

Stop Rail Now Response

Salutations

Subject: Honolulu High-Capacity Transit Corridor Project

Dear: _____

The U.S. Department of Transportation Federal Transit Administration (FTA) and City and County of Honolulu Department of Transportation Services (DTS) issued a Draft Environmental Impact Statement (EIS) for *the Honolulu High-Capacity Transit Corridor Project* in November 2008. This letter, which is being distributed in conjunction with the Final EIS, is in response to substantive comments received on the Draft EIS during the comment period, which concluded on February 6, 2009. The Final EIS identifies the Airport Alternative (the Project) as the preferred alternative and is the focus of this document. This selection was based on consideration of the benefits of each alternative studied in the Draft EIS, public and agency comments on the Draft EIS, and City Council action under Resolution 08-261 identifying the Airport Alternative as the project to be the focus in this Final EIS. The selection is described in Chapter 2 in this Final EIS. It also includes additional information and analyses, and minor Project revisions that were made to address comments from agencies and the public on the Draft EIS. The following paragraphs address comments received in your letter dated February 9, 2009.

The headings in the responses are taken directly from the comment letter to help locate the responses.

General Comments

The capital plan for the project is presented in Section 6.3 of the Final EIS, and takes the economic downturn into account and had reduced the anticipated GET surcharge collections to reflect that downturn. Section 6.6 of the Final EIS also describes risks and uncertainties associated with these funding assumptions, which include changing economic conditions and the possibility of varying levels of revenue collection and project costs. The City will continue to refine revenue forecasts and cost estimates as the Project proceeds through FTA's New Starts process. The capital plan is a dynamic document that will be updated regularly as conditions warrant.

Capital costs of the Project, including finance charges, are expected to be fully paid for by a combination of FTA Section 5309 New Starts and FTA Section 5307 Funds from the Federal government and revenues from the County General Excise Tax Surcharge levied from 2007 through 2022 on Oahu. These sources of revenue are available only for public transportation purposes.

Regarding HDOT's projects, they are all contained in the latest OahuMPO Regional Transportation Plan and are the basis of the No Build Alternative used to evaluate the fixed guideway project as described in Chapter 2 of the Final EIS. It is against this backdrop that the results are presented in the EIS.

All of the Alternatives of the Draft EIS include all the elements of the State's highway plans in the 2030 O'ahu Regional Transportation Plan (ORTP), including the No Build Alternative. Nonetheless, as discussed in Chapter 3 of the Draft EIS, the No Build Alternative does not meet the purpose and need of the Project.

A Travel Forecasting Model was used to forecast roadway conditions in 2030, both with and without the Project. As described in Chapter 2 of the Draft EIS, modeling took into account committed transportation projects anticipated to be operational by 2030, which includes the projects identified in the Governor's transportation plan.

As shown in Tables 3-9 and 3-10 of the Final EIS, roadway conditions without the fixed guideway system would get worse, despite nearly \$3 billion in roadway improvements. However, these tables also show that traffic volumes on the highway system will go down with the fixed guideway system.

The State of Hawaii's Highway Modernization Plan dated January 22, 2009 is an accelerated construction schedule for many of the projects listed in Table 2-4 of the Final EIS. These projects were included in the analysis of all alternatives in the Draft EIS, including the No Build Alternative.

The Managed Lane Alternative was fully evaluated in the Alternatives Analysis and demonstrated to be less effective than a Fixed Guideway Alternative

The Final EIS fully and adequately addresses the environmental aspects of the project.

The Draft EIS does not reference a 30 percent decrease in congestion. As shown in Table 3-14, there is approximately a 20 percent reduction in vehicle hours of delay when comparing Build conditions to No Build conditions. The travel demand forecasting model has been refined since the Draft EIS to include non home based direct demand trips during off peak hours. The air passenger model was also updated to reflect current conditions. Table 3-14 in the Final EIS shows an 18 percent reduction with the fixed guideway versus the No Build Alternative.

With respect to traffic reductions, the Draft EIS reflects the results of the analysis conducted with the Project compared to the No Build Alternative. The figures have been updated for the Final EIS based on selection of the Airport Alternative and refinements to the travel demand forecasting model to account for non home based direct demand trips during off peak periods. In addition the air passenger model was updated to reflect current conditions. The updated results continue to show that traffic will decrease with the addition of the Project. The Final EIS includes the latest information.

As discussed above, the information presented in the Final EIS reflects the congestion reduction anticipated with construction of the Project.

Section 1:

Why rail transit never improves traffic congestion and why relief must come from highway options, such as HOT lanes.

1. Regarding Section 1, Paragraph 1, this comment provides information and is not related to the environmental analysis of the Project..
2. Regarding Section 1, Paragraph 2, this comment provides information and is not related to the environmental analysis of the Project.

3. Regarding Section 1, Paragraph 3, this comment is not related to the environmental analysis of the Project. As stated in the Draft EIS on page 3-8, "With increasing traffic congestion over the last 20 years, scheduled trip times for bus routes have been lengthened to reflect the additional time each bus trip takes." The implementation of the fixed guideway will allow for the redistribution of bus service hours to add service to the growing areas of Central, West and East Oahu.
4. Regarding Section 1, Paragraph, 4, this comment is not related to the environmental analysis of the Project. Figure 3-7 in the Final EIS shows that transit travel times will be significantly shorter with the fixed guideway system than with the No Build Alternative.
5. Regarding Section 1, Paragraph 5, this comment is not related to the environmental analysis of the Project. National trends show increasing transit ridership, and last year (2008) recorded the highest demand for public transportation in 52 years (APTA 2008 Ridership Report). National transit ridership has grown 18% over the past ten years (2007 National Transit Summaries and Trends, National Transit Database). Honolulu transit ridership has grown over the past several years recovering from three fare increases (July 1, 2001, July 1, 2003, October 1, 2003) and a month-long strike (FY 2004).
6. Regarding Section 1, Paragraph 6, this comment is not related to the environmental analysis of the project. Figure 3-7 in the Final EIS shows that transit travel times will be significantly shorter with the fixed guideway system than with the No Build Alternative. Table 3-14 in the Final EIS shows that vehicle hours of delay decreases 18 percent with the Project versus the No Build Alternative.
7. Actually, as noted above, national trends show transit ridership increases.
8. The analysis is undertaken in the environmental review of the Project. In addition, the relevance to the Project of 2012 to 2000 data is unclear. There are other ways to decrease traffic congestion, including increasing the number of people per vehicle. The fixed guideway project, as currently planned, would carry a minimum of 8500 people per hour per direction during peak periods, thus reducing traffic congestion as compared to the No Build Alternative. It is unclear what is meant by the "lower table" so it cannot be addressed in this response.
9. The commenter's planned use of terminology is noted in Section 1, Paragraph 9.
10. The Final EIS discusses both bus and rail transit. As noted in Section 2.5.6 of the Final EIS, "bus service would be enhanced and the bus network would be modified to coordinate with the fixed guideway system."
11. Regarding Section 1, Paragraph, 11, this comment is not related to the environmental analysis of the Project.
12. Regarding Section 1, Paragraph, 12, this comment is not related to the environmental analysis of the Project.
13. Regarding Section 1, Paragraph, 13, this comment is not related to the environmental analysis of the Project.

14. Regarding Section 1, Paragraph, 14, this comment is not related to the environmental analysis of the Project.
15. See response above regarding national trends showing increases in transit ridership.
16. Regarding Section 1, Paragraph, 16, this comment is not related to the environmental analysis of the Project.
17. Regarding Section 1, Paragraph, 17, this comment is not related to the environmental analysis of the Project.
18. Regarding Section 1, Paragraph, 18, this comment is not related to the environmental analysis of the Project. In addition, Houston does have a rail system.
19. Regarding Section 1, Paragraph, 19, this comment is not related to the environmental analysis of the Project.
20. Regarding Section 1, Paragraph, 20, this comment is not related to the environmental analysis of the Project.
Regarding Section 1, Paragraph, 21, this comment is not related to the environmental analysis of the Project.
21. Regarding Section 1, Paragraph, 22, this comment is not related to the environmental analysis of the Project.
22. A travel demand forecasting model was used to forecast traffic volumes at six screenlines (i.e., virtual lines that cut across the corridor used to measure the performance of the transportation system at that location) in 2030, both with and without the fixed guideway system. As seen in Tables 3-9 and 3-10 in the Final EIS, traffic volumes in 2030 will be reduced with the Project versus with the No Build Alternative. For instance, with the fixed guideway system there is an 11 percent reduction in traffic at the Kaluaao screenline in the Koko Head bound direction during the a.m. peak hour and a 10 percent reduction in the Ewa bound direction during the p.m. peak hour when compared to conditions without the fixed guideway.
23. The travel forecasting model uses guidelines established by FTA for all projects seeking federal funds from the New Starts program. According to modeling done for the Project, the fixed guideway system will relieve traffic congestion compared to the No Build Alternative. Table 3-14 in the Final EIS shows an 18 percent reduction in vehicle hours of delays in 2030 with the Project compared to the No Build Alternative.
24. The Managed Lane Alternative was fully evaluated in the Alternatives Analysis and demonstrated to be less effective than a Fixed Guideway Alternative. It did not meet the objectives of the project to improve mobility, reliability, improved service to planned growth areas or improved equity in the transportation system as well as the fixed guideway.
25. As noted above, a Managed Lane Alternative meeting this general description was fully evaluated in the Alternatives Analysis and demonstrated to be less effective than a Fixed Guideway Alternative. The HOT facility was not only less effective in

meeting the project's Purpose and Need, but it was also financially unrealistic because it does not qualify for the GET Surcharge funds or federal New Starts funding. Tolls would also have to be excessively high to pay for the cost of the elevated lanes at \$6.60 during the peak period. Tolls would still only generate less than a quarter of the capital funding needed to build the system. This toll rate is comparable to similar systems where tolls are as high as \$10.00 during peak times (e.g., Orange County, CA – SR 91 HOT lanes).

26. As noted above, the Managed Lane Alternative was fully evaluated in the Alternatives Analysis and demonstrated to be less effective than a Fixed Guideway Alternative. Therefore, it has not been considered as a project alternative in the Draft EIS.

