

# CHAPTER 1

## INTRODUCTION

### A. PURPOSE OF THE RESPONSES TO COMMENTS DOCUMENT

The San Francisco Bay Area Rapid Transit District (BART) prepared a Draft Environmental Impact Report (EIR) for the BART to Livermore Extension Project (SCH# 2012082104) to evaluate and disclose the potential environmental effects of the Proposed Project and Alternatives pursuant to the California Environmental Quality Act (CEQA). The Draft EIR was released for public review on July 31, 2017. The Draft EIR identified the potential environmental consequences associated with the implementation of the Conventional BART Project (Proposed Project) and three Build Alternatives—the Diesel Multiple Unit (DMU) Alternative, which includes a variant referred to as the Electrical Multiple Unit (EMU) Option; the Express Bus/Bus Rapid Transit (BRT) Alternative; and the Enhanced Bus Alternative. The Draft EIR recommended mitigation measures to reduce potentially significant impacts of the Proposed Project and Alternatives where feasible. In addition, the Draft EIR evaluated the No Project Alternative (or No Build Alternative).

This Response to Comments (RTC) document has been prepared to respond to comments received on the Draft EIR. This document contains the comments received on the Draft EIR during the public comment period, written responses to those comments, and any changes made to the Draft EIR in response to the comments or to amend or clarify material in the Draft EIR. The responses and revisions in this document substantiate and confirm the analysis contained in the Draft EIR. No new significant environmental impacts and no substantial increase in the severity of previously identified significant impacts have been identified.

This RTC document, together with the Draft EIR, constitutes the Final Environmental Impact Report (Final EIR) for the BART to Livermore Extension Project.

### B. ENVIRONMENTAL REVIEW PROCESS

Under CEQA, following completion of a Draft EIR, BART is required to provide the public (both the general public and public agencies having jurisdiction by law with respect to the Proposed Project and Alternatives) with an opportunity to comment on the Draft EIR. As the lead agency, BART is required to respond to substantive environmental issues raised in the comments.

The Draft EIR for the BART to Livermore Extension Project was circulated for a 77-day public review period, from July 31, 2017 to October 16, 2017. The document was made available to the public and to applicable State of California (State), regional, and local agencies. During this period, two public hearings were held to receive oral comments on the Draft EIR: August 22, 2017 at the Robert Livermore Community Center in the city of Livermore, and August 29, 2017 at the Shannon Community Center in the city of Dublin.

Copies of the Draft EIR were available for public review at BART's office (300 Lakeside Drive, Oakland) and at the following Tri-Valley locations:

1. City of Pleasanton: Pleasanton Library
2. City of Dublin: Dublin Public Library
3. City of Livermore: Livermore Library – Civic Center Branch, Springtown Library, and Rincon Library

The Draft EIR was also posted for public review on the BART website at:  
<http://www.bart.gov/about/projects/liv>.

A Notice of the Availability of the Draft EIR was posted BART's website and provided to responsible agencies and the public in the following ways: (1) published in The Independent, Pleasanton Weekly, Pleasanton Express, Danville Express, East Bay Times, Tri-Valley Times, and San Ramon Valley Times; (2) mailed to addresses within 0.5 mile of the footprints of the Proposed Project, DMU Alternative/EMU Option, and Express Bus/BRT Alternatives; and (3) emailed to addresses on BART's email notification list.

Written comments were received from 14 different public agencies (federal, State, regional, and local), 14 companies and organizations, and 145 individuals. A total of 36 individuals provided oral comments at the two public hearings. As described above, this document contains the public comments received on the Draft EIR, written responses to those comments, and any changes made to the Draft EIR in response to the comments or to amend or clarify material in the Draft EIR. CEQA Guidelines Section 15204(a) states that the focus of public review should be on (1) the sufficiency of the Draft EIR in identifying and analyzing the possible impacts on the environment; and (2) the ways in which the significant effects of the project might be avoided or mitigated. CEQA Guidelines Section 15088 specifies that the lead agency is required to respond to the comments on the significant environmental issues raised in the comments received during the public review period. However, when responding to comments, lead agencies are only required to respond to substantive environmental issues; they are not required to provide all information requested by reviewers as long as a good faith effort at full disclosure is made in the Draft EIR.

