Honolulu High-Capacity Transit Corridor Project

Environmental Impact Statement

Scoping Information Package

March 15, 2007

City and County of Honolulu
Department of Transportation Services

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Chapter 1 Introduction

The City and County of Honolulu Department of Transportation Services (DTS), in cooperation with the U.S. Department of Transportation Federal Transit Administration (FTA), will be preparing an Environmental Impact Statement (EIS) to evaluate alternatives that would provide high-capacity transit service on O'ahu. The primary project study area is the travel corridor between Kapolei and the University of Hawai'i at Mānoa (UH Mānoa) (Figure 1-1). This corridor includes the majority of housing and employment on O'ahu. The east-west length of the corridor is approximately 23 miles. The north-south width is at most 4 miles because much of the corridor is bounded by the Ko'olau and Wai'anae Mountain Ranges to the north and the Pacific Ocean to the south.

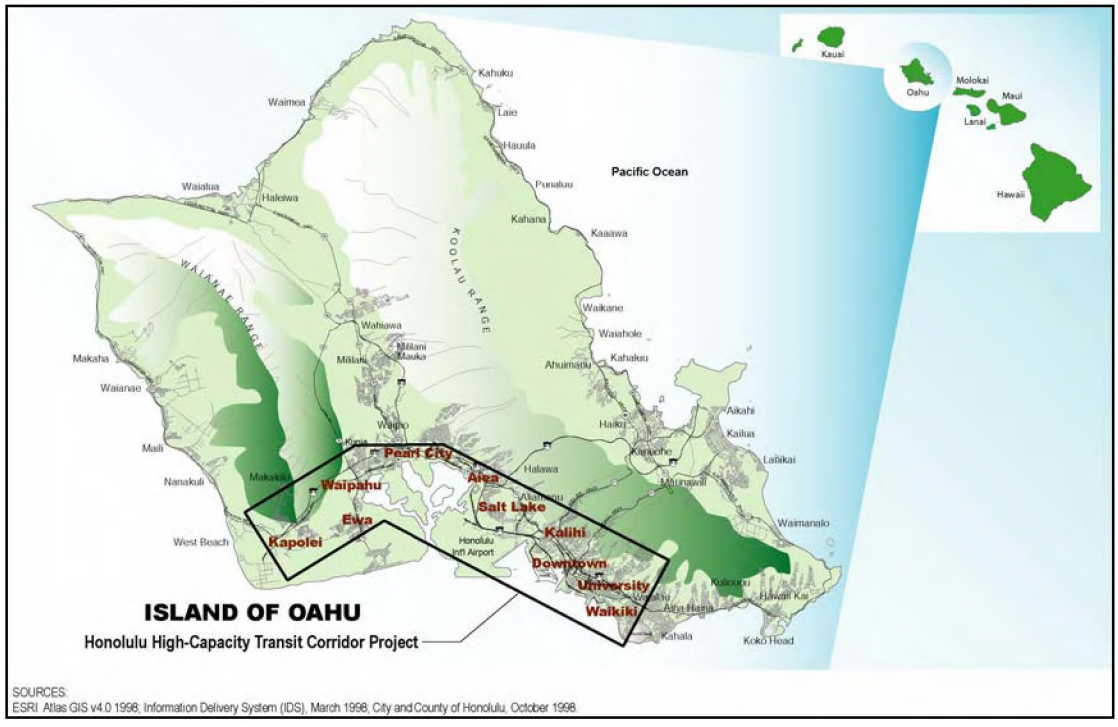

Figure 1-1. Project Vicinity

DTS completed a planning Alternatives Analysis in October 2006 that evaluated the four following alternatives to provide high-capacity transit service in the travel corridor between Kapolei and UH Mānoa:

- No Build
- Transportation System Management
- Express Buses operating in Managed Lanes
- Fixed Guideway Transit System

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After review of the *Alternatives Analysis Report* and consideration of public comments, the City and County of Honolulu Council selected a Locally Preferred Alternative (LPA) on December 22, 2006. The selection was signed into law by the Mayor on January 6, 2007, becoming Ordinance 07-001, selecting a fixed-guideway transit system extending from Kapolei to UH Mānoa with a connection to Waikīkī. The ordinance authorizes the City to proceed to planning and engineering a fixed-guideway project within these limits and following the alignment defined in the ordinance. Also, the first project must be fiscally constrained to anticipated funding sources.

FTA and DTS have issued a notice of intent to complete an EIS on the selected alternative. The EIS will be prepared to satisfy the requirements of the National Environmental Policy Act of 1969 (NEPA) and its implementing regulations and Chapter 343 of the Hawai'i Revised Statutes. The FTA and DTS are requesting public and interagency input on the purpose of and needs to be addressed by the project, the alternatives to be considered, and the scope of the NEPA EIS for the project, including the environmental and community impacts to be evaluated. Scoping activities related to the Hawai'i Revised Statutes Chapter 343 process were completed in December 2005 and January 2006.

