eBART Pittsburg Center Station
ENVIRONMENTAL JUSTICE REPORT

DRAFT REPORT
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Section 1 Background and Methodology

Introduction

Environmental Justice (EJ) is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. This report includes an analysis of EJ communities that could be affected by the eBART Project at Pittsburg Center Station.[1] Initial EJ analysis conducted in the eBART Draft Environmental Impact Report (EIR) (completed in 2008) did not include Pittsburg Center Station. This report serves as a supplemental analysis to theEIR, the Final EIR (completed in 2009), and the Addenda (completed in 2011).

Project Background

The eBART Project would be an extension of the original BART system into eastern Contra Costa County using a different rapid transit technology, envisioned to help reduce congestion and ease connections to the conventional BART system while saving costs and construction time when compared to a traditional BART extension.

The eBART Project would run from the Pittsburg-Bay Point BART Station, which is the current terminus of the Pittsburg-Bay Point - SFO BART line, eastward along the median of State Route (SR) 4 to the City of Antioch. eBART would use Diesel Multiple Unit (DMU) trains, or light-weight, self-propelled rail cars. The eBART Project would extend rail track 10 miles, which would include 9.1 miles for service tracks and 0.9 miles for train storage and maintenance. Two new stations and one transfer/interface platform would be opened as part of this extension. The two eBART stations would be located at the intersection of Railroad Avenue and SR 4 in the City of Pittsburg (Pittsburg Center Station) and east of the intersection of Hillcrest Avenue and SR 4 in the City of Antioch (Antioch Station[2]). The eBART service would replace existing freeway express bus services which are operated by Tri Delta Transit, the local bus transit service provider in the east county.

BART began construction of the eBART project in 2011. The Transfer Platform, located approximately 3000 feet east of the existing Pittsburg/Bay Point station, and the tracks in between have been constructed. The construction of the eBART Maintenance Facility and the Antioch Station parking lot have been completed. The Antioch Station under construction. Track construction in the SR 4 median and the construction of the foundation for the Pittsburg Center Station is planned to start in spring 2015. BART desires to construct the Pittsburg Center Station without the West Entrance, as evaluated in the 2011 Addendum and this report evaluates whether any adverse impacts on EJ populations need to be considered prior to BART's beginning construction.

[1] The Pittsburg Center Station was called the Railroad Avenue Station in the Draft EIR, Final EIR, and Addendum.
[2] The Antioch Station was called the Hillcrest Avenue Station in the Draft EIR, Final EIR, and Addendum.

This report summarizes the EJ analysis for the construction and operation of the Pittsburg Center Station. **Figure 1** shows the station area and the proposed parking lot.

Figure 1: Pittsburg Center Station Area

Source: eBART Draft Environmental Impact Report 2009

Regulatory Framework

Federal agencies are required to consider the potential for disproportionately high and adverse impacts on minority and low-income populations that could result from all programs, policies, and activities per the 1994 Executive Order 12898, *Federal Action to Address Environmental Justice in Minority Populations and Low-Income Populations.*[3] A disproportionate impact is one that would negatively affect minority and low-income populations (EJ populations) to a greater extent than non-EJ populations. In August 2012, FTA issued Circular 4703.1, *Environmental Justice Policy Guidance for Federal Transit Administration*.[4] Circular 4703.1 provides a framework for integrating EJ principles into public transportation decision-making processes. In addition, this report is consistent with the guiding principles in BART's Environmental Justice Policy, released in June 2012.[5]

[3] http://www2.epa.gov/laws-regulations/summary-executive-order-12898-federal-actions-address-environmental-justice
[4] http://www.fta.dot.gov/documents/FTA_EJ_Circular_7.14-12_FINAL.pdf
[5] https://www.bart.gov/sites/default/files/docs/EJ_Policy_6_14_12_FINAL.pdf

Approach to Environmental Justice Analysis

FTA's Circular 4703.1 outlines a process of analyzing demographic data to identify the presence of EJ populations, identifying adverse effects that may be disproportionately high and adverse, evaluating benefits, and achieving meaningful public engagement in the decision-making process. The circular proposes the following steps to conduct an EJ analysis; the analysis for the eBART Pittsburg Center Station project adheres to these steps:

- **Define the Project Area and Identify EJ Populations.** This report contains a definition of the study area and demographic analysis of the population near the Pittsburg Center Station.
- **Identify Adverse Environmental Effects on EJ Populations.** A Draft and Final EIR were prepared which detail the adverse effects of construction and operation of the Pittsburg Center Station. This EJ report summarizes the benefits and adverse impacts of construction and operation of the Pittsburg Center Station.
- **Determine Disproportionate Effects.** Based on the adverse effects described in the Final EIR, this report evaluates whether adverse effects are disproportionately high and/or would be borne by EJ populations.

