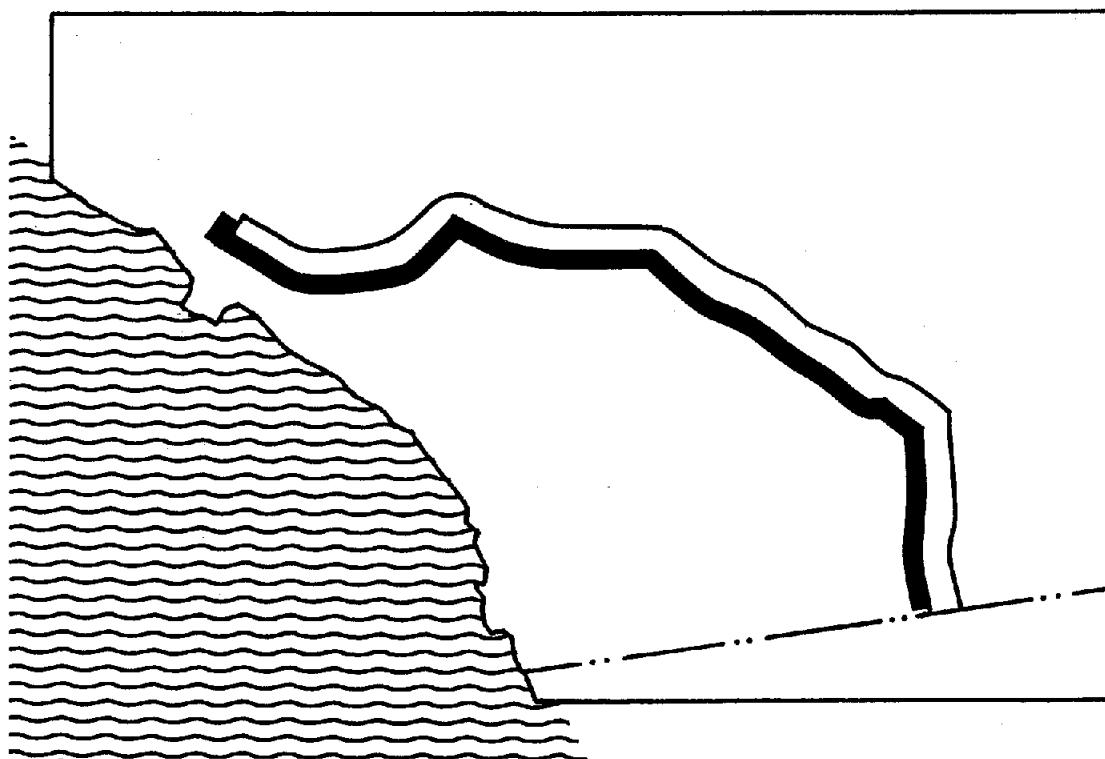


LOS ANGELES COACHELLA VALLEY IMPERIAL COUNTY

INTERCITY RAIL FEASIBILITY STUDY



PREPARED FOR
RIVERSIDE COUNTY TRANSPORTATION COMMISSION

PREPARED BY
SCHIERMEYER CONSULTING SERVICES
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City of Palm Desert
City of Riverside
City of Corona
City of Brawley
City of El Centro
City of Calexico

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EXECUTIVE SUMMARY

This report presents a recommended program for the implementation of intercity passenger rail service on existing railroads between Los Angeles, Riverside, and the Coachella and Imperial Valleys, a distance of 239 miles. The report was prepared for the Riverside County Transportation Commission to explore the technical and financial aspects of implementing the proposed passenger rail service under the auspices of the California Department of Transportation (Caltrans) intercity rail program.

The base route would traverse the San Bernardino subdivision of the Atchison, Topeka, and Santa Fe (AT&SF) line beginning at Los Angeles Union Passenger Terminal, with stops in Fullerton, Corona, and Riverside (Figure A). The service would then turn southeast in Colton and begin operating on the Southern Pacific (SP) Transportation Company Yuma main line. Stops would include Loma Linda, Beaumont, and three locations within the Coachella Valley.

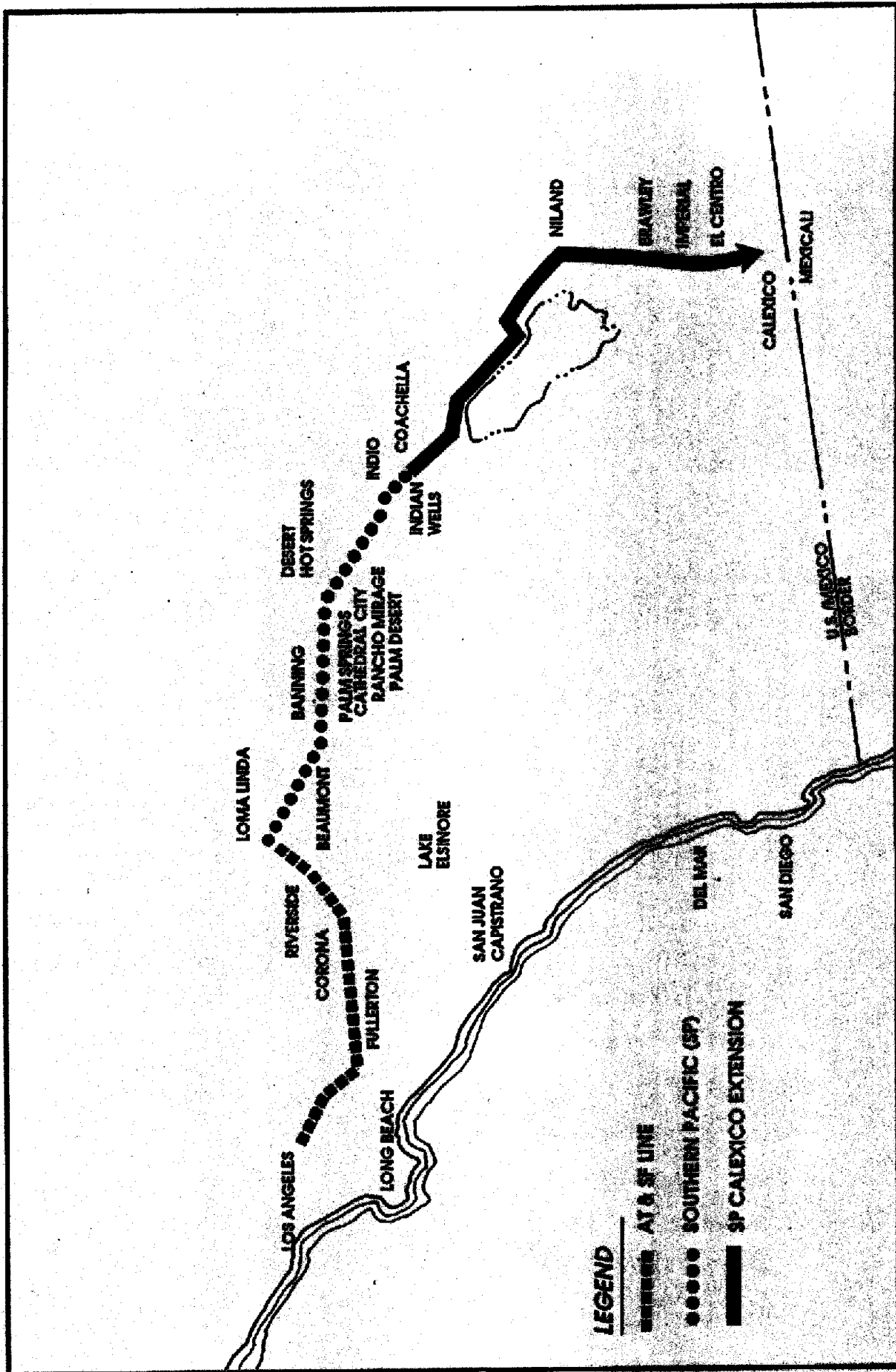
A proposed 98-mile extension to the base route would continue service along the SP Yuma main line to Niland at which point it would turn south to Calexico on the SP El Centro and Calexico branches. Calexico borders Mexicali, the capital of Baja California, Mexico. Potential stations along the proposed extension would be located in Brawley, El Centro, and Calexico.

The potential market for this service includes recreational and business trips between the Coachella Valley, downtown Riverside, Orange County, and Los Angeles, as well as international travel between Mexicali and points in Riverside, Orange, and Los Angeles Counties. With over 2 million annual visitors to the Coachella Valley, projected patronage for these markets yields an expectation of revenue recovery well within the range of industry standards.

In analyzing the proposed service, five major study tasks were addressed:

- o Station assessment analysis
- o Fares and schedules
- o Capital and operating costs
- o Patronage and revenue assessment
- o Institutional and financial issues

The technical observations and recommendations relating to each of these tasks are summarized below.



MAP OF PROPOSED ROUTE
INTERCITY RAIL FEASIBILITY STUDY

FIGURE A

SCHIERMEYER CONSULTING SERVICES

STATION LOCATION ASSESSMENT

1. Los Angeles and Fullerton each have existing passenger rail stations. Corona and Riverside will use sites identified as part of the Riverside County Transportation Commission's commuter rail network. At the present time, the Corona site will be located near Main Street and the Riverside site will be between 3rd and 14th Streets.
2. East of Riverside, new intercity rail stations are required for this service. These locations were selected through a technical analysis and screening of candidate station sites, with continuing review by the affected local, county, and regional authorities. Factors considered as part of the analysis included: regional and local access, land use suitability, track configuration, and station spacing.
3. A total of 17 sites were inventoried as potential station locations east of Riverside and west of the Coachella Valley. Of these, two have been identified as candidate station sites: Loma Linda (Mountain View Ave.) and Beaumont (5th Place).
4. Given the geographical size of the Coachella Valley, its tremendous growth over the past ten years, and its projected development, a strong case can be made in support of three stations. This report recommends that stations be located in the western, central, and eastern zones of the Valley. The Coachella Valley Association of Governments (CVAG) has expressed interest in developing a competitive bid process for the final selection of sites within the above station zones.
5. In Imperial County, three sites have been selected as candidate station locations: Brawley (Main), El Centro (Main), and Calexico (Second).

FARES AND SCHEDULES

1. No actual fares were established for this service. However, as part of the revenue projection task, sample fares were determined based on current Amtrak fare policy for the San Joaquin corridor through central California. These fares range from 19 cents per mile (for distances greater than 144 miles) to 24 cents per mile (for distances less than 25 miles).
2. Since most passengers travel using discount roundtrip tickets, the proposed one-way fares are computed at half the cost of a round trip ticket rate.

3. This report developed two possible operating schedules for analytical purposes only. One option is based on three daily round trips between Los Angeles and the Coachella Valley. The second option is based on three daily round trips between Los Angeles and the Coachella Valley, with one trip extended to Calexico.

4. Schedules were determined by considering the travel market between Los Angeles and the Coachella and Imperial Valleys and the perceived need for travellers to be able to spend a full day for business or pleasure purposes. Therefore, early morning and evening departure times have been developed (e.g. a 5:30 a.m. departure from Coachella Valley would arrive in Los Angeles at 9:00 a.m., with a 5:30 p.m. return from Los Angeles).

CAPITAL COSTS

1. Rolling Stock: The basic service to the Coachella Valley proposed in this report will involve the operation of two train sets. Each train will consist of a diesel-electric locomotive, four passenger coaches, a food service car, and a passenger coach with a control cab to permit push-pull operation. In addition, this scenario will require the following backup equipment: one locomotive, one food-service car, one cab-control coach, and one passenger coach. The total estimated cost for rolling stock in this scenario is \$28.4 million.

A service extension to Imperial County would require the additional purchase of four passenger coaches in order to make three complete train sets. In addition, one locomotive, one control-cab coach, and one food service coach will be required as back-up equipment. The incremental cost of this equipment \$10.7 million.

2. Stations: From Los Angeles through downtown Riverside, the proposed service would use stations already in existence or planned as part of the commuter rail network. Only stations located east of Riverside are programmed into the capital budget.

This assessment assumes most stations will be located on one-acre sites. The number of parking spaces per site varies from 50 spaces in Imperial County to 100 spaces for most other locations. Due to the variable and seasonal climatic conditions associated with this route, enclosed climate-controlled modular facilities have been budgeted for all station sites, with the exception of Brawley and El Centro.

It is further assumed that all stations will be unstaffed with the exception of one site in the Coachella Valley and the Calexico terminus. These stations would house a structure large enough for Amtrak offices and baggage storage. The selected Coachella Valley station would most likely become the future passenger boarding

location for the existing transcontinental Amtrak train.

The total cost for stations east of Riverside to the Coachella Valley is estimated at \$9.9 million. An additional \$2.8 million will be required for station improvements in Imperial County, bringing the total to approximately \$12.7 million.

3. Track Improvements: A new connecting track will be required at Colton Crossing (a busy junction of three railroads within the City of Colton) to permit movement from the AT&SF trackage to the SP line. The estimated cost is \$1.4 million. Further study will be required to evaluate the need for additional track capacity on the Southern Pacific line at Colton.

A 1,000 foot layover track would be required at the easternmost station in the Coachella Valley for the train that arrives in the Valley at 9:00 pm and departs at 5:30 am the following morning. These facilities are estimated to cost \$400,000.

To facilitate reasonable operating speeds on the Calexico branch, line rehabilitation would be required, including reballasting, replacing crossties, resettling crossties, adjusting the gauge, and replacing worn rails where necessary. Capital costs for this project are estimated at \$66,000 per track mile, for a total of \$2.7 million.

If demand for Imperial County service proves high, the related agencies may wish to consider a greater capital investment for complete track reconstruction. Such an expenditure would improve ride quality, but would not increase the speed of service without an additional investment in signalization of the branch. The total estimated costs for this improvement are \$25,000,000 or \$600,000 per mile.

With the exception of rolling stock and station acquisition, a contingency factor of 30%, plus an engineering factor of 15% has been applied to the final capital costs shown on Table I.

4. Summary: As shown in Table I, the total capital cost for the "minimum upgrade" level of service from Los Angeles - Imperial County is \$61.4 million. Implementing service between Los Angeles - Coachella Valley only would total \$41.0 million; the Imperial Valley increment is \$20.4 million.

TABLE I

LOS ANGELES - COACHELLA VALLEY - IMPERIAL COUNTY

Summary of Capital Expenses

<u>Rolling Stock</u>	<u>Cost</u>
Locomotives (4)	\$ 8,800,000
Passenger Coaches (13)	16,300,000
Control-cab Coaches (4)	8,000,000
Food Service Cars (4)	<u>8,000,000</u>
	39,100,000
 <u>Station Facilities</u>	
Loma Linda - Coachella Valley (5)	\$ 9,941,000
Imperial County (3)	<u>2,751,000</u>
	12,692,000
 <u>Track & Signal Improvements</u>	
Colton Crossing	\$ 1,400,000
Coachella Valley Layover Track	400,000
Calexico Branch/Track Rehabilitation	2,700,000
Calexico Branch/Road Crossing Devices (5)	1,125,000
Calexico Branch/Road Crossing Actuators (30)	<u>800,000</u>
	6,425,000
 <u>Contingency Factor</u>	
(30% of track & signal total)	\$ 1,900,000
 <u>Engineering Factor</u>	
(15% of track, signal, & contingency)	<u>\$ 1,200,000</u>
 TOTAL	 \$61,417,000

OPERATING COSTS

1. Operations: The annual operating cost of three daily round trips to the Coachella Valley would be approximately \$10.2 million. The incremental cost of extending service to Calexico would be \$2.3 million per year. These figures are based on Amtrak's long-term avoidable cost of approximately \$33 per train mile for similar state subsidized routes.
2. Track Maintenance: The cost for maintaining the Colton interconnect track is estimated to be \$15,000 per year.
3. Stations/Staffing: The annual cost for staffing the Calexico station and one of the Coachella Valley stations is estimated to be \$256,500. At this time, it is assumed that staffing costs will be part of the contract between Caltrans and Amtrak. Typically, operating and maintenance costs have been provided by local jurisdictions when stations are owned by them.

PATRONAGE AND REVENUE ASSESSMENT

1. The major demand market for this service is expected to be relatively long-distance business and other non-work trips between the major urban areas served by the line.
2. The maximum load point of the train will occur just east of Fullerton with train capacity at 65-75 percent.
3. Approximately 15-20 percent of the total ridership will take the full-length trip between the line termini.

INSTITUTIONAL ISSUES

1. Cooperation from a total of three railroad (AT&SF, SP, and Union Pacific), as well as Amtrak, will be required in order to establish the proposed route.
2. The proposed Coachella Valley Intercity Corridor is currently not listed in the California Streets and Highway Code as an eligible route to receive state funding. If local agencies agree to support this service, legislation should be sought to include this corridor.
3. It is assumed that operating costs associated with the service would be the responsibility of the State. Beginning in the third

year, however, State law requires intercity services to recover at least 55% of their operating costs through the farebox.

4. The estimated cost to electrify the railroad between Los Angeles and the eastern Coachella terminus is between \$564 - \$846 million.

FINANCIAL ISSUES

1. Most of the capital and operating costs associated with state intercity routes have traditionally been provided by legislative appropriation through the Transit Capital Improvement (TCI) Program. Two funding sources comprise this program - the Transportation, Planning, and Development (TP&D) Account and the State Highway Account, through Article XIX.

2. A county can increase its likelihood of acquiring TCI funding by passing an Article XIX measure by a simple majority vote. Article XIX permits funds from the State Highway Account to be expended for rail transportation purposes in counties which obtain a simple majority vote. Imperial County is the only county along the route which has not taken an Article XIX measure to its voters.

3. Grade crossing safety improvements can be funded under the Federal Rail-Highway crossing Program (23 U.S.C. Section 130).

4. Proposition 116 allocates approximately \$5.1 million to Imperial County for rail or transit-related expenditures. These funds do not require a local match and can be spent on this project.

5. Local governments have historically been responsible for the development of station facilities. At this time, it appears that State TCI money could be sought to finance at least 50% of the station improvement costs. This report assumes a 50% match requirement from the local jurisdictions.

FINDINGS

1. It is technically feasible to implement passenger rail service along the Los Angeles - Coachella Valley - Imperial Valley corridor. Extensive track rehabilitation and other improvements will be required south of Niland.

2. There are a sufficient number of candidate station locations and alternate sites along the line.

3. The Coachella Valley Association of Governments, the Imperial Valley Association of Governments, and many other local jurisdictions and authorities have expressed strong interest in support of the service (see Letters of Support - Appendix 5).
4. The proposed Coachella Valley service is not currently listed as an eligible corridor for intercity funding.
5. Operating agreements will be required with both the Southern Pacific and Santa Fe railways. Further negotiations with the Union Pacific railway will be necessary to arrange for a connecting track at Colton Crossing.
6. The current position of the railroads is that existing track capacity leaves little or no room for passenger traffic.
7. California Intercity Rail Service has to date been very successful. In 1989-90, the "San Diegan" line currently averaged a 103% farebox recovery rate, while the San Joaquin averaged 77%.
8. The projected patronage estimates for service between Los Angeles - Imperial County include a range of between 1205 - 1417 daily trips in 1995 and 1852 - 2178 daily trips in 2005.
9. The annual revenue for the Los Angeles - Coachella Valley service is estimated to be \$5.96 million during the first year of service and \$9.17 million in 2005. The Imperial Valley extension will generate an additional \$1.45 million in revenue during the first year and \$2.33 million in 2005.
10. The Brawley candidate station is located in close proximity to the new State Prison scheduled to open in January 1992. Under California state law, Caltrans and the State Department of Corrections must coordinate an evaluation of any new rail routes or stops which improve transportation access for visitors to prisons. Furthermore, Caltrans must give reasonable priority to stations, stops, and routes which serve visitors to prisons, particularly when alternative public transportation is minimal or nonexistent.
11. This report recommends a financing approach similar to other intercity projects wherein capital and operating costs are the obligation of the State. It further assumes that while funds may not be available today, additional funds will need to be identified and set aside to make the proposed service a reality.
12. Proposition 116 set aside \$100 million for the purchase of intercity and commuter rail locomotives and cars. At this time no rolling stock has been requested on behalf of the proposed service, since it is not listed as one of the State's eligible corridors.

13. Proposition 116 funds could be used by Imperial County to pay for a large percentage of the capital costs associated with the track improvements between Niland and Calexico. The deadline for filing a Proposition 116 application is December 31, 1992.

RECOMMENDATIONS

1. Forward this proposal for service to Caltrans for review and programming in fiscal year 1992-93.
2. The Coachella Valley Association of Governments should be the lead agency responsible for the development and administration of a public/private competitive bidding process for the selection of final station sites in the Coachella Valley.
3. Local agencies interested in supporting this service should pursue legislative inclusion of the Coachella Valley route as an eligible corridor.
4. Conduct a more detailed engineering study of the trackwork required at Colton Crossing.
5. Conduct further detailed study of existing track capacity with the railroads.
6. Imperial County should actively consider utilizing their Proposition 116 funds in support of this service, as well as placing an Article XIX measure on their ballot.
7. Notify the State Department of Corrections of the service proposal. in support of this service.

CHAPTER I
INTRODUCTION

CHAPTER I

INTRODUCTION

BACKGROUND

Since the creation of Amtrak in 1971, and the development of a structure for the public funding of intercity rail service, there has been periodic interest in the development of passenger service between Los Angeles and the Coachella and Imperial Valleys. The most recent effort concluded in 1982 when the California Department of Transportation (Caltrans) evaluated the feasibility of instituting improved rail passenger service between Los Angeles and Phoenix/Tucson.

Although Arizona decided not to participate in the jointly funded service, Caltrans believed that there was enough support for intercity service between Los Angeles and the Coachella and Imperial Valleys and redirected their study towards the California intercity market. Due to funding constraints, however, service was never implemented.

STUDY PURPOSE

The primary purpose of this study is to explore the technical and financial feasibility of implementing passenger rail service between Los Angeles and the Coachella and Imperial Valleys.

The technical analysis includes the identification of potential station locations, track improvements, patronage estimates, proposed timetables and fares, as well as anticipated institutional issues. The financial analysis identifies the capital and operating costs associated with the provision of services, and also presents a preliminary plan for financing the project.

A secondary objective of this proposal is to provide a realistic working document which can be referenced in undertaking the required steps for implementation. Therefore, an extensive effort has been made to contact a number of the related agencies relative to the technical and operational aspects of the project and to invite their comments and suggestions. Technical information relative to some of the operational characteristics of the service was provided by Caltrans and Amtrak and has been included in the report. Many of the local and regional jurisdictions have also provided technical information relative to the proposed candidate station locations.

ROUTE DESCRIPTION

This report examines the feasibility of operating rail passenger service from Los Angeles to the Coachella Valley, with a possible extension to Calexico. Calexico borders Mexicali, the capital of Baja California, Mexico (see Figure 1). The entire distance from Los Angeles to Calexico is 239 miles. The distance from Los Angeles to the Coachella Valley is approximately 141 miles.

The route would traverse the San Bernardino Subdivision of the Atchison, Topeka, and Santa Fe (AT&SF) line beginning at Los Angeles Union Passenger Terminal, with stops in Fullerton, Corona, and Riverside. The service would then turn southeast in Colton and operate on the Southern Pacific (SP) Transportation Company Yuma Main Line. Stops would include Loma Linda, Beaumont, and three locations within the Coachella Valley. Service to Calexico would extend from the Coachella Valley on the SP Yuma Main Line to Niland and proceed south to Brawley, El Centro, and Calexico on the SP Calexico Branch.

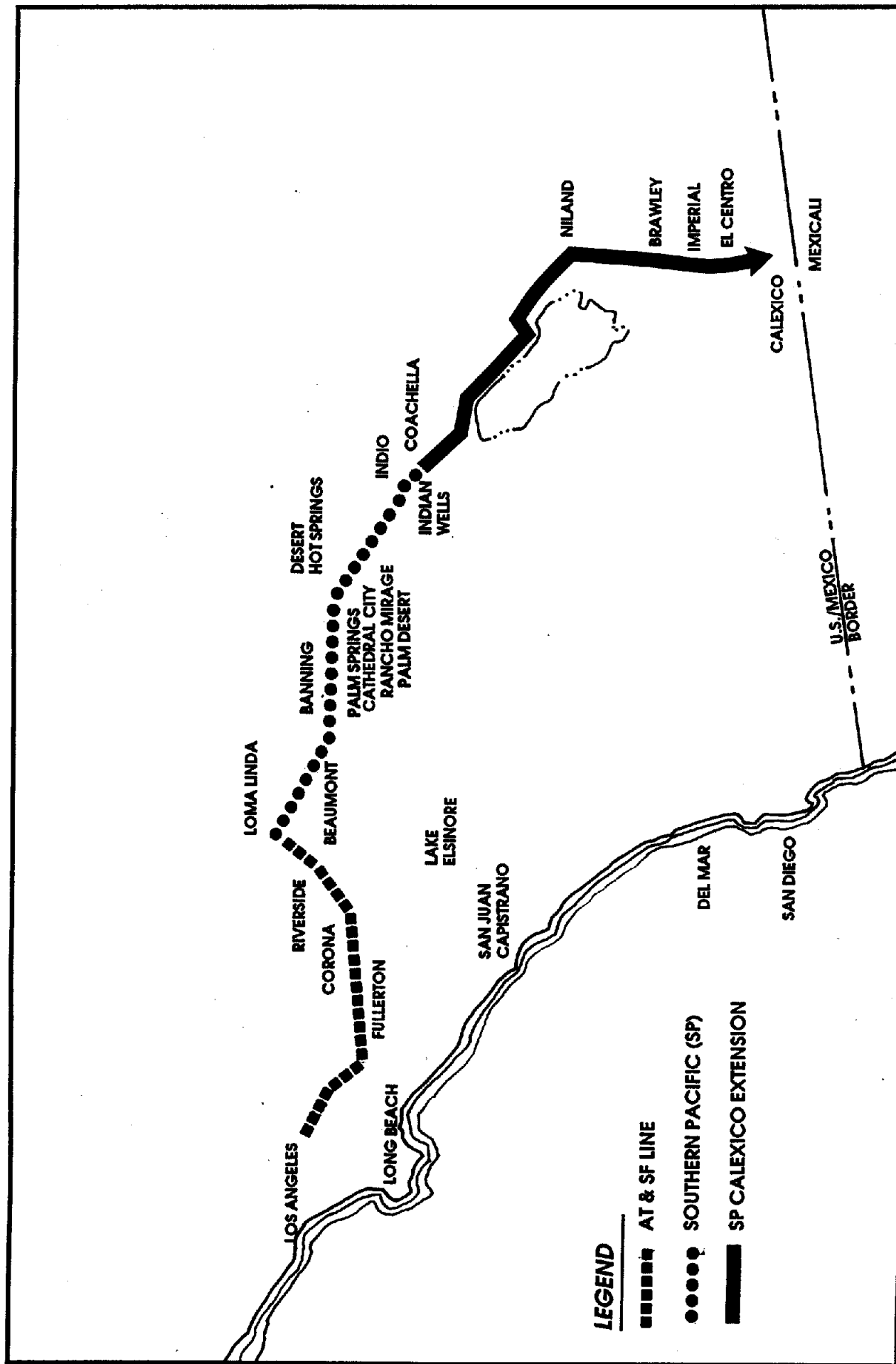
MARKET ASSESSMENT

Implementing intercity service along the San Bernardino Subdivision provides a direct link between the Coachella Valley and the counties of Orange and Riverside. New 1990 Census data indicates that Riverside County grew 76.5% since 1980, while Orange County grew by 24.7%. The Coachella Valley cities themselves grew by 73.1% (Appendix 1).

The Palm Springs Desert Resorts, Convention, and Visitors Bureau estimates that 2 million individuals visit the Coachella Valley per year. Furthermore, a study completed by the Visitors Bureau in 1989 entitled "The Changing Hotel Visitor" indicates that 49% of visitors to the City of Palm Springs originate in Southern California. In addition, 77% of visitors to Palm Springs have previously visited the area, indicating a high rate of repeat visits.

When asked about trip purpose, 72% of the Southern California respondents indicated pleasure, 13% indicated business or combined business/pleasure, and 8.4% cited conventions or business meetings.

Given the fact that SR 91 is the only freeway directly connecting Orange and Riverside counties, and the only direct link from Orange



MAP OF PROPOSED ROUTE
INTERCITY RAIL FEASIBILITY STUDY

County to the Coachella Valley, SR 91 constantly experiences high levels of congestion both on weekdays and weekends. Continued rapid population increases within the counties of Orange and Riverside indicate that this situation will worsen over the years. Passenger service along the AT&SF San Bernardino Subdivision, which closely borders SR 91, will beckon to a captive audience of vacationers and travelers.

