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Sent: 12/28/2007 8:26:01 AM
Subject: RE: booz e-mail of dec 19th on Honolulu cost review
Attachments: Honolulu Project Budget Summary Review - Dec2007.doc

I am attaching and reproducing below, the e-mail from Booz on Honolulu cost review for your info:

Honolulu High-Capacity Transit Corridor Project
Project Budget Summary Review
December 2007

At the first Project Management Oversight (PMO) meeting for the Honolulu High-Capacity Transit Corridor Project (HCTCP) on April 3, 2007, The City and County of Honolulu (City) provided an overview of the project's planned cost. The total project estimate provided in April 2007 was \$3,470 million in 2006 dollars (\$4,570 million YOE). The FTA New Starts share was reported as \$700 million in 2006 dollars (\$950 million YOE) or approximately 20% excluding finance charges.

In May 2007, the PMOC returned to Honolulu to perform a Cost Validation Analysis of the project estimate presented in April, and the following comments were noted.

- A review of the "hard asset" costs, including track and structures, facilities, systems, stations, and vehicles, were found to marginally exceed predicted costs by approximately 4.5% based on prior project experience as represented in the Federal Transit Administration (FTA) Capital Cost Database.
- In contrast, the combined project cost estimates for special conditions, Right-of-Way (ROW), and soft-costs were found to be approximately 10% lower than expected based on prior project experience as represented in the FTA database.
 - o Special Conditions - The April 2007 cost estimates for special conditions included costs for utility relocations, roadway changes, demolition and environmental mitigation. The analysis identified concerns with many of the assumptions used in developing these costs as they were based on analyses completed in 1991.
 - o ROW Costs - ROW costs include relocation costs, which are highly variable between projects based on the unique characteristics of each corridor. With that in mind, the City may still want to revisit these costs, as much of the data used in the development relied on analysis completed in 1991.
- Contingencies were found to be adequate and appropriate for a project in the pre-Preliminary Engineering (PE) phase.
- The assumed inflation rates used to adjust project costs from 2007 dollars to YOE dollars were found to be reasonable but not conservative, based on recent cost inflation for construction projects nationally and local Honolulu consumer cost inflation. Note that this analysis assumes construction will begin in 2007 and conclude in 2018

In summary, the cost analysis performed in May 2007 determined that although there were positive and negative cost variances in the various cost categories, the project estimate was reasonable for the pre-PE phase of the project. The analysis concluded that the overall project cost is approximately \$42 million or 1.2% lower than the project's expected cost based on the sample of projects recorded in the FTA's Capital Cost Database. This amount is less than the \$206 million included for unallocated contingencies or project reserves.

On December 4, 2007, the City issued the Financial Plan for PE to FTA for review. The Financial Plan provided an updated project cost estimate, updating the 2006 costs to current 2007 costs. Based on a cursory review of the Financial Plan, the following revisions have been made by the City.

- Total project estimate provided is \$3,727 million in 2007 dollars (\$4,684 million YOE) excluding finance charges; and overall increase of 2.5%.

- The FTA New Starts share was increased from 20% to 26% of the total capital cost excluding finance charges (28% percent share between 2011 and 2018) for a total of \$1,200 million YOE.
- Escalation factors were adjusted based on the Consumer Price Index for all urban consumers in Honolulu. The factors for the years 2008 through 2012 were increased slightly, however the factors used from 2012 through 2019 were slightly decreased.

The table below provides a comparison of the April 2006 project budget to the project budget provided in the Financial Plan.

April 2006 Project Budget (YOE) November 2007 Financial Plan (YOE)	Estimated Project Budget (excluding finance charges) \$4,570 million	\$4,684 million
	FTA New Starts Share \$925 million	\$1,200 million

In conclusion, the basis for the project cost estimated included in the Financial Plan appears to be the same project cost estimated presented in April 2007 and reviewed in May 2007. The total project estimate has been adjusted for 2007 costs and is reasonable for the pre-PE phase of the project. The project costs will be refined during PE as the project design is defined and developed.

Should you have any questions regarding the information provided in this report, please contact Justine Belizaire at 786-586-0026.