BART sought input from the community since 2001. BART's outreach process is summarized in Section 5 of this report.

Section 2 Project Area Definition and Identification of Environmental Justice Populations

In accordance with FTA Circular 4703.1, BART conducted an evaluation of existing conditions for the population surrounding the Pittsburg Center Station. This section includes a definition of the study area as well as an evaluation of minority and low-income populations.

Study Area Definition

The study area for analyzing the impacts of construction and operation of the Pittsburg Center Station was established based on FTA Circular 4703.1, which recommends the following:

- Identifying the presence of minority and/or low-income communities residing both within and in proximity to the project or activity.
- Identifying those minority and/or low-income groups that utilize or are dependent on natural resources and the human environment that could be potentially affected by the proposed action.

For purposes of this study, the affected geographic area has been delineated by a ½-mile radius of the project site, as presented in **Figure 2**. Transportation, air quality, noise and vibration, and community service, as well as other impact areas would be experienced in the affected geographic area. Potential benefits of the project, such as improved transit access, would also impact the ½-mile radius, which is typically considered a walkable distance.[6] Impacts are reported based on the study area assumed for each resource area in the Draft EIR.

Identification of EJ populations affected by the Pittsburg Center Station was conducted pursuant to FTA Circular 4703.1. For the purposes of locating EJ communities, census block groups within approximately ½ mile of the station area were evaluated. The study area for this EJ analysis refers to an area within ½ mile of the Pittsburg Center Station and is shown in **Figure 2**.

[6] Bernick, M. and R. Cervero. 1997. Transit Villages for the 21st Century. New York: McGrawHill

Figure 2: Study Area

Source: BART; U.S. Census Bureau. 2008–2012 American Community Survey

Race and Ethnicity Analysis

The FTA defines a minority population as any readily-identifiable group or groups of minority persons who live in geographic proximity, and if circumstances warrant, geographically dispersed or transient persons such as migrant workers or Native Americans who would be similarly affected by a proposed project. Minority includes persons who are American Indian/Alaska Native, Asian, Black/African American, Hispanic/Latino, and Native Hawaiian and other Pacific Islander.

In identifying EJ populations as described above, the FTA suggests that "non-traditional data gathering techniques, such as outreach to community-based organizations early in the screening process, is the best approach for identifying minority and/or low-income community within the study area." This analysis used 2010 Census data and a 59.4 percent threshold (which is BART's four-county service area minority population percentage), as a starting point for identifying minority populations. Field observation and specialized EJ outreach were used to further verify the presence of minority populations.

As shown in **Table 1**, minority populations make up 86.3 percent of the population within the study area. Black or African American populations make up 14.2 percent of the study area population, Asian populations make up eight percent of the study area population, and Hispanic populations make up 59.1 percent of the study area population. All block groups within a ½ mile of the project include a higher percentage of minority populations compared to BART's four-county service area average (see **Figure 3**).

Table 1: Race/Ethnicity within ½ mile

Race/Ethnicity	Percent
White, non-Hispanic	13.7%
Black or African American, non-Hispanic	14.2%
American Indian and Alaska Native, non-Hispanic	0.6%
Asian, non-Hispanic	8.0%
Native Hawaiian and Other Pacific Islander, non-Hispanic	1.3%
Other or multiple Races	3.1%
Hispanic or Latino	59.1%
Minority	*86.3%*
Non-Minority	*13.7%*

Source: U.S. Census Bureau. 2010 Decennial Census

Figure 3: Minority Block Groups

Source: BART; U.S. Census Bureau. 2010 Decennial Census

Income and Poverty Analysis

The FTA defines a low-income person as one whose household income is at or below the Department of Health and Human Services (DHHS) poverty guidelines. A low-income population is any readily identifiable group of low-income persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient populations (such as migrant workers or Native Americans) who would be similarly affected by a proposed project.

For purposes of this analysis, low-income populations as those which are at or below 200 percent of the poverty level established for households by the DHHS poverty guidelines (see **Table 2**). This assumption is more inclusive of low-income populations, accounting for higher incomes in the Bay Area as compared to the rest of the United States. The 200 percent threshold is also consistent with the assumptions employed by the Metropolitan Transportation Commission in its February 2009 Equity Analysis Report. The DHHS poverty guidelines use household size and income to determine poverty status, as shown in **Table 2**.

Table 2: 2012 Poverty Guidelines: Federal* and the BART Service Area

Persons in family/household	Poverty Guideline (Federal)	200% (BART Service Area)
1	$11,170	$22,340
2	$15,130	$30,260
3	$19,090	$38,180
4	$23,050	$46,100
5	$27,010	$54,020
6	$30,970	$61,940
7	$34,930	$69,860
8	$38,890	$77,780

*For the 48 Contiguous States and the District of Columbia

Source: U.S. Department of Health & Human Services

For the purposes of this analysis, the FTA criteria are satisfied by identifying areas where the percentage of households with median income below the 200 percent of the DHHS poverty guidelines exceed BART's four-county service area low-income population percentage (25.4 percent using US Census 2008–2012 American Community Survey data).