Regarding the proposed Calexico extension, the Immigration and Naturalization Service reports that in December 1990 there were approximately 2 million border crossings on the Calexico/Mexicali border. Such data indicates that there is a significant market for the proposed extension to Calexico.

CHAPTER II

STATION LOCATION ASSESSMENT

CHAPTER II
STATION LOCATION ASSESSMENT

LOS ANGELES - RIVERSIDE

Service would begin at the Los Angeles Union Passenger Terminal (LAUPT) located at 800 N. Alameda Street in downtown Los Angeles. Currently an intercity and commuter rail station, LAUPT is served by an extensive network of local transit, taxis, and shuttle services.

The next stop would be in the City of Fullerton located at 120 E. Santa Fe Blvd. This station is serviced by local transit via Harbor Blvd. The Fullerton station provides access to major tourist points within Orange County, such as Disneyland, Knott's Berry Farm, and the Anaheim Convention Center. In addition, the Fullerton Station provides a link to Amtrak's San Diegan service and other points within Orange County.

The Corona stop is proposed to be located in the northeast quadrant of Main Street and the Santa Fe line. This site is currently planned as a commuter rail station. Due to its accessibility from all points in Corona, it will also serve as an excellent intercity rail station.

In the city of Riverside, two potential sites have been identified between 3rd and 14th Streets in the downtown area as part of the commuter rail program. The chosen site would serve as both an intercity and commuter rail station.

Both the Corona and Riverside sites are being actively pursued as part of the Riverside County Transportation Commission Commuter Rail program, scheduled to begin in 1993. The stations described in Corona and Riverside would be funded through the commuter rail program.

The station sites located east of Riverside in this report have been identified solely for the proposed intercity service and are not currently planned to be used for commuter rail purposes.

RIVERSIDE - COACHELLA VALLEY

East of Riverside to the Coachella Valley, a total of 32 sites were identified and screened through initial field investigations. These sites are listed in Appendix 2. Due to a variety of reasons, including track configuration, accessibility, and land use, four of these sites have been identified as preliminary candidate stations in the cities of Loma Linda and Beaumont as listed in Table 1.

No specific sites have been identified for inclusion in this report in the Coachella Valley for reasons cited further in the chapter. It is recommended, however, that three locations be selected by local agencies prior to the initiation of service.

TABLE 1

Candidate Station Locations

LOMA LINDA

Candidate

Mountain View Avenue

Alternate

Bryn Mawr

BEAUMONT/BANNING

5th Place/California Street

Pennsylvania Avenue

COACHELLA VALLEY - CALEXICO

Between the Coachella Valley and the international boundary in Calexico, five sites were considered. One site each was considered in Brawley and El Centro. In both cases the historic SP station sites appear to be feasible. Three sites were identified in Calexico.

Although the distance between El Centro and Calexico (just under 9 miles) is less than the typical distance between intercity rail stations, there are unusual factors which justify stations in both cities. Although it is a smaller city than El Centro, Calexico warrants consideration because of its unique position on the international boundary adjacent to the Mexican city of Mexicali. El Centro warrants inclusion because it is the county seat and offers excellent highway access to surrounding areas.

Los Angeles - Calexico Summary

The amount of acreage required for the station sites is contingent upon the number of parking spaces desired. For the purposes of this study, one-acre sites have been programmed for all but three of the locations. These three include a three-acre parcel in the Coachella Valley for a staffed facility, and two, two-acre parcels for the remaining sites in the Coachella Valley.

It should also be noted that all intercity stations should be designed to include local and demand/response transit, intercity bus, and taxi services. At the very least, stations should be located very near to these services to provide the required connections for intercity travellers.

In addition, as described in Chapter VI, it is recommended that all stations be equipped with bicycle facilities, including bike racks and lockers. Funding for these improvements can be applied for through Proposition 116.

Should the candidate sites listed above be selected as the final station locations, the spacing would be appropriate for the intercity rail market (Table 2).

TABLE 2

Station Spacing

<u>Station</u>	<u>Miles Between Stations</u>
Los Angeles	-
Fullerton	25
Corona	23
Riverside	14
Loma Linda	12
Beaumont/Banning	18
Western Coachella Valley Zone	26-32
Central Coachella Valley Zone	4-11
Eastern Coachella Valley Zone	2-14
Brawley	74
El Centro	13
Calexico	<u>9</u>
TOTAL	239

DETAILED STATION DESCRIPTIONS: LOMA LINDA - COACHELLA VALLEY

The following detailed descriptions highlight the critical elements of proposed station locations east of Riverside. It should be noted that although specific locations are discussed, the exact station sites could be relocated within a one mile radius without affecting the service characteristics.

Loma Linda

Within the City of Loma Linda, eight potential station sites were inventoried. At each of these locations and throughout Loma Linda from the Bryn Mawr community west to Waterman Avenue, the SP line is double track with a gradient between 1.0% and 1.2%.

It should also be noted that this entire area is actively used by helper locomotives for freight trains. This situation often impacts both main line tracks, restricting the capacity available for additional train traffic. However, there is room for a third track at each of the station locations described in this section should SP deem it necessary. Another difficulty in siting a station in Loma Linda is the fact that the track is curved from MP 543 at Benton Street east through the Bryn Mawr area. However, since Loma Linda is so centrally located within San Bernardino County, it is a strategic location for an intercity rail station.

Anderson - MP 542.5

A technical analysis of each of the station sites pointed to a station in the southwest quadrant of Anderson and the SP tracks on the campus of Loma Linda University (Figure 2). Currently this is the site of the University's parking lot "U," which serves as an employee and student overflow lot. Located immediately to the west of the historic Loma Linda station site, access is via Stewart Street. The lot is currently patrolled by University Police.

On the north side of the tracks is a parcel of land adjacent to a small park. This area leaves more room to develop, but is adjacent to housing to the northeast. The Anderson overpass offers a four-lane grade-separated overcrossing.

A third site in this vicinity is also located on the north side of the tracks along Van Leuven st. and east of Orange Grove St. Although this is a small lot, the station could be developed on the SP right-of-way for additional room. The existing general plan has zoned this area as high density residential, with a vacant parcel north of Van Leuven zoned institutional.

Campus Street - MP 542.4

Another candidate location is adjacent to the University campus at the foot of Campus St. along the SP right-of-way, south of the tracks and behind the University sports complex. Bisecting this parcel is a small unimproved north/south flood channel located at the foot of Campus St. and adjacent to the baseball field.

The right-of-way is extra wide here with ample room for future parking needs. Immediately west of Campus St. is a small lower-income housing area, with housing and other University complexes extending south to Barton Road. On the east side of Campus St. is the University Medical Center.

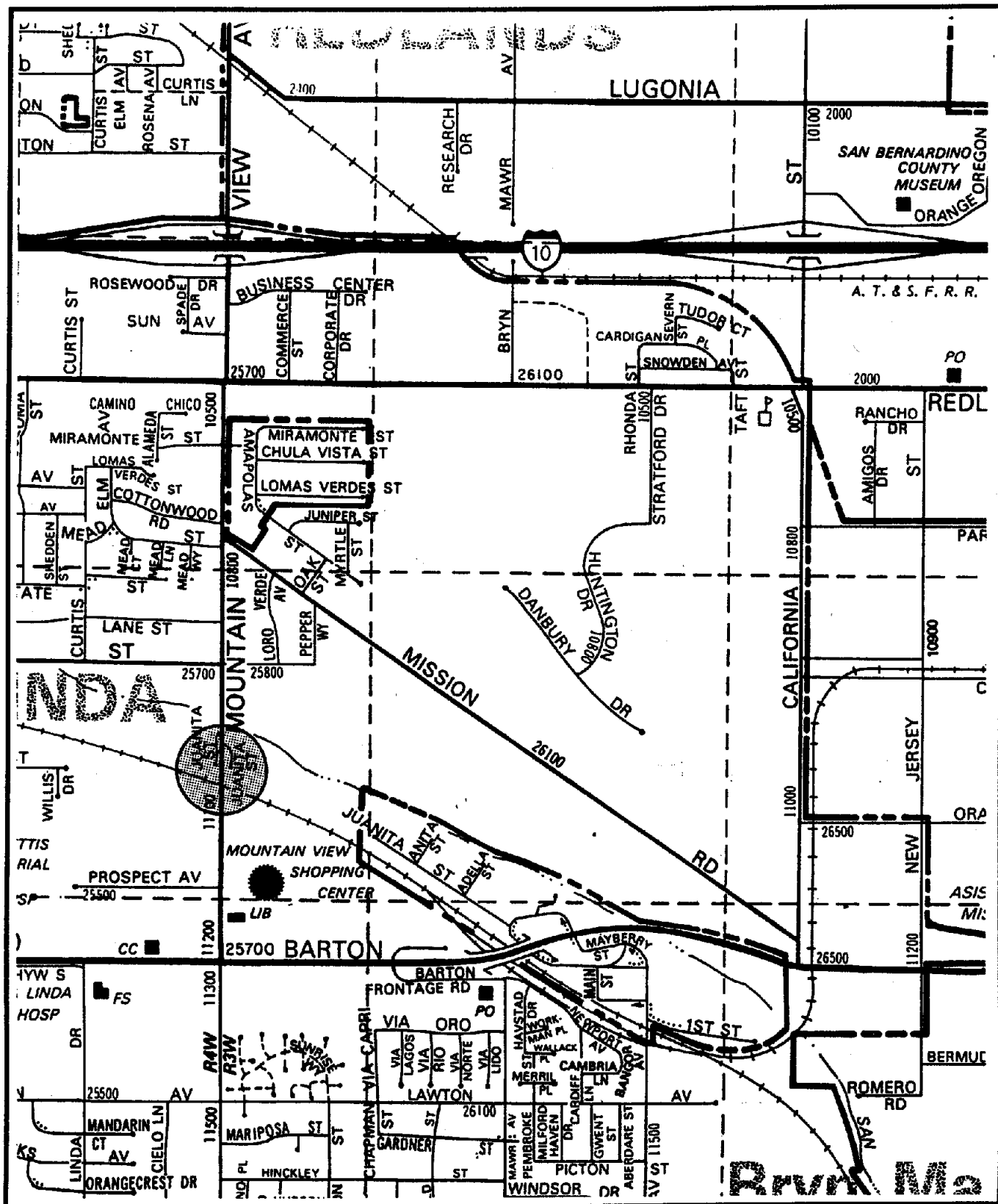
Although no public transit currently operates along Campus Street, transit is available on Anderson St., just a block east. The immediate surrounding residential area, however, provides some question regarding acceptable land use.

Mountain View Avenue - MP 543.7

Figure 3 highlights potential sites in either the northwest or northeast quadrant of the SP line. As described earlier, the tracks are on a slight curve at a 1.2% grade and would ordinarily not be considered as a station site. However, based on an initial response from the University and information collected from the City, this area is part of a redevelopment project which will make Mountain View Ave. a major arterial in the new city center.

Currently, land is available north of the tracks on both sides of Mountain View Ave. A city park is planned for the northwest side with the northeast side still undeveloped. The existing shopping center located southeast of the tracks will be expanded. Some new apartments are located on the southwest quadrant.

Mountain View Ave. has direct access to I-10 and is centrally located between Grand Terrace, Colton, San Bernardino, Redlands, and Mentone. The grade separation is a two lane overcrossing.



MOUNTAIN VIEW AVENUE, LOMA LINDA **INTERCITY RAIL FEASIBILITY STUDY**

Barton Frontage Road - MP 544.2

Another site inventoried during the analysis is shown on Figure 4 in the southwest quadrant of Barton Road and the SP line, next to the existing City Maintenance Buildings. Although this area is on a slight curve and gradient, Barton Road does provide excellent access from all cities to the west and east. Barton Road is grade separated and has local transit. The City has indicated, however, that this vacant parcel is to be used to expand the City Yards.

Bryn Mawr - MP 544.5

Figure 4 illustrates two potential sites within the Bryn Mawr community located south of Barton road and the SP crossing. The intersection of Whittier/1st St. is the historic site of the Bryn Mawr station where the track straightens for approximately 1,000 feet. Another potential site is shown south of Barton Frontage Road and west of Main Street.

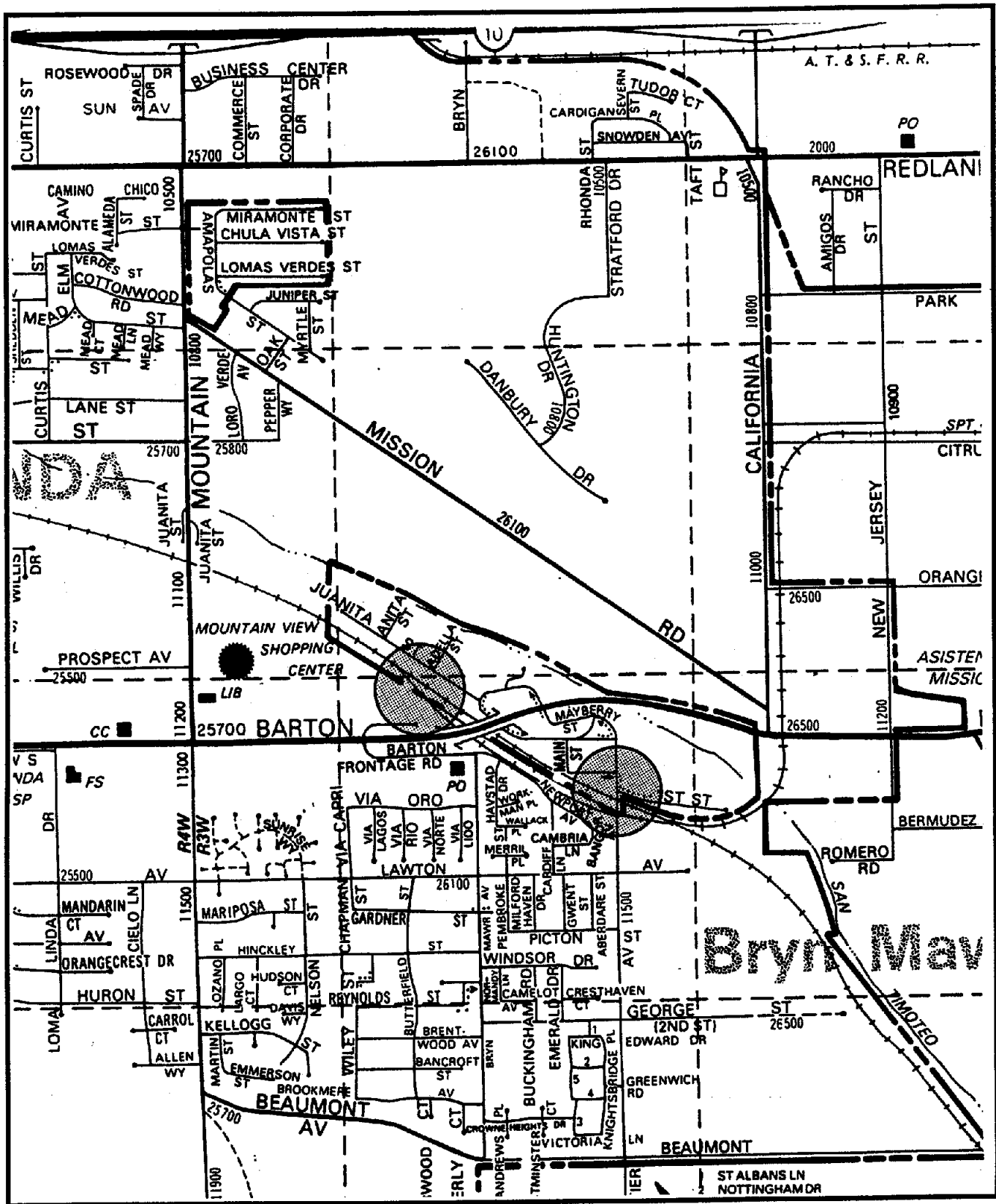
The difficulty with these sites is the circulation element. The local streets are narrow and circuitous, making access tedious. Changes would have to be made to make this a viable station site, such as a possible extension of California St. An initial conversation with the County identified no new projects for this area. In addition, the site is currently not served by transit, except for bus service on Barton Rd.

Loma Linda Summary

A station located in Loma Linda would be a primary trip generator, as well as a centrally located origin for San Bernardino County residents. The University Medical Center is a well known teaching school which hosts frequent conventions/symposiums for the medical/educational communities and is the home of the world's first hospital based Proton Cancer Treatment Center.

However, although the Anderson St. site offers the track configuration and accessibility characteristics desired for a station site, a meeting with University representatives indicated that an intercity station would be incompatible with the long term development plans of the University.

The University frequently experiences overcrowded parking conditions during conventions and symposiums. For this and other reasons, the University plans to relocate the recreational facilities east of Parking Lot "U" and develop parking where the existing track and field are located. The University is also concerned with developing a safe and secure campus environment with as little additional traffic as possible.



**BARTON FRONTAGE ROAD/BRYN MAWR
INTERCITY RAIL FEASIBILITY STUDY**

The University did indicate, however, that they would be amenable to operating shuttle services from the selected site to the Campus.

Recommendation

Based on a technical analysis of track configuration and site characteristics, a station near or on the University Campus would be desirable. However, since these locations are currently unavailable, Mountain View Ave. offers excellent land use compatibility characteristics and would be located in Loma Linda's future city center. A Bryn Mawr site, while farther away from the city center, could offer some additional technical benefits should the circulation element be improved and local transit service be made more accessible.

Beaumont/Banning

5th Place/California Ave. - MP 562.1

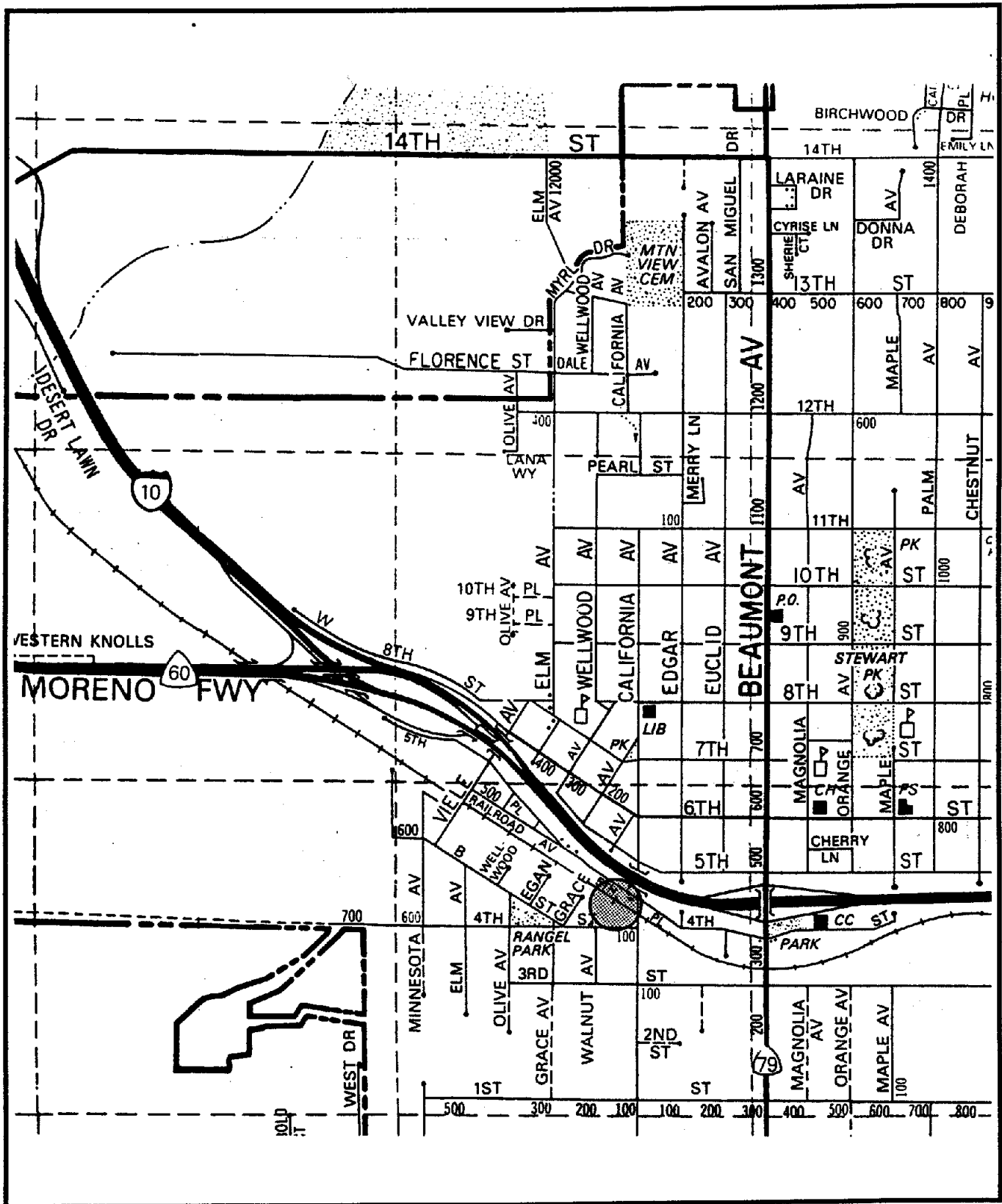
Figure 5 illustrates the approximate location of the 5th Place station site in the northwest quadrant of California Ave. and the SP line, parallel to 5th Place in the City of Beaumont.

California Ave. and 5th Place are both two-lane collector streets with full I-10 freeway access located approximately 1/4 mile in either direction from California Ave. Although Beaumont Ave. would be a preferred station location, the tracks there are significantly curved.

The double track configuration is straight at 5th Place with a 1% grade; in addition, two signal towers and crossovers are located at this site. Therefore, the actual platform would need to be located west of the signal towers and interlocking crossovers. The land north of the tracks is SP owned; south of the tracks is a triangular parcel which is currently for sale. Southern Pacific may also own a large portion of this land as well.

The area is currently zoned industrial. Initial conversation with the City indicated a strong desire for the station as the city has recently approved 9,000 new dwelling units and has 10,000 more in the pipeline. The City is also hoping to develop a reservoir with active boating uses.

This site is located close to SR 79 which provides north/south traffic circulation to Hemet and the Yucaipa area. The Greyhound terminal is also located on Beaumont Ave.



FIFTH PLACE/CALIFORNIA AVE., BEAUMONT
INTERCITY RAIL FEASIBILITY STUDY

Highland Springs Road - MP 564.2

Figure 6 shows the proposed location of a Highland Springs Road intercity station. The site is located in the southeast quadrant of Highland Springs Road and the SP right-of-way, adjacent to a shopping center in the City of Banning.

Highland Springs Rd. is a north-south major arterial with full freeway access and a grade separated undercrossing. A new access road would have to be built to the east of the shopping center to access the site. Highway 79 which extends to Hemet and points further south is approximately 1.75 miles to the west.

The SP right-of-way is wide here, with approximately 100 feet between the tracks and the shopping center. Ample space is available for parking requirements and station facilities along the right-of-way. The area is currently zoned commercial and is newly developing. North of I-10 are gasoline and restaurant services and other stores. A hospital and the California Highway Patrol are also located further north.

South of the shopping center is a residential community, country club, and golf course. Initial contact with the city was favorable towards this site, although some concern regarding parking was raised if the station were to eventually be used for commuter rail.

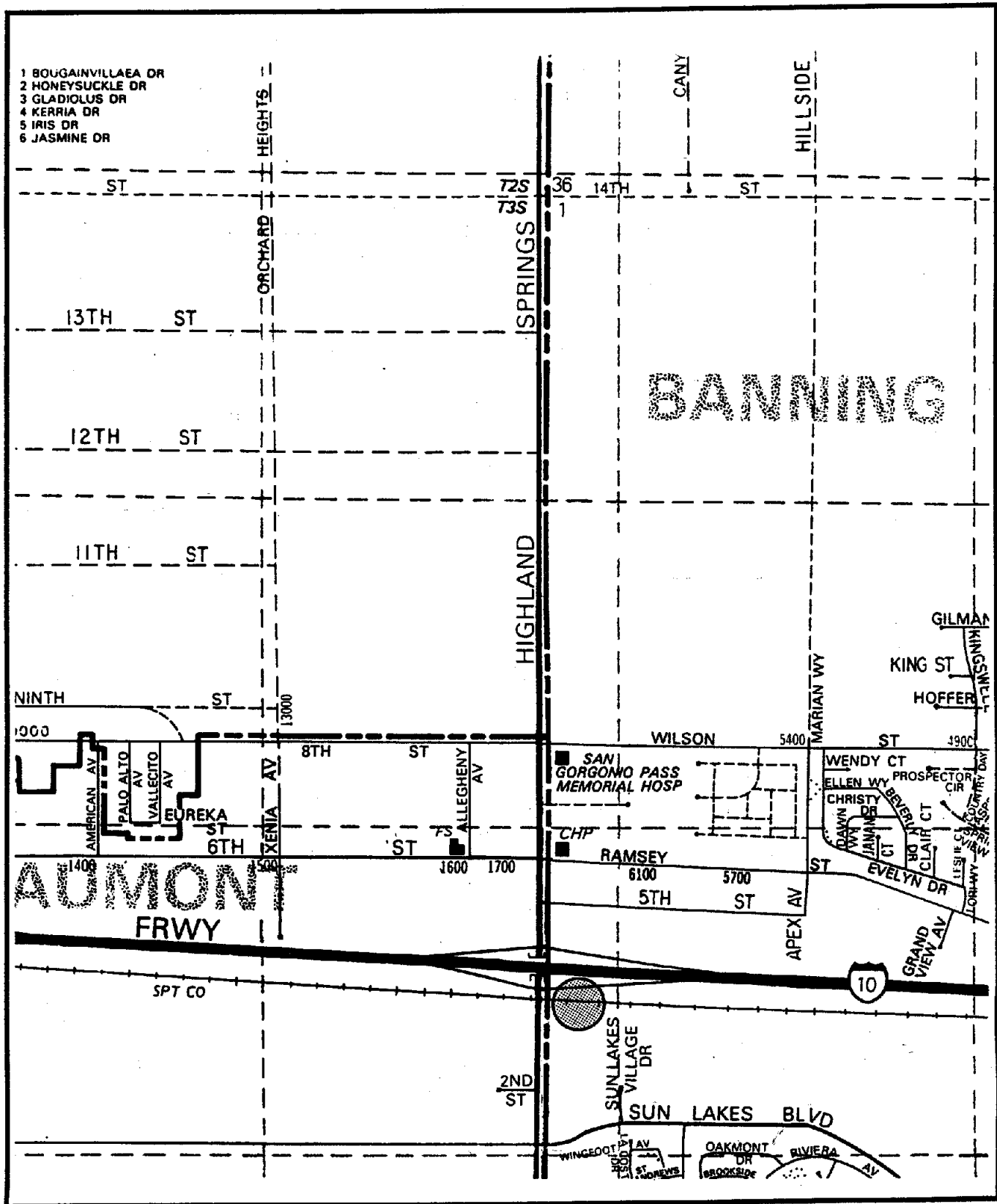
Transit service to Hemet, provided by the Riverside Transit Agency (RTA), operates along 6th Street, approximately three blocks north of the site, and then continues south to Hemet via Beaumont Avenue (SR 79).

There is a single, straight track at this location with a 0.6% grade. The rail overcrossing is wide enough for a second track, with the end of the SP double track approximately one mile west of this site.

Beaumont/Banning Summary

Given the fact that the cities of Beaumont and Banning are in such close proximity to one another, it would be unadvisable to site a station in each city. However, with the projected growth for each of the cities, and their location within the county, it is critical to place a station within one of the two cities.

A deterrent to the Highland Springs site is that Highway 79 is located 1.75 miles to the west of Highland Springs Rd. In addition, in order to properly serve the station without encroaching upon shopping center patrons, an access road would have to be developed.



**HIGHLAND SPRINGS ROAD, BANNING
INTERCITY RAIL FEASIBILITY STUDY**

Apart from this, the City of Banning has expressed support for the Beaumont site. From a regional perspective, the City of Beaumont offers a more central location to many of the proposed County developments. The County of Riverside has approved a large specific plan known as Oak Valley between Beaumont and Calimesa which would place Beaumont closer to the future center of population.

Recommendation

Based on this initial assessment, the 5th Place/California Ave. site offers many of the criteria required for a successful intercity station. Should this site become unavailable and a site is still desired within the City of Beaumont, Pennsylvania Avenue, located approximately one mile east could be considered as an alternative, although at this time only limited freeway access is provided here.

