RESOLUTION NO. 14-105

Resolution Of The City Council Of The City Of Emeryville Establishing Transportation Facility Impact Fees

WHEREAS, after an extensive community engagement process involving residents, business owners, and development representatives, the Emeryville City Council adopted a new General Plan on October 13, 2009 to guide the growth and development of the City of Emeryville; and

WHEREAS, as part of the General Plan ten guiding principles were enunciated that provide the platform for the goals, policies, and actions of the Plan, a few of which are relevant in the context of this resolution; namely, as set forth in guiding principle 2, a "connected place" that "fosters new connections-for automobiles, pedestrians, and bicyclists-between the western and eastern halves of the city; better connections to the Peninsula; and new and safe pedestrian and bicycle linkages to San Francisco"; and as directed in principle 4, "a diversity of transportation modes and choices", which includes "transit, car/vanpooling, bicycling, walking"; and

WHEREAS, in the context of transportation within the City, the transportation element provides that "the design, construction, operation, and maintenance of the city streets shall be based on a 'complete streets' concept that enables safe, comfortable, and attractive access and travel for pedestrians, bicyclists, motorists, and transit users" (Policy T-P-2), and that "the City's Traffic Impact Fee shall include bicycle, pedestrian, transit, and road improvements so that development pays its fair share toward a circulation system that optimizes travel by all modes" (Policy T-P-6), while the implementation program provides that the City's Traffic Impact Fee should be maintained "to insure that development pays its fair share toward a circulation system that optimizes travel by all modes" (Action T-A-3); and

WHEREAS, in order to implement these policy directives to provide a transportation facility impact fee to mitigate the impacts of increased development on the City's transporation network, on July 15, 2014, the City Council adopted Ordinance No. 14-008 establishing the "Impact Fee Ordinance" and thereby providing the City the ability to enact impact fees for the purpose of mitigating the impacts that development projects have upon the City's ability to provide public facilities;

WHEREAS, to ensure that the transportation facility impact fees adopted by this resolution do not exceed the actual transportation facility impacts attributable to the development projects on which the fee is imposed, the City Council has received and considered a report from Fehr & Peers dated March 2014 and entitled, "City of Emeryville Transportation Impact Fee Update" (attached as Exhibit "A")(the "Fehr & Peers Transportation Impact Study"); and

WHEREAS, the Fehr & Peers Transportation Impact Study demonstrates that, to fully mitigate the burdens created by development projects on the transportation network, a transportation facility impact fee based on a fee of $12,541 per peak hour trip would be needed; and

WHEREAS, the City Council now desires to adopt a transportation facility impact fee on development projects as authorized by the Impact Fee Ordinance, which fees do not exceed the justified fees needed to mitigate the actual transportation facility impacts attributable to the developments on which the fees are imposed; and

WHEREAS, to ensure that development projects remain economically feasible, the transportation facility impact fee adopted by this resolution are lower than the amount found by the Fehr & Peers Transportation Impact Study to be needed to fully mitigate the burdens created by new development projects on the need for transportation facilities; and

WHEREAS, at least ten days prior to the date this resolution is being heard, data was made available to the public indicating the amount of cost, or estimated cost, required to provide the service for which the fee or service charge is levied and the revenue sources anticipated to provide the service, including general fund revenues, in accordance with Government Code Section 66019; and

WHEREAS, at least fourteen days prior to the date this resolution is being heard, notice was provided to any persons or organizations who had requested notice, in accordance with Government Code Section 66019; and

WHEREAS, notice of the public hearing on the proposed fee was published twice in the manner set forth in Government Code Section 6062a as required by Government Code Section 66018; and

WHEREAS, a duly and properly noticed public hearing was conducted by the City Council on July 1, 2014; now, therefore, be it

RESOLVED, after review of the Fehr & Peers Transportation Impact Study, staff reports, and public comment at a public hearing thereon:

Section 1. The City Council finds as follows:

A. The foregoing recitals are true and correct.

B. The purpose of the transportation facility impact fee is to mitigate the burdens created by new development projects on the City's transportation facility network.

C. In compliance with the Impact Fee Ordinance, all transportation facility impact fees collected shall be deposited into a separate City fund to be used solely to develop transportation facilities identified in the Fehr & Peers Transportation Impact Study designed to mitigate the burdens created by new development projects on the City's transportation facility network and accomplish the goal of minimizing future vehicle travel while enhancing the transportation system for walking, bicycling, and transit use.

D. After considering the Fehr & Peers Transportation Impact Study, the testimony received at the public hearing, and the evidence in the record, the Council approves and adopts the attached Fehr & Peers Transportation Impact Study, and incorporates the Fehr & Peers Transportation Impact Study into this resolution by this reference, and further finds that new development will create a need for improvements to transportation facilities by increasing the projected level of automobile trip generation that utilize these facilities thereby leading to overuse and overcrowding of existing facilities if development of new transportation facilities designed to improve the efficiency of the street network, reduce vehicle trips, and enhance the transportation system for walking, bicycling and transit use are not provided to accommodate this development growth.

E. There is a need in the City of Emeryville for the transportation facilities identified in the Fehr & Peers Transportation Impact Study.

F. The facts and substantial evidence in the record establish that there is a reasonable relationship between the need for transportation facilities and the impacts of the development described in the Fehr & Peers Transportation Impact Study for which the corresponding fee is charged, and there is also a reasonable relationship between the fee's use and the type of development for which the fee is charged, as is described in more detail in the Fehr & Peers Transportation Impact Study attached to this resolution.

G. The cost estimates set forth in the Fehr & Peers Transportation Impact Study are reasonable cost estimates for constructing the transportation facilities, and the fees expected to be generated by new development will not exceed these costs.

H. Adoption of this resolution is exempt from the California Environmental Quality Act because the adoption of this resolution is not a project in that it is a government funding mechanism which does not involve any commitment to any specific project. (CEQA Guidelines Section 15378(b)(4).)

Section 2. The City Council hereby adopts the transportation facility impact fees at the rate of 20% of the amount as shown in Table 10 of the Fehr & Peers Transportation Impact Study, attached hereto as Exhibit "A," and incorporated herein by this reference. Land uses not included in Table 10 of the Fehr & Peers Transportation Impact Study

shall have their fee determined by the Community Development Director using the peak hour trip rates and diverted trip factors set forth in the latest edition of the Institute of Transportation Engineers trip generation manual and the fee calculation method as set forth in the Fehr & Peers Transportation Impact Study.

Section 3. The City Council may review and amend the transportation facility impact fee from time to time. For any annual period during which the City Council does not review the transportation facility impact fee, fee amounts shall be adjusted once as of July 1st by the Community Development Director based on the percentage increase in the Engineering News-Record Construction Cost Index for San Francisco, California.

Section 4. A transportation facility impact fee shall be collected by the City's Chief Building Official from all development subject to the fee.

Section 5. This Resolution shall go into full force and effect on September 13, 2014, or upon the effective date of the above-referenced Impact Fee Ordinance, whichever occurs later.

Section 6. Any judicial action or proceeding to attack, review, set aside, void or annul this resolution shall be brought within the 120-day time period as established by Government Code Section 54995.

APPROVED, by the City Council of the City of Emeryville at a regular meeting held on Tuesday, July 15, 2014.

MAYOR

ATTEST:

CITY CLERK

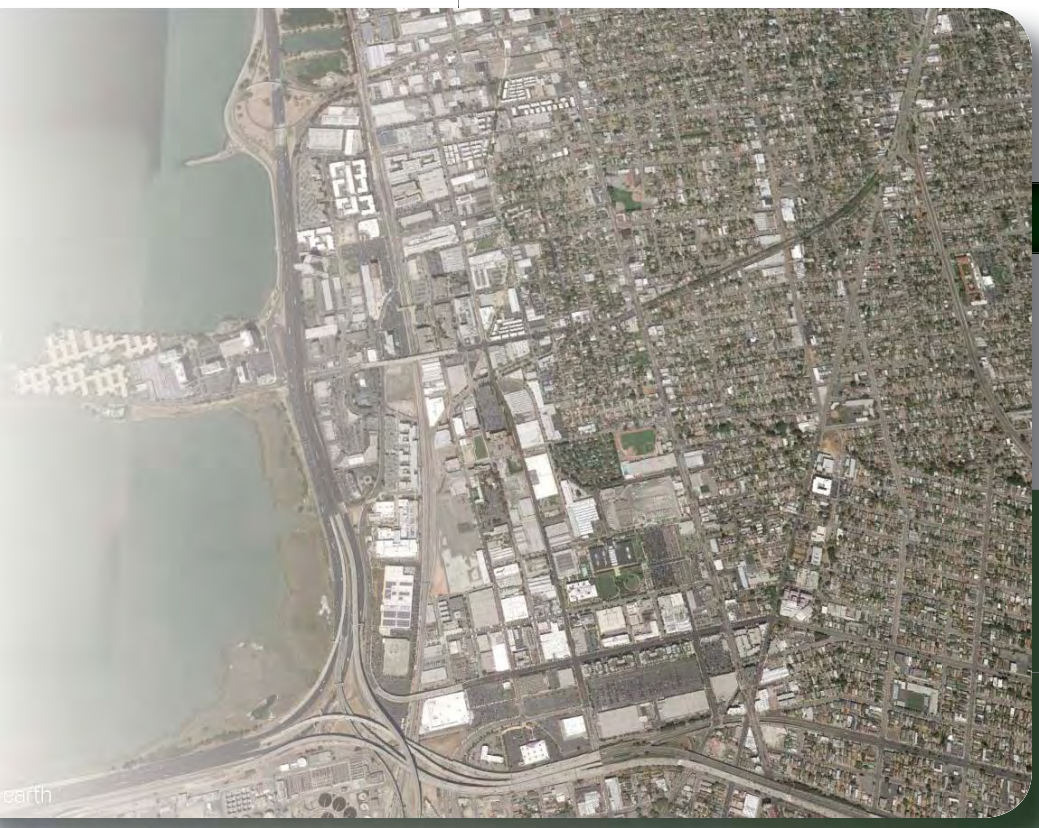
APPROVED AS TO FORM:

CITY ATTORNEY

Exhibits:

A. City of Emeryville Transportation Impact Fee Update – March 2014

CITY OF EMERYVILLE
TRANSPORTATION IMPACT FEE UPDATE



Prepared for:

City of Emeryville

March 2014

Exhibit A

FEHR & PEERS

WC10-2795

City of Emeryville

Transportation Impact Fee Update

Prepared for:
City of Emeryville

March 2014

WC10-2795

FEHR PEERS

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1. INTRODUCTION

This chapter describes the purpose of this report, including the legal requirements, analysis methodology, and report organization.

PURPOSE OF THE FEE UPDATE

This study serves as the technical foundation for an update of the City of Emeryville's Traffic Impact Fee, which was as established in 1990 by City Ordinance No. 90-8, and updated in 1998. The 1998 update primarily identified roadway capacity improvements that would need to be in place to accommodate projected development through 2010. The City has collected fees and constructed many of the improvements identified in the 1998 Traffic Impact Fee. Given that Emeryville is a built-out City with limited capacity for roadway widening to accommodate increased private vehicle trips, the updated fee program includes transportation projects that better accommodate all modes of travel, including bicycles, pedestrians and transit riders. This recognizes that improvements to one transportation system can benefit all modes of travel. For example, a bicycle trip that replaces a vehicle trip because of a better network of bicycle facilities reduces automobile congestion that would occur without a shift from vehicle to bicycle.

This study updates and extends the fee calculations from 2010 to 2030, using year 2030 land use projections, and focuses on multi-modal capital projects to reflect the *Emeryville General Plan,* adopted in October 2009 (General Plan). The General Plan places a greater emphasis on a comprehensive transportation system that accommodates all transportation modes, with key goals of reducing travel demand by autos while enhancing the transportation system for travel by walking, bicycling, and transit. The goal is to increase travel choices in Emeryville while minimizing environmental impacts associated with vehicle travel. As the program is shifting emphasis from private automobile travel to a multi-modal perspective, the fee program is being renamed the Transportation Impact Fee (TIF) program.

This report documents the analytical approach for determining the nexus between the fees and the need for transportation infrastructure caused by anticipated development in Emeryville. **Figure 1** shows the study area for the Emeryville Transportation Impact Fee program. The fee program includes multi-modal transportation infrastructure projects throughout the incorporated area of Emeryville.


San Francisco Bay
City of Berkeley
City of Oakland
City of Oakland
Bolivar Dr
Potter St
Potter St
Anthony St
Ashby Ave
Bay St
Murray St
Folger Ave
Carrison St
Haskell St
Acton St
Prince St
Woolsey St
66th St
Fairview St
Idaho St
Boise St
Harmon St
Alcatraz Ave
67th St
66th St
65th St
Peabody Ln
Ocean Ave
63rd St
62nd St
62nd St
64th St
63rd St
61st St
61st Pl
60th St
Overland Ave
Lacoste St
Frontage Rd
64th St
Shellmound St
62nd St
Vallejo St
59th St
Stanford Ave
Doyle St
Marshall St
59th St
Christie Ave
Horton St
Peladeau St
Hollis St
Doyle St
Beaudry St
57th St
Aileen St
Fremont St
56th St
55th St
54th St
54th St
54th St
53rd St
53rd St
52nd St
48th St
47th St
53rd St
46th St
45th St
45th St
Spur Alley
Doyle St
Essex St
Adeline St
44th St
43rd St
42nd St
41st St
Watts St
Sherwin St
Holden St
Hollis St
Park Ave
Horton St
40th St
39th St
Apgar St
MacArthur Blvd
37th St
36th St
Mandela Pkwy
Powell St
Admiral Dr
Commodore Dr
Captain Dr
80
580
80
580
Projects
Parks and Open Spaces
Pedestrian Priority Zone
0
500
1,000
Feet

USE OF THE TRANSPORTATION FEE

Government Code (GC) 66000 requires that fee programs comply with specific basic requirements. These basic requirements are to:

- ***Identify the purpose of the fee*** – The Emeryville TIF generates funds from new development to pay for the facilities identified as part of the General Plan, its EIR, and subsequent implementation documents such as the *City of Emeryville Bicycle and Pedestrian Plan* (adopted May 15, 2012) and *Emeryville Sustainable Transportation Plan* (March 2012) to accomplish the goal of minimizing future vehicle travel while enhancing the transportation system for walking, bicycling, and transit use.

- ***Identify how the fee will be used on the facilities to be funded through the fee*** – Funds generated by the Emeryville TIF will be used to implement a range of projects and programs derived from the General Plan and its EIR.

- ***Determine how there is a reasonable relationship between the fee's use and the type of development on which the fee is imposed*** – The fee would be imposed on future development projects in Emeryville commensurate with their projected level of auto trip generation without network enhancements based on trip generation rates from *Trip Generation Manual,* Institute of Transportation Engineers (ITE), 9th Edition. Improvements to transportation facilities included in the fee are designed to improve the efficiency of the street network, reduce vehicle trips, and enhance the transportation system for walking, bicycling, and using transit. Shifting existing and new trips that would otherwise be made by a private auto to pedestrian, bicycle and transit trips improves the efficiency of the transportation system for all users and achieves General Plan goals such as avoiding pavement additions to the street network and minimizing adverse environmental impacts associated with vehicle use.

- ***Determine how there is a reasonable relationship between the need for the public facility and the type of development on which the fee is imposed*** – The fee program is designed to accommodate and mitigate the impact of future travel demand in line with the population and employment growth in Emeryville as a 71 percent increase in population and a 46 percent increase in jobs is forecast by 2030.

- ***Determine how there is reasonable relationship between the amount of the fee and the cost of the public facility (or portion of the facility) attributable to new development*** – Because the fee will be charged based on auto trips generated by new development and is used to either

accommodate those trips or reduce existing auto trips such that the transportation system is able to accommodate future growth, there is a rational nexus between fee collection and fee usage. The improvements will also increase travel choices for the community as specified in the General Plan goals. The improvements in the fee program are not designed to fix existing deficiencies; rather they are designed to accommodate new development.

GC 66000 has been updated since the 1998 Traffic Impact Fee was adopted and the code changes are reflected in this updated document. Key changes include amendments to the code to define transportation facilities for purposes of impact fee programs to include pedestrian, bicycle, transit and traffic calming projects as well as auto-capacity related infrastructure projects. Transportation Impact Fees for housing developments that are within a transit area (in Emeryville, this is the area approximately 1/2-mile around the Amtrak Station and approximately 1/2-mile around the 40th Street transit mall) and satisfy other requirements are subject to a reduced fee.

METHODOLOGY

This report documents the connection between land uses in an urban environment and benefits from a multi-modal transportation network. The nexus between these facilities and new development that will occur under the General Plan is based on the number of Auto Trips Generated (ATG). This approach was used because the main goal of the General Plan was to reduce vehicle travel and its associated adverse environmental impacts. The transportation facilities identified for inclusion in the TIF are designed to accomplish both of these goals and the need for these improvements can be tied directly to the ATG produced by new development.

ORGANIZATION OF THE REPORT

This report contains a total of four chapters including this introductory chapter.

- *Chapter 1 – Introduction* explains the purpose and describes the study area for the fee program.
- *Chapter 2 – Fee Program Background* summarizes the current fee program and the context for the updated fee program.
- *Chapter 3 – Analysis Methodology and Results* describes the methods and summarizes the results of the analysis used to establish the nexus.
- *Chapter 4 – Financing Considerations* discusses the effect of the impact fees on the financing of the citywide transportation improvement program. A comparison of the resulting fee to other jurisdictions is also provided.

