B. REGIONAL AND LOCAL AGENCIES
October 16, 2017

Andrew Tang, Project Manager
BART to Livermore Extension Project
300 Lakeside Drive, 21st Floor
Oakland, CA 94612

Subj: Alameda County Community Development Agency Comments on the BART to Livermore Extension Project's Draft Environmental Impact Report (DEIR)

Dear Mr. Tang,

We appreciate the opportunity to comment on this critical phase of the BART to Livermore project. Alameda County staff has participated in the Technical Advisory Committees (TAC) for more than a decade, and we are pleased to reach this point in this long-awaited extension. Our Board of Supervisors has also been actively following this project, and you have received under separate cover a letter approved by the full Board at their October 12, 2017 meeting. Many of the comments in this letter relate to those contained in the Board’s letter, specifically in the area of land use and loss of agricultural land. The Board’s letter also highlights the lack of analysis of the full mobility needs in the I-580 corridor, inter-regional connectivity and specifically no consideration for a direct BART rail link to ACE in Livermore. We would reiterate all of those points at the staff level.

The potential benefits of expanded regional transit in the Tri-Valley are significant. Commuter options will be expanded and improved, with great potential for this extension to eventually connect with the Altamont Corridor Express (ACE) train, High Speed Rail, and new local bus connections. With the Transit Oriented Development (TOD) at the new Isabel BART Station being planned by the City of Livermore, this project is well positioned to help decrease future air quality and traffic impacts as the Tri-Valley region continues to grow.

The County’s support for a project such as BART to Livermore was demonstrated in the early 1990’s in the East County Area Plan (ECAP). It provides a number of supportive policies for a BART extension to Livermore. Policy 206 states that “The County shall encourage BART to extend service to the Livermore area by the year 2010. This could be facilitated by including a portion of the costs of the rail extension to the planned Livermore stations using funds to be collected from the proposed subregional transportation fee being developed by the Tri-Valley Council.” As implementation of this policy, Program 82 directs that “The County shall work with East County cities to designate high-density and high-intensity uses along major arterials and within walking distance of transit stops. The County shall work with cities to designate land near proposed BART stations for high density residential uses and personal services (e.g., child care).” There are also other policies in ECAP that support a system expansion, but the policy above is the most direct to this project.
Although there is strong support in our General Plan for extending BART into Livermore, we also want to emphasize concerns over the potential loss of agricultural and grazing lands in portions of Unincorporated Alameda County, both within and outside the Urban Growth Boundary (UGB). As identified in the DEIR, the proposed location of the Maintenance and Storage yard will cause significant, Unavoidable (SU) environmental impacts, and no mitigation short of choosing another location will decrease the impacts on these sensitive and regionally important agricultural resources. During the long planning process of developing the plans for this extension, a number of BART owned properties and other areas for the storage yard were examined, and, for a variety of reasons, were ruled out.

While our General Plan offers policy support for this project, we have also identified language in the Alameda County Zoning Ordinance that seems to prohibit this type of use in the Agriculture (A) Zone:

- Section 17.06.040 K: Public utility building or uses, excluding such uses as a business office, storage garage, repair shop or corporation yard.

We understand that by law BART is exempt from complying with local land use and zoning regulations. Although a BART extension was not likely contemplated when our Zoning Ordinance was adopted, we thought it important to highlight this language now to identify possible land use challenges.

Given the constraints of building a storage yard in the proposed location, we strongly urge the BART Board of Directors to re-examine the previously studied yard location options, to understand if any of those or other locations in the project area would meet the needs for car storage and maintenance as this project moves forward, and avoid locating the Maintenance and Storage yard facilities as currently proposed. If the BART Board will not consider relocation of these facilities, the County suggests that the DMU/EMU alternative option be considered. It requires far less land than the facilities needed to service conventional BART, and would preserve land for agricultural and related uses.

To address farmland conversion and conflicts with zoning for agricultural uses, Mitigation Measure AG-1 would provide compensatory farmland under permanent protection. The County suggests that BART collaborate with the Alameda County Resource Conservation District to identify offset lands that would meaningfully mitigate the loss of farmland.

Again, we appreciate the opportunity to comment at this time. Please do not hesitate to contact us if you have questions regarding these comments.

Sincerely,

Albert Lopez
Alameda County Planning Director
RESPONSE B1
Albert Lopez, Alameda County Community Development Agency

B1-1 Thank you for providing comments on the Draft EIR. Comments from the Alameda County Board of Supervisors letter are addressed in Responses to Comment letter B10. No response is necessary.

B1-2 Policy 206 noted by the commenter and other policies of the East County Area Plan that support a BART extension to Livermore are listed starting on page 487 of the Draft EIR, in Section 3.C, Land Use and Agricultural Resources.

In addition, Land Use Program 82, referenced in the comment, has been added on page 489 immediately following the description of Land Use Program 29, as follows:

- Land Use Program 82. The County shall work with East County cities to designate high-density and high-intensity uses along major arterials and within walking distance of transit stops. The County shall work with cities to designate land near proposed BART stations for high-density residential uses and personal services (e.g., child care).

B1-3 BART acknowledges Alameda County’s concerns regarding the proposed location for the storage and maintenance facility. As described on page 514 of the Draft EIR (Section 3.C, Land Use and Agricultural Resources) and mentioned by the commenter, the storage and maintenance facility would result in significant and unavoidable impacts related to agricultural resources (Impact AG-3: Conflict with Zoning for Agricultural Use during Construction). Please note that the Proposed Project and DMU Alternative have incorporated a mitigation measure that would provide compensatory farmland with permanent protection (Mitigation Measure AG-1). Nevertheless, even with mitigation, the loss of agricultural land is conservatively considered a significant and unavoidable impact.

As described on page 199 of the Draft EIR in Section 2.K, Alternatives Considered but Withdrawn, several other locations were considered for the storage and maintenance facility but were rejected due to infeasibility and inability to avoid significant environmental impacts. Please see Master Response 6 for further information regarding the proposed location of the storage and maintenance facility.

B1-4 As noted by the commenter and stated on page 461 of the Draft EIR, under California Government Code Sections 53090 and 53091, BART is exempt from complying with local land use plans, policies, and zoning ordinances.
Therefore, any potential land use or policy inconsistencies presented in the Draft EIR are for informational purposes only and are not considered significant impacts under CEQA. However, BART acknowledges that the Proposed Project and DMU Alternative/EMU Option would result in a conversion of a substantial amount of agriculturally zoned land, and under these unusual circumstances BART has elected to use “conflict with existing zoning for agricultural use” as a standard of significance (page 497 of the Draft EIR). As a result, loss of agricultural land was identified as a significant and unavoidable impact. See Impact AG-3 (Conflict with Zoning for Agricultural Use during Construction) on page 507 of the Draft EIR.

The location of the proposed storage and maintenance facility is in the County’s (A) Agricultural zoning district and is designated Large Parcel Agriculture by the Alameda County East County Area Plan. As described on page 47 of the East County Area Plan, uses permitted in the Large Parcel Agriculture designation include "public and quasi-public uses (...) utility corridors, and similar uses compatible with agriculture.” Other non-agricultural uses permitted in this designation include solid waste landfills, quarries, and windfarms. These non-agricultural uses permitted in the Large Parcel Agriculture designation have low potential to affect surrounding agriculture, as opposed to residential or commercial uses which are often incompatible with ongoing agricultural operations. The Draft EIR considered the storage and maintenance facility to be consistent with the agricultural zoning based on its status as a public use and its similarity to a utility.

BART acknowledges that the storage and maintenance facility use may not be consistent with Section 17.06.040 K of the Alameda County Zoning Ordinance, which allows public utility buildings and uses but excludes such uses as a storage garage, repair shop, or corporation yard. While a BART storage and maintenance facility use would fit within the definition of a public utility use, it could also fit under the definitions of "repair shop or corporation yard,” and thus may not be one of the conditionally permitted uses in the A District. Inconsistency with agricultural zoning is recognized as significant and unavoidable in Impact AG-3 and Impact AG-5(CU) of the Draft EIR. Mitigation Measure AG-1 provides compensatory agricultural land. In response to the comment, Section 3.C, Land Use and Agricultural Resources, of the Draft EIR has been revised in four locations as follows:

Page 508 of the Draft EIR is revised as follows:

While the tail tracks and storage and maintenance facility would be consistent with the types of uses conditionally allowed in the Agricultural
district zoning designation, as described in the Consistency with Applicable Local Plans and Land Use Policy subsection below. The tail tracks and storage and maintenance facility would cover approximately 104 acres of agriculturally zoned land.

Page 517 is revised as follows:

As described below, the Proposed Project and Alternatives would generally be consistent with applicable land use plans and policies and would fulfill or support the policies related to TOD, extension of BART, and agricultural land to varying degrees. However, the Proposed Project and DMU Alternative could conflict with East County Area Plan Land Use Policy 89 pertaining to rangeland, and Livermore General Plan Objective OSC-3.1, Policy 1, pertaining to farmland designated by the FMMP, as noted below. In addition, the storage and maintenance facility use, which is proposed under the Proposed Project and DMU Alternative, could conflict with uses anticipated in the Agricultural district as enumerated in Chapter 17.06 of the Alameda County Zoning Ordinance.

Page 520, third paragraph, is revised as follows:

While the proposed tail tracks and storage and maintenance facility are not standard uses described in most zoning regulations, they are part of the transportation infrastructure, and would be considered a public use similar to a public utility. While public utility buildings and uses are allowed per Chapter 17.06.40.K of the Alameda County Zoning Ordinance, the Zoning Ordinance specifically excludes storage garages, repair shops or corporation yards in the A district. The storage and maintenance facility could be considered a repair shop or corporation yard, although these terms are not specifically defined in the Alameda County Zoning Ordinance. The tail tracks and storage and maintenance facility would be consistent with the types of uses conditionally allowed in the Agricultural district zoning designation. Therefore, the storage and maintenance facility under the Proposed Project would not conflict with the County zoning designations.

Page 520, fifth paragraph, is revised as follows:

Similar to the Proposed Project, the DMU Alternative would be consistent with the zoning of the respective municipalities. As shown in Figure 3.C-8, the proposed tail tracks and storage and maintenance facility would be located on unincorporated county land zoned for agricultural uses [Agricultural (A) district]. This land mostly consists of open grasslands with...
intermittent cattle grazing. The only agricultural uses within the collective footprint are located at the far northwestern corner, in the construction staging area for the storage and maintenance facility. The tail tracks and storage and maintenance facility would be consistent with the types of uses conditionally allowed in the Agricultural district zoning designation. As noted above, a storage and maintenance facility could be considered a repair shop or corporation yard, both uses that are prohibited in the Agricultural district. Therefore, similar to the Proposed Project, the DMU Alternative would mostly be consistent with the zoning of the respective municipalities, although the storage and maintenance facility could conflict with the County agricultural zoning designations.

B1-5 The commenter’s preference for an alternative site for the Proposed Project’s storage and maintenance facility or, if another location is not adopted, preference for the DMU Alternative/EMU Option due to the smaller storage and maintenance facility, is noted. Please see Master Response 6 regarding the alternative locations studied for the storage and maintenance facilities and why those locations were rejected. The BART Board of Directors (BART Board) will consider the merits of the Proposed Project and Alternatives during the final hearing to adopt a project.

B1-6 Mitigation Measure AG-1 (Provide Compensatory Farmland under Permanent Protection), on page 506 of the Draft EIR (Section 3.C, Land Use and Agricultural Resources), provides the following standards by which off-site agricultural lands will be selected: (1) the land shall have similar agricultural value to the acreage lost; and (2) the preferred location shall be in Eastern Alameda County, although other locations are possible.

In response to the comment, the following text is added to Mitigation Measure AG-1 (Provide Compensatory Farmland under Permanent Protection) (third paragraph on page 506):

BART shall mitigate the loss of agricultural land, including Prime Farmland, Unique Farmland, and land zoned for agricultural use by providing for permanent agricultural use at an off-site location at a 1-to-1 ratio. The land shall have similar agricultural value to the acreage lost. BART will consult with the Alameda County Resource Conservation District to identify appropriate and available farmland to permanently protect. BART will coordinate with the City of Livermore and Alameda County to leverage other resources available from those agencies for open space preservation to enhance the value of the mitigation and benefits to North Livermore. The preferred location shall prioritize appropriate and available land near the land being removed from agricultural use, urban growth boundaries and/or
existing easements. The preferred location for the mitigation property shall be in Eastern Alameda County, although other locations are possible. The protection will be in perpetuity through agricultural land easements or other permanent protection.
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October 12, 2017

Mr. Andrew Tang, Project Manager
BART to Livermore Extension Project
San Francisco Bay Area Rapid Transit District
300 Lakeside Drive, 21st Floor
Oakland, CA 94612

Subject: BART to Livermore Draft Environmental Impact Report (DEIR)

Dear Mr. Tang,

The Alameda – San Joaquin Regional Rail Working Group met on October 11, 2017 and voted unanimously to submit comments on the BART to Livermore DEIR in support of the Assembly Bill (AB) 758 mandate to develop and deliver cost-effective and community responsive transit connectivity between BART and ACE in the Tri-Valley. These comments, as detailed in the attached report, urge BART to:

- Support the decision-making process of the Tri-Valley – San Joaquin Regional Rail Authority, as identified in AB758, and expeditiously advance the proposed BART extension within the context of inter-regional connectivity – consistent with the goals and objectives of this Authority when formed;
- Advance alternative design concepts that avoid significant right-of-way displacements and significant environmental impacts;
- Respond to the issues and concerns of local Working Group member jurisdictions: fully address environmental impacts and commit to implement mitigation measures to fully address them;
- Advance the BART Bay Fair Connector Project and an operating plan to accommodate a “one-seat-ride” to Southern Alameda County and the South Bay;
- Seek to significantly reduce project capital costs to improve the project cost-effectiveness and viability of the proposed BART to Livermore Extension Project; and
- Provide evidence that impacts of out-of-District BART expansion on core BART service in the Tri-Valley have been fully mitigated per the terms of the Comprehensive Agreement between the Valley Transit Authority (VTA) and BART.

On behalf of the Working Group, I ask for a full and thorough consideration of these comments.

Sincerely,

Scott Haggerty, Chair
Alameda – San Joaquin Regional Rail Working Group

Alameda – San Joaquin Regional Rail Working Group Members:

Chair: Scott Haggerty, Supervisor, Alameda County
Vice-Chair: Veronica Vargas, Mayor Pro Tem, City of Tracy
Bob Elliott, Supervisor, San Joaquin County
John Marchand, Mayor, City of Livermore
Bob Johnseen, Board Chair, SJRRC/ACE
Steven Spedowskii, Board Chair, LAVTA
Krisitin Connelly, CEO, East Bay Leadership Group

David Haubert, Mayor, City of Dublin
Jerry Thorne, Mayor, City of Pleasanton
John McPartland, Board Member, BART
Dale Kaye, CEO, Tri-Valley Innovation
Michael Ammann, CEO, San Joaquin Partnership
Alameda – San Joaquin Regional Rail Working Group  
Meeting of October 11, 2017  

STAFF REPORT

Item 6

BART to Livermore Draft Environmental Impact Report (DEIR)

Recommendation:

It is recommended that the Alameda – San Joaquin Regional Rail Working Group submit comments on the Bay Area Rapid Transit (BART) DEIR in support of the Assembly Bill (AB) 758 mandate to develop and deliver cost-effective and community responsive transit connectivity between BART and ACE in the Tri-Valley, with a key focus on urging BART to:

- Support the decision-making process of the Tri-Valley – San Joaquin Regional Rail Authority, as identified in AB758, and expeditiously advance the proposed BART extension within the context of inter-regional connectivity – consistent with the goals and objectives of this Authority when formed;
- Advance alternative design concepts that avoid significant right-of-way displacements and significant environmental impacts;
- Respond to the issues and concerns of local Working Group member jurisdictions: fully address environmental impacts and commit to implement mitigation measures to fully address them;
- Advance the BART Bay Fair Connector Project and an operating plan to accommodate a “one-seat-ride” to Southern Alameda County and the South Bay;
- Seek to significantly reduce project capital costs to improve the project cost-effectiveness and viability of the proposed BART to Livermore Extension Project; and
- Provide evidence that impacts of out-of-District BART expansion on core BART service in the Tri-Valley have been fully mitigated per the terms of the Comprehensive Agreement between the Valley Transit Authority (VTA) and BART.

Background

The passage of Assembly Bill 758 by State legislators last month is a game changing breakthrough in the now decades long effort to extend passenger rail service to Livermore. The bill, now awaiting the Governor’s approval, responds to the growing urgent need to address burgeoning congestion levels in the Tri-Valley, by closing the missing rail gap between the BART and ACE rail systems in the I-580 corridor. When approved, it will establish the Tri-Valley – San Joaquin Valley Regional Rail Authority for purposes of planning, developing and delivering cost-effective and community responsive transit connectivity between BART and ACE in the Tri-Valley. An important element of the bill is a requirement to complete a project feasibility report no later than July 1, 2019 that identifies the project, a funding plan and schedule for project implementation and delivery. This effort will include the consideration of all viable rail connectivity options including the BART to Livermore project as identified in the DEIR now
under consideration. The bill gives authority to the BART Board of Directors, however, to approve or deny an extension of the BART system if it is recommended in the project feasibility report.

Completion of the DRAFT Environmental Impact Report (DEIR) for the BART to Livermore Extension Project is a key milestone in a very long and protracted environmental review process that to-date spans nearly a decade. Scoping for the Program EIR (PEIR) was conducted in 2007, followed by the 2009 Draft PEIR and subsequent 2010 adoption of a Final PEIR. Scoping for the current project-level EIR began in 2012, and while a Spring of 2018 completion is anticipated, it should be noted that a subsequent federal-level Environmental Impact Statement is planned with a completion date of 2020. It is also important to note that the PEIR preferred alternative adopted by the BART Board in 2010, is still in place and is inconsistent with adopted City of Livermore plans and policies. This BART adopted PEIR alternative would extend BART along I-580 from the existing Dublin/Pleasanton Station to I-580/Isabel Avenue and then extend along Portola Avenue to downtown Livermore and Vasco Road.

The proposed project identified in the DEIR, which is also referred to as the Conventional BART Project, would extend existing BART service approximately 5.5 miles east from the existing Dublin/Pleasanton BART Station within and adjacent to the Interstate (I-) 580 right-of-way through the Cities of Dublin and Pleasanton, to a proposed new terminus station located at the Isabel Avenue/I-580 interchange in the City of Livermore. A new parking facility would be constructed at the new Isabel Station and a new BART storage and maintenance facility would be constructed beyond the Isabel Station, north of I-580. In addition to a No Project Alternative, the DEIR also considers three Build Alternatives: A Diesel Multiple Unit/Electric Multiple Unit (DMU/EMU) Alternative, an Express Bus/Bus Rapid Transit (BRT) Alternative and an Enhanced Bus Alternative. There are no alternatives in this DEIR that would extend rail beyond Isabel Avenue/I-580 for an inter-connection to ACE. The DEIR estimates that construction of the Proposed Project and Build Alternatives could begin in 2021 and would last approximately 5 years through 2026.

The San Joaquin Regional Rail Commission (SJRRC), examined the feasibility of a number of alternatives to connect BART to ACE, as part of the ACEForward environmental review process that is currently underway. These alternatives included options to extend ACE to a BART terminus in the Tri-Valley – at Greenville, Isabel or the existing Dublin/Pleasanton Station. Further study looked at the feasibility of extending an EMU/DMU rail line from West Tracy along the County-owned railroad rights-of-way in the Altamont Pass to a BART terminus in the Tri-Valley at one of these potential intermodal locations. A yard/shop site for this line is tentatively identified in the vicinity of Tracy – not the Tri-Valley location of EMU/DMU yard/shop that is identified in the BART DEIR. It is anticipated that this alternative will be studied further as the new AB758 mandated authority advances further study for the required project feasibility report.
Key Issues

There are many issues, questions and concerns regarding information presented in the BART DEIR, but a primary concern for the Working Group should be that the proposed five-mile extension of the BART system to Isabel Avenue in Livermore does not address full mobility needs in the I-580 corridor – it has not been planned within the context of inter-regional connectivity and there is no consideration for a direct BART rail link to ACE in Livermore. The design, location and cost of the proposed BART Storage and Maintenance Facility are also a significant concern. In addition, the BART Bay Fair Connector Project and operating plan for a one-seat ride from the Tri-Valley to Santa Clara County has not been included. Extremely high capital cost estimates and the need to address core system impacts from the extension into Santa Clara County are also a critical consideration.

Following is a summary of key issues to be addressed in the comment letter. The letter will include, but not be limited to these comments, questions and concerns.

BART Storage and Maintenance Facility

**Scope and Design:** The storage and maintenance facility is out of scale with the 36 vehicle capacity requirements of a one-station, 5-mile extension. The DEIR states that BART conducted an operations analysis to determine BART vehicle fleet and storage needs to effectively operate the Proposed Project – determining the need for a yard providing storage for approximately 172 cars. It then added a maintenance facility to meet the needs of not only the proposed Project but the entire Daly City-Dublin/Pleasanton Line. The result is a proposed 68-acre storage and maintenance facility to meet BART system-wide needs. The DEIR also states that the Proposed BART project cost estimate includes 25% of the cost of the proposed storage and maintenance facility. This represents an unacceptable premise as the total cost should be attributed to the BART system and not the project.

**Location:** The proposed storage and maintenance facility is located 1.9 miles from the main track on land zoned for agricultural uses. In total this facility will encompass approximately 100 acres plus it will require environmental mitigation on a 1 to 3 ratio – and this will roughly come to a total of approximately 400 acres. In addition, the storage and maintenance facility will require bridges over Arroyo Las Positas and Cayetano creeks as well as an approximately 450-foot-long, 20-foot high hillside tunnel for the trackway and a 2-lane access road from Campus Drive to the facility. Some grading of the existing hill slopes would also be required. The DEIR finds that there are a multitude of special status wildlife and plant species with potential to occur in the study area of the site and creeks and arroyos on the site serve as active movement corridors for large mammals and other wildlife crossings. From both a cost as well as environmental perspective, it would seem that a viable alternative would be to extend the track eastward towards Greenville Road, in proximity to ACE, and where a more suitable site may be available.

**Land Use Designation:** The proposed facility would be located on unincorporated county land with a current land use designation of “Large Parcel Agriculture,” with a small northerly portion of the site designated as “Resource Management.” The Zoning Designation is “Agriculture.” This land consists of open grasslands with intermittent cattle grazing, with some agricultural
production uses. The DEIR notes that the facility would be consistent with the types of uses conditionally allowed in the Agricultural District zoning designation – however, the DEIR also notes that BART is not subject to local land use plans, policies and ordinances per California Government Code Sections 53090 and 53091. The conversion of agriculturally zoned land to non-agricultural uses is identified in the DEIR as a significant and unavoidable impact – even with the implementation of mitigation that would preserve it through easements or other protection on a 1 to 1 ratio. The DEIR does not appear to address how the facility will impact neighboring agricultural uses through its potential 24-hour operation. It does, however, identify that there would be significant unmitigated light and glare impacts from the facility. These impacts on neighboring sites should be identified and must be mitigated.

**EMU/DMU Connection to Dublin/Pleasanton Station**

The design of the EMU/DMU connection to the Dublin/Pleasanton Station has significant right-of-way impacts on the City of Dublin Corporation Yard and the Alameda County Fire facilities. The design also eliminates 110 parking spaces at the auto dealerships as well as an additional 105 parking spaces at other commercial sites. The auto dealerships have noted that this impact is significant to the viability of their operations. Alternative concepts for this EMU/DMU connection have been developed by AECOM Engineers, part of the ACEForward consulting team. These alternative concepts will avoid potential impacts on properties and displacements of parking and it is recommended that these design concepts be submitted to BART with the DEIR comment letter. The preferred concept is one in which the EMU/DMU platform is shifted to the east side of the Dublin/Pleasanton BART station – allowing the westbound I-580 freeway lanes to return to the existing alignment near the freeway median sooner and eliminating all displacements in this area.

**Bay Fair Connector Project**

The proposed BART project in the DEIR is described as an extension of the existing Daly City Line – and the impact methodology in the Transportation section of the DEIR appears to indicate that this operating assumption was used to forecast ridership. It does not appear that alternative operating scenarios were considered. Although this operating scenario may be part of the forecasting model used for the ridership analysis, it does not appear that there has been an opportunity for the public to have adequate opportunity to review and comment on this policy decision – nor does it seem that it is an adopted policy. The BART Bay Fair Connector Project, as approved by Alameda County voters in Measure BB, would provide the opportunity for a direct “one-seat-ride” from the Tri-Valley to Southern Alameda and Santa Clara County. BART staff has indicated that there are two other existing BART lines running in that corridor and there is inadequate capacity to add another line – but without an analysis of options, it is unclear if those two lines are in fact the most appropriate two lines to run. The BART Bay Fair Connector was promised to the Alameda County voters in Measure BB and must be advanced along with an operating plan that allows for a direct “one-seat-ride” from the Tri-Valley to the South Bay.
Capital Cost Estimates

The capital costs estimate for the one-station 5.5-mile BART extension is estimated to be $1.635 billion (estimated to mid-point of construction). The one-station DMU alternative in the DEIR is estimated to be $1.599 billion. It should be noted that for the EMU/DMU project developed as part of the ACEForward project – extending from West Tracy through the Altamont Pass to the existing BART terminus at the West Dublin/Pleasanton Station - preliminary cost estimates are approximately $1.4 to $1.6 billion. We must insist that BART take a closer look at all of the project elements attributed to the project and prove that they are solely attributable to this one-station extension. We must also take a closer look at project soft costs and contingencies that have been factored into the overall cost and seek an independent review of estimated project soft costs (44%) and additional contingencies (28%) and reserves (19%) to determine if they are comparable to industry standards and practice.

There may be numerous areas in which a reduction in project costs may be made. One area of consideration should be the $112 million cost that is included for the storage/maintenance facility as it should not necessarily be assigned to the extension. In addition, the DEIR identifies the need for a rolling stock fleet size of 36 BART cars in order to accommodate increased ridership on the system and this number appears to be excessive and presented without adequate explanation. Further, it appears that the need for the proposed new tail track west of the Dublin/Pleasanton Station should also be re-evaluated.

Core System Impacts

The Comprehensive Agreement between VTA and BART in connection with the proposed Santa Clara County BART Extension outlines specific terms regarding the VTA obligation to mitigate core system modifications. This concerns all investments in core system facilities that are needed to support and maintain the expansion into Silicon Valley. The project’s impact on existing parking in East Alameda County, however, is of particular concern. VTA completed a Core System Impact Study in 2003 and a Core Stations Modification Study in 2011. This previous analysis indicated that Eastern Alameda County (Castro Valley, West Dublin & Dublin/Pleasanton Stations) would be areas of high parking demand for individuals wanting to ride BART to and from Santa Clara County. The potential for a total of 600 – 750 new parking spaces was identified for Eastern Alameda County to mitigate the impacts of Silicon Valley BART expansion in this area of the core system. Although the Phase 1 project is nearly complete, to-date there does not appear to be a commitment in place to mitigate parking displacement in Eastern Alameda County. It is of further concern that impacts identified in the previous studies were based on 2003 and 2011 BART ridership levels. These ridership numbers have increased significantly and in addition, planning for the Phase 2 project is now being advanced. BART must provide evidence that out-of-District BART expansion on core service in the Tri-Valley has been fully mitigated.

It must also be noted that the BART Board has recently turned down $20 million in funding that was designated specifically for the Phase 2 Dublin Parking Garage - a 500-space addition to the existing structure at the Dublin/Pleasanton Station that was part of the Dublin Transit Village Plan. All other parties to the agreement moved forward in good faith with the understanding this
missing piece would be advanced. Its completion will provide much needed relief to communities heavily impacted by BART station overflow parking and complement the advancement of the many other access strategies that are both planned and underway. It has been environmentally cleared and fully entitled by the City of Dublin. It is what the Tri-Valley wants, and expects after years of waiting. (this paragraph added at the 10/11/2017 Alameda – San Joaquin Regional Rail Working Group Meeting per unanimous consent)

Inter-Regional Connectivity

The formation of the Tri-Valley – San Joaquin Regional Rail Authority presents an unprecedented opportunity to comprehensively plan for inter-regional rail connectivity in the I-580 corridor. The proposed BART extension may be an important element of this rail solution and the BART Board must move expeditiously to advance this project within the context of interregional connectivity. We must also urge BART to support the goals and objectives of the new Authority when formed. The primary goal is the delivery of cost-effective and responsive rail transit connectivity between BART and ACE in the Tri-Valley while meeting the goals and objectives of the communities it will serve.

Next Steps

The public comment period on the DEIR opened on July 31, 2017 and will close on October 16, 2017 at 5:00 p.m. Submittal of comments and concerns by the Working Group at this time are of critical importance as it will require BART to respond to our questions and concerns in the Final EIR. When the Final EIR is released, it is anticipated that the Tri-Valley – San Joaquin Valley Regional Rail Authority will be in place and may choose to complete an additional review and provide comments on the FEIR and proposed action.
Follow-Up Item

Reduce ROW impacts at the Dublin/Pleasanton BART-DMU/EMU Station

- Wide gauge DMU
- Dual gauge
- At-grade station
- Aerial station
Wide or Dual Gauge DMU/EMU:

- BART gauge 5'6" vs. Standard Gauge 4'8½"
- Challenges:
  - Would require special procurement vs. off-the-shelf models
- Challenges:
  - Using BART tracks operational challenge; tail tracks used for storing, breaking and making trains
- A separate wide-gauge track would be required on the Tracy end

Duel-Gauge DMU:

- Standard gauge inside of BART's gauge allows use of off-the-shelf DMUs/EMUs
- Challenges:
  - Using BART tracks operational challenge; tail tracks used for storing, breaking and making trains

Letter B2 cont.
RESPONSE B2
Scott Haggerty, Alameda-San Joaquin Regional Rail Working Group

B2-1 Thank you for providing comments on the Draft EIR. This comment introduces issues that are covered in more detail in the remainder of the comment letter. Please see Responses to Comments B2-7 through B2-14 for individual responses to these issues.

B2-2 This comment outlines the recommendations of the Alameda-San Joaquin Regional Rail Working Group. Please see Responses to Comments B2-7 through B2-14 for individual responses to these recommendations.

B2-3 Please see Response to Comment A5-2 and Master Response 10 regarding the Tri-Valley-San Joaquin Valley Regional Rail Authority established by AB 758.

B2-4 As noted in the comment, BART’s preferred alternative, referred to as Alternative 2B (Portola-Vasco), was selected by the BART Board on July 1, 2010. The alignment extended eastward from Dublin/Pleasanton Station in the median of Interstate Highway (I-)-580 before extending south along Portola Avenue to a new station in Downtown Livermore. From Downtown Livermore, it extended along the Union Pacific Railroad tracks to Vasco Road where a second station and a maintenance yard would be constructed. This remains BART’s adopted alignment. The City of Livermore initially adopted the Portola-Vasco alignment as its own preferred alignment. Subsequently, the City determined that it instead preferred an alignment along I-580 from Dublin/Pleasanton Station to Greenville Road with stations at Isabel Avenue and Greenville Road. That is the alignment adopted in the City’s General Plan.

As described in Chapter 1, Project Description, of the Draft EIR, both the City’s preferred I-580 alignment and BART’s Portola-Vasco alignment share the 5.5-mile segment from Dublin/Pleasanton Station to Isabel Avenue in the I-580 median. This is the alignment analyzed for the Proposed Project and DMU Alternative/EMU Option in the Draft EIR. From Isabel Avenue, a future extension to the east using conventional BART or another type of technology could extend to either Downtown Livermore or along I-580 to Greenville Road. The Proposed Project and DMU Alternative/EMU Option do not preclude extending transit service farther east in an alignment within, or extending out of, the I-580 median. Such an extension, as contemplated in the previous PEIR, would be the subject of a future project with a separate project-level evaluation in a future environmental document.
As correctly noted in the comment and described in Chapter 2 of the Draft EIR, the Proposed Project and Build Alternatives would not extend rail service beyond Isabel Avenue for a direct connection to the Altamont Corridor Express (ACE) trains. However, all the alternatives include new and modified feeder bus routes that would improve the connection to the ACE stations in Downtown Livermore and Vasco Road. A direct rail connection to ACE is not proposed as part of this project.

B2-5 Please see Master Response 11 for information regarding ACE and the ACEforward Program. As discussed in that master response, ACE has rescinded the ACEforward proposal. However, the new Tri-Valley-San Joaquin Valley Regional Rail Authority may choose to incorporate elements from the ACEforward proposal into its own project, potentially including a maintenance yard location in the vicinity of Tracy. Please see Master Response 10 for more information regarding the Tri-Valley-San Joaquin Valley Regional Rail Authority.

B2-6 Though the BART extension to Isabel Avenue would not provide a direct BART-to-ACE rail connection, it would shorten the intervening distance, and provide new and modified feeder bus routes connecting the new Isabel Station to the ACE stations in Downtown Livermore and Vasco Road.

This comment introduces issues that are covered in more detail in the remainder of the comment letter. Please see Responses to Comments B2-7 through B2-14, and the Master Responses and other comments referenced therein, for individual responses to these issues.

B2-7 Please see Response to Comment A5-3 and Master Response 5 regarding the size, cost allocation, and need for the storage and maintenance facility.

B2-8 Please see Response to Comment A5-4 and Master Response 7 for impacts related to the storage and maintenance facility and Master Response 6 for a discussion regarding the location chosen and other sites considered for the storage and maintenance facility.

B2-9 This comment restates information provided in Section 3.C, Land Use and Agricultural Resources, of the Draft EIR regarding the zoning and General Plan designation of the proposed site for the storage and maintenance facility, as well the facility’s consistency with those zoning regulations. As noted in the comment, the Draft EIR identifies conversion of agricultural land required for the storage and maintenance facility to non-agricultural uses as a significant and unavoidable impact. Please see Response to Comment A5-4 for additional information related to the 24-hour operation of the storage and maintenance facility.
B2-10 Please see Response to Comment A5-5 for a discussion of impacts to businesses and Response to Comment A5-6 for consideration of the ACEforward design concepts for the DMU Alternative.

B2-11 Please see Response to Comment A5-7 regarding the BART Bay Fair Connector. Please note that there is no requirement in the 2014 Alameda County Tax Expenditure Plan (Measure BB), which authorized the Bay Fair Connector Project, that requires BART to plan for or evaluate a new line between the Tri-Valley and Santa Clara County.

B2-12 Please see Response to Comment A5-8 for a comparison of the ACEforward cost estimate and the BART DMU cost estimate.

B2-13 Please see Response to Comment A5-9 for discussion of the agreement between BART and the Santa Clara Valley Transportation Authority (VTA).

The comment refers to Phase 2 of the BART Dublin/Pleasanton Station parking garage (referred to as the Dublin/Pleasanton Station Parking Expansion Project). Please see Master Response 9 regarding the Dublin/Pleasanton Station Parking Expansion Project.

B2-14 As noted in Response to Comment A5-2, BART acknowledges the formation of the Tri-Valley-San Joaquin Valley Regional Rail Authority and will work with the new authority to improve connectivity in the Tri-Valley. Please also see Master Response 10 regarding the new rail authority.

B2-15 Thank you for providing comments on the Draft EIR.

B2-16 This attachment is a presentation regarding the Altamont DMU/EMU from the September 20, 2017 Alameda-San Joaquin Regional Rail Working Group meeting. This attachment has been reviewed and considered in the above responses. No response is required.
October 12, 2017

BART to Livermore Extension Project
Attention: Andrew Tang
300 Lakeside Drive, 21st Floor
Oakland, CA 94612

Subject: BART to Livermore Extension Project – City of Dublin’s Comments on the Draft Environmental Impact Report

Dear Mr. Tang,

Thank you for giving the City of Dublin the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the BART to Livermore Extension Project. It is our understanding that the DEIR comment period will close on October 16, 2017 at 5:00 PM.

At the October 3, 2017, City Council directed staff to forward the attached comments to BART for consideration in the Final Environmental Impact Report. We appreciate your coordination with City Staff on this project and look forward to a continued collaboration on this very important project for the City and the region. If you have any questions or concerns regarding the attached comments, please contact Obaid Khan, Transportation and Operations Manager at Obaid.Khan@dublin.ca.gov, or 925-833-6630.

Sincerely,

Christopher L. Foss
City Manager

Cc: Dublin City Council

Attachments:
2. Exhibit A to the Comments.
City of Dublin Comments on the Draft Environmental Impact Report for the BART to Livermore Project

Proposed Project and Alternatives Descriptions

Conventional BART Project (Proposed Project). The Proposed Project involves extending the Daly City-Dublin/Pleasanton Line from its existing terminus at the Dublin/Pleasanton BART Station (Dublin/Pleasanton Station) approximately 5.5 miles to the east, to a new station located at the Isabel Avenue/I-580 (State Route 84) interchange in the city of Livermore. The new alignment and the new Isabel BART Station (Isabel Station) would be constructed in the I-580 median. New parking facilities—a parking structure and surface lot containing a total of approximately 3,412 spaces—would be constructed immediately south of I-580 along East Airway Boulevard. In addition, a new, approximately 68-acre BART storage and maintenance facility would be constructed north of I-580, beyond the Isabel Station.

To accommodate the widening of the I-580 median for the new BART alignment and Isabel Station, the California Department of Transportation (Caltrans) right-of-way (ROW) would be widened along approximately 5.6 miles. I-580 lanes would be relocated by a total of approximately 46 feet, from just east of the Hacienda Drive interchange to west of the Portola Avenue/I-580 overcrossing. At the proposed Isabel Station, I-580 would be relocated by approximately 67 feet to accommodate the new station within the median. The relocation of I-580 would require modification of some interchanges and surface frontage roads.

