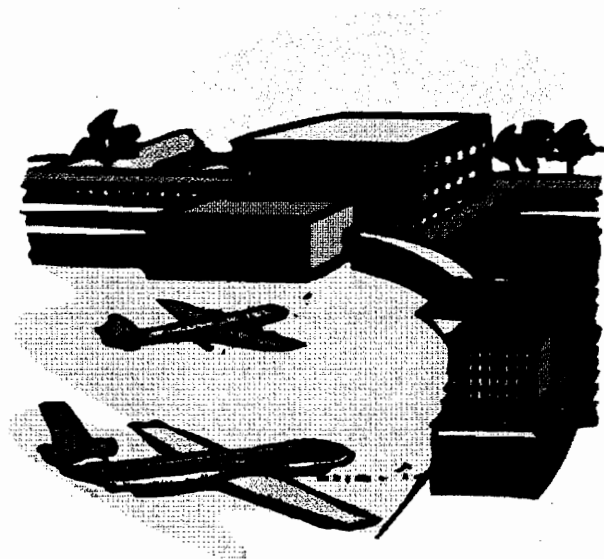




South San Diego County
Economic Development Council
*The Affordable California.
Without Compromise.*

SOUTH COUNTY ECONOMIC DEVELOPMENT COUNCIL

CROSSBORDER AIR PASSENGER TERMINAL FACILITY



PHASE 1 REPORT
OCTOBER, 1998

PREPARED BY:



Profile Research & Marketing

Study funded by City of San Diego

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BACKGROUND-

The Northern Baja California/Southern California region consists of two major cities, Tijuana and San Diego sharing a climate and workforce conducive to economic cooperation in a competitive global marketplace. The region's strong manufacturing base and agricultural industry have placed the San Diego/Tijuana region in a strong position to capitalize on expected growth in product demand and export opportunities. Opportunities that can only be seized if the region is prepared to compete.

A joint San Diego/Tijuana effort through a permanent crossborder air terminal connecting directly with the airport would immediately create a highly competitive air transport network from Lindbergh Field to Rodriguez Field. Combining cargo and general aviation operations at Brown Field, 13 million annual passengers from Lindbergh Field, and 3 million from Tijuana will create a passenger volume equivalent to Denver and Mexico City. With this three-airport network possessing ample land area, route and slot capacity for the next century, passengers and cargo will be able to easily connect between domestic and international and general aviation traffic within the U.S., Mexico and the Pacific Rim. The value of the aviation network would be further enhanced by the availability of undeveloped land where a trade center with communications, manufacturing and financial sectors could be directly tied into the Otay Mesa/Tijuana crossborder facility. The benefits to both countries would be measured by the development opportunities that would emerge.

Recognizing the need to examine viable options to satisfy the region's long-term air carrier needs, the South San Diego County Economic Development Council (SCEDC), with the support of the City of San Diego initiated this study. The intent, was to determine the feasibility and potential of linking the County of San Diego with Tijuana's Rodriguez Field. SCEDC's direction to the consultant was clear and consistent;

- Determine the feasibility of improved access to Tijuana's Rodriguez Field for San Diego-based air passengers.
- Ensure that any proposed improvements serve as a complement rather than a competitor to existing county airport facilities.

Methodology: The study team reviewed numerous documents and existing studies to obtain information on airport facilities, operation trends and standards.

Surveys were conducted at Rodriguez Field to determine the level of U.S. based passengers and vehicles that could use a crossborder terminal and to determine general facility needs for a crossborder terminal. Market research surveys were created, distributed and collected to determine industry perception of Rodriguez Field and possible changes in passenger attitudes with easier access to the airport.

Recommendations:

Phase I

1. Accept final study and direct staff to initiate Phase II activities.

Phase II

2. Refine passenger and volume estimates for San Diego-based passengers through additional survey work at Rodriguez Field;
3. Conduct an outreach program to inform San Diego/Tijuana government, community and business organizations of the findings contained in this report;
4. Identify support for the concept among state and federal agencies (U.S./Mexico);
5. Identify qualified bidders competing for the Pacific Package of airports divestiture and determine, if any, interest in a private and/or public venture to move the concept further.

Study Findings:

- A crossborder terminal would reduce vehicular congestion at both San Ysidro and Otay Mesa border crossings by as much as 3%.
- The Republic of Mexico's unused allocation of international routes and landing slots at key international destinations, places the San Diego/Tijuana region in an enviable position to move passengers and cargo efficiently and inexpensively with relatively minor investments.
- Direct foreign flights would increase the economic activity along the Otay Mesa/Tijuana corridor and extend the operational life of Lindbergh Field.

- TIJ's existing 09-27 single runway was constructed in 1965 and with the exception of a 1,640 foot extension in the mid-90's has remained unchanged and currently operates at a maximum of 22 operations per hour.
- The airport operates only one daily international flight to Los Angeles, but maintains unutilized routes and landing slots to major destinations in Asia and Europe.
- Annually, the airport services 3.2 Million Annual Passengers (MAP) and 41,428 commercial and private operations. Aeropuertos Servicios y Auxiliares (ASA) projects that within the next five years, domestic demand will grow by 5% per year and reach 4.1 million by the year 2003. Using modest demand forecast growth assumptions, improvements to the current terminal, gates and surface transportation network must be accomplished to accommodate expected demand beyond 2003.
- ASA is now considering an expansion that would increase the number of gates from 14 to 24 to accommodate 15 MAP.
- Surveys conducted at the airport estimate that 1.09 MAP originate from the Southern California region.
- Based on estimated traffic and future demand, a permanent crossborder air terminal facility could be constructed on Otay Mesa to provide easy pedestrian access to Rodriguez Field. SR 905 and 125 which are both scheduled for completion in the next several years will provide adequate convenient ground access to the entire region.
- The 55,000 square foot facility on Otay Mesa could house ticketing services, office space and concessions as well as provide waiting space for travelers and visitors which will provide business and job creation opportunities on both sides of the border.
- Federal Inspection Facilities would be required to house six Federal agencies (INS, Customs, Public Health Services, Animal and Plant Inspection and Fish and Wildlife). These facilities could be constructed, operated and maintained through reallocation of existing resources or through contributions of a private terminal operator.

- 70% of San Diego-based travel agencies surveyed believe that a crossborder air terminal would increase U.S.-based traffic at Rodriguez Field.
- Mexico's current airport privatization process will have a profound impact on the future look of Rodriguez Field. The process is now underway to divest the Southeast package, with the Pacific package, including Tijuana, to begin in February, 1999. Private operators will be responsible for landside operations and future expansion.

Reference: P&D Technologies Transborder Airport Report, 1993; Aeropuerto Y Servicios Auxiliares Rodriguez Master Plan, 1991; Estadisticas del Movimiento Aeroportuario, ASA 1998.

HISTORICAL BACKGROUND- TIJUANA AIRPORT Section II

Information for this section was obtained from ASA documents and airport staff at Tijuana's airport.

Tijuana's first airport was located adjacent to the Agua Caliente casino, which in its time was one of the most exclusive gaming houses in the world. With the prohibition of gaming in the late 1930's, the airport's location no longer suited the needs of a rapidly growing city, which from 1940 to 1950 more than tripled in population, (21,977 to 65,364).

In the late 1940's, General Abeldardo L. Rodriguez International Airport began operations with a runway orientation of 10-28. In 1965, with the introduction of the first jets, a new runway with a 09-27 orientation was built and shortly after, the current terminal configuration was developed. In 1983, as Tijuana became Mexico's fastest growing city, both the terminal and parking areas were expanded to meet increased demand. In 1987, air traffic suffered a sharp decline due to the suspension of service by Aeromexico, a major carrier at the Tijuana airport. With the restructuring of Aeromexico in 1988, service and traffic increased and the Tijuana airport experienced congestion with a shortage of both terminal and parking facilities. For that reason, in 1990, Mexico's first two private "co-investments" were initiated to expand both the departure lounges and parking area. Construction of both projects were completed in 1991.

With the financial crisis that began in December, 1994, traffic at the Tijuana airport declined, but as the economy began to recover in late 1996, traffic once again began to reach record levels. Currently, annual passenger traffic is estimated at 3.2 million.

DEMAND PROFILE

The government of Mexico started computing statistics on passenger traffic in 1967. For the past 31 years, growth in passenger volume has averaged 11 percent. Three key factors appear to influence growth:

- 1) Migration
- 2) Destination
- 3) Cost

Attracted by opportunities within California and Tijuana, each year millions migrate. As many have chosen to stay, this created a natural demand for all types of mass transit. Today, over half of Tijuana's population of 1.3 million has their origins and family ties in states such as Jalisco, Sinaloa, Michoacan, Guanajuato, and Mexico City. The large Mexican-American population in California has also become a major source of passengers for the Tijuana airport. Annually, California's farm industry also attracts several hundred thousands migrants from small towns and villages from which there is no direct service to or from U.S. international or metropolitan airports. Consequently, regular bus routes have been established between the Tijuana airport and all major agricultural and Hispanic communities throughout California.

Another factor that has attracted traffic to the Tijuana airport, is cost. Though tourist and promotional fares may be less expensive from U.S. international airports to major Mexican cities, fares for short notice or non-tourist destinations between the U.S. and interior destinations states like Michoacan and Guanajuato, are typically cost prohibitive and require multiple connections. For this reason, many opt to travel by bus from as far as Sacramento to connect with domestic flights at Tijuana. It is also estimated that as much as 70 percent of all departing passengers at Tijuana, purchase their tickets on the day of departure which on a U.S. carrier is not possible without a major premium.

That in mind, the sphere of influence of the Tijuana airport goes well beyond the San Diego/Tijuana border and is conservatively estimated to be within a 100 mile radius.

ROUTES-

Currently Tijuana has direct domestic flights to:

- Guadalajara
- Mexico City
- Monterrey
- Mazatlan
- Puerto Vallarta
- La Paz
- Leon (Bajio)
- Culiacan
- Colima
- Zacatecas
- Aguascalientes
- Hermosillo

Destinations with interconnecting flights:

- Cancun
- Cuernavaca
- Chihuahua
- Ciudad Obregon
- Durango
- Los Mochis
- Manzanillo
- Tampico
- Tepic
- San Luis Potosi
- Uruapan
- Acapulco
- Puebla

The only regular commercial international flight is to Los Angeles, but over the past two years, there have been direct cargo charter flights between Tijuana and London with wide bodied cargo Antonov jets carrying 110 tons of grapes for brandy production in Europe. Scheduled charter operations between Tijuana and Japan, Korea, and the Middle East have been discussed with major airlines, but have not been developed.

STATISTICS-

Basic data gathering on passengers and flights began in 1967. Over the past 31 years there has been a consistent growth pattern.

In 1967, Tijuana serviced 117,136 annual passengers with 13,914 aircraft operations which equated to 321 daily passengers with 39 operations. By 1972, the annual passenger volume doubled to 238,775 with 23,056 operations. As larger aircraft were introduced within the Mexican commercial airline fleet, annual passenger volume almost doubled reaching 549,317 with 23,315 operations for 1,505 daily passengers on 64 operations in 1977. With the economic crisis in 1982, growth in passenger traffic slowed but still reached 887,858 on 36,162 operations for a daily average of 2,433 on 99 operations. By 1987, annual passenger volume was 1,402,814 with 32,058 operations for a daily average of 3,844 on 88 operations. The drop in daily flights was due to the introduction of wide bodied aircraft, such as the DC-10, that allowed an increase in passenger volume with a corresponding decrease in operations.

By 1992, with the economic recovery, annual passenger volume increased to 2,613,876 on 37,488 operations for a daily passenger average of 7,162 on 103 operations. From 1992 to 1997, with the offset of the financial crisis that began in 1995, growth in passenger volume slowed reaching 2,677,388 with 38,839 operations for a daily average of 7,336 on 107 operations.

In 1998, based on actual numbers for the first six month period, annual passenger volume will reach 3,205,000 on 41,428 commercial and general aviation operations for a daily average of 8,781 on 114 operations.

The percentage growth rate over the reported periods were:

Period	Passengers	Operations
1967-1972	15.3%	10.6%
1972-1977	18.1%	0.2%
1977-1982	10.1%	9.2%
1982-1987	9.6%	(2.4)%
1987-1992	13.3%	3.2%
1992-1997	0.5%	0.7%
1997-1998	19.7%	6.7%

FUTURE DEMAND PROJECTIONS

Aeropuertos y Servicios Auxiliares (ASA) has based their projections on three markets:

- Domestic
- San Diego
- Asia (Pacific Rim)

They estimate that within the next 5 years, domestic demand will grow at an annual rate of 5 percent, reaching 4.1 million by the year 2003, which based on the historical data and Tijuana's population growth, appears to be conservative.

As mentioned, the projections also included servicing San Diego's excess traffic and establishing Trans-Pacific service to Asia. The original estimate had concluded that by the year 2000, San Diego and Asian Pacific service would have added 4 million passengers to Tijuana's domestic load for annual total between domestic and international passengers of 7.5 million.

The initial estimates for the Asia/Pacific region were based on servicing 4 weekly B-747's with a 50 percent passenger load factor for an annual total of 100,000 passengers and 420 operations. The growth rate for the initial years was estimated at 10 percent with it gradually leveling off to 6 percent within 5 years.

The estimates for servicing passenger traffic from San Diego were based on San Diego's passenger traffic growing at an 8 percent annual rate forcing airlines to seek alternate destinations within the region. The initial study calculated that in 1995, Tijuana would be servicing 2 million passengers from San Diego adding 16,500 operations and that by the year 2000, 4 million San Diego passengers would be using Tijuana with 32,800 operations. To meet this expected demand, ASA generated a general master plan that included the creation of a new International Terminal, but the plan did not address the key issue of a rapid transit system to move San Diego bound passengers across the border.

EXISTING FACILITIES

SURFACE AREA AND LOCATION

The Tijuana Airport is located Northeast of downtown Tijuana on Mesa de Otay, at 116 degrees 58 minutes West longitude and 32 degrees 32 minutes North latitude, 498 feet above sea level. The surface area covers 954 acres with an additional 170 acres in the process of condemnation, for a total of 1,149 acres. It should be noted that the ejido and additional land corridor have not yet been incorporated into the airport master plan pending further litigation.

The topography is flat with a canyon crossing from North to South at approximately the mid-point of the current runway. This section was filled and additional fill material was added to the Northwest.

The surrounding area is urban, with a park and football fields to the East, and the University Autonoma de Baja California located on the Southeast quadrant. The Northeast, is the U.S. border.

AIR SPACE

Basic Characteristics

There are two basic obstacles affecting air space:

- To the East, the San Isidro Mountain.
- To the North and West, the U.S. border/REAM Field.

The San Isidro Mountain obstructs both the take-off and landing and prevents an ILS on a 27 approach which is only VOR/DME.

The restrictions on the North and West, are due to the requirements in obtaining clearance from U.S. air controllers and military as the 09 ILS approach intersects REAM Field Naval Air Station air space.

For approximately 300 days out of the year, weather and winds blowing from a Westerly direction allow for an Easterly approach. For the remaining 65 days, due to poor weather or Easterly winds, ILS approaches must be conducted from the West on the 09 runway.