2. FEE PROGRAM BACKGROUND

The City of Emeryville established a Traffic Impact Mitigation Fee program in 1990 by City Ordinance No. 90-8, which was last updated in 1998 (Ord. 98-167). The nexus study supporting the fee program was titled *Emeryville Traffic Mitigation Fee Study* (Fehr & Peers, 1998). The fee was designed to fund capital projects to mitigate traffic impacts of new development, consistent with the 1993 General Plan. The fee was intended to maintain baseline level of service, as measured by volume to capacity ratios at intersections, and was not imposed to improve or correct service deficiencies in the baseline (1998) transportation network.

The 1998 Traffic Impact Fee included 11 roadway projects, comprised of intersection widening, improved connections for all travel modes, infrastructure for pedestrians and bicyclists, transit facilities, and traffic signal equipment upgrades. As of 2014, all but three of the projects had been completed. The following provides information on the current fee levels and the status of Projects included in the current fee.

CURRENT FEE LEVEL

In the 1998 Traffic Impact Mitigation Fee Study, the citywide fee was assessed at $943.24 per new weekday evening peak hour vehicle trip. The fee was converted to a fee per residential dwelling unit and a fee per 1,000 square feet of non-residential uses based on ITE trip generation rates. **Table 1** provides sample fees for residential, office and general retail developments based on the current traffic impact mitigation fee, which has not been updated since 1998[1] and is currently applied to projects within the City. A detailed table is provided in **Appendix A**.

TABLE 1
CURRENT (ESTABLISHED IN 1998) TRAFFIC IMPACT FEE

Land Use	Traffic Fee[3]
Apartment – per dwelling unit	$503
Office – per 1,000 square feet[1]	$895 to $1,968
Medical Office – per 1,000 square feet	$2,071
Research & Development Center – per 1,000 square feet	$784
General Retail – per 1,000 square feet[1]	$1,850 to $3,523

[1] Adjusted for inflation, the 1998 fee would be approximately $1,354 in 2014 dollars, based on government consumer price index (CPI) data as of March 2014. Many jurisdictions in the Bay Area update the fee amount on an annual basis to reflect increases in construction costs.

TABLE 1
CURRENT (ESTABLISHED IN 1998) TRAFFIC IMPACT FEE

Land Use	Traffic Fee[3]
Restaurant – per 1,000 square feet[2]	$3,603 to $16,105
Hotel – per room	$334

Notes:
1. Traffic fee range is shown; actual fee would vary depending on the size of the project.
2. Traffic fee range is shown; actual fee would vary depending on the type of restaurant, with fast-food with drive-thru at the higher end of the range.
3. Based on a unit cost of $ 943.24 per peak hour trip
Source: City of Emeryville Traffic Impact Mitigation Fee Study, 1998

CURRENT FEE PROJECTS

Table 2 presents the project list from the 1998 TIF and the current status of each project.

TABLE 2
1998 TIF PROJECT BENEFIT AND STATUS

Project	Key Benefit	Status
Christie Avenue at Powell Street	Improves vehicle operations through the Powell/Christie loop area with enhanced lane channelization, traffic signal installation and coordination, and high visibility crosswalks and curb ramps.	Complete
Shellmound Street at Christie Avenue	Improves vehicle operations with enhanced lane channelization, traffic signal modifications, and coordination as well as improved pedestrian connections and operations.	Complete
Powell Street at Hollis Street	Extending turn-pocket storage lengths on southbound Hollis Street to improve vehicle flow through the intersection and minimize vehicle queue spillback to adjacent intersection. Additional right turn-lane channelization separates bike and vehicle traffic while improving intersection operation for vehicles.	Complete
65th Street at Shellmound Street	Improves pedestrian, bicycle, and vehicular operations and safety crossing the railroad tracks.	Complete
Powell Street at I-80 Eastbound Off Ramp	Would provide additional vehicular capacity by widening the eastbound I-80 off-ramp to provide fourth lane (not complete), restriping eastbound approach to provide two through lanes and two left-turn lanes (not complete), and widening the eastbound on-ramp to provide two receiving lanes (complete).	Partially Complete

TABLE 2
1998 TIF PROJECT BENEFIT AND STATUS

Project	Key Benefit	Status
40th Street at Horton Street	Signalize intersection and provide left-turn phasing (completed) to improve pedestrian access across 40th Street at the Emery-go-Round Stop, and improve vehicle access to/from the site street. Modify the southbound approach to provide southbound left-turn and through-right shared lane (not complete).	Partially Complete
Horton-Landregan-Stanford Connections	Provides a new north/south connection for vehicle, transit, and bicycle traffic, and provides a direct connection to the Amtrak Station to serve transit riders.	Complete
40th Street at San Pablo Avenue	Widen Street and remove parking and bike lane to accommodate eastbound right-turn lane with overlap phase (not complete). Remove parking on east side of San Pablo Avenue to improve northbound left-turn channelization (complete). Benefit would improve transit access through the intersections and reduce vehicular delay.	Partially Complete
Shellmound Street Corridor	Improves vehicle and bicycle circulation through Emeryville, connecting areas west and east of the railroad as well as connections to BART to serve Emery-Go-Round; sidewalks, high visibility crossings, and curb ramps to improve pedestrian circulation; transit bus stops to serve transit riders.	Complete
Hollis Street Corridor Signal Interconnect	New traffic signals and traffic signal interconnect between adjacent signalized intersections optimizes vehicle flow. Remaining improvements include interconnect cable between 59th and 64th as well as 53rd to Park Avenue.	Complete
40th Street Signal Coordination	Provides improved signal coordination to optimize vehicle flow.	Complete

Source: 1998 TIF, and Fehr & Peers, 2014.

PROPOSED FEE PROGRAM

As shown in Table 2 above, the current fee program is primarily (though not exclusively) focused on projects that add vehicular capacity to the roadway system. Based on the policy direction from the General Plan, the updated fee program intends to incorporate transportation projects for all roadway users, not just motorists. The project list has therefore been expanded to include a range of transportation improvements, including roadway widening, intersection improvements, bikeways, pedestrian improvements, and transit projects throughout the city.

Based on the General Plan, Emeryville's overall ***goals*** for transportation system are:

- A comprehensive transportation system (T-G-1) — A transportation system that is efficient, safe, removes barriers (e.g. accessibility near freeways and rail lines), and optimizes travel by all modes.
- Universally accessible (T-G-2) — A transportation system that meets the needs of all segments of the population, including youth, seniors, persons with disabilities, and low-income households.
- Multi-modal (T-G-3) — A transportation system that eliminates the necessity of owning and/or driving personal vehicles because of the availability of convenient and accessible alternative modes of transportation.

The General Plan provides the policy foundation for the proposed TIF. Examples of relevant ***policies*** include:

- ***Policy T-P-2 –*** The design, construction, operation, and maintenance of city streets shall be based on a "complete streets" concept that enables safe, comfortable, and attractive access and travel for pedestrians, bicyclists, motorists, and transit users of all ages and abilities.
- ***Policy T-P-6 –*** To the extent allowed by law, the City's Traffic Impact Fee shall include bicycle, pedestrian, transit, and road improvements such that development pays its fair share toward a circulation system that optimizes travel by all modes.
- ***Policy T-P-12 –*** The City will plan, upgrade, and maintain pedestrian crossings at intersections and mid-block locations by providing safe, well-marked crosswalks with audio/visual warnings, bulb-outs, and median refuges that reduce crossing widths.
- ***Policy T-P-23 –*** On-street bike routes in the City's Bicycle and Pedestrian Plan shall be designated as either Class II (bike lanes) or Class III (signed routes without lanes), as appropriate. These designations are not part of the General Plan and may be changed as circumstances dictate.
- ***Policy T-P-31 –*** Develop and implement transit stop amenities such as pedestrian pathways approaching stops, benches, traveler information systems, shelters, and bike racks to facilitate transit stops as place-making destinations and further the perception of transit as an attractive alternative to driving.

This proposed TIF is consistent with the City's goals and policies on sustainability and multi-modalism as presented in the General Plan. The General Plan Circulation element focuses on shifting away from auto-dominated transportation networks to expanding opportunity to travel by all modes, and providing Emeryville residents and workers more choice in how they travel; thereby reducing vehicle congestion. This increased emphasis on making alternative transportation modes a viable option will allow the City to work towards improving environmental quality through the reduction of emissions (particularly

greenhouse gas emissions), encouraging healthier lifestyles, and supporting economic development within the city.

The nexus analysis presented in the next chapter describes how this package of multi-modal transportation improvements was identified and calculates the fees that could be collected from new developments to fund these improvements.

3. LAND USE PROJECTIONS AND TRAFFIC FORECASTING

This chapter describes the methods used to determine the nexus between new developments in Emeryville and the needed roadway and multi-modal improvements needed to serve new development. The focus of the fee program is developing a comprehensive, multi-modal transportation system that would accommodate expected future travel demand while balancing the needs of all users.

The technical analysis for this study was completed through a number of steps. Each is listed below, along with a brief description, how these steps were applied to Emeryville and the results of the fee calculations.

STEP 1 – TIF PROJECT IDENTIFICATION

The transportation infrastructure needed to serve Emeryville in 2030 would consist of a variety of improvement projects including intersection improvements, roadway widening, pedestrian connections, new bikeways, and transit infrastructure. A variety of reference documents, including the General Plan, Bicycle and Pedestrian Plan, Sustainable Transportation Plan, recently completed environmental documents, and other planning studies, have identified specific improvements that would provide the multi-modal network necessary to serve Emeryville in 2030.

The following criteria were used to select the improvement projects to be included in the proposed TIF:

- Specific intersection and/or corridor improvements that would alleviate traffic congestion at locations throughout the City, as identified in recent environmental documents and other planning studies.
- Bicycle, pedestrian, and transit projects that would complete the network for these travel modes and make these modes more attractive, easy, and convenient alternatives to single-occupancy vehicle travel. Making alternative modes of transportation convenient, viable options through comprehensive bicycle, pedestrian, and transit networks can help reduce peak period traffic demand by providing Emeryville residents and workers travel mode choices. These improvements would also reduce traffic levels along congested corridors in Emeryville that cannot feasibly be mitigated with capacity enhancing improvements.
- Transportation Demand Management (TDM) measures that help reduce peak period traffic demand. These measures would also reduce traffic levels along congested corridors in Emeryville that cannot feasibly be mitigated with capacity enhancing improvements.

Table 3 describes 28 projects that are being considered for inclusion in the TIF along with a preliminary cost estimate for each project. For projects identified from the Bicycle and Pedestrian Master Plan, the cost was obtained from that document. For projects identified in the Capital Improvement Plan (CIP), costs were obtained from the CIP project fact sheets. The location of these projects was shown previously on Figure 1. These improvement projects, located throughout the City, consist of projects such as transit stop amenities, bicycle and pedestrian enhancements, new traffic signals and intersection widening, traffic signal upgrades to provide bicycle detection, as well as key connections in the City's bicycle network, pedestrian improvements, and transit projects.

The infrastructure improvements projects included in the TIF are estimated to have an overall cost of about $101 million, when including design, environmental review, City staff time, and construction contingency. **Appendix B** provides detailed information about each project proposed to be included in the TIF.

TABLE 3
2014 EMERYVILLE TRANSPORTATION IMPACT MITIGATION FEE UPDATE
PRELIMINARY PROJECT DESCRIPTIONS AND COST ESTIMATES

Map #	Project	Type	Description	Cost	
1.	Citywide Transit Improvements	Transit	Add primary and secondary stop amenities at approximately 32 stops, 9 bus bulb-outs, signal modifications, additional transit vehicles and pedestrian enhancements (Bike/Ped Plan Projects T.1, T.3-T.17 and Emeryville Transit Study).	Bus Shelters	$640,000
				Real time signs	$640,000
				Transit Vehicles	$500,000
				Bulbouts	$360,000
				Sidewalk Improvements	$100,000
				Signal Modifications	$100,000
				Bike racks	$7,500
				Total	**$2,347,500**
2.	Powell Street Multi-Modal Phase 1	Multi-modal	Reconfigure Powell Street around Christie Avenue to better accommodate bicycles, pedestrians and transit vehicles enhancements (Bike/Ped Plan Projects B.9A and S.1A).		$3,335,000

TABLE 3
2014 EMERYVILLE TRANSPORTATION IMPACT MITIGATION FEE UPDATE
PRELIMINARY PROJECT DESCRIPTIONS AND COST ESTIMATES

Map #	Project	Type	Description	Cost	
3.	Christie Bay Trail	Multi-modal (non-motorized)	Project includes 2 new crosswalks, traffic signal modifications and a multi-use path between Shellmound Street and Powell Street. (C.16, P.18, B.4)		$480,000
4.	ECCL Path	Multi-modal (non-motorized)	Construct multi-modal path along western edge of ECCL campus between 53rd Street and 47th Street. (Bike/Ped Plan Project P.4, P.5).		$750,000
5.	South Bayfront Bridge and Horton Landing Park Paths	Multi-modal (non-motorized)	Build the South Bayfront Bridge over railroad from Ohlone Way to Horton Landing Park. (Bike/Ped Plan Projects P.17, B.26). Construct new multi-use paths from Stanford Avenue at Horton Street o South Bayfront Bridge and east-west connection from Horton Street at 53rd to South Bayfront Bridge (Bike/Ped Plan Projects P.7, B.3). May be opportunities for partial Grant Funding. (CIP 2014)		$14,549,000
6.	San Pablo Avenue Mid-block Crossing	Pedestrian	Install HAWK Beacon at San Pablo Ave/ Yerba Buena Ave between 40th St and Adeline St. (Bike/Ped Plan Project C.9).		$344,100
7.	Shorebird Park Connections	Multi-modal (non-motorized)	Improve existing sidewalk to accommodate multi-use path. At southwest corner of Access Road/ Frontage Road, reduce turning radius and realign pedestrian push button (Bike/Ped Plan Projects P.15 and SP.3).		$220,000
8.	Spur Alley Bicycle Treatments	Multi-modal (non-motorized)	Extend bike route on Spur Alley from 53rd Street to Hollis and provide enhanced crossing treatments at 53rd, 45th and Doyle Streets (Bike/Ped Plan Projects B24, B.28, I.8, I.9, P.19, C.5, and C.17).	B.24 I.8 I.9/C.17 C.5/P.19/B.28 **Total**	$3,300 $320,500 $320,500 $256,000 **$900,300**
9.	Railroad Quiet Zone	Multi-modal	Install 4 quadrant gates at 67th, 66th, and 65th Streets (CIP 2014).		$4,035,000

TABLE 3
2014 EMERYVILLE TRANSPORTATION IMPACT MITIGATION FEE UPDATE
PRELIMINARY PROJECT DESCRIPTIONS AND COST ESTIMATES

Map #	Project	Type	Description	Cost
10.	I-80/Powell Off Ramp Improvements	Automobile Capacity	Reconstruct off-ramp to provide dual left-turn and right-turn lanes on the off-ramp at Powell Street; reconstruct the southeast corner; widen the north side and provide enhanced bus stop (1998 TIF).	$450,000
11.	Christie Avenue/ Powell Street	Automobile Capacity	Widen the south side of Powell Street bridge and widen west side of Christie Avenue to accommodate second westbound left-turn lane and a southbound left-turn lane (Marketplace EIR).	$4,600,000
12.	Bicycle and Pedestrian Plan Implementation	Multi-modal (non-motorized)	Includes implementation of minor projects identified in the bicycle and pedestrian master plan, including signage, striping, and directional signs. Example projects included are B.10, B.13, B.15, SP.2, SP.4, SP.5, I.4, B.16, S.12, S.10, B.12, B.23, I.7, B.22, SP.2, P.14. Individual project costs range from $500 to $20,000, with an average cost of less than $10,000.	$300,000
13.	40th Street/ Horton Street	Multi-Modal	Restripe to provide southbound left-turn pocket and video detection for bicyclists (Pixar EIR).	$59,500
14.	40th Street/Emery Street	Automobile Capacity	Eliminate parking to provide southbound left-turn lane and modify signal operations to provide protected north/south left-turn phasing (Site B Study).	$87,000
15.	Transit Center Plaza and Platform Extension	Pedestrian	Pedestrian Plaza between Amtrak Station and the proposed EmeryStation West office building. The Plaza will include new landscaping, hardscape, lighting and street furniture. (CIP 2014)	$1,042,100

TABLE 3
2014 EMERYVILLE TRANSPORTATION IMPACT MITIGATION FEE UPDATE
PRELIMINARY PROJECT DESCRIPTIONS AND COST ESTIMATES

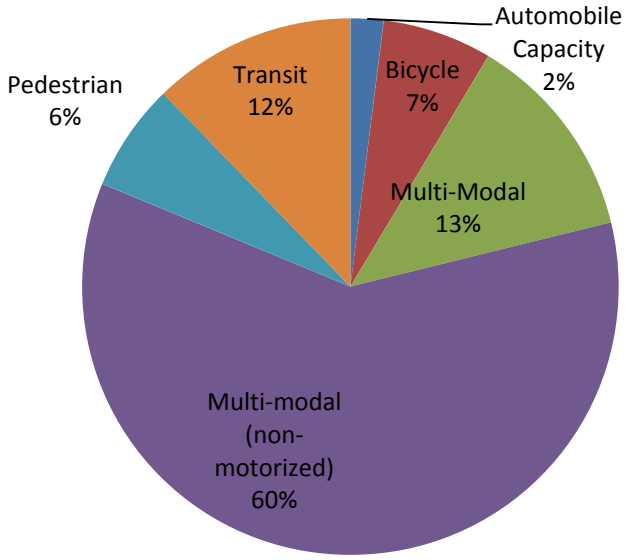
Map #	Project	Type	Description	Cost
16.	Public Parking and Bus Bays at Transit Center	Transit	Project would provide 125 public parking spaces for the Amtrak station and up to six bus bays for transit connections to the Amtrak station. (CIP 2014) Cost includes $4.230 million in remediation, which is not included in the fee calculations.	$8,431,000
17.	Doyle Street Bicycle Boulevard	Bicycle	Extend Bicycle Boulevard from 59th Street to 55th Street and install protected crossing of Powell Street (Bike/Ped Plan Project B.20, I.6, CIP 2014).	$275,000
18.	Hollis Street Sidewalk	Pedestrian	Widen sidewalks on Hollis Street from 45th Street to 53rd Street (Bike/Ped Plan Project S.6).	$603,000
19.	Adeline/San Pablo/ Macarthur/ Peralta "Star" Intersection	Multi-modal (non-motorized)	Construct landscaping and crossing improvements enhancements (Bike/Ped Plan Projects C.8 and I.5); May be able to obtain grant funding.	$456,000
20.	Ped-Bike Bridge over I-80: 65th St to Frontage Rd	Multi-modal (non-motorized)	Build pedestrian/bicycle bridge over I-80 to connect with Bay Trail (Bike/Ped Plan Projects C.1 and B.25).	$18,500,000
21.	Horton Street and Overland Avenue from 40th Street to 62nd Street	Bicycle	Improve function of north/south bicycle facilities through numerous treatments to prioritize bicycle travel over other modes (Bike/Ped Plan Project B.21).	$2,015,000
22.	Emeryville Greenway extension from Powell St south to Stanford Ave at Horton St	Multi-modal (non-motorized)	Construct new pedestrian path (Bike/Ped Plan Project P.6, C.7)	$1,350,000
23.	40th Street/ Harlan Street Signalization	Multi-Modal	Install traffic signal (CIP 2014, Bike/Ped Plan Project C.2).	$290,000