Coachella Valley

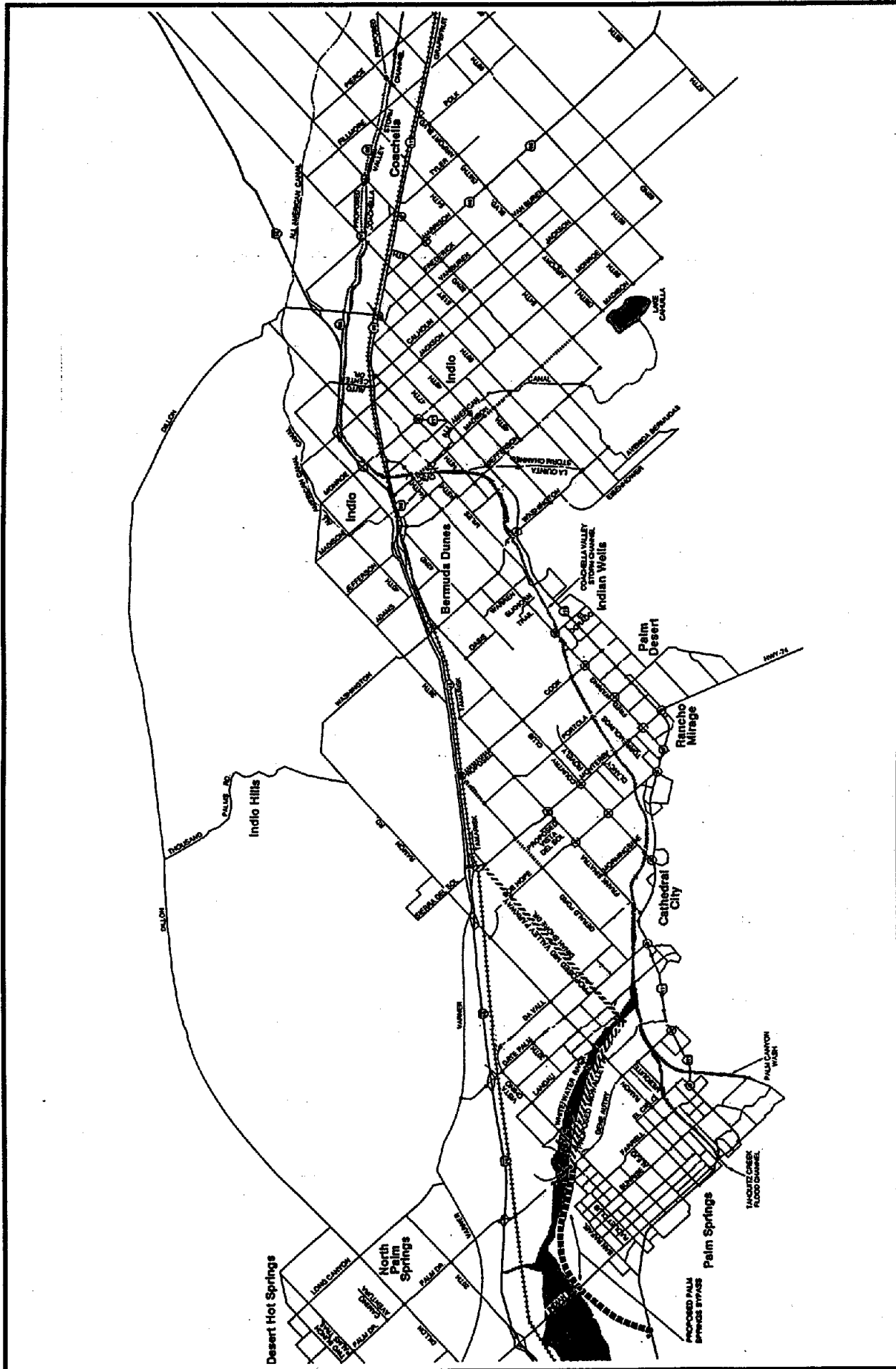
The Coachella Valley is a rapidly growing population center within Riverside County. Many major highway improvement projects have been approved or are being studied at this time. Existing population for the Valley, including seasonal residents, is 203,438 with a projected population of 525,000 by the Year 2000.

At the time of this report, the area from Indio to Mecca has just recently been designated as an Enterprise Zone. Selection as an enterprise zone will most likely be a significant boom to the economy and development of the region.

Given the geographical size of the Valley, its tremendous growth over the past ten years, and its projected population growth over the next 10 years, a strong case can be made to support the development of three station sites within the western, eastern, and central sectors of the Coachella Valley (Figure 7). In general, a station would be located within each of the following zones:

- 1) Western Zone: Indian Ave. - Date Palm Drive;
- 2) Central Zone: Date Palm Drive - Washington;
- 3) Eastern Zone: Washington - Avenue 56 (Airport Blvd).

Through field investigations and coordination with the related agencies, a number of possible station sites were reviewed. Each of these locations are near major arterials which cross the Southern Pacific line. Table 3 lists each of these rail-highway intersections, their corresponding mile posts, and the distances



MAP OF THE COACHELLA VALLEY
INTERCITY RAIL FEASIBILITY STUDY

between them. Although this list is not conclusive, it does represent examples of the most likely station locations given arterial access, regional characteristics, and track configuration.

TABLE 3

Coachella Valley Station Spacing

<u>Site</u>	<u>Mile Post</u>	<u>Miles</u>
5th Place/California (Beaumont)	562.1	-
Indian Avenue/Garnet Station	588.1	16.0
Gene Autry/Palm Drive	591.6	3.5
Date Palm/Vista Chino	594.5	2.9
Bob Hope/Ramon	598.0	3.5
Washington St	605.3	7.3
Jefferson St	607.6	2.3
Monroe St	609.7	2.1
Jackson St	610.9	1.2
Dillon/Ave 48	613.0	2.1
Ave 50	614.2	1.2
5th/6th St	614.4	.2
Ave 52	615.3	.9
Ave 54	616.6	1.3
Ave 56 (Airport Blvd)	617.9	1.3
Ave 58	619.0	1.1

The Coachella Valley Association of Governments (CVAG) has expressed interest in developing a competitive public/private bidding process for selecting the candidate station sites in the early phases of the site selection process. The primary objective of introducing this process is to encourage joint planning and development, and spawn financial opportunities for both the public and private sectors.

Examples of such cooperative efforts include donations of land or capital, with the agreement that a station be constructed in support of a specific planned development. This collaborative effort, thereby, decreases the overall cost of the project to the public sector, and increases opportunities for placing the station in a location which will have supportive facilities. Therefore, this report does not identify or recommend specific locations within the Coachella Valley.

It should be noted, however, that each of the locations displayed in Table 3 have been reviewed from a technical perspective and are operationally feasible. Therefore, this report finds that it is realistically and technically feasible to place three or more stations within the Coachella Valley. Final station site selection, however, will be the responsibility of local agencies and authorities.

TECHNICAL CONSIDERATIONS

Throughout the Coachella Valley the tracks are straight, with relatively little gradient. Passing sidings do exist at various points throughout the Coachella Valley. The existence of passing sidings or double tracks for loading/unloading passengers is advantageous. However, no passing sidings or double track exists at Date Palm Dr., Ramon Rd., or Washington St.

In addition, with the exception of Dillon Road and all sites east of it, each of the intersections are grade separated. It should be noted, however, that Dillon Road is severely impacted and the City of Coachella is currently pursuing plans for an overpass.

For the purposes of this report, we have recommended two-acre sites for two of the Coachella Valley stations, with the remaining site being programmed as a three-acre site. Moreover, based on input received from the local agencies, it was generally concluded that

one of the stations should be a larger, multi-modal center with ample parking and Amtrak staffing facilities.

Furthermore, the California/Nevada Super Speed Train Project conceptual plan for the Pacific Southwest would link the Inland Empire with Phoenix, Arizona, with a planned, intermediate stop in the Coachella Valley. Although the project's primary route is from Orange, Riverside, and San Bernardino Counties to Las Vegas, Nevada, existing plans call for a possible future spur to the Coachella Valley. Although the Super Speed Train Commission is currently exploring financing options for its construction, the future possibility of this service underscores the importance of a multi-modal facility within the Coachella Valley.

In addition, it was also concluded that final station design will reflect the community as a welcoming post for tourists and business travellers. Furthermore, given that many hotels will most likely want to provide pick-up/delivery services for their guests, it is probable that additional space will be required for staging purposes.

The eastern terminus station will require additional land to construct the necessary layover tracks.

GEOGRAPHICAL CONSIDERATIONS

The western zone of the Coachella Valley is a major population center extending on both sides of I-10. The selection of a station site should provide easy access to the adjacent cities of Palm Springs, Desert Hot Springs, and Cathedral City, as well as a collection point for communities and cities located in the Yucca Valley/Twenty-nine Palms vicinity.

The central zone of the urbanized Coachella Valley is comprised of the municipalities of Rancho Mirage and Palm Desert, as well as several communities. Several locations have been reviewed for a Central Coachella Station, including a Ramon Rd./Bob Hope Drive site, referenced in the 1982 Caltrans feasibility report entitled, "Presentation of Options for a Feasibility Study of Los Angeles - Coachella Valley - Imperial Valley Rail Passenger Service."

The eastern zone of the Coachella Valley is a mixed population center of urban and rural municipalities and communities. The city of Indio is the largest municipality in the zone with a population of 36,793 according to the 1990 Census. The County Fairgrounds are located in Indio, which is also the home of the annual Date Festival.

REGIONAL CONSIDERATIONS

Tourism/recreation continues to be one of the focal points of the Coachella Valley economy through either the hospitality/hotel industry, retirement communities, or second home ownership. In addition, the agricultural and farming industries continue to be a primary economic force. Therefore, it is critical that station locations be selected which will further enhance the vitality of each of these economies, while still serving the needs of the intercity rail traveller in an efficient manner. Furthermore, station locations must be linked to the existing and future growth and development plans for the region.

Highway Projects

At this time, several major highway projects are under consideration. The first of these is a bypass road which would be built approximately two miles north of the existing Highway 111. The road would extend from Palm Springs to the vicinity of Cook Street and I-10 in the central portion of the Valley.

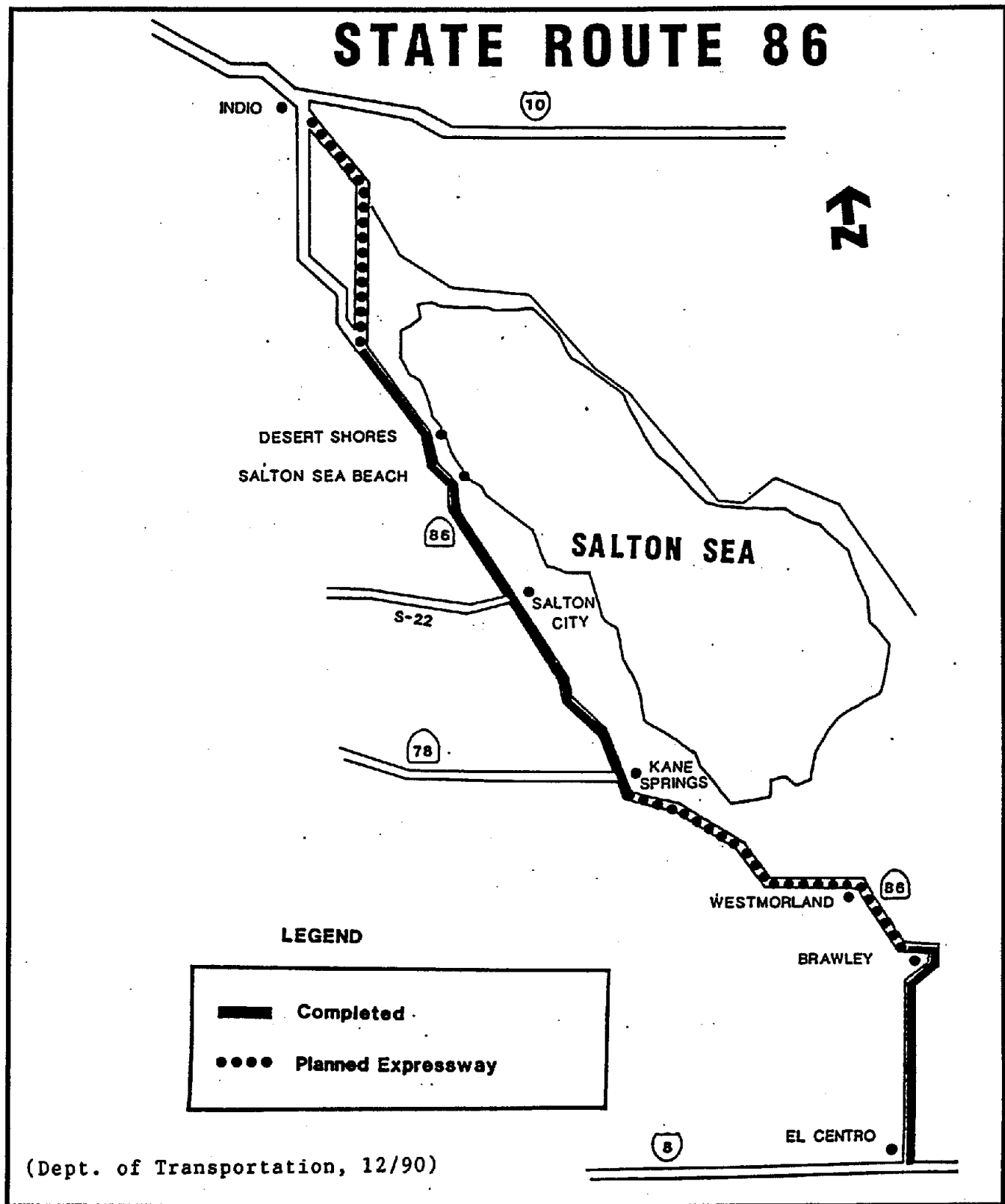
A second major highway project involves the realignment and upgrading of the existing SR 86 to a four-lane expressway (Figure 8). State Route 86 is the main north-south access between I-8 and I-10 in Imperial and Riverside Counties. Since intercity rail stations serve as both collection and distribution points, it is usually advisable to locate stations in close proximity to such major arterials as these if at all possible.

In addition, an enterprise zone has recently been designated from Indio to the community of Mecca (Figure 9). Theoretically, this project has a maximum potential of directly generating approximately 91,157 new jobs. An additional 83,553 indirect jobs are also projected within the region. As part of the Enterprise Zone development, a master plan for the further expansion of the Thermal Airport was undertaken to address the aviation needs of the area over a 20 year period.

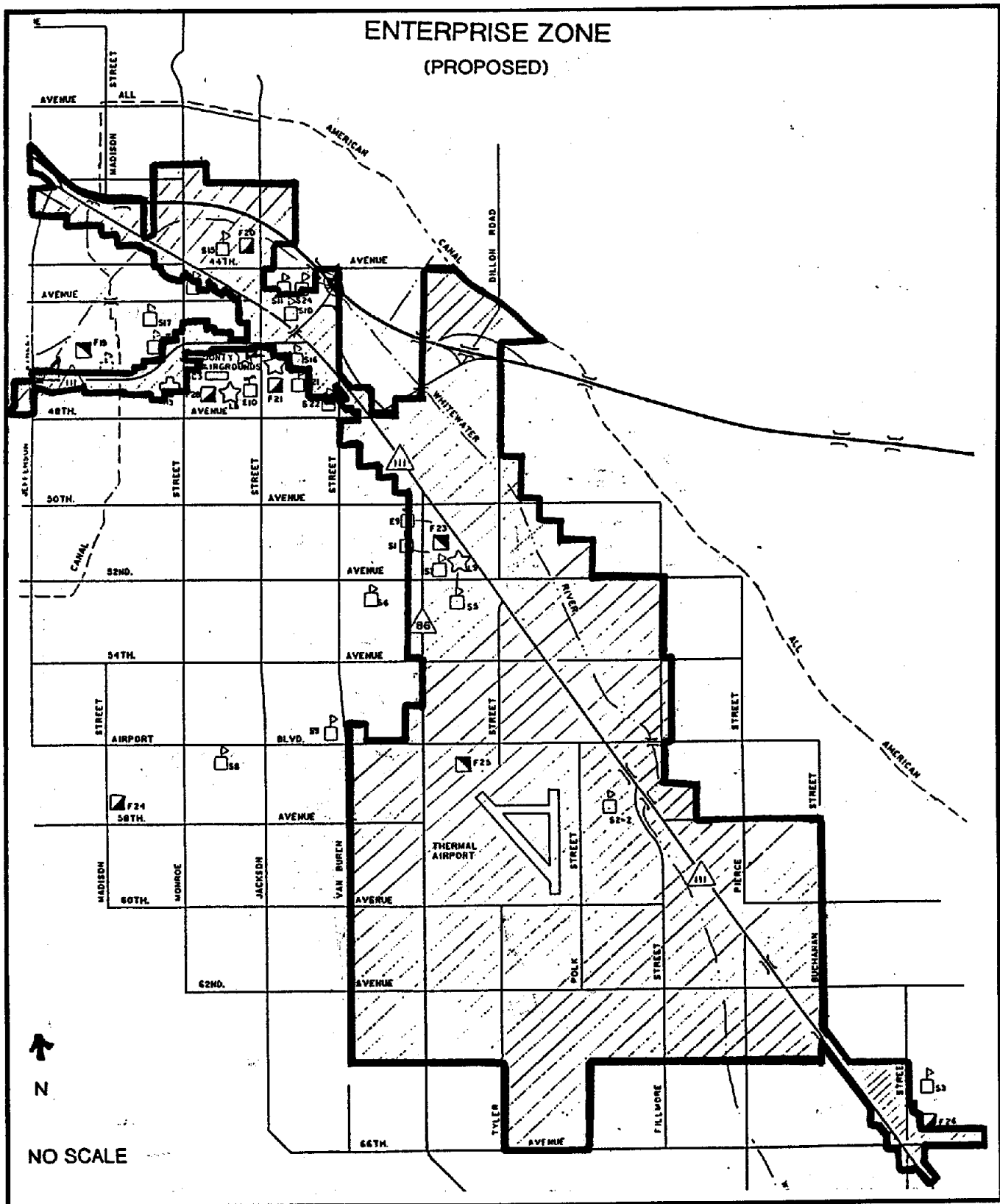
Local Transit

Sunline Transit currently provides transit service throughout the Valley. They currently operate the following routes:

- Palm Springs - Cathedral City
- Cathedral City
- Palm Desert - La Quinta
- Indio - Coachella
- Indio - Mecca
- Desert Hot Springs - Indio
- Palm Springs - Palm Desert
- Indio - Palm Springs



PROPOSED CONSTRUCTION OF STATE ROUTE 86
INTERCITY RAIL FEASIBILITY STUDY



Preliminary discussions with Sunline indicated a desire to participate in the development of a multi-modal station facility within the Valley. They further indicated that they would be prepared to extend service to each of the proposed station facilities as required.

ZONAL DESCRIPTIONS

Coachella Valley: Western Zone

The selected site within this zone should be geographically situated to serve the population center of the western Valley. The cities located within this zone include Palm Springs, Desert Hot Springs, and Cathedral City. The combined population of these cities, not including the unincorporated areas, according to the 1990 Census is approximately 82,000.

Blow sand is an ever-present factor within this zone as much of the land immediately surrounding the tracks is currently undeveloped.

Should a site be selected within this zone, preliminary review determined that acceptable land uses exist throughout this zone.

Coachella Valley: Central Zone

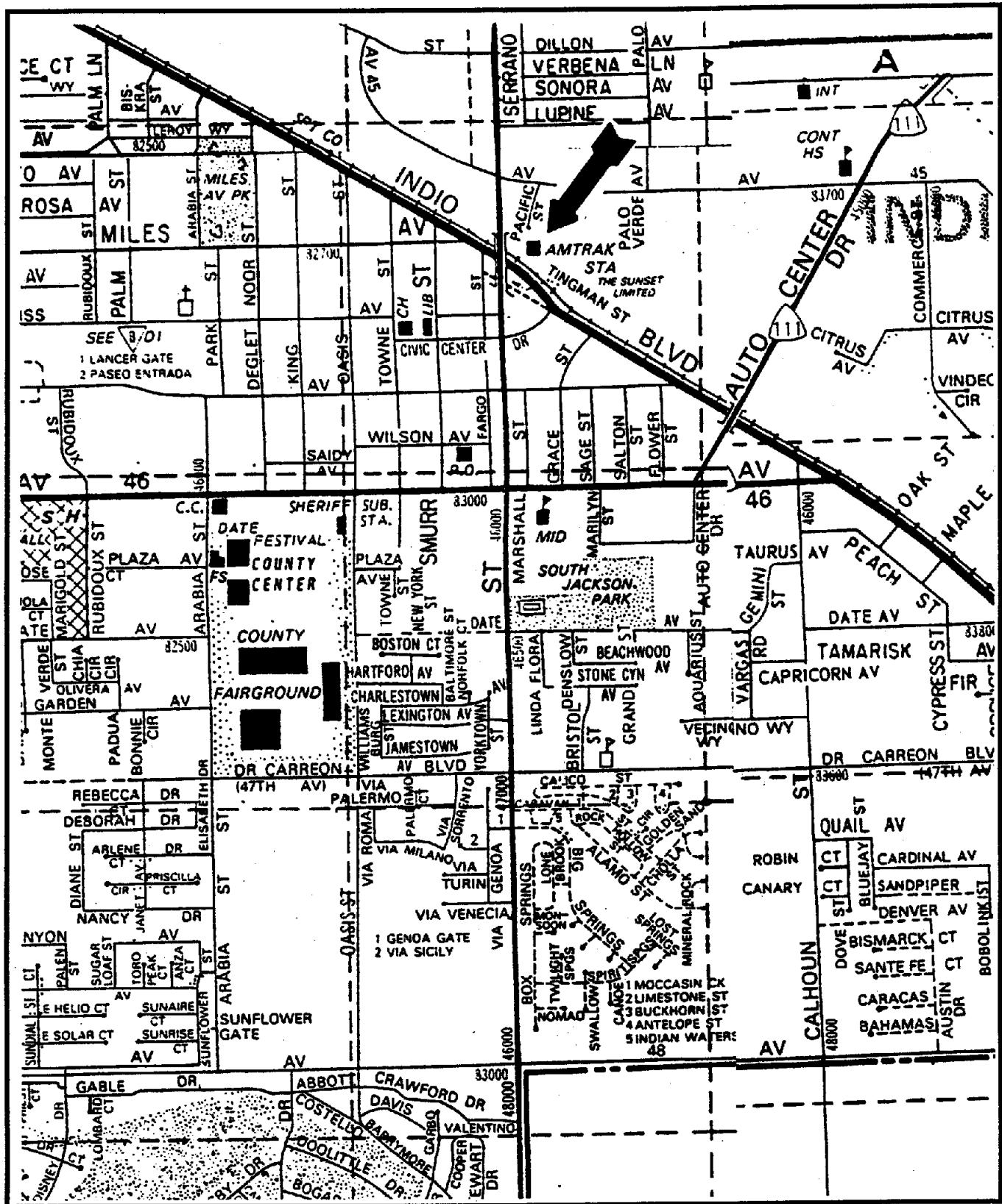
As stated earlier, a site near Ramon Rd. was preferred in 1982 due to its accessibility within the Valley. With the recommendation of three station sites for the Valley, however, both CVAG and Riverside County staff agree that a Ramon Rd. site is located slightly west of the population center which a Central Valley Station would now be expected to serve. In addition, the Ramon Rd. interchange is heavily impacted, and concern was expressed regarding any traffic increases at the intersection.

As described earlier, the Mid-Valley Parkway will most likely terminate within this zone. A 12-month study has been undertaken to determine its exact terminus and alignment.

Should a site be selected within this zone, preliminary review determined that acceptable land uses exist throughout.

Coachella Valley: Eastern Zone

Figure 10 illustrates the existing Amtrak "Sunset Limited" boarding location in Indio. The "Sunset Limited" is a transcontinental train which travels to New Orleans and stops in Indio in the early morning hours.



EXISTING AMTRAK BOARDING LOCATION
INTERCITY RAIL FEASIBILITY STUDY

Because the eastern station will be used as the layover point for the morning train to Los Angeles, additional space will be required for the layover track. While the current Indio boarding location is grade separated and has enough space for the required layover tracks, additional acceptable locations are also found further east which may prove beneficial from a station spacing perspective.

As mentioned earlier, construction of a new segment of SR 86, Dillon Rd. - Avenue 58, is scheduled to begin this year. In the future, plans call for converting this segment into a four-lane freeway with interchanges at Dillon Rd. and at Avenues 50, 52, and 56 (Airport Blvd). Until the interchanges are created, the at-grade intersection will be controlled by stop signs. Future interchanges are also planned at Avenues 62 and 66.

Should a site be selected within this zone, preliminary review determined that acceptable land uses exist throughout.

Coachella Valley Summary

Preliminary conversations with the affected jurisdictions, agencies, and communities along the Southern Pacific alignment indicated strong support for the proposed service. In addition, since a competitive bidding process will be utilized to assist in the selection of station locations, specific station evaluation criteria must be established which the related local agencies and jurisdictions can follow in selecting potential station sites.

At a minimum, potential station sites will be evaluated according to the following criteria:

- Station spacing
- Compatible land use
- Regional/local access
- Population/Business centers
- Projected growth/development
- Transit access
- Track configuration/railroad operations
- Land availability
- Potential for joint development
- Potential as a multi-modal station
- Station maintenance costs
- Station acquisition/construction costs

Each of the factors listed above will need to be clearly defined from both a local and regional perspective. A ranking of priority will also need to be established on a case-by-case basis within each of the zones. For instance, the need for the station to be a multi-modal in the eastern zone may be less than in the central zone, etc.

Notwithstanding, from a station spacing perspective, the selection of an eastern terminus is closely linked to the final selection of the central station. Given the service characteristics of intercity service, it is advisable to keep the stations as far apart as possible while still serving the existing and future population centers. Some consideration may even be given to phasing the construction of the station facilities, although it is recommended that at least two of the sites be constructed for the initiation of the service.

Recommendation

At this time, no final recommendation of specific station sites is made, although it is recommended that a site be located within each of the zones described above. The final selection of station sites will be a local decision, based on the existing and future regional objectives of the Coachella Valley and its population centers. This report does recommend that the Coachella Valley Association of Governments be the responsible agency for final station selection.

DETAILED STATION LOCATIONS: BRAWLEY - CALEXICO

This section discusses potential station locations in an operating scenario of service extended beyond the Coachella Valley. Initially, such service would consist of one round trip per day terminating in Calexico. Dedicated bus service from Imperial County to the Coachella Valley would be a likely means of connecting with the other two daily trains serving Riverside and Los Angeles.

The candidate station sites identified in this section are not intended to be a final pronouncement on station location. Ultimately each affected local community must decide the location of their passenger rail station.

The primary purpose of this analysis is to examine the feasibility of extending passenger rail service to the Imperial Valley. By identifying feasible station sites it will be possible to address the overall feasibility of passenger rail service in this corridor.

Brawley - MP 686.2

Brawley, a city of approximately 20,000, is situated near the geographic center of the Imperial Valley at the junction of SR 111 (the principal north-south artery of the Valley) and SR 78 (the principal east-west artery in the northern portion of the Valley).

Figure 11 illustrates the historic Southern Pacific station site in the northwest quadrant of Main St. and the SP line. This location is adjacent to SR 111 and near the civic center of Brawley.

Although the Southern Pacific may plan to demolish the existing station structure, the site appears to offer adequate space for parking within the existing right of way north of the station structure.

In addition to the extensive agricultural industry of the Valley, a new maximum security state prison is scheduled to open in January 1992 approximately 12 miles northeast of Brawley. As described later in Chapter VI, Section 14035.9 of California Department of Transportation's statutes mandates joint evaluation of "any new rail lines or stations which improve transportation access for visitors to prisons" by both Caltrans and the Department of Corrections.

Public transportation within Imperial County is limited; transit to surrounding counties is nonexistent. The development of a Brawley station will not only address regional transportation issues, but also fulfill the statute cited above.