Diesel Multiple Unit/Electric Multiple Unit Alternatives. The (DMU) Alternative differs from the Proposed Project in terms of vehicle technology. DMUs are self-propelled rail cars that use a diesel engine to generate their own power and run on a standard-gauge rail track, whereas BART trains use electricity and run on wide-gauge rail track.

The DMU Alternative would have a similar median alignment and station configuration as the Proposed Project, but would have a longer total length of freeway alignment changes and includes a new transfer platform at the Dublin/Pleasanton Station. A new parking structure for the Isabel Station, with approximately 2,428 parking spaces, would be constructed immediately south of I-580 along East Airway Boulevard. In addition, a new, approximately 32-acre storage and maintenance facility would be constructed north of I-580, beyond the terminus of the alignment.

To accommodate the median widening, approximately 7.1 miles of I-580 would be relocated by a total of approximately 46 feet, from west of the Dougherty Road/Hopyard Road interchange to the Portola Avenue/I-580 overcrossing. Around the Dublin/Pleasanton Station, the north side of I-580 would be relocated to accommodate the new DMU transfer platform. At the proposed Isabel Station, I-580 would be relocated approximately 67 feet to accommodate the station within the median. The relocation of I-580 would require modification of some interchanges and surface frontage roads.

The DMU Alternative includes the same feeder bus component as the Proposed Project, including new and modified bus routes connecting the new station to areas east of the BART system.
A variant of the DMU Alternative—the Electric Multiple Unit (EMU) Option—is also being considered. The EMU Option is generally the same as the DMU Alternative, except that it is electrically powered rather than diesel-powered.

**Express Bus/BRT Alternative.** The Express Bus/BRT Alternative seeks to achieve the project goals using bus technology only. This alternative does not include an extension of BART rail service or development of a new rail station. Under this alternative, new bus transfer platforms would be constructed at the existing Dublin/Pleasanton Station. Buses would enter these bus-only transfer areas via direct bus-only ramps from the I-580 express lanes, allowing passengers to transfer from bus to BART within the station.

To accommodate the new bus transfer platforms and facilities under this alternative, approximately 2.2 miles of I-580, from west of the Dougherty Road/Hopyard Road interchange to the Tassajara Road/Santa Rita Road interchange, would be relocated by approximately 88 feet. The relocation of I-580 would require modification of some interchanges and surface frontage roads.

A new parking lot or garage on the Pleasanton side with approximately 210 parking spaces would be constructed at the Dublin/Pleasanton Station to replace the 210 parking spaces removed for the relocation of I-580 to accommodate the bus platforms. In addition, a remote, approximately 230-space park-and-ride lot would be constructed at Laughlin Road; regular bus service would be provided during peak hours from the Laughlin parking lot to the Dublin/Pleasanton Station.

**Enhanced Bus Alternative.** Like the Express Bus/BRT Alternative, the Enhanced Bus Alternative uses bus-related technology only and does not include an extension of BART rail service or the development of a new rail station. Unlike the Express Bus/BRT Alternative, however, this alternative does not include any major capital improvements and would not involve the development of bus transfer platforms or direct bus ramps.
### DEIR’s Analysis Scenarios

<table>
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<tr>
<th>Year</th>
<th>Land use at Isabel</th>
<th>Land use elsewhere</th>
<th>DP garage expansion</th>
<th>BART or Alternative</th>
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<td>Future Project</td>
<td>PBA 2040</td>
<td>PBA 2040</td>
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<td>Yes</td>
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<tr>
<td>Future Cumulative</td>
<td>INP^3 2040</td>
<td>PBA 2040</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Future Baseline (PBA)</td>
<td>PBA 2025</td>
<td>PBA 2025</td>
<td>No</td>
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<tr>
<td>Future Project</td>
<td>PBA 2025</td>
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<td>Future Cumulative</td>
<td>INP 2025</td>
<td>PBA 2025</td>
<td>Yes</td>
<td>Yes</td>
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<th>DP garage expansion</th>
<th>BART or Alternative</th>
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<tr>
<td><strong>2013</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Existing Conditions</td>
<td>Existing</td>
<td>Existing</td>
<td>Existing</td>
<td>No</td>
</tr>
</tbody>
</table>

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1. DP Garage – Dublin Pleasanton BART Garage expansion
2. PBA – Plan Bay Area/ABAG
3. INP – Isabel Neighborhood Plan
City of Dublin COMMENTS

City Council Comment: At the October 3, 2017 meeting, City Council provided the below comment for BART’s consideration.

BART should consider a long term solution since it seems that the original intent of extending BART to Greenville has been dropped. Therefore BART should add and analyze a hybrid alternative that would extend existing conventional BART service to a drop-off only transfer station in the vicinity of Fallon Road/El Charro Road interchange on I-580 and then connecting with DMU/EMU or other type of system to Livermore. By extending existing conventional BART to the proposed location would significantly reduce land-use impacts at and near the Dublin/Pleasanton BART Station and would shift them to relatively less developed areas. This station could provide connectivity to Livermore outlet malls, enhance first and last mile connectivity for transit including Autonomous shuttles, improve access to schools in the City, improve east-west connectivity, reduce congestion on City streets and along I-580, and could help in realizing the San Juaquin connection in the future.

A. Land Use Impacts

The City of Dublin has significant concerns about some of the right-of-way (ROW) acquisition required by the Proposed Project, DMU & EMU Alternative and Express Bus Alternative currently being considered and we appreciate the opportunity to provide comments on the DEIR. Many of Dublin’s key revenue and employment generators are located along I-580. As such, any potential purchase of ROW will need to identify the full impacts including short and long-term viability of affected businesses and ongoing revenue impact to both the businesses and to the City.

The DEIR identifies the surface frontage roads and structures adjacent to I-580 that would need to be relocated outward in order to accommodate the Proposed Project and Alternatives. The relocation of the frontage roads results in potentially significant impacts to some of the existing and key businesses in the City of Dublin. The proposed roadway footprints as provided in Appendix B: Footprint Map Books of the DEIR, provide insufficient information to determine the severity of the potential impact to each parcel. The DEIR does not provide any dimensions or details on the necessary roadways and parcel modifications required to relocate the ROW and how those impacts will be mitigated. For example, under the DMU Alternative, the relocation of Scarlett Court shows the potential roadway to extend into the Hyundai and Volkswagen Dealerships parking areas; however, no details are provided as to how much of the existing parking lots will need to removed, number of parking spaces eliminated, how the removal of the landscape buffer strip will impact the public safety and aesthetics and how the new roadway alignment will impact the on-site circulation. No mitigation has been provided to address these impacts. Auto dealerships are very sensitive about location, visibility of dealership and automobiles, and inventory storage. The ability to showcase and store vehicles is critical and these ROW purchases could have significant impacts, not only to the dealership’s revenues, but potentially the City’s tax base. The table below provides an outline of all potentially significant impacts.
ROW impacts to the City of Dublin identified in Appendix B of the DEIR that are not sufficiently detailed in the analysis.

Table A. Potentially Significant ROW Impacts

<table>
<thead>
<tr>
<th>PROPOSED PROJECT – Conventional BART</th>
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<tbody>
<tr>
<td>ROW</td>
<td>Parcel Impact</td>
<td>Potential Impacts</td>
</tr>
<tr>
<td>Northside Drive</td>
<td>Lowe’s (985-0061-007-00/015-00)</td>
<td>The relocation of Northside Drive shows the potential roadway and ROW need impacting the Lowe’s parking lot. Any reduction in parking level may impact future ability to construct new stores or replace existing tenants in the future.</td>
</tr>
<tr>
<td>PROJECT ALTERNATIVE – DMU &amp; EMU Alternatives AND Express Bus Alternatives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROW</td>
<td>Parcel (APN)</td>
<td>Potential Impacts</td>
</tr>
<tr>
<td>Scarlett Court</td>
<td>Hyundai Dealership (941-0550-025-02)</td>
<td>The relocation of Scarlett Court shows the potential roadway to extend into the Hyundai and Volkswagen Dealerships parking areas, thus removing the landscape buffer, parking area and impacting on-site circulation. This parking impact is a significant impact to access and circulation, and no mitigation has been provided to address this impact.</td>
</tr>
<tr>
<td>Scarlett Court</td>
<td>Volkswagen Dealership (941-0550-032-02/-03)</td>
<td></td>
</tr>
<tr>
<td>Scarlett Court</td>
<td>El Monte RV Rentals (941-0550-016-04)</td>
<td>The relocation of Scarlett Court creates potential access issues for the business west of Scarlett Drive. This road serves the recreational vehicle operator, U-Haul Truck Rental and El Monte RV Rentals as well as automotive delivery trucks to the Dublin Mazda Dealership. City staff feels that any narrowing would cause significant impacts to the adjacent uses.</td>
</tr>
<tr>
<td>Scarlett Court</td>
<td>U-Haul Truck Rental (941-0550-037-05)</td>
<td></td>
</tr>
<tr>
<td>Scarlett Court</td>
<td>Alameda County Fire Department and Dublin City Maintenance Building (941-0550-077-01)</td>
<td>The relocation of Scarlett Court has significant impacts for the City and Alameda County’s operations. In 2014, the Alameda County facility was remodeled and the City Corporation Yard was constructed. Both of these facilities provide maintenance support to local and regional government agencies and will be challenging to relocate, if necessary. The relocation will impact the parking and frontage improvements at a minimum. The loss of the City’s maintenance facility will be costly to replicate.</td>
</tr>
<tr>
<td>I-580 Frontage</td>
<td>Hacienda Crossings (986-0008-001-00)</td>
<td>Hacienda Crossings is a very popular regional shopping and entertainment destination with tight parking during the weekend.</td>
</tr>
</tbody>
</table>

Express Bus Alternative:
ROW expansion identifies removal of the landscape buffer along I-580 which serves both an aesthetic and public safety function between the parking lot and the freeway. This impact could be a significant impact; however, no site level details are provided so that the impacts can be identified and no mitigation has been provided to address this potential impact.
DMU/EMU Alternative:
The ROW expansion includes those impacts identified above for the Express Bus Alternative and further removal of a large portion of the parking area near the Hacienda Drive off-ramp. This ROW expansion will have a significant impact to parking and on-site circulation in this area of the shopping center and no mitigation has been provided to address this impact. Any proposed ROW adjustment will need to be carefully crafted with the property owner to ensure full replacement of the displaced parking, as well as thoughtful construction placement to ensure no loss of visibility of existing businesses.

<table>
<thead>
<tr>
<th>ROW Parcel Impact</th>
<th>Potential Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northside Drive Lowe’s (985-0061-007-00/015-00)</td>
<td>The relocation of Northside Drive shows the potential roadway and ROW need impacting the Lowe’s parking lot. Any reduction in parking level may impact future ability to construct new stores or replace existing tenants in the future.</td>
</tr>
<tr>
<td>I-580 Frontage IKEA Retail Center Project (986-0033-005-02/006-00)</td>
<td>The impact to the future development of this parcel is significant. The current property owner is exploring development scenarios for this site and we believe the impacts would be unacceptable as they would significantly impact the ability to develop the site.</td>
</tr>
<tr>
<td>Dublin/Pleasant BART Station Access Road Dublin/Pleasanton BART Station (986-0034-019-00)</td>
<td>This alternative relocates the ROW into the surface parking area of the future garage expansion at the Dublin Pleasanton BART. This alternative will move Altamirano Road into the surface lot for Dublin/Pleasanton BART station on the Dublin side next to the existing BART garage removing available parking. This parking impact is a significant impact to access and circulation, and no mitigation has been provided to address this impact. Our review indicates that a similar parking impact on the south side of I-580 in Pleasanton under the Express Bus/BRT alternative was mitigated by either providing new surface lot parking or by building a garage (see Chapter 2, Page 151). So it is not clear why BART has not addressed a similar significant impact on the north side of I-580 in Dublin under a different alternative. Additionally, the</td>
</tr>
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</table>
Cumulative analyses for the Project and all alternatives have assumed a future BART garage expansion at the Dublin Pleasanton BART station. By having the space for the future BART garage expansion impacted without mitigation, cumulative analysis results for the Express Bus/BRT alternative are not valid and need to be redone.

As stated in the DEIR, “Acquisition of privately owned land—including businesses, farm operations, and/or parking”—is considered a significant impact. Therefore, the Proposed Project [DMU/EMU Alternative and Express Bus Alternative] would result in a potentially significant impact related to displacement of businesses. This impact would be reduced to a less-than-significant level with implementation of Mitigation Measure PH-2, which would require BART to implement an acquisition and relocation program. (p. 543)

Mitigation Measure PH-2: Acquisition of Property and Relocation Assistance. (Conventional BART Project and DMU Alternative/EMU Option)

BART’s Real Estate Department will implement an acquisition and relocation program that meets the requirements of applicable State acquisition and relocation law. Acquisition will involve compensation at fair market value for properties, and relocation assistance would include, but is not limited to, down payments or rental supplements, moving costs, business reestablishment reimbursement, and goodwill offers as appropriate. All benefits will be provided in accordance with the California Relocation Assistance and Real Property Acquisition Guidelines.

While the acquisition and relocation program may meet the applicable State acquisition and relocation law, the issue lies in the DEIR not disclosing the actual physical impacts to each property. The level of detail provided in the DEIR does not provide sufficient information to determine what acquisition would be required and how that acquisition would impact each parcel. As previously stated, the properties along I-580 are home to some of the community’s key businesses and impacts to public safety, aesthetics and functionality of the property that remove parking, modify circulation patterns, and limit visibility from I-580 are considered to be significant impacts and no mitigation has been provided to address these impacts.

Requested Change:

Provide detailed ROW acquisition needs by each parcel and provide description on how each acquisition would impact the property. Include proposed mitigation to address public safety, aesthetics and functionality of the property with removed parking, changed circulation patterns, and visibility from I-580.

B. Transportation Impacts

An overall problem with the Draft EIR is its failure to adequately analyze the impacts of the DMU, Express Bus/BRT, and Enhanced Bus alternatives within the City of Dublin, and particularly near the Dublin/Pleasanton BART Station. Both the DMU and Express Bus/BRT
alternatives contemplate significant infrastructure improvements at the Dublin/Pleasanton BART Station, including new platforms and track extensions. And the Enhanced Bus Alternative contemplates operational changes at the Dublin/Pleasanton BART Station, particularly a significant increase in bus traffic on existing streets. And yet, portions of the EIR expressly exclude analysis of impacts in and around this station. For example, page 252 states that "The bicycle study areas include all bicycle facilities within a 15-minute bike ride of the proposed Isabel Station" and page 256 similarly states that "The study area for pedestrians comprises all pedestrian facilities . . . within a 15-minute walk from the proposed Isabel Station." These statements suggest that the Draft EIR did not study bicycle and pedestrian impacts resulting from project changes to the Dublin/Pleasanton BART Station, notwithstanding the fact that these alternatives contemplate significant infrastructure and/or operational changes at that location. This is a problem with the Draft EIR's analysis of those three Build alternatives but not of the Conventional BART Project alternative, since that alternative does not contemplate significant infrastructure or operational changes at the Dublin/Pleasanton BART Station.

**Traffic Model Assumptions**

1. The Draft EIR (DEIR) has assumed that the BART garage expansion at the Dublin/Pleasanton Station would occur with the Project in Cumulative conditions, but did not include the funding for the garage expansion. This is not the correct way to assume Project Cumulative conditions while not including the funding for it, especially when constructing a garage is the responsibility of BART on its own land. This needs to be corrected in the model to reflect the proper No-Project conditions that would also change the traffic patterns under the “With” and “Without” Project scenarios. Garage Expansion at the Dublin Pleasanton Station should either be part of the future baseline (background development) without Project or be kept as currently it is in the DEIR but with funding provided for the garage construction as part of the Project. Furthermore, as per the Chapter 3, Environmental Analysis, Page 226, DEIR assumed that under the Cumulative scenarios for 2025 and 2040, Isabel Neighborhood Plan (INP) in Livermore will have additional land use changes that could not be evaluated separately from the Garage Expansion traffic patterns, which in turn impacts the With Project analysis results. For example, it is not clear what impacts would be with the INP land use addition in conjunction with the Project and the Alternative alone would have on the system.

   Requested Change:

   Move the BART Garage expansion at Dublin/Pleasanton BART Station to the future 2025 and 2040 baseline Without Project Conditions, similar to many other local and regional projects in this corridor.

2. The DEIR’s Chapter 3, Environmental Analysis, Table 3.B-18, Page 281, provides 2025 and 2040 roadway improvements assumptions used in traffic models. There are several incorrect assumptions in this table for the City of Dublin’s roadway infrastructure. The incorrect assumptions would create incorrect model results for impacts to the City of Dublin roadway infrastructure and intersections, and any related mitigations need to be redone.

   Requested Change:
Use the attached (Exhibit A) corrections to Table 3.B-18 and update the traffic models network.

Other Transportation Related Technical Issues

1. Under the DMU/EMU and Express Bus/BRT Alternatives, DEIR (Chapter 2, Project Descriptions) did not assume any time loss for transfer of passengers from one type of vehicle to the Conventional BART at Dublin/Pleasanton Station. This loss of time is critical in comparing the Conventional BART with other Alternatives. Additionally, there was no mention of travel time for buses under the Express Bus/BRT Alternative. This will be an important factor to know and compare as part of the information disclosure about project alternatives.

Requested Changes:

i. Provide the transfer time loss for DMU/EMU and Express Bus/BRT Alternatives.

ii. Provide travel time of Express Bus/BRT from Park and Ride facilities connecting the Express Bus/BRT to conventional BART at Dublin Pleasanton BART station.

2. DEIR failed to evaluate bicycle and pedestrian related impacts outside the INP. The bicycle and pedestrian impact evaluation was considered for access within 15 minute ride or walk from the future Isabel Station.

Requested Change:

Identify and evaluate the bicycle and pedestrian impacts at Dublin/Pleasanton Station and surrounding streets that will be impacted by the Project and Alternatives.

3. Chapter 3 of the DEIR on Page 226 provides the Cumulative Projections for population, employment, and housing. It states that “For the quantitative sections, the cumulative No Project Conditions for 2025 and 2040 are based on the traffic volumes forecast for those years determined by the Travel Demand Model. The Travel Demand Model is a computer model used to forecast travel volumes by different travel modes (BART, bus, automobile, etc.) across a transportation network based on projected land uses.” However in Appendix E, the DEIR states, “the proposed Dublin/Pleasanton Station Parking Expansion and the City of Livermore’s INP are two specific probable future projects/plans that are the focus of the projects/plans considered in the cumulative analysis. In addition, a list of other approved or reasonably foreseeable projects in the BART project corridor was developed.” Then in Chapter 3, Page 226, DEIR states, “This EIR uses a combination of the two approaches for the analysis of cumulative impacts; that is, the projections-based approach is used, but is augmented where appropriate with the list-based approach of past, present, and probable future projects in the project area.” It is not clear if list projects were coded into the model by replacing the assumed land use in the Alameda CTC’s regional model’s TAZs with the projects in the list.

Requested Change:
Provide a clarification on how the list projects were used in the travel demand model forecasts for Cumulative conditions in 2025 and 2040. Was the model land use modified or not? Or something else?

4. Table 3.B-23 of the DEIR shows the Dublin/Pleasanton BART station boardings. Then on the next page third paragraph, it states “Under 2040 Cumulative Conditions, which includes a net expansion of the Dublin/Pleasanton Station parking by 540 spaces, that station attracts a large number of additional park-and-ride BART patrons—a higher number than the increase in supply, as some spaces are used more than once during the day or serve multiple patrons who are carpooling together.” However, a similar change or relative change did not occur between the No Project and With Project conditions for Park and Ride mode when there will significantly be more BART service to the Isabel Station. So why no change? Additionally, a recent BART Board action has modified the garage construction with hybrid parking supply plan. The supply of hybrid parking will not be concentrated at the planned garage site. How this Board action would impact the assumed circulation under the cumulative scenarios for Project and other build alternatives.

Requested Changes:

i. Provide the reasoning behind no change in Park and Ride mode share between the No Project and Project Conditions in Table 3.B-23.

ii. Provide an analysis on traffic circulation changes due to a decision by the BART Board on supplying planned 540 parking spaces through a hybrid parking supply scheme instead of a parking garage on Dublin Side of the Dublin/Pleasanton BART station. Also to note that the hybrid parking supply will have different traffic circulation and operations due to the distributed location of parking as compared to a garage. Due to these changes many of the current traffic analysis outcomes may no longer be valid.

5. Table 3.B-30 provides VMT Reduction summary for the Project and Alternatives for various future year scenarios. The results indicate an increase in VMT when there is additional parking spaces are provided at the Isabel Station and at the Dublin/Pleasanton Station. The explanation on the next page states; “The cumulative analysis for 2025 results in smaller VMT reductions for the Proposed Project and DMU Alternative than the VMT reductions for the Proposed Project and DMU Alternative in the 2025 project analysis. This is due to the level of parking supply assumed for the Proposed Project and the DMU Alternative under the cumulative analysis in comparison to the project analysis. The Proposed Project and DMU Alternative 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 latent parking demand originating from areas relatively close to the Dublin/Pleasanton Station. The presence of new parking at the Dublin/Pleasanton Station under the cumulative analysis—in addition to the significant proposed supply of parking at the Isabel Station—in total offers enough parking to attract park-and-ride trips to the station from greater distances, ultimately resulting in an increase in auto VMT under the cumulative analysis relative to the project analysis.”
This conclusion is confusing. Given the fact that if one passenger goes to BART Station due to the availability of additional parking supply, then there should be a reduction in the length of the trip when compared to the same passenger driving to the final destination, like San Francisco. So it is critical to check the difference or the delta of trip length to BART and to that of driving all the way to the final destination. Also it is not clear what share of riders came from San Joaquin County due to the expanded BART service. This would provide some idea on trip lengths that were attracted to BART with and without expanded parking.

Requested Changes:

i. Provide a comparison of trips diverted from the roadway network including I-580 under various scenarios for 2025 and 2040 due to the availability of expanded BART service and additional parking at Dublin/Pleasanton BART Station and Isabel Station.

ii. Provide an explanation on how the Passenger VMT was calculated as indicated in Table 3.B-30.

iii. Provide the actual number of riders that came from San Joaquin County to take BART under the Project and Alternatives to properly disclose the impacts.

iv. Provide a table that shows delta of trips that were attracted to BART parking expansion VS those that had to drive after not finding parking.

6. Tables 3.B-32 to 3.B-35 have several discrepancies in V/C for freeway lanes when compared to earlier tables 3.B-14 and 3.B-15. For example, V/C for freeway segment between Vasco Road and Greenville Road is shown as LOS D in Table 3.B-14 with delay of 0.87. But in Table 3.B-32 it is shown as LOS E with a delay of 0.977. Similar issues were noted in Tables 3.B-36 to 3.B-39.

Requested Change:

Review and reconcile different numbers in tables for Freeway segments.

7. Table 3.B-40 indicates a significant impact at Segment 7 (Livermore Ave to Springtown Blvd/First Street). But the text on Page 337 (page after Table 3.B-43) indicates a wrong segment for mitigation under the DMU Alternative.

Requested change:

Correct text accordingly.

8. Mitigation Measures TRAN-7a, TRAN-7b, TRAN-19b, TRAN-19c, TRAN-20a, TRAN-20b, TRAN-20c, and TRAN-20d recommend adding a third southbound left-turn lane and a second westbound right turn lane at the intersection of Dublin Blvd and Dougherty Road. This mitigation is suggested to address the peak hour significant impacts to this intersection in 2025, and 2040 under with project/alternatives and Cumulative Scenarios. The proposed mitigation is not compatible with the existing land use at this intersection. It also would impact the pedestrian access by increasing the crossing distance for pedestrians on two approaches. Therefore this mitigation is not supported by the City of
Dublin. In order to improve operations at this intersection, the City recommends that BART contributes towards implementing an Adaptive Traffic Signal system along Dougherty Road. Enhanced signal operations under the Adaptive Traffic Signal system would minimize the significant impacts.

Requested Change:

Modify TRAN-7a, TRAN-7b, TRAN-19b, TRAN-19c, TRAN-20a, TRAN-20b, TRAN-20c, and TRAN-20d by providing Adaptive Traffic Signal system along Dougherty Road in the City of Dublin to minimize the significant impacts at the intersection of Dublin Blvd and Dougherty Road.

C. Air Quality Impacts

1. The Draft EIR Does Not Adequately Address Toxic Air Contaminants and Health Risks. The methodology and impact analysis (Draft EIR pages 1,120 – 1,125 and pages 1,160 – 1,165, respectively) indicate that the risk/TAC analysis focused on passenger vehicles, DMU vehicles, maintenance trucks, buses, shuttle vans, and emergency generators. However, there is no mention of an analysis associated with widening of the I-580 freeway right-of-way (ROW). I-580 currently has 219,000 daily vehicles, including 14,828 daily trucks traveling through Dublin.[1] Freeway ROW widening would move truck traffic (and associated diesel particulate matter [DPM] emissions) closer to receptors along the freeway. It should be noted that the VMT reductions associated with implementation of the Build Alternatives would affect passenger vehicles and would not reduce heavy duty truck traffic. As such, the Draft EIR does not demonstrate that it has adequately analyzed operational TAC/risk impacts.

Requested Change:

The Draft EIR must be revised to clearly identify impacts associated with moving heavy duty diesel vehicles (due to ROW widening) closer to receptors located along the freeway.

D. Noise and Vibration Impacts

1. The Draft EIR Should Identify Additional Options to Mitigation Pile Driving Noise. When technically feasible, silent press-in piling (such as the Giken Silent Piler) should be the preferred method rather than drilling to reduce noise and vibration impacts. This option should be included in Mitigation Measure NOI-1.

2. The Draft EIR Does Not Include All Feasible Options to Mitigate Construction Noise. Mitigation Measure NOI-1 should include noise monitoring during construction to ensure the 90 dBA $L_{eq}$ limit is not exceeded. If it is exceeded, construction activities should halt until a remedy is implemented to reduce the noise levels below the 90 dBA $L_{eq}$ limit.

Requested Change:

The noise monitoring should be incorporated into the following section of Mitigation Measure NOI-1:

To reduce potential daytime construction noise impacts to residential uses immediately south of the realignment of the eastern extent of East Airway Boulevard (Proposed Project and DMU Alternative), BART contractors shall employ moveable noise curtains or barriers along the southern side of East Airway Boulevard to shield daytime construction noise impacts to residential uses to the south. These temporary noise barriers shall be employed for construction along East Airway Boulevard, east of Sutter Street. Implementation of this measure will ensure that daytime construction activities do not exceed FTA noise criteria for daytime construction at residential uses (90 dBA Leq). Additionally, noise monitoring shall be conducted during construction to ensure this limit is not exceeded. If it is exceeded, construction activities should halt until a remedy is implemented to reduce the noise levels below the 90 dBA Leq limit.

3. The Draft EIR Does Not Include All Feasible Options to Mitigate Construction Vibration Impacts. Vibration monitoring should be conducted while these construction activities are taking place to ensure the vibration limit (0.2 PPV in/sec and 72 VdB) is not exceeded. If it is exceeded, construction activities should halt until a remedy is implemented to reduce the vibration levels below the limit.

Requested Change:

Mitigation Measure NOI-1 should be revised as follows:

To reduce potential vibration impacts to residential uses immediately south of the realignment of the eastern extent of East Airway Boulevard (Proposed Project and DMU Alternative), BART contractors shall use non-vibratory excavator-mounted compaction wheels and small smooth drum rollers for final compaction of asphalt base and asphalt concrete. If needed to meet compaction requirements, smaller vibratory rollers will be used to minimize vibration levels during repaving activities where needed to meet vibration standards. These methods shall be employed for construction along East Airway Boulevard, east of Sutter Street. Vibration monitoring shall be conducted while these construction activities are taking place to ensure the vibration limit (0.2 PPV in/sec and 72 VdB) is not exceeded. If it is exceeded, construction activities shall halt until a remedy is implemented to reduce the vibration levels below the limit.

Attachments:

Exhibit A
### TABLE 3.B-18 LOCAL ROADWAY IMPROVEMENTS, 2025 AND 2040 NO PROJECT CONDITIONS

<table>
<thead>
<tr>
<th>Street</th>
<th>Limits</th>
<th>Improvement</th>
<th>Relevant Analysis Year</th>
<th>Relevant Study Intersection #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Livermore</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isabel Avenue</td>
<td>I-580 EB Ramps</td>
<td>Widen overpass</td>
<td>2040</td>
<td>#30</td>
</tr>
<tr>
<td>Isabel Avenue</td>
<td>I-580 WB Ramps</td>
<td>Widen overpass</td>
<td>2025 and 2040</td>
<td>#28 and #29</td>
</tr>
<tr>
<td>Isabel Avenue</td>
<td>Stanley Boulevard to Ruby Hill Drive</td>
<td>Widen to four lanes</td>
<td>2040</td>
<td>#33</td>
</tr>
<tr>
<td>Isabel Avenue</td>
<td>Isabel and Jack London Boulevard</td>
<td>Intersection improvements</td>
<td>2025 and 2040</td>
<td>#36</td>
</tr>
<tr>
<td>Vasco Road</td>
<td>Northfront Road to Las Positas Road</td>
<td>Widen to eight lanes</td>
<td>2040</td>
<td>#43 and #44</td>
</tr>
<tr>
<td>Greenville Road</td>
<td>Interchange improvements</td>
<td>Widen underpass to six lanes</td>
<td>2025 and 2040</td>
<td>#48</td>
</tr>
<tr>
<td>Greenville Road</td>
<td>Las Positas Road to Paterson Pass Road</td>
<td>Widen to four lanes</td>
<td>2025 and 2040</td>
<td>#48</td>
</tr>
<tr>
<td>Greenville Road</td>
<td>Westbound ramp</td>
<td>Signalize intersection and add westbound left-turn pocket and eastbound right-turn pocket</td>
<td>2025 and 2040</td>
<td>#46</td>
</tr>
<tr>
<td>Greenville Road</td>
<td>Greenville Road and Altamont Pass Road</td>
<td>Signalize intersection</td>
<td>2025 and 2040</td>
<td>#48</td>
</tr>
<tr>
<td>Greenville Road</td>
<td>Greenville Road and Patterson Pass Road</td>
<td>Signalize intersection</td>
<td>2025 and 2040</td>
<td>#50</td>
</tr>
<tr>
<td>Pleasanton</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>El Charro Road</td>
<td>Stoneridge Drive to Jack London Boulevard</td>
<td>Extension</td>
<td>2040</td>
<td>#23</td>
</tr>
<tr>
<td>El Charro Road</td>
<td>Jack London to Stanley Boulevard</td>
<td>Extension</td>
<td>After 2040</td>
<td>N/A</td>
</tr>
<tr>
<td>Dublin</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dublin Boulevard</td>
<td>Brannigan Street to Fallon Road</td>
<td>Widen to eight lanes</td>
<td>2025 and 2040</td>
<td>#19</td>
</tr>
<tr>
<td>Dublin Boulevard</td>
<td>Dougherty Road to North Canyons Parkway</td>
<td>Extension</td>
<td>2040</td>
<td>N/A</td>
</tr>
<tr>
<td>Fallon Road</td>
<td>Connect to Tassajara Road</td>
<td>Extension</td>
<td>2040</td>
<td>N/A</td>
</tr>
<tr>
<td>Gleason Drive</td>
<td>To Fallon Road</td>
<td>Extension</td>
<td>2040</td>
<td>N/A</td>
</tr>
<tr>
<td>Fallon Road Interchange</td>
<td>N/A</td>
<td>Upgrade</td>
<td>2040</td>
<td>#20</td>
</tr>
<tr>
<td>Dublin Boulevard</td>
<td>To Schaefer Ranch Road</td>
<td>Extension</td>
<td>2040</td>
<td>N/A</td>
</tr>
</tbody>
</table>
TABLE 3.B-18  LOCAL ROADWAY IMPROVEMENTS, 2025 AND 2040 NO PROJECT CONDITIONS

<table>
<thead>
<tr>
<th>Street</th>
<th>Limits</th>
<th>Improvement</th>
<th>Relevant Analysis Year</th>
<th>Relevant Study Intersection #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tassajara Road</td>
<td>Dublin Boulevard to I-580</td>
<td>Widen to eight lanes</td>
<td>2025 and 2040</td>
<td>#14</td>
</tr>
<tr>
<td>Tassajara Road</td>
<td>Fallon to Dublin</td>
<td>Widen to six lanes</td>
<td>2040</td>
<td>#14</td>
</tr>
<tr>
<td>Hacienda Road</td>
<td>Dublin Boulevard to Central</td>
<td>Widen to six lanes</td>
<td>2040</td>
<td>#9</td>
</tr>
<tr>
<td>Dougherty Road</td>
<td>Sierra Court to City Limits</td>
<td>Widen to eight lanes</td>
<td>2025 and 2040</td>
<td>#1</td>
</tr>
</tbody>
</table>

Notes: EB = eastbound; WB = westbound; N/A = not applicable.
Local roadway improvement assumptions were made with input from the Cities of Livermore, Dublin, and Pleasanton.
Sources:
City of Livermore, 2009; City of Pleasanton, 2009; City of Dublin, 2013.

The Pleasanton General Plan has identified major roadway improvements. Table 3.B-18 summarizes the intersection and roadway lane improvements near the study area. Completion of the Stoneridge Drive extension, Busch Road, and El Charro Road are significant and necessary parts of Pleasanton's local circulation system. The extension of Nevada Street has the potential to provide some traffic relief to the Stanley Boulevard/Valley Avenue/Bernal Avenue intersection.

In addition to these improvements, the Triangle Study\textsuperscript{25} identified projects required for a strategic approach to relieving traffic congestion in the Tri-Valley Area. The Tri-Valley Triangle Study Final Plan Recommendations were approved in February 2011. This included an agreement on the sequencing of projects, specifically that the Stoneridge Drive extension be completed before construction can begin on State Route 84 as a four-lane facility between west of Ruby Hill Drive and I-680.

Table 3.B-19 presents the No Project Conditions in 2025 and 2040.

\textsuperscript{25} Alameda County Transportation Commission (Alameda CTC), 2007. Tri-Valley Triangle Study.
RESPONSE B3
Christopher L. Foss, City of Dublin

B3-1 Thank you for providing comments on the Draft EIR. This comment is informational in nature; no response is necessary.

B3-2 This comment summarizes the Proposed Project and three Build Alternatives. The table correctly summarizes the various scenarios analyzed in the Draft EIR.

B3-3 The Proposed Project does not preclude extending transit service farther east in an alignment within, or extending out of, the I-580 median. Please see Master Response 4 regarding a future extension to Greenville.

The comment regarding an extension of BART to a DMU transfer station (or other technology) at Fallon Road/El Charro Road with a DMU connection to Livermore is noted. A “hybrid” project corresponding to the Proposed Project’s alignment (Dublin/Pleasanton Station to Isabel Avenue) would create the need for two new stations (a BART-to-DMU connecting station at Fallon/El Charro and a DMU terminal station at Isabel Avenue), making the project more expensive, as well as for two new storage and maintenance facilities (one for BART cars and one for DMU vehicles). Reducing the length of the DMU segment from 5.5 miles to approximately 2.75 miles (Fallon Road/El Charro Road to Isabel Avenue), reduces the rationale for the DMU itself, as the smaller the length of the DMU, the smaller the benefit of introducing a second transit technology to the corridor.

The comment mentions a “drop-off only transfer station.” If this is intended to simply be a BART to DMU transfer platform without any access to properties outside the median (similar to the eBART transfer platform in East Contra Costa County), it is hard to see how this would substantially improve connectivity to the Livermore outlet malls, enhance connectivity for autonomous vehicles, improve access to schools, or improve east-west connectivity, all benefits mentioned in the comment. If the intent of the comment is to provide a full-service BART station as a transfer point that would provide access to the outlet malls and other local land uses in the Fallon Road/El Charro Road area, the additional cost for the full-service station would be substantial.

A BART storage and maintenance facility of approximately the same size as the proposed 68-acre storage and maintenance yard for the Proposed Project would be needed in the vicinity of the BART terminus at the Fallon Road/El Charro Road interchange. The DMU would also need a storage and maintenance facility, and it is possible that it would be advantageous to co-
locate it with the BART facility, increasing the size of the facility needed near Fallon Road and El Charro Road. Similar to the proposed storage and maintenance yard site near Cayetano Creek, the undeveloped land north and east of the Fallon Road/El Charro Road interchange has been identified as potential habitat for burrowing owl, California red-legged frog, California tiger Salamander, and San Joaquin kit fox (Figure 3.1-4a and Figure 3.1-4b of the Draft EIR, Biological Resources). Undeveloped land north of I-580 and west of Fallon road has been identified as potential habitat for burrowing owl and California red-legged frog. In additional, seasonal pools that may support vernal pool fairy shrimp were identified north of Croak Road to the east of the Fallon Road/El Charro Road interchange (page 849 of the Draft EIR). Therefore, relocation of the BART (and possibly DMU) storage and maintenance facility may not substantially reduce potential biological impacts.

Though the hybrid BART-DMU may reduce right-of-way impacts around Dublin/Pleasanton Station compared to the DMU Alternative, some of those right-of-way impacts would be transferred to the Fallon Road/El Charro Road area as new elements (transfer platform, storage and maintenance facilities) are added to east Dublin or west Livermore. The first goal listed in the goals and objectives of the Draft EIR is to “provide a cost-effective intermodal link of the existing BART system to the inter-regional rail network and a series of Priority Development Area...” The increased cost of the suggested hybrid BART-DMU compared to the DMU Alternative evaluated in the Draft EIR would not meet this criterion.

