

been approximately 25 miles and it would have included 23 stations.

2.4 Preferred Alternative Identification Process

The Draft EIS documented that of the three Build Alternatives evaluated, the Airport Alternative will carry the most passengers, with 95,000 daily passengers and 249,200 daily transit trips in 2030, and provide the greatest transit-user benefits (Table 2-5). While these numbers have changed since the Draft EIS was published, the relative differences among the alternatives would remain similar. The Airport Alternative also will result in the fewest vehicle miles traveled and vehicle hours of delay. It will provide access to employment centers at Pearl Harbor Naval Base and Honolulu International Airport and will have substantially greater ridership to those areas than the Salt Lake Alternative. It will serve the Salt Lake neighborhood with connecting bus service.

The Airport Alternative will have approximately 5 percent fewer parcel acquisitions than would the Salt Lake Alternative. It will have fewer noise impacts, and it will also result in slightly less air pollution, energy consumption, and water pollution. Because of the skewed crossing of Moanalua Stream with the Salt Lake Alternative, the Airport

Alternative will have less effect on surface waters than would the Salt Lake Alternative. The Airport Alternative will have slightly lower potential for encountering archaeological resources, but will affect more historical resources and parklands than would the Salt Lake Alternative.

During the public comment period on the Draft EIS, the public overwhelmingly supported the Airport Alternative. Of the comments that specifically supported one of the alternatives, more than 75 percent were in support of the Airport Alternative. Also, the City Council adopted Resolution 08-261, which specifies that planning, engineering, design, and construction should be completed for the Airport Alternative.

The Airport Alternative is the Preferred Alternative and is described in this Final EIS as “the Project.” The Salt Lake Boulevard Alignment is part of the Locally Preferred Alternative.

2.5 The Project: Fixed Guideway Alternative from East Kapolei to Ala Moana Center via the Airport

The Project will include the construction and operation of a grade-separated fixed guideway transit system between East Kapolei and Ala Moana Center (Figures 2-8 to 2-11). Detailed plans

Table 2-5 Summary of Data for Alternatives Considered in Draft Environmental Impact Statement

Alternative	Daily Islandwide Transit Trips	Vehicle Miles Traveled	Vehicle Hours of Delay	Hours of Transit-user Benefits	Total Capital Cost (Millions 2008 Dollars)	Cost per Hour of Transit-user Benefit Compared to No Build
2030 No Build	226,000	13,583,000	107,000	-	\$978	-
2030 Salt Lake Alternative	270,000	13,096,000	84,000	48,980	\$4,876	\$17.53
2030 Airport & Salt Lake Alternative	272,000	13,103,000	83,000	50,170	\$5,767	\$22.86
2030 Airport Alternative	273,000	13,086,000	82,000	51,900	\$5,084	\$17.78

of the alignment are included in Appendix B of this Final EIS. The system will use steel wheel on steel rail technology. The vehicles could either be manually operated by a driver or fully automated (driverless). Operating goals for system speed and reliability require that the entire system operate in exclusive right-of-way, with no potential for vehicle or pedestrian conflicts. All parts of the guideway will be elevated, except near Leeward Community College, where it will be at-grade in exclusive right-of-way.

From Waiʻanae to Koko Head (west to east), the guideway will follow North-South Road and other future roadways to Farrington Highway (Figure 2-8). The guideway will follow Farrington Highway Koko Head on an elevated structure and continue along Kamehameha Highway to the vicinity of Aloha Stadium (Figure 2-9).

The guideway will continue past Aloha Stadium along Kamehameha Highway makai to Nimitz Highway and turn makai onto Aolele Street. It will then follow Aolele Street Koko Head to reconnect to Nimitz Highway near Moanalua Stream and continue to the Middle Street Transit Center (Figure 2-10). Koko Head of Middle Street, the guideway will follow Dillingham Boulevard to the vicinity of Kaʻaahi Street and then turn Koko Head to connect to Nimitz Highway near Iwilei Road.

The guideway will follow Nimitz Highway Koko Head to Halekauwila Street, then proceed along Halekauwila Street past Ward Avenue where it will transition to Queen Street. The guideway will cross from Waimanu Street to Kona Street in the vicinity of Pensacola Street. The guideway will run above Kona Street to Ala Moana Center (Figure 2-11). The total guideway length for the Project will be approximately 20 miles.