Upon completion, the draft EIS will be available for public and agency review and comment. Public hearings on the draft EIS will be held at advertised locations within the study area. The anticipated schedule for the project through completion of the NEPA process is shown in Figure 1-2.

This information package includes the proposed purpose and need, provides a summary of the Alternatives Analysis process undertaken to identify the LPA for the project, presents the alternatives proposed for analysis in the EIS, and outlines scoping activities being undertaken.

Public scoping meetings will be held at the following locations:

- Kapolei Hale at 1000 Uluohia Street, Honolulu, HI 96707 on March 28, 2007, from 6:30 p.m. to 9:00 p.m.

- McKinley High School at 1039 South King Street, Honolulu, HI 96814 on March 29, 2007, from 5:00 p.m. to 8:00 p.m.

- Governmental agencies will be invited to a separate scoping meeting to be held during business hours..

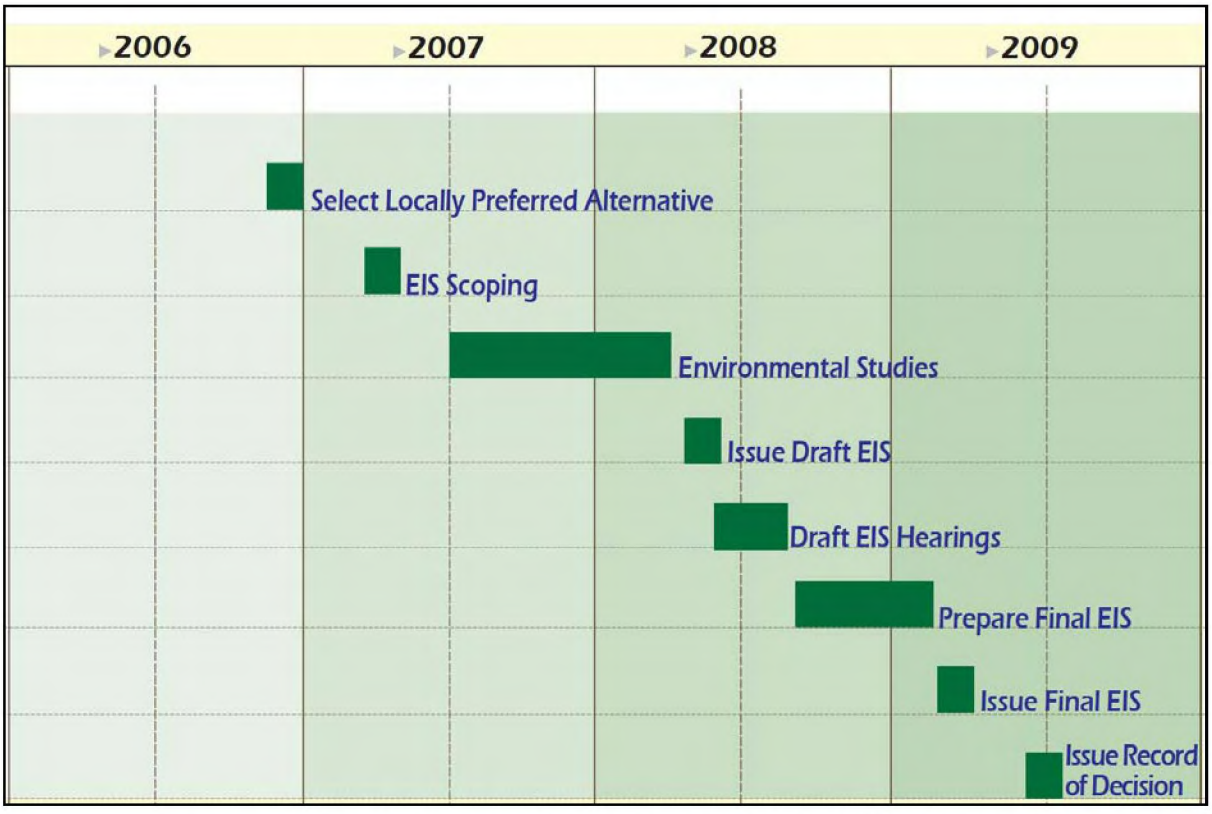

Figure 1-2. Anticipated Project Schedule for the Environmental Process

The public is invited to comment on the purpose of and needs to be addressed by the project; the alternatives, including the modes and technologies to be evaluated and the alignments and termination points to be considered; and the environmental, social, and economic impacts to be analyzed. Written comments on the project alternatives, scope of the EIS, and purpose of and needs to be addressed by the project should be forwarded to: Department of Transportation Services, City and County of Honolulu, 650 South King Street, 3rd Floor, Honolulu, HI, 96813, Attention: Honolulu High-Capacity Transit Corridor Project or via the internet at www.honolulutransit.org by April 13, 2007.