TABLE 3
2014 EMERYVILLE TRANSPORTATION IMPACT MITIGATION FEE UPDATE
PRELIMINARY PROJECT DESCRIPTIONS AND COST ESTIMATES

Map #	Project	Type	Description	Cost	
24.	Sherwin Area Improvements	Pedestrian	Install sidewalks per the Park Avenue District Plan on portions of Sherwin Avenue, Halleck Street, Hubbard Street, Horton Street, and Holden Street in addition to crossing treatments (Bike/Ped Plan Project S.2, S.3, S.4, S.5, S.13, P.2, C.3, and C.2).	S.2	$593,000
				S.3	$571,550
				S.4	$300,000
				S.5	$663,200
				S.13	$400,000
				P.2/C.4	$314,600
				C.3	$1,500
				Total	**$2,843,850**
25.	Bike Sharing Program	Bicycle	Develop and implement Citywide bike sharing program (from Emeryville Sustainable Transportation Plan).		$600,000
26.	Bicycle Parking	Bicycle	Install bicycle parking at locations throughout City (from Emeryville Sustainable Transportation Plan).		$200,000
27.	Traffic Signal Enhancements	Bicycle	Install video detection for bicyclist at all signalized intersections (from Emeryville Sustainable Transportation Plan and CIP 2014).		$490,000
28.	Emery-go-Round Bus Yard Acquisition	Transit	Acquire a bus yard site for the Emery-go-Round (CIP 2014).		$1,000,000
Total Project Costs					$70,568,350
Soft Costs: Design, Environmental, Mobilization, Construction Administration, and Contingency (40%)					$28,227,340
Preparation of Transportation Fee Study					$200,000
City Administrative Costs (2%)					$1,979,914
Total Cost					**$100,975,604**

See Project Sheets for detailed information on each project.
Source: Fehr & Peers, 2014

The projects are identified by their primary mode of benefit, including bicycle, pedestrian, transit, automobiles, non-motorized multi-modal (such as shared-use paths), and multi-modal for all travel modes. The percentage of the fee allocated to each of the various project types is summarized in the chart to the right, which shows that multi-modal non-motorized projects represents 60 percent of the total projects cost. This is primarily due to the high cost of the proposed South Bayfront and I-80 bicycle/pedestrian bridges.



During development of updated TIF, a number of improvements were considered, but ultimately not included in the TIF for a variety of reasons. These projects are summarized in **Table 4.** Grant funding has already been awarded from some projects, some have already been implemented, and other Projects will be conditioned on future adjacent development or are dependent on redevelopment of the surrounding area.

TABLE 4
PROJECTS CONSIDERED BUT ULTIMATELY NOT INCLUDED TIF

Project	Type	Description	Cost	Notes
45th Street/Hollis	Multi-Modal	Install traffic signal (CIP 2014).	$300,000	Project removed as it would be developer funded.
Greenway at 65th, 66th, and 67th Street	Multi-modal (non-motorized)	Install enhanced crossing treatments (Bike/Ped Plan Project I.1).	$115,200	Project completed.
Temescal Creek	Multi-modal (non-motorized)	Construct pedestrian pathway from Temescal Park to San Pablo Avenue (Bike/Ped Plan Project P.11).	$620,000	Project to be considered at a later date.

TABLE 4
PROJECTS CONSIDERED BUT ULTIMATELY NOT INCLUDED TIF

Project	Type	Description	Cost	Notes
45th Street Bicycle Boulevard	Bicycle	Install bicycle boulevard signage and pavement markings between Horton Street and San Pablo Avenue (Bike/Ped Plan Project B.17).	$7,500	Project completed.
Joseph Emery Path	Multi-modal (non-motorized)	Construct new multi-use path with redevelopment or modification of AC Transit facility and provide enhanced pedestrian crossings of the path and 45th and 47th Streets (Bike/Ped Plan Projects P.3, C.6, B.8, I.2).	$792,800	Project to be considered with redevelopment
Pickleworks Path	Multi-modal (non-motorized)	North-south multi-use path connecting Doyle St to 53rd St at Pickleworks property (Bike/Ped Plan Projects P.5 and B.11).	$260,000	Project requires right-of-way acquisition and is a long-term plan.
Overland Multi-use Pathway	Multi-modal (non-motorized)	Extend existing Class I bikeway on Overland Avenue from 65th Street to City Limits (Bike/Ped Plan Project B.7 and P.12).	$198,200	
Overland Avenue Sidewalk	Pedestrian	Construct a sidewalk south of 64th Street on the east side and north of 64th Street on the west side of Overland Ave (Bike/Ped Plan Project S.7).	$712,800	
62nd Street Bikeway	Bicycle	In conjunction with expansion of the Doyle-Hollis park, replace bike boulevard with Class I path (Bike/Ped Plan Project B.1b).	$338,800	
62nd Street Bikeway	Bicycle	Extend bike boulevard between Horton and Hollis Streets (Bike/Ped Plan Project B.1a).	$1,300	

TABLE 4
PROJECTS CONSIDERED BUT ULTIMATELY NOT INCLUDED TIF

Project	Type	Description	Cost	Notes
59th Street Bicycle Boulevard	Bicycle	Install additional signing and pavement markings, in addition to video detection on 59th Street at Hollis Street (Bike/Ped Plan Project B.19).	$15,000	Project completed.
Horton Landing Park (South)	Multi-modal (non-motorized)	Install a Class I path from Horton Landing Park to the intersection of Sherwin Avenue and Halleck Street (Bike/Ped Plan Project B.6);	$640,000	To be completed with development of adjacent parcel.
Yerba Buena Path	Pedestrian	Mid-block north-south pedestrian path between San Pablo Ave and Emery St at Pak N Sav (Bike/Ped Plan Project P.16).	$67,500	Project on private property.
Ex'Pressions College Path	Pedestrian	Construct new path in conjunction with redevelopment connecting Christie Avenue at 65th Street with Shellmound Street at 66th Street (Bike/Ped Plan Project P.13).	$202,500	Project requires redevelopment of adjacent parcels.
66th and 67th Street Sidewalks	Pedestrian	Construct sidewalks on 66th and 67th Streets between Shellmound Street and Hollis Street (Bike/Ped Plan Project S.8 and S.9).	$798,400	Project requires redevelopment of adjacent parcels.
Anna Yates Path	Pedestrian	Provide north-south pedestrian path through Anna Yates School Between 43rd and 41st Streets, south of Salem Street in Triangle neighborhood (Bike/Ped Plan Project P.10).	$94,500	Project requires redevelopment of adjacent parcels.

TABLE 4
PROJECTS CONSIDERED BUT ULTIMATELY NOT INCLUDED TIF

Project	Type	Description	Cost	Notes
San Pablo Avenue from 36th St to 53rd St	Pedestrian	Consider greening study for San Pablo Avenue (e.g. installation of bioswales in bulb-outs at intersections) to improve aesthetic of street and reduce run-off, provide pedestrian improvements, and calm traffic. Install parklets where feasible (Bike/Ped Plan Project E.2).	$1,800,000	
East-west on 53rd St from Horton St to San Pablo Ave	Multi-modal (non-motorized)	Opportunities to improve 53rd St and create Temescal Greenway, including bioswales, narrowing roadway and bicycle and pedestrian enhancements (Bike/Ped Plan Projects B.18, E.1).	$2,318,100	
Powell Street Multi-Modal Phase 2	Multi-modal	Continued improvements around Powell Street/Christie Avenue to better accommodate bicycles, pedestrians and transit vehicles enhancements (Bike/Ped Plan Projects B.9B and S.1B, CIP 2014).	$16,430,000	
Horton Street Traffic Calming	Bicycle	Design and installation of traffic calming measures on Horton Street between 62nd Street and Sherwin Avenue to reduce traffic volumes below thresholds for bicycle boulevard.	$56,800	Project overlaps with other planned projects.
Safe Routes to Schools (SR2S)	Pedestrian	Crossing enhancements at 43rd, 45th, and 47th Street at San Pablo Avenue, including RRFBs, bulbouts, median and signal modifications. (Projects C.11, C.12, C.13)	$425,000	SR2S Grant funding identified.
40th Street Transit Zone	Transit	Install shared lane markings (SP.1).	$10,200	Project Completed.

Source: Fehr & Peers, 2014

STEP 2 – IDENTIFY EXISTING DEFICIENCIES

The current TIF was established in 1990 by City Ordinance No. 90-8, and updated in 1998. This document serves as an update to the 1998 plan and carries forward improvements that have not yet been completed. Analysis contained in the 1998 TIF identified the Shellmound Way/Christie Avenue intersection as deficient. No other intersections with improvements included in the 1998 TIF were identified as being deficient in 1998.

The General Plan EIR identified deficient operations at the I-80 Eastbound Ramps/Powell Street and Powell Street/Christie Avenue intersection based on 2006 conditions. Deficient operations were defined as level of service E or F, indicating long delays, the potential for queue spillback between intersections and reduced mobility for roadway users, including automobiles and transit. A recent study of transit performance for the Emery-go-Round system identified significant delays traveling through the Powell/ Christie loop area which periodically delayed transit vehicles and created uncertainty in the schedule of buses that can affect the perceived reliability of transit systems and discourage ridership.

With the adoption of the General Plan, the City eliminated the Level of Service D standard for vehicles, recognizing that developing a transportation system based on vehicle level of service with minimal regard for bicycle, pedestrian, and transit users creates a bias that unintentionally but inherently ignores overall mobility and conditions for non-auto road users and perpetuates a system that focuses on expanding vehicle capacity, which can reduce the quality of service for pedestrians and bicyclists. However, the General Plan also recognizes that some roadway enhancements are necessary to maintain vehicle flow for transit vehicles.

The improvement identified at the I-80 Eastbound Ramps/Powell Street in the 1998 has not been fully implemented and will be included in the updated TIF as fees have already been collected from other developments to implement this improvement. Therefore, for purposes of calculating the fee, this intersection is not considered deficient in the baseline condition.

At the Christie Avenue/Powell Street intersection, improvements included in the 1998 TIF have been implemented. As this intersection was identified as deficient for the purposes of the baseline for this TIF, only a portion of the cost for identified improvements at this intersection will be allocated to new development.

STEP 3 – CALCULATE NEW DEVELOPMENT

By definition, a jurisdiction develops a fee program to charge fees to new developments to fund transportation improvements necessary to serve the demand and impacts generated by that new development in the jurisdiction. Thus, only the proportion of cost relative to the amount of usage to new development can be included in the fee program and charged to new developments. Different methodologies were used for traffic capacity enhancing projects (i.e., intersection and other street improvements) and non-capacity enhancing projects (i.e., bicycle, pedestrian, and transit projects) to calculate the cost of each project attributable to new developments. Both methodologies are described below.

TRAFFIC CAPACITY ENHANCING PROJECTS

For traffic capacity enhancing projects, such as intersection improvements and roadway widening, an existing deficiency is identified at the Powell Street/Christie Avenue intersection. For projects at this intersection, the cost of the improvement is divided between existing traffic, traffic generated by non-Emeryville development, and traffic generated by new Emeryville development.

For improvement projects on facilities that are not subject to an existing deficiency, the need for the improved facility is generated by new development rather than by existing transportation problems. Therefore, the cost of the improvement is divided between new non-Emeryville development, and new Emeryville development.

The Emeryville Travel Demand Model, developed for analyzing the General Plan, was used to estimate the proportion of existing traffic, new non-Emeryville traffic, and new Emeryville City traffic using each capacity enhancing improvement project in 2030 where an existing deficiency was identified. See the General Plan Environmental Impact Report (EIR) for additional details.

NON-CAPACITY ENHANCING PROJECTS

Non-capacity enhancing projects, such as bicycle and pedestrian improvements, would benefit both existing and new Emeryville residents and workers. **Table 5** shows the existing and expected growth in number of residents and workers in Emeryville. New population and jobs are expected to be about 54 percent of the total residential population and employee population in 2030.

TABLE 5
GROWTH IN POPULATION AND JOBS

	Existing	Growth	2030[1]	Total Growth	Annual Growth Rate
Population[2]	9,727	6,873	16,600	71%	2.7%
Jobs[3]	20,552	9,448	30,000	46%	1.9%
Total	30,279	16,321	46,600	54%	2.45%

1. Buildout population rounded to nearest hundred; employment rounded to nearest thousand.
2. Buildout population was calculated assuming 1.79 persons per household.
3. 2008 existing jobs calculated using ABAG projections for 2005 and 2010 employment.

Source: Department of Finance 2008; ABAG Projections 2007; City of Emeryville, 2008; and Dyett & Bhatia, 2008.

However, the shift of existing trips from auto modes to non-auto modes would increase available capacity for new vehicle trips on the roadway system and accommodate the vehicle trips that are expected to be generated by new development. Considering that the non-capacity enhancing projects would generally serve the local residents and workers, minimal non-Emeryville usage is expected. Therefore, the cost of non-capacity enhancing projects is not allocated to non-Emeryville growth.

Table 6 shows the total cost of each improvement project and a breakdown of the cost allocated to existing deficiencies, Emeryville growth, regional (i.e., non-Emeryville City) growth, and other considerations. For some projects, a portion of the cost includes soil remediation which is not included in the fee. Based on requirements of GC 66000, only the Emeryville growth share of the project may be included in the calculation of the TIF. The fee share of the project improvement cost that can be allocated to the TIF is about $88 million, corresponding to about 87 percent of the total cost of the improvement projects. This total includes approximately $62 million for construction costs, approximately $25 million for environmental review, design, contingency and other unknown costs that could arise (reflects 40 percent of the total preliminary construction cost estimate), and costs associated with development of the fee and City administrative costs. Note that right-of-way acquisition costs are not included in the fee.

TABLE 6
ALLOCATION OF PROJECT COSTS TO FEE PROGRAM

Map #	Project	Type	Total Cost	Percent of Cost to Include in Fee		Portion of Cost to include in Fee
				Existing/Other	Emeryville Growth	
1.	Citywide Transit Improvements	Transit	$2,347,500	0%	100%	$2,347,500
2.	Powell Street Multi-Modal Phase 1	Multi-modal	$3,350,000	0%	100%	$3,350,000
3.	Christie Bay Trail	Multi-modal (non-motorized)	$480,000	0%	100%	$480,000
4.	ECCL Path	Multi-modal (non-motorized)	$750,000	0%	100%	$750,000
5.	South Bayfront Bridge	Multi-modal (non-motorized)	$14,549,000	0%	100%	$14,549,000
6.	San Pablo Avenue Mid-block Crossing	Pedestrian	$344,100	0%	100%	$344,100
7.	Shorebird Park Connections	Multi-modal (non-motorized)	$220,000	0%	100%	$220,000
8.	Spur Alley Bicycle Treatments	Multi-modal (non-motorized)	$900,300	0%	100%	$900,300
9.	Railroad Quiet Zone	Multi-modal	$4,035,000	0%	100%	$4,035,000
10.	I-80/Powell Off Ramp Improvements	Automobile Capacity	$450,000	0%	100%	$450,000
11.	Christie Avenue/ Powell Street	Automobile Capacity	$4,600,000	85%	15%	$690,000
12.	Bicycle and Pedestrian Plan Implementation	Multi-modal (non-motorized)	$300,000	0%	100%	$300,000
13.	40th Street/Horton Street	Multi-Modal	$59,500	0%	100%	$59,500
14.	40th Street/Emery Street	Automobile Capacity	$87,000	0%	100%	$87,000
15.	Transit Center Plaza and Platform Extension	Pedestrian	$1,042,100	80%	20%	$208,420
16.	Public Parking and Bus Bays at Transit Center	Transit	$8,431,000	50.2%	49.8%	$4,200,048
17.	Doyle Street Bicycle Boulevard	Bicycle	$275,000	0%	100%	$275,000
18.	Hollis Street Sidewalk	Pedestrian	$603,000	0%	100%	$603,000
19.	Adeline/San Pablo/ Macarthur/Peralta "Star" Intersection	Multi-modal (non-motorized)	$456,000	0%	100%	$456,000
20.	Ped-Bike Bridge over I-80: 65th St to Frontage Rd	Multi-modal (non-motorized)	$18,500,000	0%	100%	$18,500,000
21.	Horton Street and Overland Avenue from 40th Street to 62nd Street	Bicycle	$2,015,000	0%	100%	$2,015,000

TABLE 6
ALLOCATION OF PROJECT COSTS TO FEE PROGRAM

Map #	Project	Type	Total Cost	Percent of Cost to Include in Fee		Portion of Cost to include in Fee
				Existing/Other	Emeryville Growth	
22.	Emeryville Greenway extension from Powell St south to Stanford Ave at Horton St	Multi-modal (non-motorized)	$1,350,000	0%	100%	$1,350,000
23.	40th Street/ Harlan Street Signalization	Multi-Modal	$290,000	0%	100%	$290,000
24.	Sherwin Area Improvements	Pedestrian	$2,843,850	0%	100%	$2,843,850
25.	Bike Sharing Program	Bicycle	$600,000	0%	100%	$600,000
26.	Bicycle Parking	Bicycle	$200,000	0%	100%	$200,000
27.	Traffic Signal Enhancements	Bicycle	$490,000	0%	100%	$490,000
28.	Emery-go-Round Bus Yard Acquisition	Transit	$1,000,000	0%	100%	$1,000,000
Total Project Costs			$70,568,350			$61,593,718
Contingency, Design Environmental Review and Other (40%)			$28,227,340			$24,637,487
Preparation of Transportation Fee Study			$200,000			$200,000
City Administrative Costs (2%)			$1,979,914			$1,728,624
Total Cost			$100,975,604			$88,159,829

Source: Fehr & Peers, 2014

STEP 4 – ANTICIPATED NEW EMERYVILLE DEVELOPMENT

As part of the General Plan development effort, population and employment growth forecasts for the year 2030 were developed based on land use changes envisioned in the General Plan. **Table 7** presents the existing and 2030 land use projections for the City. About 3,800 dwelling units and 2.5 million square feet of net-new non-residential development are expected in Emeryville over the next twenty years to contribute to the fee program.