27. As noted above, the Managed Lane Alternative was fully evaluated in the Alternatives Analysis and demonstrated to be less effective than a Fixed Guideway Alternative. Therefore, it has not been considered as a project alternative in the Draft EIS.

28. The Draft EIS does not consider HOT lanes, as those were eliminated for inferior performance compared to the fixed guideway during the Alternatives Analysis process, as discussed in Chapter 2 of the Draft EIS. See previous comments regarding the alternative's inability to effectively meet Purpose and Need and financial performance requirements.

29. Please see above.

30. In "Chapter 2 – Alternatives Considered" of the Alternative Analysis (AA) report, November 2007, as well as in Chapter 2 – Alternatives Considered" of the Draft EIS, November 2008, two options were considered for the managed lane alternative, Two-direction and Reversible. This alternative "would have provided a two-lane elevated toll facility between Waipahu and Downtown Honolulu, with variable pricing strategies to maintain free-flow speeds for transit and high-occupancy vehicles (HOVs)."

31. The Alternatives Analysis indicated that transit reliability would not have been improved except for express bus service operation in the managed lanes. While this alternative would have slightly reduced congestion on parallel highways, systemwide traffic congestion would have been similar to the No Build Alternative as a result of increased traffic on arterials trying to access the facility. Total islandwide Vehicle Hours of Delay (VHD) would have increased with the Managed Lane Alternative compared to the No Build Alternative, indicating an increase in systemwide congestion.

32. The capital plan for the project is presented in Section 6.3 of the Final EIS, including a description of the amount of funding anticipated from various sources. Section 6.6 of the Final EIS describes risks and uncertainties associated with these funding assumptions. The intent of the comment in Section 1, Paragraph 32 is unclear. For example, reference to first phase construction segments are inconsistent with the information in the Final EIS in Chapter 2 and the crossing of H-1 at University Avenue is not a part of the Final EIS Project, but is a potential future extension, which will be evaluated separately at a later date if the extension is pursued.

33. As stated above, Section 6.3 of the Final EIS describes the anticipated funding sources for the capital cost of the Project. Capital costs of the Project, including finance

charges, are expected to be fully paid by a combination of FTA Section 5309 New Starts Funds and FTA Section 5307 Funds from the Federal government and the revenues from the County General Excise Tax Surcharge levied from 2007 through 2022. As a note regarding cost overruns, the capital cost estimate includes over \$800 million in contingencies to account for such eventualities. Section 6.4 of the Final EIS describes the funding sources for ongoing operations and maintenance anticipated of the Project. Operating and maintenance costs will utilize the same funding sources currently used for TheBus: Federal funding, fare revenues, and subsidies from the City's General and Highway Funds.

34. Please see the previous response.

35. The analysis of the HOT facility in Honolulu from the Alternatives Analysis shows the cost to be \$2.6 billion in 2006 dollars (higher today). This estimate was reviewed by HDOT and other familiar with HOT facilities. It is the only estimate to date that addresses Honolulu conditions. There is no substantiation of the estimate from the Tampa Bay toll facility being applicable in Honolulu. The designer of the Tampa Bay facility herself admitted that to apply such an estimate without detailed consideration of the many differences between the two locations is not reasonable.

36. HOT Lanes are not eligible for FTA New Starts funding.

37. The Alternatives Analysis shows that the estimated cost of HOT Lanes is \$2.6 billion (2006 dollars) which would be higher now. This cost has been reviewed by HDOT and others.

(Comment 38. is missing.)

39. Regarding Section 1, Paragraph, 39, this comment is not related to the environmental analysis of the Project. Rail has reduced traffic congestion within the corridor within which it is built (see Salt Lake City, Dallas, etc). The travel forecasting model used in the environmental analysis of the Project uses guidelines established by FTA and according to modeling done for the Project, the fixed guideway system will relieve traffic congestion compared to the No Build Alternative. Table 3-14 in the Final EIS shows a 18 percent reduction in vehicle hours of delays in 2030 with the Project as compared to the No Build Alternative.

40. As discussed above, managed lanes alternatives were studied in the Alternatives Analysis. This alternative was rejected for the reasons discussed above. Traffic conditions will be worse in 2030 under any circumstances and regardless of whether the fixed guideway, managed lane, or more buses are implemented. With the fixed guideway system, total islandwide congestion (as measured by vehicle hours of delay) would decrease by 18 percent as compared to the No Build Alternative (Table 3-14 in the Final EIS). In addition, traffic volumes were studied at various screenlines in the study corridor. The travel demand forecasting model was used to forecast traffic volumes at these screenlines in 2030, both with and without the Project. Analysis revealed that traffic volumes at these screenlines would decrease up to 11 percent with the Project during the a.m. peak hour (Table 3-9 in the Final EIS). Accordingly, traffic conditions will be significantly better with the fixed guideway than compared to the No Build Alternative.

41. The fixed guideway project will provide an alternative to the private automobile.
42. As discussed above, the Managed Lane Alternative was fully evaluated in the Alternatives Analysis and demonstrated to be less effective than a Fixed Guideway Alternative.
43. As noted above, a Managed Lane Alternative meeting this general description was fully evaluated in the Alternatives Analysis and demonstrated to be less effective than a Fixed Guideway Alternative. The HOT facility was not only less effective in meeting the project's Purpose and Need, but it was also financially unrealistic because it does not qualify for the GET Surcharge funds or federal New Starts funding. Tolls would also have to be excessively high to pay for the cost of the elevated lanes at \$6.60 during the peak period. Tolls would still only generate less than a quarter of the capital funding needed to build the system. This toll rate is comparable to similar systems where tolls are as high as \$10.00 during peak times (e.g., Orange County, CA – SR 91 HOT lanes).

Section 2

Alternative Solutions:

1. Regarding Section 2, Paragraph, 1, this comment is not related to the environmental analysis of the Project. This option may have application in the right time and the right place in addition to the fixed guideway project. The Project does not preclude this from happening. This alternative is not within the control of the City.
2. Regarding Section 2, Paragraph, 2, this comment is not related to the environmental analysis of the Project. This option may have application in the right time and the right place in addition to the fixed guideway project. The Project does not preclude this from happening. This alternative is not within the control of the City.
3. Regarding Section 2, Paragraph, 3, this comment is not related to the environmental analysis of the Project. This option may have application in the right time and the right place in addition to the fixed guideway project. The Project does not preclude this from happening. This alternative is not within the control of the City.
4. Regarding Section 2, Paragraph, 4, this comment is not related to the environmental analysis of the Project. As noted above regarding school hours, this option may have application in the right time and the right place in addition to the fixed guideway project. The Project does not preclude this from happening. This alternative is not within the control of the City.
5. Regarding Section 2, Paragraph, 5, this comment is not related to the environmental analysis of the Project. As noted above regarding school hours, this option may have application in the right time and the right place in addition to the fixed guideway project. The Project does not preclude this from happening. This alternative is not within the control of the City.
6. The State of Hawaii's Highway Modernization Plan dated January 22, 2009 includes the \$600 million Nimitz Viaduct project. It would complement the transit project and is included in the No Build Alternative.

7. Regarding Section 2, Paragraph, 7, this comment is not related to the environmental analysis of the Project. This option may have application in addition to the fixed guideway project. The Project does not preclude this from happening.

8. Regarding Section 2, Paragraph, 8, this comment is not related to the environmental analysis of the Project. This option may have application in the right time and the right place in addition to the fixed guideway project. The Project does not preclude this from happening. This alternative is not within the control of the City.

9. Regarding Section 2, Paragraph, 9, this comment is not related to the environmental analysis of the Project. This option may have application in the right time and the right place in addition to the fixed guideway project. The Project does not preclude this from happening. This alternative is not within the control of the City.

10. Regarding Section 2, Paragraph, 10, this comment is not related to the environmental analysis of the Project. This option may have application in the right time and the right place in addition to the fixed guideway project. The Project does not preclude this from happening.

11. Regarding Section 2, Paragraph, 3, this comment is not related to the environmental analysis of the Project. The City has a program to modernize the traffic signal system. It is in addition to the Project.

12. Regarding Section 2, Paragraph, 12, this comment is not related to the environmental analysis of the Project. This option may have application in the right time and the right place in addition to the fixed guideway project. The Project does not preclude this from happening.

13. Regarding Section 2, Paragraph, 13, this comment is not related to the environmental analysis of the Project. This option may have application in the right time and the right place in addition to the fixed guideway project. The Project does not preclude this from happening.

14. Regarding Section 2, Paragraph, 14, this comment is not related to the environmental analysis of the Project. This option may have application in the right time and the right place in addition to the fixed guideway project. The Project does not preclude this from happening.

15. Regarding Section 2, Paragraph, 15, this comment is not related to the environmental analysis of the Project. This option may have application in the right time and the right place in addition to the fixed guideway project. The Project does not preclude this from happening.

16. Regarding Section 2, Paragraph, 16, this comment is not related to the environmental analysis of the Project. This option may have application in the right time and the right place in addition to the fixed guideway project. The Project does not preclude this from happening.

17. Regarding Section 2, Paragraph, 17, this comment is not related to the environmental analysis of the Project. This option may have application in the right time

and the right place in addition to the fixed guideway project. The Project does not preclude this from happening.

18. Regarding Section 2, Paragraph, 18, this comment is not related to the environmental analysis of the Project. This option may have application in the right time and the right place in addition to the fixed guideway project. The Project does not preclude this from happening.

19. Regarding Section 2, Paragraph, 19, this comment is not related to the environmental analysis of the Project. This option may have application in the right time and the right place in addition to the fixed guideway project. The Project does not preclude this from happening.

20. Regarding Section 2, Paragraph, 20, this comment is not related to the environmental analysis of the Project. This option may have application in the right time and the right place in addition to the fixed guideway project. The Project does not preclude this from happening.

21. Regarding Section 2, Paragraph, 21, this comment is not related to the environmental analysis of the Project. This option may have application in the right time and the right place in addition to the fixed guideway project. The Project does not preclude this from happening.

