

CHAPTER 3 MASTER RESPONSES

A. MASTER RESPONSE 1: FUNDING FOR THE BART TO LIVERMORE EXTENSION PROJECT AND LIVERMORE'S CONTRIBUTION

Many commenters suggested that, because Livermore residents have been contributing tax revenue to BART for years, the Livermore area deserves a BART extension based on those past contributions. This master response addresses BART's original system and funding, the uses of those funds, and how BART typically funds extension projects, as well as Livermore's contributions to the BART system.

1. Current Project Funding

As described in the Draft EIR in Chapter 2, Project Description, the capital costs for the Proposed Project would be approximately \$1,635 million; the DMU Alternative would be approximately \$1,599 million; the EMU Option would be approximately \$1,665 million; the Express Bus/BRT Alternative would be approximately \$376 million; and the Enhanced Bus Alternative would be approximately \$25 million.¹

Approximately \$533 million in funding has been committed to the design and construction of the BART to Livermore Extension Project. Project funding is provided by a combination of revenues, including local impact fees, Alameda County use tax, and State of California (State) and regional funds. The largest source of committed funding comes from the Alameda County Transportation Commission (ACTC) Measure BB, which provides approximately \$398 million for the design and construction of the Proposed Project or an alternative, as reflected in the 2014 ACTC Expenditure Plan. These sources would provide funds for the adopted project's capital costs. The source of the remaining funding required for the Proposed Project or for the DMU Alternative/EMU Option has yet to be determined. Existing committed funding would be sufficient to construct either the Express Bus/BRT Alternative or the Enhanced Bus Alternative. The committed funding sources and amounts are identified below.

- ACTC Measure BB (\$398 million)
- Metropolitan Transportation Commission (MTC) Assembly Bill (AB) 1171 (\$80 million)
- Livermore Traffic Impact Fee Program (\$40 million)
- MTC Regional Measure 1 (\$15 million)

¹ Estimates are in year of expenditure dollars.

2. Original BART System Plans and Funding

The original BART system as approved by the voters was a three-county, 75-mile-long system (71.5 miles of BART, 3.5 miles of Muni Metro tunnel) designed to provide rail service in Alameda and Contra Costa Counties with four lines: the Orange and Green lines to Fremont, the Orange and Red lines to Richmond, and the Yellow line to Concord. The only committed line east of the Berkeley and Hayward hills in the original system plan was the line to Concord in Contra Costa County. This system plan was adopted in 1962 by the BART Board of Directors (BART Board) and the boards of supervisors of the three member counties and approved by the voters of the three counties in 1962 (Measure A). The pamphlet distributed in support of the Measure A campaign showed dashed lines for possible future extensions to the Tri-Valley Area and to Pittsburg/Antioch.

Residents of San Francisco, Alameda, and Contra Costa Counties have supported the BART system with property taxes and sales taxes for 60 years. Property taxes were first levied in fiscal year 1958 to fund system planning, design, engineering, and administration. The use of bridge tolls to construct the Transbay Tube was also authorized in 1959. Measure A authorized the issuance of a \$792 million general obligation bond for construction of the initial 75-mile system. The State legislature passed a ½-cent sales tax in the three BART counties in fiscal year 1970 to provide additional funding for system construction. Through a series of legislative actions in the 1970s, the sales tax was made permanent, partially reallocated to other transit operators, and allowed to be used to fund system operating costs. Since that time, BART has received a 3/8-cent share of the sales tax.

The initial system construction was fully completed by 1976. The 1959 property tax was retired in 1999, after proceeds paid off the construction bonds. There are currently two BART line items on property tax bills; one is a general levy for ongoing system operations and maintenance, and the second is a general obligation bond for BART's earthquake safety program, as approved by voters in the three BART counties. The 3/8-cent sales tax continues to be collected in the three BART counties to fund ongoing operations and system maintenance, as fare revenues only cover approximately 75 percent of annual operating costs.²

3. Extension Program and Funding

In the mid-1980s, BART began planning several extensions to the original system, including extensions to Pittsburg/Bay Point, Warm Springs, Dublin/Pleasanton, and San Francisco International Airport. The BART extension to Dublin/Pleasanton was opened in

² San Francisco Bay Area Rapid Transit District, 2017. Livermore Tax Payments to BART System. November 7.

May 1997, and the West Dublin/Pleasanton BART Station opened in February 2011. The construction of these two stations demonstrated BART's commitment to extend rail service beyond the original system into the Tri-Valley. The cost for the Dublin/Pleasanton extension was approximately \$550 million, while the cost for the West Dublin/Pleasanton Station (an infill station) was approximately \$80 million. The total capital cost to date to bring BART service to the Tri-Valley Area is approximately \$630 million. As with all extensions to the original BART system, the extension of service to the Tri-Valley Area has been funded by a combination of sources, including federal, State, regional, and local grants. Overall, funds generated through BART's local sales tax account for a small percentage of the funds used on the extension projects, generally less than 10 percent. Systemwide, approximately 50 percent of the funds used to build the extensions have come from federal and State sources, with other regional and local funds (generally bridge tolls and county-based transportation sales tax funds) making up the balance. Funding for regional transit projects is provided through a competitive selection process. Funders such as ACTC and MTC evaluate transit projects based on a variety of criteria, including but not limited to capital cost, operating cost, new ridership, congestion reduction, air quality improvement, and transit connectivity. Therefore, a combination of regional agencies will balance the costs and benefits of any new major project and compare each against a set of criteria to try to make the best use of public funds.

4. Funds for Livermore Extension Project

Funds collected for the past 60 years via property and sales taxes have been used to plan and build the original BART system, plan and build the extensions, and operate the system. There has never been a separate fund collected and set aside for any of the individual BART extensions, including the proposed extension to Livermore. Moreover, although the Tri-Valley communities have been paying for BART since 1959 through taxes, given the historically low density and rural nature of much of the Tri-Valley Area, neither property nor sales taxes in the area generated a substantial amount until more accelerated development began in the 1990s.

BART completed an analysis of estimated property and sales tax revenues generated by Livermore from 1959 through fiscal year 2017. Between 1959 and 2017, the City of Livermore generated an estimated total of \$201.6 million in nominal value. When those nominal dollars are converted to present-value dollars using the San Francisco Bay Area (Bay Area) consumer price index, the total estimated values from Livermore's contributions is approximately \$436.2 million.³ While substantial, it is not sufficient to fund an extension. For example, the extension of service to Dublin/Pleasanton, which opened in 1997, cost \$550 million (not accounting for inflation), an amount greater than

³ San Francisco Bay Area Rapid Transit District, 2017. Livermore Tax Payments to BART System. November 7.

the \$436.2 million generated by Livermore up to that time, as well as through 2017. This does not preclude future investments in the area; it is simply an acknowledgement that BART extensions are not planned based on a one-for-one accounting of the level of tax generated in any given area.

As noted above, the \$436.2 million in revenue contributed by Livermore is insufficient by itself to pay for the construction of a Conventional BART extension from Dublin/Pleasanton to Livermore. The cost of the Proposed Project is approximately \$1,635 million, and the costs for the Build Alternatives range from \$1,665 million (EMU Option) to \$25 million (Enhanced Bus Alternative).

B. MASTER RESPONSE 2: APPLICABILITY OF BART'S SYSTEM EXPANSION POLICY TO THE LIVERMORE EXTENSION

This master response clarifies that BART's System Expansion Policy (SEP) is applicable to the Proposed Project, the DMU Alternative/EMU Option, and the Express Bus/BRT Alternative, but not the Enhanced Bus Alternative. Please also see the Draft EIR, Chapter 1, Introduction (pages 55–56) and Chapter 5, Project Merits (pages 1499–1500).

1. System Expansion Policy

BART's SEP establishes a policy framework for evaluating BART system expansion projects. It includes criteria to be applied when determining whether a new BART expansion project should be recommended for adoption. Each criterion is considered on its own merits, there is no weighting of the criteria. These criteria include:

- Transit Supportive Land Uses and Access – How well do existing residential and/or employment land uses, intermodal connections, and local land use plans and policies support transit use?
- Ridership Development Plan – How well does the project support BART ridership goals, and have the local jurisdictions prepared plans to promote transit supportive land uses and improve access to proposed stations?
- Cost-Effectiveness – How much does it cost to increase ridership?
- Regional Network Connectivity – How well does the project close gaps in the regional transportation network?
- System and Financial Capacity – How does the project affect BART's existing system, and is there a viable capital financing plan and operating financing plan?
- Partnerships – How much community and stakeholder support exists for the project?

The Ridership Development Plan (RDP) criterion (second bullet above), and its applicability to the Proposed Project and Alternatives, is discussed separately and in more detail below.

2. Ridership Development Plan Criterion

The RDP criterion includes an assessment of ridership projections for new stations and a requirement for the jurisdiction(s) where new stations would be constructed to prepare an RDP to support BART ridership. Projected average weekday daily entries and exits associated with new stations are categorized into five ridership ratings, from low to high.

As described on pages 55 through 57 of the Draft EIR (Chapter 1, Introduction), an RDP is designed to promote transit-supporting land uses around a new station and support increased transit ridership. The RDPs may be general plan amendments, specific plans, rezonings, access improvements, or other actions selected at the discretion of the local jurisdictions. By promoting additional TOD within station areas, RDPs redirect and redistribute growth into the station areas. Please see Master Response 3 regarding Livermore's RDP, the Isabel Neighborhood Plan (INP).

3. Applicability to Livermore Extension

The SEP, including the RDP criterion, applies to the Proposed Project and DMU Alternative/EMU Option, because both of those alternatives expand the BART system and include new stations. As stated on page 1500 of the Draft EIR, the SEP ridership ratings are only applicable to new stations; therefore, only future ridership at the proposed Isabel Station needs to be assessed. As both the Proposed Project and DMU Alternative/EMU Option include a new Isabel Station, the RDP criterion is applicable to both.

The SEP, except for the RDP criterion, applies to the Express Bus/BRT Alternative because it is a major capital investment that expands access to the Dublin/Pleasanton Station. The RDP criterion is not applicable to the Express Bus/BRT Alternative because it makes improvements to an existing station (Dublin/Pleasanton Station) and does not include a new station.

The SEP, including the RDP criterion, is inapplicable to the Enhanced Bus Alternative, which consists only of minor bus infrastructure improvements and would not expand the BART system.

C. MASTER RESPONSE 3: COORDINATION WITH THE CITY OF LIVERMORE AND THE ISABEL NEIGHBORHOOD PLAN PROCESS

This master response describes the relationship of the INP to the BART to Livermore Extension Project, as well as BART's coordination efforts with the City of Livermore to ensure the area around the proposed Isabel Station supports transit-oriented development and generates BART ridership.

1. Ridership Development Plans

As described on pages 55 through 57 of the Draft EIR (Chapter 1, Introduction), the BART SEP requires that an RDP be prepared for any proposed expansion projects of the existing BART system. The RDP is designed to promote transit-supporting land uses around a new station and support increased transit ridership. RDPs may be general plan amendments, specific plans, rezonings, access improvements, or other actions selected at the discretion of the local jurisdictions. By promoting additional transit-oriented development (TOD) within station areas, RDPs redirect and redistribute growth into the station areas.

As described in Master Response 2, the RDP requirement applies to the Conventional BART Alternative and DMU Alternative/EMU Option, both of which include a new station at Isabel Avenue. The RDP requirement does not apply to the Express Bus/BRT Alternative or the Enhanced Bus Alternative; the Express Bus/BRT Alternative makes improvements to the existing Dublin/Pleasanton Station, but does not include a new station, and the Enhanced Bus Alternative consists only of minor bus infrastructure improvements with no expansion of the BART system.

2. Isabel Neighborhood Plan

To satisfy the RDP requirement, the City of Livermore has prepared the INP, which would allow new housing and increased development densities in the vicinity of the proposed Isabel Station beyond those currently allowed under the General Plan. The INP is a specific plan that covers approximately 1,138 acres both north and south of I-580 in northwest Livermore. The intention of the INP is to set design standards, create safe and vibrant neighborhoods, create circulation improvements, and promote compatibility with existing residential development and community character. Full buildout of the INP would accommodate 4,095 new housing units and 9,100 net new jobs. The INP assumes buildout of the plan area by 2040.

The City of Livermore is the lead agency for the INP EIR, which is undergoing a separate environmental review and approval process from the BART to Livermore Extension Project.

The City began the initial stages of the INP preparation in July 2012, followed by an ongoing community outreach process that began in 2015. The Draft INP and its Draft EIR were published on January 12, 2018 and were available for public review through February 26, 2018.

3. INP Project Adoption

Consistent with the SEP, the City of Livermore will adopt the INP before the BART Board takes action on the Proposed Project. The City has tentatively scheduled the INP adoption hearings on May 1, 2018 for the Planning Commission recommendation and May 14, 2018 for the City Council decision. The BART Board is scheduled to consider the BART to Livermore Extension Project following the City Council's decision on the INP. As part of the consideration of the Proposed Project or DMU Alternative/EMU Option, BART will assess whether the INP can demonstrate that it will support increased ridership and provide a good station experience for patrons, along with meeting the other objectives of the SEP. BART will also evaluate whether the INP is consistent with other relevant BART policies, including the TOD, Affordable Housing, and Station Access policies.^{4, 5, 6}

As noted above, the BART to Livermore Extension Project Draft EIR assumed that the INP would be implemented under the Proposed Project and DMU Alternative/EMU Option, but not under the Express Bus/BRT Alternative or Enhanced Bus Alternative. However, the City of Livermore has specified that the Draft INP applies only to the Proposed Project (Conventional BART). The INP states that the plan "will not go into effect until and unless there is approval of a full BART extension (i.e., traditional BART service) to Isabel Avenue..."⁷ It also describes a proposed phasing program for implementation of the INP, which is linked to milestones for the Proposed Project. Specifically, Phase I is linked to BART Board approval of the Proposed Project, Phase II is linked to securing full project funding for the Proposed Project, and Phase III is linked to the start of construction for the Proposed Project.⁸

Because the Draft INP will not take effect unless BART adopts the Proposed Project, the City of Livermore has not developed land use assumptions applicable to a DMU/EMU project. Accordingly, BART requested guidance from City of Livermore staff in order to provide an appropriate analysis in this EIR of the DMU Alternative/EMU Option and its

⁴ BART, 2016. Transit-Oriented Development Policy. Adopted June 9. Available at <http://www.bart.gov/about/business/tod>.

