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May 21, 2010 RT2/09-299125R

Mr. Kirk Belsby
Kamehameha Schools
567 South King Street
Honolulu, Hawaii 96813-3036

Dear Mr. Belsby:

Subject: Honolulu High-Capacity Transit Corridor Project
Comments Received on the Draft Environmental Impact Statement

The U.S. Department of Transportation Federal Transit Administration (FTA) and the 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. This letter 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 as the Project and is the focus of this document. The selection of the Airport Alternative as the Preferred Alternative was made by the City to comply with the National Environmental Policy Act (NEPA) regulations that state that the Final EIS shall identify the Preferred Alternative (23 CFR § 771.125 (a)(1)). 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 of the Final EIS. The selection is described in Chapter 2 of the Final EIS. The Final EIS also includes additional information and analyses, as well as minor revisions to the Project that were made to address comments received from agencies and the public on the Draft EIS. The following paragraphs address comments regarding the above-referenced submittal:

I. Effects of Construction on Business

A. Physical Effects

Response to Comment #1 regarding construction effects on businesses

1. *Economic impacts during construction are presented in the Final EIS. Section 4.18.1 of the Final EIS lists mitigation measures to reduce adverse economic hardships for existing businesses (including small businesses) along the project alignment during construction. Access to businesses near construction activities could be temporarily affected but will be maintained. In several locations, left-turn lanes will be closed during construction, some streets may be made temporarily one-way or have parking eliminated during construction.*

2. *The City will mitigate temporary impacts associated with construction. To reduce adverse economic hardships for existing businesses along the project alignment during construction the City will coordinate construction planning and phasing with nearby property owners and businesses; initiate public information campaigns, including signs and lighting, to reassure people that businesses are open during construction and to encourage their continued patronage; minimize the extent and number of businesses, jobs, and access affected during construction; to the extent practicable, coordinate the timing of temporary facility closures to minimize impacts to business activities—especially those related to seasonal or high sales periods; minimize, as practical, the duration of modified or lost access to businesses; phase construction in each area so as to maintain access to individual businesses for pedestrians, bicyclists, passenger vehicles, and trucks during business hours and important business seasons; and provide advance notice if utilities will be disrupted and scheduling major utility shutoffs during non-business hour.*

   Properties that are anticipated to be acquired by the Project, including businesses are identified in Appendix C: Preliminary Right-of-Way Plans.

   As discussed in Sections 4.18.1 and 4.18.2, the City will coordinate with property owners regarding both temporary impacts during construction and long term impacts. The City will notify and coordinate with adjacent property owners adjacent to the project that will be temporarily impacted during construction and when the Project will require acquisition of property. Coordination will be on-going during both design and construction.

3. *Your suggestions regarding the Maintenance of Traffic (MOT) Plan and Transit Mitigation Program have been noted. Many of the suggestions are already discussed in the Final EIS, Section 4.18.1.*

   a. *Section 4.18.1 of the Final EIS states that, "access to businesses near construction activities could be temporarily affected but will be maintained." In addition Section 4.18.1 states, "to the extent practicable, [the Project will] coordinate the timing of temporary facility closures to minimize impacts to business activities—especially those related to seasonal or high sales periods" and "minimize, as practical, the duration*

of modified or lost access to businesses." As part of the City's coordination with businesses, advanced notice will be provided if utilities will be disrupted and shut-offs will be scheduled during non-business hours. Many of the other suggested elements in your letter will be incorporated into the construction contract documents as performance specifications or as design criteria that will be used by designers and contactors. Regarding the request for covered walkways in lieu of chain-link fencing, the contractor will be required to provide a covering if the Project affects an adjacent awning or where there is a potential for falling debris. Covering provided in other situations could be considered on a case-by-case basis, subject to City approval. In addition, allowing artwork on fences could also be considered on a case-by-case basis subject to City approval.

b. *Sections 3.5.7, 4.18.1, and 8.7 of the Final EIS discuss public involvement activities that will occur during construction. For instance, Section 4.18.1 states that public involvement activities will include signage and lighting to reassure people that businesses are open during construction.*
c. *As discussed in Section 4.18 of the Final EIS the City will coordinate with affected residents and businesses prior to construction. A public involvement plan will be developed prior to each construction phase that will detail outreach tailored to the construction phase. The City will maintain the Project website (www.honolulutransit. org) and telephone hotline, which will also provide information to the community regarding construction phasing.*
d. *The Final EIS discusses several approaches that will be taken to inform the public about construction activities. Section 8.7 of the Final EIS states that "the City will continue the use of the Speakers Bureau, the project website (www.honolulutransit.org), and a telephone hotline to inform the public about construction activities. Section 3.5.7 states that newsletters, local newspapers, radio and/or television spots, news releases, instant messaging lists, and fliers may also be used to provide information to the public. The hotline will provide the means for members of the public to talk to those working on the project and ensure their specific questions are addressed. Lighting and signage will be used to reassure the public that businesses are open during construction. Signage will also be used to direct pedestrians and bicyclists to the safest and most efficient route through construction zones (Section 3.5.7) and to direct motorists of parking disruptions and alternatives.*
e. *Some elements suggested for the Business Disruption Mitigation Plan, such as having a staff person work directly with the public and property owners to resolve construction-related problems, will be part of the MOT Plan or public information program. The DTS will work with all adjacent property owners and their tenants during construction to minimize disruption to local businesses.*

B. Economic Effects

Response to Comment #2 regarding economic effects and mitigation

1. *An analysis of the impacts to businesses during construction is provided in both the Final EIS and the Honolulu High-Capacity Transit Corridor Project Economics Technical Report (RTD 2008c). An analysis of construction impacts is shown on Page 5-6 of the Economics Technical Report, which can be found on the project website at www.honolulutransit.org. The primary impacts are anticipated to result from inconveniences and disruptions to adjacent residents, businesses, and business customers that are inherent in any major construction project, which include the following:*
   - *Presence of construction activities and material.*
   - *Temporary road closures and traffic diversions.*
   - *Temporary reductions in parking availability.*
   - *Airborne dust, noise, and vibrations.*
   - *Businesses' loss of visibility to their customers.*

As discussed in Section 4.18 of the Final EIS, the City will mitigate these temporary effects to protect residents' and businesses' comfort and daily life, as well as to prevent inconveniences and disruptions to the flow of customers, employees, materials, and supplies to and from area businesses based on successful efforts on other projects.