TABLE 7
FORECASTED GROWTH IN EMERYVILLE

	Residential (Units)	Retail (SF)	Hotel (SF)	Office (SF)	Industrial (SF)
Approved Development	907	34,461	--	1,313,000	--
Gross New Development	2,930	1,075,400	324,600	1,569,700	76,200
Loss of Existing due to Redevelopment	-70	-468,598	-14,375	-509,740	-855,377
Net New Development (A+B+C)	3,767	641,263	310,225	2,372,960	-779,177
Existing Development	5,988	2,441,660	464,500	4,852,118	4,132,675
City at 2030	9,755	3,082,923	774,725	7,225,078	3,353,498
Percent Change from Existing (2005) to 2030 Buildout	**63%**	**26%**	**67%**	**49%**	**-19%**

Notes:
Office includes R&D development. Residential buildout rounded to nearest hundred; non-residential to nearest thousand.
SF = Square feet
Source: Dyett & Bhatia, 2008. (Approved Development as of November 2007; Existing Development as of 2005.)

STEP 5 – CALCULATE TRIP GENERATION AND FEE

The level of development summarized in Table 7 is anticipated to generate trips by all modes of travel, including automobile, transit, walk and bike. As shown in **Table 8**, approximately 77,600 new daily trips could be made by planned development in Emeryville, including 61,000 new vehicle trips, 10,400 transit trips, and 6,200 bicycle and walking trips. On a peak hour basis, 5,650 new vehicle trips, 870 transit trips, and 510 bicycle and walking trips are expected.

TABLE 8
GROWTH IN TRIPS FROM GENERAL PLAN BUILD-OUT

Mode	Time Period	Existing	General Plan Growth	Total
Automobile	Weekday Daily	133,000	61,000	194,000
	Weekday Peak	11,410	5,650	17,060
	Saturday Peak	9,130	4,470	13,600
Transit	Weekday Daily	19,700	10,400	30,100
	Weekday Peak	2,030	870	2,900
	Saturday Peak	1,600	690	2,290
Walk/Bike	Weekday Daily	10,800	6,200	17,000
	Weekday Peak	1,090	510	1,600
	Saturday Peak	940	410	1,350
Total Trips	Weekday Daily	163,500	77,600	241,100
	Weekday Peak	14,530	7,030	21,560
	Saturday Peak	11,670	5,570	17,240

Source: City of Emeryville General Plan Draft Environmental Impact Report, 2009.

As shown in the previous step, the Emeryville General Plan land use forecasts include both residential and non-residential uses. Non-residential uses are represented in terms of building area, measured in square feet. Residential uses are represented in terms of dwelling units. The total cost to be contributed by new developments (Step 3) is divided by the total net new trip generation (Step 5) to determine the appropriate fee amount per evening peak hour trip. Although the travel needs of Emeryville residents, employees and visitors are met by a variety of modes, the fee per trip is calculated based on the summation of all trip types as the ITE rates used to assign a fee per land use type does not include reductions to account for non-auto modes and this method treats all projects equally within the City as they will likely have similar trip generating characteristics relative to each other.

As shown in **Table 9**, the cost of the fee program per evening peak hour trip is $12,541; for residential projects within a transit overlay district (see General Plan circulation map 3-1) a reduced fee (up to 25 percent of the fee associated with improvements related to the vehicle network, approximately 2 percent of the fee is solely related to vehicle improvements, while 13 percent of the fee partially related to automobiles although other modes of travel benefit as well) may be assessed if the following requirements of GC 66005.1 are met:

(1) The housing development is located within one-half mile of a transit station[2] and there is direct access between the housing development and the transit station along a barrier-free walkable pathway not exceeding one-half mile in length.
(2) Convenience retail uses, including a store that sells food, are located within one-half mile of the housing development.
(3) The housing development provides either the minimum number of parking spaces required by the local ordinance, or no more than one onsite parking space for zero to two bedroom units, and two onsite parking spaces for three or more bedroom units, whichever is less.

To calculate the allowed fee reduction for Emeryville, the percent of the fee that is related to automobile improvements (15 percent) was multiplied by the maximum allowable reduction of 25 percent, resulting in a reduction of 3.75 percent from the base fee. If the fee was comprised of 100 percent projects that expanded automobile capacity, the fee reduction would be 25 percent.

If a housing development does not satisfy the above characteristics, Emeryville may charge a fee that is proportional to the estimated rate of automobile trip generation associated with the housing development. The City of Emeryville has two designated transit overlay zones that generally meet the above requirements, the first is approximately 1/2-mile around the Amtrak Station and the second is approximately 1/2-mile around the 40th Street transit mall. However, each development project in and around that area would need to be evaluated to determine if the requirements of GC 66005.1 are met.

Additionally, the code does allow a jurisdiction to adopt findings after a public hearing establishing that the housing development in transit-overlay zones, even with these characteristics, would not generate fewer automobile trips than a housing development without those characteristics.

2 "Transit station" means a rail or light-rail station, ferry terminal, bus hub, or bus transfer station. "Bus hub" means an intersection of three or more bus routes, with a minimum route headway of 10 minutes during peak hours.

TABLE 9
FEE PER WEEKDAY EVENING PEAK HOUR TRIP

	PM Peak Hour
Trips	7,030
Fee Per Trip	$12,541

1. Based on total fee from Table 6 and net-new trips from Table 8.
Source: Fehr & Peers, 2014.

STEP 6 – DEFINE FEE FOR SPECIFIC LAND USE TYPES

To determine the fee for specific uses that might be proposed with the City of Emeryville, the auto trip generating potential of each project based on use-specific trip generation rates as published in Institute of Transportation Engineers (ITE) *Trip Generation Manual, 9th Edition* and estimates of pass-by trips for commercial developments from *ITE Trip Generation Handbook, 2nd Edition* were used. Although projects in Emeryville are expected to generate fewer vehicle trips than estimated by ITE, this method treats all projects equally within the City as they will likely have similar trip generating characteristics relative to each other. The fee for specific land uses can be calculated by the following formulae for the PM peak hour:

Developments outside Transit Overlay Zone	$\text{Fee} = \$12{,}541 * \left[\frac{\text{weekday PM peak hour}}{\text{trip generation rate}}\right] * \left[1 - \left(\frac{\text{passby}}{\text{rate}}\right)\right]$
Residential Developments in Transit Overlay Zone	$\text{Fee} = \$12{,}541 * \left[\frac{\text{weekday PM peak hour}}{\text{trip generation rate}}\right] * \left[1 - \left(\frac{\text{passby}}{\text{rate}}\right)\right] * 0.9625$

Table 10 summarizes the updated fees for the various land use categories based on the per trip fee calculations shown in Table 9 based on PM peak hour trip generation. As previously described, the fees for residential developments in the transit overlay district are reduced by 3.75 percent to account for lower automobile trip generation due to proximity to transit and better pedestrian and bicycle connectivity in that district. Approximately 15 percent of the total fee would benefit vehicles (includes projects related to automobile capacity as well as multi-modal projects) and the 25 percent reduction specified by CG 66005.1 was adjusted to reflect that only a portion of the fee would benefit automobile trips.

TABLE 10
WEEKDAY EVENING PEAK HOUR FEE PER TRIP

Land Use	ITE Land Use	ITE PM Peak Hour Rate	% Primary Trips[1]	Based on Peak Hour Trip Rate[2]
Residential (per dwelling unit)				
Single-Family	210	1.00	100%	$12,541
Townhome/Condominium	230	0.52	100%	$6,521
TH/Condo (Transit Zone)		0.50	100%	$6,270
Apartment	220	0.62	100%	$7,775
Apartment (Transit Zone)		0.60	100%	$7,524
Office (per sq. foot)				
Standard Office	710	1.49	100%	$18.69
Corporate HQ Building	714	1.41	100%	$17.68
Medical Office	720	3.57	100%	$44.77
Hospital	610	0.93	100%	$11.66
R&D Center	760	1.07	100%	$13.42
Retail/Commercial (per sq. foot)				
General Retail	820	3.73	50%	$23.39
Restaurant				
Quality	831	7.49	30%	$28.18
High Turnover	832	9.85	30%	$37.06
Fast Food	833	26.15	50%	$163.97
Fast Food with Drive-Thru	834	32.65	50%	$204.72
Service Station (per pump)	844	13.87	20%	$34,787
Self-Service Car Wash (per stall)	847	5.54	50%	$34,737
Supermarket	850	9.48	45%	$53.50
Convenience Market	851	52.41	30%	$197.17
Hotel (per room)	310	0.60	70%	$5,267
Bank	911	12.13	35%	$53.24

TABLE 10
WEEKDAY EVENING PEAK HOUR FEE PER TRIP

Land Use	ITE Land Use	ITE PM Peak Hour Rate	% Primary Trips[1]	Based on Peak Hour Trip Rate[2]
Manufacturing (per sq. foot)				
Light Industry	110	0.97	100%	$12.16
Manufacturing	140	0.73	100%	$9.15
Warehousing	150	0.32	100%	$4.01
Industrial Park	130	0.85	100%	$10.66
Other (per sq. foot)				
Movie Theatre	444	4.91	100%	$61.57
Tennis Court (per court)	491	3.35	100%	$42,011
Health Club	493	3.53	100%	$44.27
Day Care Center	565	12.34	100%	$154.75
Nursing Home	620	0.74	100%	$9.28
Live Work (per unit)				
Live Work[3]		0.65	100%	$8,151

1. Based on ITE Trip Generation Handbook, Second Edition.
2. Based on a unit cost of $12,541 per weekday PM peak hour trip
3. Based on survey of live/work lofts in Oakland

Land uses listed in Table 10 present basic land use designations that have been identified by the City of Emeryville as the most common. Calculations for land use designations not included in ITE Trip Generation can be based on other published rates, or developed through the preparation of a trip generation study, to be prepared under the direction of the planning director.

Sample fees for various development types were calculated, as presented in **Table 11**, based on the fee schedule shown in Table 10. Based on the proposed fees shown in Table 10, a 100 unit apartment building could be required to pay $777,500 in transportation impact fees, in addition to any other fees that might be assessed by the City of Emeryville.

TABLE 11
SAMPLE FEES BASED ON AMOUNT TO FULLY FUND TIF

Land Use Type	Size	Units	Transportation Impact Fee
Residential – Rental Multi-Family	100	Dwelling Units	$777,500
Residential – For Sale townhomes	100	Dwelling Units	$652,100
Office	100,000	Square Feet	$3,373,000
Research & Development (lab)	150,000	Square Feet	$2,013,000
Hotel	200	Rooms	$1,053,400
Mixed-Use			
Retail	20,000	Square Feet	$467,800
Restaurant (quality)	5,000	Square Feet	$140,900
Mixed-Use Total			**$608,700**

Source: Fehr & Peers, 2014.

FEE EXEMPTIONS

The City may choose to exempt specific uses (such as day-care centers) from the fee or reduce the fee for other specific uses (such as below-market-rate housing). If fees for specific uses or developments are reduced, the fee for other land uses or the cost per DUE cannot increase because other types of land uses cannot be burdened with the fee share of the exempt or reduced uses based on the nexus requirements under Government Code 66001. Therefore, exempting land uses from the fee or reducing fees for specific uses means that the City must use alternative funds from other sources to generate the corresponding loss in fee revenue to pay for that portion of the fee.

4. FINANCING CONSIDERATIONS

This chapter describes the estimated fee revenue of the proposed TIF and other potential funding sources. Questions are also posed about the varying levels of TIF projects that could be funded if the fee was adjusted from presented in Chapter 3.

ESTIMATED FEE REVENUE

Table 12 summarizes the estimated fee revenue by the basic land use designations based on projections of growth between 2005 and 2030 and the fees described in the previous chapter. Residential fees would generate about $56.7 million and non-residential uses would generate about $17.4 million in revenue. Total revenue is estimated to equal about $83.5 million. This total is slightly less than the amount shown in Table 6 for a number of reasons as described below.

Since the estimated fee revenue presented in Table 12 is based on the basic land use designations with the fee at the average of development type, the actual fee revenue collected over time may differ as specific development projects may be charged a different fee. Until precise development applications are known, the fee revenue estimates must be based on generalized land use categories. This calculation assumes that a fee credit for industrial development that converts to another use would be applied. However, depending on the length of time since an industrial use was actively in use, a credit against the existing trip generating potential of those sites may not be granted. The calculations also assume that approximately 1/3 of housing development would occur within a designated transit area and subject to a reduced fee.

The City may choose to exempt specific uses (such as day-care centers) from the fee or reduce the fee for other specific uses (such as below-market-rate housing). If fees for specific uses or developments are reduced, the fee for other land uses or the cost per DUE cannot increase because other types of land uses cannot be burdened with the fee share of the exempt or reduced uses based on the nexus requirements under GC 6600. Therefore, exempting land uses from the fee or reducing fees for specific uses means that the City chooses to use alternative funds from other sources to generate the corresponding loss in fee revenue and pay for that portion of the fee.

TABLE 12
ESTIMATE FEE REVENUE BY LAND USE CATEGORY

Land Use	Transit Overlay Zone			Outside Transit Overlay Zone			Citywide	
	Fee	Growth	Revenue	Fee	Growth	Revenue	Growth	Revenue
Residential								
Condo/Townhouse	$6,270	650	$4,075,500	$6,521	1,234	$8,046,914	1,884	$12,122,414
Apartment	$7,524	650	$4,890,600	$7,775	1,234	$9,594,350	1,884	$14,484,950
Subtotal			$8,966,100		$8,966,461	$17,641,264	3,768	$26,607,364
Non-Residential								
Industrial (Light Industrial)				$12.16	(779,177)	($9,474,792)	(779,177)	($9,474,792)
Office				$18.69	2,372,960	$44,350,622	2,372,960	$44,350,622
Retail[1]				$23.39	541,263	$12,660,142	541,263	$12,660,142
Restaurant[1]				$37.06	100,000	$3,706,000	100,000	$3,706,000
Hotel[2]				$5,267	1,050	$5,530,350	1,050	$5,530,350
Subtotal						$56,772,322		$56,772,322
Total Revenue						$74,413,586		$83,379,686
Balance of TIF Fund								$153,124
Total TIF Funds								$83,532,810

Notes:
1. Of the expected 641,263 square feet of retail development, 100,000 square feet was assumed to be high-turnover sit-down restaurants for the purpose of this exercise.
2. The expected square footage from Table 7 was used to calculate number of rooms per hotel, assuming 300 square feet per room, inclusive of circulation areas and support facilities.
Source: Fehr & Peers, 2014.

OTHER FUNDING SOURCES

As previously described, the updated TIF program, including balance of existing funds, would fund about 83 percent of the $101 million needed to fund transportation infrastructure envisioned by 2030 in Emeryville. As previously described, this is because development in Emeryville cannot be required to fund existing deficiencies or impacts caused by regional through traffic. This is the reasonable relationship (i.e., nexus) requirement specified in GC 66000. The difference between the projected fee revenue and the

actual cost of the capital improvements must be funded through other sources. Other potential funding sources include:

- Various regional, state, and federal grants and program
- Negotiated Development Agreements
- Gas taxes
- Sales taxes
- Assessment District
- Motor Vehicle license fees
- General funds
- Public/private partnerships

Appendix C provides additional information related to the past funding sources the City of Emeryville has been able to use to fund infrastructure projects, including Measure B, Proposition 84, and Bicycle Transportation Account (BTA) grants.

COMPARISON TO OTHER JURISDICTIONS

Table 13 provides a summary of traffic impact fees imposed by other jurisdictions throughout the Bay Area. Most jurisdictions use a similar methodology to determine their fee and fee allocation. Almost all the jurisdictions base their traffic impact fees on weekday PM peak hour traffic volumes or average daily traffic (ADT) volumes. In comparison to the other jurisdictions, the proposed traffic impact fees for the City of Emeryville are higher than other jurisdictions for both residential and commercial land uses.