⁵ BART, 2016. Affordable Housing Policy. Adopted January 28. Available at https://www.bart.gov/sites/default/files/docs/C-%20Affordable%20Housing%20Policy%20Adopted%201-28-16_0.pdf.

⁶ BART, 2016. Station Access Policy. Adopted June 9. Available at <https://www.bart.gov/about/planning/access>.

⁷ City of Livermore, 2018. Isabel Neighborhood Plan, Public Review Draft. January. Page 7-2.

⁸ Ibid.

cumulative impacts together with an RDP. City staff advised BART that for environmental review purposes, the land use assumptions of the Draft INP would represent a reasonable upper limit for the amount of development that would be allowed by an INP modified for the DMU Alternative/EMU Option.

If the BART Board adopts the Proposed Project, following the City of Livermore's adoption of the INP, those actions would be consistent with the SEP. If the BART Board were to select the DMU Alternative or EMU Option as its adopted project, the situation is less clear. The INP does not address BART's DMU Alternative/EMU Option, and the City of Livermore could not implement the INP as currently written. This would preclude a BART adoption of the DMU Alternative/EMU Option consistent with the SEP. Therefore, if the BART Board chose to advance the DMU Alternative/EMU Option, either the SEP would have to be waived or project adoption would have to be delayed until the City of Livermore revises the INP to reflect BART's adoption of these alternatives; this could require a new INP planning and community outreach process.

D. MASTER RESPONSE 4: EXTENSION TO GREENVILLE

This master response provides background on the Greenville alignment analyzed in the BART to Livermore Extension Program EIR and explains why the project-level Draft EIR does not include such an extension. Many commenters expressed a preference for the Proposed Project to extend toward Greenville Road in eastern Livermore. Please see Master Response 6, which explains why the proposed storage and maintenance facility in North Livermore, analyzed in the Draft EIR, is the best available location and why other locations suggested by commenters, including Greenville, are infeasible.

1. Background

Two basic factors determine the scope (i.e., length) of a BART extension in the Tri-Valley: the adopted alignment and the cost. In July 2010, the BART Board certified the BART to Livermore Extension Program EIR. The Final Program EIR evaluated 10 alternatives that included a variety of alignments and station locations. The BART Board adopted Alternative 2B (Portola-Vasco), which extended eastward in the median of Interstate Highway (I-)580 from the Dublin/Pleasanton Station to Isabel Avenue before leaving the I-580 corridor and extending south along Portola Avenue to a new station in Downtown Livermore. From Downtown Livermore, the alignment extended along the Union Pacific Railroad tracks to Vasco Road, where a second (terminus) station and storage and maintenance facility would be located. The City of Livermore adopted the same downtown alignment in 2010, and then, following further public discussion, subsequently revised its adopted alignment to one entirely along I-580 with stations at Isabel Avenue and Greenville Road. This is the current alignment in the City of Livermore's General Plan.

Neither BART nor the City of Livermore has revisited these adopted alignments, and the inconsistency between the two (BART's downtown alignment and the City of Livermore's I-580 alignment) continues. The common element between the two alignments is the segment between the Dublin/Pleasanton Station and Isabel Avenue.

Ultimately, BART chose to pursue the alignment corresponding to Alternative 4 (Isabel Avenue/I-580 interchange) in the Program EIR. Alternative 4 of the Program EIR is an extension of BART service from the Dublin/Pleasanton Station to a new terminus station in the median of I-580 at Isabel Avenue. This alignment also corresponds to the portions of the City's preferred I-580 alignment extending as far as Isabel Avenue, and is reflected in the Draft EIR under both the Proposed Project and the DMU Alternative. Extending beyond Isabel Avenue would have required a revision to the alignments adopted by either BART or Livermore.

As stated above, the other factor in determining the scope of the Tri-Valley Area extension is cost. An alignment along I-580 to Greenville with stations at Isabel and Greenville and a storage and maintenance facility at Greenville corresponds to Alternative 1 of the 2010 Program EIR. The Program EIR estimated the cost of Alternative 1 to be \$2,920 million (in 2009 dollars). Escalated to 2024 dollars, the price of a two-station extension to Greenville would be \$4,268 million.⁹ The Proposed Project's capital cost is \$1,635 million. An extension of the Proposed Project, as currently planned, farther to Greenville would increase the cost of the project by approximately \$2,633 million.¹⁰ Given the high cost of an extension to Greenville (approximately 2.6 times an Isabel-only extension) and the ongoing competition for funding among transportation projects, BART chose an extension to Isabel Avenue as a first-phase project more likely to be implemented.

2. Future Extension to Greenville Road

As described above, the scope of the BART to Livermore Extension Project evaluated in the Draft EIR extends to Isabel Avenue in the I-580 highway median. However, the project does not preclude a future extension to, and construction of a new station at, Greenville Road.

Locating the terminus for this project at Isabel Avenue preserves the option for a future extension farther east, in an alignment within or extending out of the I-580 median. An extension to Greenville Road would be the subject of a future project with a separate project-level evaluation in its own environmental document.

⁹ 2024 is an estimate of the possible mid-point of construction for an extension to Greenville Road.

¹⁰ All amounts are in 2024 dollars.

E. MASTER RESPONSE 5: STORAGE AND MAINTENANCE FACILITY – NEED, SIZE AND CAPACITY, AND COST AND COST ALLOCATION

Many commenters expressed concerns related to the need for the storage and maintenance facility for Conventional BART, as well as its size and cost. This master response describes the issues associated with the storage and maintenance facility for the Proposed Project (Conventional BART), including concerns raised by commenters related to the following: (1) the need for a storage and maintenance facility; (2) its proposed size and service capacity; and (3) the capital costs to construct it and the allocation of its costs to the Proposed Project versus the broader BART system.

1. Need for the Storage and Maintenance Facility

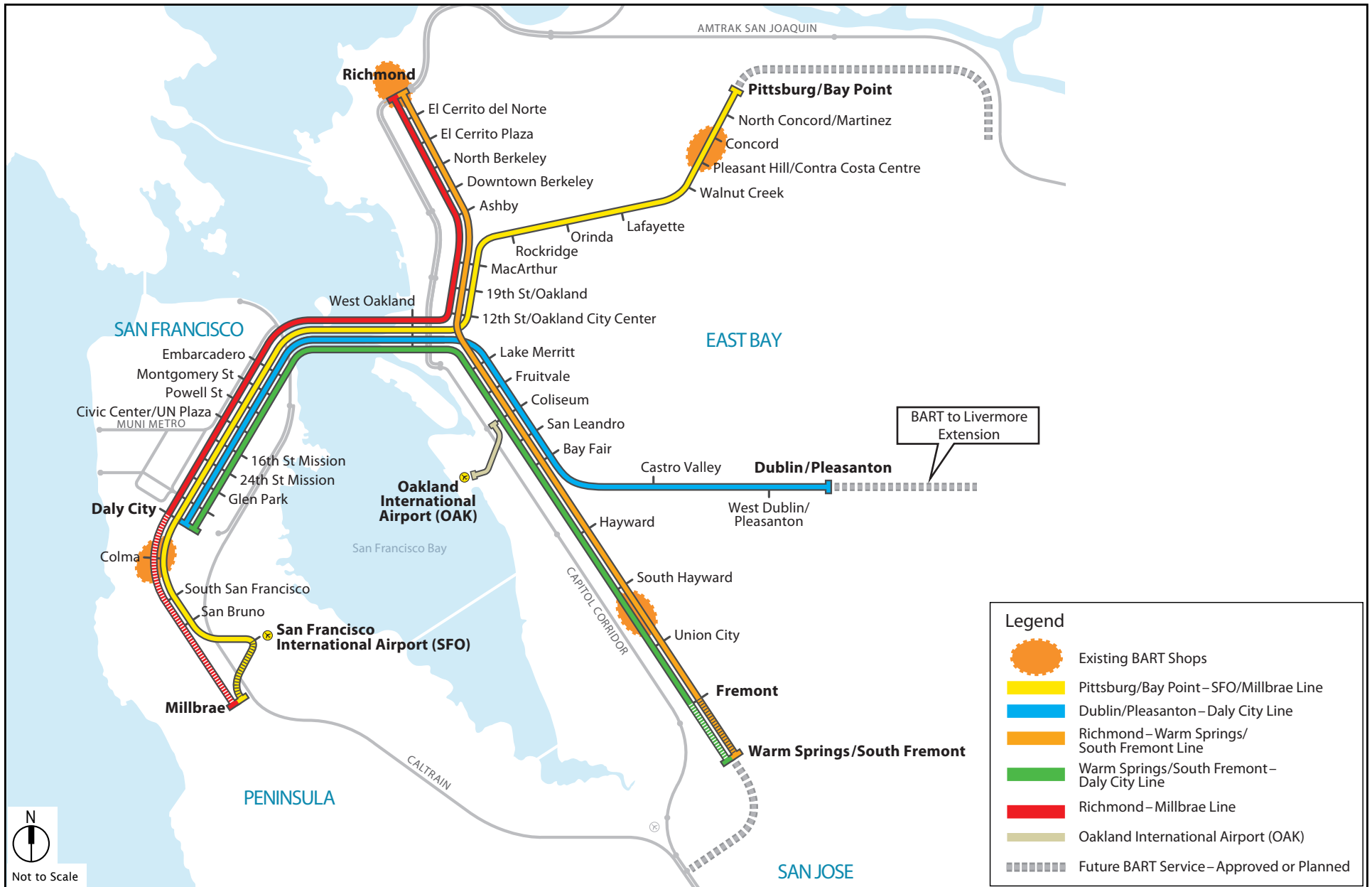
This section describes the need for a storage and maintenance facility at the eastern terminus of the Daly City-Dublin/Pleasanton Line (also referred to as the Blue Line).

a. Existing and Planned BART Storage and Maintenance Facilities

To operate the system, BART needs both vehicle storage yards and maintenance facilities (shops). BART stores its cars in yards when they are not in revenue service, as well as on tail tracks at the endpoints of several BART lines, including at the Dublin/Pleasanton Station. BART repairs and maintains the fleet at its shops.

BART currently operates four combined storage yards/shops near the beginning of their respective BART lines in the following cities: Richmond, Hayward, Concord, and Daly City, as shown on Figure 3-1. Collocating the maintenance facility with BART car storage is the most efficient design for BART operations because it reduces the amount of time that cars are out of service. Generally, BART operators and service personnel discover issues with BART cars during the standard morning inspection before trains begin revenue service. If the maintenance facility is collocated with the storage yard, maintenance personnel can immediately begin repairs on the BART cars rather than requiring the cars to travel elsewhere for repairs. Reducing or eliminating travel times to the maintenance facility keeps more cars in service at a given time and improves system capacity and reliability.

The only BART end-of-line station that does not have a shop nearby is the Dublin/Pleasanton Station on the Blue Line. Out-of-service cars near the Dublin/Pleasanton Station must travel to the Hayward or Daly City shop to be repaired; as a result, these cars remain out-of-service for longer than necessary. For example, seven- or eight-car trains, instead of the standard nine-car trains, often run in the mornings from the Dublin/Pleasanton Station terminus due to a lack of functioning cars. Other times, cars are



Source: BART, 2016.

Figure 3-1
Master Responses
Existing BART Shops

put back into service when they are safe for passenger transport but still have non-critical malfunctions, such as broken air conditioning, because there is inadequate maintenance capacity or because of the distance to the maintenance facility from the storage location.

Furthermore, wayside maintenance and repair can only be safely conducted when there are no trains operating. If the Blue Line cars are traveling to the Hayward or Daly City shop during non-passenger service hours, the time window during which wayside maintenance and repair can be performed is shortened, resulting in further inefficiencies. The farther the maintenance facility is from the car storage, the longer cars will be out of service. Shorter travel times to the maintenance facility will keep more BART cars in service at a given time and improve system capacity and reliability.

BART Facilities Standards recommend one shop space (service bay) per 16 BART cars; each service bay can serve one BART car at a time. BART currently has 668 cars and 34 service bays distributed between the four shops, averaging 20 cars per service bay.¹¹ As a result, BART is challenged to keep up with existing maintenance needs and sometimes cannot get the full set of cars out each morning.

BART has plans to expand yard and shop capacity and will be adding 7 service bays at Hayward,¹² as well as building a new maintenance facility with 10 service bays in Santa Clara as part of the Phase II Silicon Valley Extension. BART plans to add storage space for 250 cars at Hayward and 193 cars at Santa Clara. These capacity improvements are necessary to keep up with BART's expansion of its existing car fleet. However, even after the addition of the new service bays noted above, BART will still average more than 20 cars per service bay, above the ratio recommended by the BART Facilities Standards.

b. Storage and Maintenance Facility Need

BART car storage at the terminus of the Blue Line at the Dublin/Pleasanton Station is currently 86 vehicles.¹³ These cars are stored on two tail tracks to the east of the station. There are no maintenance facilities at Dublin/Pleasanton. The anticipated storage and maintenance needs for the Blue Line and the proposed Isabel extension are described below for 2040.

As described on page 107 of the Draft EIR, BART conducted an operations analysis to determine BART vehicle fleet and storage needs to effectively operate the Proposed

¹¹ BART recently added 3 service bays at Hayward, increasing the total number of service bay to 37, or an average of 18 cars per service bay.

¹² BART has since added three of the seven service bays at Hayward and plans to add another four at this location.