The City will employ the following measures during construction:

- *Maintain access to businesses during construction.*
- *Develop a public involvement plan prior to construction to inform business owners of the construction schedule and activities.*
- *Initiate public information campaigns to reassure people that businesses are open during construction and to encourage their continued patronage.*
- *Minimize the extent and number of businesses, jobs, and access affected during construction.*
- *Coordinate the timing of temporary facility closures to minimize impacts to business activities— especially those related to seasonal or high sales periods— to the extent practicable.*
- *Minimize the duration of modified or lost access to businesses—as practicable.*
- *Provide signage, lighting, or other information to indicate that businesses are open.*

- *Phase construction in each area so as to maintain access to individual businesses for pedestrians, bicyclists, passenger vehicles, and trucks during business hours and important business seasons.*
- *Provide advance notice if utilities will be disrupted.*
- *Schedule major utility shut-offs during non-business hours.*

As discussed in Section 4.3.2 of the Final EIS, the Project will require the acquisition of some commercial and industrial properties. This will displace the businesses using the properties as well as their employees. However, it is anticipated that these businesses will be relocated to new sites. Once constructed, the Project will employ workers for maintenance and operation of the system. It is anticipated that workers will be hired from the existing local labor force and trained to meet job requirements. The number of new workers will be small compared to the total labor force on O'ahu and is included in the operating and maintenance costs for the Project. Workforce costs are included in the operating and maintenance cost estimates discussed in Section 6.4.1. The Project is not expected to result in long-term adverse effects on the economy or property tax revenues. No mitigation measures will be needed.

2. *No independent evaluation study is planned.*

3. *The City will not provide direct financial assistance to mitigate temporary impacts during construction to businesses. Where acquisition of property will occur, compensation will be provided to affected property owners, businesses, or residents in compliance with all applicable Federal and State laws and will follow the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act.*

II. Potential Parking Effects of Completed System

A. Potential Parking Effects

Response to Comment #3 regarding parking

The comment involves three types of potential parking-related effects: lost on-street parking, spillover parking in station areas (referred to as "illegal parking" in original letter), and lost off-street parking, which may affect redevelopment. The number and location of on-street and off-street parking spaces to be removed by the Project are listed in Table 3-24 in the Final EIS. The estimated demand for spillover parking at each station is shown in Table 3-22 in the Final EIS.

Regarding the loss of on-street parking, a survey of parking usage conducted in June 2008, April 2009, and March 2010 found that, in locations where on-street parking will be removed by the Project, other parking capacity exists nearby to accommodate demand. Therefore, these on-street parking spaces will generally not be replaced by the City. However, some new on-street parking spaces will be created by the Project in the approximate locations of lost spaces as the streets are rebuilt after construction. New parking spaces could be short-term, long-term, or loading zones, depending on the need, as determined by the City.

Analysis conducted for the Project also examined potential effects from spillover parking. One possible effect of spillover parking would be an increase in demand for existing parking spaces near stations. As stated in Section 3.4.7 of Final EIS, the City will conduct a before-and-after parking study that will identify impacts of spillover parking both on-street and off-street, and will implement one or more of the following mitigation strategies as needed:

- *Parking restrictions*
- *Parking regulation*
- *Permit parking*
- *Shared parking arrangements*

Follow-up surveys will be conducted by the City to determine if the mitigation strategy(ies) is effective, and additional measures will be implemented by the City as needed. Regarding transit riders parking illegally in private retail and business parking areas, that issue will also be included in the City's parking study and will be covered by one or more of the strategies listed above. Additionally, analysis was completed to determine if spillover parking will affect traffic and parking supply near stations. The traffic analysis was conducted for the a.m. and p.m. peak hours. The intersection level-of-service analysis determined that additional traffic from spillover parking will not affect local traffic conditions. Please see Addendum 02 to the Transportation Technical Report (RTD 2009i) for more detail.

The City will provide parking facilities at four stations (East Kapolei, UH West Oahu, Pearl Highlands, and Aloha Stadium). These stations were selected based on results from the travel demand forecasting model which showed these stations had high drive to transit demand. The City has identified the land that will be acquired for the Project as part of the right-of-way needed along the length of the corridor, including the land needed for the four park and ride facilities. Compensation will be in accordance with the requirements of the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. The City does not anticipate acquiring any additional land for parking near any of the other stations. Additionally, regarding the limited supply of parking near stations affecting property owners' potential redevelopment plans, the City will develop parking regulations and strategies over time that respond to the specific needs of each station area.

The following text is in response to sub-comments 1-6 within Comment #3 of your letter:

1. *Parking needs at each transit station has been added to the Final EIS as Table 3-22.*
2. *Table 3-22 in the Final EIS shows an estimated demand of five parking spaces at the Kapalama Station. Rather than providing five parking spaces, the City intends to provide bus service, bicycle parking and improved sidewalks to encourage riders to access this station by modes other than the private automobile. The spillover parking surveys mentioned previously will assess spillover demand once the stations are opened and parking mitigation would be implemented as needed.*
3. *Along Dillingham Boulevard near Honolulu Community College, the City will purchase right-of-way to preserve the existing number of through- and turn-lanes.*

As shown in Table 3-24 of the Final EIS, this acquisition will result in the removal of approximately 30 off-street parking spaces that will be purchased in accordance with the requirements of the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. The City does not plan to generally replace all of the private, off-street parking purchased and removed for construction of the Project; however, the Project will help reduce the need for such parking. Where landscaping, sidewalks, and driveway access will be affected by the Project, coordination will occur with the landowner, and these property features will be replaced and/or the property owner will be compensated in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act.

