

Exhibit A

## Appendix A

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Notice of Preparation (NOP) and NOP Responses



**NOTICE OF PREPARATION of an  
ENVIRONMENTAL IMPACT REPORT  
CITY OF SAN LEANDRO**

**Date:** March 3, 2017

**To:** State Clearinghouse  
State Responsible Agencies  
State Trustee Agencies  
Other Public Agencies  
Interested Organizations

**From:** Tom Liao  
Deputy Community Development Director  
City of San Leandro  
835 East 14<sup>th</sup> Street  
San Leandro, CA 94577

**Subject:** Notice of Preparation (NOP) of a Draft Environmental Impact Report for the Bay Fair TOD Specific Plan

**Lead Agency/Sponsor:** City of San Leandro Community Development Department

**Project Title:** Bay Fair Transit-Oriented Development (TOD) Specific Plan

Pursuant to the California Environmental Quality Act (CEQA) Guidelines, Chapter 14 California Code of Regulations, Section 15378[a], the proposed Bay Fair TOD Specific Plan is considered a “Project” subject to environmental review as its implementation is “an action [undertaken by a public agency] which has the potential for resulting in either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment.” The City of San Leandro, acting as the Lead Agency, has determined that the Bay Fair TOD Specific Plan, herein referred to as “Specific Plan,” could result in potentially significant environmental impacts and that an EIR will be required.

This NOP has been prepared for the EIR for the proposed Specific Plan in compliance with Section 15082 of the CEQA Guidelines. The City is soliciting comments on the scope and content of the EIR. Consistent with Section 15168 of the CEQA Guidelines, the City will prepare an EIR to address the environmental impacts associated with the proposed Specific Plan at a programmatic level. The proposed Specific Plan consists of a long-term plan that will be implemented over time in the Plan Area. No specific development projects are proposed as part of this plan. However, the program EIR may serve to streamline future environmental review of subsequent projects within the Plan Area.

**SPECIFIC PLAN LOCATION**

San Leandro is centrally located in Alameda County in the East Bay. The city is generally bound by the cities of Oakland to the north, Castro Valley to the east, Hayward to the south, as well as unincorporated Alameda County. The city is accessed by Interstates 580 (I-580) and 880 (I- 880).

The attached figure shows the Specific Plan Area within San Leandro. The Specific Plan Area encompasses 154 acres and is generally bound by E. 14 Street to the northeast, Hesperian Boulevard to the west, and the border between the City and unincorporated Alameda County to the south and southeast. The Plan Area also includes the Bay Fair BART station and parking lots.

## **SPECIFIC PLAN BACKGROUND AND DESCRIPTION**

The City of San Leandro 2035 General Plan (adopted September 2016) designates the Plan Area as “Bay Fair Transit Oriented Development.” According to the 2035 General Plan Land Use Element, the intent of this designation is to “create a new vision for this area, including retail, office, higher density housing, open space, and public land uses. A more urban development form is envisioned, with pedestrian-scaled streets and an orientation toward BART access and transit use.” Under Government Code Section 65450 et seq., a specific plan implements, and must be consistent with, the governing general plan. However, a specific plan is a separate document from the general plan and contains a greater degree of detail, including functions of zoning, land use regulations, design standards, and capital improvement plans. The proposed Specific Plan would implement the vision for the Plan Area established in the City’s 2035 General Plan.

The proposed Specific Plan provides a vision for a sustainable, vibrant, and safe transit-oriented village with a diversity of land uses serving local and regional populations. It will include goals and policies related to land use, circulation, infrastructure, and design to fulfill the vision for the Plan Area. The Specific Plan would also establish uses and development standards for the Plan Area.

For the purposes of the environmental analysis, a reasonable and conservative estimate of buildout associated with the proposed Specific Plan through 2035 would include development of 2,540 housing units and 300,000 square feet of office space, as well as the removal of an estimated 161,000 square feet of retail space. These buildout estimates are consistent with the Specific Plan’s planning concepts and regulations, as well as with economic analysis of anticipated development in the area, and past development activity seen in other nearby TOD areas such as Downtown San Leandro. Under CEQA Guidelines Section 15206(b)(2)(A), the proposed Specific Plan is classified as a project of “regional significance” because it includes more than 500 housing units.

More information about the Specific Plan is available on the City’s website:  
<http://sanleandro.org/depts/cd/bftod>.

## **PUBLIC AGENCY APPROVALS**

The proposed Specific Plan would require adoption by the San Leandro City Council. The Planning Commission and other decision-making bodies would review the proposed Specific Plan and make recommendations to City Council. While other agencies may be consulted during the plan development process, their approval is not required for Specific Plan adoption. However, subsequent development under the Specific Plan may require approval of State, federal and responsible trustee agencies that may rely on the programmatic EIR for decisions in their areas of expertise.

## **ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED**

The proposed Specific Plan could potentially affect the following environmental factors and each will be addressed in the EIR:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources

- Geology/Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services, Schools, and Recreation
- Transportation and Traffic
- Utilities and Service Systems

The following topics are likely to be associated with less-than-significant impacts and are not expected to be evaluated in detail in the EIR:

- Agriculture and Forestry Resources
- Mineral Resources

#### **COMMENTS ON THE NOP**

Members of the public and public agencies are invited to provide comments in writing as to the scope and content of the EIR. The City needs to know the views of your agency as to the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with the proposed Specific Plan. Your agency will need to use the EIR prepared by the City when considering your permits or other approvals for the Specific Plan.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date, but no later than the close of the 30-day NOP review period at 5:00 p.m. on Monday, April 3, 2017.

Please send your comments to Tom Liao, Deputy Community Development Director, at the address shown above or email to [tliao@sanleandro.org](mailto:tliao@sanleandro.org) with "Bay Fair TOD Specific Plan NOP" as the subject. If you are commenting on behalf of an agency or organization, please include a contact person.

#### **SCOPING MEETING**

A Scoping Meeting will be held by the Planning Commission on Thursday, March 16, 2017 at 7:00 p.m. in the City Council Chambers at San Leandro City Hall (835 E. 14th Street, San Leandro).

Signature:



Name: Tom Liao, Deputy Community Development Director

Figure 1: Plan Area Location





STATE OF CALIFORNIA  
GOVERNOR'S OFFICE of PLANNING AND RESEARCH  
STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.  
GOVERNOR



KEN ALEX  
DIRECTOR

**Notice of Preparation**

March 2, 2017

To: Reviewing Agencies  
Re: Bay Fair Transit-Oriented Development (TOD) Specific Plan  
SCH# 2017032016

Attached for your review and comment is the Notice of Preparation (NOP) for the Bay Fair Transit-Oriented Development (TOD) Specific Plan draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Tom Liao  
City of San Leandro  
835 East 14th Street  
San Leandro, CA 94577

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan  
Director, State Clearinghouse

Attachments  
cc: Lead Agency

**Document Details Report**  
**State Clearinghouse Data Base**

<b>SCH#</b>	2017032016		
<b>Project Title</b>	Bay Fair Transit-Oriented Development (TOD) Specific Plan		
<b>Lead Agency</b>	San Leandro, City of		
<b>Type</b>	<b>NOP</b> Notice of Preparation		
<b>Description</b>	The proposed specific plan provides a vision for a sustainable, vibrant, and safe transit-oriented village with a diversity of land uses serving local and regional populations. It will include goals and policies related to land use, circulation, infrastructure and design to fulfill the vision for the Plan Area. The specific plan would also establish uses and development standards for the Plan Area. For the purposes of the environmental analysis, a reasonable and conservative estimate of buildout associated with the proposed Specific Plan through 2035 would include development of 2,540 housing units and 300,000 square feet of office space, as well as the removal of an estimated 161,000 square feet of retail space.		
<b>Lead Agency Contact</b>			
<b>Name</b>	Tom Liao		
<b>Agency</b>	City of San Leandro		
<b>Phone</b>	510-577-6003		
<b>email</b>			
<b>Address</b>	835 East 14th Street		
<b>City</b>	San Leandro		
	<b>Fax</b>		
	<b>State</b> CA <b>Zip</b> 94577		
<b>Project Location</b>			
<b>County</b>	Alameda		
<b>City</b>	San Leandro		
<b>Region</b>			
<b>Cross Streets</b>	E. 14th, Hesperian,		
<b>Lat / Long</b>			
<b>Parcel No.</b>			
<b>Township</b>	<b>Range</b>	<b>Section</b>	<b>Base</b>
<b>Proximity to:</b>			
<b>Highways</b>	880,238,-185		
<b>Airports</b>			
<b>Railways</b>			
<b>Waterways</b>	Estudio Canal		
<b>Schools</b>	SLeandroHs SLorenzo		
<b>Land Use</b>	Existing Commercial and residential/multiple/Bay Fair TOD		
<b>Project Issues</b>	Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Cumulative Effects; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Growth Inducing; Housing; Job Generation; Landuse; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Social; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife		
<b>Reviewing Agencies</b>	Resources Agency; Department of Parks and Recreation; Department of Water Resources; Department of Fish and Wildlife, Region 3; Department of Housing and Community Development; Office of Emergency Services, California; Native American Heritage Commission; Public Utilities Commission; California Highway Patrol; Caltrans, District 4; State Water Resources Control Board, Division of Drinking Water, District 4; Regional Water Quality Control Board, Region 2		

2017032016

## Notice of Completion &amp; Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613

For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # TBD

## Project Title: Bay Fair Transit-Oriented Development (TOD) Specific Plan

Lead Agency: City of San Leandro

Contact Person: Tom Liao

Mailing Address: 835 East 14th Street

Phone: 510-577-6003

City: San Leandro

Zip: 94577

County: Alameda

Project Location: County: Alameda

City/Nearest Community: San Leandro

Cross Streets: Generally bound by E. 14th, Hesperian, and City boundary Zip Code: \_\_\_\_\_

Longitude/Latitude (degrees, minutes and seconds): \_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ " N / \_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ " W Total Acres: \_\_\_\_\_

Assessor's Parcel No. Multiple

Section: \_\_\_\_\_ Twp: \_\_\_\_\_ Range: \_\_\_\_\_ Base: \_\_\_\_\_

Within 2 Miles: State Hwy #: 880, 238, SR-185

Waterways: Estudillo Canal

Airports: None

Railways: UPRR

Schools: SLeandroHS SLorenzoH

## Document Type:

CEQA:	<input checked="" type="checkbox"/> NOP	<input type="checkbox"/> Draft EIR	NEPA:	<input type="checkbox"/> NOI	Other:	<input type="checkbox"/> Joint Document
	<input type="checkbox"/> Early Cons	<input type="checkbox"/> Supplement/Subsequent EIR		<input type="checkbox"/> EA		<input type="checkbox"/> Final Document
	<input type="checkbox"/> Neg Dec	(Prior SCH No.) _____		<input type="checkbox"/> Draft EIS		<input type="checkbox"/> Other: _____
	<input type="checkbox"/> Mit Neg Dec	Other: _____		<input type="checkbox"/> FONSI		

## Local Action Type:

<input type="checkbox"/> General Plan Update	<input checked="" type="checkbox"/> Specific Plan	<input type="checkbox"/> Rezone MAR 02 2017	<input type="checkbox"/> Annexation
<input type="checkbox"/> General Plan Amendment	<input type="checkbox"/> Master Plan	<input type="checkbox"/> Prezone	<input type="checkbox"/> Redevelopment
<input type="checkbox"/> General Plan Element	<input type="checkbox"/> Planned Unit Development	<input type="checkbox"/> Use Permit	<input type="checkbox"/> Coastal Permit
<input type="checkbox"/> Community Plan	<input type="checkbox"/> Site Plan	<input type="checkbox"/> Land Division/Subdivision	<input type="checkbox"/> Other: _____

Governor's Office of Planning &amp; Research

STATE CLEARINGHOUSE

## Development Type:

<input checked="" type="checkbox"/> Residential: Units 2540	Acres _____	<input type="checkbox"/> Transportation: Type _____
<input checked="" type="checkbox"/> Office: Sq.ft. 300K	Acres _____	<input type="checkbox"/> Mining: Mineral _____
<input type="checkbox"/> Commercial: Sq.ft. _____	Acres _____	<input type="checkbox"/> Power: Type _____ MW _____
<input type="checkbox"/> Industrial: Sq.ft. _____	Acres _____	<input type="checkbox"/> Waste Treatment: Type _____ MGD _____
<input type="checkbox"/> Educational: _____		<input type="checkbox"/> Hazardous Waste: Type _____
<input type="checkbox"/> Recreational: _____		<input checked="" type="checkbox"/> Other: removal of 161,000 sf retail
<input type="checkbox"/> Water Facilities: Type _____	MGD _____	

## Project Issues Discussed in Document:

<input checked="" type="checkbox"/> Aesthetic/Visual	<input type="checkbox"/> Fiscal	<input checked="" type="checkbox"/> Recreation/Parks	<input checked="" type="checkbox"/> Vegetation
<input checked="" type="checkbox"/> Agricultural Land	<input checked="" type="checkbox"/> Flood Plain/Flooding	<input checked="" type="checkbox"/> Schools/Universities	<input checked="" type="checkbox"/> Water Quality
<input checked="" type="checkbox"/> Air Quality	<input checked="" type="checkbox"/> Forest Land/Fire Hazard	<input type="checkbox"/> Septic Systems	<input checked="" type="checkbox"/> Water Supply/Groundwater
<input checked="" type="checkbox"/> Archeological/Historical	<input checked="" type="checkbox"/> Geologic/Seismic	<input checked="" type="checkbox"/> Sewer Capacity	<input checked="" type="checkbox"/> Wetland/Riparian
<input checked="" type="checkbox"/> Biological Resources	<input checked="" type="checkbox"/> Minerals	<input checked="" type="checkbox"/> Soil Erosion/Compaction/Grading	<input checked="" type="checkbox"/> Growth Inducement
<input type="checkbox"/> Coastal Zone	<input checked="" type="checkbox"/> Noise	<input checked="" type="checkbox"/> Solid Waste	<input checked="" type="checkbox"/> Land Use
<input checked="" type="checkbox"/> Drainage/Absorption	<input checked="" type="checkbox"/> Population/Housing Balance	<input checked="" type="checkbox"/> Toxic/Hazardous	<input checked="" type="checkbox"/> Cumulative Effects
<input type="checkbox"/> Economic/Jobs	<input checked="" type="checkbox"/> Public Services/Facilities	<input checked="" type="checkbox"/> Traffic/Circulation	<input type="checkbox"/> Other: _____

## Present Land Use/Zoning/General Plan Designation:

Existing commercial and residential/multiple/Bay Fair TOD

## Project Description: (please use a separate page if necessary)

The proposed Specific Plan provides a vision for a sustainable, vibrant, and safe transit-oriented village with a diversity of land uses serving local and regional populations. It will include goals and policies related to land use, circulation, infrastructure, and design to fulfill the vision for the Plan Area. The Specific Plan would also establish uses and development standards for the Plan Area. For the purposes of the environmental analysis, a reasonable and conservative estimate of buildout associated with the proposed Specific Plan through 2035 would include development of 2,540 housing units and 300,000 square feet of office space, as well as the removal of an estimated 161,000 square feet of retail space.

### NOP Distribution List

Resources Agency  
Nadell Gayou

Dept. of Boating & Waterways  
Denise Peterson

California Coastal Commission  
Elizabeth A. Fuchs

Colorado River Board  
Lisa Johansen

Dept. of Conservation  
China Chan

California Energy Commission  
Eric Knight

Cal Fire  
Dan Foster

Central Valley Flood Protection Board  
James Herota

Office of Historic Preservation  
Ron Parsons

Dept of Parks & Recreation  
Environmental Stewardship Section

California Department of Resources, Recycling & Recovery  
Sue O'Leary

S.F. Bay Conservation & Dev't. Comm.  
Steve Goldbeck

Dept. of Water Resources Agency  
Nadell Gayou

Fish and Game  
Commisions.Boards

Dept. of Fish & Wildlife  
Scott Flint  
Environmental Services Division

Fish & Wildlife Region 1E  
Laurie Harnsberger

Fish & Wildlife Region 2  
Jeff Drongesen

Fish & Wildlife Region 3  
Craig Weightman

Fish & Wildlife Region 4  
Julie Vance

Fish & Wildlife Region 5  
Leslie Newton-Reed  
Habitat Conservation Program

Fish & Wildlife Region 6  
Tiffany Ellis  
Habitat Conservation Program

Fish & Wildlife Region 7/M  
Heidi Calvert  
Inyo/Mono, Habitat Conservation Program

Dept. of Fish & Wildlife M  
William Paznokas  
Maine Region

Other Departments  
Food & Agriculture  
Sandra Schubert  
Dept. of Food and Agriculture

Dept. of General Services  
Cathy Buck  
Environmental Services Section

Delta Stewardship Council  
Kevan Samsam

Housing & Comm. Dev.  
CEQA Coordinator  
Housing Policy Division

Independent Commissions.Boards  
Delta Protection Commission  
Erik Vink

Caltrans, District 8  
Mark Roberts

Caltrans, District 9  
Gayle Rosander

Caltrans, District 10  
Tom Dumas

Caltrans, District 11  
Jacob Armstrong

Caltrans, District 12  
Maureen El Harake

Santa Monica Bay Restoration  
Guangyu Wang

State Lands Commission  
Jennifer Deleong

Tahoe Regional Planning Agency (TRPA)  
Cherry Jacques

Cal State Transportation Agency CalSTA  
Aeronautics

Caltrans - Planning HQ LD-iGR  
Christian Bushong

California Highway Patrol  
Suzanne Keuchi  
Office of Special Projects

Dept. of Transportation  
Rex Jackman

State Water Resources Control Board  
Division of Financial Assistance  
Division of Water Quality  
Division of Water Resources Control  
Division of Drinking Water  
Div. Drinking Water # 04

State Water Resources Control Board  
Student Intern, 401 Water Quality Certification Unit  
Division of Water Quality

State Water Resources Control Board  
Phil Crader  
Division of Water Rights

Dept. of Toxic Substances Control  
CEQA Tracking Center

Caltrans, District 5  
Larry Newland

Caltrans, District 6  
Michael Navarro

Caltrans, District 7  
Dianna Watson

RWQCB 1  
Cathleen Hudson  
North Coast Region (1)

RWQCB 2  
Environmental Document Coordinator  
San Francisco Bay Region (2)

RWQCB 3  
Central Coast Region (3)

RWQCB 4  
Teresa Rodgers  
Los Angeles Region (4)

RWQCB 5S  
Central Valley Region (5)

RWQCB 5F  
Central Valley Region (5)  
Fresno Branch Office

RWQCB 5R  
Central Valley Region (5)  
Redding Branch Office

RWQCB 6  
Lahontan Region (6)

RWQCB 6V  
Lahontan Region (6)  
Victorville Branch Office

RWQCB 7  
Colorado River Basin Region (7)

RWQCB 8  
Santa Ana Region (8)

RWQCB 9  
San Diego Region (9)

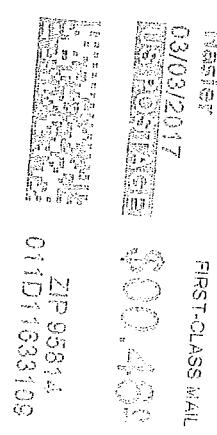
Other \_\_\_\_\_

Conservancy \_\_\_\_\_

*State of California*

Governor's Office of Planning and Research  
State Clearinghouse

P.O. Box 3044  
1400 Tenth Street  
Sacramento, California 95812-3044



845773382 0023

## Karly Kaufman

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**From:** Tom Liao <tomlliao@gmail.com>  
**Sent:** Thursday, March 30, 2017 7:32 PM  
**To:** Horvath, Cindy, CDA  
**Cc:** aaron welch; Stephanie Miller; Karly Kaufman; Josephine Fong  
**Subject:** Re: Alameda County comments on the Bay Fair BART TOD Specific Plan DEIR NOP

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Thanks for the comments Cindy. I am forwarding to the planning team and EIR consultants.

I'll try to call u next week as we had a bunch of folks from the unincorporated area come out to the NOP scoping meeting and plan update to planning commission two weeks ago.

On Mar 30, 2017, at 5:31 PM, Horvath, Cindy, CDA <[cindy.horvath@acgov.org](mailto:cindy.horvath@acgov.org)> wrote:

Dear Tom,

Thank you for the opportunity to comment on this Notice of Preparation (NOP) for the Draft Environmental Impact Report (DEIR) for the Bay Fair BART TOD Specific Plan. Although the Alameda County Planning Department has been engaged through participation on the Technical Advisory Committee (TAC) for this project, we offer the following comments for the consultant team to consider in their analysis.

- Recorded comments from TAC and CAC meetings mention that *Bus Rapid Transit (BRT) on East 14th Street by Bayfair Center "may need to be revisited"*, and, *"ACTC discourages a center-running lane due to pedestrian and cyclist access and safety, but called for bus queue-jumping locations."* These comments may influence the potential environmental impacts that are considered under various scenarios identified for this corridor. The Ashland Cherryland Business District Specific Plan (ACBD-SP) policy 8.5.2 states that we will "Explore the feasibility of Bus Rapid Transit". We also have policies that encourage improved pedestrian and bicycling connections and facilities. Please evaluate both center-line and other BRT lane configurations in the Plan area adjacent to unincorporated E.14th Street in Ashland, including any conflicts between the various modal types.
- There are alternatives proposed that identify the need for improved connections and circulation between the BART and Mall property and the adjacent neighborhoods, by creating new internal roads/connections and re-configuring various intersections within the BART and Mall property and the the Study Area. Please include an evaluation of potential traffic impacts to the unincorporated neighborhoods located adjacent to the Bay Fair BART and Mall property (Study Area) where these improvements are proposed.

We look forward to continued participation as this project moves forward. Please do not hesitate to contact me if you have questions about these comments.

Warm regards,

Cindy Horvarth

**Cindy Horvath** | Senior Transportation Planner  
Staff, Airport Land Use Commission

**ALAMEDA COUNTY • Community Development Agency**  
224 W. Winton Avenue, Suite 111 • Hayward, CA 94544

**510.670.6511 | [cindy.horvath@acgov.org](mailto:cindy.horvath@acgov.org) | [www.acgov.org/cda](http://www.acgov.org/cda) | <http://www.acgov.org/cda/planning/generalplans/airportlandplans.htm>**

**CONFIDENTIALITY NOTICE:** \*Please note that any and all communication in this email is subject to public review under the provisions of the California Public Records Act, Government Code Sections 6250-6276.48.\* This e-mail message including attachments, if any, is intended only for the person(s) or entity(ies) to which it is addressed and may contain confidential and /or privileged material. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.



Friday, April 07, 2017

Tom Liao  
Deputy Community Development Director  
Community Development Department  
City of San Leandro  
835 East 14<sup>th</sup> Street  
San Leandro, CA 94577

**SUBJECT:** Response to the Notice of Preparation of an Environmental Impact Report for the Bay Fair Transit-Oriented Development Specific Plan

Dear Mr. Liao,

Thank you for the opportunity to comment on the Notice of Preparation of the Environmental Impact Report (DEIR) for the Bay Fair Transit-Oriented Development Specific Plan. The 154-acre project site contains the City of San Leandro's currently existing Bay Fair shopping center as well as the Bay Fair BART station and parking facility. It is bounded by E. 14<sup>th</sup> Street to the northeast, Hesperian Boulevard to the west, and the San Leandro city border with unincorporated Alameda County to the south and southeast. The project site currently consists of 161,000 of retail space, which the plan calls to be replaced with 2,540 housing units and 300,000 square feet of office space.

The Alameda County Transportation Commission (Alameda CTC) respectfully submits the following comments:

**Basis for Congestion Management Program Review**

- It appears that the proposed project will generate at least 100 p.m. peak hour trips over existing conditions, and therefore the Congestion Management Program (CMP) Land Use Analysis Program requires the City to conduct a transportation impact analysis of the project. For information on the CMP, please visit: [http://www.alamedactc.org/app\\_pages/view/5224](http://www.alamedactc.org/app_pages/view/5224)

**Use of Countywide Travel Demand Model**

- The Alameda Countywide Travel Demand Model should be used for CMP Land Use Analysis purposes. The CMP was amended on March 26<sup>th</sup>, 1998 so that local jurisdictions are responsible for conducting travel model runs themselves or through a consultant. The City of San Leandro and the Alameda CTC signed a Countywide Model Agreement on April 1, 2008. Before the model can be used for this project, a letter must be submitted to the Alameda CTC requesting use of the model and describing the project. A copy of a sample letter agreement is available upon request. The most current version of the Alameda CTC Countywide Travel Demand Model is the December 2015 update.

## Impacts

- The DEIR should address all potential impacts of the project on the Metropolitan Transportation System (MTS) roadway network.
  - MTS roadway facilities in the project area include Interstate 580, Interstate 238, Interstate 880, E. 14<sup>th</sup> Street (SR 185); Hesperian Blvd; Washington Ave.; and E. Lewelling Blvd.
  - For the purposes of CMP Land Use Analysis, the Highway Capacity Manual 2010 freeway and urban streets methodologies are the preferred methodologies to study vehicle delay impacts.
  - The Alameda CTC has *not* adopted any policy for determining a threshold of significance for Level of Service for the Land Use Analysis Program of the CMP. Professional judgment should be applied to determine the significance of project impacts (Please see chapter 6 of 2015 CMP for more information).
- The DEIR should address potential impacts of the project on Metropolitan Transportation System (MTS) transit operators.
  - MTS transit operators potentially affected by the project include BART and AC Transit
  - Transit impacts for consideration include the effects of project vehicle traffic on mixed flow transit operations, transit capacity, transit access/egress, need for future transit service, and consistency with adopted plans. See Appendix J of the 2015 CMP document for more details.
- The DEIR should address potential impacts of the project to cyclists on the Countywide Bicycle Network.
  - Bicycle related impacts to consider include effects of vehicle traffic on bicyclist conditions, site development and roadway improvements, and consistency with adopted plans. See Appendix J of the 2015 CMP document for more details.
- The DEIR should address potential impacts of the project to pedestrians in Pedestrian Plan Areas of Countywide Significance.
  - The plan should consider pedestrian access to the Bay Fair BART station
  - Pedestrian related impacts to consider include effects of vehicle traffic on pedestrian conditions, site development and roadway improvements, and consistency with adopted plans. See Appendix J of the 2015 CMP document for more details.

## Mitigation Measures

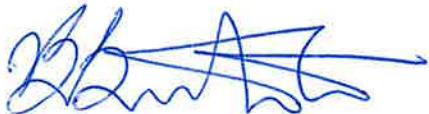
- Alameda CTC policy regarding mitigation measures is that to be considered adequate they must be:
  - Adequate to sustain CMP roadway and transit service standards;
  - Fully funded; and
  - Consistent with project funding priorities established in the Capital Improvement Program of the CMP, the Countywide Transportation Plan (CTP), and the Regional Transportation Plan (RTP) or the federal Transportation Improvement Program, if the agency relies on state or federal funds programmed by Alameda CTC.
- The DEIR should discuss the adequacy of proposed mitigation measure according to the criteria above. In particular, the DEIR should detail when proposed roadway or transit route improvements are expected to be completed, how they will be funded, and the effect on service standards if only

the funded portions of these mitigation measures are built prior to Project completion. The DEIR should also address the issue of transit funding as a mitigation measure in the context of the Alameda CTC mitigation measure criteria discussed above.

- Jurisdictions are encouraged to discuss multimodal tradeoffs associated with mitigation measures that involve changes in roadway geometry, intersection control, or other changes to the transportation network. This analysis should identify whether the mitigation will result in an improvement, degradation, or no change in conditions for automobiles, transit, bicyclists, and pedestrians. The HCM 2010 MMLOS methodology is encouraged as a tool to evaluate these tradeoffs, but project sponsors may use other methodologies as appropriate for particular contexts or types of mitigations.
- The DEIR should consider the use of TDM measures, in conjunction with roadway and transit improvements, as a means of attaining acceptable levels of service. Whenever possible, mechanisms that encourage ridesharing, flextime, transit, bicycling, telecommuting and other means of reducing peak hour traffic trips should be considered. The Alameda CTC CMP Menu of TDM Measures and TDM Checklist may be useful during the review of the development proposal and analysis of TDM mitigation measures (See Appendices F and G of the 2015 CMP).

Thank you for the opportunity to comment on this NOP. Please contact me at (510) 208-7426 or Chris Van Alstyne, Assistant Transportation Planner, at (510) 208-7479 if you have any questions.

Sincerely,



Saravana Suthanthira  
Principal Transportation Planner

cc: Chris Van Alstyne, Assistant Transportation Planner

file: R:\Planning\_Policy\_Public\_Affairs\Planning\CMP\LUAP\2017\April



March 29, 2017

Tom Liao, Deputy Community Development Director  
Community Development Department  
City of San Leandro  
835 East 14<sup>th</sup> Street  
San Leandro, CA 94577

Re: Notice of Preparation of an Environmental Impact Report for the Bay Fair Transit-Oriented Development Specific Plan

Dear Mr. Liao:

East Bay Municipal Utility District (EBMUD) appreciates the opportunity to comment on the Notice of Preparation of an Environmental Impact Report (EIR) for the City of San Leandro (City) Bay Fair Transit-Oriented Development (TOD) Specific Plan. EBMUD has the following comments.

## **GENERAL**

Pursuant to Section 15155 of the California Environmental Quality Act Guidelines, and Section 10910-10915 of the California Water Code, a Water Supply Assessment (WSA) is required, as the project would demand an amount of water equivalent to or greater than the amount of water required by a 500-dwelling-unit project. Please submit a written request to EBMUD to prepare a WSA which should include data and estimates of future water demands for the project area. Please be aware that the WSA can take up to 90 days to complete from the day the request was received.

## **WATER SERVICE**

EBMUD's Central Pressure Zone, with a service elevation between 0 and 100 feet, will serve the Bay Fair TOD Specific Plan. Any development project associated with the Bay Fair TOD Specific Plan will be subject to the following general requirements.

EBMUD owns and operates distribution pipelines in EBMUD rights-of-way (R/W 4979) in Cherrybrooke Commons, (R/W 3059) in Fairmont Drive, and (R/W 2410) in Loch Lane which provide continuous service to EBMUD customers in the area. The integrity of these pipelines needs to be maintained at all times. Any proposed construction activity in EBMUD rights-of-way would be subject to the terms and conditions determined by EBMUD, including relocation of the water mains and/or rights-of-way at the project sponsor's expense.

Main extensions that may be required to serve any specific development projects to provide adequate domestic water supply, fire flows, and system redundancy will be at the project sponsor's expense. Pipeline and fire hydrant relocations and replacements due to modifications of existing streets, and off-site pipeline improvements, also at the project sponsor's expense, may be required depending on EBMUD metering requirements and fire flow requirements set by the local fire department. When the development plans are finalized, all project sponsors should contact EBMUD's New Business Office and request a water service estimate to determine costs and conditions of providing water service to the development. Engineering and installation of new and relocated pipelines and services require substantial lead time, which should be provided for in the project sponsor's development schedule.

Project sponsors should be aware that EBMUD will not inspect, install, or maintain pipeline in contaminated soil or groundwater (if groundwater is present at any time during the year at the depth piping is to be installed) that must be handled as a hazardous waste or that may be hazardous to the health and safety of construction or maintenance personnel wearing Level D personal protective equipment. Nor will EBMUD install piping or services in areas where groundwater contaminant concentrations exceed specified limits for discharge to the sanitary sewer system and sewage treatment plants. Project sponsors for EBMUD piping and services requiring excavation in contaminated areas must submit copies of all known information regarding soil and groundwater quality within or adjacent to the project boundary.

In addition, the project sponsors must provide a legally sufficient, complete and specific written remediation plan establishing the methodology, planning and design of all necessary systems for the removal, treatment, and disposal of all identified contaminated soil and/or groundwater. EBMUD will not design piping or services until soil and groundwater quality data and remediation plans have been received and reviewed and will not start underground work until remediation has been carried out and documentation of the effectiveness of the remediation has been received and reviewed. If no soil or groundwater quality data exists, or the information supplied by the project sponsor is insufficient, EBMUD may require the project sponsor to perform sampling and analysis to characterize the soil and groundwater that may be encountered during excavation, or EBMUD may perform such sampling and analysis at the project sponsor's expense.

## **WATER RECYCLING**

EBMUD's Policy 9.05 requires that customers use non-potable water, including recycled water, for non-domestic purposes when it is of adequate quality and quantity, available at reasonable cost, not detrimental to public health and not injurious to plant, fish and wildlife to offset demand on EBMUD's limited potable water supply.

Some portions of the City's boundaries fall within and around EBMUD's San Leandro Recycled Water Pipeline service area. Any projects within the boundary of EBMUD's San Leandro Recycled Water Pipeline service area present opportunities for recycled water uses ranging from landscape irrigation, toilet flushing and other non-potable commercial and industrial applications

Tom Liao, Deputy Community Development Director

March 29, 2017

Page 3

that can be served by existing or expanded recycled water pipelines in the future. The current recycled water in the area is limited to secondary treated supply. State and health regulations do not allow the use of secondary treated water for some of these applications; however, the existing San Leandro Recycled Water Project could potentially expand uses in the future should the treatment level be upgraded to a tertiary level.

If EBMUD determines that recycled water will be available, then the project sponsor will be responsible for extension of recycled water pipelines to and within the proposed development. EBMUD recommends that the City and project sponsors maintain continued coordination and consultation with EBMUD, as they plan and implement the various projects within the Bay Fair TOD Specific Plan, regarding the feasibility of providing recycled water for appropriate non-potable uses.

## **WATER CONSERVATION**

Individual projects within the Bay Fair TOD Specific Plan area may present opportunities to incorporate water conservation measures. EBMUD requests that the City include in its conditions of approval a requirement that the project sponsor comply with Assembly Bill 325, "Model Water Efficient Landscape Ordinance," (Division 2, Title 23, California Code of Regulations, Chapter 2.7, Sections 490 through 495). Project sponsors should be aware that Section 31 of EBMUD's Water Service Regulations requires that water service shall not be furnished for new or expanded service unless all the applicable water-efficiency measures described in the regulation are installed at the project sponsor's expense.

If you have any questions regarding this response, please contact Timothy R. McGowan, Senior Civil Engineer, Major Facilities Planning Section at (510) 287-1981.

Sincerely,



David J. Rehnstrom  
Manager of Water Distribution Planning

DJR:AMM:dk  
sb17\_065

WDPD - MS 701  
*EAST BAY*  
*MUNICIPAL UTI*  
P.O. BOX 24055 • OAKLAND

Tom Liao, Deputy Community Development Director  
Community Development Department  
City of San Leandro  
835 East 14<sup>th</sup> Street  
San Leandro, CA 94577

**DEPARTMENT OF TRANSPORTATION**

DISTRICT 4  
P.O. BOX 23660  
OAKLAND, CA 94623-0660  
PHONE (510) 286-5528  
FAX (510) 286-5559  
TTY 711  
[www.dot.ca.gov](http://www.dot.ca.gov)



*Serious Drought.  
Help save water!*

March 23, 2017

04-ALA-2017-00119  
SCH # 2017032016

Mr. Tom Liao  
Community Development Department  
City of San Leandro  
835 East 14<sup>th</sup> Street  
San Leandro, CA 94577

**Bay Fair Transit-Oriented Development (TOD) Specific Plan – Notice of Preparation (NOP)**

Dear Mr. Liao:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above-referenced project. In tandem with the Metropolitan Transportation Commission's (MTC) Sustainable Communities Strategy (SCS), Caltrans mission signals a modernization of our approach to evaluating and mitigating impacts to the State Transportation Network (STN). Caltrans *Strategic Management Plan 2015-2020* targets aim to reduce Vehicle Miles Travelled (VMT) by tripling bicycle and doubling both pedestrian and transit travel by 2020. Our comments are based on the NOP.

***Project Understanding***

The proposed Specific Plan (Plan) would provide a vision for a sustainable, vibrant, and safe transit-oriented village with a diversity of land uses serving local and regional populations. The City of San Leandro 2035 General Plan designates the Plan Area as “Bay Fair Transit Oriented Development”, with the intent of creating a new vision for the area including retail, office, higher density housing, open space, and public land uses. A more urban development form is envisioned, with pedestrian-scaled streets and an orientation toward BART access and transit use. A reasonable and conservative estimate of buildout associated with the proposed Plan through 2035 would include development of 2,540 housing units and 300,000 square feet (sf) of office space, as well as the removal of an estimated 161,000 sf of retail space.

***Lead Agency***

As the Lead Agency, the City of San Leandro is responsible for all project mitigation, including any needed improvements to the STN or reduction in VMT. The project's fair share contribution, financing, scheduling, implementation responsibilities and Lead Agency monitoring should be fully discussed for all proposed mitigation measures.

### ***Project Design***

- Are higher densities than the proposed 2,540 housing units possible?
- The upcoming Plan and Draft Environmental Impact Report (DEIR) should include a discussion about parking. Will a maximum parking requirement be established as opposed to the traditional minimum parking requirement for this TOD development?
- The Plan should consider bicycle storage needs within the Plan area.
- The DEIR should analyze the project's impacts and potential improvements to bike parking/storage at the Bay Fair BART station, including the 20 current electronic lockers.
- The DEIR should also include information regarding whether BART has a plan to expand the Bay Fair Station in anticipation of future system expansion to San Jose and Livermore as well as multimodal connections to the BART station including transit, bicycle and pedestrian needs.

### ***Vehicle Trip Reduction***

In Caltrans *Smart Mobility 2010: A Call to Action for the New Decade*, this project falls under **Place Type 2 Close-In Compact Communities – Close-In Centers**, which includes small and medium sized downtowns, TOD's, institutions, lifestyle centers, and other centers of activity. Additionally, this Place Type is typically characterized by housing with scattered mixed use centers and arterial corridors forming the skeleton of the transportation system. Although the Plan has the potential to reduce VMT, we encourage the City to establish a Transportation Management Association (TMA) in partnership with other developments in the area to pursue aggressive trip reduction targets with Lead Agency monitoring and enforcement. In addition, the Transportation Demand Management (TDM) elements described below should be included in the program to promote smart mobility and reduce regional VMT and traffic impacts to the STN:

- Project design to encourage walking, bicycling, and convenient transit access;
- Reducing parking minimums/implementing parking maximums;
- BART bike station;
- Convenient opportunities for multi-modal transfers and transit transfers with nearby AC Transit Bus Routes 10, 32, 40, 48, 75, 89, 93, 97 and 801;
- Designated parking spaces for carpooling;
- Charging stations and designated parking spaces for electric vehicles; and
- Reducing headway times of nearby AC Transit Bus Routes 10, 32, 40, 48, 75, 89, 93, 97 and 801.

For additional TDM options, please refer to Chapter 8 of FHWA's *Integrating Demand Management into the Transportation Planning Process: A Desk Reference*, regarding TDM at the local planning level. The reference is available online at:  
<http://www.ops.fhwa.dot.gov/publications/fhwahop12035/fhwahop12035.pdf>.

Mr. Liao, City of San Leandro  
March 23, 2017  
Page 3

For information about parking ratios, please see MTC's report, Reforming Parking Policies to Support Smart Growth, or visit the MTC parking webpage:  
[http://www.mtc.ca.gov/planning/smart\\_growth/parking](http://www.mtc.ca.gov/planning/smart_growth/parking).

***Encroachment Permit***

Please be advised that any work or traffic control that encroaches onto the State Right-of-Way (ROW) requires an encroachment permit that is issued by Caltrans. To apply, a completed encroachment permit application, environmental documentation, and five (5) sets of plans clearly indicating State ROW must be submitted to the following address: David Salladay, District Office Chief, Office of Permits, California Department of Transportation, District 4, P.O. Box 23660, Oakland, CA 94623-0660. Traffic-related mitigation measures should be incorporated into the construction plans prior to the encroachment permit process. See the website linked below for more information: <http://www.dot.ca.gov/hq/traffops/developserv/permits>.

Should you have any questions regarding this letter, please call Jannette Ramirez at 510-286-5535 or [jannette.ramirez@dot.ca.gov](mailto:jannette.ramirez@dot.ca.gov).

Sincerely,



PATRICIA MAURICE  
District Branch Chief  
Local Development - Intergovernmental Review

# ADAMS BROADWELL JOSEPH & CARDOZO

A PROFESSIONAL CORPORATION

## ATTORNEYS AT LAW

601 GATEWAY BOULEVARD, SUITE 1000  
SOUTH SAN FRANCISCO, CA 94080-7037

MILA A. BUCKNER  
DANIEL L. CARDOZO  
CHRISTINA M. CARO  
THOMAS A. ENSLOW  
TANYA A. GULESSERIAN  
MARC D. JOSEPH  
RACHAEL E. KOSS  
NATALIE B. KUFFEL  
LINDA T. SOBCZYNSKI  
NEO C. THIMMAYYA

## SACRAMENTO OFFICE

520 CAPITOL MALL, SUITE 350  
SACRAMENTO, CA 95814-4721  
TEL: (916) 444-6201  
FAX: (916) 444-6209

TEL: (650) 589-1660  
FAX: (650) 589-5062  
[jlaurein@adamsbroadwell.com](mailto:jlaurein@adamsbroadwell.com)

March 29, 2017

### Via Email and U.S. Mail

Tamika Greenwood  
City Clerk  
City of San Leandro  
835 East 14th Street  
San Leandro, CA 94577  
[tgreenwood@sanleandro.org](mailto:tgreenwood@sanleandro.org)

Cynthia Battenberg  
Community Development Director  
City of San Leandro  
835 East 14th Street  
San Leandro, CA 94577  
[cbattenberg@sanleandro.org](mailto:cbattenberg@sanleandro.org)

### Via Email Only

Tom Liao, Deputy Community  
Development Director,  
[tliao@sanleandro.org](mailto:tliao@sanleandro.org)

**Re: Request for Mailed Notice of CEQA Actions and Hearings – Bay  
Fair Transit-Oriented Development Specific Plan**

Dear Ms. Greenwood, Ms. Battenberg and Mr. Liao:

We are writing on behalf of International Brotherhood of Electrical Workers Local 340, Plumbers & Pipefitters Local 447, Sheet Metal Workers Local 104 and Sprinkler Fitters Local 483 to request mailed notice of the availability of any environmental review document, prepared pursuant to the California Environmental Quality Act, related to the Bay Fair Transit-Oriented Development (“TOD”) Specific Plan Project (“Project”), as well as a copy of the environmental review document when it is made available for public review.

We also request mailed notice of any and all hearings and/or actions related to the Project. These requests are made pursuant to Public Resources Code Sections 21092.2, 21080.4, 21083.9, 21092, 21108 and 21152 and Government Code Section 65092, which require local agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency’s governing body.

3576-001acp

March 29, 2017  
Page 2

Please send the above requested items by email and U.S. Mail to our South San Francisco Office as follows:

**U.S. Mail**

Janet Laurain  
Adams Broadwell Joseph & Cardozo  
601 Gateway Boulevard, Suite 1000  
South San Francisco, CA 94080-7037

**Email**

[jlaurain@adamsbroadwell.com](mailto:jlaurain@adamsbroadwell.com)

Please call me at (650) 589-1660 if you have any questions. Thank you for your assistance with this matter.

Sincerely,



Janet Laurain  
Paralegal

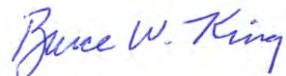
JML:acp

## **FRIENDS OF SAN LORENZO CREEK**

Date: April 3, 2017

To: Tom Liao, Deputy Community Development Director  
City of San Leandro Community Development Department  
835 East 14th St.  
San Leandro, CA 94577  
510-577-6003  
tliao@sanleandro.org

From: Bruce King  
Friends of San Lorenzo Creek  
3127 Terry Court  
Castro Valley, CA 94546  
bruceking8@gmail.com



Subject: FSLC Comments on the Bay Fair TOD Specific Plan  
Notice to Preparation (NOP) for the Draft EIR

Dear Tom,

This letter provides comments from Friends of San Lorenzo Creek (FSLC) on the scope and content of the Bay Fair Transit-Oriented Development (TOD) Specific Plan Notice of Preparation (NOP) for the Draft Environmental Impact Report (EIR). These comments were also provided during public comment at the City of San Leandro Planning Commission meeting on March 16, 2017.

In the Bayfair TOD plan area, the Estudillo Canal generally flows between BART and Bayfair Mall, and between Hesperian Boulevard and the Southern Pacific rail road tracks. See maps of the Estudillo Canal watershed in Attachment A. This creek drains the Fairmont and Ashland areas, through the Bayfair and Washington Manor areas, and then to the marshes and bay just south of the San Leandro Marina. These waterways are part of the historically-mapped creek and marsh system that was and is north of the primary San Lorenzo Creek channel. It is also my understanding that the BART parking lot, and possibly other areas, are within the 100-year flood plain.

Friends of San Lorenzo Creek recommends that the Bayfair TOD project consider the Estudillo Canal an environmental asset that is part of the creek system that needs to be protected. As part of this project, the canal's restoration to more a natural creek channel needs to be assessed, included, or protected for future restoration. In addition, the public access to the creek's upper-bank areas should be enhanced. Planned or future creek restoration and/or enhancement typically requires new development to be setback from the creek channel to allow for configuring the creek channel, riparian area, and/or public access. See setback examples in Attachment B. Public access to the creek might involve viewing areas and/or pedestrian-bike trails along the creek's upper banks.

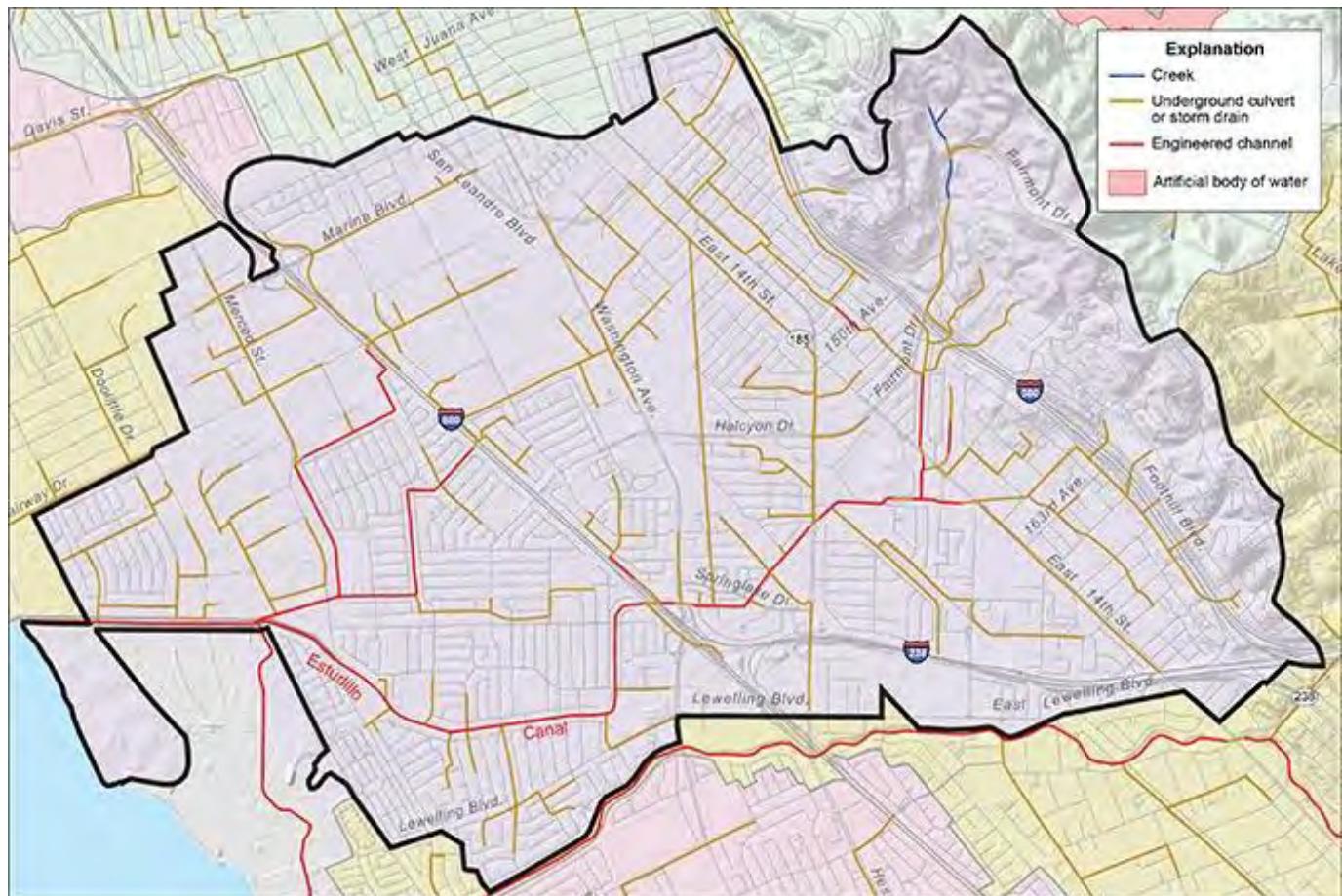
The following are examples of creek-related impacts and mitigations that should be covered in the EIR:

- Modifications to Estudillo Canal, including any new bridges or coverings along with their impacts and mitigations.
- Development of structures or grading in the floodplain and how those structures or grading impact the performance of the floodplain and comply with floodplain requirements.
- Management of storm water for new and modified building, parking, and other facilities in conformance with City and County standards and best management practices.

We should envision a Bayfair TOD plan that protects and enhances this creek, the watershed, the public from flooding.

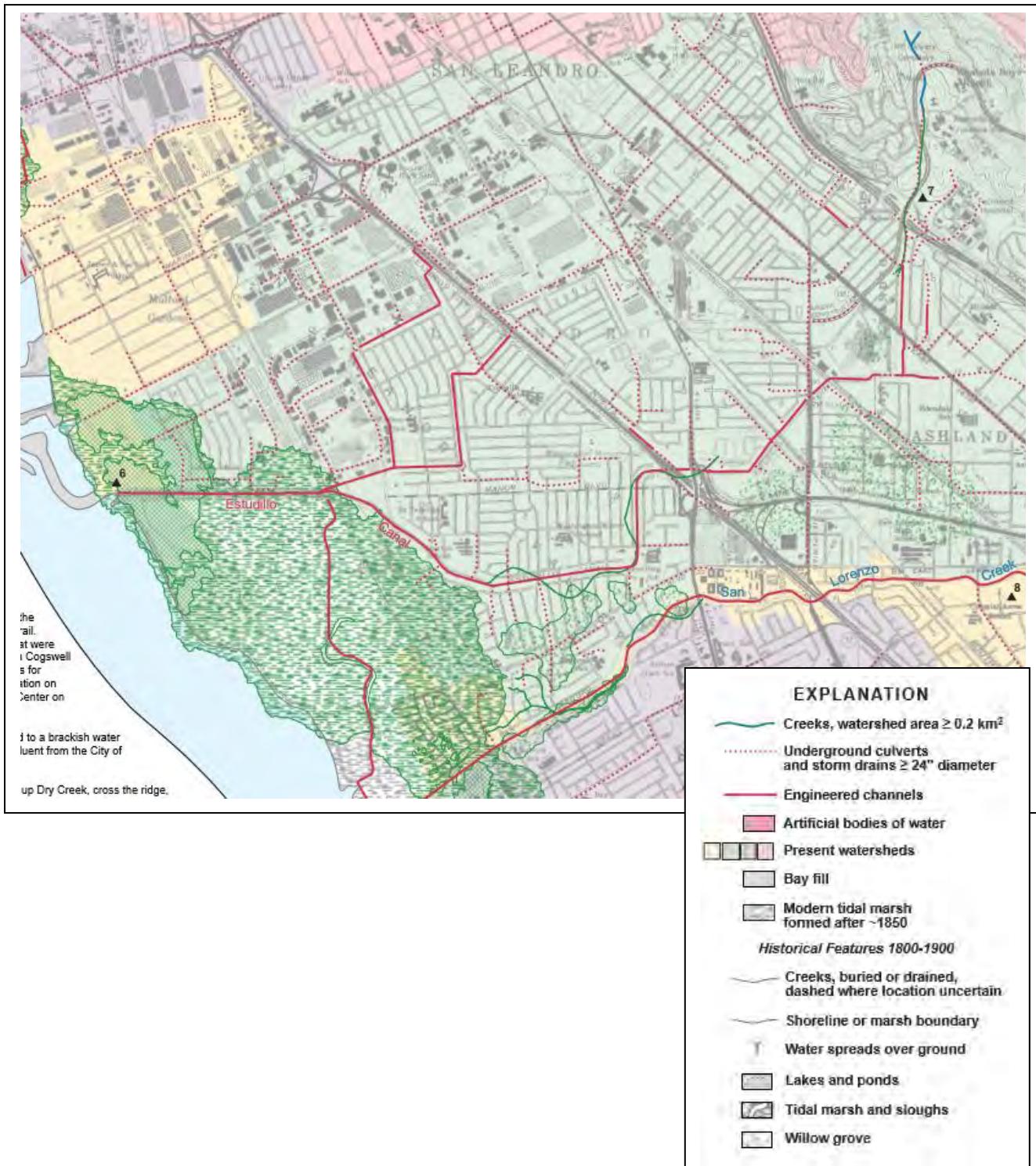
## ATTACHMENT A

### Estudillo Canal Watershed Current Creek and Channel Configurations



## ATTACHMENT A (Continued)

### Estudillo Canal Watershed Current and Historical Creek and Channel Configurations

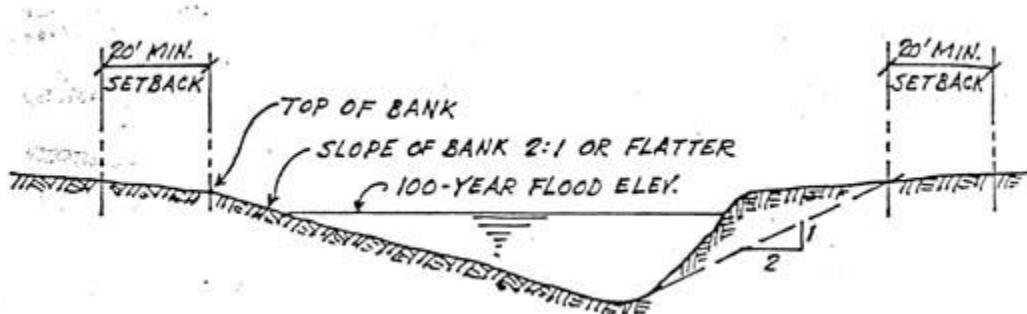


## ATTACHMENT B

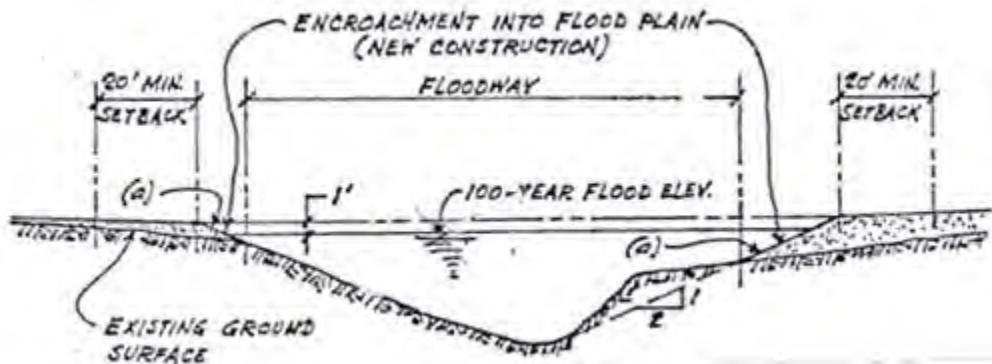
### Creek Setback Examples

#### Alameda County Watercourse Protection Ordinance Section 13.12.320: Setback Criteria

**Section A** — Typical where 100-year storm flow is contained within banks of existing watercourse.

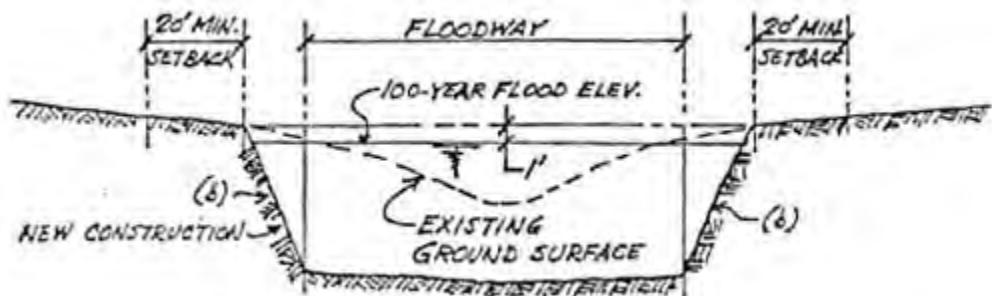


**Section B** — Typical where existing channel is sufficiently large to allow side encroachment.



(a) = Slope of bank shall be 2 horizontal to 1 vertical or flatter, as determined by director of public works.

**Section C** — Typical for a flood plain where the watercourse must be enlarged to permit development.



(b) = Sides of channel shall be structurally stable. If sides are of earth, they shall have a maximum slope of 2 horizontal to 1 vertical.

## **Karly Kaufman**

---

**From:** Liao, Thomas <TLiao@sanleandro.org>  
**Sent:** Tuesday, March 28, 2017 11:10 AM  
**To:** Karly Kaufman; Josephine Fong  
**Cc:** Aaron Welch (aaron@raimiassociates.com); Stephanie Miller - Raimi + Associates (Stephanie@raimiassociates.com)  
**Subject:** FW: Bay Fair TOD Specific Plan NOP

Hi Karly and Josephine – below is another NOP public comment along with my response.

Aaron/Stephanie – I already blind cc'd you both on this so you can disregard this email.

**Tom Liao, Deputy Community Development Director**  
**City of San Leandro Community Development Dept.**  
**835 East 14th St.**  
**San Leandro, CA 94577**  
**510-577-6003 (office)**  
**510-577-6007 (fax)**  
**e-mail: [tliao@sanleandro.org](mailto:tliao@sanleandro.org)**  
**[www.sanleandro.org](http://www.sanleandro.org)**

---

**From:** Liao, Thomas  
**Sent:** Tuesday, March 28, 2017 11:02 AM  
**To:** 'jill mae'  
**Subject:** RE: Bay Fair TOD Specific Plan NOP

Hi Jill and Bill

Thanks for your feedback. We are still in the information/public feedback stages of this Bay Fair TOD planning process so I appreciate your thoughts at this earlier stage. Just also want to reiterate that we are working on a 20 year vision plan for the area, and not an actual development project. Because the eventual plan will cover the next 20 years or so, the market or economy will ultimately dictate whether future development occurs or not. Also I also wanted to clarify that the Plan focuses on policy recommendations within City limits (and not in the County, which has its own jurisdiction and regulations for the unincorporated area). County and BART planning staff have been actively involved with this Plan to date and I have been letting them know about public concerns particularly from nearby County residents such as yourselves.

During this public planning process to date, the City's planning team has heard from residential homeowners nearby the Plan area with similar concerns about height, density and traffic/parking (especially any potential loss of future BART parking). We hope to release a draft Plan and Environmental Impact Report (EIR) for the public in a 2 to 3 months and will try our best to address yours and similar public concerns. As a response to the public concerns so far, the City Planning team has publicly presented design/development guidelines to ensure that only lower height buildings (2 to 3 stories) may be built in areas immediately adjacent to single family residential areas but we will continue to refine this concept for the draft Plan. As for 15 story buildings, that does not appear economically feasible. It appears that 3 to 8 story buildings within the major commercial areas (Bayfair Mall, Fashion Faire Place, Fairmont Square Plaza, next to the BART tracks nearer Bayfair Mall), which are a distance away from the nearby single family neighborhoods, are more likely in the future. You can follow the Plan online via the City webpage at <http://www.sanleandro.org/depts/cd/bftod/default.asp>

I've added you to my Bay Fair TOD Plan email distribution list so you will be notified in the future of upcoming public meetings/events related to the Plan. This list is blind which means no one on the list sees anyone else's email address when I email out. If you wish to not be on this list, please let me know.

Thanks Tom

**Tom Liao, Deputy Community Development Director**  
**City of San Leandro Community Development Dept.**  
**835 East 14th St.**  
**San Leandro, CA 94577**  
**510-577-6003 (office)**  
**510-577-6007 (fax)**  
**e-mail: [tliao@sanleandro.org](mailto:tliao@sanleandro.org)**  
**[www.sanleandro.org](http://www.sanleandro.org)**

---

**From:** jill mae [<mailto:jill.mae@att.net>]  
**Sent:** Monday, March 27, 2017 5:44 PM  
**To:** Liao, Thomas  
**Subject:** Bay Fair TOD Specific Plan NOP

Dear Mr. Liao,

You have to be kidding, housing 8 stories high and 15 story towers?? Please no, no, no! That is not a village, that is high rise San Francisco. Unfortunately we could not attend any of the meetings cause we were out of town, but it looks like it would be too many people and too much going on for the area. A Village is not lots of people in high rise buildings. Also if you take away the Bart parking, people will take over parking in the neighborhoods.

We have lived in hesperian gardens (behind Bart) for a long time and we see the need for updating and improvement but you cannot get crazy. Since we first moved here there were trains but no amtrack. Also one of the ambulance companies moved and changed there routes so noise is bad (trains and ambulances). Also traffic on hesperian is now already terrible. Please consider more parks or greenery and not everything crammed together. Too many housing, offices & retail and they may just end up vacant. Also up and down east 14 needs more work.

Thanks for your consideration. How can I find out about future public meetings or input? Having lived here so long I am very concerned. I do not want it to end up looking terrible and out of place and more noisy and more traffic and too many people.

Jill and Bill Mae  
534 Rutgers St  
San Lorenzo, Ca. 94580  
510-278-8390

**From:** Liao, Thomas  
**To:** [Linda Asvitt](#)  
**Subject:** RE: Bay Fair TOD Specific Plan NOP

---

Hi Ms. Asvitt:

Thanks for your comments. I wanted to let you know that this is a proposed plan, not an actual development for the Bay Fair TOD area. It is meant to be a vision and aspiration for the future. The City will be doing an environmental impact report as part of preparing this long-term plan which will consider issues such as traffic/transportation.

Sincerely,

Tom Liao, Deputy Community Development Director  
City of San Leandro Community Development Dept.  
835 East 14th St.  
San Leandro, CA 94577  
510-577-6003 (office)  
510-577-6007 (fax)  
e-mail: [tliao@sanleandro.org](mailto:tliao@sanleandro.org)  
[www.sanleandro.org](http://www.sanleandro.org)

---

**From:** Linda Asvitt [mailto:[lasvitt@comcast.net](mailto:lasvitt@comcast.net)]  
**Sent:** Tuesday, March 07, 2017 2:04 PM  
**To:** Liao, Thomas  
**Subject:** Bay Fair TOD Specific Plan NOP

Mr.Tliao: I am horrified that the City Council would even consider adding 2,540 housing units in the Bay Fair site. The infrastructure cannot support such an influx. Already the E 14th Street corridor is jammed with traffic during commute hours and the Bancroft/E 14th intersection is often blocked by traffic after the light has changed. Forget trying to shop at your favorite grocery store on the weekend or trying to go to the show. This would greatly diminish the quality of life we have come to enjoy in San Leandro. I can only conclude that the only thing that the council sees is the potential tax base or that some developer has promised vast quantities of cash to achieve his/her goals.

I am greatly saddened that the council sees fit to let our marina go without the upkeep it deserves and chooses to focus on this totally unneeded and unwanted development.

## Karly Kaufman

---

**From:** Liao, Thomas <TLiao@sanleandro.org>  
**Sent:** Monday, March 06, 2017 12:35 PM  
**To:** Lindsey Roberts  
**Subject:** RE: Bay Fair TOD Specific Plan NOP

Hi Lindsay,  
I've added you to the email list. Thanks Tom

Tom Liao, Deputy Community Development Director City of San Leandro Community Development Dept.  
835 East 14th St.  
San Leandro, CA 94577  
510-577-6003 (office)  
510-577-6007 (fax)  
e-mail: [tliao@sanleandro.org](mailto:tliao@sanleandro.org)  
[www.sanleandro.org](http://www.sanleandro.org)

-----Original Message-----

From: Lindsey Roberts [<mailto:lmr.aero@gmail.com>]  
Sent: Monday, March 06, 2017 12:06 PM  
To: Liao, Thomas  
Subject: Re: Bay Fair TOD Specific Plan NOP

Yes please add me.

Thank-you,  
Lindsey Roberts

Sent from my iPhone

> On Mar 6, 2017, at 10:58 AM, Liao, Thomas <[TLiao@sanleandro.org](mailto:TLiao@sanleandro.org)> wrote:  
>  
> Hi Lindsey,  
> Thanks for your email. The proposed Bay Fair TOD Plan envisions most development intensity occurring at Bayfair Mall, Fashion Faire Place shopping center, Fairmont Square shopping center and the Bay Fair BART Station. We project some retail space being lost in these shopping centers to be replaced by housing, office and open space potentially. More importantly to your question, the Plan does not seek to remove housing but add housing units as the Bay Area is facing a major housing supply problem.  
>  
> I want to emphasize too that this is a proposed Plan, not a development project, so it is more aspirational and visionary. If you would like me to add you to the Bay Fair TOD Plan email distribution list for future key events on the Plan, please let me know. I bcc everyone so there is anonymity. I hope this helps.  
>  
> Sincerely,  
> Tom Liao, Deputy Community Development Director City of San Leandro  
> Community Development Dept.  
> 835 East 14th St.  
> San Leandro, CA 94577

> 510-577-6003 (office)  
> 510-577-6007 (fax)  
> e-mail: [tliao@sanleandro.org](mailto:tliao@sanleandro.org)  
> [www.sanleandro.org](http://www.sanleandro.org)  
>  
> -----Original Message-----  
> From: Lindsey Roberts [<mailto:lmr.aero@gmail.com>]  
> Sent: Sunday, March 05, 2017 6:22 PM  
> To: Liao, Thomas  
> Subject: Bay Fair TOD Specific Plan NOP  
>  
> Hello,  
>  
> My name is Lindsey Roberts and I have a question regarding the area identified in the program. I live at 15067 Hesperian Blvd and have purchased my particular unit. In looking at the project area, my condo complex is within the boundaries. The letter I received stated that retail space would be removed. My condo complex is not retail space but is the plan to remove residential space as well?  
>  
>  
> Sent from my iPhone

## **Karly Kaufman**

---

**From:** Liao, Thomas <TLiao@sanleandro.org>  
**Sent:** Monday, March 06, 2017 11:56 AM  
**To:** nina Badely  
**Subject:** RE: Bay Fair TOD Specific Plan NOP

Your most welcome Nina.

