LOS ANGELES
COACHELLA VALLEY
IMPERIAL COUNTY

INTERCITY RAIL FEASIBILITY STUDY
EXECUTIVE SUMMARY

PREPARED FOR
RIVERSIDE COUNTY TRANSPORTATION COMMISSION

PREPARED BY
SCHIERMEYER CONSULTING SERVICES
WILBUR SMITH ASSOCIATES

B.02.06.01
SUMMARY OF COACHELLA VALLEY RAIL PASSENGER SERVICE PROPOSAL

The "Los Angeles - Coachella Valley - Imperial County Intercity Rail Feasibility Study" prepared by Schiermeyer Consulting Services and Wilbur Smith Associates in December 1991 recommends implementation of intercity passenger rail service 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 under the auspices of the California Department of Transportation (Caltrans) intercity rail program.

The base route would use 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, 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 an SP branchline. 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.

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.
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. The geographical size and projected growth in the Coachella Valley suggest the need for 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. Sample fares were 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 discounted roundtrip ticket.

3. This report developed two possible operating schedules for analytical purposes. 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 daily round 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 the 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 variable climatic conditions, 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 last train that arrives each day. Overnight layover 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 $2.7 million.

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.

**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.

**INSTITUTIONAL ISSUES**

1. Cooperation from three freight railroads (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.
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 $2.23 million in 2005.

10. The Brawley candidate station is located in close proximity to the new state prison. 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 service proposal 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 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, requesting their assistance in support of this service.
TABLE I

LOS ANGELES - COACHELLA VALLEY - IMPERIAL COUNTY

Summary of Capital Expenses

<table>
<thead>
<tr>
<th>Rolling Stock</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Locomotives (4)</td>
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<tr>
<td>Passenger Coaches (13)</td>
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<tr>
<td>Control-cab Coaches (4)</td>
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<td>Food Service Cars (4)</td>
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<th>Station Facilities</th>
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<tbody>
<tr>
<td>Loma Linda - Coachella Valley (5)</td>
<td>$9,941,000</td>
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<tr>
<td>Imperial County (3)</td>
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<td></td>
<td>12,692,000</td>
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<thead>
<tr>
<th>Track &amp; Signal Improvements</th>
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<tbody>
<tr>
<td>Colton Crossing</td>
<td>$1,400,000</td>
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<tr>
<td>Coachella Valley Layover Track</td>
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<tr>
<td>Calexico Branch/Track Rehabilitation</td>
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<td>Calexico Branch/Road Crossing Actuators (30)</td>
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<tr>
<th>Contingency Factor</th>
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<td>(30% of track &amp; signal total)</td>
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<td>(15% of track, signal, &amp; contingency)</td>
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| TOTAL                                              | $61,417,000 |