¹³ BART is implementing a project to lengthen the tail tracks to allow 90 vehicles to be stored there.

Project. The analysis evaluated projected BART ridership for the Proposed Project as well as BART's operating plan for the Daly City-Dublin/Pleasanton Line in 2040. Based on the analysis, a storage yard to accommodate approximately 172 BART cars would be required.

The 172-car size for the storage yard is based on the following factors:

- 1) 86 BART cars currently stored on the tail tracks at the Dublin/Pleasanton Station and the 4 additional BART cars soon to be stored there (the tail tracks would be converted to mainline tracks and would no longer be able to be used for this purpose)
- 2) 36 cars necessary to expand the system to serve the additional distance to Isabel Station
- 3) 36 additional cars necessary to provide complete 10-car trains (versus the 9-car trains now operating along much of the Daly City-Dublin/Pleasanton Line) and allow for reduced headways when BART goes from 15-minute to 12-minute headways after 2025
- 4) 10 cars needed for a ready reserve train

This increase in BART cars would allow for complete 10-car trains and 3 additional rush trains during the peak period to accommodate the additional passengers anticipated for the Proposed Project.

As described above, BART currently does not have a maintenance facility at the east end of the Daly City-Dublin/Pleasanton Line. Most Blue Line BART cars travel to the Daly City shop for service, with a smaller number also serviced at the Hayward shop. This results in increased non-passenger service car mileage that could be avoided and longer times that BART cars are out of revenue service.

The maintenance facility designed for the Proposed Project would have 10 service bays to serve the existing Blue Line and the projected demand of the additional cars resulting from the Proposed Project. The addition of 36 cars to the BART fleet for the Livermore extension would require two to three service bays, assuming a ratio of approximately 1:16 BART cars to service bays (based on BART Facilities Standards). BART would use the remaining service bays to service Blue Line cars, freeing up service bays at the Daly City and Hayward shops to be used more efficiently for other BART lines and resulting in reduced operational costs.

2. Size and Service Capacity of the Storage and Maintenance Facility

The storage and maintenance facility has been designed to serve as both a storage yard and maintenance facility for approximately 172 BART cars. The storage and maintenance facility would occupy approximately 68 acres, and together with the tail tracks would occupy a total of approximately 104 acres. The majority of the 68 acres would be

dedicated to storage of BART cars, while a smaller portion of the area would be occupied with the various maintenance structures. The main building, with a footprint of approximately 71,337 square feet and a height of approximately 44 feet, would serve as the maintenance facility. Other support buildings would include a 50-foot-high train control tower; a train control room; a traction-power substation; a vehicle cleaning supplies, equipment, and waste building; a vehicle cleaning platform; and a blowdown building. For more information regarding the storage and maintenance facility's massing and visual simulations, please see Figure 3.E-14 on page 595 of the Draft EIR and Figure 3-6 under Master Response 7.

3. Capital Costs to Construct and Allocation of Costs to the Proposed Project

The total capital costs associated with the storage and maintenance facility would be \$465 million, as follows:^{14,15}

- Storage yard – \$87 million
- Tail tracks connecting to Isabel Station – \$227 million
- Maintenance facility – \$151 million¹⁶

Because the Proposed Project would remove the existing tail tracks that store BART cars for the Blue Line at the Dublin/Pleasanton Station and additional car storage that would be required for future operation of the extension and the line, 100 percent of the costs for the storage yard and tail tracks are included in the cost of the Proposed Project.

Approximately 25 percent of the \$151 million cost of the maintenance facility—\$38 million—has been allocated to the Proposed Project, with the remainder of the cost allocated to the BART system. This allocation is based on several factors:

- In 2040, the number of BART cars on the Blue Line would total 144 if the Proposed Project is not implemented. If the Proposed Project were to be implemented, the number of BART cars on the Blue Line would increase by 25 percent, to 180 BART cars.
- Of the 10 service bays at the maintenance facility, only 2 to 3 bays are needed to maintain the 36 BART cars needed to operate the Proposed Project (approximately 25 percent).

¹⁴ Cost estimates in this response are represented in year of expenditure dollars.

¹⁵ Cost estimates do not directly match estimates in Table 2-18 of the Draft EIR (Estimated Capital Costs for Proposed Project and Build Alternatives) due to different methods for aggregating cost categories.

¹⁶ Includes the cost of the maintenance facility itself and costs needed to include a maintenance facility in a project without a maintenance facility.

Construction of the Proposed Project, including the storage and maintenance facility, would not only add one station to the Blue Line, but would also increase service levels to accommodate future loads caused by an extension to the Isabel Station.

Overall, the Proposed Project would pay for \$352 million of the \$465 million total cost of the storage and maintenance facility.

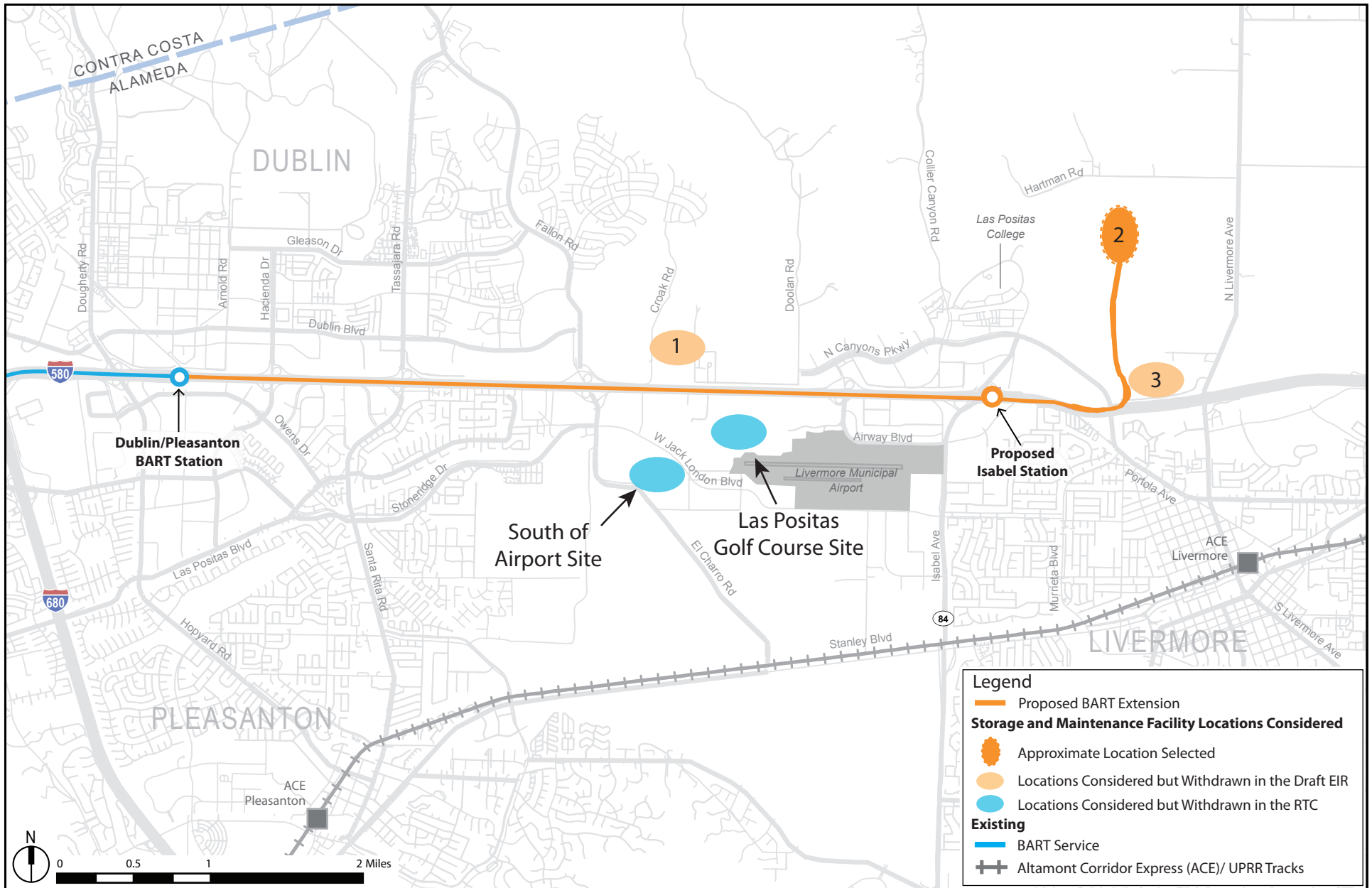
F. MASTER RESPONSE 6: STORAGE AND MAINTENANCE FACILITY LOCATION AND ALTERNATIVE SITES

This master response explains why the proposed site described in the Draft EIR is the best location for the storage and maintenance facility and describes alternative locations that were considered but rejected.

1. Site Selection Process for Draft EIR

Several locations were considered for a BART storage and maintenance facility during the initial site selection process. Initially, BART planned for a storage yard; as BART reassessed the lack of maintenance capacity in the system to service the proposed extension, a maintenance facility was added. As described in the Draft EIR in Section 2.K, Alternatives Considered but Withdrawn, a range of potential locations were considered for the BART storage yard. These locations were narrowed to three sites, all north of I-580, as shown in Figure 3-2. The potential locations are as follows: north of I-580 and east of Croak Road near Cottonwood Creek and Doolan Canyon (Location 1); north of I-580 and east of Portola Avenue in the vicinity of Cayetano Creek (Location 2); and immediately north of I-580 and west of North Livermore Avenue (Location 3). Initially, BART performed a siting analysis for a stand-alone storage yard, and Location 2 along Cayetano Creek was considered the best choice among candidate sites.¹⁷ As the design evolved into a combined storage yard and maintenance facility, the basic criteria for the combined site remained the same as for the storage yard: undeveloped land, relatively level terrain, access from the median of the freeway, and limited grading. Location 2 continued to be the best site for the combined BART storage and maintenance facility.

¹⁷ Arup, 2015b. BART Storage Track Locations. July 13.



Source: Arup, 2017b.

Figure 3 - 2
Master Responses
Locations Previously Considered for the Storage and Maintenance Facility

Location 1, north of I-580 and east of Croak Road, would create operational constraints because it is halfway between Dublin/Pleasanton Station and the proposed Isabel Station, rather than at the end-of-line. Trains entering the mainline from a storage and maintenance facility on this site would have to wait for a gap in the mainline service before moving onto the mainline. This would impose a major constraint on operations and create passenger delays.

In addition, Location 1 would have significant impacts associated with physical displacements and relocations. The westbound I-580 lanes would have to be relocated an additional 30 feet north over the span of 1.2 miles to accommodate the connecting tracks from the storage and maintenance facility to the mainline. This would necessitate additional ROW acquisition. A yard and shop on this site would require the demolition of at least one residential property. Parkwest Casino 580, just to the east of Doolan Road, would potentially be impacted by the eastern connecting tracks and could require relocation or extensive modifications to the site.

Lastly, the western portion of this site (approximately 1,200 feet of length) is designated for General Commercial and Industrial Park uses by the East Dublin Specific Plan; a storage and maintenance facility is incompatible with this designation. For all of the above reasons, this site is infeasible and was rejected from further consideration. The City of Dublin has also objected to a storage and maintenance facility on this site due to its conflict with the land use designation.¹⁸

Location 3, immediately north of I-580 between Portola Avenue and North Livermore Avenue, is on a steep hillside and would require extensive earthworks and grading. This would result in a significant visual impact as well as substantially increased project costs. Location 3 would increase the project cost by approximately \$149 million or 11 percent (see Draft EIR, page 200).¹⁹ Additionally, due to the topography at this location, which slopes upward from I-580, the yard and shop would have to be designed with a narrow aspect ratio (a minimum 4,000 feet long along I-580). The site is of insufficient length to support such a yard and shop.²⁰ For the above reasons, this site is infeasible and was rejected from further consideration. Furthermore, the City of Livermore has objected to a storage and maintenance facility on this site due to its significant visual impact.

Therefore, Location 2 in the Cayetano Creek Area was identified as the best site for the 68-acre storage and maintenance facility and was analyzed in the Draft EIR. The layout of the storage and maintenance facility is based on preliminary engineering, as well as

¹⁸ Arup, 2018. BART to Livermore Extension: Storage and Maintenance Facility Alternative Locations Assessment. May 1.

¹⁹ Amounts are in 2016 dollars.

²⁰ Arup, 2018. BART to Livermore Extension: Storage and Maintenance Facility Alternative Locations Assessment. May 1.

conservative assumptions about the presence of sensitive plant and wildlife species. If the BART Board adopts the Proposed Project, BART will conduct focused botanical surveys and a wetland delineation, and then develop a subsequent engineering design. The botanical surveys and wetland delineation may provide more specific information that would allow a modified design for the storage and maintenance facility that further reduces biological impacts. Please see Response C2-2 for more detail regarding surveys and the wetland delineation.

2. Additional Locations Considered but Withdrawn

During the comment period, BART received suggestions regarding alternative locations for the storage and maintenance facility. These alternative locations are described and assessed below. All of the alternative locations are found to be infeasible and are rejected from further consideration.

a. Capacity Improvements at Existing Yards and Shops

Several commenters suggested upgrading existing storage and maintenance facilities instead of building a new storage and maintenance facility. As described in Master Response 5, BART's existing storage and maintenance facilities are at capacity.

Independent of the Proposed Project, BART is planning to add shop and storage capacity in Hayward and to build a new storage and maintenance facility in Santa Clara. However, these improvements are necessary to maintain existing levels of service as the BART car fleet is substantially expanded in the future. The Daly City yard and shop, the primary shop for the Blue Line, has no capacity for expansion. The best location for yards and shops is at the end of a line, as this provides the most efficient location for operations and maintenance. Storing and maintaining trains elsewhere on the system results in additional non-revenue travel time for cars and delays in returning repaired cars to service. Therefore, this alternative is infeasible and no changes to the Draft EIR are required.

b. Tail Tracks in I-580 Median East of Isabel Station

Several commenters suggested constructing the storage and maintenance facility within the I-580 median east of the Isabel Station, similar to how BART cars are currently stored on the tail tracks east of Dublin/Pleasanton Station.