22. Regarding Section 2, Paragraph, 22, this comment is not related to the environmental analysis of the Project. This option may have application in the right time and the right place in addition to the fixed guideway project. The Project does not preclude this from happening.

23. Regarding Section 2, Paragraph, 23, this comment is not related to the environmental analysis of the Project. This option may have application in the right time and the right place in addition to the fixed guideway project. The Project does not preclude this from happening.

24. Regarding Section 2, Paragraph, 24, this comment is not related to the environmental analysis of the Project. This option may have application in the right time and the right place in addition to the fixed guideway project. The Project does not preclude this from happening.

25. Regarding Section 2, Paragraph, 25, this comment is not related to the environmental analysis of the Project. This option may have application in the right time and the right place in addition to the fixed guideway project. The Project does not preclude this from happening. This alternative is not within the control of the City.

26. Regarding Section 2, Paragraph, 26, this comment is not related to the environmental analysis of the Project. This option may have application in the right time and the right place in addition to the fixed guideway project. The Project does not preclude this from happening.

27. Regarding Section 2, Paragraph, 27, this comment is not related to the environmental analysis of the Project. This option may have application in the right time

and the right place in addition to the fixed guideway project. The Project does not preclude this from happening.

28. Regarding Section 2, Paragraph, 28, this comment is not related to the environmental analysis of the Project. This option may have application in the right time and the right place in addition to the fixed guideway project. The Project does not preclude this from happening.

29. Regarding Section 2, Paragraph, 29, this comment is not related to the environmental analysis of the Project. This option may have application in the right time and the right place in addition to the fixed guideway project. The Project does not preclude this from happening.

30. Regarding Section 2, Paragraph, 30, this comment is not related to the environmental analysis of the Project. This option may have application in the right time and the right place in addition to the fixed guideway project. The Project does not preclude this from happening.

Section 3 BRT Success

Why would these success stories not apply to Honolulu?

1. A variety of bus related alternatives were examined during the Alternatives Analysis. BRT was also studied in the Primary Corridor Study in 2002. These alternatives in these analyses covered a variety of options, including increasing frequency of operations on an elevated bus facility. The Alternatives Analysis revealed that the fixed guideway system was more effective at reducing congestion than a bus rapid transit system.
2. The information on the South Nevada Metropolitan Area Express (MAX) system has been noted. The Alternatives Analysis showed that transit reliability would not have been improved except for express bus service operation while in the managed lanes. While this alternative would have slightly reduced congestion on parallel highways, systemwide traffic congestion would have been similar to the No Build Alternative as a result of increased traffic on arterials trying to access the facility. Total islandwide Vehicle Hours of Delay (VHD) would have increased with the Managed Lane Alternative as compared to the No Build Alternative, indicating an increase in systemwide congestion Draft EIS, November 2008.
3. The information on the Los Angeles Metro Rapid system has been noted. The Metro Rapid system relies primarily in non-exclusive right-of-way on existing roadways. In Honolulu, there are no available options for improved bus service on existing roadways that are not already subject to high levels of congestion during peak travel times which hinder reliability and level of service severely. The development of an exclusive right-of-way option for buses, such as the Orange Line in LA, was evaluated as part of the Managed Lane Alternative in the Alternatives Analysis as noted in previous paragraphs of this response.
4. The information on the Los Angeles Orange Line system has been noted. Please see the previous response.

5. Information about TOD development has been noted. In March 2009 the City Council approved and the Mayor of Honolulu signed Bill 10 (2008) (Ordinance 09-004), which defines the city's approach to Transit Oriented Development (TOD) around fixed guideway stations. Future zoning regulations will address parking standards, new density provisions, open space and affordable housing. Financial incentives could include public-private partnerships, real property tax credits and infrastructure financing. While the Project is coordinating with City and State agencies to encourage development of enhanced pedestrian and bicycle facilities and other land use changes near the stations, the actual construction of such facilities and zoning changes are beyond the scope of the Project. The special districts also encourage public input into the design of TOD neighborhood plans to reflect unique community identities. TOD planning would occur before the fixed guideway stations are constructed.

6. Information about the NJ Transit Village Initiative and Boston's TOD policies on parking, transportation mitigation and security have been noted. A Maintenance of Traffic (MOT) and a Transit Mitigation Plan (MTP) will identify measures to mitigate temporary construction-related effects on transportation. Additionally, the MOT Plan would address effects on streets and highways, transit, business and residences, pedestrians and bicyclists, and parking as mentioned in section 3.5.5 of the Final EIS. A Safety and Security Management Plan would be developed in accordance with FTA requirements to mitigate potential effects on community services as mentioned in section 4.5.2 of the Final EIS.

7. Regarding Section 3, Paragraph, 7, this comment is not related to the environmental analysis of the Project. This comment is not related to the project alternatives or effects and refers to purported assertions not made in the document.

8. Information regarding Ottawa and Pittsburgh BRT TOD has been noted. Regarding Section 3, Paragraph, 8, this comment is not related to the environmental analysis of the Project.

9. Regarding Section 3, Paragraph, 9, this comment is not related to the environmental analysis of the Project. Information on the success of TOD developments worldwide has been noted.

10. Regarding Section 3, Paragraph, 10, this comment is not related to the environmental analysis of the Project. The information on the success of connecting TOD to transit has been noted.

Section 4 HOT Lanes

Why would these success stories not apply to Honolulu?

1. Regarding Section 4, Paragraph, 1, this comment is not related to the environmental analysis of the Project. The information on Mark Muiello and the New York Exclusive Bus Lane (XBL) has been noted.

2. Regarding Section 4, Paragraph, 2, this comment is not related to the environmental analysis of the Project. The information on New York Port Authority bridges and tunnels has been noted.

3. Regarding Section 4, Paragraph, 3, this comment is not related to the environmental analysis of the Project. The information on New York Port Authority bridges and tunnels has been noted.
4. Regarding Section, Paragraph, 4, this comment is not related to the environmental analysis of the Project. The information on New York Port Authority bridges and tunnels has been noted.
5. Regarding Section 4, Paragraph, 5, this comment is not related to the environmental analysis of the Project. The information on New York Port Authority bridges and tunnels has been noted.
6. Regarding Section 4, Paragraph, 6, this comment is not related to the environmental analysis of the Project. The information on New York Port Authority bridges and tunnels has been noted.
7. Regarding Section 4, Paragraph, 7, this comment is not related to the environmental analysis of the Project. The information on New York Port Authority bridges and tunnels has been noted.
8. Regarding Section 4, Paragraph, 8, this comment is not related to the environmental analysis of the Project. The information on further Federal studies of the NY XBL, the EZ Pass and HOT lanes have been noted.
9. Regarding Section 4, Paragraph, 9, this comment is not related to the environmental analysis of the Project. The information on New York Port Authority bridges and tunnels has been noted.
10. Regarding Section 3, Paragraph, 10, this comment is not related to the environmental analysis of the Project. The information on New York Port Authority bridges and tunnels has been noted.
11. Regarding Section 4, Paragraph, 11, this comment is not related to the environmental analysis of the Project. The information on New York Port Authority bridges and tunnels has been noted.
12. Regarding Section 4, Paragraph, 12, this comment is not related to the environmental analysis of the Project. The information on New York Port Authority bridges and tunnels has been noted.
13. Regarding Section 4, Paragraph, 13, this comment is not related to the environmental analysis of the Project. The information on the study of the NY Commercial vehicle priority has been noted.
14. Regarding Section 4, Paragraph, 14, this comment is not related to the environmental analysis of the Project. The information on the study of the Houston contraflow and HOV lanes has been noted.
15. Regarding Section 4, Paragraph, 15, this comment is not related to the environmental analysis of the Project. The information on the study of the Houston contraflow and HOV lanes has been noted.

16. Regarding Section 4, Paragraph, 16, this comment is not related to the environmental analysis of the Project. The information on the study of the Houston contraflow and HOV lanes has been noted.
17. Regarding Section 4, Paragraph, 17, this comment is not related to the environmental analysis of the Project. The information on the study of the Houston contraflow and HOV lanes has been noted.
18. Regarding Section 4, Paragraph, 18, this comment is not related to the environmental analysis of the Project. The information on the study of the Houston contraflow and HOV lanes has been noted.
19. Regarding Section 4, Paragraph, 19, this comment is not related to the environmental analysis of the Project. Information on Houston's HOV system connection to the Metro Rail system, parking capacity and trips has been noted.
20. Regarding Section 4, Paragraph, 20, this comment is not related to the environmental analysis of the Project. Information on Houston's HOV system connection to the Metro Rail system, parking capacity and trips has been noted.
21. Regarding Section 4, Paragraph, 21, this comment is not related to the environmental analysis of the Project. Information on BRT in Maryland has been noted.
22. Regarding Section 4, Paragraph, 22, this comment is not related to the environmental analysis of the Project. Information on BRT in Maryland has been noted.
23. Regarding Section 4, Paragraph, 23, this comment is not related to the environmental analysis of the Project. Information on BRT in Maryland has been noted.
24. Regarding Section 4, Paragraph, 24, this comment is not related to the environmental analysis of the Project. Information on BRT in Maryland has been noted.
25. Regarding Section 4, Paragraph, 25, this comment is not related to the environmental analysis of the Project. Information on BRT in Maryland has been noted.
26. Regarding Section 4, Paragraph, 26, this comment is not related to the environmental analysis of the Project. Information on BRT in Maryland has been noted.
27. Regarding Section 4, Paragraph, 27, this comment is not related to the environmental analysis of the Project. Information on BRT in Maryland has been noted.
28. Regarding Section 4, Paragraph, 28, this comment is not related to the environmental analysis of the Project. Information on BRT in Maryland has been noted.
29. Regarding Section 4, Paragraph, 29, this comment is not related to the environmental analysis of the Project. Information on the Bi-County Transitway project has been noted.
30. Regarding Section 4, Paragraph, 30, this comment is not related to the environmental analysis of the Project. Information on the Bi-County Transitway project has been noted.

