FTA Comments on ADEIS, Honolulu High Capacity Transit Corridor Project September 18, 2008				
Key	**No.**	**Location**	**COMMENT**	**Response**
X	2	General-Project Phasing	According to the ADEIS narrative and Figure 2-42, DDTSTS wishes to advance the project in five phases. The first two phases would be constructed in a largely uninhabited area from 'Ewa to Pearl City. This appears to meet the project purpose and need and more specifically the goal to "improve access to planned development." (p. 1-20). FTA notes that project construction on Phase 1 is to begin in 2009, and Phase 2 will not be completed until 2014. With the completion of Phase 2 project ridership and user benefits will apparently be negligible, and it is not until scheduled completion of the 3rd phase of the project in 2017 from Pearl Highlands to Aloha Stadium that DTS can expect reasonable ridership. While the study corridor (Ewa to Ala Moana Center) contains approximately 50 activity centers, fewer than one-half dozen activity centers (see Figure 1-4 Activity Centers) are contained in the first two phases. Moreover, Figure 4.2 (p. 4-11) shows that future land use in the area of the three western-most stations is planned as low-density residential – hardly supportive of an elevated LRT. Based upon Figure 1-6, Employment Distribution for Oahu, there are currently around 20,000 jobs in the Phases 1 & 2 area, excluding Pearl City. Every individual employment district in Phases 3-5 either approximates or greatly exceeds all of the employment in the four employment districts of Phases 1 and 2. Projected 2030 employment in these sectors is not projected to be significantly greater in these areas. Note that in the Daily Transit Trips summary (p. 1-11), the highest concentrations of transit dependant households are contained in the corridor's eastern portion of Phase 4 and all of Phase 5 – the very last to be served by the proposed project are those that are most in need of equity considerations. However, Phases 1, 2 and 3 will feature a total of four park-and-ride facilities that, "…would have the highest demand of people driving to access the fixed guideway system." (p.3-35) So, Phases 1-3 would serve highest income (Table 4-8), lowest ridership areas first, leaving areas with the highest concentration of households with no vehicles (Fig. 4-15) to be served at project completion. One of the four goals and objectives of this project is to "improve transportation equity". (p. 1-21) Based upon proposed project phasing, transportation equity appears to be the lowest of priorities. A reading of the Highway Traffic Operating Conditions (p. 1-15) indicates that congested traffic conditions with LOS failures occur most frequently in the easternmost areas of the corridor where it is most necessary to "improve corridor mobility" and 'improve corridor travel reliability" – two of the other major goals of the project. Those people most in need of public transit in the most congested area of the City will be served in 2018 while DTS plans an initial huge capital expense from 2009 to 2014 for what amounts to a demonstration project. Reasonable project planning would identify the need for a maintenance facility as a requirement to initiate project construction. DTS appears to have met this requirement by siting the maintenance facility near Pearl Highlands. DTS then proposes to initiate project construction to the west. Good planning practice would dictate that the initial project phases should not simply address land development opportunities, but should address the three other project goals and objectives: improve corridor mobility, improve corridor travel reliability and improve transportation equity. Good planning practice would suggest the following alternative should be considered: • Phase 1 – Leeward Community College to Aloha Stadium • Phase 2 – Aloha Stadium to Kapolana • Phase 3 – Kapolana to Ala Moana • Subsequent phases Expand the Project Phasing discussion. • Discuss how Phases 1 and 2 meet the four goals of the project	Project Phasing Section revised (Pg 2-36 and 2-37) to: ***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 provides logical termini at East Kapolei and Ala Moana Center because it connects two locations that may be easily accessed with buses to connect to areas beyond the Project. Kapolei has been designated as O'ahu's "second city" and government offices have opened there. 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. 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 Individual 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 construction phase 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.

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			• Discuss the alternative phasing suggested above and how such phasing would meet the goals of four goals the project • Discuss proposed local and federal expenditure in regards to project phasing • Discuss interim impacts caused by the proposed phasing.	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 four 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. 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.
X	**3**	General-Logical Termini	Please note that per FTA guidance for Environmental Impact and Related Procedures, 23 CFR 771.111(f)(1), the action evaluated in each EIS shall "connect logical termini and be of sufficient length to address environmental matters on a broad scope." The East Kapolei terminus is one mile short of two population centers. It is entirely unclear from the document how East Kapoeli is a logical terminus inasmuch as there is no population or employment there now and it appears that there will be little in the way of population or employment there when Phase 1 is completed in 2013. • Discuss existing land-use for the East Kapoeli area and why this is a logical terminus. • Discuss land-use sector development plans for the East Kapoeli area and why this is a logical terminus.	Per US DOT (FHWA, 1993): "Choosing a corridor of sufficient length to look at all impacts need not preclude staged construction. Therefore, related improvements within a transportation facility should be evaluated as one project, rather than selecting termini based on what is programmed as short range improvements. Construction may then be "staged," or programmed for shorter sections or discrete construction elements as funding permits" We interpreted the above to say the logical termini pertain to the Project, not the construction phases. Following language added to Project Phasing Section The Wai'anae terminus is in the vicinity of the UH West O'ahu campus, Salvation Army Kroc Center, and Ho'opili development, all of which are planned to open between 2009 and 2012.
C	**5**	Pg. S-1 and 1-19	Purpose and Need: high-capacity transit is stated as the purpose but the ensuing descriptions provide no evidence that there is a transit capacity problem today or in the future. If there is a capacity problem it needs to be better described. It appears that capacity is being used when the issue is mobility improvements. Additionally, the purpose should comport with what is stated in Chapter 7, which contains 4 sections.	Phrase on additional transit capacity added to need. Pg. 1-19
X	**13**	Pg. 1-7	Delete the last sentence in the green box referencing Honolulu not having a rail system.	OK
X	**14**	Pg. 1-10	Section 1-3, second paragraph: please cite current tourist ridership on transit that provides a context for the statement that there is a tourist market, or if the statement is intended to address the build alternatives, that should be stated more clearly.	Text added to reflect comment: " More than 17,000 transit trips are made by visitors daily."; pg. 1-10 and on pg 1-19
X	**15**	Pg. 1-20,	First full paragraph: "TheBus travel times are projected to increase substantially through 2030". The travel time differences between today and 2030 increase less than 10% which doesn't seem to warrant being characterized as "substantial".	Delete "substantial" from text