4. *Regarding the loss of on-street parking on Halekauwila Street, as stated in Final EIS section 3.4.4, a parking usage survey was conducted in April 2009 along Halekauwila Street. This survey examined current usage of on-street parking in this location. The results of this study, which are summarized in Table 3-24 of the Final EIS, revealed that most on-street spaces between Punchbowl Street and Cooke Street were lightly to moderately used during the week day (approximately 25 to 75 percent of spaces were full) while over 75 percent of spaces were full between Cooke Street and Kamani Street.. This survey also found that alternative parking was generally available within one block of the parking spaces to be removed, and as a result, it is not expected that transit riders would park in the commercial parking lots in this area. As a result, these on-street spaces will generally not be replaced.*
5. *Regarding the loss of off-street parking along Dillingham Boulevard, as stated in Section 3.4.7 of the Final EIS, properties related to effected private, off-street parking spaces will be acquired for the Project as part of right-of-way needed along the length of the corridor. Compensation will be in accordance with the requirements of the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. The City does not plan to generally replace all of the private, off-street parking purchased and removed for construction of the Project; however as stated above, the Project will help reduce the need for such parking. Where landscaping, sidewalks, and driveway access will be affected by the Project, coordination will occur with the landowner, and these property features will be replaced and/or the property owner will be compensated in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act.*
6. *The project design has been revised since the Draft EIS and as a result, there will not be a loss of parking on Halekauwila Street between Keawe Street and Coral Street.*

B. Mitigation Measures for Parking

Response to Comment #4 regarding parking mitigation

1. *Based on comments received on the Draft EIS, additional parking surveys have been conducted since the Draft EIS was released. As stated in the response to Comment #3 (above), these parking surveys revealed that there is parking*

available within one block of the parking spaces to be removed. As a result, on-street parking spaces will generally not be replaced. The City is committed to conducting spillover parking surveys before construction of the station and again after the station is opened. Results of the surveys will be used to determine the appropriate mitigation strategies.

2. *The Final EIS includes a table showing mode of access (walk/bike, bus, kiss-and-ride, and parking) to each transit station (Table 3-20). Additionally, Table 3-22 in the Final EIS shows parking demand at each station. Table 3-20 shows that 90 percent of transit riders will access fixed guideway stations by walking, biking, and the bus. Parking demand is expected to be minimal overall. Spillover parking surveys will be conducted at each station before construction begins and again after the station is opened to determine actual spillover effects. As stated in Chapter 3, Section 3.4.4, the actual extent of spillover parking near stations will be influenced by a variety of factors, including changing conditions between now and the time the station is opened as well as future development. As a result, parking surveys conducted before and after station opening is the most appropriate way to gauge actual effects directly attributable to the station.*
3. *The travel demand forecasting model identified stations with high drive to transit access. Park and ride facilities are being built at four stations (East Kapolei, UH West Oahu, Pearl Highlands, and Aloha Stadium) based on these modeling results. The City does not plan to construct any parking facilities at the other fixed guideway stations.*
4. *Thank you for your suggestion regarding public assistance toward building parking structures. The City recognizes that good parking management is important to the success of the Project and to station areas in particular. As part of the Project, the City will provide a total of 4,100 parking spaces at four stations, including structured parking for 1,600 cars at the Pearl Highlands station. In addition, as part of a different project, the City is planning to build a 1,000 space parking garage near the Middle Street Transit Center station. At this time, the City does not plan to participate in the construction of other parking structures near stations.*
5. *Regarding your suggestion for a signage and parking permit program, the City understands that providing proper signage and real-time information is crucial for the construction phase and during operation of the system. As stated in Section 3.5.7 of the Final EIS, where existing parking is disrupted by construction, signs will be posted directing people to nearby locations with available parking. The public will be kept aware of upcoming work locations and information will be available on the project website about parking disruptions and alternatives. The City will coordinate with property and business owners regarding the timing of construction and other issues to minimize disruptions to off-street parking. A permit parking program will be considered among other strategies by the City to mitigate the effects of spillover parking near transit stations.*

III. Effects of Completed System on Businesses along Rail line and at Transit Stations

A. Physical Effects

1. Traffic, Visibility, and Access to Businesses

Response to Comment #5 regarding visibility and access to businesses

a. Visibility

The assessment of visual effects discussed in Section 4.8 of the Final EIS considers businesses, which include owners, customers, and employees, as important viewer groups. Each viewer group's characteristics were considered in the visual quality assessment for the viewpoints analyzed in Section 4.8 of the Final EIS. For example, the visibility for motorists along Dillingham Boulevard is illustrated on Figure 4-29 (Viewpoint 10) in the Final EIS. The simulated view shows that the overhead guideway will not block views of businesses or signage. The guideway support columns will be spaced at about 150 foot intervals, and views of businesses will not be greatly reduced. The overall visual effect in this area, as noted in Table 4-9, will be moderate.

More detail on the consideration of viewer response in this analysis can be found in the Honolulu High-Capacity Transit Corridor Project Visual and Aesthetic Resources Technical Report (RTD 2008e). Please refer to the following tables in that report:

- *Table 4-1: Landscape Unit 1 Viewpoints—Existing Visual Quality and Viewer Groups (this Landscape Unit corresponds to the East Kapolei to Fort Weaver Road Landscape Unit in the Draft EIS).*
- *Table 4-2: Landscape Unit 2 Viewpoints — Existing Visual Quality and Viewer Groups (this Landscape Unit corresponds to the Fort Weaver Road to Aloha Stadium Landscape Unit in the Draft EIS).*
- *Table 4-3: Landscape Unit 3 Viewpoints — Existing Visual Quality and Viewer Groups (this Landscape Unit corresponds to the Aloha Stadium to Kalihi Landscape Unit in the Draft EIS).*
- *Table 4-4: Landscape Unit 4 Viewpoints — Existing Visual Quality and Viewer Groups (this Landscape Unit corresponds to the Kalihi to Ala Moana Landscape Unit in the Draft EIS).*

b. Access

Access to all businesses located near the Project will be maintained. Traffic conditions will operate at acceptable levels-of-service except for four station areas: East Kapolei, UH West Oahu, Pearl Highlands, and