As part of BART's operations analysis, several storage yard-only sites were considered within the I-580 median and were eliminated from further consideration. A site within the I-580 median would be spatially constrained due to limitations on I-580 widening. Such a site could only have enough width for three tracks. To store the 172 cars necessary for the extension, the three tracks would need to be approximately 5,000 feet long. Storing

large numbers of vehicles on a single track is operationally inflexible (e.g., a vehicle in the middle is inaccessible due to all the other vehicles on the track). Because they are constrained by the freeway, storage locations in the median would be difficult to expand if BART storage requirements were to ever increase.

BART Facilities Standards specify that BART car storage must be on a grade not exceeding 0.5 percent. BART has further specified a 0-percent gradient for the storage yard for the Proposed Project. Level storage yards reduce the risk of cars accidentally rolling, which could have catastrophic consequences.

East of the Isabel Station, the grade is too steep to accommodate a 5,000-foot-long storage yard, as shown in Figure 3-3. The grade begins to steepen approximately 1,400 feet east of the proposed Isabel Station, and the predominant gradient of I-580 is approximately 0.6 percent between Portola Avenue and First Street.²¹ In addition to widening the freeway for approximately 1 additional mile, construction of a trench or elevated structure would be required to provide a sufficiently flat grade for a storage yard east of the Isabel Station. The trench or elevated structure would have to be up to 22 feet deep or tall, increasing the project cost by approximately \$200 million, or 15 percent.^{22, 23}

Some commenters suggested that BART cars should be supplied with brakes so they could be parked on a grade, which would eliminate the need for a level storage yard. It should be noted that static (parking) brakes or chocks (blocks) are not a feasible solution to parking cars on a grade. Parking brakes require the train operator to set or release the brakes every time a car is moved. This needs to be done manually for each car as electronic brake controls are more susceptible to failure and therefore are not used. Setting and releasing the brakes, or setting and removing the chocks, for every car of a 10-car train would be a time-consuming and inefficient operation.

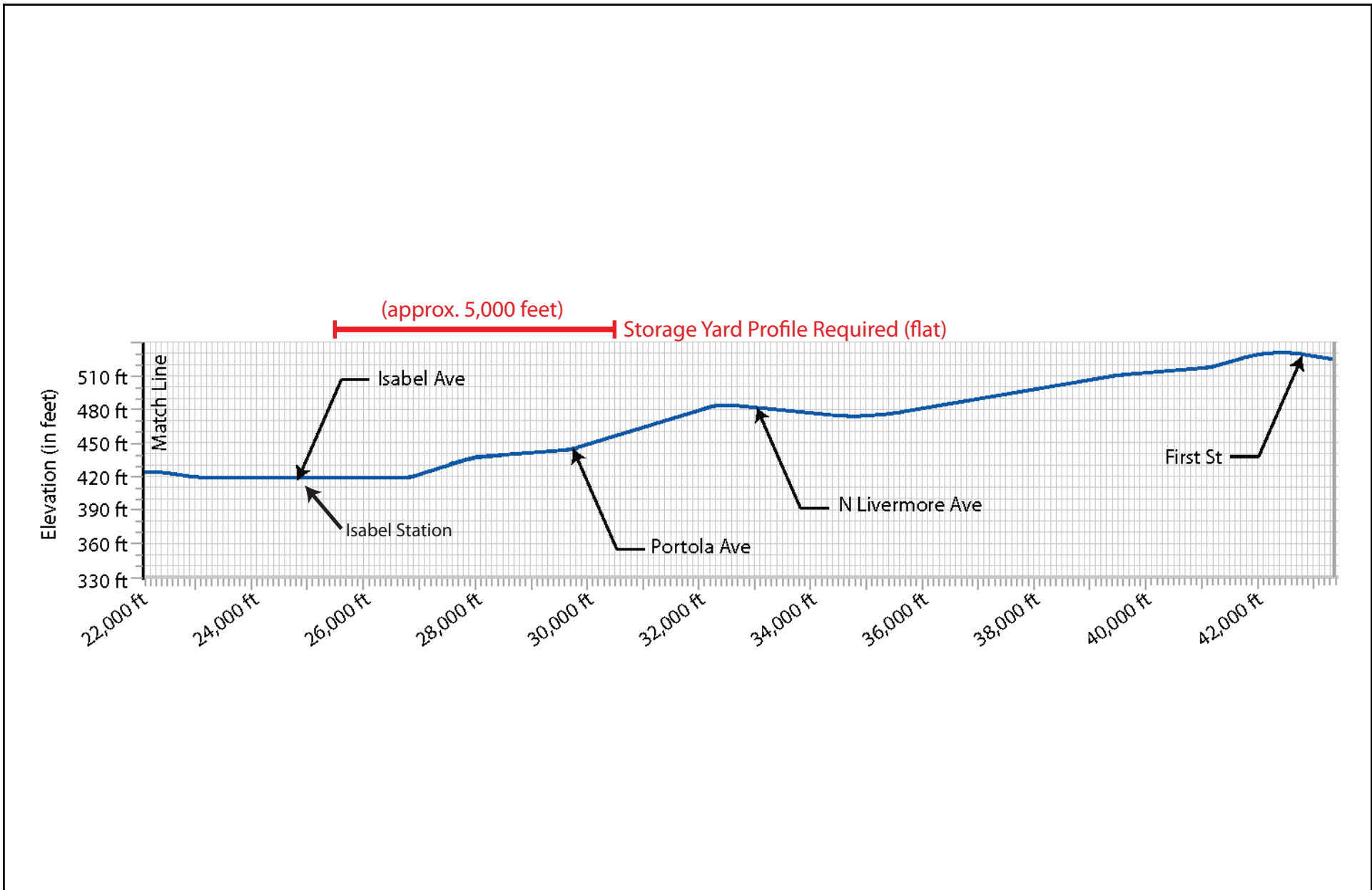
Furthermore, a maintenance facility, which is needed for the Proposed Project, cannot be built within a freeway median due to space constraints and access issues. For example, large trucks would be unable to access the facility and load and unload equipment.

For the above reasons, this alternative is infeasible and rejected from further consideration.

²¹ Arup, 2015d. BART Storage Track Locations. July 13.

²² Arup, 2015d. BART Storage Track Locations. July 13.

²³ Amounts are in 2016 dollars.



Source: BART, 2017.

c. Yard and Shop at Greenville

Many commenters suggested building a storage and maintenance facility near Greenville Road. A storage and maintenance facility, referred to as the Greenville Yard, was analyzed at a program level in the BART to Livermore Extension Program EIR for the alternatives that extended to Greenville Station. The Greenville Yard was to be located to the north of I-580 and Northfront Road, and east of Laughlin Road. One commenter also suggested using BART-owned land bounded by Laughlin Road to the east and Herman Avenue to the west.

Construction farther east of Isabel Avenue to extend tail tracks to Greenville and place a storage and maintenance facility there would substantially increase the cost of the project. Extending BART tracks within the I-580 median from the proposed Isabel Station to Greenville Road would increase the length of the rail alignment by approximately 5.5 miles. Based on the costs developed for the Program EIR and escalated to 2016 dollars, a BART extension from the Dublin/Pleasanton Station to Isabel Avenue (without a maintenance shop) would cost \$1,257 million. A preliminary cost estimate to provide a storage yard and maintenance facility at Greenville and the 5.5-mile connecting track from Isabel Avenue to Greenville is \$1,825 million. The entire Dublin/Pleasanton-to-Greenville alignment with a shop and yard at Greenville would total \$3,082 million²⁴ compared to an estimated \$1,329 million for the Proposed Project with a storage and maintenance facility in North Livermore.²⁵ Therefore, the construction of the storage and maintenance facility at Greenville has been found to be financially infeasible.

In addition, during the public comment period for the Program EIR, BART received comments from resource agencies with permitting authority for the Greenville site—including the U.S. Fish & Wildlife Service and the Regional Water Quality Control Board—indicating that these agencies may not permit a BART storage and maintenance facility on that site. The Greenville site contains sensitive species and critical habitat, including vernal pools. These agencies stated their opinion that the impacts may not be mitigatable or may require mitigation so extensive as to render these alternatives non-viable.²⁶

The Proposed Project and Blue Line need a storage and maintenance facility to function, and the facility could not be deferred until a later decision on a Greenville extension. Please see Master Response 4 for more detail regarding a future extension of rail service (and mainline track) to the east of Isabel Avenue, including to Greenville.

²⁴ This total does not include an estimated \$200 million required to construct a station at Greenville, which was included in the original estimate in the Program EIR.

²⁵ All numbers in 2016 dollars.

²⁶ BART, 2010. BART to Livermore Extension Preferred Alternative Memorandum. June 25.

d. Las Positas Golf Course

Las Positas Golf Course is immediately south of I-580, north of Livermore Airport, and east of Airway Boulevard, as shown in Figure 3-2. This site was considered as an alternative location for the storage and maintenance facility, and is assessed in a technical memorandum prepared to analyze the feasibility of the site.²⁷ However, use of the golf course for the storage and maintenance facility would entail regulatory/permitting challenges and substantial hydrological impacts, as summarized below.

The golf course is considered a Section 4(f) property, under Title 49 of the United States Code, Section 303. Section 4(f) properties are publicly owned lands, such as a park, recreation area, or wildlife and water fowl refuge or land of a historical site of national, state, or local significance, as determined by the federal, state, regional, or local officials having jurisdiction over the resource. The Proposed Project would likely require funding from the FTA, an agency within the United States Department of Transportation (USDOT), as well as project approvals from the California Department of Transportation, which has been assigned responsibility for implementing Section 4(f) by the Federal Highway Administration, another agency of the USDOT. Therefore, Section 4(f) is applicable.

Under Section 4(f), an operating agency of the USDOT may not approve a project that uses protected properties unless there are no prudent or feasible alternatives, and the project includes all possible planning to minimize harm to such properties. Because a feasible alternative to Las Positas Golf Course was identified in the Draft EIR, it is considered unlikely that BART would receive approvals to use the golf course as the site for the facility.

Furthermore, the majority of the site is designated by the Federal Emergency Management Agency as within the 100-year floodplain or 500-year floodplain. Any development in the flood zone would have to demonstrate by hydraulic modeling that it had no significant impact on flood levels. The southwest corner of the site is in a regulatory floodway, where federal standards prohibit any increase in the 100-year flood elevation as a result of encroachment. Any development in the regulatory floodway would require extensive permitting and would likely require mitigation such as replacement of wetlands at a 1:1 ratio or higher. The hydrology impacts associated with this site would adversely affect its financial and environmental feasibility. For the above reasons, the Las Positas Golf Course is infeasible and is rejected from further consideration.

²⁷ Arup, 2018. Additional Sites for Analysis for Storage and Maintenance Facility. April 30.

e. South of Airport Site

An area south of Livermore Municipal Airport and south of West Jack London Boulevard (shown in Figure 3-2), referred to as the south of airport site, was considered as an alternative location for the storage and maintenance facility.²⁸ Similar to Las Positas Golf Course, much of this site is within the regulatory floodway, 100-year floodplain, and 500-year floodplain. Because the approach tracks would pass through a regulatory floodway, they would need to be elevated for a length of approximately 4,100 feet to avoid impacts to the floodway. The portion of the approach tracks within the 100-year floodplain would need to be placed on a retained earth embankment. Furthermore, BART would be required to provide compensatory flood zone mitigation at an assumed 2:1 ratio, resulting in the need to provide 6.4 million square feet of floodplain elsewhere (approximately the size of 111 football fields).

Due to the cost of elevating the approach tracks, constructing retained earth embankments for flood protection, and compensatory flood mitigation, the south of airport site would increase the cost of the Proposed Project by approximately \$336 million, or approximately 21 percent.²⁹ Because of hydrological impacts and cost, this alternative is infeasible and is rejected from further consideration.

G. MASTER RESPONSE 7: STORAGE AND MAINTENANCE FACILITY IMPACTS

This section summarizes the impacts identified in the Draft EIR associated with the storage and maintenance facility and describes the additional analysis completed for noise and visual quality. This additional analysis further refines the analysis presented in the Draft EIR, 913 but does not change the conclusions or severity of the impacts described in the Draft EIR.

The significant and unavoidable impacts of the storage and maintenance facility are described, followed by a general discussion of land use and agricultural, noise, visual quality, and biological impacts.

1. Significant and Unavoidable Impacts

The Draft EIR identified five significant and unavoidable impacts of the storage and maintenance facility related to agricultural resources and visual quality. Significant and unavoidable impacts are those that would result in a substantial or potentially substantial

²⁸ Arup, 2018. Additional Sites for Analysis for Storage and Maintenance Facility. April 30.

²⁹ Amount is escalated to construction mid-point.

adverse change in the environment, even with implementation of mitigation measures. The BART Board is required to prepare a Statement of Overriding Considerations if it adopts a project that has significant and unavoidable impacts. If the BART Board determines that benefits of the proposed action outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered acceptable.

The significant and unavoidable impacts pertain to the following two topics:

- Agricultural Resources – Impact AG-3 (Conflict with Zoning for Agricultural Use during Construction and result in conversion of agricultural land)
- Visual Quality – Impact VQ-3 (Substantially Degrade the Existing Visual Quality); VQ-4 (Have a Substantial Adverse Effect on a Scenic Vista); Impact VQ-5 (Substantially Damage Scenic Resources within State Scenic Highway); and VQ-6 (Create a New Source of Substantial Light and Glare)

The Draft EIR found that the other impacts of the storage and maintenance facility would not be significant or would be less than significant with implementation of mitigation measures.

