FY 2011 NEW STARTS FINANCIAL ASSESSMENT

PROJECT: Honolulu High Capacity Transit Corridor Project
PROJECT LOCATION: Honolulu, Hawaii
REVIEW DATE: September 2, 2009

FINANCIAL RATINGS SUMMARY

Comparison of FY 2009, FY 2010 and FY 2011 Ratings
(1 = *Low*; 2 = *Medium-Low*; 3 = *Medium*; 4 = *Medium-High*; 5 = *High*)

	Overall Financial Rating	Non-Section 5309 New Starts Share Rating	Project Capital Financial Plan Rating	Project Operating Financial Plan Rating
FY 2009				
FY 2010				
FY 2011	3	5	3	3
Change	–	–	–	–

Capital Finance Plan

	Capital Condition	Commitment of Capital Funds	Capital Financial Capacity/ Cost Estimates and Planning Assumptions
FY 2009			
FY 2010			
FY 2011	**3**	**5**	**1**
Change	–	–	–

Operating Finance Plan

	Operating Condition	Commitment of O&M Funds	Operating Financial Capacity/ O&M Cost Estimates and Assumptions
FY 2009			
FY 2010			
FY 2011	**3**	**5**	**2**
Change	--	–	–

New Information/Changes

Factor	General Comments
Non-Section 5309 New Starts Share	*High* rating assigned. Non-Section 5309 New Starts funds are proposed to be 71 percent of the total project cost, which qualifies for a *High* rating.
Project Capital Financial Plan	*Medium* rating assigned. The project financial plan presents very little capacity to absorb cost increases or funding shortfalls, and has potentially significant revenue risks.
Capital Condition	*Medium* rating assigned. Reflects the average age of the bus fleet (9.2 years) and the bond ratings of the City and County of Honolulu (double-A).
Commitment of Funds	*High* rating assigned. All non-Section 5309 funds are committed, though the funds may not be available in the amount forecasted.
Capital Cost Estimates, Assumptions and Financial Capacity	*Low* rating assigned. Reflects concerns about revenues, debt capacity, and the City's capacity to absorb potentially large revenue risks.
Project Operating Financial Plan	*Medium* rating assigned. Reflects good current operating condition and commitment of funds.
Operating Condition	*Medium* rating. Ratio of current assets to current liabilities is 1.32.
Commitment of Funds	*High* rating assigned. All operating funds are from City-controlled sources. However, due to the substantial increase in operating subsidies that are forecasted, with no new source of funds identified to cover the increase, the forecast assumes a much higher rate of transfers from other City funds, the impacts of which are not identified.
O&M Cost Estimates, Assumptions, and Financial Capacity	*Medium-Low* rating assigned. Unit cost growth is optimistic relative to historical experience. It is questionable whether the operating subsidy required by the project could be absorbed by the City without tangible cuts in City services or increases in other taxes. O&M costs for the project may be understated.

PROJECT SUMMARY

PROJECT DESCRIPTION

The Honolulu High Capacity Transit Corridor Project ("the Project") is being undertaken by the City and County of Honolulu ("the City"). The corridor stretches across southern O'ahu, from Kapolei in the west to Ala Moana Center in the east. The locally preferred alternative (LPA) for the project, adopted in 2006, uses a 3rd-rail electrified rail technology throughout the corridor.

The Project is a 20.2-mile light rail line extending from East Kapolei in the west to the Ala Moana Center in the east. The alignment would include 21 stations and will be a dual guideway with 19.5 miles elevated and 0.7 miles constructed at-grade. The Project is expected to be constructed in phases, each with similar construction activities. Phase I will be the portion between East Kapolei and Pearl Highlands, and will also include construction of the vehicle maintenance and storage facility. The remainder of the Project (Phase II) would be built in three overlapping sub-phases continuing Koko Head from Pearl Highlands first to Aloha Stadium, then to Middle Street, and finally to Ala Moana Center. Individual construction phases would be opened as they are completed. The entire Project is scheduled to be in operation in FY2019. Conceptual design for the Project continues and work on the first construction phase is anticipated to begin in early calendar year 2010. Cost estimates for the Project presented in this Financial Plan assume that the Project is a steel wheel on steel rail technology operating on a combination of at-grade and elevated portions of guideway using high floor vehicles and a barrier-free fare collection system. While these assumptions could change as the project evolves, the cost estimates that follow are based on these project characteristics.

In the financial plan, the Project is assumed to open in March 2019. The City's fiscal year (FY) ends in June, thus the first full year of operation of the Project would be in FY 2020. The Project is estimated to cost $5,348 million in year-of-expenditure (YOE) dollars. The Project is forecasted to carry 97,000 daily trips in its opening year and 116,000 trips in 2030.

PROJECT DEVELOPMENT PHASE

- The City is requesting entry of the Project into Preliminary Engineering.
- The schedule presented in the August 2009 financial plan indicates:
  - Completion of NEPA in late 2009
  - FTA Record of Decision in 2009.
  - Execute full funding grant agreement in early 2011.
  - Begin full-length Revenue Operation in 2019.

LOCAL PROJECT SPONSOR

The City and County of Honolulu, referred to as the City in the rest of this document.

AGENCY DESCRIPTION

The City is the project sponsor, through its Department of Transportation Services (DTS).