Ala Moana Center. As shown in Table 3-23 of the Final EIS, park-and-ride, passenger drop-offs, and feeder buses will affect traffic at six intersections near these stations; however, measures included with the Project will mitigate these effects. These measures include traffic signalization and adding roadway lanes. Mitigation measures are discussed in Section 3.4.7 of the Final EIS. As stated in response to Comment #3 (above) parking is generally available within one block of the parking spaces that will be lost due to construction of the Project. As a result, the City does not generally plan to replace lost on-street parking.

c. Narrower Lanes

As indicated in Section 3.4.3 of the Final EIS, the guideway placements will not affect overall traffic operations in terms of the number of travel lanes available to motorists. Although the width of some lanes will be narrowed by the Project, they will comply with the American Association of State Highway and Transportation Officials (AASHTO) recommended minimum standards for urban roadways. During Final Design, the relationship of travel lanes, shoulders, sidewalks, and horizontal clearances to obstructions such as columns will be considered together in determining the final widths of each item. Some lane widths could be increased from what is shown in Table 3-21. Permits for construction will not be approved unless a roadway is safe and acceptable to the responsible transportation agency. Lane widths along all roadways, including those roadways referenced in your comment, will meet AASHTO and the Hawaii Department of Transportation (HDOT) standards and will not be a hazard for larger trucks. In addition, no sidewalks will be permanently closed as a result of the Project, as shown in Table 3-25 of the Final EIS.

d. Mitigation

The City commits to the following measures to mitigate effects from the Project:

(a) With regard to parking-related mitigation, as noted in Section 3.4.7 of the Final EIS, station areas with the highest estimated demands for spillover parking are at West Loch, Pearlridge, Iwilei, and Ala Moana Center. Spillover parking surveys will be conducted around each station before and after construction to determine any effects from spillover parking and mitigate as appropriate. Mitigation could range from parking restrictions or regulation, permit parking or shared parking, or other measures as noted in Section 3.4.7 of the Final EIS. Section 3.4.4 of the Final EIS states that in locations where parking will be removed by the Project, other parking capacity generally exists nearby to accommodate demand. The cumulative and

indirect effect of removing parking spaces to accommodate the Project will be that some people who parked in those spaces will either use another space nearby, will choose another mode to reach their destination, or may not make the trip at all. The indirect effect of spillover parking around stations will increase demand for existing parking spaces.

(b) With regard to access to and from businesses, Section 4.18.1 of the Final EIS states that, "access to businesses near construction activities could be temporarily affected but will be maintained." In addition Section 4.18.1 states, "to the extent practicable, [the Project will] coordinate the timing of temporary facility closures to minimize impacts to business activities—especially those related to seasonal or high sales periods" and "minimize, as practical, the duration of modified or lost access to businesses."

(c) With regard to traffic circulation, Section 3.4.7 of the Final EIS identifies strategies that will mitigate potential effects associated with the Project. With mitigation strategies, traffic conditions in the East Kapolei, UH West Oahu, Pearl Highlands, and Ala Moana Center station areas will operate in a satisfactory manner.

(d) As stated previously, lane widths along all roadways will meet AASHTO and the HDOT standards. As a result, it is not anticipated that there will be an increase in traffic accidents. Further, as stated in Section 3.6.1, the Project will result in a reduction in vehicle miles traveled, which could reduce traffic accidents. Additionally, as stated in Section 2.5.4 of the Final EIS, operation in exclusive right-of-way eliminates the potential for accidents between automobiles and fixed-guideway transit vehicles. Because pedestrians will not be allowed to cross the tracks, the potential for pedestrian accidents is virtually eliminated.

(e) The Project will be elevated over roadway. For motorists, passengers and pedestrians traveling on the roadways where the guideway will be overhead, views of businesses will not be affected..

Regarding your suggestions for traffic signals and elongated turning lanes mentioned under part d. mitigation, as detailed in Section 3.4.7 of the Final EIS, mitigation measures at the six intersections effected by the Project include widening of intersections to provide turn lanes and installing of new traffic signals and coordinating these signals with adjacent signals. Additionally, the City will restripe the section of H-2 Freeway near Kamehameha Highway to provide a parallel merge lane. Addendum 2 provides information on the additional traffic studies that have been conducted for the Project.

2. Noise and Vibration

Response to Comment #6 regarding noise and vibrations

The Project's noise analysis was prepared in accordance with FTA's Transit Noise and Vibration Impact Assessment Manual (2006). The analysis accounts for additional nighttime noise sensitivity by evaluating Ldn noise levels, which include a penalty for noise generated at night. Noise impacts to noise sensitive uses, including commercial areas, were evaluated according to FTA policy. Section 4.10.1 of the Final EIS describes the various noise measurement locations, including the lanais of upper floors of residential buildings. Noise levels at higher-level floors were measured and analyzed as a result of comments received on the Draft EIS and are shown in Section 4.10.3 of the Final EIS. The results show only moderate noise impacts to one residential building between the proposed Civic Center and Kakaako Stations. With mitigation that has been committed to in the Final EIS (wheel skirts and use of sound absorptive materials), there are no noise impacts along the corridor as a result of the Project. For the building at 860 Halekauwila Street, sound absorptive material will be required from 200 feet Ewa of Kamani Street to 100 feet Koko Head of Kamani Street—a total of 300 feet. Future buildings above the guideway at similar distances from the guideway can be expected to be exposed to comparable moderate noise levels.

3. Security

Response to Comment #7 regarding security

The majority of the system will be located in existing roadway medians, which is not conducive to being used as a shelter. Stations will be patrolled by police, transit staff, and/or private security and will be closed at night when the system is not in operation (between midnight and 4:00 a.m.). Additionally, as stated in Section 2.5.4, of the Final EIS, security cameras that are monitored at all times of operation, audible and visual messaging systems, and an intercom link to the system operations center will also be included at all stations, park-and-ride facilities, and vehicles. The system will also include park-and-ride facilities with security and lighting. The City is working with the Honolulu Police Department to develop the system's safety and security program. As discussed in this section, security measures will include Crime Prevention through Environmental Design (CPTED) principles, which is a theory that proper design and effective use of the built and natural environments can reduce the fear and incidence of crime as well as improve the quality of life. CPTED measures ensures that spaces are visible, open, well-lit and observable to minimize crime and will be incorporated at all stations. The City will provide maintenance to the guideway and transit facilities.