2. Land Use and Agricultural Impacts

Several commenters stated that the storage and maintenance facility would be incompatible with the rural and agricultural uses and character of north Livermore. Other commenters stated that Measure D, passed by Alameda County voters, prohibits any development in north Livermore. For further detail regarding the impacts discussed below, please see Section 3.C, Land Use and Agricultural Resources, starting on page 461 of the Draft EIR.

a. Measure D and the East County Area Plan

Many commenters raised concerns that the storage and maintenance facility conflicted with the voter-approved Save Agriculture and Open Space Lands Initiative (Measure D), which established the current boundaries of the East County Area Plan Urban Growth Boundary (UGB) in November 2000. Measure D permitted uses outside the UGB that were deemed to be compatible with the rural character of unincorporated Alameda County. Furthermore, the storage and maintenance facility site is designated Large Parcel Agriculture by the Alameda County East County Area Plan.

b. Agricultural Conversion

The proposed tail tracks and storage and maintenance facility would be located on approximately 104 acres of unincorporated county land in the Agricultural (A) zoning district. As described on page 497 of the Draft EIR, California Government Code Sections

53090 and 53091 exempt BART from complying with local land use plans, policies, and ordinances, including local zoning. Furthermore, CEQA grants lead agencies broad discretion to develop their own standards of significance. Therefore, BART typically would not consider conflicts with existing zoning for agricultural use a significant impact under CEQA. In this case, however, BART acknowledges that a storage and maintenance facility would result in a conversion of a substantial amount of agriculturally zoned land, as described under Impact AG-3 in the Draft EIR, starting on page 509.

Mitigation Measure AG-1 (Provide Compensatory Farmland under Permanent Protection) requires BART to mitigate the loss of agricultural land by providing for permanent agricultural use at an off-site location at a 1 to 1 ratio, with a preference for mitigation property in eastern Alameda County. Nevertheless, this impact resulting from conversion of agricultural farmland is conservatively assumed to remain significant and unavoidable.

c. Operational Impacts to Agriculture and Grazing

The storage and maintenance facility would operate 24 hours, 7 days a week. The land surrounding the proposed storage and maintenance facility is primarily grazing land, with some agricultural production uses. BART operation would not impinge on these adjacent agricultural operations, and the Draft EIR did not identify any impacts on neighboring agricultural uses. Furthermore, large-scale industrial uses often are located next to agricultural uses, as both types of uses entail similar impacts and generally are not compatible with residential or commercial development.

As described in the Draft EIR, there would be significant and unavoidable impacts related to light and glare. This is due to the facility's location in a rural area (with few existing sources of illumination). Noise impacts related to the operation of the storage and maintenance facility are described on page 1012 of the Draft EIR for the Proposed Project and page 1017 for the DMU Alternative/EMU Option (Section 3.J, Noise and Vibration) and are further discussed below. In summary, noise impacts from the storage and maintenance facility were analyzed and determined to be less than significant based on the proximity to sensitive receptors (the closest receptor is a ranch house approximately 920 feet to the west). While the Proposed Project or DMU Alternative would introduce new noise related to project operations for the storage and maintenance facility, impacts to sensitive or regulated wildlife, botanical, or wetland resources would be less than significant and wildlife and cattle grazing would not be substantially affected by these less than significant noise levels.

3. Noise Impacts

Several commenters expressed concerns regarding noise generated by the storage and maintenance facility—including noise from construction of the tail tracks and storage and

maintenance facility, operational noise generated at the storage and maintenance facility, and operational noise generated from BART trains entering and exiting the storage and maintenance facility via the tail tracks.

The analysis in the Draft EIR uses the Federal Transit Administration's (FTA) noise and vibration criteria. For a full discussion on impacts and the methodology related to noise and vibration from the Proposed Project and Alternatives, please refer to Section 3.J, Noise and Vibration, starting on page 959 of the Draft EIR.

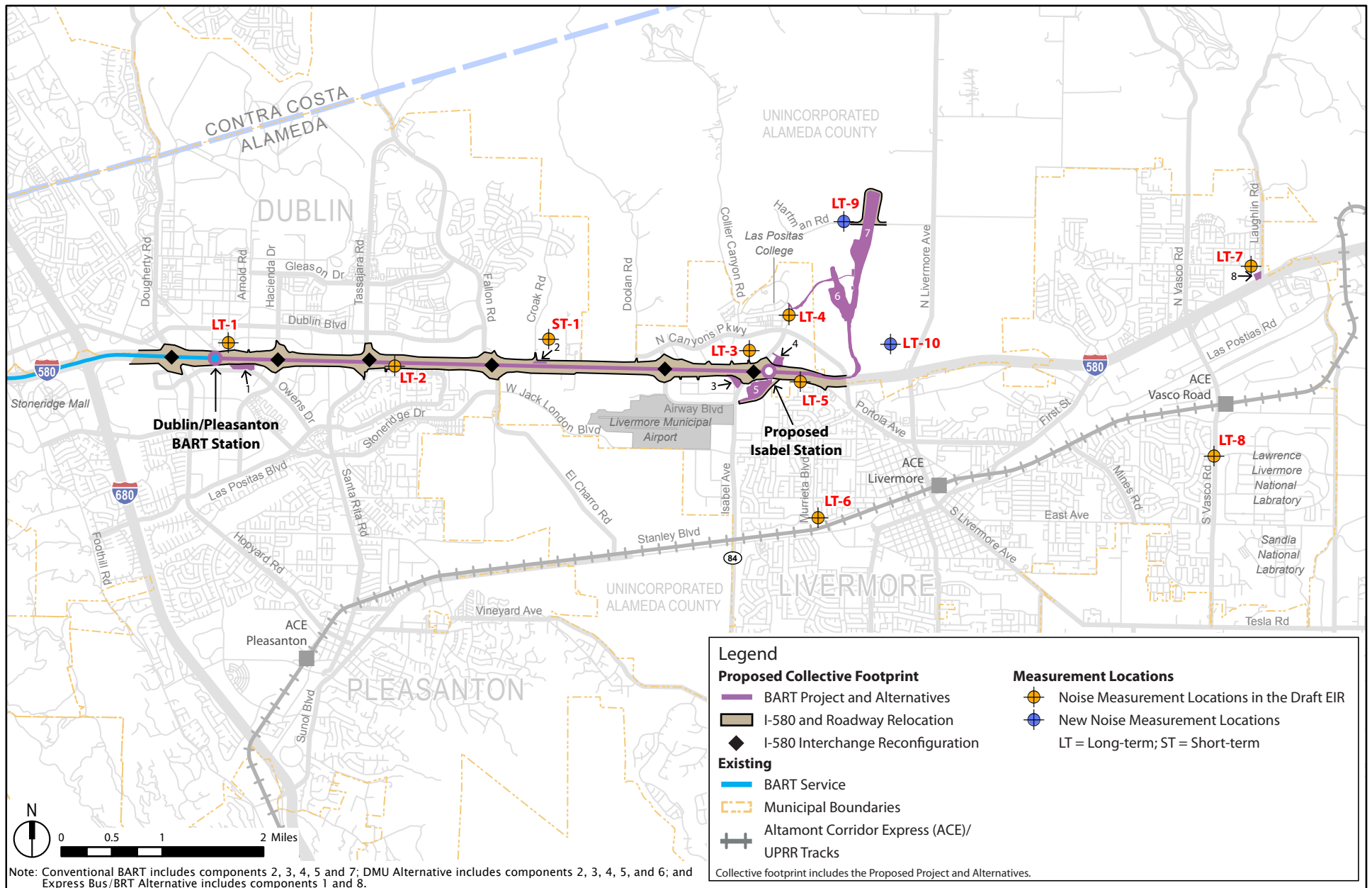
As noted in the Draft EIR, construction of the storage and maintenance facility would not result in significant noise or vibration impacts. The discussion below focuses on the 24-hour operations of the facility.

Noise and vibration impacts related to the train operations, including train operations between the proposed Isabel Station and the storage facility, and noise and vibration impacts related to the operation of the storage and maintenance facility, are described in Impacts NOI-3 and NOI-4 (Expose persons to or generate noise levels from transit facilities in excess of standards established by the FTA), starting on page 1007 of the Draft EIR. These impacts were found to be less than significant.

To further address public concerns conveyed by comments to the Draft EIR, a more refined noise analysis with respect to the storage and maintenance facility was conducted (see Chapter 5 for revised Draft EIR text, which incorporates the refined analysis). This detailed noise analysis was conducted to further assess the noise impacts that could result from a variety of activities at the storage and maintenance facility at a Hartman Road residence (LT-9) as well as at residences to the southeast of the storage and maintenance facility along the tail tracks (LT-10) (see Figure 3-4). This refined analysis considered noise of train operations within the yard, occasional train horn noise, operation of a high-railer,³⁰ and car-coupling activities based on sound levels for these activities. Additionally, this refined analysis considered noise from stationary activities such as car washing and the use of tools within the maintenance building.

Predicted noise levels assuming simultaneous operation of storage and maintenance facility activities were calculated in terms of the 24-hour day-night average noise level (L_{dn}) metric. In addition, noise levels were also predicted in terms of the nighttime hourly equivalent A-weighted noise level (L_{eq}) metric, which were then compared to the FTA's nighttime noise criteria applicable to the existing nighttime hourly noise levels monitored

³⁰ A high-railer is a truck or other maintenance vehicle fitted with railroad wheels in addition to tires that allow it to travel on railroad tracks as well as roads.



Source: Arup, 2017.

at each of the nearest two receptors to the storage and maintenance facility (LT-9 and LT-10). Noise levels were predicted assuming simultaneous operation of activities in terms of the nighttime hourly L_{eq} metric.

Three new tables are added to Chapter 3.J, Noise and Vibration, of the Draft EIR to show the results of this new analysis, as follows. As shown in Tables 3.J-19.A, 3.J-19.B, and 3.J-19.C, predicted noise from storage and maintenance facility operations and trains traveling along the tail tracks would be below the applicable FTA criteria at both receptors—in terms of both the L_{dn} noise metric and nighttime L_{eq} noise metric. Therefore, the noise impacts from operations of the storage and maintenance facility would be less than significant. Furthermore, perimeter walls or building enclosures could further reduce these predicted noise levels. This additional analysis further refines the analysis presented in the Draft EIR, but does not represent new significant impacts or more severe impacts.

TABLE 3.J-19.A CONVENTIONAL BART PROJECT – PREDICTED NIGHTTIME NOISE LEVELS FROM BART TRAINS ON TAIL TRACKS IN 2025

Monitoring Point ID	Sensitive Receptor in Study Area	Existing Nighttime Noise Level ^a (dBA L_{eq})	Threshold for Acceptable Noise Contribution (L_{eq})	Noise Level Generated by Proposed Project at Receptor (L_{eq})	Noise at Sensitive Receptors Exceeding Threshold?
LT-10	Rural residential receptor: 1,264 feet east of tail tracks	47	<53	43	No

Note:

^a Existing noise level is an average of the 5 nighttime hours with the lowest monitored L_{eq} values. Existing noise measurements were taken at LT-10 on January 2 and 3, 2018.

dBA = A-weighted decibels

LT-9 is not included in this table because it is about 1 mile north of the tail tracks, which do not run perpendicular to this receptor, and is separated from the terminus of the tail tracks by the storage and maintenance facility. Therefore, any noise levels generated by the tail tracks would be imperceptible at LT-9 compared to the noise from the storage and maintenance facility, which is assessed in Table 3.J-19.B and 3.J-19.C.

TABLE 3.J-19.B CONVENTIONAL BART PROJECT – PREDICTED DAY-NIGHT NOISE LEVELS FROM OPERATIONS OF THE STORAGE AND MAINTENANCE FACILITY

Monitoring Point ID	Sensitive Receptor in Study Area	Existing Noise Level (dBA L _{dn})	Threshold for Acceptable Noise Contribution (L _{dn}) ^a	Noise Level Generated by Proposed Project at Receptor (L _{dn})	Noise at Sensitive Receptors Exceeding Threshold?
LT-9	Rural residential receptor: 920 feet west of the storage and maintenance facility	53	<55	45	No
LT-10	Rural residential receptor: 3,010 feet southeast of storage and maintenance facility	56	<56	34	No

Notes:

^a Existing noise level is an average of the 5 nighttime hours with the lowest monitored L_{eq} values. Existing noise measurements were taken at LT-9 on January 22 and 23, 2018 and at LT-10 on January 2 and 3, 2018. dBA = A-weighted decibels

TABLE 3.J-19.C CONVENTIONAL BART PROJECT – PREDICTED NIGHTTIME NOISE LEVELS FROM OPERATIONS OF THE STORAGE AND MAINTENANCE FACILITY

Monitoring Point ID	Sensitive Receptor in Study Area	Existing Nighttime Noise Level ^a (dBA L _{eq})	Threshold for Acceptable Noise Contribution (L _{eq})	Noise Level Generated by Proposed Project at Receptor (L _{eq})	Noise at Sensitive Receptors Exceeding Threshold?
LT-9	Rural residential receptor: 920 feet west of alignment of storage and maintenance facility	32	<42	40	No
LT-10	Rural residential receptor: 3,010 feet southeast of storage and maintenance facility	47	<53	29	No

Notes:

^a Existing noise level is an average of the 5 nighttime hours with the lowest monitored L_{eq} values. Existing noise measurements were taken at LT-9 on January 22 and 23, 2018 and at LT-10 on January 2 and 3, 2018. dBA = A-weighted decibels

4. Biological Resources Impacts

Several commenters expressed concerns regarding the impact of the storage and maintenance facility on biological resources in the area, particularly to sensitive species in the area, and to the adequacy of biological surveys.