Within the study area 61.6 percent of the population is identified as low-income. All block groups within a ½ mile of the project include a higher percentage of low-income populations compared to BART's four-county service area average (see **Figure 4**).

Figure 4: Low-Income Block Groups

Source: BART; U.S. Census Bureau. 2008–2012 American Community Survey

Section 3 Identification of Adverse Environmental Effects on Environmental Justice Populations

FTA Circular 4703.1 requires the consideration of the benefits and impacts of a proposed project. Environmental impacts are identified as the incremental changes that would be caused by the proposed project (in this case, construction and operation of the Pittsburg Center Station) to the existing, or "baseline," environmental conditions as of the date of the 2008 Notice of Preparation. For each impact identified in the Final EIR and Addendum as being significantly or potentially significantly adverse, the EIR suggests mitigation measures to reduce or eliminate the negative impacts.

The purpose of this impact assessment summary is to disclose the adverse environmental impacts of construction and operation of the Pittsburg Center Station. This discussion represents the impacts that could disproportionately affect EJ communities in the study area. The impacts and mitigation measures associated with the Build Alternative are based on the Final EIR and Addendum; these documents provide additional details on the benefits, impacts, and mitigation measures of the eBART project.

No Build Alternative

The No Build Alternative considers the consequences of not extending the transit services beyond the existing Pittsburg/Bay Point BART station. This alternative is required by the California Environmental Quality Act (CEQA) to help understand future conditions without the Build Alternative. By comparing this scenario to future conditions with the Build Alternative, the advantages and disadvantages of the Build Alternative can be more readily understood.

Under the No Build Alternative, the Pittsburg Center Station would not be built. The communities in the study area are currently underserved by the BART rail system compared to many other parts of the Bay Area, and the No Build Alternative does not provide the beneficial increase in economic development and livability that the Build Alternative would provide. Without the Pittsburg Center Station, the community at Railroad Avenue would not experience the benefits of readily accessible transit in their community. The existing Tri Delta Transit District bus system would remain and additional express bus service from east Contra Costa County communities to BART would be implemented.

Under the No Build Alternative there would be no major capital investment in mass transit in the study area. Construction may still occur in areas in and around the Pittsburg Center Station study area; each of these projects would require their own environmental assessment and consideration

of how the projects would affect EJ populations as well as measures for implementation for findings of disproportionate adverse impacts.

Build Alternative

The EIR states that construction and operation of the Pittsburg Center Station would improve overall transportation service and enhance mobility in the SR 4 corridor; enhance access to transit systems; enhance connectivity and seamlessness of the transit system; promote transit-oriented land use initiatives and policies; and enhance economic benefits.

All census block groups in the study area would experience negative impacts from the construction and operation of the Pittsburg Center Station. The following discussion is intended to describe the adverse effects of the construction and operation of the Pittsburg Center Station, since they represent the effects that could disproportionately affect EJ communities in the project area. This discussion also summarizes the mitigation measures that would be implemented to reduce the intensity and severity of the adverse effect. The impacts and mitigation measures are based on the Final EIR and Addendum.

Transportation (Mitigation Measures TR-7.1, TR-9.1, and TR-10.1)

As described in the Final EIR, the Pittsburg Center Station would have a parking shortfall of 65 spaces at the Pittsburg Center Station in year 2030. Mitigation Measure TR-7.1 ensures that BART will implement a parking monitoring program and institute appropriate parking controls if necessary, which would reduce parking impacts. BART will implement an annual parking monitoring program on streets adjacent to the Pittsburg Center Station. If a parking spillover problem is confirmed by this monitoring program, BART will assist the City of Pittsburg in implementing a parking management program. The program would incorporate appropriate parking control measures based on BART's Parking Management Toolkit, which is employed at and has been proven effective at existing BART stations. Implementation of the parking monitoring program and institution of appropriate parking controls would address the parking shortfall at Pittsburg Center Station.

BART has coordinated with the City of Pittsburg in the development of a Railroad Avenue Specific Plan[7] which defines the long term vision for the area, including parking. The Railroad Avenue Specific Plan promotes enhancing key roadways, transit connections, bicycle facilities, and greenway networks. In addition, the Railroad Avenue Specific Plan states that eBART parking will eventually be incorporated into structured parking lots.