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Chapter 2 Proposed Purpose and Need

Purpose of the Project

The purpose of the Honolulu High-Capacity Transit Corridor Project is to provide high-capacity, high-speed transit in the highly congested east-west transportation corridor between Kapolei and the University of Hawai‘i at Mānoa, as specified in the 2030 O‘ahu Regional Transportation Plan (ORTP). The project is intended to provide faster, more reliable public transportation services in the corridor than those currently operating in mixed-flow traffic, to provide basic mobility in areas of the corridor where people of limited income live, and to serve rapidly developing areas of the corridor. The project would also provide an alternative to private automobile travel and improve transit linkages within the corridor. Implementation of the project, in conjunction with other improvements included in the ORTP, would moderate anticipated traffic congestion in the corridor. The project also supports the goals of the O‘ahu General Plan and the ORTP by serving areas designated for urban growth.

Need for Transportation Improvements

Improved mobility for travelers facing increasingly severe traffic congestion

The existing transportation infrastructure in the corridor between Kapolei and UH Mānoa is overburdened handling current levels of travel demand. Motorists and transit users experience substantial traffic congestion and delay at most times of the day, both on weekdays and on weekends. Average weekday peak-period speeds on the H-1 Freeway are currently less than 20 miles per hour (mph) in many places and will degrade even further by 2030. Transit vehicles are caught in the same congestion. Travelers on O‘ahu’s roadways currently experience 51,000 vehicle hours of delay, a measure of how much time is lost daily by travelers stuck in traffic, on a typical weekday. This measure of delay is projected to increase to more than 71,000 daily vehicle hours of delay by 2030, assuming implementation of all of the planned improvements listed in the ORTP (except for a fixed guideway system). Without these improvements, the ORTP indicates that daily vehicle-hours of delay could increase to as much as 326,000 vehicle hours.

Currently, motorists traveling from West O‘ahu to Downtown Honolulu experience highly congested traffic conditions during the a.m. peak period. By 2030, after including all of the planned roadway improvements in the ORTP, the level of congestion and travel time are projected to increase further. Average bus speeds in the corridor have been decreasing steadily as congestion has increased. “TheBus” travel times are projected to increase substantially through 2030. Within the urban core, most major arterial streets will experience increasing peak-period congestion, including Ala Moana Boulevard, Dillingham Boulevard, Kalākaua Avenue, Kapi‘olani Boulevard, King Street, and Nimitz Highway. Expansion of the roadway

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system between Kapolei and UH Mānoa is constrained by physical barriers and by dense urban neighborhoods that abut many existing roadways. Given the current and increasing levels of congestion, a need exists to offer an alternative method of travel within the corridor independent of current and projected highway congestion.

Improved transportation system reliability

As roadways become more congested, they become more susceptible to substantial delays caused by such incidents as traffic accidents or heavy rain. Even a single driver unexpectedly braking can have a ripple effect delaying hundreds of cars. Because of the operating conditions in the study corridor, current travel times are not reliable for either transit or automobile trips. To arrive at their destination on time, travelers must allow extra time in their schedules to account for the uncertainty of travel time. This lack of predictability is inefficient and results in lost productivity. Because The Bus system primarily operates in mixed-traffic, transit users experience the same level of travel time uncertainty as automobile users. A need exists to reduce transit travel times and provide a more reliable transit system.

Accessibility to new development in ‘Ewa/Kapolei/Makakilo as a way of supporting policy to develop the area as a second urban center

Consistent with the General Plan for the City and County of Honolulu, the highest population growth rates for the island are projected in the ‘Ewa Development Plan area (comprised of the ‘Ewa, Kapolei, and Makakilo communities), which is expected to grow by 170 percent between 2000 and 2030. This growth represents nearly 50 percent of the total growth projected for the entire island. The more rural areas of Wai‘anae, Wahiawā, North Shore, Windward, Waimānalo, and East Honolulu will have much lower population growth of between zero and 16 percent if infrastructure policies support the planned growth in the ‘Ewa Development Plan area. Kapolei, which is developing as a “second city” to Downtown Honolulu, is projected to grow by nearly 600 percent to 81,100 people, the ‘Ewa neighborhood by 100 percent, and Makakilo by 125 percent between 2000 and 2030. Accessibility to the overall ‘Ewa Development Plan area is currently severely impaired by the congested roadway network, which will only get worse in the future. This area is less likely to develop as planned unless it is accessible to Downtown and other parts of O‘ahu; therefore, the ‘Ewa, Kapolei, and Makakilo area needs improved accessibility to support its future growth as planned.