If the intent of the comment is that the hybrid project would provide a BART-DMU transfer station at Fallon Road/El Charro Road for a DMU extending beyond Isabel Avenue to the east, the cost effectiveness of the DMU would increase as the length of the DMU segment increases. A longer DMU segment would provide more opportunities to find a suitable storage and maintenance facility site for the DMU, though storage for BART cars would still need to be found in the vicinity of the BART terminus at Fallon Road/El Charro Road. A review of a hybrid project beyond Isabel Avenue is beyond the scope of this EIR. It is possible that the new Tri-Valley-San Joaquin Regional Rail Authority may choose to investigate this hybrid alternative. Please see Master Response 10 for more information on the new authority.

B3-4 Impacts to businesses are analyzed in in Impact PH-3 (Displace Substantial Numbers of Existing Businesses during Construction) on pages 542 to 544 of the Draft EIR. To mitigate this impact, the Draft EIR identified Mitigation Measure PH-2 (Acquisition of Property and Relocation Assistance), which would require BART to implement an acquisition and relocation program. This
program would provide compensation at fair market value as well as relocation assistance. Apart from this analysis, the economic impacts on businesses and revenue impacts to local jurisdictions are not considered to be significant adverse environmental impacts and are not required to be analyzed, pursuant to CEQA Guidelines Section 15064(e), which states that economic and social changes resulting from a project shall not be treated as significant effects on the environment.

As noted in the comment, the footprints of the Proposed Project as well as the Build Alternatives have been illustrated in Appendix B (Footprint Map Books) of the Draft EIR. These graphics provide reasonable estimations of the property acquisitions and the existing use (parking, landscaping, etc.) of that property. Engineering drawings of the project alignment and infrastructure modifications were made available to the City and are on BART’s project website. In addition to the footprints illustrated in Appendix B, Appendix C (ROW Information) provides the approximate percentage range of each parcel needed for the permanent project footprint. The ROW information is provided as a range based on preliminary engineering for the Proposed Project, DMU Alternative/EMU Option, and Express Bus/BRT Alternative. Information regarding on-site circulation, number of parking spaces to be removed, landscaping, etc. can be estimated from the information provided.

More detailed and precise information would be developed during the design phase of project development; however, consistent with CEQA, final design and engineering would occur after a project is adopted by the BART Board. More detailed and precise information is not necessary to either assess the potential environmental impacts or to adequately provide mitigation to reduce potential impacts. In particular, it is not necessary to provide tailored mitigation on a parcel-by-parcel basis. Mitigation Measure PH-2 (Acquisition of Property and Relocation Assistance), described on page 542 of the Draft EIR, will apply to all affected parcels and is designed to provide compensation and relocation assistance commensurate with the ROW acquisition, in accordance with the California Relocation Assistance and Real Property Acquisition Guidelines. The Draft EIR addresses potential impacts to business displacements (Section 3.D, Population and Housing), public safety (Section 3.N, Public Health and Safety), aesthetics (Section 3.E, Visual Quality), and circulation and access (Section 3.B, Transportation), as well as other impacts pertaining to ROW acquisition and frontage road relocation.

As stated in Response to Comment B3-4, socioeconomic impacts other than physical displacements are not environmental impacts under CEQA. Therefore, impacts to the dealerships’ revenues, the City of Dublin’s tax base, and other
economic issues such as visibility of businesses from I-580 are not required to be assessed pursuant to CEQA. Moreover, CEQA does not require mitigation for speculative economic losses associated with future business opportunities such as the prospect of constructing new stores or replacing tenants. In some cases, courts have found that urban decay or deterioration may be considered an indirect physical environmental effect of a proposed project. However, the commenter does not suggest any prospect of causing urban decay, but only direct economic consequences to individual businesses located along I-580 and to tax revenue for the City, which are economic effects outside the scope of CEQA. See Placerville Historic Preservation League v. Judicial Council of California (2017) 16 Cal.App.5th 187, 199 (while comments on the EIR for a courthouse relocation project “provide credible ground for concern that relocation will constitute a hardship for some local businesses, this is an insufficient basis to support a conclusion that relocation threatens urban decay”).

Responses regarding specific properties identified by the commenter are provided in Table 4.B-1 below.

| TABLE 4.B-1: SPECIFIC PROPERTIES MENTIONED BY COMMENTER |
| Conventional BART |
| Northside Drive, Lowe’s (985-0061-007-00/-015-00) | As previously stated, reduction in parking and similar property acquisition impacts will be addressed by Mitigation Measure PH-2 (Acquisition and Relocation Assistance). |
| DMU Alternative/EMU Option and Express Bus/BRT Alternative |
| Scarlett Court, Hyundai Dealership (941-0550-025-02) and Volkswagen Dealership (941-0550-032-02/-03) | The ROW acquisition will only affect the parking areas of the dealerships and will not change access and circulation. BART will replace Scarlett Court in-kind and will mitigate the parking impact per Mitigation Measure PH-2 (Acquisition and Relocation Assistance). |
| Scarlett Court, El Monte RV Rentals (941-0550-016-04) and U-Haul Truck Rental (941-0550-037-05) | As described on page 1428 of the Draft EIR, the relocation of Scarlett Court would be designed using the same dimensions as the existing roadway and would not result in the narrowing of the roadway. During construction, Mitigation Measure TRAN-1 (Develop and Implement a Construction Phasing and Traffic Management Plan), described in the Draft EIR in Section 3.B, Transportation, requires BART or its contractor to prepare and implement a construction phasing and traffic management plan to identify traffic operations and circulation procedures for each phase of construction. The plan would provide information on road closures |

| 190 |
and detours and would be coordinated with the cities of Dublin, Pleasanton, and Livermore, and with Caltrans. The plan would also allow for access to affected and adjacent properties at all times and specify measures to allow access and alternate transportation routes for maintenance and emergency response vehicles in the event of roadway closures.

**Scarlett Court, Alameda County Fire Department and Dublin City Maintenance Building (941-0550-077-01)**

As described on pages 1428 and 1429 of the Draft EIR in Section 3.O, Community Services, BART completed a preliminary assessment of the relocation of Scarlett Court and determined that adequate access to the Alameda County Fire Department maintenance facility would be maintained during construction and operation of the Proposed Project or one of the Build Alternatives.

In addition, during construction, Mitigation Measure TRAN-1 (Develop and Implement a Construction Phasing and Traffic Management Plan) would allow for access to affected and adjacent properties at all times and specify measures to allow access and alternate transportation routes for maintenance and emergency response vehicles in the event of roadway closures. As previously stated, parking and ROW impacts to the will be addressed through Mitigation Measure PH-2 (Acquisition of Property and Relocation Assistance).

**I-580 Frontage, Hacienda Crossings (986-0008-001-00)**

As shown on pages 2 and 3 of Appendix B.2 (Footprint Map Book: DMU Alternative) of the Draft EIR, only a small southernmost portion of the Hacienda Crossings parcel would be impacted by ROW acquisition. Furthermore, the overall shape and access points of the parking lot will remain similar to existing conditions and the circulation will not be substantially affected. All ROW acquisition will be addressed through Mitigation Measure PH-2, which would provide for compensation at fair market value as well as relocation assistance.

The removal of vegetation (landscape buffers) is identified as a significant and unavoidable impact on page 624 of Section 3.E, Visual Quality, of the Draft EIR. Per Mitigation Measure VQ-5 (Revegetate Areas of Removed Landscaping), BART will replace any removed landscaping in-kind to the extent feasible, although some segments may not be revegetated due to lack of ROW.

**I-580 Frontage, Toyota Dealership (986-0016-023-00/024-00) and Chevrolet/Cadillac Dealership (986-0016-004-01)**

See discussion above regarding the removal of landscaping along I-580.
**Table 4.B-1: Specific Properties Mentioned by Commenter**

<table>
<thead>
<tr>
<th>DMU Alternative/EMU Option</th>
<th>As stated in Response to Comments B3-4 and B3-5, economic impacts such as impacts to a site’s financial viability for future development are not considered environmental impacts per CEQA. All physical impacts associated with ROW acquisition will be mitigated per Mitigation Measure PH-2 (Acquisition of Property and Relocation Assistance).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northside Drive, Lowe’s (985-0061-007-00/-015-00); and I-580 Frontage, IKEA Retail Center Project (986-0033-005-02/-006-00)</td>
<td>The commenter correctly notes that under the DMU Alternative—and to a lesser degree, under the Express Bus/BRT Alternative—Altamirano Road would be relocated northward toward the existing BART parking lot, as shown in Appendix B (Footprint Map Books) of the Draft EIR. See areas of the maps hatched with the “Potential ROW Need,” which provides an approximate visual aid to illustrate ROW need and is based on preliminary engineering. Engineering drawings of the project alignment are more precise; these were made available to the City and are on BART’s project website. While Appendix B of the Draft EIR shows a hatched area overlapping with the existing southernmost row of parking, the parking ultimately would be retained upon project completion, as shown in the engineering drawings and in Figure 4.B-1 (Preliminary Engineering for Altamirano Avenue Relocation) below. The permanent project features would include shifting Altamirano Avenue northward into the landscaping area of the BART parking lot to accommodate the relocation of I-580, but existing parking in the BART parking lot would be retained. As the BART parking would not lose any spaces because of any alternative, the number of parking spaces is consistent with the assumptions in the cumulative analysis of the Draft EIR. For more information on the Dublin/Pleasanton Parking Structure and the cumulative analysis, see Response B3-7 below.</td>
</tr>
</tbody>
</table>
The analysis studied pedestrian and bicycle conditions around the proposed Isabel Station, given that the Proposed Project and DMU Alternative proposed a new BART station at Isabel Avenue that would change pedestrian and bicycle conditions in that area.

There are no changes to pedestrian and bicycle conditions near Dublin/Pleasanton Station under the DMU Alternative/EMU Option, Express Bus/BRT Alternative, or Enhanced Bus Alternative. While the proposed changes to platforms and tracks in the median of I-580 at the Dublin/Pleasanton Station change pedestrian conditions within the station itself, they do not change the pedestrian and bicycle environment in the area surrounding the station. In other words, neither the Proposed Project nor any of the alternatives would change the routes that pedestrians and bicyclists would use to access the station. Please refer to pages 382 through 388 of the Draft EIR (Section 3.B, Transportation) for more information. While bus service is planned to increase around Dublin/Pleasanton Station, such increases are minor compared with overall traffic and would not substantively change pedestrian and bicycle conditions in the area surrounding the station. For example, the Express Bus/BRT Alternative would include new bus transfer platforms in the median of I-580, and new and increased bus service would operate on I-580, which would not affect pedestrians and bicyclists in the Dublin/Pleasanton Station area. Other buses would continue to serve the Dublin/Pleasanton Station at the existing bus platforms adjacent to the Iron Horse Trail, where no changes are proposed. For more details, refer to the discussion of the Express Bus/BRT Alternative on page 143 of Chapter 2, Project Description.

Other than bicycle and pedestrian impacts, the comment does not identify any impacts of the DMU Alternative, Express Bus/BRT Alternative, and Enhanced Bus Alternative within the City of Dublin that the commenter claims were not adequately analyzed.

The comment suggests that expansion of the Dublin/Pleasanton Station parking should have been included in the baseline “without project” conditions, rather than treated as a reasonably foreseeable future project for purposes of cumulative impact analysis. However, plans for parking expansion at the Dublin/Pleasanton Station were still under development at the time that BART prepared its Draft EIR. As such, it would have been inappropriate for the Draft EIR analysis to assume the parking expansion as a baseline condition. Moreover, as described in Master Response 9, the Dublin/Pleasanton Station Parking Expansion is no longer under consideration by BART, although a different garage project is under consideration by the County.
Projects included in Draft EIR for the No Project scenarios for 2025 and 2040 generally were projects that had been approved or in an approved program at the time of the Draft EIR analysis. Given that construction of the garage or some other form of parking expansion is not an approved project and remains uncertain, it was not reasonable to include it in the No Project scenarios in the Draft EIR.

Nevertheless, CEQA requires the evaluation of cumulative impacts from the Proposed Project (or alternatives) along with the impacts of past, present, and reasonably foreseeable future projects. Given BART’s interest in some form of expanded parking at the Dublin/Pleasanton Station as of the date the Draft EIR was issued, it was considered a reasonably foreseeable future project and was included in the cumulative analyses for 2025 and 2040. To the extent that the commenter is concerned that environmental impacts may be understated without accounting for the potential Dublin/Pleasanton parking expansion, any such impacts were fully accounted for and disclosed in the cumulative analysis. See Master Response 9 for additional details regarding the history and status of the parking expansion, as well as the approach for incorporating the parking expansion into the Cumulative Conditions.

As described starting on page 226 of the Draft EIR, the cumulative analysis included the Proposed Project, the Isabel Neighborhood Plan (INP), the Dublin/Pleasanton Station Parking Expansion Project, and other past, present, and reasonably foreseeable projects in the study area. The commenter is correct that the cumulative analysis does not present the impacts of the Proposed Project and INP alone (i.e., excluding the effects of the other projects from the cumulative analysis). The purpose of the cumulative analysis is to present a more comprehensive analysis and identify any impacts that may be less than significant for the project, yet collectively significant. An isolated analysis of only the Proposed Project and the INP would not have been an adequate cumulative analysis. The Dublin/Pleasanton Station Parking Expansion Project was appropriately evaluated as part of the cumulative analysis.

The comment alternatively claims that, if parking expansion is analyzed as a separate project contributing to cumulative impacts together with the proposed project “as currently it is in the DEIR,” funding for the parking expansion must be provided as part of the Proposed Project. The comment provides no basis for this assertion and it is incorrect. If the parking expansion were funded as part of the Proposed Project, it would be part of the Proposed Project description, not a separate project evaluated for contribution to cumulative impacts together with the Proposed Project. There is no
requirement for a lead agency to provide funding for a project in order for it to be considered in cumulative impact analysis. Although the parking expansion was originally proposed as a BART project, in general most projects considered in EIR cumulative impact analyses are projects proposed and funded by other lead agencies. In any case, the Dublin/Pleasanton Station Parking Expansion is no longer under consideration by BART, although a different garage project is under consideration by a different lead agency, the County, with a different funding source.

B3-8

Thank you for the comment. The comment is correct in pointing out that Table 3.B-18 (Local Roadway Improvements, 2025 and 2040 No Project Conditions), on page 281 of the Draft EIR, contains errors in describing the City of Dublin’s roadway infrastructure. However, the transportation model used in the impact analysis did use the correct roadway configurations. No changes are required for the impact analysis; however, Table 3.B-18 has been updated to correctly reflect the roadway improvements.

Table 3.B-18 on page 281 of the Draft EIR has been revised as follows:

<table>
<thead>
<tr>
<th>Street</th>
<th>Limits</th>
<th>Improvement</th>
<th>Relevant Analysis Year</th>
<th>Relevant Study Intersection #</th>
</tr>
</thead>
</table>
| Dublin Boulev
Dublin Boulevard  | Brannigan Street to Fallon Road | Widen to eight six lanes | 2025 and 2040         | #19                         |
| Dublin Boulevard        | Dougherty Road to North Canyons Parkway | Extension          | 2040                  | N/A                         |
| Fallon Road             | Connect to Tassajara Road       | Extension             | 2040                  | N/A                         |
| Gleason Drive           | To Fallon Road                  | Extension             | 2040                  | N/A                         |
| Fallon Road Interchange | N/A                             | Upgrade                | 2040                  | #20                         |
| Dublin-Boulevard To Schaefer Ranch Road | | Extension          | 2040                  | N/A                         |
| Tassajara Road          | Dublin Boulevard to I-580       | Widen to eight lanes   | 2025 and 2040         | #14                         |
| Tassajara Road          | Fallon to Dublin                | Widen to six lanes     | 2040                  | #14                         |
| Hacienda Road           | Dublin Boulevard to Central Parkway | Widen to six lanes   | 2040                  | #9                          |
**TABLE 3.B-18**  | **LOCAL ROADWAY IMPROVEMENTS, 2025 AND 2040 NO PROJECT CONDITIONS**

<table>
<thead>
<tr>
<th>Street</th>
<th>Limits</th>
<th>Improvement</th>
<th>Relevant Analysis Year</th>
<th>Relevant Study Intersection #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dougherty Road</td>
<td>Sierra Court to City Limits</td>
<td>Widen to eight-six lanes</td>
<td>2025 and 2040</td>
<td>#1</td>
</tr>
</tbody>
</table>

Notes: EB = eastbound; WB = westbound; N/A = not applicable
Local roadway improvement assumptions were made with input from the Cities of Livermore, Dublin, and Pleasanton.

**B3-9**
For the DMU Alternative/EMU Option, the BLVX Travel Demand Model assumes that the transfer time in 2040 between the DMU (or EMU) and BART at Dublin/Pleasanton Station is 3 minutes. For the Express Bus/BRT Alternative, the model assumes that the Express Bus/BRT to BART transfer time at the Dublin/Pleasanton Station is also 3 minutes.

For the Express Bus/BRT Alternative, the travel time to the Dublin/Pleasanton Station is approximately:
- 11 minutes from the Airway Boulevard Park-and-Ride lot
- 18 minutes from the proposed Laughlin Road park-and-ride lot
- 19 minutes from Downtown Livermore
- 58 minutes from Downtown Tracy

**B3-10**
Please see Response to Comment B3-6.

**B3-11**
CEQA Guidelines section 15130(b)(1) provides that cumulative impact analysis may be based either on a list of past, present and probable future projects or on a summary of projections contained in an adopted local, regional or statewide plan. To analyze operational transportation impacts under Cumulative Conditions, the analysis utilized the BLVX Travel Demand Model, which relied on regionally adopted land use projections and modifications based on the INP. Specifically, the analysis used land use projections from the Association of Bay Area Governments’ Plan Bay Area and the San Joaquin Council of Governments’ Regional Transportation Plan/Sustainable Communities Strategy everywhere except within the INP area. In the INP area, the BLVX Travel Demand Model used the land use growth assumptions.
described in the INP. The travel model did not use the list of other approved or reasonably foreseeable projects in the BART project corridor that is in Appendix E of the Draft EIR. However, to analyze construction-related transportation impacts, the analysis used this list of approved/foreseeable projects in Appendix E.

Table 3.B-23 on page 294 of the Draft EIR provides the daily boardings and access modes at Dublin/Pleasanton Station in 2040. The number of passengers accessing the station by park-and-ride is the same for 2040 No Project and 2040 Project conditions (under all alternatives) because the demand for parking at Dublin/Pleasanton Station under both No Project and Project conditions is greater than the supply of parking, and the parking supply was not assumed to change with the Proposed Project, which does not include any additional parking at the station. The cumulative analysis, on the other hand, includes an additional 540 spaces provided under the Dublin/Pleasanton Parking Expansion Project. Therefore, as the parking supply was forecast to be expanded under the Cumulative Conditions, additional park-and-ride boardings would result at the Dublin/Pleasanton Station (ranging from 700 to 900 new boardings depending on the alternative). The number of new park-and-ride boardings is greater than the 540 spaces because it accounts for carpoolers and spaces turning over multiple times during the course of a day.

As noted in the comment, the BART Board directed its staff to look at options to the proposed Dublin/Pleasanton Station parking structure expansion and explore a “hybrid strategy” that would reduce the number of new spaces at the proposed parking structure site. The original transportation analysis accounted for the potential parking expansion by including that additional parking supply at Dublin/Pleasanton Station in the BLVX Travel Demand Model under Cumulative Conditions. The Dublin/Pleasanton Station Parking Expansion is no longer under consideration by BART, although a different garage project is under consideration by the County. See Master Response 9 for additional details regarding the Dublin/Pleasanton Parking Expansion Project.

In 2025, the vehicle miles traveled (VMT) reductions are greater under the project-only conditions for the Proposed Project and DMU Alternative/EMU Option than under the Cumulative Conditions for those alternatives. The cumulative scenarios include more transit trips from the Isabel Neighborhood Plan (INP) growth area, which results in higher VMT reductions than the project-only scenarios. However, the cumulative scenarios also include additional parking at Dublin/Pleasanton BART Station, which attracts trips away from Isabel BART Station, some of which are then traveling a farther distance to park at Dublin/Pleasanton Station, thus increasing VMT. In 2025, this effect
is greater than the VMT reductions from additional transit trips, thus creating the pattern reflecting lower VMT reductions under Cumulative Conditions than project-only conditions.

In 2040, the INP growth area and additional parking at Dublin/Pleasanton Station affect trip-making in similar ways as in 2025. However, in 2040, the INP growth area includes many more transit trips, which results in greater VMT reductions than the additional Dublin/Pleasanton Station parking produces in VMT increases. Therefore, overall, VMT reductions for those two alternatives are greater under Cumulative Conditions than under project-only conditions.

In response to this comment, the following table has been added to page 302 of the Draft EIR:

<table>
<thead>
<tr>
<th></th>
<th>Conventional BART Project</th>
<th>DMU Alternative (with EMU Option)</th>
<th>Express Bus/BRT Alternative</th>
<th>Enhanced Bus Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>2025 Project-Only</td>
<td>5,300</td>
<td>4,300</td>
<td>1,700</td>
<td>300</td>
</tr>
<tr>
<td>2025 Cumulative</td>
<td>5,900</td>
<td>4,500</td>
<td>2,500</td>
<td>1,100</td>
</tr>
<tr>
<td>2040 Project-Only</td>
<td>8,800</td>
<td>5,400</td>
<td>3,000</td>
<td>500</td>
</tr>
<tr>
<td>2040 Cumulative</td>
<td>11,000</td>
<td>7,000</td>
<td>4,200</td>
<td>1,400</td>
</tr>
</tbody>
</table>

The analysis predicted the number of new BART trips based on the assumed future land use patterns and transportation network, using origins and destinations and the mode they shifted from to calculate the associated VMT reduction. Some of those trips would include driving to BART stations, so that distance was subtracted from the savings. Lastly, the changes in distance traveled on Livermore-Amador Valley Transportation Authority (LAVTA) buses and ACE were added to the VMT savings.

Regarding the number of BART trips originating from San Joaquin County, the following table has been added to page 302 of the Draft EIR:
TABLE 3.B-30.B  NUMBER OF BART TRIPS ORIGINATING FROM SAN JOAQUIN COUNTY (2040)

<table>
<thead>
<tr>
<th></th>
<th>No Project Alternative</th>
<th>Conventional BART Project</th>
<th>DMU Alternative (with EMU Option)</th>
<th>Express Bus/BRT Alternative</th>
<th>Enhanced Bus Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>2040 Project-Only</td>
<td>3,000</td>
<td>5,900</td>
<td>4,600</td>
<td>3,300</td>
<td>3,100</td>
</tr>
</tbody>
</table>

Under the cumulative scenarios in both 2025 and 2040, demand for parking at Dublin/Pleasanton Station decreases due to the availability of parking at the proposed Isabel Station. Nevertheless, even with the added parking at Isabel Station and added parking from the Dublin/Pleasanton Station Parking Expansion, demand for parking at Dublin/Pleasanton Station would continue to exceed supply. In addition, please note that the Dublin/Pleasanton Station Parking Expansion is no longer under consideration, although a different garage project is under consideration by the County.


Tables 3.B-14 and 3.B-15 (starting on page 276 of the Draft EIR), as well as Tables 3.B-16 and 3.B-17, which require corrections as well, have been revised as follows:

TABLE 3.B-14  I-580 PERFORMANCE IN AM, 2025 NO PROJECT CONDITIONS

<table>
<thead>
<tr>
<th>#</th>
<th>To</th>
<th>From</th>
<th>General-Purpose Westbound</th>
<th>General-Purpose Eastbound</th>
<th>Express Lane Westbound</th>
<th>Express Lane Eastbound</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>LOS</td>
<td>V/C</td>
<td>LOS</td>
<td>V/C</td>
</tr>
<tr>
<td>1</td>
<td>Dougherty Road/Hopyard Road</td>
<td>Hacienda Drive</td>
<td>E</td>
<td>0.971</td>
<td>B</td>
<td>0.471</td>
</tr>
<tr>
<td>2</td>
<td>Hacienda Drive</td>
<td>Tassajara Road/Santa Rita Road</td>
<td>E</td>
<td>0.995</td>
<td>F</td>
<td>1.004</td>
</tr>
<tr>
<td>3</td>
<td>Tassajara Road/Santa Rita Road</td>
<td>Fallon Road/El Charro Road</td>
<td>F</td>
<td>1.004</td>
<td>B</td>
<td>0.567</td>
</tr>
<tr>
<td>4</td>
<td>Fallon Road/El Charro Road</td>
<td>Airway Boulevard</td>
<td>E</td>
<td>0.975</td>
<td>B</td>
<td>0.547</td>
</tr>
</tbody>
</table>

200
## TABLE 3.B-14  I-580 PERFORMANCE IN AM, 2025 NO PROJECT CONDITIONS

<table>
<thead>
<tr>
<th>#</th>
<th>To</th>
<th>From</th>
<th>General-Purpose Westbound</th>
<th>General-Purpose Eastbound</th>
<th>Express Lane Westbound</th>
<th>Express Lane Eastbound</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Airway Boulevard</td>
<td>Isabel Avenue</td>
<td>F 1.037</td>
<td>B 0.488 0.49</td>
<td>F 1.044 A</td>
<td>0.147 0.15</td>
</tr>
<tr>
<td>6</td>
<td>Isabel Avenue</td>
<td>Livermore Avenue</td>
<td>F 1.051</td>
<td>B 0.537 0.54</td>
<td>F 1.055 A</td>
<td>0.147 0.15</td>
</tr>
<tr>
<td>7</td>
<td>Livermore Avenue</td>
<td>Springtown Boulevard/First Street</td>
<td>E 0.984</td>
<td>B 0.519 0.52</td>
<td>E 0.994 A</td>
<td>0.147 0.15</td>
</tr>
<tr>
<td>8</td>
<td>Springtown Boulevard/First Street</td>
<td>Vasco Road</td>
<td>E 0.978</td>
<td>B 0.567</td>
<td>E 0.981 A</td>
<td>0.146 0.15</td>
</tr>
<tr>
<td>9</td>
<td>Vasco Road</td>
<td>Greenville Road</td>
<td>E 0.977 0.87</td>
<td>B 0.571</td>
<td>D 0.866 0.87</td>
<td>0.00</td>
</tr>
<tr>
<td>10</td>
<td>Greenville Road</td>
<td>Carroll Road/ Flynn Road</td>
<td>F 1.038 1.04</td>
<td>B 0.444</td>
<td>N/A N/A N/A</td>
<td></td>
</tr>
</tbody>
</table>

Notes: N/A = not applicable; LOS = level of service; V/C = volume to capacity ratio; bold/gray shading indicates segments that operate at unacceptable levels. Source: Arup, 2017.

## TABLE 3.B-15  I-580 PERFORMANCE IN PM, 2025 NO PROJECT CONDITIONS

<table>
<thead>
<tr>
<th>#</th>
<th>To</th>
<th>From</th>
<th>General-Purpose Westbound</th>
<th>General-Purpose Eastbound</th>
<th>Express Lane Westbound</th>
<th>Express Lane Eastbound</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dougherty Road/ Hopyard Road</td>
<td>Hacienda Drive</td>
<td>C 0.634</td>
<td>C 0.714</td>
<td>B 0.449 0.45</td>
<td>N/A N/A</td>
</tr>
<tr>
<td>2</td>
<td>Hacienda Drive</td>
<td>Tassajara Road/ Santa Rita Road</td>
<td>C 0.630</td>
<td>D 0.899 0.90</td>
<td>B 0.448 0.45</td>
<td>D 0.827 0.82</td>
</tr>
<tr>
<td>3</td>
<td>Tassajara Road/ Santa Rita Road</td>
<td>Fallon Road/ El Charro Road</td>
<td>C 0.659 0.66</td>
<td>E 0.954</td>
<td>B 0.474 D</td>
<td>0.846 0.85</td>
</tr>
<tr>
<td>4</td>
<td>Fallon Road/ El Charro Road</td>
<td>Airway Boulevard</td>
<td>C 0.623</td>
<td>E 0.970</td>
<td>B 0.473 B</td>
<td>0.442 0.42</td>
</tr>
<tr>
<td>5</td>
<td>Airway Boulevard</td>
<td>Isabel Avenue</td>
<td>B 0.545</td>
<td>E 0.953</td>
<td>B 0.426 0.43</td>
<td>B 0.398 0.40</td>
</tr>
<tr>
<td>6</td>
<td>Isabel Avenue</td>
<td>Livermore Avenue</td>
<td>C 0.636 0.64</td>
<td>F 1.037 1.04</td>
<td>B 0.421 B</td>
<td>0.433 0.40</td>
</tr>
<tr>
<td>7</td>
<td>Livermore Avenue</td>
<td>Springtown Boulevard/ First Street</td>
<td>B 0.513</td>
<td>E 0.922</td>
<td>B 0.366 0.37</td>
<td>B 0.402 0.40</td>
</tr>
</tbody>
</table>
### Table 3.B-15  I-580 Performance in PM, 2025 No Project Conditions

<table>
<thead>
<tr>
<th>#</th>
<th>To</th>
<th>From</th>
<th>General-Purpose Westbound</th>
<th>General-Purpose Eastbound</th>
<th>Express Lane Westbound</th>
<th>Express Lane Eastbound</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Springtown Boulevard/First Street</td>
<td>Vasco Road</td>
<td>C 0.586(\frac{0.59}{0.59})</td>
<td>E 0.903(\frac{0.90}{0.79})</td>
<td>B 0.356</td>
<td>B 0.364</td>
</tr>
<tr>
<td>9</td>
<td>Vasco Road</td>
<td>Greenville Road</td>
<td>B 0.578(\frac{0.57}{0.54})</td>
<td>D 0.892(\frac{0.89}{0.79})</td>
<td>A 0.180</td>
<td>C 0.624</td>
</tr>
<tr>
<td>10</td>
<td>Greenville Road</td>
<td>Carroll Road/Flynn Road</td>
<td>C 0.603(\frac{0.62}{0.62})</td>
<td>D 0.817(\frac{0.82}{0.82})</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Notes: N/A = not applicable; LOS = level of service; V/C = volume to capacity ratio; **bold**/gray shading indicates segments that operate at unacceptable levels. Source: Arup, 2017.

### Table 3.B-16  I-580 Performance in AM, 2040 No Project Conditions

<table>
<thead>
<tr>
<th>#</th>
<th>To</th>
<th>From</th>
<th>General-Purpose Westbound</th>
<th>General-Purpose Eastbound</th>
<th>Express Lane Westbound</th>
<th>Express Lane Eastbound</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dougherty Road/Hopyard Road</td>
<td>Hacienda Drive</td>
<td>E 0.981(\frac{0.98}{0.98})</td>
<td>B 0.548(\frac{0.54}{0.55})</td>
<td>B 0.466(\frac{0.47}{0.47})</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>Hacienda Drive</td>
<td>Tassajara Road/Santa Rita Road</td>
<td>F 1.004(\frac{1.00}{1.00})</td>
<td>C 0.651(\frac{0.65}{0.65})</td>
<td>B 0.450(\frac{0.45}{0.45})</td>
<td>A 0.192(\frac{0.19}{0.19})</td>
</tr>
<tr>
<td>3</td>
<td>Tassajara Road/Santa Rita Road</td>
<td>Fallon Road/El Charro Road</td>
<td>F 1.020(\frac{1.02}{1.02})</td>
<td>C 0.668(\frac{0.66}{0.66})</td>
<td>B 0.446(\frac{0.45}{0.45})</td>
<td>A 0.198(\frac{0.19}{0.19})</td>
</tr>
<tr>
<td>4</td>
<td>Fallon Road/El Charro Road</td>
<td>Airway Boulevard</td>
<td>E 0.995(\frac{0.99}{0.99})</td>
<td>C 0.653(\frac{0.65}{0.65})</td>
<td>B 0.435(\frac{0.44}{0.44})</td>
<td>A 0.105(\frac{0.10}{0.10})</td>
</tr>
<tr>
<td>5</td>
<td>Airway Boulevard</td>
<td>Isabel Avenue</td>
<td>F 1.064(\frac{1.06}{1.06})</td>
<td>C 0.588(\frac{0.59}{0.59})</td>
<td>B 0.399(\frac{0.40}{0.40})</td>
<td>A 0.102(\frac{0.10}{0.10})</td>
</tr>
<tr>
<td>6</td>
<td>Isabel Avenue</td>
<td>Livermore Avenue</td>
<td>F 1.103(\frac{1.10}{1.10})</td>
<td>C 0.633(\frac{0.63}{0.63})</td>
<td>B 0.396(\frac{0.40}{0.40})</td>
<td>A 0.098(\frac{0.10}{0.10})</td>
</tr>
<tr>
<td>7</td>
<td>Livermore Avenue</td>
<td>Springtown Boulevard/First Street</td>
<td>F 1.026(\frac{1.03}{1.03})</td>
<td>C 0.628(\frac{0.63}{0.63})</td>
<td>B 0.378(\frac{0.38}{0.38})</td>
<td>A 0.098(\frac{0.10}{0.10})</td>
</tr>
<tr>
<td>8</td>
<td>Springtown Boulevard/First Street</td>
<td>Vasco Road</td>
<td>F 1.037(\frac{1.04}{1.04})</td>
<td>D 0.766(\frac{0.77}{0.77})</td>
<td>A 0.349(\frac{0.35}{0.35})</td>
<td>A 0.096(\frac{0.10}{0.10})</td>
</tr>
<tr>
<td>9</td>
<td>Vasco Road</td>
<td>Greenville Road</td>
<td>F 1.071(\frac{0.956}{0.956})</td>
<td>C 0.674(\frac{0.66}{0.66})</td>
<td>A 0.280(\frac{0.28}{0.28})</td>
<td>A 0.17(\frac{0.16}{0.16})</td>
</tr>
<tr>
<td>10</td>
<td>Greenville Road</td>
<td>Carroll Road/Flynn Road</td>
<td>F 1.056(\frac{1.06}{1.06})</td>
<td>B 0.567(\frac{0.57}{0.57})</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Notes: N/A = not applicable; LOS = level of service; V/C = volume to capacity ratio; **bold**/gray shading indicates segments that operate at unacceptable levels. Source: Arup, 2017.
### Table 3.B-17 I-580 Performance in PM, 2040 No Project Conditions

<table>
<thead>
<tr>
<th>#</th>
<th>To</th>
<th>From</th>
<th>General-Purpose Westbound</th>
<th>General-Purpose Eastbound</th>
<th>Express Lane Westbound</th>
<th>Express Lane Eastbound</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dougherty Road/Hopyard Road</td>
<td>Hacienda Drive</td>
<td>LOS: C 0.748 V/C: 0.75</td>
<td>LOS: C 0.684 V/C: 0.684</td>
<td>LOS: A 0.214</td>
<td>N/A N/A</td>
</tr>
<tr>
<td>2</td>
<td>Hacienda Drive</td>
<td>Tassajara Road/Santa Rita Road</td>
<td>D: 0.758 E: 0.940</td>
<td>E: 0.976 V/C: 0.98</td>
<td>A: 0.221</td>
<td>A: 0.232</td>
</tr>
<tr>
<td>3</td>
<td>Tassajara Road/Santa Rita Road</td>
<td>Fallon Road/El Charro Road</td>
<td>D: 0.780 E: 0.976 V/C: 0.98</td>
<td>A: 0.222</td>
<td>A: 0.239</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Fallon Road/El Charro Road</td>
<td>Airway Boulevard</td>
<td>D: 0.754 E: 0.970 V/C: 0.97</td>
<td>A: 0.216</td>
<td>A: 0.129</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Airway Boulevard</td>
<td>Isabel Avenue</td>
<td>C: 0.664 E: 0.992 V/C: 0.99</td>
<td>A: 0.202</td>
<td>A: 0.124</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Isabel Avenue</td>
<td>Livermore Avenue</td>
<td>D: 0.771 F: 1.083 V/C: 1.083</td>
<td>A: 0.199</td>
<td>A: 0.128</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Livermore Avenue</td>
<td>Springtown Boulevard/First Street</td>
<td>C: 0.738 E: 0.97 V/C: 0.97</td>
<td>A: 0.181</td>
<td>A: 0.119</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Springtown Boulevard/First Street</td>
<td>Vasco Road</td>
<td>D: 0.826 E: 0.957 V/C: 0.957</td>
<td>A: 0.174</td>
<td>A: 0.109</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Vasco Road</td>
<td>Greenville Road</td>
<td>C: 0.776 E: 0.85 V/C: 0.85</td>
<td>A: 0.131</td>
<td>A: 0.167</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Greenville Road</td>
<td>Carroll Road/Flynn Road</td>
<td>D: 0.750 D: 0.816 V/C: 0.816</td>
<td>N/A N/A</td>
<td>N/A N/A</td>
<td></td>
</tr>
</tbody>
</table>

Notes: N/A = not applicable; LOS = level of service; V/C= volume to capacity ratio; Bold/gray shading indicates segments that operate at unacceptable levels.

Source: Arup, 2017.

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**B3-15** The text on page 337 incorrectly states the wrong segment for mitigation and has been revised. However, the numbers and impact identification in Table 3.B-40 are correct.

Page 337 of the Draft EIR has been revised as follows:

**DMU Alternative.** Under the DMU Alternative in 2025, one express lane freeway segment would have a significant impact compared to No Project Conditions. Impacts would occur at the following segment:

- **Tassajara/Santa Rita Road to Fallon/El Charro Road Livermore Avenue to Springtown Boulevard/First Street Express Lane (Segment #7).** Under 2025 with DMU Alternative Conditions, this
express lane freeway segment would operate at a V/C ratio of 1.003 and LOS F during the AM peak hour in the westbound direction. The V/C ratio for this segment increases by more than 2 percent than it would under No Project Conditions.

