Centerline LRT Project

Orange County, California

(November 2002)

Description

The Orange County Transportation Authority (OCTA) is undertaking Preliminary Engineering on an 18.7-mile rail corridor in central Orange County between Santa Ana and Irvine. The proposed project will connect major activity centers within the corridor, including downtown Santa Ana (and the county government center), John Wayne Airport, University of California at Irvine, and several hospitals and regional shopping, employment, cultural, and entertainment centers. Additionally, the proposed project would serve a major intermodal center in Santa Ana that will provide connections to Metrolink commuter trains, local bus routes and Amtrak.

In response to input from citizens and local elected officials, OCTA has revised the project since its FY 2002 New Starts review. The proposed project alignment has shortened from 18.9 miles to 17.9 miles. In October of 2002, OCTA requested to shorten the alignment to 11.9 miles, from the transit center in Santa Ana to the University of California at Irvine. This profile is based upon the 17.9-mile project.

Summary Description	
Proposed Project:	Light Rail Transit 17.9 Miles, 22 Stations
Total Capital Cost ($YOE):	$2.11 Billion
Section 5309 New Starts Share ($YOE):	$1.05 Billion (50%)
Annual Operating Cost (2025 $YOE):	$14.6 Million
Ridership Forecast (2025):	42,400 Average Weekday Boardings 37,000 Daily New Riders
Opening Year Ridership Forecast (2011):	29,200 Average Weekday Boardings
FY 2004 Finance Rating:	**Medium-High**
FY 2004 Project Justification Rating:	**Not Rated**
FY 2004 Overall Project Rating:	**Not Rated**

This project has not been rated. The project sponsor calculated the project's cost-effectiveness at $6.56 per hour of transportation system user benefit. However, FTA has serious concerns about the information submitted for this measure; the underlying assumptions used by the project sponsor may have produced an inaccurate representation of the benefits of the project. FTA continues to work with this project sponsor to validate the assumptions, information, and projections. A rating for this project will be made available to Congress and other interested parties when the issues are resolved. The *Not Rated* overall project rating applies to this Annual New Starts Report **and reflects conditions as of November 2002.** Project evaluation is an ongoing process. As New Starts projects proceed through development, the estimates of costs, benefits, schedules and impacts are refined. **The FTA ratings and recommendations will be**

updated annually to reflect new information, changing conditions, schedules and refined financing plans.

Status

OCTA completed a Major Investment Study (MIS) for the corridor in June 1997. The MIS led to the selection of a rail/bus project consisting of a 28-mile rail corridor and a 49 percent increase in bus service. The project is included in the financially constrained long range transportation plan and the Transportation Improvement Program.

In February 1998, FTA approved entry into the Preliminary Engineering (PE)/Draft Environmental Impact Statement (DEIS) phase of project development. The OCTA board selected the 18.7-mile Minimum Operating Segment (MOS) in October of 2001. The proposed project alignment has shortened from 17.9 miles to 14.9. In October 2002, OCTA requested to shorten the alignment to 11.9 miles, from the transit center in Santa Ana to the University of California at Irvine. OCTA plans to complete the NEPA process and receive a Record of Decision in summer of 2004 and begin construction in 2005. TEA-21 Section 3030(a)(59) authorizes the Fullerton-Irvine Corridor for Final Design and construction. Through FY 2002, Congress has appropriated $7.45 million in Section 5309 New Starts funds.

Evaluation

FTA has not rated the project's justification criteria. The project will be reevaluated when it is ready to advance to Final Design, and for next year's *Annual Report on New Starts*.

Project Justification
Rating: Not Rated

This project has not been rated. The project sponsor calculated the project's cost-effectiveness at $6.65 per hour of transportation system user benefit. However, FTA has serious concerns about the information submitted for this measure; the underlying assumptions used by the project sponsor may have produced an inaccurate representation of the benefits of the project. FTA continues to work with this project sponsor to validate the assumptions, information, and projections. A rating for this project will be made available to Congress and other interested parties when the issues are resolved. The overall project rating of *Not Rated* is based upon issues with the rapidly changing project and additional analysis needed to develop project justification criteria consistent with FTA guidelines. The region is currently undertaking an update to its regional travel demand model to account for the proposed expansion of the regional bus network, accommodate changes in the project scope, and produce higher quality transit ridership forecasts. Based on 1990 Census data, there are an estimated 9,340 low-income households within a ½-mile radius of the stations, representing 30 percent of all households located within ½-mile of the corridor. There are an estimated 125,780 jobs within ½-mile of the stations, representing 62 percent of employment in the corridor. Orange County lies within the South Coast Air Basin and is currently classified as an "extreme non-attainment area" for ozone, a "serious non-attainment area" for carbon monoxide and for PM-10, and a "non-attainment area" for NOx.