Construction of the Pittsburg Center Station would result in temporary traffic impacts on SR 4, local streets, and circulation around the proposed station area. Construction of the Pittsburg Center Station would also potentially interfere with Tri Delta Transit services around the proposed station

[7] http://www.ci.pittsburg.ca.us/Modules/ShowDocument.aspx?documentid=3500

area. Local streets used by Tri Delta Transit buses may be closed temporarily, delivery trucks and construction crews would increase traffic volumes on local roads that could disrupt bus service frequency and scheduling, and bus stops may need to be temporarily relocated. Mitigation Measure TR-9.1 ensures that BART's construction contractor will develop and implement a Construction Phasing and Traffic Management Plan. Mitigation Measure TR-10.1 ensures that BART will continue to coordinate with local transit agencies to reduce impacts to bus lines. The Construction Phasing and Traffic Management Plan will provide a plan for lane closures along Railroad Avenue; will provide safe access and circulation routes for vehicles, bicycles, pedestrians, and emergency response vehicles during construction of the Pittsburg Center Station; and will require consultation and coordination with Tri Delta Transit.

Noise and Vibration (Mitigation Measures NO-6.1, NO-6.2, and NO-7.1)

Noise and vibration from construction equipment could significantly impact sensitive noise receptors along the project corridor. During preparation of the Draft EIR, BART characterized existing noise levels along the eBART corridor by measuring noise at locations at or near land uses that would be sensitive to noise such as residences and schools. Two noise monitoring locations were near the Pittsburg Center Station:

- Location N1 - This noise monitoring location is northwest of the station at Power and Railroad Avenues in an area with residential and institutional land uses.
- Location N19 - This noise monitoring location is northeast of the station on California Avenue between Avon Street and Clyde Avenue in an area with residential land uses.

As described in the land use evaluation of the Draft EIR, land uses within ¼ mile of the Pittsburg Center Station include single-family residential, institutional, and commercial.

Construction would require a range of noise-generating equipment including dump trucks, scrapers, water trucks, bulldozers, graders, truck-mounted cranes, loaders, excavators, rollers, concrete mix trucks, lubrication/fueling service trucks, concrete pumps, diesel generators, and compressed air units. In addition, haul trucks would bring in sub-ballast and structural concrete. It should be noted that the Draft EIR analyzed noise and vibration impacts of pile driving; however, pile driving would not be needed during construction of the Pittsburg Center Station. The exact locations of the noise and vibration impacts would depend on number and type of equipment used in each segment at any particular time.[8] The most significant noise impacts would occur if night construction took place near residential areas. Mitigation Measures NO-6.1 and NO-7.1 ensure that BART employs noise- and vibration-reducing practices during construction such as minimizing nighttime construction in residential areas, locate equipment as far as possible from residential areas, and selecting haul truck routes to minimize impacts to residential areas.

[8] The Draft EIR includes Table 3.10-18 which shows the predicted distance within which there would be noise impacts from construction equipment during both daytime and nighttime. The Draft EIR also includes Table 3.10-19 which provides the predicted distances where vibration levels may be significant from the operation of vibratory rollers, bulldozers, and caisson drilling.

In addition, Mitigation Measure NO-6.2 ensures that BART will identify a noise-disturbance coordinator, disseminate information to residences and businesses, and implement a response/tracking program. The noise-disturbance coordinator will be responsible for receiving noise complaints, determining the cause of the complaints, and ensuring reasonable measures are taken to address the complaints. A noise disturbance coordinator was assigned for each eBART construction area to date: one for the transfer platform and one for the Antioch Station site. A noise disturbance coordinator will be assigned for the Pittsburg Center Station when construction begins. Information about construction will be disseminated to the community. Notices of construction will be mailed out to addresses in the project area with the name and contact information for the noise disturbance coordination.

Implementation of these mitigation measures would reduce the temporary construction-related noise impacts; however, given the uncertainty in the equipment to be used at the same time and the proximity to sensitive receptors, temporary impacts may be significant and unavoidable even with these mitigation measures.

Air Quality (Mitigation Measures AQ-8.1 and AQ-8.2)

Construction activities would emit exhaust pollutants in the engine exhaust from heavy construction equipment as well as fugitive dust from grading and earthmoving activities. Construction activities would expose sensitive receptors to PM_{10} in fugitive dust and equipment exhaust emissions. PM_{10} emissions can result from a variety of construction activities, including excavation, grading, demolition, vehicle travel on paved and unpaved surfaces, and vehicle and equipment exhaust. Residences and businesses close to the Pittsburg Center Station would be affected by fugitive dust and equipment exhaust during the construction period. BART will incorporate control measures for reducing air quality impacts during construction in accordance with Bay Area Air Quality Management District standards. Mitigation Measure AQ-8.1 specifically ensures that BART will incorporate control measures and construction BMPs. Mitigation Measure AQ-8.2 ensures that BART will also implement a construction emissions reduction plan that incorporates specific measures to reduce heavy equipment exhaust which would reduce air quality impacts. Examples of such measures include limit idling to five minutes or less, prohibit engine tampering to increase power, tune equipment regularly, and place truck staging areas away from sensitive receptors. Implementation of these mitigation measures would reduce impacts related to exhaust pollutants and fugitive dust.

