

**FTA Comments on ADEIS, Honolulu High Capacity Transit Corridor Project  
September 18, 2008**

<b>Key</b>	<b>No.</b>	<b>Location</b>	<b>COMMENT</b>	<b>Response</b>
X	26	Pg. 3-3	Existing Conditions: Virtually all the data presented is systemwide but the study corridor conditions are only a portion of the system. Either information should be presented that relates to the corridor, or an explanation provided stating how the systemwide information is relevant to the corridor conditions.	Provide information in a call out box on the extent of islandwide travel conditions and demand that is in the study corridor. Page 3-3
X	27	Pg. 3-7:	The information on TheBoat service should be updated as the one year demonstration should be over by now	Delete reference to “one-year demonstration project” in text. pg. 3-7
X	28	Pg. 3-14	Table 3-7: While LOS is commonly used to describe highway conditions; it is a poor description of what travelers can relate to. Please add travel times between representative origins and destinations for the corridor.	As per phone discussion with FTA on Oct. 2nd, highway travel times will not be shown. Auto travel times from the model are incorrect due to bottleneck areas in Honolulu.
X	29	Pg. 3-18	VMT, VHT and VHD: It would be useful to spell out the abbreviations and explain what they represent.	Spell out for chapter headings and table titles; there is also a table of Acronyms and Abbreviations on page xvii and the words are defined on page 3-5
X	30	Pg. 3-18	Transit Speed section: Information presented on transit speeds is systemwide. Information should be presented similar to that shown on Figure 3-8 and/or Table 7-2. The information in Table 7-2 indicates a slight deterioration of service, which is at variance with the tone of this section. Having more detailed information should allow for a better discussion on how conditions change in the corridor. A similar table showing how highway travel times change for representative origins and destinations should be presented in section 3.3.3.	New table on transit speeds for selected zone pairs is provided on page 3-19. See comment #28 regarding highway speeds. Transit travel times between select origins and destinations are shown in Ch. 3 and will be referenced in the Executive Summary.
X	31	Pg. 3-19	Transit Ridership section: Reference is made to demand exceeding bus capacity for several routes because of limited road capacity. It is very unusual for circumstances to limit increase in frequencies and the use of larger vehicles to meet capacity. These unusual circumstances, including their location so the relationship to the Build Alternatives is understood, should be explained as that better describes a problem that the Build Alternatives addresses.	Text added to page 3-20:  Although some increases in bus services would occur under the No Build Alternative, a review of route-specific demand and service levels for 2030 indicates that bus capacity would be exceeded for several routes. In some cases the demand per bus trip would be more than twice the seating capacity.  Adding significant passenger capacity with more buses is not feasible in some key locations along the system, due to roadway capacity constraints. For example, there are only a few streets serving downtown that can be used by buses, and all of those are approaching capacity during peak hours. Lack of signal priority, short blocks and narrow rights-of-way downtown limit the number of new buses that can be added to the system. Outside of downtown, other choke points for buses include the Ala Moana Center area, Waikiki and Pearl City.
X	32	Pg. 3-23	Reverse Commute Markets section: This or another section need to address one of the goals of the project which is to better serve rapidly developing areas of the corridor.	Text added to pg. 3-24: Based on transit travel forecasts, about 20 percent of fixed guideway ridership during the a.m. two-hour peak period would be in the ‘Ewa-bound direction, <a href="#">which demonstrates that the Project supports the goal of improving access to planned development and a second urban center.</a>
X	33	Pg. 3-23	Reverse Commute Markets section, last paragraph: The statement “. Build Alternatives would support enhanced transportation equity” is made without any connection made earlier to support this statement. Some evidence is needed supporting the use of the Build Alternatives by the markets that this statement targets.	Following text was added to pg. 3-24: “Of the reverse commute transit trips with destinations in ‘Ewa and Kapolei during the a.m. two-hour peak period, 51 to 52 percent originate from low income communities.”
X	34	Pg. 3-23	Transit-Dependent Household section: Information should be presented on the ridership of transit-dependent households on the project as this was cited as a major need.	Graphic (Figure 3-7) added showing how transit system serves areas with high concentrations of transit-dependent households on page 3-25
X	35	Pg. 3-24	Transit Speed section, first paragraph: The problem with presenting average systemwide speed information is illustrated again here where the impact of the project on the corridor is understated by averaging its improvements with the system. This figure is misleading and should either be deleted or retained and be described in a way that makes it meaningful.	Text was revised on page 3-26 and a table was added on page 3-19 (this table also addresses comment #30)
X	36	Pg. 3-26	Table 3-15: An explanation of the column headings is needed because of the confusion between linked and unlined trips by the public.	Footnote to be added to figure to reflect comment: “Boardings represent the total number of times someone gets on a transit vehicle, whereas a trip can include transfers” pg. 3-28