The City is a body politic and corporate, as provided in Section 1-101 of the Charter of the City and County of Honolulu 1973, as amended (RCH). The City's governmental structure consists of the Legislative Branch and the Executive Branch. The legislative power of the City is vested in and exercised by an elected nine-member City Council whose terms are staggered and limited to no more than two consecutive four-year terms. The executive power of the City is vested in and exercised by an elected Mayor, whose term is limited to no more than two consecutive full four-year terms. The City is authorized under Chapter 51 of the Hawai'i Revised Statutes to "acquire, condemn, purchase, lease, construct, extend, own, maintain, and operate mass transit systems, including, without being limited to, motor buses, street railroads, fixed rail facilities such as monorails or subways, whether surface, subsurface, or elevated, taxis, and other forms of transportation for hire for passengers and their personal baggage." This authority may be carried out either directly, jointly, or under contract with private parties. The City is the designated recipient of FTA Urbanized Area Formula Funds apportioned to the Honolulu and Kailua-Kaneohe urbanized areas.

The DTS is authorized under RCH Chapter 17 and consists of an appointed DTS Director who is the administrative head of the department, a transportation commission, and necessary staff. The DTS Director's powers, duties, and functions include planning, operating, and maintaining transportation systems, including transit. The DTS Director reports to the City Managing Director who is the principal administrative aide to the Mayor. Section 2-12.1 of the Revised Ordinances of Honolulu, as amended (ROH), assigns to the DTS Director the responsibility of planning, designing, operating, and maintaining the automated fixed guideway rapid transit system and for planning, administering, and coordinating those programs and projects that are proposed to be funded under the Federal Transit Act, as amended.

The DTS' Rapid Transit Division will be responsible for planning, designing, implementing, and operating the Project. The Public Transit Division of DTS is responsible for the City's fixed route and paratransit services operated under contract by O'ahu Transit Services, Inc. The City's fixed route bus system is referred to as "TheBus." TheBus serves the entire island of O'ahu with 91 bus routes, and carries more than 70 million unlinked passenger trips each year. O'ahu Transit Services operates the City's paratransit services, referred to as the "TheHandi-Van." TheHandi-Van serves over 13,000 eligible customers, and carries 750,000 unlinked passenger trips per year.

The local funding source for the Project is a one-half percent (0.5 percent) surcharge on the State of Hawai'i's General Excise Tax and Use (GET), first authorized in 2005, and adopted by the City in Ordinance No. 05-027, which established a 0.5 percent GET surcharge. The GET surcharge commenced on January 1, 2007, and will be levied through December 31, 2022. Business activities that are subject to the 4% GE tax rate, such as retailing of goods and services, contracting, renting real property or tangible personal property, and interest income, are also subject to the GET surcharge. This source of revenue is to be exclusively used for operating and/or capital expenditures of a fixed guideway system. The Hawai'i State Department of Taxation collects the GET surcharge and remits it to the City, net of a 10 percent administrative charge.

PROJECT FINANCIAL SUMMARY

Total capital cost ($YOE)			$ 5,347,681,000
			(including $290,300,000 in financing charges)
Section 5309 New Starts Share	*$ 1,550,000,000*	*29.0%*	
Non-Section 5309 New Starts Share	*$ 3,797,681,000*	*71.0%*	
Annual project O&M costs (first full year of operation [FY 2020])			$ 85,908,000
Total systemwide annual O&M costs (current year)			$ 189,513,000
Total systemwide annual O&M costs (first full year of New Starts Operation)			$ 356,951,000

REGIONAL ECONOMIC CONDITIONS AND FORECASTS

Honolulu County, comprising the entire island of Oahu, has traditionally experienced steady population and employment growth.

Honolulu County population increased at roughly 0.4 percent annually between 1990 and 2008, according to recent Census Bureau estimates. The annual growth rate since 2000 mirrored this longer-term trend. A population forecast was not submitted with the financial plan. However, the Hawaii Department of Business, Economic Development & Tourism (DBEDT) forecasts 0.55 percent annual population growth for Honolulu County through 2030.

Employment likewise experienced steady growth until recently. Between 1999 and 2008, employment (as reported by the Bureau of Labor Statistics) grew at 0.6 percent annually. Employment peaked in March 2008, at about 442,000, but declined to about 436,000 as of July 2009. The current unemployment rate – 6.1 percent – is one of the lowest metropolitan area unemployment rates in the country. At peak employment in March 2008, the unemployment rate was just 2.6 percent.

The financial plan includes a forecast of the General Excise and Use Tax (referred to as the GET) that is the primary source of capital funding for the Project. After a period of sustained growth, GET revenues experienced year-over-year losses in four of the past five quarters. The GET forecast included in the financial plan is more bullish than a recent forecast prepared by the Council on Revenues (COR), a group that advises the Governor of Hawaii. The GET forecast is analyzed in some detail in the Capital Financial Plan section of this report.

IMPLEMENTATION ISSUES

- **Other Planned Capital Projects in the Region.** No other projects were identified as being dependent on or linked to the Project.

- **Legislation, Referenda, or Planning Approvals Needed.** The City intends to request a letter of no prejudice (LONP) from FTA so that it can commence construction of Phase 1 of the Project prior to execution of the FFGA. The total cost of Phase 1 is $1,567 million, or approximately 29 percent of total project cost. The City plans to award design-build contracts prior to the FFGA for guideway, maintenance and service facilities, and systems & vehicles, as well as a design contract for stations.