Improved transportation equity for all travelers

Many lower-income and minority workers live in the corridor outside of the urban core and commute to work in the Primary Urban Center Development Plan area. Many lower-income workers also rely on transit because of its affordability. In addition, daily parking costs in Downtown Honolulu are among the highest in the United States, further limiting this population’s access to Downtown. Improvements to transit capacity and reliability will serve all transportation system users, including moderate- and low-income populations.

Chapter 3 Environmental Review Process

The City and County of Honolulu Department of Transportation Services (DTS), in cooperation with the U.S. Department of Transportation Federal Transit Administration (FTA), will be preparing an Environmental Impact Statement (EIS) to evaluate alternatives that would provide high-capacity transit service on O‘ahu. The EIS will be prepared to satisfy the requirements of the National Environmental Policy Act of 1969 (NEPA) and its implementing regulations and Chapter 343 of the Hawai‘i Revised Statutes.

On December 8, 2005, the environmental review process was initiated with notification in *The Environmental Notice* of the publication of the Environmental Impact Statement Preparation Notice (EISPN) for the Honolulu High-Capacity Transit Corridor Project per the requirements of Chapter 343 of the Hawai‘i Revised Statutes. Scoping activities related to the Hawai‘i Revised Statutes Chapter 343 process were completed in December 2005 and January 2006. Comments were summarized and responded to in the *Scoping Report* dated April 6, 2006. Individual response letters were mailed to all individuals who provided comment on the EISPN and had provided a valid mailing address.

DTS completed a planning Alternatives Analysis in October 2006 that evaluated the four following alternatives to provide high-capacity transit service in the travel corridor between Kapolei and UH Mānoa:

- No Build
- Transportation System Management
- Express Buses operating in Managed Lanes
- Fixed Guideway Transit System

After review of the *Alternatives Analysis Report* and consideration of public comments, the City and County of Honolulu Council selected a Locally-Preferred Alternative (LPA) on December 22, 2006. The selection was signed into law by the Mayor on January 6, 2007, becoming Ordinance 07-001, selecting a fixed-guideway transit system extending from Kapolei to UH Mānoa and connecting with Waikīkī. The ordinance authorizes the City to proceed to planning and engineering a fixed-guideway project within these limits and following the alignment defined in the ordinance. Also, the first project must be fiscally constrained to anticipated funding sources.

Per the direction established in Ordinance 07-001, DTS is initiating development of an EIS on the LPA that satisfies the requirements of NEPA and its implementing regulations and Chapter 343 of the Hawai‘i Revised Statutes. The EIS preparation will follow the project development process shown in Figure 3-1.