Therefore, this RTC document focuses on the sufficiency of the Draft EIR in addressing the significance of the environmental impacts of the Proposed Project and Alternatives. In any instance in which a commenter expresses a preference or an opinion about non-environmental issues, this document acknowledges the comment but does not provide a response. However, all comments received on the Draft EIR, including non-environmental comments, are included in this document for consideration by the BART Board of Directors (BART Board). Comments not related to the adequacy of the Draft EIR (non-CEQA) are provided in Appendix A.

The RTC was made available to agencies, organizations, and individuals who commented on the Draft EIR or who requested the Final EIR. In addition, BART provided public notification of the availability of the Final EIR through a notice on the BART website and an email to its approximately 2,000-member email list.

Copies of the Final EIR can be reviewed in a number of ways. The Final EIR can be downloaded from BART's website at: <http://www.bart.gov/about/projects/liv>. To obtain a copy of the Final EIR on a USB drive, email [BartToLivermore@bart.gov](mailto:BartToLivermore@bart.gov) or call (888) 441-0434.

The Final EIR can be reviewed at the following public libraries:

Livermore Library – Civic Center Branch 1188 South Livermore Avenue Livermore, CA 94550	Pleasanton Library 400 Old Bernal Avenue Pleasanton, CA 94566
Springtown Library 998 Bluebell Drive Livermore, CA 94551	Dublin Public Library 200 Civic Plaza Dublin, CA 94568
Rincon Library 725 Rincon Avenue Livermore, CA 94551	

The Final EIR and related documents can also be reviewed at the following location:

San Francisco Bay Area Rapid Transit District  
Attention: BART to Livermore Extension Project  
300 Lakeside Drive, 21<sup>st</sup> Floor  
Oakland, CA 94612

Contact the BART to Livermore Extension Project to set up an appointment by using the email address or phone numbers above.

## C. BART BOARD DECISION

As the lead agency, the BART Board must certify the Final EIR before action can be taken to adopt a project. Certification requires that the lead agency makes a finding that the Final EIR complies with CEQA, that the information in the EIR has been considered, and that the EIR reflects BART's independent judgment and analysis. Furthermore, consistent with CEQA Guidelines Sections 15091 and 15097, as part of the project approval process, the BART Board must also make findings regarding significant environmental effects of the project and consider and adopt a mitigation monitoring and reporting program (MMRP) that includes all mitigation measures that BART will implement to avoid or reduce significant effects identified in the Final EIR. BART will use the MMRP as a mechanism to track implementation of all mitigation measures during construction and operation of the adopted project.

If the BART Board approves the Proposed Project or an Alternative that has significant effects identified in the Final EIR, but there is no feasible way to lessen or avoid those effects, the BART Board must make a Statement of Overriding Considerations containing specified findings. These findings would state that any significant and unavoidable effects are acceptable due to overriding considerations as described in CEQA Guidelines Section 15093. In preparing this statement, CEQA requires the BART Board to balance the specific benefits of the proposed action against its unavoidable environmental impacts. If the benefits of the proposed action outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered acceptable.

This RTC document, along with the Draft EIR, will be presented to the BART Board for Final EIR certification. For project adoption, the Board will be presented with Findings, a Statement of Overriding Considerations and MMRP supporting adoption of the Proposed Project or one of the Build Alternatives.

As required by CEQA, this EIR evaluates the significant impacts of the Proposed Project and Alternatives, and provides feasible mitigation measures for significant impacts. As noted above, the alternatives evaluated in this EIR are three Build Alternatives—the DMU Alternative with EMU Option; Express Bus/BRT Alternative and Enhanced Bus Alternative—and the No Project Alternative. Upon certification of the EIR, the BART Board will have completed CEQA compliance, enabling it to adopt the Proposed Project or any of the three Build Alternatives. It is also possible that the BART Board may choose not to adopt the Proposed Project or any of the Build Alternatives. In this case, the BART Board may certify the Final EIR without taking any action to adopt a project. No further documentation would be required (i.e. Findings, Statement of Overriding Considerations, or MMRP).