TABLE 13
FEE COMPARISON TABLE

Jurisdiction	1998 Emeryville Fee Study Comparison Table					Current Fees				
	Single Family Residential (per DU)	Multi-Family Residential (per DU)	Retail/ Commercial (SF)	Office (per SF)	Industrial (per SF)	Single Family Residential (per DU)	Multi-Family Residential (per DU)	Retail/ Commercial (SF)	Office (per SF)	Industrial (SF)
Brentwood						$10,746	$6,637	$4.37	$6.70	$4.63
Concord						$2,588	--	$7.40	$5.92	--
Daly City	$189	$189	$ 1.04			$1,464	$1,836	--	--	--
Danville[1]	$1,400	$980	$ 3.50	$3.50	$3.50	$2,258	$1,400	$4.50	$4.50	--
Dublin (Downtown)[1]	$3,836	-	$ 8.40	$6.45	$2.58	Ranges from $2,167 for low-density (0-6units/acre) to $1,299 for high density (25.1+ units)		'$216 (fee per daily trip)		
Dublin (Eastern Dublin)[1]	$3,836	-	$ 8.40	$6.45	$2.58	Range from $8,833 for low-density (0-6 units/acre) outside Transit Areato $3,601 for high density (25.1+ units) in Transit Area		$772 (fee per daily trip)		
Fremont	$951	-	$ 7.75	$3.47	$0.92	$3,879	$3,009	$8.70	$10.77	$3.55
Half Moon Bay	$1,390	$870	$ 3.55	$3.62		$1,570	$910	$4.74	$3.54	$0.91
Livermore[1]	$2,036	-	$ 5.19	$5.50	$2.04	$7,893	$2,258 - $3,821 (Downtown) $3,679 - $6,223 (Other)	$9.71 (Downtown) $2.14 (Other)	$13.72	$8.52
Martinez[2]	$1,680	$1,175	$ 3.10	$4.40	$1.85	$1,444	$993	$1.45	$1.18	$0.64
Menlo Park						$2,623	$1,610	$3.87	$3.87	$1.90
Napa[3]	$1,781	$1,076	$2.82	$2.82	$1.23	$2,465	$1,669	$3.53 (Neighborhood), $7.36 (Downtown), $9.57 (Other)	$4.11 (Downtown) $5.05 (Other)	$1.80
Oakley						$11,769	$7,180	$4.87	$7.25	$4.87
Palo Alto						$2,627	$1,613	$3.88	$3.88	--
Petaluma	$3,007	$1,885	$2.48	$2.62	$1.00	$16,746	$10,215	$15.57	$16.08	$10.05
Pleasant Hill	$1,964	$1,527	$4.90	$3.80	$1.65	$2,572	$2,062	$6.65	$5.65	$2.09
Pleasanton[1]						$4,401	$3,080	$12.31	$5.86	$4.40
Redwood City (non-downtown)						$1,499	$920	$3.04	$2.21	$1.44

TABLE 13
FEE COMPARISON TABLE

Jurisdiction	1998 Emeryville Fee Study Comparison Table					Current Fees				
	Single Family Residential (per DU)	Multi-Family Residential (per DU)	Retail/ Commercial (SF)	Office (per SF)	Industrial (per SF)	Single Family Residential (per DU)	Multi-Family Residential (per DU)	Retail/ Commercial (SF)	Office (per SF)	Industrial (SF)
Redwood City (downtown)						$1,124	$690	$2.28	$1.66	$1.08
Richmond	$3,156	$2,507	$6.43	$4.29	$2.60	$1,516	$1,212	$3.77	$3.32	$1.21
Sacramento						$1,200	--	$0.53	$0.63	--
San Jose						$6,994	--	--	--	--
San Mateo	$2,063	$1,527	$2.96		$1.05	$3,422	$2,101	$5.89	$3.14	$2.04
San Ramon	$2,178	$1,466	$4.14	$4.86	$1.44	$733	$511	$2.09	$0.96	-
Santa Rosa	$3,740		$0.90	$1.05	$0.80	Ranges from $5,647 for low-density (0-1.99 units/acre) to $3,363 for high density (18+ units)		$2.95 to $9.29	$3.90	$2.39
Sunnyvale						$1,805	$1,108	$3.34	$2.66	$1.32
Vacaville	$4,297	$2,672	$2.31	$1.75	$1.28	$8,745	$5,421	$4.73	$3.59	$2.63
Vallejo[4]	$2,545	$1,590	$1.40		$0.75	$4,571	$2,572	$2.22	$2.22	$1.13
Walnut Creek[3]	$2,315	$1,040	$4.70	$6.20		$2,462	$1,477	$7.04	$6.97	--
Emeryville	**$807.00**	**$431.00**	**$3.47**	**$1.94**	**$0.54**	**$12,541**	**$6,270 to $7,775**	**$23.39**	**$18.69**	**$9.15**
Average	$2,704.60	$1,698.89	$3.30	$3.42	$1.31	$4,197	$2,647	$5.15	$5.01	$2.98

1. Projects in Danville, Dublin, Pleasanton, San Ramon, and Livermore are also subject to the Tri-Valley Transportation Development Fee, which equates to $2,170 per trip and funds regional roadway improvements.
2. Martinez has a 35% "Economic Stimulus Program" for certain applicants who had prior approval but have yet to be issued a building permit
3. Jurisdiction calculates a fee per trip
4. Vallejo includes provision to automatically adjust annually based on the ENR Construction Costs Index.

Source: Available documentation of adopted fees for each jurisdiction, Fehr & Peers (2013).

FEE LEVELS

The percent of the TIF project list that could be funded at varying fee levels is detailed in **Table 14.** This information is provided to assist the City in identifying a fee level that funds the critical transportation infrastructure within the City, but does not result in a fee that discourages development from occurring in Emeryville.

TABLE 14
PERCENT OF TIF FUNDED AT VARYING FEE LEVELS

Question?	Fee Level	Total Funds Raised	Percent of TIF Project List Funded
How much could we raise if we kept the TIF at the current level based on PM peak hour trips?	$943	$6,629,290	8%
How much could we raise if we adjusted the fee for inflation based on PM peak hour trips?	$1,353	$9,511,590	11%
How much would we need to charge to fully fund the TIF based on PM peak hour trips?	$12,541	$88,159,829	100%
How much could we raise if we charged the Bay Area average fee per peak hour trip?	$4,200	$29,526,000	33%

Source: Fehr & Peers, 2014.

OTHER FEE CONSIDERATIONS

The fee that was set in 1998 was based on construction prices and other conditions reflective of the economy in 1998 and has not been adjusted through the life of the 1998 TIF, reducing the ability to construct some projects identified in the TIF as construction prices increased from the original fee basis. Many jurisdictions update their fees on a regular basis based on the Consumer Price Index (CPI) or Construction Cost Index and Building Cost index (ENR) such that the value of their fee program does not diminish over time. The City of Emeryville can adopt as part of the fee program a mechanism to increase the fee on a set schedule, with the option to set a maximum annual escalation rate.

APPENDIX A: CURRENT FEE SCHEDULE

TABLE A-1
CURRENT (ESTABLISHED IN 1998) TRAFFIC IMPACT FEE

Land Use	ITE Land Use	ITE PM Peak Hour Rate	% Primary Trips[8]	% Diverted & Pass-by Trips[8]	Traffic Fee[9]
Residential (per dwelling unit)					
Single-Family	210	1.01	86%	14%	$ 819
Townhome/Condominium	230	0.54	86%	14%	$ 438
Apartment	220	0.62	86%	14%	$ 503
Office (per 1000 sq. feet)					
Standard Office					
Less Than 100,000 sq. feet[1]	710	2.71	77%	23%	$ 1,968
100,000 to 500,000 sq. feet[2]	710	1.39	77%	23%	$ 1,010
Greater Than 500,000 sq. feet[3]	710	1.23	77%	23%	$ 895
Corporate Headquarters Building	714	1.39	77%	23%	$ 1,010
Medical Office	720	3.66	60%	40%	$ 2,071
Hospital	610	0.92	73%	27%	$ 633
Research & Development Center	760	1.08	77%	23%	$ 784
Retail/Commercial (per 1000 sq. feet)					
General Retail					
Less Than 100,000 sq. feet[4]	820	7.95	47%	53%	$ 3,523
100,000 to 300,000 sq. feet[5]	820	4.96	47%	53%	$ 2,199
Greater Than 300,000 sq. feet[6]	820	3.63	54%	46%	$ 1,850
Small / Isolated Retail[7]		4.07	46%	54%	$ 1,766
Restaurant					
Quality	831	7.49	51%	49%	$ 3,603
High Turnover	832	10.86	51%	49%	$ 5,224
Fast Food	833	26.15	51%	49%	$ 12,579
Fast Food with Drive-Thru	834	33.48	51%	49%	$ 16,105
Service Station (per pump)	844	14.56	21%	79%	$ 2,884

TABLE A-1
CURRENT (ESTABLISHED IN 1998) TRAFFIC IMPACT FEE

Land Use	ITE Land Use	ITE PM Peak Hour Rate	% Primary Trips[8]	% Diverted & Pass-by Trips[8]	Traffic Fee[9]
Self-Service Car Wash (per stall)	847	5.79	46%	54%	$ 2,512
Supermarket	850	11.51	46%	54%	$ 4,994
Convenience Market	851	53.73	46%	54%	$ 23,312
Hotel (per room)	310	0.61	58%	42%	$ 334
Bank	911	42.02	35%	65%	$ 13,872
Manufacturing (per 1000 sq. feet)					
Light Industry	110	0.98	79%	21%	$ 730
Manufacturing	140	0.74	79%	21%	$ 551
Warehousing	150	0.51	79%	21%	$ 380
Industrial Park	130	0.92	79%	21%	$ 686
Other (per 1000 sq. feet)					
Movie Theatre	444	3.8	66%	34%	$ 2,366
Tennis Court (per court)	491	3.88	46%	54%	$ 1,683
Health Club	493	4.3	46%	54%	$ 1,866
Day Care Center	565	13.2	46%	54%	$ 5,727
Nursing Home	620	0.36	46%	54%	$ 156
Live Work (per unit)					
Live Work[10]		1.03	100%		$ 972

1. Based on Average Rate of 50,000 sq. feet
2. Based on Average Rate of 300,000 sq. feet
3. Based on Average Rate of 700,000 sq. feet
4. Based on Average Rate of 50,000 sq. feet
5. Based on Average Rate of 200,000 sq. feet
6. Based on Average Rate of 500,000 sq. feet
7. Examples of a small / isolated retail are small hardware store, small furniture store, small apparel store, etc.
8. Source: San Diego Association of Governments, 1996.
9. Based on a unit cost of $ 943.21 per peak hour trip
10. Based on Emeryville Traffic Impact Fee Analysis Final Report, 1996 prepared by Korve Engineering, Inc.

Source: City of Emeryville Traffic Impact Mitigation Fee Study, 1998

APPENDIX B: DETAILED PROJECT INFORMATION


San Francisco Bay
City of Berkeley
City of Oakland
City of Oakland
Citywide Projects:
1
12
26
27
28
Projects
Parks and Open Spaces
Pedestrian Priority Zone
0 500 1,000
Feet
80
580
Powell St
Frontage Rd
Lacoste St
Christie Ave
Shellmound St
Overland Ave
Bay St
Horton St
Peladeau St
Hollis St
Doyle St
Beaudry St
Vallejo St
Marshall St
Fremont St
Admiral Dr
Commodore Dr
Captain Dr
67th St
66th St
65th St
64th St
63rd St
62nd St
59th St
54th St
53rd St
48th St
47th St
45th St
Sherwin St
Holden St
Park Ave
Watts St
40th St
Essex St
Adeline St
Spur Alley
Mandela Pkwy
Ocean Ave
Peabody Ln
Stanford Ave
Aileen St
MacArthur Blvd
Apgar St
Bolivar Dr
Potter St
Anthony St
Ashby Ave
Folger Ave
Murray St
Carrison St
Haskell St
Acton St
Idaho St
Boise St
Prince St
Woolsey St
Fairview St
Harmon St
Alcatraz Ave
61st St
61st Pl
60th St
57th St
56th St
55th St
52nd St
46th St
44th St
43rd St
42nd St
41st St
39th St
37th St
36th St
Doyle St
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 28

1. Citywide Transit Stop Improvements

Project Extents:

Citywide

Project Type:

Transit

Primary Stop Locations

65th Street / Shellmound Street (1)
59th Street / Horton Street / Hollis Street (3)
Watergate Towers / Hilton Garden Inn (2)
Christie Avenue / Shellmound Way (2)
Hollis Street / 53rd Street (2)
Bay Street / Shellmound Street / IKEA (2)
San Pablo Avenue / 40th Street (10)
Emery Street / 40th Street (3)

(x) = Total Stops

Secondary Stop Locations

Vallejo Street / 66th Street (1)
Christie Avenue / 64th Street (2)
Powell Street / Captain Drive (1)
Horton Street / 40th Street (2)
Hollis Street / 40th Street (2)
Hollis Street / 63rd Street / 64th Street (2)
Christie Avenue / Trader Joes (1)

Project Description:

Add Primary and Secondary stop amenities at 15 Intersections:

- Shelters – With benches at approximately 32 stops
- Additional landscaping (32 stops) and enhanced medians (2 stops)
- Real time bus information at approximately 32 stops
- Add bicycle parking at approximately 5 stops
- Provide additional sidewalk connections at approximately 5 stops
- Add additional transit vehicles to Emery-Go-Round fleet
- Modify traffic signals at:
  - San Pablo Ave | Park Ave
  - Hollis Street | Stanford Ave
- Provide bus bulb-outs at 9 stop locations
  - Hollis Street | 64th Street (stop 9)
  - Hollis Street | 63th Street (stop 14)
  - Hollis Street | 53th Street (stop 5 & 16)
  - Hollis Street | 45th Street (stop 4 & 17)
  - 40th Street | Emery Street (stop 3)
  - 40th Street | Hollis Street (stop 4)
  - 40th Street | Horton Street (stop 5)

Pedestrian Priority Zone: **Varies**

Street Typology: **Varies**

Cost Estimate: **Total Cost: $2,347,500**

- 32 bus shelters with bench at $20,000 each
- 32 real time bus signs at $20,000 each
- 5 bike lockers at $1,000 each
- 10 inverted U racks at $250 each
- New Emery Go-Round transit vehicles at $500,000
- Misc sidewalk improvements $100,000
- 9 bulbouts $360,000
- 2 signal modifications $100,000

Document Source: **Emeryville Ped/Bike Plan Projects T.1, T.3-T.17**

Project Need:

Many primary and secondary stop locations provide limited or no transit amenities; existing boardings at the above stops are sufficient to warrant provision of transit amenities. These amenities are necessary to attract additional choice riders to the system to reduce automobile trips. Many Emery Go-Round vehicles are observed to operate above capacity for portions of the day. Increased capacity is needed to accommodate additional ridership. Congestion on main transit streets delays transit vehicles.

Return to Main Map

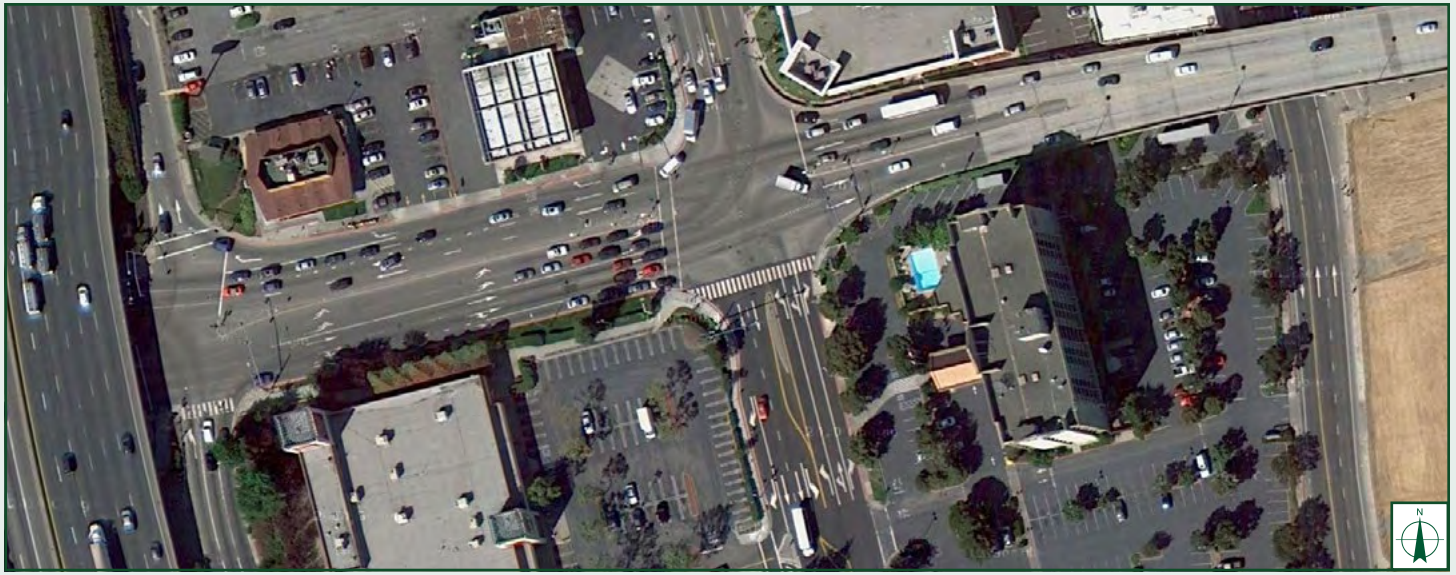
2. Powell Street Multi-modal Improvement Phase I

Project Extents:

South side of Powell Street from Frontage Road to Shellmound Street

Project Type:

Multi-Modal Facility



Project Description:

- **Interim stops for AC Transit Transbay buses including contemporary design, lighting, and proximity to sidewalk connections.**
- **Enhance visibility of the Bay Trail/sidewalk and landscape to improve pedestrian/bicycle access from Christie Avenue to Shellmound Street. This will include appropriate signage and markings for the Bay Trail adjacent to the Four Points by Sheraton.**
- **Reconfigure south side Powell Bay Trail/sidewalk and landscape to a class I bike facility from Frontage Road to Christie Avenue. Including straightening the public walkway that runs along the north side of the Powell Street Plaza, and relocation of the monument sign.**

Pedestrian Priority Zone: **No**

Street Typology: **Transit Street, Green Street**

Cost Estimate: **$3,350,000**

Document Source: **Emeryville Ped/Bike Plan Project B9.a and S.1a; Powell Urban Design Plan**

Priority: **High**

Project Need:

Project accommodates transit, bicycles and pedestrians to support a complete streets concept at the main entryway to the City. It facilitates bike and pedestrian connections from the south to transit, specifically transbay bus service.