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X	**16**	Pg. 1-21	Bottom of first full paragraph: "transit capacity" is cited without any prior reference to its relevance. It doesn't seem to have relevance to the purpose of the section to improve transportation equity.	Replacing word "capacity" with "availability"
B	**17**	Chapter 2 – Alternative Analysis	Expand the Project Phasing section. Address all of the issues mentioned above particularly project goals and objectives. Use Summit modeling with the goal in mind of demonstrating user benefits for each subarea.	See Response to comment 2.
X	**18**	Pg. 2-8, Section 2.2.1	Second paragraph: "the No Build Alternative's transit component would include an increase in fleet size to accommodate growth in transit demand and increased congestion, thereby allowing service levels to remain the same as today." It is unclear whether this means that frequencies are increased to accommodate increased demand as a result of expected growth in population and employment, in which case service levels would be increased, or whether it means that frequencies remain the same as today, the fleet size increases due to slower travel times, and there is additional demand for transit but the capacity of the system is the same as today. This should be clarified. We expect the former approach because we assume that is consistent with current policy. In the next paragraph: "Even with fleet expansion, the No Build Alternative would not provide the services necessary to respond to demand." "Response to demand" usually means adequate capacity which suggests the latter explanation above. If frequencies are not increased, the text should explain why this is a reasonable assumption	Text added and presentation re-ordered to address comment (now pg. 2-13): The No Build Alternative's transit component would include an increase in fleet size. However, due to increasing traffic congestion and slower travel times, transit service levels and passenger capacity would remain about the same as today (Table 2-4)
X	**19**	Pg. 2-13	Table 2-4: the 20% spare ratio for buses is consistent with industry practice. However the figure for rail cars is given as 10%. It should be demonstrated/documented that a 10% spare ratio is sufficient to maintain operations at an appropriate level.	Reasonable question, but we do not view this as an EIS issue. No change to EIS, but will address in O&M plan. Short answer is that peak fleet is needed for only short period morning and evening when running with minimum headways. This takes much of fleet out of service much of the day; also, if peak fleet is not available short wait times between trains can help balance demand.
X	**20**	Pg. 2-23	The elevation of stations with mezzanines is cited as 18 feet. The elevation for lower stations without mezzanines should also be cited.	Side-platform stations…its height above the ground, which averages approximately 30 feet to the top of track. See text now on pg.. 2-34
X	**21**	Pg. 2-31	The Bus System section should reference more detailed maps of the bus service illustrating how the bus services will be integrated with the fixed guideway. The figures in this section should have the station names so that references in the text to bus services at stations can be better understood.	Route numbers are added to close-up graphics. Station names added to general bus route maps that follow. See Figures 2-14 through 2-39.
X	**22**	Pg. 2-34	Green insert: the inserts are good ways of conveying information. However using the word "Potential" begs a number of questions. Either delete the word or explain what this means.	Delete "Potential" See Pg. 2-35
X	**23**	Pg. 2-35	Please reference the figure numbers when the maintenance sites are cited.	Figure 2-5 and 2-6 referenced in text. Pg. 2-35
B	**24**	Pg. 2-35	Expand the discussion of environmental impacts of the vehicle maintenance and storage facility and the traction powered substations. Use maps as necessary.	Environmental impacts are addressed in Chapter 4, not Chapter 2. Each discipline being reviewed in Chapter 4 to determine if any impacts were missed.
X	**25**	Pg. 2-36, 2-37	Project phasing and construction schedule sections: Maps with the phases identified would be clarifying. There are 5 phases but only 4 identified in the first paragraph of the construction schedule section. This is a very unusual phasing plan which delays project benefits to the areas in most need instead serving areas that are undeveloped today. An explanation should be provided addressing this concern and the need to build the project contrary to the approach followed by every other project in the US.	Will add map showing each phase. For the EIS, construction phasing has been defined as four phases, with further staged opening of the first construction phase. This approach has been taken because of the magnitude of the overlap of work Ewa of Pearl Highlands. See Figure 2-42

Key:
A = Advice needed to understand comment, first priority
B = Basic understanding of issue, need to confirm approach
C = Concept complete, need to finish revision
X = Addressed

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