In addition, the City is conducting workshops with communities that will have rail stations. The purpose of the workshops is to engage the public about rail stations and provide opportunities to residents and businesses to contribute ideas about the appearance of station entryways in the surrounding areas. Ideas generated at the workshops will be incorporated into the station design process. Please plan to attend the workshops and advance the measures listed in your comment during this process. For more information and to get involved in this process, please visit the project website at www.honolulutransit.org.

4. Visual and Aesthetic Effects

Response to Comment #8 regarding visual and aesthetic effects

The following comments are in response to Comment #8 in your letter, Letters A-D.

Throughout the Draft EIS review and comment period, many commented that visual changes associated with the project's elements will result in substantial visual effects. Many comments received expressed concern that the elevated fixed guideway transit system will adversely affect O`ahu's unique visual character by creating blight and degrading views. In addition, commenters, including KS, requested more information on how the project elements will be integrated with their communities, especially in the areas around stations.

These comments on view effects are representative of the various viewer groups (including businesses) that have been considered in the visual and aesthetic conditions analysis presented in the Draft EIS and the Final EIS. The definition and description of viewer groups is provided in Section 3.1.4 of the Honolulu High-capacity Transit Corridor Project Visual and Aesthetic Resources Technical Report (RTD 2008). The following is an explanation of the terms "viewer exposure" and "sensitivity." Viewer exposure refers to the view groups' physical location, the relative number of people exposed to the view, and the duration of their view. This includes transit and highway users and people in the surrounding area. Viewer sensitivity refers to a group's expectations relative to a particular visual setting in a particular area. It is also the extent to which visual elements are important to the viewer group. Viewer sensitivity is affected by a variety of factors, including the activities a viewer in engaged in; the visual context; and their values, expectations, and interests. The assessment of visual effects in Section 4.8 of the Final EIS has considered that each viewer group, including business owners, customers, and employees, are important (see "Viewer Groups," in Section 4.8.2 of the Final EIS). The methodology for the visual assessment is detailed in Section 4.8.1 of the Final EIS. In addition, each viewer group's characteristics were considered in the assessment of visual effects for each of the viewpoints described in Table 4-9 in Section 4.8 of the Final EIS. The effects, which are noted as low, moderate, or significant, also consider each viewer group's location, duration, and distance.

In response to the viewer groups' responses, received during the Draft EIS comment period, several key views have been reevaluated and the Final EIS has been refined (see section 4.8 of the Final EIS). The overall conclusions of the Draft EIS have not changed. The analysis of protected views and vistas was provided in earlier technical documents; however, the Final EIS more clearly describes the visual effects on these resources.

The island's unique visual character and scenic beauty were considered in the visual and aesthetic analysis presented in the Draft and Final EISs. As discussed in Section 4.8 of 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 Final EIS acknowledges that the Project will have shadow, light, and glare effects Mitigation is listed in 4.8.3. . Effects on property values are discussed in Section 4.19.2 of the Final EIS. Property values in the vicinity of rail systems tend to increase, including in the vicinity of rapid rail systems with elevated sections (see Table 4-38 Rail System Benefits on Real Estate Values and Section 4.19.2 of FEIS).

As discussed in Section 4.8.2 of the FEIS major viewer groups within the project corridor include residents, commuters, business owners, recreationists, and visitors. Residents are people who observe the visual environment daily and for extended periods. Commuters are those who frequently travel through an area and, therefore, are familiar with the existing visual environment. However, this group may not have the same sense of ownership as residential viewer groups because they do not reside within that environment but only pass through it. Business owners have a vested interest in the visual environment surrounding their operations. Most business owners are familiar with their surrounding environment and may have a sense of ownership. Recreationists include people who frequent local parks, hiking trails, bikeways, and watercourses. They have definite expectations about the visual environment's condition. Visitors consist of both first-time and repeat visitors to the area. Visitors may consist of tourists, delivery or service personnel, or business employees and customers. This viewer group is less familiar with the existing visual environment's specific details, but they tend to have some sensitivity to and expectation of the surrounding environment. .DPP and other interested groups (e.g. the Outdoor Circle, Scenic Hawaii Inc., the Honolulu Chapter of the American Institute of Architects) also provided data or input regarding the visual impact assessment for the Project. The major components of the visual impact assessment are described in 4.8.1 of the Final EIS. The U.S. Department of Transportation methodology does not prescribe the development of 360-degree visuals for multiple cross sections of the rail line. The methodology as described in the Final EIS provides the information required to determine visual impact of the Project.

The Honolulu High-Capacity Transit Corridor Project Visual and Aesthetics Resources Technical Report discusses the methodology for the visual

impact assessment. This assessment includes views from representative viewpoints. Selection of these viewpoints was limited to readily accessible public areas such as parks, sidewalks, streets, and parking lots. A greater emphasis was placed on identifying views toward the Project, because this best represents most viewers and the greater variety of views that would be experienced.

The visual simulations are intended to accurately represent the structure's scale in relation to other objects. However, they do not reproduce the entire field of view that individuals would perceive. Photographs typically produce a static field of view, but an individual's eyes constantly scan and selectively focus on a scene for content. As a result, photographs often do not show scenic features as prominently as they might appear to individual observers.

The visual simulations are intended to represent the scale and spatial relationships of project elements to other objects. Some of the simulations are also intended to represent view corridors identified as protected resources in pertinent policy documents. These simulations serve several purposes: they were used to evaluate visual and aesthetic consequences, demonstrate the potential for mitigation, and provide a means of communicating the findings of the analysis.

