

FY 2009 NEW STARTS FINANCIAL ASSESSMENT

PROJECT: Honolulu High Capacity Transit Corridor Project
PROJECT LOCATION: Honolulu, Hawaii
REVIEW DATE: June 19, 2008

FINANCIAL RATINGS SUMMARY

Comparison of FY 2007, FY 2008 and FY 2009 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 2007	Not rated			
FY 2008	Not rated			
FY 2009	3	5	3	3
Change				

Capital Finance Plan

	Capital Condition	Completeness of Capital Plan	Commitment of Capital Funds	Financial Capacity	Capital Cost Estimates and Assumptions
FY 2007					
FY 2008					
FY 2009	3		5	1	
Change	–		–	–	

Operating Finance Plan

	Operating Condition	Completeness of Operating Plan	Commitment of O&M Funds	Capacity to Operate & Maintain System	O&M Cost Estimates and Assumptions
FY 2007					
FY 2008					
FY 2009	4		5	2	
Change	–		–	–	

DRAFT: FOR INTERNAL DISCUSSION ONLY

New Information/Changes

Factor	General Comments
Non-Section 5309 New Starts Share	Non-Section 5309 New Starts funds are proposed to be 75.7 percent of the total project cost, which qualifies for a High rating.
Project Capital Financial Plan	Rated Medium. The project financial plan presents very little capacity to absorb cost increases or funding shortfalls, and has potentially significant revenue risks.
Capital Condition	Rated Medium, based on the average age of the bus fleet (8.3 years) and the bond ratings of the City and County of Honolulu (double-A).
Commitment of Funds	Rated High, based on a commitment of 100 percent of non-Section 5309 funds. However, the timing of these funds differs from cash flow needs, and the debt financing plan needs to be refined as the project moves forward.
Capital Cost Estimates, Assumptions and Financial Capacity	Rated Low, due to concerns about revenues, debt capacity, and the City's capacity to absorb potentially large revenue risks, as well as cost risks that exist at this stage of project development.
Project Operating Financial Plan	Rated Medium, due to very good current operating condition and commitment of funds.
Operating Condition	Rated Medium-High, reflecting the current operating ratio of 1.65 (June 2007) and stable service levels.
Commitment of Funds	Rated High – all operating funds are committed. However, due to the substantial increase in operating subsidies that is required by the project, 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	Rated Medium-Low – 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 (HHCTCP) 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 the University of Hawaii at Manoa in the east. The locally preferred alternative (LPA) for the project, adopted in 2006, uses light rail technology throughout the corridor. Due to financial constraints, the City Council in February 2007 selected a minimum operable segment (MOS), East Kapolei to Ala Moana Center, via Salt Lake Boulevard (Resolution 07-039) that could potentially be financed with existing revenues. The MOS is referred to as the “First Project” in the Financial Plan.

The First Project is a 19.5-mile portion of the LPA extending from East Kapolei in the west to Ala Moana Center in the east. The alignment is anticipated to be a dual guideway of which 18.0 miles are elevated, 1.2 miles are at-grade, and 0.3 mile is below grade. There will be nineteen stations. The line would operate at 3-minute headways in the peak, and 6- to 10-minute headways in the off-peak.

The First Project, which is the focus of this financial assessment, may be delivered in phases, with the initial phase being locally funded and a second phase implemented with FTA New Starts assistance. However, the financial plan assumes a single implementation phase and opening date for the entire alignment, with construction starting in FY2008 and continuing through FY2018.

East Kapolei is the western terminus of the First Project. The alignment begins at North- South Road north of Kapolei Parkway. The alignment follows North-South Road in a northerly direction to Farrington Highway where it turns east following Farrington Highway and crosses Fort Weaver Road. The alignment is elevated along North-South Road and a combination of elevated and at-grade along Farrington Highway. The alignment continues in a northeasterly direction following Farrington Highway in an elevated structure. South of the H-1 Freeway, the alignment descends to at- and belowgrade at the Navy Drum Site Maintenance Base and Storage Facility and from there continues on to Leeward Community College. This portion of the corridor was identified in the financial plan as Phase 1, and may be funded with 100% local funds.