- **Innovative Financing Techniques Under Consideration.** None are being considered for this project.

FINANCIAL RATINGS

Assessment of Local Financial Commitment — *High*

Proposed Non-Section 5309 New Starts Share of Project Capital Costs

$ 3,797,681,000	71.0 %

The proposed Non-Section 5309 share exceeds the threshold of 65 percent for a *High* rating.

ASSESSMENT OF CAPITAL FINANCE PLAN

Current Capital Condition of Agency — *Medium*

The average age of the City's bus fleet is 9.2 years (New Starts Finance Template, dated 8/19/09). The average age of the demand-responsive fleet is 4.7 years (New Starts Finance Template, 8/19/09). The bus fleet age was the oldest recorded in the time period researched with NTD data (2003-2008). The demand-responsive fleet age was slightly higher than the average over that period (4.6 years).

The latest City general obligation bond issue (May 2009) was rated AA by Standard & Poor's, Aa2 by Moody's, and AA by Fitch. No changes in the City's ratings have been reported since.

The capital condition rating based solely on fleet age would be *Medium-Low*, while the capital condition rating based solely on bond ratings would be *Medium-High*. Because this is more than a one-step difference, the rating is an average of the two, or *Medium*.

Commitment of Capital Funds — *High*

Table 1 presents the sources of capital funds for the project. Ninety-five point three percent of the funding sources are "committed." This exceeds the threshold of fifty percent for a *High* rating for a project in preliminary engineering.

The non-New Starts funds consist of five sources, which in order of magnitude are: (i) GET surcharge revenues, $2,442.4 million; (ii) general obligation bonds issued by the City that would be repaid from GET surcharge revenues, $1,042.7 million; (iii) FTA Section 5307 Urbanized Area funds, $300.7 million; (iv) interest earned on cash balances, $7.9 million; and (v) American Reinvestment and Recovery Act (ARRA) of 2009 funds, $4.0 million. The GET surcharge revenues (64.3 percent of non-New Starts funds) are considered "committed"; these funds are under the direct control of the City and County of Honolulu for the purposes of this Project. Since the GET surcharge revenues will be used to pay Project-related debt service, and will be the sole basis for interest earnings, these latter two sources are also considered "committed." The FTA 5307 Urbanized Area funds are considered "committed" through the end of the current six-year programming period, ending in the City's fiscal year 2014. During that period, the Section 5307 funds to be applied to the project total $127.5 million. The remaining $173.2 million in Section 5307 funds are considered "planned."

The GET surcharge revenues derive from a 0.5 percent surcharge on the 4 percent general excise tax levied by the State of Hawaii. The surcharge applies only to taxable activities in Honolulu County. The tax commenced in January 2007 and will sunset in December 2022. The revenues from the surcharge are to be exclusively used for operating and/or capital expenditures of a fixed guideway system. The GET

surcharge revenues cited in Table 1 include the carry-forward balance at the beginning of fiscal year (FY) 2009 ($153 million) and the revenues forecasted to be collected in fiscal years 2009-2019, less $62 million expended in FY 2009 prior to approval to enter preliminary engineering.

The bonds to be issued for the project are contemplated to be general obligation (G.O.) bonds issued by the City. The amount of bonds shown in Table 1 ($1,042,740) is the outstanding principal when the project is completed in 2019. The City plans to issue another $811,973,000 in bonds that would be retired during the construction period. The borrowing plan also includes $500 million in short-term debt. This debt is not shown as a source of funds because it will be retired or refunded before the end of the construction period.

Debt service on the bonds would be paid from GET surcharge revenues. The bonds would be issued every year beginning in fiscal year 2013 (ending June) and terminating in FY 2019. The bonds are to be fully repaid in FY 2023. The GET surcharge terminates in December 2022. Due to a lag in collecting the revenue, cash income from the GET surcharge is anticipated to continue to flow to the project through the end of March 2023 (i.e., the third quarter of FY 2023).

The amount of G.O. debt to be issued is within the City's "affordability guidelines" for self-supporting G.O. bonds. These guidelines limit G.O. debt service to 20 percent of the City's total operating budget. In the final year of construction (FY 2019), G.O. debt service, including the bonds issued for the Project, is forecasted to be 19.4 percent of the City operating budget.

In prior ratings for the Project, the City's debt capacity was more constrained because a greater amount of debt was planned. The September 2008 financial plan, for example, included $2,244 million in bond proceeds, whereas the current financial plan (August 2009) includes $1,854 in bond proceeds. The amount of long-term debt to be issued was reduced, compared to the prior plan, by including $500 million in short-term debt (to which the above affordability guidelines do not apply) and by including FTA Section 5307 funds in the Project financing plan. These changes, along with an increase in New Starts funding, offset the effects of a lower revenue forecast and an increase in Project cost, thereby reducing the need for long-term G.O. bonds, and thus reducing total G.O. debt service to a point below the affordability threshold.

Capital Cost Estimates, Planning Assumptions, and Financial Capacity *Low*

The capital cost estimates and schedule, Federal funding assumptions, financing costs, and financial capacity analyses for the project are presented below.