Although eBART vehicles would emit diesel particulate matter to the SR 4 median, and residences and businesses very close to SR 4 would be exposed to diesel particulate matter, eBART would use DMU trains that are EPA Tier 4-compliant and meet EPA's lower emissions standards. BART also intends to include a separate additive with the diesel which would reduce emissions even further. In addition, BART anticipates that this transit project would result in a reduction of regional vehicle miles traveled because people would drive less in favor of using the improved transit. This diversion from automobiles to transit would reduce the amount of greenhouse gases generated by

automobile traffic. Implementation of eBART would result in a net reduction of greenhouse gas and ozone precursor emissions compared to the No Build Alternative.

Community Services (Mitigation Measure CS-3.1)

Road detours, lane closures, and temporary freeway ramp closures during construction could have temporary, short-term impacts on emergency response times for police and fire departments. BART has already implemented Mitigation Measure CS-3.1 which requires BART to prepare and implement a Traffic Management Plan (TMP). The TMP for eBART has been reviewed and approved by Caltrans and the local jurisdictions to ensure that appropriate measures have been included. The TMP is consistent with City and Caltrans roadway construction guidelines and identifies the locations of temporary detours and signage to facilitate local traffic patterns and through-traffic requirements. For any necessary ramp closures, the TMP outlines how they comply with the Caltrans ramp closure chart. The TMP outlines that emergency service providers shall be notified two weeks in advance of any lane or roadway closures so that alternate emergency response routes can be identified for use during the affected time period.

Visual Quality (Mitigation Measures VQ-6.1 and VQ-8.1)

Project lighting from the Pittsburg Center Station platform could form point sources of light interfering with nighttime views from off-site locations. Mitigation Measure VQ-6.1 ensures that BART will design lighting fixtures in such a way to minimize spillover beyond the facilities and avoid noticeable contrast.

Construction materials stockpiling and storage and the use of construction equipment would affect visual quality in the study area. Mitigation Measure VQ-8.1 ensures that BART will visually screen construction yards and staging areas.

Cultural Resources (Mitigation Measure CR-2.2)

Construction of the Pittsburg Center Station would have the potential for disturbance of previously unknown cultural deposits or human remains during ground-disturbing activities. Mitigation Measure CR-2.2 ensures that BART will follow protocol and procedures if human remains are encountered during construction.

Geology, Soils, and Seismicity (Mitigation Measure GEO-7.1)

Although there is a low potential for soil erosion during construction of the Pittsburg Center Station, soil erosion may occur as a result of excavation and grading activities. Mitigation Measure GEO-7.1 ensures that BART would implement a Stormwater Pollution Prevention Plan (SWPPP) and erosion control BMPs to control stormwater and erosion during construction.

Hydrology and Water Quality (Mitigation Measures HY-5.1, HY-8.1, and HY-8.2)

Operation of the Pittsburg Center Station would increase the pollutant load of stormwater that could affect water quality in local water bodies. Mitigation Measure HY-5.1 ensures that BART will

implement stormwater best management practices (BMPs), such as construction of additional detention basins or the use of pervious pavement to naturally filter and remove pollutants in stormwater.

As stated above, although there is a low potential for soil erosion in the project area, soil erosion during construction of the Pittsburg Center Station could exacerbate and/or cause flooding. In addition, construction activities for the Pittsburg Center Station could violate water quality standards. Mitigation Measures HY-8.1 and HY-8.2 ensure that BART will implement a SWPPP outlining specific stormwater discharge BMPs and specific measures to prevent and control hazardous materials releases during construction.

Biological Resources (Mitigation Measures BIO-2.1a, BIO-2.1b, and BIO-6.1)

Construction of eBART may result in the filling or adverse modification of jurisdictional wetlands, other "waters of the U.S.," or "waters of the State." BART has already implemented Mitigation Measure BIO-2.1a, which required BART to verify that final locations of train control huts do not affect wetlands, "waters of the U.S.," or "waters of the State." In April 2011, BART confirmed that the final design and location of the eBART train control huts would not affect these sensitive habitats. Because no sensitive habitats will be disturbed, BART will not need to implement Mitigation Measure BIO-2.1b, requiring BART to comply with permit requirements of the U.S. Army Corps of Engineers and/or state agencies for train control huts placed within sensitive habitats.