In addition, some of the BART Board's choices immediately following certification of the EIR are constrained by BART policy and other circumstances. In particular, the BART Board

has adopted the System Expansion Policy (SEP), which establishes a policy framework for evaluating BART system expansion projects. Among other requirements, the SEP requires local jurisdictions to adopt Ridership Development Plans (RDPs) that promote transit supportive land uses and improve access to new stations that are included in proposed expansion projects. For purposes of this EIR, the RDP criterion is applicable to the Proposed Project and DMU Alternative/EMU Option, both of which include a new Isabel Station. However, no RDP is required under the SEP for the Express Bus/BRT Alternative, which includes improvements at the existing Dublin/Pleasanton Station but does not include a new station, or the Enhanced Bus Alternative, which includes only minor bus infrastructure improvements and does not constitute a BART system expansion.

To satisfy the RDP requirement, the City of Livermore has prepared the Isabel Neighborhood Plan (INP). The INP is a Specific Plan increasing development density in the vicinity of the proposed Isabel Station. However, the City has specified that the INP applies only to the Proposed Project with the Conventional BART technology. The INP “will not go into effect until and unless there is approval of a full BART extension (i.e. traditional BART service) to Isabel Avenue...”<sup>1</sup> Since the INP will not take effect unless BART adopts the Proposed Project, the City has not developed land use assumptions applicable to a DMU/EMU project but has advised BART that the land use assumptions of the INP would represent a reasonable upper limit for the amount of development that an INP modified for the DMU Alternative/EMU Option would allow.

Finally, Assembly Bill (AB) 758, adopted by the Legislature in 2017, created a new Tri-Valley-San Joaquin Valley Regional Rail Authority (TVSJVRRA) for the purposes of planning, developing, and delivering cost-effective and responsive transit connectivity between the BART system and the Altamont Corridor Express commuter rail (ACE) service in the Tri-Valley. AB 758 also provides that nothing in the bill is intended to disrupt or interrupt the environmental review process underway at BART or to infringe upon BART’s process for planning, development and delivery of a BART extension within the I-580 corridor freeway alignment to the vicinity of the I-580/Isabel Avenue interchange, provided that the BART Board adopts a preferred alternative for a BART extension within the I-580 corridor freeway alignment to the vicinity of the I-580/Isabel Avenue interchange by June 30, 2018.

The INP is a Specific Plan, accompanied by its own EIR, adopted by the City through a public notice and comment process. It would take months for the City to revise the INP to incorporate land uses consistent with the DMU Alternative/EMU Option. Accordingly, as a practical matter, the BART Board cannot adopt the DMU Alternative/EMU Option prior to June 30, 2018 unless the Board chooses to waive the SEP requirement for the INP.

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<sup>1</sup> City of Livermore, 2018. Isabel Neighborhood Plan, Public Review Draft. January. Page 7-2.

## 1. Possible Board Actions

Based on these constraints and circumstances, there are several possible outcomes depending on the BART Board's preference:

- **Adopt Proposed Project:** If the BART Board chooses to adopt the Proposed Project utilizing Conventional BART technology, it can do so based on the certified EIR before June 30, 2018. This action would also be consistent with the SEP.
- **Adopt DMU Alternative or EMU Option:** If the BART Board prefers the DMU Alternative (with or without including the EMU Option), it can:
  - Certify the EIR and direct staff to bring the DMU Alternative/EMU Option back for further consideration following adoption of a revised INP by the City of Livermore.
  - Waive the SEP requirement for the INP, certify the EIR and adopt the DMU Alternative/EMU Option before June 30, 2018.
  - Certify the EIR and adopt a recommendation that the DMU Alternative/EMU Option be given further consideration by the TVSJVRRRA. Action by the TVSJVRRRA would not require the City of Livermore to prepare an RDP since the TVSJVRRRA is not subject to BART's SEP.
- **Adopt Express Bus/BRT Alternative:** If the BART Board chooses to adopt the Express Bus/BRT Alternative, it can certify the EIR and adopt the Express Bus/BRT Alternative before June 30, 2018.
- **Adopt Enhanced Bus Alternative:** If the BART Board chooses to adopt the Enhanced Bus Alternative, it can certify the EIR and adopt the Enhanced Bus Alternative before June 30, 2018.
- **Not Certify EIR and Not Adopt any Project:** The BART Board may choose to not certify the EIR and to not adopt any project. The Board may make a recommendation for further consideration by BART and/or the TVSJVRRRA.
- **Certify EIR and Not Adopt any Project:** The BART Board may choose to certify the EIR but not to adopt any project. The Board may direct staff to bring the Proposed Project or a Build Alternative back for further consideration at a later date, or may adopt a recommendation that the Proposed Project or a Build Alternative be given further consideration by the TVSJVRRRA.