The alignment returns to an elevated structure to cross the H-1 Freeway. North of the freeway, the alignment turns eastward along Kamehameha Highway. The alignment continues on an elevated structure along Kamehameha Highway to Aloha Stadium. Leaving Aloha Stadium, the alignment turns from Kamehameha Highway to follow Salt Lake Boulevard until it crosses Pu‘uloa Road onto Pūkōloa Street.

The alignment crosses over Moanalua Stream, turning south to follow the Koko Head bank of Moanalua Stream until it turns southeast, crossing over the H-1 Freeway onto Dillingham Boulevard. The alignment is elevated throughout this section. The alignment proceeds southeast following Dillingham Boulevard and crosses Kapālama Canal, leaving Dillingham Boulevard at Ka‘aahi Street, and crosses Iwilei Road. The alignment is elevated throughout this section. After crossing Iwilei Road the alignment follows the Nimitz Highway to Halekauwila Street and continues southeast along Halekauwila Street past Ward Avenue where it transitions onto Queen Street. At the end of Queen Street the alignment crosses Waimanu Street and property on the north side of Waimanu Street that will be acquired to allow the alignment to cross over to Kona Street. The alignment then extends through Ala Moana Center and ends with a tail track along Kona Street. The alignment is elevated throughout this section.

The First Project is estimated to cost \$4,940 million in year-of-expenditure dollars, including financing cost. The project is forecasted to attract 20 million annual trips, or about 67,000 per weekday.

PROJECT DEVELOPMENT PHASE

- Project is requesting entry to Preliminary Engineering.
- The schedule presented in the November 2007 financial plan indicates:
 - Completion of NEPA in late 2009
 - FTA Record of Decision in 2009.
 - Execute full funding grant agreement in early 2011.
 - Begin Revenue Operation in 2019.

LOCAL PROJECT SPONSOR

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

AGENCY DESCRIPTION

The City and County of Honolulu (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. The DTS 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, including transit, systems. 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 First Project. The DTS' Public Transit Division 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." The Handi-Van serves over 13,000 eligible customers, and carries 750,000 unlinked passenger trips per year.

The local funding source for the First 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 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)		\$ 4,940,000,000
		(including \$ 256,000,000 in financing charges)
<i>Section 5309 New Starts Share</i>	<i>\$ 1,200,000,000</i>	<i>24.3%</i>
<i>Non-Section 5309 New Starts Share</i>	<i>\$ 3,740,000,000</i>	<i>75.7%</i>
Annual project O&M costs (first full year of operation)		\$ 82,000,000
Total systemwide annual O&M costs (current year)		\$ 177,000,000
Total systemwide annual O&M costs (first full year of New Starts Operation)		\$ 378,000,000

REGIONAL ECONOMIC CONDITIONS AND FORECASTS

Honolulu County, comprising the entire island of Oahu, has experienced steady population and employment growth, and a rapid near-term increase in economic activity that is rooted in new real estate development. The forecasts assume a higher rate of population growth and higher-than-historical economic growth, though at a lower rate than experienced recently.

Honolulu County population increased at roughly 0.5 percent annually between 1990 and 2007, according to recent Census Bureau estimates. The annual growth rate since 2000 mirrored this longer-term trend. The forecast assumes 0.9 percent annual population growth.

Employment, likewise, had a long-term growth rate of 0.5 percent, based on Bureau of Labor Statistics for the period 1998-2008, using February employment numbers. The current employment rate – 2.8 percent – is one of the lowest in the nation. It has held steady about this rate since 2005.

Other historical data provided in the financial plan give evidence of strong recent economic growth, preceded by a period of stagnation. The gross metropolitan product (GMP) grew at 1.8 percent annually between 1990 and 2000, then rose rapidly to a 7.4 percent growth rate between 2000 and 2006, yielding a 16-year average annual growth rate of 3.9 percent. Visitor arrivals by air are less now than in 1990, but have varied within a fairly small range over the period 1990-2006. Military employment declined since 1990, but has been steady since 2000. Assessed valuation (AV) of real property has been sinusoidal, rising to \$85 billion in 1995 from \$51 billion in 1990, then falling to \$70 billion in 2001, then rising rapidly to \$115 billion in 2006. Over this sixteen year period, AV rose at an average rate of 5.6 percent, but the rate almost doubled since 2001, at about 10.4 percent.

