

Section 4

Other CEQA Considerations

4.1 INTRODUCTION

This section provides a summary of significant impacts resulting from project implementation that cannot be mitigated to a less-than-significant level. This section also identifies irreversible and irretrievable commitment of resources, significant cumulative impacts, and growth-inducing impacts.

4.2 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

Section 3 of this document identifies impacts considered significant and the mitigation measures recommended to reduce those impacts to a less-than-significant level. The significant impacts of the Proposed Project that cannot be mitigated to a less-than-significant level are identified below:

- Two intersections would operate at unacceptable levels during the peak hour in Year 2015, and one intersection would operate at unacceptable levels during the peak hour in Year 2030.
- If Slatten Ranch Road has not been completed in accordance with the Antioch General Plan by the time the Proposed Project commences operation in Year 2015, the intersections of Hillcrest Avenue and the SR 4 westbound and eastbound ramps would operate at unacceptable levels of congestion.
- Within Antioch, the Hillcrest Avenue Median Station facilities would substantially degrade the existing visual character or quality of the setting, and introduce obtrusive elements substantially out of character with existing conditions of the setting.
- Glare from vehicles at the proposed Median Station parking lots could adversely affect daytime views.
- Construction noise and vibration could significantly impact nearby sensitive noise receptors.
- Noise from construction equipment could significantly impact sensitive noise receptors along the project corridor for all of the station operations.

In addition to significant and unavoidable impacts identified for the Proposed Project, the following significant unavoidable impacts have been identified for the Hillcrest Avenue Station options:

- The Northside West, Northside East, and Median Station East options would substantially worsen operations at two intersections in the vicinity of the station.
- Construction noise could significantly impact sensitive noise receptors in the vicinity of the station options and the associated maintenance facilities.

4.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

An EIR must analyze the extent to which the primary and secondary effects of a proposed project would irretrievably commit nonrenewable sources (CEQA Guidelines, Section 15126.2(c)). Irreversible commitment of resources must be evaluated to assure that current consumption is justified. Actions that may be considered significant and irreversible include:

- Uses of nonrenewable resources (e.g., land, energy, and construction materials) during the construction and operational phase of a proposed project may be irreversible (since a large commitment of such resources makes removal or non-use thereafter unlikely).
- Primary impacts, and particularly, secondary impacts, that will commit future generations to similar use.
- Irreversible damage due to environmental accidents.

The Proposed Project would necessitate the consumption of additional diesel fuel to operate the Diesel Multiple Unit (DMU) trains, but this consumption of fuels would be offset by the reduction in regional vehicle miles traveled since more individuals would be riding transit. Energy consumption from operation of the Proposed Project would be 100 billion British thermal units (Btu) per year in 2015 and 115 billion Btu by 2030. However, a reduction in automobile miles traveled due to the Proposed Project would result in a decrease of 233 billion Btu per year in 2015 and 445 million Btu by 2030.

Construction of the proposed transit facilities would require an irretrievable commitment of construction materials for the stations, guideway, and maintenance facility, such as asphalt, steel, cement, lumber, and fabricated materials.

Hazardous materials are normally required for operation and maintenance of transit systems and vehicles. However, in this case, environmental accidents stemming from the inadvertent release of these materials are not considered to be significant because of the minimal volumes and concentrations used by the Proposed Project. Moreover, BART follows standard operating procedures and emergency response activities in the event of an accidental release. As a result, while environmental accidents may occur, they are not expected to result in irreversible damage to the public or to the environment.

The Proposed Project would result in an irreversible commitment of land resources for development of the parking lots, tailtracks, and maintenance facility.