Return to Main Map

3. Christie Avenue Bay Trail - OBAG

Project Extents:

Between Powell Street and Shellmound Street on the northern sidewalk along Christie Avenue.

Project Type:

Multi-Modal (non-motorized)

Project Description:

The project will include two new crosswalks, traffic signal modifications and a Class 1 bike or multi-use path. A bike signal head may be added to the Christie Avenue and Shellmound Street intersection to accommodate turning movements by cyclists in the intersection. Striping will be added to facilitate cyclist and pedestrian crossings, with a new crosswalk from Trader Joe's across Christie Avenue and another new crossing on the north side of Christie Avenue across Shellmound Street.

Pedestrian Priority Zone: **Yes**

Street Typology: **Transit and Bicycle**

Cost Estimate: **$480,000**

Document Source: **CIP 2014-13254005; Emeryville Ped/Bike Plan Project C.16, P.18, B.4**

Priority: **High**

Project Need:

The new Bay Bridge bike path is creating demand for bike facilities along the Bay Trail in Emeryville. ABAG has identified improvements for the Christie Avenue gap as key to accommodate Bay Trail bikers. The East Bay Bicycle Coalition has identified the project as a top priority for OBAG grant funded bicycle improvements in Alameda County.

Other:

One Bay Area Grant (OBAG) funding has potentially been identified.

Return to Main Map

4. ECCL Path

Project Extents:

Between 47th Street and 53rd Street

Project Type:

Multi-Modal (non-motorized)

Project Description:

Construct a path along the western boundary of the Emery Secondary School Campus with development of the ECCL Project.

Pedestrian Priority Zone: **Yes**

Street Typology: **Local (47th)/Bike Boulevard (53rd)**

Cost Estimate: **$750,000**

Document Source: **City of Emeryville Pedestrian and Bicycle Plan Project P.4, B.5**

Priority: **Low**

Project Need:

Opportunity for improved north/south access; provides an alternative to San Pablo Avenue.

Return to Main Map

5. South Bayfront Bridge and Horton Landing Park Paths

Project Extents:

Horton Landing Park to Ohlone Way

Project Type:

Multi-Modal (non-motorized) Bridge Connection

Project Description:

Build the South Bayfront Bridge over railroad from Ohlone Way to Horton Landing Park.

Connect paths to 53rd Street and Stanford Avenue at Horton Street.

Pedestrian Priority Zone: **Yes**

Street Typology: **Local**

Cost Estimate: **$14,549,000**

Document Source: **City of Emeryville Pedestrian and Bicycle Plan Projects P.17, B.26, P.7 and B.3, CIP 2014**

Priority: **High**

Project Need:

Railroad tracks are a major barrier between east and west sides of city. No connection over railroad tracks between major mixed-use destination at Bay Street and employment centers on Horton Street. Included in General Plan; Rank 7, Score 80, Priority High on Bike List.

The Horton Landing Paths would connect the bridge to Stanford Avenue in the north and to 53rd Street in the east.

Return to Main Map

6. San Pablo Avenue Mid-block Crossing (Pak n Save)

Project Extents:

Adeline Street and 40th Street

Project Type:

Pedestrian Crossing

Project Description:

The project would install a mid-block crossing on San Pablo Avenue at the Pak n Save Supermarket, at the Yerba Buena alignment. A HAWK beacon is recommended, but if undesired, consider a pedestrian actuated signal that is coordinated with the adjacent signalized intersections. Install high visibility crosswalk markings, curb extensions and curb cuts, and remove existing parking spaces and cut in the existing median to use as a pedestrian refuge.

Pedestrian Priority Zone: **Yes**

Street Typology: **Transit Street**

Cost Estimate: **$344,100**

Document Source: **Emeryville Ped/Bike Plan Project C.9**

Priority: **High**

Project Need:

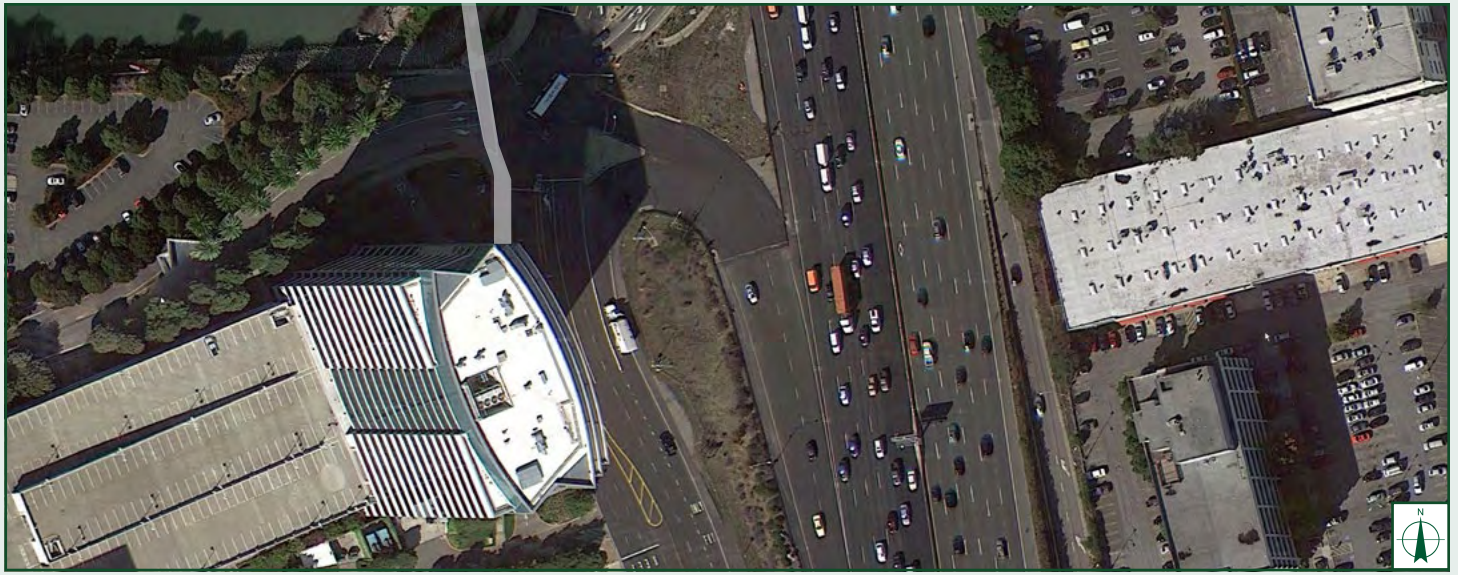
Candidate location for a mid-block crossing to provide direct connection from pedestrian path in front of Pak N Save across San Pablo Avenue; this path is at the proposed location of a Green Street on Yerba Buena Avenue.

Other:

The crossing meets Caltrans warrants for the minimum distance between signalized intersections with at least 300 feet to the nearest signal. A prior study determined that the location does not meet Caltrans warrants for a pedestrian-actuated signal.

Return to Main Map

7. Shorebird Park Connections



Project Extents:

North-south path on west side of Frontage Rd from Powell Street to Shorebird Park

Project Type:

Multi-modal (non-motorized)

Project Description:

Improve existing sidewalk to accommodate multi-use path, by replacing pavers with concrete or asphalt multi-use path and installing a landscaped buffer between Frontage Road and sidewalk path. At southwest corner of Access Road/Frontage Road, reduce turning radius and realign pedestrian push button

Pedestrian Priority Zone: **No**

Street Typology: **Connector Street**

Cost Estimate: **$220,000**

Document Source: **City of Emeryville Pedestrian and Bicycle Plan Projects P.15 and SP.3**

Priority: High

Project Need:

Opportunity to improve walking and bicycling conditions

Return to Main Map

8. Spur Alley Bicycle Treatments

Project Extents:

Spur Alley between 45th and Hollis Street

Project Type:

Multi-Modal (non-motorized)

Project Description:

Extend bike route from 53rd to Hollis Street via easement

Spur Alley / 53rd Street and Spur Alley / 45th Street

- Install high visibility marked crossing, landscaped/bioswale curb extensions or raised crosswalk, advance warning signage.

Spur Alley / Doyle Street Connection

- Provide a Class I connection along the fence line of the parking lot. This would require an easement, and reconfiguration of parking or potential parking removal within private lots.
- Install crosswalk at 47th Street/Doyle Street/Spur Alley intersection

Pedestrian Priority Zone: **No**

Street Typology: **Green Street**

Cost Estimate: **$900,300**

Document Source: **Emeryville Ped/Bike Plan Projects B.24, B.28, I.8, I.9, P.19, C.5, and C.17**

Priority: **High/Medium**

Project Need:

The current bike route is an easement along Spur Alley between 45th, 53rd, and Hollis Street. It is unimproved shared space with parking and vehicle circulation. The project would improve Spur Alley separating bikes from vehicle users. At 45th and 53rd Street, the uncontrolled intersection has limited visibility and no advance warning of bicyclists and pedestrians using the Spur Alley corridor.

Other:

Spur Alley is privately owned. South of 53rd, the City has a 12-foot easement on west side of Spur Alley for bicycle/pedestrian access. Cars currently park on easement. Project Conditions of development allow parking in Spur Alley.

Return to Main Map

9. Railroad Quiet Zone

Project Extents:

Railroad tracks at 67th Street, 66th Street and 65rd Street

Project Type:

Mulit-Modal

Project Description:

This project would install four-quadrant gates at the 65th Street, 66th Street and 67th Street at-grade crossings.

Pedestrian Priority Zone: **No**

Street Typology: **Not Applicable**

Cost Estimate: **$4,035,000**

Document Source: **CIP 2014**

Project Need:

The project improves the safety of Quiet Zones in Emeryville. Quiet Zones are areas where trains cannot sound horns/whistles. Safety measures are needed to compensate for inability to use train horn/ whistles within the quiet zone. Four-quadrant gates provide improved safety for bicyclists, pedestrians, transit buses, and drivers at railroad tracks.

Return to Main Map

10. I-80/Powell Street Improvements

Project Extents:

I-80 EB Off-Ramp and Powell Street to Christie Avenue

Project Type:

Automobile Capacity

Project Description:

- Reconstruct the off-ramp to provide dual left-turn and dual right-turn lanes. The additional lane should be about 900 feet.
- Reconstruct the southeast corner of the Powell Street/I-80 Eastbound Ramps intersection improving the curb radii to 40 feet.
- Widen the north side of Powell Street 12 to 14 feet between Christie Avenue and Eastbound I-80 Ramps to align westbound Powell Street through lanes across the intersection with Eastbound I-80 Ramps. Widen the eastbound right-turn lane at the Powell Street/Christie Avenue intersection to 14 feet and construct a pedestrian median refuge on the west side of the Powell Street/ Christie Avenue intersection. This change requires right-of-way along the north side of Powell Street between Christie Avenue and the I-80 Eastbound On-Ramp**.**

Pedestrian Priority Zone: **No**

Street Typology: **Transit Street; Green Street**

Cost Estimate: **$450,000**

Document Source: **Emeryville Marketplace Memo; 1998 TIF**

Project Need:

Insufficient vehicle storage is currently provided to accommodate existing and projected vehicle queues on the off-ramp. This project was identified in the 1998 TIF and has yet to be constructed. The wider median improves westbound vehicle flow through the interchange and if facilitates vehicle flow for right turning traffic exiting the freeway.

Other:

The full length may interfere with truck circulation at Powell Plaza and so the complete benefit of this change may not occur until the Powell Plaza activities are redefined. The improvement can be phased so the first 400 feet can be constructed now and the additional length constructed with development changes at Powell Plaza. With the wider off-ramp, a bus stop may be provided on the ramp.

Return to Main Map

11. Christie Avenue / Powell Street Improvements

Project Extents:

Powell Street at Christie Avenue

Project Type:

Automobile Capacity

Project Description:

- Widen the south side of the Powell Street bridge by about 12 feet to provide two 250-foot left-turn lanes from westbound Powell Street to southbound Christie Avenue. This change requires right-of-way purchase along the south side of the bridge.
- Widen the west side of Christie Avenue about 12 feet to provide an exclusive southbound left-turn lane (in addition to the shared left-through lane) on Christie Avenue approaching Powell Street. This change requires right-of-way along the gas station frontage and the Bay Bridge Plaza frontage.

Pedestrian Priority Zone: **Yes**

Street Typology: **Transit Streets; Green Streets**

Cost Estimate: **$4,600,000**

Document Source: **Marketplace EIR**

Project Need:

Planned development triggers the need for a second westbound left-turn to minimize the effects of vehicle queue spillback and optimize intersection operations for all modes of travel. The additional left turn lane would accommodate projected cumulative growth in vehicular traffic.

Return to Main Map

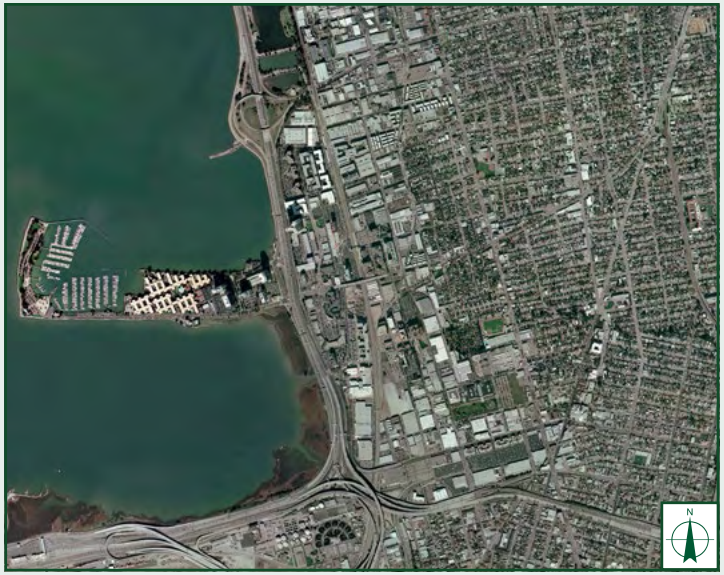
12. Bicycle and Pedestrian Master Plan Implmentation

Project Extents:

Citywide

Project Type:

Multi-Modal (non-motorized)



Project Descriptions:

This project will pay for minor cost bicycle and pedestrian improvements recommended in the adopted Pedestrian and Bicycle Plan or as recommended by the Bicycle Pedestrian Advisory Committee and City Council on a case-by-case basis. Improvements will include, but not be limited to, bicycle boulevard signs and stencils, pavement striping modifications, and installation of bike route or directional signs.

Cost Estimate: **$300,000**

Document Source: **CIP 2014, Bicycle and Pedestrian Master Plan**

Project Need:

The project will close gaps where signs are needed to define bike routes linking other facilities and clarify facility types. It will bicycling safer and more enjoyable, and improve connections among residences, workplaces, stores, schools, parks and public facilities.

Specific Projects:

Specific projects include S.10, S.12, SP.2, SP.4, SP.5, B.10 (Phase 1), B.12, B.13, B.15, B.16, B.22, B.23, I.4, I.7, P.14 (Phase 1). Potential projects range from $500 to $20,000, with an average cost of less than $10,000.

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13. 40th Street and Horton Street Left Turn Improvements

Project Extents:

40th at Horton

Project Type:

Multi-Modal (all modes)

Project Description:

The project would restripe the pavement on southbound Horton Street at 40th Street to allow for an exclusive left turn pocket. A video detection system would be installed at the signal to accommodate both vehicles and bicyclists; cost of video detection is included in Project 28.

Pedestrian Priority Zone: **Yes**

Street Typology: **Transit Street**

Cost Estimate: **$59,500**

Document Source: **Pixar EIR**

Project Need:

Planned development would result in LOS E conditions for vehicles traveling through the intersection; improvement would result in LOS D or better operations and decreased vehicle queues on southbound Horton Street. The project installs a video detection system for both bicycle and vehicle traffic.

Other:

Traffic volumes do not support implementing the project at this time. Other identified improvements include elimination of the eastbound left-turn pocket and construction of a median refuge for pedestrians.

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14. 40th Street / Emery Street Intersection Improvements

Project Extents:
40th Street at Emery Street
Project Type:
Automobile Capacity

Project Description:
Provide an exclusive southbound left turn lane on Emery Street approaching 40th Street, eliminating on-street parking on Emery Street north of 40th Street. Provide protected north/south lead/lag left-turn phasing.

Pedestrian Priority Zone: **Yes**
Street Typology: **Transit Street; Class II & III**
Cost Estimate: **$87,000**
Document Source: **Bay Street Site B Draft Transportation Impact Study Report**

Project Need:
Planned development would result in LOS E conditions for vehicles traveling through the intersection; improvement would result in LOS D or better operations and minimizes vehicle queue spillback.

Other:
On-street parking removal would be required; widening of Emery Street would allow for provision of bike lanes or on-street parking (may conflict with Emery Street Class III facilities).