The financial plan includes a forecast of the Gross Excise Tax (GET) that is the primary source of capital funding for the project. The GET forecast is analyzed in the Capital Financial Plan section of this report. The annual growth rate in this tax base – 4.1 percent in the baseline forecast – is slightly higher than historical GMP growth (3.9 percent) and is higher than historical GET revenue growth (3.0 percent, 1990-2006).

IMPLEMENTATION ISSUES

- **Other Planned Capital Projects in the Region.** No other projects were identified as being dependent on or linked to the HHCTCP project.
- **Legislation, Referenda, or Planning Approvals Needed.** Debt policies adopted annually by the City will need to be revised to support the level general obligation debt needed to support the project.
- **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

\$3,740,000,000

75.7 %

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 8.3 years (NTD, 2006). The average age of the demand-responsive fleet is 5.6 years. These were the oldest fleet ages recorded in the time period researched with NTD data (2002-2006).

A recent City general obligation bond issue (November 2007) was rated AA by Standard & Poors, Aa2 by Moodys, and AA by Fitch.

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.

The non-New Starts funds consist of two related sources: (i) general excise tax (GET) surcharge revenues; and (ii) general obligation bonds issued by the City that would be repaid from GET surcharge revenues. The GET surcharge revenues (53.0 percent of non-New Starts funds) are considered "committed". Since these revenues will be used to pay project-related debt service, the general obligation bonds (47.0 percent of non-New Starts funds) are also considered "committed".

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 or capital expenditures of a fixed guideway system.

The bonds to be issued for the project are contemplated to be general obligation bonds issued by the City. Debt service on the bonds would be paid from GET surcharge revenues. The bonds would be issued every year beginning in fiscal year 2012 (ending June) and terminating in FY 2018. 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).

If the City issues G.O. bonds, it would need to explicitly relax its affordability guidelines, as described in the City's debt policies. These guidelines limit G.O. debt service to 20 percent of the City's total

operating budget, or 20 percent of general fund revenues. The amount of debt contemplated for the project, plus debt service on existing bonds that would still be outstanding in 2019, equates to about 30 percent of the City's general fund revenues at that time. The City may suspend these guidelines for "unusual circumstances". Alternatively, the bonds could be issued as revenue bonds, in which case the G.O. debt guidelines would not apply. However, if issued as revenue bonds, other restrictions may come into play that would limit the degree to which the GET surcharge revenues could be leveraged. The issue of debt capacity and the implications of issuing revenue bonds are addressed in the next section of this assessment.

The share of committed funds (53.0 percent) exceeds the threshold for a High rating (50 percent) for a project in preliminary engineering. Accordingly, the Commitment of Capital Funds subfactor is rated High.

Capital Cost Estimates, Planning Assumptions, and Financial Capacity

Low

The capital cost estimates, planning assumptions, and financial capacity analyses for the project are presented below. It should be noted that no Project Management Oversight Contractor (PMOC) report was reviewed for this assessment.

Project cost contingency

The unallocated contingency for the project is 5.7 percent of total capital cost, excluding financing cost. Allocated, or design, contingency totals 21 percent of total cost before the unallocated contingency is considered. In all, contingencies represent about 25 percent of the total project cost. FTA will be receiving an opinion from the PMOC as to whether this level of contingency is appropriate.

Capital cost escalation

The financial plan assumed a variable construction cost escalation rate, ranging from 5.25 percent in 2008, then declining to a terminal value of 2.25 percent in 2016. The average annual cost escalation factor between 2008 and 2018 was 3.1 percent. The plan's assumption for CPI growth was likewise variable, ranging from a high of 4.15 percent in 2008 that tapered gradually to a terminal growth rate of 2.0 percent at 2016. The average CPI growth rate between 2008 and 2018 was 2.74 percent.