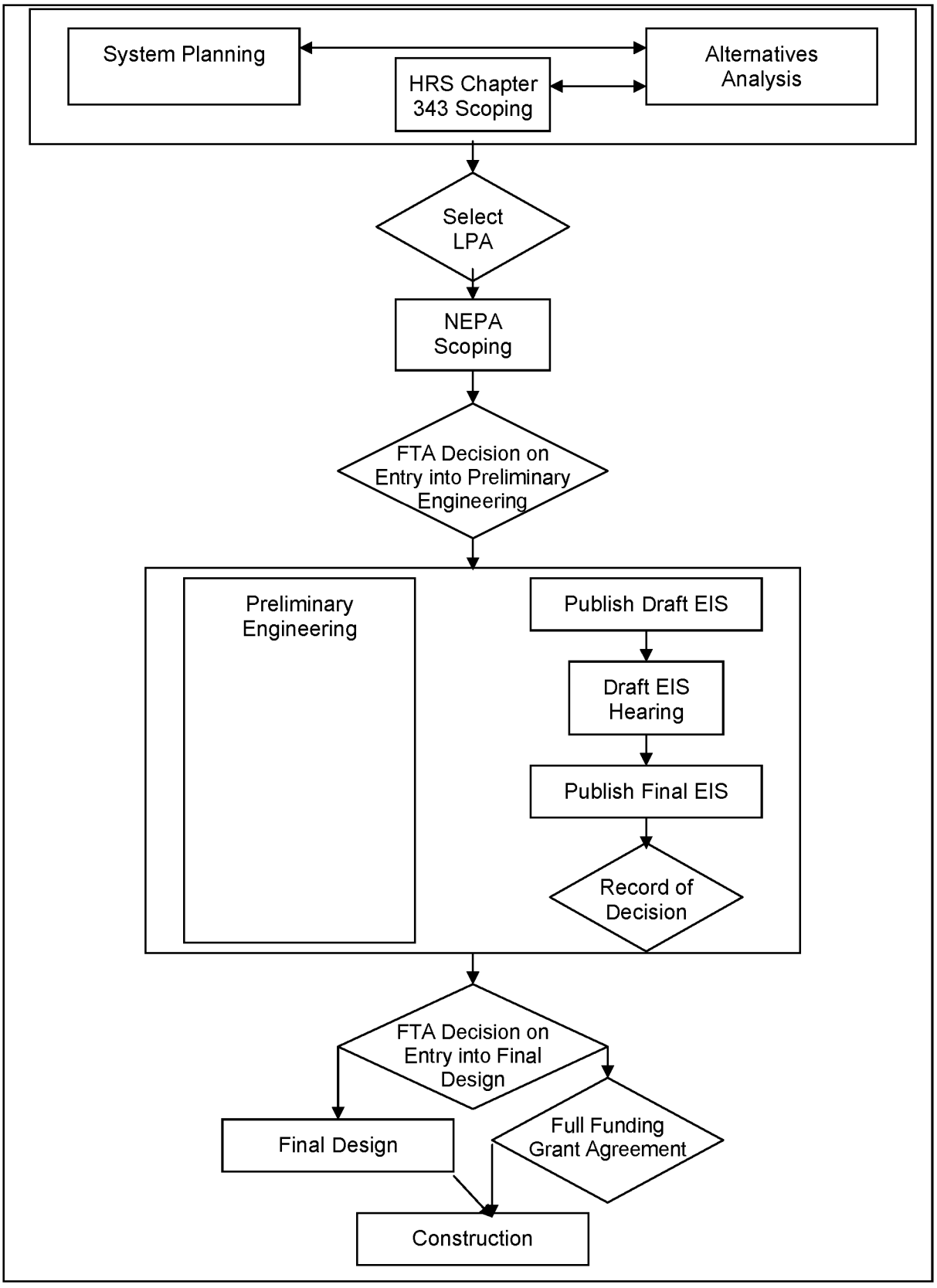

Figure 3-1. Project Development Process

Following the NEPA scoping period, DTS will continue design on the Fixed Guideway Transit Alternatives to the level of information necessary to identify impacts and prepare an EIS. Environmental consequences of the alternatives will be identified in the draft EIS, which will be distributed for public comments. Comments received on the draft EIS will be incorporated into the final EIS along with identification of the preferred alternative. The NEPA Record of Decision and State Acceptance of the Final EIS under Chapter 343 of the Hawai‘i Revised Statutes will conclude the environmental review process.

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Three alternatives will be evaluated in the EIS:

1. No Build Alternative
2. Fixed Guideway Transit Alternative via Salt Lake Boulevard
3. Fixed Guideway Transit Alternative serving Airport and Salt Lake

Comments received during the scoping process will be considered in selection of the final alternatives to be evaluated in the EIS.

ALTERNATIVE 1: No Build Alternative

The No Build Alternative includes existing transit and highway facilities and committed transportation projects anticipated to be operational by 2030. Committed transportation projects are those identified in the O'ahu 2030 Regional Transportation Plan prepared by OMPO. Highway elements of the No Build Alternative will also be included in the build alternatives.

The No Build Alternative's transit component would include an increase in fleet size to accommodate growth, allowing service frequencies to remain the same as today.

ALTERNATIVE 2: Fixed Guideway Transit Alternative via Salt Lake Boulevard

The Fixed Guideway Alternatives would include the construction and operation of a fixed-guideway transit system between Kapolei and UH Mānoa. The system could use any of a range of fixed-guideway transit technologies that meet performance requirements and could be either automated or employ drivers.

Station and supporting facility locations also are considered. Supporting facilities include a vehicle maintenance facility, park-and-ride lots, and traction-power sub-stations. The vehicle maintenance facility would either be located between North-South Road and Fort Weaver Road or in the vicinity of Leeward Community College. Some bus service would be reconfigured to bring riders on local buses to nearby fixed-guideway transit stations. To support this system, the bus fleet would be increased.

The fixed guideway system is planned to operate between 4 a.m. and midnight, with a train arriving in each direction at each station between every three and ten minutes. The system is planned to operate with a unified fare structure with TheBus, with transfers and passes usable on both systems. A possible fare-collection system would include one that operates on an honor basis. No gates or fare inspection points would be used in the stations. Fare machines would be available at all stations, and standard fare boxes would be used on buses. Fare inspectors would randomly ride the system and check that passengers have valid tickets or transfers. Violators would be cited and fined.