31. Regarding Section 4, Paragraph, 31, this comment is not related to the environmental analysis of the Project. Information on Robert Poole and exclusive bus ways has been noted.
32. Regarding Section 4, Paragraph, 32, this comment is not related to the environmental analysis of the Project. Information on value pricing has been noted.
33. Regarding Section 4, Paragraph, 33, this comment is not related to the environmental analysis of the Project. Information about the history of HOV lanes has been noted.
34. Regarding Section 4, Paragraph, 34, this comment is not related to the environmental analysis of the Project. Information about the history of HOV lanes has been noted.
35. Regarding Section 4, Paragraph, 35, this comment is not related to the environmental analysis of the Project. Information about the history of HOV lanes has been noted.
36. Regarding Section 4, Paragraph, 36, this comment is not related to the environmental analysis of the Project. Information about the history of HOV lanes has been noted.
37. Regarding Section 4, Paragraph, 37, this comment is not related to the environmental analysis of the Project. Information about the sustainability of BRT in HOV lanes has been noted.
38. Information about the I-15 HOT lanes and the 91 Express lanes has been noted. The concept of HOT was considered as part of the Alternatives Analysis, but did not perform as well as the fixed guideway in terms of travel time or delay as noted in Chapter 2 of the Final EIS. The AA does not dismiss the validity of HOT lanes in the appropriate application. They did not perform as well as the fixed guideway.
39. Please see the previous response. Information about virtual exclusive busway (VEB) concepts, capacity, pricing, cost, and individual opinion to be recognized by the FTA as a viable alternative has been noted.
40. Please see the previous response. Information about virtual exclusive busway (VEB) concepts, capacity, pricing, cost, and individual opinion to be recognized by the FTA as a viable alternative has been noted.
41. Please see the previous response. Information about virtual exclusive busway (VEB) in Houston has been noted.
42. Please see the previous responses. Information about virtual exclusive busway (VEB) concepts, capacity, pricing, cost, and individual opinion to be recognized by the FTA as a viable alternative has been noted.
43. Please see the previous responses. Information about virtual exclusive busway (VEB) concepts and their cost has been noted.

44. It is agreed that managed lanes are being considered in a number of locations in the U.S. and that policy changes could make them acceptable to more applications through various forms of funding. As stated earlier, the validity of managed lanes is not questioned as an effective transportation alternative, but it does not perform as well as the fixed guideway in Honolulu based on the Alternatives Analysis findings and the information contained in Chapter 2 of the Final EIS.

45. Regarding Section 4, Paragraph, 45, this comment is not related to the environmental analysis of the Project.

Section 5 Why buses are better

1. Project goals include supporting planned development. In addition to the number of trips served, which is related to the population density, planning also considers the length of trips served. The longer the trip, which would have greater travel time savings, the greater the benefit received from the system. Potential Transit Markets are discussed in Section 1.6 of the EIS. This section provides a summary of population projections, locations of employment growth, current and future transit dependent households, and resident and tourist transit markets.

2. As indicated in (Section 3.4.2 of the Final EIS – Effects on Transit), overall access to public transit would be enhanced with the Project. Substantial Project ridership would be provided by local bus and people walking to the station. Bus and walk access to stations would account for, "approximately 85 percent of total trips in the a.m. peak period". Access to stations would be enhanced by accommodating bicyclists and pedestrians. Several stations would be located near existing or planned bicycle facilities. In addition, bus access would be enhanced to coordinate with the fixed guideway system. Lastly, park-and-ride facilities would be provided at stations with the highest demand for drive-to-transit access.

3. Regarding Section 5, Paragraph, 3, this comment is not related to the environmental analysis of the Project.

4. Regarding Section 5, Paragraph, 4, this comment is not related to the environmental analysis of the Project.

5. As stated in Chapter 3 of the Draft EIS, "With any of the Build Alternatives, the rate of transfers would be higher than under the No Build Alternative due to proposed changes in local bus service to maximize access to the fixed guideway system." However, "Because of the high frequency of the fixed guideway service (three-minute headways between trains during peak periods), riders transferring from buses to the fixed guideway would experience minimal wait times. 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." Using these systems in the proposed complementary fashion, ridership forecasts are for 116,000 riders daily on the Project as noted in Chapters 2 and 3. This is higher than any of the options evaluated in the Alternatives Analysis or in the Draft EIS.

6. Chapter 3 of the Draft EIS states that, "Adding substantial passenger capacity with more buses is not feasible in some key locations along the system because of roadway capacity constraints. Choke points occur in Downtown Honolulu during the a.m. peak period, especially at the merger of North Beretania, North King, and Liliha Streets, and Dillingham Boulevard. King Street has been used to introduce new service in recent years; however, choke points occur at the Chinatown bus stops and at the Punchbowl Street and King Street stops. Buses often must wait to move into an open and safe boarding position. Continuing to add additional service to King Street without major physical improvements would add to the gridlock in the corridor, deteriorate transit service, and complicate pedestrian and traffic safety issues.

Several routes, including CountryExpress! Routes C, D, and E are projected to be overloaded in 2030. Increasing frequency would require headways at five minutes or less. Further, the downtown street network cannot support the number of buses that would be required to meet projected demand." These system capacity limitations are a major obstacle to an effective addition of bus service in the corridor. The Alternatives Analysis showed that an enhancement to the bus system would provide minimal benefit because it is subject to the same congestion impediments as already exist on the highway system.

7. Regarding Section 5, Paragraph, 7, this comment is not related to the environmental analysis of the Project.

8. The many improvements proposed could be part of a comprehensive program of transportation improvements. They offer additional benefit, but do not replace the need for the fixed Guideway.

9. Regarding Section 5, Paragraph, 9, this comment is not related to the environmental analysis of the Project. The Project does provide the opportunity for the development of transit oriented development (TOD), but to be implemented by the private sector to take advantage of the mobility and accessibility improvements anticipated with the Project.

10. Regarding Section 5, Paragraph, 10, this comment is not related to the environmental analysis of the Project.

11. Regarding Section 5, Paragraph, 11, this comment is not related to the environmental analysis of the Project.

12. Regarding Section 5, Paragraph, 12, this comment is not related to the environmental analysis of the Project.

13. As noted in Chapter 2 of the Draft EIS, many other alternative approaches were evaluated in the Alternatives Analysis and rejected because they do not offer the capacity and benefits of the elevated rail system proposed for the City of Honolulu.

Section 6 Rail Will Fail: HOT Lanes are Better

1. The island's unique visual character and scenic beauty was considered in the visual and aesthetic analysis presented in the Draft EIS. The Project would be set in an

urban context where visual change is expected and differences in scales of structures are typical. The following measures would be included with the Project to minimize negative visual effects and enhance the visual and aesthetic opportunities that it creates:

- Develop and apply design guidelines that would establish a consistent design framework for the Project with consideration of local context
- Retain existing trees where practical and provide new vegetation
- Shield exterior lighting
- Coordinate the project design with the City TOD planning and DPP
- RTD will consult with the communities surrounding each station for input on station design elements.

It should also be noted that the Project would provide users, including tourists, with expansive views from several portions of the corridor by elevating riders above highway traffic, street trees, and low structures adjacent to the alignment.

2. The highways will carry more vehicles in 2030 under any circumstances and regardless of which solution is applied. Traffic volume data for the H-1 Freeway reports 10,140 vehicles per hour (vph) at the Kalauao screenline in the Koko Head bound direction during the a.m. peak hour. This number is predicted to increase to 13,160 vph under 2030 No Build conditions; however, this number is lower with the fixed guideway (12,190 vph). Accordingly, traffic conditions will be better with the fixed guideway than any of the other potential solutions studied, including managed lanes and additional bus service.

3. Screened alternatives included a No Build Alternative, a Transportation System Management Alternative (enhanced bus service), and a number of Build Alternatives. The comparison of alternatives presented in the AA concluded that the TSM Alternative would provide little benefit at a relatively low cost. A brief description of the TSM Alternative is provided in section 2.1.2 of the Draft EIS.

4. The Project will travel from one end of the line to the other in 42 minutes, including stops at all stations. That is about 30 mph on average and can be delivered regardless of the time of day or the conditions on the highways. As shown in section 2.1.2 of the Draft EIS, transit reliability would not have been improved in any of the other options evaluated in the Alternatives Analysis or the Draft EIS except for express bus service operation in the managed lanes during the portion of the trip in the lanes. While this alternative would have slightly reduced congestion on parallel highways, systemwide traffic congestion would have been similar to the No Build Alternative as a result of increased traffic on arterials trying to access the facility. The TSM (enhanced bus service) alternative would have generated fewer hours of transit-user benefits than either the Managed Lane or Fixed Guideway Alternative. Since most buses would still operate in mixed traffic, the TSM Alternative would have done little to improve corridor mobility and travel reliability.

5. As stated in Chapter 3 of the DEIS, "With any of the Build Alternatives, the rate of transfers would be higher than under the No Build Alternative due to proposed changes in local bus service to maximize access to the fixed guideway system." However, "Because of the high frequency of the fixed guideway service (three-minute headways between trains during peak periods), riders transferring from buses to the fixed guideway would experience minimal wait times. 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." The travel demand forecasting model includes a time penalty for transfers. With these characteristics in place, the transit system with the Project would still have ridership levels 44 percent higher than the No Build Alternative.

6. The highways will carry more vehicles in 2030 under any circumstances and regardless of which solution is applied. Traffic volume data for the H-1 Freeway reports 10,140 vehicles per hour (vph) at the Kalauao screenline in the Koko Head bound direction during the a.m. peak hour. This number is predicted to increase to 13,160 vph under 2030 No Build conditions; however, this number is lower with the fixed guideway (12,190 vph). Accordingly, traffic conditions will be better with the fixed guideway than any of the other potential solutions studied, including managed lanes and additional bus service.

7. This analysis was included in the evaluation of the Managed Lane Alternative in the Alternatives Analysis. It accommodated buses and HOV to travel free and a toll for single occupant vehicles.

8. Adding substantial passenger capacity with more buses is not feasible in some key locations along the system because of roadway capacity constraints as shown in section 3.3.2 of the Final EIS.

