

6. Evaluation of Alternatives

6.1. SUMMARY OF ALTERNATIVES ANALYZED

The Draft EIR/EIS studied three alternatives: the No-Action Alternative and two Action Alternatives. Under the No-Action Alternative, no train or bus infrastructure and services would be constructed in the Project area, road extension and bridges would not be built, and no improvements would be made to Refugio Creek. Existing services would remain unchanged except for transportation improvements identified and programmed in the regional transportation plans (see Section 3.1 Traffic and Transportation Systems). Both Action Alternatives would construct a transit center station along the UPRR track alignment at the Hercules Waterfront that would include a terminal station, center platform and grade separation, extensions of John Muir Parkway and Bayfront Boulevard, ferry plaza and connection facility for future ferry connection, emergency vehicle access, bus and vehicle transit loop and drop off areas, extensions of the Bay trail and Creekside trail, pedestrian bridge crossing of the railroad tracks to Hercules Point, lighted parking areas, pedestrian walkways, and plazas. The Action Alternatives considered are:

- Alternative 1: West of Refugio Creek
- Alternative 2: East of Refugio Creek

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

6.2. SUPPORTING THE PROJECT PURPOSE AND NEED

The No-Action Alternative would partially respond to the deficiencies in the regional transportation network and goals established in the project Purpose and Need (Chapter 1.0) by implementing infrastructure improvements that have been identified and funded by regional transportation plans. The Action Alternatives would more fully support the Purpose and Need by adding alternative modes of travel for trans-bay commuters and midday travelers destined for San Francisco, South Bay, or Sacramento areas for work or entertainment. Train service and potential future ferry service would provide additional access and capacity to the congested trans-bay transportation network, including the Bay Bridge and the BART trans-bay tube, and provide emergency access between San Francisco and the East Bay in the event of a natural or man-made disaster. Additionally, the Action Alternatives would complete a needed section of the San Francisco Bay Trail and provide connection to the Bay Trail connector, a local Hercules trail providing bicycle commuters expanded commuting options.

6.3. ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Section 15126.6(e)(2) of the CEQA Guidelines states that if the environmentally superior alternative is the No-Action Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. With the exception of traffic impacts associated with increasing congestion, the No-Action Alternative would not produce construction- or operation-related impacts resulting from the new transit center. However, the transportation and

environmental benefits of the Action Alternatives would not occur under this alternative, nor would the project Purpose and Need nor the Objectives of the project be addressed.

In contrast, both Action Alternatives provide beneficial impacts to the environment by establishing additional modes of commuting between San Francisco, the South Bay, the East Bay, and the Sacramento areas, thereby removing cars from congested roadways. The Action Alternatives would provide regional bus and rail connections and promote bicycle and pedestrian modes of travel by expanding local and regional trail connection. Additionally, the Action Alternatives would facilitate connection to future ferry service that would provide an additional mode of travel as well as offer an additional emergency means of crossing the San Francisco Bay if a natural or man-made catastrophe disabled the Bay Bridge or the BART tube.

As discussed in Chapter 2, Alternatives Considered, several alternatives were eliminated due to the design and safety constraints for the location of the station platform. Amtrak and the CCJPA restrict construction of stations to locations that are tangent (straight) and meet minimum length requirements. Within the City, only the two Action Alternatives provide adequate track length at a location on the existing train tracks that is tangent. Alternative 1 would situate the Hercules ITC station at approximately the center of the platform west of Refugio Creek. Alternative 2 would situate the Hercules ITC at the easternmost edge of the platform east of Refugio Creek.

This discussion compares the environmental impacts of the proposed alternatives and identifies the environmentally superior alternative. Both Action Alternatives result in potentially significant impacts to the environment, most of which can be mitigated. However, both Action Alternatives would construct the temporary shoofly track that would place railroad traffic closer to existing residential areas. This temporary significant impact would not be avoidable. However, once complete, the separation of grade will create an effective barrier and improve noise and vibration of the railroad traffic to adjacent residential areas.

Both projects would require the construction of John Muir Parkway, Bayfront Boulevard and bridge, and the UPRR Bridge replacement that would result in discharges of fill to waters of the U.S. and the loss of wetlands. Both Action Alternatives would also complete the restoration and realignment of Refugio Creek and the North Channel to address local flood risk and to improve hydraulic conveyance and ecological function. Both Action Alternatives would also provide a transit terminal structure to provide connection to a future ferry.

Alternative 1 differs from Alternative 2 in that construction of the station west of Refugio Creek would require an additional bridge and wetland impacts for the Transit Loop to provide bus and vehicle drop-off and parking bays that are removed from traffic and pedestrians. Parking would be provided by a temporary surface level parking lot across Refugio Creek until additional parking is made available by the Bayfront Development. However, Alternative 1 would provide less overall parking to support the Hercules ITC than would be provided for under Alternative 2. Alternative 2 incorporates a 3-story parking structure adjacent to the Hercules ITC that would not be available under Alternative 1.

6.4. CUMULATIVE IMPACTS

According to CEQA Section 15355, “cumulative impacts” refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

WETA has made public knowledge of its intent to develop ferry service from downtown San Francisco to the City. Ferry service is therefore reasonably foreseeable as a project and must be considered for cumulative impacts. Consequently, the environmental impacts of both Action Alternatives with the addition of ferry service are considered.

Both Action Alternatives would include the development of a bay side terminal structure that would support future ferry service. Under both Action Alternatives, an EVA would be constructed at the same location and connect to the platform at the westernmost edge. If the ferry service from San Francisco is provided to Hercules, the EVA would connect to the ferry platform/terminal so that emergency vehicles could drive directly to the ferry terminal.