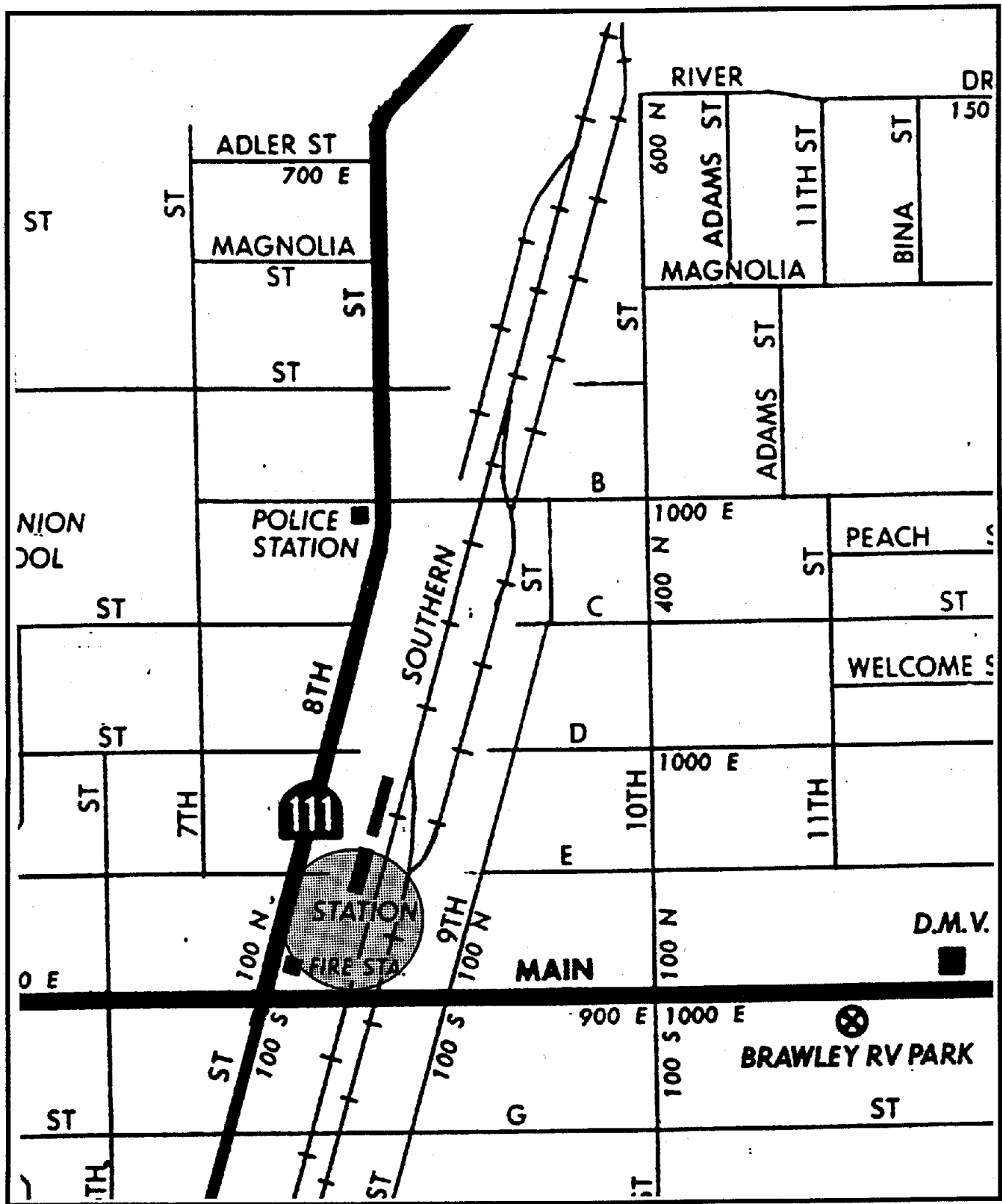
El Centro - MP 699.5

El Centro, with a population of approximately 33,000, is the seat of Imperial County and the largest city in the county. Interstate 8 links El Centro with San Diego to the west and Yuma, Arizona to the east.

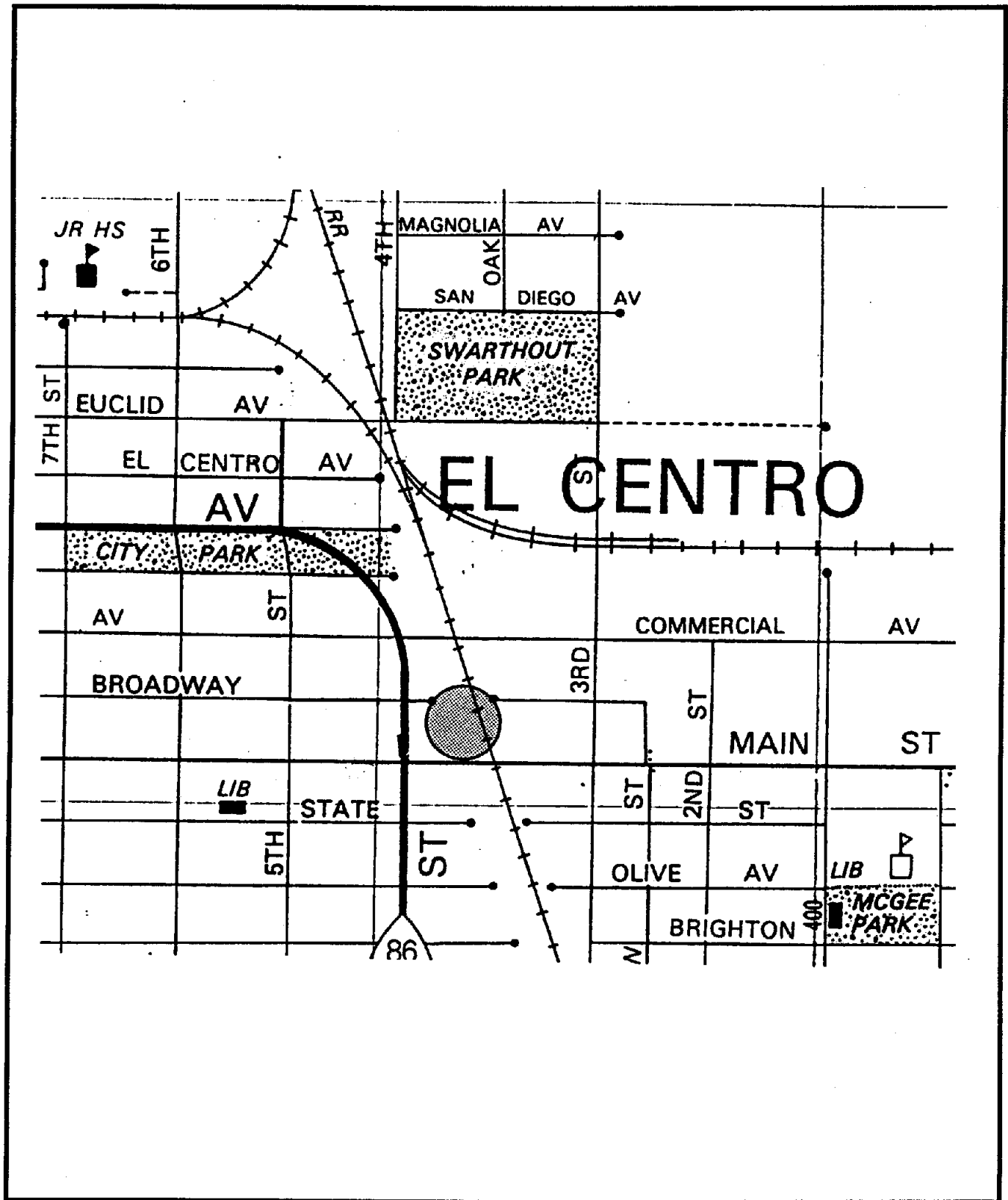
This report recommends the historic Southern Pacific station site in the northwest quadrant of Main St. and the SP tracks (Figure 12). An historic station structure is also currently located on the property and appears to be used by SP crew members.

The site is located off SR 86 (called 4th Street in El Centro), the connecting state highway between the Coachella Valley and Imperial County, and is centrally located in El Centro.

Vacant land north of the station structure offers an opportunity for adequate parking.



BRAWLEY
INTERCITY RAIL FEASIBILITY STUDY



EL CENTRO
INTERCITY RAIL FEASIBILITY STUDY

Calexico

Because travel to and from Mexicali represents a significant target market for this service, it would be desirable to locate a station as close to the international boundary as possible. However, the immediate vicinity of the border crossing poses constraints due to frequent episodes of automobile traffic congestion. This automobile congestion has the potential to affect rail operations because the rail line crosses the border in the median of California State Highway 111. The railroad continues in a street median for some distance into Mexicali.

Furthermore, the area adjacent to the border is an active freight loading and unloading yard which makes siting a station here difficult. This section studies three candidate station locations in Calexico.

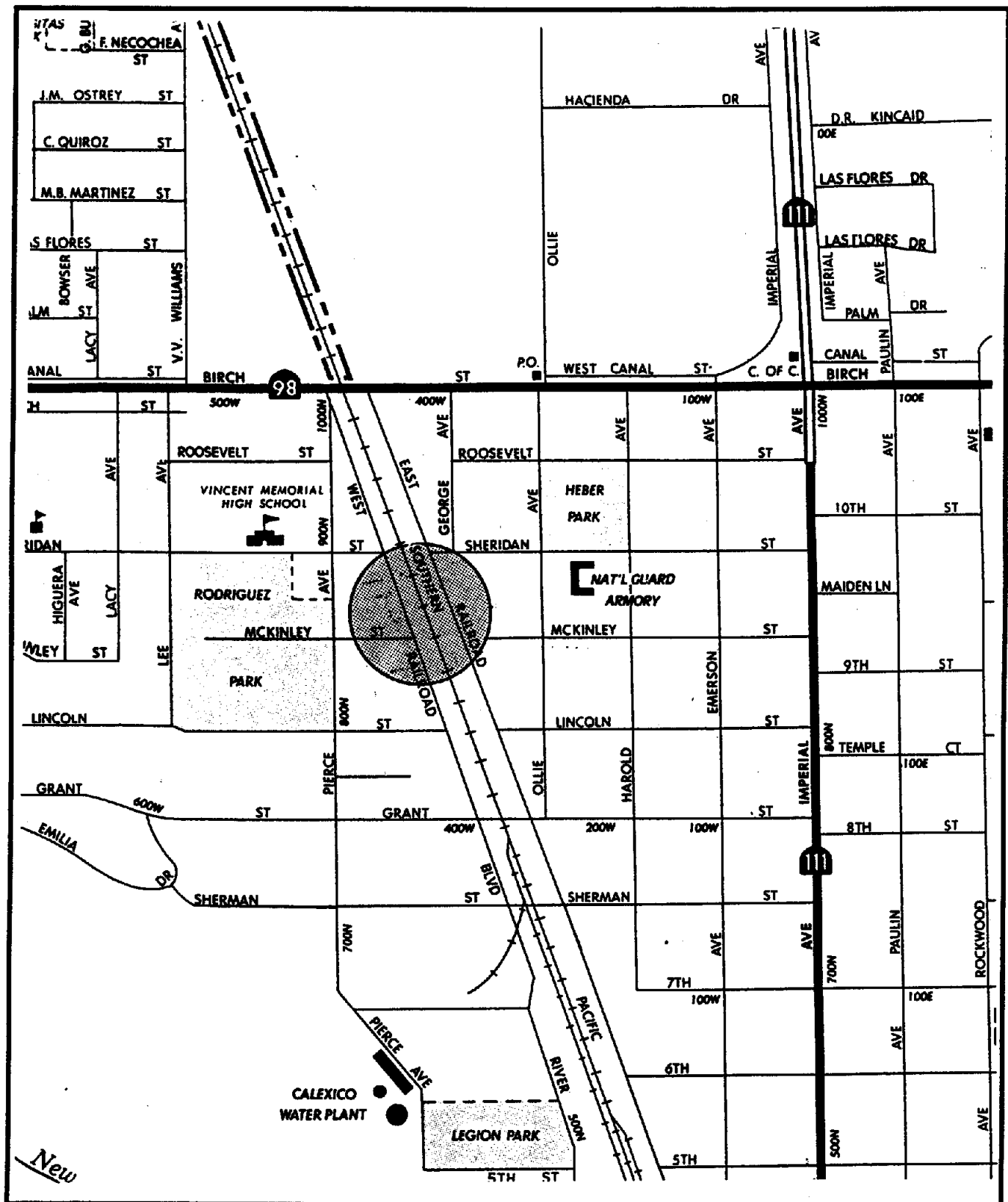
McKinley Street/West Railroad Blvd. - MP 708.0

As part of the field inspection, it was determined that the area east of West Railroad Blvd., between Birch (SR 98) and Grant Streets, would be suitable for a strip station facility (Figure 13). This site offers good highway access via West Railroad Blvd. to SR 98 and via Grant St. to SR 111. Although it is not within a convenient walking distance of the border crossing, it could serve Mexico-bound passengers with shuttle bus service.

Field investigations show approximately 80 feet of right of way between the rails and the edge of pavement on West Railroad Blvd. This presents adequate width for station amenities and parking facilities.

5th Street/East Railroad Blvd. - MP 708.5

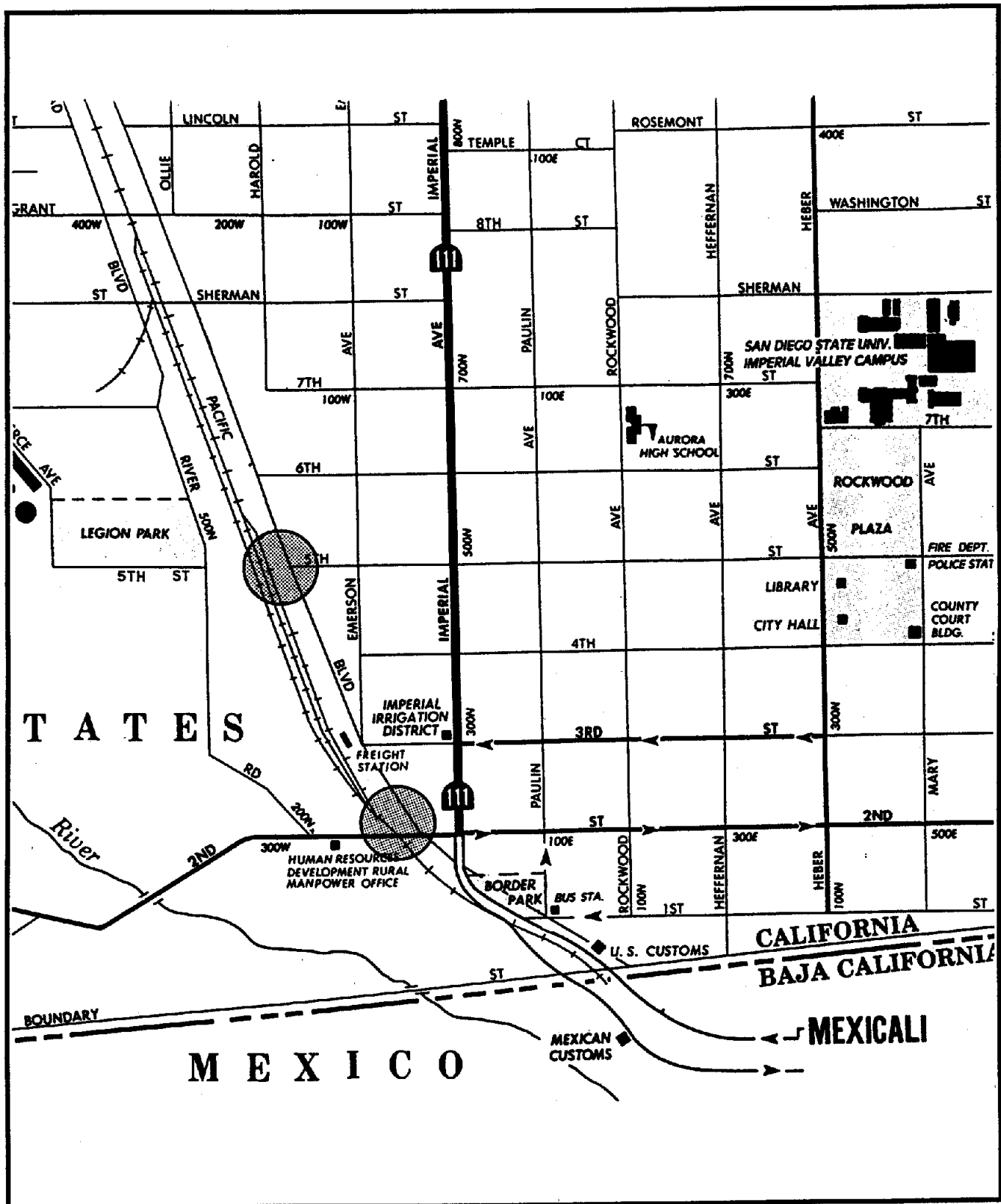
Staff of the City of Calexico suggested considering a site on the east side of the tracks at the junction of Fifth Street and East Railroad Blvd (Figure 14). This site may have approximately 10,000 to 15,000 square feet and is privately owned. Although this site is a few blocks north of the border, it is still within walking distance of the border crossing. This site is less likely to be affected by automobile congestion on Imperial Avenue (SR 111) than a site closer to the border.



McKINLEY ST./WEST RAILROAD BLVD., CALEXICO **INTERCITY RAIL FEASIBILITY STUDY**

SCHIERMEYER CONSULTING SERVICES

FIGURE 13



FIFTH ST. & SECOND ST., CALEXICO
INTERCITY RAIL FEASIBILITY STUDY

Second Street/East Railroad Blvd. - MP 708.7

Another site suggested for consideration by City staff is a location east of the tracks just north of Second Street (Figure 14). This location is the historic site of the SP passenger station. Last year, a .75 acre parcel near this vicinity was purchased from SP by a private party. The land is currently vacant and the existing owner is interested in possible joint development of the property.

It should be noted, however, that the tracks are curved at this point as they veer in a southeasterly direction towards Mexico. In addition, the existence of several tracks in this area, as well as active freight usage, make development of this site difficult.

Vehicular access/egress to the site could be off 2nd St. or 3rd St. These routes should offer adequate alternatives during periods when Imperial Avenue (SR 111) is heavily congested due to border-crossing delays.

Furthermore, it is likely that a significant number of passengers will be traveling to and from Mexicali and will cross the border by foot. Significant delays are frequently experienced when crossing the border by car. This site offers the premier advantage of being within walking distance of the border, a point of worthy consideration.

Although parking availability at this site may be constrained, the likelihood that most passengers would arrive by foot minimizes the importance of parking at this location. In addition, it may be possible to acquire more right-of-way, thereby increasing parking capacity requirements.

Recommendation

Most of the anticipated demand for passenger rail service in Calexico is likely to originate in Mexicali; available information indicates a population of nearly 1 million in the Mexicali Valley as compared to the less than 130,000 in all of Imperial County. Therefore, proximity to the border crossing is a primary consideration for site selection in Calexico.

For this reason, this report recommends a location as close to the border as possible. Given the technical constraints mentioned above, it may become necessary to look somewhere between 2nd St. and 5th St. As indicated earlier in this report, however, final station site selection will be the responsibility of the local community.

CONCLUSION

The detailed station descriptions of candidate station locations east of Riverside have been presented for preliminary planning and discussion purposes. In order to further refine and identify specific local concerns and issues, an interactive process must continue with the affected local, city, county, and state agencies as well as interested business and community groups. A listing of individuals and agencies contacted to date is included in Appendix 3.

CHAPTER III
FARES AND SCHEDULES

CHAPTER III

FARES AND SCHEDULES

This chapter presents possible passenger fares and schedules for the proposed service.

FARE COMPUTATION

No actual fares have been established for this proposed service. However, for purposes of projecting a range of revenues which might reasonably be expected from this service, this chapter presents examples of fares that are parallel to those of a similar service currently in operation.

These example fares are based on current Amtrak fare policy on the San Joaquin corridor through central California. The non-discounted one way fares in the San Joaquin corridor can be approximated in the following manner:

For distances of 25 miles or less:	24 cents per mile.
For distances of 26 miles to 62 miles:	23 cents per mile.
For distances of 63 miles to 143 miles:	21 cents per mile.
For distances of 144 miles or greater:	19 cents per mile.

Most passengers, however, travel using discounted round-trip tickets which generally cost 150% of the regular one-way fare. The one-way fares in Table 4 are computed at half the cost of a discounted round-trip ticket and are equal to 75% of the mileage charges described above for non-discounted travel.

In actual practice, a certain percentage of passengers travel during blackout periods (such as peak holiday periods) during which discounted fares are unavailable. Passengers purchasing one-way tickets are also unable to obtain the discount, so actual revenue will be higher than this fare table would project.

TABLE 4

ONE-WAY DISTANCES AND FARES FOR

LOS ANGELES - RIVERSIDE - COACHELLA VALLEY - IMPERIAL VALLEY RAIL PASSENGER SERVICE

(DISTANCES IN WHOLE MILES) --- (FARES IN DOLLARS.)

	LA	FU	CO	RI	LL	BE	WC	CC	EC	BR	EL	CX	
Los Angeles	(LA)	---	4.5	8.	10.5	11.5	14.5	19.	20.5	22.	31.	33.	34.
Fullerton	(FU)	25	---	4.	6.5	8.5	10.5	15.	16.5	18.5	27.5	29.	30.5
Corona	(CO)	48	23	---	2.5	4.5	7.5	11.5	13.	15.	24.	26.	27.
Riverside	(RI)	62	37	14	---	2.	5.	10.	10.5	13.	22.	24.	25.
Loma Linda	(LL)	74	49	26	12	---	3.	8.	9.5	11.	21.	22.	23.5
Beaumont	(BE)	92	67	44	30	18	---	5.	6.5	9.	19.5	20.5	21.
West Coachella	(WC)	121	96	73	59	47	29	---	1.5	4.	15.	17.	18.5
Central Coachella	(CC)	129	104	81	67	55	37	8	---	2.5	14.	16.	17.5
East Coachella	(EC)	141	118	95	81	69	51	22	14	---	11.5	13.5	15.
Brawley	(BR)	217	192	169	155	143	125	96	88	74	---	2.5	4.
El Centro	(EC)	230	205	182	168	156	138	109	101	87	13	---	1.5
Calexico	(CX)	239	214	191	177	165	147	118	110	96	22	9	---

FARE TABLE

The lower-left segment of Table 4 provides distances in miles between station pairs on the proposed route. For example, to find the one-way distance between Beaumont and Riverside: Find "Beaumont" (abbreviated "BE") in the column on the left. Then find Riverside, abbreviated "RI", on the top row. The intersection of the "Beaumont" row with the "RI" column yields "30", the distance in miles between Riverside and Beaumont.

The upper-right segment of Table 4 provides one-way fares in dollars (rounded to the nearest half-dollar) between station pairs on the proposed route. For example, to find the one-way fare between Beaumont and Riverside (the fare is assumed to be the same in either direction): Find "Riverside" (abbreviated "RI") in the column on the left. Then find Beaumont, abbreviated "BE", on the top row. The intersection of the "Riverside" row with the "BE" column yields "5.", meaning that the one-way fare between these two cities would be \$5.00.

SCHEDULES

Historically in California, when the state would decide to become involved in intercity rail operations, service would begin with one daily round trip. In the case of the San Joaquin service the state quickly realized that operating only one round trip inhibited reasonable market penetration. In that case the State quickly pressed for a second round trip, which was then implemented.

This study supports the point of view that for a passenger rail corridor to be successful it must offer a minimum level of service. For the Coachella Valley service, this minimum level appears to be three daily round trips.

This section compares two possible operating scenarios. One option involves three daily round trips between Los Angeles and the Coachella Valley. The other option is also based on three daily round trips, with one trip extended through the Imperial Valley to Calexico.

In order to prepare proposed timetables, it was necessary to look at the types of trips which would likely be attracted to this form of transportation. One such trip type would be persons making trips from the Coachella Valley to downtown Riverside, Orange County, or Los Angeles for business or government meetings. Vacation trips oriented towards the Coachella Valley, particularly on weekends and holidays when the highway network is severely congested, represent another target trip type. The proposed schedules presented in this chapter address these travel needs.

Table 5 presents the proposed timetable for rail service only to the Coachella Valley. Table 6 presents the proposed timetable for service extended to Calexico. In both cases, the Coachella Valley times depicted represent the East Coachella Valley station.

It should be noted that both schedules are presented only as an example of how three round trips, evenly spaced throughout the day, could be provided with two sets of equipment. Precise arrival and departure times will have to be closely coordinated with other intercity and commuter trains, particularly at Union Station in Los Angeles.

Both schedules make it possible for Coachella Valley residents to be in Los Angeles from 9:00 a.m. to 5:30 p.m. (and a longer span in Fullerton or Riverside) without staying overnight. The 5:30 p.m. departure from Los Angeles included in both schedules also permits residents of Los Angeles and Orange Counties, and of western Riverside County, to leave for weekend or other overnight stays in the Coachella Valley at the end of a work day.

The late morning to early afternoon departures in both schedules provide a convenient travel option for persons whose trips are not constrained by the opening or closing hours of businesses. The proposed Imperial Valley schedule in Table 6 permits reasonable arrival and departure times in both directions while avoiding the expense of overnighting the equipment in Calexico.

TABLE 5

PROPOSED TIMETABLE FOR COACHELLA VALLEY PASSENGER RAIL SERVICE

EAST BOUND TRAINS (READ DOWN)		STATION	WEST BOUND TRAINS (READ UP)	
7:00 a.m.	10:30 a.m.	5:30 p.m. Dep.	Los Angeles	Arr. 9:00 a.m. 3:30 p.m. 9:00 p.m.
10:30 a.m.	2:00 p.m.	9:00 p.m. Arr.	Coachella Valley	Dep. 5:30 a.m. 12:00 N 5:30 p.m.

TABLE 6

PROPOSED TIMETABLE FOR IMPERIAL VALLEY PASSENGER RAIL SERVICE

EAST BOUND TRAINS (READ DOWN)		STATION	WEST BOUND TRAINS (READ UP)	
7:00 a.m.	10:30 a.m.	5:30 p.m. Dep.	Los Angeles	Arr. 9:00 a.m. 6:30 p.m. 9:00 p.m.
10:30 a.m.	2:00 p.m.	9:00 p.m. Arr.	Coachella Valley	Dep. 5:30 a.m. 3:00 p.m. 5:30 p.m.
1:00 p.m.	-	Arr. Calexico	Dep.	- 3:00 p.m.

CHAPTER IV

CAPITAL AND OPERATING COSTS

CHAPTER IV

CAPITAL AND OPERATING COSTS

This chapter presents preliminary estimates of the capital and operating costs associated with the proposed service.

The first section discusses the capital costs of such service, including rolling stock, station construction, and track improvements. The next section presents preliminary estimates of operating costs.

CAPITAL COSTS

This report assumes that the regional commuter rail service programmed for implementation in 1993 will provide essentially all of the track and station improvements needed from Los Angeles Union Passenger Terminal to just south of Colton Crossing. Capital costs include rolling stock, stations, and track improvements.

Rolling Stock

Each train set will consist of a diesel-electric locomotive, five coaches, and a food-service car. One of the coaches will include a control cab to allow push-pull operation of the train set, eliminating the need for a costly turnaround maneuver at each end of the line.

For service only to the Coachella Valley (as proposed in Table 5), two train sets will operate each day. This schedule rotates equipment so that each set stays in Los Angeles overnight for servicing every other day. In addition to two complete train sets, this scenario will require the following backup equipment: one locomotive, one control-cab coach, one passenger coach, and one food-service car.

For service to the Imperial Valley (as proposed in Table 6), three complete train sets will be required. This will require the purchase of four additional passenger coaches beyond the equipment requirements for Coachella Valley-only service. In addition, the

following back-up equipment will be required: one locomotive, one control-cab coach, and one food-service car.

Table 7 outlines the specific equipment requirements for this service and the costs for each type of rolling stock. The total for all rolling stock is estimated to be \$28.4 million for service only to the Coachella Valley. Extending service to the Imperial Valley would add \$10.7 million to the cost of rolling stock, bringing the total to \$39.1 million.

The "Horizon" coaches recently acquired for the San Joaquin service cost just under \$1 million each. UTDC intercity bilevel coaches currently cost approximately \$1.2 million each. Although bids for the new "California Intercity" cars have been received and evaluated, at the time of this report it is unknown how much they will cost. Therefore, this report assumes an average cost of \$1.25 million each for standard passenger coaches and \$1.5 million for control-cab coaches. Although it is anticipated that the final equipment costs will exceed the cost estimates included in this report, they are based on some of the most recent acquisitions of the Southern California Regional Rail Authority for purchase of commuter rail equipment.

This report assumes that the equipment for this service will be interchangeable with Amtrak equipment. This compatibility will allow access to the Amtrak equipment pool for periods of unusually high demand. However, a specific fleet size will remain dedicated to the Coachella Valley service.

TABLE 7

ASSUMED COSTS FOR ROLLING STOCK

<u>ITEM</u>	<u>UNIT COST</u>	<u>COACHELLA VALLEY SERVICE</u>		<u>IMPERIAL VALLEY EXTENSION</u>	
		<u>UNITS NEEDED</u>	<u>TOTAL COST</u>	<u>UNITS ADDED</u>	<u>ADDED COST</u>
Diesel-electric locomotives	\$2.20M	3	\$ 6.6M	1	\$2.2M
Control-cab coaches	\$1.50M	3	\$ 4.5M	1	\$1.5M
Passenger coaches	\$1.25M	9	\$11.3M	4	\$5.0M
Food-service cars	\$2.00M	3	\$ 6.0M	1	\$2.0M
		SUBTOTAL	\$28.4M		\$10.7M
		SERVICE TOTAL	\$28.4M		\$39.1M

NOTE: Costs for the new California car are unavailable at the time of this report. The equipment costs shown above are based on the most recent acquisitions of the Southern California Regional Rail Authority and represent the best possible estimates. Actual costs are anticipated to be higher.