**Tom Liao, Deputy Community Development Director**  
**City of San Leandro Community Development Dept.**  
**835 East 14th St.**  
**San Leandro, CA 94577**  
**510-577-6003 (office)**  
**510-577-6007 (fax)**  
**e-mail: [tliao@sanleandro.org](mailto:tliao@sanleandro.org)**  
**[www.sanleandro.org](http://www.sanleandro.org)**

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**From:** nina Badely [mailto:[osojnik@att.net](mailto:osojnik@att.net)]  
**Sent:** Monday, March 06, 2017 11:20 AM  
**To:** Liao, Thomas  
**Subject:** Re: Bay Fair TOD Specific Plan NOP

Mr. Liao,

Thank you very much for answering my email and we understand the plan more clearly, my husband and I appreciated very much your letter.

Nina Badely

On Monday, March 6, 2017 10:48 AM, "Liao, Thomas" <[TLiao@sanleandro.org](mailto:TLiao@sanleandro.org)> wrote:

Dear Ms. Badely,

Thank you for your email. I wanted to respond and reassure you that this is a proposed plan for the area near the Bay Fair BART Station and nearby shopping centers and not an actual development project. It is a long range and aspirational plan looking almost twenty years out to what the City and its residents and businesses envision the area may look like in the future to attract an appropriate mix of retail, office and housing while incentivizing people to use available nearby public transit like BART.

Two important things for you to know and be reassured of. One is that your property is outside the proposed Plan Area. To see the Bay Fair TOD Plan Area, you can click [here](#) to see the City website and Plan Area map. Secondly, there will be no taking of people's properties whether in the Plan Area or beyond.

I hope this helps and provides some reassurance. Would you like me to add you the Bay Fair TOD Plan email distribution list? Please feel free to call me anytime if you would like to discuss this proposed Plan further.

Thanks,

**Tom Liao, Deputy Community Development Director**  
**City of San Leandro Community Development Dept.**  
**835 East 14th St.**  
**San Leandro, CA 94577**

510-577-6003 (office)  
510-577-6007 (fax)  
e-mail: [tliao@sanleandro.org](mailto:tliao@sanleandro.org)  
[www.sanleandro.org](http://www.sanleandro.org)

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**From:** nina Badely [<mailto:osojnik@att.net>]  
**Sent:** Sunday, March 05, 2017 5:22 PM  
**To:** Liao, Thomas  
**Subject:** Bay Fair TOD Specific Plan NOP

In the letter we received last week, there was no mention anything about taking down any homes which is our biggest concern. We have been living at the same house for over 50 years on Nabor street. There are some rumors that can happen, we certainly hope not. We also believe that there would be increase in crime with 2,540 new housing development. we cannot come to the meeting on 3-16-17 because we do not drive at night any more, but we would like to see in newspaper some public opinions what they have to say.

Thank you,

John and Nina Badely  
476 Nabor street  
San Leandro, ca. 94578

# PATRISHA PIRAS

**892 Grant Avenue      San Lorenzo, CA 94580**  
**Phone: (510) 278-1631    Fax: (510) 856-0595    Email: patpiras@sonic.net**

April 3, 2017

2 pages via email

Mr Tom Liao, Deputy Community Development Director  
City of San Leandro  
835 East 14<sup>th</sup> Street  
San Leandro CA 94577

## RE: Bay Fair TOD Specific Plan NOP

Dear Mr Liao:

I have been appointed as an alternate from the County unincorporated area to the Community Advisory Committee (CAC) for the Specific Plan for the Bay Fair Transit Oriented Development (TOD) and am submitting comments regarding the Notice of Preparation (NOP) for the Draft Environmental Impact Report (DEIR) for the referenced project. These comments are submitted from an individual. Some of the comments may fit better for the Plan itself rather than the DEIR; I leave that to your professional expertise.

In addition to attending all except one of the CAC meetings, I attended both of the Outreach Workshops for the Project, and I have listened to the relevant portion of the City Council Work Session of March 13, 2017, and the Planning Commission audio of March 16, 2017.

City staff and the consulting team have done a commendable job of keeping those of us who have expressed interest well informed. However, on various occasions there have been multiple references to the CAC as a “Citizens” Advisory Committee and this non-inclusive terminology should be avoided in future materials and presentations.

Until the March City meetings, there had been very little reference to the project as a "Priority Development Area" (PDA) under SB 375, the California Sustainable Communities and Climate Protection Act of 2008. I have been following the development of Plan Bay Area since 2010, and urge that the Bay Fair BART project be referenced by its PDA status whenever appropriate, and that all necessary actions be taken by the City and its partners to move the PDA from "Potential" to "Planned" status, as soon as feasible. The DEIR and Specific Plan should include a timeline for these next steps.

Further, there should be much better clarification of the role and plans within the County's responsibility for all unincorporated areas adjacent to the City's "Project Area." In one of the March meetings, a suggestion was made to consider some sort of a Memorandum of Understanding (MOU) among the public agencies, possibly including BART where relevant, to implement the Plan -- I support this idea. Development and community improvement do not simply begin or end at a jurisdiction's boundaries, and many of the environmental impacts (traffic, air quality, water, etc) readily cross borders. For these reasons, non-“property”-owning agencies such as AC Transit and the School Districts should also be included. In particular, “softer” impacts including but not limited to

Public Services, Aesthetics, and Cultural Resources should be enhanced Project-wide, and as a result of comprehensive community outreach and input.

The level of increased residential development for the Project should carefully ensure that housing for residents of all levels of income are included. According to information provided by the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG), the Bay Fair BART PDA is anticipated to have a population increase of 2393 residents from 2010 to 2040; in contrast the preliminary information from the City and its consultants are that approximately 2500 households will be added – these numbers should be reconciled. In addition, a non-displacement policy should be adopted and applied to the Project Area and its residents; this seems to be in pending steps for the Specific Plan.

There should be clear identification of the existing public transit service for the Project Area, and where plans for improvements are being considered. But because the enhancement of the PDA will occur over time, the Plan and DEIR should identify how different “phasings” may occur in future years, and how they will impact the residents and the physical community. To the extent feasible, outcomes and opportunities from different flexible choices should be identified, especially for changes that may occur due to evolutions in technology – it is very possible that impacts that we can barely imagine will take place even in the next 5 or 10 years, particularly involving what are currently called Transportation Network Companies (TNCs) and autonomous vehicles.

Because of these likely changes in transportation delivery modes, the DEIR should anticipate significant reductions in parking requirements and provision, which will allow for more environmentally-friendly uses for surface areas. Many members of the public may oppose this idea, but reduced parking availability is a key step in reducing Greenhouse Gases that lead to Climate Change, and is a foundational element of SB 375 and of successful PDAs. Personally, it seems to me that the number of renovations in the Bay Fair BART parking area in recent years has to have had been a questionable multi-use of public funds.

With proposals to increase housing and possibly office space in the areas closer to BART that should be opened up by reducing the parking spaces, noise suppression mitigations will be necessary. Currently, the sound travels for fairly significant distances, both within the City Project Area and nearly unincorporated areas.

Thank you for the opportunity to comment on this Project. If you have any questions regarding these comments, please do not hesitate to contact me.

Sincerely,



Patrishia Piras

## Comment Card

Name:

Address or email:

---

### Comments/suggestions:

Why do they want to do this.  
You just need more parking.  
where are you planing on building  
the new housing. what stores are  
closing

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Some person also made a comment  
that the commissioners are almost  
impossible <sup>for the audience</sup> to hear when they speak.

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## Appendix B

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### Greenhouse Gas Emissions Modeling Results

## Specific Plan 2035 Efficiency Threshold Calculations

### San Leandro CAP

<b>2020 Goal Community Emissions</b>	711,977 tons CO2e
	645894.6696 MT CO2e
<b>2030 Target</b>	387,537 MT CO2e
<b>2050 Target</b>	129,179 MT CO2e

### 2035 Efficiency Threshold

2035 Target	322947.3348
2035 Population	95,513
2035 Employment	43,590
2035 Service Population	139103
<b>Efficiency Threshold</b>	<b>2.321641768</b> MT/service population

\*See Population and Housing EIR section for 2035 projections

## Bay Fair TOD Specific Plan - Alameda County, Annual

**Bay Fair TOD Specific Plan**  
**Alameda County, Annual**

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	300.00	1000sqft	6.89	300,000.00	0
Apartments High Rise	1,905.00	Dwelling Unit	30.73	1,905,000.00	5448
Apartments Low Rise	635.00	Dwelling Unit	39.69	635,000.00	1816

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	5			Operational Year	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## Bay Fair TOD Specific Plan - Alameda County, Annual

Project Characteristics - Specific Plan Buildout is 2035

Land Use - For consistency with water usage estimates assumes 75% high rise and 25% low rise apartments based on 2,540 units

Construction Phase - Architectural coating phase changed to overlap with building construction for more realistic scenario

Demolition - Removing 161,000 SF of retail

Vehicle Trips - Trip generation rates updated per traffic study. Apartment: 6.65. Office: 11.42

Woodstoves - No fireplaces or woodstoves in development per BAAQMD Rule 3

Energy Use - Energy reduced 28%(res) and 5%(commercial) for 2016 Title 24 standards

Water And Wastewater - Water use estimates from EIR

Construction Off-road Equipment Mitigation - Implementation of BAQQMD Basic Construction Measures

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Waste Mitigation - CalGreen 65% reduction requirement

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	110.00	1,500.00
tblConstructionPhase	NumDays	1,550.00	3,500.00
tblConstructionPhase	NumDays	100.00	200.00
tblConstructionPhase	NumDays	155.00	350.00
tblConstructionPhase	NumDays	110.00	150.00
tblConstructionPhase	NumDays	60.00	150.00
tblConstructionPhase	PhaseEndDate	6/1/2040	3/2/2035
tblConstructionPhase	PhaseStartDate	9/2/2034	6/4/2029
tblEnergyUse	LightingElect	741.44	533.84
tblEnergyUse	LightingElect	810.36	583.46
tblEnergyUse	LightingElect	3.67	3.49
tblEnergyUse	NT24E	3,277.06	2,359.48

## Bay Fair TOD Specific Plan - Alameda County, Annual

tblEnergyUse	NT24E	3,418.36	2,461.22
tblEnergyUse	NT24E	4.80	4.56
tblEnergyUse	NT24NG	2,615.00	1,882.80
tblEnergyUse	NT24NG	2,615.00	1,882.80
tblEnergyUse	NT24NG	1.01	0.96
tblEnergyUse	T24E	502.89	362.08
tblEnergyUse	T24E	274.84	197.88
tblEnergyUse	T24E	4.30	4.09
tblEnergyUse	T24NG	8,824.58	6,353.70
tblEnergyUse	T24NG	25,590.91	18,425.46
tblEnergyUse	T24NG	18.41	17.49
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	285.75	0.00
tblFireplaces	NumberGas	95.25	0.00
tblFireplaces	NumberNoFireplace	76.20	0.00
tblFireplaces	NumberNoFireplace	25.40	0.00
tblFireplaces	NumberWood	323.85	0.00
tblFireplaces	NumberWood	107.95	0.00
tblGrading	AcresOfGrading	875.00	387.50
tblProjectCharacteristics	OperationalYear	2018	2035
tblVehicleTrips	ST_TR	4.98	6.65
tblVehicleTrips	ST_TR	7.16	6.65

## Bay Fair TOD Specific Plan - Alameda County, Annual

tblVehicleTrips	SU_TR	3.65	6.65
tblVehicleTrips	SU_TR	6.07	6.65
tblVehicleTrips	WD_TR	4.20	6.65
tblVehicleTrips	WD_TR	6.59	6.65
tblVehicleTrips	WD_TR	11.03	11.42
tblWater	IndoorWaterUseRate	124,118,418.81	95,954,850.00
tblWater	IndoorWaterUseRate	41,372,806.27	41,580,435.00
tblWater	IndoorWaterUseRate	53,320,124.40	10,183,500.00
tblWoodstoves	NumberCatalytic	38.10	0.00
tblWoodstoves	NumberCatalytic	12.70	0.00
tblWoodstoves	NumberNoncatalytic	38.10	0.00
tblWoodstoves	NumberNoncatalytic	12.70	0.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

## 2.0 Emissions Summary

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## Bay Fair TOD Specific Plan - Alameda County, Annual

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	13.5982	0.2169	18.7962	1.0000e-003		0.1046	0.1046		0.1046	0.1046	0.0000	30.8125	30.8125	0.0293	0.0000	31.5460
Energy	0.1840	1.5885	0.7884	0.0100		0.1271	0.1271		0.1271	0.1271	0.0000	5,282.6761	5,282.6761	0.1914	0.0658	5,307.0609
Mobile	2.7284	25.0586	29.8009	0.1742	16.9051	0.0864	16.9916	4.5406	0.0807	4.6214	0.0000	16,211.7997	16,211.7997	0.5877	0.0000	16,226.4925
Waste						0.0000	0.0000		0.0000	0.0000	293.8091	0.0000	293.8091	17.3636	0.0000	727.8997
Water						0.0000	0.0000		0.0000	0.0000	46.8644	372.0311	418.8955	4.8302	0.1171	574.5580
<b>Total</b>	<b>16.5107</b>	<b>26.8640</b>	<b>49.3855</b>	<b>0.1852</b>	<b>16.9051</b>	<b>0.3182</b>	<b>17.2233</b>	<b>4.5406</b>	<b>0.3125</b>	<b>4.8531</b>	<b>340.6735</b>	<b>21,897.3194</b>	<b>22,237.9929</b>	<b>23.0023</b>	<b>0.1829</b>	<b>22,867.5570</b>

## Bay Fair TOD Specific Plan - Alameda County, Annual

**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	13.5982	0.2169	18.7962	1.0000e-003		0.1046	0.1046		0.1046	0.1046	0.0000	30.8125	30.8125	0.0293	0.0000	31.5460
Energy	0.1840	1.5885	0.7884	0.0100		0.1271	0.1271		0.1271	0.1271	0.0000	5,282.6761	5,282.6761	0.1914	0.0658	5,307.0609
Mobile	2.2870	22.0941	21.3015	0.1165	10.5508	0.0583	10.6090	2.8339	0.0544	2.8883	0.0000	10,866.5232	10,866.5232	0.4664	0.0000	10,878.1825
Waste						0.0000	0.0000		0.0000	0.0000	293.8091	0.0000	293.8091	17.3636	0.0000	727.8997
Water						0.0000	0.0000		0.0000	0.0000	46.8644	372.0311	418.8955	4.8302	0.1171	574.5580
<b>Total</b>	<b>16.0692</b>	<b>23.8994</b>	<b>40.8861</b>	<b>0.1276</b>	<b>10.5508</b>	<b>0.2900</b>	<b>10.8408</b>	<b>2.8339</b>	<b>0.2861</b>	<b>3.1200</b>	<b>340.6735</b>	<b>16,552.0429</b>	<b>16,892.7164</b>	<b>22.8810</b>	<b>0.1829</b>	<b>17,519.2470</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	2.67	11.04	17.21	31.11	37.59	8.85	37.06	37.59	8.43	35.71	0.00	24.41	24.04	0.53	0.00	23.39

## **4.0 Operational Detail - Mobile**

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### **4.1 Mitigation Measures Mobile**

## Bay Fair TOD Specific Plan - Alameda County, Annual

Increase Density

Increase Diversity

Improve Walkability Design

Increase Transit Accessibility

Improve Pedestrian Network

Provide Traffic Calming Measures

Provide BRT System

Expand Transit Network

Implement Trip Reduction Program

Encourage Telecommuting and Alternative Work Schedules

Employee Vanpool/Shuttle

Provide Riade Sharing Program

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.2870	22.0941	21.3015	0.1165	10.5508	0.0583	10.6090	2.8339	0.0544	2.8883	0.0000	10,866.523	10,866.523	0.4664	0.0000	10,878.182
Unmitigated	2.7284	25.0586	29.8009	0.1742	16.9051	0.0864	16.9916	4.5406	0.0807	4.6214	0.0000	16,211.799	16,211.799	0.5877	0.0000	16,226.492

## 4.2 Trip Summary Information

## Bay Fair TOD Specific Plan - Alameda County, Annual

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Apartments High Rise	12,668.25	12,668.25	12,668.25	29,258,683	29,258,683	18,332,848	18,332,848
Apartments Low Rise	4,222.75	4,222.75	4,222.75	9,752,894	9,752,894	6,110,949	6,110,949
General Office Building	3,426.00	738.00	315.00	6,207,554	6,207,554	3,778,173	3,778,173
Total	20,317.00	17,629.00	17,206.00	45,219,131	45,219,131	28,221,971	28,221,971

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments High Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Apartments Low Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.566131	0.035263	0.188976	0.102013	0.011508	0.005051	0.027665	0.053145	0.002326	0.001628	0.005241	0.000420	0.000634
Apartments High Rise	0.566131	0.035263	0.188976	0.102013	0.011508	0.005051	0.027665	0.053145	0.002326	0.001628	0.005241	0.000420	0.000634
Apartments Low Rise	0.566131	0.035263	0.188976	0.102013	0.011508	0.005051	0.027665	0.053145	0.002326	0.001628	0.005241	0.000420	0.000634

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

## Bay Fair TOD Specific Plan - Alameda County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3,461.8512	3,461.8512	0.1565	0.0324	3,475.4157	
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3,461.8512	3,461.8512	0.1565	0.0324	3,475.4157	
NaturalGas Mitigated	0.1840	1.5885	0.7884	0.0100		0.1271	0.1271		0.1271	0.1271	0.0000	1,820.8249	1,820.8249	0.0349	0.0334	1,831.6452	
NaturalGas Unmitigated	0.1840	1.5885	0.7884	0.0100		0.1271	0.1271		0.1271	0.1271	0.0000	1,820.8249	1,820.8249	0.0349	0.0334	1,831.6452	

## 5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr											MT/yr					
Apartments High Rise	1.56905e+007	0.0846	0.7230	0.3077	4.6100e-003		0.0585	0.0585		0.0585	0.0585	0.0000	837.3063	837.3063	0.0161	0.0154	842.2820	
Apartments Low Rise	1.28957e+007	0.0695	0.5942	0.2529	3.7900e-003		0.0480	0.0480		0.0480	0.0480	0.0000	688.1659	688.1659	0.0132	0.0126	692.2553	
General Office Building	5.5347e+006	0.0298	0.2713	0.2279	1.6300e-003		0.0206	0.0206		0.0206	0.0206	0.0000	295.3527	295.3527	5.6600e-003	5.4100e-003	297.1078	
Total		0.1840	1.5885	0.7884	0.0100		0.1271	0.1271		0.1271	0.1271	0.0000	1,820.8249	1,820.8249	0.0349	0.0334	1,831.6452	

## Bay Fair TOD Specific Plan - Alameda County, Annual

**5.2 Energy by Land Use - NaturalGas****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr											MT/yr					
Apartments High Rise	1.56905e+007	0.0846	0.7230	0.3077	4.6100e-003		0.0585	0.0585		0.0585	0.0585	0.0000	837.3063	837.3063	0.0161	0.0154	842.2820	
Apartments Low Rise	1.28957e+007	0.0695	0.5942	0.2529	3.7900e-003		0.0480	0.0480		0.0480	0.0480	0.0000	688.1659	688.1659	0.0132	0.0126	692.2553	
General Office Building	5.5347e+006	0.0298	0.2713	0.2279	1.6300e-003		0.0206	0.0206		0.0206	0.0206	0.0000	295.3527	295.3527	5.6600e-003	5.4100e-003	297.1078	
<b>Total</b>		<b>0.1840</b>	<b>1.5885</b>	<b>0.7884</b>	<b>0.0100</b>		<b>0.1271</b>	<b>0.1271</b>		<b>0.1271</b>	<b>0.1271</b>	<b>0.0000</b>	<b>1,820.8249</b>	<b>1,820.8249</b>	<b>0.0349</b>	<b>0.0334</b>	<b>1,831.6452</b>	

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	6.20154e+006	1,804.0987	0.0816	0.0169	1,811.1677
Apartments Low Rise	2.05903e+006	598.9948	0.0271	5.6000e-003	601.3418
General Office Building	3.63945e+006	1,058.7577	0.0479	9.9000e-003	1,062.9063
<b>Total</b>		<b>3,461.8512</b>	<b>0.1565</b>	<b>0.0324</b>	<b>3,475.4157</b>

## 5.3 Energy by Land Use - Electricity

### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	6.20154e+006	1,804.0987	0.0816	0.0169	1,811.1677
Apartments Low Rise	2.05903e+006	598.9948	0.0271	5.6000e-003	601.3418
General Office Building	3.63945e+006	1,058.7577	0.0479	9.9000e-003	1,062.9063
<b>Total</b>		<b>3,461.8512</b>	<b>0.1565</b>	<b>0.0324</b>	<b>3,475.4157</b>

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

## Bay Fair TOD Specific Plan - Alameda County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	13.5982	0.2169	18.7962	1.0000e-003		0.1046	0.1046		0.1046	0.1046	0.0000	30.8125	30.8125	0.0293	0.0000	31.5460	
Unmitigated	13.5982	0.2169	18.7962	1.0000e-003		0.1046	0.1046		0.1046	0.1046	0.0000	30.8125	30.8125	0.0293	0.0000	31.5460	

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.9444					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	11.0916					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.5622	0.2169	18.7962	1.0000e-003		0.1046	0.1046		0.1046	0.1046	0.0000	30.8125	30.8125	0.0293	0.0000	31.5460
<b>Total</b>	<b>13.5982</b>	<b>0.2169</b>	<b>18.7962</b>	<b>1.0000e-003</b>		<b>0.1046</b>	<b>0.1046</b>		<b>0.1046</b>	<b>0.1046</b>	<b>0.0000</b>	<b>30.8125</b>	<b>30.8125</b>	<b>0.0293</b>	<b>0.0000</b>	<b>31.5460</b>

## Bay Fair TOD Specific Plan - Alameda County, Annual

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr										MT/yr						
Architectural Coating	1.9444					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	11.0916					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	0.5622	0.2169	18.7962	1.0000e-003		0.1046	0.1046		0.1046	0.1046	0.0000	30.8125	30.8125	0.0293	0.0000	31.5460	
<b>Total</b>	<b>13.5982</b>	<b>0.2169</b>	<b>18.7962</b>	<b>1.0000e-003</b>		<b>0.1046</b>	<b>0.1046</b>		<b>0.1046</b>	<b>0.1046</b>	<b>0.0000</b>	<b>30.8125</b>	<b>30.8125</b>	<b>0.0293</b>	<b>0.0000</b>	<b>31.5460</b>	

**7.0 Water Detail****7.1 Mitigation Measures Water**

## Bay Fair TOD Specific Plan - Alameda County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	418.8955	4.8302	0.1171	574.5580
Unmitigated	418.8955	4.8302	0.1171	574.5580

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	95.9548 / 78.2486	261.1586	3.1371	0.0760	362.2306
Apartments Low Rise	41.5804 / 26.0829	105.2015	1.3591	0.0329	148.9682
General Office Building	10.1835 / 32.6801	52.5354	0.3341	8.3000e-003	63.3592
<b>Total</b>		<b>418.8955</b>	<b>4.8302</b>	<b>0.1171</b>	<b>574.5580</b>

## 7.2 Water by Land Use

### Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	95.9548 / 78.2486	261.1586	3.1371	0.0760	362.2306
Apartments Low Rise	41.5804 / 26.0829	105.2015	1.3591	0.0329	148.9682
General Office Building	10.1835 / 32.6801	52.5354	0.3341	8.3000e- 003	63.3592
<b>Total</b>		<b>418.8955</b>	<b>4.8302</b>	<b>0.1171</b>	<b>574.5580</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

## Bay Fair TOD Specific Plan - Alameda County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
MT/yr				
Mitigated	293.8091	17.3636	0.0000	727.8997
Unmitigated	293.8091	17.3636	0.0000	727.8997

**8.2 Waste by Land Use**Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use					
	tons	MT/yr			
Apartments High Rise	876.3	177.8810	10.5125	0.0000	440.6926
Apartments Low Rise	292.1	59.2937	3.5042	0.0000	146.8975
General Office Building	279	56.6345	3.3470	0.0000	140.3095
<b>Total</b>		<b>293.8091</b>	<b>17.3636</b>	<b>0.0000</b>	<b>727.8997</b>

## Bay Fair TOD Specific Plan - Alameda County, Annual

**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	876.3	177.8810	10.5125	0.0000	440.6926
Apartments Low Rise	292.1	59.2937	3.5042	0.0000	146.8975
General Office Building	279	56.6345	3.3470	0.0000	140.3095
<b>Total</b>		<b>293.8091</b>	<b>17.3636</b>	<b>0.0000</b>	<b>727.8997</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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## 11.0 Vegetation

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## Greenhouse Gas Emission Worksheet

### N2O Mobile Emissions

Specific Plan

From URBEMIS 2007 Vehicle Fleet Mix Output:

Annual VMT:

28,221,971

Vehicle Type	Percent Type	CH4 Emission Factor (g/mile)*	CH4 Emission (g/mile)**	N2O Emission Factor (g/mile)*	N2O Emission (g/mile)**
Light Auto	49%		0.04	0.01942	0.04 0.01942
Light Truck < 3750 lbs	2%		0.05	0.00123	0.06 0.001476
Light Truck 3751-5750 lbs	17%		0.05	0.00859	0.06 0.010308
Med Truck 5751-8500 lbs	11%		0.12	0.012996	0.2 0.02166
Lite-Heavy Truck 8501-10,000 lbs	2%		0.12	0.00264	0.2 0.0044
Lite-Heavy Truck 10,001-14,000 lbs	0%		0.09	0.000423	0.125 0.000588
Med-Heavy Truck 14,001-33,000 lbs	1%		0.06	0.000714	0.05 0.000595
Heavy-Heavy Truck 33,001-60,000 lbs	16%		0.06	0.009672	0.05 0.00806
Other Bus	0%		0.06	0.000084	0.05 0.00007
Urban Bus	0%		0.06	0.000066	0.05 0.000055
Motorcycle	1%		0.09	0.000513	0.01 0.000057
School Bus	0%		0.06	0.000003	0.05 0.000025
Motor Home	0%		0.09	0.000072	0.125 0.0001
<b>Total</b>	<b>100.0%</b>		<b>0.05645</b>		<b>0.066814</b>

**Total Emissions (metric tons) =**

**Emission Factor by Vehicle Mix (g/mi) x Annual VMT(mi) x 0.000001 metric tons/g**

**Conversion to Carbon Dioxide Equivalency (CO2e) Units based on Global Warming Potential (GWP)**

CH4 25 GWP

N2O 298 GWP

1 ton (short, US) = 0.90718474 metric ton

**Annual Mobile Emissions:**

	<b>Total Emissions</b>	<b>Total CO2e units</b>
N2O Emissions:	1.8856 metric tons N2O	561.91 metric tons CO2e
<b>Project Total:</b>		<b>561.91 metric tons CO2e</b>

#### References

\* from Table C.4: Methane and Nitrous Oxide Emission Factors for Mobile Sources by Vehicle and Fuel Type (g/mile).

in California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.

Assume Model year 2000-present, gasoline fueled.

\*\* Source: California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.

\*\*\* From URBEMIS 2007 results for mobile sources

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**Bay Fair TOD Specific Plan Alternative 2**  
**Alameda County, Annual**

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments High Rise	2,400.00	Dwelling Unit	38.71	2,400,000.00	6864
Apartments Low Rise	800.00	Dwelling Unit	50.00	800,000.00	2288

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	5			Operational Year	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

Project Characteristics - Specific Plan Buildout is 2035

Land Use - For consistency with water usage estimates assumes 75% high rise and 25% low rise apartments based on 3,200 units

Construction Phase - Architectural coating phase changed to overlap with building construction for more realistic scenario

Demolition - Removing 161,000 SF of retail

Vehicle Trips -

Woodstoves - No fireplaces or woodstoves in development per BAAQMD Rule 3

Energy Use - Energy reduced 28%(res) and 5%(commercial) for 2016 Title 24 standards

Water And Wastewater -

Construction Off-road Equipment Mitigation - Implementation of BAQMD Basic Construction Measures

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Waste Mitigation - CalGreen 65% reduction requirement

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	110.00	975.00
tblConstructionPhase	NumDays	1,550.00	1,950.00
tblConstructionPhase	NumDays	100.00	500.00
tblConstructionPhase	NumDays	155.00	555.00
tblConstructionPhase	NumDays	110.00	510.00
tblConstructionPhase	NumDays	60.00	460.00
tblConstructionPhase	PhaseEndDate	3/25/2039	9/26/2033
tblConstructionPhase	PhaseEndDate	9/17/2032	2/7/2031
tblConstructionPhase	PhaseEndDate	9/6/2019	11/29/2019
tblConstructionPhase	PhaseEndDate	2/17/2023	8/18/2023
tblConstructionPhase	PhaseEndDate	6/9/2034	1/21/2033
tblConstructionPhase	PhaseEndDate	2/19/2021	7/2/2021

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

tblConstructionPhase	PhaseStartDate	6/10/2034	1/1/2030
tblConstructionPhase	PhaseStartDate	2/18/2023	8/21/2023
tblConstructionPhase	PhaseStartDate	2/20/2021	7/5/2021
tblConstructionPhase	PhaseStartDate	9/18/2032	2/10/2031
tblConstructionPhase	PhaseStartDate	9/7/2019	9/30/2019
tblEnergyUse	LightingElect	741.44	533.84
tblEnergyUse	LightingElect	810.36	583.46
tblEnergyUse	NT24E	3,277.06	2,359.48
tblEnergyUse	NT24E	3,418.36	2,461.22
tblEnergyUse	NT24NG	2,615.00	1,882.80
tblEnergyUse	NT24NG	2,615.00	1,882.80
tblEnergyUse	T24E	502.89	362.08
tblEnergyUse	T24E	274.84	197.88
tblEnergyUse	T24NG	8,824.58	6,353.70
tblEnergyUse	T24NG	25,590.91	18,425.46
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	360.00	0.00
tblFireplaces	NumberGas	120.00	0.00
tblFireplaces	NumberNoFireplace	96.00	0.00
tblFireplaces	NumberNoFireplace	32.00	0.00
tblFireplaces	NumberWood	408.00	0.00
tblFireplaces	NumberWood	136.00	0.00

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

tblGrading	AcresOfGrading	1,387.50	387.50
tblProjectCharacteristics	OperationalYear	2018	2035
tblWoodstoves	NumberCatalytic	48.00	0.00
tblWoodstoves	NumberCatalytic	16.00	0.00
tblWoodstoves	NumberNoncatalytic	48.00	0.00
tblWoodstoves	NumberNoncatalytic	16.00	0.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

## 2.0 Emissions Summary

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### 2.1 Overall Construction

#### Unmitigated Construction

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Year	tons/yr											MT/yr					
2018	0.4954	5.0700	2.9853	5.3800e-003	0.0623	0.2533	0.3156	0.0118	0.2359	0.2477	0.0000	487.9260	487.9260	0.1275	0.0000	491.1143	
2019	0.5757	5.8640	3.4544	6.2400e-003	4.2174	0.2949	4.5123	2.2962	0.2735	2.5698	0.0000	559.1619	559.1619	0.1525	0.0000	562.9751	
2020	0.5422	5.5627	2.8800	5.1600e-003	4.1739	0.2880	4.4619	2.2890	0.2650	2.5540	0.0000	454.5152	454.5152	0.1421	0.0000	458.0669	
2021	0.5350	5.6742	3.4518	6.7100e-003	6.0514	0.2631	6.3145	3.2301	0.2420	3.4721	0.0000	590.0407	590.0407	0.1858	0.0000	594.6855	
2022	0.4789	5.0550	3.8321	8.2600e-003	1.8972	0.2127	2.1098	0.9462	0.1957	1.1419	0.0000	725.9472	725.9472	0.2297	0.0000	731.6889	
2023	0.6899	5.0114	5.6067	0.0184	2.8617	0.1577	3.0194	1.2053	0.1459	1.3512	0.0000	1,667.9152	1,667.9152	0.2040	0.0000	1,673.0144	
2024	1.0645	5.7562	8.4802	0.0354	2.6807	0.0990	2.7797	0.7200	0.0929	0.8128	0.0000	3,247.5253	3,247.5253	0.1556	0.0000	3,251.4162	
2025	0.9988	5.5331	7.9876	0.0343	2.6705	0.0871	2.7576	0.7172	0.0817	0.7989	0.0000	3,153.7706	3,153.7706	0.1506	0.0000	3,157.5360	
2026	0.9577	5.4669	7.6081	0.0335	2.6705	0.0866	2.7571	0.7172	0.0813	0.7985	0.0000	3,082.4257	3,082.4257	0.1471	0.0000	3,086.1043	
2027	0.9186	5.4038	7.2728	0.0328	2.6705	0.0859	2.7563	0.7172	0.0805	0.7978	0.0000	3,018.8616	3,018.8616	0.1441	0.0000	3,022.4638	
2028	0.8746	5.3313	6.9512	0.0321	2.6603	0.0845	2.7448	0.7145	0.0793	0.7938	0.0000	2,951.7839	2,951.7839	0.1408	0.0000	2,955.3035	
2029	0.8359	5.2917	6.6993	0.0317	2.6705	0.0839	2.7544	0.7172	0.0788	0.7960	0.0000	2,912.3554	2,912.3554	0.1390	0.0000	2,915.8300	
2030	6.9418	4.8232	7.4311	0.0354	3.1462	0.0384	3.1846	0.8438	0.0372	0.8810	0.0000	3,239.0182	3,239.0182	0.0848	0.0000	3,241.1390	
2031	6.3899	1.4913	3.4593	0.0103	0.7760	0.0468	0.8228	0.2072	0.0465	0.2537	0.0000	920.3967	920.3967	0.0266	0.0000	921.0626	
2032	6.3465	1.0963	2.9866	7.3100e-003	0.4930	0.0480	0.5410	0.1312	0.0478	0.1789	0.0000	643.3646	643.3646	0.0197	0.0000	643.8570	
2033	4.4983	0.1691	0.7435	2.7500e-003	0.3490	5.7300e-003	0.3547	0.0928	5.6200e-003	0.0985	0.0000	246.8846	246.8846	4.1600e-003	0.0000	246.9885	
Maximum	6.9418	5.8640	8.4802	0.0354	6.0514	0.2949	6.3145	3.2301	0.2735	3.4721	0.0000	3,247.5253	3,247.5253	0.2297	0.0000	3,251.4162	

## **2.1 Overall Construction**

### **Mitigated Construction**

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Year	tons/yr											MT/yr					
2018	0.4954	5.0700	2.9853	5.3800e-003	0.0623	0.2533	0.3156	0.0118	0.2359	0.2477	0.0000	487.9255	487.9255	0.1275	0.0000	491.1138	
2019	0.5757	5.8640	3.4544	6.2400e-003	4.2174	0.2949	4.5123	2.2962	0.2735	2.5698	0.0000	559.1613	559.1613	0.1525	0.0000	562.9744	
2020	0.5422	5.5627	2.8800	5.1600e-003	4.1739	0.2880	4.4619	2.2890	0.2650	2.5540	0.0000	454.5147	454.5147	0.1421	0.0000	458.0664	
2021	0.5350	5.6742	3.4518	6.7100e-003	6.0514	0.2631	6.3145	3.2301	0.2420	3.4721	0.0000	590.0400	590.0400	0.1858	0.0000	594.6848	
2022	0.4789	5.0549	3.8321	8.2600e-003	1.8972	0.2127	2.1098	0.9462	0.1957	1.1419	0.0000	725.9464	725.9464	0.2297	0.0000	731.6880	
2023	0.6898	5.0114	5.6067	0.0184	2.8617	0.1577	3.0194	1.2053	0.1459	1.3512	0.0000	1,667.9146	1,667.9146	0.2040	0.0000	1,673.0137	
2024	1.0645	5.7562	8.4802	0.0354	2.6807	0.0990	2.7797	0.7200	0.0929	0.8128	0.0000	3,247.5249	3,247.5249	0.1556	0.0000	3,251.4158	
2025	0.9988	5.5331	7.9876	0.0343	2.6705	0.0871	2.7576	0.7172	0.0817	0.7989	0.0000	3,153.7702	3,153.7702	0.1506	0.0000	3,157.5357	
2026	0.9577	5.4669	7.6081	0.0335	2.6705	0.0866	2.7571	0.7172	0.0813	0.7985	0.0000	3,082.4254	3,082.4254	0.1471	0.0000	3,086.1039	
2027	0.9186	5.4038	7.2728	0.0328	2.6705	0.0859	2.7563	0.7172	0.0805	0.7978	0.0000	3,018.8613	3,018.8613	0.1441	0.0000	3,022.4634	
2028	0.8746	5.3313	6.9512	0.0321	2.6603	0.0845	2.7448	0.7145	0.0793	0.7938	0.0000	2,951.7835	2,951.7835	0.1408	0.0000	2,955.3032	
2029	0.8359	5.2917	6.6993	0.0317	2.6705	0.0839	2.7544	0.7172	0.0788	0.7960	0.0000	2,912.3550	2,912.3550	0.1390	0.0000	2,915.8296	
2030	6.9418	4.8232	7.4311	0.0354	3.1462	0.0384	3.1846	0.8438	0.0372	0.8810	0.0000	3,239.0178	3,239.0178	0.0848	0.0000	3,241.1386	
2031	6.3899	1.4913	3.4593	0.0103	0.7760	0.0468	0.8228	0.2072	0.0465	0.2537	0.0000	920.3963	920.3963	0.0266	0.0000	921.0622	
2032	6.3465	1.0963	2.9866	7.3100e-003	0.4930	0.0480	0.5410	0.1312	0.0478	0.1789	0.0000	643.3642	643.3642	0.0197	0.0000	643.8566	
2033	4.4983	0.1691	0.7435	2.7500e-003	0.3490	5.7300e-003	0.3547	0.0928	5.6200e-003	0.0985	0.0000	246.8846	246.8846	4.1600e-003	0.0000	246.9884	
Maximum	6.9418	5.8640	8.4802	0.0354	6.0514	0.2949	6.3145	3.2301	0.2735	3.4721	0.0000	3,247.5249	3,247.5249	0.2297	0.0000	3,251.4158	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2018	3-31-2018	1.3712	1.3712
2	4-1-2018	6-30-2018	1.3856	1.3856
3	7-1-2018	9-30-2018	1.4008	1.4008
4	10-1-2018	12-31-2018	1.4017	1.4017
5	1-1-2019	3-31-2019	1.2818	1.2818
6	4-1-2019	6-30-2019	1.2952	1.2952
7	7-1-2019	9-30-2019	1.3273	1.3273
8	10-1-2019	12-31-2019	2.4987	2.4987
9	1-1-2020	3-31-2020	1.5149	1.5149
10	4-1-2020	6-30-2020	1.5145	1.5145
11	7-1-2020	9-30-2020	1.5311	1.5311
12	10-1-2020	12-31-2020	1.5316	1.5316
13	1-1-2021	3-31-2021	1.4302	1.4302
14	4-1-2021	6-30-2021	1.4457	1.4457
15	7-1-2021	9-30-2021	1.6252	1.6252
16	10-1-2021	12-31-2021	1.6662	1.6662
17	1-1-2022	3-31-2022	1.3686	1.3686
18	4-1-2022	6-30-2022	1.3834	1.3834
19	7-1-2022	9-30-2022	1.3986	1.3986
20	10-1-2022	12-31-2022	1.3990	1.3990
21	1-1-2023	3-31-2023	1.2195	1.2195
22	4-1-2023	6-30-2023	1.2327	1.2327
23	7-1-2023	9-30-2023	1.4517	1.4517

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

24	10-1-2023	12-31-2023	1.8130	1.8130
25	1-1-2024	3-31-2024	1.7233	1.7233
26	4-1-2024	6-30-2024	1.6819	1.6819
27	7-1-2024	9-30-2024	1.7004	1.7004
28	10-1-2024	12-31-2024	1.7422	1.7422
29	1-1-2025	3-31-2025	1.6376	1.6376
30	4-1-2025	6-30-2025	1.6171	1.6171
31	7-1-2025	9-30-2025	1.6349	1.6349
32	10-1-2025	12-31-2025	1.6740	1.6740
33	1-1-2026	3-31-2026	1.6095	1.6095
34	4-1-2026	6-30-2026	1.5910	1.5910
35	7-1-2026	9-30-2026	1.6085	1.6085
36	10-1-2026	12-31-2026	1.6453	1.6453
37	1-1-2027	3-31-2027	1.5828	1.5828
38	4-1-2027	6-30-2027	1.5660	1.5660
39	7-1-2027	9-30-2027	1.5832	1.5832
40	10-1-2027	12-31-2027	1.6180	1.6180
41	1-1-2028	3-31-2028	1.5757	1.5757
42	4-1-2028	6-30-2028	1.5434	1.5434
43	7-1-2028	9-30-2028	1.5603	1.5603
44	10-1-2028	12-31-2028	1.5930	1.5930
45	1-1-2029	3-31-2029	1.5316	1.5316
46	4-1-2029	6-30-2029	1.5183	1.5183
47	7-1-2029	9-30-2029	1.5350	1.5350
48	10-1-2029	12-31-2029	1.5656	1.5656
49	1-1-2030	3-31-2030	2.9231	2.9231
50	4-1-2030	6-30-2030	2.9221	2.9221

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

51	7-1-2030	9-30-2030	2.9543	2.9543
52	10-1-2030	12-31-2030	2.9880	2.9880
53	1-1-2031	3-31-2031	2.2766	2.2766
54	4-1-2031	6-30-2031	1.8490	1.8490
55	7-1-2031	9-30-2031	1.8693	1.8693
56	10-1-2031	12-31-2031	1.8742	1.8742
57	1-1-2032	3-31-2032	1.8506	1.8506
58	4-1-2032	6-30-2032	1.8461	1.8461
59	7-1-2032	9-30-2032	1.8664	1.8664
60	10-1-2032	12-31-2032	1.8709	1.8709
61	1-1-2033	3-31-2033	1.6171	1.6171
62	4-1-2033	6-30-2033	1.5662	1.5662
63	7-1-2033	9-30-2033	1.5146	1.5146
		Highest	2.9880	2.9880

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	15.4581	0.2732	23.6769	1.2500e-003		0.1318	0.1318		0.1318	0.1318	0.0000	38.8121	38.8121	0.0370	0.0000	39.7358
Energy	0.1942	1.6595	0.7062	0.0106		0.1342	0.1342		0.1342	0.1342	0.0000	4,949.3740	4,949.3740	0.1737	0.0636	4,972.6574
Mobile	2.1569	19.8198	23.5223	0.1374	13.3286	0.0682	13.3968	3.5800	0.0637	3.6437	0.0000	12,789.2379	12,789.2379	0.4643	0.0000	12,800.8464
Waste						0.0000	0.0000		0.0000	0.0000	298.8027	0.0000	298.8027	17.6587	0.0000	740.2710
Water						0.0000	0.0000		0.0000	0.0000	66.1452	462.0253	528.1705	6.8146	0.1647	747.6281
<b>Total</b>	<b>17.8092</b>	<b>21.7524</b>	<b>47.9053</b>	<b>0.1492</b>	<b>13.3286</b>	<b>0.3341</b>	<b>13.6627</b>	<b>3.5800</b>	<b>0.3296</b>	<b>3.9096</b>	<b>364.9479</b>	<b>18,239.4494</b>	<b>18,604.3973</b>	<b>25.1484</b>	<b>0.2283</b>	<b>19,301.1387</b>

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	15.4581	0.2732	23.6769	1.2500e-003		0.1318	0.1318		0.1318	0.1318	0.0000	38.8121	38.8121	0.0370	0.0000	39.7358	
Energy	0.1942	1.6595	0.7062	0.0106		0.1342	0.1342		0.1342	0.1342	0.0000	4,949.3740	4,949.3740	0.1737	0.0636	4,972.6574	
Mobile	1.8111	17.4977	16.8650	0.0923	8.3514	0.0461	8.3976	2.2431	0.0431	2.2862	0.0000	8,602.4337	8,602.4337	0.3693	0.0000	8,611.6662	
Waste						0.0000	0.0000		0.0000	0.0000	298.8027	0.0000	298.8027	17.6587	0.0000	740.2710	
Water						0.0000	0.0000		0.0000	0.0000	66.1452	462.0253	528.1705	6.8146	0.1647	747.6281	
<b>Total</b>	<b>17.4634</b>	<b>19.4304</b>	<b>41.2480</b>	<b>0.1041</b>	<b>8.3514</b>	<b>0.3121</b>	<b>8.6635</b>	<b>2.2431</b>	<b>0.3090</b>	<b>2.5521</b>	<b>364.9479</b>	<b>14,052.6452</b>	<b>14,417.5931</b>	<b>25.0533</b>	<b>0.2283</b>	<b>15,111.9585</b>	

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	1.94	10.67	13.90	30.24	37.34	6.60	36.59	37.34	6.26	34.72	0.00	22.95	22.50	0.38	0.00	21.70

**3.0 Construction Detail****Construction Phase**

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2018	11/29/2019	5	500	
2	Site Preparation	Site Preparation	9/30/2019	7/2/2021	5	460	
3	Grading	Grading	7/5/2021	8/18/2023	5	555	
4	Building Construction	Building Construction	8/21/2023	2/7/2031	5	1950	
5	Paving	Paving	2/10/2031	1/21/2033	5	510	
6	Architectural Coating	Architectural Coating	1/1/2030	9/26/2033	5	975	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 387.5**

**Acres of Paving: 0**

**Residential Indoor: 6,480,000; Residential Outdoor: 2,160,000; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	732.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	2,304.00	342.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	461.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Demolition - 2018****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	tons/yr												MT/yr					
Fugitive Dust					0.0414	0.0000	0.0414	6.2600e-003	0.0000	6.2600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.4853	5.0011	2.9107	5.0700e-003		0.2530	0.2530		0.2355	0.2355	0.0000	458.3692	458.3692	0.1263	0.0000	461.5263		
Total	0.4853	5.0011	2.9107	5.0700e-003	0.0414	0.2530	0.2943	6.2600e-003	0.2355	0.2418	0.0000	458.3692	458.3692	0.1263	0.0000	461.5263		

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.2 Demolition - 2018****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	1.8200e-003	0.0624	0.0103	1.6000e-004	5.4500e-003	2.4000e-004	5.6800e-003	1.4300e-003	2.3000e-004	1.6600e-003	0.0000	14.9316	14.9316	7.9000e-004	0.0000	14.9513	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	8.2000e-003	6.4400e-003	0.0643	1.6000e-004	0.0155	1.1000e-004	0.0156	4.1200e-003	1.0000e-004	4.2200e-003	0.0000	14.6252	14.6252	4.6000e-004	0.0000	14.6367	
<b>Total</b>	<b>0.0100</b>	<b>0.0689</b>	<b>0.0746</b>	<b>3.2000e-004</b>	<b>0.0209</b>	<b>3.5000e-004</b>	<b>0.0213</b>	<b>5.5500e-003</b>	<b>3.3000e-004</b>	<b>5.8800e-003</b>	<b>0.0000</b>	<b>29.5569</b>	<b>29.5569</b>	<b>1.2500e-003</b>	<b>0.0000</b>	<b>29.5880</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					0.0414	0.0000	0.0414	6.2600e-003	0.0000	6.2600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.4853	5.0011	2.9107	5.0700e-003		0.2530	0.2530		0.2355	0.2355	0.0000	458.3686	458.3686	0.1263	0.0000	461.5258	
<b>Total</b>	<b>0.4853</b>	<b>5.0011</b>	<b>2.9107</b>	<b>5.0700e-003</b>	<b>0.0414</b>	<b>0.2530</b>	<b>0.2943</b>	<b>6.2600e-003</b>	<b>0.2355</b>	<b>0.2418</b>	<b>0.0000</b>	<b>458.3686</b>	<b>458.3686</b>	<b>0.1263</b>	<b>0.0000</b>	<b>461.5258</b>	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.2 Demolition - 2018****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	1.8200e-003	0.0624	0.0103	1.6000e-004	5.4500e-003	2.4000e-004	5.6800e-003	1.4300e-003	2.3000e-004	1.6600e-003	0.0000	14.9316	14.9316	7.9000e-004	0.0000	14.9513	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	8.2000e-003	6.4400e-003	0.0643	1.6000e-004	0.0155	1.1000e-004	0.0156	4.1200e-003	1.0000e-004	4.2200e-003	0.0000	14.6252	14.6252	4.6000e-004	0.0000	14.6367	
<b>Total</b>	<b>0.0100</b>	<b>0.0689</b>	<b>0.0746</b>	<b>3.2000e-004</b>	<b>0.0209</b>	<b>3.5000e-004</b>	<b>0.0213</b>	<b>5.5500e-003</b>	<b>3.3000e-004</b>	<b>5.8800e-003</b>	<b>0.0000</b>	<b>29.5569</b>	<b>29.5569</b>	<b>1.2500e-003</b>	<b>0.0000</b>	<b>29.5880</b>	

**3.2 Demolition - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					0.0379	0.0000	0.0379	5.7300e-003	0.0000	5.7300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.4199	4.2761	2.6362	4.6400e-003		0.2145	0.2145		0.1995	0.1995	0.0000	413.7846	413.7846	0.1151	0.0000	416.6624	
<b>Total</b>	<b>0.4199</b>	<b>4.2761</b>	<b>2.6362</b>	<b>4.6400e-003</b>	<b>0.0379</b>	<b>0.2145</b>	<b>0.2524</b>	<b>5.7300e-003</b>	<b>0.1995</b>	<b>0.2053</b>	<b>0.0000</b>	<b>413.7846</b>	<b>413.7846</b>	<b>0.1151</b>	<b>0.0000</b>	<b>416.6624</b>	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.2 Demolition - 2019****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	1.5900e-003	0.0544	9.2800e-003	1.4000e-004	5.3800e-003	2.0000e-004	5.5800e-003	1.4100e-003	1.9000e-004	1.6000e-003	0.0000	13.5378	13.5378	7.0000e-004	0.0000	13.5554	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	6.7800e-003	5.1800e-003	0.0523	1.4000e-004	0.0142	1.0000e-004	0.0143	3.7700e-003	9.0000e-005	3.8600e-003	0.0000	13.0009	13.0009	3.7000e-004	0.0000	13.0101	
Total	8.3700e-003	0.0596	0.0616	2.8000e-004	0.0196	3.0000e-004	0.0199	5.1800e-003	2.8000e-004	5.4600e-003	0.0000	26.5387	26.5387	1.0700e-003	0.0000	26.5655	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					0.0379	0.0000	0.0379	5.7300e-003	0.0000	5.7300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.4199	4.2761	2.6362	4.6400e-003		0.2145	0.2145		0.1995	0.1995	0.0000	413.7841	413.7841	0.1151	0.0000	416.6619	
Total	0.4199	4.2761	2.6362	4.6400e-003	0.0379	0.2145	0.2524	5.7300e-003	0.1995	0.2053	0.0000	413.7841	413.7841	0.1151	0.0000	416.6619	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.2 Demolition - 2019****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	1.5900e-003	0.0544	9.2800e-003	1.4000e-004	5.3800e-003	2.0000e-004	5.5800e-003	1.4100e-003	1.9000e-004	1.6000e-003	0.0000	13.5378	13.5378	7.0000e-004	0.0000	13.5554	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	6.7800e-003	5.1800e-003	0.0523	1.4000e-004	0.0142	1.0000e-004	0.0143	3.7700e-003	9.0000e-005	3.8600e-003	0.0000	13.0009	13.0009	3.7000e-004	0.0000	13.0101	
Total	8.3700e-003	0.0596	0.0616	2.8000e-004	0.0196	3.0000e-004	0.0199	5.1800e-003	2.8000e-004	5.4600e-003	0.0000	26.5387	26.5387	1.0700e-003	0.0000	26.5655	

**3.3 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					4.1552	0.0000	4.1552	2.2841	0.0000	2.2841	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.1452	1.5267	0.7391	1.2700e-003		0.0801	0.0801		0.0737	0.0737	0.0000	114.4651	114.4651	0.0362	0.0000	115.3705	
Total	0.1452	1.5267	0.7391	1.2700e-003	4.1552	0.0801	4.2353	2.2841	0.0737	2.3577	0.0000	114.4651	114.4651	0.0362	0.0000	115.3705	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.3 Site Preparation - 2019****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	2.2800e-003	1.7400e-003	0.0176	5.0000e-005	4.7700e-003	3.0000e-005	4.8000e-003	1.2700e-003	3.0000e-005	1.3000e-003	0.0000	4.3735	4.3735	1.2000e-004	0.0000	4.3766	
Total	2.2800e-003	1.7400e-003	0.0176	5.0000e-005	4.7700e-003	3.0000e-005	4.8000e-003	1.2700e-003	3.0000e-005	1.3000e-003	0.0000	4.3735	4.3735	1.2000e-004	0.0000	4.3766	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					4.1552	0.0000	4.1552	2.2841	0.0000	2.2841	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.1452	1.5267	0.7391	1.2700e-003		0.0801	0.0801		0.0737	0.0737	0.0000	114.4650	114.4650	0.0362	0.0000	115.3704	
Total	0.1452	1.5267	0.7391	1.2700e-003	4.1552	0.0801	4.2353	2.2841	0.0737	2.3577	0.0000	114.4650	114.4650	0.0362	0.0000	115.3704	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.3 Site Preparation - 2019****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	2.2800e-003	1.7400e-003	0.0176	5.0000e-005	4.7700e-003	3.0000e-005	4.8000e-003	1.2700e-003	3.0000e-005	1.3000e-003	0.0000	4.3735	4.3735	1.2000e-004	0.0000	4.3766	
Total	2.2800e-003	1.7400e-003	0.0176	5.0000e-005	4.7700e-003	3.0000e-005	4.8000e-003	1.2700e-003	3.0000e-005	1.3000e-003	0.0000	4.3735	4.3735	1.2000e-004	0.0000	4.3766	

**3.3 Site Preparation - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.1552	0.0000	4.1552	2.2841	0.0000	2.2841	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5340	5.5567	2.8183	4.9800e-003		0.2879	0.2879		0.2648	0.2648	0.0000	437.9419	437.9419	0.1416	0.0000	441.4829
Total	0.5340	5.5567	2.8183	4.9800e-003	4.1552	0.2879	4.4431	2.2841	0.2648	2.5489	0.0000	437.9419	437.9419	0.1416	0.0000	441.4829

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.3 Site Preparation - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	8.1500e-003	6.0200e-003	0.0617	1.8000e-004	0.0186	1.3000e-004	0.0188	4.9600e-003	1.2000e-004	5.0800e-003	0.0000	16.5733	16.5733	4.3000e-004	0.0000	16.5840	
Total	8.1500e-003	6.0200e-003	0.0617	1.8000e-004	0.0186	1.3000e-004	0.0188	4.9600e-003	1.2000e-004	5.0800e-003	0.0000	16.5733	16.5733	4.3000e-004	0.0000	16.5840	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					4.1552	0.0000	4.1552	2.2841	0.0000	2.2841	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.5340	5.5567	2.8183	4.9800e-003		0.2879	0.2879		0.2648	0.2648	0.0000	437.9414	437.9414	0.1416	0.0000	441.4824	
Total	0.5340	5.5567	2.8183	4.9800e-003	4.1552	0.2879	4.4431	2.2841	0.2648	2.5489	0.0000	437.9414	437.9414	0.1416	0.0000	441.4824	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.3 Site Preparation - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	8.1500e-003	6.0200e-003	0.0617	1.8000e-004	0.0186	1.3000e-004	0.0188	4.9600e-003	1.2000e-004	5.0800e-003	0.0000	16.5733	16.5733	4.3000e-004	0.0000	16.5840	
Total	8.1500e-003	6.0200e-003	0.0617	1.8000e-004	0.0186	1.3000e-004	0.0188	4.9600e-003	1.2000e-004	5.0800e-003	0.0000	16.5733	16.5733	4.3000e-004	0.0000	16.5840	

**3.3 Site Preparation - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					4.1552	0.0000	4.1552	2.2841	0.0000	2.2841	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.2547	2.6526	1.3856	2.4900e-003		0.1339	0.1339		0.1232	0.1232	0.0000	219.0040	219.0040	0.0708	0.0000	220.7747	
Total	0.2547	2.6526	1.3856	2.4900e-003	4.1552	0.1339	4.2892	2.2841	0.1232	2.4073	0.0000	219.0040	219.0040	0.0708	0.0000	220.7747	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.3 Site Preparation - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	3.7600e-003	2.6800e-003	0.0281	9.0000e-005	9.3200e-003	6.0000e-005	9.3800e-003	2.4800e-003	6.0000e-005	2.5400e-003	0.0000	7.9992	7.9992	1.9000e-004	0.0000	8.0040	
Total	3.7600e-003	2.6800e-003	0.0281	9.0000e-005	9.3200e-003	6.0000e-005	9.3800e-003	2.4800e-003	6.0000e-005	2.5400e-003	0.0000	7.9992	7.9992	1.9000e-004	0.0000	8.0040	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					4.1552	0.0000	4.1552	2.2841	0.0000	2.2841	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.2547	2.6526	1.3856	2.4900e-003		0.1339	0.1339		0.1232	0.1232	0.0000	219.0037	219.0037	0.0708	0.0000	220.7744	
Total	0.2547	2.6526	1.3856	2.4900e-003	4.1552	0.1339	4.2892	2.2841	0.1232	2.4073	0.0000	219.0037	219.0037	0.0708	0.0000	220.7744	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.3 Site Preparation - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	3.7600e-003	2.6800e-003	0.0281	9.0000e-005	9.3200e-003	6.0000e-005	9.3800e-003	2.4800e-003	6.0000e-005	2.5400e-003	0.0000	7.9992	7.9992	1.9000e-004	0.0000	8.0040	
Total	3.7600e-003	2.6800e-003	0.0281	9.0000e-005	9.3200e-003	6.0000e-005	9.3800e-003	2.4800e-003	6.0000e-005	2.5400e-003	0.0000	7.9992	7.9992	1.9000e-004	0.0000	8.0040	

**3.4 Grading - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.8766	0.0000	1.8766	0.9408	0.0000	0.9408	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2724	3.0160	2.0071	4.0300e-003		0.1291	0.1291		0.1187	0.1187	0.0000	354.2174	354.2174	0.1146	0.0000	357.0814
Total	0.2724	3.0160	2.0071	4.0300e-003	1.8766	0.1291	2.0057	0.9408	0.1187	1.0595	0.0000	354.2174	354.2174	0.1146	0.0000	357.0814

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

## 3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	4.1500e-003	2.9600e-003	0.0310	1.0000e-004	0.0103	7.0000e-005	0.0104	2.7300e-003	6.0000e-005	2.8000e-003	0.0000	8.8202	8.8202	2.1000e-004	0.0000	8.8254	
Total	4.1500e-003	2.9600e-003	0.0310	1.0000e-004	0.0103	7.0000e-005	0.0104	2.7300e-003	6.0000e-005	2.8000e-003	0.0000	8.8202	8.8202	2.1000e-004	0.0000	8.8254	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					1.8766	0.0000	1.8766	0.9408	0.0000	0.9408	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.2724	3.0160	2.0071	4.0300e-003		0.1291	0.1291		0.1187	0.1187	0.0000	354.2170	354.2170	0.1146	0.0000	357.0810	
Total	0.2724	3.0160	2.0071	4.0300e-003	1.8766	0.1291	2.0057	0.9408	0.1187	1.0595	0.0000	354.2170	354.2170	0.1146	0.0000	357.0810	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.4 Grading - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	4.1500e-003	2.9600e-003	0.0310	1.0000e-004	0.0103	7.0000e-005	0.0104	2.7300e-003	6.0000e-005	2.8000e-003	0.0000	8.8202	8.8202	2.1000e-004	0.0000	8.8254	
Total	4.1500e-003	2.9600e-003	0.0310	1.0000e-004	0.0103	7.0000e-005	0.0104	2.7300e-003	6.0000e-005	2.8000e-003	0.0000	8.8202	8.8202	2.1000e-004	0.0000	8.8254	

**3.4 Grading - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					1.8766	0.0000	1.8766	0.9408	0.0000	0.9408	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.4712	5.0497	3.7754	8.0700e-003		0.2125	0.2125		0.1955	0.1955	0.0000	708.9498	708.9498	0.2293	0.0000	714.6820	
Total	0.4712	5.0497	3.7754	8.0700e-003	1.8766	0.2125	2.0891	0.9408	0.1955	1.1363	0.0000	708.9498	708.9498	0.2293	0.0000	714.6820	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.4 Grading - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	7.7100e-003	5.3000e-003	0.0567	1.9000e-004	0.0206	1.3000e-004	0.0207	5.4700e-003	1.2000e-004	5.5900e-003	0.0000	16.9974	16.9974	3.8000e-004	0.0000	17.0069	
Total	7.7100e-003	5.3000e-003	0.0567	1.9000e-004	0.0206	1.3000e-004	0.0207	5.4700e-003	1.2000e-004	5.5900e-003	0.0000	16.9974	16.9974	3.8000e-004	0.0000	17.0069	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					1.8766	0.0000	1.8766	0.9408	0.0000	0.9408	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.4712	5.0497	3.7754	8.0700e-003		0.2125	0.2125		0.1955	0.1955	0.0000	708.9490	708.9490	0.2293	0.0000	714.6812	
Total	0.4712	5.0497	3.7754	8.0700e-003	1.8766	0.2125	2.0891	0.9408	0.1955	1.1363	0.0000	708.9490	708.9490	0.2293	0.0000	714.6812	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.4 Grading - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	7.7100e-003	5.3000e-003	0.0567	1.9000e-004	0.0206	1.3000e-004	0.0207	5.4700e-003	1.2000e-004	5.5900e-003	0.0000	16.9974	16.9974	3.8000e-004	0.0000	17.0069	
Total	7.7100e-003	5.3000e-003	0.0567	1.9000e-004	0.0206	1.3000e-004	0.0207	5.4700e-003	1.2000e-004	5.5900e-003	0.0000	16.9974	16.9974	3.8000e-004	0.0000	17.0069	

**3.4 Grading - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					1.8766	0.0000	1.8766	0.9408	0.0000	0.9408	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.2740	2.8475	2.3142	5.1200e-003		0.1175	0.1175		0.1081	0.1081	0.0000	449.9155	449.9155	0.1455	0.0000	453.5533	
Total	0.2740	2.8475	2.3142	5.1200e-003	1.8766	0.1175	1.9941	0.9408	0.1081	1.0489	0.0000	449.9155	449.9155	0.1455	0.0000	453.5533	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

## 3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	4.5500e-003	3.0200e-003	0.0330	1.1000e-004	0.0131	8.0000e-005	0.0131	3.4700e-003	8.0000e-005	3.5500e-003	0.0000	10.3743	10.3743	2.1000e-004	0.0000	10.3796	
Total	4.5500e-003	3.0200e-003	0.0330	1.1000e-004	0.0131	8.0000e-005	0.0131	3.4700e-003	8.0000e-005	3.5500e-003	0.0000	10.3743	10.3743	2.1000e-004	0.0000	10.3796	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					1.8766	0.0000	1.8766	0.9408	0.0000	0.9408	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.2740	2.8475	2.3142	5.1200e-003		0.1175	0.1175		0.1081	0.1081	0.0000	449.9149	449.9149	0.1455	0.0000	453.5527	
Total	0.2740	2.8475	2.3142	5.1200e-003	1.8766	0.1175	1.9941	0.9408	0.1081	1.0489	0.0000	449.9149	449.9149	0.1455	0.0000	453.5527	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.4 Grading - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	4.5500e-003	3.0200e-003	0.0330	1.1000e-004	0.0131	8.0000e-005	0.0131	3.4700e-003	8.0000e-005	3.5500e-003	0.0000	10.3743	10.3743	2.1000e-004	0.0000	10.3796	
Total	4.5500e-003	3.0200e-003	0.0330	1.1000e-004	0.0131	8.0000e-005	0.0131	3.4700e-003	8.0000e-005	3.5500e-003	0.0000	10.3743	10.3743	2.1000e-004	0.0000	10.3796	

**3.5 Building Construction - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0747	0.6833	0.7716	1.2800e-003		0.0332	0.0332		0.0313	0.0313	0.0000	110.1073	110.1073	0.0262	0.0000	110.7621	
Total	0.0747	0.6833	0.7716	1.2800e-003		0.0332	0.0332		0.0313	0.0313	0.0000	110.1073	110.1073	0.0262	0.0000	110.7621	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.5 Building Construction - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0345	1.2776	0.3013	4.2700e-003	0.1067	1.3500e-003	0.1081	0.0309	1.2900e-003	0.0322	0.0000	409.4210	409.4210	0.0178	0.0000	409.8670	
Worker	0.3021	0.2000	2.1866	7.6100e-003	0.8653	5.5300e-003	0.8708	0.2302	5.1000e-003	0.2353	0.0000	688.0972	688.0972	0.0142	0.0000	688.4524	
<b>Total</b>	<b>0.3365</b>	<b>1.4776</b>	<b>2.4879</b>	<b>0.0119</b>	<b>0.9720</b>	<b>6.8800e-003</b>	<b>0.9789</b>	<b>0.2611</b>	<b>6.3900e-003</b>	<b>0.2674</b>	<b>0.0000</b>	<b>1,097.5182</b>	<b>1,097.5182</b>	<b>0.0321</b>	<b>0.0000</b>	<b>1,098.3194</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0747	0.6833	0.7716	1.2800e-003		0.0332	0.0332		0.0313	0.0313	0.0000	110.1071	110.1071	0.0262	0.0000	110.7619	
<b>Total</b>	<b>0.0747</b>	<b>0.6833</b>	<b>0.7716</b>	<b>1.2800e-003</b>		<b>0.0332</b>	<b>0.0332</b>		<b>0.0313</b>	<b>0.0313</b>	<b>0.0000</b>	<b>110.1071</b>	<b>110.1071</b>	<b>0.0262</b>	<b>0.0000</b>	<b>110.7619</b>	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.5 Building Construction - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0345	1.2776	0.3013	4.2700e-003	0.1067	1.3500e-003	0.1081	0.0309	1.2900e-003	0.0322	0.0000	409.4210	409.4210	0.0178	0.0000	409.8670	
Worker	0.3021	0.2000	2.1866	7.6100e-003	0.8653	5.5300e-003	0.8708	0.2302	5.1000e-003	0.2353	0.0000	688.0972	688.0972	0.0142	0.0000	688.4524	
Total	0.3365	1.4776	2.4879	0.0119	0.9720	6.8800e-003	0.9789	0.2611	6.3900e-003	0.2674	0.0000	1,097.5182	1,097.5182	0.0321	0.0000	1,098.3194	