Project cost and schedule

The Project Management Oversight Contractor (PMOC) – Jacobs Engineering – issued a spot report in July 2009, presenting its assessment of the Project's cost and schedule risk. The PMOC recommended an increase of $116.8 million in the capital cost of the project, bringing the total capital cost (at that time) to $5,288 million. The PMOC noted that the revised total includes $1.219 billion (YOE) total contingency or 31.8% of the adjusted baseline cost estimate (BCE). The net cost increase was said by the PMOC to be primarily the result of line item adjustments to the BCE for vehicle quantity and escalation rates used to estimate year-of-expenditure costs.

The City incorporated this increase in its financial plan, but also found it necessary to increase the Project's financing costs by $59 million, bringing the total cost for the Project to the current $5,347 million.

The PMOC also recommended a project completion date of no earlier than August 2019. This recommendation has not been reflected in the financial plan, but would have an immaterial impact on this financial assessment.

Federal funding assumptions

The capital finance plan assumes receipt of Section 5309 New Starts funds of $1,550 million, as follows: $35 million in 2010; $80 million in 2011; $200 million in 2011; $250 million in both 2013 and 2014; $200 million annually, 2015-2017; and $135 million in 2018. This level of annual funding is well above that of New Starts projects in medium to large metropolitan areas, but has been accepted by FTA for planning purposes.

The capital plan includes assumptions on two other sources of Federal funds – Section 5307 formula funds and Section 5309 bus funds. The 5307 formula funds are forecasted at a reasonable rate, approximately 2.9 percent annually. This is well below the 8.4 percent annual rate in funds apportioned to Honolulu over the past four years. Section 5309 bus funds are assumed to be roughly 34 percent of on-going bus capital expenditures, averaging about $13.7 million annually in 2009 dollars, an estimate prepared by the reviewer using a 3 percent discount rate applied to the stream of YOE estimates. Over the past five years, actual earmarks have been about half that amount, or about $6.8 million annually. Thus, the section 5309 bus funding assumption is considered to be optimistic.

Financing costs

The project cost estimate includes $290.3 million in financing costs, which is approximately 5.4 percent of total project cost. The financing costs include $18 million in issuance cost, and $272 million in interest costs, calculated for the period 2013-2019. These financing costs are associated with $1,854 million in bonds, and $500 million in short-term financing, that will be used to finance the construction cash flow.

Interest cost on the bonds is estimated at different rates, depending on the term of the bond. The bonds are to be issued every year between 2013 and 2019. The average term of the bonds is eight years; the term is relatively short because the bonds must be repaid by the time the GET surcharge revenues terminate in FY 2023. The weighted average interest rate is 3.96 percent. This is slightly higher than the current yield on an AA-rated general obligation bond (about 3 percent); however, current yields are at a low and the City is prudent to plan on a higher rate. The issuance cost for the bonds is assumed to be 1 percent, which is a reasonable rule of thumb.

The $500 million in short-term financing is assumed to be in the form of tax-exempt commercial paper (TECP). TECP issued for the Project would be $214 million in 2013, growing to $500 million the following year, and would then be rolled over annually until 2017. The City currently has a $250 million TECP program; the financial plan assumes that this program can be extended to support the additional short-term debt needed for the Project. The interest rate for this debt is assumed to be 1.66 percent, which is about 120 basis points (1.2 percent) above the current market yield for one-year, AA-rated notes (0.44 percent). As with the bond interest rate noted above, this is a historically low rate and the City is prudent to plan on a higher rate. One-year rates averaged 2.46 percent over the past five years, which suggests that the City's assumption, while reasonable relative to the current market, is not conservative relative to recent history. The issuance cost for TECP is assumed to be 0.25 percent of the TECP proceeds.

The financing costs for the Project appear to be understated by about $24.7 million, or 8.5 percent. Although the above rates are reasonable, the calculations for short-term interest cost and for issuance costs are understated – short-term interest costs were calculated to be about 0.91 percent of outstanding principal, rather than 1.66 percent; and issuance costs are apparently calculated only on the bonds. Also,

if the TECP issuance cost was included, it should be calculated on the annual issues, not just the total outstanding principal, since the debt will be rolled over (i.e. resold) annually.

It should be noted that the financial plan excludes debt service costs associated with fleet replacement and acquisition, and bus facility projects. The plan anticipates $571 million in City capital funding for these projects, which is assumed to be in the form of general obligation bonds. There is not enough information in the financial plan to estimate the amount of debt service that would be associated with these bonds.

Agency-wide capital cash flow

The analysis of the agency-wide capital cash flow focused on the forecast of GET surcharge revenues, the proposed debt structure, fleet replacement costs, and year-end cash balances.

GET SURCHARGE REVENUES

GET surcharge revenues are the linchpin of the capital financial plan. These revenues are the dominant source of local capital funds, and serve as the security for bonds and TECP issued to support construction. Although the GET surcharge raises a significant amount of revenue, there is downside risk to the forecast. Given that GET surcharge revenues are highly leveraged in the financial plan, any shortfall in revenue would have material consequences on the City's ability to finance the local share of project cost, unless other sources of capital funds are identified.