Under Alternative 2, this EVA would result in an additional bridge across Refugio Creek located on the San Pablo Bay side of the railroad tracks. The EVA could not be constructed at a location east of Refugio Creek adjacent to the ITC station due to grade difference and geometric constraints. Additionally, in case of a catastrophic emergency (e.g., train or ferry on fire), a safe egress from the station building to a stable sanctuary such as Hercules Point should be provided. The construction of additional length of EVA on the bay side of the railroad tracks would be completed nearly entirely in aquatic habitats and result in greater impacts to special aquatic sites such as wetlands and mudflats (refer to CWA Section 404(b)(1) discussion below).

6.5. CLEAN WATER ACT: SECTION 404(B)(1) CONSIDERATIONS

According to the CWA: Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material (Guidelines), where the activity associated with a discharge which is proposed for a special aquatic site does not require access or proximity to or siting within the special aquatic site in question to fulfill its basic purpose (i.e., is not “water dependent”), practicable alternatives that do not involve special aquatic sites are presumed to be available, unless clearly stated otherwise.

While the construction of the train and bus station is not a water-dependent project, providing connection to future ferry service would be a water dependent requirement for the project. Additionally, the improvements proposed to Refugio Creek to provide hydraulic conveyance and improved ecological function are also “water dependent.”

According to the Guidelines, mitigation is required to offset unavoidable impacts. In determining mitigation, Section 230.10(a) allows the issuance of a permit for only the least environmentally damaging practicable alternative. The thrust of this section on alternatives is avoidance of impacts. Subsequent to the avoidance of impacts, is the minimization of

unavoidable impacts. Finally, such impacts that cannot be avoided and have been identified to have the minimal impact require compensatory mitigation.

Both Action Alternatives would result in unavoidable impacts to waters of the U.S. Unavoidable impacts to waters of the U.S. would be mitigated for through the implementation of the Guidelines. Unavoidable impacts would be compensated for through the restoration and construction of comparable and suitable habitats at locations in the vicinity of the project along Refugio Creek, the North Channel and potentially at the Chelsea Wetlands.

A comparison of impacts to waters of the U.S. associated with both Action Alternatives is provided in **Table 6.5-1**.

Table 6.5-1
Comparison of Impacts to Waters of the U.S.,
Including Wetlands for Alternatives 1 and 2

Project Component	Alternative 1 (Acres)	Alternative 2 (Acres)
North Channel Restoration ¹	0.219	0.219
Refugio Creek Restoration ¹	7.009	7.009
Station Building	0.126	0.115
Parking and Facilities	0.00	0.001
Station Platform	0.052	0.052
Transit Loop Drive, Bridge, and Promenade	0.087	N/A
John Muir Parkway, Bayfront Blvd, and Bridge	0.070	0.070
Bay Trail	0.051	0.087
Railroad	0.249	0.243
Emergency Vehicle Access	0.151	0.403
Total	8.014	8.199
¹ Impacts associated with the restoration of Refugio Creek and North Channel would be temporary. Areas will be restored and revegetated after construction.		

As discussed in previous sections and above, both Action Alternatives would result in similar impacts to the environment concerning traffic, hazards, aesthetics, etc. However, the Action Alternatives differ with respect to impacts to biological resources and aquatic habitats, especially when considering cumulative effects. Consequently, the least environmentally damaging practicable alternative and the environmentally superior alternative is Alternative 1.

6.6. OTHER CONSIDERATIONS

Both Action Alternatives would result in similar transit and commute times to the Hercules ITC and would it not have any significant difference on future ferry service travel times. As discussed above, emergency response on the water side of the railroad tracks would be best served by connecting a safe path from the ferry platform/terminal to Hercules Point. Differences in the required project elements would also result in cost implications for construction. Estimated costs to construct the Action Alternatives are presented in **Table 6.6-1**. Clarification the phases for the project are provided in Section 2.2.1.

Table 6.6-1
Comparison of Construction Costs for Alternatives 1 and 2

Phase	Alternative 1 West of Refugio Creek	Alternative 2 East of Refugio Creek
1	\$68.1 M	\$73.1 M
2	\$3.7 M	\$3.7 M
3	\$5.0 M	\$6.0 M
Total	\$76.8 M	\$82.8 M

6.7. PREFERRED ALTERNATIVE

The FTA is required to comply with the Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) which provides the procedures by which the FTA is required to implement NEPA. Upon review of the Draft EIR/EIS, the City and FTA may select a preferred alternative and may decide whether to develop the preferred alternative, after it has been officially identified, to a higher level of detail than the other alternatives. The lead agencies must determine that the development of the preferred alternative to a higher level of detail than the other alternatives under review will not prevent the lead agencies from making an impartial decision on the appropriate course of action and is necessary to facilitate the development of mitigation measures or concurrent compliance with other environmental laws. The lead agencies must agree that a particular alternative is the preferred alternative and that the relevant conditions are met, before developing that alternative in greater detail. If the lead agencies do not agree, then they must work out their differences because work on developing an alternative in greater detail cannot proceed until the lead agencies agree. SAFETEA-LU permits the preferred alternative to be developed to a higher level of detail than the other alternatives for only the following reasons: (1) to facilitate the development of mitigation measures; or (2) to facilitate concurrent compliance with other applicable environmental laws. Applied appropriately, this provision is an effective tool for achieving the concurrent reviews called for in SAFETEA-LU (U.S. DOT 2010).

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