Both the construction cost escalation rate and the CPI growth rate are reasonably close to the historical Honolulu CPI growth rate, which was 2.78 percent between 1998 and 2007. However, near-term experience with the CPI was slightly higher – it averaged 4.0 percent over the past five years and was sharply higher in the last two years, at 5.3 percent. FTA will be receiving an opinion from the PMOC as to whether this rate of cost inflation is appropriate.

Federal funding assumptions

The capital finance plan assumes receipt of Section 5309 New Starts funds averaging \$150 million per year, commencing in 2011 and continuing through 2018. Annual funding is assumed to be higher than this average in 2012-2015, ranging between \$169 million and \$186 million. This level of annual funding is well above that of New Starts projects in medium to large metropolitan areas. However, FTA has determined that for mega-projects proposing a significantly lower New Starts share, annual funding at this level might be reasonable.

Federal formula funds are forecasted at a reasonably low national rate of growth (1.8 percent). Honolulu's share of the national total is forecast to grow, reflecting service and facility expansion. This assumption may overstate future revenues since it does not account for additional transit investment in other metropolitan areas. Overall, Section 5307 funds are forecast to grow at a 3.1 percent annual rate between 2008 and 2030.

Financing costs

The project cost estimate includes \$256 million in financing costs, which is approximately 5.2 percent of total project cost. The financing costs include \$18 million in issuance cost, estimated as 1 percent of proceeds, and \$238 million in interest costs, calculated for the period 2013-2018. Interest cost on the bonds is estimated at different rates, depending on the term of the bond. The term differs for each bond issue, since all bonds are assumed to be fully repaid by 2023. The interest rate for the mid-point of the maturities (8 years) is 4.87 percent. Based on these assumptions, the reviewer confirmed the interest and issuance cost estimates. The issuance cost assumption (i.e., 1 percent of issue cost) is a common rule of thumb. The interest rate assumption (4.87 percent for 8-year term) is conservative in the current market, where AA-rated municipal bonds are bearing an average interest rate of just under 4 percent.

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 \$376 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 \$1.8 billion in bonds issued to support construction. There are two related sources of risk in the forecast: (i) the estimate of the initial tax base; and (ii) the estimated rate of growth in the tax base.

The initial tax base estimate is overstated. The forecast assumed revenues of \$44 million in FY 2007, based on one quarter (3 months) of revenue. GET surcharge revenue was actually collected and distributed for five months, though the first month reported (February) was very low. The allocation to the City, net of the state's administrative charge, was \$48.4 million. If prorated to one quarter of revenue to be consistent with the forecast, and discounting the February collections, the actual revenues would have been about \$36.3 million. The first full year of revenues, excluding the February 2007 revenues, was \$160.9 million, well below the \$178 million forecast for FY 2008 cited in the financial plan. It should also be noted that the 2008 and 2009 City budgets assume lower annual GET surcharge revenues – \$135 million in 2008 (versus \$178 million in the financial plan) and \$166 million in 2009 (versus \$189 million in the financial plan).

Forecast values for GET surcharge revenues appear optimistic when compared to historical growth. The financial plan assumes a 4.0 percent annual growth rate for GET surcharge revenues between 2008 and 2022, the last full year of collections. The historical growth rate, 1990 to 2006, was about 3 percent. This includes a ten-year period of practically no growth (1990-2000), and a sharp increase between 2000 and 2006, when the annual growth rate shot upwards to 6.7 percent. At the forecast rate of growth (4 percent), GET surcharge revenues are adequate to cover debt service payments in the out-years, providing a coverage ratio of about 10 percent in 2022. The financial plan includes one lower-growth scenario, with a 3.5 percent annual growth rate. That scenario does not provide enough revenue to cover debt service in the out year, and would require an additional \$340 million from the City to maintain a positive cash balance. A forecast of revenues at the historical rate of growth (3 percent) would further diminish GET surcharge revenues and require additional funds from the City.

DEBT STRUCTURE

The proposed debt structure wrings maximum leverage from the GET surcharge revenues, and does not respect constraints posed by the City's affordability guidelines, which are included in its debt policies that are published in the annual budget.

