

6.0 EVALUATION OF ALTERNATIVES

6.1 SUMMARY OF ALTERNATIVES ANALYZED

The EIS/EIR studied five alternatives, including the No-Action Alternative and four Action Alternatives. Under the No-Action Alternative, no ferry terminal facilities or service would be provided from Berkeley or Albany. Existing transportation infrastructure and services would remain unchanged, except for those transportation improvements identified and programmed in the Regional Transportation Plan. All Action Alternatives would construct and operate a ferry terminal along the Berkeley/Albany waterfront containing a passenger waiting area and amenities, boat dock, and ramps connecting to landside facilities. The landside facilities would include passenger pick-up and drop-off areas, bus/shuttle/vehicle circulation routes, bicycle/pedestrian circulation pathways, and lighted parking areas. The Action Alternative ferry terminal sites are located at:

- the Berkeley Marina,
- the Berkeley Fishing Pier,
- near the foot of Gilman Street south of Golden Gate Field, and
- north of Golden Gate Field along the waterfront extension of Buchanan Street.

More detailed information for these alternatives is presented in Chapter 2.

6.2 SUPPORTING THE PROJECT PURPOSE AND NEED

The No-Action Alternative would partially respond to the deficiencies in the transportation network and goals established in the project Purpose and Need by implementing infrastructure improvements that have been identified and funded in the Regional Transportation Plan. The Action Alternatives would more fully support the Purpose and Need by adding an alternative mode of travel for transbay commuters and midday travelers destined for San Francisco or to destinations in the Berkeley/Albany area. The ferry service would provide additional capacity to the already congested transbay transportation network, including the Bay Bridge and the BART transbay tube, and provide emergency access between San Francisco and the East Bay in the event of a catastrophic situation that cripples or shuts down the Bay Bridge or the BART tube.

6.3 INCLUSION IN THE REGIONAL TRANSPORTATION PLAN

The MTC “Transportation 2030 Plan for the San Francisco Bay Area,” adopted in February 2005, is the financially constrained Regional Transportation Plan that includes the Berkeley/Albany Ferry Project (#22511). The Plan allots \$22.0 million from the Resolution 3434 Regional Transit Expansion Program and from the RM-2 Toll Bridge Program for implementation and operation of the new ferry service and terminal facilities.

6.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Section 15126(A)(d)(4) of the CEQA Guidelines states that if the environmentally superior alternative is the No-Action alternative, the EIR shall also identify the environmentally superior alternative among the others. With the exception of traffic impacts in the study area, the No-Action Alternative would not produce construction and operations impacts generated by the new ferry service. However, the transportation and environmental benefits of the Action Alternatives would not occur under this alternative, nor would the project Purpose and Need be addressed.

In contrast, all Action Alternatives provide beneficial impacts to the environment by establishing an additional modal alternative to driving into San Francisco from the Berkeley/Albany area, thereby removing cars from congested roadways. The Action Alternatives also provide a means to cross the Bay during a catastrophic event that disables the Bay Bridge or BART tube. The plans for the ferry terminal incorporate pathways for pedestrians and bicyclists that enhance the operation of the Bay Trail. Environmental trade-offs among the Action Alternatives are summarized below. The summary identifies and compares adverse impacts that cannot be easily or completely mitigated as a way to determine which Action Alternative is the Environmentally Superior Alternative.

Alternatives C and D produce multiple environmental issues that would be difficult or impossible to mitigate. For Alternative C, the project would substantially contribute to cumulative traffic impacts at Gilman Street/San Pablo Avenue, which is expected to operate at LOS F in 2030. This cumulative impact could not be mitigated. In addition, ferry operation would traverse the aquatic parklands of Eastshore State Park and require periodic dredging. The operation would be in conflict with the Park's General Plan, and dredging could affect water quality through mobilization of contaminated sediment, an unavoidable impact on the aquatic park. The use of and conflict with aquatic parklands may not be permitted by the State or meet U.S. DOT Section 4(f) requirements. Ferry operation may also disturb foraging or resting for special-status bird species, such as the burrowing owl, white-tailed kite, American peregrine falcon, osprey, and long-billed curlew. The repeated disturbance may cause these species to reduce their use of these locations for foraging and resting. Alternative C also would disturb existing eelgrass beds, including an eelgrass mitigation area that Caltrans has established for the Bay Bridge project. Although it is possible to re-establish eelgrass beds and reduce this impact to a less-than-significant level, the mitigation is difficult to implement and may not succeed.

For Alternative D, unavoidable impacts on Eastshore State Park described for Alternative C would also occur. In addition, Alternative D would have multiple unavoidable traffic impacts resulting from the project. This alternative is expected to adversely affect the San Pablo Avenue/Marin Avenue intersection by increasing average vehicle delay during the p.m. peak traffic hour by 3.1 seconds, which exceeds the significance threshold for intersections that operate at LOS E. Also, cumulative traffic impacts would occur at San Pablo Avenue/Solano Avenue and at San Pablo Avenue/Marin Avenue. Ferry operation would substantially increase traffic at San Pablo Avenue/Solano Avenue, reducing LOS from E to F during the p.m. peak traffic hour.

In contrast, Alternatives A and B do not produce unavoidable impacts except for the potential traffic impacts at University/West Frontage Road, which may be difficult to mitigate. Alternatives A and B may produce parking impacts on existing businesses by converting and controlling existing parking areas that are currently used by patrons of the nearby businesses and recreational opportunities. These impacts, which can be mitigated, are less likely to occur at Alternatives C and D. Overall, Alternatives A and B produce similar long-term impacts that can be mitigated. However, differences in waterside impacts occur. For example, Alternative B requires a breakwater to be constructed to protect the terminal pier from wave action, whereas Alternative A uses an existing sheltered harbor,. Potential impacts from breakwater construction can be mitigated. Alternative A requires that eight docks in the Berkeley Marina be moved, including the location of the existing Hornblower dock, and that the harbor channel used by recreational and commercial vessels is shared. Alternative B would also require more extensive dredging than Alternative A, but the disruption to existing marine-related uses would not occur under Alternative B. Therefore, Alternative B is considered the Environmentally Superior Alternative.

6.5 OTHER CONSIDERATIONS

The ferry travel time between the East Bay and San Francisco would be less for Alternatives A and B than the other alternatives, allowing more frequent ferry service during the peak. In addition, the amount of dredging and disruption to the existing waterfront land uses would be less for Alternative B than for the other alternatives. The preliminary capital cost estimate, which does not include utility requirements, mitigation costs, or architectural elements of design, is the lowest for Alternative A. A comparison of these trade-offs is provided in Table 6-1.

**Table 6-1
Comparison of Other Considerations for Alternatives**

| Consideration | Alternative A – Berkeley Marina | Alternative B – Berkeley Fishing Pier | Alternative C – Gilman Street | Alternative D – Buchanan Street |
|--|--|--|--------------------------------------|--|
| Travel Time | 29 minutes | 25 minutes | 35 minutes | 34 minutes |
| Peak Period Frequency of Service | 35 minutes | 35 minutes | 45 minutes | 45 minutes |
| Dredging Volumes | 110,000 cubic yards | 150,000 cubic yards | 240,000 cubic yards | 280,000 cubic yards |
| Preliminary Capital Cost Estimate (2007 dollars) | \$17,152,380 | \$17,905,949 | \$18,277,730 | \$19,151,546 |