Construction of eBART may require removal of trees that could be protected by a local tree preservation policy or ordinance. BART has already implemented Mitigation Measure BIO-6.1, which required BART to conduct a tree survey and replace trees at suitable ratios. Because the Pittsburg Center Station would be constructed in the median of SR 4, no trees would be removed during construction or operation of the Pittsburg Center Station.

Public Health and Safety (Mitigation Measures HS-8.1, HS-8.2, HS-8.3, and HS-9.1)

Construction of eBART and the Pittsburg Center Station may expose construction workers to hazardous materials in contaminated soil and groundwater. As part of the EIR, BART requested and reviewed a search of regulatory agency databases listing hazardous material sites within ½ mile of the eBART corridor from Environmental Data Resources, Inc. (EDR). Based on a review of the EDR report, BART concluded that there were no hazardous materials sites listed in federal, state, and local agency databases with the potential to affect the project site. The closest hazardous materials site to the Pittsburg Center Station is more than 1 mile east.

The EIR requires three mitigation measures to reduce impacts related to potential exposure to hazardous materials in contaminated soil and groundwater:

- Mitigation Measure HS-8.1 requires BART to conduct additional file review and a Phase I ESA prior to project construction.

- Mitigation Measure HS-8.2 requires BART to conduct further soil and groundwater investigations prior to any construction activities, if the Phase I ESA identifies any hazardous materials issues.
- Mitigation Measure HS-8.3 requires BART to remediate the contaminated sites prior to construction activities as recommended by the soil and groundwater investigations.

Since the EDR report did not identify any sites with the potential to affect the Pittsburg Center Station, the proposed mitigation measures were not needed for the Pittsburg Center Station area. In addition, construction of eBART could also result in beneficial impacts through the cleanup and/or removal of contaminated material (soil, groundwater, and/or asbestos and lead-based paint particles) during construction. Without construction of eBART, cleanup and/or removal would occur either at a later date or not at all.

The EIR determined that construction of eBART may involve demolition or upgrading of existing SR 4 structures, which may potentially expose workers to asbestos-containing materials. BART has already implemented Mitigation Measure HS-9.1 which requires BART to conduct an asbestos-containing materials survey prior to demolition work, or upgrading or reconstructing of existing structures. No structures were demolished prior to construction of the Pittsburg Center Station foundation; therefore, there was no risk of asbestos-containing materials exposure for workers.

Utilities (Mitigation Measures UT-3.1 and UT-3.2)

Construction of eBART and the Pittsburg Center Station may have significant impacts on utility service within the SR 4 median. Mitigation Measures UT-3.1 and UT-3.2 ensure that BART will require the construction contractor to restrict service interruptions to off-peak periods, and will arrange temporary backup service.

Energy (Mitigation Measure EN-4.1)

Construction of eBART and the Pittsburg Center Station may consume nonrenewable energy resources in a wasteful, inefficient, and unnecessary manner. Mitigation Measure EN-4.1 ensures that BART will develop and implement a construction energy conservation plan. The construction energy conservation plan would include measures such as using energy-efficient equipment and incorporating energy-saving techniques during construction.

Section 4 Determination of Disproportionate Effects

A disproportionately high and adverse effect on human health or the environment is defined in the U.S. DOT Order 5610.2(a), *Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, as an adverse effect that meets one of the following:

1. Is predominantly borne by a minority population and/or a low-income population
2. Will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority population and/or non-low-income population

FTA Circular 4703.1 indicates that projects in areas consisting entirely of EJ populations do not necessarily preclude disproportionately high and adverse effect findings; however, the following characteristics are true of the study area and the alternatives:

- The entire study area is predominantly minority and low-income populations. All census tracts within ½ mile of the project include a higher than average percentage of minority and low-income populations.
- All of the impacts and benefits of the Pittsburg Center Station would accrue to the same minority and low-income populations, and few project benefits would occur outside the study area.
- The purpose of this project includes enhancing access to transit systems, connectivity, and economic benefits which would greatly benefit the residents within the study area.

The final step in conducting an EJ analysis is to determine whether the proposed project would have a disproportionate effect on EJ communities. The major resource areas with potential disproportionate effects include transportation, noise and vibration, air quality, and community services. In every instance that the construction and operation was found to adversely affect EJ communities, feasible mitigation measures were identified that would eliminate or reduce the adverse effects to acceptable levels, and no further mitigation measures would be necessary. With implementation of the recommended mitigation measures, all adverse effects to EJ communities have been mitigated with the exception of noise and vibration impacts.

To ensure that mitigation measures are being applied equitably among projects in both EJ and non-EJ communities, the following discussion compares the level of impacts and proposed mitigation measures for the Pittsburg Center Station to other BART projects in non-EJ communities, including the Central Contra Costa County (CCCC) Crossover Project and the West Dublin/Pleasanton BART Station.