The financial plan assumes that all debt issued for the project will be general obligation 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 and to 20 percent of general fund revenues. These guidelines would substantially restrict HHCTCP debt. According to information presented in the financial plan, the available debt service margin in 2018 is about \$155 million. HHCTCP debt service in that year is \$278 million. This implies that about 44% of HHCTCP debt is beyond the City's affordability threshold. Put another way, HHCTCP debt service plus debt service on now-existing debt would equate to about 30 percent of City general fund revenues, based on the projection of City general fund revenues presented in the financial plan. This calculation does not include the debt service that would be attributable to new bonds (\$376 million) issued to support fleet acquisitions and transit facility projects – approximately \$29 million annually at today's rates – nor does it include other G.O. bonds that might be issued by the City between 2009 and 2018.

As a work-around, the City could amend the affordability guidelines, or could instead issue revenue bonds. In the latter case, the bonds would likely be subject to an additional bonds test that references a minimum coverage ratio, as well as other requirements (e.g., a debt service reserve fund) that could reduce the leverage obtained from the GET surcharge revenues in the current financial plan. For example, City wastewater bonds issued in 2007 required a 7.2 percent debt service reserve and a minimum net revenue coverage requirement of 1.2. The current financial plan assumes no debt service reserve and no minimum coverage requirement. If the wastewater bond requirements were applied to the GET surcharge revenues, the maximum debt that could be issued for the project would be approximately \$1.36 billion, or about \$420 million less than contemplated in the financial plan. This estimate may be overstated, since excise tax revenues are usually viewed as higher risk than waterwater user charges, and would accordingly carry a higher net coverage requirement, say 1.5 or above.

FLEET REPLACEMENT COSTS

Fleet replacement costs appear to be adequately funded in the financial plan. Although no fleet plan was made available, the replacement requirements of the current fleet (bus and accessible van), plus fleet expansion, are comfortably covered in the fleet cost estimates.

YEAR-END CASH BALANCES

Year-end cash balances generally exceed \$100 million, and are forecast to be \$222 million in 2023, the last year of debt service payments.

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 \$1.24 billion. The threshold for a Medium-Low rating is 10 percent of estimated project cost, or \$490 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.

GET surcharge revenues are unlikely to provide any further capacity than what is already assumed in the financial plan – the revenue forecast assumes higher-than-historical rates of growth, there is little net capacity in the baseline forecast after debt service requirements are met, there is some doubt if the amount of debt to be incurred by the project is acceptable under the City’s affordability guidelines, and – should the bonds be issued as revenue bonds, the proceeds would be less due to likely debt reserve and revenue coverage requirements. Also, it is conceivable that GET surcharge revenues would be insufficient to support the debt service that is forecast for the project.

Year-end cash balances could potentially be allocated to absorb higher costs or funding shortfalls. As noted above, the baseline forecast includes a \$222 million year-end cash balance in 2023 following the retirement of debt issued for the project. This balance, however, is needed to support operations and without it, the operating plan would be in deficit.

The financial capacity of the City to provide additional support to the project is a complicated question that was not presented convincingly in the financial plan, and cannot be reasonably answered in the scope of this review. However, given the amount of debt to be issued for the HHCTCP and concerns over the City’s affordability guidelines noted above, as well as downside risk in the GET surcharge forecast and the substantial additional General Fund revenues that would have to be allocated to transit operating subsidies, 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.

Rating

The capital cost estimates/planning assumptions subfactor is rated Low. The major factors contributing to this rating are: (i) downside risks to the GET surcharge revenue forecast, influenced by an apparent under-estimate of the initial tax base and higher-than-historical growth rates, and consequently the inability to cover all debt service cost; (ii) an optimistic debt structure that may violate the City’s general obligation debt service affordability guidelines, and assumes higher net proceeds than would be available under a revenue bond structure; and (iii) lack of information to substantiate the City’s capacity to absorb a material amount (up to \$1 billion) of cost risk. In addition to these concerns, the capital cost escalation rates and cost contingency assumptions are more favorable than other major metropolitan projects at this stage of project development.