**3.5 Building Construction - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7223	303.7223	0.0718	0.0000	305.5179	
Total	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7223	303.7223	0.0718	0.0000	305.5179	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.5 Building Construction - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0922	3.4979	0.7959	0.0117	0.2943	3.6900e-003	0.2980	0.0851	3.5200e-003	0.0887	0.0000	1,121.3199	1,121.3199	0.0486	0.0000	1,122.5347	
Worker	0.7796	0.4971	5.5664	0.0201	2.3864	0.0149	2.4014	0.6348	0.0138	0.6486	0.0000	1,822.4830	1,822.4830	0.0352	0.0000	1,823.3637	
<b>Total</b>	<b>0.8718</b>	<b>3.9951</b>	<b>6.3623</b>	<b>0.0318</b>	<b>2.6807</b>	<b>0.0186</b>	<b>2.6993</b>	<b>0.7200</b>	<b>0.0173</b>	<b>0.7372</b>	<b>0.0000</b>	<b>2,943.8030</b>	<b>2,943.8030</b>	<b>0.0838</b>	<b>0.0000</b>	<b>2,945.8983</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7220	303.7220	0.0718	0.0000	305.5175	
<b>Total</b>	<b>0.1928</b>	<b>1.7611</b>	<b>2.1179</b>	<b>3.5300e-003</b>		<b>0.0803</b>	<b>0.0803</b>		<b>0.0756</b>	<b>0.0756</b>	<b>0.0000</b>	<b>303.7220</b>	<b>303.7220</b>	<b>0.0718</b>	<b>0.0000</b>	<b>305.5175</b>	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.5 Building Construction - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0922	3.4979	0.7959	0.0117	0.2943	3.6900e-003	0.2980	0.0851	3.5200e-003	0.0887	0.0000	1,121.3199	1,121.3199	0.0486	0.0000	1,122.5347	
Worker	0.7796	0.4971	5.5664	0.0201	2.3864	0.0149	2.4014	0.6348	0.0138	0.6486	0.0000	1,822.4830	1,822.4830	0.0352	0.0000	1,823.3637	
Total	0.8718	3.9951	6.3623	0.0318	2.6807	0.0186	2.6993	0.7200	0.0173	0.7372	0.0000	2,943.8030	2,943.8030	0.0838	0.0000	2,945.8983	

**3.5 Building Construction - 2025****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335	
Total	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.5 Building Construction - 2025****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0894	3.4565	0.7646	0.0116	0.2932	3.6200e-003	0.2968	0.0848	3.4600e-003	0.0883	0.0000	1,109.7094	1,109.7094	0.0477	0.0000	1,110.9024	
Worker	0.7309	0.4493	5.1239	0.0192	2.3773	0.0147	2.3920	0.6324	0.0135	0.6459	0.0000	1,741.4062	1,741.4062	0.0318	0.0000	1,742.2001	
<b>Total</b>	<b>0.8204</b>	<b>3.9058</b>	<b>5.8886</b>	<b>0.0308</b>	<b>2.6705</b>	<b>0.0183</b>	<b>2.6888</b>	<b>0.7172</b>	<b>0.0170</b>	<b>0.7342</b>	<b>0.0000</b>	<b>2,851.1157</b>	<b>2,851.1157</b>	<b>0.0795</b>	<b>0.0000</b>	<b>2,853.1025</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331	
<b>Total</b>	<b>0.1784</b>	<b>1.6273</b>	<b>2.0991</b>	<b>3.5200e-003</b>		<b>0.0689</b>	<b>0.0689</b>		<b>0.0648</b>	<b>0.0648</b>	<b>0.0000</b>	<b>302.6545</b>	<b>302.6545</b>	<b>0.0711</b>	<b>0.0000</b>	<b>304.4331</b>	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.5 Building Construction - 2025****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0894	3.4565	0.7646	0.0116	0.2932	3.6200e-003	0.2968	0.0848	3.4600e-003	0.0883	0.0000	1,109.7094	1,109.7094	0.0477	0.0000	1,110.9024	
Worker	0.7309	0.4493	5.1239	0.0192	2.3773	0.0147	2.3920	0.6324	0.0135	0.6459	0.0000	1,741.4062	1,741.4062	0.0318	0.0000	1,742.2001	
Total	0.8204	3.9058	5.8886	0.0308	2.6705	0.0183	2.6888	0.7172	0.0170	0.7342	0.0000	2,851.1157	2,851.1157	0.0795	0.0000	2,853.1025	

**3.5 Building Construction - 2026****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335	
Total	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.5 Building Construction - 2026****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0874	3.4291	0.7423	0.0115	0.2932	3.5700e-003	0.2967	0.0848	3.4100e-003	0.0882	0.0000	1,103.1673	1,103.1673	0.0471	0.0000	1,104.3447	
Worker	0.6918	0.4105	4.7668	0.0185	2.3773	0.0142	2.3916	0.6324	0.0131	0.6455	0.0000	1,676.6035	1,676.6035	0.0289	0.0000	1,677.3261	
<b>Total</b>	<b>0.7792</b>	<b>3.8396</b>	<b>5.5091</b>	<b>0.0300</b>	<b>2.6705</b>	<b>0.0178</b>	<b>2.6883</b>	<b>0.7172</b>	<b>0.0165</b>	<b>0.7337</b>	<b>0.0000</b>	<b>2,779.7708</b>	<b>2,779.7708</b>	<b>0.0760</b>	<b>0.0000</b>	<b>2,781.6708</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331	
<b>Total</b>	<b>0.1784</b>	<b>1.6273</b>	<b>2.0991</b>	<b>3.5200e-003</b>		<b>0.0689</b>	<b>0.0689</b>		<b>0.0648</b>	<b>0.0648</b>	<b>0.0000</b>	<b>302.6545</b>	<b>302.6545</b>	<b>0.0711</b>	<b>0.0000</b>	<b>304.4331</b>	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.5 Building Construction - 2026****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0874	3.4291	0.7423	0.0115	0.2932	3.5700e-003	0.2967	0.0848	3.4100e-003	0.0882	0.0000	1,103.1673	1,103.1673	0.0471	0.0000	1,104.3447	
Worker	0.6918	0.4105	4.7668	0.0185	2.3773	0.0142	2.3916	0.6324	0.0131	0.6455	0.0000	1,676.6035	1,676.6035	0.0289	0.0000	1,677.3261	
<b>Total</b>	<b>0.7792</b>	<b>3.8396</b>	<b>5.5091</b>	<b>0.0300</b>	<b>2.6705</b>	<b>0.0178</b>	<b>2.6883</b>	<b>0.7172</b>	<b>0.0165</b>	<b>0.7337</b>	<b>0.0000</b>	<b>2,779.7708</b>	<b>2,779.7708</b>	<b>0.0760</b>	<b>0.0000</b>	<b>2,781.6708</b>	

**3.5 Building Construction - 2027****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335	
<b>Total</b>	<b>0.1785</b>	<b>1.6273</b>	<b>2.0991</b>	<b>3.5200e-003</b>		<b>0.0689</b>	<b>0.0689</b>		<b>0.0648</b>	<b>0.0648</b>	<b>0.0000</b>	<b>302.6549</b>	<b>302.6549</b>	<b>0.0711</b>	<b>0.0000</b>	<b>304.4335</b>	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.5 Building Construction - 2027****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0857	3.4005	0.7237	0.0114	0.2932	3.5100e-003	0.2967	0.0848	3.3600e-003	0.0882	0.0000	1,097.2212	1,097.2212	0.0466	0.0000	1,098.3858	
Worker	0.6545	0.3760	4.4500	0.0179	2.3773	0.0135	2.3908	0.6324	0.0124	0.6448	0.0000	1,618.9855	1,618.9855	0.0264	0.0000	1,619.6444	
<b>Total</b>	<b>0.7401</b>	<b>3.7765</b>	<b>5.1737</b>	<b>0.0293</b>	<b>2.6705</b>	<b>0.0170</b>	<b>2.6875</b>	<b>0.7172</b>	<b>0.0158</b>	<b>0.7330</b>	<b>0.0000</b>	<b>2,716.2067</b>	<b>2,716.2067</b>	<b>0.0729</b>	<b>0.0000</b>	<b>2,718.0302</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331	
<b>Total</b>	<b>0.1784</b>	<b>1.6273</b>	<b>2.0991</b>	<b>3.5200e-003</b>		<b>0.0689</b>	<b>0.0689</b>		<b>0.0648</b>	<b>0.0648</b>	<b>0.0000</b>	<b>302.6545</b>	<b>302.6545</b>	<b>0.0711</b>	<b>0.0000</b>	<b>304.4331</b>	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.5 Building Construction - 2027****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0857	3.4005	0.7237	0.0114	0.2932	3.5100e-003	0.2967	0.0848	3.3600e-003	0.0882	0.0000	1,097.2212	1,097.2212	0.0466	0.0000	1,098.3858	
Worker	0.6545	0.3760	4.4500	0.0179	2.3773	0.0135	2.3908	0.6324	0.0124	0.6448	0.0000	1,618.9855	1,618.9855	0.0264	0.0000	1,619.6444	
Total	0.7401	3.7765	5.1737	0.0293	2.6705	0.0170	2.6875	0.7172	0.0158	0.7330	0.0000	2,716.2067	2,716.2067	0.0729	0.0000	2,718.0302	

**3.5 Building Construction - 2028****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4953	301.4953	0.0709	0.0000	303.2671	
Total	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4953	301.4953	0.0709	0.0000	303.2671	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.5 Building Construction - 2028****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0838	3.3663	0.7057	0.0113	0.2920	3.4600e-003	0.2955	0.0845	3.3000e-003	0.0878	0.0000	1,088.2177	1,088.2177	0.0459	0.0000	1,089.3643	
Worker	0.6131	0.3439	4.1545	0.0173	2.3682	0.0125	2.3807	0.6300	0.0115	0.6415	0.0000	1,562.0709	1,562.0709	0.0241	0.0000	1,562.6721	
<b>Total</b>	<b>0.6969</b>	<b>3.7102</b>	<b>4.8602</b>	<b>0.0286</b>	<b>2.6603</b>	<b>0.0160</b>	<b>2.6762</b>	<b>0.7145</b>	<b>0.0148</b>	<b>0.7293</b>	<b>0.0000</b>	<b>2,650.2886</b>	<b>2,650.2886</b>	<b>0.0699</b>	<b>0.0000</b>	<b>2,652.0364</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4949	301.4949	0.0709	0.0000	303.2667	
<b>Total</b>	<b>0.1778</b>	<b>1.6211</b>	<b>2.0910</b>	<b>3.5000e-003</b>		<b>0.0686</b>	<b>0.0686</b>		<b>0.0645</b>	<b>0.0645</b>	<b>0.0000</b>	<b>301.4949</b>	<b>301.4949</b>	<b>0.0709</b>	<b>0.0000</b>	<b>303.2667</b>	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.5 Building Construction - 2028****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0838	3.3663	0.7057	0.0113	0.2920	3.4600e-003	0.2955	0.0845	3.3000e-003	0.0878	0.0000	1,088.2177	1,088.2177	0.0459	0.0000	1,089.3643	
Worker	0.6131	0.3439	4.1545	0.0173	2.3682	0.0125	2.3807	0.6300	0.0115	0.6415	0.0000	1,562.0709	1,562.0709	0.0241	0.0000	1,562.6721	
Total	0.6969	3.7102	4.8602	0.0286	2.6603	0.0160	2.6762	0.7145	0.0148	0.7293	0.0000	2,650.2886	2,650.2886	0.0699	0.0000	2,652.0364	

**3.5 Building Construction - 2029****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335	
Total	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.5 Building Construction - 2029****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0825	3.3472	0.6912	0.0113	0.2932	3.4000e-003	0.2966	0.0848	3.2500e-003	0.0881	0.0000	1,086.5748	1,086.5748	0.0458	0.0000	1,087.7186	
Worker	0.5750	0.3173	3.9090	0.0168	2.3773	0.0117	2.3890	0.6324	0.0108	0.6432	0.0000	1,523.1257	1,523.1257	0.0221	0.0000	1,523.6779	
<b>Total</b>	<b>0.6574</b>	<b>3.6644</b>	<b>4.6002</b>	<b>0.0281</b>	<b>2.6705</b>	<b>0.0151</b>	<b>2.6856</b>	<b>0.7172</b>	<b>0.0140</b>	<b>0.7312</b>	<b>0.0000</b>	<b>2,609.7005</b>	<b>2,609.7005</b>	<b>0.0678</b>	<b>0.0000</b>	<b>2,611.3965</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331	
<b>Total</b>	<b>0.1784</b>	<b>1.6273</b>	<b>2.0991</b>	<b>3.5200e-003</b>		<b>0.0689</b>	<b>0.0689</b>		<b>0.0648</b>	<b>0.0648</b>	<b>0.0000</b>	<b>302.6545</b>	<b>302.6545</b>	<b>0.0711</b>	<b>0.0000</b>	<b>304.4331</b>	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.5 Building Construction - 2029****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0825	3.3472	0.6912	0.0113	0.2932	3.4000e-003	0.2966	0.0848	3.2500e-003	0.0881	0.0000	1,086.5748	1,086.5748	0.0458	0.0000	1,087.7186	
Worker	0.5750	0.3173	3.9090	0.0168	2.3773	0.0117	2.3890	0.6324	0.0108	0.6432	0.0000	1,523.1257	1,523.1257	0.0221	0.0000	1,523.6779	
Total	0.6574	3.6644	4.6002	0.0281	2.6705	0.0151	2.6856	0.7172	0.0140	0.7312	0.0000	2,609.7005	2,609.7005	0.0678	0.0000	2,611.3965	

**3.5 Building Construction - 2030****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0336	343.0336	0.0138	0.0000	343.3777	
Total	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0336	343.0336	0.0138	0.0000	343.3777	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.5 Building Construction - 2030****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0813	3.3256	0.6793	0.0113	0.2932	3.3500e-003	0.2965	0.0848	3.2100e-003	0.0880	0.0000	1,082.2623	1,082.2623	0.0454	0.0000	1,083.3976	
Worker	0.5355	0.2920	3.6737	0.0164	2.3773	0.0109	2.3882	0.6324	0.0100	0.6425	0.0000	1,483.5613	1,483.5613	0.0203	0.0000	1,484.0677	
<b>Total</b>	<b>0.6167</b>	<b>3.6176</b>	<b>4.3530</b>	<b>0.0277</b>	<b>2.6705</b>	<b>0.0143</b>	<b>2.6848</b>	<b>0.7172</b>	<b>0.0133</b>	<b>0.7305</b>	<b>0.0000</b>	<b>2,565.8236</b>	<b>2,565.8236</b>	<b>0.0657</b>	<b>0.0000</b>	<b>2,567.4653</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0332	343.0332	0.0138	0.0000	343.3773	
<b>Total</b>	<b>0.1708</b>	<b>1.0355</b>	<b>2.1085</b>	<b>4.0400e-003</b>		<b>0.0193</b>	<b>0.0193</b>		<b>0.0193</b>	<b>0.0193</b>	<b>0.0000</b>	<b>343.0332</b>	<b>343.0332</b>	<b>0.0138</b>	<b>0.0000</b>	<b>343.3773</b>	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.5 Building Construction - 2030****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0813	3.3256	0.6793	0.0113	0.2932	3.3500e-003	0.2965	0.0848	3.2100e-003	0.0880	0.0000	1,082.2623	1,082.2623	0.0454	0.0000	1,083.3976	
Worker	0.5355	0.2920	3.6737	0.0164	2.3773	0.0109	2.3882	0.6324	0.0100	0.6425	0.0000	1,483.5613	1,483.5613	0.0203	0.0000	1,484.0677	
Total	0.6167	3.6176	4.3530	0.0277	2.6705	0.0143	2.6848	0.7172	0.0133	0.7305	0.0000	2,565.8236	2,565.8236	0.0657	0.0000	2,567.4653	

**3.5 Building Construction - 2031****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0183	0.1111	0.2262	4.3000e-004	2.0700e-003	2.0700e-003	2.0700e-003	2.0700e-003	2.0700e-003	0.0000	36.8005	36.8005	1.4800e-003	0.0000	36.8375		
Total	0.0183	0.1111	0.2262	4.3000e-004	2.0700e-003	2.0700e-003	2.0700e-003	2.0700e-003	2.0700e-003	0.0000	36.8005	36.8005	1.4800e-003	0.0000	36.8375		

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.5 Building Construction - 2031****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	8.6200e-003	0.3551	0.0719	1.2100e-003	0.0315	3.6000e-004	0.0318	9.1000e-003	3.4000e-004	9.4400e-003	0.0000	115.7682	115.7682	4.8400e-003	0.0000	115.8893	
Worker	0.0529	0.0288	0.3700	1.7200e-003	0.2550	1.0900e-003	0.2561	0.0678	1.0100e-003	0.0689	0.0000	155.4322	155.4322	1.9900e-003	0.0000	155.4819	
<b>Total</b>	<b>0.0616</b>	<b>0.3838</b>	<b>0.4419</b>	<b>2.9300e-003</b>	<b>0.2865</b>	<b>1.4500e-003</b>	<b>0.2879</b>	<b>0.0769</b>	<b>1.3500e-003</b>	<b>0.0783</b>	<b>0.0000</b>	<b>271.2004</b>	<b>271.2004</b>	<b>6.8300e-003</b>	<b>0.0000</b>	<b>271.3712</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0183	0.1111	0.2262	4.3000e-004		2.0700e-003	2.0700e-003		2.0700e-003	2.0700e-003	0.0000	36.8005	36.8005	1.4800e-003	0.0000	36.8374	
<b>Total</b>	<b>0.0183</b>	<b>0.1111</b>	<b>0.2262</b>	<b>4.3000e-004</b>		<b>2.0700e-003</b>	<b>2.0700e-003</b>		<b>2.0700e-003</b>	<b>2.0700e-003</b>	<b>0.0000</b>	<b>36.8005</b>	<b>36.8005</b>	<b>1.4800e-003</b>	<b>0.0000</b>	<b>36.8374</b>	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.5 Building Construction - 2031****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	8.6200e-003	0.3551	0.0719	1.2100e-003	0.0315	3.6000e-004	0.0318	9.1000e-003	3.4000e-004	9.4400e-003	0.0000	115.7682	115.7682	4.8400e-003	0.0000	115.8893	
Worker	0.0529	0.0288	0.3700	1.7200e-003	0.2550	1.0900e-003	0.2561	0.0678	1.0100e-003	0.0689	0.0000	155.4322	155.4322	1.9900e-003	0.0000	155.4819	
Total	0.0616	0.3838	0.4419	2.9300e-003	0.2865	1.4500e-003	0.2879	0.0769	1.3500e-003	0.0783	0.0000	271.2004	271.2004	6.8300e-003	0.0000	271.3712	

**3.6 Paving - 2031****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1613	0.8295	1.8465	3.2700e-003			0.0385	0.0385		0.0385	0.0385	0.0000	280.7594	280.7594	0.0132	0.0000	281.0884
Paving	0.0000						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1613	0.8295	1.8465	3.2700e-003			0.0385	0.0385		0.0385	0.0385	0.0000	280.7594	280.7594	0.0132	0.0000	281.0884

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.6 Paving - 2031****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	2.8700e-003	1.5600e-003	0.0200	9.0000e-005	0.0138	6.0000e-005	0.0139	3.6800e-003	5.0000e-005	3.7300e-003	0.0000	8.4207	8.4207	1.1000e-004	0.0000	8.4234	
Total	2.8700e-003	1.5600e-003	0.0200	9.0000e-005	0.0138	6.0000e-005	0.0139	3.6800e-003	5.0000e-005	3.7300e-003	0.0000	8.4207	8.4207	1.1000e-004	0.0000	8.4234	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1613	0.8295	1.8465	3.2700e-003			0.0385	0.0385		0.0385	0.0385	0.0000	280.7590	280.7590	0.0132	0.0000	281.0881
Paving	0.0000						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1613	0.8295	1.8465	3.2700e-003			0.0385	0.0385		0.0385	0.0385	0.0000	280.7590	280.7590	0.0132	0.0000	281.0881

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.6 Paving - 2031****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	2.8700e-003	1.5600e-003	0.0200	9.0000e-005	0.0138	6.0000e-005	0.0139	3.6800e-003	5.0000e-005	3.7300e-003	0.0000	8.4207	8.4207	1.1000e-004	0.0000	8.4234	
Total	2.8700e-003	1.5600e-003	0.0200	9.0000e-005	0.0138	6.0000e-005	0.0139	3.6800e-003	5.0000e-005	3.7300e-003	0.0000	8.4207	8.4207	1.1000e-004	0.0000	8.4234	

**3.6 Paving - 2032****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1814	0.9328	2.0763	3.6700e-003			0.0433	0.0433		0.0433	0.0433	0.0000	315.7036	315.7036	0.0148	0.0000	316.0736
Paving	0.0000						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1814	0.9328	2.0763	3.6700e-003			0.0433	0.0433		0.0433	0.0433	0.0000	315.7036	315.7036	0.0148	0.0000	316.0736

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.6 Paving - 2032****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	2.9900e-003	1.6200e-003	0.0213	1.0000e-004	0.0155	6.0000e-005	0.0156	4.1300e-003	6.0000e-005	4.1900e-003	0.0000	9.2714	9.2714	1.1000e-004	0.0000	9.2742	
Total	2.9900e-003	1.6200e-003	0.0213	1.0000e-004	0.0155	6.0000e-005	0.0156	4.1300e-003	6.0000e-005	4.1900e-003	0.0000	9.2714	9.2714	1.1000e-004	0.0000	9.2742	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1814	0.9328	2.0763	3.6700e-003			0.0433	0.0433		0.0433	0.0433	0.0000	315.7033	315.7033	0.0148	0.0000	316.0733
Paving	0.0000						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.1814	0.9328	2.0763	3.6700e-003			0.0433	0.0433		0.0433	0.0433	0.0000	315.7033	315.7033	0.0148	0.0000	316.0733

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.6 Paving - 2032****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	2.9900e-003	1.6200e-003	0.0213	1.0000e-004	0.0155	6.0000e-005	0.0156	4.1300e-003	6.0000e-005	4.1900e-003	0.0000	9.2714	9.2714	1.1000e-004	0.0000	9.2742	
Total	2.9900e-003	1.6200e-003	0.0213	1.0000e-004	0.0155	6.0000e-005	0.0156	4.1300e-003	6.0000e-005	4.1900e-003	0.0000	9.2714	9.2714	1.1000e-004	0.0000	9.2742	

**3.6 Paving - 2033****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0104	0.0534	0.1189	2.1000e-004		2.4800e-003	2.4800e-003		2.4800e-003	2.4800e-003	0.0000	18.0746	18.0746	8.5000e-004	0.0000	18.0958	
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.0104	0.0534	0.1189	2.1000e-004		2.4800e-003	2.4800e-003		2.4800e-003	2.4800e-003	0.0000	18.0746	18.0746	8.5000e-004	0.0000	18.0958	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.6 Paving - 2033****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.6000e-004	9.0000e-005	1.1500e-003	1.0000e-005	8.9000e-004	0.0000	8.9000e-004	2.4000e-004	0.0000	2.4000e-004	0.5211	0.5211	1.0000e-005	0.0000	0.5212		
Total	1.6000e-004	9.0000e-005	1.1500e-003	1.0000e-005	8.9000e-004	0.0000	8.9000e-004	2.4000e-004	0.0000	2.4000e-004	0.5211	0.5211	1.0000e-005	0.0000	0.5212		

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0104	0.0534	0.1189	2.1000e-004		2.4800e-003	2.4800e-003		2.4800e-003	2.4800e-003	0.0000	18.0746	18.0746	8.5000e-004	0.0000	18.0958	
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.0104	0.0534	0.1189	2.1000e-004		2.4800e-003	2.4800e-003		2.4800e-003	2.4800e-003	0.0000	18.0746	18.0746	8.5000e-004	0.0000	18.0958	

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**3.6 Paving - 2033****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.6000e-004	9.0000e-005	1.1500e-003	1.0000e-005	8.9000e-004	0.0000	8.9000e-004	2.4000e-004	0.0000	2.4000e-004	0.0000	0.5211	0.5211	1.0000e-005	0.0000	0.5212	
Total	1.6000e-004	9.0000e-005	1.1500e-003	1.0000e-005	8.9000e-004	0.0000	8.9000e-004	2.4000e-004	0.0000	2.4000e-004	0.0000	0.5211	0.5211	1.0000e-005	0.0000	0.5212	

**3.7 Architectural Coating - 2030****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	6.0301						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0171	0.1117	0.2346	3.9000e-004		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003	0.0000	33.3200	33.3200	1.3500e-003	0.0000	33.3537
Total	6.0471	0.1117	0.2346	3.9000e-004		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003	0.0000	33.3200	33.3200	1.3500e-003	0.0000	33.3537

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**3.7 Architectural Coating - 2030****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1071	0.0584	0.7351	3.2800e-003	0.4757	2.1800e-003	0.4779	0.1265	2.0100e-003	0.1285	0.0000	296.8410	296.8410	4.0500e-003	0.0000	296.9424	
<b>Total</b>	<b>0.1071</b>	<b>0.0584</b>	<b>0.7351</b>	<b>3.2800e-003</b>	<b>0.4757</b>	<b>2.1800e-003</b>	<b>0.4779</b>	<b>0.1265</b>	<b>2.0100e-003</b>	<b>0.1285</b>	<b>0.0000</b>	<b>296.8410</b>	<b>296.8410</b>	<b>4.0500e-003</b>	<b>0.0000</b>	<b>296.9424</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Archit. Coating	6.0301						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0171	0.1117	0.2346	3.9000e-004		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003	0.0000	33.3199	33.3199	1.3500e-003	0.0000	33.3536	
<b>Total</b>	<b>6.0471</b>	<b>0.1117</b>	<b>0.2346</b>	<b>3.9000e-004</b>		<b>2.6500e-003</b>	<b>2.6500e-003</b>		<b>2.6500e-003</b>	<b>2.6500e-003</b>	<b>0.0000</b>	<b>33.3199</b>	<b>33.3199</b>	<b>1.3500e-003</b>	<b>0.0000</b>	<b>33.3536</b>	

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**3.7 Architectural Coating - 2030****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1071	0.0584	0.7351	3.2800e-003	0.4757	2.1800e-003	0.4779	0.1265	2.0100e-003	0.1285	0.0000	296.8410	296.8410	4.0500e-003	0.0000	296.9424	
Total	0.1071	0.0584	0.7351	3.2800e-003	0.4757	2.1800e-003	0.4779	0.1265	2.0100e-003	0.1285	0.0000	296.8410	296.8410	4.0500e-003	0.0000	296.9424	

**3.7 Architectural Coating - 2031****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Archit. Coating	6.0301						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0171	0.1117	0.2346	3.9000e-004		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003	0.0000	33.3200	33.3200	1.3500e-003	0.0000	33.3537	
Total	6.0471	0.1117	0.2346	3.9000e-004		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003	0.0000	33.3200	33.3200	1.3500e-003	0.0000	33.3537	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.7 Architectural Coating - 2031****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0987	0.0536	0.6900	3.2000e-003	0.4757	2.0400e-003	0.4777	0.1265	1.8800e-003	0.1284	0.0000	289.8958	289.8958	3.7100e-003	0.0000	289.9885	
<b>Total</b>	<b>0.0987</b>	<b>0.0536</b>	<b>0.6900</b>	<b>3.2000e-003</b>	<b>0.4757</b>	<b>2.0400e-003</b>	<b>0.4777</b>	<b>0.1265</b>	<b>1.8800e-003</b>	<b>0.1284</b>	<b>0.0000</b>	<b>289.8958</b>	<b>289.8958</b>	<b>3.7100e-003</b>	<b>0.0000</b>	<b>289.9885</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Archit. Coating	6.0301						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0171	0.1117	0.2346	3.9000e-004		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003	0.0000	33.3199	33.3199	1.3500e-003	0.0000	33.3536	
<b>Total</b>	<b>6.0471</b>	<b>0.1117</b>	<b>0.2346</b>	<b>3.9000e-004</b>		<b>2.6500e-003</b>	<b>2.6500e-003</b>		<b>2.6500e-003</b>	<b>2.6500e-003</b>	<b>0.0000</b>	<b>33.3199</b>	<b>33.3199</b>	<b>1.3500e-003</b>	<b>0.0000</b>	<b>33.3536</b>	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.7 Architectural Coating - 2031****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0987	0.0536	0.6900	3.2000e-003	0.4757	2.0400e-003	0.4777	0.1265	1.8800e-003	0.1284	0.0000	289.8958	289.8958	3.7100e-003	0.0000	289.9885	
Total	0.0987	0.0536	0.6900	3.2000e-003	0.4757	2.0400e-003	0.4777	0.1265	1.8800e-003	0.1284	0.0000	289.8958	289.8958	3.7100e-003	0.0000	289.9885	

**3.7 Architectural Coating - 2032****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Archit. Coating	6.0532						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0171	0.1122	0.2355	3.9000e-004		2.6600e-003	2.6600e-003		2.6600e-003	2.6600e-003	0.0000	33.4476	33.4476	1.3500e-003	0.0000	33.4815	
Total	6.0703	0.1122	0.2355	3.9000e-004		2.6600e-003	2.6600e-003		2.6600e-003	2.6600e-003	0.0000	33.4476	33.4476	1.3500e-003	0.0000	33.4815	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.7 Architectural Coating - 2032****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0918	0.0498	0.6535	3.1500e-003	0.4775	1.9100e-003	0.4794	0.1270	1.7600e-003	0.1288	0.0000	284.9419	284.9419	3.4300e-003	0.0000	285.0276	
<b>Total</b>	<b>0.0918</b>	<b>0.0498</b>	<b>0.6535</b>	<b>3.1500e-003</b>	<b>0.4775</b>	<b>1.9100e-003</b>	<b>0.4794</b>	<b>0.1270</b>	<b>1.7600e-003</b>	<b>0.1288</b>	<b>0.0000</b>	<b>284.9419</b>	<b>284.9419</b>	<b>3.4300e-003</b>	<b>0.0000</b>	<b>285.0276</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Archit. Coating	6.0532						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0171	0.1122	0.2355	3.9000e-004		2.6600e-003	2.6600e-003		2.6600e-003	2.6600e-003	0.0000	33.4476	33.4476	1.3500e-003	0.0000	33.4814	
<b>Total</b>	<b>6.0703</b>	<b>0.1122</b>	<b>0.2355</b>	<b>3.9000e-004</b>		<b>2.6600e-003</b>	<b>2.6600e-003</b>		<b>2.6600e-003</b>	<b>2.6600e-003</b>	<b>0.0000</b>	<b>33.4476</b>	<b>33.4476</b>	<b>1.3500e-003</b>	<b>0.0000</b>	<b>33.4814</b>	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.7 Architectural Coating - 2032****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0918	0.0498	0.6535	3.1500e-003	0.4775	1.9100e-003	0.4794	0.1270	1.7600e-003	0.1288	0.0000	284.9419	284.9419	3.4300e-003	0.0000	285.0276	
Total	0.0918	0.0498	0.6535	3.1500e-003	0.4775	1.9100e-003	0.4794	0.1270	1.7600e-003	0.1288	0.0000	284.9419	284.9419	3.4300e-003	0.0000	285.0276	

**3.7 Architectural Coating - 2033****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Archit. Coating	4.4128						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0125	0.0818	0.1717	2.8000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	24.3836	24.3836	9.9000e-004	0.0000	24.4082	
Total	4.4253	0.0818	0.1717	2.8000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	24.3836	24.3836	9.9000e-004	0.0000	24.4082	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.7 Architectural Coating - 2033****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0624	0.0338	0.4518	2.2500e-003	0.3481	1.3100e-003	0.3494	0.0926	1.2000e-003	0.0938	0.0000	203.9054	203.9054	2.3200e-003	0.0000	203.9632	
<b>Total</b>	<b>0.0624</b>	<b>0.0338</b>	<b>0.4518</b>	<b>2.2500e-003</b>	<b>0.3481</b>	<b>1.3100e-003</b>	<b>0.3494</b>	<b>0.0926</b>	<b>1.2000e-003</b>	<b>0.0938</b>	<b>0.0000</b>	<b>203.9054</b>	<b>203.9054</b>	<b>2.3200e-003</b>	<b>0.0000</b>	<b>203.9632</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Archit. Coating	4.4128						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0125	0.0818	0.1717	2.8000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	24.3835	24.3835	9.9000e-004	0.0000	24.4082	
<b>Total</b>	<b>4.4253</b>	<b>0.0818</b>	<b>0.1717</b>	<b>2.8000e-004</b>		<b>1.9400e-003</b>	<b>1.9400e-003</b>		<b>1.9400e-003</b>	<b>1.9400e-003</b>	<b>0.0000</b>	<b>24.3835</b>	<b>24.3835</b>	<b>9.9000e-004</b>	<b>0.0000</b>	<b>24.4082</b>	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**3.7 Architectural Coating - 2033****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0624	0.0338	0.4518	2.2500e-003	0.3481	1.3100e-003	0.3494	0.0926	1.2000e-003	0.0938	0.0000	203.9054	203.9054	2.3200e-003	0.0000	203.9632	
Total	0.0624	0.0338	0.4518	2.2500e-003	0.3481	1.3100e-003	0.3494	0.0926	1.2000e-003	0.0938	0.0000	203.9054	203.9054	2.3200e-003	0.0000	203.9632	

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

Increase Density

Increase Diversity

Improve Walkability Design

Increase Transit Accessibility

Improve Pedestrian Network

Provide Traffic Calming Measures

Provide BRT System

Expand Transit Network

Implement Trip Reduction Program

Encourage Telecommuting and Alternative Work Schedules

Employee Vanpool/Shuttle

Provide Riade Sharing Program

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.8111	17.4977	16.8650	0.0923	8.3514	0.0461	8.3976	2.2431	0.0431	2.2862	0.0000	8,602.4337	8,602.4337	0.3693	0.0000	8,611.6662
Unmitigated	2.1569	19.8198	23.5223	0.1374	13.3286	0.0682	13.3968	3.5800	0.0637	3.6437	0.0000	12,789.2379	12,789.2379	0.4643	0.0000	12,800.8464

## 4.2 Trip Summary Information

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Apartments High Rise	10,080.00	11,952.00	8760.00	23,462,971	23,462,971	14,701,382	14,701,382
Apartments Low Rise	5,272.00	5,728.00	4856.00	12,189,447	12,189,447	7,637,640	7,637,640
Total	15,352.00	17,680.00	13,616.00	35,652,418	35,652,418	22,339,023	22,339,023

## 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments High Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Apartments Low Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments High Rise	0.566131	0.035263	0.188976	0.102013	0.011508	0.005051	0.027665	0.053145	0.002326	0.001628	0.005241	0.000420	0.000634
Apartments Low Rise	0.566131	0.035263	0.188976	0.102013	0.011508	0.005051	0.027665	0.053145	0.002326	0.001628	0.005241	0.000420	0.000634

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3,027.5193	3,027.5193	0.1369	0.0283	3,039.3820	
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3,027.5193	3,027.5193	0.1369	0.0283	3,039.3820	
NaturalGas Mitigated	0.1942	1.6595	0.7062	0.0106		0.1342	0.1342		0.1342	0.1342	0.0000	1,921.8548	1,921.8548	0.0368	0.0352	1,933.2754	
NaturalGas Unmitigated	0.1942	1.6595	0.7062	0.0106		0.1342	0.1342		0.1342	0.1342	0.0000	1,921.8548	1,921.8548	0.0368	0.0352	1,933.2754	

## 5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr											MT/yr					
Apartments High Rise	1.97676e+007	0.1066	0.9109	0.3876	5.8100e-003		0.0736	0.0736		0.0736	0.0736	0.0000	1,054.8741	1,054.8741	0.0202	0.0193	1,061.1427	
Apartments Low Rise	1.62466e+007	0.0876	0.7486	0.3186	4.7800e-003		0.0605	0.0605		0.0605	0.0605	0.0000	866.9807	866.9807	0.0166	0.0159	872.1327	
<b>Total</b>		<b>0.1942</b>	<b>1.6595</b>	<b>0.7062</b>	<b>0.0106</b>		<b>0.1342</b>	<b>0.1342</b>		<b>0.1342</b>	<b>0.1342</b>	<b>0.0000</b>	<b>1,921.8548</b>	<b>1,921.8548</b>	<b>0.0368</b>	<b>0.0352</b>	<b>1,933.2754</b>	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**5.2 Energy by Land Use - NaturalGas****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments High Rise	1.97676e+007	0.1066	0.9109	0.3876	5.8100e-003		0.0736	0.0736		0.0736	0.0736	0.0000	1,054.8741	1,054.8741	0.0202	0.0193	1,061.1427
Apartments Low Rise	1.62466e+007	0.0876	0.7486	0.3186	4.7800e-003		0.0605	0.0605		0.0605	0.0605	0.0000	866.9807	866.9807	0.0166	0.0159	872.1327
<b>Total</b>		<b>0.1942</b>	<b>1.6595</b>	<b>0.7062</b>	<b>0.0106</b>		<b>0.1342</b>	<b>0.1342</b>		<b>0.1342</b>	<b>0.1342</b>	<b>0.0000</b>	<b>1,921.8548</b>	<b>1,921.8548</b>	<b>0.0368</b>	<b>0.0352</b>	<b>1,933.2754</b>

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	7.81296e+006	2,272.8802	0.1028	0.0213	2,281.7860
Apartments Low Rise	2.59405e+006	754.6391	0.0341	7.0600e-003	757.5960
<b>Total</b>		<b>3,027.5193</b>	<b>0.1369</b>	<b>0.0283</b>	<b>3,039.3820</b>

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	7.81296e+006	2,272.8802	0.1028	0.0213	2,281.7860
Apartments Low Rise	2.59405e+006	754.6391	0.0341	7.0600e-003	757.5960
<b>Total</b>		<b>3,027.5193</b>	<b>0.1369</b>	<b>0.0283</b>	<b>3,039.3820</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	15.4581	0.2732	23.6769	1.2500e-003		0.1318	0.1318		0.1318	0.1318	0.0000	38.8121	38.8121	0.0370	0.0000	39.7358
Unmitigated	15.4581	0.2732	23.6769	1.2500e-003		0.1318	0.1318		0.1318	0.1318	0.0000	38.8121	38.8121	0.0370	0.0000	39.7358

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr										MT/yr						
Architectural Coating	2.2526					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	12.4976					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	0.7079	0.2732	23.6769	1.2500e-003		0.1318	0.1318		0.1318	0.1318	0.0000	38.8121	38.8121	0.0370	0.0000	39.7358	
<b>Total</b>	<b>15.4581</b>	<b>0.2732</b>	<b>23.6769</b>	<b>1.2500e-003</b>		<b>0.1318</b>	<b>0.1318</b>		<b>0.1318</b>	<b>0.1318</b>	<b>0.0000</b>	<b>38.8121</b>	<b>38.8121</b>	<b>0.0370</b>	<b>0.0000</b>	<b>39.7358</b>	

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr										MT/yr						
Architectural Coating	2.2526					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	12.4976					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	0.7079	0.2732	23.6769	1.2500e-003		0.1318	0.1318		0.1318	0.1318	0.0000	38.8121	38.8121	0.0370	0.0000	39.7358	
<b>Total</b>	<b>15.4581</b>	<b>0.2732</b>	<b>23.6769</b>	<b>1.2500e-003</b>		<b>0.1318</b>	<b>0.1318</b>		<b>0.1318</b>	<b>0.1318</b>	<b>0.0000</b>	<b>38.8121</b>	<b>38.8121</b>	<b>0.0370</b>	<b>0.0000</b>	<b>39.7358</b>	

**7.0 Water Detail****7.1 Mitigation Measures Water**

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	528.1705	6.8146	0.1647	747.6281
Unmitigated	528.1705	6.8146	0.1647	747.6281

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	156.37 / 98.5809	396.1279	5.1110	0.1236	560.7211
Apartments Low Rise	52.1232 / 32.8603	132.0426	1.7037	0.0412	186.9070
<b>Total</b>		<b>528.1705</b>	<b>6.8146</b>	<b>0.1647</b>	<b>747.6281</b>

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	156.37 / 98.5809	396.1279	5.1110	0.1236	560.7211
Apartments Low Rise	52.1232 / 32.8603	132.0426	1.7037	0.0412	186.9070
<b>Total</b>		<b>528.1705</b>	<b>6.8146</b>	<b>0.1647</b>	<b>747.6281</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	298.8027	17.6587	0.0000	740.2710
Unmitigated	298.8027	17.6587	0.0000	740.2710

## Bay Fair TOD Specific Plan Alternative 2 - Alameda County, Annual

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	1104	224.1020	13.2441	0.0000	555.2033
.....	.....	.....	.....	.....	.....
Apartments Low Rise	368	74.7007	4.4147	0.0000	185.0678
<b>Total</b>		<b>298.8027</b>	<b>17.6587</b>	<b>0.0000</b>	<b>740.2710</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	1104	224.1020	13.2441	0.0000	555.2033
.....	.....	.....	.....	.....	.....
Apartments Low Rise	368	74.7007	4.4147	0.0000	185.0678
<b>Total</b>		<b>298.8027</b>	<b>17.6587</b>	<b>0.0000</b>	<b>740.2710</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

## 10.0 Stationary Equipment

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### Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

### Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

### User Defined Equipment

Equipment Type	Number
----------------	--------

## 11.0 Vegetation

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## Greenhouse Gas Emission Worksheet

### N2O Mobile Emissions

Specific Plan -Alternative 2

From URBEMIS 2007 Vehicle Fleet Mix Output:

Annual VMT:

22,339,023

Vehicle Type	Percent Type	CH4 Emission Factor (g/mile)*	CH4 Emission (g/mile)**	N2O Emission Factor (g/mile)*	N2O Emission (g/mile)**
Light Auto	49%		0.04	0.01942	0.04 0.01942
Light Truck < 3750 lbs	2%		0.05	0.00123	0.06 0.001476
Light Truck 3751-5750 lbs	17%		0.05	0.00859	0.06 0.010308
Med Truck 5751-8500 lbs	11%		0.12	0.012996	0.2 0.02166
Lite-Heavy Truck 8501-10,000 lbs	2%		0.12	0.00264	0.2 0.0044
Lite-Heavy Truck 10,001-14,000 lbs	0%		0.09	0.000423	0.125 0.000588
Med-Heavy Truck 14,001-33,000 lbs	1%		0.06	0.000714	0.05 0.000595
Heavy-Heavy Truck 33,001-60,000 lbs	16%		0.06	0.009672	0.05 0.00806
Other Bus	0%		0.06	0.000084	0.05 0.00007
Urban Bus	0%		0.06	0.000066	0.05 0.000055
Motorcycle	1%		0.09	0.000513	0.01 0.000057
School Bus	0%		0.06	0.000003	0.05 0.000025
Motor Home	0%		0.09	0.000072	0.125 0.0001
<b>Total</b>	<b>100.0%</b>		<b>0.05645</b>		<b>0.066814</b>

**Total Emissions (metric tons) =**

**Emission Factor by Vehicle Mix (g/mi) x Annual VMT(mi) x 0.000001 metric tons/g**

**Conversion to Carbon Dioxide Equivalency (CO2e) Units based on Global Warming Potential (GWP)**

CH4 25 GWP

N2O 298 GWP

1 ton (short, US) = 0.90718474 metric ton

**Annual Mobile Emissions:**

	<b>Total Emissions</b>	<b>Total CO2e units</b>
N2O Emissions:	1.4925 metric tons N2O	444.78 metric tons CO2e
<b>Project Total:</b>		<b>444.78 metric tons CO2e</b>

#### References

\* from Table C.4: Methane and Nitrous Oxide Emission Factors for Mobile Sources by Vehicle and Fuel Type (g/mile).

in California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.

Assume Model year 2000-present, gasoline fueled.

\*\* Source: California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.

\*\*\* From URBEMIS 2007 results for mobile sources

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**Bay Fair TOD Specific Plan Alternative 3**  
Alameda County, Annual

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	450.00	1000sqft	10.33	450,000.00	0
Apartments High Rise	1,125.00	Dwelling Unit	18.15	1,125,000.00	3218
Apartments Low Rise	375.00	Dwelling Unit	23.44	375,000.00	1073

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	5			Operational Year	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

Project Characteristics - Specific Plan Buildout is 2035

Land Use - For consistency with water usage estimates assumes 75% high rise and 25% low rise apartments based on 1,500 units

Construction Phase - Architectural coating phase changed to overlap with building construction for more realistic scenario

Demolition - Removing 161,000 SF of retail

Vehicle Trips -

Woodstoves - No fireplaces or woodstoves in development per BAAQMD Rule 3

Energy Use - Energy reduced 28%(res) and 5%(commercial) for 2016 Title 24 standards

Water And Wastewater -

Construction Off-road Equipment Mitigation - Implementation of BAQMD Basic Construction Measures

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Waste Mitigation - CalGreen 65% reduction requirement

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	75.00	1,250.00
tblConstructionPhase	NumDays	1,110.00	2,500.00
tblConstructionPhase	NumDays	70.00	440.00
tblConstructionPhase	NumDays	110.00	520.00
tblConstructionPhase	NumDays	75.00	450.00
tblConstructionPhase	NumDays	40.00	380.00
tblConstructionPhase	PhaseEndDate	6/1/2040	10/16/2034
tblConstructionPhase	PhaseEndDate	2/3/2034	9/17/2032
tblConstructionPhase	PhaseEndDate	10/5/2018	9/6/2019
tblConstructionPhase	PhaseEndDate	9/4/2020	2/17/2023
tblConstructionPhase	PhaseEndDate	9/1/2034	6/9/2034
tblConstructionPhase	PhaseEndDate	5/3/2019	2/19/2021

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

tblConstructionPhase	PhaseStartDate	9/2/2034	1/1/2030
tblConstructionPhase	PhaseStartDate	9/5/2020	2/20/2023
tblConstructionPhase	PhaseStartDate	5/4/2019	2/22/2021
tblConstructionPhase	PhaseStartDate	2/4/2034	9/20/2032
tblConstructionPhase	PhaseStartDate	10/6/2018	9/9/2019
tblEnergyUse	LightingElect	741.44	533.84
tblEnergyUse	LightingElect	810.36	583.46
tblEnergyUse	LightingElect	3.67	3.49
tblEnergyUse	NT24E	3,277.06	2,359.48
tblEnergyUse	NT24E	3,418.36	2,461.22
tblEnergyUse	NT24E	4.80	4.56
tblEnergyUse	NT24NG	2,615.00	1,882.80
tblEnergyUse	NT24NG	2,615.00	1,882.80
tblEnergyUse	NT24NG	1.01	0.96
tblEnergyUse	T24E	502.89	362.08
tblEnergyUse	T24E	274.84	197.88
tblEnergyUse	T24E	4.30	4.09
tblEnergyUse	T24NG	8,824.58	6,353.70
tblEnergyUse	T24NG	25,590.91	18,425.46
tblEnergyUse	T24NG	18.41	17.49
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	168.75	0.00

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

tblFireplaces	NumberGas	56.25	0.00
tblFireplaces	NumberNoFireplace	45.00	0.00
tblFireplaces	NumberNoFireplace	15.00	0.00
tblFireplaces	NumberWood	191.25	0.00
tblFireplaces	NumberWood	63.75	0.00
tblGrading	AcresOfGrading	1,300.00	275.00
tblProjectCharacteristics	OperationalYear	2018	2035
tblWoodstoves	NumberCatalytic	22.50	0.00
tblWoodstoves	NumberCatalytic	7.50	0.00
tblWoodstoves	NumberNoncatalytic	22.50	0.00
tblWoodstoves	NumberNoncatalytic	7.50	0.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

## 2.0 Emissions Summary

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### 2.1 Overall Construction

#### Unmitigated Construction

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Year	tons/yr											MT/yr					
2018	0.4956	5.0785	2.9867	5.4000e-003	0.0680	0.2534	0.3214	0.0127	0.2359	0.2486	0.0000	489.9622	489.9622	0.1276	0.0000	493.1531	
2019	0.5014	5.1233	2.9475	5.3200e-003	3.4865	0.2589	3.7455	1.8975	0.2399	2.1373	0.0000	476.6088	476.6088	0.1316	0.0000	479.8979	
2020	0.5422	5.5627	2.8800	5.1600e-003	3.4512	0.2880	3.7392	1.8918	0.2650	2.1567	0.0000	454.5152	454.5152	0.1421	0.0000	458.0669	
2021	0.5497	5.9548	3.9160	7.8500e-003	5.1645	0.2603	5.4248	2.7687	0.2395	3.0081	0.0000	690.7167	690.7167	0.2182	0.0000	696.1707	
2022	0.4789	5.0550	3.8321	8.2600e-003	1.7321	0.2127	1.9448	0.8819	0.1957	1.0775	0.0000	725.9472	725.9472	0.2297	0.0000	731.6889	
2023	0.6720	4.5450	5.5648	0.0206	2.9760	0.1128	3.0888	1.2168	0.1055	1.3223	0.0000	1,887.6639	1,887.6639	0.1397	0.0000	1,891.1572	
2024	0.6700	4.4186	5.6196	0.0222	1.4691	0.0908	1.5599	0.3955	0.0853	0.4808	0.0000	2,039.1353	2,039.1353	0.1238	0.0000	2,042.2299	
2025	0.6280	4.2309	5.3443	0.0217	1.4635	0.0791	1.5426	0.3940	0.0743	0.4683	0.0000	1,987.0518	1,987.0518	0.1207	0.0000	1,990.0684	
2026	0.6058	4.1916	5.1393	0.0212	1.4635	0.0789	1.5424	0.3940	0.0741	0.4680	0.0000	1,948.1492	1,948.1492	0.1187	0.0000	1,951.1173	
2027	0.5847	4.1537	4.9583	0.0208	1.4635	0.0784	1.5420	0.3940	0.0737	0.4677	0.0000	1,913.4713	1,913.4713	0.1170	0.0000	1,916.3968	
2028	0.5608	4.1070	4.7809	0.0204	1.4579	0.0776	1.5355	0.3925	0.0729	0.4654	0.0000	1,875.9155	1,875.9155	0.1150	0.0000	1,878.7912	
2029	0.5403	4.0860	4.6487	0.0202	1.4635	0.0774	1.5409	0.3940	0.0727	0.4667	0.0000	1,855.2613	1,855.2613	0.1142	0.0000	1,858.1159	
2030	3.2796	3.6088	5.1502	0.0226	1.7163	0.0312	1.7476	0.4613	0.0306	0.4918	0.0000	2,062.7480	2,062.7480	0.0591	0.0000	2,064.2254	
2031	3.2522	3.5826	5.0006	0.0223	1.7164	0.0308	1.7471	0.4613	0.0301	0.4914	0.0000	2,038.4700	2,038.4700	0.0578	0.0000	2,039.9157	
2032	3.1592	2.8584	4.2578	0.0175	1.3068	0.0352	1.3420	0.3510	0.0347	0.3857	0.0000	1,591.6342	1,591.6342	0.0458	0.0000	1,592.7802	
2033	2.9293	1.0629	2.6410	5.7600e-003	0.2673	0.0466	0.3139	0.0711	0.0465	0.1176	0.0000	503.0317	503.0317	0.0178	0.0000	503.4768	
2034	2.2546	0.5164	1.3507	3.2300e-003	0.2063	0.0218	0.2282	0.0549	0.0218	0.0767	0.0000	283.7871	283.7871	8.8300e-003	0.0000	284.0079	
Maximum	3.2796	5.9548	5.6196	0.0226	5.1645	0.2880	5.4248	2.7687	0.2650	3.0081	0.0000	2,062.7480	2,062.7480	0.2297	0.0000	2,064.2254	

## **2.1 Overall Construction**

### **Mitigated Construction**

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Year	tons/yr											MT/yr					
2018	0.4956	5.0785	2.9867	5.4000e-003	0.0680	0.2534	0.3214	0.0127	0.2359	0.2486	0.0000	489.9616	489.9616	0.1276	0.0000	493.1526	
2019	0.5014	5.1233	2.9475	5.3200e-003	3.4865	0.2589	3.7455	1.8975	0.2399	2.1373	0.0000	476.6082	476.6082	0.1316	0.0000	479.8974	
2020	0.5422	5.5627	2.8800	5.1600e-003	3.4512	0.2880	3.7392	1.8918	0.2650	2.1567	0.0000	454.5147	454.5147	0.1421	0.0000	458.0664	
2021	0.5497	5.9548	3.9160	7.8500e-003	5.1645	0.2603	5.4248	2.7687	0.2395	3.0081	0.0000	690.7159	690.7159	0.2182	0.0000	696.1699	
2022	0.4789	5.0549	3.8321	8.2600e-003	1.7321	0.2127	1.9448	0.8819	0.1957	1.0775	0.0000	725.9464	725.9464	0.2297	0.0000	731.6880	
2023	0.6720	4.5450	5.5648	0.0206	2.9760	0.1128	3.0888	1.2168	0.1055	1.3223	0.0000	1,887.6635	1,887.6635	0.1397	0.0000	1,891.1568	
2024	0.6700	4.4186	5.6196	0.0222	1.4691	0.0908	1.5599	0.3955	0.0853	0.4808	0.0000	2,039.1350	2,039.1350	0.1238	0.0000	2,042.2295	
2025	0.6280	4.2309	5.3443	0.0217	1.4635	0.0791	1.5426	0.3940	0.0743	0.4683	0.0000	1,987.0515	1,987.0515	0.1207	0.0000	1,990.0681	
2026	0.6058	4.1916	5.1393	0.0212	1.4635	0.0789	1.5424	0.3940	0.0741	0.4680	0.0000	1,948.1488	1,948.1488	0.1187	0.0000	1,951.1169	
2027	0.5847	4.1537	4.9583	0.0208	1.4635	0.0784	1.5420	0.3940	0.0737	0.4677	0.0000	1,913.4709	1,913.4709	0.1170	0.0000	1,916.3964	
2028	0.5608	4.1070	4.7809	0.0204	1.4579	0.0776	1.5355	0.3925	0.0729	0.4654	0.0000	1,875.9151	1,875.9151	0.1150	0.0000	1,878.7908	
2029	0.5403	4.0860	4.6487	0.0202	1.4635	0.0774	1.5409	0.3940	0.0727	0.4667	0.0000	1,855.2610	1,855.2610	0.1142	0.0000	1,858.1155	
2030	3.2796	3.6088	5.1502	0.0226	1.7163	0.0312	1.7476	0.4613	0.0306	0.4918	0.0000	2,062.7475	2,062.7475	0.0591	0.0000	2,064.2249	
2031	3.2522	3.5826	5.0006	0.0223	1.7164	0.0308	1.7471	0.4613	0.0301	0.4914	0.0000	2,038.4695	2,038.4695	0.0578	0.0000	2,039.9152	
2032	3.1592	2.8584	4.2578	0.0175	1.3068	0.0352	1.3420	0.3510	0.0347	0.3857	0.0000	1,591.6338	1,591.6338	0.0458	0.0000	1,592.7798	
2033	2.9293	1.0629	2.6410	5.7600e-003	0.2673	0.0466	0.3139	0.0711	0.0465	0.1176	0.0000	503.0312	503.0312	0.0178	0.0000	503.4764	
2034	2.2546	0.5164	1.3507	3.2300e-003	0.2063	0.0218	0.2282	0.0549	0.0218	0.0767	0.0000	283.7869	283.7869	8.8300e-003	0.0000	284.0077	
Maximum	3.2796	5.9548	5.6196	0.0226	5.1645	0.2880	5.4248	2.7687	0.2650	3.0081	0.0000	2,062.7475	2,062.7475	0.2297	0.0000	2,064.2249	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2018	3-31-2018	1.3734	1.3734
2	4-1-2018	6-30-2018	1.3877	1.3877
3	7-1-2018	9-30-2018	1.4030	1.4030
4	10-1-2018	12-31-2018	1.4039	1.4039
5	1-1-2019	3-31-2019	1.2838	1.2838
6	4-1-2019	6-30-2019	1.2973	1.2973
7	7-1-2019	9-30-2019	1.3625	1.3625
8	10-1-2019	12-31-2019	1.6442	1.6442
9	1-1-2020	3-31-2020	1.5149	1.5149
10	4-1-2020	6-30-2020	1.5145	1.5145
11	7-1-2020	9-30-2020	1.5311	1.5311
12	10-1-2020	12-31-2020	1.5316	1.5316
13	1-1-2021	3-31-2021	1.4828	1.4828
14	4-1-2021	6-30-2021	1.6477	1.6477
15	7-1-2021	9-30-2021	1.6658	1.6658
16	10-1-2021	12-31-2021	1.6662	1.6662
17	1-1-2022	3-31-2022	1.3686	1.3686
18	4-1-2022	6-30-2022	1.3834	1.3834
19	7-1-2022	9-30-2022	1.3986	1.3986
20	10-1-2022	12-31-2022	1.3990	1.3990
21	1-1-2023	3-31-2023	1.2362	1.2362
22	4-1-2023	6-30-2023	1.3085	1.3085

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

23	7-1-2023	9-30-2023	1.3228	1.3228
24	10-1-2023	12-31-2023	1.3475	1.3475
25	1-1-2024	3-31-2024	1.2787	1.2787
26	4-1-2024	6-30-2024	1.2560	1.2560
27	7-1-2024	9-30-2024	1.2698	1.2698
28	10-1-2024	12-31-2024	1.2927	1.2927
29	1-1-2025	3-31-2025	1.2118	1.2118
30	4-1-2025	6-30-2025	1.2040	1.2040
31	7-1-2025	9-30-2025	1.2173	1.2173
32	10-1-2025	12-31-2025	1.2387	1.2387
33	1-1-2026	3-31-2026	1.1958	1.1958
34	4-1-2026	6-30-2026	1.1890	1.1890
35	7-1-2026	9-30-2026	1.2021	1.2021
36	10-1-2026	12-31-2026	1.2223	1.2223
37	1-1-2027	3-31-2027	1.1804	1.1804
38	4-1-2027	6-30-2027	1.1746	1.1746
39	7-1-2027	9-30-2027	1.1875	1.1875
40	10-1-2027	12-31-2027	1.2066	1.2066
41	1-1-2028	3-31-2028	1.1795	1.1795
42	4-1-2028	6-30-2028	1.1618	1.1618
43	7-1-2028	9-30-2028	1.1745	1.1745
44	10-1-2028	12-31-2028	1.1925	1.1925
45	1-1-2029	3-31-2029	1.1511	1.1511
46	4-1-2029	6-30-2029	1.1472	1.1472
47	7-1-2029	9-30-2029	1.1598	1.1598
48	10-1-2029	12-31-2029	1.1766	1.1766
49	1-1-2030	3-31-2030	1.7098	1.7098

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

50	4-1-2030	6-30-2030	1.7105	1.7105
51	7-1-2030	9-30-2030	1.7293	1.7293
52	10-1-2030	12-31-2030	1.7478	1.7478
53	1-1-2031	3-31-2031	1.6955	1.6955
54	4-1-2031	6-30-2031	1.6973	1.6973
55	7-1-2031	9-30-2031	1.7159	1.7159
56	10-1-2031	12-31-2031	1.7332	1.7332
57	1-1-2032	3-31-2032	1.7022	1.7022
58	4-1-2032	6-30-2032	1.6861	1.6861
59	7-1-2032	9-30-2032	1.6004	1.6004
60	10-1-2032	12-31-2032	1.0126	1.0126
61	1-1-2033	3-31-2033	0.9892	0.9892
62	4-1-2033	6-30-2033	0.9978	0.9978
63	7-1-2033	9-30-2033	1.0088	1.0088
64	10-1-2033	12-31-2033	1.0111	1.0111
65	1-1-2034	3-31-2034	0.9879	0.9879
66	4-1-2034	6-30-2034	0.9327	0.9327
67	7-1-2034	9-30-2034	0.7272	0.7272
		Highest	1.7478	1.7478

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	9.2385	0.1281	11.1026	5.9000e-004		0.0618	0.0618		0.0618	0.0618	0.0000	18.2012	18.2012	0.0173	0.0000	18.6347
Energy	0.1358	1.1848	0.6729	7.4100e-003		0.0938	0.0938		0.0938	0.0938	0.0000	4,351.1847	4,351.1847	0.1617	0.0528	4,370.9543
Mobile	1.5458	14.1850	16.9235	0.0990	9.6168	0.0491	9.6660	2.5830	0.0459	2.6289	0.0000	9,214.2832	9,214.2832	0.3333	0.0000	9,222.6145
Waste						0.0000	0.0000		0.0000	0.0000	225.0155	0.0000	225.0155	13.2980	0.0000	557.4663
Water						0.0000	0.0000		0.0000	0.0000	56.3796	392.3847	448.7643	5.8085	0.1404	635.8159
<b>Total</b>	<b>10.9201</b>	<b>15.4979</b>	<b>28.6990</b>	<b>0.1070</b>	<b>9.6168</b>	<b>0.2047</b>	<b>9.8216</b>	<b>2.5830</b>	<b>0.2015</b>	<b>2.7845</b>	<b>281.3951</b>	<b>13,976.0539</b>	<b>14,257.4489</b>	<b>19.6188</b>	<b>0.1932</b>	<b>14,805.4856</b>

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	9.2385	0.1281	11.1026	5.9000e-004		0.0618	0.0618		0.0618	0.0618	0.0000	18.2012	18.2012	0.0173	0.0000	18.6347
Energy	0.1358	1.1848	0.6729	7.4100e-003		0.0938	0.0938		0.0938	0.0938	0.0000	4,351.1847	4,351.1847	0.1617	0.0528	4,370.9543
Mobile	1.2921	12.4814	12.0393	0.0659	5.9653	0.0329	5.9982	1.6022	0.0307	1.6330	0.0000	6,142.5990	6,142.5990	0.2635	0.0000	6,149.1871
Waste						0.0000	0.0000		0.0000	0.0000	225.0155	0.0000	225.0155	13.2980	0.0000	557.4663
Water						0.0000	0.0000		0.0000	0.0000	56.3796	392.3847	448.7643	5.8085	0.1404	635.8159
<b>Total</b>	<b>10.6664</b>	<b>13.7943</b>	<b>23.8148</b>	<b>0.0739</b>	<b>5.9653</b>	<b>0.1885</b>	<b>6.1538</b>	<b>1.6022</b>	<b>0.1863</b>	<b>1.7886</b>	<b>281.3951</b>	<b>10,904.3696</b>	<b>11,185.7647</b>	<b>19.5491</b>	<b>0.1932</b>	<b>11,732.0582</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	2.32	10.99	17.02	30.94	37.97	7.90	37.34	37.97	7.52	35.77	0.00	21.98	21.54	0.36	0.00	20.76

**3.0 Construction Detail****Construction Phase**

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2018	9/6/2019	5	440	
2	Site Preparation	Site Preparation	9/9/2019	2/19/2021	5	380	
3	Grading	Grading	2/22/2021	2/17/2023	5	520	
4	Building Construction	Building Construction	2/20/2023	9/17/2032	5	2500	
5	Paving	Paving	9/20/2032	6/9/2034	5	450	
6	Architectural Coating	Architectural Coating	1/1/2030	10/16/2034	5	1250	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 275**

**Acres of Paving: 0**

**Residential Indoor: 3,037,500; Residential Outdoor: 1,012,500; Non-Residential Indoor: 675,000; Non-Residential Outdoor: 225,000; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	732.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,224.00	234.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	245.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Demolition - 2018****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	tons/yr												MT/yr					
Fugitive Dust					0.0470	0.0000	0.0470	7.1200e-003	0.0000	7.1200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.4853	5.0011	2.9107	5.0700e-003		0.2530	0.2530		0.2355	0.2355	0.0000	458.3692	458.3692	0.1263	0.0000	461.5263		
Total	0.4853	5.0011	2.9107	5.0700e-003	0.0470	0.2530	0.3000	7.1200e-003	0.2355	0.2427	0.0000	458.3692	458.3692	0.1263	0.0000	461.5263		