B3-16 As described starting on page 357 of the Draft EIR, significant impacts under 2025 project conditions at Dougherty Road & Dublin Boulevard (Intersection #2) would be reduced to less than significant with implementation of Mitigation Measure TRAN-7a (Improvements for Intersections #2, #5, #39, and #48 under 2025 Project Conditions), which requires improvements for turning and through lanes. Similarly, this mitigation is applied for other scenarios as noted in the comment.

BART acknowledges the City of Dublin’s concerns about the proposed mitigation and will consult with the City to explore other options, including an adaptive signal control system as suggested in the comment.

B3-17 The change in the contribution of truck traffic emissions to cancer risk and impacts to sensitive receptors from particulate matter less than 2.5 microns in diameter (PM\(_{2.5}\)) that would result from the relocation of the I-580 lanes has been added to the Draft EIR in response to this comment.

Table 2-1, starting on page 80 of the Draft EIR (Chapter 2, Project Description), describes the required relocation of the I-580 lanes. As shown there, relocation would typically be around 46 feet. Generally, approximately half of the relocation would occur north of the I-580 median, shifting the westbound lanes farther north, and half would occur south of the median, shifting the eastbound lanes farther south. The extent of relocation along the project corridor is shown in Figure 2-2 (Conventional BART), Figure 2-14 (DMU Alternative/EMU Option), and Figure 2-20 (Express Bus/BRT Alternative) (see also Appendix B in the Draft EIR). The relocation of I-580 lanes would shift the closest traffic adjacent to a particular sensitive receptor even closer and shift the distant traffic on lanes headed the opposite direction farther from the receptor.

In order to assess health risk from highway relocation, cancer risk and PM\(_{2.5}\) concentration values were calculated for the maximally exposed individual sensitive receptors (MEISRs) using the Bay Area Air Quality Management District (BAAQMD) Highway Screening Analysis Tool. As shown in Appendix B.1 of the RTC, Revised Air Quality Appendix, Table 41, this screening analysis indicates that risks from widening the I-580 median to accommodate rail (Proposed Project and DMU Alternative/EMU Option) and bus transfer platforms (Express
Bus/BRT Alternative) would be reduced for the Proposed Project and EMU Option (as traffic shifts farther from sensitive receptors as a result of the relocation) and less than significant for the DMU Alternative and Express Bus/BRT Alternative (despite traffic shifts closer to sensitive receptors as a result of the relocation). The Enhanced Bus Alternative would not entail relocation of I-580, and thus would have no impacts. Therefore, as described below, no new significant impacts would result from changes in truck traffic emissions associated with the relocation of I-580 and no changes to the significance conclusions presented in the Draft EIR are required.

In response to the comment, the following text is added to the third paragraph on page 1121:

Sources considered in the operational HRA include: (1) traffic generated by full buildout of the BART to Livermore Extension Project (roadway segments with an increase in average daily traffic volume greater than 10,000 vehicles per day); (2) traffic lanes shifting closer to, or farther from sensitive receptors as a result of the I-580 relocation; (3) buses; (4) DMUs (DMU Alternative only); (5) maintenance trucks and solvents to be used for maintenance operations at the BART and DMU maintenance facilities (Proposed Project and DMU Alternative); and (6) maintenance operation of the diesel-fired emergency generators. Under State regulatory guidelines, diesel particulate matter (DPM) is used as a surrogate measure of carcinogen exposure for the mixture of chemicals that make up diesel exhaust.

A new section is added under the fourth paragraph on page 1122 (Source Configurations and Parameters) as follows:

I-580 Relocation – Changing the Location of Traffic with Respect to Sensitive Receptors (Conventional BART Project, DMU Alternative/EMU Option, and Express Bus/BRT Alternative). This analysis addresses the impacts of moving traffic on I-580 closer to and/or farther from sensitive receptors as a result of the highway relocation. Generally, the westbound I-580 lanes would be shifted to the north and the eastbound I-580 lanes would be shifted to the south to accommodate the widened median for the rail extension or the bus transfer platforms, resulting in traffic being closer to, as well as farther from, each respective sensitive receptor.

In order to assess health risks from highway relocation, cancer risk and PM2.5 concentration values were calculated for the MEISRs using the
The BAAQMD Highway Screening Analysis Tool.\(^1\) The tool was used to estimate the excess cancer risk from shifting the traffic closest to a sensitive receptor even closer and shifting distant traffic on I-580 lanes headed the opposite direction, even farther (similar to the example above).

Health risks from the BAAQMD Highway Screening Analysis Tool were estimated using 2014 emission rates from CARB’s mobile source emissions estimation tool EMFAC2007.\(^2\) As EMFAC2007 is no longer available for public use, the more recent model (EMFAC2014) was run for calendar years 2014 through 2050.\(^3\) To estimate cancer risk in 2025, a scaling value was developed to adjust for fleet improvements in DPM emissions between 2014 and 2025. The scaling value takes into account the year-by-year changes to estimated fleet-average per-mile emission factors and applies an appropriate weighting for age-specific exposure factors over a 30-year period starting at the third trimester. The scaling value also takes into account the updates to OEHHA (2015) risk assessment guidelines made since the development of the BAAQMD Highway Screening Analysis Tool, updating the exposure factors for cancer risk (including daily breathing rate, fraction of time at home, and age sensitivity factors). Additionally, an adjustment was made to account for the increase in traffic volumes on I-580 from 2014 (the basis for the Highway Screening Analysis Tool) and project evaluation years 2025 and 2040. The resulting adjustments for lower future emissions, higher traffic volume, and updated OEHHA guidance were used to scale cancer risk estimates from the Highway Screening Analysis Tool. To estimate PM\(_{2.5}\) concentration in 2025, the PM\(_{2.5}\) concentration from the Highway Screening Analysis Tool was multiplied by the ratio of the emission factor for PM\(_{2.5}\) in 2025 to the emission factor for PM\(_{2.5}\) in 2014, scaled upwards for the increase in traffic volume on I-580. It is conservatively assumed that DPM emissions contribute 80 percent of the total cancer risk from highway emissions. The same scaling factor developed to estimate highway impacts for 2025 (accounting for lower emissions and updated risk assessment guidelines) was conservatively applied to estimate highway impacts for 2040 emissions, although it is


\(^3\) Every calendar year between 2014 and 2050 (inclusive) was evaluated because cancer risk is based on a 30-year exposure and exposure parameters vary by year. A 30-year exposure starting in 2025 will end in 2054. The maximum year possible to run EMFAC is 2050. Thus, it is assumed that DPM emissions level off (i.e., stay constant) after 2050.
expected that highway impacts in 2040 would be much lower due to reduced emissions anticipated under existing regulations. Appendix H shows the contribution to cancer risk and PM$_{2.5}$ concentration from the highway relocation (Table 41).

The Draft EIR is revised to include the following sentence in the fifth paragraph on page 1122 as follows:

Passenger Vehicle Traffic (Conventional BART Project and Alternatives).

To address the impacts of passenger vehicle traffic described in Section 3.B, Transportation, road segments with an increase in average daily traffic volume greater than 10,000 vehicles per day were identified. A screening-level risk assessment was completed for these segments using the BAAQMD Roadway Screening Analysis Calculator. The same adjustment for lower emissions in future years, as described above, was applied to the BAAQMD Roadway Screening Analysis Calculator. Cancer risk and PM$_{2.5}$ concentration were identified for the operational MEISR.

The Draft EIR is revised to include the following sentence at the end of the first paragraph on page 1160 under Impact 11 (Result in emissions of TACs and PM$_{2.5}$ causing increased health risk above BAAQMD significance thresholds under 2025 Project Conditions) as follows:

In addition, the relocation of I-580 would result in changes to health risk at nearby sensitive receptors.

Draft EIR Tables 3.K-19 and 3.K-20, on page 1161 and 1162, respectively, have been revised as follows:
## Table 3.K-19 Maximum Operational Project Cancer Risk at Off-Site Receptors in 2025

<table>
<thead>
<tr>
<th>Source</th>
<th>Conventional BART Project</th>
<th>DMU Alternative</th>
<th>EMU Option</th>
<th>Express Bus/BRT Alternative</th>
<th>Enhanced Bus Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Type</td>
<td>Resident</td>
<td>Resident</td>
<td>Resident</td>
<td>Resident</td>
<td>Resident</td>
</tr>
<tr>
<td>Traffic</td>
<td>0.26</td>
<td>0.26</td>
<td>0.26</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Highway Relocation</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1.4</td>
<td>--</td>
</tr>
<tr>
<td>Buses</td>
<td>6.1</td>
<td>6.1</td>
<td>6.1</td>
<td>4.1</td>
<td>6.3</td>
</tr>
<tr>
<td>DMU</td>
<td>--</td>
<td>1.6</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Generator (Isabel Station)</td>
<td>0.44</td>
<td>0.44</td>
<td>0.44</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Generator (Maintenance Facility)</td>
<td>0.025</td>
<td>0.043</td>
<td>0.043</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Maintenance Trucks and Shuttle Van</td>
<td>9.1E-06</td>
<td>2.1E-05</td>
<td>2.1E-05</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Solvent Use</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6.6</strong></td>
<td><strong>8.4</strong></td>
<td><strong>8.2</strong></td>
<td><strong>6.8</strong></td>
<td><strong>6.6</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Significance Threshold</th>
<th>10</th>
<th>10</th>
<th>10</th>
<th>10</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above Threshold?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Notes: -- = not applicable.

* Incremental increase in traffic volume is less than 10,000 vehicles per day for all roadway segments. Per BAAQMD screening methodology, cancer risk is considered to be negligible.

* Solvent use in the storage and maintenance facility for the Proposed Project, DMU Alternative, and EMU Option would be less than the BAAQMD permitting thresholds. Therefore, cancer risk is considered to be negligible.

* A numerical value with "E" denotes scientific notation; thus, 5.6E-06 is equivalent to 5.6 x 10^-6.

* A shuttle van is included for the Proposed Project only. Maintenance trucks are included for the Proposed Project, DMU Alternative, and EMU Option.

* A shuttle van is included for the Proposed Project only. Maintenance trucks are included for the Proposed Project, DMU Alternative, and EMU Option.

Note: For the Conventional BART Project, DMU Alternative, and EMU Option, the highway relocation would result in a reduction in cancer risk at the MEISR because the cancer risk impact from moving the westbound lanes of I-580 closer to the MEISR (by 11 feet) is outweighed by moving the eastbound lanes of I-580 farther from the MEISR (by 36 feet). As a conservative measure, this reduction in cancer risk (beneficial effect) is not included.
<table>
<thead>
<tr>
<th>Source</th>
<th>Conventional BART Project</th>
<th>DMU Alternative</th>
<th>EMU Option</th>
<th>Express Bus/BRT Alternative</th>
<th>Enhanced Bus Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic</td>
<td>0.0054</td>
<td>--</td>
<td>0.0052</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Highway Relocation</td>
<td>--</td>
<td>0.024</td>
<td>--</td>
<td>0.0049</td>
<td>--</td>
</tr>
<tr>
<td>Buses</td>
<td>0.0087</td>
<td>0.00043</td>
<td>0.0087</td>
<td>0.0057</td>
<td>0.0085</td>
</tr>
<tr>
<td>DMU</td>
<td>--</td>
<td>0.022</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Generator (Isabel Station)</td>
<td>0.00059</td>
<td>4.2E-05</td>
<td>0.00059</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Generator (Maintenance Facility)</td>
<td>3.3E-05</td>
<td>0.00013</td>
<td>5.8E-05</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Maintenance Trucks and Shuttle Van</td>
<td>2.3E-08</td>
<td>6.4E-08</td>
<td>5.8E-08</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Total</td>
<td>0.015 0.0093</td>
<td>0.047 0.023</td>
<td>0.015</td>
<td>0.011 0.0057</td>
<td>0.0085</td>
</tr>
<tr>
<td>Significance Threshold</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Notes: -- = not applicable; µg/m³ = micrograms per cubic meter; PM₂.₅ = fine particulate matter.

a Incremental increase in traffic volume is less than 10,000 vehicles per day for all roadway segments. Per BAAQMD screening methodology, cancer risk is considered to be negligible.

b A numerical value with "E" denotes scientific notation; thus, 3.7E-05 is equivalent to 3.7 x 10⁻⁵.

c A shuttle van is included for the Proposed Project only. Maintenance trucks are included for the Proposed Project, DMU Alternative, and EMU Option.

d For the Conventional BART Project and EMU Option, the highway relocation would result in a reduction in PM₂.₅ concentration at the MEISR because the concentration impact from moving the westbound lanes of I-580 closer to the MEISR (by 11 feet) is outweighed by moving the eastbound lanes of I-580 farther from the MEISR (by 36 feet). As a conservative measure, this reduction in PM₂.₅ concentration (beneficial effect) is not included.

Page 1162 of the Draft EIR has been revised as follows:

**Conventional BART Project.** In 2025, the Proposed Project would result in potential impacts to health risk associated with toxic air contaminants (TACs) and PM₂.₅ concentrations due to changes in passenger vehicle activity, highway relocation, new bus routes, activities at the storage and maintenance facility, and emergency generators.

- In 2025, the Proposed Project would have an overall net reduction in VMT of 38,250,574 miles compared to 2025 No Project Conditions.
However, as described above, this analysis conservatively does not quantify the reduction in TACs and PM$_{2.5}$ associated with the net reduction in VMT.

- No roadway segments were projected to have an increase of 10,000 vehicles per day. Thus, the contribution to incremental cancer risk and PM$_{2.5}$ concentration is not evaluated for changes in passenger vehicle.

- There is one roadway segment of Airway Boulevard projected to have a net increase of greater than 10,000 vehicles per day within 1,000 feet of the MEISR. This segment is to the south of I-580 and to the west of Sutter Street. All other roadway segments would have a net increase of less than 10,000 vehicles per day or a net decrease in roadway volume. Thus, this one roadway segment was evaluated for contribution to incremental cancer risk and PM$_{2.5}$ concentration. In addition, I-580 is within 1,000 feet of the MEISR. Both will impact the MEISR.

- At the identified MEISR location, the westbound lanes of I-580 would be shifted 11 feet closer to the MEISR and the eastbound lanes would be shifted 36 feet farther from the MEISR. This results in a reduction in cancer risk and PM$_{2.5}$ concentration at the MEISR. The reduction (beneficial effect) is conservatively not accounted for in the overall cancer risk and PM$_{2.5}$ concentration at the MEISR.

The second paragraph on page 1163 of the Draft EIR has been revised as follows:

Table 3.K-19 shows that the increased cancer risk at the MEISR is 6.5-6.8 in-1-million and Table 3.K-20 shows that the maximum PM$_{2.5}$ concentration is 0.00993-0.015 µg/m$^3$, which are below the thresholds of 10-in-1-million and 0.3 µg/m$^3$, respectively. Therefore, the Proposed Project in 2025 would have less-than-significant impacts related to health risk. (LS)

In addition, the following revisions have been made to page 1163 of the Draft EIR:

DMU Alternative. In 2025, the DMU Alternative would result in similar emission sources as the Proposed Project, except that it would include DPM emissions from the DMU vehicles. The new and modified bus routes, highway relocation, emergency generators, and maintenance trucks at the storage and maintenance facility would be similar to the Proposed Project.

- In 2025, the DMU Alternative would have an overall net reduction in VMT of 28,578,215 miles compared to the 2025 No Project Conditions. However, as described above, this analysis conservatively does not
quantify the reduction in TACs and PM$_{2.5}$ associated with the net reduction in VMT.

- No roadway segments under this alternative were projected to have an increase of 10,000 vehicles per day. Thus, the contribution to incremental cancer risk and PM$_{2.5}$ concentration is not evaluated for changes in passenger vehicle activity.

- There is one roadway segment of Airway Boulevard projected to have a net increase greater than 10,000 vehicles per day within 1,000 feet of the MEISR. This segment is to the south of I-580 and to the west of Sutter Street. All other roadway segments would have a net increase of less than 10,000 vehicles per day or a net decrease in roadway volume. Thus, this one roadway segment was evaluated for contribution to incremental health risk and PM$_{2.5}$ concentration.

- At the identified cancer risk MEISR location, the westbound lanes of I-580 would be shifted 11 feet closer to the MEISR, while the eastbound lanes would be shifted 36 feet farther from the MEISR. This results in a reduction in cancer risk at the MEISR. The reduction (beneficial effect) is conservatively not accounted for in the overall cancer risk at the MEISR.

- At the identified PM$_{2.5}$ concentration MEISR location, the eastbound lanes of I-580 would be shifted 21 feet closer to the MEISR, while the westbound lanes would be shifted 5 feet farther from the MEISR.

The second paragraph on page 1164 of the Draft EIR (under DMU Alternative) has been revised as follows:

Table 3.K-19 shows that the increased cancer risk at the MEISR is $8.2 \text{ to } 8.4\text{-in-1-million}$ and Table 3.K-20 shows that the maximum PM$_{2.5}$ concentration is $0.023 \text{ to } 0.047 \mu g/m^3$, which are below the thresholds of 10-in-1-million and 0.3 $\mu g/m^3$, respectively. Therefore, the 2025 DMU Alternative would have less-than-significant impacts related to health risk. (LS)

The second-to-last sentence in the third paragraph under the EMU Option on page 1164 of the Draft EIR has been revised as follows:

Table 3.K-19 shows that the increased cancer risk at the MEISR is $6.6 \text{ to } 6.8\text{-in-1-million}$ and Table 3.K-20 shows that the maximum PM$_{2.5}$ concentration is $0.0093 \text{ to } 0.015 \mu g/m^3$, which are below the thresholds of 10-in-1-million and 0.3 $\mu g/m^3$ respectively.
A new (third) bullet is added under the Express Bus/BRT Alternative on page 1164 of the Draft EIR, as follows:

- **At the identified MEISR location, the westbound lanes of I-580 would be shifted 43 feet closer to the MEISR, while the eastbound lanes would be shifted 69 feet farther from the MEISR.**

The last paragraph on page 1164 of the Draft EIR (under the Express Bus/BRT Alternative) has been revised as follows:

In 2025, the cancer risk MEISR and maximum PM$_{2.5}$ concentration for the Express Bus/BRT Alternative are located at the Dublin Station – Avalon II apartment complex, approximately 127 meters north of the Dublin/Pleasanton Station. Table 3.K-19 shows that the increased cancer risk at the MEISR is 4.1-5.5-in-1-million and Table 3.K-20 shows that the maximum PM$_{2.5}$ concentration is 0.0057-0.011 µg/m$^3$, which are below the thresholds of 10-in-1-million and 0.3 µg/m$^3$, respectively. Therefore, the 2025 Express Bus/BRT Alternative would have less-than-significant impacts related to health risk. *(LS)*

Draft EIR Tables 3.K-21 and 3.K-22, on page 1166 and 1167, respectively, under Impact AQ-12 (Result in Emissions of TACs and PM$_{2.5}$ Causing Increased Health Risk Above BAAQMD Significance Thresholds Under 2040 Project Conditions) have been revised as follows:
### Table 3.K-21 Maximum Operational Project Cancer Risk at Off-Site Receptors in 2040

<table>
<thead>
<tr>
<th>Source</th>
<th>Conventional BART Project</th>
<th>DMU Alternative</th>
<th>EMU Option</th>
<th>Express Bus/BRT Alternative</th>
<th>Enhanced Bus Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receptor Type</td>
<td>Resident</td>
<td>Resident</td>
<td>Resident</td>
<td>Resident</td>
<td>Resident</td>
</tr>
<tr>
<td>Traffic</td>
<td>0.17</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Highway Relocation</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Buses</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
<td>3.9</td>
<td>6.1</td>
</tr>
<tr>
<td>DMU</td>
<td>--</td>
<td>1.8</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Generator (Isabel Station)</td>
<td>0.44</td>
<td>0.44</td>
<td>0.44</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Generator (Maintenance Facility)</td>
<td>0.025</td>
<td>0.043</td>
<td>0.043</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Maintenance Trucks and Shuttle Van&lt;sup&gt;c,d&lt;/sup&gt;</td>
<td>4.5E-06</td>
<td>9.9E-06</td>
<td>9.9E-06</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Solvent Use</td>
<td>--&lt;sup&gt;b&lt;/sup&gt;</td>
<td>--&lt;sup&gt;b&lt;/sup&gt;</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4.5</strong>&lt;sup&gt;d&lt;/sup&gt;</td>
<td><strong>5.0</strong></td>
<td><strong>3.2</strong></td>
<td><strong>3.9</strong></td>
<td><strong>6.1</strong></td>
</tr>
<tr>
<td>Significance Threshold</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Above Threshold?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Notes: -- = not applicable.
-<sup>a</sup> Incremental increase in traffic volume is less than 10,000 vehicles per day for all roadway segments. Per BAAQMD screening methodology, cancer risk is considered to be negligible.
-<sup>b</sup> Solvent use in the storage and maintenance facility under the Proposed Project, DMU Alternative, and EMU Option would be less than BAAQMD permitting thresholds. Therefore, cancer risk is considered to be negligible.
-<sup>c</sup> A numerical value with "E" denotes scientific notation; thus, 2.7E-06 is equivalent to 2.7 x 10<sup>-6</sup>.
-<sup>d</sup> A shuttle van is included for the Proposed Project only. Maintenance trucks are included for the Proposed Project, DMU Alternative, and EMU Option.

For the Conventional BART Project, DMU Alternative, and EMU Option, the highway relocation results in a reduction in cancer risk at the MEISR because the cancer risk impact from moving the westbound lanes of I-580 closer to the MEISR (by 11 feet) is outweighed by moving the eastbound lanes of I-580 farther from the MEISR (by 36 feet). As a conservative measure, this reduction (beneficial effect) is not included.

The 2040 MEISR for Express Bus/BRT Alternative is located over 1,000 feet from I-580. Any impacts from the highway relocation are expected to be negligible.
### TABLE 3.K-22 MAXIMUM ANNUAL AVERAGE OPERATIONAL PROJECT PM$_{2.5}$ CONCENTRATIONS AT OFF-SITE RECEPTORS IN 2040

<table>
<thead>
<tr>
<th>Source</th>
<th>Conventional BART Project</th>
<th>DMU Alternative</th>
<th>EMU Option</th>
<th>Express Bus/BRT Alternative</th>
<th>Enhanced Bus Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receptor Type</td>
<td>Resident</td>
<td>School</td>
<td>Resident</td>
<td>Resident</td>
<td>Resident</td>
</tr>
<tr>
<td>Traffic</td>
<td>0.0160.0034</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Highway Relocation</td>
<td>--</td>
<td>0.026</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Buses</td>
<td>0.0039</td>
<td>0.00021</td>
<td>0.0039</td>
<td>0.0053</td>
<td>0.0082</td>
</tr>
<tr>
<td>DMU</td>
<td>--</td>
<td>0.025</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Generator (Isabel Station)$^a$</td>
<td>0.00059</td>
<td>4.2E-05</td>
<td>0.00059</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Generator (Maintenance Facility)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance Trucks and Shuttle Van$^c$</td>
<td>1.7E-08</td>
<td>4.7E-08</td>
<td>4.3E-08</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Total</td>
<td><strong>0.021</strong>0.079</td>
<td><strong>0.025</strong>0.051</td>
<td>0.0046</td>
<td>0.0053</td>
<td>0.0082</td>
</tr>
<tr>
<td>Significance Threshold</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>Above Threshold?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Notes: -- = not applicable; PM$_{2.5}$ = respirable particulate matter.

$^a$ Incremental increase in traffic volume is less than 10,000 vehicles per day for all roadway segments. Per BAAQMD screening methodology, cancer risk is considered to be negligible.

$^b$ A numerical value with “E” denotes scientific notation; thus, 3.7E-05 is equivalent to 3.7 x 10$^{-5}$.

$^c$ A shuttle van is included for the Proposed Project only. Maintenance trucks are included for the Proposed Project, DMU Alternative, and EMU Option.

$^d$ For the Conventional BART Project and EMU Option, the highway relocation would result in a reduction in PM$_{2.5}$ concentration at the MEISR because the concentration impact from moving the westbound lanes of I-580 closer to the MEISR (by 12 feet) is outweighed by moving the eastbound lanes of I-580 farther from the MEISR (by 36 feet). As a conservative measure, this reduction in PM$_{2.5}$ concentration (beneficial effect) is not included.

$^e$ The 2040 MEISR for Express Bus/BRT Alternative is located over 1,000 feet from I-580. Any impacts from the highway relocation are expected to be negligible.

The second paragraph on page 1168 of the Draft EIR has been revised as follows:

**Conventional BART Project.** In 2040, emissions of TACs and PM$_{2.5}$ would be similar to those in 2025, with differences described below.

- There is one segment of Airway Boulevard projected to have an increase of more than 10,000 vehicles per day. This segment is to the south of I-580 and east of the Isabel Station. All other roadway segments would have a net increase of less than 10,000 vehicles per day or a net
decrease in roadway volume. Thus, this one roadway segment was evaluated for contribution to incremental health risk and PM$_{2.5}$ concentration.

- There is one roadway segment of Airway Boulevard projected to have a net increase greater than 10,000 vehicles per day within 1,000 feet of the MEISR. This segment is to the south of I-580 and to the east of Sutter Street. All other roadway segments would have a net increase of less than 10,000 vehicles per day or a net decrease in roadway volume. Thus, this one roadway segment was evaluated for contribution to incremental cancer risk and PM$_{2.5}$ concentration. In addition, I-580 is within 1,000 feet of the MEISR. Both will impact the MEISR.

The last paragraph under Conventional BART Project on page 1168 of the Draft EIR has been revised as follows:

Tables 3.K-21 and 3.K-22, respectively, show that the increased cancer risk at the MEISR is $4.5 \times 10^{-3}$-in-1-million and the maximum PM$_{2.5}$ concentration is $0.021 \pm 0.079$ µg/m$^3$, which are below the thresholds of 10-in-1-million and 0.3 µg/m$^3$, respectively.

The last paragraph under DMU Alternative on page 1169 of the Draft EIR has been revised as follows:

Tables 3.K-21 and 3.K-22 show that the increased cancer risk at the MEISR is $5.0 \times 10^{-3}$-in-1-million and the maximum PM$_{2.5}$ concentration is $0.025 \pm 0.051$ µg/m$^3$, which are below the thresholds of 10-in-1-million and 0.3 µg/m$^3$, respectively.

Draft EIR Tables 3.K-25 and 3.K-26, on page 1183 and 1184, respectively, under Impact AQ-18(CU) (Result in Emissions of TACs and PM$_{2.5}$ Causing Increased Health Risk Above BAAQMD Significance Thresholds Under 2025 Cumulative Conditions) have been revised as follows:
### Table 3.K-25 Maximum Operational Cancer Risk at Off-Site Receptors, 2025 Cumulative Conditions

<table>
<thead>
<tr>
<th>Source</th>
<th>Conventional BART Project</th>
<th>DMU Alternative</th>
<th>EMU Option</th>
<th>Express Bus/BRT Alternative</th>
<th>Enhanced Bus Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receptor Type</td>
<td>Resident</td>
<td>Resident</td>
<td>Resident</td>
<td>Resident</td>
<td>Resident</td>
</tr>
<tr>
<td>Highway Relocation</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1.4</td>
<td>--</td>
</tr>
<tr>
<td>Buses</td>
<td>6.1</td>
<td>6.1</td>
<td>6.1</td>
<td>4.1</td>
<td>6.3</td>
</tr>
<tr>
<td>DMU</td>
<td>--</td>
<td>1.6</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Generator (Isabel Station)</td>
<td>0.44</td>
<td>0.44</td>
<td>0.44</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Generator (Maintenance Facility)</td>
<td>0.025</td>
<td>0.043</td>
<td>0.043</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Maintenance Trucks and Shuttle Van&lt;sup&gt;b,d&lt;/sup&gt;</td>
<td>9.1E-06</td>
<td>2.1E-05</td>
<td>2.1E-05</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Solvent Use</td>
<td>--&lt;sup&gt;c&lt;/sup&gt;</td>
<td>--&lt;sup&gt;c&lt;/sup&gt;</td>
<td>--&lt;sup&gt;c&lt;/sup&gt;</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Non-Project Sources</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>9.9</td>
<td>4.2</td>
</tr>
<tr>
<td>Total</td>
<td>+32.130</td>
<td>+32.131</td>
<td>+31.129</td>
<td>+41.142</td>
<td>77</td>
</tr>
<tr>
<td>Significance Threshold</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Above Threshold?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Notes: -- = not applicable. Bold/gray values exceed thresholds.

<sup>a</sup> Includes traffic impact from INP and Dublin/Pleasanton Parking Expansion. The analysis considers roadway segments with an average of greater than 10,000 vehicles per day.

<sup>b</sup> A shuttle van is included for the Proposed Project only. Maintenance trucks are included for the Proposed Project, DMU Alternative, and EMU Option.

<sup>c</sup> Solvent use in the storage and maintenance facility under the Proposed Project, DMU Alternative, and EMU Option would be less than BAAQMD permitting thresholds. Therefore, cancer risk is considered to be negligible.

<sup>d</sup> A numerical value with "E" denotes scientific notation; thus, 5.6E-06 is equivalent to 5.6 x 10^-6.

<sup>e</sup> For the Conventional BART Project, DMU Alternative, and EMU Option, the highway relocation results in a reduction in cancer risk at the MEISR because the cancer risk impact from moving the westbound lanes of I-580 closer to the MEISR (by 11 feet) is outweighed by moving the eastbound lanes of I-580 farther from the MEISR (by 36 feet). As a conservative measure, this reduction (beneficial effect) is not included.
## Table 3.K-26 Maximum Annual Average Operational PM$_{2.5}$ Concentrations at Off-Site Receptors, 2025 Cumulative Conditions

<table>
<thead>
<tr>
<th>Source</th>
<th>Conventional BART Project</th>
<th>DMU Alternative</th>
<th>EMU Option</th>
<th>Express Bus/BRT Alternative</th>
<th>Enhanced Bus Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Resident</td>
<td>School</td>
<td>Resident</td>
<td>Resident</td>
<td>Resident</td>
</tr>
<tr>
<td>Traffic*</td>
<td>0.82 0.78</td>
<td>1.15</td>
<td>0.86 0.77</td>
<td>0.86 0.58</td>
<td></td>
</tr>
<tr>
<td>Highway Relocation*</td>
<td></td>
<td>0.024</td>
<td></td>
<td>0.0049</td>
<td></td>
</tr>
<tr>
<td>Buses</td>
<td>0.0087</td>
<td>0.00043</td>
<td>0.0087</td>
<td>0.0057</td>
<td>0.0085</td>
</tr>
<tr>
<td>DMU</td>
<td>--</td>
<td>0.022</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Generator (Isabel Station)</td>
<td>0.00059</td>
<td>4.2E-05</td>
<td>0.00059</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Generator (Maintenance Facility)</td>
<td>3.3E-05</td>
<td>1.3E-04</td>
<td>5.8E-05</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Maintenance Trucks and Shuttle Van*</td>
<td>2.3E-08</td>
<td>6.4E-08</td>
<td>5.8E-08</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Non-Project Sources</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0.0097</td>
<td>0.0050</td>
</tr>
<tr>
<td>Total</td>
<td>0.83 0.79</td>
<td>1.17 1.20</td>
<td>0.81 0.78</td>
<td>0.87 0.88</td>
<td>0.59</td>
</tr>
</tbody>
</table>

Note: -- = not applicable; PM$_{2.5}$ = fine particulate matter. **Bold**/gray values exceed thresholds.

* Includes traffic impact from INP and Dublin/Pleasanton Parking Expansion. The analysis considers roadway segments with an average of greater than 10,000 vehicles per day.
* A shuttle van is included for the Proposed Project only.
* Maintenance trucks are included for the Proposed Project, DMU Alternative, and EMU Option.
* A numerical value with "E" denotes scientific notation; thus, 3.7E-05 is equivalent to 3.7 x 10$^{-5}$.
* For the Conventional BART Project and EMU Option, the highway relocation results in a reduction in PM$_{2.5}$ concentration at the MEISR because the concentration impact from moving the westbound lanes of I-580 closer to the MEISR (by 11 feet) is outweighed by moving the eastbound lanes of I-580 farther from the MEISR (by 36 feet). As a conservative measure, this reduction in PM$_{2.5}$ concentration (beneficial effect) is not included.

The first bullet under Conventional BART Project on page 1184 of the Draft EIR has been revised as follows:

- There are **five-four** roadway segments projected to have greater than 10,000 vehicles per day within 1,000 feet of the MEISR. In addition, I-580 is within 1,000 feet of the MEISR. Both will impact the MEISR.
The first paragraph on page 1185 of the Draft EIR has been revised as follows (for Conventional BART Project):

Table 3.K-25 shows that the cumulative cancer risk at the MEISR is 132-130-in-1-million and Table 3.K-26 shows the maximum PM$_{2.5}$ concentration is 0.83-0.79 µg/m$^3$. The cumulative cancer risk is which are above the thresholds of 100-in-1-million, while the cumulative PM$_{2.5}$ concentration is below the threshold of and 0.8 µg/m$^3$, respectively.

The first paragraph on page 1186 of the Draft EIR has been revised as follows (for DMU Alternative):

Table 3.K-25 shows that the cumulative cancer risk at the MEISR is 132-131-in-1-million and Table 3.K-26 shows the maximum PM$_{2.5}$ concentration is 1.20-1.17 µg/m$^3$, which are above the thresholds of 100-in-1-million and 0.8 µg/m$^3$, respectively.

The last paragraph on page 1186 of the Draft EIR has been revised as follows (for EMU Option):

Table 3.K-25 shows that the cumulative cancer risk at the MEISR is 132-131-in-1-million and Table 3.K-26 shows the maximum PM$_{2.5}$ concentration is 0.78-0.83 µg/m$^3$. The cumulative cancer risk is above the threshold of 100-in-1-million, while the cumulative PM$_{2.5}$ concentration is below the threshold of 0.8 µg/m$^3$, which are above the thresholds of 100-in-1-million and 0.8 µg/m$^3$, respectively.

The last paragraph on page 1187 of the Draft EIR has been revised as follows (for Express Bus/BRT Alternative):

Table 3.K-25 shows that the cumulative cancer risk at the MEISR is 142-141-in-1-million and Table 3.K-26 shows that the maximum PM$_{2.5}$ concentration is 0.87-0.88 µg/m$^3$, which are above the thresholds of 100-in-1-million and 0.8 µg/m$^3$, respectively.

Draft EIR Tables 3.K-27 and 3.K-28, on page 1190 and 1191, respectively, under Impact AQ-19(CU) (Result in Emissions of TACs and PM$_{2.5}$ Causing Increased Health Risk Above BAAQMD Significance Thresholds Under 2040 Cumulative Conditions) have been revised as follows:
### TABLE 3.K-27  MAXIMUM OPERATIONAL CANCER RISK AT OFF-SITE RECEPTORS, UNDER 2040  
CUMULATIVE CONDITIONS

<table>
<thead>
<tr>
<th>Source</th>
<th>Conventional BART Project</th>
<th>DMU Alternative</th>
<th>EMU Option</th>
<th>Express Bus/BRT Alternative</th>
<th>Enhanced Bus Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receptor Type</td>
<td>Resident</td>
<td>Resident</td>
<td>Resident</td>
<td>Resident</td>
<td>Resident</td>
</tr>
<tr>
<td>Traffic</td>
<td>120</td>
<td>119</td>
<td>119</td>
<td>78</td>
<td>73</td>
</tr>
<tr>
<td>Highway Relocation</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Buses</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
<td>3.9</td>
<td>6.1</td>
</tr>
<tr>
<td>DMU</td>
<td>--</td>
<td>1.8</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Generator (Isabel Station)</td>
<td>0.44</td>
<td>0.44</td>
<td>0.44</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Generator (Maintenance Facility)</td>
<td>0.025</td>
<td>0.043</td>
<td>0.043</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Maintenance Trucks and Shuttle Van</td>
<td>4.5E-06</td>
<td>9.9E-06</td>
<td>9.9E-06</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Solvent Use</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Non-Project Sources</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>9.9</td>
<td>4.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>123</strong></td>
<td><strong>124</strong></td>
<td><strong>122</strong></td>
<td><strong>92</strong></td>
<td><strong>83</strong></td>
</tr>
<tr>
<td>Significance Threshold</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Above Threshold?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Notes:  
- Bold/gray values exceed thresholds.  
- Includes traffic impact from INP and Dublin/Pleasanton Parking Expansion. The analysis considers roadway segments with an average of greater than 10,000 vehicles per day.  
- A shuttle van is included for the Proposed Project only. Maintenance trucks are included for the Proposed Project, DMU Alternative, and EMU Option.  
- Solvent use in the storage and maintenance facility under the Proposed Project, DMU Alternative, and EMU Option would be less than BAAQMD permitting thresholds. Therefore, cancer risk is considered to be negligible.  
- A numerical value with "E" denotes scientific notation; thus, 2.7E-05 is equivalent to 2.7 x 10^{-5}.  
- For the Conventional BART Project, DMU Alternative, and EMU Option, the highway relocation results in a reduction in cancer risk at the MEISR because the cancer risk impact from moving the westbound lanes of I-580 closer to the MEISR (by 12 feet) is outweighed by moving the eastbound lanes of I-580 farther from the MEISR (by 36 feet). As a conservative measure, this reduction (beneficial effect) is not included.  
- The 2040 MEISR for Express Bus/BRT Alternative is located over 1,000 feet from I-580. Any impacts from the highway relocation are expected to be negligible.
### Table 3.K-28 Maximum Annual Average Operational PM$_{2.5}$ Concentrations at Off-Site Receptors, Under 2040 Cumulative Conditions

<table>
<thead>
<tr>
<th>Source</th>
<th>Conventional BART Project</th>
<th>DMU Alternative</th>
<th>EMU Option</th>
<th>Express Bus/BRT Alternative</th>
<th>Enhanced Bus Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receptor Type</td>
<td>Resident</td>
<td>School</td>
<td>Resident</td>
<td>Resident</td>
<td>Resident</td>
</tr>
<tr>
<td>Traffic$^a$</td>
<td>0.75</td>
<td>1.10</td>
<td>0.73</td>
<td>0.73</td>
<td>0.66</td>
</tr>
<tr>
<td>Highway Relocation</td>
<td>--</td>
<td>0.026</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Buses</td>
<td>0.0039</td>
<td>0.00021</td>
<td>0.0039</td>
<td>0.0053</td>
<td>0.0082</td>
</tr>
<tr>
<td>DMU</td>
<td>--</td>
<td>0.025</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Generator (Isabel Station)</td>
<td>0.00059</td>
<td>4.2E-05</td>
<td>0.00059</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Generator (Maintenance Facility)</td>
<td>3.3E-05</td>
<td>1.3E-04</td>
<td>5.8E-05</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Maintenance Trucks and Shuttle Van$^a$</td>
<td>1.7E-08</td>
<td>4.7E-08</td>
<td>4.3E-08</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Non-Project Sources</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0.0097</td>
<td>0.0050</td>
</tr>
<tr>
<td>Total</td>
<td>0.75</td>
<td><strong>1.12</strong></td>
<td>0.74</td>
<td>0.75</td>
<td>0.67</td>
</tr>
<tr>
<td>Significance</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>Above Threshold?</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Notes: -- = not applicable; µg/m$^3$ = micrograms per cubic meter; PM$_{2.5}$ = fine particulate matter. **Bold**/gray values exceed thresholds.