Before the Board could adopt the Proposed Project or any of the Build Alternatives, Findings, Statement of Overriding Considerations, and MMRP must be prepared for the project being adopted. No Findings, Statement of Overriding Considerations or MMRP would be necessary if the BART Board does not adopt a project.

## 2. Summary of Project Objectives and Performance Metrics for Proposed Project and Alternatives

Performance metrics for the BART to Livermore Extension Project are summarized below and will be taken into consideration by the BART Board when deciding whether to adopt the Proposed Project or one of the Build Alternatives. For more information, see the Proposed Project and Build Alternatives Evaluation Report (Evaluation Report), provided as a link on the project website at: <https://www.bart.gov/about/projects/liv>.

### a. Project Goals/Objectives and Overall Performance

The Evaluation Report assesses how well the Proposed Project and Build Alternatives implement the goals/objectives identified in the Draft EIR. The objectives are as follows:

- 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 MTC, 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 TOD 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.

Table 1-1 shows how well the Proposed Project and Build Alternatives meet the goals and objectives identified in the Draft EIR, followed by a summary of the Proposed Project and Build Alternatives' performance. The first goal from the Draft EIR is expressed in two parts to differentiate between (1) cost-effectiveness and (2) intermodal connectivity to the inter-regional rail network and PDAs.

- The Proposed Project and the Express Bus/BRT Alternative perform better than the other alternatives. The Proposed Project, which has the highest ridership projections, would result in the greatest number of benefits, such as reductions in regional vehicle miles traveled (VMT) and GHG emissions.
- The DMU Alternative/EMU Option has lower benefits than those of the Proposed Project, but higher benefits—such as improved transit travel time, increased transit ridership, and reduced regional VMT—than the two bus alternatives. However, the cost of the DMU Alternative is comparable to the Proposed Project.

**TABLE 1-1 ASSESSMENT OF PROJECT GOALS AND OBJECTIVES**

Project Goals and Objectives	Proposed Project - (Conventional BART)	DMU Alternative	EMU Option	Express Bus/BRT Alternative	Enhanced Bus Alternative
Link existing BART, inter-regional rail, Priority Development Areas (Isabel, Downtown, East Side)					
Create TOD opportunities					
Provide alternative to I-580 congestion					
Improve air quality, reduce GHGs					
High                  Medium-high                  Medium                  Medium-low                  Low					

- The Express Bus/BRT Alternative performs better than the Proposed Project for the cost-effectiveness and financial capacity measures, but generally worse for the other measures.
- The Enhanced Bus Alternative performs equal to or worse than the Express Bus/BRT Alternative for all measures.

**b. Performance Metrics**

A more detailed discussion of the five performance metrics shown in Table 1-1 is provided below.

**(1) Provide a Cost-Effective Link**

This goal is focused on the affordability and effectiveness for BART to provide new service. Systemwide boardings represent ridership, an important component of cost-

effective service. To evaluate affordability, the total capital cost, operations and maintenance (O&M) costs, farebox recovery, and lifecycle costs for the Proposed Project and Build Alternatives were analyzed and rated.

Capital costs are provided primarily in year of expenditure dollars (YOES); that is, inflating current costs to the estimated midpoint of construction of each Build Alternative. Values in 2016 dollars are provided in parenthesis. O&M costs only are provided in 2016 dollars.