The collection of GET surcharge revenues commenced in January 2007. GET surcharge revenue has consistently been less than forecasted. Through the end of FY 2009 (June), cumulative actual revenues were $337 million. In the November 2007 financial plan, GET surcharge revenues were to have totaled $411 million ("Forecast B") by the close of FY 2009, and in the September 2008 financial plan they were to have totaled $363 million.

The annual forecasted growth rate for the GET surcharge revenues in Honolulu County in the current financial plan – 5.4 percent – approximates the historical GET revenue growth in Honolulu County over the last ten fiscal years (5.3 percent, 1999-2009). This period was characterized by rapid economic growth – GET revenues experienced double-digit growth between 2003 and 2007. Since then, growth has cooled, experiencing year-over-year losses in four of the past five quarters. The financial plan forecast is higher than a recent forecast prepared by the Council on Revenues (COR), a group that advises the Governor of Hawaii. The COR forecasts 3.4 percent annual growth through 2015. Although the COR forecast is for the entire State of Hawaii, the historical GET growth rates for the state and for Honolulu County are highly correlated (i.e., Pearson's correlation coefficient exceeding 0.99). The COR forecast approximates the longer-term growth rate in GET revenues, which averaged 3.6 percent annually between 1991 and 2009.

If the forecast were restated to reflect the COR's forecasted rate of growth for GET revenues, the revenue shortfall would be about $80 million through 2015. If the financial plan's forecasted growth rates were applied from that point forward, the shortfall would total about $322 million through 2023.

DEBT STRUCTURE

The proposed debt structure fits within the City's affordability guidelines, but has no additional capacity to address cost increases or revenue shortfalls.

The financial plan assumes that all debt issued for the project, other than the TECP described above, will be general obligation (G.O.) debt, thereby obviating the need to maintain a minimum debt service coverage ratio or to fund a debt service reserve. The financial plan also assumes that debt issued in a given year would have no current-year interest payment, which is reasonable only if the bond proceeds

are needed late in the fiscal year. Collectively, these features maximize the amount of debt that could be supported by GET surcharge revenues.

The City's affordability guidelines restrict G.O. debt service to 20 percent of the City's operating budget, for all "direct" and "self-supporting" bonds. The City has confirmed that the debt issued for the Project will be considered "self-supporting" bonds, since the debt service will be paid with GET surcharge revenue. The City provided a forecast of the operating budget through 2023 (the final maturity of Project-related debt), and a forecast of G.O. debt service, including that associated with debt issued for the Project. The forecast of the City operating budget and other G.O. debt appeared reasonable, but was not vetted in detail. At its maximum point, total G.O. and self-supporting debt service would equal 19.6 percent of the forecasted City operating budget at 2018. This translates to $12 million in additional capacity for debt service. This capacity could be interpreted as about $300 million in additional principal that could be financed at the financial plan's assumed interest rate (about 4 percent), or could be viewed as a contingency that would cover a 0.1 percent increase in the weighted average interest rate for all G.O. and self-supporting debt.

The GET surcharge revenues that will be applied to Project-related debt service provide very slim coverage. The debt service coverage ratio is 1.0 – the absolute minimum – in fiscal years 2019 through 2021. Although there is no coverage requirement per se associated with G.O. debt, the slim margin in debt capacity coupled with the slim coverage ratio effectively means there is no additional financial capacity to address funding shortfalls or cost increases.

FLEET REPLACEMENT COSTS

Fleet replacement costs are adequately funded in the financial plan, but rely on much higher Section 5309 bus funding than was the case in prior financial plans. The Bus Fleet Plan indicates that the average fleet age will decline (improve) to 6.8 years in the horizon year of the forecast (FY 2030) from 9.3 years in FY 2009. A fleet plan for the demand-responsive fleet was not available. However, the replacement requirements of the current fleet are comfortably covered in the fleet cost estimates.

YEAR-END CASH BALANCES

The year-end cash balance at FY 2023, the last year of debt service and the last year that GET excise revenues are allocated to the project, is $29 million. During the heaviest years of construction (2012-2019), the ending cash balance is zero. The cash flow is at the margin of feasibility.

Capital financial capacity

The capital financial capacity threshold for a *Medium* rating for a project in preliminary engineering is 25 percent of estimated project cost, or $1.34 billion. The threshold for a *Medium-Low* rating is 10 percent of estimated project cost, or $535 million. One may consider three sources of funds to provide this capacity: GET surcharge revenues, forecasted year-end cash balances, and additional financial support from the City or other beneficiaries of the Project.

GET surcharge revenues are unlikely to provide any further capacity beyond what is already assumed in the financial plan – the revenue forecast appears to be overstated based in comparison to long-term trends and in comparison to the COR forecast; there is no net capacity in the baseline forecast after debt service requirements are met; and there is scant debt capacity remaining within the City's affordability guidelines.

Year-end cash balances show that relatively little remains after meeting the project's currently-estimated costs – just $29 million after the bonds are paid off in 2023.

The financial capacity of the City to provide additional support to the project is a complicated question that cannot be reasonably answered in the scope of this review. However, given the relative optimism of other assumptions affecting the amount of City funds that would be needed to support the Project and the other elements of the transit system (e.g., GET surcharge revenue forecast, section 5309 bus funds, funding of operating subsidy requirements), it seems reasonable to conclude, until and if supporting information is presented, that the City lacks the capacity to provide the additional funds necessary to support a *Medium* or *Medium-Low* rating.