$^a$ Includes traffic impact from INP and Dublin/Pleasanton Parking Expansion. The analysis considers roadway segments with an average of greater than 10,000 vehicles per day.

$^b$ A shuttle van is included for the Proposed Project only.

$^c$ Maintenance trucks are included for the Proposed Project, DMU Alternative, and EMU Option.

$^d$ A numerical value with "E" denotes scientific notation; thus, 3.7E-05 is equivalent to 3.7 x 10$^{-5}$.

$^e$ For the Conventional BART Project and EMU Option, the highway relocation results in a reduction in PM$_{2.5}$ concentration at the MEISR because the cancer risk impact from moving the westbound lanes of I-580 closer to the MEISR (by 12 feet) is outweighed by moving the eastbound lanes of I-580 farther from the MEISR (by 36 feet). As a conservative measure, this reduction in PM$_{2.5}$ concentration (beneficial effect) is not included.

$^f$ The 2040 MEISR for Express Bus/BRT Alternative is located over 1,000 feet from I-580. Any impacts from the highway relocation are expected to be negligible.

The second-to-last paragraph on page 1192 of the Draft EIR has been revised as follows (for DMU Alternative):

Tables 3.K-27 and 3.K-28 show that the cumulative cancer risk at the MEISR is 124-in-1-million and the maximum PM$_{2.5}$ concentration is **1.15 µg/m$^3$**, respectively, which are above the thresholds of 100-in-1-million and 0.8 µg/m$^3$,
Impacts related to pile driving are summarized below for the Proposed Project, followed by the DMU Alternative/EMU Option and Express Bus/BRT Alternative.

For the Proposed Project, construction noise impacts are summarized in Table 3.J-12 (Conventional BART Project – Predicted Construction Noise Levels at Representative Sensitive Receptors), on page 990 of the Draft EIR. Locations where pile driving would occur (East Airway Boulevard to Isabel Avenue, Proposed Isabel Station, and Isabel Station South Parking Facility) would have construction noise levels of 101.3 A-weighted decibels (dBA) at 50 feet, and there would be no exceedances of daytime or nighttime thresholds at sensitive receptors associated with pile driving (no significant impacts). Construction noise associated with other activities could result in impacts to sensitive receptors along the project corridor from Tassajara Road/Santa Rita Road to Fallon Road/El Charro Road and along the eastern extent of the East Airway Boulevard realignment. Mitigation Measure NOI-1 (Limit Construction Hours and Methods for Pile Driving and Other Construction Activities) addresses this impact. However, no significant noise impacts from pile driving were identified for the Proposed Project.

DMU Alternative/EMU Option and Express Bus/BRT Alternative construction noise impacts are summarized in Table 3.J-14 (DMU Alternative – Predicted Construction Noise Levels at Representative Sensitive Receptors), on page 996 and in Table 3.J-16 (Express Bus/BRT Alternative – Predicted Construction Noise Level at Representative Sensitive Receptors), on page 1001 of the Draft EIR, respectively. Under both alternatives, pile driving near the Dublin/Pleasanton Station platform would exceed the FTA threshold for nighttime noise at residential receptors. Therefore, the Draft EIR identified Mitigation Measure NOI-1 (Limit Construction Hours and Methods for Pile Driving and Other Construction Activities) to limit construction at affected locations to daytime hours or to the use alternative construction methods. Either of these methods would be sufficient to reduce the impact to a less-than-significant level.

Additional measures are not required to reduce pile driving noise impacts. Mitigation Measure NOI-1 allows alternative pile installation methods, and BART may consider using the equipment suggested by the commenter.

As discussed in the Response to Comment B3.18, there would be no exceedances of daytime or nighttime thresholds at sensitive receptors associated with pile driving, and thus no significant impacts. Potential significant construction noise impacts are identified on page 993 and 1000 of Section 3.J, Noise and Vibration, of the Draft EIR. Specifically, the realignment
of the eastern extent of East Airway Boulevard and along the project corridor from Tassajara Road/Santa Rita Road to Fallon Road/El Charro Road could exceed the applicable FTA criteria for noise generated by construction during daytime and nighttime hours. This impact would be reduced to a less-than-significant level with implementation of Mitigation Measure NOI-1 (Limit Construction Hours and Methods for Pile Driving and Other Construction Activities) on page 1003. Additionally, this measure would require BART’s contractors to employ moveable noise curtains or barriers along the southern side of East Airway Boulevard to shield daytime construction noise impacts to residential uses to the south. Moveable sound barrier curtains can provide 15 dBA of sound attenuation.\(^4\) Static sound barrier curtains can provide sound transmission loss of 16 to 40 dBA, depending on the frequency of the noise source.\(^5\) Given that the predicted noise levels shown in Table 3.J-12 (Conventional BART Project – Predicted Construction Noise Levels At Representative Sensitive Receptors) and Table 3.J-14 (DMU Alternative – Predicted Construction Noise Levels At Representative Sensitive Receptors), on pages 990 and 996, respectively, noise levels would only exceed daytime thresholds by 2 dBA. Therefore, the identified mitigations would be more than sufficient to reduce noise levels to a less-than-significant level and continuous verification noise monitoring during construction activities is not required.

For the Proposed Project, construction vibration impacts are summarized in Table 3.J-13 (Conventional BART – Predicted Construction Vibration Levels at Representative Sensitive Receptors) on page 993 of the Draft EIR. The Proposed Project would have construction vibration impacts associated with the realignment of East Airway Boulevard resulting from standard construction equipment (vibratory roller). This impact would also occur for the DMU Alternative; see Table 3.J-15 (DMU Alternative – Predicted Construction Vibration Levels at Representative Sensitive Receptors) on page 998. There would be no significant construction vibration impacts associated with either the Express Bus/BRT Alternative or the Enhanced Bus Alternative; see Table 3.J-17 (Express Bus/BRT Alternative – Predicted Construction Vibration Level at Representative Sensitive Receptors) on page 1002.

The Draft EIR identified Mitigation Measure NOI-1 (Limit Construction Hours and Methods for Pile Driving and Other Construction Activities) to require BART and its contractors to use non-vibratory excavator-mounted compaction wheels and small smooth drum rollers for final compaction of asphalt base and


asphalt concrete. This is a standard mitigation measure used to minimize construction vibration from compaction rollers and is sufficient to reduce this impact to a less-than-significant level in the judgment of the technical experts who prepared it. Continuous verification vibration monitoring during construction activities is not warranted.

B3-21 Table 3.B-18 (Local Roadway Improvements, 2025 and 2040 No Project Conditions) has been updated as shown in Response to Comment B3-8.
October 16, 2017

Bay Area Rapid Transit District
Attention: BART to Livermore Extension Project
300 Lakeside, 21st Floor
Oakland, CA 94612

RE: City of Livermore Comments
BART to Livermore Extension Project Draft Environmental Impact Report

Dear Mr. Tang:

Thank you for coordinating with the City of Livermore in the preparation of the BART to Livermore Draft Project-level Environmental Impact Report (DEIR). The City’s General Plan considers the BART extension to Isabel as the first phase of an eventual extension to Greenville Road. The Metropolitan Transportation Commission’s Regional Rail Plan calls for a connection between BART and the Altamont Corridor Express (ACE) in Livermore. The DEIR evaluates extending BART to Livermore and three build alternatives for improving the BART connection with Livermore: 1) A diesel or electric multiple unit (DMU/EMU) extension to Isabel; 2) Express Bus/Bus Rapid Transit (BRT) service to Dublin/Pleasanton BART; and 3) Enhanced Bus service to Dublin/Pleasanton BART. The BART Extension is an important project for the City and the Region.

Summary Observations
The release of the DEIR is a key milestone towards fulfilling the City’s General Plan Policy to extend BART service to Isabel Avenue in the median of I-580. The DEIR shows that a conventional BART extension would have clear benefits over the other three alternative modes analyzed for the proposed 5.5 mile extension:

- The proposed BART extension would generate the most daily new BART riders (11,900 v. 7,000 for DMU/EMU without the Isabel Neighborhood Plan) and have the most environmental benefits compared to the other alternatives with respect to reduced daily vehicle miles traveled (244,000 v. 140,600 for DMU/EMU) reduced greenhouse gases emissions (11,200 metric tons of CO₂/year v. 3,500 for DMU and 6,000 for EMU), and reduced energy consumption (130,500 million BTUs/year v. 35,000 for DMU and 66,500 for EMU).

- The proposed BART extension is 66 percent more cost effective than the DMU/EMU Alternative as measured by capital costs per new daily BART rider. It is also more cost effective than the DMU/EMU and Enhanced Bus Alternatives when measured by annual operational costs per new daily BART rider.
• The proposed BART extension would generate at least 3.4 times more riders than the Express Bus/BRT Alternative, resulting in 151,400 fewer Vehicle Miles Travelled (VMT) per day and about 7,400 fewer metric tons of Green House Gases (GHG) per year. In addition, when farebox recovery rates are considered, the proposed BART alternative may be more cost effective than Express Bus/BRT.

• The proposed BART extension would create a major opportunity for the City of Livermore and property owners to implement transit-oriented development on approximately 1,130 acres of land around the proposed Isabel Station, including approximately 52 acres owned by BART, while the alternatives would not support the same level of development.

• The proposed BART extension would be better than the alternatives in helping to implement goals for targeting regional housing and job growth in Priority Development Areas (PDAs) served by regional transit.
  o It would support the Isabel Neighborhood Plan which, if adopted, is estimated to generate over 4,000 new housing units and about 9,000 new jobs—increasing the estimated new daily BART ridership to 13,400.
  o It would leverage Livermore’s progressive affordable housing policies to place high frequency transit near a walkable neighborhood of affordable housing in the Isabel Neighborhood Plan.
  o It would take advantage of reverse commute capacity in the BART system by linking to jobs in Livermore.

• The proposed BART extension would enhance the core system by providing a new maintenance yard and shops and by extending the tail tracks to accommodate 12-minute headways, while the alternatives do not provide this system wide benefit.

In addition, the Chabot Community College District representatives have noted that the proposed BART extension would directly link Las Positas Community College to other Chabot Community College campuses and facilities, while the alternatives would require multiple transfers.

With respect to the other alternatives studied in the DEIR:

• Livermore cannot support the bus alternatives because they do not do enough to advance the project objectives of improving access to the BART system from Livermore, increasing transit ridership, and reducing VMT/GHG. In particular, the Enhanced Bus Alternative would have no measureable effect since it is very similar
to the system changes that LAVTA already implemented within the last year. The City will continue to support LAVTA’s efforts to provide local bus service and connections to the BART system, but users of the system, including Livermore residents and workers and those from the Central Valley, need direct access to the regional transit system. In addition, the bus alternatives fail to support transit-oriented development at the same levels as the proposed BART extension, eliminating the opportunity for the Isabel Neighborhood Plan to support much needed housing in the region.

- Livermore is concerned about significant right of way impacts on our neighboring cities if the DMU/EMU and Express Bus/BRT alternatives were to be implemented. Alternative DMU-BART interface options, including those developed by AECOM Engineers as part of the ACEforward effort, need to be studied as they avoid many of the potential impacts to neighboring cities outlined in the DEIR.

Total boardings at the Isabel Station for the full BART option are 8,100 per day by year 2040, not including increased boardings due to the Isabel Neighborhood Plan. Only 3,500 parking spaces are planned. The City of Livermore is concerned about a lack of adequate parking similar to what the cities of Dublin and Pleasanton experience today with the same number of boardings. Of particular concern is the location of the Isabel station adjacent to residential communities; parking may spill over to nearby neighborhoods. In addition, the DEIR assumes 540 new parking spaces at the Dublin/Pleasanton station that the BART Board elected not to build.

**CEQA Comments**
As currently configured, the City cannot support locating a storage yard and shops in North Livermore. We acknowledge that BART studied several locations for a storage yard and tail tracks in the vicinity of the Isabel Station, and based on the analysis of the constraints, selected the Hartman Road location as the most cost-effective and least impactful to BART operations. The City is concerned that the proposed configuration would affect the rural character of North Livermore with respect to noise, lighting, aesthetics, and biological resources.

The City has the following comments on the environmental analysis in the DEIR:

1. The analysis of long-term noise impacts should identify the 24-hour average noise level at the closest residence to the yard, reflecting the potential for 24/7 activity, and identify mitigations for this impact if found to be significant. Consider moving the noise generators as far south as possible to increase the distance to sensitive receptors.

2. The aesthetics analysis should consider the effect of nighttime lighting on nearby residents and potential berm or other design treatments to minimize any adverse effects.
3. We expect BART to consider alternative designs and locations to avoid relocation of Hartman Road and displacement of existing residences/businesses, while continuing to minimize impacts to known habitats of sensitive species. This could mean reducing the size of the yard to accommodate fewer shop spaces.

4. All properties in the vicinity of the proposed yard that have not yet been surveyed should be surveyed to determine the presence or absence of protected species, prior to finalizing the yard location and design. Site-specific surveys may reveal a better location that minimizes impacts to both residents and biological resources.

5. The mitigation measures for potential impacts to biological resources and farmland should be amended to provide stronger protection of the rural character and open space assets in North Livermore. Revising the mitigation measures to specify geographic requirements and priorities would ensure consistency with and help implement the Eastern Alameda County Conservation Strategy, which establishes a vision and guidelines for open space preservation in the project area. The City recommends BART change the mitigation measures as follows:

A. The City is requesting that the compensatory mitigation for biological resources and farmland impacts must be implemented in Eastern Alameda County, not anywhere in Alameda County as indicated in the DEIR. The top priority should be sites immediately adjacent to the area of project impacts. If this is not acceptable to the Resource Agencies, other properties in North Livermore and Doolan Canyon (within unincorporated Alameda County) offer many opportunities. Potential mitigation areas that are farther from the project footprint but still within Eastern Alameda County include: Altamont hills, Greenville Road, and South Livermore.

B. Open space preservation should prioritize land that is adjacent to urban growth boundaries and/or existing easements, in order to create and protect wildlife corridors. For example, establishing easements on either side of I-580 could enable the connection of the north and south sides of the freeway via wildlife tunnels.

C. BART should work with the City and County to leverage other resources for open space preservation to maximize the value of the mitigation and benefits to North Livermore. For example, the City’s Transfer of Development Credits program has been used to acquire and maintain land for natural resources and agricultural purposes in this area.

Without significant changes to the yard and shop configuration and the required mitigation for its impacts, the City cannot support this facility in North Livermore.
Selection of Preferred Alternative
When adopting a project, the City requests that BART consider other issues that influence ridership projections.

1. The land use assumptions in the travel model assume that housing growth will keep up with demand through 2040, and that adjacent regions provide more job growth relative to housing. The City recognizes the need to use Plan Bay Area land use assumptions in the travel model for the purpose of evaluating transportation-related impacts, since Plan Bay Area is the adopted regional plan for land use and transportation. While considering demographic and economic trends, the forecast of population and job growth at the jurisdictional level also assumes local government cooperation in implementing visionary policies. While the City of Livermore is committed to transit-oriented development of our self-identified Priority Development Areas (PDAs), many other Bay Area jurisdictions are less inclined to accommodate their fair share of regional housing demand. It is very likely that the Bay Area housing market will not keep pace with housing demand generated by job growth (as has been the case for decades) and that people will continue to seek more affordable housing options at the edges and outside the region. The Tri-Valley directly experiences the effects of this job-housing mismatch as the I-580 corridor has become one of the most congested corridors in the region. When choosing a preferred alternative, BART should analyze projected land use based on actual trends and consider ridership based on those conditions in addition to Plan Bay Area.

2. The travel model assumes “normal” travel conditions without delay-causing incidents such as traffic accidents and uses travel time as the dominant factor in predicting travel choices by mode. The City realizes that this is a standard practice in the industry for CEQA. In reality, there are frequent incidents on I-580 that slow down traffic and add unpredictability and frustration to daily commutes. Incidents are more likely to affect the two bus alternatives evaluated in the DEIR because the buses would use the same travel lanes as vehicles, while rail modes use separate facilities. When evaluating the preferred alternative, BART should consider travel model assumptions that reflect the likelihood of incidents in this corridor. This will likely result in longer travel times for buses with resulting changes in ridership.

3. The DEIR assumes that the Bay Fair Connector Project has been implemented; however, a one-seat ride from Tri-Valley to Silicon Valley was not operationally included. This operational change has the potential to further boost BART ridership, especially when considering the Livermore Extension. This analysis should be performed and considered when selecting a preferred alternative.

4. Considering the growth of the Tri-Valley and the influx of commuters to the Bay Area from San Joaquin Valley, any rail extension to Livermore must be planned with future rail connectivity to ACE in mind.
5. For conventional BART, the DEIR proposes 100 percent allocation of the cost of the 1.9 mile tail track to the Project while the tail track serves both the core system and the extension. The DEIR proposes 100 percent allocation of the cost of the 172 train car storage yard to the Project while only 36 train cars are needed to serve the extension. The DEIR proposes a 25 percent allocation of the shops to the Project, because the shop facility has been designed with 10 service bays while only 2-3 are required to serve the extension. Since the tail tracks, storage yard and shop facilities benefit both the core system and the extension, the total cost should be attributed to the system as a whole since Livermore residents have provided funding for BART capital and operation costs for over 40 years and will continue to provide this funding into the future.

6. Cost estimates in the DEIR appear to be excessively high. The current estimated capital costs for a 5.5 mile BART extension with 12 minute headways (5 trains per hour) is $1.63 billion. The single station DMU/EMU alternative extension estimate is $1.60 billion/$1.66 billion. The results of an analysis by the ACEforward consultant of a 25 mile, single track with 30 minute (2 trains per hour) headways, DMU/EMU service from West Tracy to the Dublin/Pleasanton BART station show preliminary costs estimated within the same range as both the 5.5 mile conventional BART and DMU/EMU rail extension options. Please provide a cost comparison to other rail extension projects. We expect that delivery of the BART to Livermore extension project could be achieved at significantly less cost than shown in the DEIR using alternative project delivery methods administered through a single purpose agency.

Thank you for the opportunity to comment on the DEIR and for your ongoing coordination on this important project for the City of Livermore and the Region.

Sincerely,

Steven Spedowfski
Vice Mayor

C: Mayor and City Council
   City Manager
   City Attorney
   Community Development Director
RESPONSE B4
Steven Spedowfski, City of Livermore

B4-1 Thank you for providing comments on the Draft EIR. This comment is informational in nature and no response is necessary.

B4-2 This comment summarizes the findings of the Draft EIR and enumerates the benefits of the Proposed Project and the opportunity the Proposed Project provides for transit-oriented development at Isabel Avenue. No response is necessary.

B4-3 The commenter’s opposition to the Express Bus/BRT Alternative and Enhanced Bus Alternative is noted. No response is necessary. Please see Response to Comment B7-2 regarding LAVTA’s 2016 system changes.

B4-4 The City’s concern about the ROW impacts of the DMU and Express Bus/BRT in Dublin and Pleasanton is noted. For more discussion of the ROW issue in Dublin, see the Responses to Comment letter B3. For discussion of an alternative BART-DMU interface at the Dublin/Pleasanton Station, see Response to Comment A5-6.

B4-5 As shown in Table 3.B-24 of the Draft EIR, of 8,100 weekday boardings that are forecasted to occur at Isabel Station in 2040 for the Proposed Project, 4,300 are expected to access the station by driving to the station and parking. Because each parking space accommodates more than one rider due to carpooling and parking space turnover, 3,400 parking spaces is sufficient to accommodate this demand.

As described on page 300 of the Draft EIR in Section 3.B, Transportation, the parking facilities for the Proposed Project and Build Alternatives were sized to accommodate the projected demand. The Draft EIR acknowledges that, while the quantity of station parking has been designed to accommodate the anticipated demand, unanticipated demand for parking could exceed supply and could result in BART patrons parking on local streets. If any of the cities were to request assistance in managing overflow parking by BART patrons, BART would work with that city to implement the BART Parking Management Toolkit (see Appendix D of the Draft EIR), which provides recommended strategies for addressing parking overflow onto city streets. In addition, the Isabel Station parking garage would be designed to accommodate the potential future construction of two additional levels of parking. However, these additional two levels are not proposed as part of the current project and are
not analyzed in the Draft EIR; they would require subsequent environmental analysis as a separate future project.

The Draft EIR did not assume the construction of the 540 new spaces at Dublin/Pleasanton Station for the analysis of the Proposed Project—only the new spaces at Isabel Avenue. The 540 spaces that would have been provided by a separate project, the Dublin/Pleasanton Station Parking Expansion, were assumed for the cumulative analysis. The Dublin/Pleasanton Station Parking Expansion is no longer under consideration by BART, although a different garage project is under consideration by the County. See Master Response 9 for information regarding the Dublin/Pleasanton Station Parking Expansion.

B4-6 The commenter’s opposition to the location of the storage and maintenance facility for the Proposed Project is acknowledged. Key impacts assessed in the Draft EIR as summarized below.

- The Draft EIR identified significant and unavoidable impacts associated with the storage and maintenance facility for the Proposed Project related to agricultural resources and visual quality.
- The Draft EIR found that potential biological resource impacts related to the storage and maintenance facility would be reduced to less-than-significant levels with implementation of mitigation measures that require preconstruction surveys, avoidance measures, and compensation measures for loss of habitat.
- The Draft EIR determined that the storage and maintenance facility would not result in significant noise impacts.

In addition, as noted in Response B4-9 below, if botanical surveys and wetland delineation provide more specific information that would allow a modified design for the storage and maintenance facility that minimizes impacts, BART would consider revising the design of the storage and maintenance facility. For additional information on the criteria and process that led to the selection of the North Livermore site for the storage and maintenance facility, see Master Response 6. For more information on the environmental impacts related to the storage and maintenance facility, see Master Response 7.

B4-7 Noise generating activities, such as trains moving over switches in the yard and car coupling would occur throughout the yard and cannot be located farther south. Other activities, such as blow pit operations, car washing, and wheel truing would occur within enclosed buildings, which would reduce the noise levels associated with these activities at sensitive receptors. These impacts were found to be less than significant: (1) the Proposed Project would have
less-than-significant impacts; and (2) the DMU Alternative would have less-than-significant impacts with implementation of mitigation measures. Please see Master Response 7 for a comprehensive discussion of impacts associated with operation of the storage and maintenance facility in terms of the 24-hour day-night noise metric as well as the peak hour noise metric during the quietest nighttime hours.

As stated on page 617 of Section 3.E, Visual Quality, of the Draft EIR, Mitigation Measure VQ-3 (Screen Storage and Maintenance Facility) provides that BART shall use fences and berms to provide visual screening of the facility from prominent views, where feasible. As stated on pages 627 through 629, Mitigation Measure VQ-6 (Design and Install Lighting Fixtures to Reduce Spillover) provides that light sources shall be screened and shielded to reduce spillover light outside of BART property. Any night lighting shall be focused downward, shielded, and recessed within fixtures so as not to introduce new light or glare. However, the Draft EIR conservatively identifies the nighttime impact from the storage and maintenance facility as significant and unavoidable, as it would be in a rural area with few existing sources of illumination where any new lighting would be substantially noticeable. Therefore, if the BART Board adopts the Proposed Project or DMU Alternative/EMU Option, it will also need to adopt a Statement of Overriding Considerations.

BART has elected to do further visual analysis for the storage and maintenance facility and prepared new photo-simulations for the Proposed Project to address the concerns of several residents in North Livermore. This new analysis confirms the conclusions in the Draft EIR. Please see Master Response 7 for a discussion of the additional photo-simulations.

Please see Response to Comment A5-3 and Master Response 5 for a discussion about the required size and need for the storage and maintenance facility. A reduction in the size of the storage and maintenance facility could result in operational inefficiencies, requiring more cars to be out of service for longer periods, resulting in increased crowding of trains and possibly increased headways. Also see Master Response 6 for a description of sites BART considered for the storage and maintenance facility.

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 analysis of aerial photos by plant, wildlife, and wetland specialists. All accessible portions of the Proposed Project footprint (and the footprints of all Build Alternatives) were surveyed for
biological resources using California Department of Fish and Wildlife (CDFW) and United States Fish and Wildlife Service (USFWS) standards. Even following the completion of surveys, it is common to have data gaps, particularly in the presence, absence, and distribution of rare plants—which have a long survey window—that typically are addressed through the application of appropriate mitigation measures. Mitigation Measure BIO-1.A (Botanical Surveys for Areas Not Previously Surveyed and Refinement of Project Design) on page 886 of the Draft EIR requires that focused botanical 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 special status plant populations to the extent feasible. Similarly, Mitigation Measure BIO-11.A (Avoid and Minimize Impacts to Wetlands, Waters of the U.S. and/or Waters of the State) and Mitigation Measure BIO-11.B (Compensatory Mitigation for Wetlands, Waters of the U.S. and/or Waters of the State) on page 927 of the Draft EIR requires a formal wetlands delineation to be completed and for final project design to avoid and minimize the fill of wetlands, waters of the U.S., and/or waters of the State to the greatest practicable. Please see Responses to Comments C2-2, C2-3, and C2-4 for more information regarding biological resources. As the commenter notes, the botanical surveys and wetland delineation may provide more specific information that would allow a modified design for the storage and maintenance facility that minimizes impacts. Should this occur, BART would consider revising the design of the storage and maintenance facility.

B4-10 BART will coordinate with Alameda County, the City of Livermore, and the respective resource agencies in selecting appropriate and available lands for biological and agricultural protection. In response to this comment, mitigation measures related to the provision of compensatory biological habitat and agricultural lands have been revised to prioritize preservation of lands in the North Livermore area. BART appreciates the City’s offer to contribute funds from its Transfer of Development Credits program to acquire and maintain additional land for natural resources and agricultural purposes.

The following text has been added to Mitigation Measure BIO-2 (Consult with USFWS and Reduce Impacts on Vernal Pool Invertebrates and Their Habitat in the I-580 Corridor Area – north of Croak Road and Cayetano Creek Area), on page 891:

b. Participation in a USFWS-approved vernal pool invertebrate mitigation bank program such as the Mountain House Conservation Bank with purchase of appropriate vernal pool creation and preservation credits to mitigate for anticipated vernal pool habitat losses. BART, after
consulting with the agencies, will select appropriate and available mitigation locations, with a preference for those in Eastern Alameda County, North Livermore, and Doolan Canyon.

The following text has been added at the end of Mitigation Measure BIO-3.B (Provide Compensatory Habitat to Mitigate for the Loss and Disturbance of CTS and CRLF Habitat) on page 897:

BART, after consulting with the agencies, will select appropriate and available mitigation locations, with a preference for those in Eastern Alameda County, North Livermore, and Doolan Canyon.

The following text has been added at the end of Mitigation Measure BIO-6.B (Off-Site Compensatory Habitat for Burrowing Owl) on page 909:

BART, after consulting with the agencies, will select appropriate and available mitigation locations, with a preference for those in Eastern Alameda County, North Livermore, and Doolan Canyon.

The following text has been added at the end of Mitigation Measure BIO-10.B (Provide Compensatory Habitat to Mitigate for the Loss and Disturbance of San Joaquin Kit Fox Habitat) on page 922:

BART, after consulting with the agencies, will select appropriate and available mitigation locations, with a preference for those in Eastern Alameda County, North Livermore, and Doolan Canyon.

The following text has been added to Mitigation Measure BIO-11.B (Compensatory Mitigation for Wetlands, Waters of the U.S. and/or Waters of the State) on page 928:

1. Purchase or dedicate land to provide wetland preservation, restoration, or creation in a ratio of at least 1-to-1 (i.e., no net loss). Wetland mitigation requirements may be adjusted in the final conditions of the 404 permit, 401 water quality certification, and streambed alteration agreement issued by the USACE, RWQCB, and CDFW, respectively. Where practical and feasible, on-site mitigation shall be implemented. If the use of on-site mitigation is not practical and feasible to meet resource agency-required compensatory mitigation requirements, BART, after consulting with the agencies, will select appropriate and available off-site mitigation locations, with a preference for property in Eastern Alameda County, North Livermore, and Doolan Canyon. BART shall
satisfy the remaining portions of the obligation through the purchase of mitigation credits through an approved wetland mitigation bank.

The following text has been added to Mitigation Measure AG-1 (Provide Compensatory Farmland under Permanent Protection) on page 506:

BART shall mitigate the loss of agricultural land, including Prime Farmland, Unique Farmland, and land zoned for agricultural use by providing for permanent agricultural use at an off-site location at a 1-to-1 ratio. The land shall have similar agricultural value to the acreage lost. BART will consult with the Alameda County Resource Conservation District to identify appropriate and available farmland to permanently protect. BART will coordinate with the City of Livermore and Alameda County to leverage other resources available from those agencies for open space preservation to enhance the value of the mitigation and benefits to North Livermore. The preferred location shall prioritize appropriate and available land near the land being removed from agricultural use, urban growth boundaries and/or existing easements. The preferred location for the mitigation property shall be in Eastern Alameda County although other locations are possible. The protection will be in perpetuity through agricultural land easements or other permanent protection.

B4-11 The commenter’s opposition to the location of the storage and maintenance facility for the Proposed Project is acknowledged. The BART Board will consider the comments provided on the Draft EIR, responses to those comments, and any revisions to the Draft EIR along with the potential project impacts and the benefits. If the BART Board decides to approve the Proposed Project or an alternative that has significant effects identified in the Final EIR, but that are not avoided or substantially lessened, the BART Board must prepare a Statement of Overriding Considerations that makes findings that any unavoidable significant effects are acceptable due to overriding considerations, as described in CEQA Guidelines Section 15093.

B4-12 As described on page 224 of the Draft EIR in Section 3.A, Introduction to Environmental Analysis, the BLVX Travel Demand Model used for the EIR’s transportation analysis used the regionally adopted land use projections, in accordance with accepted methodology for similar types of projects. These projections include growth for the nine-county Bay Area region as described in the Regional Transportation Plan (RTP) adopted by the Metropolitan Transportation Commission, called Plan Bay Area, as well as projections by the San Joaquin Council of Governments in its RTP. To use different future land use assumptions would be considered speculative and is not standard practice. As
the comment acknowledges, the analysis correctly used assumptions from the adopted RTPs for purposes of transportation impact analysis. It should also be noted that federal law requires transportation and air quality modeling based on the land use assumptions contained in adopted RTPs. The comment suggests that, in addition, BART should conduct a second analysis of ridership utilizing projected land uses based on unspecified “actual trends.” However, the comment does not identify any source of generally accepted, quantifiable “actual trend” assumptions for land uses, beyond generally speculating that future housing demand within the Bay Area may exceed supply to an unknown degree. Nothing in CEQA requires BART to develop and provide a second analysis of ridership based on unidentified and speculative land use assumptions.

B4-13

In response to this comment, the following text will be added to page 269 of the Transportation section following the first paragraph under “BART Ridership Forecast.”

Traffic incidents are indirectly taken into account by the BLVX Travel Demand Model. In preparing the model for analysis via the validation and calibration step, the model’s processes for generating transit ridership and traffic volumes are informed by existing, observed conditions. While the set of observed data to be used is selected to exclude existing conditions with major, outlier incidents, the selected dataset does represent ‘typical’ travel conditions, which include some amount of incidents. Therefore, the model’s transit ridership and traffic volume outputs do reflect the effects of the ordinary course of incidents on delays.

The model does not use the likelihood of incidents as an independent variable in explaining travel behavior; the current state of the art in travel demand modeling is unable to do so. Thus, the level of incidents cannot be used as an explanatory variable in travel forecasting.

This comment suggests that BART should conduct a second analysis of ridership reflecting the likelihood of traffic incidents but does not identify any information on quantifiable consequences of such incidents, beyond generally noting that “there are frequent incidents on I-580 that slow down traffic and add unpredictability”. Nothing in CEQA requires BART to develop a novel methodology for a second analysis of ridership based on traffic incidents. It should be noted that traffic analysis in the Draft EIR prepared by City of Livermore for the INP follows the standard methodology and not the approach suggested in the comment.
B4-14 Please see Response to Comment A5-7.

B4-15 The commenter’s support for future direct connections between ACE and BART is noted. While a direct connection between ACE and BART is outside the scope of this project, which extends service to Isabel Avenue, a future project connecting to ACE is not precluded by this project. As discussed on page 1497 in Chapter 5 of the Draft EIR, adoption of a rail extension to Livermore using conventional BART, DMU or EMU technology does not preclude future service expansions such as a rail connection with ACE. Such an extension would be the subject of a separate project-level evaluation in a future environmental document. Specifically, if the BART Board adopts the Proposed Project, a future extension farther east of the Isabel Station could be implemented using conventional BART technology or DMU or EMU technology. If the BART Board adopts the DMU Alternative or EMU Option, a future extension using DMU or EMU technology could be implemented; however, a future extension using conventional BART technology would be highly ineffective.

B4-16 See Master Response 5 regarding the required size of the storage and maintenance facility and cost allocation to the Proposed Project. See also Master Response 1 regarding Livermore’s contributions to funding the BART system.

B4-17 The comment on cost estimates and request for cost comparisons to other rail projects is not a comment on the adequacy of the EIR or environmental impacts pursuant to CEQA. However, a response is provided here for informational purposes. Please also see Response to Comment A5-8, which provides a cost comparison of the DMU Alternative to a similar stretch of the ACEforward Project’s DMU alignment.

Table 4.B-2 provides a comparison with the costs of other extensions completed by BART. BART has discussed alternative project delivery methods with the City of Livermore and will continue to explore such approaches and potential cost savings.
<table>
<thead>
<tr>
<th>Extension Project</th>
<th>Capital Cost (2016 $)</th>
<th>Track Miles</th>
<th>Cost per Mile</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BART to Livermore Extension Project</td>
<td>$1.30B</td>
<td>7.7</td>
<td>$169M</td>
<td>--</td>
</tr>
<tr>
<td>Cost without highway widening</td>
<td>$1.04B</td>
<td>7.7</td>
<td>$136M</td>
<td>--</td>
</tr>
<tr>
<td>Dublin/Pleasanton Extension</td>
<td>$0.82B</td>
<td>14</td>
<td>$58M</td>
<td>Did not include ROW costs as the ROW was provided by others</td>
</tr>
<tr>
<td>Pittsburg/Bay Point Extension</td>
<td>$0.78B</td>
<td>7.8</td>
<td>$100M</td>
<td>--</td>
</tr>
<tr>
<td>Warm Springs Extension</td>
<td>$0.80B</td>
<td>5.5</td>
<td>$146M</td>
<td>--</td>
</tr>
<tr>
<td>Colma Extension</td>
<td>$0.28B</td>
<td>1.6</td>
<td>$172M</td>
<td>Built around active yard</td>
</tr>
<tr>
<td>SFO Extension</td>
<td>$1.93B</td>
<td>8.7</td>
<td>$222M</td>
<td>Mostly subway</td>
</tr>
</tbody>
</table>

Notes:
- M = Millions; B = Billions
- Costs for historical extensions escalated to 2016 dollars using consumer price index;
- Does not include cost of maintenance facility.
October 13, 2017

Andrew Tang
Livermore Extension Project
300 Lakeside Dr., 21st Fl.,
Oakland, CA 94612

RE: BART to Livermore Extension Project Draft Environmental Impact Report

Dear Mr. Tang:

Thank you for the opportunity to submit comments on the BART to Livermore Extension Project Draft Environmental Impact Report (Draft EIR). The City of Pleasanton is excited to see this project moving forward and is encouraged that the publishing of this Draft EIR will bring the BART Extension to Livermore much closer to completion.