4.4 SUMMARY OF SIGNIFICANT CUMULATIVE IMPACTS

Cumulative effects are those effects resulting from future growth and other foreseeable development projects in combination with those effects identified for the Proposed Project. Other present and reasonably foreseeable future projects and population growth that are included in the cumulative analysis are presented in Section 3.1 and include:

- SR 4 widening project;
- SR 4 Bypass Project;
- Association of Bay Area Government's growth forecasts for 2030;
- Specific Plans (Ridership Development Plans) for proposed stations at Railroad Avenue in the City of Pittsburg and at Hillcrest Avenue in the City of Antioch; and
- Increased Union Pacific use of the Mococo Line.

The Proposed Project's contribution to cumulative impacts would be less than significant for land use, population and housing, geology, and community services. As a result, there would not be significant cumulative impacts in these areas.

Significant cumulative impacts that can be reduced to a less-than-significant level and were identified in Section 3 of this EIR include:

- Cultural Resources – impacts to archaeological resources, including possibly human remains.
- Hydrology and Water Quality – increase in siltation and the amount of impervious surface area in the affected watersheds that could result in additional flooding; water quality impacts to local water bodies; and additional runoff that could exceed storm drain capacity.
- Biological Resources – loss of jurisdictional wetlands, other “waters of the U.S.,” and “waters of the State,” as well as loss of special-status wildlife and their habitat.
- Public Health and Safety – exposure of construction worker and the public to asbestos-containing materials and other hazardous materials in contaminated soil and groundwater.
- Utilities – utility service interruptions.
- Energy – consumption of nonrenewable energy resources in a wasteful, inefficient, and unnecessary manner.

Significant cumulative impacts that would be significant and unavoidable, even with the implementation of mitigation measures, were identified in Section 3 of this EIR and include:

- Transportation – intersection operations at the SR 4 and Hillcrest Avenue interchange.

- Transportation – with resumption of freight traffic on the Mococo Line at the level of frequency indicated by the Union Pacific Railroad, congestion at intersections around Hillcrest Avenue.
- Visual Quality – change in visual character of the area east of Hillcrest Avenue.
- Noise – exposure of sensitive receptors to excessive noise from vehicular traffic and train operations and activities (i.e., service and maintenance activities).
- Noise – exposure of nearby sensitive receptors to construction noise and vibration.

4.5 BENEFITS OF THE PROPOSED PROJECT

Beneficial effects are those that that enhance or improve an existing condition. Impacts from the Proposed Project that are beneficial include those related to transportation, air quality, and energy, as described below.

- Transportation – The Proposed Project would result in reductions to traffic volumes in the project corridor and on the regional highways. As such, the Proposed Project would have a beneficial impact on future traffic and intersection conditions.
- Air Quality – The Proposed Project would result in an overall net reduction in regional air emissions, including greenhouse gas emissions, which would be supportive of the Clean Air Plan, the Bay Area 2005 Ozone Strategy, and AB 32, the landmark state legislation calling for reducing greenhouse gas emissions.
- Energy – The Proposed Project would result in an overall net reduction in regional energy consumption, as well as in petroleum consumption.

4.6 GROWTH-INDUCING IMPACTS

Pursuant to Section 15126.2(d) of the CEQA Guidelines, this section discusses the growth-inducing effects of the Proposed Project. A project is considered growth inducing if has the potential to directly or indirectly foster economic or population growth or the construction of additional housing. For example, extension of urban services or transportation facilities into previously unserved or underserved areas, or removal of obstacles to growth and development, are considered factors that contribute to growth inducement. Growth could occur in the form of land development or increased numbers and concentrations of housing and jobs.

The analysis in this section evaluates whether the Proposed Project would directly or indirectly induce economic, population, or housing growth adjacent to the project corridor, as well as a description of the Proposed Project's potential to re-distribute regional population growth in a more compact manner (i.e., "smart growth" as defined below in this section).

Growth, Land Use, and Transportation Systems

Growth rates and patterns within an area are influenced by various local, regional, and nationwide forces that reflect ongoing social, economic, and technological changes. Ultimately, the amount and location of population growth and economic development that occurs within a specific area is regulated by city and county governments through zoning, land use plans and policies, and decisions regarding development applications. Local government and other regional, state, and federal agencies also make decisions regarding the provision of infrastructure (e.g., transportation facilities, water facilities, sewage facilities) that may influence growth rates and the location of future development.

