

4.1 GROWTH INDUCEMENT

The San Francisco Bay Area is attractive not only for its geographic setting, but also for its relatively strong and diverse economy. The Association of Bay Area Governments (ABAG) estimates that the population of the nine-county region will increase by 1.4 million people in the next 25 years, from approximately 6.8 million in the year 2000 to 8.2 million in the year 2025. During the same time period, 252,800 acres would be available for development (residential and commercial/industrial), which is about 5.7 percent of the region's total area. This population growth rate is not as dramatic as in the late 1990s and early 2000s (ABAG 2001).

According to the General Plans of the nine counties, seven will experience housing shortages over the next 25 years. Those shortages will range from 5,450 housing units in Alameda County to 26,480 housing units in Santa Clara County in the year 2025. The average number of persons per household is expected to remain at approximately 2.7 for the Bay Area as a whole. The mean household income for the Bay Area is expected to rise from \$93,800 in the year 2000 to \$116,400 by the year 2025 (ABAG 2001).

The housing crisis in the Bay Area is negatively affecting the regional transportation system because the centers of population growth (i.e., where people are living or moving to) are not located where most employment opportunities are. Between the years 2000 and 2025, the projected increase in jobs will exceed the number of employed residents by approximately 149,000 people (ABAG 2001). This trend is expected to continue because Bay Area cities and counties seek to maximize job production without commensurate emphasis on housing production (ABAG 2001).

***Impact GRO-1* The Proposed Project would expand ferry service at existing terminals and add new ferry terminals primarily at developed waterfront areas. This could be growth inducing for areas near the terminals.**

The Proposed Project includes expansion of service at existing terminal locations and at new sites selected because they have attributes and public support that indicate that ferry service will be successful in terms of ridership and cost effectiveness. All of the new terminal locations, with the exception of Hercules/Rodeo, would serve areas that are already generally developed with maritime or urban uses. The Hercules/Rodeo site is forecast (in their General Plan) for urban uses.

Growth can be considered negative or positive, depending on the objectives of the local government and the community. Local governments have the responsibility to make land use decisions. Potential growth inducement impacts should be considered by planning staffs at the local level to ensure that specific projects do not induce unplanned or unwanted growth. For these reasons, the Proposed Project is not anticipated to have a significant effect on unplanned growth. However, until site specific analyses are performed, this impact remains potentially significant.

Public Services

With the exception of Hercules/Rodeo, all of the ferry terminals in the Proposed Project are in built-up areas. Therefore, the Proposed Project would minimize impacts to open space resources and limit the expansion of the urban environment. However, redevelopment of an urban area can

carry its own set of environmental impacts, such as creating a demand for additional public services and infrastructure, causing the displacement of people or businesses, or physically dividing a community or neighborhood. For discussions of community impacts related to the displacement of people or businesses and the division of community, refer to Impacts LU-1 and LU-2 in Section 3.7 (Land Use).

A new ferry terminal or expansion of an existing terminal in an urban area could have an adverse effect on local public services such as police, fire, sewer, and water if the demand is great enough to require the expansion of those services. Likewise, the increase of ferries on the Bay could result in impacts to regional public services provided by the U.S. Coast Guard (USCG) (see Navigation Section 3.2 for a discussion on impacts to USCG operations). Typically, all public services are designed to provide adequate services for the growth planned in the local general plan or management plan. However, the exact size and nature of future planned development is not always known, so the capacity of public services is often determined by the maximum development allowed by the local zoning ordinance. Therefore, although many of the proposed ferry terminal locations are not identified in local planning documents, new terminals may not adversely impact public services.

Each terminal location would have a different set of potential impacts on the existing public services and infrastructure of a city or county, depending on the current capacity of local sewer and water infrastructure and the capabilities of the existing public safety workforce. Therefore, it is important that each potential ferry terminal site be considered in light of the local conditions. This is especially true of ferry terminals that are being considered by local agencies as part of a larger project to provide amenities adjacent to the terminal, such as retail or commercial centers (see Cumulative Growth Inducement Impacts, below, for more discussion on adjacent land uses).