For a full discussion on impacts and the methodology related to biological resources from the Proposed Project and Alternatives, please refer to Section 3.I, Biological Resources, starting on page 817 of the Draft EIR.

a. Biological Surveys

The Draft EIR biological resources setting and impact analysis are based on the best available scientific data; the East Alameda County Conservation Strategy habitat and species modeling; and an analysis of aerial photos by plant, wildlife, and wetland specialists. All accessible portions of the Proposed Project have been fully surveyed for biological resources using California Department of Fish and Wildlife and United States Fish and Wildlife Service standards. However, as described in the Draft EIR, biological surveys could not be performed for the proposed storage and maintenance facility location due to lack of access to private property.

Mitigation measures in Section 3.I, Biological Resources, of the Draft EIR require that focused field surveys be conducted in areas of the footprint for the adopted project that have not been surveyed, and that the final project design avoid and minimize impacts on identified rare plants and special status species to the extent feasible. Surveys would be conducted following project adoption and prior to final design.

b. Construction Impacts to Biological Resources

The area proposed for the storage and maintenance facility is likely to have occurrences of western burrowing owl, California red-legged frog, California tiger salamander, and San Joaquin kit fox. However, impacts from ground-disturbing activities associated with construction of the storage and maintenance facility would be less than significant with the implementation of mitigation measures in the Draft EIR, as described on pages 896, 897, 898, and 903. Most of these mitigation measures entail additional surveying before construction activities, training of construction workers to identify these species, and compensatory measures for loss of habitat. With implementation of mitigation measures described in the Draft EIR, construction impacts on biological resources were determined to be less than significant.

c. Operational Impacts to Biological Resources

Biological resources impacts related to the operation of the storage and maintenance facility are discussed in Impact BIO-21, starting on page 954 on the Draft EIR.

Operational impacts associated with the storage and maintenance facility would not result in direct or indirect impacts to biological resources. Maintenance activities and train operations would not be expected to influence the behavior of smaller animals such as amphibians and small mammals. BART activities, which would be a change from the existing conditions that have little or no human activity in the area, would be detectable to larger, mobile wildlife such as grassland birds, raccoon, gray fox, coyote, deer, and similar species. However, these species are not considered sensitive or endangered species, and this would not be considered a significant impact under CEQA. While some species, possibly including deer, could avoid the edge of facilities during periods of active train movement, it is anticipated that these wildlife species would continue using the grasslands and open space around the tail tracks and fenced storage and maintenance facility, as they would become habituated to these operations.

5. Visual Quality Impacts

Several commenters expressed concerns regarding the visual impacts of the storage and maintenance facility, including compatibility with the surrounding visual character of north Livermore and new nighttime lighting.

For a full discussion on impacts related to visual quality from the Proposed Project and Alternatives, please refer to Section 3.E, Visual Quality, starting on page 743 of the Draft EIR.

a. Construction Impacts to Visual Quality

Construction of the storage and maintenance facility would introduce views of construction equipment and crews, unfinished structures, and construction-related and safety signs along the project corridor. These impacts would be localized and short-term, lasting intermittently during the actual phased periods of construction at the storage and maintenance facility. These impacts would be reduced to a less-than-significant level with implementation of Mitigation Measure VQ-1.A (Visually Screen Staging Areas) and Mitigation Measure VQ-1.B (Minimize Light Spillover During Construction).

b. Visual Character and Obstruction of Views

The tunnel and tail tracks leading to the storage and maintenance facility would be visible and conspicuous to drivers and passengers traveling along I-580, even though these project elements would only be visible to passing drivers and passengers for a brief

period of time. For these reasons, the tail tracks and tunnel are considered to represent a significant man-made intrusion into an otherwise natural landscape. Furthermore, the tail tracks and tunnel could also be visible to users at Vista Meadows Park, which is located on a hill south of I-580. Therefore, this impact is conservatively identified as high and significant and unavoidable. No mitigation measures are available to reduce the visual impact of the tail tracks and tunnel as seen from I-580.

The storage and maintenance facility would be visible from North Livermore Avenue, Hartman Road, and Hartford Avenue. The storage and maintenance facility would introduce transportation-related elements that would contrast with the rural character of this area. This impact would be reduced with implementation of Mitigation Measure VQ-3.C (Screen Storage and Maintenance Facility), but is conservatively assumed to remain significant and unavoidable because of the large size of the storage and maintenance facility and the extended duration of time it would be visible to drivers along North Livermore Avenue.

Furthermore, the storage and maintenance facility would relocate and directly abut a portion of Hartman Road, obstructing views from this scenic route. No feasible mitigation measures are available to reduce this significant and unavoidable impact.

c. Operational Lighting Impacts

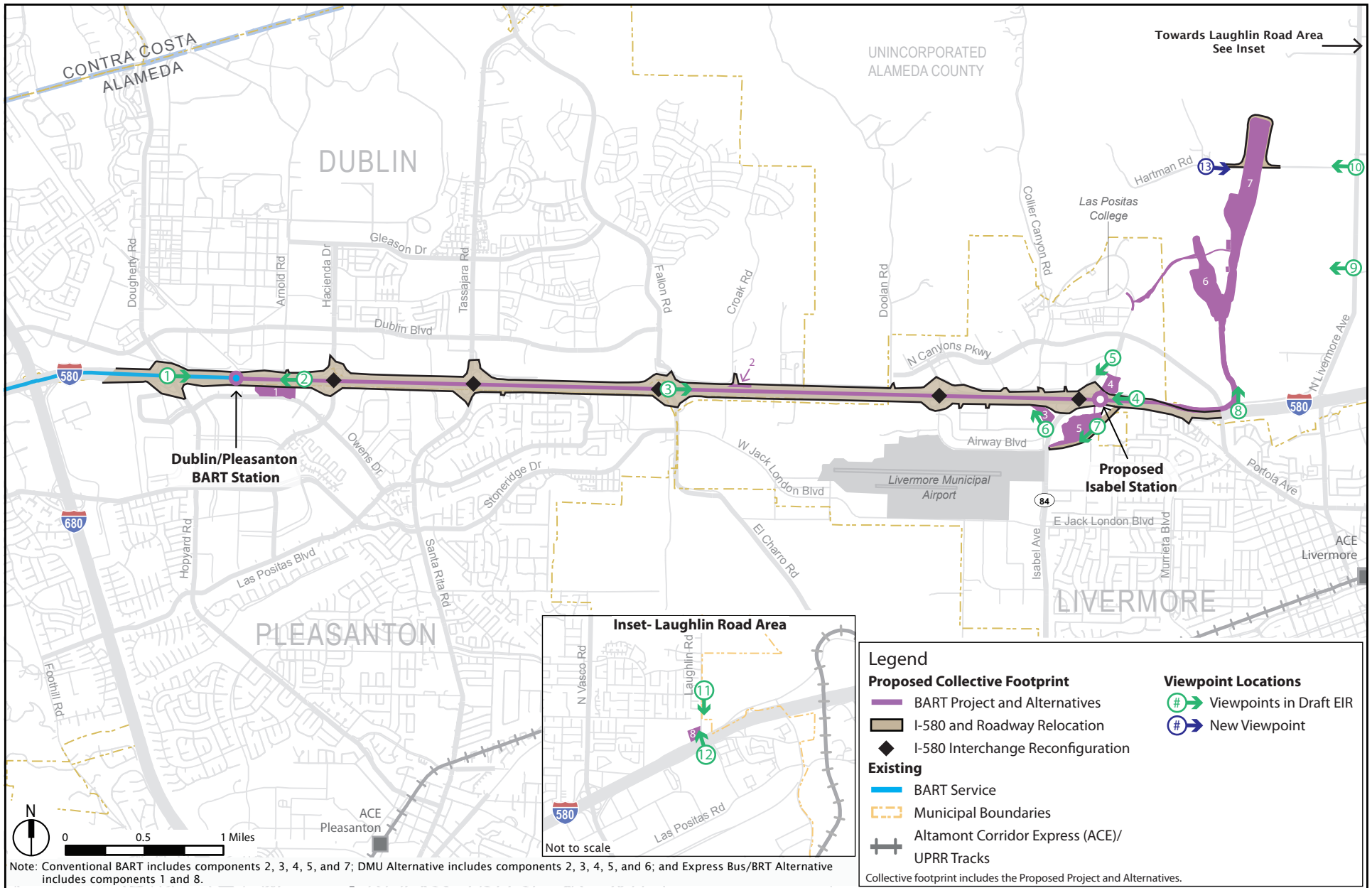
Lighting would be installed at the storage and maintenance facility, which would be located in an open grassland area with few other proximate sources of light. Lighting along the BART mainline track and tail tracks would be minimal and would not contribute to a significant or potentially significant impact from new sources of light and glare.

BART would implement Mitigation Measure VQ-6, which requires lighting fixtures at BART facilities to be designed to minimize spillover into adjacent areas and require any night lighting to be focused downward, shielded, and recessed within fixtures so as not to introduce new light or glare. Even with implementation of this mitigation measure, the impact pertaining to light and glare is conservatively assumed to remain significant and unavoidable because the storage and maintenance facility would be in a rural area with few existing sources of illumination where any lighting could be noticeable.

d. Additional Analysis

BART has completed additional photo-simulations for the storage and maintenance facility, subsequent to publication of the Draft EIR, to address commenters' concerns regarding the visual impacts of the facility.

A new photo-simulation was prepared for the existing viewpoint #10 (as shown in Figure 3-5), looking west from the intersection of North Livermore Avenue and Hartman



Source: Arup, 2017.

Figure 3-5
Master Responses
Viewpoint Locations

Road. The prior photo-simulation in the Draft EIR portrays the impact on visual quality from the proposed storage and maintenance facility in the daytime that was described in Impact VQ-3 (Substantially Degrade the Existing Visual Quality). The new photo-simulation shows a nighttime view of the storage and maintenance facility and lighting associated with the facility, which is described in Impact VQ-6 (Create a New Source of Substantial Light or Glare).

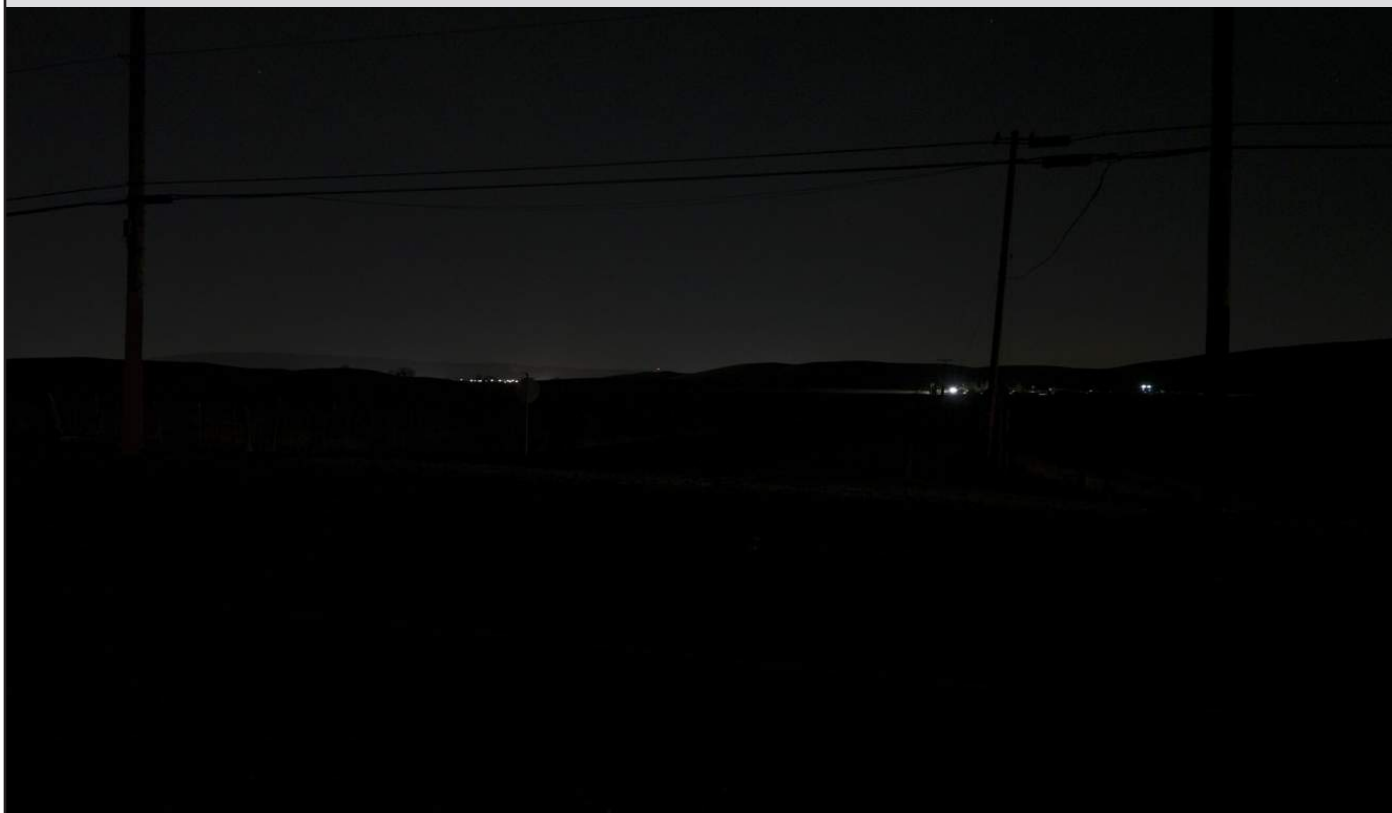
The Proposed Project would entail the acquisition and displacement of several residences on Hartman Road, as described in Section 3.D, Population and Housing, of the Draft EIR.

As shown in Figure 3-6 (under Master Response 10), the existing bright lights emanating from those residences and seen in the center right of the Existing Conditions portion of the figure would be eliminated. However, the Proposed Project would entail the installation of approximately 50-foot-tall poles, spaced approximately 200 feet apart, which would introduce a series of new lights. As described on page 629 of the Draft EIR, these lights would have reduced spillover outside of BART property due to implementation of Mitigation Measure VQ-6 (Design and Install Lighting Fixtures to Reduce Spillover). The Draft EIR conservatively identifies the nighttime impact from the storage and maintenance facility as significant and unavoidable (Impact VQ-6). The new photo-simulation further clarifies but does not change the magnitude of this impact previously described in the Draft EIR.