Transportation projects can have a wide range of growth-inducing effects. A project may hasten growth in certain areas, retard it in others, intensify development in certain locations, or shift growth from one locality to another. Generally, transportation improvements support growth, whereas land use development generates new travel demand and therefore contributes to the need for new transportation capacity. Transportation infrastructure is one component of the overall infrastructure that may serve to accommodate planned growth. This infrastructure may also serve to accelerate or shift planned growth or encourage and intensify unplanned growth (i.e., growth not specifically identified in an adopted general or specific plan) within an area. Such shifts in growth patterns can occur by extending roadways and, hence, accessibility to unserved areas, or by providing substantially more roadway capacity than would be needed to support the land development. Other factors, particularly local planning and community standards or environmental initiatives, may also direct the location and timing of transportation investments.

Projects in an already developed corridor (such as the Proposed Project) tend to respond to and accommodate, rather than induce, new growth. Association of Bay Area Governments (ABAG) projects substantial population and employment growth in east Contra Costa County over the next 20 years. These forecasts, which are documented in Section 3.4, Population and Housing, of this EIR, show that the cities of Pittsburg and Antioch's population are expected to increase. Additionally, the corridor that the Proposed Project seeks to serve is one that is heavily urbanized with increasing traffic. The corridor is already served by State Route 4 (SR 4), but the capacity of this facility is sorely over-extended, causing this stretch of east Contra Costa County to experience some of the worst congestion in the San Francisco Bay Area. The Proposed Project is planned to serve the existing corridor's transit needs as well as accommodate this planned future development.

While the Proposed Project would serve regional and corridor-wide growth and travel demand, it is reasonable to also expect that new development in addition to that already planned or proposed could be fostered by improved transit services and accessibility to BART's regional transit system. Proximity to the Proposed Project offers major access improvements, and thus the Proposed Project's presence in the corridor is likely to enhance development, primarily

around the station areas. This development may occur regardless of the Proposed Project, but the location and intensity of growth would likely shift to take advantage of the Proposed Project. Population or employment growth stimulated by the proximity to Proposed Project stations could, in turn, put pressure on existing community services and facilities. Presented below are the growth-inducing impacts of the Proposed Project.

Growth-Inducing Impacts

The following analysis concludes that the Proposed Project would:

- not affect overall growth in the Bay Area region.
- not directly foster population or housing growth.
- not directly foster economic growth.
- indirectly and adversely result in potential growth-related impacts in the project corridor.
- indirectly and positively contribute to smart growth patterns in the project corridor.

Regional Growth Inducement. BART's original vision was to shape regional economic growth on a large-scale, area-wide basis. An explicit goal was to encourage and support large economic and redevelopment plans in the downtown areas of San Francisco and Oakland and in suburban centers along major corridors – effectively becoming an integrated transit system that the Bay Area needed. Thirty-five years later, the original economic focus of Bay Area rail investment has largely succeeded; San Francisco and Oakland's central business districts added millions of square feet of office uses during the 1970s and 1980s. However, many expectations of growth in outlying areas did not occur, even in planning policy, until recently.

As mixed-use centers became accepted by the development community in the mid-1980s, commercial and employment-oriented development occurred more frequently around several suburban centers, notably Concord, Hayward, and Walnut Creek. As the Bay Area's chronic housing shortage worsened, and given that many BART stations exist in redevelopment areas, more multifamily housing, especially affordable housing, began to be included near BART stations.

A large number of general plan updates and redevelopment plan amendments occurred in cities around the Bay Area during the mid to late 1990s, some of which had not been substantially revised for decades. With the refinement of smart growth principles in urban design and planning, the focus shifted to transit-oriented development with higher employment and housing densities within walking distance of rail stations. The late 1990s economic boom led to the creation of many transit-oriented development plans, which ultimately were adopted into updated general plans.