Population/Employment

Implementation of the Proposed Project could increase demand for public services, housing, and other services. Specifically, people may move into the areas due to a perceived increase in the regional quality of life or job opportunities afforded by the proposed increase in ferry services. However, a population increase as a result of either of these would not likely be significant relative to the number of people projected to move to the Bay Area in the next 25 years overall (see Section 3.7.1.1). People moving into communities from outside the Bay Area to improve their quality of life would be attracted by the availability of affordable housing, and the climate, and not just by improved ferry service.

New jobs created by the project would create new employment opportunities in the ferry industry. However, the existing ferry operators are not significant employers in the context of overall Bay Area employment, or even when considered within a single community where a terminal might be located. New positions would include additional ferry operators, and on-board and landside support for operation, passenger assistance, ticketing, maintenance, etc. However, while the actual number of employment positions is unknown, it is reasonable to assume that most if not all of the positions would be filled by people currently residing in the Bay Area. Furthermore, job opportunities that are created as a result of the project would occur incrementally, which would make any immigration to the Bay Area as a result of increased jobs in the ferry industry insignificant. Therefore, the potential impacts due to creating employment opportunities are anticipated to be less than significant.

Cumulative Growth Inducement Impacts

Cumulative growth inducement impacts would involve the implementation of other projects adjacent to ferry terminals that are not associated with the proposed WTA initiative. Cumulative growth inducement impacts due to unplanned development may occur in communities where ferry terminals are proposed because: (1) terminals function as transportation hubs where transit riders congregate, creating a potential real estate market; or (2) ferry service would increase accessibility to communities.

As a transportation nexus, a ferry terminal attracts people using a variety of transportation modes, including private cars, buses, bicycles, walking, and potentially rail. The placement of a new terminal facility or enhancement of an existing terminal could change the local transportation patterns in a community, resulting in a potentially significant impact. Furthermore, ferry terminals could also become destinations for tourists or Bay Area residents, given their accessibility and locations along the shoreline. This concentration of transit users as well as destination-seekers represents a potential market for real estate development or redevelopment that could result in a potentially significant impact on the existing community.

Changes at the local level as a result of providing new or enhanced ferry service could also occur by making local communities more accessible. The benefits of ferry service may be perceived by many as an improvement to their current quality of life, making these communities attractive for commuters to live in. This effect is primarily of concern at terminal locations in relatively undeveloped or less accessible areas (Hercules/Rodeo). Increased accessibility to the relatively urban and suburban communities that would be served by the Proposed Project is expected to benefit the people currently living there.

As discussed above, it is important that each potential ferry terminal site be considered in light of the local conditions and the potential for additional growth to occur. Without proper planning, cumulative growth associated with the Proposed Project and other currently unplanned development could lead to potentially significant impacts on communities, public services, or open space resources, depending on the location.

Summary of Impact GRO-1

- With the exception of Hercules/Rodeo, all of the ferry terminals in the Proposed Project are in developed areas. The Proposed Project is not expected to result in significant growth inducing impacts. However, until site specific analyses are performed, this impact is considered potentially significant.

Mitigation GRO-1.1: Implement Mitigation LU-1.1.

Impact After Mitigation: Impact GRO-1 would be less than significant after implementation of Mitigation GRO-1.1.

4.2 SIGNIFICANT IRREVERSIBLE CHANGES

Significant irreversible changes are considered to involve the use of nonrenewable resources, which from implementation of the Proposed Project could create an irreversible commitment of resources or do irreversible damage to the environment. These impacts fall within three categories:

- The irretrievable commitment of resources, such as energy and construction materials, expended from the expansion of ferry service;
- The irreversible loss of resources due to a direct or indirect impact; or
- An increase in the use of natural resources due to growth.

4.2.1 Irretrievable Commitment of Resources

Natural resources such as fossil fuel energy would be used for the construction of new or expanded facilities as well as for the operation of an expanded fleet of vessels. This EIR evaluates the use of energy for the Proposed Project, based on the use of diesel fuel. It also identifies and evaluates possible alternative means of minimizing the use of this fuel. However, as noted in Section 3.13 (Energy) the Proposed Project would result in a 0.42 percent increase over the No Project Alternative in energy consumption per passenger mile traveled for all transit modes in the Bay Area. The WTA has investigated the feasibility and application of alternative propulsion systems and fuel that can be considered as ferry transit service is expanded.