In general the City of Pleasanton is very supportive of the BART Extension to Livermore and specifically the Proposed Project (the Conventional BART project). The benefits that Conventional BART extension brings both locally and regionally are well documented in the Draft EIR. These benefits include significant environmental improvements, including reducing greenhouse gas emissions by 11,200 metric tons per year and reducing energy consumption by 130,800 million British thermal units per year. These reductions occur in large part because based on the analysis vehicles miles traveled is reduced by 244,000 miles per day with the Conventional BART project.

The City is encouraged by the significant increase in ridership the Conventional BART to Livermore Extension provides which is projected to increase ridership by 11,900 riders per day. A significant portion of these new riders come from the City of Pleasanton (17 percent of new riders are from Pleasanton –BART Presentation on 8/16/17) and these new riders are able to ride due to the additional station capacity created by the Conventional BART extension to Livermore and construction of 3,400 new parking spaces.

This project is a great start to the Tri-Valley’s ultimate goal of extending BART to ACE. This long-range goal will allow for a single station connection to the Central Valley which will provide a much needed transportation congestion solution to the thousands of commuters that travel across the Altamont Pass on a daily basis.
BART to Livermore Extension Project Draft EIR  
October 13, 2017  
Page 2

The City appreciates the inclusion of Chapter 5 of the Draft EIR that details the “project alternative merits.” This is an optional chapter in the environmental document and its inclusion provides additional data to help decision-makers better understand the project.

The City believes that the Conventional BART extension best meets the goals of the project, including:

- Provide a cost-effective intermodal link of the existing BART system to the inter-regional rail network and a series of Priority Development Areas (PDAs) identified by the City of Livermore, the Metropolitan Transportation Commission, and the Association of Bay Area Governments. These PDAs include the Livermore Isabel Avenue BART Station PDA, the Livermore Downtown PDA, and the Livermore East Side PDA

- Support the regional goals of integrating transit and land use policies to create opportunities for transit-oriented development in PDAs in the Livermore area

- Provide an effective commute alternative to traffic congestion on I-580

- Improve air quality and reduce greenhouse gas (GHG) and other emissions associated with automobile use.

The Conventional BART provides a cost effective intermodal link, supports the regional goals, is the most effective commute alternative and shows the greatest reduction in greenhouse gas, Vehicle Miles Traveled and greatest increase in ridership. In addition, the Conventional BART project minimizes impacts to local land use and right of way.

To a lesser extent, the DMU/EMU alternative also meets these objectives, although the environmental benefits are lower as is the ridership and there is a significant increase in impact to needed right of way and an increase in the cost per rider. The City does not believe the No project, Express Bus or Enhanced Bus meet these objectives and these alternatives are not supported by the City.

The City is looking forward to the updated operational costs and associated cost per rider, as it appears the significant increase in ridership would make the conventional BART extension one of the most cost effective stations when considering fair box recovery.

The City submits the following comments for consideration to the BART to Livermore Extension Project’s Draft EIR:

**Freeway capacity:** Table 3.B-36 on page 326 of the Draft EIR provides 2040 freeway level of service. Within this table it is shown that the No Project alternative is over capacity between Airway Boulevard and Greenville Road. Page 321 of the EIR provides a graphic that indicates that the Conventional BART project will increase traffic east of Isabel station as “new riders are attracted to the BART Station.”

These trips under the No Project condition would either already be on the network as automobiles or as ACE riders. We are concerned that the model inaccurately predicts that ACE riders would leave the
ACE system to drive on an over capacity freeway network. This assumption in the modeling leads to identification of 5 Significant and Unavoidable impacts (listed on page 330) that should not be attributed to the Conventional BART project.

**Ridership:** Pages 188 and 291 provide the ridership numbers for both Project Conditions and Cumulative Conditions. The Cumulative Conditions identify a change in land use adjacent to the Conventional BART Project.

This change in land use is a requirement by both BART and the Metropolitan Transportation Commission for rail expansion and should therefore be included in the base project assumptions, not in the Cumulative Conditions. Cumulative Conditions analysis are intended to review “probable future projects,” but the Livermore Transit Oriented Development (TOD), is not “probable” under the Conventional BART project, it is a requirement and should therefore be included as a Conventional BART assumption.

This required Transit Oriented Development increases BART ridership to 13,400 riders per day, an additional increase of 1,500 riders per day.

There are other benefits to Vehicle Miles Traveled (VMT) as shown on page 1221 where the cumulative condition would further reduce the annual VMT by 29,000 miles per day and Green House Gases would be further reduced by 1,606 metric tons of carbon dioxide per year (pages 1239 and 1252).

The EIR includes the Bayfair Connector Project, which the City also supports, as it will provide travel time benefits to BART riders from the Tri-Valley. The ridership numbers, however, don’t include the operation as a single trip from the Tri-Valley. The City’s expectation is that the Bayfair Connector Project would allow for the “one seat ride” to San Jose and this operational change would increase BART ridership beyond the values shown in the Draft EIR. The analysis of the “one seat ride” should be included in the EIR.

**Cost Analysis:** The Draft EIR assumes that 25 percent of both the capital cost and operating cost for the storage and maintenance facility in the overall cost of the proposed project.

The use of 25 percent of the capital cost is noted to be the result of needing two or three of the ten proposed repair bays that are proposed in the shop facility. The use of 25 percent of the operating cost seems excessively high, as the station would be just 1 of 19 stations that is located along the Blue Line and just 1 of 46 total stations. The Project should not include this 25 percent operating cost of the yard.

Similarly, the cost of the storage yard should be removed from the project cost. The storage of BART trains currently takes place in the median. The Conventional BART extension will use these storage tracks for operation, and new storage tracks are necessary, however, assigning the full 172 car train storage to a project that will only require an additional 36 train cars places an unfair burden on the Proposed Project.
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Page 4

The storage yard and maintenance facility is located 1.9 miles from the Isabel Station and includes bridges over the Arroyo Las Positas and Cayetano Creek as well as a hillside tunnel. This adds significant cost to the project. This project capital cost would be better served constructing rail that will benefit the ultimate extension to Greenville. 1.9 miles of tracks would extend from Isabel station past North Livermore Interchange and nearly to the First Street Interchange. This is nearly half of the distance needed to get to the originally planned Greenville maintenance facility.

This 100% cost artificially inflates the Proposed Project and does not allow for an equal comparison between the Project and the alternatives. The storage cost should be removed from the cost calculation to allow for an equal comparison of the Project and alternatives.

**Beneficial Effects:** Table S-4 on Page 20 of the Summary shows the Beneficial Effects of the proposed project and the project alternatives. A summary paragraph on the Conventional BART providing the greatest number of benefits should be included on Page 19 of the Summary.

**Environmentally Superior Alternative:** Under CEQA guidelines, alternatives selected should “describe a range of reasonable alternatives to the project . . . which would feasibly attain most of the basic objectives of the project” (CEQA Guidelines, § 15126.6, subd. (a)).

The Draft EIR identifies the Enhanced Bus Alternative (page 1482) of as the environmentally superior alternative. This alternative, however, fails to meet the basic objectives of the project and should be eliminated as the Environmentally Superior Alternative.

The EIR goes on to identify the Express Bus Alternative as the next best Alternative due to it having the second fewest number of impacts (page 1483), but this alternative too fails to meet the objectives of the project. This alternative fails to provide a sufficient intermodal link to the rail network or provide an effective commute alternative. Pleasanton’s residents do not gain any benefit in access to the BART station and are not presented with a “commute alternative” under the bus alternatives.

The Draft EIR does recognize that the selection of a project should not be based on the identification as environmentally superior and should also consider the project merits, but the document should also recognize the alternatives lack of meeting the objectives of the project.

Thank you for your consideration of our comments. The City looks forward to our continued cooperative and proactive effort to improve transit ridership and transportation alternatives in the Tri-Valley.

If you have any questions, please contact Mike Tassano, Deputy Director of Community Development, Transportation at 925-931-5670.

Sincerely,

Gerry Beaudin
Director of Community Development
BART to Livermore Extension Project Draft EIR
October 13, 2017
Page 5

c: Mayor Jerry Thorne and City Council
   Nelson Fialho, City Manager
   Adam Weinstein, Deputy Director of Community Development, Planning
   Mike Tassano, Deputy Director of Community Development, Transportation
RESPONSE B5
Gerry Beaudin, City of Pleasanton

B5-1 Thank you for providing comments on the Draft EIR. This comment summarizes the findings of the Draft EIR. The commenter’s support for the Proposed Project is noted. No response is necessary.

B5-2 Three metrics have been calculated that measure cost effectiveness for the Proposed Project and Alternatives. These are: (1) combined rail and bus farebox recovery ratio, defined as the total revenue collected via fares divided by the total cost to operate the services; (2) annualized lifecycle costs per net new BART boarding; and (3) annual Operations and Maintenance (O&M) cost per net new BART boarding. All metrics were calculated for 2040 conditions, but are expressed in 2016 dollars. Calculations for both project-only conditions and Cumulative Conditions are provided in Table 4.B-3 below.

<table>
<thead>
<tr>
<th>Table 4.B-3</th>
<th>COST EFFECTIVENESS METRICS FOR PROPOSED PROJECT AND ALTERNATIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Proposed Project (Conventional BART)</td>
</tr>
<tr>
<td>2040 Project Conditions</td>
<td></td>
</tr>
<tr>
<td>Combined Rail and Bus Farebox Recovery Ratio</td>
<td>88%</td>
</tr>
<tr>
<td>Annualized Lifecycle Costs per Net New BART Boarding</td>
<td>$20.56</td>
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<tr>
<td>Annual O&amp;M Cost per Net New BART Boarding</td>
<td>$6.61</td>
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<tr>
<td>2040 Cumulative Conditions</td>
<td></td>
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<tr>
<td>Combined Rail and Bus Farebox Recovery Ratio</td>
<td>101%</td>
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<tr>
<td>Annualized Lifecycle Costs per Net New BART Boarding</td>
<td>$18.26</td>
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### Table 4.B-3 Cost Effectiveness Metrics for Proposed Project and Alternatives

<table>
<thead>
<tr>
<th></th>
<th>Proposed Project (Conventional BART)</th>
<th>DMU Alternative</th>
<th>EMU Alternative</th>
<th>Express Bus/BRT Alternative</th>
<th>Enhanced Bus Alternative</th>
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</thead>
<tbody>
<tr>
<td>Annual O&amp;M Cost per Net New BART Boarding</td>
<td>$5.87</td>
<td>$6.98</td>
<td>$6.90</td>
<td>$2.16</td>
<td>$3.26</td>
</tr>
</tbody>
</table>

Note: All metrics are expressed in 2016 dollars.

The Express Bus/BRT Alternative is the most cost-effective alternative as measured by all three metrics. Under project-only conditions, it has a combined rail and bus farebox recovery ratio of 193 percent, an annualized lifecycle cost per net new boarding of $14.11, and an annual O&M cost per boarding of $2.96.

The Proposed Project is less cost-effective than the Express Bus/BRT Alternative, but performs better than other alternatives—with a combined rail and bus farebox recovery ratio of 88 percent, an annualized lifecycle cost per net new boarding of $20.56, and an annual O&M cost per boarding of $6.61 under Project-only conditions. Farebox recovery is higher than the BART system average, which was 74 percent in 2017, even when bus expenses and fares are taken into account. This is in part because the new passengers take longer trips than average, and thus pay higher fares than average.

Please refer to the Proposed Project and Build Alternatives Evaluation Report for additional information pertaining to the costs and benefits of the Proposed Project and Build Alternatives, provided as a link on the project website at [https://www.bart.gov/about/projects/liv](https://www.bart.gov/about/projects/liv).

B5-3 The freeway impacts identified for the Proposed Project in the Draft EIR are a worst-case scenario and result due to some ACE riders shifting to driving to the proposed Isabel Station to ride BART. As discussed on pages 380 and 454 of Section 3.B, Transportation, of the Draft EIR, the BLVX Travel Demand Model predicts that some ACE riders will shift to driving to the proposed Isabel Station to ride BART because riding BART will become more convenient once the Isabel Station is in place. Please see Response to Comment B8-11 describing a comparison of travel time assumptions for BART and ACE. The analysis assumed a faster BART travel time compared to ACE, which explains
why some ACE riders may shift to using BART. Also, note that under existing conditions, some ACE riders may find BART to be the faster mode of travel but take ACE nevertheless because of lack of parking at Dublin/Pleasanton Station.

B5-4 Consistent with BART’s System Expansion Policy, the City of Livermore is considering the INP, which is a ridership development plan intended to promote transit supportive land use and access to the proposed Isabel Station. The INP is a Specific Plan allowing for new housing and denser development around the proposed station area than currently permitted by the City of Livermore’s General Plan. The City of Livermore is the lead agency for the INP, which is undergoing a separate review and approval process from the BART to Livermore Extension Project. The comment suggests that, because BART policy requires the City to develop an INP, BART should have included the land uses permitted under the INP “in the base project assumptions.” However, the INP was still under development at the time that BART prepared its Draft EIR; thus, it would have been inappropriate for the Draft EIR analysis to assume that land uses under the INP were already in effect. To the extent that the commenter is concerned that anticipated ridership, VMT reductions, and greenhouse gas (GHG) emission reductions would be understated without assuming anticipated land use changes from the INP, those anticipated benefits are fully accounted for and disclosed under the Cumulative Conditions scenario, which includes the land use assumptions from the INP. The commenter appears to prefer that BART disclose only the cumulative benefits of the project together with the INP. However, nothing in CEQA (which does not require an EIR to provide analysis of project benefits in the first place) prohibited BART from identifying project benefits with and without other anticipated projects, including the INP. See Table 5-1 in Chapter 5, Project Merits, comparing “Project” and “Cumulative” beneficial effects of the Proposed Project and Build Alternatives. See the description of projects included under Cumulative Conditions, which includes the INP (page 227 of the Draft EIR).

Page 1494 of the Draft EIR has been revised to clarify that the Cumulative Conditions as presented in Table 5-1, include the INP, as follows:

This discussion includes both project-level beneficial effects from implementation of the Proposed Project or an alternative and cumulative beneficial effects from implementation of the Proposed Project or an alternative in combination with the effects of other projects, including the INP.

As described on pages 1501 to 1502 of the Draft EIR, while the BART to Livermore Extension Project is included in MTC’s Resolution #3434, it is not
listed as one of the transit extension projects subject to the TOD policy. Therefore, the housing thresholds listed in the TOD policy are not applicable to the Proposed Project and Alternatives. See Draft EIR Chapter 5, Project Merits, for discussion of the consistency of the Proposed Project and DMU Alternative with the MTC housing thresholds for informational purposes.

Please see Response to Comment A5-7 for information regarding the BART Bay Fair Connector Project.

Please see Master Response 4 regarding the proposal to extend toward Greenville Road instead of constructing a storage and maintenance facility.

Please see Master Response 5 for a discussion about the required size and need for the storage and maintenance facility as well as the allocation of costs associated with the facility to the Proposed Project.

The suggestion to place a paragraph summarizing the benefits of the Proposed Project on page 19 is noted. The same information is available in Table S-4 and the paragraphs that follow.

The comment asserts that the Enhanced Bus Alternative cannot qualify as the environmentally superior alternative because it fails to meet basic project objectives. The comment conflates selection of a reasonable range of feasible alternatives for evaluation in an EIR with identification of the environmentally superior alternative among those alternatives. CEQA Guidelines 15126.6(e)(2) provides that, if the environmentally superior alternative is the No Project alternative, an EIR must identify an environmentally superior alternative among the other alternatives that are analyzed in the EIR. Consistent with this requirement, the Draft EIR properly identified the No Build Alternative as the environmentally superior alternative, and properly identified the Enhanced Bus Alternative as the environmentally superior alternative among the Build Alternatives (pages 1481 to 1482 of the Draft EIR). There is no basis to exclude an alternative that has been selected for analysis in an EIR from being identified as environmentally superior based on its ability to meet project objectives.

As to whether the Enhanced Bus Alternative and Express Bus/BRT Alternative should have been selected for analysis in the EIR in the first place, an EIR must select a range of reasonable alternatives to the project which could feasibly attain most of the basic objectives of the project while avoiding or reducing significant impacts (CEQA Guidelines §15126.6(a), (c)). Not all of the objectives must be attained by every alternative. Moreover, when selecting some alternatives for analysis in an EIR and excluding others as “considered but
rejected," an agency must determine whether an alternative is potentially feasible [California Native Plant Society v. City of Santa Cruz (2009) 177 Cal.App.4th 957, 1000]. “While the lead agency may ultimately determine that the potentially feasible alternatives are not actually feasible due to other considerations, the actual infeasibility of a potential alternative does not preclude the inclusion of that alternative among the reasonable range of alternatives” [Watsonville Pilots Ass’n v. City of Watsonville (2010) 183 Cal.App.4th 1059, 1087]. Applying this standard, it was appropriate to include the Enhanced Bus Alternative and Express Bus/BRT Alternative in the Draft EIR because these alternatives would provide a cost-effective intermodal link between the existing BART system, the ACE train, and Priority Development Areas in Livermore—supporting the first project objective. In addition, the Express Bus/BRT Alternative would reduce GHG emissions and other pollutants, which is also a project objective.

B5-8 Thank you for your comments. No response is necessary.
October 3, 2017

San Francisco Bay Area Rapid Transit District
BART to Livermore Extension Project
C/O Andrew Tang, Project Manager
21st Floor
300 Lakeside Drive
Oakland, CA 94612

RE: BART to Livermore Extension Project Draft Environmental Impact Report (SCH 2012082104)

Dear BART Board of Directors and Staff:

The City Council of the City of Tracy encourages the San Francisco Bay Area Rapid Transit District (BART) Board of Directors to review and include our comments as it relates to the Draft Environmental Impact Report (DEIR) for the proposed BART to Livermore Extension Project. We support your advancement of the region’s economic growth with this system expansion project consisting of the 5.5-mile extension of the current transit system to Isabel Avenue/I-580 interchange and additional enhanced and new bus service linkages between BART and the Altamont Corridor Express (ACE) stations, but feel that there are elements missing from the DEIR that could more fully address the issue of interregional connectivity.

Population, housing and employment trends have created fundamentally different impacts on the Tri-Valley and San Joaquin Valley interregional trip pattern. A five-mile extension of the BART system to Isabel Avenue in Livermore for approximately $2 billion over the next 10 years does not address mobility needs in the I-580 corridor. It does not create any significant reduction in congestion from the Altamont Pass through the project area and beyond the Dublin/Pleasanton station. The missing mobility links in the Tri-Valley and San Joaquin Valley extend far beyond Isabel Avenue. Transit improvements from the Tri Valley area to Tracy and beyond should be added to the scope of the DEIR. Serious consideration should be given to amending the DEIR to include additional alignment and route segments earlier in the project delivery cycle. The DEIR does not contain any alternative projects that provide a direct link to ACE in Livermore for the next 10 years. There are no cost-effective options to build the missing transit links to effectively manage the population, housing and employment trends on an interregional basis in a reasonable timeframe.
In the Chapter 1 Introduction Section of the DEIR in item “D” Regional Context, the document makes a compelling case for expanding the scope of the project geographically and functionally. In part the DEIR says:

“Eastern Alameda County has been one of the fastest growing subregions of the Bay Area. As a result travel demand has continued to increase despite frequent congestion on I-580. In addition, inter-regional commuting along I-580 from San Joaquin County to the Bay Area has exacerbated traffic issues throughout the project corridor. The regional trends of continued growth, a constrained road network, and limited transit options create the need for additional transit service to improve mobility throughout the area…”

Despite the DEIR calling for more effective transit options in the project area as well as focusing action on the substantial impacts that regional growth trends such as population, housing and employment create, there are no responsive build alternatives included in the DEIR assessment. The inclusion of responsive and relevant alternatives in the assessment is vitally necessary.

The DEIR articulates the need for pursuing more appropriate and sorely needed options that provide effective congestion relief as well as transit network accessibility gap fillers to combat the economic, environmental and quality of life issues across interregional boundaries when it states:

“San Joaquin County, immediately east of Alameda County along the I-580 corridor, is projected to have an approximately 44% increase in population by 2040 and an approximately 38% increase in households and by 2040, San Joaquin County is projected to have approximately 37 percent increase in Jobs…”

Despite these growth projections the DEIR provides no meaningful relief to increasing congestion on the I-580 corridor in the vicinity of the Altamont Pass and no direct rail connection between BART and ACE for at least the next ten years despite the expenditure of almost $2 billion. These results do not meet two important project goals, namely, cost effectiveness and timely delivery. This calls for a re-evaluation of the list of project options that render more useful outcomes.

A highly connective regional transportation system only helps to enhance the economic vitality of the Greater San Francisco Bay Area and Northern California Megaregion. Approximately 65,000 employees from the Northern San Joaquin Valley commute daily through the City of Tracy via Interstates 205 and 580 to employers over the Altamont Pass.
Corridor. The highly congested corridor is impacted during peak hours from regional and interregional commuter, freight and recreational traffic.

The BART to Livermore Extension Project can assist in creating further economic development opportunities for our entire region including increased access to the public transportation network and major job centers, decreased vehicle congestion resulting in higher worker productivity and a better quality of life for commuters, and a reduction of stress and destruction of the highway / interstate transportation infrastructure, but only if these alternative solutions to address interregional connectivity are evaluated and implemented in a timely and cost effective manner.

The BART to Livermore Extension Project can also provide new, or enhanced connections between the Proposed Isabel Station and the ACE Livermore Station. The ACE rail currently operates four daily weekday round-trips between Stockton to San Jose. ACE provides an alternative to the heavily congested I-580/I-680 corridor for over 1.3 million riders a year—since 2011, ridership has doubled and is continuing to grow. Improving connectivity to the system will also provide opportunities for our residents to use the rail network systems in lieu of single passenger vehicle commute trips.

In addition, as a member of the Tri-Valley-San Joaquin Valley Regional Rail Authority, the City of Tracy supports our mutual efforts of planning, developing, and delivering cost-effective and responsive transit connectivity between the BART and ACE service in the Tri-Valley.

On behalf of the Tracy City Council, we support the proposed BART to Livermore Extension Project but respectfully request that the Board of Directors for the San Francisco Bay Area Rapid Transit include our recommendations for additional evaluation in the DEIR supporting this vital project that impacts the economy of the San Francisco Bay Area and its Northern California Megaregion. It is further recommended that the Board support the decision-making authority of the Tri-Valley – San Joaquin Regional Rail Authority, as identified in Assembly Bill 758, and urge the BART Board to expeditiously advance the BART extension within the context of interregional connectivity and consistent with the goals and objectives of the Authority.

Sincerely,

Robert Rickman
Mayor
RESPONSE B6
Robert Rickman, City of Tracy

B6-1 The commenter’s concerns about project cost-effectiveness, providing relief to congestion on the I-580 corridor in the vicinity of the Altamont Pass, and a direct rail connection between BART and ACE are noted. The importance of greater linkages within the wider region including the Tri-Valley Area, Tracy, and the San Joaquin Valley is acknowledged.

The comment underscores the need for increased connectivity between the Tri-Valley Area and the San Joaquin Valley and between BART and ACE. The Proposed Project and Build Alternatives evaluated in the Draft EIR were chosen to determine how well different transit technologies (conventional BART, DMU or EMU, and bus) could achieve the goals and objectives of a BART extension to Isabel Avenue. A BART extension to Isabel Avenue was determined to be a feasible project given the costs and environmental impacts identified in the 2010 BART to Livermore Extension Program EIR and the differing alignments east of Isabel Avenue adopted by the BART Board and the City of Livermore. The alternatives suggested by the comment (for example, direct links to ACE, transit from the Tri-Valley to Tracy) address larger regional needs and are beyond the scope of this EIR, but are not precluded as possible future projects. The commenter’s objection to the cost and timeline of the EIR’s alternatives is noted. BART supports increased connectivity in the region, particularly with ACE. Please note that the Proposed Project and all three Build Alternatives provide enhanced bus connections to ACE.

Additional information about the ability of the Proposed Project and Build Alternatives to satisfy the project objectives is provided in the Proposed Project and Alternatives Evaluation Report, which compares the benefits and costs of the Proposed Project and Build Alternatives, evaluating their consistency with the project goals and objectives and with the BART System Expansion Policy. The report is available as a link on the project website at: https://www.bart.gov/about/projects/liv.

Please see Master Response 10 for information regarding AB 758 and the Tri-Valley San Joaquin Valley Regional Rail Authority.
October 16, 2017

Bay Area Rapid Transit District
Attention: BART to Livermore Extension Project
306 Lakeside, 21st Floor
Oakland, CA 94612
Attn: Andrew Tang, Principal Planner

Dear Mr. Tang:

Thank you for providing the Livermore Amador Valley Transit Authority (LAVTA) with the opportunity to submit comments on the BART to Livermore Draft Environmental Impact Report (DEIR). The proposed project identified in the DEIR, which is also referred to as Conventional BART, would extend existing BART service approximately 3.5 miles east from the existing Dublin/Pleasanton BART Station within the I-580 right-of-way to a proposed new terminus station located at the Isabel Avenue/I-580 interchange in the City of Livermore. A new parking facility would be constructed at the new Isabel Station and a new BART storage and maintenance facility would be constructed beyond the Isabel Station, north of the I-580. In addition to the No Project Alternative, the DEIR also considers three Building Alternatives: A Diesel Multiple Unit (DMU)/Electric Multiple Unit (EMU) Alternative, an Express Bus Alternative with a direct access ramp from the 580 Express Lanes to BART, and an Enhanced Bus Alternative.

The DEIR indicates that the most impactful alternative in terms of transit ridership growth, greenhouse gas (GHG) reduction and energy consumption is Conventional BART. Conventional BART also best serves and supports the proposed Isabel Neighborhood Plan, including provisions for job creation and affordable housing. The DMU/EMU Alternative provides significantly fewer new BART riders and environmental benefits at approximately the same cost as full BART. The bus alternatives provide far less environmental benefits and levels of transit service. It is worth noting that with the implementation of LAVTA’s Wheels Forward service plan in August 2016, LAVTA is essentially operating the Enhanced Bus Alternative today. In short, the Enhanced Bus Alternative and the Express Bus Alternative do not generate enough ridership nor offer adequate congestion relief on the I-580 corridor.

LAVTA has the following comments on the BART to Livermore DEIR:

1) The formation of the Tri-Valley – San Joaquin Valley Regional Rail Authority presents an unprecedented opportunity to comprehensively plan for inter-regional rail connectivity in the I-580 corridor. The proposed Conventional BART extension may be an important element of this rail solution and the BART Board must move expeditiously to advance this
project within the context of interregional connectivity. We also urge BART to support the goals and objectives of the new Authority when formed. The primary goal is the delivery of cost-effective and responsive rail transit connectivity between BART and ACE in the Tri-Valley while meeting the goals and objectives of the communities it will serve.

2) The storage and maintenance facility is out of scale with the 36 vehicle capacity requirements of a one-station, 5-mile extension. The DEIR states that BART conducted an operations analysis to determine BART vehicle fleet and storage needs to effectively operate Conventional BART—determining the need for a yard providing storage for approximately 172 cars. It then added a maintenance facility to meet the needs of not only the Conventional BART extension, but the entire Daly City – Dublin/Pleasanton Line. The result is a proposed 68-acre storage and maintenance facility to meet BART systemwide needs. The DEIR also states that the Conventional BART cost estimate includes 25% of the cost of the proposed storage and maintenance facility. This represents an unacceptable premise as the total cost should be attributed to the BART system and not the project.

3) The DEIR plans for a 3,500 space parking garage based on modeling. However, the modeling does not appear to take into account the impacts of the VTA/Santa Clara County BART extensions, which according to Core Impact Studies in 2003 and 2011 will create a demand of 600 to 750 new parking spaces for Eastern Alameda County.

4) The DEIR should analyze the need for appropriate park and rides, as identified in the 2017 Alameda County Tri-Valley Integrated Park and Ride Study. The study recommends a high-frequency shuttle (every 15-minutes) between the Airway Park and Ride lot in Livermore and Dublin/Pleasanton BART as a precursor to the Conventional BART to Isabel extension. The study also recommends a shuttle from a future Laughlin/Greenville Road Park and Ride lot to the Isabel Station when the Conventional BART extension in operational.

5) The DEIR has assumed that the BART parking garage at Dublin/Pleasanton would be expanded to include 540 net new spaces; however, the BART Board has elected not to build the expansion and instead implement a hybrid plan to increase the parking spaces by 540. This change in direction might have an impact on local traffic circulation that would affect bus circulation and could change the information utilized in the DEIR analysis.

6) The DEIR should address the additional time needed to transfer between the DMU/EMU Alternative and BART, and the Express Bus Alternative and BART, for inclusion in the travel demand forecasting.

7) Alternative concepts for connecting the DMU/EMU at the Dublin/Pleasanton BART Station have been developed by AECOM engineers, part of the ACEforward consulting team. These alternative concepts will avoid potential impacts on properties and displacements of parking and should be evaluated and considered as a part of this DEIR.
8) ACE ridership is projected to decrease as a result of the full BART alternative, as well as the DMU/EMU option in the DEIR. BART staff states that this is because people who currently ride ACE to Silicon Valley may opt to instead drive to Isabel and take BART (as it will have been extended to Silicon Valley by then). It is not clear if the modeling took into account the ACEforward plans for the Highway 99-corridor, especially with the $400 million identified in SB1 to extend ACE to Merced, and the increased ridership expected as a result. 

9) The Bay Fair Connector project is in the DEIR. However, the plan to operate the one-seat ride from the Tri-Valley to southern Alameda/South Bay is not. The ridership forecasts for this one-seat ride from the Tri-Valley to southern Alameda/South Bay should be included in the DEIR.

10) The local traffic conditions projected as a result of the Conventional BART extension show an increase in the traffic on local Livermore streets, and an alleviation of traffic on I-580 west of the Isabel station. Did the DEIR take into account other roadway projects designed to address local gridlock, for example, the SR-84 widening?

11) Table S-4 indicates that the Enhanced Bus Alternative would have a negative impact on Greenhouse Gas emissions (GHG), as the ridership would be low and the bus would produce more GHG than the riders reduced. However, by the year 2040, it should be assumed that the fleet of transit buses will be fully electric technology. The GHG calculations should be revisited for all alternatives that include buses.

12) For the Enhanced and Express Bus Alternatives, the DEIR claims that additional Transit Signal Priority (TSP) would improve overall performance of these services. Did modeling include TSP throughout the LAVTA system on routes serving the Isabel Station? If not, what impact would doing so have on Enhanced and Express Bus Alternatives? Additionally, what impact in ridership would bus-only lanes on local arterials have on these alternatives?

LAVTA appreciates the opportunity to respond to the BART to Livermore DEIR and recognizes the importance of BART responding to the issues and concerns of local agencies in the Tri-Valley area, addressing fully environmental impacts and committing to mitigate measures fully. Please do not hesitate to contact me with any questions or concerns.

Respectfully,

Karla Brown
LAVTA Board Chair
RESPONSE B7
Michael Tree, Livermore Amador Valley Transit Authority

B7-1 Thank you for providing comments on the Draft EIR. This comment is introductory in nature and does not specifically address the adequacy of the EIR; no response is necessary.

B7-2 The commenter’s support for Conventional BART is noted. As mentioned in the comment and described on page 83 of the Draft EIR, several components of the proposed bus routes are similar to Wheels Forward, a program of changes to the LAVTA transit system implemented in August 2016 to provide more frequent buses and new routes in Livermore, Dublin, and Pleasanton. BART developed its Proposed Project and Alternatives, all of which included expanded bus service, in advance of the implementation of Wheels Forward. BART consulted with LAVTA staff in developing the bus service proposals for inclusion in Draft EIR. The new, modified, or eliminated routes under the Proposed Project and Build Alternatives are described in the Draft EIR in relation to the previous bus route network. Elements shared by the Proposed Project and Build Alternatives and the Wheels Forward program include improved bus service from Downtown Livermore to BART, improved bus service to Las Positas College, and improved bus shelters to serve the new Express and Rapid routes. Other capital improvements, such as real-time arrival message boards at bus stations, expansion of transit signal priority to additional intersections, and installation of bus bulbs, are not included in the Wheels Forward program. Additionally, the Proposed Project and Build Alternatives would include improved bus service to Lawrence Livermore National Laboratory and the east side of Livermore. As noted on page 92 of the Draft EIR, although LAVTA eliminated Route 12 and 12X service in August 2016, a restructured Rapid route serves most of the existing Route 12 stops on Dublin Boulevard, as well as North Canyons Parkway and Las Positas College, and a restructured Route 14 serves areas of Livermore previously served by Route 12. Therefore, these restructured routes would generally serve the areas previously served by the 12 and 12X, and the existing routes analyzed in this EIR remain as previously operated by LAVTA.

B7-3 Please see Master Response 10 for information regarding AB 758 and the Tri-Valley San Joaquin Valley Regional Rail Authority.

B7-4 Please see Master Response 5 regarding the need, size, and cost and cost allocation for the storage and maintenance facility.
B7-5 Travel demand modeling for the Proposed Project indicated the need for approximately 3,400 parking spaces at the new Isabel Station for the Proposed Project. The BLVX Travel Demand Model was a version of the Alameda County Transportation Commission model that was customized for the project as described on page 269 of the Draft EIR in Section 3.B, Transportation. The travel demand model did include planned BART extensions to Santa Clara County, both an extension to Berryessa in the near term and a longer-term extension to Santa Clara. Please see Response to Comment A5-9 regarding the VTA/Santa Clara County BART extension and core system impacts.

B7-6 The Express Bus/BRT Alternative and Enhanced Bus Alternative both include park-and-ride bus services/shuttles similar to the suggestions in the comment. Please refer to pages 146 and 161 in Chapter 2, Project Description, of the Draft EIR for a detailed description of the bus routes and access to park and ride facilities.

Please also see Responses to Comments D1a-1 and D1k-4 about the East Airway Boulevard park-and-ride. As noted in those responses, BART considered increased bus service between the Airway Boulevard site and the Dublin/Pleasanton Station, but did not implement this concept due to the estimated cost of the increased bus service that would be required to provide adequate peak hour headways to meet BART trains. BART also reviewed the ACTC study referenced by the commenter, which recommends a high-frequency shuttle from the park-and-ride at Isabel. However, LAVTA previously provided service from the park-and-ride to Dublin/Pleasanton Station and dropped it due to insufficient ridership.

B7-7 See Master Response 9 for information regarding the Dublin/Pleasanton Station Parking Expansion Project.

B7-8 Please see Response to Comment B3-9.

B7-9 Please see Responses to Comments A5-6.

B7-10 The BLVX Travel Demand Model used in the Draft EIR assumed increased ACE train frequency (10 trains per peak period) in 2025 and 2040, which is consistent with ACEforward. While San Joaquin County is included within the model coverage area, Stanislaus County is beyond the modeled area; thus, the ACE extension to Merced is not included in the model. See also Responses to Comments B8-7 through B8-10.

Please see Master Response 11 for additional information regarding ACE and the ACEforward Program.
B7-11 Please see Response to Comment A5-7.

B7-12 The analysis in the Draft EIR takes into account future roadway configurations, including the State Route (SR)-84 widening. Please see Table 3.B-18 on page 281 of the EIR for a complete list of future roadway improvements assumed in the analysis. However, SR-84 is a north-south direction street, with the future widening happening south of Stanley Boulevard in the southwestern edge of Livermore. The increase in traffic in Livermore is mainly through the center of Livermore or parallel to the freeway, with traffic being generated from the east going west. Most of the increase in traffic is not anticipated to use SR-84, south of Stanley Boulevard. The traffic pattern changes are depicted in the Draft EIR on Figure 3.B-9 (Traffic Pattern Changes, AM Peak Period) on page 321.

B7-13 As noted in the comment and summarized on page 21 of the Draft EIR (Chapter 1, Introduction), the Enhanced Bus Alternative would result in an increase of 600 metric tons of greenhouse gas emissions per year, as emission reductions associated with its small number of riders and small VMT reductions would not be enough to outweigh the emissions from the bus itself.

BART consulted with LAVTA staff in developing the bus service proposals for inclusion in the Draft EIR. The comment does not explain why it should be assumed that the fleet of transit buses will be fully electric by 2040. The Draft EIR assumptions regarding bus vehicle fleet characteristics were based on the information provided in LAVTA's Short Range Transit Plan, which states that LAVTA is pursuing all-electric vehicles for much of the 2017 fleet replacement. However, it does not state specifically how many buses will be electric. The Draft EIR conservatively assumed buses operated by LAVTA would be hybrid diesel models, which typically consume 15 percent less fuel than standard diesel buses per manufacturer specifications; see page 1216 of the Draft EIR in Section 3.L, Greenhouse Gas Emissions. However, if LAVTA fully electrifies the entire fleet of buses by 2040, this would reduce impacts for both air quality and greenhouse gases. As such, the analysis in the Draft EIR is conservative, including the conclusions presented in Table S-4 (Summary of Quantitative Beneficial Effects in 2040, page 20), the current air quality emissions impacts (pages 1071 to 1198), and the GHG emissions impacts (pages 1199 to 1255). Thus, the modification requested would not result in any new significant impacts and would only further reduce already identified impacts. Specifically, an all-electric bus fleet would reduce emissions of reactive organic gases, nitrogen oxides, respirable particulate matter, and PM$_{2.5}$ for the Proposed Project and Build Alternatives (as electric buses do not have emissions associated with combustion), as analyzed in Impacts AQ-9, AQ-10, AQ-17(CU),
and AQ-18(CU). Additionally, cancer risk and PM_{2.5} concentration impacts would be reduced, as analyzed in Impacts AQ-11, AQ-12, AQ-19(CU), and AQ-20(CU). Furthermore, overall GHG emissions would also be reduced but not eliminated, as some of the emissions are displaced from the bus tailpipe to the source of electricity generation, as analyzed in Impacts GHG-3, GHG-4, GHG-5(CU), and GHG-6(CU).