Stations

From Los Angeles through downtown Riverside, the proposed Coachella Valley service will use stations already in existence or planned for the commuter rail network. Therefore, only the cost of stations east of Riverside will be attributable to the Coachella Valley intercity service.

As discussed in Chapter II, east of Riverside, stations are recommended for Loma Linda, Beaumont, and three locations within the Coachella Valley. If rail service is extended into the Imperial Valley, station stops are recommended for Brawley, El

Centro, and Calexico.

Land Acquisition

The major variable in station costs will be the cost of land acquisition. This preliminary assessment assumes that most new stations will be located on one-acre sites with land-acquisition costs of approximately \$500,000 per acre. This is a weighted-estimate cost for preliminary purposes. Local agencies in Imperial County requested the use of specific land acquisition costs for each community. These costs are \$175,000 per acre in Brawley; \$350,000 per acre in El Centro; and \$500,000 per acre in Calexico.

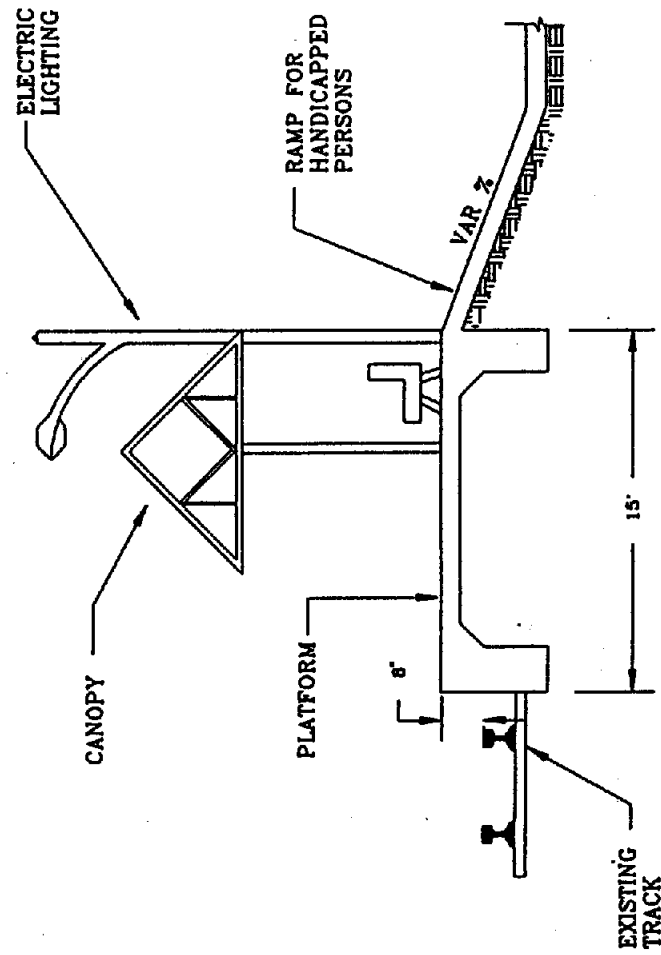
Station Platforms and Shelter

Apart from land acquisition costs, the major station development costs include the construction of a platform, a shelter or enclosed structure, and related lighting. Based upon technical guidelines and cost estimates received from Caltrans during the preparation of this report (See Appendix 4), certain assumptions have been made relative to station improvement costs.

Amtrak intercity guidelines require a platform which is at least 800 feet long, 12 feet wide, and situated eight inches above the rail head. Figure 15 shows a cross section of a typical station platform with canopy. The total costs for the platform and related lighting is \$335,575.

Because of climatic conditions including strong winds, dust storms, extreme heat, and cold temperatures in winter, this report recommends enclosed climate-controlled waiting areas for all stations between Loma Linda and the Coachella Valley. A 1,500 square-foot modular facility of this type is expected to cost \$225,000 at \$150 per square foot.

It should be noted that in Brawley and El Centro, historic station structures still exist, although Brawley city staff believes that



NOT TO SCALE

TYPICAL STATION PLATFORM **INTERCITY RAIL FEASIBILITY STUDY**

SP plans to demolish the building. Should these communities be interested in using these structures, further analysis would be needed to determine the safety of the structures, as well as acquisition and rehabilitation costs.

For purposes of this study, however, the Brawley and El Centro station structures have been programmed as a 500 foot shelter at \$80 per square foot. This type of shelter is not enclosed, but would be expected to have a roof and three sides to provide shade and shelter from the elements.

Furthermore, because transportation facilities have historically helped define the image of the surrounding community, this report assumes that implementing intercity rail service to the Coachella and Imperial Valleys will most likely involve the construction of two larger staffed facilities. A staffed facility differs from an unstaffed station in that it includes baggage storage facilities as well as station services for Amtrak in an enclosed structure.

Based upon projected origins and trip end destinations referenced in Chapter V, this report recommends one staffed station in the Coachella Valley and one in Calexico. As a major tourism point along the line, the selected Coachella Valley station is expected to be a more major multi-modal facility with possible private and public transit operators connecting to the station. Keeping in line with this regional perspective, this report recommends a 5,000 square foot station structure estimated to cost \$750,000.

The Calexico station is also recommended as a staffed location given its close proximity to the border and large population base. The Calexico station has been programmed at 1,500 square feet.

Station Parking

Station parking costs relate to the total number of parking spaces and required lighting. Parking stalls are estimated at \$1,400 per space and \$9750 per light (Appendix 4). Table 8 shows the total parking costs per station. The Loma Linda and Beaumont stations have been budgeted with 100 spaces each. The staffed Coachella Valley station has been programmed with 300 spaces; the eastern Coachella Valley terminus with 100 spaces; and the western station with 164 spaces. The Imperial County stations have been programmed with 50 spaces each.

Based on an estimate of 115 spaces per acre, each of the two-acre sites will have room for future expansion as required. In addition, each parking lot will have a specified number of short term, long term, and handicapped spaces.

TABLE 8

ASSUMED COSTS FOR EACH STATION

<u>STATION LOCATION</u>	<u>LAND ACQUISITION</u>	<u>PARKING IMPROVEMENTS</u>	<u>PLATFORM, CANOPY AND LIGHTING</u>	<u>STRUCTURE</u>	<u>TOTAL</u>
Loma Linda	\$ 500,000	\$286,250	\$335,575	\$225,000	\$1,346,825
		Subtotal, San Bernardino County Station			\$1,346,825
Beaumont	\$ 500,000	\$286,250	\$335,575	\$225,000	\$1,346,825
Coachella Valley	\$1,000,000	\$444,100	\$335,575	\$225,000	\$2,004,675
Coachella Valley, staffed station	\$1,500,000	\$810,000	\$335,575	\$750,000	\$3,395,575
Coachella Valley	\$1,000,000	\$286,250	\$335,575	\$225,000	\$1,846,825
		Subtotal, Riverside County Stations			\$8,593,900
Brawley	\$ 175,000	\$138,250	\$335,575	\$ 40,000	\$ 688,825
El Centro	\$ 350,000	\$138,250	\$335,575	\$ 40,000	\$ 863,825
Calexico, staffed station	\$ 500,000	\$138,250	\$335,575	\$225,000	\$1,198,825
		Subtotal, Imperial County Stations			\$2,751,475
		GRAND TOTAL, ALL STATIONS			\$12,692,200

Summary of Station Costs

A typical unstaffed station outside of Imperial County will cost approximately \$1.3 million, as shown in Table 8. The estimated total cost for the Coachella Valley staffed station is \$3.4 million. The estimated cost of the Brawley station is \$689,000; the El Centro station is \$863,000. The staffed Calexico station is estimated to cost \$1.2 million. Each of these costs include land acquisition.

The total cost for stations from Loma Linda to the Coachella Valley, as shown in Table 9, is estimated to be \$9.9 million. Extending service to Calexico would add \$2.8 million in new station costs to this figure, bringing the total to \$12.7 million.

Track Improvements: Los Angeles - Indio

Proposed intercity service on this route will be able to use existing track for most of the route. However, some track improvements and terminal facilities will be needed. A new connecting track will be required at Colton Crossing to permit movement between trackage of the Santa Fe and Southern Pacific. A layover track, with amenities, will be required at the terminal in the eastern Coachella Valley. If service is extended to Calexico, track, roadbed, and crossing improvements will be required south of Niland.

Colton Crossing Interconnect Track

Colton Crossing is a busy junction located just south of I-10 where the joint Union Pacific/Santa Fe trackage (from Riverside to Barstow) crosses the Southern Pacific Yuma main line (Figure 16).

Although it would be technically possible today for a train to make the connection from the Santa Fe trackage coming from Riverside to the SP trackage going to Indio, such a transition would require slow maneuvering through numerous manual turnouts in the small Union Pacific yard located east of Colton Crossing. Such operation would also require negotiating operating rights with a third railroad company, Union Pacific.

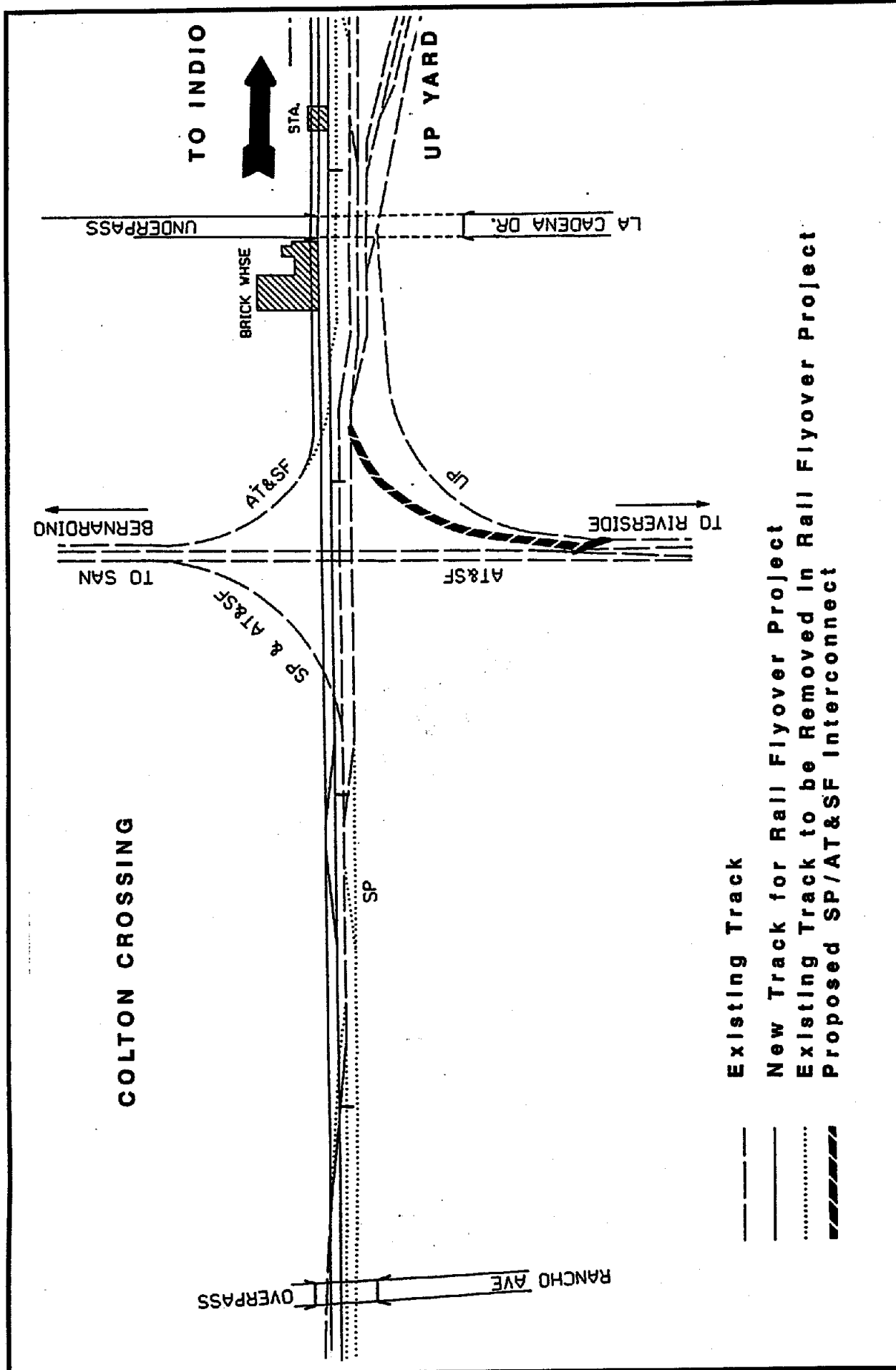
TABLE 9

ESTIMATED STATION CONSTRUCTION COSTS FOR

NEW STATIONS REQUIRED TO IMPLEMENT

PROPOSED COACHELLA/IMPERIAL VALLEY PASSENGER RAIL SERVICE

Route Segment	NUMBER OF STATIONS		<u>Estimated Cost</u>
	<u>Unstaffed</u>	<u>Staffed</u>	
Loma Linda to Coachella Valley	4	1	\$ 9,940,725
Imperial Valley	2	1	\$ 2,751,475
TOTALS	6	2	\$12,692,200



COLTON CROSSING
INTERCITY RAIL FEASIBILITY STUDY

FIGURE 16

To provide for an efficient transfer between the Santa Fe and Southern Pacific lines, three controlling factors need to be addressed:

1. An existing powered switch on the eastbound SP mainline east of the crossing is controlled by a signal. A connecting track for this proposed service must converge (from the perspective of trains bound for the Coachella Valley) with the eastbound SP mainline before reaching this switch in order to minimize the costs of relocating this switch and signal.
2. A signal bridge over the AT&SF and UP tracks south of the crossing controls trains approaching the junction from the south. The Coachella Valley bound trains must be controlled by signals on this bridge when diverging from the AT&SF/UP trackage heading towards the eastbound SP mainline. Field investigations indicate that this should be feasible.
3. Union Pacific has storage and transfer tracks south of the junction. Provisions must be made to minimize interference with the functions of these tracks.

The design solution addressing these factors will involve construction of an additional track for the UP east of the two existing UP tracks south of the junction. In order to provide for the transition movement of Coachella Valley passenger trains, the existing westernmost UP track will require upgrading to mainline standards with appropriate signal and switch modifications beginning at a point approximately 1200 feet south of the signal bridge. Also, the construction of more than 1200 feet of new storage track for use by the UP will be required to the east of this trackage to replace former UP trackage involved in the mainline upgrade.

With these improvements UP operations would shift one track position to the east for approximately the first 1200 feet south of the signal bridge. Coachella Valley service would operate on the first track east of the AT&SF tracks for approximately 1200 feet before diverging to join the SP mainline.

These improvements will require four new power switches (turnouts) with appropriate signalization at an approximate cost of \$250,000 each. The nearly 4,000 feet of track construction required will cost approximately \$100 per lineal foot. Approximately another \$30,000 will be required for miscellaneous manual switches in the Union Pacific yard. The total estimated cost of this new connection is \$1,430,000.

Maintenance of these new facilities is estimated to cost \$15,000 per year. Because this connection would be constructed and maintained solely for Coachella Valley passenger service, this cost would be borne entirely by the passenger operation.

In conclusion, the proposed connection would permit passenger train movement between two railroads, even if a Santa Fe or Union Pacific train is occupying the crossing. Queuing of Southern Pacific trains at Loma Linda could require additional track capacity to permit a passenger train to move through the area without delay. Whether such additional track capacity is required should be the subject of a future joint analysis by both the railroad and the Caltrans Division of Rail. If track capacity is needed, it would appear to be a warranted expenditure by the State if it permitted the operation of new passenger service.

Colton Crossing Rail/Rail Grade Separation

The need for a new interconnect track is not the only challenge this service may encounter at Colton Crossing. The junction experiences significant congestion due to freight train movements. With the existing at-grade rail/rail crossing, the SP frequently must stage freight trains in the Loma Linda area to wait for a window between AT&SF and UP trains proceeding through Colton Crossing.

The "Conventional Commuter Rail Task 2 Report" of the Riverside County Transportation Commission recommends a rail/rail grade separation for Colton Crossing (Figure 16).

This grade separation, or flyover, will permit through trains on both lines (SP and joint AT&SF/UP) to proceed through Colton Crossing without stopping. The proposed flyover will eliminate the need for additional storage tracks in Loma Linda while reducing delays on both lines.

If the flyover is not constructed, Coachella Valley passenger service could experience significant delays as long SP freight trains with helper engines wait in Loma Linda for AT&SF or UP trains to maneuver through Colton.

The proposed grade separation in Colton would leave most of the existing trackage in place and construct a new SP main line immediately north of the existing SP tracks, elevated above the joint AT&SF/UP tracks.

This study assumes that this flyover will be constructed in order to accommodate growth in freight traffic and to accommodate the

programmed regional commuter rail service. Therefore none of the costs of this new facility are attributable to Coachella Valley passenger rail service.

Layover track in eastern Coachella Valley

A layover track approximately 1,000 feet long would be required at the easternmost station in the Coachella Valley. Because of the use of push-pull equipment with a control cab at the end of one passenger coach, turnaround facilities will not be required.

Facilities needed for the layover track include a drip pan for the locomotive, a double-walled fuel tank with leakage monitors, a paved access road, a small structure to house equipment, potable water supply connections plus locomotive water supply, a battery charger with standby batteries, and a standby power connection. Standby power provides light and cooling for the coaches during layovers to facilitate cleaning and minor service without requiring operation of the locomotive engines. It also ensures that the coach interiors are cooled or heated to a comfortable temperature before passenger boarding begins.

Layover facilities as described above are estimated to cost \$400,000.

Track and Grade Crossing Improvements: Niland - Calexico

Certain improvements will be required for a service extension to Calexico, including track rehabilitation south of the Niland Wye, upgrading grade-crossing protection devices, improved detection/timing systems for grade-crossing protection, and possible upgrading of roadbed and drainage systems.

This report assumes that service to Calexico will originate in Los Angeles in the morning and return to Los Angeles the same day, eliminating the need for layover facilities in Calexico.

Niland Wye

Field inspection of the existing track configuration in Niland confirms the existence of a high-quality interconnect track appropriate for Indio - Calexico service.

Figure 17 (a view looking west towards Indio on the Yuma main line) shows the existing double crossover which facilitates the transition from the Yuma main track (the middle track in the foreground of the photograph) to the Calexico main line (the track



View west towards Indio from Niland. The middle track is the Yuma Mainline. The crossover track in the foreground serves Indio - Calexico trains.

DOUBLE CROSSOVER AT NILAND WYE
INTERCITY RAIL FEASIBILITY STUDY

in the lower part of the photograph). This crossover is signalized, and is operated with electric switch motors as part of the Southern Pacific's Centralized Train Control (CTC) system.

Figure 18 is a schematic diagram showing the passing siding on the north side of the Yuma mainline, the Yuma mainline track, the Calexico main track, and the transition track in the southeast segment of the wye (which permits maneuvers from Calexico towards Yuma). This diagram is not to scale and does not accurately represent all additional yard trackage which exists primarily in the southwestern segment of the wye.

The trackage shown in Figure 18 is part of SP's CTC system with track signals and electrically-powered turnouts. The tracks shown on this diagram (except for the Calexico - Yuma transition track which would not be used in this proposed passenger service) consist of welded rail maintained to high standards. These amenities permit trains travelling between Indio and Calexico to make the transition from the Yuma mainline to the Calexico branchline without stopping for a person to change the orientation of a manual turnout.

Figure 19 is a view to the north showing the southernmost turnout on the Niland Wye (the perspective would be that of coming up the track from Calexico). The sign on the left reads: "End Calipatria Block". The sign on the twin-aspect signal reads: "Begin CTC".

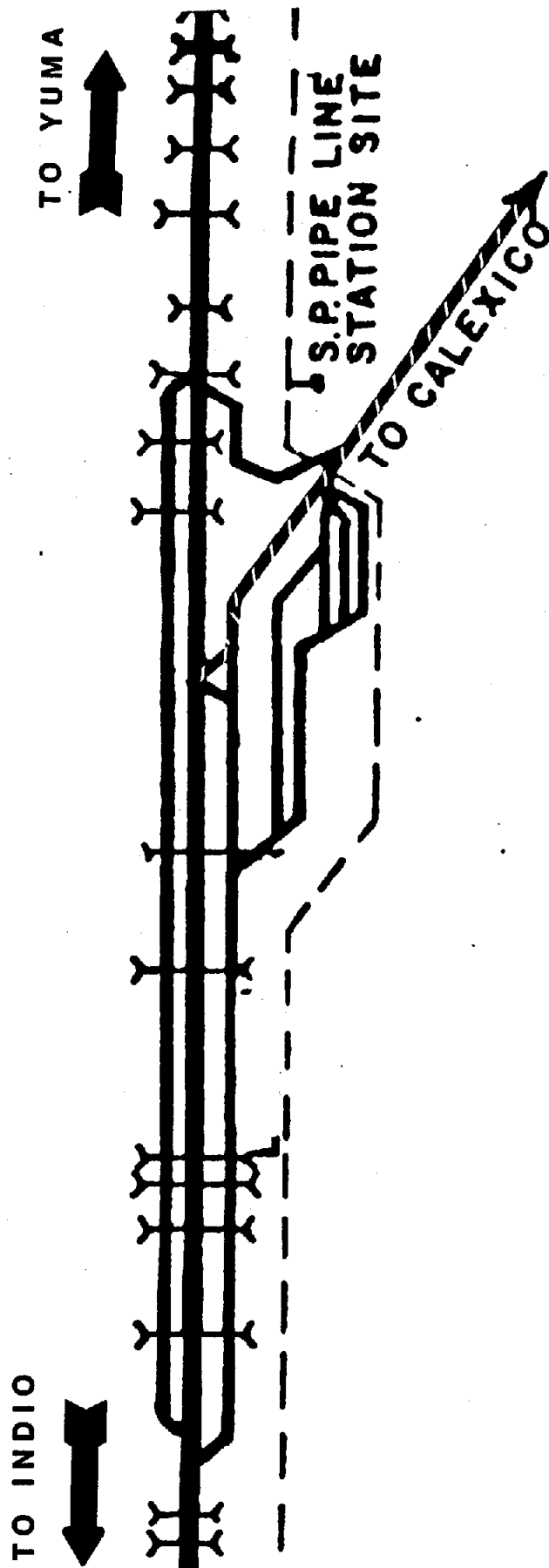
Because of this high quality trackwork and signalization, additional facilities would not be required at Niland for extension of passenger service to Calexico.

Track Rehabilitation

To facilitate reasonable passenger-train operating speeds for the proposed level of startup service (one round trip per day through the Imperial Valley) line rehabilitation will be required. This would include: reballasting the route, replacing an average of 1200 crossties per track mile, resettling the crossties, adjusting the gauge, and replacing worn rails where necessary. Trackage thus rehabilitated would permit passenger train speeds up to 59 MPH, the maximum permissible on a railroad lacking signalization.

At an estimated cost of \$66,000 per track mile, this rehabilitation is projected to cost \$2.7 million from Niland Wye to a new Calexico station.

Additional work may be needed due to the deteriorated condition of the roadbed. The contingency factor which will be applied to total capital-cost estimates later in this chapter should cover this possibility.



Existing Transition Track: Indio - Calexico

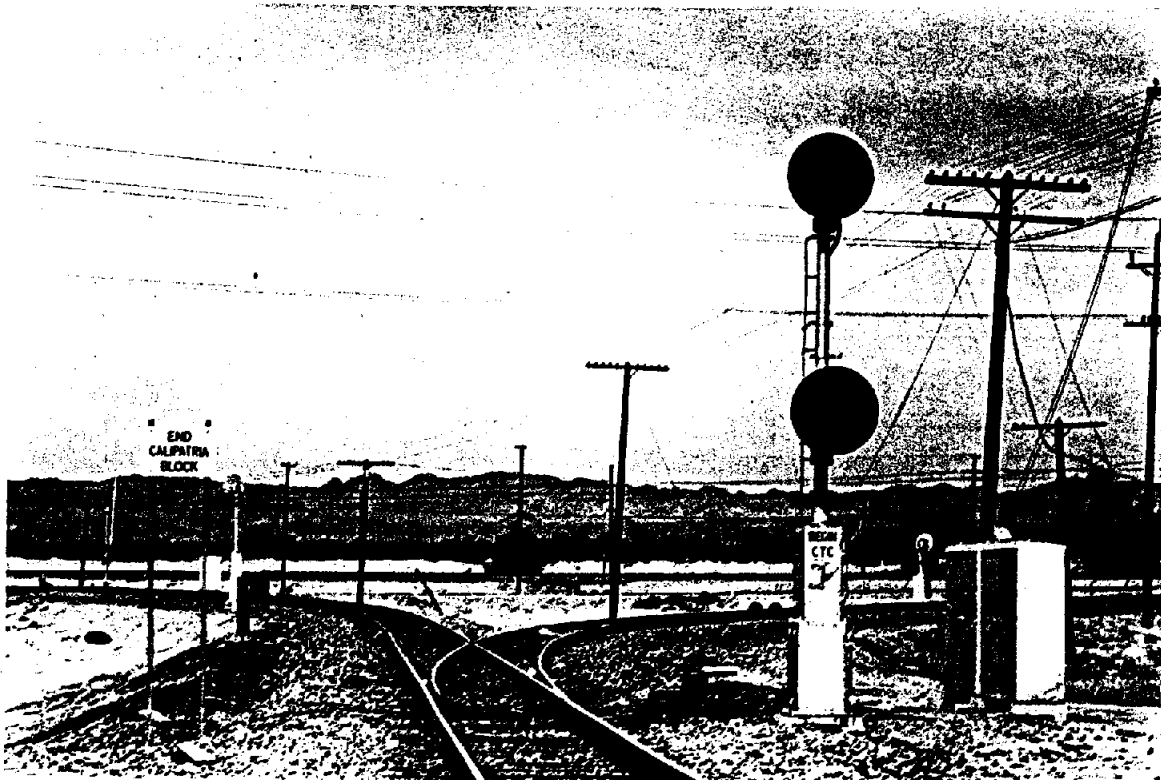
This track diagram is not to scale.

SCHEMATIC TRACK DIAGRAM OF NILAND WYE

INTERCITY RAIL FEASIBILITY STUDY

SCHIERMEYER CONSULTING SERVICES

FIGURE 18



View north from the south turnout on the Niland Wye.

SOUTH TURNOUT AT NILAND WYE
INTERCITY RAIL FEASIBILITY STUDY

The proposed level of track rehabilitation would facilitate a reasonable startup level of service, permitting an actual test of the market. If demand for the service proved to be great, public agencies could then consider a greater capital investment in track improvements and signalization in order to operate trains at higher speeds on this route segment.

Currently, the Calexico branch is operated under Direct Traffic Control (DTC) rules which limits the maximum speed authorized by the Federal Rail Administration to 59 mph for passenger service and 49 mph for freight, once the track has been improved to Class 3.

The proposed track rehabilitation referenced in this report would be considered Class 3. In order to achieve speeds higher than this the branch would have to be totally reconstructed and signalized.

The Calexico branch was formerly operated with automatic block signaling. This signal system has been deactivated for several years and it is questionable whether reinstating this technology would be a better choice than installing new Centralized Train Control signalization.

Complete reconstruction of the track, including the installation of continuously-welded rail, would cost approximately \$600,000 per track mile. Such an expenditure, amounting to nearly \$25 million from Niland to Calexico, would improve ride quality, but would still not permit speeds greater than 59 mph without an additional investment in signalization of the branch. Therefore, this report does not recommend signalization and complete reconstruction of the track at this time.

Road Crossing Protection Devices

The highest level of protection available for at-grade highway/rail crossings is known as a "Type 9A" protection device. This type of protection includes gates, flashing lights on poles at the roadside, and cantilevered flashing lights over the roadway. This type of protection costs approximately \$75,000 for each two-lane roadway and approximately \$125,000 for four-lane road crossings.

Information available from the California Public Utilities Commission does not indicate that any crossings on this route currently have Type 9A protection. A field inspection of grade crossings in Imperial County was outside the scope of this preliminary study. Available records indicate that there are approximately 46 grade crossings between the Yuma mainline track in Niland and the proposed station site in Calexico.

The total cost for new Type 9A protection devices at all crossings between Niland and Calexico would be approximately \$3.5 million.