The financial plan references several other options that could conceivably be tapped to provide additional funds or to reduce Project cost – reducing the amount of GET surcharge revenues that are retained by the State (currently 10 percent); accessing Federal airport funding programs to support eligible Project costs; implementing various value capture mechanisms (e.g., assessment districts, tax increment financing); and acquiring military funding. However, none of these concepts have been developed to the point that would allow their reasonableness to be established.

Rating

The capital cost estimates/planning assumptions subfactor is rated *Low*. The major factors contributing to this rating are: (i) material downside risks to the GET surcharge revenue forecast, and consequently the inability to cover all debt service cost; (ii) no net debt capacity; and (iii) lack of information to substantiate the City's capacity to absorb a material amount (up to $535 million) of cost risk. In addition to these concerns, bus capital funding – clearly needed as evidenced by the relatively old age of the bus fleet – depends on a much higher level of Federal funding than has previously been the case.

Summary Capital Plan Rating *Medium*

The summary capital plan rating is *Medium*, reflecting: (i) a capital condition score of *Medium*, weighted at 25 percent; (ii) a capital funding commitment score of *High*, rated at 25 percent; and (iii) a capital cost/planning assumptions/capacity score of *Low*, weighted at 50 percent. The weighted score is 2.5, which is rounded to a score of 3.0, or *Medium*.

Table 1
Proposed Sources of Capital Funds ($000 Year of Expenditure)

	Amount ($)	% of Total	Level of Commitment*	Maturity of Sources**	Planning and PE Funds Expended to Date
Federal Section 5309	$1,550,000	29.0%	N/A	N/A	
Other Federal:					
FTA Sec. 5307 (TIP period)	$127,508	2.4%	C	E	
FTA Sec. 5307 (after 2014)	$173,210	3.2%	P	E	
Other					
Subtotal Other Federal	**$300,718**	5.6%			
State:					
Subtotal State	**$0**				
Local:					
Honolulu G.O. Bonds	$1,042,735	19.5%	C	N	
GET Surcharge Revenues	$2,442,350	45.7%	C	E	
ARRA Funds	$4,000	0.1%	P	N	
Interest earnings	$7,878	0.1%	C	N	
Subtotal Local	**$3,496,963**	**65.4%**			
Other:					
Subtotal Other	**$0**				
Total	**$5,347,681**	**100.0%**			**$0**

* Commitment Codes	
Committed	C
Budgeted	B
Planned	P
Uncertain	U
Not Specified	NS

** Maturity Codes	
Existing	E
New	N
Not Specified	NS

Level of Commitment of Capital Funds

	Amount ($)	%
Committed	$3,620,471	95.3%
Budgeted	$0	0.0%
Planned	$177,210	4.7%
Uncertain	$0	0.0%
Not Specified	$0	0.0%
Total	**$3,797,681**	**100.0%**

Maturity of Capital Funding Sources

	Amount ($)	%
Existing	$2,743,068	72.2%
New	$1,054,613	27.8%
Not Specified	$0	0.0%
Total	**$3,797,681**	**100.0%**

ASSESSMENT OF OPERATING FINANCE PLAN

Current Operating Condition of Agency *Medium*

Financial reporting for the operation of transit services by the City of Honolulu is provided in the City's Public Transportation System Fund. At the close of FY 2008 (June), that fund had current assets of $26.5 million and current liabilities of $20.1 million, yielding a current ratio of 1.32, indicating sound financial condition. The Public Transportation System Fund held cash and investments of $11.2 million, which is about 6.3 percent of annual operating cost.

Two other funds which support public transit operations via interfold transfers – the General Fund and the Highway Fund – are governmental funds, for which the annual financial reports do not distinguish between current and long-term assets and liabilities. However, total assets in both funds substantially exceed total liabilities, and the funds collectively reported an unreserved fund balance of $126.5 million.

According to operating data reported through the National Transit Database (NTD), service levels (i.e., vehicle revenue miles) were fairly steady between 2002 and 2008 for both bus and demand-response services. Fares were increased in 2001 and 2003, pursuant to a City Council resolution that mandates a fare recovery ratio of between 27 percent and 33 percent. There have been no subsequent fare increases, although a fare increase is planned in FY 2010. The fare recovery ratio reported through NTD in 2008 for the bus system was 27 percent. The observed price elasticity for the 2003 fare increase, estimated from NTD data, was -0.06, indicating a fairly low degree of price sensitivity. This estimate adjusts for the lower level of service operated in 2004, reflecting a one-month strike by transit workers.

The operating condition rating is *Medium*. This is based on the current operating ratio of 1.32 and the absence of service cutbacks in recent years, both of which qualify the *Medium* rating.

Commitment of Operating and Maintenance Funding *High*

Transit operating funds for the opening year of the project (FY 2019) are presented in Table 2.

The operating funds total approximately $357 million. These funds consist of: (i) Federal formula funds, $23.3 million (7 percent); (ii) operating revenues, composed almost entirely of passenger revenues, $108 million (30 percent); and (iii) operating subsidies from the City's General Fund and Highway Fund, $225 million (63 percent).

All these funds are considered to be "committed", since they are under the direct control of the City. Thus, this subfactor is rated *High*.