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The system is planned to operate with multicar trains approximately 175 to 200 feet in length, with each train capable of carrying a minimum of 300 passengers. This would provide a peak capacity of at least 6,000 passengers per hour per direction. The system would be expandable to longer trains of up to 300 feet in the future to increase capacity by 50 percent. Also, the system could be operated with shorter headways (time between train arrivals) to increase peak capacity. The following five technologies are under consideration, based on their ability to meet these operating requirements: light rail transit, rapid rail transit, rubber-tired guided vehicles, magnetic levitation, and monorail.

The Fixed Guideway Transit Alternative via Salt Lake Boulevard would generally follow the following route: Saratoga Avenue/North-South Road to Farrington Highway/Kamehameha Highway to Salt Lake Boulevard to Dillingham Boulevard to Nimitz Highway/Halekauwila Street/Kona Street/Kapiʻolani Boulevard/University Avenue with a branch serving Waikīkī (Figure 4-1). Transit station locations are listed in Table 4-1. Detailed alignment drawings are available in the *Honolulu High-Capacity Transit Corridor Project Alignment Plans and Profiles*. The first project would begin in the vicinity of the planned University of Hawaiʻi West Oʻahu campus and extend to Ala Moana Center, which is the portion of the alternative that can be constructed with reasonably anticipated funding. The remainder of the alternative would be constructed once additional funding is secured.

Table 4-1. Transit Station Locations for the Fixed Guideway Transit Alternatives

Station Locations for First project	Station Locations for Future Extensions
UH West Oʻahu Makai Station	Kapolei Parkway at Hanua Street
UH West Oʻahu at Farrington Highway Station	Kapolei Parkway at Wākea Street
Farrington Highway Koko Head of North-South Road Station	Saratoga Avenue at Wākea Street
Farrington Highway at Leokū Street Station	Saratoga Avenue at Fort Barrette Road
Farrington Highway at Mokuola Street Station	Kapolei Parkway at North-South Road
Leeward Community College Station	Kapiʻolani Boulevard at McCully Street
Kamehameha Highway at Kuala Street Station	University Avenue at Date Street
Kamehameha Highway at Kaonohi Street Station	University Avenue at S. King Street
Salt Lake Boulevard at Kahuapaʻani Street	UH Mānoa Lower Campus
Salt Lake Boulevard at Ala Nioi Place Station	Kalākaua Avenue at Convention Center
Dillingham Boulevard at Middle Street Station	Kūhiō Avenue at Kālaimoku Street
Dillingham Boulevard at Mokauea Street Station	Kūhiō Avenue at Liliʻuokalani Avenue
Dillingham Boulevard at Kōkea Street Station	**Additional Station Locations for Future Extensions of the Alternative serving Airport and Salt Lake**
Kaʻaahi Street Station	
Nimitz Highway at Kekaulike Street Station	
Nimitz Highway at Fort Street Station	Aloha Stadium Station
Halekauwila Street at South Street Station	Kamehameha Highway at Radford Drive Station
Halekauwila Street at Ward Street Station	Airport Station
Ala Moana Center Station	Aolele Street at Lagoon Drive Station