B7-14 Transit signal priority was assumed for routes serving the Isabel Station, including 10, 12, 12X, 20X, X-A, X-B, and R-B. Page 159 of the Draft EIR lists specific intersections for the Express Bus/BRT Alternative, and page 164 lists the specific intersections for the Enhanced Bus Alternative. The adjusted bus run times in the analysis for the Express Bus/BRT Alternative and Enhanced Bus Alternative included time savings from transit signal priority (and other improvements) at key selected locations along those routes. The analysis treated local bus improvements at a programmatic level and did not evaluate the effect of specific bus-only lanes on ridership. Doing so would have required determining whether local roads would be widened or existing travel lanes removed in order to provide the bus-only lanes, a level of detail beyond the scope of the programmatic nature of the bus improvement portion of the analysis.

B7-15 This comment is informational in nature; no response is necessary.
October 16, 2017

BART to Livermore Extension Project
300 Lakeside Drive, 21st Floor
Oakland, CA 94612
Submitted electronically to barttolivermore@bart.gov

RE: San Joaquin Regional Rail Commission
Comments on the Draft Environmental Impact Report
BART to Livermore Extension Project
SCH No. 2012082104

The San Joaquin Regional Rail Commission (SJRRC) appreciates the opportunity to review and provide comments on the Draft Environmental Impact Report (EIR). Our comments below are provided in order to assist BART in fully evaluating the potential Livermore extension alternatives.

Our primary concern is about the EIR evaluation of the effect of the BART build alternatives on ACE service. For the reasons articulated below, we are of the opinion that the model used by BART is not well suited to evaluate ACE ridership, that the EIR likely overstates the potential effects of BART build alternatives on ACE ridership, and that ACE will be more competitive with BART for ridership from the San Joaquin Valley to Silicon Valley than the EIR recognizes.

The SJRRC is supportive of improved connections between ACE and BART in the Tri-Valley, regardless of the decisions that BART makes concerning the Livermore extension. We look forward to working with BART and other transit agencies in this regard as planning advances.

Chapter 2, Project Description

1. Page 128, Figure 2-16: EMU Alternative. The photo shown is an example of an EMU alternative is a Santa Clara VTA light rail train, which is an older design and not likely representative of new EMUs that would be used for a dedicated rail system extension. The EMU alternative would likely employ EMUs similar to those proposed by Caltrain for its electrification project. It is suggested to replace this photo with a more representative EMU instead.

2. Page 175, DMU Alternative: The proposed relocation of I-580 and surface frontage roads, as described in Chapter 3.D, Population and Housing, contributes to business displacement impacts. Please see in comments below a suggest modification to the DMU alternative design that could lower the displacement effects.
3. Page 188, Table 2-16: DMU Alternative: 2025 ridership for the DMU Alternative is 5,000 increasing to 7,000 in 2040, an increase of 40% from 2025 to 2040. 2025 ridership for the Conventional BART Alternative is 6,600 increasing to 11,900 in 2040, an increase of 80% from 2025 to 2040. Given that both alternatives would operate the same hours at the same frequency, it is not obvious why the Conventional BART alternative ridership should increase at double the rate of the DMU Alternative over the period. Clearly a DMU Alternative with the same frequency of service and capacity should have somewhat less ridership than a Conventional BART Alternative due to the inconvenience of a transfer, but the lack of an equivalent ridership percent increase between 2025 and 2040 requires more explanation.

4. Figures 2-1, 2-13, 2-19, and 2-24: Suggest the existing bus connection from ACE Pleasanton to BART Dublin/Pleasanton Station be shown (Wheels Bus 10 and Bus 54).

5. Section 2.K: Alternatives Considered but Withdrawn: It is suggested that this section summarize the key environmental impacts of the project and how the alternatives evaluated in the DEIR provide options for lowering or avoiding those impacts.

Section 3.B, Transportation

6. Section 3.B Transportation, Page 288: The EIR states that “The following two phases of the ACEforward program are included in the BLVX transportation analysis. The first phase of ACE improvements includes the extension of service to Modesto, and would increase daily round trips to San Jose from four trains to six. The second phase improvements would include extension of service to Merced and the expansion of service to 10 round-trip trains daily.” It appears that BART may have assumed that ACE service would expand to 10 daily round trips for 2025 and 2040 No Project and Project conditions, but it is not explicitly stated in the text. Clarifications should be made in the Final EIR regarding the assumed amount of ACE service between the San Joaquin Valley and Silicon Valley and whether the proposed ACE extensions to Modesto and Merced were or were not included for each condition and milestone year.

7. Table 3.B-5, Other Transit Services: Describe the connecting bus shuttle from the ACE Pleasanton Station to the BART (Wheels 53 to West Dublin BART; Wheels 10 to Dublin/Pleasanton BART; Wheels 54 to Hacienda Business Park to Dublin/Pleasanton BART).

8. Table 3.B-6: Suggest adding level of train service for ACE (4 AM/4 PM) and adding existing ACE ridership at the Vasco, Livermore, and Pleasanton stations.

9. Table 3.B-20: ACE ridership modelling in the ACEforward EIR shows higher future weekday ridership levels than shown in this table. For example, for 2025 and 2040, weekday ridership for the ACEforward No Build scenario in ACE modelling is 6,500 and 8,600 compared to 5,800 and 6,900 respectively in this table. The ACE ridership report is included in Appendix E of the ACEforward DEIR. SJRRC suggests that BART review the ACE ridership modelling to examine if there are different assumptions being used in the ACE modelling that might warrant an update of the ACE ridership estimates in the BART EIR. Please also note that ACE ridership has been increasing in recent years (Q4 2016 average weekday ridership is ~5,200 per APTA (http://www.apta.com/resources/statistics/Pages/ridershipreport.aspx).
ACE Ridership Estimates in BART DEIR and ACEforward DEIR

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<tbody>
<tr>
<td></td>
<td>No Project</td>
<td>Conventional BART</td>
<td>DMU</td>
</tr>
<tr>
<td></td>
<td>Existing</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>2025</td>
<td>5,600</td>
<td>4,800(-800)</td>
</tr>
<tr>
<td></td>
<td>2040</td>
<td>6,900</td>
<td>5,500(-1,400)</td>
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</table>

(1) BART DEIR results based on BART ridership model. Excludes boardings in Stanislaus and Merced Counties.

(2) ACEforward DEIR results based on ACE ridership model including expansion of service to 10 round trips per day. Results in table above does not include extension of ACE to Modesto or Merced or direct rail connection to BART.

10. Table 3.B-50 and Table 3.B-51: This table shows a drop in 2025 ACE weekday ridership by 14% to 0%, depending on BART extension alternative and a drop in 2040 ACE weekday ridership by 20% to 1%, depending on BART extension alternative. SJRRC questions this conclusion and finds it hard to understand why there might be such a drop in ACE system ridership due to a Tri-Valley linkage at Isabel. ACE provides a direct link to Silicon Valley and BART riders from east of the Tri-Valley would still have to utilize a highly congested I-580 to reach Isabel. Based on review of the ridership report for the BART project, SJRRC concludes that the model used by BART is not the appropriate tool for evaluating ACE ridership and that the model likely overstates the effect of the BART build alternatives on ACE ridership. This is discussed further in SJRRC’s comments on the ridership report below. As noted therein, SJRRC believes that ACE is more competitive with BART for travel from the San Joaquin Valley and the Tri-Valley to Silicon Valley than concluded in the Draft EIR.

11. Page 382: The Draft EIR concludes that the 2025 and 2040 drop in ACE ridership is less than significant as this would be a “small” decrease. Twenty percent or 13 percent decline in 2040 ACE ridership (with the Conventional BART alternative and the DMU alternative respectively) would not be “small”. Furthermore, if such a decline in ACE ridership were to occur, there would be secondary environmental impacts of lowering ACE ridership such as increased traffic on I-580 over the Altamont Pass into Livermore. However, SJRRC doubts that ACE ridership will significantly drop with the BART build alternatives because the ACE service will be more competitive than assumed in the BART EIR ridership analysis, as discussed in comments on ridership projections below.

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1 As shown in Figure 3.B-9 and as described on Pages 322 and 323, the DEIR concludes that traffic levels would increase on I-580 east of Isabel and over the Altamont Pass and would result in a significant unavoidable impact on I-580 between Greenville and Carroll Road.
Chapter 3.D, Population and Housing

12. Impact PH-3 (p. 542) discloses that the project would displace substantial numbers of existing businesses during construction, which varies according to alternative. This impact would be greatest for the Conventional BART Project (requiring the partial or full acquisition of approximately 117 parcels) and the DMU Alternative (requiring the partial or full acquisition of approximately 139 parcels). The relocation of I-580 and surface frontage roads, as described on page 175, contributes to this business displacement impact. The DMU Alternative requires the westbound I-580 freeway lanes and Scarlett Court to be shifted to the north at the Dublin/Pleasanton Station with impacts to abutting businesses.

While evaluating a DMU Alternative as part of the ACEforward EIR, SJRRC examined options for the DMU alignment and station at Dublin/Pleasanton and thus has the following suggestions to reduce the displacement impacts of BART’s DMU Alternative relative to the designs shown on Drawings 3TW-101 and 3RW-101:

- Shift the 30-ft. DMU 30 platform 75 ft. east.
- Begin curving the I-580 westbound mainline immediately at the western edge of the 30-ft. DMU platform.
- Submit a Caltrans Design Exception for a 5-ft. median shoulder and a 2 ft. buffer, which currently exist along I-580 in the Tri-Valley.
- Eliminate the sidewalk on the south side of Scarlett Court, which has no abutting uses.

We believe that these design modifications would lower the displacement impacts identified for the DMU alternative. The lowering of such impacts could make the Conventional BART alternative and the DMU alternative similar in terms of displacement effects. We recommend that BART analyze these design modification in the Final EIR.

Should BART wish to discuss this design further, please feel free to contact the SJRRC.

Cambridge Systematics, BART to Livermore Ridership Projections (Draft), July

13. Page 17-18, ACE Ridership: The BLVX modeled results for ACE boarding, as shown in Figure 13, are much lower than actually observed for existing conditions. While the numeric results are not shown for the model results, the observed level cited in the BART DEIR for 2013 is 4,700, and the modeled results appear to be approximately 2,500 or 53 percent of the actual amounts. The report states that since ACE ridership is low (compared to BART system ridership), the fact that the BLVX poorly models existing ACE ridership is “not expected to have a large impact on the evaluation of the potential Isabel BART station”. However, this model is not only used to evaluate overall BART ridership, but also to evaluate the changes in other transit system ridership, including ACE. Although the forecasted ACE ridership was post-processed to reflect the difference between modeled 2013 ridership and the actual 2013 ridership, based on the lack of validation to existing conditions, SJRRC has little confidence that the BLVX model forecasts can accurately represent the dynamics between ACE ridership and BART build alternatives. This undermines the level of confidence in the conclusions regarding BART effects on ACE ridership.
14. In contrast to the BLVX modeled results for existing ACE ridership, the model used by SJRRC to evaluate ridership for the ACEforward EIR, was able to result in a much more accurate replication of existing ridership. As explained in Appendix E of the ACEforward DEIR, Table 4, the ACE model was able to replicate ACE 2015 ridership with six percent of the calendar year annual total. SJRRC recognizes that no model is perfect and that models are analytical tools. It is logical that BART has built a model that is primarily focused on replicating BART ridership. SJRRC has built a model that is primarily focused on replicating ACE ridership. However, given the limitations in the BLVX model in terms of ACE ridership, the EIR should describe the uncertainty in its conclusions about the accuracy of ridership effects based on model results.

15. Furthermore, the SJRRC believes that ACE will be more competitive than assumed in the BLVX model for travel from the San Joaquin Valley and the Tri-Valley to Silicon Valley for the reasons discussed below.

a. BART’s model includes San Joaquin County, but it does not include Stanislaus County or Merced County and thus it cannot accurately model existing or future demands from those areas. In contrast, the ACE model does include those counties.

b. For the Build Scenarios, per Figure 29, the BLVX model assumes a shorter travel time from San Joaquin County to north San Jose areas compared to ACE. On Page 39, the ridership memo states clearly: “The reason why some riders switch from using ACE to BART is due to the faster travel time on the BART system.” The following example was provided by BART for travel from one address in Stockton to an address on North 1st Street in San Jose.

(1) ACE: 144 minutes: Drive 6 min. to station; wait 15 min for ACE; 113 min. on ACE; 10 min. on Shuttle.

(2) BART: 127 minutes: Drive 53 min. to Isabel; wait 6 min. for BART; 52 min on BART (including 3 min transfer at Bay Fair); 16 min on Shuttle/Bus

c. SJRRC review of the BLVX assumptions indicates that they likely overestimate future ACE travel times:

(1) The assumption that riders will wait 15 minutes for ACE on average is an overestimate. ACE, even with ACEforward improvements would only have 6 to 10 trains per day. Individual riders target their arrival for specific train times, because headways between trains are much longer than for BART service. An assumption of 10 minutes on average would still be very conservative and far more reasonable.

(2) With the improvements included in the ACEforward 2025 Program, the ACE trip train time would actually be 100 minutes to Great America.

(3) Using the above revised assumption, the total ACE travel time would be 126 minutes.
d. SJRRC review of the BLVX assumptions indicates that they likely underestimate average BART travel times:

**Revised estimated BART travel time, Isabel to Milpitas**

<table>
<thead>
<tr>
<th>Trip Segment</th>
<th>Minutes</th>
<th>SJRRC Review</th>
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<tbody>
<tr>
<td>Isabel – Dublin/Pleasanton</td>
<td>6</td>
<td>per Arup (6 minutes is also confirmed by scatter plot analysis described below)</td>
</tr>
<tr>
<td>Dublin/Pleasanton – Warm Springs</td>
<td>41-55 (49)</td>
<td>Per current schedule; transfer time at Bay Fair varies between 0 and 12 minutes at present. Assumed average of 6 minutes.</td>
</tr>
<tr>
<td>Warm Springs – Milpitas</td>
<td>8</td>
<td>estimate based on scatter plot of longest intervals between stations vs. travel time; extrapolating the longest “straight shot” between two BART stations (Rockridge-Orinda), the Warm Springs to Milpitas travel time would have to be at least 8 minutes</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>55 – 69 (63)</strong></td>
<td>Travel time with 0 min. wait time at Bay Fair to 12 min. wait time. Average time shown in parenthesis.</td>
</tr>
</tbody>
</table>

Using this adjusted range, the travel time from Stockton to San Jose utilizing BART could range from 130 minutes to 144 minutes, with an average time of 138 minutes. This would compare to a future ACE time of 126 minutes with the adjustments noted above. SJRRC recommends that BART revise their modelling assumptions for ACE and for BART to reflect the information above.

SJRRC is confident that ACE service will be more competitive with BART service between the San Joaquin Valley and Silicon Valley than BART’s model assumes. As a result, SJRRC expects that the effect of BART build alternatives for the Livermore Extension on ACE ridership will be far less than presented in the EIR. This is a positive environmental outcome because more ACE ridership from the San Joaquin Valley would reduce the number of vehicles transiting I-580 over the Altamont Pass and through the Tri-Valley east of Isabel.

16. The BART model, like most, if not all travel demand models, does not take into account qualitative differences in travel experiences. Even if the BART travel time assumptions are assumed to be correct (which SJRRC disagrees with), the EIR does not take into account the quality issue of 53 minutes of driving from Stockton to Livermore (and vice-versa) via I-205 and I-580 congested conditions over the Altamont Pass (compared to 6 miles driving to an ACE station). The BART EIR is concluding that commuters will prefer to save 17 minutes in travel, even though it means driving 47 minutes more than with ACE in highly congested areas with uncertain daily conditions. Travel via BART from the San Joaquin Valley will also require more transfers than using ACE. ACE’s Great America station location is a more central location for serving most Silicon Valley businesses – particularly for those employees who already are using ACE compared to the future BART Stations in Milpitas, San Jose, and Santa Clara. ACE trains also provide amenities not available on BART, including Wi-Fi, charging for phones and other electronic devices, storage space, and restrooms. Separate from travel time considerations, these are additional qualitative reasons why ACE service from the San Joaquin Valley to Silicon Valley will be competitive with BART.
We appreciate BART’s coordination in the past between the BART extension to Livermore and the ACEforward project which has helped us to understand the project better. We look forward to continued cooperation in the future to expand regional transportation options.

Sincerely,

Dan Leavitt
Manager of Regional Initiatives
San Joaquin Regional Rail Commission
RESPONSE B8
Dan Leavitt, San Joaquin Regional Rail Commission

B8-1 Thank you for providing comments on the Draft EIR. The comment on effects on ACE ridership is introductory; please see Responses to Comments B8-7 through B8-15.

The commenter’s support for improved connections between ACE and BART in the Tri-Valley is noted. While a direct connection between ACE and BART is outside the scope of this project extending service to Isabel Avenue, a future project connecting to ACE is not precluded by this project.

The commenter expresses an opinion that the BLVX Travel Demand Model analysis under-predicts future ACE ridership. Please see Responses to Comments B8-7 through B8-10 for detailed responses.

B8-2 The design for the EMU vehicles has not yet been determined; if the EMU Option is adopted, then a design will be selected. However, the commenter’s recommendation related to Figure 2-15 (DMU Alternative – Typical DMU and EMU Vehicles) to show a newer model of the EMU vehicle has been implemented. The figure has been updated on the following page to show a newer EMU vehicle design.

B8-3 Please see Responses to Comments A5-5 and A5-6.

B8-4 The regional travel demand model is a highly complex system with many elements affecting transit ridership, including anticipated land uses, relative travel times, available modes, parking conditions, and highway congestion, among others. The DMU Alternative represents a different transportation network than the Proposed Project; therefore, changes in ridership over time for one alternative will not be directly proportional to changes for the other. For example, the DMU Alternative includes a transfer at the Dublin/Pleasanton Station, which introduces a delay that does not occur for the Proposed Project. The transfer delay is a disincentive to ridership. A three-minute timed transfer weighted time translates into approximately 7.5 minutes of added wait time. As a result, the attractiveness of a trip that includes a transfer is reduced, causing a corresponding reduction in ridership even if the travel times are identical.
Figure 2-15
DMU Alternative
Typical DMU and EMU Vehicles

Source: Arup, 2011; Mark Duferene, 2016.

Typical DMU Train

Typical EMU Train
The text has been revised to clarify that there are additional existing bus routes connecting BART and ACE that were not described in the Draft EIR.

The following text has been added to Chapter 2, Project Description, at end of the first paragraph on page 116 and at the end of the last paragraph on page 157:

Three bus routes connect to ACE in the project vicinity: from the ACE Pleasanton Station, Wheels 53 connects to the West Dublin/Pleasanton Station and Wheels 54 connects to Dublin/Pleasanton Station; and from the ACE Livermore Station, Wheels 10 connects to the Dublin/Pleasanton Station.

The following text has been added as a note to Table 3.B-5, Surrounding Transit Services (Existing), on page 250 of the Draft EIR:

Three bus routes connect to ACE in the project vicinity: from the ACE Pleasanton Station, Wheels 53 connects to the West Dublin/Pleasanton Station and Wheels 54 connects to Dublin/Pleasanton Station; and from the ACE Livermore Station, Wheels 10 connects to the Dublin/Pleasanton Station.

The following text has been added to the middle of the second paragraph on page 251 of the Draft EIR:

In addition, Wheels 10 connects the ACE Livermore Station to the Dublin/Pleasanton Station.

The comparisons requested in the comment are provided in several locations in the Draft EIR. The key environmental impacts of the Proposed Project and Alternatives are presented in the Summary Chapter on page 18 and pages 27 through 42; see Table S-5 (Summary of Significant Impacts). In addition, impacts of the Proposed Project and Alternatives are summarized and compared in Chapter 4, Other CEQA, in the discussion of the Environmentally Superior Alternative, and listed in Table 4-1 (Summary of Significant Impacts) on pages 1,481 through 1,491.

Section 2.K of the Draft EIR, Alternatives Considered but Withdrawn, is provided pursuant to CEQA Guidelines Section 15126.6(c), which states that the EIR should also identify any alternatives that were considered by the lead agency but rejected as infeasible during the scoping process, and briefly explain the reasons underlying the lead agency's determination. CEQA does not require this discussion to restate the Proposed Project's environmental
impacts. Furthermore, these alternatives were withdrawn from further consideration specifically because, among other reasons, they did not avoid environmental impacts.

B8-7 The BLVX Travel Demand Model used in the Draft EIR assumes ACE train frequency is increased to 10 trains per peak period in 2025 and 2040.

Regarding the ACEforward program, on January 10, 2018 (subsequent to the date of its comment letter on the Draft EIR), the commenter rescinded its ACEforward Draft EIR and announced that it does not intend to pursue the projects evaluated in that EIR, including extensions to Modesto and Merced. Instead, in a new NOP issued on January 10, ACE proposed a project extending to Ceres (Phase I), with a potential future extension to Merced to be analyzed at a programmatic level (Phase II). The Phase I project to Ceres and potential Phase II project to Merced, as described in the January 10, 2018 NOP, are not considered reasonably foreseeable projects for purposes of the Draft EIR. However, for purposes of the travel demand model, it is reasonable to assume the future increase in ACE service frequency.

On page 288 of the Draft EIR, the text has been revised to read:

Under 2025 and 2040 No Project Conditions, the analysis assumed that other surrounding transit service would remain identical to existing conditions, except for future ACE service, which is described below.

Elsewhere on page 288, the text has been revised to read:

ACE proposed is currently conducting environmental review of its ACEforward program, which is a series of improvement projects and service upgrades in its ACEforward program, to be implemented through 2022. The following two phases of the ACEforward program are included in the BLVX Travel Demand Model analysis: The first phase of ACE improvements includes the extension of service to Modesto and would increase daily round trips to San Jose from four trains to six. The second phase improvements would include extension of service to Merced and the expansion of service to 10 round-trip trains daily. The BLVX Travel Demand Model analysis assumes that the ACE service increase to 10 trains daily applies to both analysis years, 2025 and 2040. However, the BLVX model’s coverage area does not include Stanislaus or Merced Counties; therefore, the ACE extensions to Modesto and Merced were not included in the transportation analysis. Moreover, ACE has rescinded the ACEforward EIR and announced that it does not intend to pursue the projects evaluated in that EIR, including the extension to Modesto. However, for purposes of the
travel demand model, it is reasonable to assume the future increase in ACE service frequency.

Extensions to Modesto and Merced were not included because this is outside the model coverage area and because ACE has decided not to pursue these projects. The EIR has been revised to state as such more explicitly; please see above.

B8-8 Information about Wheels 53, Wheels 10, and Wheels 54 has been added to Table 3.B-4 (Surrounding Transit Services) on page 249 of the Draft EIR as follows:

**Table 3.B-4 Surrounded Transit Services, Existing**

<table>
<thead>
<tr>
<th>Operator</th>
<th>Route</th>
<th>Existing Peak Headway</th>
<th>Existing Service Span</th>
<th>Route Overview</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAVTA</td>
<td>53</td>
<td>30-80 min</td>
<td>Weekday: 5:36 a.m. – 8:39 a.m. &amp; 3:55 p.m. – 7:16 p.m.</td>
<td>Fairgrounds, East/ACE, West Pleasanton BART Station, Stoneridge Mall</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Weekend: No service</td>
<td></td>
</tr>
<tr>
<td>LAVTA</td>
<td>10R</td>
<td>15 min</td>
<td>Weekday: 4:32 a.m. – 1:38 a.m.</td>
<td>East Dublin/Pleasanton Station, Valley Care Livermore, Transit Center</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Weekend: 6:02 a.m. – 1:38 a.m.</td>
<td></td>
</tr>
<tr>
<td>LAVTA</td>
<td>54</td>
<td>60 min</td>
<td>Weekday: 6:51 a.m. – 8:20 a.m. &amp; 3:47 p.m. – 6:16 p.m.</td>
<td>ACE, Hacienda, West Pleasanton BART</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Weekend: No service</td>
<td></td>
</tr>
</tbody>
</table>

Notes: This table refers to existing surrounding transit services prior to implementation of Wheels Forward Plan. min = minutes; LAVTA = Livermore-Amador Valley Transit Authority; RTD = San Joaquin Regional Transit District; MAX = Modesto Area Express; StaRT = Stanislaus Regional Transit; SJRRC = San Joaquin Regional Rail Commission; LLNL = Lawrence Livermore National Laboratory; SNL = Sandia National Laboratories.

Sources: Livermore-Amador Valley Transit Authority (LAVTA), 2014; San Joaquin Regional Transit District (RTD), 2016; Stanislaus Regional Transit (StaRT), 2016; County Connection, and Modesto Area Express (MAX), 2016; San Joaquin Regional Rail Commission (SJRRC), 2016.
Existing ACE ridership at the Vasco, Livermore, and Pleasanton ACE Stations has been added to the Draft EIR. The following edits have been made to Table 3.B-5 on page 251:

**Table 3.B-5  Weekday Ridership, Existing**

<table>
<thead>
<tr>
<th>Operator</th>
<th>Route</th>
<th>Station</th>
<th>Ridership</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAVTA</td>
<td>10</td>
<td>-</td>
<td>1,470</td>
</tr>
<tr>
<td>LAVTA</td>
<td>12/12X</td>
<td>-</td>
<td>490</td>
</tr>
<tr>
<td>LAVTA</td>
<td>20X</td>
<td>-</td>
<td>60</td>
</tr>
<tr>
<td>LAVTA</td>
<td>Rapid Route</td>
<td>-</td>
<td>1,440</td>
</tr>
<tr>
<td>SJRRC</td>
<td>ACE</td>
<td>[all stations]</td>
<td>4,380</td>
</tr>
<tr>
<td>SJRRC</td>
<td>ACE</td>
<td>Vasco Road</td>
<td>490</td>
</tr>
<tr>
<td>SJRRC</td>
<td>ACE</td>
<td>Livermore</td>
<td>540</td>
</tr>
<tr>
<td>SJRRC</td>
<td>ACE</td>
<td>Pleasanton</td>
<td>1,720</td>
</tr>
</tbody>
</table>

Notes: LAVTA = Livermore-Amador Valley Transit Authority; SJRRC = San Joaquin Regional Rail Commission; ACE = Altamont Corridor Express, reflecting existing 4 trains per day. Sources: Livermore-Amador Valley Transit Authority (LAVTA), 2014; San Joaquin Regional Rail Commission (SJRRC), 2014-2015.

BART acknowledges that the model used in the ACEforward Draft EIR primarily focuses on ACE, and therefore is likely to produce more accurate ACE ridership projections than the BART to Livermore Extension Project Draft EIR. As stated on page 288 of the Draft EIR, the ACEforward Draft EIR projections differ from the values shown in Table 3.B-20 (Surrounding Transit Services Ridership – Weekday Boardings, Existing and 2025/2040 No Project Conditions) on page 289 of the Draft EIR, because different ridership forecasting methodologies were used in the BART to Livermore Extension and ACEforward Draft EIRs. Whereas the primary focus of the BART to Livermore Extension ridership analysis is on BART ridership, the primary focus of the ACEforward ridership analysis is on ACE ridership. The commenter notes multiple factors that the commenter believes have led the BLVX Travel Demand Model to under-predict ACE ridership. BART acknowledges this possibility and notes that the approach used in this Draft EIR may over-state the negative environmental impacts of the Proposed Project and Build Alternatives on the ACE system, thus providing a conservative discussion of potential impacts, consistent with CEQA. BART is
not aware of other differing assumptions for ACE under this project compared to ACEforward besides those described below.

The BLVX Travel Demand Model used in this study, adapted from the one developed by the Alameda County Transportation Commission (ACTC), does not include Stanislaus County, and thus does not capture the ridership to or from Merced, a fact noted on pages 289, 380, and 381 of the Draft EIR. Other factors that contributed to lower ACE ridership projections from the BLVX Travel Demand Model include the model’s lack of geographic coverage of Stanislaus and Merced counties, as well as higher travel times than assumed by the ACEforward project. The ACE model is also a different type of model that focuses on ACE service. These factors point to the possibility that the BLVX Travel Demand Model under-predicts ACE ridership. However, the BLVX analysis included a sensitivity test to determine whether a faster ACE travel time would affect BART system ridership, and found that BART ridership was affected by less than 1 percent. See Response to Comment B8-10 for more details.

In response to the commenter’s questioning of the predicted drop in future ACE ridership resulting from the BART to Livermore Extension Project, please see the explanation provided on page 380 of the Draft EIR, which cites the increase in parking provided at the proposed Isabel Station, closer to San Joaquin County, as an attractor of potential trips that may otherwise have been taken on ACE. Please also see the response to Comment B8-11 below, which describes the BLVX Travel Demand Model analysis assumptions for travel time in which assumed BART times were lower than assumed ACE times, and acknowledges that ACE travel times might be lower than assumed by the BLVX Travel Demand Model analysis.

In response to the commenter’s statement that the forecasted drop in ACE ridership is not small, page 382 of the Draft EIR has been revised to read:

ACE currently serves a higher number of riders and would also see a decrease. Note that, for the reasons described on page 272, the analysis may have under-predicted ACE ridership. Also, ACE ridership could increase if any of the BART-ACE rail connection alternatives considered in the ACEforward Draft EIR analysis are implemented. Because the changes in ridership are small compared to overall ridership for these transit services, the impacts to these transit services is not expected to be significant. Overall, impacts under the Proposed Project related to surrounding transit service ridership in 2025 and 2040 would be less than significant, and no mitigation measures are required. (LS)
Regarding possible secondary impacts of a potential under-estimate of ACE ridership, specifically, as mentioned by the commenter, traffic on roads over the Altamont Pass, the EIR has reported a conservative result. The BLVX Travel Demand Model's possible under-prediction of ACE ridership is reflected in trips through this area assigned not to ACE but instead to driving over the Altamont Pass. The resulting prediction of traffic on roads such as I-580 east of the proposed Isabel Station, at 2,000 daily vehicles higher under the Proposed Project than under No Project Conditions, may then be considered to be higher than would actually occur; thus, the EIR may have over-stated the secondary traffic impact.

B8-11 This comment summarizes Impact PH-3 (Displace Substantial Numbers of Existing Businesses During Construction) in the Draft EIR regarding potential impacts to businesses. While the Proposed Project would require the partial or full acquisition of 117 parcels and the DMU Alternative would require the partial or full acquisition of 139 parcels, as stated by the commenter, the actual displacement of businesses would be substantially less. One commercial building (2600 Kitty Hawk Road, APN 904-004-010-02) would need to be removed either under the Proposed Project or DMU Alternative/EMU Option. The remainder of the commercial land that the Proposed Project or DMU Alternative/EMU Option would encroach into consists primarily of surface parking. Please see pages 542 and 543 of the Draft EIR. Under the Proposed Project, 5 percent of the land to be acquired (26 parcels) is occupied by office or commercial uses. Under the DMU Alternative/EMU Option, 10 percent of the land to be acquired (38 parcels) is occupied by commercial and office uses.

Thank you for the design recommendations intended to reduce the amount of ROW required from the DMU Alternative/EMU Option. Please see Response to Comment A5-6.

B8-12 The focus of the Draft EIR is on BART performance, and the forecasts provide a reasonable representation of BART services and ridership in and through the Tri-Valley Area, for the 2013 base year and for each of the future years of 2025 and 2040. However, BART acknowledges that the BLVX Travel Demand Model analysis may have under-estimated future ACE ridership, as the commenter contends. The BLVX modeling system, adapted from ACTC, does not include coverage of the entire future ACE system, as Stanislaus and Merced counties are outside the ACTC model's coverage area. This factor, together with other factors as noted by the commenter, point to the possibility that future ACE ridership will be higher than predicted by the BLVX Travel Demand Model analysis.
The text on page 272 of the Draft EIR has been revised to describe this uncertainty and potential impacts as follows:

To quantify the effect of the Proposed Project and Build Alternatives on transit operators’ ability to meet their efficiency and ridership goals, the study analyzed daily ridership for key selected transit providers near the Proposed Project and Build Alternatives. The BLVX Travel Demand Model generated daily ridership forecasts for the relevant transit providers under each project scenario and alternative. Several methodological factors could have led the BLVX model to under-estimate ACE ridership compared to modeling performed by ACE for its ACEforward EIR. In particular, the BLVX model is adapted from a model developed by the Alameda County Transportation Commission, which does not include geographic coverage of Stanislaus and Merced counties. The ACE model is also a different type of model that focuses on ACE service and incorporates lower ACE travel time assumptions. However, the BLVX analysis included a sensitivity test to determine whether a faster ACE travel time would affect BART system ridership, and found that BART ridership was affected by less than 1 percent.

The BART to Livermore Extension Project EIR defined an impact to surrounding transit services, including ACE, as impeding those agencies’ ability to improve their ridership. On the basis of the BLVX Travel Demand Model’s ridership forecast for ACE, which may have overstated ridership impacts to ACE, the Draft EIR identified a less-than-significant impact on ACE. If more travelers choose ACE than the BLVX Travel Demand Model predicted, then the Draft EIR analysis and significance determination was conservative. The differences noted by the commenter with respect to ACE ridership would not lead to new or more severe impacts than already described in the Draft EIR.

However, to acknowledge the uncertainty inherent in the analysis, text on page 380 of the Draft EIR has been revised as follows:

Table 3.B-50 below presents the daily ridership projections under 2025 Project Conditions for surrounding transit services; ACE ridership is expected to drop under the Proposed Project and DMU Alternative. Once BART is extended to Santa Clara County, some ACE riders traveling to southern Alameda County and Santa Clara County may prefer to ride BART but may be unable to find parking at the Dublin/Pleasanton Station. However, under the Proposed Project and DMU Alternative, these riders would switch from ACE to BART due to the available parking spaces at Isabel Station.
Note that the BLVX Travel Demand Model was set up specifically to provide as accurate a forecast as possible on BART system ridership. Different ridership forecasting methodologies were used in the ridership modeling performed by ACE for the ACEforward EIR, which primarily focuses on ACE and therefore is likely to produce more accurate ACE ridership projections. Multiple factors point to the possibility that the BLVX Travel Demand Model has under-estimated future ACE ridership, including lack of geographic coverage of Stanislaus and Merced counties and higher travel time assumptions than those in ACE’s model for the ACEforward EIR.

Similarly, note that the ridership projections do not include an assumption of a BART-ACE rail connection. ACE ridership could increase if any of the BART-ACE rail connection alternatives considered in the ACEforward Draft EIR analysis are implemented.

B8-13 Please see Response to Comment B8-11 below for more details on comparative travel time assumptions for ACE and BART. BART acknowledges that the BLVX Travel Demand Model analysis may have under-estimated future ACE ridership. During the development of the ridership forecasts for the Draft EIR, the analysis tested sensitivity to faster ACE train travel times for the Proposed Project. ACE travel times were reduced by 10 percent, which is consistent with the improvements expected from the ACEforward Project. Reducing ACE travel times resulted in 600 additional daily ACE trips in the year 2040, 200 of which switched from using BART. BART systemwide boardings dropped by 200 in 2040, and boardings in the Tri-Valley Area dropped by 100. Total future ACE ridership is forecasted to be approximately 6,000, while total future BART ridership is forecasted to be approximately 600,000. Based on these results, the analysis concluded that the BART ridership forecast was not highly sensitive to a 10 percent change in ACE travel time and that the original forecasts provide a reasonable projection of overall BART ridership. At the same time, 600 trips constitute a much larger percentage of total ACE ridership than 200 trips would constitute of total BART ridership. The analysis thus concluded ACE ridership to be much more sensitive to changes in ACE travel time assumptions than BART ridership, and as noted in the Response to Comment B8-11, BART acknowledges that future ACE service may be more competitive than the BLVX Travel Demand Model analysis has shown.

B8-14 The commenter suggests that BART travel time will be higher, and that ACE travel time lower, than the assumptions used in the Draft EIR. A comparison of the Draft EIR assumptions regarding BART and ACE travel times to those suggested by the commenter indicate the following: (1) the Draft EIR assumptions regarding future BART travel time are reasonable; but (2) the
future ACE travel time may be lower than represented in the Draft EIR analysis. An explanation is provided below for information purposes.

The Draft EIR analysis assumptions regarding BART and ACE travel times for year 2040 under the No Project Conditions are described below. The travel times presented were for a hypothetical trip between a home in Stockton (707 North Monroe Street) and a 1st Street employer (1st Street and Tasman Drive, Sunnyvale).

Table 4.B-4 summarizes the BART travel times presented by BART and those suggested by SJRRC.

<table>
<thead>
<tr>
<th>Trip Segment</th>
<th>Travel Time Assumed in BLVX Analysis (minutes)</th>
<th>SJRRC Suggested Travel Time (minutes)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive</td>
<td>53</td>
<td>53</td>
<td>The travel times presented are for the 2040 no project scenario. There is no Isabel Station in this scenario and therefore no BART trip between Isabel and Dublin/Pleasanton. The drive time of 53 minutes (above) assumes a drive trip to the Dublin/Pleasanton Station.</td>
</tr>
<tr>
<td>Wait</td>
<td>6</td>
<td>6</td>
<td>The transfer at Bay Fair is a coordinated 3-minute transfer (and not assumed to be half the headway, i.e., 6 minutes). Note that there is no timed transfer currently, but BART expects to be able to provide this type of operation after implementation of the Bay Fair Connection project. The travel time is therefore 44 minutes (41 minutes travel time on BART plus 3 minutes transfer at Bay Fair).</td>
</tr>
<tr>
<td>Isabel – Dublin/ Pleasanton</td>
<td>0</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Dublin/ Pleasanton – Warm Springs</td>
<td>44</td>
<td>41-55 (49)</td>
<td>Travel time would be 127 minutes as presented.</td>
</tr>
<tr>
<td>Warm Springs - Milpitas</td>
<td>8</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Shuttle</td>
<td>16</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>127</td>
<td>130 – 144 (138)</td>
<td>Travel time would be 127 minutes as presented.</td>
</tr>
</tbody>
</table>
For the reasons stated in the notes in Table 4.B-4, the BART trip travel time assumptions in the Draft EIR analysis remain reasonable.