The Proposed Project is designed to serve the current and planned growth in population, housing, and employment in the next 15 to 20 years in east Contra Costa County. The Proposed Project would provide a key segment in the Bay Area's regional rail transportation network between San Francisco, East Bay communities already served by BART, and eventually the South Bay by providing a link as part of an integrated system. If approved, nearly 10 miles of DMU service would extend from the existing Pittsburg/Bay Point BART Station terminus to the Hillcrest Avenue Station in Antioch within the SR 4 median.

On a regional level, the Metropolitan Transportation Commission (MTC) has determined that the region-wide transportation improvements in the Bay Area (specifically those in MTC's *Transportation 2030 Plan*, which includes the Proposed Project) would not have a significant growth-inducement effect in the Bay Area because the proposed transportation systems lag behind the growth that has already occurred in the Bay Area.^{1,2} MTC has determined that these transportation improvements are consistent with projected and planned growth in the region overall and would not adversely alter land designated for future development in existing local plans. MTC, in conjunction with ABAG and other regional agencies, has since created a smart growth approach to planning regional transportation improvements that support updated general plans, redevelopment plans, and concept plans with a transit-oriented development focus. The Proposed Project satisfies MTC's criteria for transit extensions; these are criteria that rely heavily on ensuring that there is sufficient ridership to support transit and the capital investment necessary to make it successful. Regionally, these criteria underscore that there are areas of the Bay Area that are underserved in terms of transit services and thus providing rapid transit systems to these areas would support an existing need, rather than create a mechanism to induce growth to the region.

Direct Growth Inducement in the Local Project Area. The Proposed Project would introduce about 10 miles of DMU service east from the current BART terminus at the Pittsburg/Bay Point BART Station. The Proposed Project would include new stations at Railroad Avenue in Pittsburg and at Hillcrest Avenue in Antioch, with a maintenance facility near the Hillcrest Avenue Station. The Proposed Project is an improvement to the existing transportation system because it would extend rail transit from the mostly suburban development in east Contra Costa County, to more densely populated, urbanized areas and employment centers in San Francisco, the East Bay, and the South Bay. The Proposed Project would not directly induce substantial population, housing, or economic growth. New residential and retail development with associated demands for public services is already anticipated in the Pittsburg and Antioch General Plans for the proposed station areas.

¹ Metropolitan Transportation Commission, MTC Resolution 3434 Transit-Oriented Development (TOD) Policy for Regional Transit Expansion Projects, adopted July 27, 2005.

² Metropolitan Transportation Commission, *Transportation 2030 Plan Draft Environmental Impact Report*, October 2004, p. 2.11-10.

The operation of the Proposed Project, including the Railroad Avenue and Hillcrest Avenue Stations and the maintenance facility, would result in the employment of approximately up to 80 new employees.³ As described in Section 3.4, Population and Housing, total employment in the cities of Pittsburg and Antioch is projected to grow from 167,671 in 2000 to 232,000 by 2030, an increase of about 28 percent. The Proposed Project is projected to contribute less than one percent towards growth in the cities of Pittsburg and Antioch during this period and this would be minimal in the context of total employment growth in these cities. Similarly, if each new employee conservatively required a separate housing unit, as many as 80 new housing units would be required for the new employees. This represents about 0.4 percent of projected household growth in the cities of Pittsburg and Antioch by 2030 and, like employment, would be minimal in the context of total households in Pittsburg and Antioch. The Proposed Project would therefore not directly foster substantial economic growth. While the amount of new growth surrounding the proposed stations could be substantial, it is being addressed through specific planning processes by the cities of Pittsburg and Antioch, which will increase the amount of allowable development around stations in order to accommodate growth in a more compact and transit-oriented configuration, which is considered smart growth. In conclusion, the Proposed Project would not directly induce substantial population, housing, or economic growth beyond that currently defined in the Pittsburg and Antioch General Plans.