Summary Capital Plan Rating

Medium

The summary capital plan rating is Medium-low, reflecting: (i) a capital condition score of Medium-High, weighted at 25 percent; (ii) a capital funding commitment score of Medium, 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	\$1,200,000	24.3%	N/A	N/A	
Other Federal:					
STP					
CMAQ					
Other					
Subtotal Other Federal	\$0				
State:					
Honolulu G.O. Bonds	\$1,759,000	35.6%	C	E	
GET Surcharge Revenues	\$1,981,000	40.1%	C	N	
Subtotal State	\$3,740,000	75.7%			
Local:					
Subtotal Local	\$0				
Other:					
Subtotal Other	\$0				
Total	\$4,940,000	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	\$3,740,000	100.0%
Budgeted	\$0	0.0%
Planned	\$0	0.0%
Uncertain	\$0	0.0%
Not Specified	\$0	0.0%
Total	\$3,740,000	100.0%

Maturity of Capital Funding Sources

	Amount (\$)	%
Existing	\$1,759,000	47.0%
New	\$1,981,000	53.0%
Not Specified	\$0	0.0%
Total	\$3,740,000	100.0%

ASSESSMENT OF OPERATING FINANCE PLAN

Current Operating Condition of Agency

Medium-High

Financial reporting for the operation of transit services by the City of Honolulu is reported in the City's Public Transportation System Fund. At the close of FY 2007 (June), that fund had current assets of \$30.6 million and current liabilities of \$18.5 million, yielding a current ratio of 1.65, indicating sound financial condition. The Public Transportation System Fund held cash and investments of \$17.5 million, which is about 10.5 percent of annual operating cost.

Two other funds which support public transit operations via interfund 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 \$155.6 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 2006 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. The fare recovery ratio reported through NTD in 2006 for the bus system was 30 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-High. This is based on the current operating ratio of 1.65 and the absence of service cutbacks in recent years, both of which qualify the Medium-High 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 \$378 million. These funds consist of: (i) Federal formula funds, \$15 million (4 percent); (ii) operating revenues, comprised almost entirely of passenger revenues, \$111 million (29.4 percent); and (iii) operating subsidies from the City's General Fund and Highway Fund, \$252 million (66.7 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 much higher share of the General Fund and Highway Fund than has historically been the case. Because no information was presented that could substantiate the reasonableness of this increase, there is some doubt that the incremental subsidies can truly be considered "committed".

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 light rail operation implemented in HHCTCP is projected to cost \$82 million in its opening year (2019). Approximately 5 million annual vehicle revenue miles will be operated, yielding a unit cost in 2019 of \$16.40. This cost can be compared to that of other light rail operations in the western U.S. to gain some sense of its reasonability. The 2019 unit cost can be discounted to 2006 dollars using the CPI rates that were used in the financial plan to escalate unit costs from a 2006 base. The average discount rate is 2.74 percent, yielding a 2006 unit cost of \$11.54 for the project. This unit cost is slightly below the average (\$12.89) of seven LRT operations that reported to NTD in 2006: Santa Clara, \$19.17; Los Angeles, \$16.45; Dallas, \$15.76; Sacramento, \$13.15; Portland, \$10.97; Denver, \$7.98; and San Diego, \$6.73. Of these, Los Angeles and Dallas have the highest speed operations (23.3 mph and 21.4 mph respectively) and may be the closest analogs to the high-speed, high-frequency operation envisioned by the City. Based on this comparison, the unit cost for HHCTCP may be considered slightly optimistic.

Operating trends

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

The forecasted rate of inflation, based on the CPI, is variable year to year, averaging 2.74 percent through 2018, with a stable rate of 2.0 percent annually beginning in 2016 and continuing through the horizon year of the forecast (2030). The Honolulu CPI-U, as reported by the Bureau of Labor Statistics, averaged 2.8 percent between 1998 and 2007, with near-term growth being higher – 4.0 percent between 2002 and 2007, and 5.3 percent between 2005 and 2007. Recent rates of inflation nationally reflect rising commodities prices that do not appear to be abating, due to increases in world-wide demand for foodstuffs and energy. Thus, future rates of inflation are more likely to mirror near-term rates, rather than the fairly low rates experienced in the decade prior to 2005. Although the forecast includes near-term rates that are higher than the average long-term rate (e.g., the rates for 2008 and 2009 are 4.2 percent and 3.6 percent respectively), it is the long-term rate that has the most influence on the operating requirements, since much of the increase in operating cost and operating subsidies is attributable to the introduction of light rail service in 2019. As noted above, light rail service will add 30 percent to operating cost and 33 percent to operating subsidies.

