

# High Capacity Transit Corridor Project

## Honolulu, Hawaii

### Preliminary Engineering

(Based upon information received by FTA in November 2009)

Summary Description	
<b>Proposed Project:</b>	Elevated rail line with 3 <sup>rd</sup> -rail electrification 20.1 Miles, 21 Stations
<b>Total Capital Cost (\$YOE):</b>	\$5,347.68 Million (Includes \$290.3 million in finance charges)
<b>Section 5309 New Starts Share (\$YOE):</b>	\$1,550.00 Million (29.0%)
<b>Annual Forecast Year Operating Cost:</b>	\$125.92 Million
<b>Ridership Forecast (2030):</b>	116,000 Average Weekday Boardings 64,000 Daily New Riders
<b>Opening Year Ridership Forecast (2019):</b>	97,000 Average Weekday Boardings
<b>Overall Project Rating:</b>	Medium
<b>Project Justification Rating:</b>	Medium
<b>Local Financial Commitment Rating:</b>	Medium

**Project Description:** The City and County of Honolulu (the City) proposes to construct the High-Capacity Corridor Transit Project, a rail line that would serve the south shore of Oahu from a western terminus in Kapolei, past Pearl Harbor and Honolulu International Airport, through downtown Honolulu, to an eastern terminus at Ala Moana Center. The electrified (third rail) line would be almost entirely on elevated structure in existing public rights of way – primarily arterial streets. Rail service would extend over 20 hours each day with automated trains running every three minutes in the weekday peak periods and six minutes during most off-peak hours.

**Project Purpose:** The corridor is geographically constrained by the ocean to the south and two mountain ranges to the north. Pearl Harbor reaches well inland from the ocean and pinches the already-narrow corridor near its mid-point. Severe highway congestion persists on H-1, a freeway that extends through the length of the corridor, and on the limited number of major arterials that serve the corridor. In the urban core around downtown Honolulu, street capacity is similarly limited by the scarcity of continuous arterials. The Honolulu bus system provides service throughout the corridor. Per-capita ridership is among the top five in the country, reflecting heavy traffic congestion, high parking costs in the urban core, and high-frequency service. Service quality suffers substantially from mixed-traffic operations. Increasing traffic congestion continues to degrade schedule reliability, increase operating costs, and exacerbate capacity limitations on the highest-ridership bus routes. The proposed project would be fully grade-separated, provide higher-speed and more reliable transit service, and produce substantial reductions in travel times for large numbers of transit riders in the corridor.

**Project Development History, Status and Next Steps:** The City completed an alternatives analysis for the corridor in November 2006, and identified an elevated fixed-guideway as a starter project with future extensions both east and west. In May 2007, the Oahu Metropolitan Planning Organization amended the transportation plan for Oahu to include this initial project. In April 2008, the City chose steel-wheel-on-steel-rail as the technology and, in November 2008, a Draft Environmental Impact Statement (EIS) was issued for the project. FTA approved the project into preliminary engineering in October 2009. A Final EIS was issued in June 2010, and a Record of Decision was issued in January 2011. The City's schedule anticipates entry into final design in August 2011, receipt a Full Funding Grant Agreement in 2012, and the start of revenue operations in 2019.

Locally Proposed Financial Plan		
<u>Source of Funds</u>	<u>Total Funds (\$million)</u>	<u>Percent of Total</u>
<b>Federal:</b>		
Section 5309 New Starts	\$1,550.00	29.0%
Section 5307 Urbanized Area Formula Funds	\$300.72	5.6%
American Recovery and Reinvestment Act	\$4.00	0.1%
<b>State/Local:</b>		
General Excise Tax (GET)	\$3,492.96	65.3%
<b>Total:</b>	<b>\$5,347.68</b>	<b>100.0%</b>

**NOTE:** The financial plan reflected in this table has been developed by the project sponsor and does not reflect a commitment by DOT or FTA. The sum of the figures may differ from the total as listed due to rounding.

**HI Honolulu, High Capacity Transit Corridor Project**  
**FY2011 Financial Assessment Summary prepared September 2009**