In addition to the guideway, the Project will require the construction of 21 stations and supporting facilities. Supporting facilities include a vehicle

maintenance and storage facility, transit centers, park-and-ride lots, traction power substations, and an access ramp from the H-2 Freeway to the Pearl Highlands park-and-ride. The vehicle maintenance and storage facility would either be located in the planned Hoʻopili development near Farrington Highway or near Leeward Community College (Figures 2-8 and 2-9).

The Project will require widening of existing streets to accommodate the guideway columns, provide bus stops, improve sidewalks, or related improvements. Appendix C of this Final EIS shows which locations would require additional right-of-way to accommodate the widening. The widenings will occur at the following locations:

- Makai side of Farrington Highway at Waipahu High School (Figure 2-9)
- Kamehameha Highway at various locations between Pearl Highlands and Pearl Harbor Naval Base Station
- Makai side of Dillingham Boulevard between Puʻuhale Road and King Street (Figure 2-11)
- Makai side of Halekauwila Street between Cooke Street and Kamani Street (Figure 2-11)
- Both sides of Kona Street between Pensacola Street and Piʻikoi Street

Some bus routes will be reconfigured to bring riders on local buses to nearby fixed guideway transit stations. Service on some routes will be reduced as the service is replaced by the fixed guideway system. To support this system, the bus fleet will be increased (Table 2-4). Appendix D details future transit routes.

The Project will provide high-capacity transit service between East Kapolei and Ala Moana Center with future extensions planned for West Kapolei to East Kapolei and from Ala Moana Center to UH Mānoa and to Waikīkī.

The East Kapolei Station is the proposed Waiʻanae terminus for the Project. It is located on