- **Conventional BART Project — Medium.** The Proposed Project would have an estimated capital cost of YOES \$1.635 billion (\$1.329 billion in 2016 dollars), annual O&M costs of \$22.8 million in 2016 dollars, and would generate 11,900 net new weekday BART boardings in 2040. The Proposed Project would thus be the most expensive option, but would also attract the greatest number of riders. It would have a farebox recovery rate of 88% and a total cost per boarding of \$20.56. The Proposed Project rates medium because its higher ridership is offset by high costs, making it less cost-effective than the Express Bus/BRT Alternative.
- **DMU Alternative/EMU Option — Low-Medium.** The DMU Alternative would have an estimated capital cost of YOES \$1.599 billion (\$1.353 billion in 2016 dollars), annual O&M costs of \$16.8 million in 2016 dollars (74% of the Proposed Project's O&M cost), and would generate 7,000 net new weekday BART boardings in 2040. The DMU Alternative would have a farebox recovery rate of 72% and a total cost per boarding of \$30.60. The EMU Option would have a slightly higher capital cost of YOES \$1.665 billion (2016 \$1.353 billion) due to the additional electrical infrastructure (catenary system and wayside facilities), but a slightly lower annual O&M cost of \$16.6 million. It would have a farebox recovery rate of 73% and a total cost per boarding of \$31.33. The DMU Alternative/EMU Option rates as low-medium because it has similar costs as the Proposed Project, but would attract fewer users and would not be as cost-effective in comparison.
- **Express Bus / BRT Alternative — Medium-High.** The Express Bus/BRT Alternative would have an estimated capital cost of YOES \$367 million (\$305 million in 2016 dollars), annual O&M costs of \$3 million in 2016 dollars (13% of the Proposed Project's O&M cost), and would generate 3,500 net new weekday BART boardings in 2040. The Express Bus/BRT Alternative would have a farebox recovery rate of 196% and a total cost per boarding of \$14.11. The Express Bus/BRT Alternative rates as medium-high because it is the most affordable and effective option that would attract any significant number of passengers.
- **Enhanced Bus Alternative — Medium.** The Enhanced Bus Alternative would have an estimated capital cost of YOES \$25 million (\$21 million in 2016 dollars), annual O&M costs of \$1.7 million in 2016 dollars (7% of the Proposed Project's O&M cost), and would generate 400 net new weekday BART boardings in 2040. The Enhanced Bus Alternative would have a farebox recovery rate of 42% and a total cost per

boarding of \$21.24. The Enhanced Bus Alternative rates as medium under this goal because it is the most affordable option, but would attract a low number of additional users to BART.

**(2) Provide an Intermodal Link Between BART, Inter-Regional Rail and Priority Development Areas**

To evaluate this goal, transit travel times to and from key origins and destinations under the Proposed Project and Build Alternatives were calculated, and the regional gap closure was evaluated qualitatively.<sup>2</sup> All transit time estimates are for the year 2040 and are compared to the No Project Conditions in 2040.

The Proposed Project and all Build Alternatives make transit travel time improvements to PDAs in Livermore. There are three PDAs in Livermore: Livermore Isabel Avenue BART Station PDA, Livermore Downtown PDA, and Livermore East Side PDA (east of Vasco Road). PDAs are transit-accessible areas designated by municipalities for growth and are used by the regional Plan Bay Area to allocate planned future growth.

It should also be noted that the Livermore Isabel Avenue BART Station PDA is a 'Potential PDA', which is defined as a PDA that needs assistance with site specific planning, such as a specific plan that has been adopted by a city council. As discussed above, the INP is a specific plan adopted by the City of Livermore, consistent with BART's SEP, which will take effect if BART adopts the Proposed Project with Conventional BART technology. For purposes of evaluating the DMU Alternative/EMU Option, it is assumed that the City would adopt a modified INP, consistent with the SEP. The INP would not be implemented under the Express Bus/BRT Alternative or Enhanced Bus Alternative and therefore this PDA would remain as a 'Potential PDA' under those alternatives.

Livermore Amador Valley Transit Authority (LAVTA) express, Rapid, and local routes currently connect ACE stations to the Dublin/Pleasanton and West Dublin/Pleasanton BART stations. The Proposed Project and Build Alternatives improve marginally on these connections with more frequent express bus service. Only the Proposed Project was rated as medium for providing the best transit connections in terms of travel time to Livermore destinations. Neither the Proposed Project nor any of the Build Alternatives provide a rail connection to ACE, and therefore do not close this regional transportation gap.

- **Conventional BART Project — Medium.** The Proposed Project would link the existing BART system to the Livermore Isabel Avenue/BART Station PDA. As a result of the Proposed Project, transit travel times would improve from the Livermore Isabel Avenue BART Station PDA to Downtown San Francisco (from 80

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<sup>2</sup> For travel times estimations, it was assumed that travelers used the fastest transit option (bus or train) for all legs of their total trip.

minutes to 57 minutes) and from the Livermore Downtown PDA to Downtown San Francisco (from 90 minutes to 71 minutes). However, it does not provide a rail connection to ACE and therefore does not close this regional transportation gap. For these reasons, the Proposed Project rates medium under this goal.