RUNWAYS AND TAXIWAYS

Physical Layout

The current runway has an orientation of 09-27, with an original length of 8,202 feet by 144 feet on a concrete base with a safety zone at each end of 492 feet. To accommodate the wide body aircraft maintenance center (Matrix), the runway was extended by 1,640 feet creating a 9,842 feet runway with a 492 foot safety zone at each end for a total of 10,827 feet. '

The taxiway is 75 feet wide and 4,593 feet in length.

The platform for commercial aviation is 786,652 sq. ft.

TERMINAL BUILDING

Size and Services

The passenger terminal building has a total building area of 174,596 sq. ft., distributed over three levels.

The general terminal area counts with one self-service restaurant, 8 snack counters, 2 pharmacies/magazine stands, 1 import/gift store, 1 shoe shine stand, 2 foreign exchange houses, 1 bank, 7 car rental agencies, 1 long distance phone service company, 12 public telephones, 3 bus counters, 3 travel agencies, 12 airline ticket counters, 23 airline check-in counters, and 6 restrooms.

There are two departure lounges each offering similar services for a total of 2 bar/sandwich shops, 4 bar counters, 2 newspaper stands, 6 snack counters, 1 eyeglass store, 1 souvenir shop, 2 carts (one selling candy, the other alcohol), 4 public telephones, and 8 restrooms.

The principal commercial air carriers are Taesa, Aeromexico, and Aerocalifornia. Other carriers are Mexicana, Aerolineas Internacionales, and Aero Exo/Aviacsa.

CONCOURSE AREA-

The concourse area located to the front and runs along the length of the terminal building has a surface area of 30,140 sq. ft., along which are the airline ticket counters, other transportation counters (bus, taxi, and rental cars), small shops, food services, and restrooms.

PASSENGER AND PUBLIC PARKING-

The parking structure consists of 2.5 levels with a total surface area of 101,593 sq. ft. to accommodate 900 cars. It is located in front of the terminal and is connected to the terminal by a pedestrian bridge.

GROUND ACCESS-

A four lane road parallels the airport with a single turn in lane controlled by a signal light. Four one way lanes are located directly in front of the terminal allowing for taxi service, drop-offs and pick-ups. At the East end of the terminal, a bus parking area is located that provides service to destinations as far North as Sacramento. The entrance for the parking structure is located to the Northeast with three entry lanes offering both short and long-term parking.

CARGO-

The cargo warehouse is 4,844 sq. ft. with the main components being small air parcel packages carried as "belly cargo." UPS and DHL use this facility for their express and next day delivery service. Some perishable goods are also moved such as flowers and fruits, but in very limited quantities.

ANALYSIS OF EXISTING FACILITIES AND CAPACITIES

PLANNING STANDARDS FOR CAPACITY ANALYSIS-

The basic planning assumptions used by ASA for estimating current and future airside/landside capacity were:

- 22 operations per hour with the existing improvements.
- 45 operations per hour maximum capacity for a single runway with high volume departure gates and parallel taxiways.
- 60 maximum operations per hour with two parallel runways.
- 64,586 sq. ft. of platform per operation/commercial aircraft in simultaneous positions.
- 4,844 sq. ft. of platform per operation/general aviation aircraft in simultaneous positions.
- 129 sq. ft. building area per commercial passenger at peak hours.
- 86 sq. ft. building area per general aviation passenger at peak hours.
- 323 sq. ft. for automobile parking per passenger and employee.
- 1.1 spaces of parking per commercial passenger at peak hours.
- 0.5 spaces of parking per general aviation passenger at peak hours.
- 20 parking spaces for ground transportation vehicles per million annual passengers.
- 125 parking spaces for employees per million annual passengers.
- 6 parking spaces for rental cars per million annual passengers.
- 2 access lanes per 1.5 million annual passengers.

- 13 sq. ft. per annual ton for international cargo warehouse space.
- 1 sq. ft. per annual ton for domestic cargo warehouse space.
- 3,170 gallons of fuel per operation flight for international aircraft of the DC-10, A-300 type.
- 1,057 gallons of fuel per operation for domestic aircraft of the B-727 type.
- 159 gallons per operation for general aviation aircraft.
- 53,821 sq. ft. maintenance and construction zone per million annual passengers.
- 43,057 sq. ft. commercial and hotel space per million annual passengers.
- 699,677 sq. ft. food preparation, aircraft maintenance per 100,000 annual operations.

**DEMAND/ CAPACITY
INTERNATIONAL AIRPORT OF TIJUANA, BC**

Facilities Requirements (Existing & Projected)

Year	1998	1999	2000	2001	2002	2003	2004
Terminal Area/sq.ft.	174,600	333,035	344,887	356,512	368,138	379,763	391,389
Pass. Auto Parking	900	2578	2670	2760	2850	2940	3030
Commercial Area	-0-	318,622	343,386	369,214	395,048	420,883	446,717
Jet Fuel Capacity	959,049 glns.	1.033 mil glns.	1.109 mil glns.	1.183 mil glns.	1.260 mil glns.	1.334 mil glns.	1.410 mil glns.
Maint. Area sq.ft.	367,061	398,278	428,418	460,710	493,003	526,332	558,665
Air Food Service sq.ft.	517,761	551,130	584,499	623,913	651,238	683,511	716,900
Runway Cap. Ops/hr	22	38	38	38	38	38	38

RUNWAY AND TAXIWAY CAPACITY CONSIDERING DOMESTIC, PACIFIC RIM AND SAN DIEGO

RUNWAY AND TAXIWAY CAPACITY ANALYSIS

To determine capacity, factors that directly affect the operations must be considered:

Configuration- The current configuration of the taxiway is not adequate for high speed departures, especially for aircraft such as the B-727-200 and is especially restricting for large bodied aircraft such as the DC-10.

Weather conditions- From November to February there are occasions that during the night and early morning the airport must be closed.

Proximity to the United States- Bordering with the United States has restricted operations and required the signing of operating letters between the control towers of Mexico and the United States.

Topographical obstacles- the principal obstacle affecting almost 80 percent of the operations is the San Isidro mountain with an elevation of 800 meters (2,625 feet) and in the path of the 27 heading.

Pilot Experience.

Aircraft mix of different sizes and speeds.

The above factors have established an estimated capacity of 22 operations per hour under visual (VFR) conditions and 32 operations per hour under instruments (IFR), which under current volume, offers ample capacity.

CAPACITY DEMAND COMMERCIAL AVIATION PLATFORM

From 1967 to 1985, the platform area was sufficient to support the parking of 4 aircraft simultaneously.

In 1986, to accommodate large-bodied aircraft such as the DC-10, the platform area was expanded to accommodate six (6) aircraft simultaneously, four (4) at the terminal and two (2) remote. In 1990, the capacity was further expanded to seven (7) positions to handle four (4), DC-10's and (3), B-727-200's. In 1993, additional platform area was added to expand to parking area to 14 aircraft.

TERMINAL BUILDING-

Currently the terminal building can adequately accommodate 1,500 passengers per hour, a number which under peak periods is often surpassed causing congestion that affect operations and passenger comfort. With the current growth rate, it is estimated that counter space, immigration, basic food services, restrooms, parking and access will become inadequate forcing major reconstruction of the airport terminal building.

AEROPUERTOS Y SERVICIOS AUXILIARES RODRIGUEZ FIELD MASTER PLAN

Calculating that the maximum passenger capacity of the Tijuana airport with the planned facilities expansion will be 15 MAP, it is estimated that the airport will reach full capacity by the year 2020. If the airport services San Diego-based passengers, capacity could be reached prior to the design year. With this in mind, a general Master Plan was formulated that included an immediate course of action (Phase 1) and two secondary Phases to accommodate demand into the year 2005, as well as an overall Master Plan that would carry the airport to its full 15 million annual passenger capacity in the year 2020 which in addition of covering domestic and Asian/Pacific passengers, would also accommodate service for San Diego's excess passenger flows.

For purpose of the planning process, the basic premises that were accepted:

- ◆ Take full advantage of the current facilities
- ◆ Extend the runway by 1,640 feet to service long range and high volume aircraft. *(completed)*
- ◆ Development of the terminal area in stages based on needs.
- ◆ Maximum development to the year 2020 which will require additional terminal area East of the current terminal.
- ◆ Consider all terminal configurations within the current terminal area.
- ◆ The construction of a second runway parallel to the existing one to meet forecast demand.
- ◆ Relocation of general aviation facilities to meet future growth needs.
- ◆ Relocation of the cargo area.







ASA MASTER PLAN RECOMMENDATIONS-

For the current terminal building, the most effective alternative that was chosen, was the extension of the existing terminal. This U shaped configuration allows for 18 ramp/jetways, eight (8) for DC-10 sized aircraft and ten (10) for B-727 sized aircraft with 6 remote positions to service two (2) DC-10 sized aircraft and four (4) B-727 sized aircraft.

The selection of the option was based on:

- ◆ Available land and maximum buildout;
- ◆ Demand;
- ◆ Development phasing;
- ◆ Possibility of development beyond the established horizon;
- ◆ Travel/walking distance for the passenger;
- ◆ Simplicity and efficiency of passengers and baggage movement;
- ◆ Taking maximum advantage of the existing improvements;
- ◆ Optimize financial resources.

EVALUATION OF ASA EXPANSION OPTIONS

TYPE	CONCEPT	DIAGRAM	CHARACTERISTICS	COMMENTS	
LINEAR JETWAY	DIRECT CONNECTION		PLATFORM AREA NO. OF POSITIONS SQ.FT. PER AIRCRAFT	1,481,356 sqft 26 56,975 sqft	DEMOLITION OF CURRENT TERMINAL IS REQUIRED. MAXIMUM WALKING DISTANCE 1,706 FEET.
PIER	EXTENSION		PLATFORM AREA NO. OF POSITIONS SQ.FT. PER AIRCRAFT	1,533,907 sqft 26 58,988 sqft	TAKES FULL ADVANTAGE OF CURRENT FACILITIES. MAXIMUM WALKING DISTANCE 1,083 FEET.
PIER	45 DEGREE PIERS		PLATFORM AREA NO. OF POSITIONS SQ.FT. PER AIRCRAFT	2,322,390 sqft 26 89,322 sqft	REQUIRES THE DEMOLITION OF THE CURRENT DEPARTURE LOUNGES. MAXIMUM WALKING DISTANCE 1,312 FEET
SATELLITE	SATELLITE GATES		PLATFORM AREA NO. OF POSITIONS SQ.FT. PER AIRCRAFT	2,277,212 sqft 26 85,662 sqft	REQUIRES THE DEMOLITION OF THE CURRENT DEPARTURE LOUNGES. MAXIMUM WALKING DISTANCE 1,280 FEET
TRANSPORT	VEHICLE ACCESS SYSTEM		PLATFORM AREA NO. OF POSITIONS SQ.FT. PER AIRCRAFT	2,227,212 sqft 26 85,662 sqft	REQUIRES THE DEMOLITION OF THE CURRENT DEPARTURE LOUNGES.
PREFERRED OPTION	PIER		16 JETWAYS 8 REMOTE POSITIONS TAKES FULL ADVANTAGE OF CURRENT FACILITIES MAXIMUM WALKING DISTANCE 1,083 FEET DOES NOT AFFECT OPERATION DURING ITS CONSTRUCTION.		

PLANNING HORIZON

FIRST PHASE -

The objective of the first phase was to assure ample passenger capacity up to the year 2000, with the ability to handle 2,500 passengers, 22 hourly operations on 14 gates simultaneously at peak hours without considering overflows from San Diego.

The completion of this stage will require the following:

- ◆ Extension of the departure lounges to be able to handle passengers from 14 positions simultaneously (completed).
- ◆ Two high speed/volume departure gates towards the 09 heading.
- ◆ Second phase of the taxiway extension of the 09 heading towards the platform.

- ◆ Reconfigure surface taxiways to provide high speed/volume runway access from departure gates.
- ◆ Installation of 8 jetways.
- ◆ Expansion of the parking structure to 2,940 spaces.
- ◆ Relocation of security and fueling roads so that they do not interfere with the planned expansion.
- ◆ Relocation of general aviation to the old terminal site with a platform for 47 positions with a new general aviation building.
- ◆ Expansion of the fuel dump to store 1,056,803 gallons of jet fuel.

SECOND PHASE

The second phase is to service capacity forecast to the year 2005 with the ability to handle 2,917 passengers with 25 daily operations at 14 gates simultaneously during peak hours. This does not consider any excess overflow from San Diego. This additional demand would require:

- ◆ Construction of a second 9,843 foot X 148 foot runway not including safety zones, located 689 feet South of the current runway with a taxiway with 5 exits capable of handling high speed departures, 3 towards the 09 heading and 2 towards the 27 heading.
- ◆ Expansion of the terminal buildings and platform to accommodate passengers at 18 simultaneous gate operations.
- ◆ Installation of 8 jetways
- ◆ If a decision is made to service overflow from San Diego, the aircraft platform will be required to be extended to handle 8 remote spaces for a total of 26.
- ◆ Expansion of the parking structure to 3,430 spaces.

- ◆ Expansion of the fuel dump to 1,506,945 gallons of jet fuel.
- ◆ Building a two level access road, one for vehicles originating from the East and the other from the West.
- ◆ Building of a cargo warehouse to accept, process and distribute cargo and a platform with three positions.

With the planned expansion and improvement to the existing terminal, there should be sufficient capacity to accommodate seven (7) million annual passengers and provide service until the year 2005.

THIRD PHASE - MAXIMUM DEVELOPMENT OF THE AIRPORT

Beyond the demand forecast year of 2005, especially to meet the overflow of San Diego traffic, a general master plan has been formulated by ASA. ASA's process began by considering several runway options with a separation from the current runway of 689 feet, 984 feet, 2,297 feet, 3,281 feet, and 4,265 feet for the possibility of simultaneous operations.

EVALUATION OF POTENTIAL RUNWAY OPTIONS

Each runway option was evaluated based on the following:

- ◆ Separation of the runways;
- ◆ Length;
- ◆ Maximum capacity;
- ◆ Required land;
- ◆ Construction cost including required land fill;
- ◆ Internal impacts (particularly the Matrix air maintenance facility);
- ◆ Impacts on the surrounding areas.

In theory, the greater the separation, the greater the capacity, but with the exception of the 689 foot separation, the cost of adding the additional capacity began to outweigh any achieved benefits, especially since the separation at any distance will not allow ILS landings from the 27 approach. In addition, a major engineering and construction program would be required to fill in a large ravine coupled with the expropriation of a large number of homes, commercial properties and a university in the area. Because of this, a separation of 689 feet was opted with a 9,843 foot runway with the following characteristics:

- ◆ 60 operations per hour creating a theoretical 20 million annual passenger capacity where take-offs could be staggered with visual approaches on the 27 and a single ILS on the 09.
- ◆ Land requirement: no additional land would be required for the runway and only an adjacent 24.7 acre parcel would have to be acquired for taxiways.
- ◆ The requirement of fill would escalate costs above a normal runway construction cost by 75 percent.
- ◆ Existing Facilities Impact- The Matrix concession would be impacted by a height limit that would be placed on its location and surrounding surface area reducing the parking capacity area for aircraft making the maintenance facility non-operational.
- ◆ Surrounding Area Impacts- basically none, including noise as the impact would be similar to the existing runway.