However, as noted below in the operating financial capacity section, the forecasted subsidies would require the City to transfer to the Public Transportation System Fund a higher share of the General Fund and Highway Fund than has historically been the case.

Operating and Maintenance Cost Estimates, Planning Assumptions, and Financial Capacity *Medium-Low*

The evaluation of this subfactor focused on the project's O&M costs, system-wide operating trends, and operating financial capacity.

Project O&M costs

The Project is projected to cost $85.9 million in its first full year of operation (2020). Approximately 6.8 million annual vehicle revenue miles will be operated, yielding a unit cost in 2020 of $12.56 per vehicle revenue mile. The rail operating cost estimate was reviewed by an FTA consultant in June 2009. The cost estimate was developed from an operating analysis of the Washington, DC, Metrorail system, from which a series of adjustments were made to make the model representative of conditions in Honolulu. The Metrorail system was not a first choice, nor the only choice, to use as a base for the operating cost model. In fact, the Honolulu rail line was said in the report to be analogous to rapid transit operations in Vancouver, BC and Kennedy International Airport (Air Train). The report noted the difficulty in using the Metrorail data to approximate the Honolulu operation, and questioned some of the cost adjustments.

A comparison of the unit cost ($12.56, 2020$) to the unit cost of heavy rail and high-speed light rail operators indicates that the financial plan assumptions are optimistic. The 2020 unit cost was discounted to 2007 dollars, at a 2.5 percent annual discount rate, yielding a unit cost of $9.11. This was compared to 2007 actual results for a collection of heavy rail systems – WMATA Metrorail ($10.39); Los Angeles MTA ($14.59); Baltimore ($10.68); and Miami ($9.65). The average of these systems was $11.33. BART was considered but excluded due to its very high operating speed (34.9 mph). The Honolulu unit cost estimate was also compared to two high-speed light rail operations – Dallas ($15.28) and Los Angeles MTA ($16.63). The estimated unit cost for Honolulu ($9.11) is lower than any of these systems. It is 20 percent lower than the heavy rail average, and is 43 percent lower than the light rail average. Although more information is needed about the planned operation, these results suggest that the rail operating cost estimate has much more upside risk than downside risk. Also worth noting is the relatively low rate of growth in rail unit costs – between 2019 and 2030, rail unit cost is forecast to grow at 1.5 percent annually, a full point below inflation.

The Project will have a significant operating impact. Its net cost at 2020 ($85.9 million) is about 32 percent of the cost of bus and Handi-Van services. The Project will add 6.8 million revenue vehicle miles, a 26 percent increase relative to bus and Handi-Van services.

Operating trends

The review of operating trends focused on inflation assumptions, unit costs, the firebox recovery ratio, and operating subsidies.

The forecasted rate of inflation is 2.5 percent annually beginning in 2012 and continuing through the horizon year of the forecast (2030). The inflation rate for the period 2010-2012 was not cited. The Honolulu CPI-U, as reported by the Bureau of Labor Statistics, averaged 3.1 percent between 1999 and 2008. In the first half of calendar year 2009, Honolulu inflation fell to just 0.8 percent (nationally, there was a 0.5 percent decline). The long-term inflation assumption may be slightly optimistic.

The financial plan assumes a steady increase in bus and demand-response services throughout the forecast. Bus vehicle revenue miles are assumed to grow from about 19.4 million miles currently to 21.6 million miles at 2030, or a growth rate of about 0.5 percent annually. In contrast, bus service levels were nearly constant between 2003 and 2008.

The operating costs of bus and demand-response services were based on a cost build-up model, calibrated to current operations. The disaggregate unit costs were escalated at the assumed rates of growth in the CPI. The average unit costs that result from this procedure show a lower compound annual growth rate than near-term history indicates. Bus operating cost per vehicle revenue mile is forecasted to grow at 2.8 percent between 2009 and 2030, whereas the actual rate of growth between 2004 and 2008 was 4.1 percent. Demand-response cost per vehicle revenue mile is forecasted to grow at 2.4 percent between 2009 and 2030, whereas the actual rate of growth between 2004 and 2008 was 10.7 percent. Thus, the operating cost forecast for both bus and demand-response service is considered to be optimistic.

The financial plan assumes that fares will increase in 2010 (per the budget), 2015 (following the opening of Phase 1), and 2023 (following the opening of Phase 2). Although the fare is planned to increase in steps, the changes in fares approximate inflationary growth throughout the forecast period, and are consistent with the demand modeling assumption. The resulting fare recovery ratio averages 34 percent (2010-2030), which is higher than the five-year historical average (26 percent). This is due to two factors: (i) the introduction of rail system, which is forecasted to have an average 52.9 percent fare recovery ratio; and (ii) relatively low unit cost growth for bus and Handi-Van services.

Operating subsidies are forecast to grow at 4.3 percent, on average, for the forecast period, with near-term rates being higher (5.6 percent, 2009-2018) and the out-years being lower (1.7 percent, 2019-2030). This is a lower rate of growth than experienced over the past five years (8.5 percent), and is also less than the longer-term trend (6.3 percent annually, 1998 to 2008).