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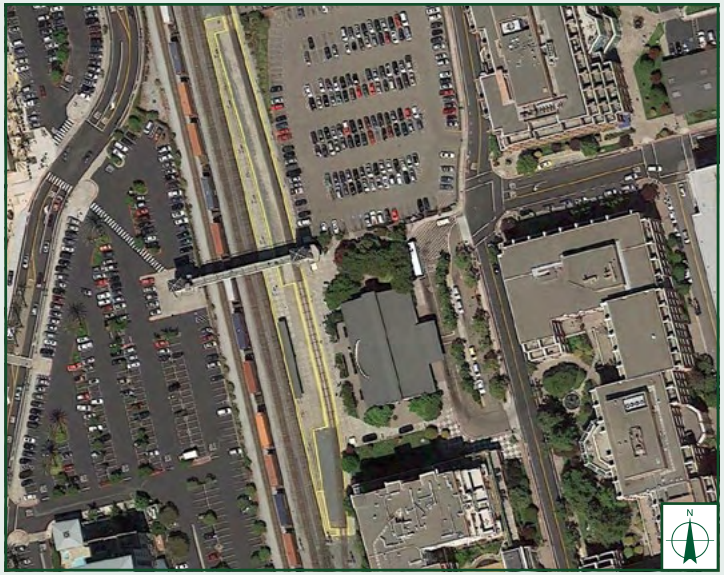
15. Transit Center Plaza and Platform Extension

Project Extents:

Emeryville Amtrak Station and the proposed EmeryStation West office building, and an extension of the loading platform abutting the new bus bays in the Transit Center parking podium.

Project Type:

Pedestrian



Project Description:

The plaza will create a public space and visual terminus of 59th Street focusing on the pedestrian bridge over the tracks. The pedestrian plaza will include new landscaping, hardscape, lighting and street furniture.

Pedestrian Priority Zone: **Yes**

Street Typology: **Pedestrian-only**

Cost Estimate: **$1,042,100**

Document Source: **CIP 2014**

Project Need:

The plaza will enhance pedestrian connections by providing east/west pedestrian connections across the site from Horton Street Bicycle Boulevard (a Transit Priority Street) and 59th Stret to the pedestrian/ bicycle bridge.

Other:

FTA funding was allocated in 2008 that would provide $836,000. A 20 percent local match is required, which is included in the fee. The plaza will be deveopled after the adjacent EmeryStation West is completed.

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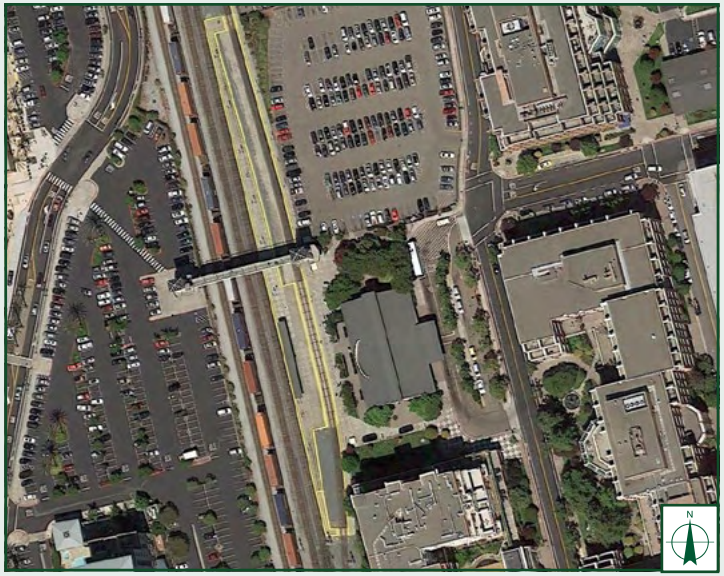
16. Public Parking and Bus Bays - Transit Center

Project Extents:

Directly adjacent to the Amtrak Station

Project Type:

Multi-Modal



Project Description:

The Transit Center project is a multi-modal, high-density project that includes both public and private components. The private use on the site will be office and laboratory space; the public uses promote mass transit and connect rail to bus travel modes, and include 125 public parking spaces and up to six bus bays serving Amtrak. The project will also include improvements to public plazas and enchance the linkage across the railroad by improving the existing pedestrian/bicycle bridge. Construction of the project will require remediation of the existing parking lot site, which is highly contaminated.

Pedestrian Priority Zone: **Yes**
Street Typology: **Transit**
Cost Estimate: **$8,431,000**
Document Source: **CIP 2014**

Project Need:

When completed, the project will remove contamination, enhance public space, improve Emeryville's mass transit, pedestrian, and bicycle connections, bring approximately 500 new high-quality jobs to Emeryville, and expand Emeryville's bio-technology presence in the region.

The city has secured a $4.2 million State STIP grant. An additional $4.2 million in redevelopment funds is being sought from the successor agency, but the status is unknown. $4.23 million of the cost is for remediation, which is not included in the fee calculation.

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17. Doyle Street Bicycle Boulevard

Project Extents:
55th Street to 59th Street
Project Type:
Bicycle Boulevard

Project Description:
Extend the existing bicycle boulevard on Doyle Street from 59th Street to 55th Street. Improvements include signage, stenciling and installing a protected crossing on Powell Street. i.e., HAWK or full traffic signal.

Pedestrian Priority Zone: **No**
Street Typology: **Green Street; Bicycle Boulevard**
Cost Estimate: **$275,000**
Document Source: **Emeryville Ped/Bike Plan Project B.20 and I.6**
Priority: **Medium**

Project Need:
The Doyle Street bicycle boulevard from Ocean Avenue to 59th Street includes signage and stencils as well as curb extensions and roadway narrowing. Stop signs turned to favor bicycle boulevard traffic. South of 59th Street the boulevard is unimproved. The project would complete the bicycle boulevard on Doyle Street.

Return to Main Map

18. Hollis Street Sidewalk

Project Extents:
45th Street to 53rd Street
Project Type:
Pedestrian

Project Description:
Widen sidewalks on Hollis Street (45th Street to 53rd Street) from about 5 feet to a minimum of 12 feet with street trees and lighting to match recommendations in Park Avenue District Plan.

Pedestrian Priority Zone: **Yes**
Street Typology: **Transit Street**
Cost Estimate: **$603,000**
Document Source: **Emeryville Ped/Bike Plan Project S.6**
Priority: **Medium**

Project Need:
The sidewalks are narrow on Hollis Street from 53rd to 45th Street while 53rd Street is a major east/west corridor for pedestrian travel through Emeryville. The project would improve the sidewalk, to enhance the walking experience and encourage additional walking trips.

Other:
Due to the transit and heavy vehicle use on Hollis Street, parking would likely need to be removed on one side of the street to make room for this improvement. Coordinate with potential redevelopment of adjacent parcels.

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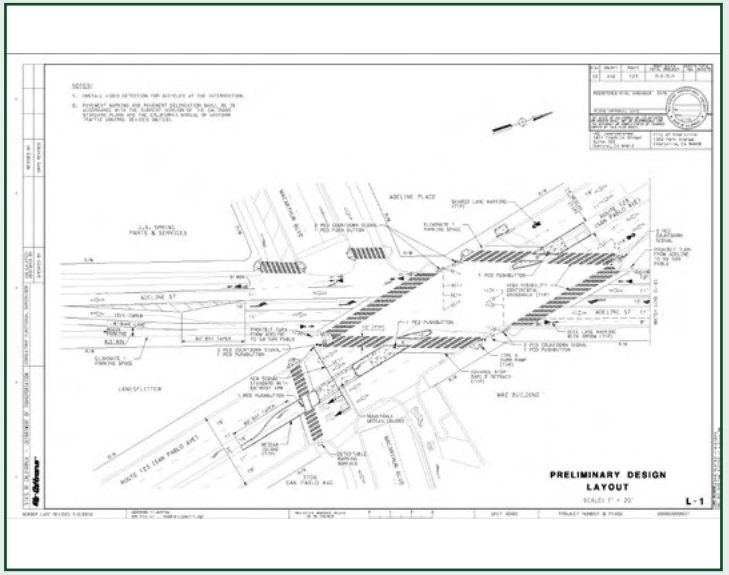
19. Safe Routes to Transit Star Intersection and 40th and San Pablo Avenue Intersection Improvments

Project Extents:

San Pablo Avenue between 40th Street and 36th/Adeline/MacArthur

Project Type:

Multi-Modal (non-motorized)



Project Description:

The Safe Routes To Transit (SRTT) project includes pedestrian and bicycle safety improvements to two intersections on San Pablo Avenue: the transit hub near 40th Street and the Star intersection at 36th/Adeline/MacArthur and San Pablo Avenue. Safety improvments include new crosswalks, bike lanes, video detection, sharrows, expansion of medians, and bulb-outs. A lead pedestrian phase (on east-west movement) of 2 seconds at 40th Street will be installed for evaluation. At the Star intersection, innovative treatments include a bike turning lane within the median, green bicycle lanes, and intersection crossing treatments.

Pedestrian Priority Zone: **Yes**

Street Typology: **Transit Street, Connector Street**

Cost Estimate: **$456,000**

Document Source: **CIP2014-12254008; Emeryville Ped/Bike Plan Project C.8 and I.5**

Priority: **High**

Project Need:

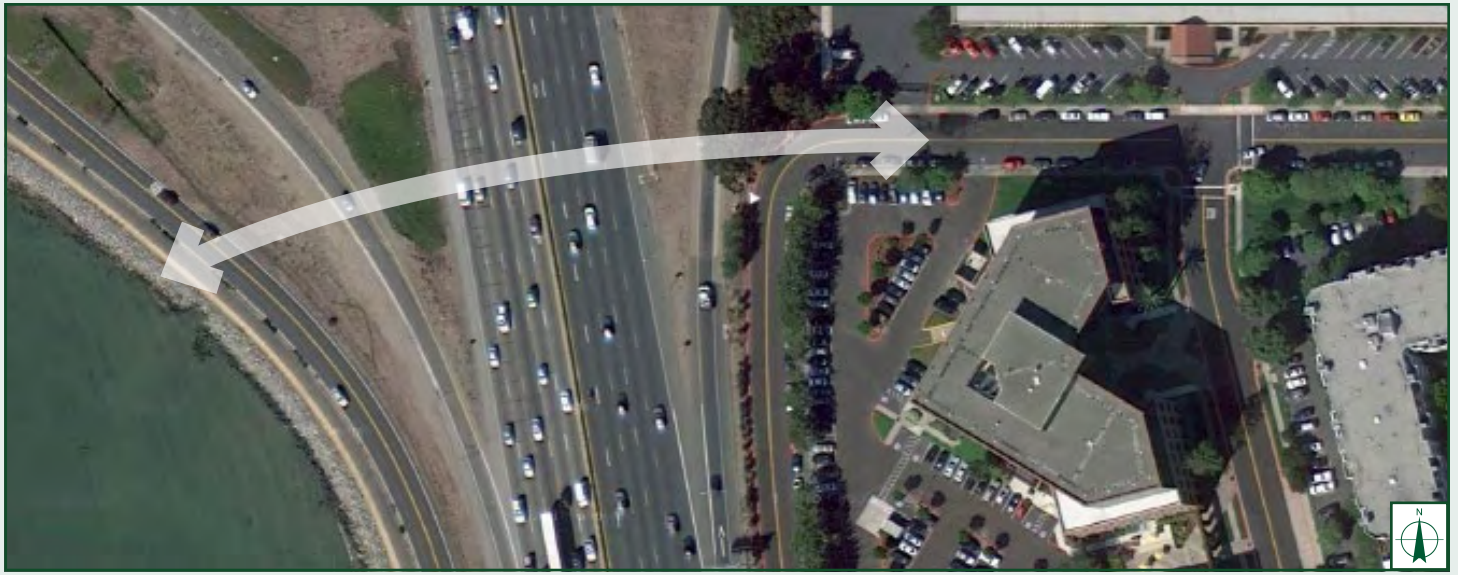
San Pablo Avenue is a heavily traveled street with high traffic volumes, which presents hazards to pedestrians and bicyclists. The number of residents living on or near to the intersections improved by the project is growing. Improvements will enable these residents to more safely access transit along San Pablo Avenue.

Other:

Design completed in the Fall of 2013. Bid is anticipated in Spring 2014. Construction is anticipated in Summer 2014.
Grant funding may be available for this improvement.

Return to Main Map

20. I-80 / 65th Street Pedestrian and Bicycle Bridge



Project Extents:
Lacoste Street to Frontage Road
Project Type:
Non-Motorized Bridge Connection

Project Description:
This project was being planned by the Redevelopment Agency and would construct a pedestrian and bicycle over crossing to connect with the Bay Trail at 65th Street from Lacoste Street to Frontage Road. The overcrossing would allow pedestrians and bicyclists to access the Bay Trail without interacting with vehicle traffic along I-80 at the Ashby interchange.

Pedestrian Priority Zone: **No**
Street Typology: **Not Applicable**
Cost Estimate: **$18,500,000**
Document Source: **Emeryville Ped/Bike Plan Projects B.25 and C.1**

Project Need:
I-80 is a significant barrier to regional bicycle and pedestrian travel. Bridge would provide an additional east-west connection and is consistent with the General Plan. Bridge allows pedestrians / bicyclists to access Bay Trail without interacting with vehicles at the Ashby interchange.

Other:
This project was being planned by the Redevelopment Agency and alternative funding sources are being sought.

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21. Horton Street and Overland Avenue from 40th Street to 62nd Street

Project Extents:

North-South on Horton Street and Overland Avenue from 62nd Street to 40th Street

Project Type:

Bicycle

Project Description:

Opportunity to impove function of major north-south bicycle boulevard. The entire route is currently signed as bicycle boulevard. Bicycle boulevard pavement markings north of 62nd St and south of 53rd St. Bike lanes striped on Horton St from 62nd to 53rd St. Section from 59th St to Stanford Ave identified as Green Street and Transit Street in General Plan.

Pedestrian Priority Zone: **No**

Street Typology: **Bicycle Boulevard**

Cost Estimate: **$2,015,000**

Document Source: **Emeryville Ped/Bike Plan Project B.21**

Priority: **High**

Project Need:

Implement bicycle boulevard treatments as described in the bike/ped plan.

- **Measure speeds and volumes**
- **Consider diversion at 62nd St, Stanford Ave, 45th St, and 40th St. Diversion to be installed on a trial basis only after evaluation with community input and traffic analysis.**
- **Reconfigure roadway between 59th St and Powell St to prevent loading/ parking in bike lanes. Widen to include bike lanes on both sides and loading zone on east side.**
- **Consider speed cushions, tables, split lumps, curb extensions, median islands and permanent speed feedback signs to reduce vehicle speeds.**
- **Improve bicycle detection at 40th St and 65th St**
- **Install 3-way stop at 62nd St and Horton**
- **Study measures to discourage through motor vehicle movement northbound on Horton at 40th St.**

Other:

Included in General Plan; See also pedestrian Projects S.4 and S.7.

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22. Emeryville Greenway Crossings at Hollis Street and Powell Street and Extension from Powell Street South to Stanford Avenue at Horton Street

Project Extents:

Emeryville Greenway between Hollis and Powell Streets, and from Powell Street to Stanford/Horton Streets

Project Type:

Mutli-Modal (non-motorized)

Project Description:

Enhance Greenway crossing of Powell and Hollis Streets.
Alternative A: Provide a raised crosswalk across the right-turn slip lane on the southwest corner and lengthen the refuge to improve pedestrian visibility and slow vehicles around the turn.
Alternative B: Eliminate slip lane to provide protected signalized crossing for pathway users crossing.

Extend greenway to the south to connect with Horton Landing Park at Stanford Avenue/Horton Street. Construct new ped path. Project designed.

Pedestrian Priority Zone: **No**
Street Typology: **Pedestrian Path**
Cost Estimate: **$1,350,000**
Document Source: **Emeryville Ped/Bike Plan Projects, C.7, P.6; CIP 2014-10480006**
Priority: **Medium**

Project Need:

Opportunity to create continuous path through city, completing one of the last gaps.

Other:

Grant funding may be available for a portion of the project cost.

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23. 40th Street and Harlan Street Traffic Signal

Project Extents:

40th Street at Harlan Street

Project Type:

Multi-Modal (all modes)

Project Description:

The project would install a traffic signal across 40th street at Harlan Street.

Pedestrian Priority Zone: **Yes**

Street Typology: **Transit Street Class II & III**

Cost Estimate: **$290,000**

Document Source: **CIP 2014-03444125; Emeryville Ped/Bike Plan Project C.2**

Priority: **Medium**

Project Need:

This unsignalized intersection includes long crossing distances across 40th Street and a higher than average rate of vehicle / pedestrian collisions within Emeryville. The signal would provide additional controlled access for bicyclists and pedestrians to the surrounding commercial and residential properties and would provide an opportunity for enhanced bus stop connectivity.

Other:

40th Street and Harlan Street now meet signal warrants for a traffic signal with a pedestrian crossing component.

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24. Sherwin Area Improvements

Project Extents:

Halleck, Horton, Hubbard & Holden Streets

Project Type:

Pedestrian

Project Description:

Install sidewalks per the Park Avenue District Plan on:

- North side of Sherwin Avenue between Halleck Street and Hubbard Street (S.13) $400,000
- West side of Halleck Street between Park Avenue and Sherwin Avenue (S.2) $593,000
- East side of Halleck St between Oakland Border and Park Avenue (S.2)
- East side of Hubbard Street between Oakland Border and Sherwin Ave (S.3) $571,550
- West side of Hubbard Street between Oakland Border and Park Avenue (S.3)
- West side of Horton Street between Park Avenue and Sherwin Avenue (S.4) $300,000
- Both sides of Holden Street between Park Avenue and 45th Street (S.5) $663,200

Construct a mid-block pedestrian path extending from Sherwin Avenue between Horton Street to Hollis Street (P.2) $314,600

Provide enhanced crossings at:

- Sherwin Avenue/Halleck Street (C.3) $1,500
- Sherwin Avenue/Hubbard Street (C.3)
- Mid-block crossing on Holden Street (C.4) Cost combined with P.2

Pedestrian Priority Zone: **Yes**

Street Typology: **Green Streets with Local (Sherwin/Hubbard/Holden)/ Connector (Park/Halleck)/ and Bike Boulevard (Horton) designations**

Cost Estimate: **$2,842,850**

Document Source: **City of Emeryville Pedestrian and Bicycle Plan Projects**

Priority: **Low**

Project Need:

Sidewalk gaps.