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.2 Demolition - 2018****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	2.0700e-003	0.0710	0.0118	1.8000e-004	5.5600e-003	2.7000e-004	5.8300e-003	1.4700e-003	2.6000e-004	1.7300e-003	0.0000	16.9678	16.9678	8.9000e-004	0.0000	16.9901	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	8.2000e-003	6.4400e-003	0.0643	1.6000e-004	0.0155	1.1000e-004	0.0156	4.1200e-003	1.0000e-004	4.2200e-003	0.0000	14.6252	14.6252	4.6000e-004	0.0000	14.6367	
<b>Total</b>	<b>0.0103</b>	<b>0.0774</b>	<b>0.0760</b>	<b>3.4000e-004</b>	<b>0.0210</b>	<b>3.8000e-004</b>	<b>0.0214</b>	<b>5.5900e-003</b>	<b>3.6000e-004</b>	<b>5.9500e-003</b>	<b>0.0000</b>	<b>31.5930</b>	<b>31.5930</b>	<b>1.3500e-003</b>	<b>0.0000</b>	<b>31.6268</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					0.0470	0.0000	0.0470	7.1200e-003	0.0000	7.1200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.4853	5.0011	2.9107	5.0700e-003		0.2530	0.2530		0.2355	0.2355	0.0000	458.3686	458.3686	0.1263	0.0000	461.5258	
<b>Total</b>	<b>0.4853</b>	<b>5.0011</b>	<b>2.9107</b>	<b>5.0700e-003</b>	<b>0.0470</b>	<b>0.2530</b>	<b>0.3000</b>	<b>7.1200e-003</b>	<b>0.2355</b>	<b>0.2427</b>	<b>0.0000</b>	<b>458.3686</b>	<b>458.3686</b>	<b>0.1263</b>	<b>0.0000</b>	<b>461.5258</b>	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.2 Demolition - 2018****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	2.0700e-003	0.0710	0.0118	1.8000e-004	5.5600e-003	2.7000e-004	5.8300e-003	1.4700e-003	2.6000e-004	1.7300e-003	0.0000	16.9678	16.9678	8.9000e-004	0.0000	16.9901	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	8.2000e-003	6.4400e-003	0.0643	1.6000e-004	0.0155	1.1000e-004	0.0156	4.1200e-003	1.0000e-004	4.2200e-003	0.0000	14.6252	14.6252	4.6000e-004	0.0000	14.6367	
Total	0.0103	0.0774	0.0760	3.4000e-004	0.0210	3.8000e-004	0.0214	5.5900e-003	3.6000e-004	5.9500e-003	0.0000	31.5930	31.5930	1.3500e-003	0.0000	31.6268	

**3.2 Demolition - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					0.0322	0.0000	0.0322	4.8800e-003	0.0000	4.8800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.3145	3.2026	1.9744	3.4700e-003		0.1606	0.1606		0.1494	0.1494	0.0000	309.9056	309.9056	0.0862	0.0000	312.0610	
Total	0.3145	3.2026	1.9744	3.4700e-003	0.0322	0.1606	0.1929	4.8800e-003	0.1494	0.1543	0.0000	309.9056	309.9056	0.0862	0.0000	312.0610	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.2 Demolition - 2019****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	1.3600e-003	0.0463	7.9000e-003	1.2000e-004	5.2700e-003	1.7000e-004	5.4400e-003	1.3700e-003	1.6000e-004	1.5300e-003	0.0000	11.5218	11.5218	6.0000e-004	0.0000	11.5368	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	5.0800e-003	3.8800e-003	0.0392	1.1000e-004	0.0106	8.0000e-005	0.0107	2.8200e-003	7.0000e-005	2.8900e-003	0.0000	9.7370	9.7370	2.8000e-004	0.0000	9.7440	
Total	6.4400e-003	0.0502	0.0471	2.3000e-004	0.0159	2.5000e-004	0.0161	4.1900e-003	2.3000e-004	4.4200e-003	0.0000	21.2588	21.2588	8.8000e-004	0.0000	21.2808	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					0.0322	0.0000	0.0322	4.8800e-003	0.0000	4.8800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.3145	3.2026	1.9744	3.4700e-003		0.1606	0.1606		0.1494	0.1494	0.0000	309.9053	309.9053	0.0862	0.0000	312.0606	
Total	0.3145	3.2026	1.9744	3.4700e-003	0.0322	0.1606	0.1929	4.8800e-003	0.1494	0.1543	0.0000	309.9053	309.9053	0.0862	0.0000	312.0606	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.2 Demolition - 2019****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	1.3600e-003	0.0463	7.9000e-003	1.2000e-004	5.2700e-003	1.7000e-004	5.4400e-003	1.3700e-003	1.6000e-004	1.5300e-003	0.0000	11.5218	11.5218	6.0000e-004	0.0000	11.5368	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	5.0800e-003	3.8800e-003	0.0392	1.1000e-004	0.0106	8.0000e-005	0.0107	2.8200e-003	7.0000e-005	2.8900e-003	0.0000	9.7370	9.7370	2.8000e-004	0.0000	9.7440	
Total	6.4400e-003	0.0502	0.0471	2.3000e-004	0.0159	2.5000e-004	0.0161	4.1900e-003	2.3000e-004	4.4200e-003	0.0000	21.2588	21.2588	8.8000e-004	0.0000	21.2808	

**3.3 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					3.4326	0.0000	3.4326	1.8868	0.0000	1.8868	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.1777	1.8685	0.9046	1.5600e-003		0.0980	0.0980		0.0902	0.0902	0.0000	140.0916	140.0916	0.0443	0.0000	141.1997	
Total	0.1777	1.8685	0.9046	1.5600e-003	3.4326	0.0980	3.5306	1.8868	0.0902	1.9770	0.0000	140.0916	140.0916	0.0443	0.0000	141.1997	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.3 Site Preparation - 2019****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	2.7900e-003	2.1300e-003	0.0215	6.0000e-005	5.8400e-003	4.0000e-005	5.8800e-003	1.5500e-003	4.0000e-005	1.5900e-003	0.0000	5.3527	5.3527	1.5000e-004	0.0000	5.3565	
Total	2.7900e-003	2.1300e-003	0.0215	6.0000e-005	5.8400e-003	4.0000e-005	5.8800e-003	1.5500e-003	4.0000e-005	1.5900e-003	0.0000	5.3527	5.3527	1.5000e-004	0.0000	5.3565	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					3.4326	0.0000	3.4326	1.8868	0.0000	1.8868	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.1777	1.8685	0.9046	1.5600e-003		0.0980	0.0980		0.0902	0.0902	0.0000	140.0915	140.0915	0.0443	0.0000	141.1995	
Total	0.1777	1.8685	0.9046	1.5600e-003	3.4326	0.0980	3.5306	1.8868	0.0902	1.9770	0.0000	140.0915	140.0915	0.0443	0.0000	141.1995	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.3 Site Preparation - 2019****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	2.7900e-003	2.1300e-003	0.0215	6.0000e-005	5.8400e-003	4.0000e-005	5.8800e-003	1.5500e-003	4.0000e-005	1.5900e-003	0.0000	5.3527	5.3527	1.5000e-004	0.0000	5.3565	
Total	2.7900e-003	2.1300e-003	0.0215	6.0000e-005	5.8400e-003	4.0000e-005	5.8800e-003	1.5500e-003	4.0000e-005	1.5900e-003	0.0000	5.3527	5.3527	1.5000e-004	0.0000	5.3565	

**3.3 Site Preparation - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.4326	0.0000	3.4326	1.8868	0.0000	1.8868	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5340	5.5567	2.8183	4.9800e-003		0.2879	0.2879		0.2648	0.2648	0.0000	437.9419	437.9419	0.1416	0.0000	441.4829
Total	0.5340	5.5567	2.8183	4.9800e-003	3.4326	0.2879	3.7205	1.8868	0.2648	2.1517	0.0000	437.9419	437.9419	0.1416	0.0000	441.4829

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.3 Site Preparation - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	8.1500e-003	6.0200e-003	0.0617	1.8000e-004	0.0186	1.3000e-004	0.0188	4.9600e-003	1.2000e-004	5.0800e-003	0.0000	16.5733	16.5733	4.3000e-004	0.0000	16.5840	
Total	8.1500e-003	6.0200e-003	0.0617	1.8000e-004	0.0186	1.3000e-004	0.0188	4.9600e-003	1.2000e-004	5.0800e-003	0.0000	16.5733	16.5733	4.3000e-004	0.0000	16.5840	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					3.4326	0.0000	3.4326	1.8868	0.0000	1.8868	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.5340	5.5567	2.8183	4.9800e-003		0.2879	0.2879		0.2648	0.2648	0.0000	437.9414	437.9414	0.1416	0.0000	441.4824	
Total	0.5340	5.5567	2.8183	4.9800e-003	3.4326	0.2879	3.7205	1.8868	0.2648	2.1517	0.0000	437.9414	437.9414	0.1416	0.0000	441.4824	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.3 Site Preparation - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	8.1500e-003	6.0200e-003	0.0617	1.8000e-004	0.0186	1.3000e-004	0.0188	4.9600e-003	1.2000e-004	5.0800e-003	0.0000	16.5733	16.5733	4.3000e-004	0.0000	16.5840	
Total	8.1500e-003	6.0200e-003	0.0617	1.8000e-004	0.0186	1.3000e-004	0.0188	4.9600e-003	1.2000e-004	5.0800e-003	0.0000	16.5733	16.5733	4.3000e-004	0.0000	16.5840	

**3.3 Site Preparation - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					3.4326	0.0000	3.4326	1.8868	0.0000	1.8868	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0700	0.7290	0.3808	6.8000e-004		0.0368	0.0368		0.0339	0.0339	0.0000	60.1843	60.1843	0.0195	0.0000	60.6709	
Total	0.0700	0.7290	0.3808	6.8000e-004	3.4326	0.0368	3.4694	1.8868	0.0339	1.9207	0.0000	60.1843	60.1843	0.0195	0.0000	60.6709	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.3 Site Preparation - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.0300e-003	7.4000e-004	7.7200e-003	2.0000e-005	2.5600e-003	2.0000e-005	2.5800e-003	6.8000e-004	2.0000e-005	7.0000e-004	0.0000	2.1983	2.1983	5.0000e-005	0.0000	2.1996	
Total	1.0300e-003	7.4000e-004	7.7200e-003	2.0000e-005	2.5600e-003	2.0000e-005	2.5800e-003	6.8000e-004	2.0000e-005	7.0000e-004	0.0000	2.1983	2.1983	5.0000e-005	0.0000	2.1996	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					3.4326	0.0000	3.4326	1.8868	0.0000	1.8868	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0700	0.7290	0.3808	6.8000e-004		0.0368	0.0368		0.0339	0.0339	0.0000	60.1842	60.1842	0.0195	0.0000	60.6708	
Total	0.0700	0.7290	0.3808	6.8000e-004	3.4326	0.0368	3.4694	1.8868	0.0339	1.9207	0.0000	60.1842	60.1842	0.0195	0.0000	60.6708	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.3 Site Preparation - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.0300e-003	7.4000e-004	7.7200e-003	2.0000e-005	2.5600e-003	2.0000e-005	2.5800e-003	6.8000e-004	2.0000e-005	7.0000e-004	0.0000	2.1983	2.1983	5.0000e-005	0.0000	2.1996	
Total	1.0300e-003	7.4000e-004	7.7200e-003	2.0000e-005	2.5600e-003	2.0000e-005	2.5800e-003	6.8000e-004	2.0000e-005	7.0000e-004	0.0000	2.1983	2.1983	5.0000e-005	0.0000	2.1996	

**3.4 Grading - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.7116	0.0000	1.7116	0.8764	0.0000	0.8764	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4715	5.2200	3.4738	6.9800e-003		0.2234	0.2234		0.2055	0.2055	0.0000	613.0685	613.0685	0.1983	0.0000	618.0255
Total	0.4715	5.2200	3.4738	6.9800e-003	1.7116	0.2234	1.9349	0.8764	0.2055	1.0819	0.0000	613.0685	613.0685	0.1983	0.0000	618.0255

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

## 3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	7.1900e-003	5.1200e-003	0.0536	1.7000e-004	0.0178	1.2000e-004	0.0179	4.7300e-003	1.1000e-004	4.8400e-003	0.0000	15.2656	15.2656	3.6000e-004	0.0000	15.2748	
Total	7.1900e-003	5.1200e-003	0.0536	1.7000e-004	0.0178	1.2000e-004	0.0179	4.7300e-003	1.1000e-004	4.8400e-003	0.0000	15.2656	15.2656	3.6000e-004	0.0000	15.2748	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					1.7116	0.0000	1.7116	0.8764	0.0000	0.8764	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.4715	5.2200	3.4738	6.9800e-003		0.2234	0.2234		0.2055	0.2055	0.0000	613.0678	613.0678	0.1983	0.0000	618.0248	
Total	0.4715	5.2200	3.4738	6.9800e-003	1.7116	0.2234	1.9349	0.8764	0.2055	1.0819	0.0000	613.0678	613.0678	0.1983	0.0000	618.0248	

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**3.4 Grading - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	7.1900e-003	5.1200e-003	0.0536	1.7000e-004	0.0178	1.2000e-004	0.0179	4.7300e-003	1.1000e-004	4.8400e-003	0.0000	15.2656	15.2656	3.6000e-004	0.0000	15.2748	
Total	7.1900e-003	5.1200e-003	0.0536	1.7000e-004	0.0178	1.2000e-004	0.0179	4.7300e-003	1.1000e-004	4.8400e-003	0.0000	15.2656	15.2656	3.6000e-004	0.0000	15.2748	

**3.4 Grading - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					1.7116	0.0000	1.7116	0.8764	0.0000	0.8764	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.4712	5.0497	3.7754	8.0700e-003		0.2125	0.2125		0.1955	0.1955	0.0000	708.9498	708.9498	0.2293	0.0000	714.6820	
Total	0.4712	5.0497	3.7754	8.0700e-003	1.7116	0.2125	1.9241	0.8764	0.1955	1.0719	0.0000	708.9498	708.9498	0.2293	0.0000	714.6820	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

## 3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	7.7100e-003	5.3000e-003	0.0567	1.9000e-004	0.0206	1.3000e-004	0.0207	5.4700e-003	1.2000e-004	5.5900e-003	0.0000	16.9974	16.9974	3.8000e-004	0.0000	17.0069	
Total	7.7100e-003	5.3000e-003	0.0567	1.9000e-004	0.0206	1.3000e-004	0.0207	5.4700e-003	1.2000e-004	5.5900e-003	0.0000	16.9974	16.9974	3.8000e-004	0.0000	17.0069	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					1.7116	0.0000	1.7116	0.8764	0.0000	0.8764	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.4712	5.0497	3.7754	8.0700e-003		0.2125	0.2125		0.1955	0.1955	0.0000	708.9490	708.9490	0.2293	0.0000	714.6812	
Total	0.4712	5.0497	3.7754	8.0700e-003	1.7116	0.2125	1.9241	0.8764	0.1955	1.0719	0.0000	708.9490	708.9490	0.2293	0.0000	714.6812	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.4 Grading - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	7.7100e-003	5.3000e-003	0.0567	1.9000e-004	0.0206	1.3000e-004	0.0207	5.4700e-003	1.2000e-004	5.5900e-003	0.0000	16.9974	16.9974	3.8000e-004	0.0000	17.0069	
Total	7.7100e-003	5.3000e-003	0.0567	1.9000e-004	0.0206	1.3000e-004	0.0207	5.4700e-003	1.2000e-004	5.5900e-003	0.0000	16.9974	16.9974	3.8000e-004	0.0000	17.0069	

**3.4 Grading - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					1.7116	0.0000	1.7116	0.8764	0.0000	0.8764	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0581	0.6040	0.4909	1.0900e-003		0.0249	0.0249		0.0229	0.0229	0.0000	95.4366	95.4366	0.0309	0.0000	96.2083	
Total	0.0581	0.6040	0.4909	1.0900e-003	1.7116	0.0249	1.7365	0.8764	0.0229	0.8993	0.0000	95.4366	95.4366	0.0309	0.0000	96.2083	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

## 3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	9.7000e-004	6.4000e-004	6.9900e-003	2.0000e-005	2.7700e-003	2.0000e-005	2.7900e-003	7.4000e-004	2.0000e-005	7.5000e-004	0.0000	2.2006	2.2006	5.0000e-005	0.0000	2.2017	
Total	9.7000e-004	6.4000e-004	6.9900e-003	2.0000e-005	2.7700e-003	2.0000e-005	2.7900e-003	7.4000e-004	2.0000e-005	7.5000e-004	0.0000	2.2006	2.2006	5.0000e-005	0.0000	2.2017	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					1.7116	0.0000	1.7116	0.8764	0.0000	0.8764	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0581	0.6040	0.4909	1.0900e-003		0.0249	0.0249		0.0229	0.0229	0.0000	95.4365	95.4365	0.0309	0.0000	96.2082	
Total	0.0581	0.6040	0.4909	1.0900e-003	1.7116	0.0249	1.7365	0.8764	0.0229	0.8993	0.0000	95.4365	95.4365	0.0309	0.0000	96.2082	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.4 Grading - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	9.7000e-004	6.4000e-004	6.9900e-003	2.0000e-005	2.7700e-003	2.0000e-005	2.7900e-003	7.4000e-004	2.0000e-005	7.5000e-004	0.0000	2.2006	2.2006	5.0000e-005	0.0000	2.2017	
Total	9.7000e-004	6.4000e-004	6.9900e-003	2.0000e-005	2.7700e-003	2.0000e-005	2.7900e-003	7.4000e-004	2.0000e-005	7.5000e-004	0.0000	2.2006	2.2006	5.0000e-005	0.0000	2.2017	

**3.5 Building Construction - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1769	1.6183	1.8275	3.0300e-003		0.0787	0.0787		0.0741	0.0741	0.0000	260.7803	260.7803	0.0620	0.0000	262.3312
Total	0.1769	1.6183	1.8275	3.0300e-003		0.0787	0.0787		0.0741	0.0741	0.0000	260.7803	260.7803	0.0620	0.0000	262.3312

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.5 Building Construction - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0558	2.0703	0.4883	6.9200e-003	0.1729	2.1900e-003	0.1751	0.0500	2.1000e-003	0.0521	0.0000	663.4661	663.4661	0.0289	0.0000	664.1888	
Worker	0.3801	0.2517	2.7512	9.5700e-003	1.0888	6.9600e-003	1.0957	0.2896	6.4100e-003	0.2960	0.0000	865.7803	865.7803	0.0179	0.0000	866.2272	
<b>Total</b>	<b>0.4359</b>	<b>2.3220</b>	<b>3.2395</b>	<b>0.0165</b>	<b>1.2617</b>	<b>9.1500e-003</b>	<b>1.2708</b>	<b>0.3397</b>	<b>8.5100e-003</b>	<b>0.3482</b>	<b>0.0000</b>	<b>1,529.2464</b>	<b>1,529.2464</b>	<b>0.0468</b>	<b>0.0000</b>	<b>1,530.4160</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1769	1.6183	1.8275	3.0300e-003		0.0787	0.0787		0.0741	0.0741	0.0000	260.7800	260.7800	0.0620	0.0000	262.3309	
<b>Total</b>	<b>0.1769</b>	<b>1.6183</b>	<b>1.8275</b>	<b>3.0300e-003</b>		<b>0.0787</b>	<b>0.0787</b>		<b>0.0741</b>	<b>0.0741</b>	<b>0.0000</b>	<b>260.7800</b>	<b>260.7800</b>	<b>0.0620</b>	<b>0.0000</b>	<b>262.3309</b>	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.5 Building Construction - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0558	2.0703	0.4883	6.9200e-003	0.1729	2.1900e-003	0.1751	0.0500	2.1000e-003	0.0521	0.0000	663.4661	663.4661	0.0289	0.0000	664.1888	
Worker	0.3801	0.2517	2.7512	9.5700e-003	1.0888	6.9600e-003	1.0957	0.2896	6.4100e-003	0.2960	0.0000	865.7803	865.7803	0.0179	0.0000	866.2272	
Total	0.4359	2.3220	3.2395	0.0165	1.2617	9.1500e-003	1.2708	0.3397	8.5100e-003	0.3482	0.0000	1,529.2464	1,529.2464	0.0468	0.0000	1,530.4160	

**3.5 Building Construction - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7223	303.7223	0.0718	0.0000	305.5179	
Total	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7223	303.7223	0.0718	0.0000	305.5179	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.5 Building Construction - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0631	2.3933	0.5446	8.0000e-003	0.2013	2.5200e-003	0.2039	0.0582	2.4100e-003	0.0607	0.0000	767.2189	767.2189	0.0332	0.0000	768.0500	
Worker	0.4141	0.2641	2.9572	0.0107	1.2678	7.9400e-003	1.2757	0.3373	7.3100e-003	0.3446	0.0000	968.1941	968.1941	0.0187	0.0000	968.6619	
<b>Total</b>	<b>0.4772</b>	<b>2.6574</b>	<b>3.5017</b>	<b>0.0187</b>	<b>1.4691</b>	<b>0.0105</b>	<b>1.4796</b>	<b>0.3955</b>	<b>9.7200e-003</b>	<b>0.4052</b>	<b>0.0000</b>	<b>1,735.4130</b>	<b>1,735.4130</b>	<b>0.0520</b>	<b>0.0000</b>	<b>1,736.7120</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7220	303.7220	0.0718	0.0000	305.5175	
<b>Total</b>	<b>0.1928</b>	<b>1.7611</b>	<b>2.1179</b>	<b>3.5300e-003</b>		<b>0.0803</b>	<b>0.0803</b>		<b>0.0756</b>	<b>0.0756</b>	<b>0.0000</b>	<b>303.7220</b>	<b>303.7220</b>	<b>0.0718</b>	<b>0.0000</b>	<b>305.5175</b>	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.5 Building Construction - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0631	2.3933	0.5446	8.0000e-003	0.2013	2.5200e-003	0.2039	0.0582	2.4100e-003	0.0607	0.0000	767.2189	767.2189	0.0332	0.0000	768.0500	
Worker	0.4141	0.2641	2.9572	0.0107	1.2678	7.9400e-003	1.2757	0.3373	7.3100e-003	0.3446	0.0000	968.1941	968.1941	0.0187	0.0000	968.6619	
<b>Total</b>	<b>0.4772</b>	<b>2.6574</b>	<b>3.5017</b>	<b>0.0187</b>	<b>1.4691</b>	<b>0.0105</b>	<b>1.4796</b>	<b>0.3955</b>	<b>9.7200e-003</b>	<b>0.4052</b>	<b>0.0000</b>	<b>1,735.4130</b>	<b>1,735.4130</b>	<b>0.0520</b>	<b>0.0000</b>	<b>1,736.7120</b>	

**3.5 Building Construction - 2025****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335	
<b>Total</b>	<b>0.1785</b>	<b>1.6273</b>	<b>2.0991</b>	<b>3.5200e-003</b>		<b>0.0689</b>	<b>0.0689</b>		<b>0.0648</b>	<b>0.0648</b>	<b>0.0000</b>	<b>302.6549</b>	<b>302.6549</b>	<b>0.0711</b>	<b>0.0000</b>	<b>304.4335</b>	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.5 Building Construction - 2025****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0612	2.3650	0.5232	7.9100e-003	0.2006	2.4800e-003	0.2031	0.0580	2.3700e-003	0.0604	0.0000	759.2749	759.2749	0.0327	0.0000	760.0911	
Worker	0.3883	0.2387	2.7221	0.0102	1.2630	7.7900e-003	1.2707	0.3360	7.1700e-003	0.3431	0.0000	925.1221	925.1221	0.0169	0.0000	925.5438	
<b>Total</b>	<b>0.4495</b>	<b>2.6037</b>	<b>3.2453</b>	<b>0.0181</b>	<b>1.4635</b>		<b>0.0103</b>	<b>1.4738</b>	<b>0.3940</b>	<b>9.5400e-003</b>	<b>0.4035</b>	<b>0.0000</b>	<b>1,684.3969</b>	<b>1,684.3969</b>	<b>0.0495</b>	<b>0.0000</b>	<b>1,685.6349</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331	
<b>Total</b>	<b>0.1784</b>	<b>1.6273</b>	<b>2.0991</b>	<b>3.5200e-003</b>		<b>0.0689</b>	<b>0.0689</b>		<b>0.0648</b>	<b>0.0648</b>	<b>0.0000</b>	<b>302.6545</b>	<b>302.6545</b>	<b>0.0711</b>	<b>0.0000</b>	<b>304.4331</b>	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.5 Building Construction - 2025****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0612	2.3650	0.5232	7.9100e-003	0.2006	2.4800e-003	0.2031	0.0580	2.3700e-003	0.0604	0.0000	759.2749	759.2749	0.0327	0.0000	760.0911	
Worker	0.3883	0.2387	2.7221	0.0102	1.2630	7.7900e-003	1.2707	0.3360	7.1700e-003	0.3431	0.0000	925.1221	925.1221	0.0169	0.0000	925.5438	
Total	0.4495	2.6037	3.2453	0.0181	1.4635	0.0103	1.4738	0.3940	9.5400e-003	0.4035	0.0000	1,684.3969	1,684.3969	0.0495	0.0000	1,685.6349	

**3.5 Building Construction - 2026****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335	
Total	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.5 Building Construction - 2026****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0598	2.3463	0.5079	7.8700e-003	0.2006	2.4400e-003	0.2030	0.0580	2.3300e-003	0.0604	0.0000	754.7987	754.7987	0.0322	0.0000	755.6043	
Worker	0.3675	0.2181	2.5324	9.8400e-003	1.2630	7.5600e-003	1.2705	0.3360	6.9600e-003	0.3429	0.0000	890.6956	890.6956	0.0154	0.0000	891.0795	
<b>Total</b>	<b>0.4273</b>	<b>2.5643</b>	<b>3.0402</b>	<b>0.0177</b>	<b>1.4635</b>	<b>0.0100</b>	<b>1.4735</b>	<b>0.3940</b>	<b>9.2900e-003</b>	<b>0.4033</b>	<b>0.0000</b>	<b>1,645.4943</b>	<b>1,645.4943</b>	<b>0.0476</b>	<b>0.0000</b>	<b>1,646.6837</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331	
<b>Total</b>	<b>0.1784</b>	<b>1.6273</b>	<b>2.0991</b>	<b>3.5200e-003</b>		<b>0.0689</b>	<b>0.0689</b>		<b>0.0648</b>	<b>0.0648</b>	<b>0.0000</b>	<b>302.6545</b>	<b>302.6545</b>	<b>0.0711</b>	<b>0.0000</b>	<b>304.4331</b>	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.5 Building Construction - 2026****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0598	2.3463	0.5079	7.8700e-003	0.2006	2.4400e-003	0.2030	0.0580	2.3300e-003	0.0604	0.0000	754.7987	754.7987	0.0322	0.0000	755.6043	
Worker	0.3675	0.2181	2.5324	9.8400e-003	1.2630	7.5600e-003	1.2705	0.3360	6.9600e-003	0.3429	0.0000	890.6956	890.6956	0.0154	0.0000	891.0795	
Total	0.4273	2.5643	3.0402	0.0177	1.4635	0.0100	1.4735	0.3940	9.2900e-003	0.4033	0.0000	1,645.4943	1,645.4943	0.0476	0.0000	1,646.6837	

**3.5 Building Construction - 2027****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335	
Total	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.5 Building Construction - 2027****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0586	2.3267	0.4952	7.8200e-003	0.2006	2.4000e-003	0.2030	0.0580	2.3000e-003	0.0603	0.0000	750.7303	750.7303	0.0319	0.0000	751.5272	
Worker	0.3477	0.1997	2.3641	9.5000e-003	1.2630	7.1700e-003	1.2701	0.3360	6.5900e-003	0.3426	0.0000	860.0860	860.0860	0.0140	0.0000	860.4361	
<b>Total</b>	<b>0.4063</b>	<b>2.5264</b>	<b>2.8592</b>	<b>0.0173</b>	<b>1.4635</b>	<b>9.5700e-003</b>	<b>1.4731</b>	<b>0.3940</b>	<b>8.8900e-003</b>	<b>0.4029</b>	<b>0.0000</b>	<b>1,610.8164</b>	<b>1,610.8164</b>	<b>0.0459</b>	<b>0.0000</b>	<b>1,611.9632</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331	
<b>Total</b>	<b>0.1784</b>	<b>1.6273</b>	<b>2.0991</b>	<b>3.5200e-003</b>		<b>0.0689</b>	<b>0.0689</b>		<b>0.0648</b>	<b>0.0648</b>	<b>0.0000</b>	<b>302.6545</b>	<b>302.6545</b>	<b>0.0711</b>	<b>0.0000</b>	<b>304.4331</b>	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.5 Building Construction - 2027****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0586	2.3267	0.4952	7.8200e-003	0.2006	2.4000e-003	0.2030	0.0580	2.3000e-003	0.0603	0.0000	750.7303	750.7303	0.0319	0.0000	751.5272	
Worker	0.3477	0.1997	2.3641	9.5000e-003	1.2630	7.1700e-003	1.2701	0.3360	6.5900e-003	0.3426	0.0000	860.0860	860.0860	0.0140	0.0000	860.4361	
Total	0.4063	2.5264	2.8592	0.0173	1.4635	9.5700e-003	1.4731	0.3940	8.8900e-003	0.4029	0.0000	1,610.8164	1,610.8164	0.0459	0.0000	1,611.9632	

**3.5 Building Construction - 2028****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4953	301.4953	0.0709	0.0000	303.2671	
Total	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4953	301.4953	0.0709	0.0000	303.2671	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.5 Building Construction - 2028****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0574	2.3032	0.4828	7.7500e-003	0.1998	2.3600e-003	0.2022	0.0578	2.2600e-003	0.0601	0.0000	744.5700	744.5700	0.0314	0.0000	745.3545	
Worker	0.3257	0.1827	2.2071	9.1600e-003	1.2581	6.6300e-003	1.2648	0.3347	6.1000e-003	0.3408	0.0000	829.8502	829.8502	0.0128	0.0000	830.1696	
<b>Total</b>	<b>0.3830</b>	<b>2.4860</b>	<b>2.6899</b>	<b>0.0169</b>	<b>1.4579</b>	<b>8.9900e-003</b>	<b>1.4669</b>	<b>0.3925</b>	<b>8.3600e-003</b>	<b>0.4009</b>	<b>0.0000</b>	<b>1,574.4202</b>	<b>1,574.4202</b>	<b>0.0442</b>	<b>0.0000</b>	<b>1,575.5241</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4949	301.4949	0.0709	0.0000	303.2667	
<b>Total</b>	<b>0.1778</b>	<b>1.6211</b>	<b>2.0910</b>	<b>3.5000e-003</b>		<b>0.0686</b>	<b>0.0686</b>		<b>0.0645</b>	<b>0.0645</b>	<b>0.0000</b>	<b>301.4949</b>	<b>301.4949</b>	<b>0.0709</b>	<b>0.0000</b>	<b>303.2667</b>	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.5 Building Construction - 2028****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0574	2.3032	0.4828	7.7500e-003	0.1998	2.3600e-003	0.2022	0.0578	2.2600e-003	0.0601	0.0000	744.5700	744.5700	0.0314	0.0000	745.3545	
Worker	0.3257	0.1827	2.2071	9.1600e-003	1.2581	6.6300e-003	1.2648	0.3347	6.1000e-003	0.3408	0.0000	829.8502	829.8502	0.0128	0.0000	830.1696	
<b>Total</b>	<b>0.3830</b>	<b>2.4860</b>	<b>2.6899</b>	<b>0.0169</b>	<b>1.4579</b>	<b>8.9900e-003</b>	<b>1.4669</b>	<b>0.3925</b>	<b>8.3600e-003</b>	<b>0.4009</b>	<b>0.0000</b>	<b>1,574.4202</b>	<b>1,574.4202</b>	<b>0.0442</b>	<b>0.0000</b>	<b>1,575.5241</b>	

**3.5 Building Construction - 2029****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335	
<b>Total</b>	<b>0.1785</b>	<b>1.6273</b>	<b>2.0991</b>	<b>3.5200e-003</b>		<b>0.0689</b>	<b>0.0689</b>		<b>0.0648</b>	<b>0.0648</b>	<b>0.0000</b>	<b>302.6549</b>	<b>302.6549</b>	<b>0.0711</b>	<b>0.0000</b>	<b>304.4335</b>	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.5 Building Construction - 2029****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0564	2.2902	0.4730	7.7400e-003	0.2006	2.3300e-003	0.2029	0.0580	2.2300e-003	0.0603	0.0000	743.4459	743.4459	0.0313	0.0000	744.2285	
Worker	0.3054	0.1686	2.0767	8.9400e-003	1.2630	6.2100e-003	1.2692	0.3360	5.7100e-003	0.3417	0.0000	809.1605	809.1605	0.0117	0.0000	809.4539	
<b>Total</b>	<b>0.3619</b>	<b>2.4587</b>	<b>2.5496</b>	<b>0.0167</b>	<b>1.4635</b>	<b>8.5400e-003</b>	<b>1.4721</b>	<b>0.3940</b>	<b>7.9400e-003</b>	<b>0.4019</b>	<b>0.0000</b>	<b>1,552.6064</b>	<b>1,552.6064</b>	<b>0.0430</b>	<b>0.0000</b>	<b>1,553.6824</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331	
<b>Total</b>	<b>0.1784</b>	<b>1.6273</b>	<b>2.0991</b>	<b>3.5200e-003</b>		<b>0.0689</b>	<b>0.0689</b>		<b>0.0648</b>	<b>0.0648</b>	<b>0.0000</b>	<b>302.6545</b>	<b>302.6545</b>	<b>0.0711</b>	<b>0.0000</b>	<b>304.4331</b>	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.5 Building Construction - 2029****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0564	2.2902	0.4730	7.7400e-003	0.2006	2.3300e-003	0.2029	0.0580	2.2300e-003	0.0603	0.0000	743.4459	743.4459	0.0313	0.0000	744.2285	
Worker	0.3054	0.1686	2.0767	8.9400e-003	1.2630	6.2100e-003	1.2692	0.3360	5.7100e-003	0.3417	0.0000	809.1605	809.1605	0.0117	0.0000	809.4539	
Total	0.3619	2.4587	2.5496	0.0167	1.4635	8.5400e-003	1.4721	0.3940	7.9400e-003	0.4019	0.0000	1,552.6064	1,552.6064	0.0430	0.0000	1,553.6824	

**3.5 Building Construction - 2030****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0336	343.0336	0.0138	0.0000	343.3777	
Total	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0336	343.0336	0.0138	0.0000	343.3777	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.5 Building Construction - 2030****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0556	2.2754	0.4648	7.7100e-003	0.2006	2.2900e-003	0.2029	0.0580	2.1900e-003	0.0602	0.0000	740.4952	740.4952	0.0311	0.0000	741.2721	
Worker	0.2845	0.1551	1.9516	8.7000e-003	1.2630	5.8000e-003	1.2688	0.3360	5.3300e-003	0.3413	0.0000	788.1420	788.1420	0.0108	0.0000	788.4110	
<b>Total</b>	<b>0.3401</b>	<b>2.4305</b>	<b>2.4164</b>	<b>0.0164</b>	<b>1.4635</b>	<b>8.0900e-003</b>	<b>1.4716</b>	<b>0.3940</b>	<b>7.5200e-003</b>	<b>0.4015</b>	<b>0.0000</b>	<b>1,528.6372</b>	<b>1,528.6372</b>	<b>0.0418</b>	<b>0.0000</b>	<b>1,529.6830</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0332	343.0332	0.0138	0.0000	343.3773	
<b>Total</b>	<b>0.1708</b>	<b>1.0355</b>	<b>2.1085</b>	<b>4.0400e-003</b>		<b>0.0193</b>	<b>0.0193</b>		<b>0.0193</b>	<b>0.0193</b>	<b>0.0000</b>	<b>343.0332</b>	<b>343.0332</b>	<b>0.0138</b>	<b>0.0000</b>	<b>343.3773</b>	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.5 Building Construction - 2030****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0556	2.2754	0.4648	7.7100e-003	0.2006	2.2900e-003	0.2029	0.0580	2.1900e-003	0.0602	0.0000	740.4952	740.4952	0.0311	0.0000	741.2721	
Worker	0.2845	0.1551	1.9516	8.7000e-003	1.2630	5.8000e-003	1.2688	0.3360	5.3300e-003	0.3413	0.0000	788.1420	788.1420	0.0108	0.0000	788.4110	
Total	0.3401	2.4305	2.4164	0.0164	1.4635	8.0900e-003	1.4716	0.3940	7.5200e-003	0.4015	0.0000	1,528.6372	1,528.6372	0.0418	0.0000	1,529.6830	

**3.5 Building Construction - 2031****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0336	343.0336	0.0138	0.0000	343.3777	
Total	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0336	343.0336	0.0138	0.0000	343.3777	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.5 Building Construction - 2031****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0550	2.2645	0.4587	7.6900e-003	0.2006	2.2700e-003	0.2029	0.0580	2.1700e-003	0.0602	0.0000	738.3488	738.3488	0.0309	0.0000	739.1213	
Worker	0.2621	0.1424	1.8321	8.5000e-003	1.2630	5.4100e-003	1.2684	0.3360	4.9800e-003	0.3410	0.0000	769.7015	769.7015	9.8500e-003	0.0000	769.9477	
<b>Total</b>	<b>0.3171</b>	<b>2.4069</b>	<b>2.2908</b>	<b>0.0162</b>	<b>1.4636</b>	<b>7.6800e-003</b>	<b>1.4712</b>	<b>0.3940</b>	<b>7.1500e-003</b>	<b>0.4012</b>	<b>0.0000</b>	<b>1,508.0503</b>	<b>1,508.0503</b>	<b>0.0408</b>	<b>0.0000</b>	<b>1,509.0690</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0332	343.0332	0.0138	0.0000	343.3773	
<b>Total</b>	<b>0.1708</b>	<b>1.0355</b>	<b>2.1085</b>	<b>4.0400e-003</b>		<b>0.0193</b>	<b>0.0193</b>		<b>0.0193</b>	<b>0.0193</b>	<b>0.0000</b>	<b>343.0332</b>	<b>343.0332</b>	<b>0.0138</b>	<b>0.0000</b>	<b>343.3773</b>	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.5 Building Construction - 2031****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0550	2.2645	0.4587	7.6900e-003	0.2006	2.2700e-003	0.2029	0.0580	2.1700e-003	0.0602	0.0000	738.3488	738.3488	0.0309	0.0000	739.1213	
Worker	0.2621	0.1424	1.8321	8.5000e-003	1.2630	5.4100e-003	1.2684	0.3360	4.9800e-003	0.3410	0.0000	769.7015	769.7015	9.8500e-003	0.0000	769.9477	
Total	0.3171	2.4069	2.2908	0.0162	1.4636	7.6800e-003	1.4712	0.3940	7.1500e-003	0.4012	0.0000	1,508.0503	1,508.0503	0.0408	0.0000	1,509.0690	

**3.5 Building Construction - 2032****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1224	0.7419	1.5107	2.8900e-003		0.0139	0.0139		0.0139	0.0139	0.0000	245.7751	245.7751	9.8600e-003	0.0000	246.0216	
Total	0.1224	0.7419	1.5107	2.8900e-003		0.0139	0.0139		0.0139	0.0139	0.0000	245.7751	245.7751	9.8600e-003	0.0000	246.0216	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.5 Building Construction - 2032****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0391	1.6161	0.3255	5.4900e-003	0.1437	1.6100e-003	0.1453	0.0416	1.5400e-003	0.0431	0.0000	527.9716	527.9716	0.0220	0.0000	528.5226	
Worker	0.1740	0.0943	1.2384	5.9600e-003	0.9049	3.6200e-003	0.9085	0.2407	3.3300e-003	0.2441	0.0000	539.9794	539.9794	6.5000e-003	0.0000	540.1418	
<b>Total</b>	<b>0.2131</b>	<b>1.7104</b>	<b>1.5639</b>	<b>0.0115</b>	<b>1.0486</b>	<b>5.2300e-003</b>	<b>1.0538</b>	<b>0.2823</b>	<b>4.8700e-003</b>	<b>0.2872</b>	<b>0.0000</b>	<b>1,067.9510</b>	<b>1,067.9510</b>	<b>0.0285</b>	<b>0.0000</b>	<b>1,068.6644</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1224	0.7419	1.5107	2.8900e-003		0.0139	0.0139		0.0139	0.0139	0.0000	245.7748	245.7748	9.8600e-003	0.0000	246.0213	
<b>Total</b>	<b>0.1224</b>	<b>0.7419</b>	<b>1.5107</b>	<b>2.8900e-003</b>		<b>0.0139</b>	<b>0.0139</b>		<b>0.0139</b>	<b>0.0139</b>	<b>0.0000</b>	<b>245.7748</b>	<b>245.7748</b>	<b>9.8600e-003</b>	<b>0.0000</b>	<b>246.0213</b>	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.5 Building Construction - 2032****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0391	1.6161	0.3255	5.4900e-003	0.1437	1.6100e-003	0.1453	0.0416	1.5400e-003	0.0431	0.0000	527.9716	527.9716	0.0220	0.0000	528.5226	
Worker	0.1740	0.0943	1.2384	5.9600e-003	0.9049	3.6200e-003	0.9085	0.2407	3.3300e-003	0.2441	0.0000	539.9794	539.9794	6.5000e-003	0.0000	540.1418	
Total	0.2131	1.7104	1.5639	0.0115	1.0486	5.2300e-003	1.0538	0.2823	4.8700e-003	0.2872	0.0000	1,067.9510	1,067.9510	0.0285	0.0000	1,068.6644	

**3.6 Paving - 2032****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0519	0.2670	0.5944	1.0500e-003		0.0124	0.0124		0.0124	0.0124	0.0000	90.3732	90.3732	4.2400e-003	0.0000	90.4791	
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.0519	0.2670	0.5944	1.0500e-003		0.0124	0.0124		0.0124	0.0124	0.0000	90.3732	90.3732	4.2400e-003	0.0000	90.4791	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.6 Paving - 2032****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	8.6000e-004	4.6000e-004	6.0900e-003	3.0000e-005	4.4500e-003	2.0000e-005	4.4700e-003	1.1800e-003	2.0000e-005	1.2000e-003	0.0000	2.6540	2.6540	3.0000e-005	0.0000	2.6548	
Total	8.6000e-004	4.6000e-004	6.0900e-003	3.0000e-005	4.4500e-003	2.0000e-005	4.4700e-003	1.1800e-003	2.0000e-005	1.2000e-003	0.0000	2.6540	2.6540	3.0000e-005	0.0000	2.6548	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0519	0.2670	0.5944	1.0500e-003			0.0124	0.0124		0.0124	0.0124	0.0000	90.3731	90.3731	4.2400e-003	0.0000	90.4790
Paving	0.0000						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0519	0.2670	0.5944	1.0500e-003			0.0124	0.0124		0.0124	0.0124	0.0000	90.3731	90.3731	4.2400e-003	0.0000	90.4790

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.6 Paving - 2032****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	8.6000e-004	4.6000e-004	6.0900e-003	3.0000e-005	4.4500e-003	2.0000e-005	4.4700e-003	1.1800e-003	2.0000e-005	1.2000e-003	0.0000	2.6540	2.6540	3.0000e-005	0.0000	2.6548	
Total	8.6000e-004	4.6000e-004	6.0900e-003	3.0000e-005	4.4500e-003	2.0000e-005	4.4700e-003	1.1800e-003	2.0000e-005	1.2000e-003	0.0000	2.6540	2.6540	3.0000e-005	0.0000	2.6548	

**3.6 Paving - 2033****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1800	0.9256	2.0604	3.6500e-003			0.0430	0.0430		0.0430	0.0430	0.0000	313.2937	313.2937	0.0147	0.0000	313.6609
Paving	0.0000						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1800	0.9256	2.0604	3.6500e-003			0.0430	0.0430		0.0430	0.0430	0.0000	313.2937	313.2937	0.0147	0.0000	313.6609

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.6 Paving - 2033****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	2.7700e-003	1.5000e-003	0.0200	1.0000e-004	0.0154	6.0000e-005	0.0155	4.1000e-003	5.0000e-005	4.1500e-003	0.0000	9.0315	9.0315	1.0000e-004	0.0000	9.0340	
Total	2.7700e-003	1.5000e-003	0.0200	1.0000e-004	0.0154	6.0000e-005	0.0155	4.1000e-003	5.0000e-005	4.1500e-003	0.0000	9.0315	9.0315	1.0000e-004	0.0000	9.0340	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1800	0.9256	2.0604	3.6500e-003		0.0430	0.0430		0.0430	0.0430	0.0000	313.2933	313.2933	0.0147	0.0000	313.6605	
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.1800	0.9256	2.0604	3.6500e-003		0.0430	0.0430		0.0430	0.0430	0.0000	313.2933	313.2933	0.0147	0.0000	313.6605	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.6 Paving - 2033****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	2.7700e-003	1.5000e-003	0.0200	1.0000e-004	0.0154	6.0000e-005	0.0155	4.1000e-003	5.0000e-005	4.1500e-003	0.0000	9.0315	9.0315	1.0000e-004	0.0000	9.0340	
Total	2.7700e-003	1.5000e-003	0.0200	1.0000e-004	0.0154	6.0000e-005	0.0155	4.1000e-003	5.0000e-005	4.1500e-003	0.0000	9.0315	9.0315	1.0000e-004	0.0000	9.0340	

**3.6 Paving - 2034****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0796	0.4094	0.9114	1.6100e-003		0.0190	0.0190		0.0190	0.0190	0.0000	138.5722	138.5722	6.5000e-003	0.0000	138.7346	
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.0796	0.4094	0.9114	1.6100e-003		0.0190	0.0190		0.0190	0.0190	0.0000	138.5722	138.5722	6.5000e-003	0.0000	138.7346	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.6 Paving - 2034****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.1500e-003	6.2000e-004	8.4000e-003	4.0000e-005	6.8200e-003	2.0000e-005	6.8400e-003	1.8100e-003	2.0000e-005	1.8400e-003	0.0000	3.9301	3.9301	4.0000e-005	0.0000	3.9311	
Total	1.1500e-003	6.2000e-004	8.4000e-003	4.0000e-005	6.8200e-003	2.0000e-005	6.8400e-003	1.8100e-003	2.0000e-005	1.8400e-003	0.0000	3.9301	3.9301	4.0000e-005	0.0000	3.9311	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0796	0.4094	0.9114	1.6100e-003			0.0190	0.0190		0.0190	0.0190	0.0000	138.5720	138.5720	6.5000e-003	0.0000	138.7345
Paving	0.0000						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0796	0.4094	0.9114	1.6100e-003			0.0190	0.0190		0.0190	0.0190	0.0000	138.5720	138.5720	6.5000e-003	0.0000	138.7345

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.6 Paving - 2034****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.1500e-003	6.2000e-004	8.4000e-003	4.0000e-005	6.8200e-003	2.0000e-005	6.8400e-003	1.8100e-003	2.0000e-005	1.8400e-003	0.0000	3.9301	3.9301	4.0000e-005	0.0000	3.9311	
Total	1.1500e-003	6.2000e-004	8.4000e-003	4.0000e-005	6.8200e-003	2.0000e-005	6.8400e-003	1.8100e-003	2.0000e-005	1.8400e-003	0.0000	3.9301	3.9301	4.0000e-005	0.0000	3.9311	

**3.7 Architectural Coating - 2030****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.6947						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0171	0.1117	0.2346	3.9000e-004		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003	0.0000	33.3200	33.3200	1.3500e-003	0.0000	33.3537
Total	2.7117	0.1117	0.2346	3.9000e-004		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003	0.0000	33.3200	33.3200	1.3500e-003	0.0000	33.3537

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.7 Architectural Coating - 2030****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0569	0.0311	0.3906	1.7400e-003	0.2528	1.1600e-003	0.2540	0.0673	1.0700e-003	0.0683	0.0000	157.7572	157.7572	2.1500e-003	0.0000	157.8110	
<b>Total</b>	<b>0.0569</b>	<b>0.0311</b>	<b>0.3906</b>	<b>1.7400e-003</b>	<b>0.2528</b>	<b>1.1600e-003</b>	<b>0.2540</b>	<b>0.0673</b>	<b>1.0700e-003</b>	<b>0.0683</b>	<b>0.0000</b>	<b>157.7572</b>	<b>157.7572</b>	<b>2.1500e-003</b>	<b>0.0000</b>	<b>157.8110</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Archit. Coating	2.6947						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0171	0.1117	0.2346	3.9000e-004		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003	0.0000	33.3199	33.3199	1.3500e-003	0.0000	33.3536	
<b>Total</b>	<b>2.7117</b>	<b>0.1117</b>	<b>0.2346</b>	<b>3.9000e-004</b>		<b>2.6500e-003</b>	<b>2.6500e-003</b>		<b>2.6500e-003</b>	<b>2.6500e-003</b>	<b>0.0000</b>	<b>33.3199</b>	<b>33.3199</b>	<b>1.3500e-003</b>	<b>0.0000</b>	<b>33.3536</b>	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.7 Architectural Coating - 2030****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0569	0.0311	0.3906	1.7400e-003	0.2528	1.1600e-003	0.2540	0.0673	1.0700e-003	0.0683	0.0000	157.7572	157.7572	2.1500e-003	0.0000	157.8110	
Total	0.0569	0.0311	0.3906	1.7400e-003	0.2528	1.1600e-003	0.2540	0.0673	1.0700e-003	0.0683	0.0000	157.7572	157.7572	2.1500e-003	0.0000	157.8110	

**3.7 Architectural Coating - 2031****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Archit. Coating	2.6947						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0171	0.1117	0.2346	3.9000e-004		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003	0.0000	33.3200	33.3200	1.3500e-003	0.0000	33.3537	
Total	2.7117	0.1117	0.2346	3.9000e-004		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003	0.0000	33.3200	33.3200	1.3500e-003	0.0000	33.3537	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.7 Architectural Coating - 2031****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0525	0.0285	0.3667	1.7000e-003	0.2528	1.0800e-003	0.2539	0.0673	1.0000e-003	0.0682	0.0000	154.0661	154.0661	1.9700e-003	0.0000	154.1154	
<b>Total</b>	<b>0.0525</b>	<b>0.0285</b>	<b>0.3667</b>	<b>1.7000e-003</b>	<b>0.2528</b>	<b>1.0800e-003</b>	<b>0.2539</b>	<b>0.0673</b>	<b>1.0000e-003</b>	<b>0.0682</b>	<b>0.0000</b>	<b>154.0661</b>	<b>154.0661</b>	<b>1.9700e-003</b>	<b>0.0000</b>	<b>154.1154</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Archit. Coating	2.6947						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0171	0.1117	0.2346	3.9000e-004		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003	0.0000	33.3199	33.3199	1.3500e-003	0.0000	33.3536	
<b>Total</b>	<b>2.7117</b>	<b>0.1117</b>	<b>0.2346</b>	<b>3.9000e-004</b>		<b>2.6500e-003</b>	<b>2.6500e-003</b>		<b>2.6500e-003</b>	<b>2.6500e-003</b>	<b>0.0000</b>	<b>33.3199</b>	<b>33.3199</b>	<b>1.3500e-003</b>	<b>0.0000</b>	<b>33.3536</b>	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.7 Architectural Coating - 2031****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0525	0.0285	0.3667	1.7000e-003	0.2528	1.0800e-003	0.2539	0.0673	1.0000e-003	0.0682	0.0000	154.0661	154.0661	1.9700e-003	0.0000	154.1154	
Total	0.0525	0.0285	0.3667	1.7000e-003	0.2528	1.0800e-003	0.2539	0.0673	1.0000e-003	0.0682	0.0000	154.0661	154.0661	1.9700e-003	0.0000	154.1154	

**3.7 Architectural Coating - 2032****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Archit. Coating	2.7050						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0171	0.1122	0.2355	3.9000e-004		2.6600e-003	2.6600e-003		2.6600e-003	2.6600e-003	0.0000	33.4476	33.4476	1.3500e-003	0.0000	33.4815	
Total	2.7221	0.1122	0.2355	3.9000e-004		2.6600e-003	2.6600e-003		2.6600e-003	2.6600e-003	0.0000	33.4476	33.4476	1.3500e-003	0.0000	33.4815	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.7 Architectural Coating - 2032****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0488	0.0265	0.3473	1.6700e-003	0.2538	1.0200e-003	0.2548	0.0675	9.3000e-004	0.0684	0.0000	151.4334	151.4334	1.8200e-003	0.0000	151.4789	
Total	<b>0.0488</b>	<b>0.0265</b>	<b>0.3473</b>	<b>1.6700e-003</b>	<b>0.2538</b>	<b>1.0200e-003</b>	<b>0.2548</b>	<b>0.0675</b>	<b>9.3000e-004</b>	<b>0.0684</b>	<b>0.0000</b>	<b>151.4334</b>	<b>151.4334</b>	<b>1.8200e-003</b>	<b>0.0000</b>	<b>151.4789</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Archit. Coating	2.7050						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0171	0.1122	0.2355	3.9000e-004		2.6600e-003	2.6600e-003		2.6600e-003	2.6600e-003	0.0000	33.4476	33.4476	1.3500e-003	0.0000	33.4814	
Total	<b>2.7221</b>	<b>0.1122</b>	<b>0.2355</b>	<b>3.9000e-004</b>		<b>2.6600e-003</b>	<b>2.6600e-003</b>		<b>2.6600e-003</b>	<b>2.6600e-003</b>	<b>0.0000</b>	<b>33.4476</b>	<b>33.4476</b>	<b>1.3500e-003</b>	<b>0.0000</b>	<b>33.4814</b>	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.7 Architectural Coating - 2032****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0488	0.0265	0.3473	1.6700e-003	0.2538	1.0200e-003	0.2548	0.0675	9.3000e-004	0.0684	0.0000	151.4334	151.4334	1.8200e-003	0.0000	151.4789	
Total	0.0488	0.0265	0.3473	1.6700e-003	0.2538	1.0200e-003	0.2548	0.0675	9.3000e-004	0.0684	0.0000	151.4334	151.4334	1.8200e-003	0.0000	151.4789	

**3.7 Architectural Coating - 2033****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Archit. Coating	2.6844						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0170	0.1113	0.2337	3.9000e-004		2.6400e-003	2.6400e-003		2.6400e-003	2.6400e-003	0.0000	33.1923	33.1923	1.3400e-003	0.0000	33.2259	
Total	2.7014	0.1113	0.2337	3.9000e-004		2.6400e-003	2.6400e-003		2.6400e-003	2.6400e-003	0.0000	33.1923	33.1923	1.3400e-003	0.0000	33.2259	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.7 Architectural Coating - 2033****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0452	0.0245	0.3269	1.6300e-003	0.2518	9.4000e-004	0.2528	0.0670	8.7000e-004	0.0679	0.0000	147.5142	147.5142	1.6700e-003	0.0000	147.5561	
<b>Total</b>	<b>0.0452</b>	<b>0.0245</b>	<b>0.3269</b>	<b>1.6300e-003</b>	<b>0.2518</b>	<b>9.4000e-004</b>	<b>0.2528</b>	<b>0.0670</b>	<b>8.7000e-004</b>	<b>0.0679</b>	<b>0.0000</b>	<b>147.5142</b>	<b>147.5142</b>	<b>1.6700e-003</b>	<b>0.0000</b>	<b>147.5561</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Archit. Coating	2.6844						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0170	0.1113	0.2337	3.9000e-004		2.6400e-003	2.6400e-003		2.6400e-003	2.6400e-003	0.0000	33.1923	33.1923	1.3400e-003	0.0000	33.2258	
<b>Total</b>	<b>2.7014</b>	<b>0.1113</b>	<b>0.2337</b>	<b>3.9000e-004</b>		<b>2.6400e-003</b>	<b>2.6400e-003</b>		<b>2.6400e-003</b>	<b>2.6400e-003</b>	<b>0.0000</b>	<b>33.1923</b>	<b>33.1923</b>	<b>1.3400e-003</b>	<b>0.0000</b>	<b>33.2258</b>	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.7 Architectural Coating - 2033****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0452	0.0245	0.3269	1.6300e-003	0.2518	9.4000e-004	0.2528	0.0670	8.7000e-004	0.0679	0.0000	147.5142	147.5142	1.6700e-003	0.0000	147.5561	
Total	0.0452	0.0245	0.3269	1.6300e-003	0.2518	9.4000e-004	0.2528	0.0670	8.7000e-004	0.0679	0.0000	147.5142	147.5142	1.6700e-003	0.0000	147.5561	

**3.7 Architectural Coating - 2034****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Archit. Coating	2.1268						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0135	0.0882	0.1852	3.1000e-004		2.0900e-003	2.0900e-003		2.0900e-003	2.0900e-003	0.0000	26.2985	26.2985	1.0600e-003	0.0000	26.3251	
Total	2.1403	0.0882	0.1852	3.1000e-004		2.0900e-003	2.0900e-003		2.0900e-003	2.0900e-003	0.0000	26.2985	26.2985	1.0600e-003	0.0000	26.3251	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.7 Architectural Coating - 2034****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0336	0.0182	0.2458	1.2700e-003	0.1995	7.0000e-004	0.2002	0.0531	6.4000e-004	0.0537	0.0000	114.9862	114.9862	1.2300e-003	0.0000	115.0170	
<b>Total</b>	<b>0.0336</b>	<b>0.0182</b>	<b>0.2458</b>	<b>1.2700e-003</b>	<b>0.1995</b>	<b>7.0000e-004</b>	<b>0.2002</b>	<b>0.0531</b>	<b>6.4000e-004</b>	<b>0.0537</b>	<b>0.0000</b>	<b>114.9862</b>	<b>114.9862</b>	<b>1.2300e-003</b>	<b>0.0000</b>	<b>115.0170</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Archit. Coating	2.1268						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0135	0.0882	0.1852	3.1000e-004		2.0900e-003	2.0900e-003		2.0900e-003	2.0900e-003	0.0000	26.2985	26.2985	1.0600e-003	0.0000	26.3251	
<b>Total</b>	<b>2.1403</b>	<b>0.0882</b>	<b>0.1852</b>	<b>3.1000e-004</b>		<b>2.0900e-003</b>	<b>2.0900e-003</b>		<b>2.0900e-003</b>	<b>2.0900e-003</b>	<b>0.0000</b>	<b>26.2985</b>	<b>26.2985</b>	<b>1.0600e-003</b>	<b>0.0000</b>	<b>26.3251</b>	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**3.7 Architectural Coating - 2034****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0336	0.0182	0.2458	1.2700e-003	0.1995	7.0000e-004	0.2002	0.0531	6.4000e-004	0.0537	0.0000	114.9862	114.9862	1.2300e-003	0.0000	115.0170	
Total	0.0336	0.0182	0.2458	1.2700e-003	0.1995	7.0000e-004	0.2002	0.0531	6.4000e-004	0.0537	0.0000	114.9862	114.9862	1.2300e-003	0.0000	115.0170	

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

Increase Density

Increase Diversity

Improve Walkability Design

Increase Transit Accessibility

Improve Pedestrian Network

Provide Traffic Calming Measures

Provide BRT System

Expand Transit Network

Implement Trip Reduction Program

Encourage Telecommuting and Alternative Work Schedules

Employee Vanpool/Shuttle

Provide Riade Sharing Program

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	1.2921	12.4814	12.0393	0.0659	5.9653	0.0329	5.9982	1.6022	0.0307	1.6330	0.0000	6,142.5990	6,142.5990	0.2635	0.0000	6,149.1871	
Unmitigated	1.5458	14.1850	16.9235	0.0990	9.6168	0.0491	9.6660	2.5830	0.0459	2.6289	0.0000	9,214.2832	9,214.2832	0.3333	0.0000	9,222.6145	

## 4.2 Trip Summary Information

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Apartments High Rise	4,725.00	5,602.50	4106.25	10,998,267	6,891,273		
Apartments Low Rise	2,471.25	2,685.00	2276.25	5,713,803	3,580,144		
General Office Building	4,963.50	1,107.00	472.50	9,011,758	5,484,927		
Total	12,159.75	9,394.50	6,855.00	25,723,829	15,956,344		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments High Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Apartments Low Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.566131	0.035263	0.188976	0.102013	0.011508	0.005051	0.027665	0.053145	0.002326	0.001628	0.005241	0.000420	0.000634
Apartments High Rise	0.566131	0.035263	0.188976	0.102013	0.011508	0.005051	0.027665	0.053145	0.002326	0.001628	0.005241	0.000420	0.000634
Apartments Low Rise	0.566131	0.035263	0.188976	0.102013	0.011508	0.005051	0.027665	0.053145	0.002326	0.001628	0.005241	0.000420	0.000634

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3,007.2863	3,007.2863	0.1360	0.0281	3,019.0697	
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3,007.2863	3,007.2863	0.1360	0.0281	3,019.0697	
NaturalGas Mitigated	0.1358	1.1848	0.6729	7.4100e-003		0.0938	0.0938		0.0938	0.0938	0.0000	1,343.8984	1,343.8984	0.0258	0.0246	1,351.8846	
NaturalGas Unmitigated	0.1358	1.1848	0.6729	7.4100e-003		0.0938	0.0938		0.0938	0.0938	0.0000	1,343.8984	1,343.8984	0.0258	0.0246	1,351.8846	

## 5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr											MT/yr					
Apartments High Rise	9.26606e+006	0.0500	0.4270	0.1817	2.7300e-003		0.0345	0.0345		0.0345	0.0345	0.0000	494.4722	494.4722	9.4800e-003	9.0700e-003	497.4106	
Apartments Low Rise	7.6156e+006	0.0411	0.3509	0.1493	2.2400e-003		0.0284	0.0284		0.0284	0.0284	0.0000	406.3972	406.3972	7.7900e-003	7.4500e-003	408.8122	
General Office Building	8.30205e+006	0.0448	0.4070	0.3419	2.4400e-003		0.0309	0.0309		0.0309	0.0309	0.0000	443.0290	443.0290	8.4900e-003	8.1200e-003	445.6617	
Total		0.1358	1.1848	0.6729	7.4100e-003		0.0938	0.0938		0.0938	0.0938	0.0000	1,343.8984	1,343.8984	0.0258	0.0246	1,351.8845	

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**5.2 Energy by Land Use - NaturalGas****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments High Rise	9.26606e+006	0.0500	0.4270	0.1817	2.7300e-003		0.0345	0.0345		0.0345	0.0345	0.0000	494.4722	494.4722	9.4800e-003	9.0700e-003	497.4106
Apartments Low Rise	7.6156e+006	0.0411	0.3509	0.1493	2.2400e-003		0.0284	0.0284		0.0284	0.0284	0.0000	406.3972	406.3972	7.7900e-003	7.4500e-003	408.8122
General Office Building	8.30205e+006	0.0448	0.4070	0.3419	2.4400e-003		0.0309	0.0309		0.0309	0.0309	0.0000	443.0290	443.0290	8.4900e-003	8.1200e-003	445.6617
<b>Total</b>		<b>0.1358</b>	<b>1.1848</b>	<b>0.6729</b>	<b>7.4100e-003</b>		<b>0.0938</b>	<b>0.0938</b>		<b>0.0938</b>	<b>0.0938</b>	<b>0.0000</b>	<b>1,343.8984</b>	<b>1,343.8984</b>	<b>0.0258</b>	<b>0.0246</b>	<b>1,351.8845</b>

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	3.66233e+006	1,065.4126	0.0482	9.9700e-003	1,069.5872
Apartments Low Rise	1.21596e+006	353.7371	0.0160	3.3100e-003	355.1231
General Office Building	5.45918e+006	1,588.1366	0.0718	0.0149	1,594.3594
<b>Total</b>		<b>3,007.2863</b>	<b>0.1360</b>	<b>0.0281</b>	<b>3,019.0697</b>

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	3.66233e+006	1,065.4126	0.0482	9.9700e-003	1,069.5872
Apartments Low Rise	1.21596e+006	353.7371	0.0160	3.3100e-003	355.1231
General Office Building	5.45918e+006	1,588.1366	0.0718	0.0149	1,594.3594
<b>Total</b>		<b>3,007.2863</b>	<b>0.1360</b>	<b>0.0281</b>	<b>3,019.0697</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	9.2385	0.1281	11.1026	5.9000e-004		0.0618	0.0618		0.0618	0.0618	0.0000	18.2012	18.2012	0.0173	0.0000	18.6347	
Unmitigated	9.2385	0.1281	11.1026	5.9000e-004		0.0618	0.0618		0.0618	0.0618	0.0000	18.2012	18.2012	0.0173	0.0000	18.6347	

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.2906					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.6157					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3322	0.1281	11.1026	5.9000e-004		0.0618	0.0618		0.0618	0.0618	0.0000	18.2012	18.2012	0.0173	0.0000	18.6347
<b>Total</b>	<b>9.2385</b>	<b>0.1281</b>	<b>11.1026</b>	<b>5.9000e-004</b>		<b>0.0618</b>	<b>0.0618</b>		<b>0.0618</b>	<b>0.0618</b>	<b>0.0000</b>	<b>18.2012</b>	<b>18.2012</b>	<b>0.0173</b>	<b>0.0000</b>	<b>18.6347</b>

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr										MT/yr						
Architectural Coating	1.2906					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	7.6157					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	0.3322	0.1281	11.1026	5.9000e-004		0.0618	0.0618		0.0618	0.0618	0.0000	18.2012	18.2012	0.0173	0.0000	18.6347	
<b>Total</b>	<b>9.2385</b>	<b>0.1281</b>	<b>11.1026</b>	<b>5.9000e-004</b>		<b>0.0618</b>	<b>0.0618</b>		<b>0.0618</b>	<b>0.0618</b>	<b>0.0000</b>	<b>18.2012</b>	<b>18.2012</b>	<b>0.0173</b>	<b>0.0000</b>	<b>18.6347</b>	

**7.0 Water Detail****7.1 Mitigation Measures Water**

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	448.7643	5.8085	0.1404	635.8159
Unmitigated	448.7643	5.8085	0.1404	635.8159

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	73.2983 / 46.2098	185.6849	2.3958	0.0579	262.8380
Apartments Low Rise	24.4328 / 15.4033	61.8950	0.7986	0.0193	87.6127
General Office Building	79.9802 / 49.0201	201.1844	2.6141	0.0632	285.3652
<b>Total</b>		<b>448.7643</b>	<b>5.8085</b>	<b>0.1404</b>	<b>635.8159</b>

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	73.2983 / 46.2098	185.6849	2.3958	0.0579	262.8380
Apartments Low Rise	24.4328 / 15.4033	61.8950	0.7986	0.0193	87.6127
General Office Building	79.9802 / 49.0201	201.1844	2.6141	0.0632	285.3652
<b>Total</b>		<b>448.7643</b>	<b>5.8085</b>	<b>0.1404</b>	<b>635.8159</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste**

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
MT/yr				
Mitigated	225.0155	13.2980	0.0000	557.4663
Unmitigated	225.0155	13.2980	0.0000	557.4663

**8.2 Waste by Land Use**Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use					
	tons	MT/yr			
Apartments High Rise	517.5	105.0478	6.2082	0.0000	260.2515
Apartments Low Rise	172.5	35.0159	2.0694	0.0000	86.7505
General Office Building	418.5	84.9517	5.0205	0.0000	210.4643
<b>Total</b>		<b>225.0155</b>	<b>13.2980</b>	<b>0.0000</b>	<b>557.4663</b>