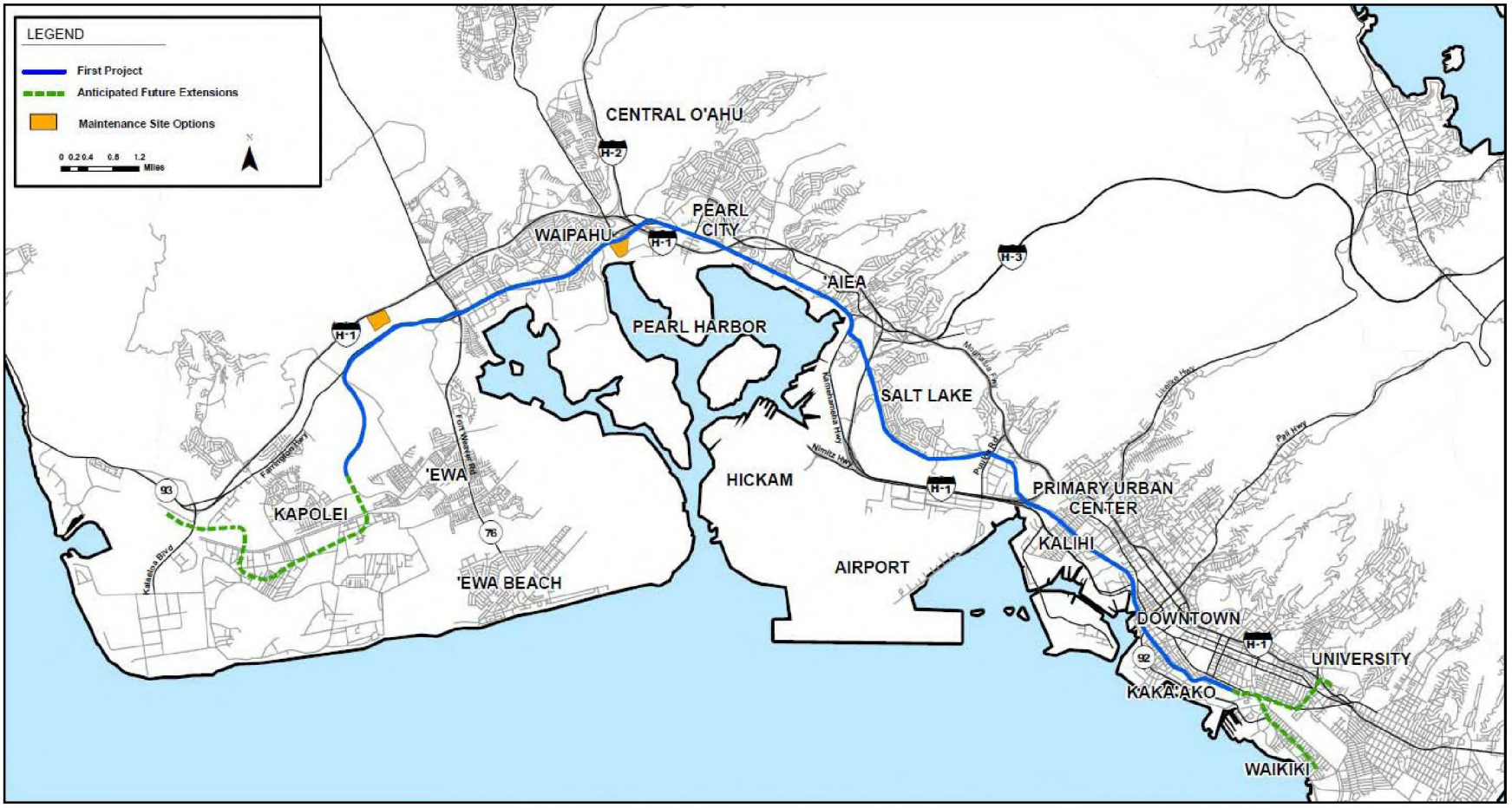

Figure 4-1. Alternative 2: Fixed Guideway Transit Alternative via Salt Lake Boulevard

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ALTERNATIVE 3: Fixed Guideway Transit Alternative serving Airport and Salt Lake

The Fixed Guideway Transit Alternative serving Airport and Salt Lake is identical to the Fixed Guideway Transit Alternative via Salt Lake, with the exception of also including a future fork in the alignment following Kamehameha Highway and Aolele Street at Aloha Stadium that rejoins at the Middle Street Transit Center (Figure 4-2). The additional transit station locations associated with this alternative are listed in Table 4-1.