In addition, the Project will 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. Section 4.8.3 of the Final EIS contains specific environmental, architectural, and landscape design criteria that will help minimize visual effects of the Project. Design criteria will govern all new utility construction outside of buildings, as well as the maintenance, relocation, and restoration of utilities encountered or affected by construction of the fixed guideway.

The assessment of visual effect from the Project as described in Section 4.8.3 of the Final EIS considers the existing development along the project alignment. Within the Project corridor the environment changes from rural in the Wai'anae end of the corridor to dense high-rise development at the Koko Head end.

As part of the design process, DTS has developed specifications and design criteria to address the City's requirements for the Project that will be implemented as mitigation measures to minimize visual effects. Guideway materials and surface textures will be selected in accordance with generally accepted architectural principles to achieve effected integration between the guideway and its surrounding environment. Landscape and streetscape improvements will mitigate potential visual impacts, primarily for street-level views.

Other measures to address visual impacts of the Project are being developed through the station design and planning process. The initial station

area plans and design guidelines were first developed with coordination between DTS and DPP. The next level of transit station design focuses on integrating individual neighborhood characteristics of the communities served by stations.

The following mitigation framework 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 will establish a consistent design framework for the Project with consideration of local context.*
- *Coordinate the project design with City TOD planning and DPP.*
- *Consult with the communities surrounding each station for input on station design elements.*
- *Consider specific sites for landscaping and trees during the final design phase when plans for new plantings will be prepared by a landscape architect. Landscape and streetscape improvements will serve to mitigate potential visual impacts.*

Utility relocations are discussed in Section 4.5.3 of the Final EIS. The Project will relocate utilities where required, and the City will coordinate with adjacent property owners and utility companies prior to relocation and during relocation. Utility relocations will be designed to be compatible with the community setting as feasible. Details about utility relocations are discussed in section 4.18.2 of the Final EIS.

B. Economic Effects

1. Business Effects

Response to Comment # 9 regarding economic effects on businesses

The Project is the construction and implementation of rail transit service, which is discussed in the Draft and Final EISs. As discussed in Section 4.19.2 of the Final EIS, TOD is expected to occur in station areas as an indirect effect of the Project. Based on experiences with systems in other places with all types of rail systems (i.e., elevated, at-grade, and underground), it is the increased mobility and accessibility afforded by the Project that will increase the desirability and value of land near stations and attract new real estate investment nearby (in the form of TOD). Planning and zoning around station areas will be established and conducted by the City's Department of Planning and Permitting under a process covered by the City's new TOD Ordinance 09-4. For properties outside the boundaries of TOD station locations, these requested studies are beyond the scope of the Project and the EIS.

As noted earlier, an additional independent study is not planned.

2. Redevelopment

Response to Comment #10 regarding redevelopment options

To accomplish the economic development objectives for Oahu's urban corridor, suitable infrastructure must be developed as described in Section 4.3 of the Final EIS. The Project is supportive of the land use and transportation elements of plans, policies, and controls within the study corridor as documented in Appendix J of the Final EIS.

Section 4.5.3 of the Final EIS discusses the potential new development and redevelopment along the project alignment, as well as the scale of the transit system itself, may affect the character of development along the alignment. This section includes a discussion of the Project's effects on individual eighborhoods along the corridor.

IV. Cost and Financial Analysis

Response to Comment #11 regarding financial feasibility

a. *The capital plan for the Project is presented in Section 6.3 of the Final EIS, which includes a description of the amount of funding anticipated from various sources. The capital plan takes the current economic downturn into account.*
b. *Section 6.6 discusses the risks and uncertainties associated with the financial analysis prepared for the Project, including risks related to changes in project scope. If the Project is over budget, other sources of revenue have been identified in 6.3.3 and 6.6.3 and could include private funds (i.e., contributions toward the cost of building stations) or airport funds; however, $1.3 billion in year-of-expenditure dollars is included in the project budget as contingency for just such eventualities.*
c. *The State's announcement of a series of projects for construction as a result of a Federal stimulus program are already included in the No Build Alternative and are shown in Table 2-4 of the Final EIS. All the major stimulus projects are identified in the OahuMPO's Regional Transportation Plan and were also part of the No Build Alternative in the Draft and Final EISs against which all the Build Alternatives were compared.*
d. *Chapter 6 of the Final EIS describes the financial resources expected to be needed to pay for the capital costs 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 General Excise and Use Tax (GET) surcharge levied from 2007 through 2022. Additionally, $1.3 billion in year-of-expenditure dollars is included in the project budget as contingency in the event of cost overruns.*

The financial plan will be updated periodically as conditions warrant and as the Project moves ahead. This is a requirement of the Federal New Starts process and is intended to ensure the Project continues to be financially feasible and to avoid the types of problems encountered on other projects.

V. Effects of Land Acquisitions

Response to Comment #12 regarding land acquisition and mitigation

1. Individual assessments will be performed by the Project's Right-of-Way Team as the design progresses. Right-of-way plans are shown in Appendix C of the Final EIS. These maps show full and partial acquisitions and individual properties can be identified by tax map parcel numbers. As discussed in Section 4.4.3 of the Final EIS, where relocations will occur, compensation will be provided to affected property owners, businesses, or residents in compliance with all applicable Federal and State laws and will follow the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act (49 CFR 24). The following measures will be implemented for relocations:

- *The City will assist all affected persons in locating suitable replacement housing and business sites within an individual's or business's financial means. P A minimum 90 -day written notice will be provided before any business or resident will be required to move.*
- *Relocation services will be provided to all affected business and residential property owners and tenants without discrimination; persons, businesses, or organizations that are displaced as a result of the Project will be treated fairly and equitably.*
- *Where landscaping, sidewalks, and driveway access will be affected by the Project, coordination will occur with the landowner, and these property features will be replaced and/ or the property owner will be compensated in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act.*

2. All acquisitions will follow the requirements of the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. The City will work with land owners if non-conformities occur as a result of acquisitions.

(3. Please note, there is no #3 comment in your original letter).