X	37	Pg. 3-26	Second paragraph: a 2-hr max peak load of 11,950 is cited along with a reference to the system design capacity of 18,000. The capacity cited is the potential capacity with scope beyond what the project would have. The relevant capacity is 6,000/hr per direction as that is what the project will have. Because peak-hour loadings are greater than 50% of the two-hour loadings, it appears that the projected loadings exceed project capacity. This should be explained.	Here is the proposed text, to replace the current paragraph on pg. 3-26 and 28: The maximum peak direction (Koko Head) volume during the a.m. two-hour peak period would be about 11,950 passengers in 2030. This is close to the fixed guideway system's currently planned minimum capacity of 12,000 passengers per direction for a two-hour period, making it possible demand could exceed capacity for a short time during the peak period. While this is not anticipated to be a significant problem based on forecast ridership, should higher passenger volumes be realized, the system will be designed to be able to provide substantially higher capacity by adding vehicles or reducing headways. Such operational adjustments would be evaluated as the system approaches the planned capacity toward 2030.
X	38	Pg. 3-32	Access to Fixed Guideway section: Given that many of the riders of the Build Alternatives are forecast to access by bus, the number of riders by bus, walk and park-and-ride should be presented	New table (3-18) on mode of access added to reflect comment. Table appears on page 3-34
X	39	Pg 3-32	Transit Reliability section: If many of the riders on the Build Alternatives access by bus, they will be subject to congestion and less reliable travel times for this portion of their trip. That should be discussed.	Text added on pg. 3-34: The bus network would also be restructured to provide access from surrounding communities to the fixed guideway with more frequent bus service. Bus routes serving guideway stations would typically be shorter and would operate in less congested residential communities. These operations would help maintain service reliability compared to operations of longer-distance routes.
X	40	Pg. 3-33	Transfers section, third paragraph: Minimal wait times are cited for riders transferring from buses to the project because of its frequent service. The implications of the return trip for these riders should also be described.	Text added on pg. 3-35: Riders transferring from the guideway service to buses would benefit from improved frequencies on existing bus routes serving stations. Also, several new routes with high frequencies would be provided as feeders to the guideway system. Since these routes would primarily operate in residential areas, they would provide greater reliability versus routes operating along congested arterials. Riders transferring from rail-to-bus would also benefit from coordinated transfers between trains and buses thereby minimizing wait times.
X	41	Pg. 3-33	Comfort and Convenience section: Our earlier comment on demand exceeding peak capacity contradicts what is said in this section. The section should be eliminated or significantly changed.	Text was revised on pg. 3-35 and 3-36; Reference to standing patrons was deleted; added text pertaining to short wait times, covered waiting areas, and seats
X	42	Pg. 3-33	Transit User Benefits section: The description of user benefits gives the impression that this measure is a bureaucratic invention of the federal government that has no relevance to a project, which has two of its objectives as the improvement of mobility (the measure has been referenced in academia for decades). User benefits should be explained as a powerful measure of improved mobility which directly addresses two of the project goals. Information should be developed using the measure to present how the Build Alternatives meet these goals. User benefits are best expressed on a user basis rather than totals.	Text modified on pg. 3-36 to 3-37. Text now references benefits for transit-dependent communities (references Figure 3-7 which also addresses comment 37) and work trips from 'Ewa and Kapolei. All 4 Project goals are addressed.  While we agree that in most cases, individual user level information is more pertinent to a reader's perception of a project, we have typically only presented aggregate user benefits (as opposed to "per user" benefits) from SUMMIT. They are developed on the basis of aggregate information about the transportation system. Furthermore, unlike many other types of information, user benefits have little meaning to the average reader and the summary would seem more appropriate as a basis of comparison for the various alternatives. Our discussions with modeling experts also suggest the aggregate approach to be more common.
X	43	Pg. 3-42	Initial options for construction staging areas should be provided by the City in each construction package developed. Additional construction staging areas identified and requested by the Contractor should be reviewed and approved by the City.	Text revised on page 3-45: The maintenance and storage facility, park-and-ride lots, and stations could be used for construction staging areas. Additional areas would be identified by the contractor as needed. The contractor would be responsible for obtaining any necessary permits and approvals. Additional construction and staging areas identified and requested by the contractor would be reviewed and approved by the City. Staging areas are not expected to cause a substantial effect.

X	44	Pg. 3-43	The City should develop MOT plans typical roadway closures for each roadway identified in Table 3-24. MOT should account for the most critical activity, drilled shaft installation, allowing access operating area for the crane as well as access and operating areas for concrete delivery. The Contractor would be responsible to submit for approval any revisions to the typical MOT plans provided as part of the plan set.	Add text on pg. 3-49: The contractor would be given parameters, such as the number of lanes that could be closed and the procedures for closures, and would develop the MOT Plan accordingly with approval from the City or HDOT. The MOT Plan would address roadway closures for streets identified in Table 3-26.
X	45	Pg. 3-43	MOT plans should also address the delivery and unloading of pre-cast guideway sections including crane positioning for unloading.	Add text reflecting comment on pg. 3-49
X	46	Pg. 3-44	Consider locations where shoring may be needed; ex. Cantilever sections. Determine effect to both vehicular and pedestrian traffic in areas where additional shoring may be required.	Text added to pg 3-48: Construction with segmented precast sections would avoid the need for substantial shoring or false work. Appendix C, Construction Approach, describes the general construction process and methods likely to be used to construct the Project.
X	47	Pg. 3-44	Require that pedestrian detours be submitted and approved by the City to ensure that the detours are reasonable for all pedestrian including disabled pedestrians, and that proper deterrents are in place to prevent access (shortcut) through the construction area.	Add text to reflect comment, pg. 3-48: Proposed pedestrian detours would be submitted to the City for review and approval to ensure they are reasonable for all pedestrians and meet ADA regulations. Proper deterrents, such as barriers or fencing, would be placed to prevent access (short-cuts) through the construction areas.  Text added on pg. 3-50: Measures to maintain safe and efficient pedestrian and bicycle access <a href="#">would meet ADA regulations</a> and could include the following:
X	48	Pg. 3-45	Table 3-24, There is some concern that there is not sufficient construction work room to maintain roadway access on both sides during foundation installation and overhead guideway construction on the roadways with 2 lanes.	Sufficient space has been provided based on discussion with the contracting community

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