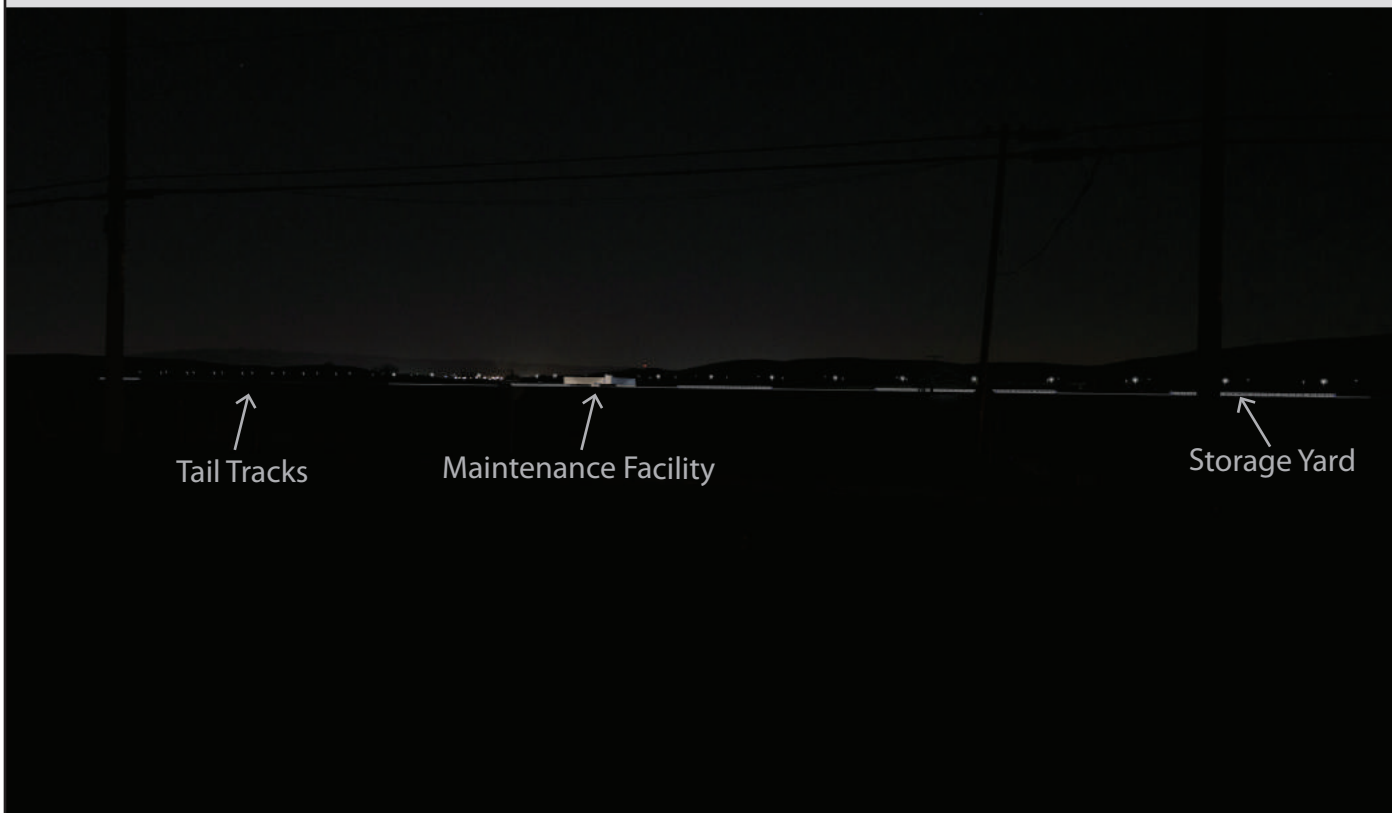
A new photo-simulation was prepared for a new viewpoint #13 (see Figure 3-5), looking east from the western end of Hartman Road. As shown in Figure 3-7, the storage and maintenance facility is greater in scale than the much smaller farm houses, and it is a transportation-related rather than an agricultural structure.

On page 602, the Draft EIR states that the storage and maintenance facility would be visible from Hartman Road—a proposed scenic route—and would significantly alter the undeveloped, rural character of the area by introducing transportation-related elements. This impact is identified as significant and unavoidable (Impact VQ-3). This new photo-simulation further clarifies but does not change the magnitude of this impact, which was previously described in the Draft EIR.

Existing Conditions (7:20 PM on February 2, 2018)



Conventional BART Project



Viewpoint 10: West along Hartman Road at nighttime

Source: Urban Advantage, 2018.

Existing Conditions



Conventional BART Project



Viewpoint 13: East from western end of Hartman Road

Source: Urban Advantage, 2018.

H. MASTER RESPONSE 8: EFFECTS OF THE LIVERMORE EXTENSION ON THE BART SYSTEM

A number of commenters were concerned that the additional passengers attracted by a BART extension to Isabel Avenue would degrade the riders' experience or negatively affect BART's core system. This master response describes the effects that a Livermore extension would have on BART's core system, including passenger loads, parking, and availability of funding for other BART improvements.

1. Passenger Load

The Draft EIR analysis assumed a BART rail operation plan that addressed (1) increases in passenger demand by increasing the number of trains per hour from four to five³¹; (2) during peak hours, maximizing the number of cars in each Blue Line train (Daly City to Isabel Avenue) to 10 cars; and (3) adding two peak-period, peak-direction trains to minimize in-vehicle passenger crowding, especially at the stations where trains are the most crowded (e.g., Lake Merritt, West Oakland, and Embarcadero)³².

Future passenger loads for the Proposed Project and Build Alternatives are discussed starting on page 296 of the Draft EIR. As illustrated in Table 3.B-25 on page 297 of the Draft EIR, systemwide peak hour passenger loads in 2040 would remain the same or would decrease slightly from No Project Conditions for the Proposed Project, and systemwide passenger loads would also decrease slightly for the DMU Alternative, Express Bus/BRT Alternative, and Enhanced Bus Alternative. On the Blue Line, the Proposed Project would generate modest increases in passenger loads at some stations during peak hours. Tables 3-1 and 3-2 below illustrate the increase in passenger loads on trains arriving at each station on the Blue Line in 2040, in the peak hour and peak direction (westbound in the AM and eastbound in the PM, respectively). This modest increase for the Proposed Project and decrease for the other three alternatives is due to the increased number of BART cars operating on the Blue Line in 2040, which would effectively reduce the number of passengers per car.

Peak hour loads in 2025 would increase somewhat at stations closest to the proposed Livermore extension, with smaller increases in crowding as trains travel farther from Isabel Station (see Response C4-3 for more information regarding year 2025). Peak hour loads in 2040 would follow a similar pattern, with increased levels of crowding closest to

³¹ BART plans to implement 12-minute headways (compared to the current 15-minute headways) sometime after 2025.

³² During the AM peak period, these two trains provide three inbound runs and one outbound run. One of the three inbound peak period runs would be during the peak hour. The two trains would provide the same service in the opposite direction in PM peak period.

the proposed Isabel Station. At San Leandro Station and points farther west, levels of crowding would remain similar to No Project Conditions. The analysis predicted that passenger loads at the Dublin/Pleasanton Station in 2025 and 2040 would be such that most passengers could find a seat, even under the Proposed Project Cumulative Conditions in the AM peak direction.

TABLE 3-1 2040 AM PEAK HOUR WESTBOUND ARRIVING LOADS AT BLUE LINE BART STATIONS

Blue Line Station	No Project		Conventional BART Project (Project Conditions)		Conventional BART Project (Cumulative Conditions)	
	Total Peak Hour Passenger Load	Average Passengers per Car	Total Peak Hour Passenger Load	Average Passengers per Car	Total Peak Hour Passenger Load	Average Passengers per Car
Isabel (proposed)	--	--	--	--	--	--
Dublin/Pleasanton*	--	--	1,775	35	1,691	34
West Dublin	2,492	50	3,625	60	3,824	64
Castro Valley	3,019	60	4,173	70	4,383	73
Bay Fair	4,634	93	5,757	96	5,967	99
San Leandro	4,082	82	4,948	82	5,130	85
Coliseum	4,496	90	5,342	89	5,523	92
Fruitvale	4,736	95	5,532	92	5,710	95
Lake Merritt	5,214	104	5,993	100	6,169	103
West Oakland	5,363	107	6,078	101	6,253	104
Embarcadero	5,620	112	6,326	105	6,502	108
Montgomery	3,371	67	3,782	63	3,862	64
Powell	1,846	37	2,117	35	2,155	36
Civic Center	1,368	27	1,552	26	1,578	26
16th Street	636	13	702	12	701	12
24th Street	496	10	546	9	545	9
Glen Park	429	9	473	8	472	8
Balboa Park	381	8	421	7	420	7
Daly City	140	3	151	3	151	3

Note: -- No Information/Not Applicable

* 5 trains/50 cars arrive at Dublin/Pleasanton Station in the AM peak hour. An additional peak hour, peak direction (westbound) train leaves from Dublin/Pleasanton Station during the AM Peak hour and serves the rest of the Blue Line.

TABLE 3-2 2040 PM PEAK HOUR EASTBOUND ARRIVING LOADS AT BLUE LINE BART STATIONS

Blue Line Station	No Project		Conventional BART Project (Project Conditions)		Conventional BART Project (Cumulative Conditions)	
	Total Peak Hour Passenger Load	Average Passengers per Car	Total Peak Hour Passenger Load	Average Passengers per Car	Total Peak Hour Passenger Load	Average Passengers per Car
Daly City	--	--	--	--	--	--
Balboa Park	166	3	179	3	178	3
Glen Park	417	8	460	8	459	8
24th Street	510	10	557	9	555	9
16th Street	627	13	681	11	679	11
Civic Center	824	16	895	15	894	15
Powell	1,633	33	1,833	31	1,859	31
Montgomery	2,091	42	2,386	40	2,422	40
Embarcadero	3,516	70	3,980	66	4,047	67
West Oakland	5,745	115	6,546	109	6,697	112
Lake Merritt	5,474	109	6,285	105	6,436	107
Fruitvale	5,257	105	6,140	102	6,290	105
Coliseum	4,739	95	5,641	94	5,791	97
San Leandro	4,346	87	5,298	88	5,453	91
Bay Fair	3,949	79	4,923	82	5,078	85
Castro Valley	4,414	88	5,684	95	5,860	98
West Dublin	2,870	57	4,173	70	4,350	72
Dublin/Pleasanton	2,258	45	3,534	59	3,697	62
Isabel (Proposed)*	--	--	1,858	37	1,770	35

Note: -- No Information/Not Applicable

2. Parking

Neither the Proposed Project nor any of the Build Alternatives would reduce the number of existing BART parking spaces at the Dublin/Pleasanton Station. Existing station parking, including for the Dublin/Pleasanton Station, is described starting on page 299 of the Draft EIR. Please see Table 3.B-28 (BART Parking Facilities, Existing) on page 300 and

Table 3.B-29 (Parking Demand at Existing and Proposed BART Parking Facilities) on page 301 of the Draft EIR.

The Proposed Project and DMU Alternative/EMU Option provide enough parking supply at the Isabel Station to meet the parking demand projected for the station, as well as to absorb a substantial portion of the unmet parking demand originating from areas relatively close to the Dublin/Pleasanton Station. The Dublin/Pleasanton Station loses boardings under the Proposed Project and DMU Alternative due to a reduction in people accessing the station by bus, as major connecting bus services are routed to connect at the Isabel Station instead of the Dublin/Pleasanton Station under those alternatives. The amount of people accessing the Dublin/Pleasanton Station by car or by foot is forecast to remain relatively similar to existing conditions. Although some passengers who currently park at the Dublin/Pleasanton Station would park at the new Isabel Station instead, those freed-up parking spaces would be filled due to unmet parking demand, and parking at the Dublin/Pleasanton would continue to be at capacity. In addition, please see Master Response 9 for additional information regarding the Dublin/Pleasanton Station Parking Expansion Project.

Boardings at the West Dublin/Pleasanton Station would remain largely constant across all alternatives; the station is parking-constrained and no other station access changes are proposed, so station access there would remain relatively unchanged.

3. BART Systemwide Funding

If approved, funding for the BART to Livermore Extension Project would be independent of any other planned projects intended to help the system meet the state of good repair. Construction of the extension is not expected to affect ongoing efforts to maintain and improve the system. Funds are awarded independently by funding agencies on the merits of each individual project. Overall, transportation funding sources are limited and any one agency may not receive multiple large awards for major infrastructure projects in a short period of time. However, there is no mechanism by which funds not utilized for the BART to Livermore Extension could be easily reprogrammed for other BART projects or any other specific projects.

I. MASTER RESPONSE 9: DUBLIN-PLEASANTON STATION PARKING EXPANSION

The Dublin/Pleasanton Station Parking Expansion Project is included as a reasonably foreseeable project in the cumulative analysis of the Draft EIR. This master response describes the changes that have occurred to that project since the publication of the Draft EIR.

1. Project Analyzed in the Draft EIR

The Dublin/Pleasanton Station Parking Expansion Project (referred to herein as the BART garage expansion project) was included as a reasonably foreseeable project in the cumulative analysis of the Draft EIR. The BART garage expansion project proposed expanding the existing BART parking garage on Altamirano Avenue north of the Dublin/Pleasanton Station, resulting in a 540-space net increase in parking.