- **DMU Alternative/EMU Option — Low-Medium.** The DMU Alternative//EMU Option would link the existing BART system to the Livermore Isabel Avenue/BART Station PDA, with a transfer required. As a result of the DMU Alternative/EMU Option, transit travel times would improve from the Livermore Isabel Avenue BART Station PDA to Downtown San Francisco (from 80 minutes to 60 minutes) and from the Livermore Downtown PDA to Downtown San Francisco (from 90 minutes to 74 minutes), though travel times savings would be less than with the Proposed Project. Similar to the Proposed Project, it does not provide a rail connection to ACE and does not close this regional transportation gap. For these reasons, the DMU Alternative/EMU Option is rated low-medium under this goal.
- **Express Bus/BRT Alternative — Low-Medium.** The INP would not be implemented under the Express Bus/BRT Alternative. As a result of the Express Bus/BRT Alternative, transit travel times would improve from the Livermore Isabel Avenue BART Station PDA to Downtown San Francisco (from 80 minutes to 66 minutes) and from the Livermore Downtown PDA to Downtown San Francisco (from 90 minutes to 74 minutes), but would not improve as much as with either the Proposed Project or the DMU Alternative/EMU Option. Similar to the Proposed Project and other Build Alternatives, it does not provide a rail connection to ACE and therefore does not close this regional transportation gap. For these reasons, the Express Bus/BRT Alternative is rated low-medium under this goal.
- **Enhanced Bus Alternative — Low.** The INP would not be implemented under the Enhanced Bus Alternative. However, as a result of the Enhanced Bus Alternative, transit travel times would improve from the Livermore Isabel Avenue BART Station PDA to Downtown San Francisco (from 80 minutes to 71 minutes). Travel times from the Livermore Downtown PDA to Downtown San Francisco would not change under the Enhanced Bus Alternative (remaining at 90 minutes), However, travel times would not improve as much as with the Proposed Project or other Build Alternatives. Similar to the Proposed Project and the other Build Alternatives, it does not provide a rail connection to ACE and therefore does not close this regional transportation gap. For these reasons, the Enhanced Bus Alternative is rated low under this goal.

### (3) Support Integrating Transit and Land Use Policies to Create Transit-Oriented Development Opportunities

To measure how well the Proposed Project and each Build Alternative contributes to TOD opportunities, the single metric of land use policy and plans was employed. Plans that were reviewed included the following:

- Isabel Neighborhood Plan (draft)
- Livermore General Plan
- Livermore Downtown Specific Plan
- Plan Bay Area

The Livermore Isabel Avenue BART Station PDA and Livermore Downtown PDA are addressed in the proposed INP and Downtown Specific Plan, respectively, while there is no specific plan underway for the redevelopment of the Livermore East Side PDA.

- **Proposed Project — Medium-High.** The plan that would most significantly create TOD opportunities in association with the Proposed Project is the INP. This plan proposes zoning the area around the Isabel Station to increase development density, encourage mixed-use development, and enhance the transit-oriented character of the area. However, even with the INP implemented, the development will not result in the level of densities observable at many other BART stations (e.g., Downtown Oakland and Downtown Berkeley). While the Livermore Downtown Specific Plan encourages strengthening Livermore’s downtown through redevelopment as a mix of uses including housing, it is not particularly relevant to the Proposed Project, given that rail will not be extended to Downtown Livermore. For these reasons, a medium-high rating is given to the Proposed Project for land use plans and policies.
- **DMU Alternative/EMU Option — Medium.** As discussed above, the INP is proposed specifically for a conventional BART extension. The City of Livermore would need to reassess the INP and potentially conduct a new planning process to prepare a revised INP for the DMU Alternative/EMU Option. For this reason, a medium rating is given to the DMU Alternative/EMU Option for the land use plans and policies.
- **Express Bus/BRT Alternative — Low-Medium.** The INP would not be implemented in association with the Express Bus/BRT Alternative, as the INP is intended for buildout around a future rail station. Therefore, the most relevant plan is the Downtown Specific Plan. The Downtown Specific Plan encourages strengthening Livermore’s downtown through redevelopment as a mix of uses including housing. It is debatable whether this alternative’s improvements to bus routes accessing the Livermore Transit Center and ACE station will create TOD

opportunities. For this reason, the Express Bus/BRT Alternative is rated low-medium.