BART's adopted System Expansion Policy requires the preparation of one or more Ridership Development Plans around the proposed stations in order to ensure a desired level of ridership. Accordingly, the extension of BART into eastern Contra Costa County under the Proposed Project would not be considered without the Ridership Development Plans for the Railroad Avenue and Hillcrest Avenue Station areas. Since the Proposed Project facilitates more compact transit-oriented growth and development around the proposed station by attracting more development at these locations, both the Proposed Project and Ridership Development Plans have a direct effect on smart growth around the proposed stations.

Indirect Adverse Growth-Inducing Impacts in the Local Project Area. Smart growth along the project corridor, or more specifically around the proposed stations, would indirectly induce growth in east Contra Costa County by alleviating highly congested transportation systems. Smart growth would also improve access to existing neighborhoods, civic resources, and employment centers from regional public transit that may grow as a result. It would also provide incentives for development on vacant and underutilized land in the vicinity. However, this indirect growth effect is not considered adverse under CEQA definitions, because the principal effect is increased accessibility and not a physical change to the environment.

To the extent that improved transit systems encourage development by removing obstacles to mobility or improving access in the region, the Proposed Project could have an indirect

³ BART, electronic communication to PBS&J, March 17 2008.

growth-inducing effect by accelerating planned growth in a more compact, transit-oriented form, particularly in and around the proposed station areas. Additionally, changes in land use designations that are currently being initiated and proposed by the cities of Pittsburg and Antioch in the areas around the proposed station areas would allow for more mixed-use development and would directly encourage growth.

Although the indirect growth caused by the Proposed Project in the local area is not considered adverse in itself, it could cause indirect adverse growth-related impacts associated with construction and implementation of new development projects in the local project area (i.e., air and noise impacts from construction of new housing or other development, etc.). Any potential future growth that could result from implementation of the Proposed Project is under the jurisdiction of the cities of Pittsburg and Antioch. The cities are preparing Specific Plans (Ridership Development Plans) for the Railroad Avenue Station and Hillcrest Avenue Station. These Specific Plans must undergo environmental review, and will have documented the physical changes to the environment – changes in land use intensity, traffic generation, development massing and heights, demand for services and utilities, and air and noise emissions. Thus, the indirect effects of the Proposed Project would be addressed through the environmental review process for the Specific Plans.

Indirect Positive Contribution to Smart Growth Patterns in the Local Project Area. A major objective of the Proposed Project is to improve regional transit access and transportation services to accommodate planned and future growth in east Contra Costa County. As outlined in Section 1, Introduction, of this document, the objectives of the Proposed Project reflect BART's cooperation with other government entities, and serve to advance multi-jurisdictional efforts to plan and implement transit-oriented development.

New development, defined through the creation of Specific Plans (Ridership Development Plans) for areas surrounding the proposed stations, is intended to reflect a more pedestrian-oriented, compact, and mixed-use development. The Proposed Project access plans providing multi-modal access to regional rail emphasize public space and infrastructure improvements that are designed to encourage private sector developers, who increasingly specialize in transit-oriented projects around BART and other rail stations. In essence, the Proposed Project's stations become catalysts to support local development plans promoted by the cities of Pittsburg and Antioch.

Proximity to a one of the Proposed Project stations offers major incentives to attract business, entertainment, commercial/retail, and other employment-generating land uses, along with unique opportunities for meeting local growing housing needs. While development may occur without the Proposed Project, it most likely will be auto-oriented and thus will not be smart growth. The Proposed Project thus meets the major policy goals of smart growth being endorsed by state, regional, and county agencies by providing an incentive for local transit-oriented planning, which is being led by the cities of Pittsburg and Antioch. The

environmental benefits of smart growth will be measured through these separate planning efforts, while this EIR identifies how the Proposed Project contributes to the probability of such future development patterns.