4. All acquisitions will follow the requirements of the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. The City will work with land owners if non-conformities occur as a result of acquisitions

5. If payment is delayed more than 30 days after the final judgment, additional interest at the rate of 5 percent shall be added to the final judgment (Section 100-25, Hawaii Revised Statutes). For a Federal-aid project, the cost of this interest payment is not eligible for Federal reimbursement.

6 – 8. The City recognizes property owner's specific needs and will have Right-of-Way Team dedicated to this Project. Specific details will be worked out with individual property owners.

VI. Kelo Concerns

Response to Comment # 13 regarding private property

The Project evaluated in the Draft and Final EISs concerns the construction and implementation of rail transit service. However, as discussed in Section 4.19.2 of the Final EIS, TOD is expected to occur in station areas as an indirect effect of the Project. Planning around stations is currently underway by the City's Department of Planning and Permitting (DPP) under a process covered by the City's new TOD Ordinance 09-4. The TOD ordinance, and subsequent TOD plans, are designed to encourage private investment in the vicinity of the stations, as appropriate. The DPP has encouraged community involvement in the development of those plans. As for the Project, the City will acquire only properties needed to build the Project, which includes about 200 full and partial acquisitions, mostly strip acquisitions along roadways (Section 4.4.3 of the Final EIS). All acquisitions and relocations will comply with the Federal Uniform Relocation Assistance and Real Property Acquisitions Policies Act.

VII. TODs As Potential Mitigation

Response to Comment #14 regarding TOD

The following paragraphs are in response to Comment #14, Letters A, B1 and B2A-C in your comment letter.

a. The City has adopted plans that direct future development to occur within the study corridor and away from less developed portions of O'ahu. The TOD policy will focus the growth into patterns that will increase the viability of a number of travel options available to corridor residents and employees, including transit, walking, and bicycling. TOD special districts will restrict development in agricultural and open-space areas and encourage mixed-use, high-density, walkable communities around transit stations. The special districts also encourage public input into the design of TOD neighborhood plans to reflect unique community identities. TOD planning is underway and will occur before the fixed guideway stations are constructed. The City passed this TOD ordinance in March 2009 in anticipation of the Project. Development in the study corridor, whether highway-oriented or TOD, will be based on market demands. Pursuant to the policy, TOD may occur in project station areas as an indirect effect of the Project. The increased mobility and accessibility that the Project will provide may also increase the desirability and value of land near the stations, attracting new real estate investment nearby. See Section 4.19.2 of the Final EIS for additional information regarding TOD development.

b. The National Environmental Policy Act (NEPA) and Hawai'i Revised Statutes (HRS) Chapter 343 require the evaluation of potential effects of proposed government actions on the environment. ILand use impacts, including potential TOD development, are critical criteria for FTA in ranking projects for Federal funding. Potential TOD development is addressed in Section

4.18 of the Draft EIS. This section was updated in the Final EIS Section 4.19 to reflect Ordinance 09-4. Evaluation of TOD projects in other cities with new rail projects is beyond the scope of this EIS.

c. The City and County of Honolulu Department of Planning and Permitting is working with the community to develop TOD plans. The Department of Transportation Services, the lead agency for the Project is not responsible for planning. However, the Project is supportive of the this planning effort.

VIII. Study of the North King Street Alignment

Response to Comment #15 regarding a North King Street alignment

The North King Street alignment was evaluated in the Alternatives Analysis (November 2006). This alignment would have effected a greater number of parcels located within environmental justice/communities of concern areas (29 parcels of which 2 are residential versus 23 parcels of which 0 are residential along Dillingham Boulevard). In addition, a North King Street alignment would have moderate-high visual impacts whereas the Dillingham Boulevard alignment would have low-moderate visual impacts. The noise analysis conducted revealed moderate impacts at 52 receivers along the North King Street alignment whereas there would be moderate impacts at 17 receivers along Dillingham Boulevard.

There are 43 cultural practices and resources along the North King Street alignment that would be affected during construction and 2 that would be affected during operation. With the Dillingham Boulevard alignment, 23 cultural practices would be affected during construction and 0 would be affected during operation (cultural practices varied from one-time annual events to churches or community organizations where cultural activities are regularly held). The historic analysis identified pre-1965 tax map lots within the study corridor. Locations on this list included resources reviewed in previous studies and/or already included in the State Historic Preservation Division's State and National Register lists. The North King Street alignment is adjacent to 33 historic resources (of which 5 are on either the Hawaii Register or Eligible for the National Register) whereas the Dillingham Boulevard alignment is adjacent to 12 potentially historic resources (of which only 1 is on one of the registers).

The North King Street alignment would have required a longer and less efficient route and would have increased the system's cost by $50 million. While the North King Street alignment would serve more residents, Table 3-3 in the Alternatives Analysis Report shows that the fixed guideway route via North King Street had fewer overall riders than the route along Dillingham Boulevard. As a result of these reasons, the North King Street alignment was rejected as an alternative and thus not studied as part of the EIS. This information is provided in the Alternatives Analysis and technical reports prepared for the Alternatives Analysis. The North King Street alignment will not be reexamined as part of the Final EIS. The Nimitz flyover project was included in the modeling conducted for both the No Build and Build Alternatives studied in the Alternatives Analysis and EIS.

IX. Evaluation of An At-Grade or Multi-Modal System in the Urban Core

Response to Comment #16 regarding an at-grade or multimodal transit system

As stated in Section 2.2 of the Final EIS, prior to selecting an elevated fixed guideway system, a variety of high-capacity transit options were evaluated during the Primary Corridor Transportation Project (1998—2002) and Alternatives Analysis. Options evaluated and rejected included an exclusively at-grade fixed guideway system using light rail or bus rapid transit (BRT) vehicles, as well as a mix of options consisting of both at-grade and grade-separated segments. These alternatives were rejected because they did not meet the Purpose and Need of the Project. The text below explains further reasons why an at-grade system was rejected.