- **Enhanced Bus Alternative — Low-Medium.** The INP would not be implemented in association with the Enhanced Bus Alternative, as the INP is intended for buildout around a future rail station. For this reason, the Enhanced Bus Alternative is rated low-medium.

#### (4) Provide Alternative to I-580 Congestion

This goal is not intended to directly alleviate congestion experienced by drivers on I-580 itself. Rather, the following summary discusses the degree to which the Proposed Project and Build Alternatives provide an effective, time-efficient commute alternative to driving on I-580, and the resulting reduction in VMT. Commuters' decision to drive or take transit is predicated on a variety of factors, including: parking fees and availability at destination; bridge tolls; commute length uncertainty due to varying degrees of congestion, accidents, or construction; and perceived quality of the experience on either commute mode (e.g., stress of driving under congested conditions, availability or lack of availability of seats on train). Besides reduction in VMT, the metric used to measure the alternatives' performance under this goal is how much each alternative reduced transit travel time between key destinations (thereby making transit a more attractive alternative to driving). Under the No Project Alternative in 2040, the transit travel time between Downtown Livermore and Downtown San Francisco would be 90 minutes. The Proposed Project, DMU Alternative/EMU Option, and Express Bus/BRT Alternative would all offer significantly faster transit travel times.

- **Proposed Project — Medium-High.** The Proposed Project would offer the fastest transit travel time between Downtown Livermore and Downtown San Francisco (71 minutes), which is faster than the 74 minutes required to drive the same distance during the AM peak period under No Project Conditions in 2040. The Proposed Project would also reduce regional VMT by 244,000 per weekday in 2040. For this reason, it rates as medium-high.
- **DMU Alternative/EMU Option — Medium.** The DMU Alternative / EMU Option would provide a transit travel time of 74 minutes between Downtown Livermore and Downtown San Francisco (3 minutes longer than the Proposed Project). It would reduce regional VMT by 140,600 per day in 2040 (103,400 less than the Proposed Project). The DMU Alternative/EMU Option performs worse than the Proposed Project, but better than the other Build Alternatives. For this reason, it rates as medium.
- **Express Bus/BRT Alternative — Low-Medium.** The Express Bus/BRT Alternative would provide a transit travel time of 74 minutes between Downtown Livermore and Downtown San Francisco (identical to the DMU Alternative/EMU Option). It

would reduce regional VMT by 92,600 per day in 2040 (151,400 less than the Proposed Project and 48,000 less than the DMU Alternative/EMU Option), and thus rates as low-medium.

- **Enhanced Bus Alternative — Low.** The Enhanced Bus Alternative performs significantly worse than the Proposed Project and other Build Alternatives, with a travel time of 90 minutes between Downtown Livermore and Downtown San Francisco and a regional weekday VMT reduction of 6,500 per day in 2040 (237,500 less than the Proposed Project). It rates as low.

#### (5) Improve Air Quality, Reduce Greenhouse Gas Emissions

The following summarizes how the Proposed Project and Build Alternatives would improve air quality and reduce GHGs. As there is a strong correlation between VMT reduction and improvement in air quality with GHG reductions, VMT reductions are also included below as contributing to this goal.

- **Conventional BART Project — Medium-High.** In 2040, the Proposed Project would reduce GHG emissions by 11,200 metric tons of carbon dioxide equivalent (CO<sub>2</sub>e) per year and would reduce regional VMT by 244,000 per day. The Proposed Project would also result in net reductions in emissions for fine particulate matter (PM<sub>2.5</sub>) and respirable particulate matter (PM<sub>10</sub>). While reactive organic gas (ROG) and nitrogen oxide (NO<sub>x</sub>) emissions would increase due to increased feeder bus services, they would not exceed the threshold of significance. For these reasons, the Proposed Project rates medium-high under this goal.
- **DMU Alternative — Medium.** In 2040, the DMU Alternative would reduce GHG emissions by 3,500 metric tons of CO<sub>2</sub>e per year and would reduce regional VMT by 140,600 per day. The EMU Option would remove an additional 2,500 metric tons of CO<sub>2</sub>e per year because of cleaner vehicle technology. The DMU Alternative/EMU Option would also result in reductions in PM<sub>2.5</sub> and PM<sub>10</sub> compared to the No Project Alternative, although the reductions would be less substantial than under the Proposed Project. While ROG and NO<sub>x</sub> emissions would increase due to increased feeder bus services, they would not exceed the threshold of significance. For these reasons, the DMU Alternative/EMU Option rates medium.
- **Express Bus/BRT Alternative — Medium.** In 2040, the Express Bus/BRT Alternative would reduce GHG emissions by 3,700 metric tons of CO<sub>2</sub>e per year and would reduce regional VMT by 92,600 per day. This reduction is significantly less than under the Proposed Project.