## Bay Fair TOD Specific Plan Alternative 3 - Alameda County, Annual

**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	517.5	105.0478	6.2082	0.0000	260.2515
Apartments Low Rise	172.5	35.0159	2.0694	0.0000	86.7505
General Office Building	418.5	84.9517	5.0205	0.0000	210.4643
<b>Total</b>		<b>225.0155</b>	<b>13.2980</b>	<b>0.0000</b>	<b>557.4663</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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## 11.0 Vegetation

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## Greenhouse Gas Emission Worksheet

### N2O Mobile Emissions

Specific Plan -Alternative 3

From URBEMIS 2007 Vehicle Fleet Mix Output:

Annual VMT:

15,956,344

Vehicle Type	Percent Type	CH4 Emission Factor (g/mile)*	CH4 Emission (g/mile)**	N2O Emission Factor (g/mile)*	N2O Emission (g/mile)**
Light Auto	49%		0.04	0.01942	0.04
Light Truck < 3750 lbs	2%		0.05	0.00123	0.06
Light Truck 3751-5750 lbs	17%		0.05	0.00859	0.06
Med Truck 5751-8500 lbs	11%		0.12	0.012996	0.2
Lite-Heavy Truck 8501-10,000 lbs	2%		0.12	0.00264	0.2
Lite-Heavy Truck 10,001-14,000 lbs	0%		0.09	0.000423	0.125
Med-Heavy Truck 14,001-33,000 lbs	1%		0.06	0.000714	0.05
Heavy-Heavy Truck 33,001-60,000 lbs	16%		0.06	0.009672	0.05
Other Bus	0%		0.06	0.000084	0.05
Urban Bus	0%		0.06	0.000066	0.05
Motorcycle	1%		0.09	0.000513	0.01
School Bus	0%		0.06	0.00003	0.05
Motor Home	0%		0.09	0.000072	0.125
<b>Total</b>	<b>100.0%</b>		<b>0.05645</b>		<b>0.066814</b>

**Total Emissions (metric tons) =**

**Emission Factor by Vehicle Mix (g/mi) x Annual VMT(mi) x 0.000001 metric tons/g**

**Conversion to Carbon Dioxide Equivalency (CO2e) Units based on Global Warming Potential (GWP)**

CH4	25 GWP
N2O	298 GWP
1 ton (short, US) =	0.90718474 metric ton

**Annual Mobile Emissions:**

N2O Emissions:	Total Emissions		Total CO2e units	
	1.0661	metric tons N2O	317.70	metric tons CO2e
<b>Project Total:</b> 317.70 metric tons CO2e				

#### References

- \* from Table C.4: Methane and Nitrous Oxide Emission Factors for Mobile Sources by Vehicle and Fuel Type (g/mile).  
in California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.
- Assume Model year 2000-present, gasoline fueled.
- \*\* Source: California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.
- \*\*\* From URBEMIS 2007 results for mobile sources

# Appendix C

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## Noise Measurement Results

## Appendix C

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### Noise Measurement Results

Freq Weight : A  
 Time Weight : FAST  
 Level Range : 40-100  
 Max dB : 83.0 - 2017/07/05 16:49:50  
 Level Range : 40-100  
 SEL : 99.5  
 Leq : 70.0

No.	s	Date	Time	(dB)				
1	2017/07/05	16:35:46	67.6	67.1	66.7	65.5	65.3	
6	2017/07/05	16:35:51	68.0	73.5	62.1	57.8	60.7	
11	2017/07/05	16:35:56	59.2	61.4	60.1	60.4	57.1	
16	2017/07/05	16:36:01	55.9	56.2	58.4	59.5	64.9	
21	2017/07/05	16:36:06	68.4	71.2	73.6	74.3	72.4	
26	2017/07/05	16:36:11	69.4	71.9	71.5	74.5	69.8	
31	2017/07/05	16:36:16	72.5	75.0	71.3	64.5	60.3	
36	2017/07/05	16:36:21	58.7	59.8	57.7	57.6	57.5	
41	2017/07/05	16:36:26	60.8	64.2	67.7	70.3	58.7	
46	2017/07/05	16:36:31	54.6	55.1	56.8	59.0	60.1	
51	2017/07/05	16:36:36	60.5	60.7	56.4	54.8	56.0	
56	2017/07/05	16:36:41	57.4	59.9	61.6	63.7	67.9	
61	2017/07/05	16:36:46	72.3	74.9	72.8	69.5	73.2	
66	2017/07/05	16:36:51	75.3	72.1	68.4	69.3	71.4	
71	2017/07/05	16:36:56	73.4	70.1	72.6	69.2	64.5	
76	2017/07/05	16:37:01	66.6	67.5	70.2	72.2	69.1	
81	2017/07/05	16:37:06	71.7	70.6	61.0	62.7	64.7	
86	2017/07/05	16:37:11	68.2	64.7	56.7	57.5	54.6	
91	2017/07/05	16:37:16	54.1	53.7	52.9	53.9	53.8	
96	2017/07/05	16:37:21	54.4	56.1	57.3	61.0	62.8	
101	2017/07/05	16:37:26	64.4	66.3	66.1	67.6	73.2	
106	2017/07/05	16:37:31	76.2	67.1	67.1	67.5	68.3	
111	2017/07/05	16:37:36	68.6	69.1	69.0	67.2	69.2	
116	2017/07/05	16:37:41	68.3	66.7	65.6	70.1	72.6	
121	2017/07/05	16:37:46	70.2	65.7	64.5	64.1	62.6	
126	2017/07/05	16:37:51	62.2	61.6	60.5	60.6	62.2	
131	2017/07/05	16:37:56	63.7	66.6	72.9	72.6	68.8	
136	2017/07/05	16:38:01	72.4	70.8	74.3	74.1	70.9	
141	2017/07/05	16:38:06	66.1	62.8	66.3	69.7	72.2	
146	2017/07/05	16:38:11	67.3	66.5	65.1	69.3	76.6	
151	2017/07/05	16:38:16	76.3	68.0	61.2	58.4	56.6	
156	2017/07/05	16:38:21	57.4	64.4	70.1	62.4	62.9	
161	2017/07/05	16:38:26	65.2	60.7	53.7	53.0	52.6	
166	2017/07/05	16:38:31	53.5	51.6	52.9	54.0	54.7	
171	2017/07/05	16:38:36	55.6	60.8	64.1	67.5	70.3	
176	2017/07/05	16:38:41	70.5	66.8	70.6	73.0	77.4	
181	2017/07/05	16:38:46	78.5	72.4	72.7	75.0	71.8	
186	2017/07/05	16:38:51	71.8	72.4	72.7	72.9	73.3	
191	2017/07/05	16:38:56	66.4	65.3	66.1	65.4	68.8	
196	2017/07/05	16:39:01	65.0	66.8	69.1	70.9	72.6	
201	2017/07/05	16:39:06	72.1	78.0	76.5	78.1	71.3	
206	2017/07/05	16:39:11	68.5	65.9	65.7	65.0	62.9	
211	2017/07/05	16:39:16	61.8	60.6	61.9	61.8	62.3	
216	2017/07/05	16:39:21	60.5	59.1	56.2	54.7	53.3	
221	2017/07/05	16:39:26	52.3	53.2	75.4	59.4	61.9	
226	2017/07/05	16:39:31	60.0	68.9	59.3	59.8	60.7	
231	2017/07/05	16:39:36	58.5	58.0	58.4	54.9	53.4	
236	2017/07/05	16:39:41	53.6	54.5	57.9	65.4	68.9	
241	2017/07/05	16:39:46	72.7	61.7	58.8	58.1	58.1	
246	2017/07/05	16:39:51	57.8	56.3	56.1	57.5	58.8	
251	2017/07/05	16:39:56	60.0	65.0	70.5	78.0	71.7	
256	2017/07/05	16:40:01	68.2	66.8	69.1	71.0	75.2	
261	2017/07/05	16:40:06	66.1	63.6	60.6	59.3	60.4	
266	2017/07/05	16:40:11	59.2	59.4	56.7	53.3	52.8	
271	2017/07/05	16:40:16	52.7	52.9	55.4	57.2	59.2	
276	2017/07/05	16:40:21	63.7	66.8	66.1	60.6	62.1	
281	2017/07/05	16:40:26	65.2	68.6	72.3	67.9	69.4	
286	2017/07/05	16:40:31	75.7	76.4	77.7	67.6	71.1	
291	2017/07/05	16:40:36	77.9	75.5	74.9	70.0	74.5	
296	2017/07/05	16:40:41	78.0	76.5	70.5	72.5	71.8	
301	2017/07/05	16:40:46	72.0	73.5	75.1	72.5	74.4	
306	2017/07/05	16:40:51	76.3	72.5	75.3	72.3	71.4	
311	2017/07/05	16:40:56	74.1	69.9	72.5	74.4	73.3	
316	2017/07/05	16:41:01	69.0	70.9	72.1	72.3	74.8	
321	2017/07/05	16:41:06	69.1	70.3	74.6	73.7	72.8	
326	2017/07/05	16:41:11	72.1	77.0	79.2	70.1	65.7	
331	2017/07/05	16:41:16	68.5	67.5	68.4	66.2	65.3	
336	2017/07/05	16:41:21	63.7	61.3	60.1	64.0	66.3	
341	2017/07/05	16:41:26	71.0	69.3	72.6	69.2	66.4	
346	2017/07/05	16:41:31	62.6	60.2	58.8	55.1	53.4	
351	2017/07/05	16:41:36	52.6	50.8	50.1	48.2	48.1	
356	2017/07/05	16:41:41	51.4	51.2	52.0	50.0	49.4	
361	2017/07/05	16:41:46	51.2	53.1	58.1	64.2	66.6	
366	2017/07/05	16:41:51	72.0	65.3	68.9	74.1	70.1	
371	2017/07/05	16:41:56	69.9	72.6	73.4	74.6	75.4	
376	2017/07/05	16:42:01	73.2	75.1	78.7	72.6	75.5	
381	2017/07/05	16:42:06	72.5	76.2	67.1	71.8	76.1	
386	2017/07/05	16:42:11	74.4	66.9	63.7	64.9	66.6	
391	2017/07/05	16:42:16	66.2	70.0	78.1	70.5	68.1	
396	2017/07/05	16:42:21	66.5	65.7	67.0	66.3	67.8	
401	2017/07/05	16:42:26	71.4	66.7	65.9	67.4	72.7	
406	2017/07/05	16:42:31	73.3	71.1	74.1	77.5	75.8	
411	2017/07/05	16:42:36	76.7	76.8	70.6	73.4	72.4	
416	2017/07/05	16:42:41	73.9	70.9	72.6	73.0	71.9	
421	2017/07/05	16:42:46	71.3	70.1	69.5	69.2	66.0	

426	2017/07/05	16: 42: 51	63. 6	64. 1	63. 4	63. 0	67. 7
431	2017/07/05	16: 42: 56	63. 9	66. 1	70. 3	69. 3	67. 5
436	2017/07/05	16: 43: 01	65. 7	69. 6	68. 0	65. 6	63. 8
441	2017/07/05	16: 43: 06	65. 9	66. 1	66. 5	64. 6	65. 1
446	2017/07/05	16: 43: 11	66. 1	64. 0	66. 4	65. 4	67. 1
451	2017/07/05	16: 43: 16	67. 6	66. 4	66. 5	67. 6	67. 2
456	2017/07/05	16: 43: 21	65. 7	66. 4	65. 2	65. 1	64. 8
461	2017/07/05	16: 43: 26	64. 9	63. 9	64. 9	66. 9	73. 4
466	2017/07/05	16: 43: 31	81. 5	76. 1	69. 1	71. 1	74. 9
471	2017/07/05	16: 43: 36	73. 7	76. 3	72. 7	68. 8	70. 3
476	2017/07/05	16: 43: 41	71. 9	70. 9	72. 0	63. 0	65. 4
481	2017/07/05	16: 43: 46	69. 8	63. 9	58. 5	57. 8	57. 9
486	2017/07/05	16: 43: 51	57. 5	56. 3	56. 3	56. 7	56. 3
491	2017/07/05	16: 43: 56	56. 3	56. 9	58. 6	58. 9	60. 3
496	2017/07/05	16: 44: 01	64. 1	63. 9	64. 2	63. 7	63. 0
501	2017/07/05	16: 44: 06	58. 6	59. 9	61. 4	65. 0	69. 4
506	2017/07/05	16: 44: 11	74. 0	76. 1	72. 1	73. 8	73. 3
511	2017/07/05	16: 44: 16	68. 6	71. 4	70. 8	65. 2	68. 6
516	2017/07/05	16: 44: 21	71. 4	67. 4	70. 4	69. 3	65. 8
521	2017/07/05	16: 44: 26	59. 3	56. 0	53. 8	53. 7	51. 1
526	2017/07/05	16: 44: 31	50. 4	51. 6	52. 0	52. 2	54. 2
531	2017/07/05	16: 44: 36	55. 0	56. 5	57. 2	59. 5	61. 4
536	2017/07/05	16: 44: 41	63. 0	64. 7	65. 2	64. 5	60. 3
541	2017/07/05	16: 44: 46	55. 4	53. 9	53. 3	52. 6	54. 0
546	2017/07/05	16: 44: 51	54. 7	55. 6	55. 9	55. 0	54. 8
551	2017/07/05	16: 44: 56	53. 7	56. 5	65. 1	70. 3	76. 3
556	2017/07/05	16: 45: 01	65. 8	64. 7	70. 3	77. 2	77. 5
561	2017/07/05	16: 45: 06	73. 6	74. 6	72. 9	68. 3	70. 3
566	2017/07/05	16: 45: 11	72. 3	75. 1	64. 9	63. 7	61. 4
571	2017/07/05	16: 45: 16	61. 1	59. 9	59. 4	61. 8	63. 9
576	2017/07/05	16: 45: 21	64. 9	67. 0	66. 8	65. 1	69. 6
581	2017/07/05	16: 45: 26	77. 6	75. 6	67. 1	68. 6	72. 0
586	2017/07/05	16: 45: 31	76. 2	77. 4	77. 4	77. 1	75. 6
591	2017/07/05	16: 45: 36	76. 3	71. 6	74. 1	75. 2	74. 0
596	2017/07/05	16: 45: 41	75. 6	75. 4	74. 4	76. 2	71. 9
601	2017/07/05	16: 45: 46	72. 2	70. 4	71. 0	70. 1	67. 5
606	2017/07/05	16: 45: 51	68. 3	69. 3	66. 1	65. 3	64. 8
611	2017/07/05	16: 45: 56	65. 0	67. 2	67. 4	65. 7	65. 1
616	2017/07/05	16: 46: 01	63. 9	64. 3	65. 0	65. 9	65. 7
621	2017/07/05	16: 46: 06	65. 3	65. 2	63. 9	64. 5	64. 7
626	2017/07/05	16: 46: 11	64. 3	65. 3	62. 6	66. 0	65. 5
631	2017/07/05	16: 46: 16	67. 0	69. 0	68. 9	64. 0	62. 9
636	2017/07/05	16: 46: 21	64. 6	62. 1	63. 4	64. 6	66. 8
641	2017/07/05	16: 46: 26	72. 1	76. 2	73. 2	63. 6	61. 8
646	2017/07/05	16: 46: 31	64. 1	69. 1	73. 3	72. 3	75. 6
651	2017/07/05	16: 46: 36	72. 1	72. 4	69. 1	69. 3	70. 9
656	2017/07/05	16: 46: 41	73. 8	72. 6	74. 9	75. 1	74. 5
661	2017/07/05	16: 46: 46	73. 0	71. 0	75. 3	79. 3	70. 1
666	2017/07/05	16: 46: 51	68. 4	67. 0	65. 9	67. 0	70. 7
671	2017/07/05	16: 46: 56	72. 4	75. 0	72. 8	69. 9	67. 6
676	2017/07/05	16: 47: 01	67. 9	71. 3	71. 7	73. 0	71. 5
681	2017/07/05	16: 47: 06	69. 7	64. 8	64. 6	65. 5	64. 9
686	2017/07/05	16: 47: 11	65. 0	65. 7	64. 6	68. 4	68. 8
691	2017/07/05	16: 47: 16	65. 1	61. 9	57. 8	54. 7	54. 1
696	2017/07/05	16: 47: 21	52. 8	52. 5	53. 0	53. 2	54. 6
701	2017/07/05	16: 47: 26	56. 5	58. 6	59. 7	57. 6	58. 6
706	2017/07/05	16: 47: 31	62. 2	70. 1	75. 9	71. 3	72. 5
711	2017/07/05	16: 47: 36	66. 5	65. 0	66. 8	67. 4	67. 9
716	2017/07/05	16: 47: 41	68. 7	66. 9	68. 9	71. 0	70. 1
721	2017/07/05	16: 47: 46	72. 0	71. 7	64. 9	64. 9	64. 7
726	2017/07/05	16: 47: 51	61. 3	58. 4	55. 6	54. 6	53. 7
731	2017/07/05	16: 47: 56	54. 6	57. 8	59. 4	59. 8	59. 6
736	2017/07/05	16: 48: 01	62. 6	68. 0	72. 1	78. 8	72. 4
741	2017/07/05	16: 48: 06	73. 4	71. 6	75. 1	76. 4	76. 1
746	2017/07/05	16: 48: 11	73. 8	76. 6	75. 4	74. 9	73. 5
751	2017/07/05	16: 48: 16	74. 8	75. 5	74. 3	73. 2	72. 8
756	2017/07/05	16: 48: 21	73. 1	72. 0	74. 6	79. 8	81. 5
761	2017/07/05	16: 48: 26	72. 9	67. 2	68. 4	74. 1	77. 3
766	2017/07/05	16: 48: 31	70. 8	65. 6	64. 3	70. 3	74. 2
771	2017/07/05	16: 48: 36	77. 6	68. 7	72. 5	77. 5	62. 6
776	2017/07/05	16: 48: 41	58. 6	54. 9	55. 3	53. 3	54. 9
781	2017/07/05	16: 48: 46	56. 6	61. 3	68. 2	73. 0	74. 6
786	2017/07/05	16: 48: 51	70. 2	73. 0	78. 1	70. 3	69. 5
791	2017/07/05	16: 48: 56	72. 7	74. 0	63. 8	66. 7	69. 1
796	2017/07/05	16: 49: 01	70. 3	66. 4	60. 8	60. 5	60. 4
801	2017/07/05	16: 49: 06	58. 8	56. 2	54. 6	55. 5	53. 9
806	2017/07/05	16: 49: 11	53. 6	54. 7	55. 7	54. 6	53. 9
811	2017/07/05	16: 49: 16	55. 4	56. 0	57. 3	58. 1	61. 5
816	2017/07/05	16: 49: 21	63. 5	66. 4	67. 8	67. 8	68. 4
821	2017/07/05	16: 49: 26	68. 4	66. 9	66. 2	73. 1	79. 0
826	2017/07/05	16: 49: 31	69. 9	70. 6	72. 1	68. 9	72. 8
831	2017/07/05	16: 49: 36	77. 0	73. 7	72. 3	68. 9	71. 4
836	2017/07/05	16: 49: 41	75. 6	75. 1	72. 8	69. 7	73. 1
841	2017/07/05	16: 49: 46	75. 1	72. 3	73. 3	82. 8	81. 0
846	2017/07/05	16: 49: 51	78. 2	72. 1	74. 6	67. 7	67. 2
851	2017/07/05	16: 49: 56	67. 5	69. 7	72. 9	67. 6	70. 2
856	2017/07/05	16: 50: 01	75. 4	79. 3	70. 1	67. 0	66. 3
861	2017/07/05	16: 50: 06	66. 0	64. 3	63. 8	63. 0	62. 4
866	2017/07/05	16: 50: 11	63. 8	63. 6	63. 6	63. 9	63. 9
871	2017/07/05	16: 50: 16	64. 0	62. 8	63. 8	68. 1	73. 8
876	2017/07/05	16: 50: 21	64. 2	63. 6	62. 3	61. 9	59. 4
881	2017/07/05	16: 50: 26	58. 9	59. 2	61. 0	61. 8	67. 8
886	2017/07/05	16: 50: 31	77. 4	74. 9	66. 5	64. 2	65. 2
891	2017/07/05	16: 50: 36	70. 3	74. 1	69. 5	71. 5	75. 5
896	2017/07/05	16: 50: 41	66. 8	62. 6	63. 9	60. 5	58. 1

Freq Weight : A  
 Time Weight : FAST  
 Level Range : 40-100  
 Max dB : 93.2 - 2017/07/05 17:05:57  
 Level Range : 40-100  
 SEL : 99.5  
 Leq : 70.0

No.	s	Date	Time	(dB)				
1		2017/07/05	17:02:37	59.0	59.4	57.1	56.2	56.6
6		2017/07/05	17:02:42	57.9	56.5	57.1	58.3	57.4
11		2017/07/05	17:02:47	58.0	57.5	59.1	59.1	60.0
16		2017/07/05	17:02:52	63.3	64.9	67.0	66.6	66.9
21		2017/07/05	17:02:57	68.0	68.6	69.3	68.7	67.1
26		2017/07/05	17:03:02	65.0	64.7	63.0	62.8	62.6
31		2017/07/05	17:03:07	62.9	63.0	63.9	74.6	66.4
36		2017/07/05	17:03:12	63.8	65.5	68.5	65.4	65.1
41		2017/07/05	17:03:17	64.7	66.0	68.1	70.4	68.2
46		2017/07/05	17:03:22	65.3	63.5	61.6	62.1	62.9
51		2017/07/05	17:03:27	61.6	67.4	59.3	58.6	60.4
56		2017/07/05	17:03:32	62.2	63.3	59.9	58.9	58.9
61		2017/07/05	17:03:37	60.0	60.2	60.0	58.8	61.3
66		2017/07/05	17:03:42	63.3	64.3	66.5	67.4	67.9
71		2017/07/05	17:03:47	67.9	67.6	67.6	68.5	68.3
76		2017/07/05	17:03:52	68.2	67.3	67.4	67.2	65.9
81		2017/07/05	17:03:57	68.0	72.3	76.0	77.8	75.6
86		2017/07/05	17:04:02	75.0	76.1	74.5	71.9	73.2
91		2017/07/05	17:04:07	76.5	77.9	76.0	75.0	74.4
96		2017/07/05	17:04:12	75.3	73.1	73.8	74.5	72.2
101		2017/07/05	17:04:17	70.7	71.1	70.9	71.5	66.1
106		2017/07/05	17:04:22	63.3	62.1	63.9	64.5	65.7
111		2017/07/05	17:04:27	66.0	66.3	63.7	62.2	60.9
116		2017/07/05	17:04:32	64.0	66.9	67.6	64.3	59.4
121		2017/07/05	17:04:37	57.9	60.6	60.7	61.3	62.3
126		2017/07/05	17:04:42	66.1	71.0	70.9	73.4	75.6
131		2017/07/05	17:04:47	75.9	70.0	65.3	62.0	60.1
136		2017/07/05	17:04:52	59.1	60.3	59.2	59.3	59.9
141		2017/07/05	17:04:57	61.2	65.0	67.3	69.7	75.1
146		2017/07/05	17:05:02	76.1	74.8	71.5	67.7	66.6
151		2017/07/05	17:05:07	65.3	66.6	66.9	68.8	69.2
156		2017/07/05	17:05:12	70.0	71.2	72.4	71.9	71.8
161		2017/07/05	17:05:17	72.1	71.0	69.4	67.3	66.5
166		2017/07/05	17:05:22	65.2	63.4	63.1	62.1	62.8
171		2017/07/05	17:05:27	63.4	64.4	64.2	64.7	65.7
176		2017/07/05	17:05:32	65.3	65.6	65.0	64.3	62.8
181		2017/07/05	17:05:37	61.9	61.2	61.1	60.5	60.0
186		2017/07/05	17:05:42	60.8	62.3	61.5	60.5	60.9
191		2017/07/05	17:05:47	63.9	68.7	71.8	71.2	71.9
196		2017/07/05	17:05:52	75.4	74.9	75.2	82.7	86.9
201		2017/07/05	17:05:57	81.7	76.7	74.8	75.7	76.0
206		2017/07/05	17:06:02	74.1	74.9	75.0	75.5	74.4
211		2017/07/05	17:06:07	74.3	74.7	75.9	74.3	73.3
216		2017/07/05	17:06:12	74.2	73.2	72.4	72.6	70.3
221		2017/07/05	17:06:17	72.0	74.9	74.7	72.9	73.5
226		2017/07/05	17:06:22	75.8	74.3	75.1	73.6	73.6
231		2017/07/05	17:06:27	73.8	74.2	74.4	74.2	72.7
236		2017/07/05	17:06:32	71.4	73.5	71.7	69.5	69.9
241		2017/07/05	17:06:37	72.9	74.9	72.6	75.3	79.2
246		2017/07/05	17:06:42	81.9	82.3	78.4	79.0	77.0
251		2017/07/05	17:06:47	74.7	75.3	73.5	72.6	72.7
256		2017/07/05	17:06:52	71.5	69.6	65.0	64.8	61.2
261		2017/07/05	17:06:57	61.1	61.2	59.8	58.1	57.2
266		2017/07/05	17:07:02	56.7	56.3	57.3	60.6	62.9
271		2017/07/05	17:07:07	65.0	65.9	65.0	63.1	58.3
276		2017/07/05	17:07:12	56.5	56.6	58.0	57.9	59.6
281		2017/07/05	17:07:17	63.2	62.9	62.5	60.8	59.3
286		2017/07/05	17:07:22	58.4	62.6	66.3	69.8	68.8
291		2017/07/05	17:07:27	66.6	62.4	59.5	59.6	57.6
296		2017/07/05	17:07:32	56.1	55.4	54.9	55.0	54.7
301		2017/07/05	17:07:37	55.4	57.2	58.3	61.2	63.2
306		2017/07/05	17:07:42	65.9	67.8	69.9	70.3	68.1
311		2017/07/05	17:07:47	66.4	67.9	70.8	69.7	66.8
316		2017/07/05	17:07:52	65.0	65.2	65.6	63.9	65.5
321		2017/07/05	17:07:57	65.7	64.6	65.9	72.8	77.7
326		2017/07/05	17:08:02	72.3	74.6	76.0	75.0	71.3
331		2017/07/05	17:08:07	74.0	74.9	73.4	75.0	73.7
336		2017/07/05	17:08:12	73.2	72.6	71.9	72.5	72.9
341		2017/07/05	17:08:17	72.1	70.3	70.7	67.4	69.6
346		2017/07/05	17:08:22	71.0	69.0	68.3	67.3	69.0
351		2017/07/05	17:08:27	69.9	72.0	72.0	70.3	69.5
356		2017/07/05	17:08:32	70.1	68.6	66.2	69.0	69.7
361		2017/07/05	17:08:37	65.1	60.6	57.4	54.7	54.1
366		2017/07/05	17:08:42	56.8	53.3	51.1	53.5	52.4
371		2017/07/05	17:08:47	52.8	53.4	55.0	56.9	61.5
376		2017/07/05	17:08:52	63.2	66.9	67.4	64.5	62.2
381		2017/07/05	17:08:57	62.0	60.1	60.9	61.8	59.8
386		2017/07/05	17:09:02	57.6	57.1	58.4	58.9	62.5
391		2017/07/05	17:09:07	66.8	67.0	64.0	66.0	66.4
396		2017/07/05	17:09:12	68.8	67.0	63.7	68.5	66.7
401		2017/07/05	17:09:17	66.6	65.2	71.5	74.3	78.4
406		2017/07/05	17:09:22	70.3	66.0	63.4	60.7	62.2
411		2017/07/05	17:09:27	62.6	63.7	64.7	66.8	68.8
416		2017/07/05	17:09:32	70.4	68.9	67.6	63.9	63.7
421		2017/07/05	17:09:37	60.9	60.2	61.7	62.9	63.6

426	2017/07/05	17: 09: 42	63. 7	65. 4	65. 6	64. 6	63. 6
431	2017/07/05	17: 09: 47	61. 6	60. 1	59. 2	61. 8	61. 7
436	2017/07/05	17: 09: 52	67. 9	74. 6	74. 2	70. 9	74. 6
441	2017/07/05	17: 09: 57	74. 3	75. 4	76. 5	75. 4	74. 6
446	2017/07/05	17: 10: 02	74. 9	75. 0	75. 1	73. 3	72. 0
451	2017/07/05	17: 10: 07	71. 4	71. 2	71. 8	71. 2	71. 1
456	2017/07/05	17: 10: 12	69. 8	69. 9	71. 0	71. 8	72. 0
461	2017/07/05	17: 10: 17	70. 7	69. 6	67. 5	66. 0	65. 7
466	2017/07/05	17: 10: 22	69. 6	69. 4	68. 3	67. 6	65. 3
471	2017/07/05	17: 10: 27	65. 4	65. 7	68. 2	68. 0	66. 2
476	2017/07/05	17: 10: 32	68. 0	65. 2	61. 4	58. 1	60. 8
481	2017/07/05	17: 10: 37	66. 5	70. 6	71. 3	70. 7	64. 3
486	2017/07/05	17: 10: 42	62. 6	62. 7	61. 5	61. 6	62. 1
491	2017/07/05	17: 10: 47	62. 3	63. 4	65. 7	67. 3	68. 3
496	2017/07/05	17: 10: 52	68. 8	67. 6	67. 4	65. 5	62. 9
501	2017/07/05	17: 10: 57	58. 7	60. 0	61. 1	62. 8	65. 6
506	2017/07/05	17: 11: 02	66. 8	69. 5	69. 7	73. 5	72. 3
511	2017/07/05	17: 11: 07	68. 6	65. 7	65. 6	67. 3	67. 2
516	2017/07/05	17: 11: 12	67. 8	67. 9	68. 7	72. 0	66. 1
521	2017/07/05	17: 11: 17	65. 9	68. 6	69. 2	66. 7	65. 4
526	2017/07/05	17: 11: 22	66. 4	70. 0	69. 0	67. 9	71. 0
531	2017/07/05	17: 11: 27	73. 5	71. 3	72. 4	71. 8	72. 3
536	2017/07/05	17: 11: 32	73. 5	71. 8	73. 0	72. 6	72. 5
541	2017/07/05	17: 11: 37	72. 9	73. 0	73. 7	72. 5	73. 0
546	2017/07/05	17: 11: 42	75. 3	73. 7	72. 8	74. 6	74. 4
551	2017/07/05	17: 11: 47	72. 6	72. 8	70. 8	71. 5	73. 2
556	2017/07/05	17: 11: 52	68. 6	68. 6	71. 0	70. 3	66. 5
561	2017/07/05	17: 11: 57	66. 5	70. 1	73. 9	75. 2	71. 9
566	2017/07/05	17: 12: 02	65. 9	63. 4	62. 4	61. 0	61. 9
571	2017/07/05	17: 12: 07	64. 3	67. 4	71. 0	73. 2	67. 6
576	2017/07/05	17: 12: 12	65. 1	64. 1	61. 5	66. 1	64. 8
581	2017/07/05	17: 12: 17	65. 6	67. 4	71. 5	73. 0	72. 7
586	2017/07/05	17: 12: 22	73. 8	73. 2	72. 7	74. 2	73. 3
591	2017/07/05	17: 12: 27	73. 6	74. 6	70. 5	69. 8	69. 3
596	2017/07/05	17: 12: 32	71. 3	71. 5	70. 7	73. 0	73. 3
601	2017/07/05	17: 12: 37	69. 7	66. 2	62. 7	62. 3	61. 4
606	2017/07/05	17: 12: 42	60. 8	59. 3	58. 0	58. 0	57. 5
611	2017/07/05	17: 12: 47	57. 7	58. 6	57. 9	56. 3	55. 6
616	2017/07/05	17: 12: 52	54. 7	55. 2	55. 9	57. 4	59. 5
621	2017/07/05	17: 12: 57	59. 9	63. 6	69. 7	75. 4	67. 2
626	2017/07/05	17: 13: 02	63. 7	61. 3	58. 3	58. 8	59. 6
631	2017/07/05	17: 13: 07	60. 4	63. 2	64. 3	64. 7	65. 1
636	2017/07/05	17: 13: 12	66. 4	69. 9	72. 5	75. 0	76. 5
641	2017/07/05	17: 13: 17	80. 8	81. 8	82. 9	80. 1	77. 8
646	2017/07/05	17: 13: 22	78. 3	79. 0	76. 8	76. 4	75. 1
651	2017/07/05	17: 13: 27	76. 6	74. 9	73. 5	74. 9	74. 3
656	2017/07/05	17: 13: 32	72. 8	75. 3	75. 4	74. 5	75. 1
661	2017/07/05	17: 13: 37	74. 8	72. 6	71. 9	70. 5	70. 1
666	2017/07/05	17: 13: 42	73. 5	72. 9	71. 8	73. 8	71. 2
671	2017/07/05	17: 13: 47	72. 5	72. 1	68. 4	65. 5	61. 8
676	2017/07/05	17: 13: 52	60. 2	59. 7	58. 2	57. 7	58. 4
681	2017/07/05	17: 13: 57	66. 1	60. 8	59. 3	61. 0	68. 2
686	2017/07/05	17: 14: 02	69. 5	71. 7	76. 3	77. 1	75. 8
691	2017/07/05	17: 14: 07	76. 4	79. 7	76. 5	73. 6	75. 6
696	2017/07/05	17: 14: 12	74. 0	71. 2	67. 5	65. 6	66. 3
701	2017/07/05	17: 14: 17	67. 0	63. 1	60. 0	62. 3	64. 4
706	2017/07/05	17: 14: 22	64. 2	63. 8	62. 2	62. 1	61. 8
711	2017/07/05	17: 14: 27	63. 5	61. 0	60. 7	61. 2	61. 2
716	2017/07/05	17: 14: 32	61. 6	61. 0	61. 1	62. 5	61. 1
721	2017/07/05	17: 14: 37	61. 4	63. 2	61. 8	63. 2	64. 1
726	2017/07/05	17: 14: 42	64. 0	63. 2	63. 7	62. 8	63. 3
731	2017/07/05	17: 14: 47	64. 0	63. 5	62. 7	61. 8	60. 4
736	2017/07/05	17: 14: 52	59. 4	59. 7	65. 0	66. 4	69. 8
741	2017/07/05	17: 14: 57	68. 2	72. 5	68. 5	68. 3	70. 0
746	2017/07/05	17: 15: 02	65. 2	64. 6	65. 5	65. 7	64. 3
751	2017/07/05	17: 15: 07	63. 6	63. 6	67. 2	66. 6	63. 7
756	2017/07/05	17: 15: 12	70. 6	70. 8	67. 4	67. 2	63. 8
761	2017/07/05	17: 15: 17	61. 7	61. 3	62. 5	66. 3	71. 8
766	2017/07/05	17: 15: 22	75. 0	76. 0	72. 7	74. 1	73. 5
771	2017/07/05	17: 15: 27	71. 8	71. 8	71. 2	72. 4	70. 5
776	2017/07/05	17: 15: 32	69. 9	71. 0	72. 4	73. 5	73. 0
781	2017/07/05	17: 15: 37	72. 7	71. 4	68. 8	69. 2	70. 8
786	2017/07/05	17: 15: 42	70. 8	70. 0	70. 3	66. 8	65. 4
791	2017/07/05	17: 15: 47	68. 5	73. 0	75. 6	72. 4	68. 8
796	2017/07/05	17: 15: 52	64. 5	63. 0	64. 3	66. 6	71. 3
801	2017/07/05	17: 15: 57	73. 1	73. 1	73. 2	74. 4	76. 6
806	2017/07/05	17: 16: 02	75. 5	75. 1	73. 9	74. 4	76. 3
811	2017/07/05	17: 16: 07	77. 1	79. 8	81. 2	80. 4	78. 5
816	2017/07/05	17: 16: 12	81. 4	77. 5	75. 9	74. 6	73. 9
821	2017/07/05	17: 16: 17	71. 3	71. 7	72. 1	70. 6	70. 7
826	2017/07/05	17: 16: 22	68. 8	71. 1	70. 7	72. 4	70. 6
831	2017/07/05	17: 16: 27	70. 3	68. 1	65. 5	67. 9	67. 8
836	2017/07/05	17: 16: 32	66. 6	63. 8	63. 3	62. 0	64. 1
841	2017/07/05	17: 16: 37	63. 4	63. 6	62. 3	60. 2	61. 5
846	2017/07/05	17: 16: 42	62. 0	61. 3	61. 6	61. 5	61. 4
851	2017/07/05	17: 16: 47	63. 3	61. 3	60. 0	60. 2	59. 5
856	2017/07/05	17: 16: 52	62. 7	63. 4	66. 8	70. 5	73. 9
861	2017/07/05	17: 16: 57	74. 1	73. 6	74. 6	73. 2	73. 3
866	2017/07/05	17: 17: 02	74. 4	73. 6	73. 4	75. 4	74. 0
871	2017/07/05	17: 17: 07	73. 7	69. 1	68. 7	72. 6	72. 8
876	2017/07/05	17: 17: 12	74. 4	72. 7	70. 7	69. 0	66. 7
881	2017/07/05	17: 17: 17	65. 1	64. 5	64. 6	65. 4	68. 2
886	2017/07/05	17: 17: 22	72. 5	77. 3	74. 0	75. 1	75. 0
891	2017/07/05	17: 17: 27	72. 5	71. 7	72. 0	75. 9	74. 5
896	2017/07/05	17: 17: 32	72. 0	69. 3	68. 2	65. 6	64. 6

Freq Weight : A  
 Time Weight : FAST  
 Level Range : 40-100  
 Max dB : 79.3 - 2017/07/05 17:44:40  
 Level Range : 40-100  
 SEL : 96.9  
 Leq : 67.4

No.	s	Date	Time	(dB)				
1		2017/07/05	17:34:26	68.1	65.8	67.0	69.1	68.4
6		2017/07/05	17:34:31	67.4	67.2	67.7	68.2	68.5
11		2017/07/05	17:34:36	71.4	70.9	68.9	66.9	66.3
16		2017/07/05	17:34:41	63.4	65.1	69.6	70.8	70.4
21		2017/07/05	17:34:46	71.3	67.9	72.3	67.1	62.9
26		2017/07/05	17:34:51	65.6	65.6	62.4	60.0	59.9
31		2017/07/05	17:34:56	60.8	63.1	67.0	67.0	67.9
36		2017/07/05	17:35:01	67.9	65.7	65.1	67.9	72.7
41		2017/07/05	17:35:06	69.2	65.9	64.7	62.7	60.5
46		2017/07/05	17:35:11	62.0	60.9	59.8	57.2	58.8
51		2017/07/05	17:35:16	60.0	64.7	65.9	61.1	62.0
56		2017/07/05	17:35:21	65.9	65.6	63.8	65.7	67.2
61		2017/07/05	17:35:26	63.3	65.6	63.1	63.1	63.7
66		2017/07/05	17:35:31	60.7	60.2	60.3	61.1	60.9
71		2017/07/05	17:35:36	60.3	60.6	62.3	60.3	63.9
76		2017/07/05	17:35:41	64.6	64.7	64.6	60.5	68.9
81		2017/07/05	17:35:46	62.7	69.6	64.9	67.1	62.9
86		2017/07/05	17:35:51	60.1	59.6	60.3	65.2	60.5
91		2017/07/05	17:35:56	61.2	63.5	65.3	73.3	72.2
96		2017/07/05	17:36:01	73.3	69.6	66.1	65.3	66.8
101		2017/07/05	17:36:06	67.9	69.3	70.3	68.3	68.9
106		2017/07/05	17:36:11	68.4	67.7	67.6	68.9	70.2
111		2017/07/05	17:36:16	70.7	69.7	70.5	68.3	68.4
116		2017/07/05	17:36:21	68.8	71.0	72.2	72.1	69.4
121		2017/07/05	17:36:26	70.3	71.4	72.1	73.5	73.2
126		2017/07/05	17:36:31	70.4	66.7	64.2	64.6	72.1
131		2017/07/05	17:36:36	66.0	66.0	68.6	71.3	72.3
136		2017/07/05	17:36:41	70.1	67.7	68.5	67.2	67.5
141		2017/07/05	17:36:46	60.4	58.6	56.7	58.1	55.8
146		2017/07/05	17:36:51	56.7	58.3	60.1	64.7	70.6
151		2017/07/05	17:36:56	63.3	60.3	59.6	69.1	65.7
156		2017/07/05	17:37:01	60.0	63.6	57.8	62.5	60.7
161		2017/07/05	17:37:06	62.2	63.1	64.8	66.3	70.1
166		2017/07/05	17:37:11	66.6	63.4	66.0	70.5	65.7
171		2017/07/05	17:37:16	66.2	63.4	62.2	64.9	65.3
176		2017/07/05	17:37:21	59.7	58.8	57.5	59.1	57.6
181		2017/07/05	17:37:26	59.7	58.6	58.6	58.3	59.3
186		2017/07/05	17:37:31	63.3	73.1	67.5	66.5	70.3
191		2017/07/05	17:37:36	66.9	64.5	66.1	68.7	69.2
196		2017/07/05	17:37:41	70.3	71.4	72.3	68.6	70.5
201		2017/07/05	17:37:46	69.9	70.4	71.3	71.6	69.7
206		2017/07/05	17:37:51	68.3	66.8	69.5	70.5	69.4
211		2017/07/05	17:37:56	70.8	66.4	69.4	67.1	64.2
216		2017/07/05	17:38:01	61.4	58.8	60.1	58.0	58.5
221		2017/07/05	17:38:06	62.7	68.0	65.7	71.0	66.6
226		2017/07/05	17:38:11	60.6	64.1	66.3	64.6	63.8
231		2017/07/05	17:38:16	61.2	61.6	61.4	60.5	60.0
236		2017/07/05	17:38:21	62.6	67.7	65.1	63.0	66.1
241		2017/07/05	17:38:26	65.7	68.0	69.4	69.4	69.5
246		2017/07/05	17:38:31	70.0	72.9	73.1	76.7	76.8
251		2017/07/05	17:38:36	72.3	70.6	67.6	70.6	67.7
256		2017/07/05	17:38:41	62.1	63.9	69.4	67.0	67.3
261		2017/07/05	17:38:46	62.9	59.0	57.3	56.9	61.8
266		2017/07/05	17:38:51	63.8	64.5	64.0	67.0	69.8
271		2017/07/05	17:38:56	70.1	69.7	76.1	68.6	65.7
276		2017/07/05	17:39:01	65.4	67.3	68.4	69.8	68.9
281		2017/07/05	17:39:06	67.2	66.2	67.3	69.1	68.7
286		2017/07/05	17:39:11	65.1	59.4	58.2	57.9	59.8
291		2017/07/05	17:39:16	62.0	62.1	60.6	63.4	63.6
296		2017/07/05	17:39:21	67.5	64.9	64.0	64.1	63.9
301		2017/07/05	17:39:26	65.1	68.7	70.1	71.3	69.9
306		2017/07/05	17:39:31	66.3	67.9	68.4	66.5	65.7
311		2017/07/05	17:39:36	63.5	63.2	61.5	62.1	63.8
316		2017/07/05	17:39:41	65.2	68.5	67.2	69.1	71.6
321		2017/07/05	17:39:46	72.9	73.4	72.9	71.6	71.0
326		2017/07/05	17:39:51	74.1	70.1	68.7	65.5	64.8
331		2017/07/05	17:39:56	64.9	65.5	66.5	68.8	67.9
336		2017/07/05	17:40:01	66.7	73.4	72.4	72.0	69.1
341		2017/07/05	17:40:06	61.8	58.9	58.2	60.2	61.5
346		2017/07/05	17:40:11	60.8	64.0	61.7	66.5	65.5
351		2017/07/05	17:40:16	64.0	63.3	65.6	62.3	61.9
356		2017/07/05	17:40:21	56.5	59.6	58.0	57.9	58.1
361		2017/07/05	17:40:26	58.6	61.7	62.9	67.4	71.9
366		2017/07/05	17:40:31	69.2	63.0	63.9	63.8	72.6
371		2017/07/05	17:40:36	67.8	62.5	64.7	64.5	58.6
376		2017/07/05	17:40:41	60.9	58.9	64.4	64.7	66.9
381		2017/07/05	17:40:46	66.9	69.1	69.5	72.0	72.5
386		2017/07/05	17:40:51	66.9	66.2	64.7	61.2	59.5
391		2017/07/05	17:40:56	58.1	57.5	56.0	56.6	56.8
396		2017/07/05	17:41:01	57.0	58.9	60.4	62.5	65.6
401		2017/07/05	17:41:06	68.7	72.1	71.2	71.0	72.0
406		2017/07/05	17:41:11	72.0	69.4	70.5	71.4	72.3
411		2017/07/05	17:41:16	70.3	68.6	64.8	67.7	71.1
416		2017/07/05	17:41:21	71.6	67.2	65.8	66.6	69.6
421		2017/07/05	17:41:26	65.6	65.0	69.7	65.3	65.9

426	2017/07/05	17: 41: 31	68. 4	68. 3	66. 8	68. 9	68. 9
431	2017/07/05	17: 41: 36	66. 9	67. 1	66. 3	65. 3	64. 4
436	2017/07/05	17: 41: 41	64. 9	65. 5	65. 0	66. 2	63. 4
441	2017/07/05	17: 41: 46	62. 7	61. 2	61. 6	60. 0	60. 8
446	2017/07/05	17: 41: 51	59. 8	60. 5	68. 3	65. 7	76. 9
451	2017/07/05	17: 41: 56	67. 0	64. 9	72. 2	68. 8	67. 2
456	2017/07/05	17: 42: 01	65. 7	66. 5	64. 5	61. 4	60. 7
461	2017/07/05	17: 42: 06	60. 5	60. 1	59. 3	58. 7	61. 1
466	2017/07/05	17: 42: 11	63. 0	62. 4	67. 7	69. 4	63. 3
471	2017/07/05	17: 42: 16	63. 4	67. 2	74. 3	66. 8	66. 0
476	2017/07/05	17: 42: 21	68. 3	69. 5	71. 5	71. 2	71. 0
481	2017/07/05	17: 42: 26	70. 6	70. 5	67. 7	66. 4	65. 7
486	2017/07/05	17: 42: 31	65. 6	66. 0	65. 0	65. 1	65. 9
491	2017/07/05	17: 42: 36	67. 9	67. 4	67. 4	67. 1	67. 1
496	2017/07/05	17: 42: 41	67. 2	67. 1	65. 3	68. 1	69. 5
501	2017/07/05	17: 42: 46	70. 5	68. 2	65. 9	63. 1	59. 6
506	2017/07/05	17: 42: 51	60. 6	60. 1	62. 8	66. 8	73. 0
511	2017/07/05	17: 42: 56	76. 6	73. 7	67. 3	65. 0	67. 1
516	2017/07/05	17: 43: 01	67. 1	64. 9	61. 7	59. 2	60. 1
521	2017/07/05	17: 43: 06	66. 3	66. 0	61. 3	67. 9	66. 7
526	2017/07/05	17: 43: 11	63. 3	68. 4	66. 0	66. 5	67. 4
531	2017/07/05	17: 43: 16	65. 9	64. 8	68. 9	67. 4	66. 7
536	2017/07/05	17: 43: 21	66. 3	63. 8	62. 7	64. 9	63. 7
541	2017/07/05	17: 43: 26	63. 7	69. 8	63. 4	61. 3	60. 9
546	2017/07/05	17: 43: 31	59. 6	57. 7	57. 1	56. 5	59. 2
551	2017/07/05	17: 43: 36	58. 9	57. 6	56. 9	57. 2	55. 7
556	2017/07/05	17: 43: 41	55. 3	56. 2	55. 2	55. 5	57. 3
561	2017/07/05	17: 43: 46	58. 2	59. 1	59. 1	59. 3	56. 7
566	2017/07/05	17: 43: 51	57. 6	59. 7	61. 2	62. 1	64. 8
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616	2017/07/05	17: 44: 41	68. 7	67. 8	66. 5	67. 3	66. 0
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671	2017/07/05	17: 45: 36	66. 6	65. 4	64. 6	66. 1	65. 7
676	2017/07/05	17: 45: 41	65. 4	63. 5	61. 2	59. 7	64. 4
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691	2017/07/05	17: 45: 56	67. 2	65. 0	61. 8	61. 4	64. 9
696	2017/07/05	17: 46: 01	64. 9	62. 9	61. 3	60. 1	61. 1
701	2017/07/05	17: 46: 06	62. 7	66. 0	65. 5	67. 3	68. 5
706	2017/07/05	17: 46: 11	70. 5	71. 9	71. 6	69. 8	71. 2
711	2017/07/05	17: 46: 16	72. 2	71. 8	70. 3	70. 2	72. 3
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761	2017/07/05	17: 47: 06	67. 7	70. 0	68. 8	70. 7	69. 8
766	2017/07/05	17: 47: 11	68. 7	66. 4	65. 8	63. 3	66. 7
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776	2017/07/05	17: 47: 21	70. 0	72. 0	68. 7	67. 7	69. 6
781	2017/07/05	17: 47: 26	68. 8	69. 8	70. 3	68. 9	66. 7
786	2017/07/05	17: 47: 31	66. 6	64. 7	65. 7	73. 3	72. 3
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861	2017/07/05	17: 48: 46	69. 0	69. 7	69. 8	70. 0	67. 9
866	2017/07/05	17: 48: 51	68. 0	64. 7	64. 8	65. 5	69. 1
871	2017/07/05	17: 48: 56	67. 6	63. 2	58. 5	56. 8	58. 3
876	2017/07/05	17: 49: 01	56. 8	56. 3	57. 5	57. 1	57. 9
881	2017/07/05	17: 49: 06	57. 2	57. 0	56. 1	56. 2	56. 5
886	2017/07/05	17: 49: 11	59. 3	60. 0	63. 1	63. 8	63. 6
891	2017/07/05	17: 49: 16	68. 8	68. 5	61. 3	60. 4	62. 9
896	2017/07/05	17: 49: 21	68. 1	72. 5	70. 9	69. 4	70. 3

## Appendix D

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Traffic Impact Study

Transportation Impact Analysis

# **Bay Fair BART Transit Village TOD Specific Plan**

San Leandro, California

# **Final**

September 2017

## Transportation Impact Analysis

# Bay Fair BART Transit Village TOD Specific Plan

San Leandro, California

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Project No. 18303

September 2017



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## Section 1

### Executive Summary

## EXECUTIVE SUMMARY

The Proposed Bay Fair BART Transit Village TOD Specific Plan is a transit-oriented development on the eastern shore of the San Francisco Bay Area in San Leandro. The main access to the Proposed Plan area is provided by East 14<sup>th</sup> Street and Hesperian Boulevard, which are connected by Fairmont Drive. Land uses immediately surrounding the Proposed Plan area are a mix of retail and residential. Beyond the immediate area toward Interstate 880 and Interstate 580, the area is primarily single-family residential. The Proposed Plan is a mixed-use urban village composed of residential and office land uses including 2,540 residential units and 300,000 square feet of office space, as well as the displacement of 161,000 square feet of retail. The anticipated build-out year is 2035, which is treated as the Cumulative analysis year for this transportation impact study.

The results of the transportation impact analysis indicate that the Proposed Plan can be implemented while maintaining acceptable levels of service at most locations of the surrounding transportation system as long as the appropriate mitigations are in place, and it can be implemented while maintaining safety on the surrounding transportation system. Below are a summary of the proposed mitigations for the Proposed Plan, and the significant and unavoidable impacts associated with implementation of the Proposed Plan.

## CONCLUSIONS AND RECOMMENDATIONS

The results of the traffic impact analysis indicate that the Proposed Plan can be implemented while maintaining acceptable levels of service at most locations of the surrounding transportation system as long as the appropriate mitigations are in place. It can be implemented while maintaining safety on the surrounding transportation system. This section summarizes the proposed mitigations for the Proposed Plan, and it summarizes the significant and unavoidable impacts under Cumulative conditions associated with implementation of the Proposed Plan.

## MITIGATIONS

The following list summarizes the mitigation measures recommended as part of this proposed development.

- **Mitigation Measure #1:** Optimize traffic signal phasing at the Hesperian Boulevard/Halcyon Drive/Fairmont Drive intersection.
- **Mitigation Measure #2:** Optimize traffic signal phasing at the East 14th Street/Fairmont Drive intersection.
- **Mitigation Measure #3:** Add a northbound through lane at the Hesperian Boulevard/Thornally Drive intersection.
- **Mitigation Measure #4:** Add a vehicle lane along the northbound East 14<sup>th</sup> Street segment, south of Estudillo Avenue.

- **Mitigation Measure #5:** Add a vehicle lane along the southbound East 14<sup>th</sup> Street segment, south of Estudillo Avenue.
- **Mitigation Measure #6:** Add a vehicle lane along the northbound Hesperian Boulevard segment, south of East 14<sup>th</sup> Street.
- **Mitigation Measure #7:** Add a vehicle lane along the southbound Hesperian Boulevard segment, south of East 14<sup>th</sup> Street.

## SIGNIFICANT AND UNAVOIDABLE IMPACTS

The following Cumulative impacts were identified.

**East 14th Street/Fairmont Drive (#7).** The addition of Proposed Plan traffic would cause the intersection V/C ratio of an intersection already exceeding the LOS standard to increase by 0.05 during the weekday AM peak hour. Therefore, the Proposed Plan impact is considered to be **significant**. The City of San Leandro is to work with Caltrans to implement a signal timing improvement project within the coordinated signal group for the intersection of E. 14th Street and Fairmont Drive by funding actual cost which would reduce the Project's impact to less than significant. However, this intersection is under the jurisdiction of Caltrans so the implementation and timing of the mitigation measure is not under the City's control. Therefore, this impact would remain **significant and unavoidable**.

**Hesperian Boulevard/Thornally Drive Intersection.** The addition of Proposed Plan traffic would cause the intersection V/C ratios to increase by 0.11 during the weekday AM peak hour and by 0.09 during the weekday PM peak hour, which exceed the City's standard. Therefore, the Proposed Plan impacts are considered to be **significant**. Addition of a northbound through lane at the intersection (Mitigation Measure #3) would reduce the V/C ratio to within the standard. However, the available right-of-way at the intersection would not accommodate an additional through lane without removal of the bike lanes included as part of the street network improvements in the Proposed Plan. Therefore, an additional through lane would be infeasible and the impact would remain **significant and unavoidable**.

**Northbound East 14th Street Segment, South of Estudillo Avenue.** Addition of a northbound lane along the segment (Mitigation Measure #4) would reduce the V/C ratio to within the standard. However, the available right-of-way along the segment would not accommodate an additional lane making this mitigation physically and economically infeasible. Therefore, an additional lane would not be installed with implementation of the Proposed Plan, and the impact would remain **significant and unavoidable**.

**Southbound East 14th Street Segment, South of Estudillo Avenue.** Addition of a southbound lane along the segment (Mitigation Measure #5) would reduce the V/C ratio to within the standard. However, the available right-of-way along the segment would not accommodate an additional lane making this mitigation physically and economically infeasible. Therefore, an additional lane would not be installed with implementation of the Proposed Plan, and the impact would remain **significant and unavoidable**.

**Northbound Hesperian Boulevard Segment, South of East 14<sup>th</sup> Street.** Addition of a northbound vehicle lane along the segment (Mitigation Measure #6) would reduce the segment LOS to within the standard. However, the available right-of-way along the segment would not accommodate an additional vehicle lane without removal of the bike lanes included as part of the street network improvements in the Proposed Plan. Therefore, an additional vehicle lane would not be installed with implementation of the Proposed Plan, and the impacts would remain **significant and unavoidable**.

**Southbound Hesperian Boulevard Segment, South of East 14<sup>th</sup> Street.** Addition of a southbound vehicle lane along the segment (Mitigation Measure #7) would reduce the segment LOS to within the standard. However, the available right-of-way along the segment would not accommodate an additional vehicle lane without removal of the bike lanes included as part of the street network improvements in the Proposed Plan making this mitigation physically and economically infeasible. Therefore, an additional vehicle lane would not be installed with implementation of the Proposed Plan, and the impact would remain **significant and unavoidable**.

**Mixed Flow Transit Operations.** The Proposed Plan would cause potentially significant impacts to intersections in the Plan area on East 14<sup>th</sup> Street and on Hesperian Boulevard. Mitigation #1 and Mitigation #2 were identified to reduce the impact on East 14<sup>th</sup> Street and one impact on Hesperian Boulevard to less than significant. However, the Hesperian Boulevard/Thornally Drive intersection would experience an increase in delay and a change in the V/C ratio that would not be mitigated. This change in operations at the intersection would affect mixed flow transit operations. Therefore, the impact of the Proposed Plan on mixed flow transit operations would be considered **significant and unavoidable**.

## Section 2

### Introduction

## INTRODUCTION

This report presents the findings of the transportation impact analysis conducted for the proposed Bay Fair BART Transit Village TOD Specific Plan (Proposed Plan) located in San Leandro, California. The Proposed Plan area is adjacent to the Bay Fair BART Station and is defined by several primary roadways that serve both regional and local trips.

The purpose of the study is to assess potentially significant impacts resulting from the implementation of the Proposed Plan on the surrounding transportation system and to identify measures to mitigate them. The study also serves as the basis for the transportation component of an environmental document that will be prepared for the Proposed Plan.

## PROPOSED PLAN DESCRIPTION

The Proposed Plan is a transit-oriented development on the eastern shore of the San Francisco Bay Area in San Leandro. The main access to the Proposed Plan area is provided by East 14<sup>th</sup> Street and Hesperian Boulevard, which are connected by Fairmont Drive. Land uses immediately surrounding the Proposed Plan area are a mix of retail and residential. Beyond the immediate area toward Interstate 880 and Interstate 580, the area is primarily single-family residential.

The Proposed Plan is a mixed-use urban village composed of residential and office land uses including 2,540 residential units and 300,000 square feet of office space, as described in Table 1. The Proposed Plan will remove 161,000 square feet of retail. The Proposed Plan's land uses by Transportation Analysis Zones (TAZs) are shown in Figure 1.

**Table 1: Proposed Changes to Land Uses by Traffic Analysis Zones**

TAZ	Jurisdiction	Residential Units	Office Sq. Ft.	Retail Sq. Ft.
547	City	569	45,900	-20,000
1,474	City	575	72,800	-44,000
1,473	City	1,371	171,300	-97,000
548	City	12	5,000	0
546	City	13	5,000	0
<b>Totals</b>		<b>2,540</b>	<b>300,000</b>	<b>-161,000</b>

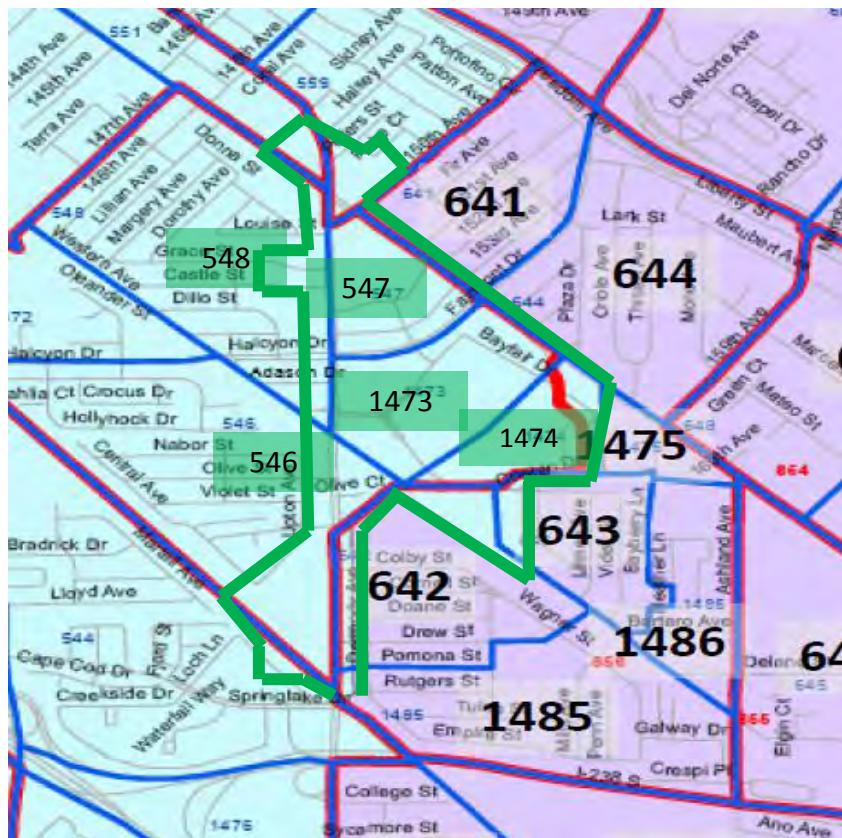
*Source: Raimi and Associates, 2017*

*Notes: Plan estimates represent change compared to existing*

*Conversion of office assumed 300 sq.ft. per job*

*Conversion of retail assumed 500 sq.ft. per job*

Figure 1: Proposed Plan Traffic Analysis Zones



Source: Alameda CTC Countywide Model

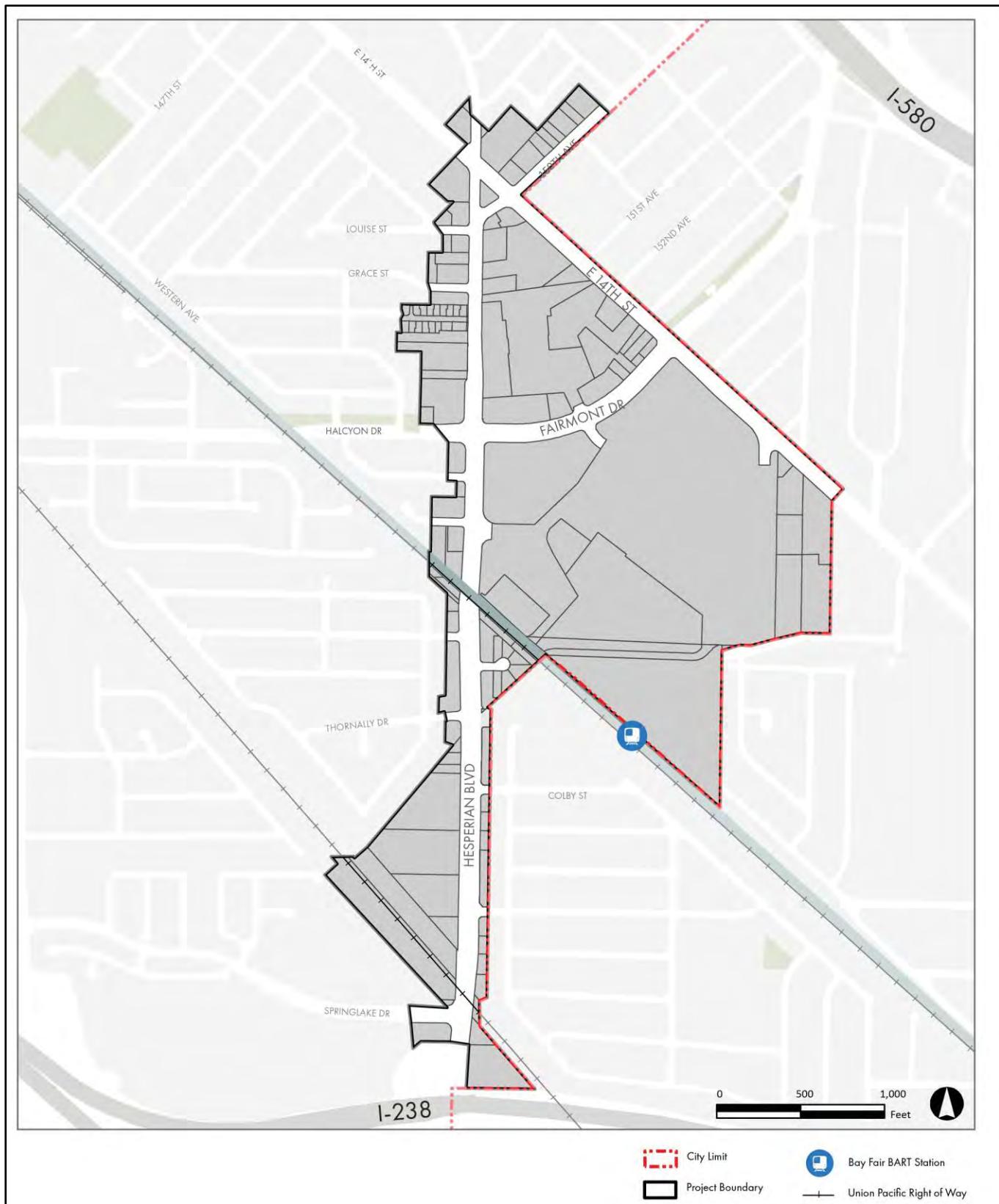
Notes: Green outline represents Specific Plan area boundary.

Light blue shading represents City jurisdiction.

Purple shading represents unincorporated County jurisdiction.

The Proposed Plan is intended to support a mix of land uses and provide new street network connections throughout the area to improve routes for pedestrians, bicyclists, transit, and vehicles. The Proposed Plan area is presented in Figure 2.

**Figure 2: Proposed Plan Area**



Source: Bay Fair BART Transit Village TOD Specific Plan, Raimi + Associates

## Analysis Scenarios

Intersection level of service analysis was performed to assess the performance of the circulation system for the weekday morning (AM) and weekday afternoon (PM) peak hours at selected locations for the following three scenarios. These scenarios are described in more details in their respective sections:

- Existing (2017) conditions
- Cumulative (2035) conditions
- Cumulative (2035) with Proposed Plan conditions

This study has not considered an Existing with Proposed Plan scenario because near-term development is not anticipated in the Specific Plan Area based on current market trends. Additionally, the City is currently focused on implementing planned development in the downtown area. Without a market to support development in the near term and most new development concentrated in the downtown area, the existing plus project scenario would not be representative of likely development in the near term so it was excluded from the analysis. Therefore, an Existing with Proposed Plan analysis would not be of informational value.

## Study Locations

A set of intersections and freeway mainline segments were selected for analysis based upon the anticipated volumes and distributional patterns of Proposed Plan traffic from the San Leandro General Plan Update 2035. The intersection and freeway segment locations are listed below, and the study intersections are presented in Figure 3.