Construction of new or expanded facilities would require natural resources such as gravel, sand, asphalt, etc. These materials are generally not retrievable, but they are generally not in limited supply.

4.2.2 Loss of Resources from Direct or Indirect Impacts

The implementation of the Proposed Project may lead to adverse impacts on natural resources. The potential for these impacts is addressed in each of the appropriate sections in this EIR. It is not envisioned that new terminal sites or other facilities that would have substantial impacts to areas such as sensitive habitat, aquatic, or community resources would advance very far in the planning process. Specific projects that go forward for consideration will undergo additional site specific environmental review, and avoidance and/or other mitigation measures will have to be applied.

4.2.3 Increase in the Use of Resources from Growth

The potential for growth inducement was addressed earlier in this section. The implementation of the Proposed Project would affect shifts in commuting patterns, but growth changes are not expected on a regional scale. If growth occurred, it would likely be limited to localized areas around some potential terminals. Although some changes in the regional use of natural resources could take place, they are not expected to be significant.

4.3 CUMULATIVE IMPACTS

CEQA requires analysis of cumulative impacts of the Proposed Project and other projects that are planned and that could produce related cumulative impacts. The Proposed Project is treated as a program, and therefore the impact analyses evaluate the whole of the action. This allows for consideration of cumulative project impacts for each subject area. Cumulative impacts could potentially occur regionally or locally. Local cumulative impacts cannot be evaluated in a program EIR as the analyses are not site specific. Site specific analyses of cumulative impacts

(such as site specific traffic impacts, noise, light/glare, etc.) may be required when specific locations and routes are determined.

Regionally, cumulative impacts are included in the analyses for several potential impact areas:

- Section 3.1 describes dredge management for the entire San Francisco Bay area, including existing dredge and disposal activities, current dredging projects, and the LTMS program for dredge management in future years. This includes estimates from the LTMS (USACE 1998) for future baywide (cumulative) dredging volumes. The LTMS program was used as a basis for comparison in the impact assessment, to provide an understanding of the quantity of dredge volumes against the anticipated regional quantities. The WTA Proposed Project would not affect achievement of the LTMS goals.
- The navigation analysis (Section 3.2) includes projected increases in other vessel traffic on the Bay. Cumulative growth in regional vessel traffic was estimated using two extreme scenarios, one low and one high, to which the proposed ferry transits were added. These cumulative scenarios were then used to evaluate the increase in potential ferry interactions between ferries, and between non-ferry vessels.
- The air quality analysis includes projections of Bay Area-wide emissions for cars, busses, and ferries for the pollutants NO_x, PM₁₀, CO, SO₂, and ROG. The total estimated Proposed Project emissions were then compared against the no project alternative, providing an indication of how the cumulative regional pollutant emission “burden” changes with and without the Proposed Project.
- The transportation analysis includes transit forecasts from the Regional Transportation Plan (MTC 2001) and projections from ABAG.
- The energy analysis is based on the same region-wide travel forecasts used for the air quality assessment, and evaluated in terms of energy consumption per passenger mile traveled (PMT) for vehicles and vessels. The total emissions for the Proposed Project were also compared against the No Project Alternative, to show the change in cumulative regional transportation energy consumption with and without the Proposed Project in place.

References

- Association of Bay Area Governments (ABAG). 2001. Projections 2002. Oakland, California. December.
- Cambridge Systematics. 2002. Traffic Modeling Results. Prepared for WTA.
- Metropolitan Transportation Commission (MTC). 2001. Draft Environmental Impact Report, 2001 Regional Transportation Plan. State Clearinghouse No. 2001032141, August 10.
- Outwater, Maren. 2002. Personal Communication between Maren Outwater of Cambridge Systematics and URS. June and July.
- U.S. Army Corps of Engineers (USACE). 1998. Long-Term Management Strategy for Dredged Material Disposal in the San Francisco Bay Region. Phase I: Evaluation of Existing Management Options. U.S. Army Corps of Engineers, San Francisco District. San Francisco, CA.