Although the forecasted rates of growth in operating subsidies are below historical growth rates, the forecast requires increasing levels of transit subsidy relative to the funds from which the subsidies are transferred – the General Fund and the Highway Fund. Between 2000 and 2010, transit operating subsidies were, on average, 10 percent of combined General Fund-Highway Fund revenues. Between 2010 and 2030, operating subsidies are forecast to average 14 percent of General Fund-Highway Fund revenues, reaching a maximum of 17 percent when the full line opens in 2019. Although there was one year when the historical percentage approached the forecasted average (e.g., 14.8 percent in 2001, when the resolution was passed to keep the firebox recovery ratio between 27 percent and 33 percent), it was an anomaly. An increase from 10 percent to 14 percent of General Fund-Highway Fund revenues is significant. If the forecasted rate (14 percent) were put into effect today, it would leave about $44 million less revenue for General Fund and Highway Fund programs.

Operating Financial Capacity

The operating cash flow assumes a balanced budget, with no accrual of an operating surplus or reserve. Thus, the 2008 year-end cash and investments held in the Public Transportation System Fund ($11.2 million) could be assumed to be constant. These funds represent 6.3 percent of operating costs in 2008, and would represent 3.2 percent of operating costs in 2019 when the Project fully opens. In 2030, these funds would represent 2.3 percent of operating cost.

Rating

The cost estimates/planning assumptions/financial capacity subfactor is rated *Medium-Low*. Several observations support this rating. First, it is questionable whether the City can afford the growth in subsidies presented in this financial plan, which require a higher portion of the General Fund and Highway Fund revenues than has historically been the case. Second, the subsidies could be yet higher due to optimistic assumptions regarding operating cost growth for all services. Third, the projected cash balances of the Public Transportation System Fund, inferred from current cash plus investments and the forecasted balanced budget, fall below the 1.5 month standard (12 percent of operating costs) that would be needed to support a higher rating. Finally, there is some prospect that the Project's O&M costs could be understated, based on a comparison to heavy rail and light rail operations in the U.S.

Summary Operating Plan Rating *Medium*

The operating plan is rated *Medium*, based on: (i) a *Medium* rating for operating condition, weighted at 25 percent; (ii) a *High* rating for operating funding commitment, weighted at 25 percent; and (iii) a *Medium-Low* rating for operating cost estimates/planning assumptions/capacity, weighted at 50 percent. The weighted score is 3.0, or *Medium*.

Table 2
Proposed Sources of Annual Operating Funds ($000)

	Amount ($)	% of Total	Level of Commitment*	Maturity of Sources**
Federal:				
5307 Formula	$23,347	6.5%	C	E
CMAQ				
Other				
Subtotal Federal	**$23,347**	6.5%		
State:				
Subtotal State	**$0**			
Local:				
Operating Revenues	$108,425	30.4%	C	E
City/County of Honolulu	$225,178	63.1%	C	E
Subtotal Local	**$333,603**	**93.5%**		
Other:				
Subtotal Other	**$0**	**0.0%**		
Total	**$356,951**	**100.0%**		

*Level of Comm. Codes	
Committed	C
Budgeted	B
Planned	P
Uncertain	U
Not Specified	NS

** Maturity Codes	
Existing	E
New	N
Not Specified	NS

Commitment Status

	Amount ($)	%
Committed	$356,951	100.0%
Budgeted	$0	0.0%
Planned	$0	0.0%
Uncertain	$0	0.0%
Not Specified	$0	0.0%
Total	**$356,951**	**100.0%**

Maturity of Commitment of Capital Funds

	Amount ($)	%
Existing	**$356,951**	100.0%
New	**$0**	0.0%
Not Specified	**$0**	0.0%
Total	**$356,951**	**100.0%**

CONCLUSIONS

- The Honolulu metropolitan area has experienced an economic downturn after several years of robust growth, but appears to have been less effected by the national recession than other metropolitan areas.
- The Honolulu High Capacity Transit Corridor Project will introduce significant capital and operating funding requirements.
- The City's intention to obtain a Letter of No Prejudice (LONP) so that Phase 1 construction can commence prior to the FFGA is unusual, and is conspicuous in scope.
- The GET surcharge revenue forecast has downside risks that could reasonably result in revenues that are inadequate to support debt service payments for the project. The forecast is higher than a recent forecast prepared by the Council on Revenues, and exceeds the long-term growth rate of the GET tax base in Honolulu County.
- The debt financing assumptions for the project maximize the leverage that could be gained from the GET surcharge revenue stream, leaving little if any upside to debt capacity. The Project-related debt will also push the City to its limit of affordability for general obligation debt.
- The operating plan has some optimistic features – operating cost estimates are understated relative to near-term trends (for City operations) and peers (for rail operations); the increase in operating subsidies would require a proportionately greater share of funds to be transferred from the City's General Fund and Highway Fund than has been the case.

RECOMMENDATIONS FOR IMPROVEMENT OF RATING

- The City should provide an <u>independent</u> forecast of GET surcharge revenues from a source that is familiar with the Hawaii economy.
- The City should substantiate its capacity to: (i) provide back-up funds for the Project should there be a cost increase or funding shortfall; and (ii) transfer a greater degree of revenue to the transit program without impacting other necessary City services.
- The operating cost estimate for the Project should be refined and better substantiated.
- The financing of bus and Handi-Van fleet replacements should be less reliant on FTA Section 5309 bus funds.
- The operating plan should be amended to reflect higher rates of unit cost growth for all services.