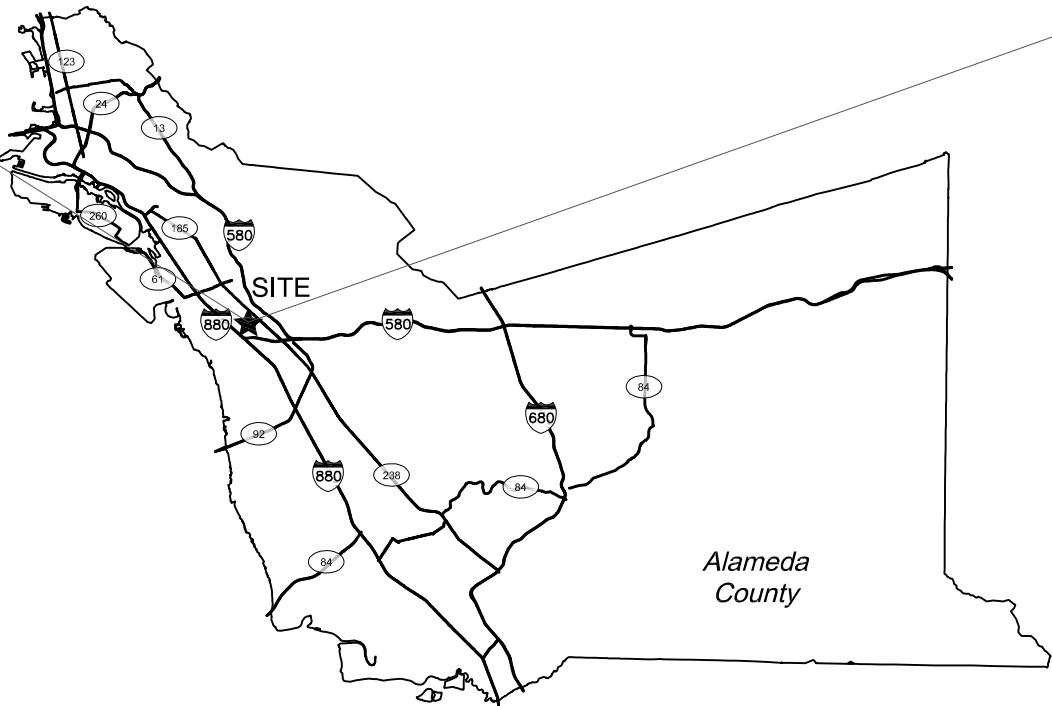
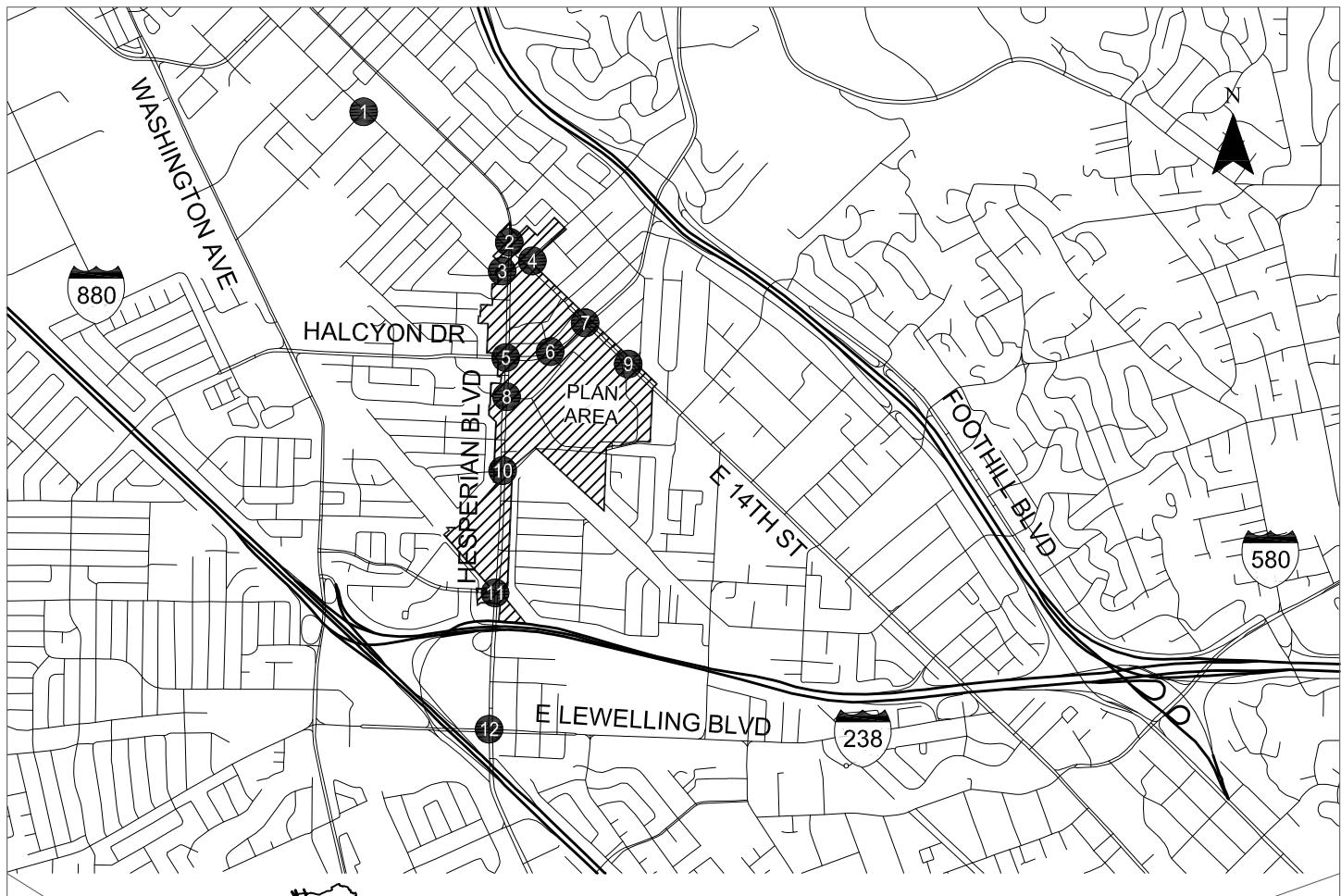
### *Study Intersections*

1. East 14<sup>th</sup> Street & 143<sup>rd</sup> Avenue
2. East 14<sup>th</sup> Street & Hesperian Boulevard/Bancroft Avenue
3. Hesperian Boulevard & 150<sup>th</sup> Avenue
4. East 14<sup>th</sup> Street & 150<sup>th</sup> Avenue
5. Hesperian Boulevard & Halcyon Drive/Fairmont Drive
6. Bayfair Way & Fairmont Drive
7. East 14<sup>th</sup> Street & Fairmont Drive
8. Hesperian Boulevard & Bayfair Drive
9. East 14<sup>th</sup> Street & Bayfair Drive
10. Hesperian Boulevard & Thornally Drive
11. Hesperian Boulevard & Springlake Drive
12. Hesperian Boulevard & Lewelling Boulevard

### *Study Freeway Segments*

- I-238 eastbound, mainline segment between Hesperian Boulevard and State Route (SR) 185
- I-238 westbound, mainline segment between SR 185 and Hesperian Boulevard

- I-580 northbound, mainline segment between 150th Avenue and Benedict Drive
- I-580 southbound, mainline segment between Benedict Drive and 150th Avenue
- I-580 northbound, mainline segment between I-238 and Liberty Street
- I-580 southbound, mainline segment between Liberty Street and I-238
- I-880 northbound, mainline segment between Marina Boulevard and Davis Street
- I-880 southbound, mainline segment between Davis Street and Marina Boulevard
- I-880 northbound, mainline segment between Washington Avenue and Marina Boulevard
- I-880 southbound, mainline segment between Marina Boulevard and Washington Avenue



Site Vicinity Map  
San Leandro, CA

Figure  
**3**

## Section 3 Existing Conditions

## EXISTING CONDITIONS

### PHYSICAL SETTING

This section summarizes existing mobility conditions in the Proposed Plan area related to pedestrian, bicycle and transit circulation, traffic operations, and parking. This report section also addresses the existing policy and regulatory context by identifying policy statements from the adopted San Leandro General Plan that are relevant to transportation issues in the Bay Fair area. The data and conclusions of this report will inform the development of the Proposed Plan.

The Proposed Plan area includes a mix of circulation routes, including three regional freeways, arterials, collectors, and local streets. All of these different streets are within one mile of the Bay Fair BART Station. The Proposed Plan area is physically framed by East 14<sup>th</sup> Street, Hesperian Boulevard, and Fairmont Drive. These streets are automobile-oriented facilities without immediate access to the Bay Fair BART Station. The area immediate to the Bay Fair BART Station has connectivity barriers including intersecting drainage canals, wide roadways which pose constraints for pedestrians and bicyclists, and skewed intersections. The entrance to the Station is not currently compliant with the Americans with Disabilities Act (ADA) requirements.

The primary pedestrian areas are the Bay Fair BART Station, the Bay Fair Center, Fashion Fair Place, and the Fairmont Square Shopping Center. Bicyclists use the various on-street facilities for local and regional access through the Proposed Plan area. The Bay Fair BART Station serves as the location of the AC Transit Intermodal Terminal. Most of the routes running through the study area connect to the Intermodal Terminal.

To the east of the Bay Fair study area, the Ashland and Cherryland Business District Specific Plan is nearing completion and includes recommendations for Complete Streets improvements along East 14th Street. Additionally, the Central County Complete Streets Implementation Study is underway and will address programs, tools and procedures to assist the City of San Leandro, the City of San Hayward and Alameda County in implementing Complete Streets policies. The infrastructure and policy recommendations from these efforts will provide coordination opportunities to identify common improvement strategies that further the objectives of this Specific Plan.

The existing roadway, transit, bicycle and pedestrian components of the transportation system within the study area are described below.

### ROADWAY NETWORK

The street network within the Proposed Plan area is defined by several primary roadways that serve both regional and local trips. From a regional context, the study area is located adjacent to several interstates and highways that provide direct roadway connections to other portions of the Bay Area. These regional connections include to and from the South Bay via Interstate 880 (I-880); to and from

the Tri-Valley via Interstate 238 (I-238) to Interstate 580 (I-580); and to and from Oakland via I-880 and I-580.

As shown in Figure 3, several of the streets within the Bay Fair study area have interchange connections to these regional roadways, and are therefore affected by regional traffic patterns.

The following are the primary streets within the study area.

#### Freeway

**Interstate 238** (I-238) is a six- to seven-lane freeway with a posted speed limit of 65 miles per hour. The east-west freeway serves as a connection between Interstate 880 and Interstates 580. The average daily traffic on I-238 between the East 14<sup>th</sup> Street junction and the Hesperian Boulevard junction is between 105,000 and 147,000 vehicles per day (vpd)<sup>1</sup>. The Specific Plan Area is served by the interchanges at East 14<sup>th</sup> Street and Hesperian Boulevard. Bicyclists and pedestrians are not allowed on this facility.

**Interstate 580** (I-580) is an eight- to ten-lane freeway with a posted speed limit of 65 miles per hour. The north-south freeway connects San Leandro with nearby cities, such as Oakland and Pleasanton, and regional destinations, such as Stockton. It also provides access to the greater freeway network with direct connections to Interstates 5, 205, 238, 680, 80 and 880, and State Routes 13, 24, and 94. The Proposed Plan area is served by the interchanges at 150<sup>th</sup> Avenue. The average daily traffic on I-580 in the vicinity of the 150<sup>th</sup> Avenue interchange ranges between 120,100 and 160,000 vehicles per day (vpd)<sup>2</sup>. Bicyclists and pedestrians are not allowed on this facility.

**Interstate 880** (I-880) is an eight- to ten-lane freeway with a posted speed limit of 65 miles per hour. The north-south freeway connects San Leandro with nearby cities, such as Hayward and Oakland, and regional destinations, such as Fremont and San Jose. It also provides access to the greater freeway network with direct connections to Interstates 80, 580, 980, 238, US Highway 101, State Routes 92, 237 and 17. The Proposed Plan area is served by interchanges at Washington Avenue and off-ramps at Hesperian Boulevard. The average daily traffic on I-880 in the vicinity of the Washington Avenue

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<sup>1</sup> 2015 Traffic Volumes, California Department of Transportation (Caltrans)  
<http://www.dot.ca.gov/hq/traffops/saferesr/trafdata/index.htm>

<sup>2</sup> 2015 Traffic Volumes, California Department of Transportation (Caltrans)  
<http://www.dot.ca.gov/hq/traffops/saferesr/trafdata/index.htm>

interchange ranges between 172,000 and 237,000 vehicles per day (vpd)<sup>3</sup>. Bicyclists and pedestrians are not allowed on this facility.

## Arterials

**East 14<sup>th</sup> Street** (State Route 185) is a north-south arterial that provides access to Interstate 238 south of the study area. East 14<sup>th</sup> Street also connects with Bay Fair study area with the City of Oakland to the north and unincorporated Alameda County and the City of Hayward to the south. East 14<sup>th</sup> Street is designated as a truck route, and Caltrans is responsible for the design, operations and maintenance of this street. (The City of San Leandro has some ability to influence the design of East 14<sup>th</sup> Street, depending on the City's level of investment in the corridor.) East 14<sup>th</sup> Street south of Bayfair Drive has four through lanes, a left turn lane and a median. The vehicle lanes are 10 to 12 feet and there are sidewalks on both sides. There are no bicycle lanes, and parallel parking exists on both sides of the street. *The Countywide Multimodal Arterial Plan* classifies the primary mode on East 14<sup>th</sup> Street as transit within the Proposed Plan area.

**Hesperian Boulevard** is a north-south arterial that connects the Bay Fair study area to Interstate 880 in the south and serves the cities of Hayward and Union City. Hesperian Boulevard is designated as a truck route by the City of San Leandro. From East 14th Street south to Fairmont Drive, Hesperian Boulevard has four through lanes and a median. From Fairmont Drive south, there are six through lanes. Vehicle lanes along Hesperian Boulevard range from 10 feet to 12 feet and there are sidewalks on both sides. There are Class II bike lanes northbound and southbound; on-street parking is provided along the section south of the BART rail corridor. *The Countywide Multimodal Arterial Plan* classifies the primary mode on Hesperian Boulevard as trucks between East 14<sup>th</sup> Street and Fairmont Drive, pedestrian between Fairmont Drive and Thornally Drive, and transit south of Thornally Drive.

**Fairmont Drive** is an east-west arterial that provides access from the Bay Fair study area to Interstate 580. Fairmont Drive is part of a longer corridor extending from west of Interstate 880 to Castro Valley in the east. Fairmont Drive east of Bayfair Drive has a six-lane cross section with a median. The vehicle lanes along Fairmont Drive range from 11 feet to 14 feet. There are no bicycle facilities located on Fairmont Drive. West of Hesperian Boulevard, Fairmont Boulevard changes to Halcyon Drive. *The Countywide Multimodal Arterial Plan* classifies the primary mode on Fairmont Drive as pedestrian within the Proposed Plan area.

**Halcyon Drive** is a residential arterial street that connects Hesperian Boulevard and Fairmont Drive with Washington Avenue to the west. Halcyon Drive is classified as a truck route by the City of San Leandro. Within the study area, Halcyon Drive is a four-lane divided street with bicycle lanes on both sides only

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<sup>3</sup> 2015 Traffic Volumes, California Department of Transportation (Caltrans)

<http://www.dot.ca.gov/hq/traffops/saferesr/trafdata/index.htm>

between Hesperian Boulevard and Union Pacific Railroad. *The Countywide Multimodal Arterial Plan* classifies the primary mode on Halcyon Drive as bicycle within the Proposed Plan area.

**150th Avenue** is an arterial that provides access to the Bay Fair study area from Interstate 580. 150th Avenue generally runs parallel to Fairmont Drive between Interstate 580 and Hesperian Boulevard and is designated as a truck route by the City of San Leandro. Near the study area, 150th Avenue is a four-lane street with on-street parking. Class III bicycle routes currently exist along the street. *The Countywide Multimodal Arterial Plan* classifies the primary mode on 150<sup>th</sup> Avenue as trucks between East 14<sup>th</sup> Street and Robin Street and automobile east of Robin Street.

### Collectors

**Bayfair Drive** is a collector street that extends through the Bayfair Center site and connects Hesperian Boulevard and East 14th Street. Bayfair Drive forms part of the loop for Bayfair Center and provides direct access to parking aisles for the center. The majority of Bayfair Drive within the study area is a two-lane street with intermittent sidewalks and no bicycle lanes.

**Springlake Drive** is an east-west collector street that connects Hesperian Boulevard to Washington Avenue. Springlake Drive is a two-lane median divided street with on-street parking, sidewalks on both sides and bicycle lanes.

**Thornally Drive** is a collector street that provides access to the parking areas for the Bay Fair BART Station. Thornally Drive includes an underpass connecting either side of the Union Pacific and BART rail corridors. Within the study area, Thornally Drive is a two-lane street that is marked as a Class III bicycle route. The Estudillo Canal is located along the north side of Thornally Drive between the BART station and Bayfair Center.

## TRANSIT FACILITIES

The Bay Fair study area is served by a variety of transit types, including heavy rail, on-street buses, and on-demand paratransit shuttles. Local and regional transit operators include Alameda-Contra Costa County Transit (AC Transit) and BART. These services are described below. The existing transit network is illustrated in Figure 4.

### AC Transit

The Bay Fair BART station serves as the location of an Alameda-Contra Costa Transit (AC Transit) Intermodal Terminal, a key transfer point for BART-to-bus and bus-to-bus connections. The Intermodal Terminal currently has 14 bus bays serving 11 AC Transit routes. Existing (FY 2015-2016) transit service in the study area is summarized in Table 2. Generally, curbside transit stops are identified with posted signs and do not include passenger amenities such as shelter, seating, landscaping, bicycle parking, or pedestrian-scale lighting.

Most of the lines running through the study area connect to the Intermodal Terminal. According to data included in the *Bay Fair BART Transit-Oriented Development (TOD) & Access Plan (March 2007)*, approximately 56% of bus patrons transfer to BART and 38% transfer between buses at the Bay Fair BART Station Intermodal Terminal.

**Table 2: Existing AC Transit Weekday Service**

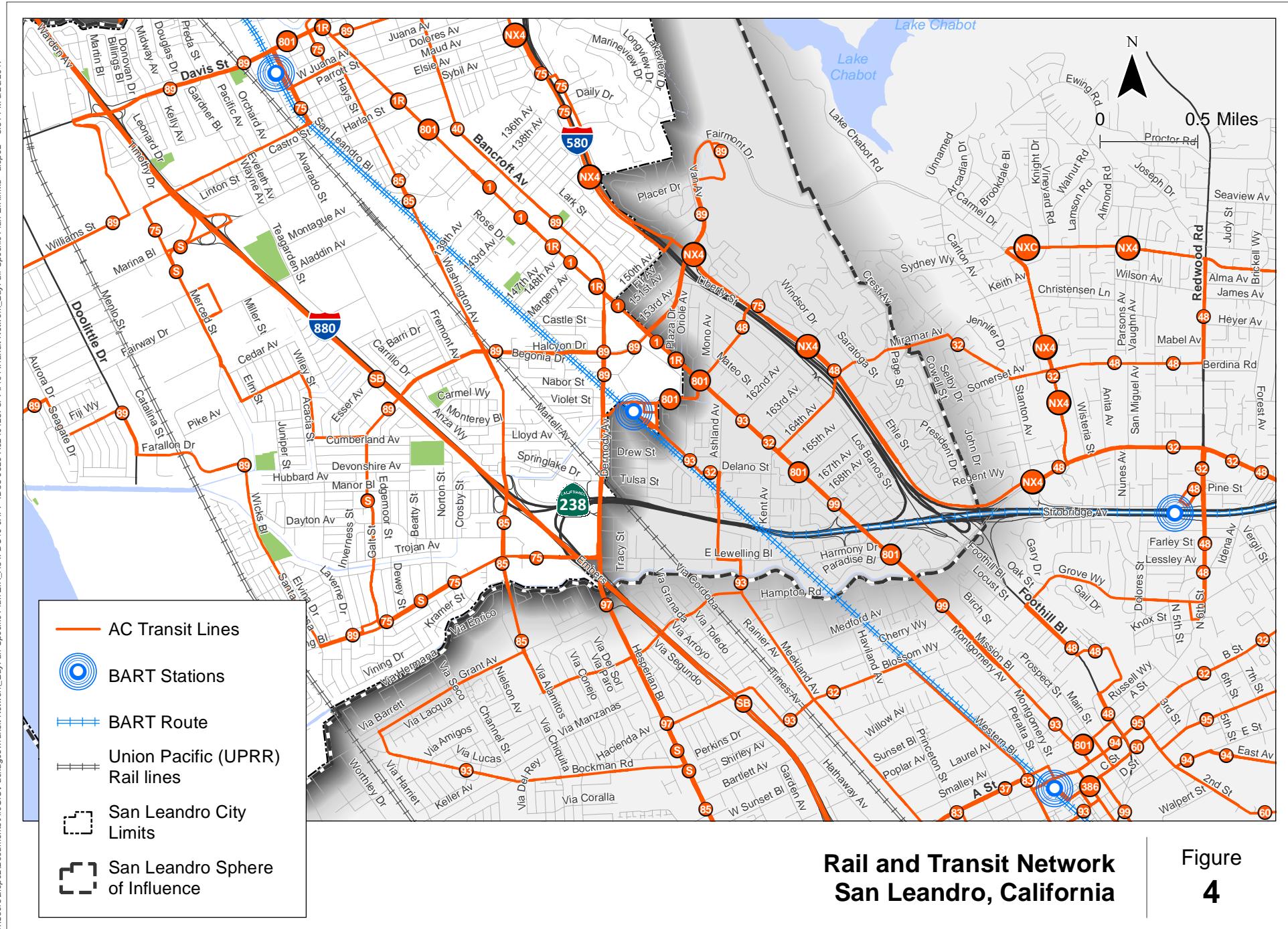
Route	Beginning and End Points		Peak / Off-Peak Frequency <sup>1</sup> (in minutes)	Average Daily Ridership <sup>2</sup>
	North/East	South/West		
1	Downtown Berkeley BART	Bay Fair BART	15 / 20	11,374
1R	Downtown Berkeley BART	Bay Fair BART	12	10,314
32	Bay Fair BART	Hayward BART	60	647
40	Downtown Oakland	Bay Fair BART	8-20	9,032
48	Bay Fair BART	Hayward BART	60	340
75	San Leandro BART	Bay Fair BART	60	549
89	San Leandro BART	Bay Fair BART	30	1,168
93	Bay Fair BART	Hayward BART	60	584
97	Bay Fair BART	Union City BART	20	4,294
99	Bay Fair BART	Fremont BART	20 / 30	4,506
801	Downtown Oakland	Fremont BART	NA / 30-60	423

Source: 2016 Annual Ridership and Route Performance Report, AC Transit, 2016

Notes: NA indicates value not applicable.

<sup>1</sup> Frequency in minutes. Peak and Off-Peak frequency provided only when they differ.

<sup>2</sup> Average daily ridership provided in passengers per day based on automatic passenger count data for FY 2015-2016.



## Bay Area Rapid Transit (BART)

The Bay Fair BART Station is one of two BART stations in San Leandro. The station is served by the Richmond-Fremont and Dublin/Pleasanton-Millbrae lines and connects riders to downtown Oakland, San Francisco, the San Francisco International Airport, and the Peninsula. The station is an important transfer point to eastern portions of Alameda County via the Dublin/Pleasanton line, as well as a regional link to central Alameda County. The planned extension from Fremont to Silicon Valley will further enhance the importance of this station.

According to the April 2017 ridership information provided by BART, there are approximately 5,731 daily weekday boardings at the Bay Fair BART Station. According to the *2008 BART Station Profile Study*, approximately 16% of people walked to the station, 10% rode transit, and 2% arrived by bike, and 70% arrived by car (52% drove alone, 13% were dropped off, and 5% carpooled). Nearly 20% of those driving alone to the station drove less than 0.5 mile (about a 10-minute walking trip), a distance that would generally be considered within the transit “walkshed.” Major barriers to increasing non-auto mode share include circuitous routing, inadequate wayfinding, and safety and security concerns.

The Bay Fair BART Station provides 1,665 parking spaces in two surface parking lots (892 on the west side and 773 on the east side). As of August 2017, the daily parking fee is \$3.00. Based on information provided by BART, the parking lots typically fill up by 8:00 AM on weekdays<sup>4</sup>. There are currently 70 bicycle parking spaces at the Bay Fair BART station, provided through a combination of racks, electronic lockers and keyed lockers. A total of 120 spaces are recommended under the BART Bike Parking Capital Program (April 2015).

## FLEX Shuttle and East Bay Paratransit

The East Bay Paratransit Consortium (EBPC) was formed by the AC Transit District and BART to jointly provide paratransit services as mandated by the Americans with Disabilities Act (ADA) of 1990 in the overlapping service areas of the two agencies. These services are generally provided to anyone in the two districts who is unable to use conventional fixed-route transit services, or who need special assistance in using transit. Service is by advance reservation only and is provided “door to door;” although, trips may be shared with other riders (i.e., unlike a taxi, this is not an exclusive ride service).

The City of San Leandro also offers transportation for seniors and people with disabilities through the FLEX Shuttle service.

<sup>4</sup> Source: <http://www.bart.gov/stations/bayff#parking>

## Planned Transit Improvements

There are a number of planned transit improvements near the Bay Fair BART Station.

### ***Bay Fair Connector/BART Metro and Station Modernization***

The Bay Fair Connector/BART METRO project will increase capacity and operational flexibility systemwide. The Bay Fair Connector project is in the conceptual design and planning stage, but currently defined alternatives include a third set of tracks on the station's east side to accommodate future operational needs. This project would enable a one-seat ride from San Francisco to the Tri-Valley area.

The Station Modernization Program will invest resources into existing stations and surrounding areas to increase capacity in order to serve more riders and enhance quality of life in the station area. The program will address all aspects of the station, including buildings, escalators and elevators, circulation and signage/wayfinding, lighting, and other station equipment replacement and upgrades.

### ***Bay Fair BART Station Development Options***

As part of the 2007 *Bay Fair BART TOD & Access Plan*, three options were developed to address elements of the circulation network that create a barrier to transit access and discourage pedestrian activity in the area. Recommendations common across the three development options are summarized below.

- Improve safety and security in the BART pedestrian underpass
  - Options 1 and 2. Safety and security would be improved with enhanced lighting, video surveillance, and other treatments
  - Option 3. Safety and security would be improved through the connection of the BART parking lots and removal of the underpass
- Create “Grand Main Streets” with streetscape, raised crosswalks, and wide sidewalks
- Increase bicycle parking at the station
- Provide simple, visible and readable signage throughout the station area
- Initiate planned AC Transit BRT service
- Re-evaluate local bus service to consider adding service and reconfiguring routes to capture more riders in future growth areas and consider signal priority for transit
- Consider off-peak BART pricing strategies to increase ridership
- Add Key Way for more direct vehicle access between BART and East 14<sup>th</sup> Street
- Implement bike friendly indications on access streets
- Increase BART replacement parking

### ***AC Transit Corridor Operations Analysis***

AC Transit is implementing bus rapid transit (BRT) along International Boulevard and East 14<sup>th</sup> Street as well as other service improvements within the study area.

**Service Improvements.** Service improvements are planned for eight AC Transit lines (1/1R, 32, 48, 75, 89, 93, 97, and 99) that operate on streets within the study area. Planned improvements include increased service frequency, extended hours of operations and merging and realigning of lines. These improvements have been recommended to better serve existing riders, capture new riders, and improve operational efficiency<sup>5</sup>.

**East Bay Bus Rapid Transit (BRT).** The International Boulevard/East 14<sup>th</sup> Street BRT project is located north of the Bay Fair study area and will improve the efficiency of transit service through features such as dedicated bus lanes and transit signal priority. The BRT alignment stretches 9.5 miles from downtown Oakland to San Leandro BART. Local and rapid service (AC Transit Line 1/1R) will be maintained between Bay Fair BART and Downtown Oakland until the International Boulevard BRT Project comes online.

#### *Hesperian Boulevard Streetscape Improvement Project*

The Hesperian Boulevard Streetscape Improvement Project is located south of the Bay Fair study area from the I-880 overcrossing to A Street in Hayward. The project includes wider sidewalks, new crosswalks, curb ramps, and bulb outs, pedestrian-scale lighting, Class II bike lanes, landscaping and street trees, bus shelters, and accommodations for future AC Transit improvements. Construction is scheduled to be completed by 2018<sup>6</sup>.

#### *South Alameda County Major Corridors Travel Time Improvement Project*

The South Alameda County Major Corridors Travel Time Improvement Project will enhance corridor traffic and transit operations on Hesperian Boulevard, Union City Boulevard, Alvarado Boulevard, Dyer Street, Alvarado-Niles Road and Decoto Road to improve AC Transit Line 97 operations. Specific improvements include implementation of Adaptive Signal Control and Transit Signal Priority systems, which use technology to reduce wait time at traffic signals for transit vehicles by holding green lights longer or shortening red lights, as well as coordination of traffic signal timing along the corridor. Relocation of certain bus stops may also be necessary if impacts to the adjoining businesses or properties cannot be mitigated. All of these improvements will be constructed within the existing right of way.

This project will improve 61 signalized intersections, including three in San Leandro, three under Caltrans' jurisdiction, nine in Alameda County's unincorporated area, 19 in the City of Hayward, and 27

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<sup>5</sup> <http://www.actransit.org/overview-san-leandrohayward-proposed-improvements/>. Website accessed September 1, 2015.

<sup>6</sup> Source: <http://www.acgov.org/pwahome/pub/documents/Hesperian-Blvd-Project-Meeting-Notice-10-2-14.pdf>

in Union City. The three San Leandro signals are located on Hesperian Boulevard at the Thornally Drive, Drew Street, and Springlake Drive intersections.

The project is currently under design, and construction is expected to begin and finish in 2019. Improvements at the identified intersections in Alameda County will be coordinated with completion of the County's upcoming Hesperian Boulevard Streetscape Project.

## BICYCLE CONDITIONS

This section summarizes the existing and proposed bicycle network to provide a basis for potential strategies. In addition to bikeways, the Bay Fair station provides bicycle parking. Bicycle parking ranges from bike racks to 20 shared use electronic bike lockers located on the street level of the Bay Fair BART station. The electronic lockers are available on a first-come, first-served basis.

The Bicycle and Pedestrian Master Plan (2010) guides the development and enhancement of the bicycle environment in the City of San Leandro and includes design standards for the following three types of bicycle facilities:

- **Class I Bike Path or Multi-Use Path.** A Class I Multi-Use Path provides a dedicated path for the exclusive use of bicycles and pedestrians. Class I facilities create a relaxed environment for non-motorized travel and reduce the risk of potential conflict between vehicles and bicyclists. These facilities are typically located in parks or greenway areas, areas connecting dead-end streets, or within railroad right-of-way that is no longer in use.
- **Class II Bike Lane.** A Class II Bike Lane is a portion of the roadway network that has been striped and signed for bicycle use. Implementation of Class II facilities requires sufficient right-of-way between the vehicle stream and the curb or curbside parking. Bike lanes are typically used along collector or major streets with medium to high traffic volumes, providing additional travel space for bicyclists along busy roadway segments.
- **Class III Bike Route.** A Class III Bike Route is a signed and improved roadway where bike lanes are not deemed feasible. This type of facility primarily serves to connect other facilities and destinations in the bikeway network but provides a lower level of service than Class I or Class II facilities. These routes include signage and may include shared lane markings ("sharrows") but do not provide designated space for bicyclists.

### Existing Bicycle Facilities

The existing bikeways in the planning area are limited. Existing and proposed bicycle facilities within the Bay Fair study area are illustrated in Figure 5 and summarized in Table 3. There are approximately 1.6 miles of existing bicycle facilities and 2.3 miles of proposed facilities in the study area.

**Table 3: Existing and Planned Bicycle Facilities**

Type of Facility	Street	From	To
<b>Existing Facilities</b>			
Class II	Hesperian Boulevard	Bancroft Avenue	Springlake Drive
	Halcyon Drive	Adason Drive	Hesperian Boulevard
	Springlake Drive	Washington Avenue	Hesperian Boulevard
Class III	Bancroft Avenue	146 <sup>th</sup> Avenue	150 <sup>th</sup> Avenue
	Thornally Drive	Hesperian Boulevard	Coelho Drive
Class III	150 <sup>th</sup> Avenue	Freedom Avenue	East 14 <sup>th</sup> Street
<b>Planned Facilities</b>			
Class I	East Bay Greenway <sup>1</sup>	North City Limits	South City Limits
Class II	Fairmont Avenue <sup>2</sup>	Hesperian Boulevard	East 14 <sup>th</sup> Street
	Hesperian Boulevard <sup>1</sup>	Springlake Drive	Lewelling Boulevard
Class III	East 14 <sup>th</sup> Street	Chumalia Street	159 <sup>th</sup> Avenue
	Coehlo Drive	Bayfair Drive	East 14 <sup>th</sup> Street
	Cohelo Drive	Bayfair Drive	South City Limits

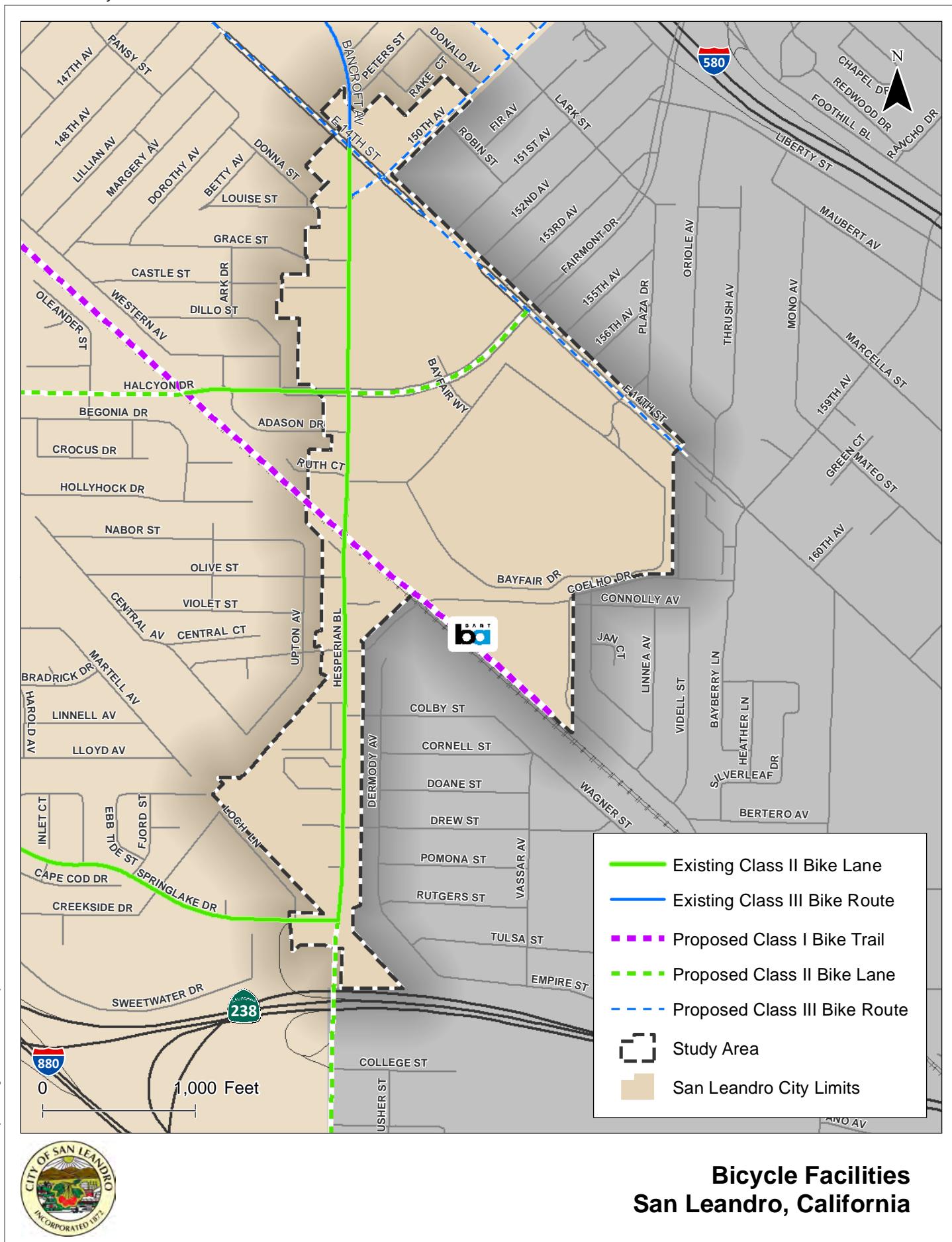
Source: San Leandro Bicycle and Pedestrian Master Plan Update, 2010; Google Earth

<sup>1</sup>Designated route of regional significance: Alameda County Bike Route

<sup>2</sup> Designated route of regional significance: Alameda County Bike Route and Metropolitan Transportation Commission Regional Bike Route

### Planned Bicycle Facilities

Figure 5 presents the planned bicycle facilities. Bicycle facilities currently planned within the study area include the East Bay Greenway (Greenway). Planning efforts are currently ongoing to extend the northern limit to the Lake Merritt BART station and the southern limit to the South Hayward BART station. Within the Bay Fair TOD Specific Plan study area, the Bay Fair station segment (Segment 13) is planned to run along the Union Pacific Railroad right-of-way from Hesperian Boulevard to Elgin Street.



## PEDESTRIAN CONDITIONS

San Leandro is taking steps to encourage biking and walking for both transportation and recreation. With this goal in mind, this Specific Plan provides an opportunity to create a pedestrian and bicycle-friendly environment and improve accessibility to key destinations. This section summarizes the existing and proposed pedestrian network to provide a basis for potential strategies.

### Existing Pedestrian Facilities

Eight-foot sidewalks are provided along most streets within the study area. However, obstructions such as lamp posts, bus stops, signs, signal cabinets, and other objects or elements within the “furnishing” zone reduce the effective width that can be used for pedestrian travel. In some locations along Fairmont Drive, these obstructions reduce the effective sidewalk width to less than three feet.

Most sidewalks in the study area do not provide a buffer (e.g., parking lane or landscaping) to separate pedestrians from moving traffic. Additionally, there are several locations with discontinuous sidewalks or where the sidewalk ends abruptly; most instances are along Bayfair Drive within the Bayfair Center parking areas. The discontinuous sidewalks force pedestrians to walk along the edge of the roadway or causes pedestrians to cross at undesignated locations.

Marked crosswalks with standard striping are provided at most signalized intersections. Some exceptions include the 150<sup>th</sup> Avenue/Hesperian Boulevard/Bancroft Avenue/East 14<sup>th</sup> Street intersection (west leg) and the Bayfair Drive/East 14<sup>th</sup> Street intersection (northwest leg).

Curb ramps (diagonal or perpendicular) are provided at most intersections within the study area. However, the majority of existing curb ramps within the study area are not Americans with Disabilities Act (ADA)-compliant and do not have detectable warnings with contrasting colors.

## PEDESTRIAN AND BICYCLIST SAFETY

Crash data for intersections in the Proposed Plan area were obtained from the Statewide Integrated Traffic Records System (SWITRS) from January 1, 2010 to December 31, 2014. Crash reports are summarized in Appendix 2. SWITRS reports only pedestrian-involved and bicyclist-involved crashes when a police report is filed, and under-reporting of these crash types likely occurred. Therefore, the actual number of pedestrian-involved and bicyclist-involved crashes may be higher than what can be documented here.

Within the Proposed Plan area, there were 63 crashes over the five-year period. Pedestrians were involved in 11 of the 63 crashes and bicyclists were involved in five of the 63 crashes. There was one pedestrian-related fatality reported.

Of the 11 pedestrian crashes, five occurred on East 14<sup>th</sup> Street, five occurred on Hesperian Boulevard, and the fatal crash occurred at the intersection of Bayfair Drive and Fairmont Drive in 2011. All of the pedestrian crashes had reported injuries.



Of the five bicyclist crashes, one occurred on East 14<sup>th</sup> Street, one occurred on Hesperian Boulevard, and two occurred at the intersection of East 14<sup>th</sup> Street and Hesperian Boulevard. All of the bicyclist crashes had reported injuries.

While not as detailed as the SWITRS data, the City was able to provide additional collision data between January 2015 and June 2016 from their database for the Proposed Plan area. This database showed that there were 34 total collisions with 17 having injuries and 5 involving a death. Pedestrian collisions accounted for 6 (18%) of all collisions. Bicycle collisions accounted for 0 (0%) of all collisions.

## PARKING AND TRANSPORTATION DEMAND MANAGEMENT

Parking conditions related to available parking supply, pricing and development requirements can influence travel behavior by creating incentives or disincentives for pedestrian, bicycle, and transit circulation. Parking within the Plan Area consists of both on-street and off-street parking spaces. On-street parking is provided along East 14<sup>th</sup> Street and along Hesperian Boulevard south of the BART rail corridor.

The Bay Fair BART station provides 1,665 off-street parking spaces in two surface parking lots (892 on the west side and 773 on the east side). BART parking typically fills up by 8:00 AM on weekdays.

As documented in the October 19, 2011 Bayfair Center Parking Ratio memo by Abram Associates, Bayfair Center provides 3,520 parking spaces in surface parking lots. Parking surveys conducted at the Bayfair Center on the day after Thanksgiving ("Black Friday") indicate that the maximum parking demand is approximately 2,615 parking spaces, reflecting a maximum utilization of approximately 72% corresponding to a parking demand of 3.24 spaces per 1,000 square feet.

### Parking Requirements

As stated in the City of San Leandro Municipal Code Article 17: Off-Street Parking and Loading Regulations, the purpose of the off-street parking and loading regulations are to:

- Ensure that off-street parking and loading facilities are provided for new land uses and for major alterations and enlargements of existing uses (except single-family and two-family uses) in proportion to the need for such facilities created by each use.
- Ensure that off-street parking and loading facilities are designed in a manner that will ensure efficiency, protect the public safety, and, where appropriate, insulate surrounding land uses from adverse impacts

The current zoning code for the Bay Fair study area requires in excess of two parking spaces per residence, up to five spaces per 1,000 square feet for office, and as many as 10 spaces per 1,000 square feet for small restaurants. These minimum parking requirements result in an over-supply of parking that encourages driving. The requirements can also impose a financial burden on new development

since parking is expensive to build and requires land that could otherwise be used for more productive purposes.

## RAILROAD CROSSINGS

Hesperian Boulevard between Bayfair Drive and Olive Street is bisected by an at-grade railroad crossing, which is owned and operated by Union Pacific Railroad (UPRR). As observed during a field survey, all of the at-grade crossings in the study area appeared to be provided with features to facilitate traffic crossings for vehicles, pedestrians, and bicyclists, including concrete pavement beds, warning bells, and crossing gates for vehicles and on-street bicyclists.

## TRUCK ROUTES

Many of the existing businesses in the Specific Plan study area depend on efficient and convenient truck access. To facilitate truck traffic and avoid neighborhood conflicts, the City has designated certain thoroughfares as truck routes<sup>7</sup>. According to the General Plan, East 14<sup>th</sup> Street, Hesperian Boulevard, and Halcyon Drive/Fairmont Drive are designated truck routes in the study area.

Alameda CTC's Multimodal Arterial Plan developed a modal priority network for automobiles, bicycles, pedestrians, transit, and trucks. Hesperian Boulevard is designated a truck priority between Fairmont Drive and East 14<sup>th</sup> Street. 150<sup>th</sup> Avenue also is designated a truck priority route between East 14<sup>th</sup> Street and Robin Street.

## EXISTING TRAFFIC CONDITIONS

Automobile operating conditions within the Bay Fair Proposed Plan area are influenced by a variety of factors, including regional through traffic found along arterial routes and the limited network of local streets. Driving conditions on the roadway network are measured through automobile Level of Service (LOS), which reflects motorists' and passengers' perceptions of traffic conditions. The following documents the LOS perceived by motorists traveling through the corridor today. Appendix 3 provides the corresponding analysis files.

### Level of Service Standards

"Levels of service" describes the operating conditions experienced by motorists. Level of service is a qualitative measure of the effect of a number of factors, including speed and travel time, traffic interruptions, freedom to maneuver, driving comfort and convenience. Levels of service are designated "A" through "F" from best to worst, which cover the entire range of traffic operations that might occur.

<sup>7</sup> Source: Draft San Leandro General Plan 2035

Level of Service (LOS) "A" through "E" generally represents traffic volumes at less than roadway capacity, while LOS "F" represents over capacity and/or forced flow conditions.

#### *Freeway Mainline Segments*

For both circulation system performance and congestion management program (CMP) analyses, the freeway mainline segments were analyzed using the methodology outlined in the Highway Capacity Manual (HCM) (Transportation Research Board, Washington, D.C., 2010) as implemented by the Highway Capacity Software (HCS) tool to calculate the density in terms of passenger cars per mile per lane for the study freeway segments. Table 4 shows the relationship of freeway density to level of service.

**Table 4: Level of Service Definitions for Freeway Mainline Segment**

Level of Service	Density (passenger vehicles per mile per lane)
A	≤11
B	>11-18
C	>18-26
D	>26-35
E	>35-45
F	>45 (Demand exceeds capacity.)

Source: Transportation Research Board, *Highway Capacity Manual*, Exhibit 10-7, Washington, D.C., 2010

#### *CMP Arterial Segment Analysis*

Level of service analyses for designated Metropolitan Transportation System (MTS) arterial segments was performed based on the service volume table shown in Table 4. A volume to capacity ratio was calculated using the volumes from the Alameda Countywide Model and using the LOS F service volume threshold shown in Table 4 as the estimate for roadway capacity.

#### *Intersection*

Intersection analyses were conducted using the operational methodology outlined in the 2000 Highway Capacity Manual (HCM) (Transportation Research Board, Washington, D.C., 2000) and Synchro software tool as required by the City of San Leandro. Since all study intersections of this study are signalized, only signalized criteria will be discussed.

**Signalized intersection.** The HCM procedure calculates a weighted average stop delay in seconds per vehicle at a signalized intersection, and assigns a level of service designation based upon the delay.

Table 5 presents the relationship of average delay to level of service for signalized intersections.

**Table 5: Level of Service Definition for Intersections**

Average Delay Per Vehicle (Seconds)	LOS	Description of Traffic Conditions
≤10.0	A	Free flowing. Most vehicles do not have to stop.
>10.0 and ≤20.0	B	Minimal delays. Some vehicles have to stop, although waits are not bothersome.
>20.0 and ≤35.0	C	Acceptable delays. Significant numbers of vehicles have to stop because of steady, high traffic volumes. Still, many pass without stopping.
>35.0 and ≤55.0	D	Tolerable delays. Many vehicles have to stop. Drivers are aware of heavier traffic. Cars may have to wait through more than one red light. Queues begin to form, often on more than one approach.
>55.0 and ≤80.0	E	Significant delays. Cars may have to wait through more than one red light. Long queues form, sometimes on several approaches.
>80.0	F	Excessive delays. Intersection is jammed. Many cars have to wait through more than one red light, or more than 60 seconds. Traffic may back up into “up-stream” intersections.

Source: Transportation Research Board, *Highway Capacity Manual*, Washington, D.C., 2000

### Existing Freeway Levels of Service

Table 6 presents the level of service on the study freeway segments under existing conditions. Most study segments are experiencing LOS D or better conditions with the exception of the I-238 eastbound segment between Hesperian and SR-185. This mainline segment experiences LOS E during the weekday AM peak hour and LOS F during the weekday PM Peak. Appendix 6 provides detailed calculation summaries.

**Table 6: Freeway Level of Service – Existing Conditions**

Freeway	Location	Speed Limit <sup>1</sup>	Weekday AM Peak Hour			Weekday PM Peak Hour		
			Volume <sup>2</sup>	Density <sup>3</sup>	LOS	Volume <sup>2</sup>	Density <sup>3</sup>	LOS
I-238 EB	Hesperian Boulevard to SR-185	65	6,023	41.2	E	7,440	73.5	F
I-238 WB	SR-185 to Hesperian Boulevard	65	3,303	18.6	C	2,913	16.4	B
I-580 NB	150 <sup>th</sup> Avenue to Benedict Drive	65	7,146	32.3	D	7,455	34.5	D
I-580 NB	I-238 to Liberty Street	65	6,689	29.4	D	6,978	31.2	D
I-580 SB	Benedict Drive to 150 <sup>th</sup> Avenue	65	7,516	33.4	D	7,272	31.7	D
I-580 SB	Liberty Street/164 <sup>th</sup> Avenue to I-238	65	7,034	30.2	D	6,807	28.9	D
I-880 NB	Marina Boulevard to Davis Street	65	7,034	24.1	C	7,656	26.6	D
I-880 NB	Washington Avenue to Marina Boulevard	65	7,196	24.7	C	7,833	27.3	D
I-880 SB	Davis Street to Marina Boulevard	65	7,353	20.9	C	6,514	18.5	C
I-880 SB	Marina Boulevard to Washington Avenue	65	7,523	26.0	D	6,664	22.7	C

<sup>1</sup>Speed = Miles per Hour (mph)

<sup>2</sup>Volume = Passenger Cars per Hour (pcph)

<sup>3</sup>Density = Passenger Cars per Mile per Lane (pcpmpl)

Source: Kittelson & Associates, Inc., 2017

### Existing Arterial Segment Levels of Service

Table 7 presents the level of service on the study arterial segments under existing conditions. Most study segments are experiencing LOS E or better conditions with the exception of the following intersections operating at LOS F:

- Northbound East 14<sup>th</sup> Street, south of Estudillo Avenue, during the weekday AM and weekday PM peak hours
- Northbound Washington Avenue, south of San Leandro Boulevard, during the weekday AM peak hour
- Southbound Washington Avenue, south of San Leandro Boulevard, during the weekday PM peak hour

**Table 7: Arterial Segment Level of Service – Existing Conditions**

Segment	2017 Existing		
	Condition	AM	PM
<b>Northbound/Eastbound</b>			
East 14th Street, south of Estudillo Avenue	Volume	<b>1,148</b>	<b>1,148</b>
	LOS	<b>F</b>	<b>F</b>
East 14th Street, south of Fairmont Drive	Volume	1,095	1,095
	LOS	D	D
Washington Avenue, south of San Leandro Boulevard	Volume	<b>1,068</b>	691
	LOS	<b>F</b>	E
Hesperian Boulevard, south of East 14th Street	Volume	668	855
	LOS	C	C
Lewelling Boulevard, east of Washington Avenue	Volume	76	121
	LOS	C	C
<b>Southbound/Westbound</b>			
East 14th Street, south of Estudillo Avenue	Volume	848	848
	LOS	D	D
East 14th Street, south of Fairmont Drive	Volume	1,040	1,040
	LOS	D	D
Washington Avenue, south of San Leandro Boulevard	Volume	666	<b>937</b>
	LOS	D	<b>F</b>
Hesperian Boulevard, south of East 14th Street	Volume	775	780
	LOS	C	C
Lewelling Boulevard, east of Washington Avenue	Volume	351	464
	LOS	C	C

Source: Kittelson & Associates, Inc., 2017

Bold text indicates substandard operations.

### Existing Intersection Levels of Service

The automobile LOS for several intersections within the Bay Fair study area was calculated as part of the General Plan update currently underway. Table 8 summarizes the LOS for the weekday AM and weekday PM peak hours based on available data. As shown in the table, most of key study area intersections currently operate at LOS E or better. The East 14<sup>th</sup> Street/150<sup>th</sup> Avenue intersection operates beyond the standard at LOS F during the weekday PM peak hour. The Hesperian Boulevard/Thornally Drive intersection operates beyond the standard at LOS F during the weekday AM peak hour.

**Table 8: Existing Intersection Level of Service**

No	North/South Street	East/West Street	Control	Existing LOS		LOS Standard
				AM	PM	
1	[1] East 14 <sup>th</sup> Street	143 <sup>rd</sup> Avenue	Signalized	B	B	E
2	[2] Hesperian Boulevard/Bancroft Avenue	East 14 <sup>th</sup> Street	Signalized	C	C	E
3	[2] Hesperian Boulevard	150 <sup>th</sup> Avenue	Signalized	C	B	E
4	[1] East 14th Street	150 <sup>th</sup> Avenue	Signalized	C	F	E
5	[2] Hesperian Boulevard	Halcyon Drive/Fairmont Drive	Signalized	D	D	E
6	[3] Bayfair Way	Fairmont Drive	Signalized	B	B	E
7	[1] East 14 <sup>th</sup> Street	Fairmont Drive	Signalized	D	D	E
8	[3] Hesperian Boulevard	Bayfair Drive	Signalized	B	C	E
9	[3] East 14 <sup>th</sup> Street	Bayfair Drive	Signalized	B	B	E
10	[3] Hesperian Boulevard	Thornally Drive	Signalized	F	D	E
11	[2] Hesperian Boulevard	Springlake Drive	Signalized	B	B	E
12	[2] Hesperian Boulevard	Lewelling Boulevard	Signalized	D	D	E

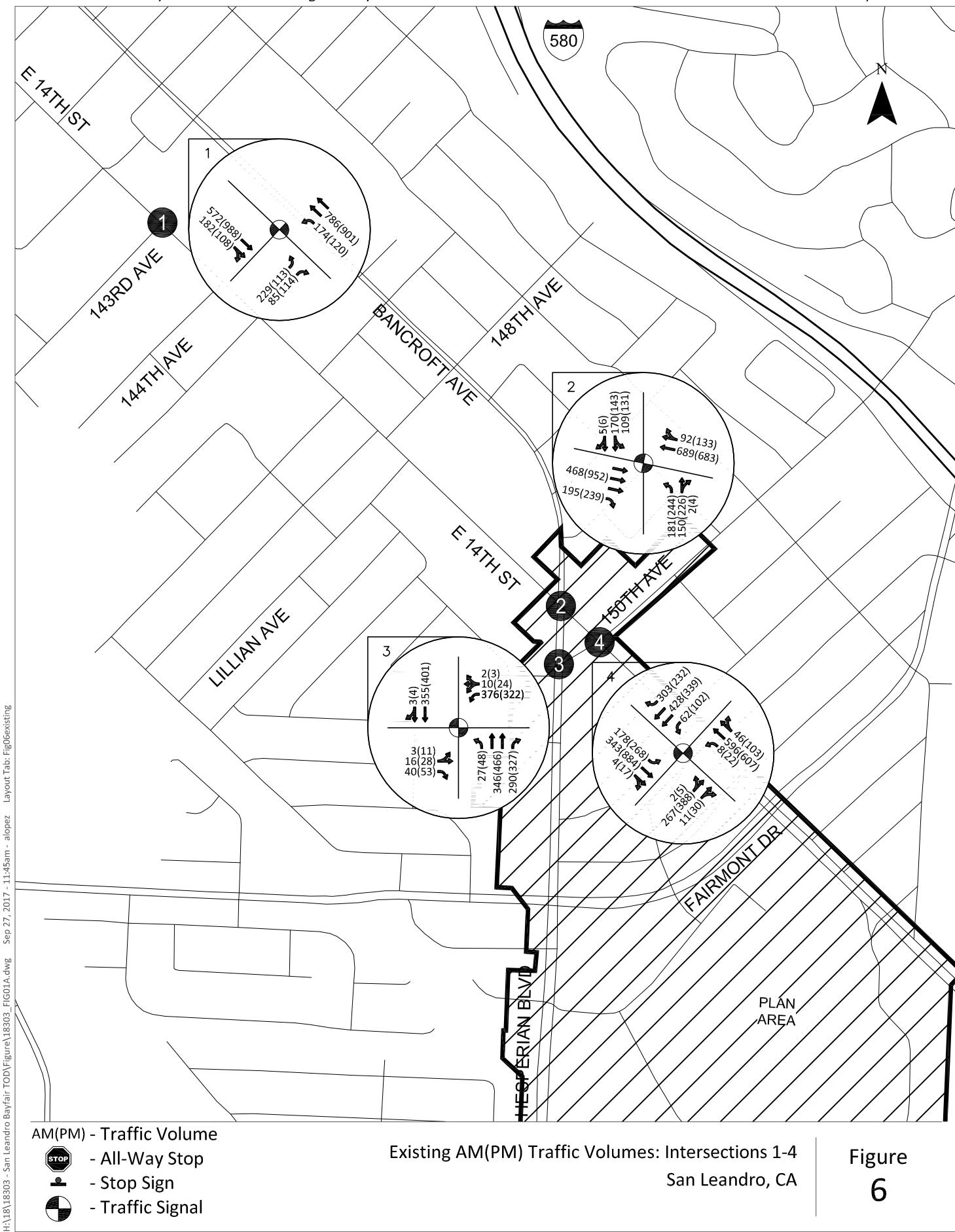
Sources: [1]Halcyon Drive Industrial TIA, Kittelson & Associates, Inc., 2016; [2]San Leandro General Plan EIR, 2015;

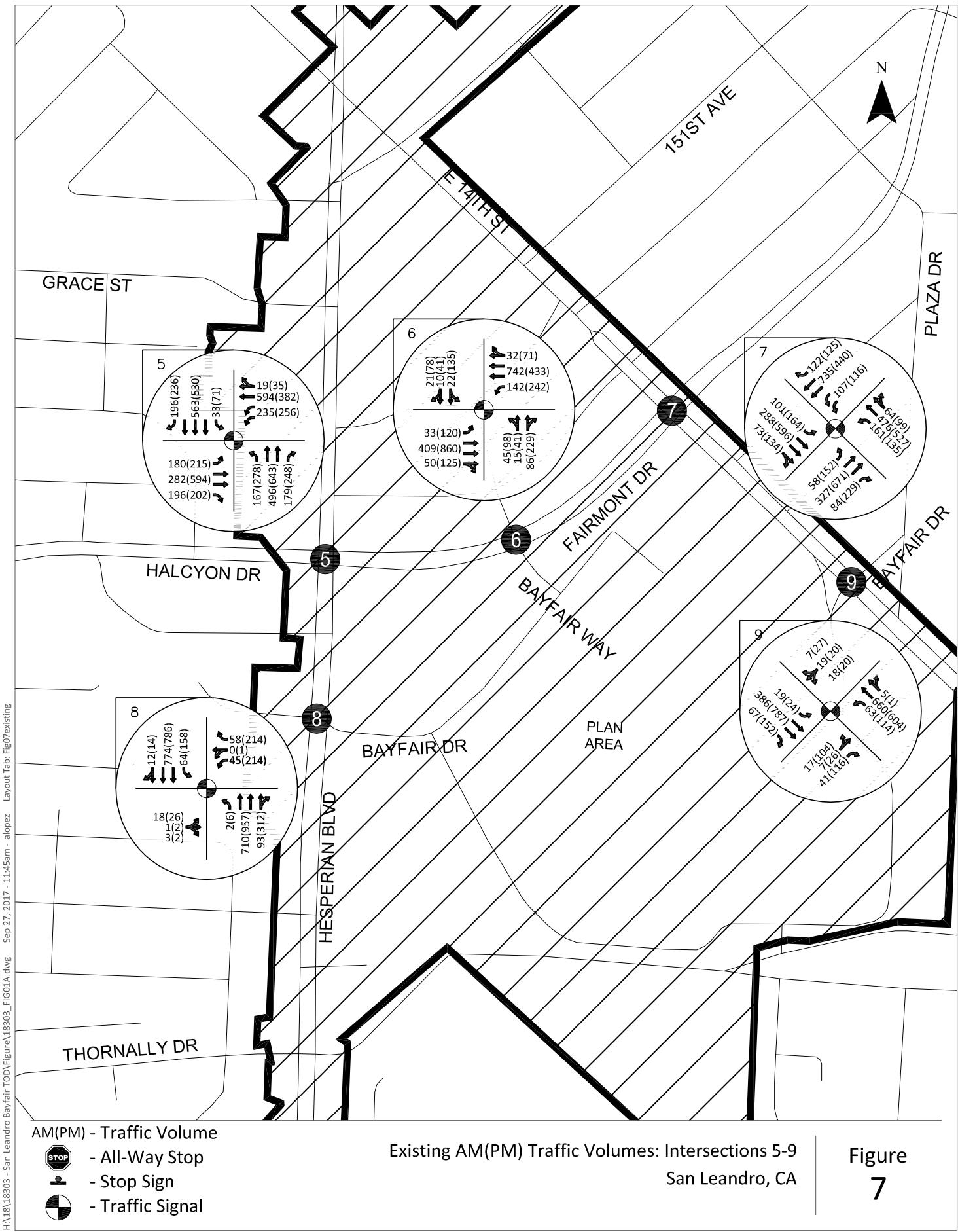
[3] New Counts

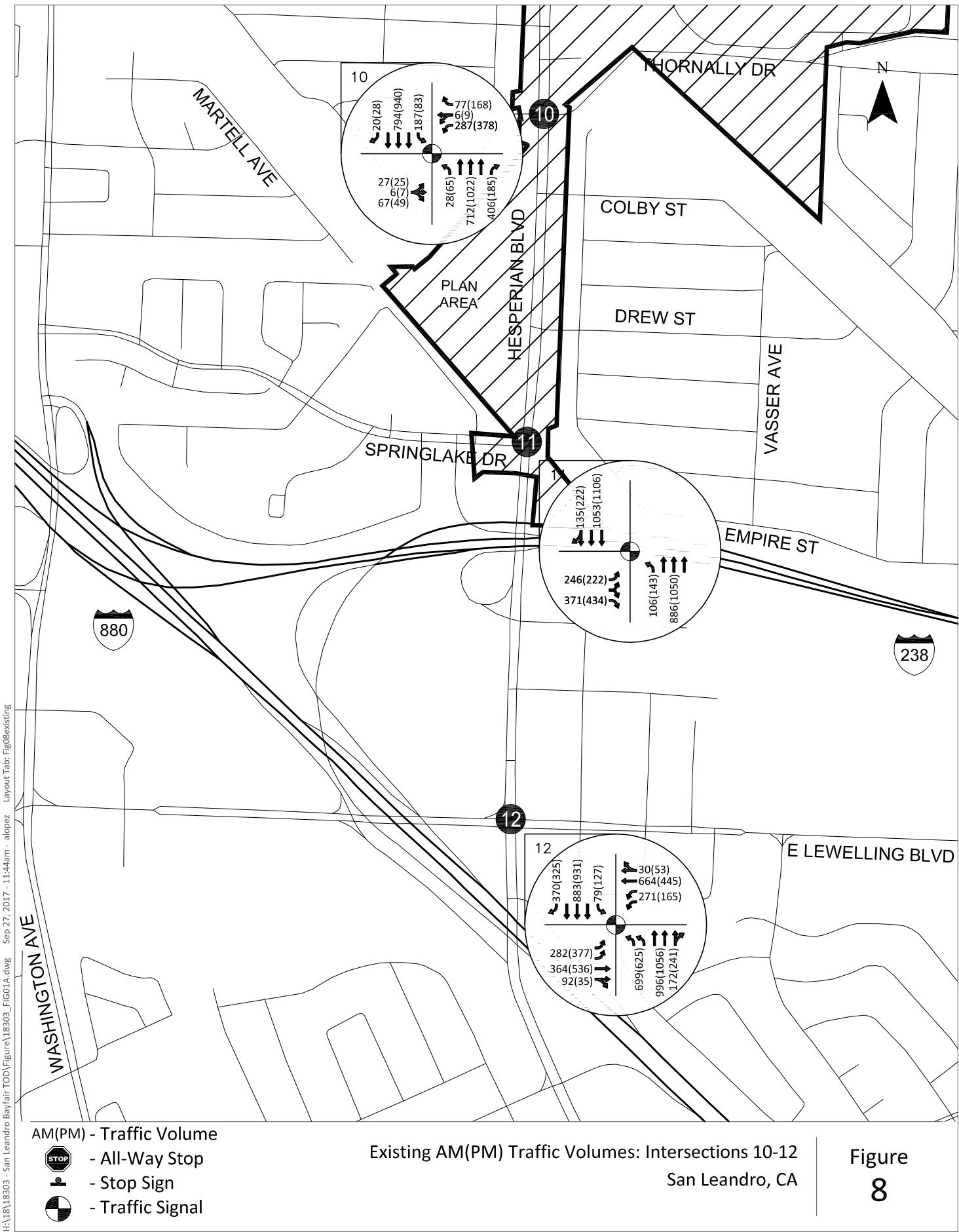
San Leandro General Plan EIR (2015)

San Leandro Halcyon Drive Industrial TIA (2016)

The existing operation conditions of the study intersections were assessed based on count data collected. Traffic counts of this study are from three different sources: San Leandro Halcyon Drive Industrial TIA; San Leandro General Plan EIR; new counts collected in May 2017. Intersection turning movement volumes were collected during typical weekday morning (AM) peak period (7:00 AM to 9:00 AM) and afternoon (PM) peak period (4:00 PM to 6:00 PM). Since the San Leandro Halcyon Drive Industrials TIA (2016) and San Leandro General Plan (2015) were conducted less than three years ago, the traffic turning movement counts are still considered valid. The lane configuration and existing intersection volumes are shown in Figure 6 through Figure 8.







## Section 4 Regulatory Setting

## REGULATORY SETTING

This section summarizes applicable local and municipal plans and regulations that apply to the study area. This information provides a context for the impact discussion related to the Proposed Plan's consistency with applicable policies, plans, laws and regulations.

### FEDERAL

The US Department of Transportation (USDOT) provides a number of grant programs, primarily for the construction and upgrading of major highways and transit facilities. Many of these grants are administered by the state and regional governments. Use of federal grant funding also invokes the National Environmental Protection Act (NEPA) in some cases. The Federal Highway Administration (FHWA) sets design standards (such as interchange spacing) for interstate highways, such as Interstate 880. The Federal Railroad Administration within the USDOT establishes safety rules regarding the operation of railroads (e.g., maximum train speeds, maximum allowed highway crossing blockage time).