The 9,843 foot second runway option was considered ideal, but because of its impact on the Matrix facilities, other options were considered, which in effect reduced the runway length from 9,843 feet to 6,562 feet.

2nd Runway 689 foot separation and 6,562 feet in length capabilities:

- ◆ 6,562 foot runway- though not able to offer long distance service, it would still be capable of servicing aircraft such as the DC-10 flying non-stop to New York and 747's to Chicago and Cancun. This runway would not affect the current 9,843 foot runway which could offer longer distance service.
- ◆ 60 operations per hour creating a theoretical 20 million annual passenger capacity where take-offs could be staggered with visual approaches on the 27 heading and a single ILS on the 09 heading similar to the existing runway.
- ◆ Land Requirement: no additional land would be required for the runway and only an adjacent 19.8 acre parcel would have to be acquired for planned taxiways.
- ◆ The required fill would escalate costs above a normal runway construction by 68 percent.
- ◆ Existing Facility Impacts- The concession of Matrix could remain in the same location with only minor adjustments to its operations.
- ◆ Surrounding Area Impacts- basically none, including noise as the impact would be similar to the existing runway.

When this option was presented to Matrix operators, there was little opposition. However, they prefer to relocate the facility to an area that could offer sufficient space for its operations and future expansion.

PROPOSED DEVELOPMENT

The initial development extended the current runway by 1,640 feet to be capable of offering non-stop service to the Asia/Pacific on B-747's.

With reference to the second runway, the option selected by ASA was that of 6,562 feet with a separation of 689 feet with the potential of being extended to 9,843 feet (not including safety zones). The only draw back of this proposal was its impact on the Matrix air maintenance facility, which indicated that it would prefer to relocate to a new 98.8 acre site to the Northeast which would require 37 acres from the airport and 61.8 acres from the Ejido Tampico. This relocation would also allow a 09 ILS on the second runway.

CONCLUSION

In order to service future Asian/Pacific Rim traffic and San Diego overflows, it will be necessary to build the second runway in approximately the year 2010, but in order to increase current operations and efficiency, the recommendation is to build the runway in and around the year 2000. The separation of the runway would be 689 feet and the initial length could be 6,562 feet with a future expansion to 9,843 feet for staggered operations which would give the airport a capacity of 60 operations per hour for 20 million annual passengers.

Reference: AC 150/5360; P&D Technologies Transborder Airport Report, 1993; Aeropuerto Y Servicios Auxiliares Rodriguez Master Plan, 1991; Estadisticas del Movimiento Aeroportuario, ASA 1998. Unified Port District, Lindbergh Field Statistics

Rodriguez Field Statistics

3.23 MAP
37,400 Annual Ops.

San Diego Based Passengers 644,180 Arriving
453,230 Departing
1.097 MAP (San Diego)

San Diego Lindbergh Field International Airport Passengers (Mexico)

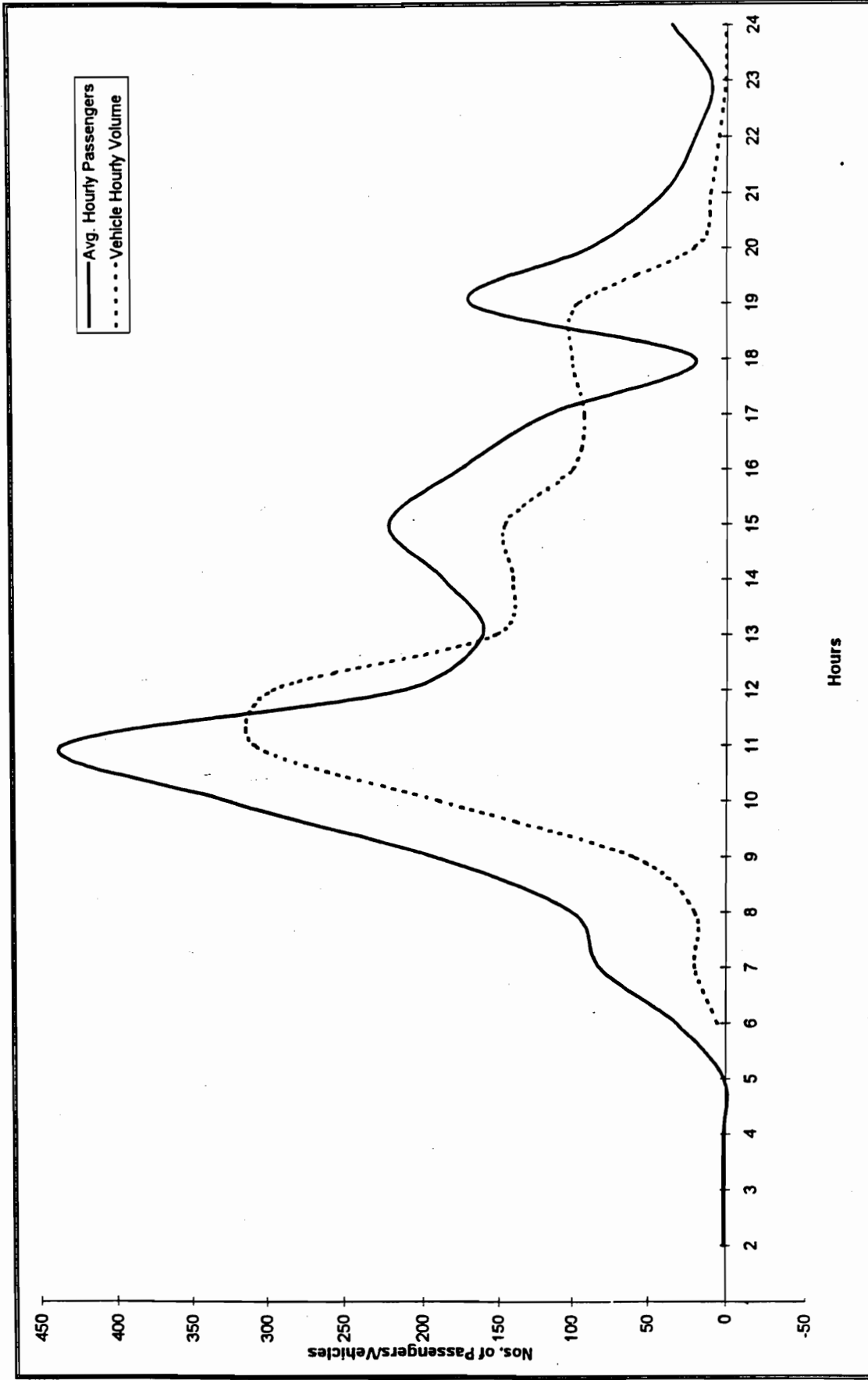
193,777 Annual Passengers
1,472 Annual Operations

GENERAL-

This section provides general information on facility requirements for the Crossborder Air Terminal. The requirements are determined by applying accepted planning standards to the estimated demand values.

These calculated facilities do not represent a concept, but rather, they indicate the theoretical sizes of facilities based on relationships of others around the U.S. The sizes are subject to modification as may be required in order to carry out the concept layout.

SAN DIEGO-BASED PASSENGER/VEHICULAR PEAK HOUR TRAFFIC

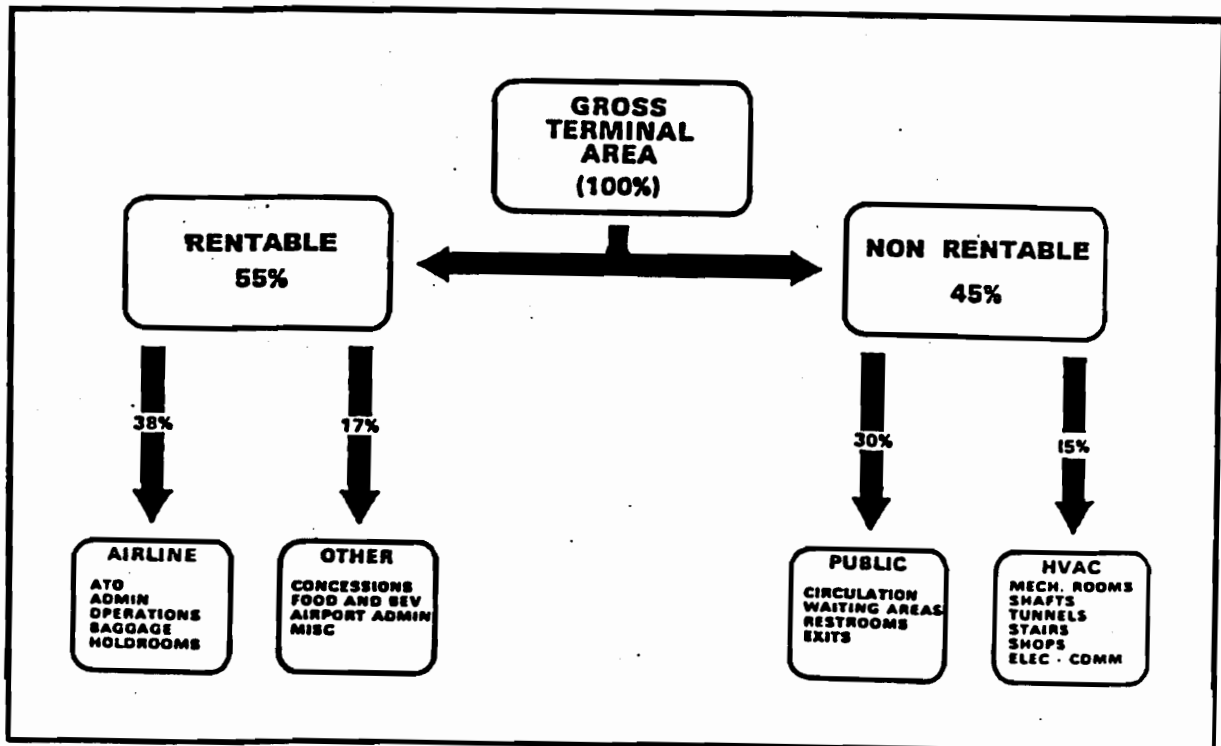


GRAL. ABELARDO L. RODRIGUEZ INTERNATIONAL AIRPORT
TIJUANA, BAJA CALIFORNIA.

PLANNING METHODOLOGY- Effective planning and design of the terminal area and complementary facilities involves the active participation of the airport management and airlines. For this study, historical and current data was not provided, therefore surveys were conducted of passenger and vehicle flows for short and intermediate periods over a two-week period during the month of September. From the survey information and weekly airline flight information, a design day and peak hour activity table was developed. That information established passenger, aircraft and vehicular traffic relationships used in the planning standards.

Gross Terminal Building Area Estimate: Based on a planning standard of 0.12 sq. ft. per annual enplaned passenger, a relationship between traffic and required gross terminal area can be determined.

The required usable and unusable terminal space is provided:



INCLUDES CONNECTOR AND TERMINAL AREAS COMBINED
STRUCTURE SPACE IS INCLUDED IN EACH AREA

Gross Terminal Area Space Distribution

Total Terminal Building Area **55,450 sq. ft.**

Unusable 2,720 sq. ft.

Usable 51,660 sq. ft.

Concessions 14,000 sq. ft.

Office Space 2,200

Passenger Services 6,000

Misc. services and uses 1,500

Total Revenue Space **23,700 sq. ft.**

Ticketing 7,000 sq. ft.

Passenger/Visitor Waiting 6,000

Passenger Check-In 3,000

Baggage Check/Claim 5,800

Restrooms 1,800

HVAC 8,150

Total Non-Revenue Space **31,756 sq. ft.**

Federal Inspection Service (FIS) Facilities:

GENERAL-

Airports with international traffic require space for Federal inspections (Immigration, Customs, Agriculture and the Public Health Service) of passengers, aircraft, crewmembers, baggage and cargo. The area where these functions are conducted is known as the Federal Inspection Services (FIS) facilities. In most airports, these facilities and personnel are housed either in the main terminal building or within the terminal connector building. The following pages illustrate the critical aspects of the inspection facilities, required relationships and flow sequences.

FEDERAL INSPECTION SERVICES-

U.S. governmental procedures restricting the clearance of passengers, baggage and cargo require that applicable Federal Inspection Agencies be provided facilities at International Airports. The following paragraphs describe the required agencies and their respective duties.

Immigration and Naturalization Services (INS) – The INS, Department of Justice, is charged with examining all persons arriving in the United States to determine their admissibility under the provisions of the Immigration and Nationality Act.

Customs Service – The U.S. Customs Service, the Department of the Treasury, controls the entrance and clearance of aircraft arriving in and departing from the United States and inspects the crew, passengers, baggage and cargo carried thereon. The baggage of any person arriving in the country may be inspected in order to view the contents. A determination is then made on items, which are subject to duty, free of duty or prohibited.

Public Health Service (PHS) – The U.S. Public Health Service, Department of Health and Human Services, makes and enforces such regulations required to prevent the introduction, transmission, or spread of communicable diseases from foreign countries into the United States or its possessions.

Animal and Plant Health Inspection Services (APHIS) – APHIS, U.S. Department of Agriculture, provides inspection service at all airports with scheduled and unscheduled passenger aircraft arrivals from foreign countries. The purpose is to protect American agriculture by preventing the introduction of injurious plant and animal pests and diseases.

U.S. Fish and Wildlife (FWS) – FWS, Department of the Interior, in accordance with legislation dealing with the illegal trafficking of protected fish, wildlife and plants, is responsible for inspecting packages, crates and other containers including contents and all accompanying documents, upon importation or exportation.