The Express Bus/BRT Alternative would result in reductions in ROG, PM<sub>2.5</sub>, and PM<sub>10</sub>, and an increase in NO<sub>x</sub>. The two bus alternatives are the only ones that would result in a reduction in ROG; the Proposed Project and DMU Alternative would result in increases in ROG. However, the Express Bus/BRT Alternative would result

in smaller PM<sub>2.5</sub> and PM<sub>10</sub> reductions compared to the Proposed Project and in an increase in NO<sub>x</sub> compared to the Proposed Project. For these reasons, the Express Bus/BRT Alternative rates medium.

- **Enhanced Bus Alternative — Low.** The Enhanced Bus Alternative would not reduce GHG emissions and would result in very limited VMT reduction compared to the Proposed Project and the other Build Alternatives.

The Enhanced Bus Alternative would result in reductions in ROG, PM<sub>2.5</sub>, and PM<sub>10</sub>, and in an increase in NO<sub>x</sub>. The two bus alternatives are the only ones that would result in a reduction in ROG; the Proposed Project and DMU Alternative would result in increases in ROG. However, the Enhanced Bus Alternative would result in much smaller PM<sub>2.5</sub> and PM<sub>10</sub> reductions compared to the Proposed Project and in an increase in NO<sub>x</sub> compared to the Proposed Project. For these reasons, the Enhanced Bus Alternative rates low.

## D. DOCUMENT ORGANIZATION

This RTC document consists of the following chapters:

- **Chapter 1: Introduction.** This chapter discusses the purpose and organization of this RTC document and the Final EIR and summarizes the environmental review process for the Proposed Project and Alternatives.
- **Chapter 2: List of Commenters.** This chapter contains a list of agencies, organizations, and individuals who submitted written or verbal comments on the Draft EIR during the public review period.
- **Chapter 3: Master Responses.** This chapter contains more detailed responses to comments that were raised on multiple occasions and that warrant a single comprehensive response. Master Responses are included to address the following issues:
  - Master Response 1: Funding for the BART to Livermore Extension Project and Livermore's Contribution
  - Master Response 2: Applicability of BART's System Expansion Policy to the Livermore Extension
  - Master Response 3: Coordination with the City of Livermore and the Isabel Neighborhood Plan Process
  - Master Response 4: Extension to Greenville
  - Master Response 5: Storage and Maintenance Facility – Need, Size and Capacity, and Cost and Cost Allocation

- Master Response 6: Storage and Maintenance Facility Location and Alternative Sites
- Master Response 7: Storage and Maintenance Facility Impacts
- Master Response 8: Effects of the Livermore Extension on the BART System
- Master Response 9: Dublin/Pleasanton Station Parking Expansion
- Master Response 10: Assembly Bill 758 and the Tri-Valley-San Joaquin Valley Regional Rail Authority
- Master Response 11: ACE and the ACEforward Program
- **Chapter 4: Comments and Responses.** This chapter contains reproductions of CEQA-related written comments received on the Draft EIR as well as transcripts of the verbal comments provided at the public hearings. A written response is provided for each CEQA-related comment received. Each response is keyed to the respective comment.
- **Chapter 5: Draft EIR Revisions.** Revisions to the Draft EIR that are necessary based on the comments received, or necessary to amend or clarify material in the Draft EIR, are contained in this chapter. Text with double underline represents language that has been added to the Draft EIR; text with ~~strikeout~~ has been deleted from the Draft EIR. Revisions to figures and tables are also provided, where necessary.
- **Appendix A: Non-CEQA-Related Comments.** This appendix contains comments on the Draft EIR that express a preference for one alternative versus another, but that do not raise environmental concerns or questions about the Draft EIR.
- **Appendix B: Revised Draft EIR Appendices.** This appendix contains two appendices from the Draft EIR that have been revised in response to comments or due to staff-initiated text changes.
- **Appendix C: Attachment to Comment Letter.** This appendix contains an attachment provided with a comment letter that is not included in Chapter 4.