For a "minimum upgrade" scenario with trains operating no faster than 59 MPH, this report assumes that existing protection devices will be adequate at most crossings. A report from the Public Works Department of the County of Imperial lists 15 crossings where paved roads cross this rail route without gated protection. Upgrading all of these crossings to Type 9A protection is estimated to cost \$1,125,000. Further on-site inspection of grade crossings may be appropriate to determine the exact extent to which protection devices will require upgrading or replacement.

Road Crossing Protection Device Actuators

The track reconstruction required for the higher operating speeds of passenger service will necessitate revising the mechanism for actuating grade-crossing protection devices.

This report recommends a new type of actuation, known as "constant-warning devices", for all grade crossings where train speeds are likely to exceed 20 MPH. This actuation technology provides adequate advance warning at grade crossings for trains approaching at any speed. This type of actuation costs approximately \$25,000 per crossing.

This report assumes that, due to track geometry and the fact that passenger trains operate more slowly approaching and leaving stations, approximately 16 crossings will not need this new type of actuation. Therefore, from Niland to Calexico, approximately 30 constant-warning devices would need to be installed, at a cost of \$750,000.

SUMMARY OF CAPITAL COSTS

Table 10 summarizes the capital costs associated with this proposed service. A contingency factor of 30% is added to the capital costs associated with track, roadbed, and grade crossings. A factor of 15% for engineering is then added to these capital costs plus the contingency. These factors do not apply to station costs or rolling stock which is purchased on a bid basis.

The estimated capital cost for startup service from Los Angeles to the Coachella Valley is \$41 million.

Extending service to Calexico is presented in two options in Table 10. The "minimum upgrade" option involves track rehabilitation (not track replacement) and upgrading of a limited number of grade-crossing protection devices. The incremental fixed-facility cost

TABLE 10

SUMMARY OF CAPITAL COSTS FOR

LOS ANGELES - RIVERSIDE - COACHELLA VALLEY - IMPERIAL VALLEY RAIL PASSENGER SERVICE

(\$ Millions)

	LOS ANGELES - COACHELLA VALLEY	IMPERIAL VALLEY INCREMENT MINIMUM UPGRADE	IMPERIAL VALLEY FULL UPGRADE	LOS ANGELES - IMPERIAL VALLEY MINIMUM UPGRADE	LOS ANGELES - IMPERIAL VALLEY FULL UPGRADE
Colton Crossing Interconnect Track	1.4	-	-	1.4	1.4
Track Rehabilitation	0.0	2.7	-	2.7	-
Track Reconstruction	0.0	-	25.0	-	25.0
Road Crossing Protection Devices	0.0	1.1	3.5	1.1	3.5
Road Crossing Protection Actuators	0.0	0.8	0.8	0.8	0.8
Layover Track in Coachella Valley	0.4	-	-	0.4	0.4
Subtotal A	1.8	4.6	29.3	6.4	31.1
Contingency (30% of subtotal A)	0.5	1.4	8.8	1.9	9.3
Subtotal B (contingency + subtotal A)	2.3	6.0	38.1	8.3	40.4
Engineering (15% of subtotal B)	0.4	0.9	5.7	1.3	6.1
TOTAL FOR TRACK AND ROAD CROSSINGS (engineering + subtotal B)	2.7	6.9	43.8	9.6	46.5
Stations	9.9	2.8	2.8	12.7	12.7
TOTAL FOR FIXED FACILITIES	12.6	9.7	46.6	22.3	59.2
Rolling Stock	28.4	10.7	10.7	39.1	39.1
GRAND TOTAL	41.0	20.4	57.3	61.4	98.3

of extending service to Imperial County in this option is estimated to be \$9.7 million. Rolling stock would cost an additional \$10.7 million.

The "full upgrade" option displayed in Table 10 involves replacing all track from Niland to Calexico with continuously-welded rail and other extensive improvements to the roadbed, drainage systems, and grade crossings. This option includes providing "Type 9A" protection devices at all grade crossings.

As discussed earlier in this chapter, the full upgrade extension does not include installation of track signals and is estimated to cost \$46.6 million. Without signalization, trains would not be allowed to operate faster than 59 mph despite other improvements. Estimating the cost of signalization is beyond the scope of this report as this level of service is not recommended for the start-up scenario.

Therefore, the total capital cost for the Los Angeles to Calexico "minimum upgrade" scenario, as recommended in this report, is estimated to be \$61.4 million, including rolling stock.

OPERATING COSTS

This section discusses the costs of operating rail passenger service over the proposed route. The initial level of service is assumed to be three daily round trips between Los Angeles and Indio. An alternative which extends one of these round trips to Calexico is also considered.

Train Operations

Reviewing existing passenger financial data, Amtrak's long-term avoidable cost is approximately \$33 per train mile. This cost figure was not developed by Amtrak, but represents actual costs incurred by states operating trains under the 403(b) program.

Based upon a one-way route distance of 141 miles from Los Angeles to the eastern Coachella Valley, the operating cost of three daily round trips to the eastern Coachella Valley would be approximately \$10.2 million per year.

The one-way route distance from the eastern Coachella Valley to Calexico is 98 miles. Therefore, extending one daily round trip to Calexico would cost an incremental \$2.3 million per year.

The proposed daily timetable for service to the Imperial Valley (as shown in Table 6) would incur operating costs of approximately \$12.5 million annually.

A third operating scenario, which is not the subject of this study but included as a reference, involves a connecting feeder bus from the easternmost Coachella Valley station to Imperial Valley. According to Caltrans, the estimated cost for this type of service is \$1.65 per mile. Therefore, extending one round-trip per day to Calexico would cost approximately \$118,000 per year. Extending three round-trips would cost \$354,000. Based on the initial patronage estimates included in Chapter V, at least two full size buses would be required to meet the demand; therefore, actual operating costs would be doubled.

Although these costs are dramatically lower than the rail option, Imperial County has indicated very strong interest in reinstating passenger rail service to the Valley. In addition, experience indicates that a bus feeder system usually handles fewer passengers than a direct train over the same route due to passenger preference for train service and a dislike of transfers.

Track Maintenance

The cost for maintaining the Colton interconnect track required for this service is estimated to be \$15,000 per year.

Stations/Staffing

Operating costs related to stations have been excluded from this analysis. Typically, operating and maintenance costs have been provided by local jurisdictions when stations are owned by them. Amtrak staffing costs, however, are usually considered part of costs for providing the service and must be budgeted.

To staff the Coachella Valley station, it is estimated that three positions will be required to cover the period from 5:00 am to 9:30 pm daily. The Calexico station will require 1.5 positions. Based on recent Caltrans cost estimates, each staff position is budgeted at \$57,000, for a total annual staffing cost of \$256,500.

However, based on current practices on the "San Joaquin" line and other intercity services, it appears unlikely that local jurisdictions would be required to pay the staffing costs.

SUMMARY OF OPERATING COSTS

The operating costs for implementing the proposed level of service include train operation costs, the track maintenance at Colton crossing, and station staffing costs. The total annual cost for service from Los Angeles - Calexico is \$12.77 million. As referenced above, this dollar amount does not include the additional costs associated with maintenance of station facilities.

CHAPTER V

PATRONAGE AND REVENUE ASSESSMENT

CHAPTER V

PATRONAGE AND REVENUE ASSESSMENT

This chapter presents preliminary patronage forecasts and revenue estimates based on the level of train service proposed in Chapters III and IV. It was prepared by Wilbur Smith Associates.

To provide a foundation for projections of intercity rail patronage in the Los Angeles - Coachella Valley - Imperial County corridor, existing and historical patronage trends from the Los Angeles - San Diego (LOSSAN) and San Joaquin services were reviewed. Trends for these two services were used as guidelines for evaluating the reasonableness of patronage estimates for the Coachella Valley service, with the San Joaquin service representing the lower limit and the LOSSAN service representing the upper limit. Historical patronage trends for the Los Angeles-Santa Barbara service were also reviewed. Patronage estimates for the proposed Coachella Valley intercity rail service were tested against the performance of the rail services in all three of these existing corridors.

Ridership forecasts were developed for an assumed first year of operation in 1995 and for year 2005. Two operating scenarios were considered. One scenario involves three daily round trips between Los Angeles and the Coachella Valley, while the other scenario also involves three daily round trips, with one trip extending through Imperial Valley to Calexico. Patronage for this intercity rail passenger service will be dependent upon growth in population and economic activity throughout the corridor and the overall demand for intercity travel. Patronage estimates were developed for the year 1995, and then increased to produce estimates for the year 2005 based upon estimated population increases in the cities and areas surrounding the proposed station locations.

Key Factors Affecting the Patronage Estimates

Intercity passenger demand is the total number of person trips between population concentrations in the corridor. It is the gross travel market for which the rail service will compete. Patronage is the number of one-way trips the rail service can actually be expected to serve.

Fundamental to the patronage estimates were 1990 estimates of population along the proposed rail corridor and projections to 1995 and 2005. Table 11 shows total corridor population including areas around the stations which would be served by the proposed intercity rail service as well as 1995 and 2005 population projections.

Total corridor population within the rail corridor service area is approximately 783,000 from Los Angeles to the Coachella Valley and about 865,000 when service is extended to Calexico. The industrial city of Mexicali across the border in Mexico would also be served by the proposed rail service. Many residents of Mexicali have close connections with family and friends residing along the rail corridor and in the Los Angeles Metropolitan Area. A verifiable population for Mexicali could not be obtained. Various estimates of the population in Mexicali range from approximately 800,000 to 1,500,000. The patronage estimates are based on an assumed population of 1,000,000 in Mexicali.

While Norco and Moreno Valley are not within a five-mile radius of on-line stations, they are assumed to be connected to the intercity rail service by feeder bus service, due to their population concentration. The feeder bus service would run between these communities and the proposed intercity rail station in Riverside.

There is no well defined service area for the Los Angeles (LAUPT) station because of its unique location as a terminal for the proposed commuter rail lines. By the year 1995, LAUPT will be an interchange/transfer station between many different modes of transport such as commuter rail, light rail, metro rail, feeder bus service, shuttle bus service and public bus transit. The extent of the patronage catchment area at LAUPT will be dependant to a large degree upon the various interconnecting transport services which exist in the year 1995.

During the early years of the service, the major travel demand markets for the intercity rail service can be expected to have relatively long distance business and other non-work trips between the major urban areas served by the line. A major travel demand market will be recreational trips, to and from areas such as Calexico/Mexicali and Palm Springs.

Patronage Projections

Based on the actual performance of other intercity rail services an average of about 0.0024 daily trips per capita may be anticipated. Using an average annual growth rate of 5.05 percent along the corridor, the projected year 1995 population would be about 1,107,000 for the Los Angeles to Imperial Valley corridor and about 1,012,000 for the Los Angeles to Coachella Valley corridor.

TABLE 11

TOTAL CORRIDOR POPULATION

Rail Corridor Service Area	1990 Population	1995 Population Projection	2005 Population Projection
Fullerton	111,700	128,801	148,744
Corona	76,095	97,443	125,223
Norco	23,302	25,489	28,746
Riverside	226,505	266,170	330,554
Moreno Valley	118,779	197,014	244,670
Loma Linda	13,950	15,783	17,871
Beaumont	9,685	10,144	11,128
Banning	20,570	25,843	32,569
Palm Springs	40,181	45,284	53,126
Desert Hot Spring	11,668	15,926	20,527
Cathedral City	30,085	45,342	60,054
Rancho Mirage	9,778	12,725	15,757
Palm Desert	23,252	31,708	39,147
Indian Wells	2,647	3,299	3,828
La Quinta	11,215	15,627	19,598
Indio	36,793	49,868	61,327
Coachella	16,896	25,417	33,632
Subtotal	783,101	1,011,882	1,246,500
Calipatria	2,690	2,826	3,118
Westmorland	1,380	1,524	1,741
Brawley	18,923	22,001	26,924
Holtville	4,820	5,480	6,505
Imperial	4,113	4,812	5,941
El Centro	31,384	36,400	44,415
Calexico	18,633	21,938	27,298
Subtotal	81,943	94,982	115,945
TOTAL	865,044	1,106,864	1,362,445

Source: 1990 U.S. Census Data.

Based on trips per capita and 1995 population estimates, the number of daily trips would be 2,430 for the Los Angeles to Coachella Valley scenario and 2,660 for the Los Angeles to Imperial Valley scenario.

As can be seen in Table 12, the 1995 patronage estimates for the Coachella Valley service are lower than the amounts determined above. This is reasonable since the approximate trip generation amount of 0.0024 per capita was derived from existing services which have been in operation for several years and have developed higher ridership from their potential for patronage than can be expected from a new service. The Coachella Valley estimates do yield performance characteristics that fall within the range of the actual performance of other intercity rail services, however.

Following are some general characteristics of the proposed intercity rail service:

1. The average trip length will be relatively long;
2. About 50 percent of all passengers will have LAUPT as an origin or destination;
3. Most riders will live within five miles of a station, and about two-thirds of them will access the service by drive-alone automobile (and require parking space); an additional 10-15 percent will come by car to be dropped off;
4. Only about 15-20 percent of total ridership will be involved in a full-length trip between the line termini; and
5. About 65-75 percent of the train capacity will occur at the maximum load point, which is just east of Fullerton.

Tables 12 and 13 summarize patronage estimates for the proposed three round trips per day service plan. Table 12 shows station to station boardings and alightings for the first scenario which has all three round trips from Los Angeles to the Coachella Valley.

TABLE 12

STATION BY STATION BOARDINGS AND ALIGHTINGS
Los Angeles - Coachella Valley
 (DAILY)

Station	YEAR 1995				YEAR 2005			
	Eastbound Direction		Westbound Direction		Eastbound Direction		Westbound Direction	
	On	Off	On	Off	On	Off	On	Off
East Coachella	0	119	134	0	0	184	206	0
Central Coachella	1	105	118	1	2	161	181	2
West Coachella	6	92	103	7	9	141	159	10
Beaumont	15	66	73	17	22	102	114	26
Loma Linda	28	70	79	32	43	108	121	48
Riverside	95	106	119	107	147	163	183	165
Corona	49	57	64	54	74	87	98	83
Fullerton	113	33	37	127	175	50	56	196
LAUPT	341	0	0	382	524	0	0	588
Total (Upper Limit)	648		727		996		1118	
Daily Total (Range)	1169 - 1375				1798 - 2114			
Farebox Recovery	0.58				0.90			

Source: Wilbur Smith Associates

TABLE 13

STATION BY STATION BOARDINGS AND ALIGHTINGS

Los Angeles - Imperial Valley

(DAILY)

Station	YEAR 1995				YEAR 2005			
	Eastbound Direction		Westbound Direction		Eastbound Direction		Westbound Direction	
	On	Off	On	Off	On	Off	On	Off
Calexico	0	48	54	0	0	75	83	0
El Centro	0	43	47	0	0	65	73	0
Brawley	1	31	35	1	1	48	53	1
East Coachella	19	100	111	21	29	154	171	32
Central Coachella	4	83	93	5	8	128	143	7
West Coachella	9	74	82	10	13	113	126	15
Beaumont	20	60	67	23	31	93	103	35
Loma Linda	30	64	71	33	46	98	109	52
Riverside	92	92	102	102	142	142	157	157
Corona	50	53	59	55	76	81	90	85
Fullerton	106	23	25	118	163	35	38	181
LAUPT	340	0	0	378	523	0	0	581
Total (Upper Limit)	671		746		1032		1146	
Daily Total (Range)	1205 - 1417		1852 - 2178					
Farebox Recovery	0.59		0.91					

Source: Wilbur Smith Associates

Table 13 shows similar information, but for the second scenario which has three round trips from Los Angeles to the Coachella Valley with one round trip extending to Calexico. Table 12 shows a first-year (1995) patronage of about 1,375 passengers per day increasing to 2,114 passenger per day in the year 2005. These numbers are daily averages and may be higher on weekends and lower on some weekdays. For the second scenario analyzed, Table 13 shows a first-year (1995) patronage of about 1,417 passenger per day increasing to 2,178 passengers per day for the year 2005.

In both scenarios, a range of values is shown to reflect the speculative nature of the patronage estimation. The low estimate reflects extreme conservatism in all phases of the analysis; the prospects are good that this conservative level of patronage would be exceeded if the rail service is implemented as described.

Annual Fare Revenues

Estimates of annual operating revenues are based on the patronage projections and the related fare levels described in Chapter III. Estimates of operating costs are given in Chapter IV. For the first operating scenario, LA - Coachella Valley, first-year (1995) revenues are projected to be \$5.96 million giving a farebox recovery ratio of approximately 0.58. Year 2005 revenues are projected to be \$9.17 million giving a farebox recovery ratio of approximately 0.90.

For the second scenario, LA - Imperial County, 1995 and 2005 revenues are projected to be \$7.41 and \$11.40 million, respectively, giving farebox recovery ratios of approximately 0.59 and 0.91, respectively. All amounts are expressed in 1991 dollars.

CHAPTER VI

INSTITUTIONAL AND FINANCIAL ISSUES

CHAPTER VI

INSTITUTIONAL AND FINANCIAL ISSUES

INSTITUTIONAL ISSUES

Establishing a new intercity rail route presents several challenges. In addition to establishing the basic technical and financial feasibility of a new route, cooperation from a number of interested parties is absolutely essential.

In California, all State-financed intercity rail service is currently operated by Amtrak through Section 403(b) of the Federal Rail Passenger Service Act of 1970, more commonly referred to as the Amtrak Act. It is assumed that this service would also be operated under contract to Amtrak.

In addition to developing an acceptable funding agreement with Amtrak, there are at least two additional institutional issues which must be resolved prior to proceeding with this service:

- . Railroad operating agreements;
- . Eligibility for State funding.

Railroad Operating Agreements

As proposed, this service will operate over trackage of both the Southern Pacific Transportation Company and the Atchison, Topeka & Santa Fe Railway Company. In addition, arrangements with the Union Pacific Railroad Company will be necessary to provide for relocation of some of their trackage at Colton Crossing. The State of California and Amtrak must get each railroad company's approval to operate trains on that railroad's trackage.

If the railroad company is unwilling to provide these operating rights, it is possible that Amtrak might be able to gain such rights through arbitration. However, there are two reasons why this would be an unlikely option. First, the Amtrak Act has a 25-year span expiring in 1996. The closer we approach this date, the less likely Amtrak will be inclined to take disputes to the railroads as they will be anticipating totally new legislation for the provision of passenger service.

Secondly, Proposition 116, approved by California voters in June 1990, gives railroads the authority to approve or disapprove projects funded by that proposition, and appears to establish a broader state policy which may be applied to rail services other than just commuter rail. Specifically, Section 99681 of Proposition 116 reads:

Funds shall not be allocated for a project requiring service over the right-of-way of a railroad corporation unless a course of improvements and operations is agreed to by the railroad corporation or unless the right-of-way, or all or part of use of the right-of-way, is acquired by eminent domain or purchase. New or increased passenger service over the right-of-way of a railroad corporation shall be implemented in a manner which ensures the adequacy and efficiency of existing freight service.

This language gives the railroads the right of approval over all expenditures affecting them under Proposition 116 and may set up a "de facto" precedent for the spending of all state funds on rail projects. Therefore, acceptance by the railroads is critical to implementation of the service.

Thirdly, both the AT&SF and SP railroads have expressed reservations regarding the proposed service and existing track capacity. The SP trackage between Colton and Niland is a portion of their transcontinental southern corridor. Existing freight traffic forecasts indicate that all present line capacity will be required for freight service, leaving little or no room for passenger traffic. Santa Fe also indicated that their San Bernardino subdivision, the portion of track between Los Angeles and Colton, experiences heavy freight traffic and would most likely be unable to accommodate increased intercity passenger service.

While these conditions are valid concerns which will need further analysis, it should be pointed out that these same concerns arose with the proposed development of commuter rail in Riverside County. However, after further study was conducted by the railroads and the Riverside County Transportation Commission, it was determined that increased passenger service could be implemented. Therefore, this report recommends that as efforts proceed to implement the service, that a similar analysis be conducted to analyze rail line capacity

with the railroads.

Eligibility for State Funding

Since the beginning of State financial involvement in intercity rail service in 1974, there has been an evolving code of state laws pertaining to all aspects of such service, including minimum farebox requirements.

Prior to the passage of Proposition 108 in 1990, most funding for the state rail program (both capital and operating) was provided by legislative appropriation from the Transportation, Planning, and Development (TP&D) Account. This account is still the source of funds to support rail operations. And, while rail capital expenditures are also still funded, in part, by funds from the TP&D account, the passage of Proposition 108 has created a much larger and more significant source of intercity rail capital funds than the TP&D Account.

Notwithstanding the great increase in capital funding under Proposition 108, the legislation which placed that measure on the 1990 ballot also established new procedures for funding intercity improvements. All intercity projects must now be programmed through the State Transportation Improvement Program and, more significantly, only those rail corridors specified in Streets and Highways Code sections 2701.07 and 2703.07 are eligible for such state funding.

The proposed Coachella Valley Intercity rail service is not yet a designated intercity rail corridor. If local agencies agree to support this service, legislation should be sought to include this corridor.

Railroad Electrification

Public agencies are currently conducting a study to examine the possibility of electrifying specific railroads in the Southern California region. If such a system were implemented, electric locomotives would be required, as well as a variety of operational improvements. These improvements include such things as changes to the railroad signals; reconstruction of overhead bridges to new clearance requirements; construction of substations, overhead catenary wire, and electric locomotive storage facilities.

The estimated cost of converting conventional rail to electrification range from \$4 million to \$6 million per mile. Based on the distance of 141 miles from Los Angeles to the Coachella Valley, this totals \$564 to \$846 million. The additional 98 miles from the eastern Coachella Valley terminus to Calexico

would cost \$392 - \$588 million. These numbers illustrate the high costs associated with electrification, and demonstrate that such an expenditure is far too costly for further consideration as part of this report.

California Department of Corrections

In addition, under California state law, Caltrans and the State Department of Corrections must coordinate an evaluation of any new rail routes or stops which improve transportation access for visitors to prisons. Section 14035.9 of the Department of Transportation statutes is cited as follows:

The department shall in conjunction with the Department of Corrections evaluate the addition of stations or stops on existing bus or rail routes, or the addition of new services, which improve transportation access for visitors to prisons. The department shall give reasonable priority to stations, stops, and routes which serve visitors to prisons, particularly when alternative public transportation is minimal or nonexistent.

Whenever possible, the department and the Department of Corrections shall seek to implement these services in conjunction with the opening of new prison facilities. The Department of Corrections shall publicize the availability of services provided by the department under this section.

A maximum security facility is currently scheduled to be opened in January 1992 approximately 12 miles northeast of Brawley, near Calipatria, in Imperial County. Currently, there is no public transit system linking Imperial County to the surrounding counties, and only marginal service between Calipatria and Calexico. The proposed intercity rail service could fulfill this statute mandated by California legislation.

FINANCIAL ISSUES

OPERATING COSTS

The State of California currently provides operating support to two intercity routes in the state. The third route is scheduled to begin operation in December 1991. The service proposed in this report would represent the fourth state-subsidized intercity route in California. As previously discussed, monies for these intercity operations traditionally come from the TP&D Account of the Transit Capital Improvement Program.

Of the existing routes, two are located in Northern California and one in Southern California. The proposed service would represent a second route for Southern California.

The San Diego - Los Angeles - Santa Barbara corridor (known as the "San Diegans") currently has eight daily roundtrips between San Diego and Los Angeles, with two of these roundtrips continuing to Santa Barbara. In 1989-90, this route achieved a farebox return ratio of 103%, thus exceeding operating costs by three percent.

The Oakland - Bakersfield corridor (called the "San Joaquins") currently has three daily roundtrips. Originally, this route had only one roundtrip. However, the State quickly realized that to improve overall financial performance more trips had to be added; in 1989-90 the route had a 78% farebox recovery rate.

The third route being developed is in the San Jose - Oakland - Sacramento corridor and will be known as the "Capitols." The 1991 edition of the State's Rail Passenger Development Plan initially proposes three daily round trips, with a phased goal of ten daily round trips on this corridor. It is scheduled to begin service in December 1991.

If the proposed Coachella Valley service is approved by Caltrans, start-up operating costs would be paid entirely by the State based on funding availability. Beginning in the third year of operation, however, State law requires intercity services to recover at least 55% of their operating costs through fares in order to continue receiving state support.

CAPITAL COSTS

In considering the possible funding options for the proposed Coachella service, it is necessary to evaluate potential sources at both the state and local level. As indicated in Table 10, the capital costs of implementing service include improvements to tracks and grade crossings, rolling stock acquisition, and station construction. The total capital costs for the minimum upgrade scenario from Los Angeles to Imperial Valley are estimated at \$61.4 million.

While state funding can be sought for much of this expense, local governments are traditionally responsible for a portion of station development costs. With the exception of the combined intercity/commuter rail stations in Corona and Riverside, which will not require any additional local funding, this report assumes local funding participation for station development. The following sections of this report describe each of the potential funding sources at both the state and local levels.

POTENTIAL STATE FUNDING SOURCES

Transit Capital Improvement (TCI) Program

The State of California has a program which funds projects principally related to rail transit. Known as the Transit Capital Improvement (TCI) Program, this program funds such projects as acquisition of abandoned railroad right-of-way, bus rehabilitation, exclusive public mass transit guideways, rolling stock, grade separations, and intermodal transportation centers.

Monies for this program originate from two funding sources - the Transportation, Planning, and Development (TP&D) Account and the State Highway Account, through Article XIX. Together, both of these sources comprise the available funding for eligible TCI projects. Therefore, when an agency applies for funding assistance through the TCI program, the agency applies for TCI funds, not TP&D or Article XIX funds. A brief explanation of the function of these funding accounts is described below.

Transportation, Planning, and Development (TP&D) Account

The Transportation, Planning, and Development (TP&D) Account is the primary source of State funds for financing intercity rail services

operations. It is based on a portion of the sales tax collected on gasoline and diesel fuel statewide.

Historically, TP&D funds have been appropriated by the legislature for both operating and capital rail projects. For example, this account currently funds the administration of Caltrans' transit programs (including Amtrak contracts) and the San Jose-San Francisco Peninsula Commuter Service. This account has also funded a variety of capital projects included in the TCI program, such as the construction of new train stations in many areas of California.

Article XIX Guideway Funds (State Highway Account)

As a method of increasing a county's likelihood of acquiring TCI funding, many counties have passed Article XIX measures. This measure originated through the passage of "Proposition 5" on the June 1974 ballot which enacted Article XIX of the State Constitution, permitting gasoline-tax revenue from the State Highway Account to be expended for rail transportation purposes in counties which obtain a simple majority vote approving the use of such funds for rail construction.

This is a continuous funding source which guarantees a minimum allocation of funds on an annual basis to eligible counties. And, although additional bond monies are now available for rail transportation which were not available in 1974, Senate Bill 791, recently approved by the Governor in October 1991, indicates that, "It is the intent of the Legislature that the commission continue to allocate funds pursuant to Sections 199 and 199.1 notwithstanding the current availability of rail bond funds, consistent both with voter approval of Proposition 5 at the June 4, 1974, direct primary election.... This action is necessary because the bond funds are of a one-time, temporary nature, while guideway funds are available on an ongoing basis, as are the needs of that program (page 7). "

In this corridor, Los Angeles, Orange, Riverside, and San Bernardino Counties have approved Article XIX measures. To date Riverside and San Bernardino Counties have committed their "county minimums" to capital improvements for commuter rail.

If Imperial County, the only county in this corridor which has not submitted an Article XIX measure to its voters, chooses to move ahead with passenger rail service, their chances for acquiring funds for rail passenger improvements through the TCI program would be greatly increased.

Federal Rail-Highway Crossing Program

Grade crossing safety improvements can be funded under the Federal Rail-Highway Crossing Program (23 U.S.C. Section 130). Caltrans administers this program through its Highway/Railroad Grade Crossing Safety Committee.

Under this program, Section 130 provides nearly \$10 million per year to pay 90% of the cost of grade crossing safety facilities. Local governments are responsible for the remaining 10%. The balance available in the Section 130 fund, as of January 31, 1991, was \$9,648,302.

Proposition 116

Proposition 116, enacted by California voters in June 1990, allocates \$73 million to 28 of the state's less populous counties in proportion to the population of each for rail or transit-related expenditures. Imperial County is included in this group of 28 counties. These funds do not require a local match, and are to be used for railroad grade-crossing improvements, acquisition of railroad rights-of-way for rail transportation purposes, rail passenger or other rail stations, railroad soundwalls, other local rail improvements for safety, purchase of paratransit vehicles, and other capital facilities for public transportation.

Proposition 116 also includes a bicycle element which allocates funds on an annual basis for capital outlay for bicycle improvement projects which improve safety and convenience for bicycle commuters. Examples of such facilities include bicycle racks, lockers, and shower facilities.