<b>Factor</b>	<b>Rating</b>	<b>Comments</b>
<b>Local Financial Commitment Rating</b>	<b>Medium</b>	
<b>Non-Section 5309 New Starts Share (20% of summary financial rating)</b>	<b>High</b>	The New Starts share of the project is 29.0 percent.
<b>Project Capital Financial Plan (50% of summary financial rating)</b>	<b>Medium</b>	
Capital Condition (25% of capital plan rating)	Medium	The average age of the City's bus fleet is 9.2 years, which is older than the industry average. The City's good general obligation bond ratings, which were issued in 2009, are as follows: Moody's Investors Service Aa2, Standard & Poor's Corporation AA, and Fitch AA.
Commitment of Funds (25% of capital plan rating)	High	Approximately 91 percent of non-New Starts funding is committed. Federal sources include Section 5307 Formula funds and funds from the American Recovery and Reinvestment Act. Local funds derive from the general excise tax (GET).
Capital Cost Estimates, Assumptions and Financial Capacity (50% of capital plan rating)	Low	Assumptions regarding growth in GET revenues and Section 5309 bus discretionary funds are optimistic compared to historical experience. Financing costs appear to be understated. The capital cost estimate is considered reasonable. The financial plan show the City has little ability to address funding shortfalls or cost increases. The GET surcharge revenues that will be applied to project-related debt service provide very slim coverage.
<b>Project Operating Financial Plan (30% of summary financial rating)</b>	<b>Medium</b>	
Operating Condition (25% of operating plan rating)	Medium	Financial reporting for the operation of transit services by the City of Honolulu is reported in the City's Public Transportation System Fund. The current ratio of assets to liabilities for that fund as reported in its most recent audited financial statements is 1.32. The City has no recent service cutbacks.
Commitment of Funds (25% of operating plan rating)	High	All operating funds are considered committed, including Federal formula funds, fare revenues and other operating income, and subsidies from the City's General Fund and Highway Fund.

O&M Cost Estimates, Assumptions, and Financial Capacity (50% of operating plan rating)	Medium-Low	Assumptions regarding state operating subsidies and growth in rail unit operating costs and bus and paratransit operating costs are optimistic compared to historical experience.  The operating cash flow assumes a balanced budget, with no accrual of an operating surplus or reserve.
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Preliminary Engineering

(Land Use and Economic Development Rating based upon Information accepted by FTA in November 2008)

## ***LAND USE RATING: Medium***

The land use rating reflects the population and employment densities within ½-mile of proposed station areas:

- Average population density across all station areas is 8,300 persons per square mile. Total employment served is at least 164,000 (including 48,000 in the central business district (CBD).)
- Ranging from west to east, existing land uses in the station areas typically include open, agricultural land; low-density, single-family residential; moderate-density, multi-family residential; light-commercial and harbor front industrial; high-density commercial and retail, and moderate-density, mixed-use retail and residential.
- Pedestrian facilities in the corridor's station areas are non-existent in the undeveloped western end of the corridor, but generally improve towards the east. Many station areas suffer from wide arterial streets, considerable surface parking, disconnected residential subdivisions, and segregated development patterns. The corridor's eastern areas have adequate pedestrian infrastructure and better pedestrian amenities and design.
- Parking is scarce and expensive in the CBD, but generally free and available in most other areas.

## ***ECONOMIC DEVELOPMENT RATING: Medium-High***

### **Transit-Supportive Plans and Policies: Medium**

(50 percent of Economic Development Rating)

- Land use in the corridor is controlled by only two entities – the State of Hawaii and the City and County of Honolulu. Honolulu has specifically sought to concentrate new development in the Honolulu primary urban center and to establish a secondary urban area to the east in the community of Kapolei, at the eastern end of the proposed alignment. City and state-developed regional and subarea plans that cover the corridor include urban growth boundaries with strong protections for agricultural and preserved land outside these boundaries. The majority of the developable urban area was built up in the 1940s to 1960s and has been redeveloped since.
- All current area and sub-area community land use plans contain objectives that explicitly support the project and that generally encourage transit-oriented projects, pedestrian orientation, and dense, mixed-use patterns of development. Neighborhood transit-oriented development (TOD) plans are being developed for each of the station areas, and will serve as the basis for rezoning and other improvements.
- In 2006, the City Council of Honolulu amended its *Revised Ordinances* to define a *Transit-Oriented Development Ordinance*. The ordinance is intended to guide development in and around transit stations and is currently under development by the city.
- Existing zoning statutes allow for relatively high commercial and residential densities and relatively low parking requirements compared to most suburban areas in the U.S., and in some cases allow for mixed-use development. Some planned-unit developments and special districts have provisions for pedestrian amenities, but for the most part pedestrian-oriented design requirements and guidelines are not included in existing zoning regulations.
- Of the several comprehensive plans covering corridor communities, only the initial TOD Ordinance definition in the *Revised Ordinances* proposes incentives to explicitly promote transit-oriented development, including the use of floor area ratio bonuses, shared parking requirements, and reductions in external trips. Honolulu is currently engaged in a TOD planning process for the proposed station areas to develop more detailed plans and amendments to zoning ordinances to implement land use policies and encourage appropriate development.

# Honolulu High-Capacity Transit Corridor Project

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