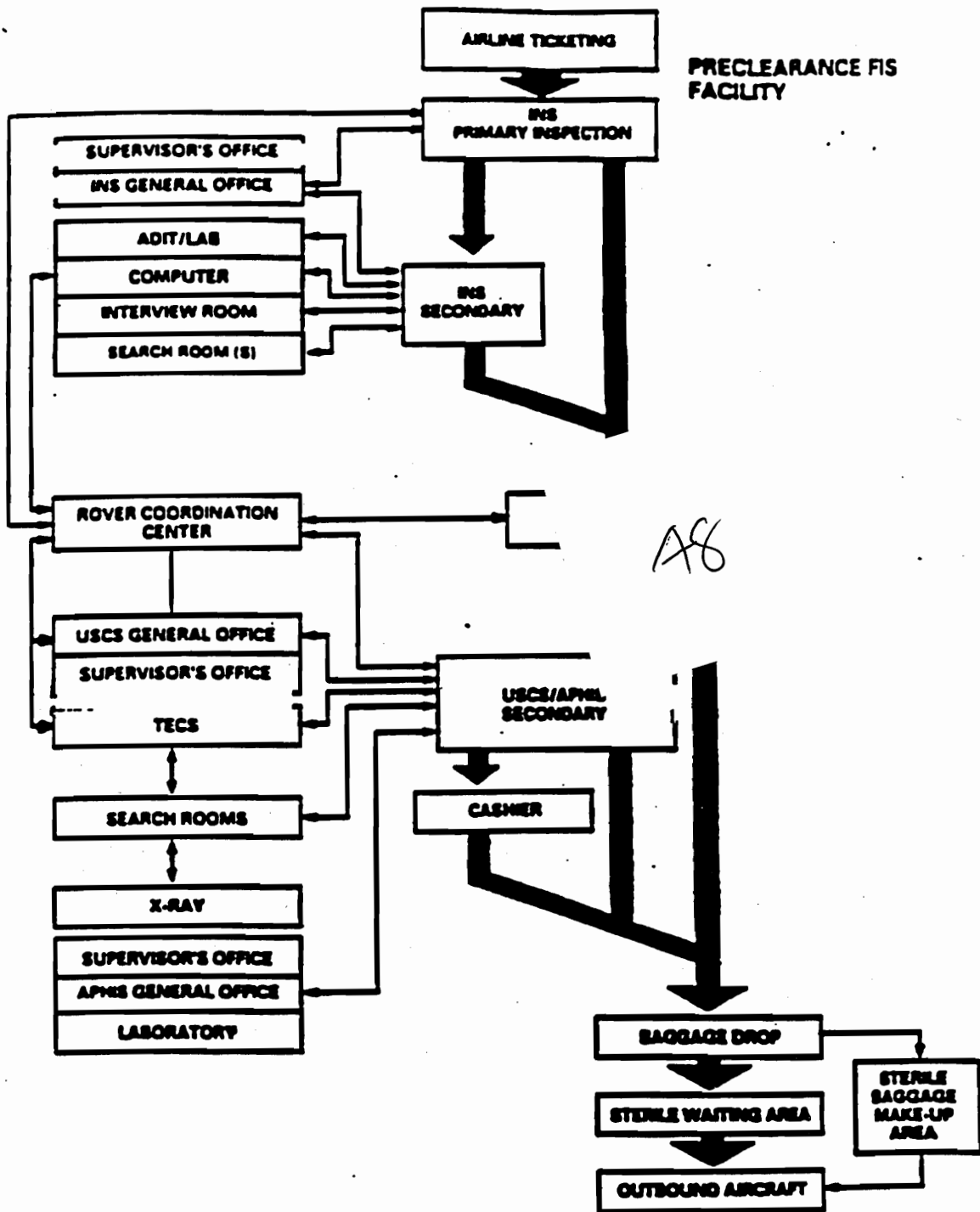
FIS Space and Facility Requirements at International Airports

FEDERAL INSPECTION SERVICES SPACE AND FACILITY REQUIREMENTS AT INTERNATIONAL AIRPORTS

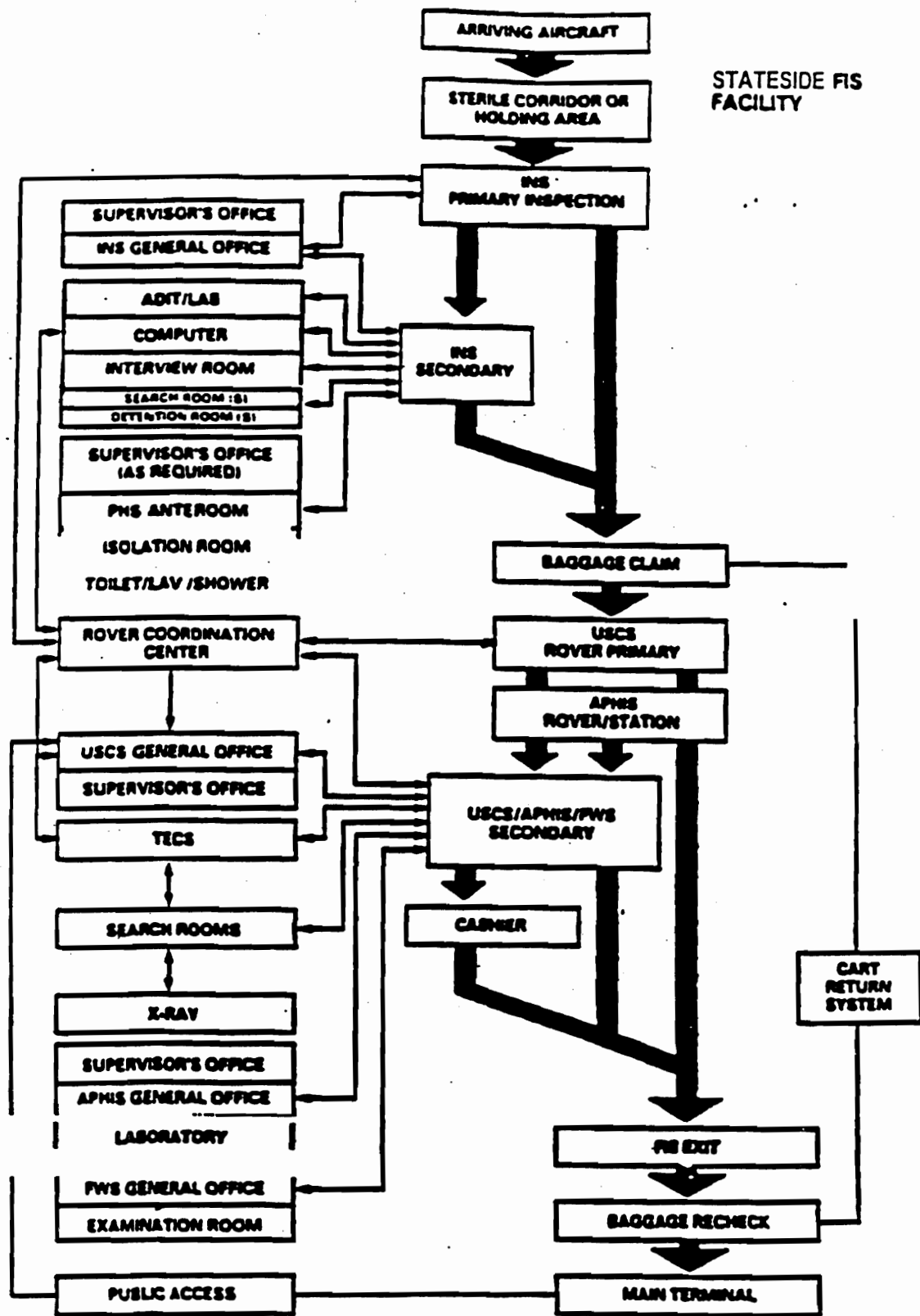
• Passengers Per Hour	800	1400	2000
U.S. IMMIGRATION & NATURALIZATION SERVICE			
# OF PIGGYBACK BOOTHS	7	12	17
GENERAL OFFICE SPACE	1300	2150	3000
CONFERENCE/TRAINING	200	250	300
BREAK/LUNCH ROOM	200	200	300
SECONDARY INSPECTION AREA	250	375	600
INTERVIEW ROOM(S)	83(1)	80ea.(2)	80ea.(3)
SUPERVISOR'S OFFICE(S)	150(1)	150ea.(2)	150ea.(2)
PORT DIRECTOR'S OFFICE	200	200	225
CLERK/RECEPTION	160	160	160
EMPLOYEE LOCKER & TOILET	as required	as required	as required
ADIT/LAB	150	150	150
STORAGE	100	100	100
HOLD ROOM'S W/TOILET FACILITIES	225	225	225ea.(2)
COMPUTER ROOM	100	100	100
U.S. PUBLIC HEALTH SERVICE			
SUPERVISOR'S OFFICE	200	200	200
CLERK/RECEPTION	150	150	150
GENERAL OFFICE SPACE	400	400	400
ISOLATION AREA	160	160	160
U.S. CUSTOMS SERVICE			
# OF PIGGYBACK BOOTHS	7	12	17
CUSTOMS SUPERVISOR	300	400	500
CUSTOMS OFFICE	800	1400	2000
IN-BOND ROOM			
(not required for preclearance)	200	400	500
CASHIER(S)	as required	as required	as required
TECS ROOM (lockable room)	150	200	200
SEARCH ROOMS	80 square feet. Should be located near the front of baggage modules. Minimum 2 per FIS facility		
PUBLIC SPACE W/COUNTER	150	200	250
STORAGE ROOM	150	200	200
AIRPORT DIRECTOR AND SECRETARY	350	350	350
CONFERENCE AND TRAINING ROOM	400	500	600
CUSTOMS PATROL	300	400	500
EMPLOYEE LOCKER & TOILET	as required	as required	as required
ANIMAL & PLANT HEALTH INSPECTION SERVICE			
OFFICER IN CHARGE	200	200	200
INSPECTOR'S OFFICE	440	750	1200
LABORATORY	220	400	450
GARBAGE DISPOSAL UNIT (HP)	5	10	10 or larger
SUPERVISOR'S OFFICE	150	250	300
CLERK-STENOGRAPHER	-	150	250
STORAGE	100	100	100
CONFERENCE/TRAINING	150	200	200
BREAK/LUNCH ROOM	150	200	200

Laboratory requirements: Stainless steel or formica counter top and drain-board stainless steel double sink, garbage disposal unit, under-counter cabinets, counter space for microscope and identification work, lockers, and at least two 220V outlets. At locations not having or expecting scheduled service office-laboratory space size requirements will vary from above requirements depending upon expected volume of charter traffic. Space requirements under these conditions will usually be less than shown and will be negotiated with the headquarters office of the Animal and Plant Health Inspection Service noted on frontispiece.

* This ratio can only be achieved under optimum conditions. Factors such as baggage delays, origin of flight, passenger mix, etc. are key determinants which could possibly mitigate against achieving these figures. These issues must be considered during early planning phases.



FIS Preclearance Facility Functional Adequacy Diagram



STATESIDE FIS FACILITY

FIS Facility Functional Adequacy Diagram

AIRPORT TERMINAL GROUND ACCESS AND PARKING CONSIDERATIONS-

Reference: The following information and formulas were provided by AC 150/5360-13; Transborder Airport Master Plan Phase 1B, P&D Technologies

GENERAL- Ground access systems serve passengers, employees and other airport users traveling to and from the airport terminal facility. The focus of this section will be to provide information on minimum requirements for access and parking systems needed to accommodate passengers and other related traffic at a crossborder terminal facility.

STUDY- As part of the Ground Access work, a survey was conducted on modal splits and volumes at TIJ. The information was used to determine baseline requirements for facilities at a crossborder terminal. The vehicular travel and parking demand is related to the level of passenger activity at the airport. The landside demand/capacity and facilities requirements are restricted to at-terminal needs.

METHODOLOGY- Study consultants were not provided information on ground access volumes or splits. After months of attempting to obtain information with no success, the study team initiated an on-site survey counting vehicles arriving and leaving the airport. The survey was conducted over a two-week period during various day parts. Survey activities were focused during peak traffic times to best approximate average and peak volumes for each mode. (note: survey results were predicated California and other U.S. licensed vehicles, a significant number of those vehicles are owned by Tijuana residents, which may skew the actual numbers.)

FINDINGS- Landside facilities include on-airport access roads and vehicular parking spaces, particularly the public parking needs of passengers. Landside facilities also include passenger terminal curbside parking needs. The quantity or length of curbside parking needed to satisfy the demand is dependent on the loading/unloading directly in front of the

terminal facility. (note: traffic/parking management and enforcement can alleviate congestion during peak periods.)

On-site vehicle surveys at TIJ were conducted during the month of September which produced relationships between passengers, vehicles, parking demand and terminal curbside demand. Additionally, historical data from Lindbergh Field was also used to provide relationship standards where none could be produced and to compare assumptions for reasonability.

Airport Roadway Traffic Projection Standards

- 1,700 Vehicles/Day/MAP
- 1.65 Vehicles/Passenger
- 1.34 Vehicles/Peak Hour/Passenger

Terminal Curbside Demand

The terminal frontage is a critical element in the performance of the ground access system. Accordingly, to avoid congestion caused by inevitable double parking, a minimum of four lanes is suggested. The following table shows typical curb dwell times and required vehicle slot lengths for different kinds of vehicles.

Typical Curbfrontage Dwell Times and Vehicle Slot Lengths

Vehicle	Curb Dwell Time (minutes)		Vehicle Slot Lgth
	Enplane	Deplane	
Private Auto	1.0 to 3.0	2.0 to 4.0	25 feet
Rental Car	1.0 to 3.0	2.0 to 4.0	25 feet
Taxi	1.0 to 2.0	1.0 to 3.0	20 feet
Limousine/Van	2.0 to 4.0	2.0 to 5.0	35 feet
Bus	2.0 to 5.0	5.0 to 10.0	50 feet

The standard selected is the sum of demand generated at both terminals at Lindbergh Field. The are summarized as follows:

• Automobile:	0.030 Vehicles/Peak Hour Passenger=	0.75 Lin.Ft.
• Van/Limo:	0.008 Vehicles/Peak Hour Passenger=	0.24 Lin.Ft.
• Bus:	0.002 Vehicles/Peak Hour Passenger=	0.10 Lin.Ft.
• Maint/Delivery:	0.003 Vehicles/Peak Hour Passenger=	0.09 Lin.Ft.
• Taxi Queuing:	0.022 Vehicles/Peak Hour Passenger=	0.35 Lin.Ft.

Total: 0.065 Vehicles/Peak Hour Passenger= 1.53 Lin.Ft.

Terminal Curbfront Parking Requirements

Based on the relationships provided above and the transportation modal split at Rodriguez field, it is estimated that approximately **326 lineal feet of curbside terminal front parking** would be required to accommodate existing peak hour traffic.

Parking Demand

GENERAL- Surveys of airports across the United States indicate that from 40 to 85 % of originating passengers arrive in private vehicles. Surveys conducted at Rodriguez Field demonstrate that as many as 86% of originating passengers arrive by private vehicle. This relatively high number can be attributed to the fact that the facility lacks adequate mass transit and other for-hire transportation opportunities.

PLANNING CONSIDERATIONS- Parking lots should be located to limit walking distances from parked vehicles to terminals to no more than 1,000 feet.