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 18 million miles currently to 25 million miles at 2027, or a growth rate of about 1.6 percent annually. In contrast, bus service levels declined very slightly between 2002 and 2006. The peak bus fleet is forecast to grow from the current 425 vehicles to 493 vehicles at 2030, or about 0.6 percent annually. The difference in mileage and fleet growth rates reflects a reorientation of bus service to serve more off-peak demand, coincident with implementation of light rail service. Demand-response services are assumed to grow only slightly, with fleet growth at about 1 percent per year.

The operating costs of bus and demand-response services were based on 2004-2005 unit costs derived from DTS operations, escalated to a 2006\$ base by 4.32 percent, stated in the financial plan to be the inflation rate between 2005 and 2006. Unit costs were developed for each line item, then 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 2.9 percent between 2006 and 2019, whereas the actual rate of growth between 2002 and 2006 was 5.8 percent, or roughly double the rate of growth assumed in the forecast. Demand-response cost per vehicle revenue mile is forecasted to grow at 9.4 percent between 2006 and

2019, whereas the actual rate of growth between 2002 and 2006 was 12.8 percent. Thus, the operating cost forecast for both bus and demand-response service is considered to be optimistic.

The financial plan assumes fare increases in 2009 (+31 percent), 2019 (+71 percent), and 2025 (+17 percent) to ensure that the farebox recovery ratio remains in the Council-mandated range of 27 percent to 33 percent. These fare increases are accompanied by small year-to-year changes in the average fare of 1 percent or less. The fare revenue that results from the three fare increases is probably slightly overstated because there is no corresponding decline in ridership. As noted earlier, the 2003 fare increase resulted in a ridership loss that, after adjusting for service levels that were affected by a month-long strike, translated to a price elasticity of -0.06. The passenger revenue forecast assumes zero price elasticity, which is slightly optimistic. Between 2007 and 2030, the average annual change in the average fare per linked trip is 3.4 percent (\$1.67 in 2030 versus \$0.78 in 2007). This exceeds the average annual rate of inflation over this period, which is 2.4 percent.

Operating subsidies are forecast to grow at historical rates or less, except for a large increase in 2019 to fund the additional subsidy requirements of the HHCTCP. Between 2002 and 2007, City subsidies grew at an average rate of 9.6 percent annually, though a large increase between 2006 and 2007 (+23 percent) distorts this average growth rate (between 2002 and 2006, the annual growth rate was 6.4 percent). For bus and demand-response operations, operating subsidies are forecast to grow at 4.5 percent annually between 2007 and 2018. In 2019, operating subsidies are forecast to increase by 33 percent to support the opening of the HHCTCP. Between 2019 and 2030, operating subsidies are forecast to grow at 2.3 percent annually.

The 33 percent increase in operating subsidies in 2019 would require a substantial increase in the allocation of General Fund and Highway Fund revenues to the Public Transportation System Fund. Transit subsidies in that year are forecast to represent about 18 percent of general fund and highway revenues. The historical share (1994-2007) was 10.9 percent. Given that general and highway fund revenues are forecast to increase at a rate only slightly above inflation (3.4 percent), the increase in transit share implies the need to reduce other City services or to raise taxes. Whether either of these actions is realistic is not substantiated in the financial plan.

Operating Financial Capacity

The operating cash flow assumes a balanced budget, with no accrual of an operating surplus or reserve. Thus, the 2007 year-end cash and investments held in the Public Transportation System Fund (\$17.5 million) could be assumed to be constant. These funds represent 10.8 percent of operating costs in 2007, and would represent 4.6 percent of operating costs in 2019 when the HHCTCP opens. In 2030, these funds would represent 3.5 percent of operating cost.