9. Overall system reliability, considering all factors, for a fully grade-separated transit system is substantially greater than for any system operating in mixed-flow conditions. In Honolulu, there is no practical difference between the proposed rail system and TheBus regarding labor considerations. The same is true for the project or any other system such as the Managed Lane Alternative.

10. There is no indication that damage to a fixed-guideway would be any more difficult to repair than to an elevated roadway. The chance of a transit vehicle being stopped by a disabled vehicle is much greater in any form of mixed traffic flow, such as managed lanes, than in an exclusive right-of-way carrying only routinely maintained rail vehicles. In the event of a closure to H-1, a substantially greater number of people would be accommodated by a fixed-guideway transit system than in two highway lanes being used to detour traffic.

11. Section 6.3 of the Final EIS describes the financial resources anticipated to be needed to pay for the capital cost of the project including finance charges. Capital costs are expected to be fully paid for by a combination of FTA Section 5309 New Starts and FTA Section 5307 Funds from the Federal government and revenues from the County General Excise Tax Surcharge levied from 2007 through 2022 on Oahu. The Managed Lane cost estimate was \$2.6 billion in 2006 dollars. It provides less benefit per dollar spent than the Project as indicated in the Alternative Analysis and in Chapter 2 of the Final EIS.

12. Regarding Section 6, Paragraph, 12, this comment is not related to the environmental analysis of the Project. Information about the quality of buses has been noted.

13. The EIS does not address tolling because the Project does not include any tolled facilities. Tolls were considered in the Alternative Analysis in the Managed Lane Alternative. Tolls of \$6.60 during the peak period were used and able to fund only 25% of the capital cost of the elevated lane project. In other places such as Orange County, CA, the SR-91 tolls rise to \$10 during the peak times of the week. Similar costs are forecast for the HOT lanes on the Dulles Expressway.

14. Implementation of the Managed Lane Alternative would have resulted in increased automobile use on O'ahu relative to all other alternatives evaluated in the Alternatives Analysis.

15. Project goals include supporting planned development. The objective of this goal is to avoid the dispersal of development which will lead to more sprawl in parts of the island unable to support it. In addition to the number of trips served, which is related to the population density, planning of the system considers the length of trips served. The Project will help shape future development. Jobs and housing are more likely to locate closer to each other with the Project based on the experience in all other rail projects over the past 20 years. The Project has developed plans to prevent safety and security problems at stations and will provide staffing at stations to support those plans. Ridership forecasts, on the other hand, are made without the benefit of speculation about what type of land uses might locate near transit stations. The FTA only allows approved development or imminent plans to be considered in planning the system.

16. The Final EIS does not consider HOT lanes, as those were eliminated for inferior performance compared to the fixed guideway during the Alternatives Analysis process, as discussed in Chapter 2 of the Final EIS.

17. The Managed Lane Alternative was fully evaluated in the Alternatives Analysis and demonstrated to be less effective than a Fixed Guideway Alternative. The engineering cost estimate for a two-lane reversible managed lane facility, which was calculated following the same rigorous cost estimating process used for the Fixed Guideway Alternatives, was \$2.6 billion in 2006 dollars. The zipper lane was eliminated in evaluation of the reversible facility because with the additional lanes, the demand and capacity would be better balanced without the zipper lane. Implementation of the zipper lane results in the loss of two lanes of capacity in the reverse direction. By 2030, the directional transportation demand will be more balanced than it is today. Eliminating the zipper lane while evaluating the reversible managed lane alternative provided the greatest benefit to modeled freeway users by increasing capacity in both directions. Access ramps were provided at several locations. Park-and-ride facilities and bus stops were included to maximize transit use, providing the alternative the greatest opportunity to generate transit user benefits.

The City Council's Transit Advisory Task Force to review the Alternatives Analysis concluded in their report of December 14, 2006 that the assessment of each alternative was "fair and accurate" and that capital cost estimates were compiled using the same methodology and unit cost and that the construction cost estimates were fairly and consistently prepared.

The Managed Lane Alternative was evaluated in the Alternatives Analysis and demonstrated to be less effective than a Fixed Guideway Alternative. The findings are

summarized in Chapter 2 of the Final EIS as follows:

The Managed Lane Alternative was evaluated for its ability to meet project goals and objectives related to mobility and accessibility, supporting planned growth and economic development, constructability and cost, community and environmental quality, and planning consistency. VMT would have increased compared to any of the other alternatives. While this alternative would have reduced congestion on parallel highways, systemwide traffic congestion would have been similar to the No Build Alternative as a result of increased traffic on arterials trying to access the facility. Total islandwide VHD would have increased with the Managed Lane Reversible Option as compared to the No Build Alternative, indicating an increase in systemwide congestion. Transit reliability would not have been improved except for express bus service operating in the managed lanes. The Managed Lane Alternative would not have supported planned concentrated future population and employment growth because it would not provide concentrations of transit service that would serve as a nucleus for transit-oriented development. The Managed Lane Alternative would have provided little transit benefit at a high cost. The cost-per-hour of transit-user benefits for the Managed Lane Alternative would have been two to three times higher than that for the Fixed Guideway Alternative. Similar to the TSM Alternative, the Managed Lane Alternative would not have substantially improved service or access to transit for transit-dependent communities.

Section 7: transit debate

1. Adding buses and elevated HOT Lanes were evaluated in the Alternatives Analysis and eliminated because they did not perform as well as the fixed guideway, as described in Chapter 2 of the Final EIS.
2. Adding substantial passenger capacity with more buses, even larger buses, is not feasible in some key locations along the system because of roadway capacity constraints as shown in Section 3.3.2 of the Final EIS. Even with the fixed guideway, buses will continue to carry the largest portion of transit users (about 78 percent). The difference is TheBus will be operated in support of the fixed guideway where that intermodal linkage provides for a more efficient trip. Bicycles will be accommodated on the rail vehicles. A policy is in development regarding bicycle accommodation on rail vehicles.
3. As mentioned in Chapter 2 of the Final EIS, transit reliability would not have been improved except for express bus service operation in the managed lanes. While the Managed Lanes alternative would have slightly reduced congestion on parallel highways, systemwide traffic congestion would have been similar to the No Build Alternative as a result of increased traffic on arterials trying to access the facility. Transit travel times for the Project compared to Existing Conditions and the No Build Alternative are shown in Chapter 3 in Figure 3-7 and travel speeds in Table 3-15. In all cases, the transit performance is improved with the Project.
4. As shown in Chapter 2 of the Final EIS, even using a managed lane for part of the trip, most buses still operate primarily in mixed traffic. That results in little improvement in corridor mobility and travel reliability even though the portion in the special lanes improves. Buses can travel at reasonable speeds in the special lanes, but still must negotiate very congested access points which obviate much of the benefit of the concept which prevents them from achieving the travel time claims in the comment.

5. As noted in Chapter 2, of the Final EIS adding buses and HOT lanes has been studied in the Alternatives Analysis and eliminated because those options did not perform as well as the fixed guideway, which is the subject of the Final EIS.

6. As stated in Chapter 3 of the Final EIS, "With any of the Build Alternatives, the rate of transfers would be higher than under the No Build Alternative due to proposed changes in local bus service to maximize access to the fixed guideway system." However, "Because of the high frequency of the fixed guideway service (three-minute headways between trains during peak periods), riders transferring from buses to the fixed guideway would experience minimal wait times. 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." The travel demand forecasting model includes a time penalty for transfers. With these characteristics in place, the transit system with the Project would still have ridership levels 44 percent higher than the No Build Alternative. In addition, as stated in Section 1.2 of the Draft EIS, 63 percent of O'ahu population and 80 percent of employment are located within the study corridor. By 2030, these distributions will increase to 69 percent and 83 percent, respectively. Lastly, the fixed guideway system provides park-and-ride lots at the stations with the highest projected drive-to-transit demand. While people typically try to minimize transfers on any trip, the more fundamental criterion for making a trip decision is how long the trip takes. Rail will offer people a shorter overall trip time compared to other options even with the transfers as noted in Section 3.4.2 of the Final EIS.

7. As stated in response to a previous comment, those transferring to the rail from the bus will experience minimal wait times. Riders transferring from the guideway service to buses will benefit from improved frequencies on bus routes serving stations. As stated in Chapter 3 of the Draft EIS, all stations will be equipped with escalators and elevators. Stations will also have covered waiting areas.

8. The Alternatives Analysis showed the cost of the Managed Lane Alternative to be \$2.6 billion (vetted by HDOT and other experts familiar with Hawai'i), compared to the fixed guideway at \$3.5 billion, and had little benefit to users compared to the fixed guideway. The Tampa Bay experience is not typical and could not be duplicated in Honolulu.

9. Regarding Section 7, Paragraph, 9, this comment is not related to the environmental analysis of the Project. Information about other cities building HOT lanes and population numbers has been noted. Recognizing each city is unique, no other single city has been used as a model for Honolulu in developing the characteristics of the rail system.

10. The Alternatives Analysis evaluated an expanded bus system (TSM Alternative) and showed it did not perform in a satisfactory manner compared to the fixed guideway. This is discussed in Chapter 2 of the Final EIS. Ridership for the TSM Alternative grows to only 7% over the No Build Alternative compared to 38% for the Project over the No Build.

11. Regarding Section 7, Paragraph, 11, this comment is not related to the environmental analysis of the Project. Prior BRT planning programs are not part of the current Project or EIS.

12. The Final EIS indicates that any of the build alternatives would reduce energy consumption by about 3,000 MBTU's over the No Build. This represents about 23,000 gallons of fuel saved per day. Alternative energy sources, such as photo-voltaic cells, can be built into the rail system as the development of alternative energy sources continues. The project will still rely on HECO.

13. As presented in the Alternatives Analysis and summarized in Chapter 2 of the Final EIS, the cost for a two-lane reversible managed lane facility, which was calculated following the same cost estimating process used for the Fixed Guideway Alternatives, is \$2.6 billion in 2006 dollars. Toll revenue would pay for less than 25% of the cost. The construction of numerous off-ramps and parking facilities would require acquisition of property and displacement of current businesses and residents.