The Dublin/Pleasanton Station currently has 2,890 parking spaces in a combination of surface parking lots and a six-level, 1,512-space garage. As described in the Draft EIR on pages 226-227 (Section 3.A, Introduction to Environmental Analysis), the BART garage project proposed to expand the Dublin/Pleasanton garage with 655 additional parking spaces. Because an existing 118-space surface parking lot south of the Dublin/Pleasanton garage would be removed to make way for the garage expansion, the net increase in parking would be approximately 540 spaces.

At the February 9, 2017 BART Board meeting, the Board considered but did not adopt the BART garage expansion project, and unanimously directed BART staff to provide options for a more cost-effective delivery of 540 net new parking spaces at the Dublin/Pleasanton Station. In response to the BART Board's direction, staff developed an alternative proposal, known as the "hybrid parking strategy." The hybrid parking strategy was designed to provide the same number of net new spaces (540) as previously considered without building a conventional parking garage. The hybrid strategy provided 540 additional spaces through a combination of automated stacked parking, attendant-assisted parking, restriping of existing BART lots, and utilizing shared parking with nearby businesses. BART staff worked on variations of the hybrid strategy through spring 2017. The BART Board considered the hybrid strategy again on July 27, 2017 and directed BART staff to continue work on the hybrid strategy.

Independently of BART, in January 2018, Alameda County and the Livermore-Amador Valley Transportation Authority (LAVTA) applied for funding to construct a 398-space parking garage on County-owned property adjacent to the Dublin/Pleasanton garage. In April 2018, LAVTA was awarded \$20.5 million for this project.

The BART Board considered the hybrid strategy again on February 22, 2018 and was briefed on the County's independent garage proposal. The BART Board ultimately chose not to pursue the hybrid strategy. BART will provide an additional 55 spaces by reconfiguring and restriping portions of its existing parking.

2. Cumulative Analysis in Draft EIR

The Draft EIR (released July 31, 2017) acknowledged the uncertainty regarding the ultimate decision of the BART Board by stating that BART was also considering an alternative to the BART garage project, and specifically referred to the hybrid parking strategy. Nevertheless, it was the addition of 540 net new spaces on a site immediately south of the existing Dublin/Pleasanton garage that was included in the cumulative analysis. This inclusion was primarily reflected in the analysis of intersection impacts in Section 3.B, Transportation, with smaller effects on quantitative sections that rely on traffic volumes as inputs (Section 3.J, Noise and Vibration; Section 3.K, Air Quality; Section 3.L, Greenhouse Gas Emissions; and Section 3.M, Energy).

The cumulative analysis in the Draft EIR analyzed up to 540 net new spaces at the Dublin/Pleasanton parking garage. Spaces currently proposed around the Dublin/Pleasanton Station area include the 398-space Alameda County-proposed garage and the reconfiguration/ restriping of existing BART lots to provide an additional 55 parking spaces—a total of 453 spaces. The Alameda County garage would be constructed close to the originally considered 540-space BART garage project. Therefore, the vehicle trips associated with the Alameda County garage would be fewer than, and in the same area as, the trips associated with the BART garage project analyzed in the Draft EIR. As for the restriped BART parking spaces, the net new trips resulting from adding only 55 spaces within existing BART parking areas would have a *de minimis* impact on intersection operations and would not cause the Proposed Project to have a cumulative impact on transportation and circulation.

J. MASTER RESPONSE 10: ASSEMBLY BILL 758 AND THE TRI-VALLEY-SAN JOAQUIN VALLEY REGIONAL RAIL AUTHORITY

This master response provides background on the current plan of the Tri-Valley-San Joaquin Valley Regional Rail Authority (TVSJVRRA) and its role related to a potential BART extension to Livermore.

TVSJVRRA was established by AB 758 and adopted by the California Legislature in 2017, for the purposes of planning, developing, and delivering cost-effective and responsive transit connectivity between the BART system and the Altamont Corridor Express (ACE) commuter rail service in the Tri-Valley Area. The bill specifies the powers, duties, and responsibilities of the TVSJVRRA, and requires the TVSJVRRA to provide a project feasibility report to the public by July 1, 2019 on its plans for the development and implementation of transit connectivity. The TVSJVRRA's governing board comprises 15 representatives, including but not limited to the City of Livermore, ACE, and BART, and is currently conducting public meetings on a monthly basis.

1. Tri-Valley-San Joaquin Valley Regional Rail Authority Project Concept

As of the publication of this Final EIR, the TVSJVRRRA has a project concept that would connect the Northern San Joaquin County communities to the Tri-Valley Area and BART through EMU/DMU rail service through the Altamont Pass. This rail line would extend initially from West Tracy through the Altamont Pass, then connect with BART at either the existing Dublin/Pleasanton Station, the proposed terminus station at Isabel Avenue, or a new station at Greenville Road in the Tri-Valley; as well as to ACE near Greenville Road. More information on the TVSJVRRRA's project concept can be found at: <https://www.acetobart.org/project-concept>.

2. BART and the Tri-Valley-San Joaquin Valley Regional Rail Authority

BART acknowledges the formation of the TVSJVRRRA and the requirements of AB 758. As provided in Sections 4 and 5 of AB 758, nothing in the bill is intended to disrupt or interrupt the environmental review process underway at BART or to infringe upon BART's process for planning, development, and delivery of a BART extension within the I-580 corridor freeway alignment to the vicinity of the I-580/Isabel Avenue interchange, provided that the BART Board adopts a preferred alternative for a BART extension within the I-580 corridor freeway alignment to the vicinity of the I-580/Isabel Avenue interchange by June 30, 2018. AB 758 also requires the unencumbered balance of local funds programmed for completion of the BART to Livermore extension, or that have otherwise been identified for the connectivity, to be transferred to the TVSJVRRRA. The \$398 million from the largest funding source programmed to date for the design and construction of the BART to Livermore Extension Project, ACTC Measure BB, have been specifically excluded from the transfer to the TVSJVRRRA through the language in AB 758.

K. MASTER RESPONSE 11: ACE AND THE ACEFORWARD PROGRAM

This master response provides background on the ACE rail service; describes the ACEforward Program, its EIR, and its eventual rescission; and discusses ACE's current and potential future integration with BART service.

1. Existing ACE Service

ACE provides service within an 86-mile corridor between Stockton and northern San Joaquin County, the Tri-Valley Area, and San Jose, as described in the Draft EIR on page 54 (Chapter 1, Introduction). ACE is operated by the San Joaquin Regional Rail Commission (SJRRC). Running primarily on tracks owned by the Union Pacific Railroad, ACE currently operates four weekday peak period commuter rail trains using diesel-powered locomotives. In the Tri-Valley Area, ACE runs generally south of the I-580 corridor and has

three stations: Pleasanton, Downtown Livermore, and Vasco Road in Livermore, as shown in Figure 3-8. The Downtown Livermore ACE Station functions as a regional transit hub and connects to eight LAVTA bus routes, as well as to Amtrak California intercity bus service. There are no direct connections between the ACE system and BART, although the BART tracks cross over the ACE tracks near Shinn Street in Fremont, approximately 2.4 miles south of BART's Union City Station and 0.75 mile north of the Fremont BART Station. Currently, ACE riders from northern San Joaquin County who wish to transfer from ACE to BART can do so by taking the Wheels Bus 53 from the ACE Pleasanton Station to the West Dublin/Pleasanton BART Station, a distance of approximately 5 miles.

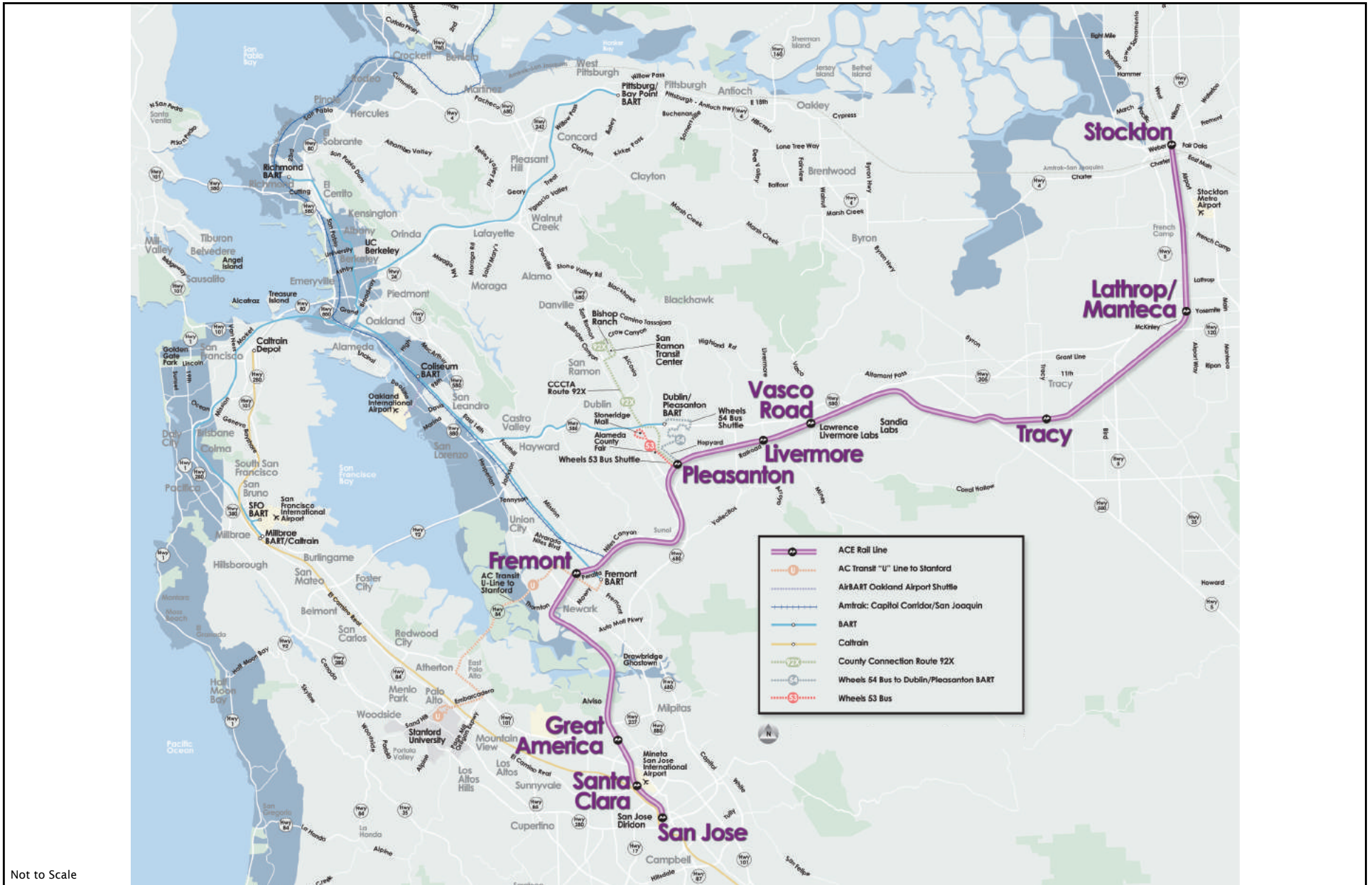
2. ACEforward Program

ACEforward was a phased rail infrastructure and service improvement plan proposed by SJRRC that aimed to provide a foundation for SJRRC's long-term vision of inter-city/commuter passenger rail services. ACEforward included plans to increase the number of ACE trains per day and extend ACE San Joaquin County service southeastward, initially to Modesto and later to Merced. The SJRRC issued a Draft EIR for ACEforward in April 2017. The ACEforward Draft EIR also evaluated 15 possible connections between BART and ACE at a programmatic level. The ACEforward program was described in the Draft EIR in Chapter 1, Introduction (pages 60–61) as well as Section 3.A, Introduction to Environmental Analysis (pages 230–231). ACE improvements (e.g., increased number of trains per day) were also incorporated into the Draft EIR's transportation and other analyses, where relevant.

Following the close of public comment on the ACEforward EIR, SJRCC determined that it would not continue with the project and rescinded the EIR, proposing a different project instead. SJRCC's Notice of Preparation of an EIR for an ACE Extension from Lathrop to Ceres/Merced, January 10, 2018, states that "the ACEforward project is not moving forward" and the "improvements envisioned in the ACEforward plan no longer represent the intention of the SJRRC for ACE." The candidate ACE-BART connections and related improvements identified in the ACEforward EIR are no longer considered reasonably foreseeable future projects. On April 13, 2018, ACE issued a Draft EIR for its Lathrop to Ceres/Merced extension.

3. Potential ACE Connections to BART

A direct rail-to-rail connection between ACE and BART is outside the scope of this project, which extends service to Isabel Avenue. However, BART acknowledges that ACE-to-BART connectivity was raised in numerous comments and the first project objective of the BART to Livermore Extension Project is to "provide a cost-effective intermodal link of the existing BART system to the inter-regional rail network". BART supports increased connectivity in the region, particularly with ACE. Though the Proposed Project would not provide a direct



Not to Scale

Source: ACE, 2017.

Figure 3 - 8
Master Responses
ACE System Map

BART-to-ACE rail connection, it would shorten the intervening distance, as the proposed Isabel Station would be less than 2 miles northwest of the Downtown Livermore ACE Station, compared to 3 miles from Dublin/Pleasanton Station to the Pleasanton ACE Station. The Proposed Project would also provide new and modified feeder bus routes connecting the new Isabel Station to the ACE stations in Downtown Livermore and Vasco Road.

Adopting the Proposed Project or a Build Alternative does not preclude a future extension to one of the two ACE stations in Livermore: Downtown Livermore and Vasco Road. Locating the terminus for this project at Isabel Avenue would preserve both options for a future extension further east, either continuing in the I-580 median or departing from the highway median and extending to Downtown Livermore. Such an extension would be the subject of a separate project-level evaluation in a future environmental document.

Please refer to Master Response 10 regarding the Tri-Valley-San Joaquin Valley Regional Rail Authority, which was established in October 13, 2017 for the purposes of developing connectivity between the BART system and ACE in the Tri-Valley Area.