### STATE POLICIES AND REGULATIONS

The California Department of Transportation (Caltrans) has jurisdiction over state highways in the Planning Area. Caltrans constructs and maintains all state highways, and sets design standards that are often copied by local government. The Metropolitan Transportation Commission (MTC) is the state-designated metropolitan planning organization for the nine-county San Francisco Bay Area; it has authority for regional planning, distributing and administering federal and state funds for all modes of transportation, and assuring that projects are consistent with the Regional Transportation Plan.

#### Caltrans Authority of the State Highway System

Caltrans is responsible for planning, design, construction and maintenance of all interstate freeways and state routes. It sets design standards that are often used by local governments. In the study area, East 14<sup>th</sup> Street (State Route 185) is under Caltrans jurisdiction. Caltrans requirements are described in their Guide for Preparation of Traffic Impact Studies (Caltrans, 2002)<sup>8</sup>, which covers the information needed for Caltrans to review the impacts to State highway facilities, including freeway and arterial segments, on- and off-ramps, and signalized intersections.

Caltrans builds, maintains, and operates the State Highway system in California with a goal to allow for the safe and efficient use of the State transportation system for all users. Caltrans has set standards for the operational goals of its facilities pertaining to intersection, arterial segment, and freeway segment level of service. These standards are set forth in the Caltrans Guide for the Preparation of Traffic Impact

<sup>8</sup>

Guide for the Preparation of Traffic Impact Studies, Caltrans, December 2002.

Studies. This document establishes procedures to uniformly review the operational standards of Caltrans-maintained facilities in terms of measures of effectiveness.

### Statewide Transportation Improvement Plan (STIP)

The Statewide Transportation Improvement Plan is a capital improvement program that plans transportation projects related to state facilities in California for the next five years. The program is updated every two years with new construction projects as more funding is provided. The California Transportation Commission approves the fund estimate and then Caltrans and regional planning agencies submit plans for transportation improvement projects. If the projects are programmed in the STIP, then relevant agencies can begin the implementation process.

### California's Complete Streets Law

The Complete Streets Law was signed in by Governor Schwarzenegger as Assembly Bill 1358 and requires that cities include the needs of all users, including bicyclists and pedestrians, when updating local general plans. Caltrans specifically adopted Deputy Directive 64, which addresses the needs of people of all ages and abilities concerning transportation planning. It also recognizes that transportation improvement projects are opportunities to improve safety, access, and mobility for motorists, bicyclists, pedestrians, and transit users. The *Complete Streets Implementation Action Plan*<sup>9</sup> provides an overview of the program.

## REGIONAL POLICIES AND REGULATIONS

### Metropolitan Transportation Commission (MTC)

The Metropolitan Transportation Commission is designated by the state as the regional transportation planning agency for the nine-county San Francisco Bay Area. MTC is responsible for updating the Regional Transportation Plan, which plans the future transit, highway, roadway, railroad, bicycle and pedestrian facilities. MTC portions out federal funding to local agencies for transportation projects and determines their compliance with the Regional Transportation Plan.

### Regional Transportation Plan (RTP) and Sustainable Communities Strategy

MTC recently updated its Regional Transportation Plan which was adopted by ABAG and MTC in July 2017. This new plan, Plan Bay Area 2040<sup>10</sup>, specifies how future transportation spending will occur

<sup>9</sup> Complete Streets Implementation Action Plan, Caltrans, February 2010

<sup>10</sup> Plan Bay Area 2040, Metropolitan Transportation Commission, July 2017

through 2040. The new plan incorporates a California mandated Sustainable Communities Strategy. It also focuses on reducing greenhouse gas emissions as it relates to transportation, per the requirements set out in the California Sustainable Communities and Climate Protection Act of 2008. Part of this effort includes the goal to increase non-auto mode share. Other main transportation goals of the plan include reducing vehicle operating and maintenance costs due to pavement conditions and reduce per-rider transit delay due to aged infrastructure.

### MTC: Transit-Oriented Development and Complete Streets Policies

MTC adopted Resolution 3434 in July 2005, which discusses its policy on transit-oriented development (TOD) for regional transit expansion projects. The goal of the policy is to improve the cost-benefits of transit expansions by ensuring those transportation agencies, local jurisdictions, and the public work together. The plan will specify corridor-level thresholds to determine minimum residential and commercial development adjacent to transit stations. The plan will also address key issues within TOD's, such as land use changes, access improvements, circulation improvements, and multi-modal design features.

MTC adopted Resolution 3765 in 2006 which states that future projects consider bicycle and pedestrian needs. Associated with this is a Routine Accommodation checklist, which developers must complete at the beginning stages of the project to ensure that all transportation modes have been accommodated for.

MTC adopted Resolution 4202 in 2015, which outlines project selection policies and project programming for the One Bay Area Grant program (OBAG 2). OBAG 2 dedicates funds to support Plan Bay Area, including Priority Development Area (PDA) Planning and Implementation. PDAs are places identified by Bay Area communities as areas for investment, new homes and job growth. The Bay Fair BART Transit Village is designated as a potential Transit Town Center PDA by the Association of Bay Area Governments (ABAG) as of July 2017.

### Bay Area Rapid Transit (BART) District

BART provides regional access throughout the Bay Area. BART trains provide direct access between Contra Costa County, Alameda County, San Francisco County, and San Mateo County. Within the study area the Bay Fair BART station provides access to residents, businesses, and visitors.

### ***BART Multimodal Access Design Guidelines (MADG)***

BART is in the process of developing design guidelines and recommended standards for planning for pedestrian, bicycle, transit, and vehicle access within BART's stations areas. The Multimodal Access

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Design Guidelines<sup>11</sup> focus on design elements that create a safe and comfortable experience for station area users, prioritizing human activity.

### ***BART Transit-Oriented Development Guidelines***

BART developed guidelines for planning and development around BART stations in May 2017. These guidelines refer to several policies and principles, including BART's Transit-Oriented Development Policy<sup>12</sup>. It established BART's priorities for TOD on and near BART property and presents recommendations during the planning and development process.

### ***BART Station Access Policy***

BART adopted the BART Station Access Policy<sup>13</sup> in June 2016. This policy describes the process to which BART patrons arrive at the BART station and leave to their final destinations. The policy is meant to incorporate planning of the user's entire journey with partnering of local agencies to make the transition from BART to the final destination a smooth transition. It establishes an investment framework regarding walking, bicycling, transit, drop-off and pick-up, taxi, and parking based on station type.

### ***BART: Policy on Joint Development and Replacement Parking***

BART prepared a policy<sup>14</sup> on replacing BART parking in 2005 to address the growing issues that BART will face in the future to meet user demands. Ridership is expected to grow for BART in the coming years, which will require additional parking. Transit-oriented development also creates new issues to portioning out available land adjacent to BART stations. This policy provides guidelines on how to address the issues, a methodology for access and replacement parking analysis, and sample case studies. These policies will help to govern the redevelopment of the Bay Fair BART station site.

### **Alameda County Transportation Commission (CTC)**

The Alameda County Transportation Commission (Alameda CTC) coordinates transportation planning efforts throughout Alameda County and programs local, regional, state and federal funding for project implementation. It prepares the Congestion Management Program (CMP), a plan mandated by

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<sup>11</sup> BART Multimodal Access Design Guidelines, Nelson/Nygaard Consulting Associates and Fehr & Peers, July 2017

<sup>12</sup> BART Transit-Oriented Development Guidelines. Economic & Planning Systems and Nelson/Nygaard Consulting Associates, May 2017

<sup>13</sup> BART Station Access Policy, June 2016

<sup>14</sup> Replacement Parking for Joint Development: An Access Policy Methodology, Richard Wilson, April 2005

California law to describe the strategies to address congestion problems on the CMP network, which includes state highways and principal arterials. The CMP requires analysis of Metropolitan Transportation System (MTS) roadway and transit system and uses level of service standards as a means to measure congestion and has established LOS standards to determine how local governments meet the standards of the CMP.

Alameda CTC is the governing agency for the oversight on transportation projects and planning in Alameda County. These projects improve the highway corridors, arterial street network, public transit, and pedestrian and bicycle facilities. Long-range planning is outlined in the Alameda Countywide Transportation Plan<sup>15</sup> (CWTP), which looks at a 25-year horizon for the Alameda County transportation system. The Alameda CTC also develops the Transportation Expenditure Plan<sup>16</sup> to allocate necessary funding for future capital projects. The Alameda CWTP states the main goals are for the transportation system to be:

- Multimodal
- Accessible, Affordable, and Equitable for people of all ages, incomes, abilities, and geographies
- Integrated with land use patterns and local decision-making
- Connected across the county, within and across the network of streets, highways and transit, bicycle and pedestrian routes
- Reliable and Efficient
- Cost Effective
- Well Maintained
- Safe
- Supportive of a Healthy and Clean Environment

### ***Alameda County Congestion Management Program***

The Alameda County Congestion Management Program (CMP) specifically lays out the strategies to implement the Countywide Transportation Plan. The CMP<sup>17</sup> is updated every two years and sets guidelines on level of service standards, analysis of land uses on the transportation network, managing the transportation demand, and developing a seven-year Capital Improvement Program (CIP). The program also develops a travel demand model to assess the future impacts in the Cumulative year.

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<sup>15</sup> Alameda Countywide Transportation Plan, Nelson/Nygaard Consulting Associates, July 2016

<sup>16</sup> 2014 Alameda County Transportation Expenditure Plan, Alameda CTC, January 2014

<sup>17</sup> *Congestion Management Plan 2015*, Alameda CTC, October 2015

## California Public Utilities Commission (CPUC)

CPUC has regulatory oversight authority over a number of design and operational aspects of railroads and at-grade highway crossings in the state. CPUC also administers a limited fund for constructing highway/rail grade separations.

## CITY OF SAN LEANDRO POLICIES AND REGULATIONS

The City of San Leandro is the local agency with discretion of the growth near the Bay Fair station. The City has a General Plan that outlines the goals for future sustainable growth and the City of San Leandro Municipal code enforces the rules and regulations. With the exception of State highways that are under Caltrans' jurisdiction, streets in the study area are generally under the jurisdiction of the City of San Leandro.

### San Leandro 2035 General Plan

The City of San Leandro adopted the 2035 General Plan in September 2016. The plan was previously updated in 2002 and a Housing Element was updated in January 2015. The Transportation Element addresses the movement of people and goods in and around San Leandro. The updated Element is more balanced in its treatment of each mode of travel (automobile, bicycling, walking, public transit, etc.) and also looks at environmental health, equity, greenhouse gas reduction, and the quality of public space around transportation routes. The main goals of the element are outlined below:

Goal T-1: Coordinate land use and transportation planning.

Goal T-2: Design and operate streets to be safe, attractive, and accessible for all transportation users whether they are pedestrians, bicyclist, transit riders or motorists, regardless of age or ability.

Goal T-3: Promote and accommodate alternative, environmentally-friendly methods of transportation, such as walking and bicycling.

Goal T-4: Ensure that public transportation is safe, convenient, and affordable and provides a viable alternative to driving.

Goal T-5: Improve major transportation arteries for circulation in and around the city.

Goal T-6: Minimize the adverse effects of business, industrial, and through traffic on neighborhood streets.

Goal T-7: Improve traffic safety and reduce the potential for collisions on San Leandro Streets.

Goal T-8: Coordinate local transportation planning with other agencies and jurisdictions.

## Bicycle and Pedestrian Master Plan

The City's Bicycle and Pedestrian Master Plan was adopted in February 2011. (While an update of this plan is in progress, it is not yet adopted. Therefore, this EIR relies on the adopted 2011 plan.) It contains an assessment of existing conditions for bicyclists and pedestrians and provides recommendations for biking and walking facilities, the interface between bicyclists and transit, and programs. It contains the following goals, accompanied by specific policies:

Goal 1: Support bicycling and walking and the development of a comprehensive bicycle and pedestrian transportation system as a viable alternative to the automobile.

Goal 2: Implement bicycle and pedestrian improvements maximizing the amount of funding for which San Leandro is eligible.

Goal 3: Develop a bicycle system that meets the needs of utilitarian and recreation users, helps reduce vehicle trips, and links residential neighborhoods with local and regional destinations.

Goal 4: Create a well-connected pedestrian environment by improving the walkability of all streets in San Leandro through the planning, implementing, and maintaining of pedestrian supportive infrastructure that meets the needs of all users.

Goal 5: Maximize bicycle and pedestrian access to transit.

Goal 6: Improve bicycle and pedestrian safety.

Goal 7: Develop detailed and ranked bicycle and pedestrian improvements.

Goal 8: Raise awareness of the benefits of walking and biking by developing a coordinated public outreach strategy to encourage bicycling and walking.

Goal 9: Develop land use policies and development standards that promote bicycling and walking for utilitarian and recreation trips.

## Section 5

### Transportation Impact Analysis

## TRANSPORTATION IMPACT ANALYSIS

The transportation impact analysis assesses how the study area's transportation system would operate with the implementation of the Proposed Bay Fair Plan. The potential impacts were identified based on a set of significance criteria based on the California Environmental Quality Act (CEQA) guidelines and set forth by the City of San Leandro, the California Department of Transportation, and the Alameda County Transportation Commission. These criteria are presented below after a discussion on traffic generated by the Proposed Plan.

### PROPOSED PLAN TRAFFIC

A mix of residential and commercial land uses comprise the Proposed Plan, including 2,540 residential units, 300,000 square feet of office space, and a reduction of 161,000 square feet of existing retail.

#### Proposed Plan Trip Generation

Since the Proposed Plan includes a mix of new uses and a reduction of some existing uses, trip generation for the Proposed Plan was computed using the Alameda CTC Countywide Model as updated for the recent San Leandro General Plan, in 2016. The model computes trips for all modes, including pedestrian, bicycle, transit, and automobile trips. In addition, the model computes internalization, mixed use reductions, pass-by trips, and mode split to transit and non-motorized modes. The model computes weekday daily, weekday AM and weekday PM peak hour trips.

Under Cumulative conditions, the model estimates the Plan area would generate approximately 37,400 daily trips on a typical weekday. Under Cumulative plus Proposed Plan conditions, the Plan area would increase by about 5,600 daily trips to a total of approximately 43,000 trips on a typical weekday. Of these new trips, approximately 447 trips would occur during the weekday AM peak hour and approximately 559 trips during the weekday PM peak hour.

#### Proposed Plan Trip Distribution and Assignment

The Countywide Model also was used to distribute Proposed Plan trips to and from the Plan area as well as to assign Proposed Plan trips to the roadway network.

#### Vehicle Miles Traveled

SB 743 will eventually require impacts to transportation network performance to be viewed through a filter that promotes the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. SB 743 identified possible alternative metrics, including VMT and VMT per capita, which can help identify how projects (land development and infrastructure) affect GHG emissions, but do not provide information about how the transportation network performs or functions with respect to efficiency or user experience. SB 743 does not prevent a

city or county from continuing to analyze delay or LOS as part of other plans (i.e., the general plan), studies, or on-going network monitoring, but once the new CEQA Guidelines are adopted, LOS metrics may no longer constitute the sole basis for CEQA impacts. However, the State Office of Planning and Research has not finalized its guidelines, standards, or definitions for analyzing VMT impacts, and none are currently in effect. Therefore, this section provides a VMT discussion for informational purposes only and not as part of the CEQA findings of significance discussion.

The Alameda Countywide Model was used to help evaluate the change in VMT for the proposed Plan. Total daily VMT and VMT per capita based on the model are presented in Table 9. As shown, VMT per capita for existing conditions is 32.6 miles per service population. By 2035, the VMT is forecast to drop to 30.0 miles per service population. The Proposed Plan further reduces VMT to 22.1 miles per service population which is 32% lower than existing conditions. This exceeds the Regional Transportation Plans 2035 performance objective goal of 10%.

**Table 9: VMT PER CAPITA – EXISTING AND PROJECTED**

	Existing 2017	Cumulative 2035 No-Project	Cumulative 2035 Proposed Plan
Daily VMT	226,370	271,636	310,008
Households	1,078	1,905	3,618
Total Population	3,227	5,760	10.937
Total Jobs	2,893	3,888	3,971
VMT Per Capita	<b>32.6</b>	<b>30.0</b>	<b>22.1</b>

Source: Association of Bay Area Government (ABAG) Projections 2013; Kittelson & Associates, Inc. 2017.

## STANDARDS OF SIGNIFICANCE

Significance criteria are used to establish what constitutes a significant impact by a plan or project. The CEQA Guidelines Appendix G, Environmental Checklist, state a project or plan would result in a significant impact if it would:

1. Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit, non-motorized travel, and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.
2. Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.

3. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.
4. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
5. Result in inadequate emergency access.
6. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

## Intersection Operations Thresholds

The following significance thresholds established by the City and Caltrans were used to evaluate the effects of the Proposed Plan on intersection operations.

### *City of San Leandro Jurisdiction*

The City of San Leandro General Plan sets the LOS standard for City-controlled, signalized intersections at LOS D or better.

For intersections within Alameda CTC's priority development areas (PDA), such as the Bay Fair PDA, the City's LOS standard for signalized intersections is LOS E.

For those intersections operating below the standard without Proposed Plan traffic, the impact would be considered significant when:

- The new trips added by the Proposed Plan would cause the volume-to-capacity (V/C) ratio to increase by 0.05 or more.

### *Caltrans Jurisdiction*

As stated in the Caltrans Traffic Impact Study Guide<sup>18</sup>, “Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on State highway facilities; however, Caltrans acknowledges that this may not always be feasible. If an existing State highway facility is operating at less than the appropriate target LOS, the existing measure of effectiveness should be maintained.” The Caltrans Guide sets an LOS standard of LOS C. However, given the traffic volumes and the congestion levels of San Francisco Bay Area facilities, for the purposes of this analysis, the City has determined, in its discretion, to use the City's standard of LOS E within the Bay Fair PDA as the LOS standard for intersections under Caltrans jurisdiction. For those intersections operating below the standard without Proposed Plan traffic, the impact would be considered significant when:

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<sup>18</sup> *Guide for the Preparation of Traffic Impact Studies*, State of California Department of Transportation, December 2002

- The new trips added by the Proposed Plan would cause the volume-to-capacity (V/C) ratio to increase by 0.05 or more.

The LOS standard for each study intersection is indicated in Table 10. An impact would be potentially significant if it exceeded the LOS standard.

**Table 10: Study Intersection LOS Standards**

Study Intersection	Intersection	Jurisdiction	CMP	LOS Standard
1	East 14th Street & 143rd Avenue	Caltrans	Yes	E
2	Hesperian Blvd/ Bancroft Ave & E 14th Street	Caltrans	Yes	E
3	Hesperian Boulevard & 150th Avenue	San Leandro	Yes	E
4	E 14th Street & 150th Avenue	Caltrans	Yes	E
5	Hesperian Boulevard & Halcyon Drive/ Fairmont Drive	San Leandro	Yes	E
6	Bayfair Way & Fairmont Drive	San Leandro	No	E
7	East 14th Street & Fairmont Drive	Caltrans	Yes	E
8	Hesperian Boulevard & Bayfair Drive	San Leandro	Yes	E
9	E 14th Street & Bayfair Drive	Caltrans	Yes	E
10	Hesperian Boulevard & Thornally Drive	San Leandro	Yes	E
11	Hesperian Boulevard & Springlake Drive	San Leandro	Yes	E
12	Hesperian Boulevard & Lewelling Boulevard	San Leandro	Yes	E

Source: Kittelson & Associates, Inc., 2017

### Freeway and Arterial Segment Operations Thresholds

As stated in the Caltrans Traffic Impact Study Guide<sup>19</sup>, “Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on State highway facilities; however, Caltrans acknowledges that this may not always be feasible. If an existing State highway facility is operating at less than the appropriate target LOS, the existing Measure of Effectiveness (MOE) should be maintained.” While the Caltrans Guide sets a LOS C standard, given the traffic volumes and the congestion levels of San Francisco Bay Area freeways, for the purposes of this analysis, the City has determined, in its discretion,

<sup>19</sup> *Guide for the Preparation of Traffic Impact Studies*, State of California Department of Transportation, December 2002

to use LOS D as the LOS standard. For those freeway segments operating below the standard without Proposed Plan traffic, the impact would be considered significant when:

- The new trips added by the Proposed Plan increases the density by more than 5 passenger cars/mile/lane.

### CMP Segment Operations Thresholds

The LOS standard for freeway and arterial segments in the Alameda CTC CMP is LOS E. For those segments operating below the standard without Proposed Plan traffic, an impact would be considered significant when the addition of Proposed Plan trips causes:

- The V/C ratio along a freeway or arterial segment to increase by 0.03 or more, or
- An increase in transit passengers by 1% or more on buses or trains already at maximum load capacity.

## ITEM 1: CIRCULATION SYSTEM PERFORMANCE

The performance of the study intersections, arterial segments, and freeway segments were assessed for year 2035 conditions (Cumulative conditions), which coincides with the planning year of the San Leandro General Plan. The processes through which the cumulative background traffic and Proposed Plan-generated traffic were developed are described below. Impact assessments of Cumulative conditions and Cumulative plus Proposed Plan conditions follow.

### Traffic Volume Forecasting Approach

This section documents the assumptions and approach used for the traffic forecast modeling as part of the transportation impact analysis for the Bay Fair Specific Plan.

The Alameda CTC Countywide Model was updated in 2014 with more recent network and land use assumptions based on the Alameda Countywide Transportation Plan (CWTP) and ABAG Projections 2013 Plan Bay Area. The new model has a 2010 base year and a 2040 horizon year. A revision to the model was provided by the Alameda CTC on May 28, 2015 that was used for this analysis. This version of the model was recently used for the San Leandro General Plan update, completed in 2016, and forecasts were interpolated to 2035 to serve as the basis for the Cumulative conditions. It is important to understand that the model includes forecasted development for the entire Bay Area region, not only for San Leandro. As demonstrated by the analysis of Cumulative conditions, representing the Existing San Leandro General Plan scenario, even with no additional growth or development in the Plan area, traffic on roadway and freeway segments in San Leandro would increase substantially due to regional growth.

## Approach

This transportation analysis is based on the most recent version of the Alameda Countywide Model with Plan Bay Area Projections dated May 28, 2015. The recently updated Countywide Model includes network changes and regional improvements outside the City of San Leandro. The zonal detail, street network, and land uses are based on the Countywide Model and some modification were made to better represent actual 2010 conditions as well as the General Plan buildout within San Leandro. Transportation analysis zone (TAZ) boundaries within the Plan area were not adjusted.

The Countywide Model was used to generate, distribute, apply mode split and assign traffic to develop the traffic forecasts for the analysis of the effects of the Proposed Plan on traffic operations in and around the Plan area and compare those effect to Cumulative conditions using significance thresholds established by the City, Alameda CTC, and Caltrans to identify potential impacts. This approach captures not only the increased traffic associated with the Proposed Plan land uses, but also the diversion of existing and future background traffic as a result of the future growth.

In addition to automobile trips, truck trips are accounted for in the traffic analysis for the Proposed Plan. Land use assumptions in the traffic model include truck trips in the fleet mix, and the Countywide Model distributes those truck trips on regional and local roadways according to the land uses, and it accounts for truck routes within San Leandro. Therefore, the traffic analysis reflects projected future truck trips based on land use changes for the Proposed Plan. Noise, air quality, and GHG modeling are based on traffic analysis. Therefore, any noise, air quality, or GHG analyses performed based on the traffic analysis developed as part of this transportation impact study would accurately reflect projected future auto and truck trips.

Transportation-related project impacts were analyzed for the following scenarios for weekday AM and weekday PM peak hour conditions:

- Cumulative Conditions – Cumulative conditions represent assumed growth at Bay Fair consistent with the San Leandro General Plan for a 2035 horizon year for consistency with the other topic areas in the EIR. In this scenario, growth within San Leandro, consistent with the General Plan was added to projected growth outside of San Leandro in the larger Bay Area region.
- Cumulative plus Proposed Plan Conditions – Cumulative plus Proposed Plan conditions are assumed to be represent a 2035 horizon year for consistency with the other topic areas in the EIR. In this scenario, growth associated with implementation of the Proposed Plan was added to Cumulative conditions.

The Cumulative (year 2035) traffic volumes were developed using the most recent version of the Countywide Model to estimate the increment of growth over the 18-year period between 2017 and 2035, both in San Leandro and in the region as a whole, to add to the existing volumes. Given that the base year (2010) and horizon year (2040) of the model differ from the EIR analysis years, the following approach was used:

### *Land Use*

The Countywide Model was updated with adjusted 2010 land uses for TAZs within the City of San Leandro boundaries. Adjusted 2010 housing and employment numbers that better represent existing uses in 2010 were used. No changes were made to 2010 land uses for TAZs outside of San Leandro, including the unincorporated sphere of influence.

### *Roadway Network*

Roadway network assumptions were based on the recent Countywide Transportation Plan and recent citywide projects, including:

- Marina Boulevard and I-880 ramp improvements (per recent construction)
- Davis Street and I-880 ramp improvements
- I-880 northbound HOV lane extension from Marina Boulevard to Hegenberger Road
- I-880 southbound HOV lane
- No Aladdin Avenue extension across the railroad track to Washington Avenue
- No Polvorosa Avenue extension
- Local road improvements as part of the Kaiser and Shoreline project mitigations
- Road diet for Hesperian Boulevard and Bay Fair Drive
- Circulation within and around the Plan area were updated in the model to more accurately represent the Bay Fair Mall area and Bay Fair BART station area

### *Model Forecasts*

The Countywide Model was run, and traffic outputs were extracted at the study locations for 2010 and 2040. These forecasts were used to develop a growth increment that was added to the 2017 counts to represent the Cumulative plus Proposed Plan conditions. Adjustments for land use growth between 2010 and 2017 were considered. While there was little land use growth within San Leandro between 2010 and 2017, and similarly limited job and housing growth has been observed in surrounding jurisdictions, there has been growth in regional traffic. Therefore, a straight line interpolation from 2010 to 2017 was performed.

Adjustments were made to the model forecasts to account for the Proposed Plan horizon year of 2035. The model forecasts were interpolated back from 2040 to 2035 to reflect the horizon year consistent with the recently updated San Leandro General Plan. An interpolation based on land use projections was used to scale back the 2040 results to 2035. The growth increment from 2017 to 2035 from the model forecasts were added to the existing counts to represent Cumulative conditions.

Suitable incremental adjustments were made at the intersection level per National Cooperative Highway Research Program (NCHRP) Report 255<sup>20</sup> methods to reduce any model error at study intersections or segments between the existing year model and the counts, consistent with the

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<sup>20</sup> Highway Traffic Data for Urbanized Area Project Planning and Design, Transportation Research Board, 1992.

methodology used for other transportation impact studies in San Leandro, such as for the recent general plan update.

## Cumulative Conditions Analysis

Analyses of Cumulative conditions, without and with the Proposed Plan, were performed to study how the transportation system near the Plan Area would operate under Cumulative conditions and with the full build-out of the Proposed Plan.

### *Cumulative Intersection Operations*

The weekday AM and PM peak hour intersection turning movement volumes and lane configurations for Cumulative conditions without and with the Proposed Plan are provided in Figure 9 through Figure 14. The information was used to evaluate intersection operations and identify potential impacts by the Proposed Plan based on the City's significance thresholds, as described previously. The analysis results are summarized in Table 11.

Under Cumulative conditions, the following four intersections are projected to operate beyond the standard at LOS F during the weekday AM and weekday PM peak hours:

- East 14<sup>th</sup> Street/150<sup>th</sup> Avenue (#4)
- Hesperian Boulevard/Halcyon Drive/Fairmount Drive (#5)
- East 14<sup>th</sup> Street/Fairmont Drive (#8)
- Hesperian Boulevard/Thornally Drive (#10)

All other intersections would operate acceptably within the standard during the weekday AM and weekday PM peak hours.

With the addition of Proposed Plan traffic and street network improvements, the same four intersections would continue to operate beyond the standard at LOS F during the weekday AM and weekday PM peak hours. The following locations would experience an increase in V/C of more than 0.05 during the peak hours noted:

- Hesperian Boulevard/Halcyon Drive/Fairmount Drive (#5, weekday PM peak hour)
- East 14th Street/Fairmont Drive (#7, weekday AM peak hour)
- Hesperian Boulevard/Thornally Drive (#10, weekday AM and weekday PM peak hours)

All other intersections would operate acceptably within the standard during the weekday AM and weekday PM peak hours.

**Table 11: Intersection Level of Service for Cumulative Conditions, without and with Proposed Plan**

#	Intersection	LOS Standard	Peak Hour	Cumulative Conditions			Cumulative plus Proposed Plan Conditions			
				Delay	LOS	V/C	Delay	LOS	V/C	Change in V/C
1	E 14 <sup>th</sup> Street & 143 <sup>rd</sup> Avenue	E	AM	20.4	C	0.85	19.2	B	0.86	N/A
			PM	65.8	E	0.93	65.4	E	0.93	N/A
2	Hesperian Boulevard & Bancroft Avenue & East 14 <sup>th</sup> Street	E	AM	34.6	C	0.82	41.1	D	0.86	N/A
			PM	26.6	C	0.64	27.4	C	0.65	N/A
3	Hesperian Boulevard & 150 <sup>th</sup> Avenue	E	AM	18.0	B	0.48	20.6	C	0.52	N/A
			PM	22.8	C	0.66	25.4	C	0.68	N/A
4	East 14 <sup>th</sup> Street & 150 <sup>th</sup> Avenue	E	AM	<b>109.1</b>	F	<b>0.75</b>	119.1	F	0.76	0.01
			PM	<b>237.2</b>	F	<b>1.04</b>	277.3	F	1.01	-0.03
5	Hesperian Boulevard & Halcyon Drive/ Fairmont Drive	E	AM	<b>109.3</b>	F	<b>1.16</b>	116.0	F	1.17	0.01
			PM	<b>95.9</b>	F	<b>1.19</b>	<b>130.2</b>	F	<b>1.25</b>	<b>0.06</b>
6	Bayfair Way & Fairmont Drive	E	AM	31.5	C	0.39	35.2	D	0.53	N/A
			PM	37.8	D	0.69	75.9	E	0.91	N/A
7	East 14 <sup>th</sup> Street & Fairmont Drive	E	AM	<b>86.0</b>	F	<b>1.04</b>	<b>95.0</b>	F	<b>1.09</b>	<b>0.05</b>
			PM	<b>132.0</b>	F	<b>1.21</b>	129.7	F	1.18	-0.03
8	Hesperian Boulevard & Bayfair Drive	E	AM	15.6	B	0.53	19.7	B	0.65	N/A
			PM	69.9	E	0.90	54.0	D	0.85	N/A
9	East 14 <sup>th</sup> Street & Bayfair Drive	E	AM	14.4	B	0.64	17.3	B	0.70	N/A
			PM	22.3	C	0.75	27.2	C	0.81	N/A
10	Hesperian Boulevard & Thornally Drive	E	AM	<b>126.9</b>	F	<b>0.87</b>	<b>212.6</b>	F	<b>0.98</b>	<b>0.11</b>
			PM	<b>191.4</b>	F	<b>0.93</b>	<b>292.2</b>	F	<b>1.02</b>	<b>0.09</b>
11	Hesperian Boulevard & Springlake Drive	E	AM	21.1	C	0.72	20.1	C	0.69	N/A
			PM	57.5	E	0.90	21.4	C	0.76	N/A
12	Hesperian Boulevard & Lewelling Boulevard	E	AM	53.8	D	0.95	54.7	D	0.96	N/A
			PM	57.1	E	0.91	48.6	D	0.88	N/A

Source: Kittelson & Associates, 2017

Notes:

Delay = Weighted average delay in seconds of all intersection approaches

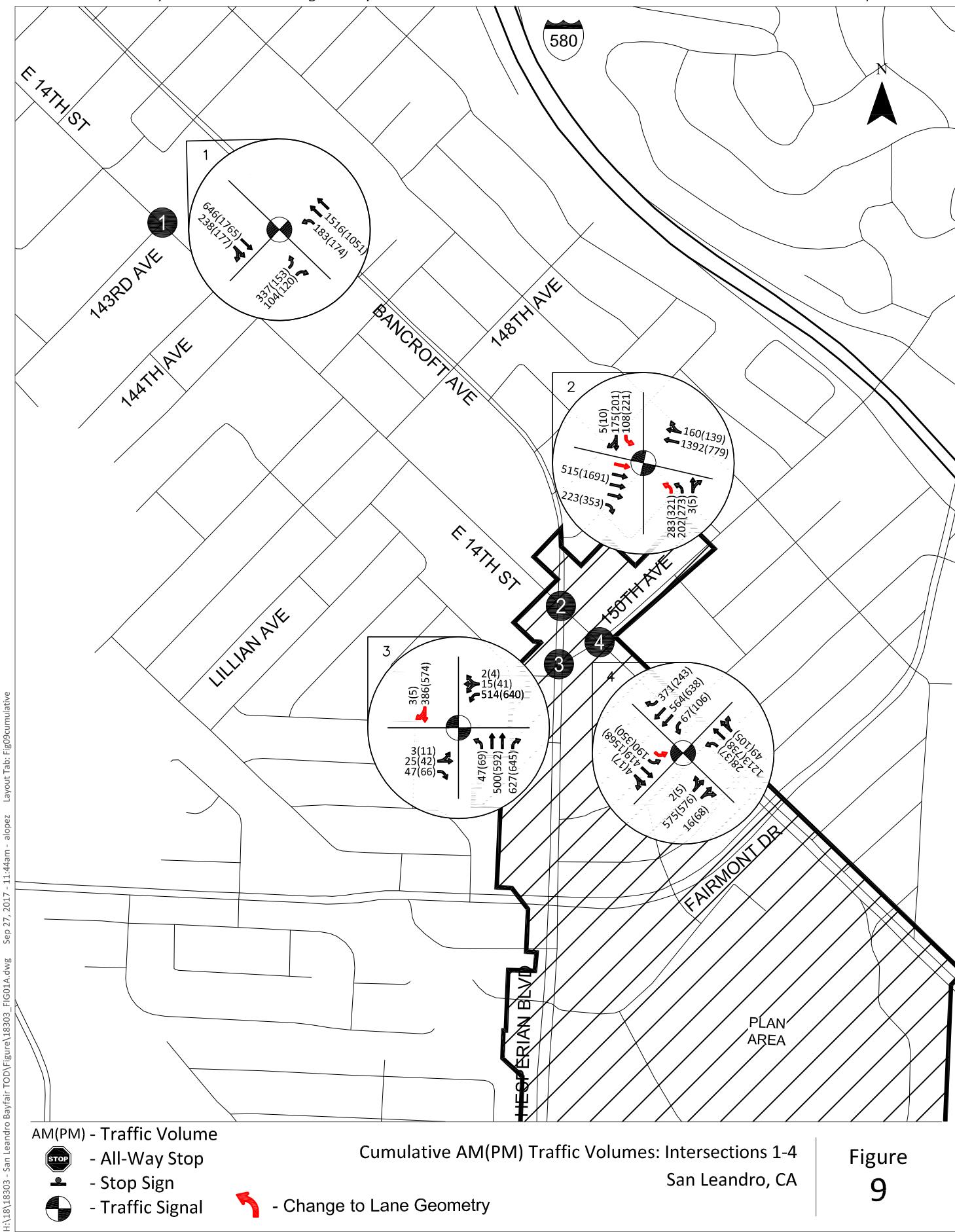
LOS = Level of service

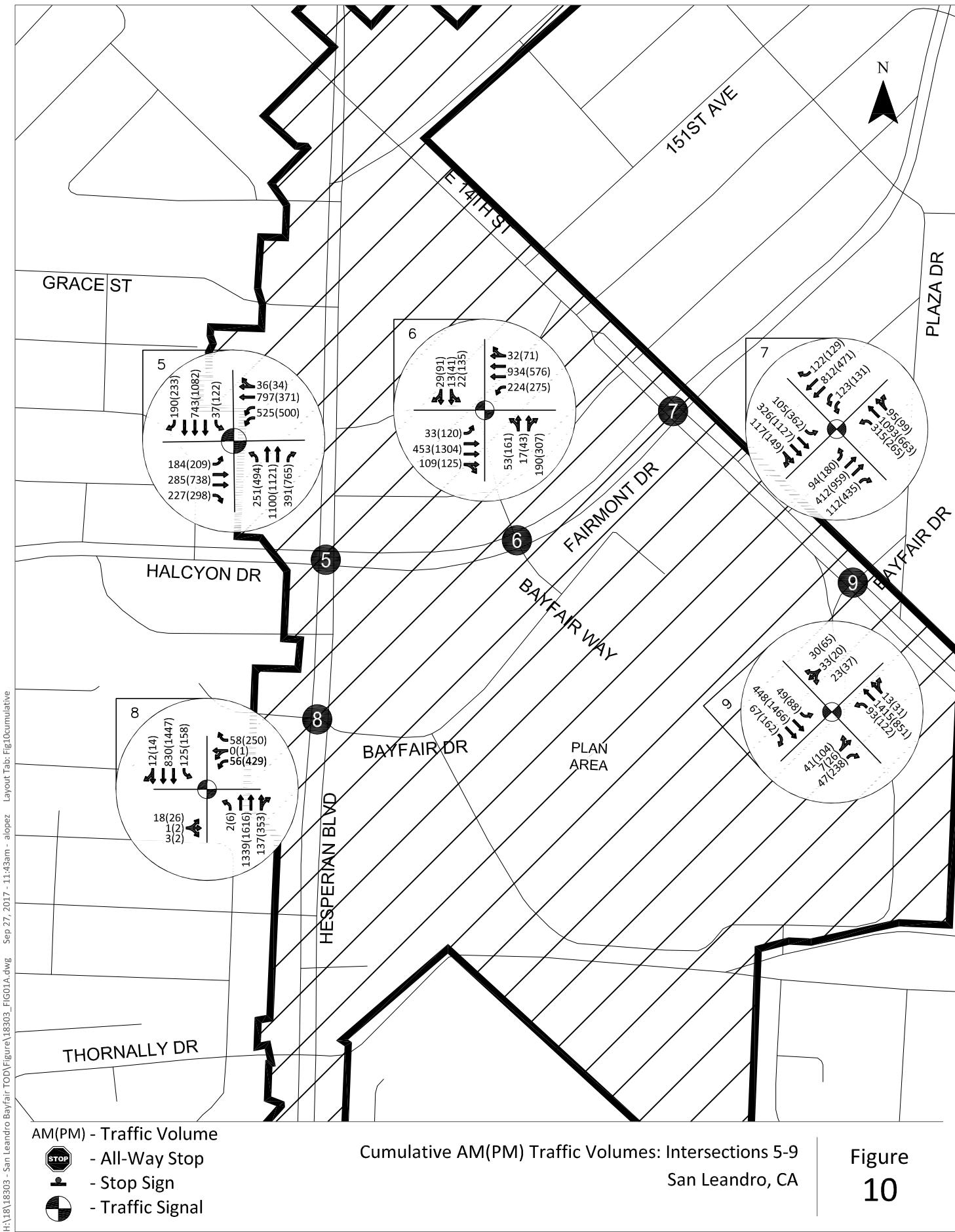
V/C = Volume-to-capacity ratio

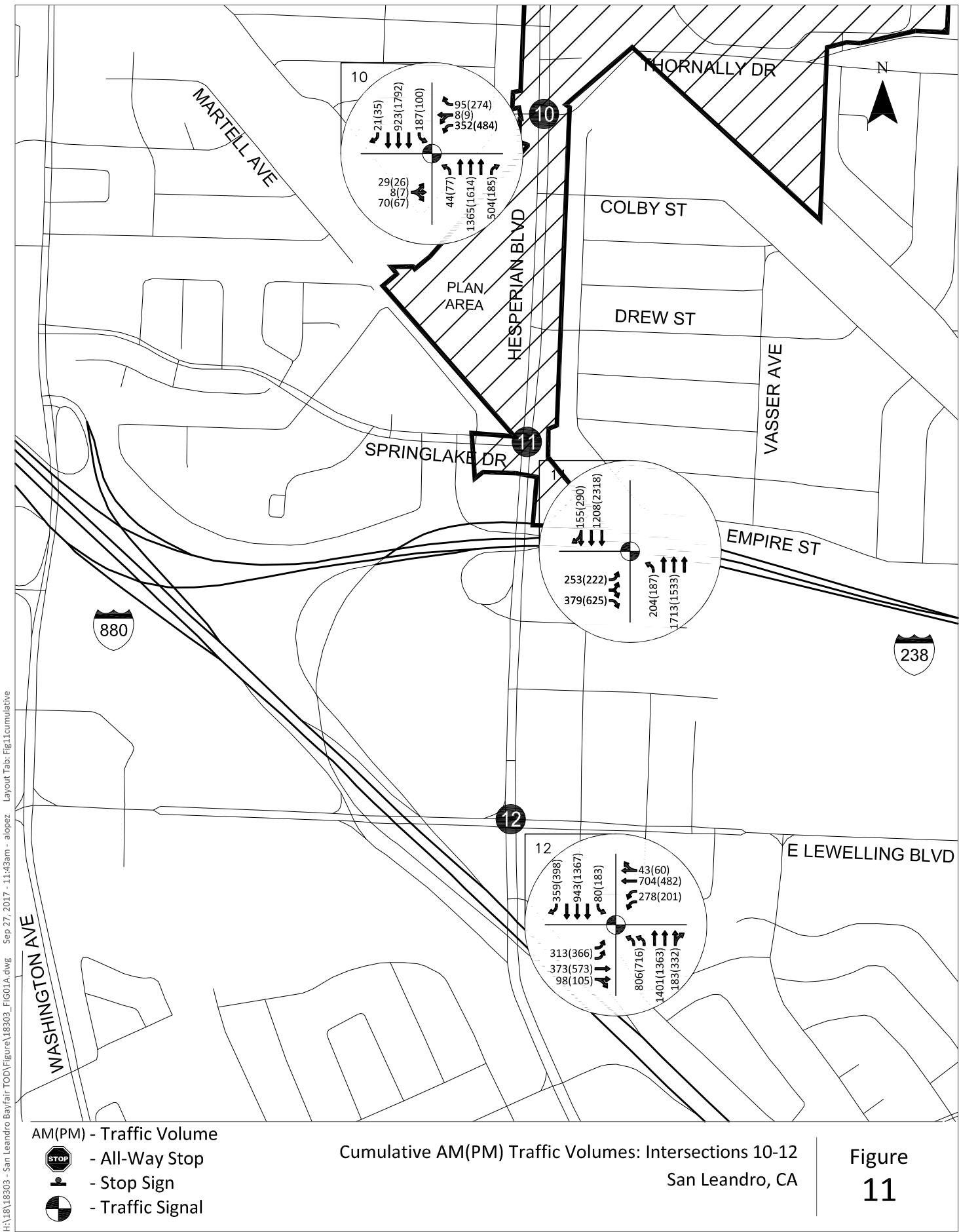
N/A indicates where V/C criterion is not relevant, as LOS is E or better.

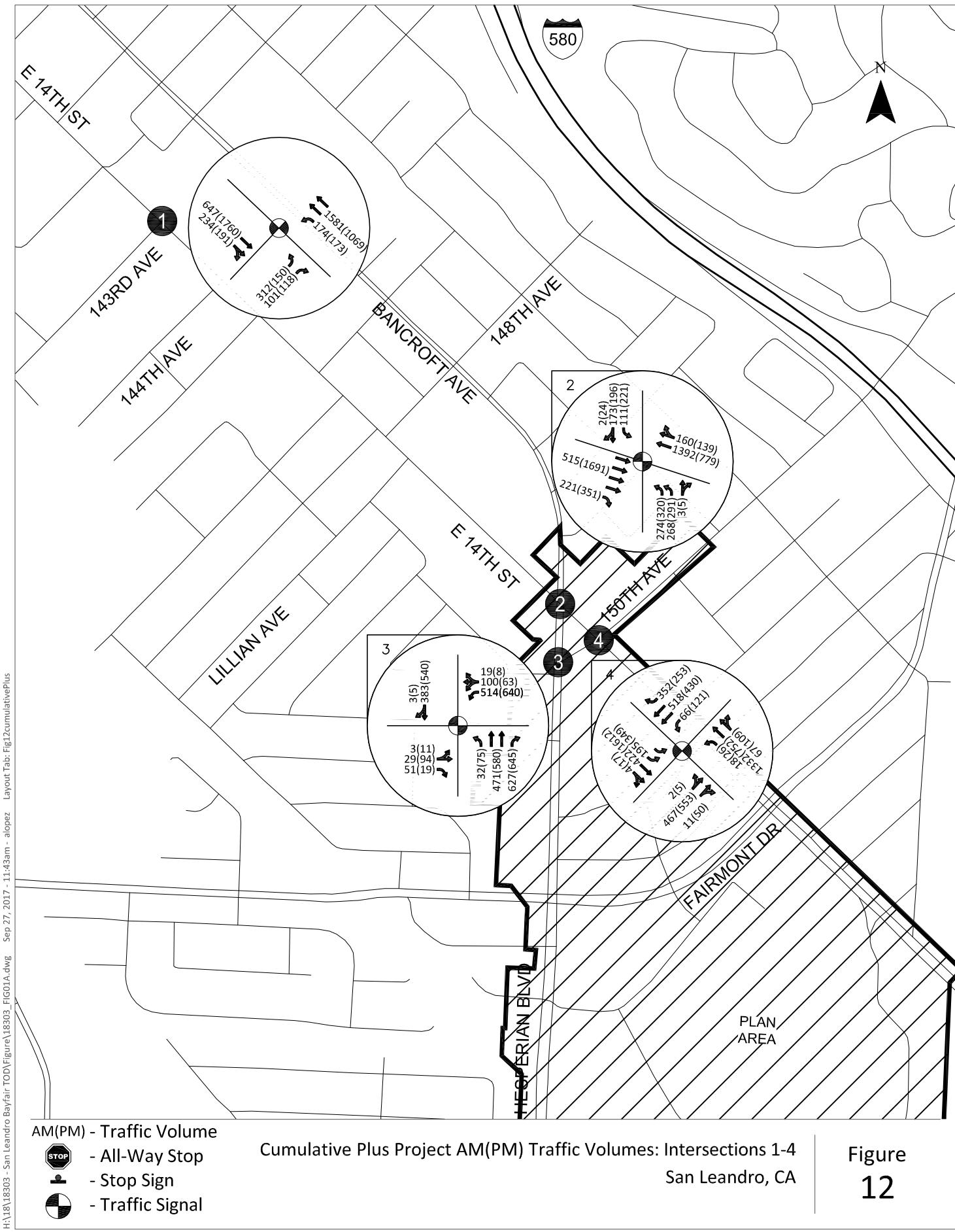
Bold font indicates substandard operations.

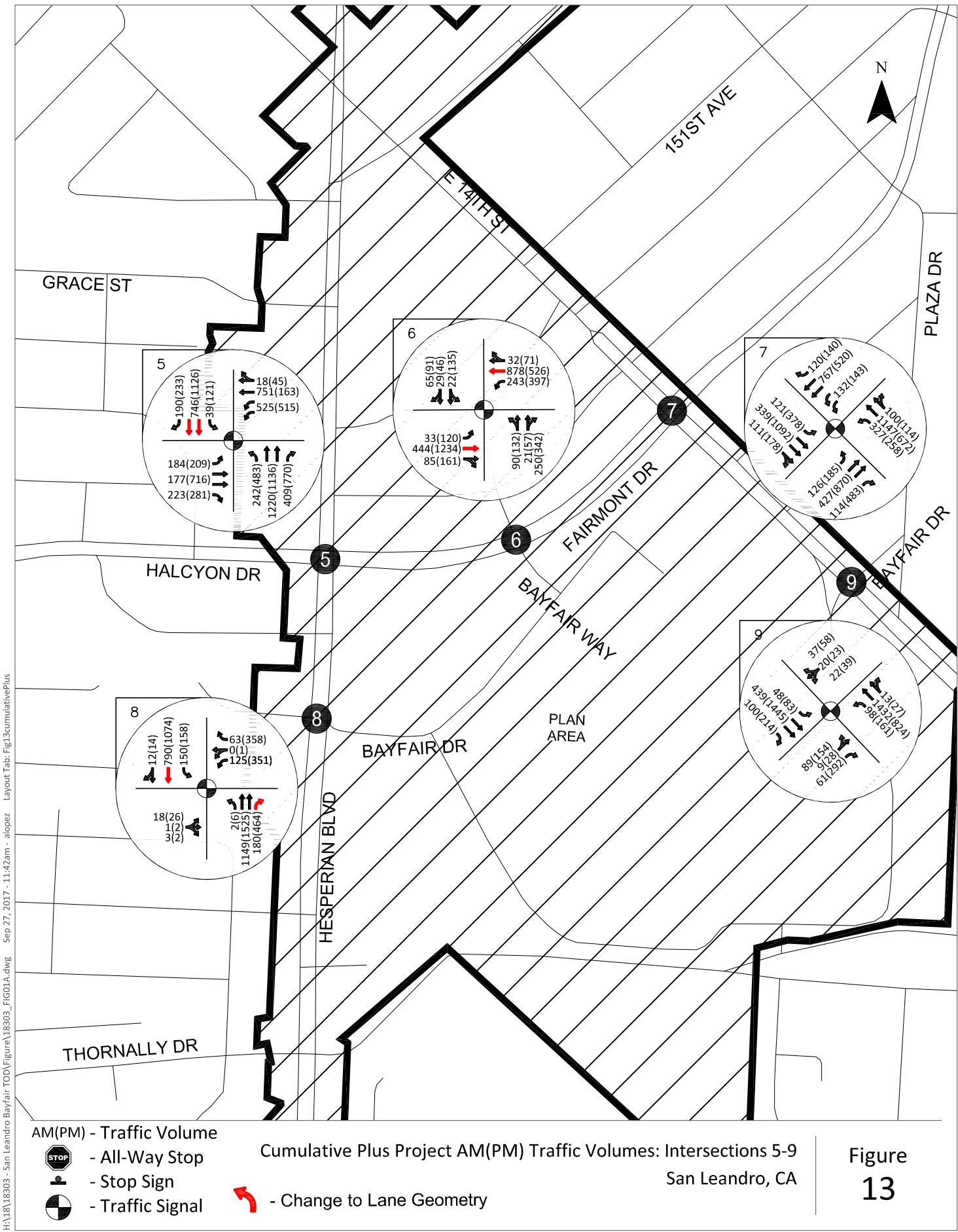
Highlighted cell indicates potentially significant impact.

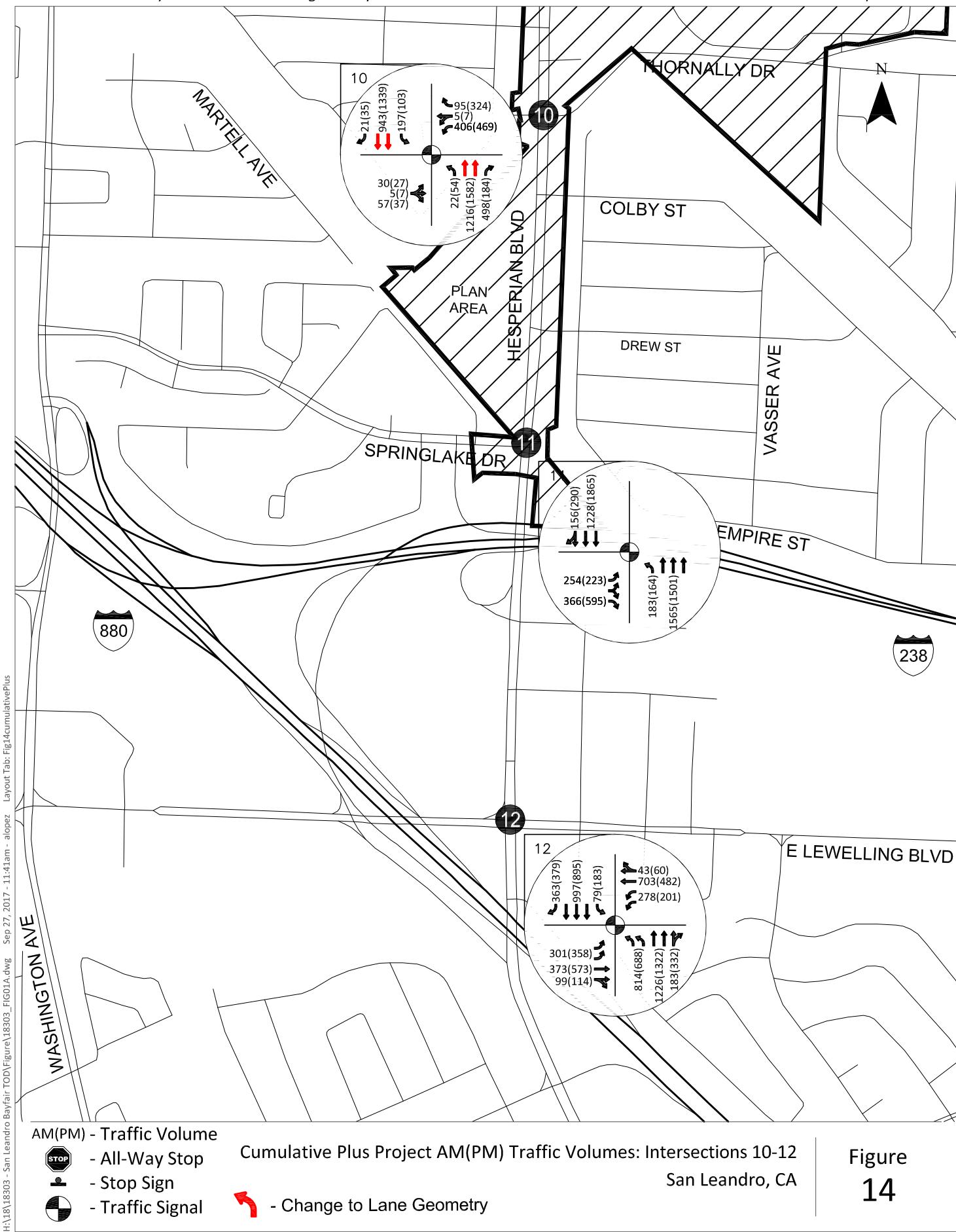












### ***Cumulative Intersection Impacts and Mitigation Measures***

Potentially significant impacts of the Proposed Plan were identified using the City's significance thresholds for intersection operations described in the Standards of Significance section. The potentially significant impacts and the associated mitigation measures are discussed below.

**Hesperian Boulevard/Halcyon Drive/Fairmont Drive (#5).** The addition of Proposed Plan traffic would cause the intersection V/C ratio of an intersection already exceeding the LOS standard to increase by 0.06 during the weekday PM peak hour. Therefore, the Proposed Plan impact is considered to be **significant**.

**Mitigation Measure #1:** Implementation of the following measure would reduce the V/C ratio to 0.04 above that of the Cumulative condition in the weekday PM peak hour. Therefore, the cumulative impact would be reduced to **less than significant**:

- The City of San Leandro shall implement a signal timing improvement project within the coordinated signal group for the intersection of Hesperian Boulevard and Halcyon Drive. The improvement shall occur when the proposed road diet on Hesperian Boulevard is implemented.

**East 14th Street/Fairmont Drive (#7).** The addition of Proposed Plan traffic would cause the intersection V/C ratio of an intersection already exceeding the LOS standard to increase by 0.05 during the weekday AM peak hour. Therefore, the Proposed Plan impact is considered to be **significant**.

**Mitigation Measure #2:** Implementation of the following measure would reduce the V/C ratio to that of the Cumulative condition in the weekday AM peak hour and reduce the impact to less than significant. However, because this intersection is under the jurisdiction of Caltrans, the implementation and timing of the mitigation measure is not under the City's control. Therefore, this impact would remain **significant and unavoidable**:

- The City of San Leandro shall coordinate with Caltrans to implement a signal timing improvement project within the coordinated signal group for the intersection of East 14th Street and Fairmont Drive. This mitigation measure is to occur when new projects within the Plan Area generate a cumulative total of 350 net new AM peak hour trips.

**Hesperian Boulevard/Thornally Drive (#10).** The addition of Proposed Plan traffic would cause the intersection V/C ratios of an intersection already exceeding the LOS standard to increase by 0.11 during the weekday AM peak hour and by 0.09 during the weekday PM peak hour. Therefore, the Proposed Plan impacts are considered to be **significant**.

**Mitigation Measure #3:** Addition of a northbound through lane at the intersection would reduce the V/C ratio to within the standard. However, the available right-of-way at the intersection would not accommodate an additional through lane without removal of the bike lanes included as part of the street network improvements in the Proposed Plan. Therefore, an additional through lane would not be installed with implementation of the Proposed Plan, and the impact would remain **significant and unavoidable**.

### Cumulative Freeway Operations

Freeway operations during the weekday AM and weekday PM peak hours are presented in Table 12, and detailed calculation worksheets are provided in Appendix 7. Under Cumulative conditions, the analysis segment for eastbound I-238, both analysis segments for northbound I-580, and both analysis segments for southbound I-580 operate below the standard during the weekday AM peak hour. During the weekday PM peak hour, the analysis segment for eastbound I-238, both analysis segments for northbound I-580, and one analysis segment for southbound I-580 operate below the standard. All other segments would operate as LOS D or better.

Under Cumulative plus Proposed Plan conditions, the same freeway segments operating beyond the standard would continue to operate beyond the standard. All other segments would continue to operate as LOS D or better. With Proposed Plan traffic, the change in density on the segments already operating beyond the standard would not exceed five passenger cars per lane per mile. Therefore, the Proposed Plan impacts are considered to be **less than significant**.

**Table 12: Cumulative Freeway Operations, without and with Proposed Plan**

Location	Cumulative Conditions			Cumulative plus Proposed Plan Conditions		
	Volume <sup>1</sup>	Density <sup>2</sup>	LOS <sup>3</sup>	Volume	Density	LOS
<b>AM Peak Hour</b>						
<b>I-880 Northbound</b>						
Washington Av. to Marina Blvd.	8,023	28.2	D	8,003	28.1	D
Marina Blvd. to Davis St.	7,981	28.0	D	7,966	27.9	D
<b>I-880 Southbound</b>						
Davis St. to Marina Blvd.	8,167	23.2	C	8,152	23.2	C
Marina Blvd. to Washington Av.	8,208	30.2	D	8,192	29.0	D
<b>I-238 Eastbound</b>						
Hesperian Blvd. to SR-185	6,160	43.2	E	6,180	43.5	E
<b>I-238 Westbound</b>						
SR-185 to Hesperian Blvd.	3,368	19.0	C	3,339	18.8	C
<b>I-580 Northbound</b>						
I-238 to Liberty Street/164th Avenue	7,560	35.3	E	7,561	35.3	E
150th Avenue to Benedict Drive	8,233	41.3	E	8,218	41.1	E
<b>I-580 Southbound</b>						
Benedict Drive to 150th Avenue	8,609	42.6	E	8,539	41.9	E
Liberty Street/164th Avenue to I-238	7,955	36.7	E	7,913	36.3	E

Location	Cumulative Conditions			Cumulative plus Proposed Plan Conditions		
	Volume <sup>1</sup>	Density <sup>2</sup>	LOS <sup>3</sup>	Volume	Density	LOS
<b>PM Peak Hour</b>						
<b>I-880 Northbound</b>						
Washington Av. to Marina Blvd.	8,839	32.3	D	8,805	32.1	D
Marina Blvd. to Davis St.	8,761	31.8	D	8,732	31.7	D
<b>I-880 Southbound</b>						
Davis St. to Marina Blvd.	7,437	21.1	C	7,456	21.2	C
Marina Blvd. to Washington Av.	7,469	25.8	C	7,471	25.8	C
<b>I-238 Eastbound</b>						
Hesperian Blvd. to SR-185	7,703	85.1	F	7,714	85.7	F
<b>I-238 Westbound</b>						
SR-185 to Hesperian Blvd.	3,198	18.1	C	3,195	18.0	C
<b>I-580 Northbound</b>						
I-238 to Liberty Street/164th Avenue	7,885	38.0	E	7,933	38.4	E
150th Avenue to Benedict Drive	8,920	49.3	F	8,835	48.2	F
<b>I-580 Southbound</b>						
Benedict Drive to 150th Avenue	8,193	38.6	E	8,150	38.3	E
Liberty Street/164th Avenue to I-238	7,664	34.4	D	7,733	34.9	D

Source: Kittelson & Associates, Inc., 2017

<sup>1</sup> Volume = vehicles per hour (vph)

<sup>2</sup> Density = passenger car per mile per lane (pc/m/ln)

<sup>3</sup> LOS = Level of Service

Bold font indicates substandard operations.

## ITEM 2: CONGESTION MANAGEMENT PROGRAM

Alameda CTC Congestion Management Program (CMP) Land Use Analysis was performed to identify potential impacts of the Proposed Plan on the Metropolitan Transportation System (MTS) roadway network and the MTS transit operators. The potential impacts of the Proposed Plan to bicyclists and pedestrians are discussed in the Item 6: Bicycle, Pedestrian, and Transit Facilities Performance section of this report. MTS roadways in the study area include I-880, I-238, I-580, East 14<sup>th</sup> Street, Washington Avenue, Hesperian Boulevard, and Lewelling Boulevard.

Vehicle impacts were assessed at selected roadway locations including two segments of I-880, one segment of I-238, two segments of I-580, two segments of East 14<sup>th</sup> Street, and one segment each of Washington Avenue, Hesperian Boulevard, and Lewelling Boulevard. Transit impacts were addressed



for AC Transit bus routes servicing the Proposed Plan study area (Line 89) and other nearby routes (Lines S and 75). The BART system was investigated for the Bay Fair BART station.

## MTS Roadway Segments

Traffic counts representative of year 2017 were used to establish existing conditions. Traffic forecasts for Year 2040 conditions were extracted at the selected MTS roadway segments from the latest version of the Countywide Model, dated August 2015. The forecasts differ from those applied to the Circulation System Performance analysis in that no adjustments or changes were made to the Countywide Model in accordance with the CMP guidelines. Consequently, the CMP analysis results do not account for land use developments or roadway improvements not already in the model. The Proposed Plan forecasts at the roadway segments were developed by incorporating the Proposed Plan land use and street network improvements into the Countywide Model.

Level of service analyses for selected MTS freeway and arterial segments were performed in accordance to methodologies discussed under the Level of Service Standards section. The LOS results along with peak hour volumes and density on the freeway analysis segments for the Year 2040 Cumulative conditions, with and without Proposed Plan, are provided in Table 13 and on the MTS arterial segments in Table 14.

## MTS Freeway Segments

Under Year 2040 Cumulative conditions, most freeway segments would operate within the standard. The following segments would operate at LOS F, which is beyond the standard, during the peak hours noted:

- I-580 northbound segment between 150<sup>th</sup> Avenue and Benedict Drive (weekday AM peak hour)
- I-580 southbound segment between Benedict Drive and 150<sup>th</sup> Avenue (weekday PM peak hour)
- I-580 southbound segment between Liberty Street/164<sup>th</sup> Avenue and I-238 (weekday PM peak hour)
- I-880 northbound segment between Marina Boulevard and Davis Street (weekday AM peak hour)
- I-880 northbound segment between Washington Avenue and Marina Boulevard (weekday AM peak hour)
- I-880 southbound segment between Marina Boulevard and Washington Avenue (weekday PM peak hour)

With the addition of Proposed Plan traffic and street network improvements, the change in the V/C ratios for these segments would be less than 0.03, and no additional segments would operate beyond the standard. Therefore, the impacts of the Proposed Plan would be considered **less than significant**.

**Table 13: MTS Freeway LOS Results for 2040**

Freeway	Location		Year 2040 Cumulative Conditions			Year 2040 Cumulative with Proposed Plan Conditions			Change in V/C
			Volume <sup>1</sup>	Density <sup>2</sup>	LOS	Volume	Density	LOS	
I-238 EB	Hesperian Boulevard to SR-185	AM	2,049	11.4	B	2,069	11.4	B	N/A
		PM	4,689	33.3	D	4,700	33.4	D	N/A
I-238 WB	SR-185 to Hesperian Boulevard	AM	5,119	40.9	E	5,090	40.9	E	N/A
		PM	3,544	21.1	C	3,541	21.2	C	N/A
I-580 NB	150 <sup>th</sup> Avenue to Benedict Drive	AM	8,824	<b>74.3</b>	<b>F</b>	<b>8,809</b>	<b>74.1</b>	<b>F</b>	<b>-0.002</b>
		PM	6,784	32.5	D	6,699	32.3	D	N/A
I-580 NB	I-238 to Liberty Street	AM	7,437	41.0	E	7,438	41.1	E	N/A
		PM	5,192	21.0	C	5,240	21.2	C	N/A
I-580 SB	Benedict Drive to 150 <sup>th</sup> Avenue	AM	5,553	22.9	C	5,483	22.5	C	N/A
		PM	8,676	<b>69.3</b>	<b>F</b>	<b>8,633</b>	<b>69.0</b>	<b>F</b>	<b>-0.005</b>
I-580 SB	Liberty Street/164 <sup>th</sup> Avenue to I-238	AM	4,583	18.0	C	4,541	17.9	B	N/A
		PM	7,958	<b>50.5</b>	<b>F</b>	<b>8,027</b>	<b>51.1</b>	<b>F</b>	<b>0.009</b>
I-880 NB	Marina Boulevard to Davis Street	AM	9,223	<b>51.1</b>	<b>F</b>	<b>9,208</b>	<b>50.8</b>	<b>F</b>	<b>-0.002</b>
		PM	7,394	30.2	D	7,365	29.9	D	N/A
I-880 NB	Washington Avenue to Marina Boulevard	AM	9,250	<b>69.6</b>	<b>F</b>	<b>9,230</b>	<b>69.9</b>	<b>F</b>	<b>-0.002</b>
		PM	7,177	32.6	D	7,143	32.5	D	N/A
I-880 SB	Davis Street to Marina Boulevard	AM	5,845	21.6	C	5,830	21.4	C	N/A
		PM	7,801	39.7	E	7,820	39.8	E	N/A
I-880 SB	Marina Boulevard to Washington Avenue	AM	5,259	27.8	D	5,243	27.8	D	N/A
		PM	7,740	<b>104.9</b>	<b>F</b>	<b>7,742</b>	<b>104.0</b>	<b>F</b>	<b>0.000</b>

Source: Kittelson & Associates, Inc., 2017

<sup>1</sup>Volume = Passenger Cars per Hour (pcph)

<sup>2</sup>Density = Passenger Cars per Mile per Lane (pcpmpl)

Bold text indicates substandard operations.

