

Excerpt from the <u>2010 Final Environmental Impact Statement</u> for the Honolulu High Capacity Transit Project, pages 1-21 & 1-22

#### 1.7 Purpose of the Project

The purpose of the Honolulu High-Capacity Transit Corridor Project is to provide high-capacity rapid transit in the highly congested east-west transportation corridor between Kapolei and UH Mānoa, as specified in the ORTP (OʻahuMPO 2007). The project is intended to provide faster, more reliable public transportation service in the study corridor than can be achieved with buses operating in congested mixed-flow traffic, to provide reliable mobility in areas of the study corridor where people of limited income and an aging population live, and to serve rapidly developing areas of the study corridor. The project also will provide additional transit capacity, an alternative to private automobile travel, and improve transit links within the study corridor. Implementation of the project, in conjunction with other improvements included in the ORTP, will moderate anticipated traffic congestion in the study corridor. The HHCTCP also supports the goals of the Honolulu General Plan and the ORTP by serving areas designated for urban growth.

### 1.8 Need for Transit Improvements

There are several needs for transit improvements in the study corridor. These needs are the basis for the following goals:

- Improve corridor mobility
- Improve corridor travel reliability
- Improve access to planned development to support City policy to develop a second urban center
- Improve transportation equity

# 1.8.1 Improve Corridor Mobility

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 mph in many places and will degrade even further by 2030. Transit vehicles are caught in the same congestion. In 2007, travelers on Oʻahu's roadways experienced 74,000 vehicle hours of delay on a typical weekday, a measure of how much time is lost daily by travelers stuck in

traffic. This measure of delay is projected to increase to 107,000 daily vehicle hours of delay by 2030, assuming implementation of all planned improvements listed in the ORTP (except for a fixed-guideway system). Without these improvements, the ORTP indicates that daily vehicle hours of delay would increase to 154,000 vehicle hours.

Currently, motorists traveling from West Oʻahu to Downtown experience highly congested traffic during the a.m. peak period. By 2030, after including all the planned roadway improvements in the ORTP, the level of congestion and travel time are projected to increase further. Average bus speeds in the study corridor have been decreasing steadily as congestion has increased. TheBus travel times are projected to increase through 2030. Within the urban core, most major arterial streets will experience increasing peak-period congestion, including Ala Moana Boulevard, Dillingham Boulevard, Kalākaua Avenue, Kapiʻolani Boulevard, King Street, and Nimitz Highway. Expansion of the roadway system between Kapolei and UH Mānoa is constrained by physical barriers and by dense urban neighborhoods that abut many existing roadways. Given current and increasing levels of congestion, an alternative method of travel is needed within the study corridor independent of current and projected highway congestion.

## 1.8.2 Improve Corridor Travel 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 that delays hundreds of cars. Because of the operating conditions in the study corridor, current travel times are not reliable for either transit or automobile trips.

Because TheBus primarily operates in mixedtraffic, transit users experience the same level of travel time uncertainty as automobile users. To arrive at their destination on time, travelers must allow extra time in their schedules to account for the uncertainty of travel time. During the a.m. peak period, more than one-third of bus service is more than five minutes late. This lack of predictability is inefficient and results in lost productivity or free time. A need exists to provide more reliable transit services.

# 1.8.3 Improve Access to Planned Development to Support City Policy to Develop a Second Urban Center

Consistent with the Honolulu General Plan, the highest population growth rates for the island are projected in the 'Ewa Development Plan area (comprised of the 'Ewa, 'Ewa Beach, Kapolei, Kalaeloa, Honokai Hale, and

Makakilo areas), which is expected to grow by approximately 150 percent between 2000 and 2030. This growth represents nearly 50 percent of the total growth projected for the entire island. The communities of Wai'anae, Wahiawā, North Shore, Windward O'ahu, Waimānalo, and East Honolulu will have much lower population growth of up to 23 percent, if infrastructure policies support the planned growth rates in the 'Ewa Development Plan area. Kapolei, which is developing as a "second city" to Downtown, is projected to grow by more than 350 percent, to 55,500 people, the 'Ewa district by more than 100 percent, and Makakilo by nearly 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 Development Plan area needs improved accessibility to support its future planned growth.

#### 1.8.4 Improve Transportation Equity

Equity is about the fair distribution of resources so that no group carries an unfair burden of the negative environmental, social, or economic impacts or receives an unfair share of benefits.

Many lower-income and minority workers who commute to work in the PUC Development Plan area live in the corridor outside of the urban core. Transit-dependent households concentrated in the Pearl City, Waipahu, and Makakilo areas (Figure 1-9) rely on transit availability, such as TheBus, for access to jobs in the PUC Development Plan area. Delay caused by traffic congestion accounts for nearly one-third of the scheduled time for routes between 'Ewa and Waikīkī.

Many lower-income workers also rely on transit because of its affordability. These transit-dependent and lower-income workers lack a transportation choice that avoids the delay and schedule uncertainty currently experienced by TheBus.

In addition, Downtown median daily parking rates are the highest among U.S. cities, further limiting access to Downtown by lower-income workers. Improvements to transit availability and reliability would serve all transportation system users, including minority and moderate- and low-income populations.