14. The Project is the construction and implementation of rail transit service and that is what is analyzed in the Final EIS. As mentioned in Section 4.18.2 of the Draft EIS, transit-oriented development (TOD) is anticipated in project station areas as an indirect effect of the Project. The increased mobility and accessibility that the Project may provide will also increase the desirability and value of land near the stations, thereby attracting new real estate investment (in the form of TOD). Planning and zoning around station areas is the responsibility of the City's Department of Planning and Permitting in compliance with the City's new TOD ordinance (09-004).

15. The Project provides a variety of ways to access the fixed guideway and does not account for the possibility of Transit Oriented Development in the forecasts of ridership. If riders live nearby, they can walk or bike, if they live further, they can drive and park or take the bus. Chapter 3 details ridership characteristics and system usage on a station-by-station basis which shows ridership is not impeded by the planned station locations.

Section 8 City Myths on Rail Transit

1. The Managed Lane Alternative was evaluated in the Alternatives Analysis and demonstrated to be less effective than a Fixed Guideway Alternative. The findings are summarized in Chapter 2 of the Final EIS.

2. In many instances, rail does perform better overall in these measures, including construction costs, if the bus system requires that a new guideway be built. The Alternatives Analysis compares an expansion of the bus system against the fixed guideway. Unlike the Project, while the bus expansion is less costly, it provides no measurable benefit compared to the No Build Alternative.

3. Most buses still operate in mixed traffic, meaning little improvement in corridor mobility and travel reliability. As shown in the Alternatives Analysis and Section 2.2.2 of the Final EIS, transit reliability would not have been improved except for express bus service operation in the managed lanes. While a managed lane alternative would have slightly reduced congestion on parallel highways according to the Alternatives Analysis,

systemwide traffic congestion would have been similar to the No Build Alternative as a result of increased traffic on arterials trying to access the facility.

4. Chapters 2 and 3 of the Final EIS state that the fixed guideway is being designed to accommodate over 9,000 an hour in the peak direction using three-car consists. If demand warrants, the system can expand to a four-car and run at 90-second intervals, expanding capacity to over 25,000 riders an hour in each direction. Also, like a bus system, during the off-peak periods, the service level is reduced to use equipment and other resources efficiently.

5. Overall system reliability, considering all factors, for a fully grade-separated transit system is substantially greater than for any system operating in mixed-flow conditions. Breakdowns do not affect the operation of the system beyond removal of the defective equipment. The system is designed to allow trains to continue function even if there an obstruction in the line. Though transit strikes in Honolulu have been infrequent, labor unions can be expected to be part of the operation of the system, so there is the possibility of a work stoppage under some circumstances. That does not obviate the benefit of the Project. Though strikes can be disruptive, the Project would provide service well over 99% of the time based on the past ten years of transit labor history on Oahu.

6. According to the Federal Transit Administration's Safety Management Information Statistics for 1997, the most recent data available in the Transportation Research Board (TRB) Report Improving Transit Security, there was one serious offense for every million passenger miles carried on rail. There is a need for security on transit systems, just as there is a need for police and other security in all aspects of modern society, but there is no evidence that crime rates associated with transit are any higher than for society in general. The costs of security are included in the operating costs for the Project.

7. Information about the cost of the Managed Lane Alternative vs. the Fixed Guideway is shown in the Alternatives Analysis. The Project is more expensive than the managed lane alternative, but provides substantially higher benefits I terms of reliability, mobility, access to planned development and transportation system equity compared to the No Build Alternative. The Project is subject to the bidding process as would be the construction of an elevated managed lane facility.

8. The Managed Lane Alternative was evaluated in the Alternatives Analysis and eliminated because it did not perform as effectively as the Fixed Guideway Alternative as noted in Chapter 2 of the Final EIS. Details in the comment regarding other locations are inconsistent with the findings of a comprehensive analysis completed in the Alternatives Analysis for Honolulu. The Tampa Bay example is unique and not duplicable for the same costs in Honolulu as noted by the designer of the Tampa Bay elevated lanes. The estimate for construction of the Managed Lane in Honolulu was reviewed by HDOT and others and found to be consistent with cost experience in Hawai'i.

9. While it may be true that auto pollution is less when cars are traveling on uncongested roadways, this comment is not related to the project alternatives or effects.

10. As shown in Table 3-7 in the Transportation Technical Report, ridership on TheBus (including TheHandi-Van) has been rising. The increase in resident daily transit

trips from 166,400 in 2007 to 255,500 (Table 3-13) in 2030 with the Project represents a 53.5-percent increase for this 23-year period. This represents a compound annual growth rate of less than 2 percent. This is a reasonable expectation with the addition of a grade-separated fixed guideway line to the transportation system. Increases of this magnitude and higher are not uncommon in other U.S. transit systems.

11. As stated above, the Final EIS indicates that any of the build alternatives would reduce energy consumption over the No Build. Table 4-20 shows that construction of the Project will reduce energy consumption for transportation by 3% over the No Build Alternative. The construction of the Project is expected to consume 7.5 million MBTUs. Other similar construction would be expected to use a similar amount of energy.
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12. According to information provided by HECO, transportation accounts for 63 percent of Hawaii's imported oil while electrical generation consumes 30 percent of the imported oil. Currently, 11 percent of the electricity on O'ahu is generated by renewable resources. HECO is currently soliciting proposals for 100 MW of renewable-energy non-firm generating capacity to be in service between 2010 and 2014.

The transit system will allow for a decrease in automobile use, thereby reducing the amount of oil required for transportation while only using about 1 percent of the existing electrical generating capacity through HECO and other independent power producers.

13. As discussed in Section 4.11.3 of the Final EIS, "All Build Alternatives are anticipated to reduce daily transportation energy demand by 3 percent compared to the No Build Alternative." No additional power from HECO over and above the No Build Alternative is anticipated. Emergency generators will be provided at stations. They are a safety and security requirement for stations. They do not draw additional electrical energy.

14. Regarding Section 8, Paragraph, 14, this comment is not related to the environmental analysis of the Project. Information regarding the Vancouver Skytrain is noted.

15. Regarding Section 8, Paragraph, 15, this comment is not related to the environmental analysis of the Project. Information regarding the Vancouver transportation system is noted.

16. Regarding Section 8, Paragraph, 16, this comment is not related to the environmental analysis of the Project. Information regarding Buenos Aires, Atlantic City, Hong Kong, and Asia is noted.

17. Regarding Section 8, Paragraph, 17, this comment is not related to the environmental analysis of the Project. Information regarding transit ridership trends in Pittsburgh is noted.

18. Regarding Section 8, Paragraph, 18, this comment is not related to the environmental analysis of the Project. Information regarding transit ridership trends in Pittsburgh is noted.

19. Regarding Section 8, Paragraph, 19, this comment is not related to the environmental analysis of the Project. Information regarding transit ridership trends in Pittsburgh is noted.

20. The American Public Transportation Association's 2008 Public Transportation Fact Book states: "Since 1995, public transportation ridership in the U.S. grew by more than 32 percent, faster than highway travel or the U.S. population." Data from the American Public Transportation Association is based on information reported by transit agencies regarding various aspects of transit ridership. Census data is based on more general information and does not adequately reflect transit trends.

21. See previous comment.

22. The ridership forecast for the fixed guideway project is over 116,000 boardings a day in 2030 (Table 3-18 in the Final EIS). As stated in Section 3.4.2 of the Final EIS, of the 116,000 boardings a day, more than 40,000 are riders who, in the absence of the fixed guideway, would have had to take a car and further congest the freeways and highways of the island. Travel forecasting models and methodologies are developed using the FTA guidance and procedures. The forecasts in the Final EIS have been reviewed and approved by the FTA.

23. Please see previous comment.

24. Regarding Section 8, Paragraph, 24, this comment is not related to the environmental analysis of the Project.

25. Regarding Section 8, Paragraph, 25, this comment is not related to the environmental analysis of the Project.

26. This statement does not appear in the Draft EIS.

27. Table 7-2 in the Draft EIS shows that a transit trip from Wai'anae to UH Manoa will take 121 minutes (two hours) with one transfer in 2030 without the Project (No Build Alternative) and 93 minutes (with two transfers) for the Airport Alternative.

28. It is not clear what the source of the comment is, but the intent appears to be a concern about an increase in transfers. There will be an increase in transfers with the fixed guideway, but even with the transfers, overall travel times will be substantially shorter as noted in Chapter 3, Figure 3-7.

29. Regarding Section 8, Paragraph, 29, this comment is not related to the environmental analysis of the Project.

30. The evaluated managed lane alternative from the Alternatives Analysis includes ramps at several locations, including Aloha Stadium and Middle Street. Any increase in the number of access points to the facility will result in additional right-of-way requirements and additional costs beyond the estimate of \$2.6 billion in 2006 dollars .

31. As described in Chapter 2 of the Final EIS, the City has selected steel wheels operating on steel rail transit. The technology of steel wheels operating on steel rail transit has been selected. The FTA requires that a project begin Preliminary Engineering

before the Final EIS is completed. Information from Preliminary Engineering is required to assess all significant impacts that would result from project implementation.

32. The Federal New Starts process can be done in different ways. An Alternatives Analysis/EIS or and EIS/Preliminary Engineering. The EIS is not required prior to preliminary Engineering. In fact, the latter approach allows for a better understanding of the project because more information is known about the details as the environmental work is completed.

33. Chapter 6 of the Final EIS describes the financial resources anticipated to be needed to pay for the capital cost of the project and for ongoing operating and maintenance costs. Capital costs of the project, including finance charges, are expected to be fully paid for by a combination of FTA Sections 5307 and 5309 New Starts Funds from the Federal government and the General Excise Tax surcharge revenues collected from 2007 through 2022 on O'ahu. Operating and maintenance costs will be paid for using the same sources currently used for TheBus—Federal funding, fare revenues, and City revenues from the General and Highway Funds.

34. As described above, the Managed Lane Alternative was evaluated in the Alternatives Analysis and demonstrated to be less effective than a Fixed Guideway Alternative.