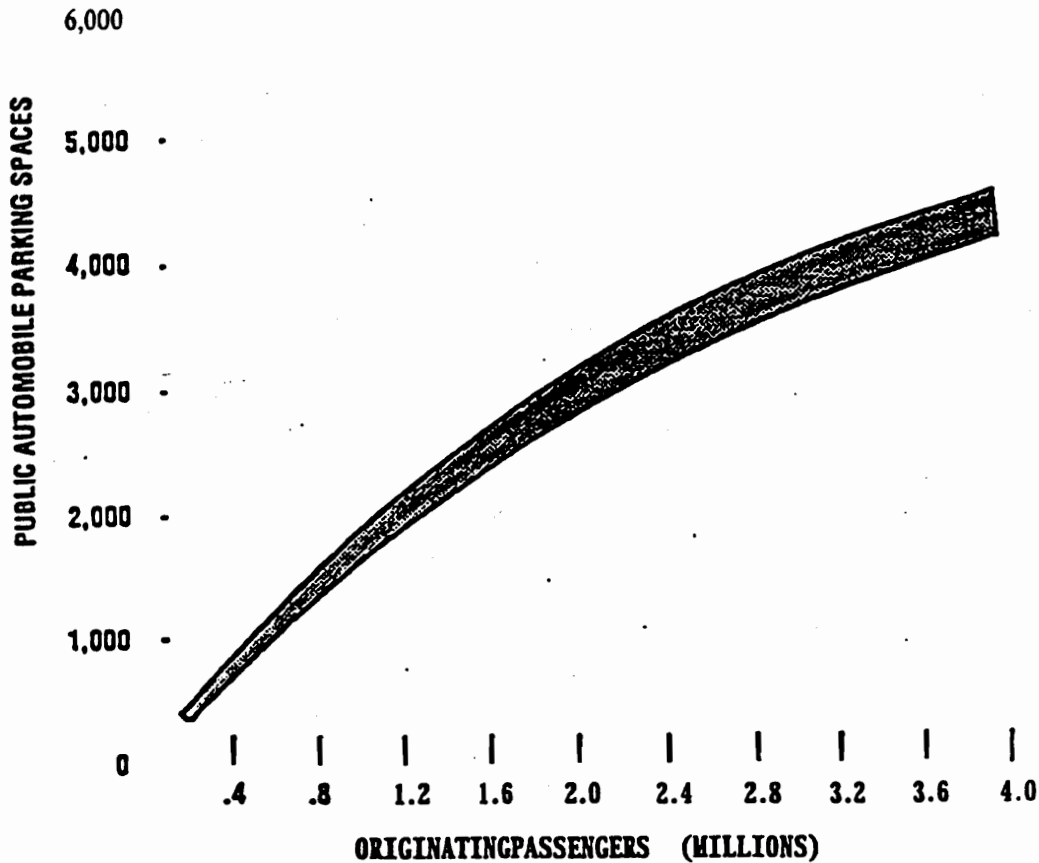
Parking Requirement Calculations:

The number of parking spaces available per one million originating passengers varies between airports with over 1.5 million originations.

The range at existing airports may vary from 1,000 to as high as 3,000. Conversely, Rodriguez Field currently contains a 1,000 space, three-level structure that provides both long and short-term parking. Surveys indicate that on average, the structure operates at 58% of capacity.

This is somewhat low due to average annual enplanements of 1.9 MAP. For the purposes of the Crossborder Terminal, rule of thumb estimates based on historical patterns at U.S. airports will be used to determine general requirements.

- 350 to 400 square feet (including lanes per vehicle space)
- 109 to 124 parking spaces per acre (surface spaces)



SOURCE: TRB SPECIAL REPORT 215

Estimated Required for Public Parking at U.S. Airports

Short vs. Long Term Parking

Planning Standard- The generally accepted definition for short-term parking is any thing less than three hours. Approximately, 70 to 85 percent of parking lot users are short-term parkers, mainly greeters and well wishers. Long-term parkers, the remaining 15-30 percent are typically travelers and occupy 70 to 80 percent of the available parking spaces.

Lindbergh Field Airport Parking (pre expansion)

Short term:	1,364 =	32.7%
<u>Long term:</u>	<u>2,856 =</u>	<u>67.7%</u>
	4,220 =	100%

The relationship between parking demand and air passengers was as follows:

Short term and Employee Demand with Peak Hour Air Passengers
Long term On- and Off-Airport Demand with Daily Air Passengers

Based on figures compiled at Lindbergh Field, the demand standards are:

Short Term Public:	0.45 spaces/peak hour
passenger	
Long Term Public:	0.12 spaces/daily passenger
Employee*	0.17 spaces daily/peak passenger

* employee ratios have been reduced from Lindbergh Field standards because

the Crossborder facility will support no airside or gate activity.

Parking Requirements

Short term spaces	195
Long term	300
<u>Employee</u>	<u>75</u>
Total Spaces	570
Land Requirement	228,000 square ft.

EXECUTIVE SUMMARY-

During the month of June 1998, Profile Research and Marketing mailed surveys to 233 county travel agencies for the purpose of identifying issues and perspectives among travel professionals regarding air service from Tijuana's Rodriguez Field Airport. Survey response rate was 29%, an exceedingly high percentage for mail surveys.

The survey revealed and confirmed rather obvious assumptions regarding San Diego residents' use of Rodriguez Field. The findings and conclusions are included in this summary.

73% of agencies responding book relatively little travel to Mexico in relation to other destinations domestic and abroad. 6% of area agencies specialize in Mexican travel. Of those trips destined for Mexico, approximately 94% are tourism related.

When asked about airport preferences for departing and arrivals, only 8% of respondents stated that a majority of their customers asked for, or preferred to use Rodriguez Field when flying to/from Mexican destinations. On the other hand, a significant number, 86% responded that their customers ask to use the airport up to 20% of the time. Specific comments related to customer preferences varied but were highly weighted to only two key factors.

Comments were broken into 5 general areas.

- Access; Physical, Cultural
- Fare / Cost Considerations
- Proximity; Geographical Location
- Awareness of Rodriguez Field
- Quality of Facilities and Service

55% respondents listed accessibility/language difficulties as the most common reason not to use the airport. In 31% of the cases, quality of the airport facility, security and availability of flights were the primary barrier to airport utilization. In the remaining three categories, each were listed well below 10% and therefore not significant.

Overall, the concept of additional improvements to enhance accessibility was met with high degree of support. Almost 2/3rds (64%) of respondents believe that easier, quicker access to the airport would increase the number of travelers using the airport. While 36% did not believe that airport improvements would increase customer demand, a closer look at negative responses is warranted. Of the negative received, 72% were from agencies more than 30 miles from the International Border. Specific responses invariably were related to distance. For those travelers, Lindbergh and Orange County were stated as more convenient.

CROSSBORDER AIRPORT STUDY

Profile Research and Marketing

TRAVEL AGENCY SURVEY ANALYSIS

Background

In June of 1998, Profile Research and Marketing was retained by South County Economic Development Council to investigate and provide feedback on the feasibility and demand for improvements to the Rodriguez Field Facilities on the U.S. side of the border. The survey was distributed in April 1998 to 233 travel agencies throughout San Diego County. The survey group constituted a broad range of travel agencies, with varying degrees of involvement in cross border travel and differing proximities to Rodriguez Field and Lindbergh Field. Of the 233 travel agencies the survey was sent to, approximately 29% sent in responses.

Methodology

The survey consisted of six "best-choice" type questions and one open ended question that allowed respondents to offer recommendations on how to increase use and awareness of Rodriguez Field in Mexico. The six "best choice" questions were used to determine the extent of cross border flights arranged and the amount of repeat business, the ratio of business related to leisure flights coordinated, the percentage of flights arranged out of Rodriguez Field and reasons for the preference and whether agencies felt improvements to Rodriguez Field would increase customers inclinations to utilize Rodriguez Field. The answer choices for the first four questions were set up on a scale and respondents were asked to indicate the percentage range that best described their business and customer base. The fifth question listed frequent problems or concerns encountered when traveling or when utilizing Rodriguez Field. Respondents were asked to mark any and all of the reasons stated that applied to their usage of Rodriguez Field.

Scoring

Answers to all questions were scored based on single choice selections. While there was no additional weighting given to factors such as proximity to Rodriguez Field versus Lindbergh Field, there is added consideration and discussion of the affect of factors external to specific conditions of Rodriguez Field. The number of occurrences of each choice were tracked and tabulations were made based of the percentage of respondents indicating that preference. Recommendations for improvement are listed at the end of the survey analysis which the frequency of response occurrence.

Survey Response Data

The following is a detail of responses to the survey:

1. Approximately what percentage of the travel you arrange is to/from Mexico?

0-20%	48
21-40%	14
41-60%	0
61-80%	0
81-100%	4

Of the travel agencies participating in the survey, the majority (73%) book relatively little travel to Mexico, as opposed to other destinations both domestic and international. Most travel agencies responding to the survey primarily arrange domestic travel and, therefore, have limited interaction with the Rodriguez Field facilities. A small minority (6.3%) of the agencies surveyed indicated a specialization in travel to Mexico. However, the results of answers to concerns at Rodriguez Field may be skewed, due to the closer proximity of most agencies and their clients to Lindbergh Field. For a more depth analysis of proximity as a factor in utilization of Rodriguez Field, refer to question 4.

2. Approximately what percentage of your business is repeat customers?

0-20%	3
21-40%	7
41-60%	9
61-80%	31
81-100%	16

There was a wide range of variation in responses to the proportion of sales to repeat customers. The majority of agencies, however, indicated that most of their clients are repeat customers. 45% of respondents indicated between 60 and 80% of their business is from repeat clients, with nearly 4% answering that 80 to 100% of their business is from repeat customers. The significance of this becomes more apparent when examining the impact that possible future improvements to Rodriguez Field will have on facility utilization. In order to compensate for the common practice of booking flights from the same airport, there will need to be a public relations campaign and promotional incentives, created to encourage usage of Rodriguez Field.

3. *Approximately what percentage of the travel you arrange to/from Mexico is business related (rather than leisure related)?*

0-20%	55
21-40%	6
41-60%	3
61-80%	0
81-100%	1

The overwhelming response to the type of travel arranged by travel agencies was that the majority of travel booked to Mexico is leisure oriented. 82% of respondents indicated that only between 0 and 20% of travel booked is of a business nature. 11% of respondents indicated that 20 to 40% of their travel arrangements are business related. Only one agency, specializing in corporate travel, replied that 80 to 100% of their flights booked to Mexico are business related.

4. *When arranging airline flights for customers to/from Mexico, approximately what proportion of the flights are out of Rodriguez Field?*

0-20%	57
21-40%	4
41-60%	3
61-80%	0
81-100%	2

The majority of travel agencies (86%) booking flights to Mexico indicated that they rarely (0-20% of the time) arrange travel through Rodriguez Field. Only 8% of all travel agencies surveyed responded that they arrange travel to Mexico through Rodriguez Field as frequently as through other air facilities. Only 3% of agencies responding book the majority of their travel through Rodriguez Field.

One of the primary factors affecting travel agencies' responses to this question is their proximity to the alternate air fields. A large proportion of the agencies surveyed are closer and have a customer base that is located closer to Lindbergh Field. In the absence of significant cost or convenience incentives to utilize Rodriguez Field, these customers have no rational reason to choose to utilize Rodriguez Field over Lindbergh Field. The proximity of Lindbergh Field to the border, and large clusters of corporations and communities north of, or closer to, Lindbergh Field, makes the issue one of simple access. The agencies responding that the majority of their travel is through Rodriguez Field were located close to the border and were in regions with a large Hispanic populations, more apt to be comfortable utilizing Rodriguez Field.

5. What are some reasons stated why your customers prefer to travel through Lindbergh Field instead of Rodriguez Field?

Language Difficulties	23
Inconvenience of Crossing Border	49
Flight Availability and Frequency	17
Safety/Security Concerns	40
Lack of Knowledge of Options	12
Other, refer to comments section.	12

Responses to the reason for the overwhelming preference of Lindbergh Field over Rodriguez Field were conclusive, with more than three-quarters of respondents citing inconvenience of crossing the border as a factor in their air field choice. This figure is impacted the previously mentioned consideration of customer proximity to the air fields. Over 60% of respondent agencies indicated that safety and security concerns were a foremost concern in their clients' decisions not to utilize Rodriguez Field. When examined together with suggestions for improvement, these two factors offer suggestions for methods to increase utilization of Rodriguez Field. Many agencies cited that customers fear theft or damage to automobiles and personal possessions when parking in Mexico. A possible solution to these concerns would be to establish regular shuttle service from convenient locations in San Diego to Rodriguez Field. The presence of shuttle services to Lindbergh Field and the reluctance of many shuttle services to take customers to Rodriguez Field prevents many who might otherwise utilize Rodriguez Field from doing so.

6. In your opinion, if significant changes and improvements were made to Rodriguez Field, making access simpler and boarding easier, do you believe more customers would be inclined to travel through Rodriguez Field?

Yes	42
No	24

70% of travel agencies responded that, if significant improvements were made to Rodriguez Field, they believed that there would be an increase in travel through Rodriguez Field. Comments by both the 30% who felt there would be no increase and those who felt that improvements would increase utilization of Rodriguez Field indicated that increases were hypothetical and might not affect their own personal usage of Lindbergh Field. Again, this may be largely attributable to the simple factor of agency and customer proximity to the alternate choices in air fields.

7. Please list any recommendations on specific improvements you believe would increase interest and utilization of Rodriguez Field by San Diegans?

- Trolley directly from airport to avoid border crossing
- Advertising campaign to make more people aware and more comfortable utilizing Rodriguez Field - current lack of awareness
- Fares are currently comparable or less out of San Diego - why would San Diegans want to go through more hassle to travel out of TJ
- NORTH COUNTY RESIDENTS
- Provide low cost parking in US and shuttle service to Rodriguez Field
- Cleaner, more efficient and safer
- Parking enhancements at Rodriguez Field - Cheaper, safer
- More bilingual people working there to help travelers
- Direct flights
- Reliable transportation to and from airport - Cloud 9, shuttles and trolley
- Safe parking on US side of the border with shuttles to airport
- Government funded shuttle service
- Non-stop flights to Europe (Honolulu, London)
- Easier boarding
- Comprehensive English signs at airport
- Airport hotel with conference center
- Publicity campaign and image enhancement with Concorde landing there once per month
- Real duty free shops (arriving/departing) similar to European
- Remove border problems and hassles
- Better service at airport
- Improve safety of commute and parking and in/around airport
- Easy direct transport from convenient locations in San Diego (ie- Mission Valley, La Jolla, etc)
- Improve safety of baggage
- Make border crossing quicker
- Demolish mountain near Brown field where plane crashed
- Make access easier
- Make sure there are no surcharges for tickets when time for departure
- Assure air passengers of safety
- Sterile environment @Rodriguez for transit passengers to be able to move directly to US customs and immigration facility for clearance to the US
- Have more overseas flights

COMMERCIAL OPPORTUNITIES FROM A CROSSBORDER TERMINAL

Section V

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- Better International Service: Economic base and economic benefits, Kurth and Co, Inc., 1989.*

ROUTES/HUBS/SLOTS-

With the recent global deregulation of the airline industry, start-up companies have begun to challenge all the major airlines and their capital intensive HUBS and alliances. Based more on leasing equipment rather than actual acquisitions, these small and newly established airlines are aggressively seeking new markets in the same regional areas as the major carriers and hubs. Tijuana is geographically within the Southern California corridor and ideally positioned by virtue of an underutilized route and slot capacity that could easily feed into every major destination in the U.S., the Pacific Rim and Europe. In addition, Tijuana International Airport (TIJ), can offer what few West coast airports can, prime time landing slot capacity.

Tijuana's unique location can allow it to become a major transit point, a mini-international HUB where people and cargo will be able to "interconnect". Because of the route and slot availability between Mexico, the U.S., the Pacific Rim, and Europe, passenger and cargo operators could establish a feeder network not only within Mexico, but from Pacific and Atlantic routes that will also be able to tie into the proposed cargo center at Brown Field. What this means, is that a wide bodied international aircraft not wishing or able to enter into a U.S. airport, could feed into smaller domestic or regional aircraft at Tijuana or Brown Field. A hypothetical example can best illustrate how the cross-border facility could operate.