The Alternatives Screening Memorandum (DTS 2006a) recognized the visually sensitive areas in Kakaako and Downtown Honolulu, including the Chinatown, Hawaii Capital, and Thomas Square/Academy of Arts Special Design Districts. To minimize impacts on historic resources, visual aesthetics, and surface traffic, the screening process considered 15 combinations of tunnel, at-grade, or elevated alignments between Iwilei and Ward Avenue. Five different alignments through Downtown Honolulu were advanced for further analysis in the Alternatives Analysis, including an at-grade portion along Hotel Street, a tunnel under King Street, and elevated guideways along Nimitz Highway and Queen Street.

The Alternatives Analysis Report (DTS 2006b) evaluated the alignment alternatives based on transportation and overall benefits, environmental and social impacts, and cost considerations. The report found that an at-grade alignment along Hotel Street would require the acquisition of more parcels and could potentially affect more burial sites than any of the other alternatives considered. The alignment with at-grade operation Downtown and a tunnel under King Street, in addition to the environmental effects such as impacts to cultural resources, reduction of street capacity, and property acquisition requirements of the at-grade and tunnel sections, would cost approximately $300 million.

The Project's purpose is "to provide high-capacity rapid transit" in the congested east-west travel corridor (see Section 1.7 of the Final EIS). The need for the Project includes improving corridor mobility and reliability. The at-grade alignment would not meet the Project's Purpose and Need because it could not satisfy the mobility and reliability objectives of the Project (see bullets below). Some of the technical considerations associated with an at-grade versus elevated alignment through Downtown Honolulu include the following:

- ***System Capacity, Speed, and Reliability:*** *The short, 200-foot (or less) blocks in Downtown Honolulu would permanently limit the system to two-car trains to prevent stopped trains from blocking vehicular traffic on cross-streets. Under ideal operational circumstances, the capacity of an at-grade system could reach 4,000 passengers per hour per direction, assuming optimistic five minute headways. Based on travel forecasts, the Project should support approximately 8,000 passengers in the peak hour by 2030. Moreover, the Project can be readily expanded to carry over 25,000 in each direction by reducing the interval between trains (headway) to 90 seconds during the peak period. To reach a comparable system capacity, speed, and reliability, an at-grade alignment would*

require a fenced, segregated right-of-way that would eliminate all obstacles to the train's passage, such as vehicular, pedestrian, or bicycle crossings. Even with transit signal priority, the at-grade speeds would be slower and less reliable than an elevated guideway. An at-grade system would travel at slower speeds due to the shorter blocks, tight and short radius curves in places within the constrained and congested Downtown street network, the need to obey traffic regulations (e.g., traffic signals), and potential conflicts with other at-grade activity, including cars, bicyclists, and pedestrians. These effects mean longer travel times and far less reliability than a fully grade-separated system. None of these factors affect an elevated rail system. The elevated rail can travel at its own speed any time of the day regardless of weather, traffic or the need to let cross traffic proceed at intersections.

- ***Mixed-Traffic Conflicts**: The Project will run with three minute headways. However, three-minute headways on an at-grade rail system would prevent effective coordination of traffic signals in the delicately balanced signal network in Downtown Honolulu. A three minute cycle of traffic lights would affect traffic flow and capacity of cross-streets. Furthermore, there would be no option to increase the capacity of the rail system by reducing the headway to 90 seconds, which would only exacerbate the signalization problem. An at-grade system would require removal of two or more existing traffic lanes on affected streets. This effect is significant and would exacerbate congestion. Congestion would not be isolated to the streets that cross the at-grade alignment but, instead would spread throughout Downtown. The Final EIS shows that the Project's impact on traffic will be isolated and minimal with elevated rail, and in fact will reduce system-wide traffic delay by 18 percent compared to the No Build Alternative (Table 3-14 in the Final EIS). The elevated guideway will require no removal of existing travel lanes, while providing a reliable travel alternative. When traffic slows, or even stops due to congestion or incidents, the elevated rail transit will continue to operate without delay or interruption.*

  An at-grade light rail system with continuous tracks in-street, would create major impediments to turning movements, many of which would have to be closed to eliminate a crash hazard. Even where turning movements are designed to be accommodated, at-grade systems experience potential collision problems. In addition, mixing at-grade fixed guideway vehicles with cars, bicyclists, and pedestrians presents a much higher potential for conflicts compared to grade-separated conditions. Where pedestrians and automobiles cross the tracks in the street network, particularly in areas of high activity (e.g., station areas or intersections), there is a risk of collisions involving trains that does not exist with an elevated system. There is evidence of crashes between trains and cars and trains and pedestrians on other at-grade systems throughout the country. This potential would be high in the Chinatown and Downtown neighborhoods, where the number of pedestrians is high and the aging population presents a particular risk.

- ***Construction Impacts**: Constructing an at-grade rail system could have more effects than an elevated system in a number of ways. The wider and continuous footprint of an at-grade rail system compared to an elevated rail system (which touches the ground only at discrete column foundations, power substations and station accessways) increases the potential of utility conflicts and discovery of sensitive cultural resources. In addition, the extra roadway lanes taken away for the system would result in increased congestion or require that additional businesses or homes be taken to widen the roadway through Downtown. Additionally, the duration of short-term construction impacts to the community and environment with an at-grade system would be greater than with an elevated system. Because of differing construction techniques, more lanes would need to be continuously closed for at-grade construction and the closures would last longer than with elevated construction. This would result in a greater disruption to business and residential access.*

Because it is not feasible for an at-grade system through Downtown to move passengers rapidly and reliably without significant detrimental effects on other transportation system elements (e.g., the highway and pedestrian systems, safety, reliability, etc.), an at-grade system would have a negative system-wide impact that would reduce ridership throughout the system. The at-grade system would not meet the Project's Purpose and Need and, therefore, does not require additional analysis. As a result of these reasons, an at-grade system was not evaluated as part of the Draft or Final EISs.

The FTA and DTS appreciate your interest in the Project. The Final EIS, a copy of which is included in the enclosed DVD, has been issued in conjunction with the distribution of this letter. Issuance of the Record of Decision under NEPA and acceptance of the Final EIS by the Governor of the State of Hawaii are the next anticipated actions.

Very truly yours,

WAYNE Y. YOSHIOKA
Director

Enclosure