Project Justification Quantitative Criteria		
Mobility Improvements Rating: Not Rated		
	New Start vs. Baseline	
Average Employment Per Station	5,717	
Average Low Income Households Per Station	425	
Transportation System User Benefit Per Project Passenger Mile (Minutes)	Not Yet Available	
Environmental Benefits Rating: N/A		
Criteria Pollutant s Reduced (tons)	**New Start vs. Baseline**	
Carbon Monoxide (CO)	N/A	
Nitrogen Oxide (NO_x)	N/A	
Hydrocarbons	N/A	
Particulate Matter (PM_{10})	N/A	
Carbon Dioxide (CO_2)	N/A	
Annual Energy Savings (million) BTU	N/A	
Cost Effectiveness Rating: Not Rated		
	New Starts vs. Baseline	
Transportation System User Benefit (current year dollars/hour)	Not Rated	
Operating Efficiencies Rating: Not Rated		
	Baseline	**New Start**
System Operating Cost per Passenger Mile (current year dollars)	N/A	N/A

[ ] indicate an increase in emissions.

Existing Land Use, Transit-Supportive Land Use Policies and Future Patterns Rating: Medium

The *Medium* rating reflects the varied densities and transit-supportive conditions found along the 17.9-mile corridor, but acknowledges the proactive role of OCTA in encouraging transit-oriented planning by local jurisdictions.

Existing Conditions: The proposed 17.9-mile Locally Preferred Alternative serves three jurisdictions – Santa Ana, Costa Mesa, and Irvine. In Santa Ana, the proposed alignment runs along an arterial street fronted by strip commercial development and surrounded by primarily single-family neighborhoods with some multi-family developments. In Costa Mesa, development is a mix of mid-rise office, shopping plaza, and multi-family residential. In Irvine, two major employment centers are served, as well as planned residential developments at a range of densities. Other high trip generators include the John Wayne Airport and the University of California at Irvine. As of 2000, a total of 99,000 jobs were located within ½-mile of proposed stations, and residential densities were moderate, averaging 7,400 persons per square mile. Pedestrian accessibility is good in Santa Ana and other portions of the corridor, but limited in other areas.

Future Plans, Policies and Performance: OCTA has been working with corridor communities to develop station area planning and design guidelines and has executed cooperative agreements with all jurisdictions in the corridor to conduct station area planning. OCTA has also developed tools to assist in station area planning efforts including transit-supportive development guidelines, a joint development strategy, station area land use profiles, station area parking guidelines, and an implementation plan. In addition, OCTA has conducted public education and outreach on transit-oriented land use planning, and is investigating joint development opportunities. The communities along the corridor have relatively dense residential zoning (15 to 30 units per acre and higher) in place in most station areas. Allowable commercial densities are relatively high in the two Irvine employment centers, but commercial floor area ratios (FARs) are less than 1.0 in the remainder of the corridor. Good examples of transit-supportive design are located in downtown Santa Ana, where mixed-use redevelopment and pedestrian oriented design improvements have recently been completed.

Local Financial Commitment
Rating: Medium-High

The rating of *Medium-High* for local financial commitment is because of the *Medium-High* rating for the Capital Operating Plan and the *Medium-High* rating of the Operating Financial Plan.

Proposed Non-Section 5309 New Starts Share of Total Project Costs: 50%
Rating: Medium

OCTA plans to use Section 5309 New Starts funds, FHWA Flexible Funding, State Transportation Improvement Program funds, State Highway funds, and local funds from Measure M, a County transportation sales tax.

Locally Proposed Financial Plan		
Proposed Source of Funds	**Total Funding ($million)**	**Percent of Total**
Federal:		
Section 5309 New Starts	$1,055.4	50.0%
FHWA Flexible Funds	$521.9	25.0%
State:		
STIP	$234.3	12.4%
Proposition 116	$120.0	6.4%
Local:		
Measure M	$179.2	9.5%
Total:	**$2,110.7**	100.0 %

NOTE: Funding proposal reflects assumptions made by project sponsors, and not DOT or FTA assumptions. Total may not add due to rounding.

Stability and Reliability of Capital Financing Plan
Rating: Medium-High

The Centerline Rail Corridor has received a *Medium-High* capital plan rating because 100 percent of proposed local funding for the project is committed from existing sources. OCTA has demonstrated its ability to finance large projects.

Agency Capital Financial Condition: OCTA is in sound financial condition. The agency has sufficient capital resources from a ½-percent sales tax (Measure M) to finance a wide range of capital improvements. OCTA carries a very high bond rating: Aa2/AA/AA by Moody's, Standard and Poor's, and Fitch, respectively.

Capital Cost Estimate and Contingencies: OCTA has incorporated cost contingencies into its financial plan. The contingencies appear adequate to cover cost overruns for design and construction, rights-of-way, and vehicle cost. An additional project reserve of ten percent exists and is applied to the total costs, including contingencies.

Existing and Committed Funding: The OCTA Board of Directors has committed $179 million in Measure M funds and sufficient CMAQ and State Transit Improvement Program (STIP) funding to finance the non-Section 5309 New Starts share of capital costs.

New and Proposed Sources: All of the proposed Non-Section 5309 share of project costs are from existing funding sources.