An independent commercial or charter operator originating in Osaka, Japan with a B-747 running at a 60/40 passenger to cargo ratio with a final destination to Dallas, could do the following:

- 1) Land in Tijuana, unload cargo and passengers destined for Southern California without entering U.S. jurisdiction.
- 2) Through the cross-border facility, passengers and luggage destined to San Diego would rapidly cross into the U.S.
- 3) As passengers and luggage are being transferred across the border, cargo could be moved to regional aircraft at Brown Field.
- 4) Non-U.S. bound passengers on the B-747 could interconnect with flights to multiple Mexican destinations.
- 5) The commercial or charter operator could then accept new passengers and cargo, and proceed to its final U.S. destination.

This method would allow the operator to service two U.S. cities with no impact on the limited allocation of U.S./Asian slots and routes. The key to this development, is a rapid link to San Diego. In effect, for the international passenger or cargo, there would be no operational difference between landing in San Diego or Tijuana, but for the operator, there would be a tremendous cost and commercial advantage.

Currently, the Asia/Pacific region accounts for roughly 35 percent of the world's international scheduled traffic. Within the next decade, it is projected that it will account for nearly half the world's scheduled traffic. This forecast increase in traffic has sparked massive investments in airport improvements which have escalated operational costs. In addition, airline industry deregulation has spurred competition impacting expenditures and airline profit margins. This development coupled with increasing construction costs, limited land availability, and operational restrictions at all major airports in the U.S., has directed interest to under-utilized alternative regional airports. This motivation is further supported by the fact that the majority of the Asian Pacific traffic is serviced by only 7 airports: Tokyo, Osaka, Hong Kong, Singapore, Seoul, Taipei, and Bangkok, all of which have reached both their route and slot capacity. Therefore, regional airports that have both route and "prime" slot capacity and can operate at a third or fourth the cost of the major "hub" airports can become attractive operator destinations. These regional airports would service aggressive, start-up airlines and cargo operators.

OTAY MESA/TIJUANA PASSENGER POTENTIAL-

From 1985-90, annual average scheduled passenger service on international routes grew by 7.6 percent reaching 280 million in 1990. From 1990 until the recent Asian economic crisis, the international growth rate was averaging 5 percent reaching almost 400 million. In the Asia/Pacific region, the growth rate has been more phenomenal, averaging close to 9 percent annually. By the year 2010, it is projected that Japan, Hong Kong, Singapore, and Korea alone will be moving close to 300 million passengers.

Traffic to North America is expected to almost double, yet none of the major U.S. international airports are in a position to cost effectively increase capacity to meet the future demand. This situation will open an entirely new market for well structured regional airports. The importance of international passengers to regional development can best be highlighted through the following examples:

-One year after initiating nonstop service between Washington Dulles to Tokyo and Frankfurt, Japanese passengers rose 260 percent while German passengers rose 180 percent. This increase added almost 900,000 new room nights to the local hotel industry.

-Three years after the first nonstop flights between Dallas and Tokyo, Japanese passenger traffic grew 377 percent and trade by over 1 billion dollars.

-In Maryland, a single KLM passenger/cargo flight operating 4 days per week, contributed over 100 million dollars to the local economy.

It is estimated that the introduction of a single scheduled 747 international nonstop daily service, can contribute between 200 to 700 million dollars annually to the local economy, the reason, on the average Asian tourists spend 500 dollars daily for an average stay of five days contributing 1 million dollars to the local economy per flight.

OTAY MESA/TIJUANA CARGO POTENTIAL-

San Diego generates approximately 7 billion dollars in exports, 3 billion of which moves directly into Mexico. A growing amount of these exports are increasingly moving by air generating 500,000 tons of air cargo annually. While air cargo shipped through San Diego's Lindbergh Field has increased by more than 300 percent since 1980, no new air cargo space has been added to the airport.

Currently, San Diego's Lindbergh Field is moving approximately 100,000 tons of air cargo annually, the majority of which must be trucked to warehouses located approximately 3 miles from the airport where they are broken down, inspected, and then distributed to their final destinations adding both time and cost to operators who have no other options. Suggestions have been made to allocate 15 to 30 acres adjacent to Lindbergh Field to improve air cargo handling and presently, the Port of San Diego is conducting a 2.2 million dollar

master plan study that in part will address cargo requirements.

Though adding cargo capacity is an option, the Port's focus will be on enhancing passenger service rather than cargo capabilities. The outcome is predicated on limited land availability, aircraft fleet mix restrictions, and hour of operation limitation constraining Lindbergh Field.

The importance of developing international air cargo capacity in San Diego cannot be overstated. In Los Angeles, it is estimated that 10 percent of the economic activity (43.5 billion dollars), is directly attributed to its international airport, while in San Diego, it accounts for less than 5 percent. Ironically, 80 percent of San Diego's cargo is moved through LAX. The need to develop air cargo capacity can be best viewed by San Diego's surge in exports.

From 1993 to 1996, San Diego's exports to other countries grew by 54 percent. In 1996 alone, the value of local exports ranked San Diego with the third highest growth among all major metropolitan areas in the U.S. The following outlines the major destination of San Diego based goods and their corresponding dollar amounts:

San Diego merchandise export sales to selected destinations
(U.S. Department of Commerce)

Country	1995	1996	%Chg.
Mexico	2,484,708,183	2,973,933,686	19.3
Canada	496,838,600	613,232,817	23.4
Carib.& Central America	71,886,638	67,134,617	(20.3)
South America	196,106,139	197,317,484	1.1
Europe	1,036,347,404	1,162,545,747	11.3
Japan	508,155,609	517,470,810	2.2
China	37,030,448	57,819,059	56.4
Hong Kong	141,445,067	165,792,358	17.2
Singapore	137,215,265	156,210,092	13.8
South Korea	111,302,500	181,505,130	83.1
Taiwan	123,196,244	154,765,355	25.8
India	15,628,298	19,873,915	27.2
Indonesia	22,879,444	37,780,219	85.1
Rest of Asia	216,696,980	235,044,762	8.5

This growing volume of exports has not only forced San Diego manufacturers to ship their air cargo to LAX or Ontario, but also discouraged corporations from establishing manufacturing operations in the region. In addition, cargo operations must address two important issues:

- 1) Nearly 40 percent of all air cargo is transported by passenger aircraft which under the proposed San Diego Air Commerce Center master plan would not be allowed to operate from Brown Field.***

- 2) Major Trans-Pacific and Atlantic routes and slots from the U.S. West Coast have already been assigned.***

By "linking" Tijuana to Otay Mesa and the proposed San Diego Air Commerce Center at Brown Field, San Diego could effectively and efficiently remedy both these problems while offering a range of cargo "services" not possible or available at any other airport on the West Coast or U.S. This capability would make the Tijuana/Brown Field destination a key import/export center.

What this means is that currently San Diego does not have a cost and time effective means of moving international "belly" and heavy cargo which will continue to force manufacturers and importers to move their product via LAX and Ontario. In addition, the number of routes and slots from the U.S. into Asian, European, and Latin countries is limited by accord, therefore when new positions do open, the competition in the U.S. becomes tremendously aggressive.

An operationally and cost effective supplement to both Lindbergh Field and Brown Field exists just 50 yards from the U.S.-Mexico border, Tijuana's International Airport which through ample route and slot capacity and a crossborder facility could easily complement the international air cargo needs of not only Mexico and San Diego, but for all Asia, Central, and Latin America. Through greater utilization of Tijuana, San Diego could offer the growing export market a strategic advantage over existing cargo options in Southern California, e.g. LAX, Ontario, and George Air Force Base in San Bernardino.

Tijuana's strategic value is further reinforced by the fact that the majority of Asian air cargo destined for North and South America enters the U.S. via LAX

and Ontario. South American bound cargo is then trucked to Miami for general distribution. This multi-modal transportation network is not only costly, but adds three days shipping time.

Consequently, in order to gain a leg up in this lucrative market, the Port of Miami is aggressively seeking to develop direct Asia-Miami air cargo service. Their intent is to by-pass LAX and Ontario, but as already mentioned, route and slot development in the U.S. is not only limited and costly, but also tremendously time consuming.

Alternately, a more cost and time effective option can be developed at Tijuana. Adding to this potential is the fact that almost half of the U.S. horticultural exports are destined to the Pacific Rim, the majority of which originates in the Western U.S., making Tijuana's underutilized international route and slot network tremendously attractive and logical to regional and local producers on both sides of the border.

LAX/SAN DIEGO/TIJUANA-

LAX is today the second busiest air cargo airport and the third busiest passenger airport in the world. It currently handles well over a million tons of air cargo and 60 million passengers annually. To maintain its position, LAX has initiated a master plan to increase annual passenger volume by 50 percent to reach 90 million, by increasing gate capacity from 154 to 276. The plan also seeks to more than double air cargo operations by increasing air cargo space from 197 acres to 446. The tentative cost for upgrading passenger terminals, cargo facilities and the required infrastructure that surrounds the airport, is already estimated to be in excess of 12 billion dollars.

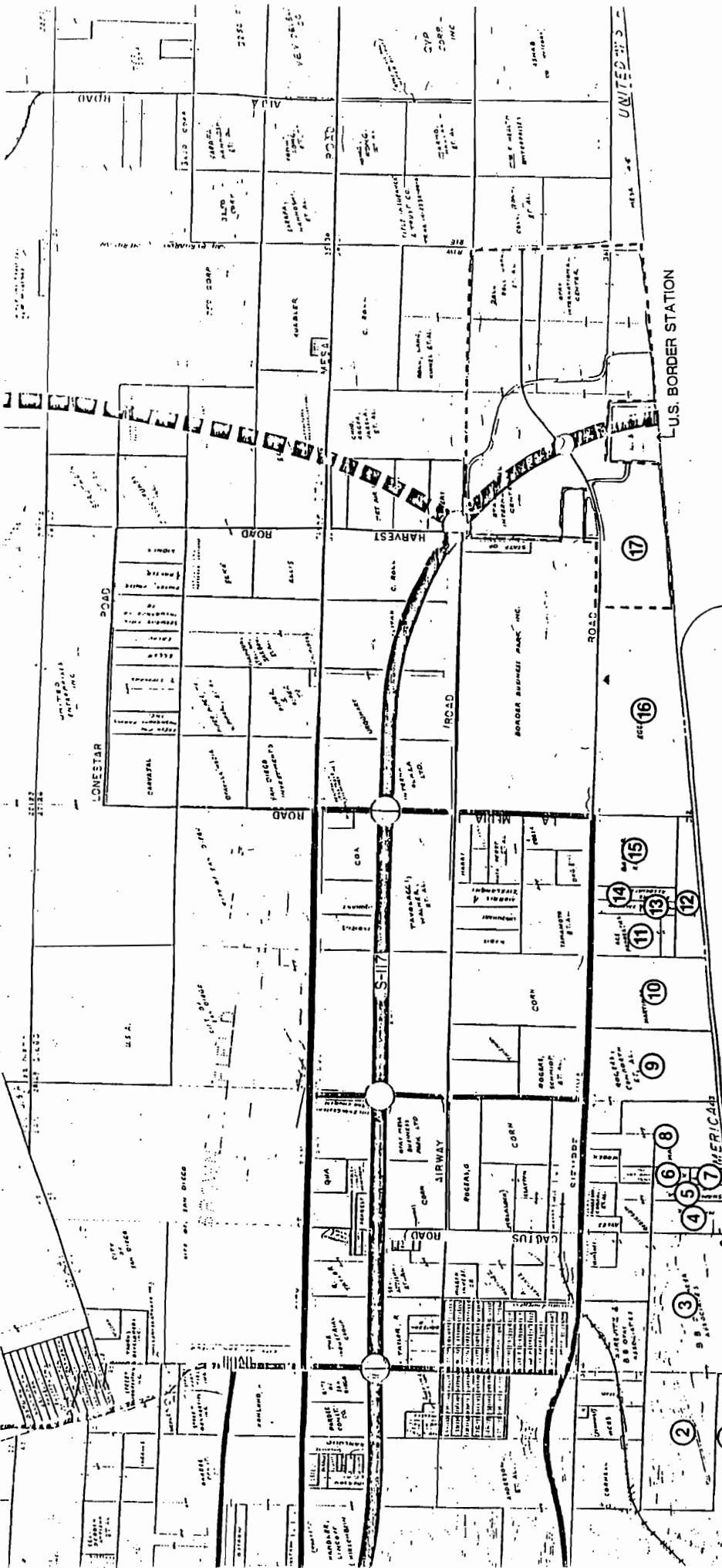
Landing fees could easily triple and further complicating the issues is the fact that LAX's 3,500 acres is surrounded by residential and commercial development, limiting its ability to acquire land for future expansion and increasing costs well beyond current estimates. For this reason, air traffic in Los Angeles and Orange County has been "farmed out" to airports such as Ontario and John Wayne, and currently there is a plan to create a 24 million annual passenger supplemental airport at the former El Toro U.S. Marine Air Station.

The LAX approach has created a fragmented network of airports which is

OTAY MESA

Available Industrial parcels adjacent to Mexico/USA border

Parcel #	Acres	Zoning	Present Usage	Comments
1	450	Ind/Residential	Raw Land	MSCP/Open space/Canyons
2	40	Industrial	Raw Land	MSCP/Canyon
3	85	Industrial	Finished Lots	Ind. Business Park/International Business Center
4	16	Industrial	Truck Storage	Trucking yard
5	10	Industrial	Raw Land	Vacant
6	5	Industrial	Raw Land	Outside storage of containers
7	5	Industrial	Raw Land	Vacant
8	64	Industrial	Raw Land	Farming
9	68	Industrial	Finished Lots/Ind. Bldgs.	Ind. Business Park/Britannia Commerce Center
10	68	Industrial	Raw Land	Vacant/Nursery
11	25	Industrial	Raw Land	Vacant
12	24	Industrial	Raw Land	Vacant
13	10	Industrial	Raw Land	Vacant
14	10	Industrial	Raw Land	Vacant
15	40	Industrial	Raw Land	Vacant
16	142	Industrial	Raw Land	Being developed into an industrial sub-division
17	50	Industrial	Ind. Business Park	800,000 s.f. business park



Lot No.	Owner/Company	Lot No.	Owner/Company
1	...	11	...
2	...	12	...
3	...	13	...
4	...	14	...
5	...	15	...
6	...	16	...
7	...	17	...