Rating

The cost estimates/planning assumptions/financial capacity subfactor is rated Medium-Low. Two material assumptions supporting the operating cash flow – unit cost growth and riders response to fare increases – are optimistic relative to historical experience. 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. It is questionable whether the operating subsidies that are assumed to be available to support the additional requirements of the HHCTCP would in fact occur, given the implication that other activities supported by the General Fund or the Highway Fund would need to be curtailed. Finally, there is some prospect that the project's O&M costs could be understated, based on a comparison to seven LRT operations in the western U.S.

Summary Operating Plan Rating

Medium

The operating plan is rated Medium, based on: (i) a Medium-Low 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 2.75, which is rounded to a score of 3.0, or Medium.

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

	Amount (\$)	% of Total	Level of Commitment*	Maturity of Sources**
Federal:				
Formula	\$15,000	4.0%	P	E
CMAQ				
Other				
Subtotal Federal	\$15,000	4.0%		
State:				
Subtotal State	\$0			
Local:				
Operating Revenues	\$111,000	29.4%	C	E
City/County of Honolulu	\$252,000	66.7%	P	E
Subtotal Local	\$363,000	96.0%		
Other:				
Subtotal Other	\$0	0.0%		
Total	\$378,000	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	\$111,000	29.4%
Budgeted	\$0	0.0%
Planned	\$267,000	70.6%
Uncertain	\$0	0.0%
Not Specified	\$0	0.0%
Total	\$378,000	100.0%

Maturity of Commitment of Capital Funds

	Amount (\$)	%
Existing	\$378,000	100.0%
New	\$0	0.0%
Not Specified	\$0	0.0%
Total	\$378,000	100.0%

CONCLUSIONS

- The Honolulu metropolitan area has experienced strong growth since 2000, following a ten-year period of very little economic growth.
- The Honolulu High Capacity Transit Corridor Project (HHCTCP) will introduce significant capital and operating funding requirements.
- The capital financing plan depends materially on strong growth in GET surcharge revenues relative to an 18-year trend.
- The GET surcharge revenue forecast has downside risk that could reasonably result in revenues that are inadequate to support debt service payments for the project.
- 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. Chief among these assumptions is that HHCTCP debt would be excluded from the City's affordability guidelines, which limit general obligation debt to 20 percent of General Fund revenues or expenses. Should the bonds instead be issued as revenue bonds, they would be subject to coverage requirements of up to 1.5 (versus an assumption of zero coverage in the financial plan), and may be subject to debt service reserve requirements as well, that together could reduce the amount of debt that could be supported by GET surcharge revenues to something in the neighborhood of \$1,360 million (versus \$1,777 million in the financial plan).
- There is no indication in the financial plan that the City could provide additional capital funding to the project without affecting other City services.
- The operating plan has several optimistic features – operating cost estimates are understated relative to near-term trends (for City operations) and peers (for HHCTCP operations); significant fare increases assume zero price elasticity; and the increase in operating subsidies coincident with the opening of the HHCTCP would require a large and unsubstantiated increase in revenues transferred from the City's General Fund and Highway Fund.

RECOMMENDATIONS FOR IMPROVEMENT OF RATING

- The City should formally communicate its intent to exempt the HHCTCP debt from the City's affordability guidelines that restrict general obligation debt service to 20 percent of General Fund revenues or expenses or, alternatively, resubmit the financial plan assuming a revenue bond structure.
- The City should provide a forecast of General Fund and Highway Fund revenues and expenditures that substantiates the City's capacity to: (i) provide back-up funds for HHCTCP should there be a cost increase or funding shortfall; and (ii) provide the level of operating subsidies contemplated in the HHCTCP financial plan.
- The capital plan should be amended to include: (i) debt service costs associated with non-project related capital items that will be debt financed; and (ii) a more thorough presentation of capital replacement and rehabilitation costs.
- The operating plan should be amended to reflect higher rates of unit cost growth and a reasonable amount of ridership diversion from the assumed fare increases.

- All numbers presented in the financial plans as “millions” should either be presented in thousands or presented at a higher level of precision (e.g., 2 decimal places).
- The City should provide a forecast of the GET surcharge revenue tax base in Honolulu County, explaining the components of economic activity that would generate the tax revenues.