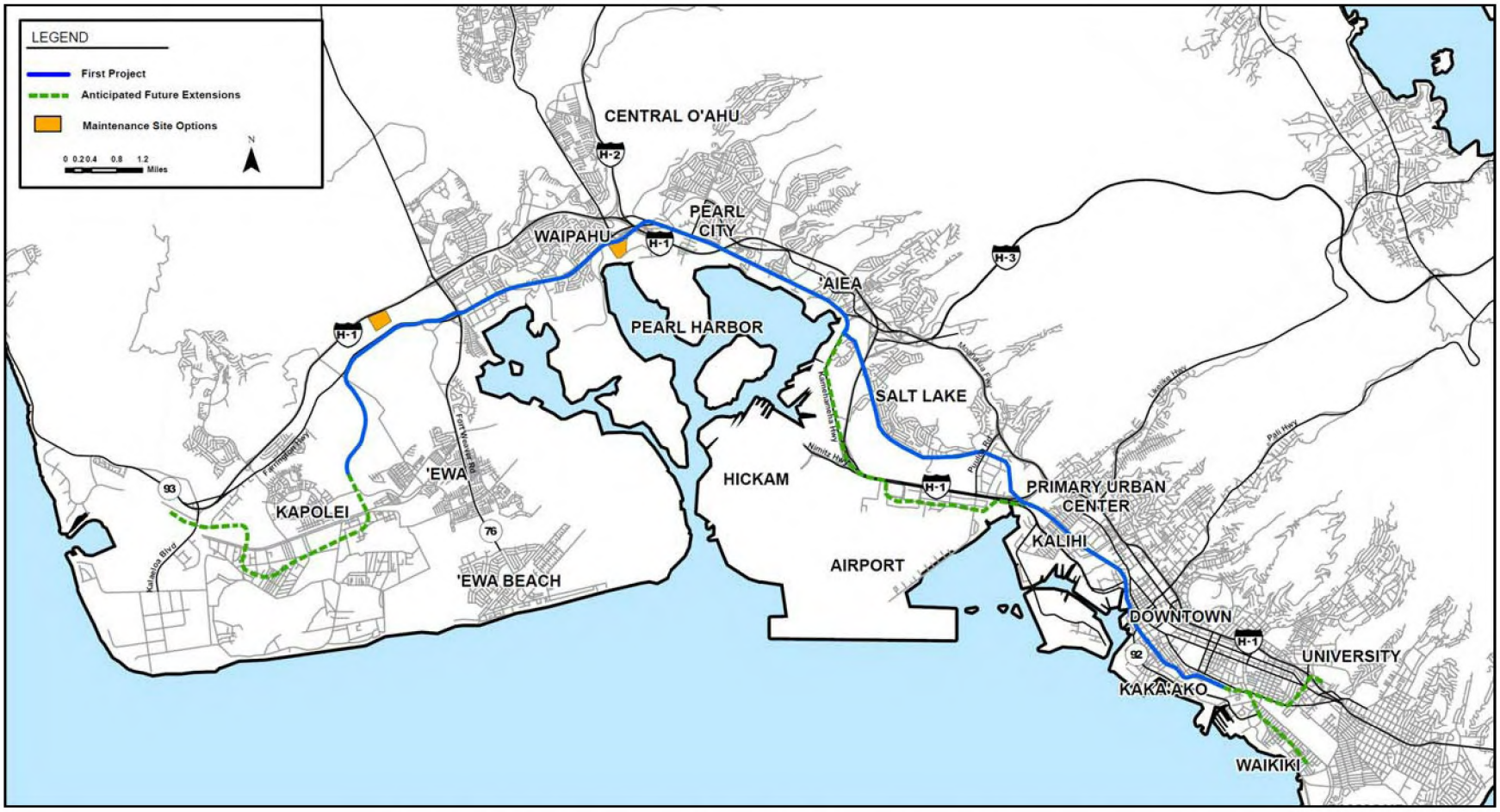

Figure 4-2. Alternative 3: Fixed Guideway Transit Alternative serving Airport and Salt Lake

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Chapter 5 Elements of the Environment

The effects of the various alternatives on the following social and environmental resources are proposed to be evaluated in the Alternatives Analysis and documented in the Environmental Impact Statement:

- Land Use and Economic Activity
- Displacements and Relocations
- Neighborhoods and Communities
- Visual and Aesthetic Resources
- Air Quality
- Noise and Vibration
- Biological Resources and Ecosystems
- Water Resources
- Energy
- Hazardous Materials
- Farmlands, Soils, and Natural Hazards
- Parks and Recreation Areas
- Cultural, Historic, and Archaeological Resources

In addition to these social and environmental resources that will considered in the EIS, the effects on the transportation system will be evaluated and a financial analysis of the alternatives will be provided.

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Chapter 6 Scoping Process

All interested individuals and organizations, as well as federal, state, and local agencies and Native Hawaiian organizations, are invited to comment on the project's purpose and need, the alternatives to be considered, and the impacts to be evaluated. During the scoping process, comments on the proposed statement of purpose and need should address its completeness and adequacy, and comments on the alternatives should propose additional alternatives that would satisfy the purpose and need at less cost or with greater effectiveness or less environmental impact. At this time, comments should not focus on a preference for a particular alternative. The opportunity for that type of input will be after the release of the draft EIS.

Comments may be given in oral or written form at the following public scoping meetings:

- Kapolei Hale at 1000 Uluohia Street, Honolulu, HI 96707 on March 28, 2007, from 6:30 p.m. to 9:00 p.m.
- McKinley High School at 1039 South King Street, Honolulu, HI 96814 on March 29, 2007, from 5:00 p.m. to 8:00 p.m.

An agency scoping meeting for resource agencies will be held at the following location:

- Honolulu Hale, Mission Memorial Auditorium at 558 South King Street, Honolulu, HI 96813 on March 28, 2007, from 10:00 a.m. to 12:00 p.m.

Written comments on the project alternatives, scope of the EIS, and purpose of and needs to be addressed by the project should be forwarded to: Department of Transportation Services, City and County of Honolulu, 650 South King Street, 3rd Floor, Honolulu, HI, 96813, Attention: Honolulu High-Capacity Transit Corridor Project or via the internet at www.honolulutransit.org.

Following the public scoping process, public outreach activities will include meetings with interested parties or groups. The project web site, www.honolulutransit.org, is periodically updated to reflect the project's current status. Additional opportunities for public participation will be announced through mailings, notices, advertisements, and press releases. Those wishing to be placed on the project mailing list may do so by registering on the web site at www.honolulutransit.org, or by calling (808) 566-2299.

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