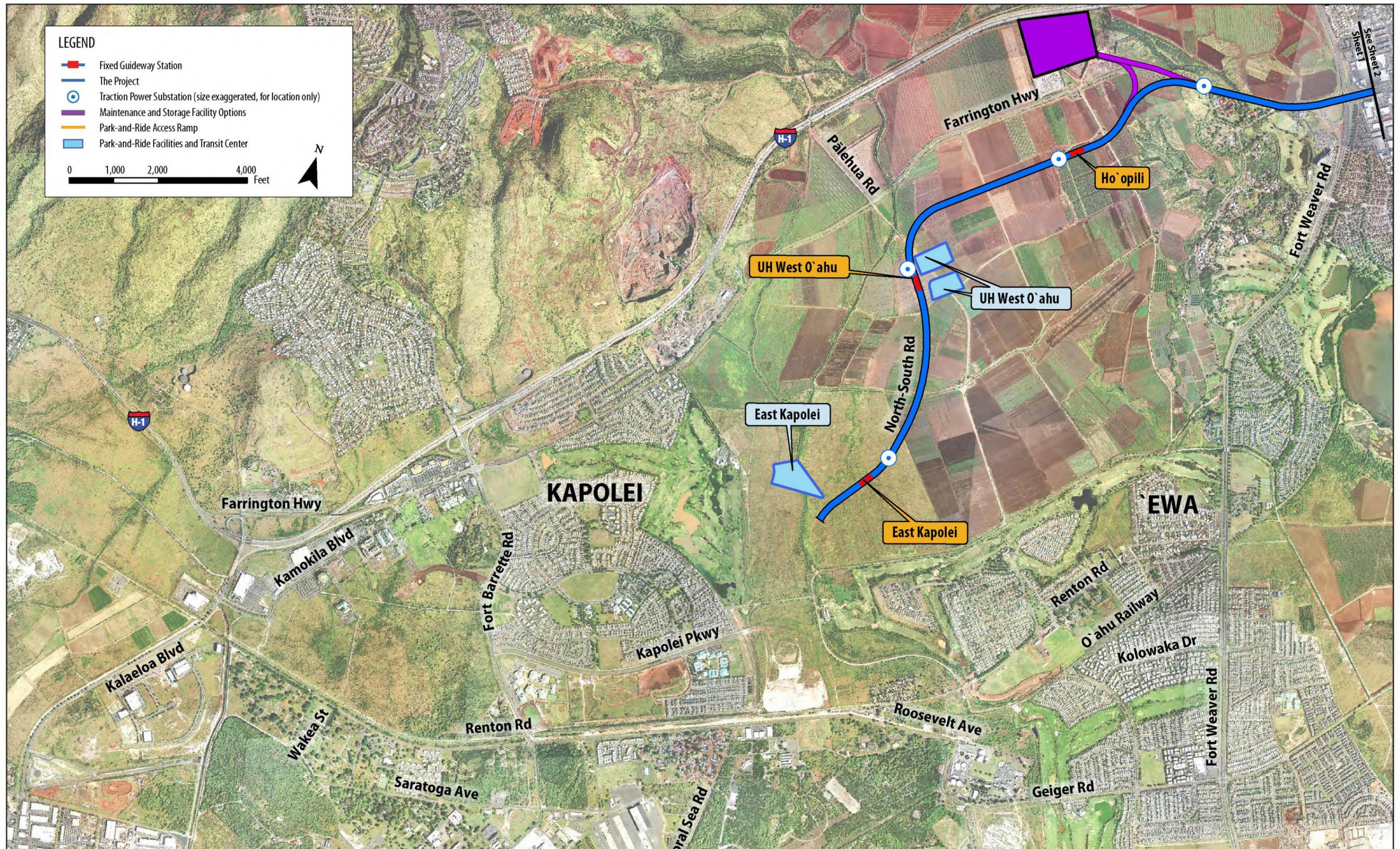


Figure 2-8 Fixed Guideway Transit Alternative Features, Kapolei to Fort Weaver Road



Figure 2-9 Fixed Guideway Transit Alternative Features, Fort Weaver Road to Aloha Stadium