Section 9 Rail Transit Daily Journey Segments

1 through 11 and a. As stated in Chapter 3 of the Draft EIS, "With any of the Build Alternatives, the rate of transfers would be higher than under the No Build Alternative due to proposed changes in local bus service to maximize access to the fixed guideway system." However, "Because of the high frequency of the fixed guideway service (three-minute headways between trains during peak periods), riders transferring from buses to the fixed guideway would experience minimal wait times. 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." The travel demand forecasting model includes a time penalty for transfers. Ridership forecasts increase 44 percent over the No Build Alternative despite a higher rate of transfers. While people typically try to minimize transfers on any trip, the more fundamental criterion for making a trip decision is how long the trip takes. Rail will offer people a shorter overall trip time compared to other options even with the transfers as noted in Section 3.4.2 of the Final EIS.

12. As stated in Section 3.4.2 of the Draft EIS, "for those leaving stations in the a.m. two-hour peak period, egress via walking dominates, particularly at stations with large employment concentrations." Table 3-20 in the Final EIS shows the mode of access information for each fixed guideway station.

13. The fixed guideway system will directly serve the Airport. As shown in Table 2-6 in the Final EIS, trains will serve stations every 3 minutes during peak periods and up to every 10 minutes during off-peak periods.

14. As stated in the Alternatives Analysis and Section 2.2.2 of the Final EIS, enhanced bus service was examined during the Alternatives Analysis and rejected because this alternative would not have improved roadway congestion.

15. Tourist use of rail with luggage is estimated to be very low. Other tourist use, such as shopping or visiting sites of interest, would represent about 7% of total usage.

Section 10 (No Title)

1. Regarding Section 10, Paragraph, 1, this comment is not related to the environmental analysis of the Project.

2. The Managed Lane Alternative was evaluated in the Alternatives Analysis and demonstrated to be less effective than a Fixed Guideway Alternative. Person-capacity is less for a roadway solution. Improved traffic congestion compared to the No Build Alternative will result in improved operations of roadway users.

3. Rail transit will be provided by the City and County of Honolulu's Department of Transportation Services or their selected operator.

4. An increase in the bus fleet was addressed in the Alternatives Analysis under the Transportation System Management alternative as noted in Chapter 2 of the Final EIS. It did not improve conditions because of existing congestion on the highway system and was eliminated from further consideration in favor of the fixed guideway that is the subject of the Final EIS.

5. Such express-bus service fails to serve any intermediate points. If any portion of the bus trip is within mixed traffic flow, travel time reliability is less than an exclusive right-of-way fixed-guideway system.

6. There is no indication that damage to a fixed-guideway would be any more difficult to repair than to an elevated roadway.

7. For a high-volume transit system, operating costs are higher per passenger for bus compared to rail service. The greatest cost of transit is the labor cost which is higher for buses than rail. Rail systems are less expensive to operate than bus systems on a per passenger mile basis according to the Transportation Energy Data Book of the Department of Energy.

Section 11 Comparisons

HOT Lanes Rail

DESCRIPTION

1. The HOT lanes were addressed in the Alternatives Analysis (described as the Managed Lane Alternative) and rejected as providing less benefit as compared to the fixed guideway. The summary of that finding is presented in Chapter 2 of the Final EIS.

2. The Project is a 20-mile fixed-guideway system that extends from East Kapolei to Ala Moana Center and points in-between.

COST

3. The Draft EIS analyzes the fixed guideway project. The HOT lanes were addressed in the Alternatives Analysis (described as the Managed Lane Alternative) and rejected as inadequate compared to the fixed guideway. The summary of that finding is presented in Chapter 2 of the Draft EIS. The \$1 billion construction cost figure is not consistent with the results of the Alternatives Analysis. The Alternatives Analysis estimated the cost of the managed lane in Honolulu at \$2.6 billion. This cost was verified by HDOT and others familiar with Hawaii and HOT projects. The HOT facility could qualify for some Federal funding from highway sources, but it is not eligible for the funds available to the fixed guideway project.

4. The capital plan for the project is presented in Section 6.3 of the Final EIS, including a description of the amount of funding anticipated from various sources. Section 6.6 of the Final EIS describes risks and uncertainties associated with these funding assumptions. While federal funds are not guaranteed until Congress acts to allocate them, the completion of the environmental process and approval of a Record of Decision provides a good indication of the Project's eligibility for New Starts funding. FTA has given no indication that they will not fund the Project at the levels requested.

TRAFFIC CONGESTION

5. While managed lanes would have reduced congestion on parallel highways, systemwide traffic congestion would have been similar to the No Build Alternative as a result of increased traffic on arterials trying to access the facility. Total islandwide Vehicle Hours of Delay would have increased with the Managed Lane Alternative as compared to the No Build Alternative, indicating an increase in systemwide congestion as shown in chapter 2 of the Draft EIS.

6. Conditions on the highway will be worse in 2030 under any circumstances, regardless of which solution is applied. With the fixed guideway system, total islandwide congestion (as measured by VHD) would decrease by 18 percent, compared to the No Build Alternative (Figure 3-14 in the Final EIS). In addition, traffic volumes were studied at various screenlines in the study corridor. The travel demand forecasting model was used to forecast traffic volumes at these screenlines in 2030, both with and without the Project. Analysis revealed that traffic volumes at these screenlines will decrease up to 11 percent with the Project during the a.m. peak hour (Table 3-9 of the Final EIS).

ENERGY SAVINGS

7. The energy consumption of HOT lanes was not evaluated in the Draft EIS as energy consumption was not a screening criterion for the Alternatives Screening and Selection Process in Section 2.1 of the Draft EIS.

8. As stated before, the Final EIS indicates that any of the build alternatives would reduce energy consumption by about 2,000 MBTU's over the No Build. The result is also noted in Chapter 4, Section 4.11 of the Final EIS. This represents about 23,000 gallons of fuel saved per day. Alternative energy sources, such as photo-voltaic cells, can be built into the rail system at stations and facilities. As the development of alternative energy sources evolves on the island, HECO will generate more electric power from renewable sources which will contribute to a greener use of energy by the Project.

9. The Managed Lane Alternative was fully evaluated in the Alternatives Analysis and demonstrated to be less effective than a Fixed Guideway Alternative. All alternatives, including the No Build Alternative, include trade-offs between benefits and impacts.

10. To paraphrase from Section 4.5.3 of the Draft EIS: The Transit facility is not expected to be a visual or physical barrier in most neighborhoods; the Project will not substantially change development patterns, although it may change the character of development along the alignment. The Project will provide a reliable and efficient travel mode for accessing the region's current and future jobs, shopping, and social resources, particularly those in Kapolei and Downtown. This increase in mobility for neighborhood residents will generally improve the quality of life, especially those with limited financial resources and those who may be transit dependent.

The Project is a little over 20 miles long, not 34, as stated in the comment and noise levels are lower than for a bus at 50 feet (see Section 4.9). In most of the corridor noise levels as a result of the Project are lower than existing ambient levels. There is also recognition of the visual effect of the Project in the Final EIS. The island's unique visual character and scenic beauty was considered in the visual and aesthetic analysis presented in the Final EIS. The Project will be set in an urban context where visual change is expected and differences in scales of structures are typical. The following measures will be included with the Project to minimize negative visual effects and enhance the visual and aesthetic opportunities that it creates:

- Develop and apply design guidelines that would establish a consistent design framework for the Project with consideration of local context
- Retain existing trees where practical and provide new vegetation
- Shield exterior lighting
- Coordinate the project design with the City TOD planning and DPP
- Consult with the communities surrounding each station for input on station design elements. It should also be noted that the Project would provide users, including tourists, with expansive views from several portions of the corridor by elevating riders above highway traffic, street trees, and low structures adjacent to the alignment.

RIDERSHIP & CAPACITY

11. The TSM (enhanced bus) alternative had a larger number of daily transit trips than the No Build Alternative and less than the Fixed Guideway alternative as shown in Table 2-1 of the Final EIS.

12. Figure 3-11 in the Final EIS shows that the fixed guideway will substantially increase the transit mode share for home-based work trips during the a.m. two-hour peak period. As shown in Figure 3-11, for many travel markets, the transit share of trips under the Project would double or triple the share occurring under the No Build Alternative. For example, the commute-to-work transit share of the Kapolei to Downtown Honolulu travel market would increase from 23 percent under No Build to 60 percent under the Project. In other words, more than half of the people going from Kapolei to Downtown to work in the morning would use transit with the Project, compared to only a quarter without the Project.

CONVENIENCE

13. HOT lanes were evaluated during the Alternatives Analysis and rejected because they did not reduce congestion as compared to other alternatives considered.

14. As stated in Chapter 3 of the Draft EIS, “With any of the Build Alternatives, the rate of transfers would be higher than under the No Build Alternative due to proposed changes in local bus service to maximize access to the fixed guideway system.” However, “because of the high frequency of the fixed guideway service (three-minute headways between trains during peak periods), riders transferring from buses to the fixed guideway would experience minimal wait times. 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.” The travel demand forecasting model includes a time penalty for transfers. Ridership forecasts increase 44 percent over the No Build Alternative despite a higher rate of transfers. While people typically try to minimize transfers on any trip, the more fundamental criterion for making a trip decision is how long the trip takes. Rail will offer people a shorter overall trip time compared to other options even with the transfers as noted in Section 3.4.2 of the Final EIS.

LAND DEVELOPMENT

15. The Project will include enhanced bus service integrated with the fixed guideway system. Alternatives that relied only on bus transit were evaluated during the Alternatives Analysis and shown to be less effective than the Fixed Guideway Alternative. Chapter 2 of the Draft EIS summarizes those findings.