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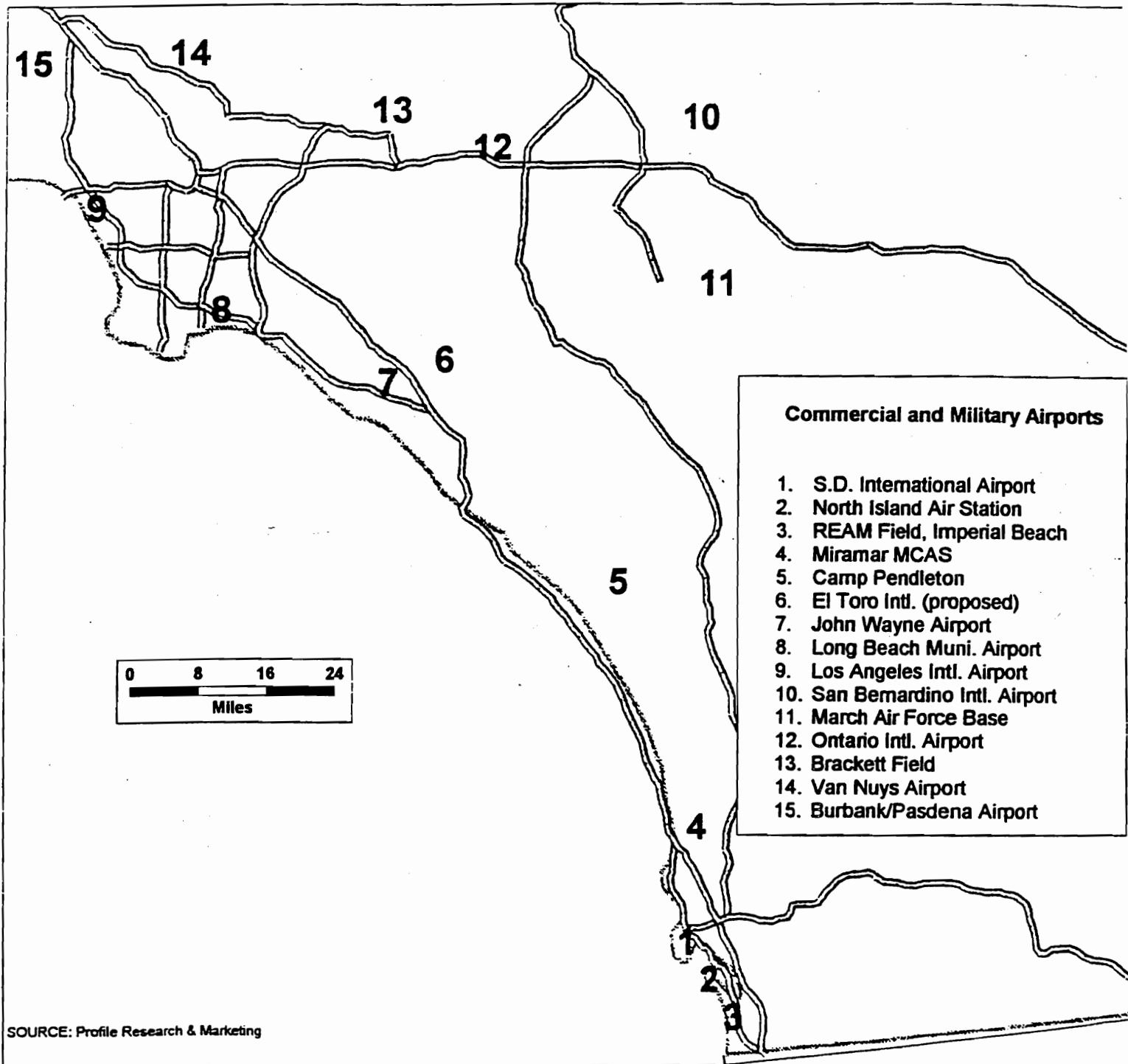
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neither highly efficient or desirable. Access to and from the supplemental airports will require hours as freeways and highways are in constant gridlock. In the air over Southern California, with over 3,000 daily operations, gridlock is almost as pervasive as on land.

Aircraft must maneuver between nine airports within a 40 mile corridor: three commercial, three general aviation, and three military. As costs, surface, air traffic continues to grow, and El Toro is converted into a major commercial airport, uninterrupted flow and control will become more complex and difficult to maintain.

South of LAX, is San Diego's Lindbergh Field with over 600 daily operations moving 13 million passengers and a 100,000 tons of air cargo annually out of a 470 acre facility, making it America's smallest "large hub" airport. The FAA and the Port of San Diego's most recent study, predicts that within the next five years, Lindbergh Field will begin to suffer from chronic delays as its single 9,700 foot runway configuration will peak at 650 daily operations. Further adding to its problems is the fact that from 11 p.m. to 6 a.m., all departing operations are suspended due to noise restrictions.

SOUTHLAND AIRPORTS



SOURCE: Profile Research & Marketing

One of the solutions proposed is annexing 47 acres from Camp Nimitz Naval Training Center to develop an international terminal at a projected cost of 400 million dollars, but there are no major plans to improve air side facilities, i.e. the 9,700 foot runway, or the cargo warehousing built in 1980.

Airports to the north of LAX, i.e. San Francisco to Anchorage, have also reached saturation. This leaves only one airport sector on the West Coast with underutilized operational capacity and access to international routes and slots, Tijuana. With a crossborder facility, San Diego could today achieve a functional international passenger/cargo operation.

RODRIGUEZ FIELD NOISE CONTOUR DATA

Section VII

BINATIONAL PROCESS - Section VIII

Approval of U.S.-Mexico Bridges and Border Crossings

The two main groups involved with approval of U.S.-Mexico bridges and border crossings, the U.S. Mexico Binational Bridges and Border Crossings Group and the U.S. Interagency Working Group on Bridges and Border Crossings, are discussed in this section. They are discussed in terms of their participants, their purpose, and benefits resulting from their intervention.

U.S.-Mexico Binational Bridges and Border Crossings Group-

Exchange of technical and policy information on bridges and border crossings between the United States and Mexico is coordinated through the U.S.-Mexico Binational Bridges and Border Crossings Group. This group, formed in 1983, is composed of delegations from the governments of the United States and of Mexico. It is co-chaired by senior officials of the U.S. Department of State and the Mexican Secretariat of Foreign Relations. It meets semi-annually to discuss proposed and existing bridges and border crossings, and related matters on the U.S.-Mexican border.

Participants

The meetings of the group of U.S. and Mexican delegations consist of representatives of federal agencies that have an interest in or responsibility for the conduct of bilateral relations, provision of permits or approval of new crossings (international ports of entry), including inspections, highway/rail access, facilities construction, the environment, and the international boundary. The U.S. delegation is chaired by the U.S. Department of State's Coordinator for U.S.-Mexican Affairs, while the Secretariat of Foreign Relations (SRE) Director General for North American Affairs chairs the Mexican delegation. In recent years, both governments agreed to include representatives of each of their respective border states. These representatives participate as observers.

Purpose and Benefits

The purpose of the meetings is to discuss the existing and proposed bridges and border crossings and their related infrastructure and exchange technical information on bridges and border crossings. This is to enable projects which both federal governments deem beneficial to successfully complete the approval process of the two respective governments. Related issues such as toll roads and other infrastructure projects are discussed as are operational matters involving existing and future crossings. In addition to regular semi-annual meetings, the delegations conduct a "border walk" at least once annually. These border walks visit U.S. and Mexican border stations and international crossings in a specific area. Until 1995, these were held twice a year, but both governments, recognizing budgetary stringencies, decided to hold one formal "border walk" annually with mini "border walks" to be held at the Binational meetings whenever feasible.

The meetings normally consist of three sessions over a three-day period. The first day is devoted to the public sessions in which proponents of proposed bridges and border crossings and related infrastructure projects such as highways make public presentations to the two delegations. This session is open to the press and the public. Next are the technical sessions in which both delegations discuss specific border crossings, exchanging views and technical information.

The third session is a plenary at which positions are summarized. If feasible, one half day is set aside for a mini "border walk" or site visit to nearby border crossings.

Beginning in 1994, the border state representatives were included although their roles in the respective delegations vary somewhat. Each U.S. and Mexican border state is asked to make a presentation on the development of relevant transportation infrastructure projects since the last meeting.

The value of the Group is the exchange of policy views and technical information between the two delegations. The public session permits bridge and infrastructure project sponsors to brief various agencies of both the U.S. and Mexican governments on proposed projects or to provide updates on those already in progress.

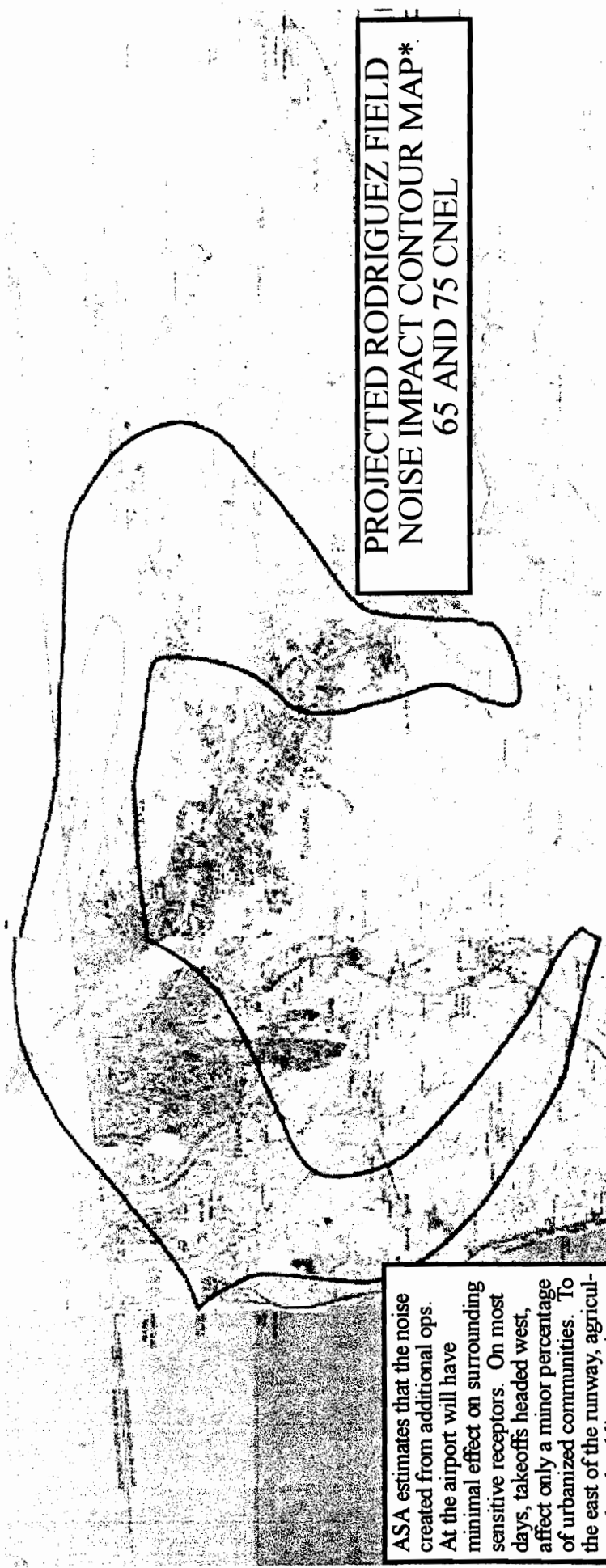
The participation of state representatives gives direct input to both American and Mexican participants in a way that the FHWA and the DOT cannot. State input is critical on specific projects and is considered in advancing proposed bridge and border crossing projects throughout the approval process. This participation makes it far less likely that bridge and border crossings will complete the approval process without the required transportation infrastructure.

It should be noted that both the United States and Mexico have separate approval processes. In both cases, the responsibility for approving or permitting new bridge and border crossings rests with the U.S. Department of State and the Mexican Secretariat of Foreign Relations. However, any commitment for a new bridge or border crossing requires the exchange of diplomatic notes between the U.S. Department of State and Mexico Secretariat of Foreign Relations.

U.S. APPROVAL-

The Presidential Permit application process requires consideration of 11 items to be submitted by applicants. These are:

- Applicant identification
- Detailed description of proposed facility and approaches
- Explanation of how the nation's interest will be served by the construction of the proposed facility
- Schedule for permit acquisition, other approvals, funding, construction
- Costs and financing plan, including approach roads
- Plan to secure all approvals
- Verification that Mexican authorities are aware of the proposal and will consider it
- Identification of any impacts on properties on the "National Register of Historic Places"
- Minority and low-income populations likely to be affected
- Commitments needed to ensure adequate support
- Compatibility with Mexican plans and priorities
- Viable plan for inspection facilities, inspection agency staffing, and bridge operation
- Required NEPA documentation



**PROJECTED RODRIGUEZ FIELD
NOISE IMPACT CONTOUR MAP*
65 AND 75 CNEL**

ASA estimates that the noise created from additional ops. At the airport will have minimal effect on surrounding sensitive receptors. On most days, takeoffs headed west, affect only a minor percentage of urbanized communities. To the east of the runway, agricultural and public recreation zones are compatible with airport operations. Directly south, urban areas should not be impacted by the noise. Additionally, a new generation of jet turbine will further reduce ambient noise levels.

*Plan Maestro del Aeropuerto Internacional de Tijuana, B.C.

The above items are considered prior to a recommendation for permit approval. The Presidential Permit is the first U.S. federal permit obtained.

The process involves review of the application by several Federal and state agencies to assess the liability and impact of the proposed bridge. Once this permit is issued, the sponsor may proceed to obtain permits from the International Boundary and Water Commission and the U.S. Coast Guard. Mexico's Secretary of Foreign Relations has an analogous process.

U.S. Interagency Working Group on Bridges and Border Crossings IWG

This interagency committee was created to coordinate participation of U.S. federal agencies responsible for bridges and border crossings and the international boundary.

Participants

The approval of new bridges and border crossings between the United States and Mexico is an integral part of bilateral relations between the two countries. The International Bridge Act of 1972 required Presidential Permits for new bridges (and related structures). An interagency group was formed to facilitate the approval process. The Coordinator of U.S.-Mexico Border Affairs, Office of Mexican Affairs, in the U.S. Department of State chairs this interagency group. This group is composed of federal agency representatives involved in the approval, construction, operation and maintenance of international crossings in the international boundary.

Regular members include the U.S. Department of State (chair), the Department of Transportation, the Federal Highway Administration, the International Boundary and Water Commission (IBWC), the U.S. Coast Guard, the General Services Administration, the Immigration and Nationalization Service, the Customs Service, the Department of Agriculture (Animal Plant and Health Inspection Servicing-APHS), the Department of Commerce, the Environmental Protection Agency, the Federal Railroad Administration, and others as appropriate.

Members of the Interagency Working Group on Bridges and Border Crossings often are also the Federal members of the U.S. delegation to the semi-annual U.S.-Mexico Bridges and Border Crossings Group (see previous section).

Purpose

The Interagency Working Group coordinates policy with regard to bridges and border crossings between the U.S. and Mexico and fosters communication among responsible agencies with regard to individual projects. While decisions on individual projects are not made in interagency meetings, member agencies of the Interagency Working Group on Bridges and Border Crossings are asked to provide detailed written comments on all new proposals for bridges and border crossings as part of the Presidential Permit process (bridges) or the approval process (land crossings).

All U.S.-Mexico border crossings require exchange of diplomatic notes approving such projects. Proposed bridge construction in Texas also requires approval from the Texas Transportation Commission to construct a bridge as well as the Presidential Permit; such permits are not required for land crossings in other U.S. states, although the Department of State and Mexico Secretariat of Foreign Relations have similar procedures.