- **Transportation.** The Pittsburg Center Station would have a parking shortfall of 65 spaces at the Pittsburg Center Station in year 2030. The parking impacts related to operation of the Pittsburg Center Station are similar to those at other BART projects that are located in non-EJ communities, such as the CCCC Crossover Project. There were parking impacts during construction of the CCCC Crossover Project rather than long-term parking impacts as at the Pittsburg Center Station.

  eBART Mitigation Measure TR-7.1 ensures that BART will implement a parking monitoring program and institute appropriate parking controls if necessary, which would reduce parking impacts. This mitigation measure for eBART is similar to the CCCC Crossover Project Mitigation Measure TR-2.

  The West Dublin/Pleasanton BART Station project did not experience parking impacts unless BART implemented a parking charge program in which case spillover parking was a problem. Mitigation Measure 4.5-5 for the West Dublin/Pleasanton BART Station project is similar to eBART Mitigation Measure TR-7.1.

  Based on the above discussion and analysis, operation of the Pittsburg Center Station would not cause disproportionately high and adverse effects on any minority or low-income populations and proposed mitigation measures are comparable to those offered to non-EJ populations near other BART projects.

- **Noise and Vibration.** Noise and vibration during construction of the Pittsburg Center Station could significantly impact sensitive noise receptors along the project corridor. The noise and vibration impacts related to construction of the Pittsburg Center Station are similar to those at other BART projects that are located in non-EJ communities. The level of noise impacts during construction would be very similar for the Pittsburg Center Station and the West Dublin/Pleasanton BART Station; vibration impacts were not addressed in the West Dublin/Pleasanton BART Station Draft EIR. The noise created during construction of the Pittsburg Center Station would be greater in magnitude and longer in duration than construction of the CCCC Crossover Project.

  eBART Mitigation Measures NO-6.1 and NO-7.1 ensure that BART employ noise- and vibration-reducing practices during construction. eBART Mitigation Measure NO-6.1 is similar to the West Dublin/Pleasanton BART Station Mitigation Measure 4.3-1. CCCC Crossover Project Mitigation Measure N-2 is also similar to eBART Mitigation Measures NO-6.1 and NO-7.1 ensuring that BART reduce construction-related noise and vibration impacts.

  The mitigation strategy followed by BART does not disadvantage or result in disproportionate impacts on EJ communities; rather, it seeks to reduce the noise and vibration effects to any and all sensitive receptors to those levels considered acceptable by FTA and BART standards.

- **Air Quality.** Construction of the Pittsburg Center Station would emit exhaust pollutants in the engine exhaust from heavy construction equipment as well as fugitive dust from grading and earthmoving activities. The air quality impacts related to exhaust pollutants and fugitive dust related to construction of the Pittsburg Center Station would be similar to those at other BART projects that are located in non-EJ communities. The level of construction-related air quality impacts of the Pittsburg Center Station are similar to those of the West Dublin/Pleasanton BART Station and greater in magnitude than those for the CCCC Crossover Project.

  eBART Mitigation Measures AQ-8.1 and AQ-8.2 ensure that BART will incorporate control measures and construction BMPs, and will implement a construction emissions reduction plan. These mitigation measures are similar to Mitigation Measure 4.4-1 for the West Dublin/Pleasanton BART Station as well as Mitigation Measure AQ-1 for the CCCC Crossover Project.

  Based on the above discussion and analysis, construction of the Pittsburg Center Station would not cause disproportionately high and adverse effects on any minority or low-income populations and proposed mitigation measures are comparable to those offered to non-EJ populations near other BART projects.

- **Community Services.** Road detours, lane closures, and temporary freeway ramp closures during construction of the Pittsburg Center Station could have short-term impacts on emergency response times for police and fire departments. The level of impacts of the Pittsburg Center Station are similar to those of the CCCC Crossover Project, which is located in a non-EJ community.

  eBART Mitigation Measure CS-3.1 requires BART to prepare and implement a Traffic Management Plan. The CCCC Crossover Project Mitigation Measure TR-1 required BART to implement a TMP, reducing traffic impacts. The West Dublin Pleasanton BART Station EIR does not address traffic impacts related to emergency response times during construction.

  Based on the above discussion and analysis, operation of the Pittsburg Center Station would not cause disproportionately high and adverse effects on any minority or low-income populations and proposed mitigation measures are comparable to those offered to non-EJ populations near other BART projects.

Based on the above discussion and analysis, operation of the Pittsburg Center Station would not cause disproportionately high and adverse impacts related to parking, noise, air quality, or community services on any minority or low-income populations. Proposed mitigation measures are comparable to those offered to non-EJ populations near other BART projects.