Based upon preliminary 1990 census figures, with a population of 107,615, Imperial County is entitled to nearly \$5.1 million. If Caltrans approves passenger service to the Imperial Valley, it is likely it will expect the County to invest its share of Proposition 116 money in improvements beneficial to this project.

It should be noted, however, that this fund has a "use it or lose it" clause requiring the transportation planning agency of each eligible county to submit an application by December 31, 1992. If an eligible county does not submit an application, the California Transportation Commission may reallocate the remainder of the fund to eligible counties based on a competitive grants program.

Proposition 116 also allocates \$100 million to Caltrans for purchase of rolling stock for California rail services. While no final allocation for purchase of cars from this funding source has

been made, at this time no rolling stock has been requested on behalf of this service since it is not listed as one of the State's eligible corridors.

The Proposition 116 grants to both San Bernardino and Riverside counties are allocated to specific commuter rail corridors and are unavailable for this project.

Proposition 108

In 1989, the California State Legislature approved Assembly Bill 973 authorizing three rail bond initiatives. The first of these initiatives became known as Proposition 108, "The Passenger Rail and Clean Air Bond Act of 1990." The remaining two bond measures are scheduled to be taken to the voters in 1992 and 1994.

Under each of these bond measures, \$150 million is set aside for intercity rail, with the balance of the \$850 million dedicated to commuter rail and other rail programs. All Proposition 108 intercity rail money is to be dedicated to capital improvements, such as stations, track, signals, and rolling stock.

At this time, however, all of the Proposition 108 funds have been programmed to existing routes, including the bond measures of 1992 and 1994. Therefore, it appears that this source of funding is not a viable option for the capital costs associated with this project. Furthermore, this corridor is not yet listed in State law as an eligible recipient for these funds.

POTENTIAL LOCAL FUNDING SOURCES

In the development of intercity rail services, local governments have historically been responsible for constructing and maintaining passenger stations. At this time, it appears that state TCI funds might be a reasonable source of funds to finance a portion of the development of station sites. The remaining amount will be provided through local funding sources, which include local sales tax measures dedicated to transportation and Transportation Development Act (TDA) funds.

Local Transportation Sales Tax

Imperial, Riverside, and San Bernardino Counties each have a sales tax for transportation. These sales taxes were approved by the voters with specific commitments as to how the revenue would be expended. However, because this service was not anticipated at the time these ballot measures were prepared, funding for this service

was not included.

Local jurisdictions may wish to evaluate the feasibility of using this fund source for local match requirements.

Transportation Development Act

Transportation Development Act (TDA) funds are generated by 1/4 of one percent sales tax collected in each county in California. This local transportation fund is the principal source of funding for mass transportation programs in California. Recent changes in law, however, have clarified that these monies can also be used for intercity rail operations and capital improvements under certain conditions.

FINANCING OPTIONS

Based on existing state policy, this financial analysis assumes that Caltrans will provide 100% of the funding required to operate this service.

Therefore, this section focuses specifically on developing a plan to finance the capital expenses. As described above, there are a variety of funding sources for the capital costs associated with this project. The capital costs presented in this report represent the best available estimates.

Table 14 summarizes these expenses and proposes a plan for financing the costs associated with the "minimum upgrade" scenario of service. The cost figures shown for track and grade crossing improvements in Table 11 include the contingency and engineering factors itemized separately in Table 10.

Since this plan depicts only one possible financing approach, it is provided solely as a point of reference for initiating further discussions with the relevant local, county, and state agencies. Therefore, several assumptions have been made relative to stations, track improvements, grade crossings, and rolling stock as indicated below.

TABLE 14

CAPITAL COSTS AND POTENTIAL FUNDING SOURCES FOR

LOS ANGELES - RIVERSIDE - COACHELLA VALLEY - IMPERIAL VALLEY RAIL PASSENGER SERVICE

(\$ Millions)

CAPITAL COSTS:	-----POTENTIAL FUNDING SOURCES-----					
	LOMA RIVERSIDE		-IMPERIAL COUNTY-			
"MINIMUM UPGRADE" SCENARIO	STATE FUNDS	LINDA LOCAL	COUNTY LOCAL	PROP. 116	OTHER LOCAL	
Stations	12.7	5.9	0.6	4.3	1.1	0.8
Track Improvements	6.7	2.7	-0-	-0-	4.0	-0-
Grade Crossing Improvements	2.9	2.6	N/A	N/A	-0-	0.3
FIXED FACILITIES SUBTOTAL	22.3	11.2	0.6	4.3	5.1	1.1
Rolling Stock	39.1	39.1	-0-	-0-	-0-	-0-
GRAND TOTAL	61.4	50.3	0.6	4.3	5.1	1.1

Stations

In this funding scenario, State TCI monies would fund at least 50% of the cost of station improvements. The remaining 50% would be produced by local governments through local funds or donation of land/property from either the public or private sectors.

Although the existing TCI application process does not require a local match for intercity rail development, this report has conservatively programmed a local match of 50% for the associated costs of station development as depicted on Table 8.

It should be acknowledged, however, that Caltrans could elect to waive any local financial participation, based on specific considerations unique to each station site.

In addition, a total of \$1.1 million was allocated from Proposition 116 for station development in Imperial County.

Track Improvements

All of the required \$4 million for track improvements in Imperial County would be funded through Proposition 116. The balance of the potential \$5.1 million Proposition 116 funds was allocated to station improvements as described above.

The \$2.7 million provided through State funds are related to improvements described for Colton Crossing and the required layover tracks at the East Coachella Valley station site.

Grade Crossing Safety Improvements

To the maximum extent possible, this plan assumes the use of state crossing funds in Imperial County. The \$300,000 shown under Imperial County represents the required 10% match for participation in the Section 130 Federal-Highway Crossing Program.

Rolling Stock

The \$39.1 million reflected shows the capital costs for acquiring four sets of equipment (including locomotives and passenger cars) dedicated to this service. If it would be possible to pool these equipment needs with other services, it might be possible to reduce these costs. As discussed in Chapter IV, terminating service in the Coachella Valley would reduce the cost of rolling stock by \$10.7 million.

At this time, limited funding is available through traditional State accounts. In fact, it appears that the only possible source of funding for rolling stock is through the TCI program and its associated TP&D account. Unfortunately, this source is also severely constrained. Therefore, in order to make this service a reality, additional funds will need to be identified and set aside.

APPENDIX 1

COACHELLA VALLEY POPULATION CHANGE

COACHELLA VALLEY DESERT CITIES

Population Change*

	<u>1980</u>	<u>1990</u>	<u>% Change</u>
Cathedral City	11,096	30,085	171.1
La Quinta	4,728	11,215	137.2
Palm Desert	11,801	23,252	97.0
Desert Hot Springs	5,941	11,668	96.4
Indian Wells	1,394	2,647	89.9
Coachella	9,129	16,896	85.1
Indio	22,612	36,793	62.7
Rancho Mirage	6,345	9,778	54.1
Palm Springs	32,342	40,181	24.2
	<hr/>	<hr/>	<hr/>
	105,388	182,515	73.1

* Based on 1990 Census Tract Data

APPENDIX 2

INVENTORY OF STATION SITES

INVENTORY OF STATION SITES

LOMA LINDA - CABAZON

LOMA LINDA

Waterman Ave (in San Bernardino City Limits)

Anderson St - University Parking Lot "U"
- Park on north side

Campus St

Van Leuven St/Orangethorpe St

Benton St

Mountain View Ave

Barton Rd

Mayberry St/Main St (Bryn Mawr)

Whittier Ave/1st St (Bryn Mawr)

BEAUMONT

California Ave/5th Place

Beaumont Ave

Pennsylvania Ave

BANNING

Highland Springs Ave

Lincoln St/Eighth St

San Geronimo Ave

CABAZON

Broadway

COACHELLA VALLEY

Indian Ave/Garnet Station Rd

Gene Autry/Palm Dr

Date Palm Dr/Vista Chino

Bob Hope Dr/Ramon Rd

Washington St

Jefferson St

Monroe St

Jackson St

Dillon Rd

Ave 50

5th/6th Sts

Ave 52

Ave 54

Airport Blvd

IMPERIAL VALLEY

BRAWLEY

Main St. (historic SP station site)

EL CENTRO

Main St. (historic SP station site)

CALEXICO

2nd St. (historic SP station site)

5th St./East Railroad Blvd.

McKinley St./West Railroad Blvd.

APPENDIX 3

AGENCIES/PERSONS CONTACTED

AGENCIES CONTACTED

RIVERSIDE COUNTY

City of Beaumont
Community Development Dept
550 E. Sixth St
Beaumont 92223

Steve Koules,
Director
(714) 845-1171

City of Banning
Community Development Dept
1434 W. Ramsey St
Banning 92220

Roger Derda,
Director
(714) 922-1224

City of Palm Springs
Community Development Dept
3200 E. Tahquitz Canyon Way
Palm Springs 92262

Richard E. Patenaude,
Planner III
(619) 323-8245

City of Rancho Mirage
Community Development Dept
69825 Highway #111
Rancho Mirage 92270

Randy Bynder,
Associate Planner
(619) 328-2266

City of Indio
Planning Dept
100 Civic Center Mall
Indio 92201

Dan Udall,
Assistant Planner
(619) 342-6500

City of Cathedral City
Community Development Dept
68-625 Perez Road
Cathedral City 92235-5001

Pat Russell,
Senior Planner
(619) 770-0344

City of Desert Hot Springs
65950 Pierson Blvd
Desert Hot Springs 92240

Glen Crowson,
City Manager
(619) 329-6411

City of Coachella
Community Development Dept
1515 Sixth St
Coachella 92236

John Croswhite,
Director
(619) 398-3202

City of Palm Desert
Community Development Dept
73-510 Fred Waring Dr
Palm Desert 92260

Phillip Drell,
Senior Planner
(619) 346-0611

City of Riverside
Planning Department
3900 Main St.
Riverside 92522

J. Craig Aaron,
Principal Planner
(714) 782-5375

County of Riverside
Planning Dept
79733 Country Club Dr., Ste E
Bermuda Dunes 92201

Francisco Urbina,
Planner
(619) 342-8277

County of Riverside
Transportation Planning Dept
4080 Lemon St., 8th Floor
Riverside 92501

Ed Studor,
Manager
(714) 275-6767

County of Riverside
Planning Department
4080 Lemon St., 9th Floor
Riverside 92501

Jerry Jolliffe,
Chief Deputy Director
(714) 782-4618

County of Riverside
Economic Development Agency
46209 Oasis St., Room 308
Indio, CA 92201

Lori Moss,
Desert Liaison
(619) 342-8331

County of Riverside
Administrative Offices
46209 Oasis St., Rm 308
Indio, CA 92201

Brad Hudson,
Managing Administrator
(619) 342-8340

Coachella Valley Assn. of Govnmts
73-710 Fred Waring Drive
Palm Desert, CA 92260

Lloyd Nickerson,
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(619) 346-1127

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32505 Harry Oliver Trail
Thousand Palms, CA 92276

Debra Astin,
Senior Planner
(619) 343-3451

Riverside Transit Agency
1825 3rd Street
Riverside 92570

Barbara Bray,
Senior Planner
(714) 682-1234

SAN BERNARDINO COUNTY

San Bernardino Assn. Governments
472 N. Arrowhead Ave., Ste 101
San Bernardino 92401

Michael Bair,
Deputy Executive Director
(714) 884-8276

City of Loma Linda
Community Development Dept
25541 Barton Rd
Loma Linda 92354

Marianne Cordova,
Senior Planner
(714) 799-2832

City of Loma Linda
Civic Center
25541 Barton Rd
Loma Linda 92354

Elmer J. Digneo,
Mayor pro tempore
(714) 799-2808

City of Loma Linda
Chamber of Commerce
25541 Barton Rd, Ste 4
Loma Linda 92354

Peg Karsick,
Executive Director
(714) 799-2828

Loma Linda University
Business Center, Room 205
Loma Linda 92350

Don Pursley,
VP for Financial Affairs
(714) 824-4543

County of San Bernardino
Land Management Dept
385 N. Arrowhead Ave
San Bernardino 92415

Barbetta Suttles,
Land Use Technician
(714) 387-8311

IMPERIAL COUNTY

County of Imperial
Public Works Department
155 S. 11th St.
El Centro 92243

S. Harry Orfanos,
Director;
Mary Ellen Rebik,
Deputy Director;
Kathi Williams
(619) 339-4462

City of Calexico
Planning Department
408 Heber Avenue
Calexico 92231

Ricardo Hinojosa,
Director
(619) 768-2100

City of Calexico
Public Works Department
408 Heber Avenue
Calexico 92231

Mariano Martinez,
Director
(619) 768-2100

City of Calexico
Engineering Department
408 Heber Avenue
Calexico 92231

John Wankum,
City Engineer
(619) 768-2100

City of Brawley
Community Development Dept
400 Main Street
Brawley 92227-2941

Patrick Mulready,
Planner
(619) 344-8622

City of El Centro
Planning Department
1275 Main Street
El Centro 92244-4450

Oliver Alvarado,
Director
(619) 337-4545

City of Imperial
Public Works
420 South Imperial Avenue
Imperial, CA 92251

Bay Mauricio
Director
(619) 355-1152

County of Imperial
First Supervisorial District
923 Heffernan
Calexico, CA 92231

Wayne Van de Graaff,
County Supervisor
(619) 357-3030

County of Imperial
Fourth Supervisorial District
P.O. Box 1385
Brawley 92227

Abe Seabolt,
County Supervisor
(619) 344-9873

CALIFORNIA DEPARTMENT OF TRANSPORTATION

Caltrans, District 8
3569 University Avenue
Riverside, CA 92501

Bill Rogers
(714) 787-7971

Caltrans, Division of Rail
1130 K S., Suite 101
Sacramento, CA 94274-0001

Steve Alston
(916) 327-9045

Caltrans, District 11
2829 Juan St (MS S-5)
P.O. Box 885406
San Diego, CA 92186-5406

Stan Hunter
(619) 688-3338

OTHER AGENCIES

Palm Springs Chamber of Commerce
190 W. Amado
Palm Springs, CA 92262

Rolfe Arnhyrn,
Executive Director
(619) 325-1577

Palm Springs Desert Resorts,
Convention, & Visitors Bureau
69-930 Highway 111, Suite 201
Rancho Mirage, CA 92270

Terri Woolston
(619) 770-9000

Southern California Association
of Governments
3600 Lime St., Suite 216
Riverside, CA 92501

City of Mexicali
P.O. Box 20176
Calexico, CA 92231 USA

Mike Ainsworth,
Senior Transportation
Planner
(714) 784-1513

Leonel Vizcarra Ojeda,
Civil Engineer

APPENDIX 4

CALTRANS STATION COST ESTIMATES

Station Cost Estimate

Attachment A

5000 ft sq		Facilities Needs -- Staffed Station				16-Jul-91
Peak Hour Passengers		189				
Station Requirements:						
Waiting Room		3969				
Seating Area		151				
Restrooms		284				
Baggage Claim		227				
Station Svcs		389				
Total Square footage		5020	Est Cost/ft sq	\$150	Est Cost	\$752,925
Platforms						
Number		1				
Length		800				
Width		15				
Height		2				
Total Cu Yds		889	Est Cost/Cu Yd	\$175	Est Cost	\$155,556
Total No Lights		20	Est Cost/light	\$9,000	Est Cost	\$180,000
Parking Lot						
Drop off		28				
Short term		38				
Long term		95				
Taxi stalls		3				
Number of Stalls		164	Est Cost/stall	\$1,400	Est cost	\$229,600
Parking lot lights		22	Est Cost/light	\$9,750	Est cost	\$214,500
Bus Pads		1	Est Cost/yd cu	\$175	Est cost	\$1,620
Resurface Lot						
Signage	lump sum					\$10,000
Curbs & Gutters	(lf)		Est Cost/lin ft	\$270	Est Cost	\$0
Ped Grade Xing	(lf)		Est Cost/lin ft	\$185	Est Cost	\$0
					SUB TOTAL	\$1,544,201
					Contingencies*	\$617,680
					Design & Project Mgmnt	\$324,282
					GRAND TOTAL	\$2,486,163
No right of way costs included.						
*Contingencies include permits, connections to sewers, storm drains, water, and power, extraordinary excavations, landscaping, covered outdoor waiting areas, etc.						

Attachment B

Contingencies include permits, connections to sewers, storm drains, water, and power, extraordinary excavations, landscaping, covered outdoor waiting areas, etc.

Attachment C

500 ft sq		Facilities Needs -- Unstaffed Stations				16-Jul-91
Peak Hour Passengers		24				
Station Requirements:	(Shelter similar to city transit shelters.)					
Waiting Room		504				
Total Square footage		504	Est Cost/ft sq	\$80	Est Cost	\$40,320
Platforms						
Number		1				
Length		800				
Width		15				
Height		2				
Total Cu Yds		889	Est Cost/Cu Yd	\$175	Est Cost	\$155,556
Total No Lights		20	Est Cost/light	\$9,000	Est Cost	\$180,000
Parking Lot						
Drop off		4				
Short term		5				
Long term		2				
Taxi stalls		1				
Number of Stalls		12	Est Cost/stall	\$1,400	Est cost	\$16,800
Parking lot lights		3	Est Cost/light	\$9,750	Est cost	\$29,250
Bus Pads		1	Est Cost/yd cu	\$175	Est cost	\$1,620
Resurface Lot						
Signage	lump sum					\$10,000
Curbs & Gutters	(lf)		Est Cost/lin ft	\$270	Est Cost	\$0
Ped Grade Xing	(lf)		Est Cost/lin ft	\$185	Est Cost	\$0
					SUB TOTAL	\$433,546
				Contingencies*		\$173,418
				Design & Project Mgmnt		\$91,045
				GRAND TOTAL		\$698,009
No right of way costs included.						
*Contingencies include permits, connections to sewers, storm drains, water, and power, extraordinary excavations, landscaping, covered outdoor waiting areas, etc.						

Standard Specifications for Unstaffed Amtrak Stations in California

Typical new, relocated, or upgraded unstaffed Amtrak stations in California will be constructed to the specifications noted below. *Staffed stations will include all the following*, plus other buildings to meet American Railway Engineering Association standards as modified to meet California needs.

1. Each station shall contain at least one **PLATFORM**, usually constructed of portland cement concrete, 12 feet wide and constructed eight inches above top of rail. The minimum standard length of platform shall be 800 feet. Longer or shorter platforms will be constructed on an exception basis. This platform shall meet all current handicapped accessibility laws and shall contain provisions for handicapped lift security. Platform shall be lighted during night, evening and inclement weather hours.
2. Each station shall have a **PARKING LOT**, capable of containing no fewer than twenty-five cars for the use of Amtrak passengers. Lots shall be expandable, and shall be larger than twenty-five cars if needed for peak hour, commuter or other public transit uses. Parking lot shall contain handicapped accessible parking as defined by law or local custom, whichever is greater. Parking lot will be lighted during night, evening and inclement weather hours. Stations shall contain bus stops whenever practical or needed for intermodal transfer.
3. Each station shall contain **SHELTER(S)** to protect passengers from sun, wind, and inclement weather. Shelter size shall be based on anticipated peak hour passenger usage. If the shelter is small, it shall be placed on the platform. Larger shelters may be placed near or adjacent to the platform. Seating areas outside of shelters may also be built if necessary.
4. Each stations shall contain an **OPERATING PUBLIC TELEPHONE** in a well lighted area. The telephone should not require coins for emergency use. The Amtrak information telephone number shall be posted with the telephone.

5. Each station will have **SIGNAGE** with the name "Amtrak" and the name of the station visible from the nearest street. Appropriate local authorities will post signage from major population and or business centers to the station. Caltrans will post larger signs on nearby Freeways and State Highways as is done with airports.

6. Each station will have **SCHEDULE INFORMATION** posted in a visible, well lighted place. Amtrak information will be updated as necessary by Caltrans personnel. If possible, the station's owner will make space available to local public transit operators for schedule information. Such information will be maintained in good condition and updated regularly as necessary by the transit operator.

7. Each station will be kept **CLEAN** and in good **REPAIR**. The appropriate local authority will be responsible for routine cleaning and maintenance. Major rehabilitation will remain the responsibilities of Amtrak and Caltrans.

Revised July 11, 1991

APPENDIX 5

LETTERS OF SUPPORT

CVAG

COACHELLA VALLEY ASSOCIATION of GOVERNMENTS

- County of Riverside & Cities of:
- Cathedral City • Coachella • Desert Hot Springs
- Indian Wells • Indio • La Quinta • Palm Desert
- Palm Springs • Rancho Mirage

November 26, 1991

Mr. Jack Reagan, Executive Director
Riverside County Transportation Commission
3560 University Avenue, Suite 100
Riverside, CA 92501


Dear Jack:

At its November 25, 1991 meeting, CVAG's Executive Committee approved the enclosed CVAG Resolution 90-013: A Resolution of the Coachella Valley Association of Governments Supporting, Under the California Department of Transportation, an Intercity Rail Service Program Between the Los Angeles Area and the Coachella Valley.

CVAG is interested in the intercity rail service program and looks forward to an active role in its successful development.

Sincerely,

COACHELLA VALLEY
ASSOCIATION OF GOVERNMENTS



LESTER D. CLEVELAND
EXECUTIVE DIRECTOR

COACHELLA VALLEY ASSOCIATION of GOVERNMENTS

RESOLUTION 90-013

A RESOLUTION OF THE COACHELLA VALLEY ASSOCIATION OF GOVERNMENTS SUPPORTING, UNDER THE CALIFORNIA DEPARTMENT OF TRANSPORTATION, AN INTERCITY RAIL SERVICE PROGRAM BETWEEN THE LOS ANGELES AREA AND THE COACHELLA VALLEY.

WHEREAS, the people of Southern California are critically concerned about the ever increasing problem of traffic congestion;

WHEREAS, the voters of California have approved ballot measures to provide funds for reducing traffic congestion through the use of rail systems;

WHEREAS, the Riverside County Transportation Commission has ordered the preparation of the Los Angeles, Coachella Valley, Imperial County Intercity Rail Feasibility Study;

WHEREAS, the findings of the "Los Angeles-Coachella Valley-Imperial County Intercity Rail Feasibility Study" indicates that the service is technically feasible and positive in terms of projected patronage from Coachella Valley;

WHEREAS, this commuter rail system will play an important role in the reduction of traffic congestion and health related air quality issues;

WHEREAS, the Coachella Valley will benefit from this rail system with three stops in the area--one in the Eastern, Central, and Western sections of the Coachella Valley; and

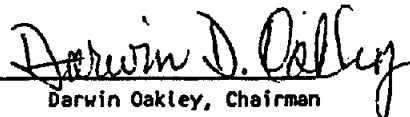
WHEREAS, this commuter rail system will provide a positive impact on bringing tourists/visitors to the Coachella Valley and provide an alternate form of transportation to the citizens of the Coachella Valley.

NOW THEREFORE, be it resolved that the Coachella Valley Association of Governments supports the development in concept of the intercity rail service program with at least three stops within the Coachella Valley (specific sites to be named at a later date).

APPROVED AND ADOPTED this 25 day of November, 1991.


COACHELLA VALLEY
ASSOCIATION OF GOVERNMENTS

BY:


Darwin Oakley, Chairman

ATTEST:

By:


Lester D. Cleveland
Executive Director

IMPERIAL VALLEY ASSOCIATION OF GOVERNMENTS

RICHARD H. INMAN, Sr.
REGIONAL COUNCIL COORDINATOR

COUNTY ADMINISTRATION CENTER
940 W. MAIN STREET
EL CENTRO, CA. 92243-2875
FAX: (619) 352-7876

July 31, 1991

Elaine Kuhnke, Associate Planner
Schiermeyer Consulting Services
17390 Brookhurst Street, Suite 100
Fountain Valley, CA 92708

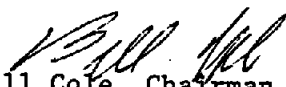
Dear Ms. Kuhnke:

We are in receipt of the preliminary draft of the "Los Angeles - Coachella Valley - Imperial County Intercity Rail Feasibility Study", less Section V Patronage and Revenue Assessments and Section VII Findings and Recommendations.

We are receptive to the proposed project and interested in the concept of an intercity passenger rail service between Imperial County and Los Angeles.

Should Caltrans and Riverside County Transportation Commission commit to this project, we would like to become a partner in the development of any further plans with respect to Imperial County.

Sincerely yours,


Bill Cole, Chairman
Imperial Valley Association
of Governments - Regional Council

msr

cc: Jack Regan, Executive Director
Riverside County Transportation Commission

CITIES OF: BRAWLEY, CALEXICO, CALIPATRIA, EL CENTRO, HOLTVILLE, IMPERIAL,
WESTMORLAND, COUNTY OF IMPERIAL



OFFICE OF: **Community Development Department - Planning Division**

(714) 736-2262

815 WEST SIXTH STREET (P.O. BOX 940), CORONA, CALIFORNIA 91718-0090

September 26, 1991

RECEIVED

SEP 30 1991

Mr. Jack Reagan
Executive Director
Riverside County Transportation Commission
3560 University Avenue, Ste. 100
Riverside, CA 92501

Transportation Commission

Dear Mr. Reagan,

Thank you for the opportunity to review the draft "Los Angeles - Coachella Valley - Imperial County Intercity Rail Feasibility Study". It appears to be a worthwhile project and we are pleased that Corona is one of the planned station locations on the route.

At present, the City's primary interest in rail transit is for the commuter rail network connecting Riverside County with Orange and Los Angeles Counties. Although the study assumes that the commuter rail service is on-line prior to this service, it is unclear how the two programs will interface. It is also not clearly stated as to whether local funding from the City of Corona is expected to implement the project or whether the City's contribution is met as part of the establishment of stations in connection with the Commuter Rail Program. We would appreciate clarification regarding these points in the final document or by separate correspondence, as appropriate.

As this project progresses, we recommend that an inventory and analysis be made of secondary transit modes that would need to be available at the various rail stations to transport passengers to their ultimate destinations, (i.e., hotels, offices, and recreational areas). The easier, faster and less costly these secondary transport options are will encourage the user to commit to rail transit when planning a trip. Therefore, we believe this secondary system is a vital ingredient to rail transit planning.

The City of Corona appreciates the efforts of you and the RCTC members to improve the transportation situation in Riverside County.

Please contact me at (714) 736-2267 if I can be of any further assistance.

Sincerely,

William Kettelman
Community Development Director

WK/mt
misc\reagan



CITY OF *Indio* CALIFORNIA

100 CIVIC CENTER MALL • P.O. DRAWER 1788 • INDIO, CALIFORNIA 92202

September 17, 1991

Jack Reagan, Executive Director
Riverside County Transportation Commission
3560 University Ave., Suite 100
Riverside, CA 92501

Re: Los Angeles-Coachella Valley-Imperial County
Intercity Rail Feasibility Study

SEP 20 1991

Riverside County
Transportation Commission

Dear Mr. Reagan:

On behalf of the City Council of the City of Indio, I wish to go on record as supporting the concept of intercity rail service between the Los Angeles region and the Coachella Valley. Based on our analysis of the feasibility study, we strongly support establishing a stop at Jackson Street in Indio as one of the through Coachella Valley stations. If this site were selected the City would work with the transportation company to make the station accessible and attractive.

Sincerely,

James H. FitzHenry
James H. FitzHenry
Mayor

JHF:WMN:dt

x/c: City Council
City Manager
Asst. City Manager



50th YEAR

Palm Springs Chamber of Commerce

190 WEST AMADO ROAD □ PALM SPRINGS, CALIFORNIA 92262 □ AREA CODE 619 • 325-1577
FAX: 619 • 325-8549



September 12, 1991

Mr. Jack Reagan
Executive Director
Riverside County Transportation Commission
3560 University Avenue, Suite 100
Riverside, CA 92501

RECEIVED

SEP 16 1991

Riverside County
Transportation Commission

Dear Jack:

Thank you for the opportunity to review the draft of the "Los Angeles-Coachella Valley-Imperial County Intercity Rail Feasibility Study." It is an excellent piece of work and long overdue step toward making greater and full utilization of rail. It has been clear to all of us that transportation is the most critical agenda item of the 90's and we therefore heartily endorse the Study.

Enclosed, please find a copy of a recommendation to our Board of Directors along with a letter that we will be forwarding to you in the next few days regarding this most important effort. We fully recognize and acknowledge the importance of moving ahead with this effort and certainly agree that it is imperative that the Coachella Valley Intercity Corridor be listed in the California Streets and Highway Code as an eligible route to receive State funding.