Stability and Reliability of Operating Finance Plan
Rating: Medium-High

The *Medium-High* operating plan rating reflects the existing dedicated revenue stream for operating the Centerline Rail Corridor.

Agency Operating Financial Condition: OCTA is in sound operating financial condition. Measure M and other existing revenues provide the agency with sufficient resources to operate its existing bus system.

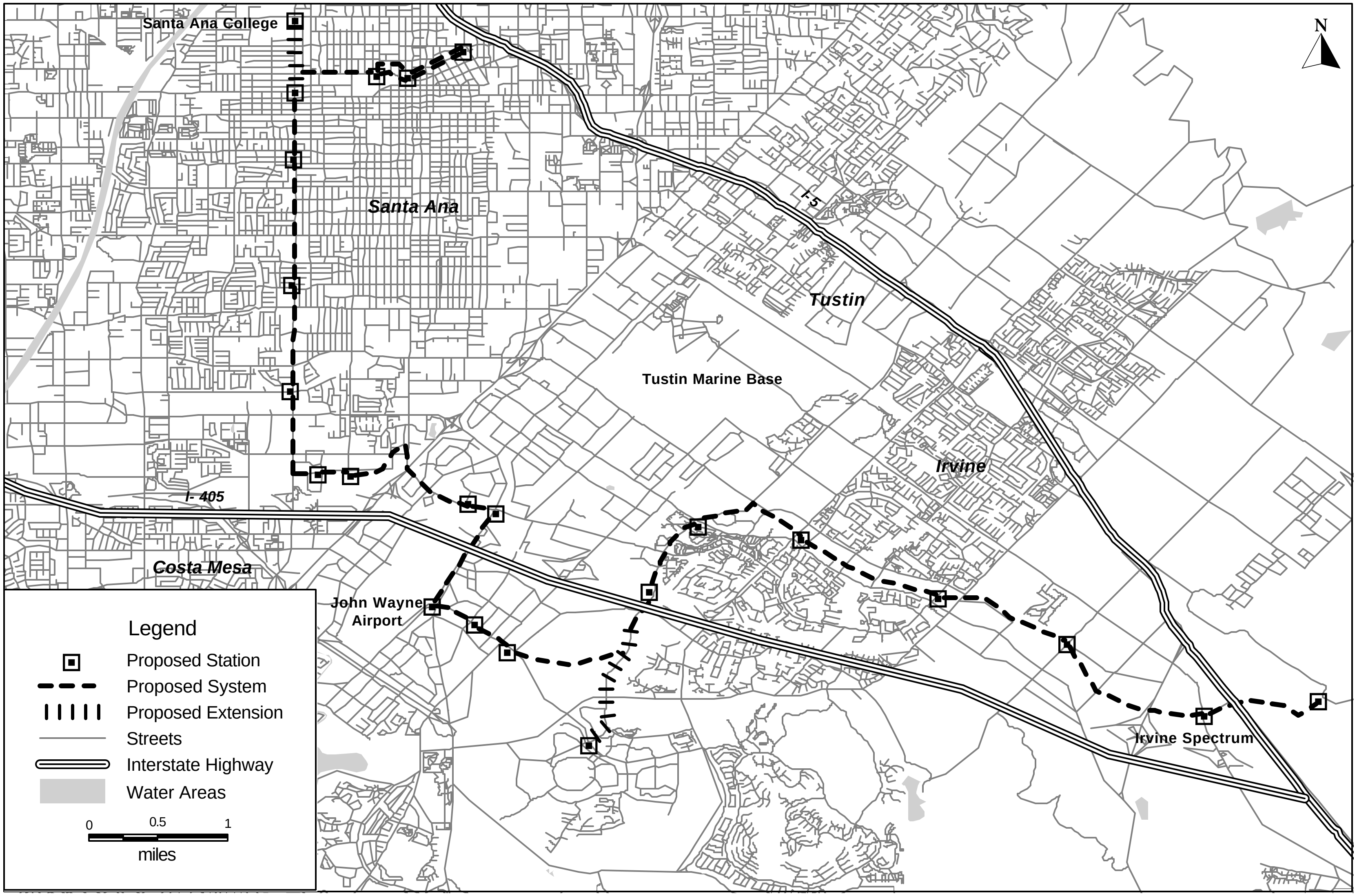
Operating Cost Estimates and Contingencies: Annual operating and maintenance costs are estimated at $38.7 million. These estimates appear reasonable given the proposed size of the system. OCTA uses conservative growth forecasts.

Existing and Committed Funding: OCTA proposes that operation of the completed Rail Corridor would be funded from Measure M funds, farebox revenues, and CMAQ funds for the first three years of operation. These resources are expected to yield sufficient funds to operate the completed 17.9-mile system through 2011, when the current round of Measure M sales tax is scheduled to end. If the Measure M initiative is not renewed, the project would experience a declining, but still positive, operating cash balance from 2012 through 2028.

New and Proposed Funding Sources: No new sources of funding are proposed.

Centerline LRT

Orange County, Califonia



Federal Transit Administration, 2002