16. Population growth is expected regardless of the Project. However, because of the Project, more development and growth is expected around station locations. From page 4-166 of the Draft EIS, “The increased mobility and accessibility that the Project may provide would also increase the desirability and value of land near the stations, thereby attracting new real estate investment nearby. Therefore, the Project’s primary indirect effect would be higher densities than presently planned or could otherwise be developed near transit stations. These land use effects could take the form of Transit Oriented Development or Transit Supportive Development. If development occurs around stations, it is anticipated that City infrastructure would be improved in these areas.” In March 2009, the City Council approved and the Mayor of Honolulu signed Bill 10 (2008) (Ordinance 09-004), which defines the City’s approach to TOD around fixed guideway stations. Zoning regulations will address parking standards, new density provisions, open space, and affordable housing. Financial incentives could include public-private partnerships, real property tax credits, and infrastructure financing. While the Project is coordinating with City and State agencies to encourage development of enhanced pedestrian and bicycle facilities and other land use changes near the stations, the actual construction of such facilities and zoning changes are beyond the scope of the Project. The special districts also encourage public input into the design of TOD neighborhood plans to reflect unique community identities.

TAX INCREASE

17. The \$1 billion construction cost figure is not consistent with the results of the Alternatives Analysis. The Alternatives Analysis estimated the cost of the managed lane in Honolulu at \$2.6 billion. This cost was verified by HDOT and others familiar with Hawaii and HOT projects. The HOT facility could qualify for some Federal funding from highway sources, but it is not eligible for the funds available to the fixed guideway project.

18. Section 6.3 of the Final EIS describes the financial resources anticipated to pay for the capital cost of the Project, including finance charges. Ordinance 07-001 prohibits using real property tax revenues to pay for capital costs.

Section 12 The city's Alternative Analysis of the Managed Lanes was faulty in several ways.

The engineering cost estimate for a two-lane reversible managed lane facility, which was calculated following the same cost estimating process used for the Fixed Guideway Alternatives, was \$2.6 billion in 2006 dollars. The City Council's Transit Advisory Task Force to review the Alternatives Analysis concluded in their report of December 14, 2006, that the assessment of each alternative was "fair and accurate" and that capital cost estimates were compiled using the same methodology and unit cost and that the construction cost estimates were fairly and consistently prepared. The Task Force also concluded that the Honolulu project is not comparable to the Tampa tollway that you reference. As a point of reference, the State of Hawai'i's Highway Modernization Plan, dated January 22, 2009, estimates the cost of the Nimitz Viaduct at \$600 million for a less-than 2.5-mile elevated highway.

The zipper lane was eliminated in evaluation of the reversible facility because with the additional lanes, the demand and capacity would be better balanced without the zipper lane. Implementation of the zipper lane results in the loss of two lanes of capacity in the reverse direction. By 2030, the directional transportation demand will be more balanced than it is today. Eliminating the zipper lane while evaluating the reversible managed lane alternative provided the greatest benefit to modeled freeway users by increasing capacity in both directions.

Stations were provided at important transfer points to maximize the benefit to transit users with destinations other than on the elevated lanes.

As described above, access ramps were provided at several locations including Aloha Stadium and Middle Street.

Section 13 cost in other places

As shown in the Draft EIS on Table 6-1, the estimated costs for the Build Alternatives range from \$3.9 billion to \$5.7 (two costs are given, 2008 dollars and year of expenditure dollars). The other system costs are noted. Because these costs are not adjusted for inflation (they include costs that are more than 20 years old in 20-year old dollars), a direct comparison cannot be made to the other projects mentioned in your comment.

Section 14 Best Traffic Fix

1. A travel forecasting model was used to forecast traffic volumes during the a.m. and p.m. peak hour in 2030, both with and without the fixed guideway system. Six screenlines (virtual lines across the corridor used to measure total travel at that point) were identified to compare changes in traffic conditions in the corridor at the six locations. As seen in Tables 3-9 and 3-10 in the Final EIS, traffic volumes in 2030 will be better with the Project compared to the No Build Alternative. For instance, with the fixed guideway system, there is a 11-percent reduction in traffic at the Kalauao

screenline in the Koko Head bound direction during the a.m. peak hour and a 10-percent reduction in the 'Ewa bound direction during the p.m. peak hour when compared to conditions without the fixed guideway.

2. In "Chapter 2 – Alternatives Considered" of the Alternative Analysis report, November 2006 and summarized in the Draft EIS in November 2008, two options were considered for the managed lane alternative—two-direction and reversible. The managed lane alternative "would have provided a two-lane elevated toll facility between Waipahu and Downtown Honolulu, with variable pricing strategies for single or low occupant vehicles to maintain free-flow speeds for transit and high-occupancy vehicles (HOVs)."

3. "The Two-direction Option would have served express buses operating in both directions during the entire day. To maintain free-flow speeds in the Two-direction Option, it may be necessary to charge tolls to manage the number of HOVs using the facility. For the Reversible Option, three-person HOVs would be allowed to use the facility for free, while single-occupant and two-person HOVs would have to pay a toll." The Reversible Option was found to be the most optimal.

4. Toll revenues from the Managed Lanes Alternative would pay for ongoing operations and maintenance while remaining toll revenue, supplemented by about \$3 billion (year of expenditure dollars) in other revenues would be needed to construct the system. No funding sources were identified for the Managed Lane Alternative.

5. As mentioned in Chapter 2 of the Final EIS, transit reliability would not have been improved except for express bus service operation in the managed lanes. While this alternative would have slightly reduced congestion on parallel highways, systemwide traffic congestion would have been similar to the No Build Alternative as a result of increased traffic on arterials trying to access the facility. Total islandwide Vehicle Hours of Delay would have increased with the Managed Lane Alternative as compared to the No Build Alternative, indicating an increase in systemwide congestion (Table 2-1 of the Draft EIS).

6. As mentioned in Chapter 2 of the Draft EIS, transit reliability would not have been improved except for express bus service operation in the managed lanes. While this alternative would have slightly reduced congestion on parallel highways, systemwide traffic congestion would have been similar to the No Build Alternative as a result of increased traffic on arterials trying to access the facility. Total islandwide Vehicle Hours of Delay would have increased with the Managed Lane Alternative as compared to the No Build Alternative, indicating an increase in systemwide congestion (Table 2-1 of the Draft EIS).

7. According to the U.S. Department of Energy, Transportation Energy Data Book, for the year 2006, passenger cars require 3,512 BTUs per passenger mile while rail transit require 2,784 BTUs per passenger mile and transit buses require 4,235 BTUs per passenger mile. Based upon these figures, transit trains are a more energy-efficient mode of transportation than passenger cars or transit buses.

8. Please see the response to the comment above.

9. Please see the response to the comment above.

10. As mentioned in the Summary and Chapter 2 of the Draft EIS, the Managed Lane Alternative would have provided very little transit benefit at a high cost. The Fixed Guideway will be more cost effective in the long run. In the “Summary – Funding Options” section, funding sources for the capital investments associated with the fixed guideway include a State GET surcharge, City general obligation bonds, and FTA funds. Only the Fixed Guideway Alternative could be funded with the GET surcharge. As noted in Chapter 6 of the Final EIS, the GET is expected to generate \$3.4 billion through 2022 and the FTA has agreed to consider at least \$1.4 billion for Federal contribution to the Project through the New Starts program for the Fixed Guideway. The Alternatives Analysis indicates that toll revenues from the Managed Lanes Alternative, if high enough, would pay for ongoing operations and maintenance while any remaining toll revenues, supplemented by other revenues, would be used to repay debt incurred to construct the system.

11. As shown in Chapter 2 of the Draft EIS, November 2008, the “Managed Lane Alternative would have provided little community benefit, as it would not have resulted in substantially improved transit access in the corridor.” This alternative also would not have supported planned concentrated future population and employment growth because it would not provide concentrations of transit service that would serve as a nucleus for TOD. As noted in the Alternatives Analysis, the Managed Lane Alternative would have provided very little transit benefit at a high cost compared to the benefits provided by the Project.

9. Regarding Section 14, Paragraph, 9, this comment is not related to the environmental analysis of the Project.

10. If traveling in mixed-traffic, such a transit user would not experience reliable travel time. Maximum rail-journey travel time from one end of the system to the other will be 42 minutes.

11. As noted earlier, adding substantial passenger capacity with more buses is not feasible in locations along the system because of roadway capacity constraints as shown in Section 3.4.2 of the Final EIS. The remainder of the comment is not related to the environmental impact of the project.

12. The purpose of the Project as established in Section 1.8 of the Final EIS is to provide high-capacity rapid transit in the highly congested east-west transportation corridor between Kapolei and UH Manoa. In Section 1.9, goals include: improve corridor mobility, corridor travel reliability, access to planned development, and improve transportation equity.

13. Chapter 6 of the Final EIS describes the financial resources anticipated to pay for the capital cost of the project and for ongoing operating and maintenance costs. Capital costs of the project, including finance charges, are expected to be fully paid for by a combination of FTA Section 5309 New Starts and FTA Section 5307 Funds from the Federal government and revenues from the County General Excise Tax Surcharge levied from 2007 through 2022 on O’ahu. Section 6.6 of the Final EIS describes risks and uncertainties associated with these funding assumptions.

14. Chapter 3 of the Final EIS indicates that over 70% of the people within the corridor reside or work within a 10 minute bus ride of the Project. Many are much closer

than that. Ridership forecasts of over 115,000 a day indicate service will reach a broad base of the population and carry very high percentages of trips during the peak travel times when it is most needed. For example, over 30% of work trips to downtown Honolulu will use transit with the implementation of the Project. The National Environmental Policy Act requires a broad outreach to the community as part of the environmental impact statement process. The public involvement program is designed, as required by NEPA, to engage the public in as many ways as practical. The program for the Project has been comprehensive to bring information to as many people as possible. Other assertions about travel behavior in the comment are based on unsubstantiated or incomplete analysis and inconsistent with the findings in Chapter 3 of the Final EIS related to transit ridership.

15. The Project provides an alternative to the travel condition noted in your comment. The Project would result in decreased congestion compared to the No Build Alternative, making travel more reliable for emergency vehicles than with the No Build Alternative.

16. Your preference for elevated lanes is noted.

The FTA and DTS appreciate your interest in the Project. The Final EIS has been issued in conjunction with the distribution of this letter. Issuance of the Record of Decision under the National Environmental Policy Act and acceptance in this Final EIS by the Governor of the State of Hawai'i are the next anticipated actions, and will conclude the environmental review process for the Project.

Very truly yours,

WAYNE Y. YOSHIOKA
Director