# High Capacity Transit Corridor Project
## Honolulu, Hawaii
### Final Design
### (Rating Assigned November 2011)

| Summary Description | |
|---|---|
| **Proposed Project:** | Elevated rail line with third rail electrification<br>20.1 Miles, 21 Stations |
| **Total Capital Cost ($YOE):** | $5,125.96 Million (Includes $247.0 million in finance charges) |
| **Section 5309 New Starts Share ($YOE):** | $1,550.00 Million (30.2%) |
| **Annual Forecast Year Operating Cost:** | $125.92 Million |
| **Ridership Forecast (2030):** | 116,000 Average Weekday Trips<br>64,000 Daily New Trips |
| **Opening Year Ridership Forecast (2019):** | 97,000 Average Weekday Trips |
| **Overall Project Rating:** | Medium- High |
| **Project Justification Rating:** | Medium- High |
| **Local Financial Commitment Rating:** | Medium |

***Project Description:*** The City and County of Honolulu (the City) and the Honolulu Authority for Rapid Transit (HART) propose to construct the High-Capacity Transit Corridor 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 weekday peak periods and every 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 currently 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 published in June 2010, and a Record of Decision issued in January

2011. FTA approved the project into final design in December 2011. The City and HART anticipate receipt of a Full Funding Grant Agreement in late 2012, and the start of revenue operations in 2019.

***Significant Changes Since Last Evaluation (November 2010):*** The project's capital cost estimate decreased from $5,347.68 million to $5,125.96 million. The project sponsor bid and awarded several contracts since the previous project cost estimate was developed. These contracts included the first two guideway line segments, the maintenance and storage facility, and the vehicle core systems. As a result of favorable market conditions, the project sponsor received bids that were less than the engineers' estimates, and the resulting awarded contract amounts were incorporated into the revised cost estimate. Additionally, the cost estimate was reduced by approximately $100 million based on seven cost containment measures proposed by the project sponsor. In July 2011, HART was established to oversee the project, replacing the City as the project sponsor. The City will remain the direct recipient of FTA grant funds.

| Locally Proposed Financial Plan | | |
|---|---|---|
| **Source of Funds** | **Total Funds ($million)** | **Percent of Total** |
| **Federal:** | | |
| Section 5309 New Starts | $1,550.00 | 30.2% |
| Section 5307 Urbanized Area Formula Funds | $244.00 | 4.8% |
| American Recovery and Reinvestment Act | $4.00 | 0.1% |
| **State/Local:** | | |
| General Excise Tax (GET) | $3,327.96 | 64.9% |
| **Total:** | **$5,125.96** | 100.0% |

**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.

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***LAND USE RATING: Medium***

The land use rating reflects the significant population and employment densities served by much of the corridor, tempered by a relatively poor pedestrian environment.

- Existing land uses in the station areas include open, agricultural land; low-density, single-family residential; moderate-density, multi-family residential; light-commercial and harborfront industrial; and high-density commercial and retail in the Honolulu central business district (CBD). Many of the developed station areas suffer from wide arterial streets, considerable surface parking, disconnected residential subdivisions, and segregated development patterns.
- Average population density across all station areas is 8,300 persons per square mile, rating "medium" according to FTA guidance. Total employment served is at least 164,000 (including 48,000 in the CBD) which also rates "medium." Parking is scarce and expensive in the CBD, but generally free and available in most other station 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. 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. 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 transit alignment.
- Neighborhood transit-oriented development (TOD) plans are being developed for each of the 21 station areas, and will serve as the basis for rezoning and other improvements. All current area and sub-area community land use plans contain objectives that explicitly support the transit project and that generally encourage transit-oriented projects, pedestrian orientation, and dense, mixed-use development.
- 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. Revised city ordinances provide incentives for TOD around stations such as density bonuses, but these do not appear to have been applied to project station areas yet.

**Performance and Impacts of Policies: Medium-High**
(50 percent of Economic Development Rating)

- Opportunities for redevelopment are greatest near the termini of the alignment in the Ewa Plain to the west and the Kaka'ako Community Development District (CDD) to the east. The Ewa Plain has master plans for major development projects including high densities, a mix of uses, and pedestrian-friendly design in the vicinity of three proposed stations. The Kaka'ko CDD has seen an abundance of pedestrian/transit friendly development projects recently including expansion of open-air, pedestrian retail strips, major commercial and shopping centers located at existing bus transit stations, and high-density, live-work developments.
- Other parts of the corridor including the Waipahu, Pearl City, and Salt Lake communities may not be very adaptable to redevelopment due to the concentration of industrial/light-commercial uses, U.S. military and state property, and low demand.

# HI, Honolulu High Capacity Transit Corridor Project
# (Rating Assigned September 2011)

| Factor | Rating | Comments |
|---|---|---|
| **Local Financial Commitment Rating** | **Medium** | |
| **Non-Section 5309 New Starts Share (20% of summary financial rating)** | **High** | The New Starts share of the project is 30.2 percent. |
| **Project Capital Financial Plan (50% of summary financial rating)** | **Medium** | |
| Capital Condition (25% of capital plan rating) | Medium | The average age of the bus fleet is 10.2 years, which is older than the industry average.<br>The City's most recent General Obligation bond rating, issued in August 2011, is as follows: Standard & Poor's Corporation, AA+. |
| Commitment of Funds (25% of capital plan rating) | High | All of the non-Section 5309 New Starts funds are committed. Sources of funds include General Excise Tax (GET) surcharge revenues, Section 5307 Urbanized Area formula funds, and an American Recovery and Reinvestment Act grant. |
| Capital Cost Estimates, Assumptions and Financial Capacity (50% of capital plan rating) | Medium-Low | Growth in revenue assumptions is comparable to historical experience.<br>The capital cost estimate is considered reasonable.<br>The City has the financial capacity to cover cost increases or funding shortfalls equal to less than 10 percent of estimated project costs. |
| **Project Operating Financial Plan (30% of summary financial rating)** | **Medium-High** | |
| Operating Condition (25% of operating plan rating) | High | The City's current ratio of assets to liabilities as reported in its most recent audited financial statement is 3.18. There have been no service cutbacks or cash flow shortfalls in recent years. |
| Commitment of Funds (25% of operating plan rating) | High | All operating funding is committed. Revenue sources include fare revenues, subsidies from the City's General Fund and Highway Fund, and Federal Section 5307 formula funds. |
| O&M Cost Estimates, Assumptions, and Financial Capacity (50% of operating plan rating) | Medium-Low | Assumed growth in operating expenses and state operating subsidies are optimistic compared to historical experience. Assumed farebox collections and sales tax revenues are consistent with historical experience.<br>The operating cash flow assumes a balanced budget, with no accrual of an operating surplus or reserve. |

# Honolulu High-Capacity Transit Corridor Project

Honolulu, Hawaii