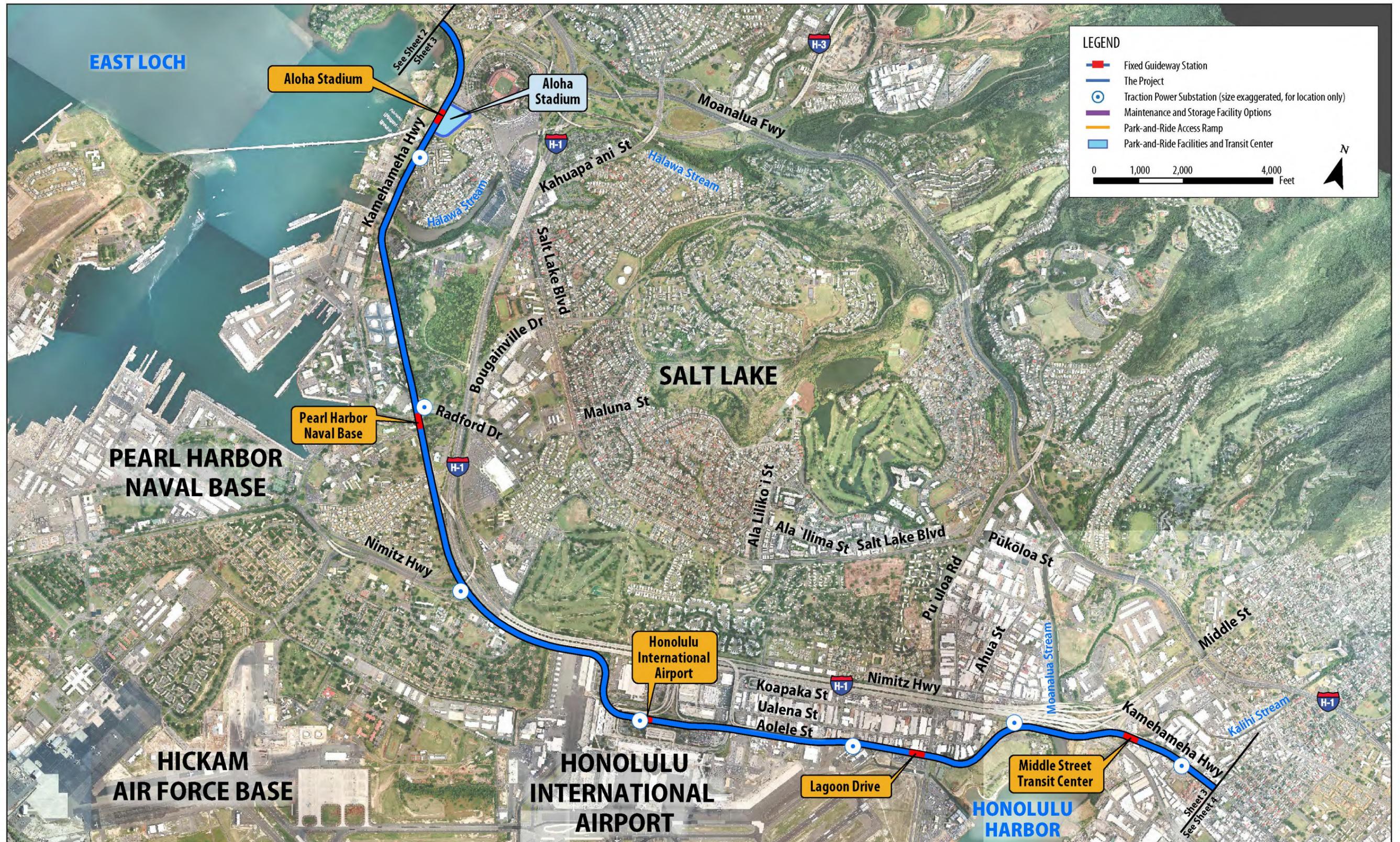


Figure 2-10 Fixed Guideway Transit Alternative Features, Aloha Stadium to Kalihi

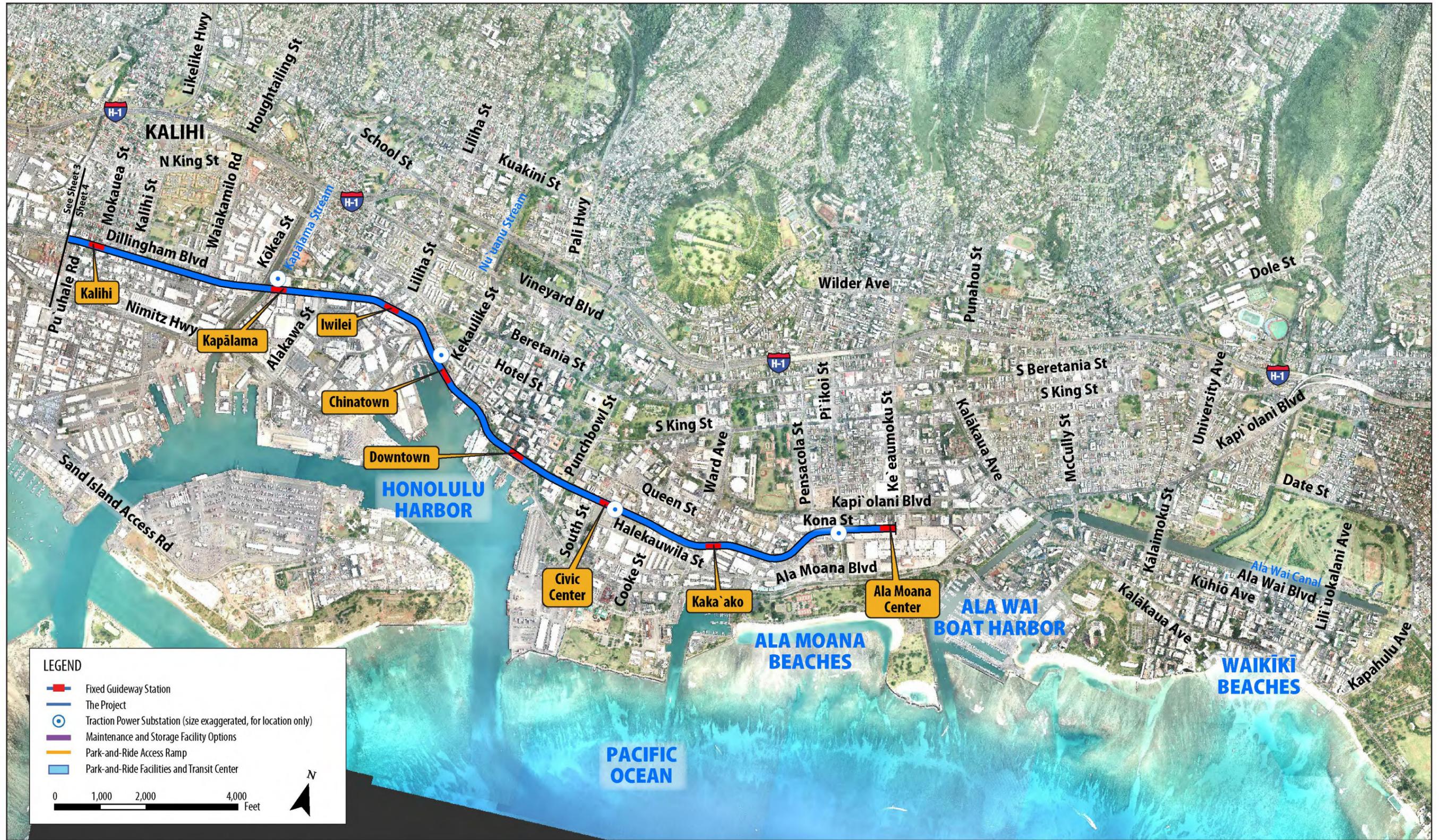


Figure 2-11 Fixed Guideway Transit Alternative Features, Kalihi to Ala Moana