N/A indicates where V/C criterion is not relevant, as LOS is E or better.

### MTS Arterial Segments

The MTS arterial segment analysis results are presented in Table 14. As shown in the table, the following arterial segments would operate beyond the standard under Year 2040 Cumulative conditions during the peak hours noted:

- Northbound East 14<sup>th</sup> Street, south of Estudillo Avenue (weekday AM and weekday PM peak hours)
- Southbound East 14<sup>th</sup> Street, south of Estudillo Avenue (weekday PM peak hour)
- Northbound East 14<sup>th</sup> Street, south of Fairmont Drive (weekday AM peak hour)



- Southbound East 14<sup>th</sup> Street, south of Fairmont Drive (weekday PM peak hour)
- Northbound Washington Avenue, south of San Leandro Boulevard (weekday AM and weekday PM peak hours)
- Southbound Washington Avenue, south of San Leandro Boulevard (weekday AM and weekday PM peak hours)
- Eastbound Lewelling Boulevard, east of Washington Avenue (weekday AM peak hour)
- Westbound Lewelling Boulevard, east of Washington Avenue (weekday AM peak hour)

With the addition of Proposed Plan traffic and street network improvements, most of these segments operating beyond the standard would continue to operate beyond the standard but would not experience an increase in the V/C ratio of 0.03 or more. Therefore, the Proposed Plan impacts at those locations are considered to be **less than significant**.

However, two of the segments already operating beyond the standard under Year 2040 Cumulative conditions would experience an increase in the V/C ratio of 0.03 or more. These segments are:

- Northbound East 14<sup>th</sup> Street, south of Estudillo Avenue (weekday PM peak hour)
- Southbound East 14<sup>th</sup> Street, south of Estudillo Avenue (weekday PM peak hour)

In addition, two segments would deteriorate to LOS F with the addition of Proposed Plan traffic and street network improvements, and would operate beyond the standard. These segments are:

- Northbound Hesperian Boulevard, south of East 14<sup>th</sup> Street (weekday AM and weekday PM peak hours)
- Southbound Hesperian Boulevard, south of East 14<sup>th</sup> Street (weekday PM peak hour)

Therefore, the Proposed Plan impacts to East 14<sup>th</sup> Street, south of Estudillo Avenue, and to Hesperian Boulevard, south of East 14<sup>th</sup> Street, are considered to be **significant**.

**Table 14: MTS Arterial LOS, 2040 Cumulative Conditions, without and with Proposed Plan**

Segment		Year 2040 Cumulative Conditions		Year 2040 Cumulative with Proposed Plan Conditions	
		AM	PM	AM	PM
<b>Northbound/Eastbound</b>					
East 14 <sup>th</sup> Street, south of Estudillo Avenue	Volume	1,987	1,295	2,039	1,337
	LOS	F	F	F	F
	V/C Change			0.03*	0.03
East 14 <sup>th</sup> Street, south of Fairmont Drive	Volume	2,309	1,258	2,356	1,279
	LOS	F	D	F	D
	V/C Change			0.02	0.02

Segment		Year 2040 Cumulative Conditions		Year 2040 Cumulative with Proposed Plan Conditions	
		AM	PM	AM	PM
Washington Avenue, south of San Leandro Boulevard	Volume	<b>1,351</b>	<b>1,033</b>	<b>1,359</b>	<b>1,028</b>
	LOS	<b>F</b>	<b>F</b>	<b>F</b>	<b>F</b>
	V/C Change			0.01	0.00
Hesperian Boulevard, south of East 14 <sup>th</sup> Street	Volume	1,771	2,050	<b>1,766</b>	<b>2,080</b>
	LOS	D	D	<b>F</b>	<b>F</b>
	V/C Change			<b>0.00</b>	<b>0.01</b>
Lewelling Boulevard, east of Washington Avenue	Volume	<b>1,553</b>	<b>1,609</b>	1,455	1,490
	LOS	<b>F</b>	<b>F</b>	D	E
	V/C Change			-0.06	-0.07
<b>Southbound/Westbound</b>					
East 14 <sup>th</sup> Street, south of Estudillo Avenue	Volume	982	<b>1,665</b>	997	<b>1,739</b>
	LOS	D	<b>F</b>	D	<b>F</b>
	V/C Change			0.02	<b>0.04</b>
East 14 <sup>th</sup> Street, south of Fairmont Drive	Volume	1,124	<b>2,164</b>	1,135	<b>2,209</b>
	LOS	D	<b>F</b>	D	<b>F</b>
	V/C Change			0.01	0.02
Washington Avenue, south of San Leandro Boulevard	Volume	<b>946</b>	<b>1,238</b>	<b>910</b>	<b>1,237</b>
	LOS	<b>F</b>	<b>F</b>	<b>F</b>	<b>F</b>
	V/C Change			-0.04	0.00
Hesperian Boulevard, south of East 14 <sup>th</sup> Street	Volume	1,513	1,705	1,464	<b>1,722</b>
	LOS	D	D	D	<b>F</b>
	V/C Change			-0.03	<b>0.01</b>
Lewelling Boulevard, east of Washington Avenue	Volume	<b>1,733</b>	1,396	<b>1,669</b>	1,276
	LOS	<b>F</b>	D	<b>F</b>	D
	V/C Change			-0.04	-0.09

Source: Kittelson & Associates, Inc., 2017

\*V/C change is round up to 0.03; therefore, the segment operates within the standard.

Bold text indicates substandard operations.

Shaded cell indicated a significant impact.

### **MTS Roadway Segment Impacts and Mitigation Measures**

Mitigation measures were identified in the TIA for intersections potentially impacted by the addition of traffic from the proposed Specific Plan. Opportunities for physical mitigation measures such as restriping of intersection approaches to add turn lanes and improving traffic control devices were investigated. The emphasis was to identify physical and/or operational improvements that could be easily implemented. Mitigation measures that were considered included modifications to intersection traffic control or restriping of the approaches to provide turn-lanes. These potential mitigation measures were either ineffective in reducing the impact to a level below significance or were determined to be infeasible based on the constrained right-of-way that precludes widening or the addition of vehicular capacity at this location. There are no feasible improvements that could be implemented within the available right-of-way of the significantly affected intersections that would reduce impacts.

**Northbound East 14<sup>th</sup> Street, south of Estudillo Avenue.** The addition of Proposed Plan traffic and street network improvements would cause the segment V/C ratio to increase by 0.03 during the weekday PM peak hour, which exceeds the Alameda CTC's standard for CMP roadways. Therefore, the Proposed Plan impact is considered to be **significant**.

**Mitigation Measure #4:** The addition of a northbound lane along the segment would reduce the V/C ratio to within the standard. However, the available right-of-way along the segment would not accommodate an additional lane, and adding additional right-of-way would potentially impact other modes. Therefore, an additional lane would not be installed with implementation of the Proposed Plan, and the impact would remain **significant and unavoidable**.

**Southbound East 14<sup>th</sup> Street, south of Estudillo Avenue.** The addition of Proposed Plan traffic and street network improvements would cause the segment V/C ratio to increase by 0.03 during the weekday PM peak hour, which exceed the Alameda CTC's standard for CMP roadways. Therefore, the Proposed Plan impact is considered to be **significant**.

**Mitigation Measure #5:** The addition of a southbound lane along the segment would reduce the V/C ratio to within the standard. However, the available right-of-way along the segment would not accommodate an additional lane, and adding additional right-of-way would potentially impact other modes. Therefore, an additional lane would not be installed with implementation of the Proposed Plan, and the impact would remain **significant and unavoidable**.

**Northbound Hesperian Boulevard, south of East 14<sup>th</sup> Street.** The addition of Proposed Plan traffic and street network improvements would cause the segment LOS to deteriorate from LOS D to LOS F during the weekday AM and weekday PM peak hours, which exceed the City's standard. Therefore, the Proposed Plan impacts are considered to be **significant**.

**Mitigation Measure #6:** The addition of a northbound vehicle lane along the segment would reduce the segment LOS to within the standard. However, the available right-of-way along the segment would not accommodate an additional vehicle lane without removal of the bike lanes included as part of the street network improvements in the Proposed Plan. Therefore, an

additional vehicle lane would not be installed with implementation of the Proposed Plan, and the impacts would remain **significant and unavoidable**.

**Southbound Hesperian Boulevard, south of East 14<sup>th</sup> Street.** The addition of Proposed Plan traffic and street network improvements would cause the segment LOS to deteriorate from LOS D to LOS F during the weekday PM peak hour, which exceeds the City's standard. Therefore, the Proposed Plan impact is considered to be **significant**.

**Mitigation Measure #7:** The addition of a northbound vehicle lane along the segment would reduce the segment LOS to within the standard. However, the available right-of-way along the segment would not accommodate an additional vehicle lane without removal of the bike lanes included as part of the street network improvements in the Proposed Plan. Therefore, an additional vehicle lane would not be installed with implementation of the Proposed Plan, and the impact would remain **significant and unavoidable**.

### *Transit Operations*

The two primary transit agencies serving San Leandro Bay Fair are AC Transit and BART. Amtrak service via the Capitol Corridor passes through the city but the nearest station is at the Coliseum Station in Oakland. AC Transit has numerous routes serving Bay Fair, including; 1, 1R, 32, 40, 48, 75, 89, 93, 97, 99 and 801; while the Bay Fair BART station directly serves the Specific Plan area. Future service includes the AC Transit BRT along International Boulevard/ E. 14<sup>th</sup> Street from Oakland to the San Leandro BART station, and the BART extension to San Jose.

### *Effects of Vehicle Traffic on Mixed Flow Transit Operations*

An assessment was made to determine if vehicle trips generated by the Proposed Plan would cause congestion that reduces transit vehicle operations. AC Transit currently operates 11 bus lines in the area that include 1, 1R, 32, 40, 48, 75, 89, 93, 97, 99 and 801. While Proposed Plan traffic is dispersed around the Bay Fair Mall and BART station area, traffic increases do occur along Hesperian Boulevard, East 14<sup>th</sup> Street, Halcyon Drive, and Bay Fair Drive. Generally, traffic increases resulting from the Proposed Plan range from 0.0 percent to 4.0 percent on arterial segments already at LOS F. As discussed previously, the Proposed Plan would cause potentially significant impacts to intersections in the Plan area on East 14<sup>th</sup> Street and on Hesperian Boulevard. Mitigation #1 and Mitigation #2 were identified to reduce the impact on East 14<sup>th</sup> Street and one impact on Hesperian Boulevard to **less than significant**. However, the Hesperian Boulevard/Thornally Drive intersection would experience an increase in delay and a change in the V/C ratio that would not be mitigated. This change in operations at the intersection would affect mixed flow transit operations. Therefore, the impact of the Proposed Plan on mixed flow transit operations would be considered **significant and unavoidable**.

### Transit Capacity

In addition to the impact of vehicles on transit operations, the CMP guidelines require a determination for whether a proposed Plan would cause the existing transit service to exceed its available capacity. All combined AC Transit routes and were considered for these purposes.

#### AC Transit

The Proposed Project is estimated to generate 344 new AC Transit bus trips per day compared to the 2035 no-project with approximately 35 occurring in each peak hour. Given these trips are spread on multiple routes from/to Bay Fair each operating at an average headway of 30 minutes in the peak hour, and 15 minutes for the BRT, the Proposed Project is likely to contribute an average of under 5.0 additional passengers per bus, which is not expected to exceed AC Transit's capacity at the maximum load segments within San Leandro. Therefore, the impacts of the Proposed Plan on AC Transit service would be considered **less than significant**.

#### BART

The Bay Fair BART station is located within the Plan area. According to the April 2017 ridership information provided by BART, there are approximately 5,731 daily weekday boarding's at the Bay Fair BART Station today. Under Cumulative conditions, the model estimates this will increase to 18,911 daily weekday boarding's. Under Cumulative plus Proposed Plan conditions, the model estimates this will further increase to 20,422 daily weekday boardings. As presented in Table 15, the Proposed Plan is expected to increase daily BART ridership in 2035 by 1,511 new riders at the station, with approximately 151 trips (10%) occurring during the weekday AM peak hour and approximately 151 trips (10%) occurring during the weekday PM peak hour. BART service would be fully operational to San Jose by 2035. Based on four future routes that will pass through San Leandro, and assuming 12 trains per hour in each direction, the Proposed Plan would contribute on average 6.3 additional passengers per train. The capacity of each train is 1,000 seated and standing passengers. Per BART's 2008 Station Profile Study, the maximum load factors during the peak hours on BART are at 100 percent. Assuming this condition continues with the future expanded service, the projected ridership increase due to the Proposed Plan of 6.3 passengers per train would increase BART ridership on trains at the Bay Fair station by less than 1 percent. Therefore, the impacts of the Proposed Plan would be considered **less than significant**.

**Table 15: Proposed Plan Trips on BART**

Period	Proposed Plan Trips	BART Trains	Additional Passengers per Train	Percent Increase in Passengers per Train <sup>1</sup>
Weekday AM Peak Hour	151	24	6.3	0.6%
Weekday PM Peak Hour	151	24	6.3	0.6%

Source: Kittelson & Associates, 2017

<sup>1</sup> Train capacity assumed to be 1,000 passengers

### *Transit Access and Egress*

Since the Proposed Plan is not making changes to connections to the Bay Fair BART station, the Proposed Plan would provide the same adequate pedestrian connection between the Proposed Plan land use sites and transit stops. Therefore, the impacts of the Proposed Plan to transit access and egress would be considered **less than significant**.

### *Future Transit Service*

Future transit service to San Leandro would include the BART extension to San Jose as well as the AC Transit BRT route from Oakland to the San Leandro BART station along East 14<sup>th</sup> Street. Proposed Plan improvements along this route would not preclude implementation of these planned service improvements. Therefore, the impacts of the Proposed Plan to future transit service would be considered **less than significant**.

### *Consistency with Adopted Plans*

The Proposed Plan's consistency with transit operators' adopted plans was assessed. The Proposed Plan is not expected to generate additional BART trips to a point that would exceed the current maximum load capacity of the BART trains by more than one percent. Implementation of the Proposed Plan also would not affect any future plans established by BART. AC Transit's future plans also would not be inhibited by the Proposed Plan. Therefore, the impacts of the Proposed Plan to planned improvements to BART and AC Transit service would be considered **less than significant**.

### *Effects of Vehicle Traffic on Mixed Flow Transit Operations*

An assessment was made to determine if vehicle trips generated by the Proposed Plan would cause congestion that reduces transit vehicle operations. AC Transit currently operates 11 bus lines in the area that include 1, 1R, 32, 40, 48, 75, 89, 93, 97, 99 and 801. While Proposed Plan traffic is dispersed around the Bay Fair Mall and BART station area, traffic increases would occur along Hesperian Boulevard, East 14<sup>th</sup> Street, Halcyon Drive, and Bay Fair Drive. Generally, traffic increases resulting from the Proposed Plan range from 0.0 percent to 4.0 percent on arterial segments already at LOS F. As discussed previously, the Proposed Plan would cause potentially significant impacts to intersections in the Plan Area on East 14th Street and on Hesperian Boulevard. Mitigations were identified to reduce the impacts on East 14th Street and one impact on Hesperian Boulevard to less than significant. However, the Hesperian Boulevard/Thornally Drive intersection would experience an increase in delay and a change in the V/C ratio that would not be mitigated. This change in operations at the intersection would affect mixed flow transit operations. Therefore, the impact of the Proposed Plan on mixed flow transit operations would be **significant and unavoidable**.

### *Mitigation Measure*

As discussed under Item 1: Circulation System Performance, no feasible mitigation measures exist at the Hesperian Boulevard/Thornally Drive intersection.

### ***Significance after Mitigation***

Addition of a northbound through lane at the intersection would reduce the V/C ratio to within the standard and, therefore, would not significantly impact transit operations. However, the available right-of-way at the intersection would not accommodate an additional through lane without removal of the bike lanes included as part of the street network improvements in the Proposed Plan. Therefore, an additional through lane would not be installed with implementation of the Proposed Plan, and the impact would remain **significant and unavoidable**.

## **ITEM 3: INFLUENCE AIR TRAVEL PATTERNS**

While the Plan area is located approximately five miles southeast of the Oakland International Airport and three miles north of the Hayward Executive Airport, the nature of the Proposed Plan as a plan for mixed-use, low rise residential and commercial development is such that it would not result in a change in air traffic patterns. Therefore, the impacts of the Proposed Plan to air travel patterns would be considered **less than significant**.

## **ITEM 4: DESIGN AND INCOMPATIBLE USE HAZARDS**

The types of land uses included in the Proposed Plan are generally similar to existing and surrounding uses and thereby are compatible with the existing uses in the Plan area and in the surrounding area. Therefore, the impact of the Proposed Plan with respect to hazards as a result of incompatible uses would be considered **less than significant**.

The City will work on a project level to identify new connections within the Plan area, as included in the Proposed Plan. A thorough review of all street network connections will be performed during the course of implementation of the Proposed Plan to ensure that all future street network designs comply with City standards. Therefore, the impact of the Proposed Plan with respect to design hazards would be considered **less than significant**.

## **ITEM 5: EMERGENCY ACCESS**

The Proposed Plan involves changes to lane configurations on Hesperian Boulevard and East 14th Street and new street connections within the Plan Area. The City would work to determine the exact future lane configurations. The design of roadways would be reviewed by the San Leandro Police Department and Alameda County Fire Department to ensure emergency access standards are met. In addition, the City would work on a project level to identify new connections within the Specific Plan Area, as included in the proposed Specific Plan. A thorough review of all street network connections will be performed during the course of implementation of the proposed Specific Plan to ensure that all future street network designs comply with City standards. The proposed Specific Plan would involve improvements to bicycle and pedestrian facilities, which would reduce hazards to bicyclists and pedestrians. Therefore, the impact of the proposed Specific Plan with respect to design hazards would be **less than significant**.

## ITEM 6: ADOPTED POLICIES, PLANS, AND PROGRAMS REGARDING PUBLIC TRANSIT, BICYCLE, AND PEDESTRIAN FACILITIES

This section discusses potential impacts to bicyclists, pedestrians, and transit passengers.

### Bicycle and Pedestrian Impacts

The Alameda Countywide Bicycle Plan, Countywide Pedestrian Plan, and Countywide Transit Plan, all enacted by the Alameda CTC, as well as Plan Bay Area: Strategy for a Sustainable Region, the 2040 Regional Transportation Plan enacted by the MTC in 2013, contain strategies designed to support alternative modes of transportation, including walking, bicycling, and public transit. The Proposed Plan identifies and prioritizes improvements to enhance the pedestrian and bicycle environment.

The Proposed Plan includes strategies that, once adopted, would implement the following strategies from the Alameda Countywide Bicycle Plan, Countywide Pedestrian Plan, and Countywide Transit Plan, and would ensure adequate bicycle, pedestrian, and public transit facilities are available in the Plan area.

- **Countywide Bicycle Plan Strategy 1.7:** Encourage local jurisdictions to adopt policies, guidelines, standards and regulations that result in bicycle-friendly communities, and, where applicable, transit-oriented land use development; and provide them with technical assistance and resources to do so
- **Countywide Pedestrian Plan Strategy 1.8:** Encourage local jurisdictions to adopt policies, guidelines, standards and regulations that result in pedestrian-friendly communities, and, where applicable, transit-oriented land use development; and provide them with technical assistance and resources to do so
- **Countywide Transit Plan, Streets Plus Strategy #2:** Encourage transit-oriented community planning along transit corridors and transit-dense areas

The Proposed Plan is a plan for transit-oriented development. Therefore, by its nature it implements the above strategies. As described in Chapter 2 of the Proposed Plan, a strategy to improve mobility for all modes along existing major streets is integrated throughout the Proposed Plan as a planning framework. Chapter 3, Mobility, of the Proposed Plan includes standards and guidelines to improve the pedestrian and bicycle networks in the Specific Plan Area. Therefore, implementation of the Proposed Plan would support the strategies mentioned above and would not conflict with plans, programs and policies regarding bicycle, pedestrian, or transit facilities, or decrease the performance and safety of such facilities. Therefore, impacts to bicyclists, pedestrians, and transit service providers resulting from implementation of the Proposed Plan would be considered **less than significant**.

## CONCLUSIONS AND RECOMMENDATIONS

The results of the transportation impact analysis indicate that the Proposed Plan can be implemented while maintaining acceptable levels of service at most locations of the surrounding transportation system as long as the appropriate mitigations are in place. It can also be implemented while maintaining safety on the surrounding transportation system. This section summarizes the proposed mitigations for the Proposed Plan, and it summarizes the significant and unavoidable impacts associated with implementation of the Proposed Plan.

## MITIGATIONS

Mitigation measures were identified through this study for intersections potentially impacted by the addition of traffic from the proposed Specific Plan. Opportunities for physical mitigation measures such as restriping of intersection approaches to add turn lanes and improving traffic control devices were investigated. The emphasis was to identify physical and/or operational improvements that could be easily implemented. Mitigation measures that were considered included modifications to intersection traffic control or restriping of the approaches to provide turn-lanes. These potential mitigation measures were either ineffective in reducing the impact to a level below significance or were determined to be infeasible based on the constrained right-of-way that precludes widening or the addition of vehicular capacity at this location. There are no feasible physical improvements that could be implemented within the available right-of-way of the significantly affected intersections that would reduce impacts.

In addition, other feasible mitigation measures, such as trip reduction or TDM programs, were considered. However, Chapter 3, Mobility, of the proposed Specific Plan already includes TDM guidelines to encourage residential and employer TDM programs for new projects in the Specific Plan Area. Further, the effectiveness of TDM programs cannot be guaranteed. Therefore, it cannot be guaranteed TDM programs would reduce impacts to a level below significance.

The following list summarizes the mitigation measures recommended as part of this proposed development to mitigate Cumulative impacts.

- **Mitigation Measure #1:** Optimize traffic signal phasing at the Hesperian Boulevard/Halcyon Drive/Fairmont Drive intersection.
- **Mitigation Measure #2:** Optimize traffic signal phasing at the East 14th Street/Fairmont Drive intersection.
- **Mitigation Measure #3:** Add a northbound through lane at the Hesperian Boulevard/Thornally Drive intersection.
- **Mitigation Measure #4:** Add a vehicle lane along the northbound East 14<sup>th</sup> Street segment, south of Estudillo Avenue.
- **Mitigation Measure #5:** Add a vehicle lane along the southbound East 14<sup>th</sup> Street segment, south of Estudillo Avenue.

- **Mitigation Measure #6:** Add a vehicle lane along the northbound Hesperian Boulevard segment, south of East 14<sup>th</sup> Street.
- **Mitigation Measure #7:** Add a vehicle lane along the southbound Hesperian Boulevard segment, south of East 14<sup>th</sup> Street.

## SIGNIFICANT AND UNAVOIDABLE IMPACTS

**East 14th Street/Fairmont Drive (#7).** The addition of Proposed Plan traffic would cause the intersection V/C ratio of an intersection already exceeding the LOS standard to increase by 0.05 during the weekday AM peak hour. Therefore, the Proposed Plan impact is considered to be **significant**. The City of San Leandro is to work with Caltrans to implement a signal timing improvement project within the coordinated signal group for the intersection of E. 14th Street and Fairmont Drive by funding actual cost which would reduce the Project's impact to less than significant. However, this intersection is under the jurisdiction of Caltrans so the implementation and timing of the mitigation measure is not under the City's control. Therefore, this impact would remain **significant and unavoidable**.

**Hesperian Boulevard/Thornally Drive Intersection.** The addition of Proposed Plan traffic would cause the intersection V/C ratios to increase by 0.11 during the weekday AM peak hour and by 0.09 during the weekday PM peak hour, which exceed the City's standard. Therefore, the Proposed Plan impacts are considered to be **significant**. Addition of a northbound through lane at the intersection (Mitigation Measure #3) would reduce the V/C ratio to within the standard. However, the available right-of-way at the intersection would not accommodate an additional through lane without removal of the bike lanes included as part of the street network improvements in the Proposed Plan. Therefore, an additional through lane would not be installed with implementation of the Proposed Plan, and the impact would remain **significant and unavoidable**.

**Northbound East 14th Street Segment, South of Estudillo Avenue.** Addition of a northbound lane along the segment (Mitigation Measure #4) would reduce the V/C ratio to within the standard. However, the available right-of-way along the segment would not accommodate an additional lane, and adding additional right-of-way would potentially impact other modes. Therefore, an additional lane would not be installed with implementation of the proposed Specific Plan, and other feasible mitigation, such as trip reduction programs, could not be guaranteed to reduce impacts to a level below significance. The impact would remain **significant and unavoidable**.

**Southbound East 14th Street Segment, South of Estudillo Avenue.** Addition of a southbound lane along the segment (Mitigation Measure #5) would reduce the V/C ratio to within the standard. However, the available right-of-way along the segment would not accommodate an additional lane. Therefore, an additional lane would not be installed with implementation of the Proposed Plan, and the impact would remain **significant and unavoidable**.

**Northbound Hesperian Boulevard Segment, South of East 14<sup>th</sup> Street.** Addition of a northbound vehicle lane along the segment (Mitigation Measure #6) would reduce the segment LOS to within the standard. However, the available right-of-way along the segment would not accommodate an

additional vehicle lane without removal of the bike lanes included as part of the street network improvements in the Proposed Plan. Therefore, an additional vehicle lane would not be installed with implementation of the Proposed Plan, and the impacts would remain **significant and unavoidable**.

**Southbound Hesperian Boulevard Segment, South of East 14<sup>th</sup> Street.** Addition of a southbound vehicle lane along the segment (Mitigation Measure #7) would reduce the segment LOS to within the standard. However, the available right-of-way along the segment would not accommodate an additional vehicle lane without removal of the bike lanes included as part of the street network improvements in the Proposed Plan. Therefore, an additional vehicle lane would not be installed with implementation of the Proposed Plan, and the impact would remain **significant and unavoidable**.

**Mixed Flow Transit Operations.** The Proposed Plan would cause potentially significant impacts to intersections in the Plan area on East 14<sup>th</sup> Street and on Hesperian Boulevard. Mitigation #1 and Mitigation #2 were identified to reduce the impact on East 14<sup>th</sup> Street and one impact on Hesperian Boulevard to less than significant. However, the Hesperian Boulevard/Thornally Drive intersection would experience an increase in delay and a change in the V/C ratio that would not be mitigated. This change in operations at the intersection would affect mixed flow transit operations. Therefore, the impact of the Proposed Plan on mixed flow transit operations would be considered **significant and unavoidable**.

# Appendix E

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## Water Supply Assessment



July 11, 2017

Tom Liao, Deputy Community Development Director  
City of San Leandro  
Community Development Department  
835 East 14<sup>th</sup> Street  
San Leandro, CA 94577



Re: Water Supply Assessment – Bay Fair Transit-Oriented Development Specific Plan

Dear Mr. Liao:

This letter is in response to your request dated April 25, 2017 for water agency consultation (Enclosure 1) concerning the Water Supply Assessment (WSA) for the Bay Fair Transit-Oriented Development (TOD) Specific Plan (Project), located in the City of San Leandro (City), which is within East Bay Municipal Utility District's (EBMUD's) Ultimate Service Boundary. EBMUD appreciates the opportunity to provide this response.

Pursuant to Sections 10910-10915 of the California Water Code, the Project meets the threshold requirement for an assessment of water supply availability based on the amount of water this Project would require, which is greater than the amount of water required by a 500-dwelling-unit project.

Please note that this WSA addresses the issue of water supply only and is not a guarantee of service, and future water service is subject to the rates and regulations in effect at that time.

### **Project Demand**

The water demand for the Project is accounted for in EBMUD's water demand projections, as published in EBMUD's Urban Water Management Plan (UWMP) 2015 (Enclosure 2). EBMUD's water demand projections account for anticipated future water demands within EBMUD's service boundaries and for variations in demand-attributed changes in development patterns. The historical water use in the Project area is approximately 230,000 gallons per day (gpd). The projected water demand at Project build-out is estimated to increase by approximately 370,000 gpd.

EBMUD's demand projections indicate both densification and land use changes in a few existing land use classifications, including commercial and residential land use areas. These changes increase EBMUD's overall demand. EBMUD's UWMP 2015 projects water demands over time, accounting for estimated variations in demand usage less conservation and recycled supply

sources as noted in the UWMP 2015, Table 4-1, Mid-Cycle Demand Projections (Table 1). Typically, EBMUD prepares a full demand study every ten years; the most recent version, the 2040 Demand Study, was completed in 2009. For planning purposes, water demands are estimated in five-year increments, but it is recognized that actual incremental amounts may occur stepwise in shorter time increments. An increase in usage by one customer in a particular customer class does not require a strict gallon-for-gallon increase in conservation by other customers in that class as, in actuality, the amount of potable demand, conservation and recycled water use EBMUD-wide will vary somewhat. In 2014, EBMUD prepared the Mid-Cycle Demand Assessment (MCDA) in order to assess any significant effects on metered water consumption caused by the 2008-2010 drought and the economic downturn that affected growth in the Bay Area. As part of the MCDA, recently updated city and county general plans were reviewed for significant changes since the 2040 Demand Study was completed, and meetings were also held with representatives from the cities of Alameda, Oakland, Richmond, and San Ramon. The MCDA concluded that, while the cities and counties might reach their build-out goals later than originally anticipated, they would still reach these goals by 2040. Accordingly, the MCDA validated the 2040 Demand Study, as the demands are expected to gradually increase back to 2040 projected demand levels as development and water use return to pre-drought and pre-recession conditions. EBMUD plans to complete another full demand study in 2019 looking out at a long-term horizon of 2050. As part of the demand study, EBMUD will be reaching out to each city and county in the service area to ask about projected development and future land use changes. The study results will be incorporated into the UWMP 2020.

**Table 1**  
**Mid-Cycle Demand Projections (UWMP 2015, Table 4-1)**

TABLE 4-1	AVERAGE ANNUAL DEMAND (MGD)	MID-CYCLE DEMAND PROJECTIONS				
		2015	2020	2025	2030	2035
PROJECTED TOTAL DEMAND	232	267	276	290	304	312
CONSERVATION <sup>1</sup>	-33	-39	-44	-51	-57	-62
NON-POTABLE WATER <sup>1,2</sup>	-9	-11	-14	-17	-18	-20
PLANNING LEVEL OF DEMAND	190	217	218	222	229	230

<sup>1</sup> See Chapters 6 and 7 for more discussion of water recycling and conservation, respectively.

<sup>2</sup> Non-potable water includes recycled water and raw water projects.

## Project Area

The Project is generally bounded to the northeast by East 14<sup>th</sup> Street, to the west by Hesperian Boulevard, and to the south by State Route 238. At build-out, the Project area will add up to 2,540 multi-family housing units and 300,000 square feet of office space, as well as the removal of approximately 161,000 square feet of retail space.

## EBMUD Water Demand Projections

Since the 1970s, water demand within EBMUD's service area has ranged from 200 to 220 million gallons per day (mgd) in non-drought years. Section 4.1 of the UWMP 2015 outlines past and current EBMUD water demand, including Figure 4.1 which shows historic water use (including metered and unmetered demands) within EBMUD's service area along with the

number of customer accounts. The 2040 water demand forecast of 312 mgd for EBMUD's service area can be reduced to 230 mgd with the successful implementation of water recycling and conservation programs, as outlined in the UWMP 2015. Current demand is lower than estimated in the MCDA as a result of the recent multi-year drought. This is because the planning level of demand may differ from the actual demand in any given year due to water use reductions that typically occur during droughts. After droughts, a rebound effect is expected wherein demand rises back to projected levels. Thus, the MCDA still reflects a reasonable expectation for growth over the long term for demand in year 2040, as the demands are expected to gradually increase back to 2040 projected demand levels as development and water use return to pre-drought and pre-recession conditions. The proposed Project's future development and operations will not change EBMUD's 2040 demand projection.

### **EBMUD Water Supply, Water Rights and the UWMP 2015**

EBMUD has water right permits and licenses that allow for delivery of up to a maximum of 325 mgd from the Mokelumne River, subject to the availability of Mokelumne River runoff and the senior water rights of other users. EBMUD's position in the hierarchy of Mokelumne River water users is determined by a variety of agreements between Mokelumne River water right holders and the terms of the appropriative water right permits and licenses.

Conditions that could, depending on hydrology, restrict EBMUD's ability to receive its full entitlement include:

- Upstream water use by senior water right holders.
- Downstream water use by riparian and senior appropriators and other downstream obligations, including protection of public trust resources.
- Variability in precipitation and runoff.

During prolonged droughts, the Mokelumne River supply cannot meet EBMUD's projected customer demands. To address this, EBMUD has completed construction of the Freeport Regional Water Facility and the Bayside Groundwater Facility, which are discussed below in the Supplemental Water Supply and Demand Management section of this assessment. EBMUD has obtained and continues to seek supplemental supplies.

The UWMP 2015, adopted on June 28, 2016 by EBMUD's Board of Directors under Resolution No. 34092-16, is a long-range planning document used to assess current and projected water usage, water supply planning, along with conservation and recycling efforts. EBMUD's water supply sources are discussed in Section 1.5.1 of the UWMP 2015. EBMUD's main water supply is the Mokelumne River, and EBMUD has rights to receive up to 325 mgd of water from this source subject to the availability of runoff, senior water rights of other users, and downstream fishery flow requirements. EBMUD also has a Long-Term Renewal Contract (Contract No. 14-06-200-5183A-LTR1) with the U.S. Bureau of Reclamation to receive water from the Central Valley Project (CVP) through the Freeport Regional Water Project in years when EBMUD's water supplies are relatively low (for more details, see Section 3.3.2 of the UWMP 2015).

During some dry years, EBMUD may purchase water transfers to help meet customer demands. Section 5.1 of the UWMP 2015 discusses EBMUD's water transfer program.

EBMUD maintains a biennial budget and five-year capital improvement program to optimize investments and maximize drinking water quality, and the reliability, safety, flexibility, and overall efficiency of the water supply system. EBMUD's most recently adopted budget, which includes capital expenditures for the delivery of water supplies to its customers, can be found at <http://www.ebmud.com/about-us/investors/budget-and-rates/>.

EBMUD complies with applicable local, state, and federal regulations in the operation of its water supply system. Figure 1-4 of the UWMP 2015 illustrates the numerous local, state, and federal agencies that may regulate EBMUD's facilities and operations.

A summary of EBMUD's demand and supply projections, in five-year increments, for a 25-year planning horizon is provided in UWMP 2015, Table 4-5, Preliminary EBMUD Baseline Supply and Demand Analysis (Table 2).

EBMUD's evaluation of water supply availability accounts for the diversions of both upstream and downstream water right holders and fishery releases on the Mokelumne River. Fishery releases are based on the requirements of a 1998 Joint Settlement Agreement (JSA) between EBMUD, United States (U.S.) Fish and Wildlife Service, and the California Department of Fish and Wildlife. The JSA requires EBMUD to make minimum flow releases from its reservoirs to the lower Mokelumne River to protect and enhance the fishery resources and ecosystem of the river. As this water is released downriver, it is, therefore, not available for use by EBMUD's customers.

**Table 2**  
**Preliminary EBMUD Baseline Supply and Demand Analysis (UWMP 2015, Table 4-5)**

TABLE 4-5		PRELIMINARY EBMUD BASELINE SUPPLY & DEMAND ANALYSIS						
SUPPLY AND DEMAND COMPARISON - NORMAL YEAR (MGD)		2015	2020	2025	2030	2035	2040	
DRY YEAR RESULTS FROM EBMUDSIM (MGD)	MOKELEMNE SYSTEM	>190	>217	>218	>222	>229	>230	
	DIFFERENCE	0	0	0	0	0	0	
	DRY YEAR RESULTS FROM EBMUDSIM (MGD)	2015	2020	2025	2030	2035	2040	
	SINGLE DRY YEAR OR FIRST YEAR OF MULTI-YEAR DROUGHT	MOKELEMNE SYSTEM	145	169	170	173	179	179
	CVP SUPPLIES <sup>2</sup>	36	35	35	35	35	35	
	BAYSIDE <sup>3</sup>	0	0	0	0	0	0	
	PLANNING LEVEL DEMAND <sup>1</sup>	190	217	218	222	229	230	
	RATIONING <sup>4</sup>	5%	6%	6%	6%	7%	7%	
	NEED FOR WATER (TAF <sup>5</sup> )	0	0	0	0	0	0	
	SECOND YEAR	MOKELEMNE SYSTEM	81	103	103	107	112	113
DRY YEAR RESULTS FROM EBMUDSIM (MGD)	CVP SUPPLIES <sup>2</sup>	71	71	71	71	71	71	
	BAYSIDE <sup>3</sup>	0	0	0	0	0	0	
	PLANNING LEVEL DEMAND <sup>1</sup>	190	217	218	222	229	230	
	RATIONING <sup>4</sup>	20%	20%	20%	20%	20%	20%	
	NEED FOR WATER (TAF <sup>5</sup> )	0	0	0	0	0	0	
	THIRD YEAR	MOKELEMNE SYSTEM	111	132	132	125	120	104
	CVP SUPPLIES <sup>2</sup>	40	40	40	40	40	40	
	BAYSIDE <sup>3</sup>	1	1	1	1	1	1	
	PLANNING LEVEL DEMAND <sup>1</sup>	190	217	218	222	229	230	
	RATIONING <sup>4</sup>	20%	20%	20%	20%	20%	20%	
	NEED FOR WATER (TAF <sup>5</sup> )	0	0	2	18	24	48	

1. Planning Level of Demand accounts for projected savings from water recycling and conservation programs as discussed in Chapters 6 and 7 respectively.

Customer demand values are based on the Mid Cycle Demand Assessment, October 2014.

2. Projected available CVP supplies are taken according to the Drought Management Program Guidelines discussed in Chapter 3.

3. For the purposes of this modeling effort, it is assumed that the Bayside Groundwater Project would be brought online in the third year of a drought.

4. Rationing reduction goals are determined according to projected system storage levels in the Drought Management Program Guidelines discussed in Chapter 3.

5. Need for Water includes unmet customer demand as well as shortages on the Lower Mokelumne River.

The available supply and demand shown in Table 2 was derived from EBMUD's baseline hydrologic model with the following assumptions:

- Customer demand values are based on the MCDA, and planning level demands account for projected savings from water recycling and conservation programs.
- EBMUD Drought Planning Sequence assumes water years 1976, 1977 and a modified 1978 hydrology.
- Total system storage is depleted by the end of the third year of the drought.
- EBMUD will implement its Drought Management Program (DMP) when necessary.

- The diversions by Amador and Calaveras Counties upstream of Pardee Reservoir will increase over time, eventually reaching the full extent of their senior rights.
- Releases are made to meet the requirements of senior downstream water right holders and fishery releases, as required by the JSA.
- EBMUD allocation of CVP supply is available the first year of a drought and subsequent drought years, according to the U.S. Bureau of Reclamation's Municipal and Industrial Shortage Policy.
- The Bayside Groundwater Project Phase 1 is available and brought online in the third year of a drought.

The UWMP 2015 concludes that EBMUD has, and will have, adequate water supplies to serve existing and projected demand within the Ultimate Service Boundary during normal and wet years but that deficits are projected for multi-year droughts. During multi-year droughts, EBMUD may require significant customer water use reductions and may also need to acquire supplemental supplies to meet customer demand.

As discussed under the DMP Guidelines section in Chapter 3 of the UWMP 2015, EBMUD's system storage generally allows EBMUD to continue serving its customers during dry-year events. EBMUD typically imposes water use restrictions based on the projected storage available at the end of September and, based on recent changes to its DMP Guidelines (summarized below), may also implement water use restrictions in response to a State of California mandate. By imposing water use restrictions in the first dry year of potential drought periods, EBMUD attempts to minimize water use restrictions in subsequent years if a drought persists. Throughout dry periods, EBMUD must continue to meet its current and subsequent-year fishery flow release requirements and obligations to downstream agencies.

The UWMP 2015 includes DMP Guidelines that establish the level of water use restrictions EBMUD may implement under varying conditions. Under the DMP Guidelines, water use restrictions may be determined based upon either projected end-of-September Total System Storage (TSS) or water use restriction mandates from the State Water Resources Control Board. When state-mandated water use restrictions exceed the reductions that would otherwise be called for based upon end-of-September TSS, EBMUD's water use reduction requirements may be guided by the applicable state mandates. Under either scenario, while EBMUD strives to keep water use reductions at or below 15 percent, if the drought is severe, mandatory water use reductions could exceed 15 percent.

Despite water savings from EBMUD's aggressive conservation and recycling programs and water use restrictions called for in the DMP Guidelines, supplemental supplies are still needed in significant, severe, and critical droughts. The proposed Project will be subject to the same drought restrictions that apply to all EBMUD customers. In addition, the proposed Project will be subject to EBMUD's regulations aimed at encouraging efficient water use, such as Sections 29 and 31 of EBMUD's Regulations Governing Water Service. Section 29, "Prohibiting Wasteful Use of Water," promotes efficient water use by EBMUD customers and includes additional restrictions on wasteful uses of potable water. Section 31, "Water Efficiency Requirements," identifies the types of water efficiency requirements (i.e., maximum flow rates for flow control devices) for water service.

## **Supplemental Water Supply and Demand Management**

The goals of meeting projected water needs and increased water reliability rely on supplemental supplies, improving reliability of existing water supply facilities, water conservation and recycled water programs.

By 2011, EBMUD completed construction of the Freeport Regional Water Facility and the Bayside Groundwater Project Phase 1 Facility to augment its water supply during drought periods. However, additional supplemental supplies beyond those provided through these facilities will still be needed, as noted above. Chapter 5 of the UWMP 2015 describes potential supplemental water supply projects that could be implemented to meet projected long-term water demands during multi-year drought periods.

The Freeport Regional Water Facility became operational in February 2011. EBMUD's ability to take delivery of CVP water through the Freeport facility is based on its Long Term Renewal Contract (LTRC) with the U.S. Bureau of Reclamation. The LTRC provides for up to 133,000 acre feet of CVP supply in a single dry year, not to exceed a total of 165,000 acre feet in three consecutive dry years. Under the LTRC, the CVP supply is available to EBMUD only in dry years when EBMUD's total stored water supply is forecast to be below 500,000 total acre feet on September 30 of each year.

EBMUD is developing the Bayside Groundwater Project in phases to provide a source of supplemental supply in dry years. Construction of the first phase was completed in 2010, allowing EBMUD to inject treated potable water into a deep aquifer in the South East Bay Plain Groundwater Basin for later extraction, treatment, and use during severe droughts. A permit from the Department of Public Health is required before the groundwater can be extracted and treated for municipal use. As described in Chapter 4 of the UWMP 2015, EBMUD's drought planning calls for using the Bayside Phase 1 Project during the third year of multi-year droughts to provide up to one mgd of water to meet customer demands. Additional information on the Bayside Project can be found in Section 5.3 and Appendix E of the UWMP 2015.

Chapter 5 of the UWMP 2015 also lists other potential supplemental water projects, including northern California water transfers, Bayside Groundwater Project Expansion, Expansion of Contra Costa Water District's Los Vaqueros Reservoir, and others that could be implemented to meet the projected long-term water supplemental need during multi-year drought periods. The UWMP 2015 identifies a broad mix of projects, with inherent scalability and the ability to adjust implementation schedules for particular components which will allow EBMUD to pursue the necessary supplemental supplies, while minimizing the risks associated with future uncertainties such as project implementation challenges and global climate change. The Environmental Impact Report that EBMUD certified for the Water Supply Management Program 2040 examined the impacts of pursuing these supplemental supply projects at a program level. Separate project-level environmental documentation will be prepared, as appropriate, for specific components as they are developed in further detail and implemented in accordance with EBMUD's water supply needs.

In addition to pursuing supplemental water supply sources, EBMUD also maximizes resources through continuous improvements in the delivery and transmission of available water supplies and investments in ensuring the safety of its existing water supply facilities. These programs, along with emergency interties and planned water recycling and conservation efforts, would ensure a reliable water supply to meet projected demands for current and future EBMUD customers within the current service area.

### **Water Conservation and Recycled Water Considerations**

The proposed Project presents opportunities to incorporate water conservation measures. Conditions of approval for the implementation of the proposed Project should require that the Project comply with the California Model Water Efficient Landscape Ordinance (Division 2, Title 23, California Code of Regulations, Chapter 2.7, Sections 490 through 495). EBMUD staff would appreciate the opportunity to meet with the City to discuss conservation measures. This meeting will explore early opportunities to expand water conservation via EBMUD's conservation programs and best management practices applicable to the Project.

Conservation strategies will be required to achieve water use reduction goals and restrictions, including compliance with Sections 29 and 31, described above, of EBMUD's Regulations Governing Water Service, and the Water Conservation Act of 2009. The Water Conservation Act of 2009 sets an overall goal of reducing per capita urban water use by 20 percent by December 31, 2020.

The Project is not currently a candidate for recycled water. The Project has a minimal irrigation demand, and providing recycled water for toilet flushing in the structures would be prohibitively expensive. The Project area is not located within the vicinity of any existing or future planned EBMUD recycled water supply pipeline. Based on the location of the Project boundaries, EBMUD currently does not anticipate providing recycled water to any of the Project's components; however, the feasibility of providing recycled water to this area may change in the future. EBMUD encourages the City and its developers to continue to coordinate closely with EBMUD during the planning of the Project to further explore the options relating to recycled water.

The Project sponsor should contact Jennifer L. McGregor, Senior Civil Engineer, at (510) 287-1030 for further information.

Sincerely,



David J. Rehnstrom

Manager of Water Distribution Planning Division

DJR:LAM:dk

sb17\_099\_BayFairTOD\_WSA\_Ltr to Liao

Tom Liao, Deputy Community Development Director

July 11, 2017

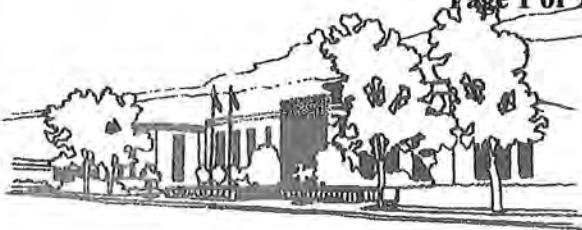
Page 9

Enclosures: 1. Letter of Request for Water Supply Assessment dated April 25, 2017

2. EBMUD Urban Water Management Plan 2015

cc: Board of Directors w/o Enclosure 2

**City of San Leandro**  
Civic Center, 835 E. 14th Street  
San Leandro, California 94577  
[www.sanleandro.org](http://www.sanleandro.org)



April 25, 2017

David Rehnstrom  
Water Services Planning  
East Bay Municipal Utility District  
375 Eleventh Street  
Oakland, CA 94607-4240

**RE: Request for Water Supply Assessment for the Proposed Bay Fair Transit-Oriented Development (TOD) Specific Plan**

Dear Mr. Rehnstrom:

Pursuant to Section 15155 of the California Environmental Quality Act (CEQA) Guidelines and Section 10910-10915 of the California Water Code, the City of San Leandro requests that EBMUD prepare a Water Supply Assessment (WSA) to determine if there is adequate water supply to meet projected demand under future implementation of the Bay Fair TOD Specific Plan (Specific Plan). EBMUD received a Notice of Preparation (see attached NOP dated March 3, 2017) for the Environmental Impact Report (EIR) and submitted comments to the City (see attached) during the 30 day public comment period.

The Specific Plan is a 20 year plan with a planning horizon of 2035, which matches the City's 2035 General Plan. The 2035 General Plan (adopted in September 2016) designates the Plan Area as the "Bay Fair Transit Oriented Development" land use classification. According to the 2035 General Plan Land Use Element, the intent of this designation is to "create a new vision for this area, including retail, office, higher density housing, open space, and public land uses. A more urban development form is envisioned, with pedestrian-scaled streets and an orientation toward BART access and transit use." The proposed Specific Plan would implement the vision for the Plan Area established in the City's 2035 General Plan and comply with the regional Plan Bay Area 2040.

The Specific Plan will include goals and policies related to land use, circulation, infrastructure, and design to fulfill the vision for the Plan Area. The Specific Plan would also establish uses and development standards for the Plan Area. For the purposes of the CEQA EIR, a reasonable and conservative estimate of buildout or growth projection associated with the proposed Specific Plan through 2035 includes development of 2,540 housing units and 300,000 square feet of office space, as well as the removal of an estimated 161,000 square feet of retail space. Because this is a plan (and not a development project), the timing, intensity and type of development within the Specific Plan area over the next 20 years are less certain. Future

Pauline Russo Cutler, Mayor

City Council:

Pete Ballew

Benny Lee

Deborah Cox

Corina N. López

Ed Hernandez

Lee Thomas



Water Supply Assessment Request – Bay Fair TOD Specific Plan  
April 25, 2017  
Page 2 of 2

development under the Specific Plan may likely require approval by State, federal and responsible trustee agencies, which may in turn rely on the programmatic EIR for the Specific Plan to render their decisions. For instance, future development projects in the Specific Plan area may need to request an EBMUD WSA on a case-by-case basis depending on each project's size and scale.

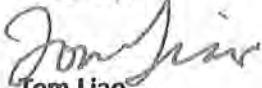
The 2035 General Plan and EIR estimated up to 1,100 new residential units in the Specific Plan area. Because the proposed Specific Plan is projecting up to 2,540 housing units to 2035, the City expects to amend its General Plan after the City Council adopts the final Specific Plan. However, the 2,540 housing units is consistent with and well below the approximately 5,400 new housing units which the General Plan covers through 2035.

The City Planning staff and its consultant team led by Raimi + Associates are currently in the process of preparing the public draft Specific Plan and draft EIR. The City anticipates publicly releasing these draft documents for public review in Summer 2017 and submitting the final Specific Plan/EIR to City Council in Fall/Winter 2017. Rincon Consulting is preparing the draft and final EIR documents.

While EBMUD has up to 90 days to prepare the WSA, the City would greatly appreciate if EBMUD is able to complete the WSA earlier if possible. The City understands that this WSA request is a required part of the environmental documentation for the project. The timing of this request coincides with the draft Plan and EIR preparation currently underway.

Please contact me, at [tliao@sanleandro.org](mailto:tliao@sanleandro.org) or (510)577-6003, if you have any questions or require additional information. Thank you for your time and assistance on this matter.

Sincerely,



Tom Liao

Deputy Community Development Director

Attachments (2)

Cc: Timothy McGowan, EBMUD  
Aaron Welch, Raimi + Associates  
Abe Leider, Rincon Consulting, Inc.  
Karly Kaufman, Rincon Consulting, Inc.



**NOTICE OF PREPARATION of an  
ENVIRONMENTAL IMPACT REPORT  
CITY OF SAN LEANDRO**

**Date:** March 3, 2017

**To:** State Clearinghouse  
State Responsible Agencies  
State Trustee Agencies  
Other Public Agencies  
Interested Organizations

**From:** Tom Liao  
Deputy Community Development Director  
City of San Leandro  
835 East 14<sup>th</sup> Street  
San Leandro, CA 94577

**Subject:** Notice of Preparation (NOP) of a Draft Environmental Impact Report for  
the Bay Fair TOD Specific Plan

**Lead Agency/Sponsor:** City of San Leandro Community Development Department

**Project Title:** Bay Fair Transit-Oriented Development (TOD) Specific Plan

Pursuant to the California Environmental Quality Act (CEQA) Guidelines, Chapter 14 California Code of Regulations, Section 15378[a], the proposed Bay Fair TOD Specific Plan is considered a "Project" subject to environmental review as its implementation is "an action [undertaken by a public agency] which has the potential for resulting in either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment." The City of San Leandro, acting as the Lead Agency, has determined that the Bay Fair TOD Specific Plan, herein referred to as "Specific Plan," could result in potentially significant environmental impacts and that an EIR will be required.

This NOP has been prepared for the EIR for the proposed Specific Plan in compliance with Section 15082 of the CEQA Guidelines. The City is soliciting comments on the scope and content of the EIR. Consistent with Section 15168 of the CEQA Guidelines, the City will prepare an EIR to address the environmental impacts associated with the proposed Specific Plan at a programmatic level. The proposed Specific Plan consists of a long-term plan that will be implemented over time in the Plan Area. No specific development projects are proposed as part of this plan. However, the program EIR may serve to streamline future environmental review of subsequent projects within the Plan Area.

**SPECIFIC PLAN LOCATION**

San Leandro is centrally located in Alameda County in the East Bay. The city is generally bound by the cities of Oakland to the north, Castro Valley to the east, Hayward to the south, as well as unincorporated Alameda County. The city is accessed by Interstates 580 (I-580) and 880 (I- 880).

The attached figure shows the Specific Plan Area within San Leandro. The Specific Plan Area encompasses 154 acres and is generally bound by E. 14 Street to the northeast, Hesperian Boulevard to the west, and the border between the City and unincorporated Alameda County to the south and southeast. The Plan Area also includes the Bay Fair BART station and parking lots.

## SPECIFIC PLAN BACKGROUND AND DESCRIPTION

The City of San Leandro 2035 General Plan (adopted September 2016) designates the Plan Area as "Bay Fair Transit Oriented Development." According to the 2035 General Plan Land Use Element, the intent of this designation is to "create a new vision for this area, including retail, office, higher density housing, open space, and public land uses. A more urban development form is envisioned, with pedestrian-scaled streets and an orientation toward BART access and transit use." Under Government Code Section 65450 et seq., a specific plan implements, and must be consistent with, the governing general plan. However, a specific plan is a separate document from the general plan and contains a greater degree of detail, including functions of zoning, land use regulations, design standards, and capital improvement plans. The proposed Specific Plan would implement the vision for the Plan Area established in the City's 2035 General Plan.

The proposed Specific Plan provides a vision for a sustainable, vibrant, and safe transit-oriented village with a diversity of land uses serving local and regional populations. It will include goals and policies related to land use, circulation, infrastructure, and design to fulfill the vision for the Plan Area. The Specific Plan would also establish uses and development standards for the Plan Area.

For the purposes of the environmental analysis, a reasonable and conservative estimate of buildout associated with the proposed Specific Plan through 2035 would include development of 2,540 housing units and 300,000 square feet of office space, as well as the removal of an estimated 161,000 square feet of retail space. These buildout estimates are consistent with the Specific Plan's planning concepts and regulations, as well as with economic analysis of anticipated development in the area, and past development activity seen in other nearby TOD areas such as Downtown San Leandro. Under CEQA Guidelines Section 15206(b)(2)(A), the proposed Specific Plan is classified as a project of "regional significance" because it includes more than 500 housing units.

More information about the Specific Plan is available on the City's website:  
<http://sanleandro.org/depts/cd/bftod>.

## PUBLIC AGENCY APPROVALS

The proposed Specific Plan would require adoption by the San Leandro City Council. The Planning Commission and other decision-making bodies would review the proposed Specific Plan and make recommendations to City Council. While other agencies may be consulted during the plan development process, their approval is not required for Specific Plan adoption. However, subsequent development under the Specific Plan may require approval of State, federal and responsible trustee agencies that may rely on the programmatic EIR for decisions in their areas of expertise.

## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The proposed Specific Plan could potentially affect the following environmental factors and each will be addressed in the EIR:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources

*Notice of Preparation (NOP) of a Draft Environmental Impact Report for the  
Bay Fair TOD Specific Plan  
Page 3 of 4*

- Geology/Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services, Schools, and Recreation
- Transportation and Traffic
- Utilities and Service Systems

The following topics are likely to be associated with less-than-significant impacts and are not expected to be evaluated in detail in the EIR:

- Agriculture and Forestry Resources
- Mineral Resources

**COMMENTS ON THE NOP**

Members of the public and public agencies are invited to provide comments in writing as to the scope and content of the EIR. The City needs to know the views of your agency as to the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with the proposed Specific Plan. Your agency will need to use the EIR prepared by the City when considering your permits or other approvals for the Specific Plan.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date, but no later than the close of the 30-day NOP review period at 5:00 p.m. on Monday, April 3, 2017.

Please send your comments to Tom Liao, Deputy Community Development Director, at the address shown above or email to [tliao@sanleandro.org](mailto:tliao@sanleandro.org) with "Bay Fair TOD Specific Plan NOP" as the subject. If you are commenting on behalf of an agency or organization, please include a contact person.

**SCOPING MEETING**

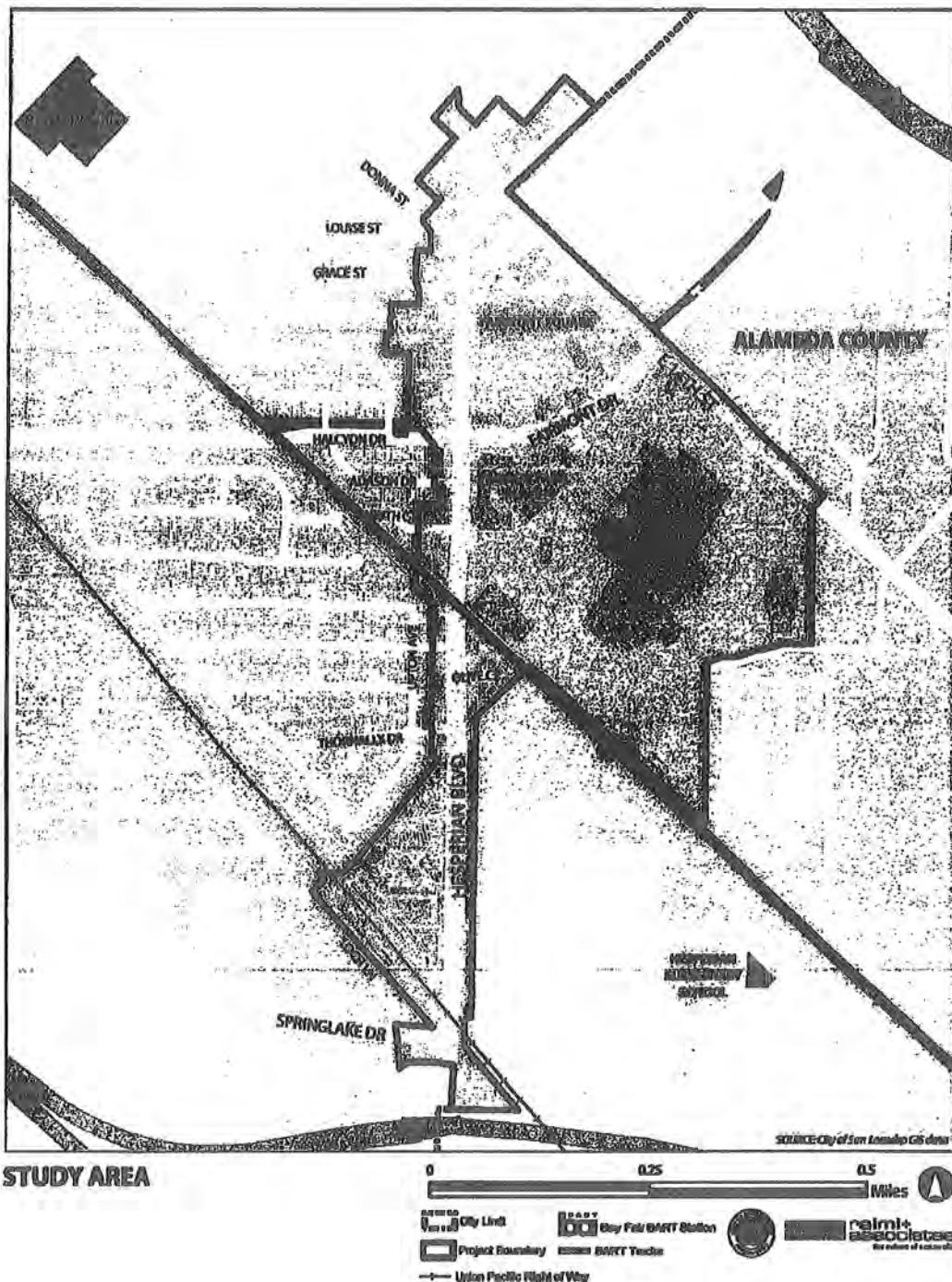
A Scoping Meeting will be held by the Planning Commission on Thursday, March 16, 2017 at 7:00 p.m. in the City Council Chambers at San Leandro City Hall (835 E. 14th Street, San Leandro).

Signature:



Name: Tom Liao, Deputy Community Development Director

Figure 1: Plan Area Location





March 29, 2017

Tom Liao, Deputy Community Development Director  
Community Development Department  
City of San Leandro  
835 East 14<sup>th</sup> Street  
San Leandro, CA 94577

**Re: Notice of Preparation of an Environmental Impact Report for the Bay Fair Transit-Oriented Development Specific Plan**

Dear Mr. Liao:

East Bay Municipal Utility District (EBMUD) appreciates the opportunity to comment on the Notice of Preparation of an Environmental Impact Report (EIR) for the City of San Leandro (City) Bay Fair Transit-Oriented Development (TOD) Specific Plan. EBMUD has the following comments.

#### **GENERAL**

Pursuant to Section 15155 of the California Environmental Quality Act Guidelines, and Section 10910-10915 of the California Water Code, a Water Supply Assessment (WSA) is required, as the project would demand an amount of water equivalent to or greater than the amount of water required by a 500-dwelling-unit project. Please submit a written request to EBMUD to prepare a WSA which should include data and estimates of future water demands for the project area. Please be aware that the WSA can take up to 90 days to complete from the day the request was received.

#### **WATER SERVICE**

EBMUD's Central Pressure Zone, with a service elevation between 0 and 100 feet, will serve the Bay Fair TOD Specific Plan. Any development project associated with the Bay Fair TOD Specific Plan will be subject to the following general requirements.

EBMUD owns and operates distribution pipelines in EBMUD rights-of-way (R/W 4979) in Cherrybrooke Commons, (R/W 3059) in Fairmont Drive, and (R/W 2410) in Loch Lane which provide continuous service to EBMUD customers in the area. The integrity of these pipelines needs to be maintained at all times. Any proposed construction activity in EBMUD rights-of-way would be subject to the terms and conditions determined by EBMUD, including relocation of the water mains and/or rights-of-way at the project sponsor's expense.

Tom Liao, Deputy Community Development Director  
March 29, 2017  
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Main extensions that may be required to serve any specific development projects to provide adequate domestic water supply, fire flows, and system redundancy will be at the project sponsor's expense. Pipeline and fire hydrant relocations and replacements due to modifications of existing streets, and off-site pipeline improvements, also at the project sponsor's expense, may be required depending on EBMUD metering requirements and fire flow requirements set by the local fire department. When the development plans are finalized, all project sponsors should contact EBMUD's New Business Office and request a water service estimate to determine costs and conditions of providing water service to the development. Engineering and installation of new and relocated pipelines and services require substantial lead time, which should be provided for in the project sponsor's development schedule.

Project sponsors should be aware that EBMUD will not inspect, install, or maintain pipeline in contaminated soil or groundwater (if groundwater is present at any time during the year at the depth piping is to be installed) that must be handled as a hazardous waste or that may be hazardous to the health and safety of construction or maintenance personnel wearing Level D personal protective equipment. Nor will EBMUD install piping or services in areas where groundwater contaminant concentrations exceed specified limits for discharge to the sanitary sewer system and sewage treatment plants. Project sponsors for EBMUD piping and services requiring excavation in contaminated areas must submit copies of all known information regarding soil and groundwater quality within or adjacent to the project boundary.

In addition, the project sponsors must provide a legally sufficient, complete and specific written remediation plan establishing the methodology, planning and design of all necessary systems for the removal, treatment, and disposal of all identified contaminated soil and/or groundwater. EBMUD will not design piping or services until soil and groundwater quality data and remediation plans have been received and reviewed and will not start underground work until remediation has been carried out and documentation of the effectiveness of the remediation has been received and reviewed. If no soil or groundwater quality data exists, or the information supplied by the project sponsor is insufficient, EBMUD may require the project sponsor to perform sampling and analysis to characterize the soil and groundwater that may be encountered during excavation, or EBMUD may perform such sampling and analysis at the project sponsor's expense.

#### **WATER RECYCLING**

EBMUD's Policy 9.05 requires that customers use non-potable water, including recycled water, for non-domestic purposes when it is of adequate quality and quantity, available at reasonable cost, not detrimental to public health and not injurious to plant, fish and wildlife to offset demand on EBMUD's limited potable water supply.

Some portions of the City's boundaries fall within and around EBMUD's San Leandro Recycled Water Pipeline service area. Any projects within the boundary of EBMUD's San Leandro Recycled Water Pipeline service area present opportunities for recycled water uses ranging from landscape irrigation, toilet flushing and other non-potable commercial and industrial applications

Tom Liao, Deputy Community Development Director  
March 29, 2017  
Page 3

that can be served by existing or expanded recycled water pipelines in the future. The current recycled water in the area is limited to secondary treated supply. State and health regulations do not allow the use of secondary treated water for some of these applications; however, the existing San Leandro Recycled Water Project could potentially expand uses in the future should the treatment level be upgraded to a tertiary level.

If EBMUD determines that recycled water will be available, then the project sponsor will be responsible for extension of recycled water pipelines to and within the proposed development. EBMUD recommends that the City and project sponsors maintain continued coordination and consultation with EBMUD, as they plan and implement the various projects within the Bay Fair TOD Specific Plan, regarding the feasibility of providing recycled water for appropriate non-potable uses.

#### **WATER CONSERVATION**

Individual projects within the Bay Fair TOD Specific Plan area may present opportunities to incorporate water conservation measures. EBMUD requests that the City include in its conditions of approval a requirement that the project sponsor comply with Assembly Bill 325, "Model Water Efficient Landscape Ordinance," (Division 2, Title 23, California Code of Regulations, Chapter 2.7, Sections 490 through 495). Project sponsors should be aware that Section 31 of EBMUD's Water Service Regulations requires that water service shall not be furnished for new or expanded service unless all the applicable water-efficiency measures described in the regulation are installed at the project sponsor's expense.

If you have any questions regarding this response, please contact Timothy R. McGowan, Senior Civil Engineer, Major Facilities Planning Section at (510) 287-1981.

Sincerely,



David J. Rehnstrom  
Manager of Water Distribution Planning

DJR:AMM:dk  
sb17\_065