October 6, 2008
Barr rewrite of Project Phasing and Construction Schedule sections.
HTS will add discussion of project phasing and user benefits per response on B-17.

Project Phasing
The Locally Preferred Alternative adopted by the City Council identified a fixed guideway transit system between Kapolei and UH Mānoa with a branch line to Waikīkī. The Build Alternatives in this Draft EIS would begin to implement the Locally Preferred Alternative. The Project would begin near the planned UH West O'ahu campus and extend to Ala Moana Center. This is the portion of the Locally Preferred Alternative that can be constructed with anticipated funding. The remainder of the Locally Preferred Alternative, referred to in this Draft EIS as "planned extensions," would be constructed once additional funding is secured.

The Project connectsprovides logical termini at East Kapolei toand Ala Moana Center because it connects two locations that may be easily accessed with buses to connect to areas beyond the Project. A future growth area, Kapolei has been designated as O'ahu's "second city" and government offices have opened there. Population and employment in Kapolei is a logical Wai'anae terminus because both population and employment are forecasted to grow by approximately 400 percent. The Wai'anae terminus is near the UH West O'ahu campus, the Salvation Army Kroc Center, and development in Ho'opili, all of which are planned to open between 2009 and 2012. Ala Moana Center is the logical Koko Head terminus because it is O'ahu's largest shopping center and currently serves as a major transit hub with more than 2,000 weekday bus trips.

The Project also has independent utility because it would connect multiple activity centers, provide cost-effective transit-user benefits, and meet the Purpose and Need for the Project whether or not the planned extensions are provided. Finally, construction of the Project would not preclude future development of the planned extensions.

Proposed phasing:
Phase 1 – Pearl Highlands to West Loch
Phase 2 – West Loch to Kapolei
Phase 3 – Pearl Highlands to Aloha Stadium
Phase 4 – Aloha Stadium to Middle Street
Phase 5 – Middle Street to Ala Moana Center

While Phase 1 and 2 of the project would be primarily a demonstration project, Because of its size, the Project would be constructed in phases to accomplish the following:
Match the anticipated schedule for right-of-way acquisition and utility relocations
Reduce the time that each area will experience traffic and community disturbances
Allow for multiple construction contracts with smaller contract size to promote more competitive bidding
Match the rate of construction to what can be maintained with local workforce and resources
Balance expenditure of funds to minimize borrowing

iIndividual construction phases would be opened as they are completed so that some system benefits, even if limited during the first phases, can be realized prior to completion of construction of the entire Project. The temporary effects associated with the interim operations are discussed in Sections 3.5 and 4.16 of this Draft EIS. The Project's cash flow analysis, which is presented in Section 6.4, anticipates the use of Local funds for the first two construction phases and a combination of Local and Federal funds for the remaining phases.

The Airport & Salt Lake Alternative would include additional construction phases. The section between East Kapolei and Ala Moana Center along Salt Lake Boulevard would be constructed as discussed above, followed by a 2.1-mile connection from the Middle Street Transit Center 'Ewa to the Honolulu International Airport, and finally the section from the airport to Aloha Stadium. The final phases could be completed after 2018.

Prior to completion of the section from the airport to Aloha Stadium, the connection to the airport would provide a direct link from the Koko Head terminus of the Project to the airport but would require a transfer at Middle Street for those traveling from the 'Ewa end of the line. It would accommodate the demand for access to the large employment base at and near the airport and provide access for travelers to and from the airport.

Construction Schedule

Construction is currently planned to be completed in fivecur overlapping phases of work. Construction activities would be similar for each phase and are described in Appendix C, Construction Approach. The first phase would include construction of the vehicle maintenance and storage facility and a portion of the Project between the Wai'anae end of the Project and Pearl Highlands. The limits of the first phase have been selected so that it can connect to either maintenance and storage facility option because system testing and operation cannot be completed without access to the maintenance and storage facility. Construction of a storage and maintenance facility at Pearl Highlands would facilitate project intiation and phasing in both an easterly or westerly direction. Station areas, park-and-ride lots, and the maintenance and storage facility site would function as construction staging areas for the first construction phase.

The remainder of the Project likely would be built in three overlapping phases continuing Koko Head from Pearl Highlands, first to Aloha Stadium, then to Middle Street, and finally to Ala Moana Center (Figure 2-43). Construction staging areas for future phases beyond station areas, park-and-ride lots, and the maintenance and storage facility site would be identified and developed by the contractors and approved by the City. Variations to the schedule will continue to be evaluated during Preliminary Engineering. Conceptual design for the Project is under way, and work on the first construction phase is anticipated to begin in 2009 (Figure 2-43). The entire Project is planned to be in operation in 2018.

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