Table 4.B-5 summarizes the ACE travel time assumptions from the BART to Livermore Extension Project analysis and those suggested by SJRRC.

<table>
<thead>
<tr>
<th>Trip Segment</th>
<th>Travel Time Presented by BART (minutes)</th>
<th>SJRRC Proposed Travel Time (minutes)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive</td>
<td>6</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Wait</td>
<td>15</td>
<td>10</td>
<td>Consistent with industry standards, the travel demand model assumed wait time to be half of the headway. Future ACE headway is 30 minutes and hence a wait time of 15 minutes is given. It is acknowledged that riders may target their arrival for specific train times and that a wait time of 10 minutes could be reasonable.</td>
</tr>
<tr>
<td>ACE</td>
<td>113</td>
<td>100</td>
<td>As part of developing the 2040 ridership forecasts for the EIR's Proposed Project, Cambridge Systematics tested the sensitivity of ridership forecasts to faster ACE train travel times. Consistent with the improvements expected from the ACEforward Plan, ACE train travel times were reduced by 10% (no other changes were made to the 2040 Alameda County Transportation Commission model run developed for the EIR 2040 Proposed Project). Reducing ACE travel times resulted in 600 additional daily ACE trips, increasing the total ACE ridership on the Stockton-San Jose line by 11%. Only 200 of the additional trips switched from using BART to ACE and BART boardings in the Tri-Valley were reduced by 100. The BART to Livermore ridership forecasts did not exhibit highly sensitivity to a 10% change in ACE travel times.</td>
</tr>
<tr>
<td>Shuttle</td>
<td>10</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>144</td>
<td>126</td>
<td></td>
</tr>
</tbody>
</table>

Should the assumed wait time for ACE be 10 minutes and the ACE train travel time 100 minutes, then the ACE travel time (126 minutes) would be less than the BART travel time (127 minutes), making ACE the more desirable choice for
overall travel time. Under these conditions, the BLVX Travel Demand Model analysis would have estimated higher ACE ridership. As noted in the comment, with a higher ACE ridership estimate, the EIR would identify a smaller environmental impact, for traffic specifically, as more ACE ridership from the San Joaquin Valley would reduce the number of vehicles transiting I-580 over the Altamont Pass and through the Tri-Valley east of Isabel Avenue. Therefore, the analysis in the Draft EIR is conservative.

B8-15 The adopted version of the ACTC model explicitly accounts for differences in travel times and costs of different alternatives. The preferences for one mode of travel over another are captured in the weights that are assigned to different travel modes (e.g., taking BART versus driving) based on how attractive that travel mode is: the higher the weighting, the better the perception of this mode. The weighting for commuter rail, including ACE, is higher in the ACTC model than it is for BART, thereby accounting for the attractiveness of those additional amenities described in the comment within the model. The Draft EIR analysis is adequate pursuant to CEQA and no revisions are required for the Draft EIR.
BART to Livermore Extension Project
21st Floor, 300 Lakeside Drive
Oakland, CA 94612.

Sent via e-mail to barttolivermore@bart.gov

Re: Notice of Availability of Draft Environmental Impact Report for the BART to Livermore Extension Project and Public Meetings

Zone 7 Water Agency (Zone 7, or Zone 7 of the Alameda County Flood Control and Water Conservation District) has reviewed the referenced Draft EIR in the context of Zone 7’s mission to provide water supply, flood protection, and groundwater and stream management within the Livermore-Amador Valley. We have the following comments for your consideration:

1. **New Development / Impervious Surfaces.** New development and the expansion of existing development may impose a burden on the existing flood protection and storm drainage infrastructure within the Zone 7 service area. Developments creating new impervious areas within the Livermore-Amador Valley are subject to the assessment of the Development Impact Fee for Flood Protection and Storm Water Drainage. These fees are collected for Zone 7 by the local governing agency: 1) upon approval of final map for public improvements creating new impervious areas; and/or 2) upon issuance of a building or use permit required for site improvements creating new impervious areas. Fees are dependent on whether post-project impervious area conditions are greater than pre-project conditions and/or whether fees have previously been paid. Please refer to Zone 7’s Flood Protection & Storm Water Drainage Development Impact Fee Ordinance and additional information at: http://www.zone7water.com/permits-a-fees.

2. **Section HYD-9 / Mitigation Measure HYD-5, Impacts to Hydrology.** As noted in the Draft EIR, we expect BART to continue to consult with Zone 7 staff on plans for maintaining the existing hydraulic capacity and velocities for storm flows at channel crossing locations.

3. **Zone 7 Stream Management Master Plan (SMMP) Project R5-2.** Sediment management is a key component for overall regional flood protection. In the 2006 SMMP (which is currently being updated), Zone 7 identified a potential location for a new sedimentation basin along Arroyo Las Positas near Portola Avenue and Interstate 580 (see the Project R5-2 description, attached). The BART project includes facilities near that proposed location. Please contact Jeff Tang, 925-454-5075 or jtang@zone7water.com to discuss potential compatibility of these facilities.

4. **Table 1-1, and page 782:** Zone 7 is the permitting agency for drilling and well permits. Any drilling (well destruction, well construction, geotechnical borings, etc.) must be permitted by Zone 7 before starting work. Find more information at: http://www.zone7water.com/permits-a-fees/public/content/64-well-drilling-and-destruction-permits
5. **Existing wells.** Several wells within Zone 7’s groundwater monitoring network are within the project limits and have the potential to be impacted. Wells may need to be properly destroyed and a replacement well constructed. BART should consult with Zone 7 for specific rules and practices; contact Matt Katen, 925-454-5071 or mkaten@zone7water.com.

6. **Page 748, last paragraph:** The EIR states that Arroyo Mocho is perennial due to mining discharges. This information is out of date, as the mining companies have not discharged to the Mocho since December 2013. Note also that Zone 7 releases water, when available from the State Water Project, to Arroyo Mocho for groundwater recharge.

7. **Figure 3.H-2:** The depiction of the lakes within the mining area is inaccurate. Lakes F, G, H, and I are not shown but a lake is shown south of where Lake I is. In addition to the image below for reference, included here as an attachment is a pdf with the current pond outlines. Note that due to active mining at some of these lakes, the outline of the lakes can change somewhat from year to year.

![Figure 4.B: Map of Future Chain of Lakes](image)

*This figure depicts the future Chain of Lakes.


8. **Zone 7 Existing Facilities.** Water transmission and pumping facilities are located in the Southwest corner of the proposed development at Isabel & East Airway. See Figures 1 and 2, below. We would request that our facility not be within the confines of the BART facilities (including parking areas) to ensure our ability for access during maintenance or emergency activities. Additionally, the Zone 7 facilities could be impacted by construction as it runs along the frontage road of East Airway Ave. Any work with Zone 7’s easements will require an encroachment permit; Contact John Koltz, 925-454-5067.

![Figure 1. The red oval indicates the location of a Zone 7 pipeline along the south side of 580 between Santa Rita and Isabel Ave.; this could be impacted by the BART project dependent on how far to the south 580 would be widened to accommodate the BART tracks.](image)
9. **Water Supply Evaluation.** Note that Zone 7 provided comments to the City of Livermore on their Draft Water Supply Assessment for the Isabel Neighborhood Plan, which may be relevant to BART’s analysis.

On behalf of Zone 7, I appreciate the opportunity to comment on this project. If you have any questions on this letter, please feel free to contact me at (925) 454-5005 or via email at erank@zone7water.com.

Sincerely,

Elke Rank

cc: Carol Mahoney, Amparo Flores, Matt Katen, Rhett Alzona, Jeff Tang, Joe Seto, file

Attachments (2)
**Project Number**: R5-2  
**Project Name**: Airway Improvement Project  
**Project Location**: Arroyo las Positas from the Airway Boulevard crossing, eastward to just upstream of the I-580 crossing (STA 220+00 to 145+00).  
**Purpose**: The capacity deficiency of Arroyo las Positas is exacerbated by the aggradation of the channel due to excessive sediment deposition upstream of the Las Positas Golf Course. The project purpose is to restore the reach capacity and curtail future aggradation by trapping sediment loads in a sediment basin located upstream of I-580.  
**Project Components**:  
1. Remove sediment accumulated at culverts in Kitty Hawk Road.  
2. Remove sediment along Airway Blvd (STA 185+00 to 145+00).  
3. Construct a 2.8 acre sediment basin north of I-580 and downstream of confluence of Arroyo las Positas with Cayetano Creek.  
4. Carry out mitigation for sediment removal. Assuming approximately 10.6 acres of land is needed for mitigation purposes.  
5. Construct levees starting upstream of the Kitty Hawk Road crossing and ending at the I-580 crossing (STA 220+00 to 195+00). As an alternative, construct floodplain terrace incorporating bank stabilization measures and native species plantings around proposed BART station. For cost estimating purposes, levees were assumed.  
6. Plant shaded riverine aquatic cover along 4,000 feet of channel banks (STA 185+00 to 145+00).  
**Capital Cost Estimate**: $24,960,000  
**Implementation Issues**:  
- Ensuring that local drainage is not impacted by levees upstream of Kitty Hawk Road.  
- Permitting in compliance with CWA Section 401/404.  
- Coordination of improvements with Caltrans Isabel Road Interchange Project and potential future BART extension including identified mitigation measures.  
- Coordination of construction of sediment basin north of I-580 with Caltrans storm water compliance program.  
- Coordination of use of access road for seasonal trail under I-580 with Caltrans, City of Livermore and LARPD.  
- Coordinate with private landowners on right of way (ROW) issues.  
- If sediment basin upstream of I-580 is deemed unfeasible due to right-of-way restrictions, consider implementation of sediment basin downstream of the I-580 crossing at Station 185+00. Phasing of project implementation must consider downstream improvements.  
- Coordination with County Mosquito Abatement District  
**Project Precursors**:  
- Conduct sediment balance analysis for Arroyo las Positas.  
- Conduct hydrologic/hydraulic analysis to define channel capacity with proposed improvements.  
**Project Benefits**:  
- Restores conveyance capacity of Arroyo las Positas upstream of Airway Boulevard.  
- Reduces sediment accumulation into Arroyo las Positas upstream of Airway Boulevard.  
- Provides trail connectivity between areas south and north of 580.  
**Goals/Objectives Addressed**: Flood Protection & Drainage: A, B, C  
Erosion and Sedimentation: A, B, C  
Water Supply: none  
Water Quality: C  
Habitat & Environment: E  
Recreation, Trails, and Public Education: none  
**Maintenance Activities**:  
- Conduct field inspections of the sediment basin.  
- Conduct sediment sampling prior to sediment removal and prepare Sediment Characterization Report.
**Zone 7 Stream Management Master Plan**

**Section 5 SMMP Project Descriptions**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>If desilting activities are conducted in a “wet stream”, conduct water quality sampling prior to and after sediment removal. Prepare a Water Quality Sampling Plan.</td>
<td></td>
</tr>
<tr>
<td>Dewater site if desilting activities are conducted in a “wet stream”. Conduct desilting activities.</td>
<td></td>
</tr>
<tr>
<td>Store and transport dredged material to an off-site landfill facility.</td>
<td></td>
</tr>
<tr>
<td>Conduct mitigation for sediment removal activities.</td>
<td></td>
</tr>
</tbody>
</table>

**Levee Maintenance:**
- Conduct annual inspection of site.
- Conduct repairs of levee, as needed.

**Vegetation maintenance:**
- Conduct annual inspection of planted riparian vegetation.
- Conduct maintenance of riparian vegetation by utilizing a combination of methods including hand removal, mechanical or chemical clearing. The annual maintenance cost estimate is based on chemical clearing of invasive species which includes conducting a biological survey and implementing a water quality sampling plan.
- Collect and dispose of vegetation debris.

<table>
<thead>
<tr>
<th>Annual Maintenance Cost Estimate</th>
<th>$279,000</th>
</tr>
</thead>
</table>

**Notes**
- Channel improvements proposed upstream of Kitty Hawk Road should be reassessed once the BART and Caltrans improvements are defined.
- Alternatives to sediment basins such as offline ponds with habitat bypass channels, wetlands, floodplain benches, and in-line pools can be considered as part of the pre-design phase.

**References**
- Existing Conditions and Sensitivities/Constraints Analysis for Arroyo Las Positas Stream Corridor Management Plan Phase I, Questa Engineering Corporation, April 1998
- Flood Control MP, TM No. 5: Evaluation of Problem Areas & Identification of Solutions, West Yost & Associates, November 2001
Zone 7 Stream Management Master Plan  
Section 5 SMMP Project Descriptions

R5-2

Airway Improvement Project

- Revegetate with native trees and shrubs
- Levees from Kitty Hawk Rd. to I-580 crossing or floodplain terrace
- Sedimentation basin (2.8 ac)
- Location of future Isabel Avenue/I-580 Interchange
- Remove sediment from Airway Blvd. to Kitty Hawk Rd.
- Clean culverts at Kitty Hawk Rd.

Project Location

11 cont.
RESPONSE B9

Elke Rank, Zone 7 Water Agency

B9-1  Thank you for providing comments on the Draft EIR. This comment is informational in nature and no response is necessary.

B9-2  The Draft EIR describes the applicable regulatory framework and permitting processes related to stormwater management and impervious surfaces starting on page 775 and describes Zone 7 regulatory oversight starting on page 780. BART will pay fees to which it is subject by applicable law.

B9-3  As stated in the comment and as noted on page 799 of the Draft EIR in Section 3.H, Hydrology, BART is continuing to coordinate with Zone 7 and will submit pre- and post-project hydraulic and hydrology calculations for review and approval by Zone 7, as described in Mitigation Measure HYD-5 (Hydraulic Capacity for Non-Flood Hazard Area Crossings).

B9-4  Thank you for this information. The location of Zone 7’s potential sedimentation basin along Arroyo las Positas near Portola Avenue and I-580 is noted. BART will coordinate with Zone 7 once the BART Board adopts a project and during the development of the final design.

B9-5  BART will adhere to Zone 7’s boring, well-drilling, and well-destruction permits as applicable and the Draft EIR has been updated to reflect minor text additions.

Table 1-1 (Public Agencies with Possible Future Permit and/or Approval Authority), on page 75 of the Draft EIR, under Zone 7 Water Agency, the column for Permit or Approval Jurisdiction has been revised to include the following text:

Zone 7 Geotechnical Borings/Well Drilling/Abandonment Permitting as applicable

Page 782 of the Draft EIR under Zone 7 Encroachment Permits has been revised as follows:

As discussed previously, Zone 7 requires an encroachment permit prior to activities or construction that will be conducted within the agency’s property, easements, or ROWs and a well drilling/abandonment permit prior to any drilling including well destruction, well construction, or geotechnical borings.
B9-6 Thank you for this information. After the BART Board adopts a project and during development of final design, BART will coordinate with Zone 7 regarding the location, destruction and replacement of any wells within the project footprint, as necessary.

B9-7 In response to this comment, the end of the last paragraph on page 748 has been deleted as follows:

Additionally, though tributary inputs and total annual runoff volumes can be highly variable, discharges from quarries in the Pleasanton area generally result in year-round flow in the lower reach of Arroyo Mocho and downstream to Arroyo de la Laguna.  

The first paragraph on page 763 has also been revised as follows:

Groundwater recharge occurs through natural and artificial recharge from rainfall, releases from the South Bay Aqueduct of Lake del Valle, and gravel mining (water) recharge to Arroyo Mocho and Arroyo del Valle, and Zone 7 release of State Water Project water to Arroyo Mocho when available; however, the majority of recharge is through artificial recharge and recharge through stream channels.

B9-8 Thank you for this information. In response to this comment Figure 3.H-2 (Surface Hydrology) has been revised as shown on the following page.

B9-9 Thank you for this information. As illustrated in Figure 2 of the comment letter, the Zone 7 pumping facility on East Airway Boulevard will be separate from the proposed Isabel Station parking structure and parking lots. Once the BART Board adopts a project and during the development of the final design, BART will coordinate with Zone 7 regarding the water transmission and pumping facilities, the pipeline along the south side of I-580 between Santa Rita Road and Isabel Avenue, and the pipeline in East Airway Boulevard. As stated in Impact UTIL-1 on page 1444 of the Draft EIR, prior to starting construction, BART will notify and coordinate with affected utility providers per California Government Code (Sections 4216–4216.9).

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Figure 3.H-2

Hydrology and Water Quality
Surface Hydrology

Legend
- **Proposed Collective Footprint**
  - BART Project and Alternatives
  - I-580 and Roadway Relocation
  - I-580 Interchange Reconfiguration
- **Existing**
  - BART Service

**Hydrological Features**
- Rivers/Streams
- Watershed Boundaries

**Wetland Type**
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake*
- Riverine
- Other

Collective footprint includes the Proposed Project and Alternatives.
*The Chain of Lakes' boundaries can change year to year.

Source: Arup, 2017b; DWR, 2004; USFW (NWI), 2012; Zone 7, 2016.
B9-10 Zone 7’s August 24, 2017 comment letter on the water assessment for the INP was reviewed, and there were no indications of any inconsistencies or conflicts with the Draft EIR.

B9-11 See Response to Comment B9-4.

B9-12 See Response to Comment B9-8.
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October 12, 2017

Mr. Andrew Tang, Project Manager
BART to Livermore Extension Project
San Francisco Bay Area Rapid Transit District
300 Lakeside Drive, 21st Floor
Oakland, CA 94612

Subject: BART to Livermore Draft Environmental Impact Report (DEIR)

Dear Mr. Tang,

The Alameda County Board of Supervisors met on October 10, 2017 and voted unanimously to submit comments on the BART to Livermore DEIR with specific focus on project alternatives with significant impact on the people, properties and resources of Alameda County including, but not limited to:

- Impacts of the proposed BART tail track, storage and maintenance facility located on unincorporated county land zoned for agricultural uses - consisting of open grasslands, intermittent cattle grazing, and agricultural production uses; and

- Impacts of proposed Electrical Multiple Unit/ Diesel Multiple Unit (EMU/DMU) displacement of essential Alameda County Fire Department facilities and right-of-way impacts on numerous car dealership properties within the City of Dublin.

These comments, as detailed in the attached report, urge BART to:

- Support the decision-making process of the Tri-Valley – San Joaquin Regional Rail Authority, as identified in Assembly Bill 758, and expeditiously advance the proposed BART extension within the context of interregional connectivity - consistent with the goals and objectives of this Authority when formed;

- Insist that BART advance alternative design concepts that avoid significant right-of-displacements and impacts;

- Respond to County issues and concerns, fully address environmental impacts and commit to implement mitigation measures to fully address them;

- Advance the Bay Fair Connector and an operating plan to accommodate a “one-seat ride” to southern Alameda County and the South Bay;
• Seek to significantly reduce project capital costs to improve the project cost-effectiveness and viability of the proposed BART to Livermore Extension Project, and

• Provide evidence that impacts of out-of-District BART expansion on core BART service in the Tri-Valley have been fully mitigated per the terms of the Comprehensive Agreement between the Valley Transit Authority (VTA) and BART.

On behalf of the Alameda County Board of Supervisors, I ask for a full and thorough consideration of these comments.

Sincerely,

[Signature]

Scott Haggerty, District 1
Alameda County Board of Supervisors
October 3, 2017

Honorable Board of Supervisors
Alameda County Administration Building
Oakland, CA 94612

Dear Board Members:

Subject: BART to Livermore Draft Environmental Impact Report (DEIR)

RECOMMENDATION:

Approve the following recommendations approved by the Transportation Planning Committee on October 3, 2017:

1. Submit comments on the Bay Area Rapid Transit (BART) to Livermore DEIR with specific focus on project alternatives with significant impact on the people, properties and resources of Alameda County including, but not limited to:
   - Impacts of the proposed BART tail track, storage and maintenance facility located on unincorporated county land zoned for agricultural uses - consisting of open grasslands, intermittent cattle grazing, and agricultural production uses; and
   - Impacts of proposed Electrical Multiple Unit/ Diesel Multiple Unit (EMU/DMU) displacement of essential Alameda County Fire Department facilities and right-of-way impacts on numerous car dealership properties within the City of Dublin.

2. Urge BART to:
   - Support the decision-making process of the Tri-Valley – San Joaquin Regional Rail Authority, as identified in Assembly Bill 758, and expeditiously advance the proposed BART extension within the context of interregional connectivity - consistent with the goals and objectives of this Authority when formed;
   - Insist that BART advance alternative design concepts that avoid significant right-of-displacements and impacts;
- Respond to County issues and concerns, fully address environmental impacts and commit to implement mitigation measures to fully address them;

- Advance the Bay Fair Connector and an operating plan to accommodate a “one-seat ride” to southern Alameda County and the South Bay;

- Seek to significantly reduce project capital costs to improve the project cost-effectiveness and viability of the proposed BART to Livermore Extension Project; and

- Provide evidence that impacts of out-of-District BART expansion on core BART service in the Tri-Valley have been fully mitigated per the terms of the Comprehensive Agreement between the Valley Transit Authority (VTA) and BART.

**DISCUSSION:**

**Background**

The passage of Assembly Bill 758 by State legislators last month is a game changing breakthrough in the now decades long effort to extend passenger rail service to Livermore. The bill, now awaiting the Governor’s approval, responds to the growing urgent need to address burgeoning congestion levels in the Tri-Valley, by closing the missing rail gap between the BART and the Altamont Corridor Express rail systems (ACE) in the I-580 corridor. When approved, it will establish the Tri-Valley – San Joaquin Valley Regional Rail Authority for purposes of planning, developing and delivering cost-effective and community responsive transit connectivity between BART and ACE in the Tri-Valley. An important element of the bill is a requirement to complete a project feasibility report no later than July 1, 2019 that identifies the project, a funding plan and schedule for project implementation and delivery. This effort will include the consideration of all viable rail connectivity options including the BART to Livermore project as identified in the DEIR now under consideration. The bill gives authority to the BART Board of Directors, however, to approve or deny an extension of the BART system if it is recommended in the project feasibility report.

Completion of the Draft Environmental Impact Report (DEIR) for the BART to Livermore Extension Project is a key milestone in a very long and protracted environmental review process that to-date spans nearly a decade. Scoping for the Program Environmental Impact Report (PEIR) was conducted in 2007, followed by the 2009 Draft PEIR and subsequent 2010 adoption of a Final PEIR. Scoping for the current project-level EIR began in 2012, and while completion in spring 2018 is anticipated, it should be noted that a subsequent federal-level Environmental Impact Statement is planned with a completion date of 2020. It is also important to note that the PEIR preferred alternative adopted by the BART Board in 2010, is still in place and is inconsistent with adopted City of Livermore plans and policies. This BART adopted PEIR alternative would extend BART along I-580 from the existing Dublin/Pleasanton Station to I-580/Isabel Avenue and then extend along Portola Avenue to downtown Livermore and Vasco Road.

The proposed project identified in the DEIR, which is also referred to as the Conventional BART Project, would extend existing BART service approximately 5.5 miles east from the existing Dublin/Pleasanton BART Station within and adjacent to the I-580 right-of-way through the Cities of Dublin and Pleasanton, to a proposed new terminus station located at the Isabel Avenue/I-580 interchange in the City of Livermore. A new parking facility would be constructed at the new Isabel Station and a new BART storage and maintenance facility would be constructed beyond the Isabel Station, north of I-580. In addition to a No Project Alternative, the DEIR also considers three Build Alternatives: A DMU/EMU Alternative, an Express Bus/Bus Rapid Transit (BRT) Alternative and an Enhanced Bus Alternative. There are no alternatives in this DEIR that would extend rail beyond Isabel Avenue/I-580 for an inter-connection to ACE. The DEIR estimates that construction of the Proposed Project and Build Alternatives could begin in 2021 and would last approximately 5 years through 2026.
The San Joaquin Regional Rail Commission (SJRRC), examined the feasibility of a number of alternatives to connect BART to ACE, as part of the ACEForward environmental review process that is currently underway. These alternatives included options to extend ACE to a BART terminus in the Tri-Valley – at Greenville, Isabel or the existing Dublin/Pleasanton Station. Further study looked at the feasibility of extending an EMU/DMU rail line from West Tracy along the County-owned railroad rights-of-way in the Altamont Pass to a BART terminus in the Tri-Valley at one of these potential intermodal locations. A yard/shop site for this line is tentatively identified in the vicinity of Tracy – not the Tri-Valley location of EMU/DMU yard/shop that is identified in the BART DEIR. It is anticipated that this alternative will be studied further as the new AB758 mandated authority advances further study for the required project feasibility report.

**Key Issues**

There are many issues, questions and concerns regarding information presented in the BART DEIR, but a primary area of focus for Alameda County must be the potential displacements that include loss of agricultural land and impacts on essential Alameda County Fire Department facilities as well as right-of-way impacts on numerous commercial properties including car dealerships within the City of Dublin. In this regard, it is important to review the proposed project and project alternatives to understand if in fact these impacts are avoidable through design. It is also critical to question the scope and magnitude of the yard/shop that is proposed for just a one station extension as well as its location. Further, the proposed five-mile extension of the BART system to Isabel Avenue in Livermore does not address full mobility needs in the I-580 corridor – it has not been planned within the context of inter-regional connectivity and there is no consideration for a direct BART rail link to ACE in Livermore. In addition, the BART Bay Fair Connector Project and operating plan for a one-seat ride from the Tri-Valley to Santa Clara County has not been included. Extremely high capital cost estimates are also a concern.

Following is a summary of key issues to be addressed in the comment letter. The letter will include, but not be limited to these comments, questions and concerns.

**BART Storage and Maintenance Facility**

**Scope and Design:** The storage and maintenance facility is out of scale with the 36 vehicle capacity requirements of a one-station, 5-mile extension. The DEIR states that BART conducted an operations analysis to determine BART vehicle fleet and storage needs to effectively operate the Proposed Project – determining the need for a yard providing storage for approximately 172 cars. It then added a maintenance facility to meet the needs of not only the proposed project but the entire Daly City-Dublin/Pleasanton Line. The result is a proposed 68-acre storage and maintenance facility to meet BART system-wide needs. The DEIR also states that the Proposed BART project cost estimate includes 25% of the cost of the proposed storage and maintenance facility. This represents an unacceptable premise as the total cost should be attributed to the BART system and not the project.

**Location:** The proposed storage and maintenance facility is located 1.9 miles from the main track on land zoned for agricultural uses. In total this facility will encompass approximately 100 acres plus it will require environmental mitigation on a 1 to 3 ratio – and this will roughly come to a total of approximately 400 acres. In addition, the storage and maintenance facility will require bridges over Arroyo Las Positas and Cayetano creeks as well as an approximately 450-foot-long, 20-foot high hillside tunnel for the trackway and a 2-lane access road from Campus Drive to the facility. Some grading of the existing hill slopes would also be required. The DEIR finds that there are a multitude of special status wildlife and plant species with potential to occur in the study area of the site and creeks and arroyos on site serve as active movement corridors for large mammals and other wildlife crossings. From both a cost as well as environmental perspective, it would seem that a viable alternative would be to extend the track an
additional 5 miles east towards the Greenville Road site where approximately 150 acres are in BART ownership for this purpose.

**Land Use Designation:** The proposed facility would be located on unincorporated county land with a current land use designation of “Large Parcel Agriculture,” with a small northerly portion of the site designated as “Resource Management.” The Zoning Designation is “Agriculture.” This land consists of open grasslands with intermittent cattle grazing, with some agricultural production uses. The DEIR notes that the facility would be consistent with the types of uses conditionally allowed in the Agricultural District zoning designation—however, the DEIR also notes that BART is not subject to local land use plans, policies and ordinances per California Government Code Sections 53090 and 53091. The conversion of agriculturally zoned land to non-agricultural uses is identified in the DEIR as a significant and unavoidable impact—even with the implementation of mitigation that would preserve it through easements or other protection on a 1 to 1 ratio. The DEIR does not appear to address how the facility will impact neighboring agricultural uses through its potential 24-hour operation. It does, however, identify that there would be significant unmitigated light and glare impacts from the facility. These impacts on neighboring sites should be identified and must be mitigated.

**EMU/DMU Connection to Dublin/Pleasanton Station**

The design of the EMU/DMU connection to the Dublin/Pleasanton Station has significant right-of-way impacts on the City of Dublin Corporation Yard and the Alameda County Fire facilities. The design also eliminates 110 parking spaces at the auto dealerships as well as an additional 105 parking spaces at other commercial sites. The auto dealerships have noted that this impact is significant to the viability of their operations. Alternative concepts for this EMU/DMU connection have been developed by AECOM Engineers, part of the ACEForward consulting team. These alternative concepts will avoid potential impacts on properties and displacements of parking and it is recommended that these design concepts be submitted to BART with the DEIR comment letter. The preferred concept is one in which the EMU/DMU platform is shifted to the east side of the Dublin/Pleasanton BART station—allowing the westbound I-580 freeway lanes to return to the existing alignment near the freeway median sooner and eliminating all displacements in this area.

**Bay Fair Connector Project**

The proposed BART project in the DEIR is described as an extension of the existing Daly City Line—and the impact methodology in the Transportation section of the DEIR appears to indicate that this operating assumption was used to forecast ridership. It does not appear that alternative operating scenarios were considered. Although this operating scenario may be part of the forecasting model used for the ridership analysis, it does not appear that there has been an opportunity for the public to have adequate opportunity to review and comment on this policy decision—nor does it seem that it is an adopted policy. The BART Bay Fair Connector Project, as approved by Alameda County voters in Measure BB, would provide the opportunity for a direct “one-seat-ride” from the Tri-Valley to Southern Alameda and Santa Clara County. BART staff has indicated that there are two other existing BART lines running in that corridor and there is inadequate capacity to add another line—but without an analysis of options, it is unclear if those two lines are in fact the most appropriate two lines to run. The BART Bay Fair Connector was promised to the Alameda County voters in Measure BB and must be advanced along with an operating plan that allows for a direct “one-seat-ride” from the Tri-Valley to the South Bay.

**Capital Cost Estimates**

The capital costs estimate for the one-station 5.5-mile BART extension is estimated to be $1.635 billion (estimated to mid-point of construction). The one-station DMU alternative in the DEIR is estimated to be $1.599 billion. It should be noted that for the EMU/DMU project developed as part of the ACEForward
project – extending from West Tracy through the Altamont Pass to the existing BART terminus at the West Dublin/Pleasanton Station - preliminary cost estimates are approximately $1.4 to $1.6 billion. We must insist that BART take a closer look at all of the project elements attributed to the project and prove that they are solely attributable to this one-station extension. We must also take a closer look at project soft costs and contingencies that have been factored into the overall cost and seek an independent review of estimated project soft costs (44%) and additional contingencies (28%) and reserves (19%) to determine if they are comparable to industry standards and practice.

There may be numerous areas in which a reduction in project costs may be made. One area of consideration should be the $112 million cost that is included for the storage/maintenance facility as it should not necessarily be assigned to the extension. In addition, the DEIR identifies the need for a rolling stock fleet size of 36 BART cars in order to accommodate increased ridership on the system and this number appears to be excessive and presented without adequate explanation. Further, it appears that the need for the proposed new tail track west of the Dublin/Pleasanton Station should also be re-evaluated.

**Core System Impacts**

The Comprehensive Agreement between VTA and BART in connection with the proposed Santa Clara County BART Extension outlines specific terms regarding the VTA obligation to mitigate core system modifications. This concerns all investments in core system facilities that are needed to support and maintain the expansion into Silicon Valley. The project’s impact on existing parking in East Alameda County, however, is of particular concern. VTA completed a Core System Impact Study in 2003 and a Core Stations Modification Study in 2011. This previous analysis indicated that Eastern Alameda County (Castro Valley, West Dublin & Dublin/Pleasanton Stations) would be areas of high parking demand for individuals wanting to ride BART to and from Santa Clara County. The potential for a total of 600 – 750 new parking spaces was identified for Eastern Alameda County to mitigate the impacts of Silicon Valley BART expansion in this area of the core system. Although the Phase 1 project is nearly complete, to-date there does not appear to be a commitment in place to mitigate parking displacement in Eastern Alameda County. It is of further concern that impacts identified in the previous studies were based on 2003 and 2011 BART ridership levels. These ridership numbers have increased significantly and in addition, planning for the Phase 2 project is now being advanced. BART must provide evidence that out-of-District BART expansion on core service in the Tri-Valley has been fully mitigated.

**Inter-Regional Connectivity**

The formation of the Tri-Valley – San Joaquin Regional Rail Authority presents an unprecedented opportunity to comprehensively plan for inter-regional rail connectivity in the I-580 corridor. The proposed BART extension may be an important element of this rail solution and the BART Board must move expeditiously to advance this project within the context of interregional connectivity. We must also urge BART to support the goals and objectives of the new Authority when formed. The primary goal is the delivery of cost-effective and responsive rail transit connectivity between BART and ACE in the Tri-Valley while meeting the goals and objectives of the communities it will serve.

**Next Steps**

The public comment period on the DEIR opened on July 31, 2017 and will close on October 16, 2017 at 5:00 p.m. Submittal of comments and concerns by Alameda County at this time are of critical importance as it will require BART to respond to our questions and concerns in the Final EIR. When the Final EIR is released, it is recommended that the Board complete an additional review and provide comments on the FEIR and proposed action.
FINANCING:

Approval of the submittal of a letter of comment on the BART to Livermore DEIR will have no impact on the County's General Fund.

Respectfully,

Scott Haggerty
Alameda County Board of Supervisor, District 1
Follow-Up Item

Reduce ROW impacts at the Dublin/Pleasanton BART-DMU/EMU Station:
- Wide gauge DMU
- Dual gauge
- At-grade station
- Aerial station
Wide-Gauge DMU:
- BART gauge 5'6" vs. Standard Gauge 4'8½"

Challenges:
- Would require special procurement vs. off-the-shelf models
- Using BART tracks operational challenge; tail tracks used for storing, breaking and making trains
- A separate wide-gauge track would be required on the Tracy end

Duel-Gauge DMU:
- Standard gauge inside of BART's gauge allows use of off-the-shelf DMUs/EMUs

Challenge:
- Using BART tracks operational challenge; tail tracks used for storing, breaking and making trains
Letter B10
cont.

BART/DMU - Scarlett Court
RESPONSE B10
Alameda County Board of Supervisors

B10-1 Thank you for providing comments on the Draft EIR. This comment introduces issues that are covered in more detail in the remainder of the comment letter. Please see Responses to Comments B10-7 through B10-14 and the Master Responses and other responses referenced therein for individual responses to these issues.

B10-2 This comment outlines the recommendations of the Alameda-San Joaquin Regional Rail Working Group. Please see Responses to Comments A5-3 through A5-9 for individual responses to these recommendations.

B10-3 Please see Response to Comment A5-2 and Master Response 10 regarding the Tri-Valley-San Joaquin Valley Regional Rail Authority established by AB 758.

B10-4 Please see response to comment B2-4 for response more information related to the Program EIR and the current BART to Livermore Extension Project.

B10-5 Please see Response to Comment B2-5 and Master Response 11 for more information related to the ACEforward project.

B10-6 Please see Response to Comment B2-6 for more information related to BART-to-ACE rail connection.

This comment introduces issues that are covered in more detail in the remainder of the comment letter. Please see Responses to Comments B10-7 through B10-14 and the Master Responses and other responses referenced therein for individual responses to these issues.

B10-7 Please see Response to Comment A5-3 and Master Response 5 regarding the size, cost allocation, and need for the storage and maintenance facility.

B10-8 Please see Response to Comment A5-4 and Master Response 7 regarding impacts and Master Response 6 regarding location, and other sites considered for the storage and maintenance facility.

B10-9 Please see Response to Comment B2-9 for more information related to zoning and General Plan designation of the proposed site for the storage and maintenance facility. Please also see Master Response 7 for a summary of impacts related to the storage and maintenance facility and Response to Comment A5-4 for additional information related to the 24-hour operation of the storage and maintenance facility.
B10-10 Please see Response to Comment A5-5 for a discussion of impacts to businesses and Response to Comment A5-6 for consideration of the ACEforward design concepts for the DMU Alternative.

B10-11 Please see Response to Comment A5-7 regarding the BART Bay Fair Connector. Please note that there is no requirement in the 2014 Alameda County Tax Expenditure Plan (Measure BB), which authorized the Bay Fair Connector Project, that requires BART to plan for or evaluate a new line between the Tri-Valley and Santa Clara County.

B10-12 Please see Response to Comment A5-8 for a comparison of the ACEforward cost estimate and the BART DMU cost estimate.

B10-13 Please see Response to Comment A5-9 for discussion of the agreement between BART and the Santa Clara Valley Transportation Authority (VTA).

B10-14 As noted in Response to Comment B2-3, BART acknowledges the formation of the Tri-Valley-San Joaquin Valley Regional Rail Authority and will work with the new authority to improve connectivity in the Tri-Valley. Also see Master Response 10 relating to the new rail authority.

B10-15 Thank you for providing comments on the Draft EIR.

B10-16 This comment does not relate to the Draft EIR; no response is necessary.

B10-17 This attachment is a presentation regarding the Altamont DMU/EMU from the September 20, 2017 Alameda-San Joaquin Regional Rail Working Group meeting. This attachment has been reviewed and considered in the above responses. No additional response is required.