As described in the EIR, the benefits related to the Pittsburg Center Station outweigh the adverse impacts of the Pittsburg Center Station. If the Pittsburg Center Station were not built (or the station were constructed outside of an EJ community), the EJ community surrounding the Pittsburg Center Station would not benefit from improved overall transportation service and enhanced mobility in the SR 4 corridor; enhanced access to transit systems; enhanced connectivity and seamlessness of the transit system; transit-oriented land use initiatives and policies; and enhanced economic benefits.

The eBART Title VI Service Impacts Analysis Report, completed in 2011, describes several benefits, including improved access, span of service, service levels, and travel time benefits. Public comments are were also submitted in support of the project, including the following:

- "Very interesting. And very nice. Everything that you are doing for everybody is a lot of what we need."
- "We need e-BART ASAP!"
- "I think the eBART train will help to relieve some congestion on Route 4, which will benefit all commuters."
- "I think this is absolutely great and am looking forward to an easier commute to SF. Thanks so much eBart!!"

Section 5 Public Engagement

Outreach Methods and Summary

In accordance with FTA Circular 4703.1, specialized outreach was conducted to reach EJ populations to ensure awareness of the Pittsburg Center Station and most importantly, to provide opportunities for EJ populations to have meaningful participation in the review of the project and respective benefits and impacts. Methods of affording these opportunities included coordination with community leaders, targeted distribution of project information, and development of project materials in the languages of those that are linguistically isolated.

LEP

There are several languages spoken within the study area. U.S. Census data was evaluated to determine languages that are spoken other than English in households where English proficiency is low. **Table 3** shows languages spoken and the percentage of households with low English proficiency. Spanish, Hindi, and Tagalog represent the highest percentages of linguistically isolated households in the study area.

Table 3: Language Spoken At Home by Ability to Speak English

Population of Census Tracts within ½ mile	Population of Census Tracts within ½ mile	Percent
Speak only English	9,521	48.0%
Spanish or Spanish Creole:	7,857	39.6%
Speak English less than "very well"	4,002	20.2%
Portuguese or Portuguese Creole:	18	0.1%
Speak English less than "very well"	18	0.1%
Russian:	47	0.2%
Speak English less than "very well"	30	0.2%
Polish:	40	0.2%
Speak English less than "very well"	26	0.1%
Persian:	37	0.2%
Speak English less than "very well"	28	0.1%
Gujarati:	16	0.1%
Speak English less than "very well"	9	0.0%
Hindi:	327	1.6%
Speak English less than "very well"	62	0.3%
Urdu:	10	0.1%
Speak English less than "very well"	10	0.1%
Other Indic languages:	277	1.4%
Speak English less than "very well"	168	0.8%
Chinese:	81	0.4%
Speak English less than "very well"	25	0.1%
Thai:	19	0.1%
Speak English less than "very well"	10	0.1%
Vietnamese:	147	0.7%
Speak English less than "very well"	93	0.5%
Other Asian languages:	50	0.3%
Speak English less than "very well"	50	0.3%
Tagalog:	1,069	5.4%
Speak English less than "very well"	329	1.7%
Other Pacific Island languages:	129	0.7%
Speak English less than "very well"	54	0.3%
Arabic:	37	0.2%
Speak English less than "very well"	12	0.1%

Public Outreach to Date

Since 2001, BART has been engaging the community in regards to the eBART project corridor. BART has done the following:

- Maintained two websites (www.ebartproject.org and www.bart.gov/projects)
- 5 mailings to 85,000+ East County addresses
- Educational mailer to 58,000 addresses (2008)
- Email updates to interested parties
- 28 public ePPAC meetings (monthly or as needed 2005 – 2009)
- Public PAC meetings (monthly or as needed 2001 – 2002)
- 6 public scoping meetings to define project (2005, 2008)
- 2 hearings on EIR
- Meeting announcements via flyers, passenger bulletins, electronic stations signs, press releases
- Community and group meetings as requested
- Numerous presentations to City Councils, Supervisors, MAC, MTC, TRANSPLAN, CCTA
- 7 public presentations to BART Board

To meet the needs of minority, low-income, and LEP communities, BART has hosted three public meetings with printed and web surveys designed to draw participation from communities of concern (July 2010); bilingual announcements of public meetings hand-distributed to local CBOs, churches, and public offices; translation offered at public meetings; childcare and refreshments offered at public meetings; and announcements of various public meetings made in Spanish-language local newspaper. In addition, environmental documents were made available on websites, at local libraries, and at BART.

Ongoing Public Outreach

Ongoing public outreach activities will continue to engage members of EJ populations who may be affected by the project.

Next Steps

In accordance with FTA Circular 4703.1, construction and operation of the Pittsburg Center Station will use the mitigation measures as described in the EIR, incorporating input from the community obtained through the public outreach process.

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