Major Initiatives and Benefits

The Interagency Working Group provides the framework for individual agency input in the Presidential (bridge) Permit or land border approval processes. It has created the Binational Bridges and Border Crossings Group that meets semi-annually to exchange policy and technical information on individual bridge and land border crossings, to hear from sponsors of new or related projects, and to learn about border state activities relevant to international crossings.

The IWG also serves as the staff to the U.S.-Mexico Binational Bridges and Border Crossings Group.

MEXICAN APROVAL-

All inquiries regarding border projects and issues are handled by the Ministry of Foreign Relations, Department of Border Issues (Direccion Asuntos Fronterizos). The Department of Border Issues then assumes the role of coordinating with all the different Ministries but prior to that, their protocol requires that before any project can be considered or discussed, a full business plan identifying both the economic and social benefit and a basic rendering of the project must be submitted for review.

If the information submitted meets the basic approval of the Department of Border Issues, sufficient copies must be submitted by the interested party so that they can be distributed to the various Ministries who will be required to evaluate the proposal.

The Ministries that would be involved in a project such as a cross-border passenger facility would include, but are not limited to the following:

- Ministry of Foreign Relations
- Ministry of Interior
- Ministry of Communications and Transportation
- Ministry of Defense
- Ministry of Commerce and Industrial Development
- Ministry of Finance and Public Debt
- Ministry of Comptrollership and Administrative Development
- Ministry of Social Development

Due to the wide range of Ministries and individuals involved, in order to avoid conflicting views or misinterpretations between the various Ministries, as a policy, Mexican officials will not consider a "concept" that has not been fully formulated into a business plan which can then be submitted and discussed within an inter-agency committee. The reason, anyone within the committee can effectively deny a proposal. Therefore, cooperation between the various elements is only assured if issues are approached in an open and equal basis between all the committee members.

Though this process may appear redundant and complicated, it generally has the effect of filtering marginal proposals before they can ever reach the committee process. Therefore those proposals filtering through the initial review by the Ministry of Foreign Relations, Department of Border Issues, have a greater chance of success since the proposal must meet a basic standard agreeable by the majority of the Ministries involved.

Crossborder Terminal Concept

In the case of the passenger border-crossing for the Tijuana airport, attempts were made to discuss the concept with both the Ministry of Foreign Relations, Department of Border Issues and the Director of Airports and Auxiliary Services.

In each case, specific data, such as a cost/benefit analysis, number of foreign passengers that currently arrive in San Diego either directly or indirectly through other regional airports, the tonnage and value of international air cargo moved to and from San Diego either directly or indirectly, projected growth and potential markets were requested. Noting that none of this data was either offered or made available, officials felt that any discussion could be interpreted as a tacit approval. Though agreeing that the concept was "interesting", judgment was reserved pending the availability of data by which they could support a position and offer an "educated" opinion.

This cautious position was partly due to the fact that any discussion involving a major Mexican airport, could have hindered the airport divestiture process currently underway. This position was supported by the fact that the airport divestiture process controlled within one Ministry, i.e. the Ministry of Communications and Transportation, had already been delayed by more than a year due to technical and legal considerations which forced a reconfiguration of the airport packages.

The introduction of a border facility into this equation prior to the divestiture was seen as undesirable as it would involve a half dozen Ministries which in effect not only risked delaying the divestiture process of the Pacific package by years, but also may distract potential investors as they would be asked to "buy into" an unknown and lengthy process without a clear definition as to cost or benefit.

At this time, the divestiture of the Pacific Package, which includes the Tijuana airport, is anticipated for February of 1999. Officials in Mexico have suggested formulating a strong business plan which will attract investors to the San Diego market. This point was highlighted by the fact that a general master plan will be required for each individual airport, which will allow an investment group to incorporate the concept of a Tijuana/Otay passenger crossing as part of the general development plan.

This section is based on the Diario Oficial of June 29, 1998, outlining the basic guidelines for the first divestiture package.

BACKGROUND- AIRPORT DIVESTITURE PROCESS

HISTORY:

Mexico's airport divestiture process officially began on April 7, 1995, with the publication in the "Diario Oficial", the Mexican Federal Registry, of the Presidential decree that established the Intersecretarial Disincorporation Commission. One of the tasks of this Commission was the creation of Mexico's "Airports Law" published in the Official Diary on December 22, 1995, which established the scope and definitions that would be applied in the divestiture process. As with all laws in Mexico, the implementation of the law cannot take place until the general guidelines for enforcement known as the "Reglamentos", are also published in the Official Diary, which to date, has not taken place.

Throughout 1996, a variety of divestiture options were studied which included models from Austria, England, and Argentina. The range moved from single to regional airport packages. Without a clear definition as to how airports would be assigned or packaged, the publication of the Airport Law opened the divestiture process to various interpretations. Adding to this confusion were six definitions covering a variety of airport configurations from basic air strips to fully instrumented international facilities. Article 12, section I of The Airport Law also allowed local municipalities and State Governments to ask the Federal government to assign local municipal airports (aerodromos civiles) without the need of a formal bid. Article 14 covered the possible assignment of airport concessions without the need of a public bid to entities of the Federal Public Administration. As provided for the Airport Law, provisions of Article 12 covered only some general aviation air facilities.

The divestiture process was further complicated by the fact that the initial list of 58 airports included many unprofitable and marginal operations. As the divestiture and privatization process was studied, a general consensus was reached in which unprofitable airports were dropped and regional packages with approximately 9 million passengers, were established. After two years of studies, four packages were structured and are listed in the anticipated divestiture order:

Southeast Package- 9 airports with Cancun as the hub and including Conzumel, Merida, Villahermosa, Oaxaca, Huatulco, Minatitlan, and Veracruz.

Pacific Package- 12 airports with Guadalajara as the hub and including Puerto Vallarta, Tijuana, Los Cabos, Bajio, Morelia, Hermosillo, La Paz, Aguascalientes, Los Mochis, Mexicali, and Manzanillo.

Center-North Package- 13 airports with Monterrey as the hub and including Acapulco, Mazatlan, Zihuatanejo, Zacatecas, Culiacan, Ciudad Juarez, Chihuahua, San Luis Potosi, Durango, Torreon, Tampico, and Reynosa.

Mexico City- will stand alone.

For purposes of the divestiture process, all the individual airports have been converted into corporate entities known as "Sociedades Concesionarias", stock is controlled by their respective holding companies, "Sociedad Controladora". The holding company must control at least 51 percent of the stock of each of the individual airports.

ANNOUNCEMENT OF FIRST DIVESTITURE-

On June 29, 1998, the divestiture of the first package became official. This package covers the Southeast region and is made up of 9 airports with Cancun as its hub. Though the "Reglamentos" that covers the Airport Law has yet to be published, the divestiture parameters were established with the "Convocatoria" published in the Diario Oficial on June 29, 1998.

The Convocation established the bases that will dictate the divestiture process. The first step was the incorporation of each airport as outlined in Article 14 of the Airport Law. This created 9 "concession" entities:

Aeropuerto de Cancun, S.A. de C.V.	Aeropuerto de Cozumel, S.A. de C.V.
Aeropuerto de Huatulco, S.A. de C.V.	Aeropuerto de Merida, S.A. de C.V.
Aeropuerto de Minatitlan, S.A. de C.V.	Aeropuerto de Oaxaca, S.A. de C.V.
Aeropuerto de Tapachula, S.A. de C.V.	Aero. de Villahermosa, S.A. de C.V.
Aeropuerto de Veracruz, S.A. de C.V.	

The concession entities were then packaged into a holding company that will retain a minimum 51 percent equity position in each of the respective airports with the Federal government retaining a majority control over the holding company. The holding company is known as the Airport Group of the Southeast, Incorporated (Grupo Aeroportuario del Sureste, S.A. de C.V.).

In addition to the creation of the holding company, the Federal government also created a subsidiary of the holding company which will control all administrative services known as Airport Services of the Southeast, Incorporated (Servicios Aeroportuarios del Sureste, S.A. de C.V.).

The relationship between the various working entities will be defined through a Participation Contract (Contrato de Participacion), which will include the stock purchase agreement, stock option agreement, trust agreement, and the legal and working terms and conditions between the holding company, the consigned airports, services, the Federal government (as the majority stockholder), and the Strategic Partner (bidding/investment group).

STRATEGIC PARTNER-

The divestiture process will be based on attracting a "Strategic Partner" who will be granted a 15 year operating term. The Strategic Partner must consist of a Mexican group teamed up with a foreign operator and investors.

The principal obligations and responsibilities of the Strategic Partner within the regional package will be:

- 1) Development and promotion of the operational, commercial, financial, and marketing needs.
- 2) Technology transfer to the holding company, subsidiaries, and each airport within the regional package, as well as training of all personnel.
- 3) Review and update the master plan of each individual airport within the regional package.
- 4) Support and promote public offerings made by the holding company (controlled by the Federal government).

The strategic partner will be required to acquire 15 percent of the equity shares of the holding company and an option for an additional 5 percent of the shares. The Federal government will retain the remaining shares which will be sold through one or more public offerings on the Mexican stock market.

At no time will the strategic partner be able to hold more than a 20 percent equity position within the holding company while voting rights will be restricted to a 10 percent position. This is done to encourage diversification.

PARTNERSHIP STRUCTURE-

The Strategic Partnership will require a minimum of one Mexican partner and a foreign airport operator with a proven track record. Full background profiles on both corporate entities and individuals must be submitted including those of subsidiaries and individuals holding more than a 10 percent equity position.

The Mexican partner will constitute no less than 25.5 % of the partnership group while the airport operator will also hold no less than 25.5 % with the remainder, up to 49 %, distributed among other investors, who must be disclosed and approved. The bidding group must have been established no later than September 25, 1998.

BASIC DIVESTITURE REQUIREMENTS-

In order to participate in the divestiture process, groups will have to have registered with the Ministry of Communications and Transportation by no later than August 7, 1998, and have obtained the "authorization" to participate by complying with the following:

- 1) Proof of registration.
- 2) Application of authorization in the proper format.
- 3) Comply with the documentation that will show legal, technical, administrative and financial capacity.
- 4) Submit a written proposal outlining the motive and interest to participate in the divestiture process.
- 5) Submit a full disclosure under oath, of the names of all parties within a group and declaration that each is acting for their own benefit and not representing the interests of a third party.
- 6) Communications and Transportation.

In addition to the above, a good faith deposit of \$100,000,000 (one hundred million) Mexican Pesos, in currency, equivalent Mexican government securities, or dollars at the exchange rate at the time of submittal, must have been deposited by each bidding group into a trust account with Banco Interacciones no later than September 18, 1998. Upon the announcement of the winning bid, the deposit of the winning group would be applied to the winning bid with all other deposits being refunded to their respective groups.

All members within a specific group, must act through a common representative who must have sufficient legal capacity to represent and bind the whole.

The Ministry of Communications and Transportation with prior opinions submitted by the Inter-Agency Commission for the Granting of Concessions and Permits Outlined in the Airport Law of the Restructuring Committee of the Mexican Airport System, will review all applications prior the actual bidding process. Any applications deficient in information or not submitting full disclosure, will be automatically barred from the process.

RIGHTS OF PARTICIPANTS-

A confidentiality agreement will be required from all participants. All information will be restricted to those actually participating in the process. Upon qualifying as a participant, bidding groups will be entitled to the following:

- 1) Information packet which will include technical, operational and financial data corresponding to all the airports within the Southeast package as well as on the holding company, airports, and service entities.
- 2) Participation Contract with all supporting documentation.
- 3) Articles of incorporating of the holding company, airports, and service entities.
- 4) Current concessions at each of the respective airports within the package.
- 5) Right to inspect all installations within each of the respective airports within the Southeast package. Prior notification must be given to the Financial Agent (Grupo Financiero Interacciones), with 3 potential dates, as well as those who will be attending with a maximum of 5 individuals who must be escorted by a representative of the Financial Agent and the Ministry of Communications and Transportation. The inspections must be completed no later than October 9, 1998.

- 6) All questions must be submitted in writing and information will only be given in reference to that outlined in the divestiture process and respective to the holding company, airports, and service company.
- 7) Access to the central data bank will be allowed until October 9. The central data bank holds all legal, financial, and operative information regarding the holding company, their respective airports, service company, their equipment, and markets. Access is restricted and controlled by the Financial Agent, and prior authorization and appointments must be sought before reviewing the information. No information can be duplicated or removed without a formal written request to the Financial Agent.
- 8) The Financial Agent will deliver the final draft of the Participation Contract by October 2, 1998.

SUBMISSION OF PROPOSALS-

Proposals will be made up of two parts:

- A) Technical- which must include a master plan for each airport within a package with specific information on traffic projections, service standardization to international levels, improvement and expansion plans, maintenance programs, technological transfers, personnel training and the curriculum of all personnel who will be acting in a managerial capacity for the group.
- B) Economic- financial sources which must include a detail of how the bid will be covered.

The proposal must be submitted with the original application supplied by the Financial Agent and will be restricted to the acquisition of the "participating stock" as outlined in the Diario Oficial dated June 29, 1998 (15 percent of the shares). Submittals must be dated no later than October 15, 1998, 11:00 AM to the address indicated by the Financial Agent.

Upon submission, the technical aspects will be reviewed and evaluated by the Ministry of Communications and Transportation (SCT).

If all groups fail to meet the technical evaluation, the process will be declared abandoned by no later than October 29, 1998, and the economic portion of the application will be returned unopened to the respective groups. If the technical aspects are met, the economic review will begin no later than October 29, 1998.

For groups not having withdrawn or been disqualified in the technical process, before a public forum, the economic packets will be opened and the amounts of the bids made public. The bids and the submitted economic information will then be reviewed. The basis of selection will be based on those groups whose technical proposal will have met with all the conditions and requirements established by the Ministry of Communications and Transportation. Having met the technical conditions as well as all other conditions outlined in the Participation Contract, a proposal will be chosen based on their highest offered price for the Stock Participation (15% stock block), with the Ministry of Communications and Transportation reserving the right to void the bid if the amount does not assure the best economic conditions for the Federal government. If no bid is considered adequate, the process will be declared invalidated.

SUCCESSFUL PROPOSAL-

Upon the acceptance of a successful proposal, the winning group must sign a Participation Contract within 10 working days from which it is notified by the Ministry of Communications and Transportation. The winning group must abide to all the conditions and requirements established during the divestiture process including the following:

- 1) The Mexican partner and operator must maintain a 51 % position with the Strategic Partnership.
- 2) The Strategic Partner must maintain its equity position within the holding company that corresponds to the Mexican or operating partner for 10 years after which a fifth of the shares can be released annually.
- 3) The investment partner must maintain its stock position for the initial 3 year period after the first public offering.

- 4) The option to acquire an additional 5 percent of the shares, can be exercised beginning on the third year in one third blocks annually.
- 5) To guarantee performance, the shares will be free from all encumbrances and the Federal government will be the beneficiary of the trust holding the shares.
- 6) The debt to equity must not exceed 50 percent.

The Participation Contract will also hold the terms and conditions under which the Federal government can revoke the contract if the Strategic Partner fails to meet its obligations and commitments.