By way of comment, it would be my suggestion that information be included in this report regarding the California/Nevada Super Speed Train Project. I believe the most important part of that project is the fact that a concept has been prepared for the Pacific Southwest that links the Inland Empire with Phoenix with an intermediate stop in the Coachella Valley. This I believe serves to underscore the importance of a multi-modal transportation facility. By separate correspondence I will ask that additional information be forwarded to you as quickly as possible so that you can evaluate its potential for incorporation in your study efforts.

While I will be forwarding a statement of support to you from the Palm Springs Chamber of Commerce be assured in the interim that I congratulate you on this fine effort.

Cordially,

Rolfe G. Arnheim
Executive Vice President

Enclosure (Board Action)



50th YEAR

Palm Springs Chamber of Commerce

190 WEST AMADO ROAD □ PALM SPRINGS, CALIFORNIA 92262 □ AREA CODE 619 • 325-1577
FAX: 619 • 325-8549



RECOMMENDATION TO THE BOARD OF DIRECTORS
PALM SPRINGS CHAMBER OF COMMERCE
DATE: SEPTEMBER 11, 1991

GROUP: ADMINISTRATION

SUBJECT: INTERCITY RAIL FEASIBILITY STUDY

BACKGROUND/DISCUSSION: The Riverside County Transportation Commission has recently completed a "draft" study, subject as above. They have found that implementing service between Los Angeles and the Coachella Valley is not only technically feasible, but extremely positive in terms of projected patronage and revenue. Chamber staff contributed to this study effort. Three candidate RR stations have been identified in the Coachella Valley. One of those is at Gene Autry/Palm Drive (this coincides with our current efforts). Three daily round trips from Union Station to the Coachella Valley are envisaged with an option to Calexico. Assumed first year of operation is 1995. Each train has a capacity of 420 passengers. All Coachella Valley Stations would be unstaffed except for one site which would serve AMTRAK, have offices and baggage storage. This one station is expected to be a major multi-modal facility with possible private and public transit operators/operations.

STATUS: 1. Comments on the draft are due by 9/17/91. Resolutions of support are requested by 10/11/91.

2. Coachella Valley service is not currently listed in the California Streets and Highway Code as an eligible route to receive funding (requires legislative action.)

RECOMMENDATION: 1. That the Board of Directors endorse subject study.

2. That the Board of Directors urge City Council to:

- * Endorse Subject Study
- * Take immediate action to seek legislation (in concert w/CVAG) to include the Coachella Valley corridor in the California Streets and Highway Code.
- * Take steps to position the Palm Springs RR Station as a multi-modal facility and the staffed station in the Coachella Valley.

IMPLEMENTATION: Letters (see other side) to be signed by the Chamber President and dispatched to Riverside County Transportation Commission and the Mayor & City Council.

COST: Staff Time - TBD



Palm Springs Chamber of Commerce

190 WEST AMADO ROAD □ PALM SPRINGS, CALIFORNIA 92262 □ AREA CODE 619 • 325-1577
FAX: 619 • 325-8549



50th YEAR

September 24, 1991

Mayor Sonny Bono & City Council
City of Palm Springs
P.O. Box 2743
Palm Springs, CA 92263

SEP 24 1991

Mayor Sonny Bono & City Council:

Transportation

The Palm Springs Chamber of Commerce has reviewed the "Los Angeles - Coachella Valley Intercity Feasibility Study." It is our view that this study presents a program which is critical to the growing transportation needs of Palm Springs and the Coachella Valley. We are therefore very pleased that the City Council has taken action to endorse the Intercity Rail Feasibility Study with a Resolution of Support.

At the same time, Amtrak service is long overdue in order to enhance tourism. We believe that it is imperative that Palm Springs take the lead in maximizing the opportunities inherent in the expanded use of rail.

In order to move this effort forward, there are several steps that must be taken:

- o Take immediate action to seek legislation to include the Coachella Valley corridor in the California Streets and Highway code.
- o Take immediate action to pin-point a specific location for a Palm Springs RR Station. (Vic. Gene Autry/Palm Drive).
- o Follow up on Annexations 24 & 25 to ensure approval.
- o Take steps to position the Palm Springs RR Station as a multi-modal facility and the "staffed" station in the Coachella Valley.

We look forward to working with you and City Staff on this most vital and important undertaking.

Cordially,

Kay Hazen
President

CC: Riverside County
Transportation Commission



50th YEAR

Palm Springs Chamber of Commerce

190 WEST AMADO ROAD □ PALM SPRINGS, CALIFORNIA 92262 □ AREA CODE 619 • 325-1577
FAX: 619 • 325-8549



October 9, 1991

Jack Reagan
Executive Director
Riverside County Transportation Commission
3560 University Ave., Ste. 100
Riverside, CA 92501

RECEIVED

OCT 11 1991

Dear Jack,

From: [illegible]
Transportation [illegible]

In previous correspondence to you we advised you that the Palm Springs Chamber of Commerce supports the Coachella Valley Intercity Rail Feasibility Study. It was our view that this study represents a program which is critical to the growing transportation needs of Palm Springs and the Coachella Valley as a whole.

This correspondence will forward a copy of a resolution of support adopted by the City of Palm Springs.

Cordially,

Rolfe G. Arnhym
Executive Vice President

RGA/lm

enclosure: Resolution

264

RESOLUTION NO. 17647

OF THE CITY COUNCIL OF THE CITY OF PALM SPRINGS,
CALIFORNIA, ENCOURAGING AND SUPPORTING, UNDER THE
AUSPICES OF THE CALIFORNIA DEPARTMENT OF TRANS-
PORTATION, AN INTERCITY RAIL SERVICE PROGRAM,
INCLUDING AMTRAK, BETWEEN THE LOS ANGELES AREA,
AND PALM SPRINGS, BY AMTRAK.

- - - - -

WHEREAS the people of Southern California are critically concerned
about the ever increasing problem of traffic congestion; and

WHEREAS the voters of California have approved ballot measures to
provide funds for reducing traffic congestion through the use of
rail systems; and

WHEREAS the Riverside County Transportation Commission has ordered
the preparation of the Los Angeles, Coachella Valley, Imperial
County Intercity Rail Feasibility Study; and

WHEREAS said study indicates a rail station site within an area
soon to be annexated to Palm Springs; and

WHEREAS the City Council feels strongly that commuter rail systems
will play an important role in the reduction of traffic congestion
and health related air quality issues; and

WHEREAS the tourist economy of Palm Springs as well as the rest of
the Coachella Valley will benefit from systems which make it easier
and quicker for tourists to get here.

NOW THEREFORE BE IT RESOLVED that the City Council of the City of
Palm Springs does hereby direct staff to begin that work which will
be necessary with the appropriate Federal and State agencies in
order to encourage an early beginning of round trip railway service
between the Los Angeles area and the City of Palm Springs,
California.

ADOPTED this 18th day of September, 1991.

AYES: Councilmembers Broich, Hodges, Murawski, Neel and Mayor Bono
NOES: None
ABSENT: None

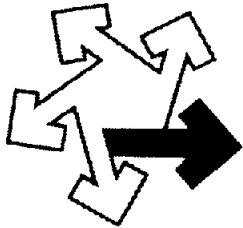
ATTEST: CITY OF PALM SPRINGS, CALIFORNIA

By: /s/Judith Sumich
City Clerk

/s/Robert W. Parkins
City Manager

REVIEWED & APPROVED: _____

7B



EQUITY DIRECTIONS, INC.

NOV. 21 1991

November 19, 1991

Elaine Kuhnke
17390 Brookhurst
Suite 100
Fountain Valley, CA 92708

Dear Elaine:

Please find enclosed an area map and a parcel map. We are in the process of master planning this site. One of the concepts calls for an Am Track commuter station. My thinking is that having a station in a strategic location in the Coachella Valley might complement the existing Los Angeles and Irvine locations, particularly as there is going to be a Riverside station in the near future.

It would be helpful to us if we could open a dialogue with you or the appropriate individual to consider the merits of this concept.

Sincerely,

Dennis D. French
President

DDF:sw
Enc.

APPENDIX 6
CORRESPONDENCE

The Atchison, Topeka and Santa Fe Railway Company



740 East Carnegie Drive
San Bernardino, CA 92408-3571

September 16, 1991
File: 01000608-1

RECEIVED

SEP 17 1991

Riverside County
Transportation Commission

Mr. Jack Reagan, Executive Director
Riverside County Transportation Commission
3560 University Avenue, Suite 100
Riverside, CA 92501

Dear Mr. Reagan:

Your August 28 letter asked for comments or suggestions we may have regarding the Imperial County Rail Feasibility Study.

We are concerned about two major points. First, the effect of Los Angeles-Calexico trains on our San Bernardino subdivision is a real concern. As you recall, the Morrison-Knudsen study did not include the simulation of the additional trains. This draft has no mention of additional capital requirements for the San Bernardino subdivision as a result of the Calexico service.

Second, the connection to Southern Pacific at Colton needs ample room to maneuver passenger trains, even given the assumed SP-ATSF "flyover" at Colton. At this time, we must reserve comment on the proposed trackage arrangements at Colton because descriptions of Santa Fe and Union Pacific tracks as well as locations of power switches, etc. were not detailed enough to judge their adequacy.

Sincerely,

A handwritten signature in dark ink, appearing to read "T. H. Shalin".

T. H. Shalin
Asst. Vice President - Operations

Southern Pacific Transportation Company

1200 Corporate Center Drive • Monterey Park, California 91754

September 16, 1991

R.C.T.C.

Mr. Jack Reagan
Executive Director
Riverside County Transportation
Commission
3560 University Avenue - Ste 100
Riverside, CA 92501

RECEIVED

SEP 19 1991

Riverside County
Transportation Commission

Dear Mr. Reagan:

Reference your letter of August 28, 1991, to Mr. G. R. Fetty requesting comments on your Los Angeles/Imperial County Intercity Rail Feasibility Study.

Please consider the following in preparing the final document:

1. **Line Capacity** - The S.P. trackage between Colton and Niland is a portion of our transcontinental southern corridor. Freight traffic forecasts indicate that all present line capacity will be required for freight service leaving little or no room for passenger traffic.
2. **Schedules** - In addition to possible conflicts with freight service, the schedule proposed in the study may be in conflict with commuter rail and other intercity service schedules. The concern is not only for on-line train vs. train delays, but also backup due to station platform availability in Los Angeles.
3. **Colton Crossing** - S.P. already experiences substantial train delay at the Colton Crossing which sometimes results in congestion on our main tracks at Loma Linda. This condition will have a serious negative impact on any new service contemplated through this area. The Colton Crossing should be an integral part of any study or service expansion planning in this area.
4. **No Endorsement** - Due to the negative impact on current facilities, operations and line capacity support for, or endorsement of this project is not presently available.

Page Two

September 16, 1991

Thank you for the opportunity to review and comment on the report. Should you have any questions, please call me at (213) 780-6511.

Sincerely,

A handwritten signature in cursive script, appearing to read "Royce D. Green".

Royce D. Green

Director - Special Projects



June 11, 1991

Ms. Elaine H. Kuhnke
Project Manager
Schiermeyer Consulting Services
17390 Brookhurst Street Suite 100
Fountain Valley, California 92708

Dear Ms. Kuhnke:

This refers to your letter dated May 9, 1991, concerning the preliminary draft of the "Los Angeles/Coachella Valley/Imperial County Intercity Rail Feasibility Study."

We have reviewed the proposed study and it is a good technical review of the operational feasibility of the service.

The report does not emphasize the problem of freight train interference along the route. The Sunset Route from Niland to Colton is the Southern Pacific's primary route from Southern California and the port of Long Beach to the east. Freight traffic is heavy and in many cases truck competitive or competitive with the Santa Fe. Also, from Colton to Los Angeles is Santa Fe's primary freight route. Significant numbers of passenger trains cannot be proposed for these routes without determining their impact on freight service.

A critical deficiency in the report is the lack of analysis and discussion of demand, population demographics, and population trends. The population of the Coachella Valley is only 182,000+. While this population is fast growing, has it reached a level to support rail service? If not, when? One of the biggest problems working against the rail service is that the population centers offering the most desirable group of high income travelers is located several miles south of the rail line, along the mountains and Highway 111.

The report makes note of the large population located just across the border in Mexicali. While there is a great deal of interaction between families in northern Mexico and Southern California, which will increase with the proposed free trade pact, bus transportation tends to be the preferred mode in Mexico. As a result, rail service may not generate demand levels one would expect from these population levels.

Ms. Elaine Kuhnke
Los Angeles/Coachella Valley/
Imperial County Intercity Rail
Feasibility Study

June 11, 1991
Page 2 of 2

We appreciate the opportunity to comment on the draft report.

Sincerely,



Ron Scolaro
Chief Administrative Officer
Government Affairs - West

RS:stm

cc: Hideo Sugita, RCTC
T. Gillespie, Amtrak

DEPARTMENT OF TRANSPORTATION

DIVISION OF RAIL

P.O. BOX 942874

SACRAMENTO, CA 94274-0001

(916) 327-9045

TDD (916) ~~327-9045~~ 654-4014

October 18, 1991

Mr. Jack Reagan
Executive Director
Riverside County Transportation
Commission
3560 University Avenue, Suite 100
Riverside, CA 92501

RECEIVED
OCT 25 1991
Riverside County
Transportation Commission

Dear Mr. Reagan:

Thank you for your recent letter transmitting a draft of the report entitled Los Angeles - Coachella Valley - Imperial County Intercity Rail Feasibility Study for our review. While we were not a participant in your study, we are very interested in your findings and the local support for rail service evidenced by the study.

There are several points we would like to be clarified in the final report. Our technical comments are enclosed. These comments do not represent a Caltrans position on the initiation of rail passenger service between Los Angeles and the Coachella and Imperial Valleys.

Should you have any questions or need additional information, please call Steve Alston at (916) 327-9045, or Matt Paul at (916) 322-9019.

Sincerely,

Cindy McKim
CINDY MCKIM, Chief
Division of Rail

Enclosure

**CALTRANS COMMENTS ON THE LOS ANGELES - COACHELLA VALLEY - IMPERIAL COUNTY
INTERCITY RAIL FEASIBILITY STUDY**

Page xii (Findings): We do not agree with the conclusion that "California State funds are available for all capital and operating costs associated with this project, with the exception of station development".

See the comments below covering Chapter 6 (Page 83 and thereafter).

Pages 52/53 (Rolling Stock): For service to the Coachella Valley only, add one back-up coach, as the eight coaches listed in Table 7 are part of the two regular sets.

For service to the Imperial Valley, add one locomotive, one control cab coach, and one food service car to provide back-up equipment to the three required train sets.

For planning purposes, Caltrans is now using the following per unit estimated costs for new locomotives and cars:

- Locomotive - \$3,000,000
- Intercity coach trailer - \$2,000,000
- Intercity coach cab car - \$2,250,000
- Intercity food service car - \$2,250,000

Page 54 (Land Acquisition): One acre sites are considered sufficient for most stations.

Pages 54/55 (Station Platforms and Shelter): Five hundred square feet is considered adequate for stations between Loma Linda and the Coachella Valley (fifteen hundred square feet enclosed structures would have excessive heating and air conditioning costs).

Fifteen hundred square feet is considered adequate for the Coachella Valley staffed station with respect to intercity rail needs. A larger facility would require justification on the basis of use by additional modes.

Page 56 (Station Parking): One hundred parking spaces are considered adequate for stations between Loma Linda and the Coachella Valley.

One hundred fifty parking spaces are considered adequate for the staffed Coachella Valley station.

Experience demonstrates that a large percentage of intercity passengers are dropped off at stations, significantly reducing the actual need for parking spaces.

Page 72 (Train Operations): The Amtrak feeder buses to the *San Joaquin* and *San Diegan* routes serve exactly the same market as the trains on these routes. However, a bus feeder system will usually handle fewer passengers than a direct train over the same route due to passenger preference for train service and a dislike of transfers. Therefore the conclusion that a bus/rail service would decrease all-rail passenger estimates is correct. (Also, please compare this to comments on feeder bus service in Item 7 on page 75.)

Page 73 (Stations/Staffing): The first paragraph correctly notes that Amtrak staffing costs are part of the cost for providing the service. These costs are treated no differently than any other normal operating cost, and are included in the cost base billed by Amtrak to the State for 403(b) services. The third paragraph on page 73 should be deleted as it is in conflict with the first paragraph and suggests positions by Amtrak and Caltrans which are not part of current practice or agreements.

Page 80/81 (Ridership Estimates): Tables 12 and 13 should be labeled "DAILY" in the title.

Page 83 (Institutional Issues): Although Amtrak wants California to pay 100 percent of long-term avoidable losses, Caltrans is not agreeable to this basis. Our position is that 403(b) services should represent a cost-sharing arrangement between the State and Amtrak. Therefore, Amtrak's participation in new services is not assured and depends upon the availability of their share of any operating loss within their overall budget.

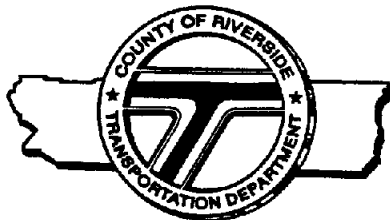
Page 86 (Operating Costs): The 1991 Rail Passenger Development Plan proposes an initial three daily round-trips on the San Jose-Oakland-Sacramento corridor.

The statement that the State would have responsibility for funding all operating costs presumes availability of adequate TP&D funds and legislative budgeting of such costs. There is no assurance that there will be such funding availability and budgeting for this new route.

Page 87 (TCI Program): Under current CTC policy, Article XIX (State Highway Account) funds are made available only to new projects in the Flexible Congestion Relief program. By law, this program cannot be used to fund intercity rail projects, so Article XIX funds are not a likely funding source for TCI projects on this new route.

Page 90 (Proposition 108): The discussion implies Proposition 108 funds will be available for this new service. However, no such funds can be made available unless the Coachella/Imperial Valley Corridor is designated as eligible for funding in Streets and Highway Code Section 2701.01 (as is explained on Page 85). It should also be noted that in the 1990 State Transportation Improvement Program (STIP), the California Transportation Commission programmed to existing routes all of the 15 percent intercity component of bond funding from Proposition 108 (and the two subsequent \$1 billion bond issues scheduled for the 1992 and 1994 ballots). If all of this funding is made available (plus Proposition 116 funding for intercity service), there still remains a deficit of about \$88 million to fund Caltrans Intercity Rail Capital Program for existing routes. If Proposition 108 funding is made available to a new Coachella Imperial Valley route, funds would have to be reallocated from other routes.

Page 92 (Table 14): The identification of State funds for \$32.1 million in rolling stock costs is not understood. This route is not now eligible for Proposition 108 funds and the limited amount of Proposition 116 funding likely to be available to Imperial County is included in station and track improvements. It is also noted that the Proposition 116 grants to San Bernardino and Riverside Counties are allocated to commuter rail corridors, and are not available for this project. The only other source of State funds that is available for rolling stock is TP&D funds through the TCI program. Based on input from the Rolling Stock Advisory Committee, formed pursuant to Proposition 116, the \$100 million in Proposition 116 funding for car acquisition has been designated to acquire cars for existing routes. Adding funds from Proposition 108 (and the two subsequent \$4 billion bond issues), there remains an unfunded need of about \$67 million for intercity rolling stock acquisition. Diversion of funds to acquire equipment for the Coachella/Imperial route would increase this unfunded amount.



FRANKLIN E. SHERKOW
Director of Transportation

COUNTY OF RIVERSIDE

TRANSPORTATION DEPARTMENT

September 12, 1991

SEP 18 1991

Mr. Jack Reagan, Executive Director
Riverside County Transportation Commission
3560 University Avenue, Suite 100
Riverside, CA 92501

Riverside County
Transportation Commission

RE: Draft of the "Los Angeles -
Coachella Valley - Imperial
County Intercity Rail
Feasibility Study"

Jack
Dear Mr. Reagan:

The Riverside County Transportation Department has reviewed the above referenced document. Our comments are as follows:

1. This Department strongly supports the establishment of the Los Angeles - Coachella Valley - Imperial County intercity rail service.
2. The report has been revised to include comments made by CVAG and Riverside County. However, these revisions are not reflected in the analysis portion of the report.
3. Although Page 21 states that "the Coachella Valley Association of Governments (CVAG) has expressed interest in developing a competitive bidding process for final station selection", the 16 candidate stations (Table 3, Page 21) in the Coachella Valley have not been described in detail. Only specific sites have been picked from the 16 candidate stations (Pages 22 to 38). We suggest that a competitive process which is open to any land owner or developer along the proposed line be considered. A set of specific guidelines (e.g. spacing, compatible land use, access, etc.) should be established for this process.
4. The proposed Monterey Avenue station site is owned by Riverside County. It will not be available for consideration as an Intercity Rail Station. The County has planned other uses for the Monterey Avenue parcels. Alternate sites between Monterey Avenue and Cook Street should be considered as station candidates.



5. Page 35 states that additional land acquisition may be needed to fully develop the proposed Avenue 56 (Airport Boulevard) site. However, our discussions of improvements to Highway 111 have revealed that Southern Pacific Railroad has excess right of way in the area.

Other items that should be added to the final study include bicycle facilities at rail stations (e.g. bike racks, lockers, shower facilities, etc.). Proposition 116 funds are available annually for bicycle facilities. Studies for a totally electrified rail system should also be briefly discussed. Reference is made to diesel-electric locomotives on Page vii. When will these be replaced by a totally electrified system? This should be considered in the cost estimates.

We also recommend closer coordination between RCTC, the project consultant, and local agencies, to be informed of all developments/revisions in the project. This Department is available to answer any questions or share ideas during the development of the project. We will also be working closely with CVAG as this process moves forward, and will make every effort to coordinate our comments with them.

If you have any questions, do not hesitate to contact Edwin Studor, Transportation Planning Manager, at (714) 275-6767 or Sena B. Wijesinha, Associate Transportation Planner, at (714) 275-6828.

Sincerely,


Franklin E. Sherkow
Director of Transportation

FES:ES:SBW:jw

cc: Supervisor Larson
Les Cleveland, CVAG

CVAG

COACHELLA VALLEY ASSOCIATION of GOVERNMENTS

- County of Riverside & Cities of:
- Cathedral City • Coachella • Desert Hot Springs
- Indian Wells • Indio • La Quinta • Palm Desert
- Palm Springs • Rancho Mirage

September 17, 1991

RECEIVED

SEP 18 1991

Mr. Jack Reagan, Executive Director
Riverside County Transportation Commission
3560 University Avenue, Suite 100
Riverside, CA 92501

Riverside County
Transportation Commission

Dear Jack:

CVAG Staff has reviewed the "Draft Los Angeles, Coachella Valley, Imperial County Intercity Rail Feasibility Study" and find it to be generally acceptable. The following comment is presented for your consideration:

- Although the report briefly discusses CVAG's interest in developing a competitive bid process for the final station selection process, the report does not discuss any options or alternatives that incorporate or encourage public/private partnership. CVAG requests options and alternatives be developed and included in the "Final Report".

CVAG looks forward to and supports the ultimate reality of intercity rail service to the Coachella Valley.

Sincerely,

COACHELLA VALLEY
ASSOCIATION OF GOVERNMENTS


LLOYD NICKERSON, JR.
Regional Planner

cc: Lester D. Cleveland, Executive Director
Frank Sherkow, County of Riverside

CVAG

COACHELLA VALLEY ASSOCIATION of GOVERNMENTS

- County of Riverside & Cities of:
- Cathedral City • Coachella • Desert Hot Springs
- Indian Wells • Indio • La Quinta • Palm Desert
- Palm Springs • Rancho Mirage

May 21, 1991

RECEIVED

MAY 31 1991

Riverside County
Transportation Commission

Elaine Kuhnke, Associate Planner
Schiermeyer Consulting Services
17390 Brogkhurst Street, Suite 100
Fountain Valley, Ca 92708

Dear Ms. Kuhnke:

It was a pleasure to receive the letter, from Jack Reagan, which requested CVAG input for the proposed development of an intercity rail system within the Coachella Valley. I assure you we are receptive and can offer direction and resources to consider for the proposed project.

Specifically, Jack requested comments on a document titled "Draft Coachella Valley Intercity Service Station Assessment," prepared by your consulting firm. Our comments are as follows:

The overall document leads to the question of passenger fares. Passenger fares appear to be a critical variable in determining usage within the Coachella Valley. The lower the fare the higher projections of passenger usage. Tourism is the Valley's largest industry, therefore, the rail system could tap both labor and tourism to transport people in and out of the Coachella Valley.

The initiation of this study should not be limited to site selection. Creative options and alternatives in the planning process should also be explored. This may include, as an example, plans to incorporate private sector participation in; site selection, parking lot sharing, and mutually agreed land uses surrounding stop points.

At this time we should not foreclose the choice of having three or more stops, western, central and eastern, within the Coachella Valley. Examples of appropriate locations are as follows;

- (1) Gene Autry Trail/Palm Drive - This area is located between two urban centers, adjacent to Interstate 10 and accessible to the western terminus of the Mid-Valley Parkway and the Palm Springs Bypass. This stop point will be accessible to public transit.

COACHELLA VALLEY ASSOCIATION of GOVERNMENTS

(2) Eastern Terminus, Mid-Valley Parkway - [currently proposed at Monterey and I-10] This is a centrally located stop point, which will feed east and west into Interstate 10. This stop point will be accessible to public transit.

(3) Enterprise Zone -

Jackson Street Southeast quadrant - Full freeway access is available on vacant redevelopment area, adjacent to existing Amtrak stop point. Public transit can access to County Fairgrounds, Administrative Offices and Civic Center.

Avenue 48/Hwy 111 - Full freeway access with connection to Highway 86. Centrally located in Enterprise Zone, with proximity to Thermal Airport. This stop point will be accessible to public transit.

We look forward to the ultimate reality of inter city train connections throughout Southern California and specifically within the Coachella Valley.

Sincerely,

COACHELLA VALLEY
ASSOCIATION OF GOVERNMENTS



John Pena, Chairman
Executive Committee

xc: Jack Reagan, Executive Director
Riverside County Transportation Commission

RIVERSIDE COUNTY PLANNING DEPARTMENT

JJ:0085

March 5, 1991

Mr. Jack Reagan
Riverside County Transportation Commission
3560 University Avenue, Suite 100
Riverside, California 92501

Dear Mr. Reagan:

The Riverside County Planning Department has reviewed the Draft Coachella Valley Intercity Rail Service Assessment prepared by Schiermeyer Consulting Services, dated February 1991, and would like to offer the thoughts below.

The study should consider the effects and potential ridership associated with developments proposed in the County that would be near the proposed Beaumont/Banning and the Rancho Mirage/Palm Springs station sites. Specifically, the County has approved a large Specific Plan (Oak Valley) between Beaumont and Calimesa (13,000 residential units, 430 commercial acres, 578 industrial acres), which could result in the future center of population for the entire Calimesa-Banning area being closer to the proposed Beaumont (5th Place/California) site. The proximity of this site to Highway 79, and the potential for auto/bus connections to the Hemet/San Jacinto area, should be given substantial weight. Similarly, the County has approved, or is considering several specific plans in the vicinity of Desert Hot Springs - SP Nos. 107, 170, 261, and 262. SP No. 261 is very large, proposing 9,559 residential units and 200 acres of commercial uses. While that which has been proposed may not be approved, substantial interest has nevertheless been shown toward development in this area for residential and commercial uses. This potential development might increase the viability of the proposed Gene Autry/Palm Drive alternative. Also, the proposed Palm Springs International Raceway is near this alternative site, increasing its potential for destination trips.

As you know, a key component of our regional air quality, transportation, and housing plans is the concept of improving the jobs/housing balance in the Riverside/San Bernardino County regions. Accordingly, it would be helpful to coordinate station locations with geographical areas that might foster additional job growth. One potential opportunity is to site stations near the County's activity centers, or at hubs with other transportation corridors, as has been cited in the report. Corona, downtown Riverside, and Indio are currently such activity centers. Station locations that allow for future linkages with other potential rail corridors; i.e., Temescal Valley to Lake Elsinore, I-215 from downtown Riverside through Perris, and

Mr. Jack Reagan
Riverside Co. Transportation Commission
March 5, 1991
Page 2

Indio to Calexico, will increase the viability of these routes, increase ridership potential of the current proposal, and hopefully, become a stimulus to job growth additionally in other County communities.

The ridership potential for focused need groups; i.e., service workers in Coachella Valley resorts that cannot afford to live near their jobs, should also be considered while the general Inland Empire/Coastal County commute patterns are studied.

I hope these comments are of assistance. We look forward to continued participation in the development of this project as it progresses.

If you have any questions, please call me at 782-4641.

Very truly yours,

RIVERSIDE COUNTY PLANNING DEPARTMENT
Joseph A. Richards, Planning Director



Jerry Tolliffe, Chief Deputy Director

JJ/kjs

cc: Elaine Kuhnke - Schiermeyer Consulting Services