Other:

Improvements may be conditioned on development when Sherwin-Williams Property Redevelops.

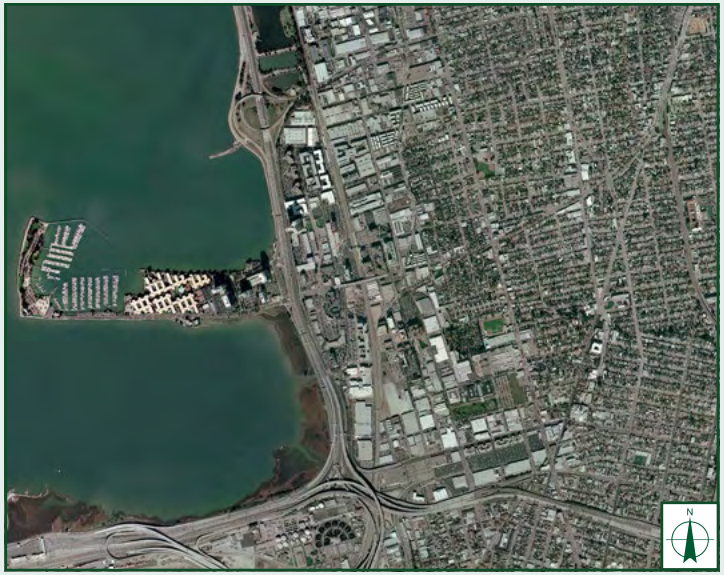
Project Issues:

Some of the improvements could be constructed when adjacent properties redevelop.

Return to Main Map

25. Bike Sharing Program

Project Extents:
Citywide Project
Project Type:
Bicycle



Project Description:
Citywide bike sharing program with approximately 17 stations (approximately 10 bikes per station).

Pedestrian Priority Zone: **Not Applicable**
Street Typology: **Not Applicable**
Cost Estimate: **$600,000**
Document Source: **Emeryville Sustainable Transportation Plan**

Project Need:
The project could generate 60,000 to 120,000 bike trips per year by providing additional non-motorized transportation options.

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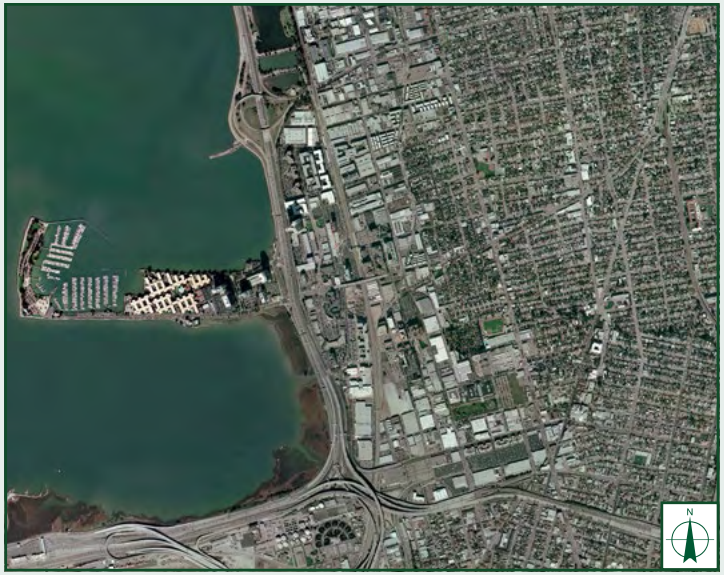
26. Bicycle Parking



Project Extents:
Citywide Project
Project Type:
Bicycle

Project Description:
Install bicycle parking at various locations throughout the City.

Pedestrian Priority Zone: **Not Applicable**
Street Typology: **Not Applicable**

Cost Estimate: **$200,000**
Document Source: **Emeryville Sustainable Transportation Plan**

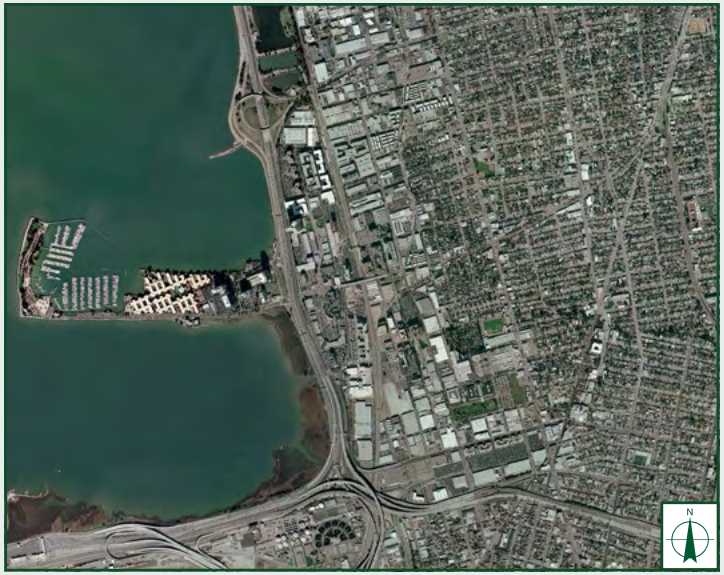
Project Need:
Lack of bicycle parking at activity centers reduces potential bicycle travel mode share. Accessible bicycle parking promotes bicycle use as an alternative to auto-bused trips.

Other:
Annual cost estimated at $10,000 per year for installation of new facilities.

Return to Main Map

27. Traffic Signal Enhancements

Project Extents:
Citywide
Project Type:
Bicycle



Project Description:
Install video detection at all signalized intersections in city that have not been upgraded (17 locations).

Pedestrian Priority Zone: **Not Applicable**
Street Typology: **All Streets**
Cost Estimate: **$490,000**
Document Source: **Emeryville Sustainable Transportation Plan and CIP 2014**

Project Need:
Existing signal detection at intersection does not adequately detect bicyclists. Project would provide video detection to decrease bicycle travel delay. When completed, all 26 of the city's traffic signals will have video detection.

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28. Emery Go-Round Bus Yard Acquisition

Project Extents:

Northeast of I-580 / I-80 / I-880 Interchange

Project Type:

Transit

Project Description:

The project acquires a bus yard site for the Emery Go-Round Shuttle through an agreement with the Emeryville Transportation Management Association (TMA). The City would purchase the property and resale or lease the land to the TMA.

Pedestrian Priority Zone: **Not Applicable**

Street Typology: **Not Applicable**

Cost Estimate: **$1,000,000**

Document Source: **CIP 2014**

Project Need:

The TMA leases a bus yard which is up for sale because of foreclosure. The TMA lease agreement includes a six-month notice of termination, therefore finding an alternative bus yard is imperative for continued operations of the Shuttle. A new and expanded facility is needed to provide enhanced service a local bus yard would improve reliability and reduce operating / maintenance costs.

Other:

Achieves climate change reductions. Shuttle funded by Emeryville Property Based Improvement District which includes City and commercial properties.

Return to Main Map

APPENDIX C: ADDITIONAL FUNDING SOURCES

FEHR PEERS

MEMORANDUM

Date: July 15, 2011

To: Miroo Desai, City of Emeryville

From: Kathrin Tellez, Fehr & Peers

Subject: ***Funding Sources for Emeryville Transportation Improvements***

WC10-2795

This memorandum outlines current and potential funding sources for transportation improvements within the City of Emeryville. A majority of existing financing for transportation infrastructure projects in Emeryville comes through the Capital Improvement Plan (CIP). The CIP sets priorities for building the City's infrastructure. A majority of funding for the CIP currently comes from the City's Redevelopment Agency or existing Traffic Impact Fee (TIF) program, with some funding also coming from the City's General Fund or federal, state, or regional grants. The future of Redevelopment Agencies throughout California is uncertain and it is likely that this funding source may not be a dependable source of revenue in the long-term as it may be significantly reduced starting in November 2011.

The City's current TIF program funds are mostly spent, as it was planned to extend to 2010. This memorandum is part of the update to the TIF program to extend its useful life to 2030, consistent with the recently adopted General Plan. The updated TIF is planned to reflect community values as expressed in the General Plan to include funding for pedestrian, bicycle, and transit projects in the TIF program.

PREVIOUS TIF FUNDING SOURCES AND EXPENDITURES

This section summarizes funding sources that have been used previously for infrastructure projects by the City of Emeryville and TIF expenditures from the previous five years.

Past Funding Sources

Table 1 discusses the primary funding mechanisms for transportation infrastructure in the City of Emeryville. This information was collected during a conversation with City staff from the Economic Development and Housing Department, Public Works Department, and Planning Department on April 18th, 2011. As shown in **Table 1** and noted earlier, a majority of existing financing for transportation infrastructure projects comes from local sources including the Redevelopment Agency and the existing TIF. City staff noted the overall difficulty of getting regional or non-local funding due to Emeryville's small size and the lack of regional connections when compared to its larger neighbors.

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TABLE 1
PAST FUNDING SOURCES

Funding Source	Description	Example Projects
Local		
Redevelopment Agency	Emeryville is split into two large redevelopment zones that cover the entire City except for the Marina. Redevelopment Agency funds are used for projects that require new right-of-way or to acquire land for large infrastructure projects funded. Due to proposed State changes to Redevelopment Agencies, the future of this funding source may not be viable in the long-term.	*South Bayfront Bridge* - $13 million in redevelopment fees used to secure bonds from tax increment *Greenway*: Redevelopment funds used to acquire property and conduct environmental cleanup.
Capital Improvement Program (CIP)	The CIP is primarily funded through the Redevelopment Agency, grants, and General Plan funds. The CIP 2011 Update includes approximately $30 million in City funds and $245 million in Redevelopment Agency funds. In addition, approximately $9 million is included for infrastructure maintenance.	Key CIP projects shown in **Table 3.** Other projects include maintenance items such as street trees and sidewalks in residential neighborhoods.
Condition of Development (COD)	Emeryville has included transportation improvements as a COD for developers. Improvements include new sidewalks or bicycle facilities along the project frontage, or intersection improvements to facilitate project site access. In commercial areas, property owners are required to maintain street trees and sidewalks along their frontage.	*Pixar Path*, *Bike Boulevard on 45th Street*, and *65th Street bike lanes*
Countywide		
Measure B	The one half cent sales tax for Alameda that is often used to fund slurry seal portion of roadways each summer. The slurry seal projects can be combined with other transportation improvement projects such as roadway restriping or bicycle lanes.	*Adeline Street Reconstruction* used Measure B funds
Regional		
Regional Transportation Plan (RTP)	The Metropolitan Transportation Commission (MTC) adopted the 2009 *Transportation 2035 Plan for the San Francisco Bay Area*, to specify how the approximately $218 billion in anticipated federal, state, and local transportation funds will be spent in the San Francisco Bay Area. Eighty percent of these funds will be used to maintain and operate the existing transportation system. Due to the uncertainty of redevelopment funds, the City has submitted 12 to 15 pedestrian and bicycle related projects for inclusion in the RTP and subsequent eligibility for Federal funding.	*I-80 / 65th Street Bridge* The City submitted a request for $13 million in the RTP
Statewide		
Transportation	The City of Emeryville receives between $5,000 and	

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TABLE 1
PAST FUNDING SOURCES

Funding Source	Description	Example Projects
Development Act Article 3	$7,000 in pass-through funds annually as a part of TDA Act 3. The City also receives $10,000 annually through the related Transportation Fund for Clean Air.	
Bicycle Transportation Account (BTA) Grant	BTA grants are used for projects that improve the safety and convenience of bicycle commuting	*Doyle Street Greenway* was [partially] constructed using BTA Grants
Proposition 84	Urban Greening for Sustainable Communities Grant Program	Prop 84 funds have been used for some landscaping & planning projects
National		
Federal Funding	Federal earmarks through the SAFETEA-LU programs	Funding for the planned Transit Center and Plaza [partially?]] covered by a Federal Earmark

Notes:
Source: City of Emeryville, Fehr & Peers, 2011

TIF Revenues and Expenditures

Table 2 shows the revenues that have been collected by the TIF program between 2005 and 2010. As shown in **Table 2**, a large number of reimbursements were distributed in 2010 due to the program reaching the end of the TIF cycle. Since the development of the TIF in 1992, nearly $6 million has been brought into the TIF program.

TABLE 2
TRAFFIC IMPACT FEE FUND
REVENUES (FISCAL YEAR 2005-10)

	2005	2006	2007	2008	2009	2010[1]	Total 1992-2010
Traffic Impact Fees	$202,322	$107,372	$578,191	$216,298	$149,311	$356,440	$5,601,842
Interest	$54,684	$64,740	$74,990	$108,459	$82,459	$27,025	$648,567
Reimbursements	$0	$ (6,581)	$689,138	$0	($439,673)	($2,583,363)	($275,197)
Total	$257,006	$165,530	$1,342,319	$324,757	($207,903)	($2,199,898)	$5,975,212

Notes:
1. 2010 includes through June 30, 2010.
Source: City of Emeryville, 2010

Table 3 shows the expenditures per year between 2005 and 2010, and the net TIF fund balance at the end of 2010. As shown in **Table 3**, after the reimbursements distributed in 2010 the net

balance of the TIF fund is just over $150,000. The updated TIF will provide the funds to continue the TIF program through the General Plan horizon year of 2030.

TABLE 3
TRAFFIC IMPACT FEE FUND
EXPENDITURES (FISCAL YEAR 2005-10)

	2005	2006	2007	2008	2009	2010	Total 1992-2010
Powell St & I-80 E Off Ramp	$0	$0	$0	$0	$0	$0	$34,959
Update Traffic Fee Study	$0	$0	$0	$0	$0	$0	$54,988
Shellmound Loop Improvements	$0	$0	$0	$0	$0	$0	$1,967,995
Powell/Hollis Intersection Improvements	$0	$0	$0	$0	$0	$0	$185,559
Hollis St Interconnect	$0	$54,706	$0	$0	$0	$0	$73,049
Shellmound Signal Timing	$0	$0	$0	$0	$0	$0	$142,984
40th Street Signal Design	$0	$0	$0	$0	$0	$0	$17,403
40th & SPA Widening	$0	$0	$0	$0	$0	$0	$7,965
Shellmound Street Striping	$0	$0	$0	$0	$0	$0	$8,512
Horton Street Extension	$0	$0	$0	$0	$0	$0	$2,047,791
65th Street Traffic Signal	$22,737	$318,517	$679,043	$0	$0	$0	$1,225,898
Powell Streetscape Design	$0	$0	$0	$0	$17,420	$37,567	$54,986
Total Expenditures	$22,737	$373,223	$679,043	-	$17,420	$37,567	$5,822,088
Revenues Over / (Under) Expenditures[1]	$234,269	($207,693)	$663,276	$324,757	($225,323)	($2,237,464)	$153,124
Beginning Fund Balance, July 1	$1,601,302	$1,835,571	$1,627,878	$2,291,154	$2,615,912	$2,390,589	N/A
Ending Fund Balance, June 30	$1,835,571	$1,627,878	$2,291,154	$2,615,912	$2,390,589	$153,124	$153,124

Notes:

1. See **Table 2** for revenues.

Source: City of Emeryville, 2010

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ALTERNATE FUNDING SOURCES

In addition to the proposed TIF, there are numerous funding sources at the local, countywide, regional, statewide, and federal levels that are potentially available to the City of Emeryville to implement the transportation infrastructure projects and programs. Below is a description of the most promising funding programs available for future projects. Most of the non-local sources are highly competitive and require staff time and resources to preparation applications and manage successful grants.

Local Funding Sources

Capital Improvement Plan (CIP)

The CIP sets priorities for building the City's infrastructure, including pedestrian and bicycle improvements. A majority of funding for the CIP currently comes from the City's Redevelopment Agency, with some funding also coming from the City's General Fund or federal, state, or regional grants. As noted earlier, Redevelopment Agency funding is uncertain in the future so this funding may not be a dependable source of revenue in the long-term.

Mello-Roos Districts

This is the common name for the *Community Facilities District Act* passed by the California State Legislature in 1982. This bill allows for local communities to establish "Community Facilities Districts" (CFDs) as a means for obtaining funding for such community services or infrastructure. CFDs include a special property tax that is above the normal property taxes for real estate owners within the district. This tax income can be used to cover the principle payments for bonds that the jurisdiction takes out to build new public infrastructure and services within that district. New infrastructure could include streets, pedestrian or bicycle amenities, or transit facilities.

Private Financing Mechanisms

New construction can be used to finance new pedestrian and bicycle infrastructure through several key mechanisms:

- Developer financed infrastructure on- or off-site. This could include on-site pedestrian or bicycle connections to existing infrastructure or entirely new infrastructure in the project vicinity. Emeryville has used this mechanism to require Pixar to construct multi-use path between Park Avenue and 43rd Street.

- Create a Mello-Roos District as discussed previously.

In addition to the upfront infrastructure costs, the financing for the maintenance of new facilities may be provided for by private developments. Funding for long-term operations and maintenance can be financed through several mechanisms:

- Condition of approval that the new development maintains the infrastructure along the project frontage or in the project vicinity. It is currently the City's policy for retail uses to maintain sidewalks along the establishment's frontage.

- Require resident and employee transit or "eco-pass" for new developments. This would include monthly passes that are included in rental or homeowner fees and could provide

a source of funding for transit service to the development of an on-site bicycle station or rental facility.

- Implement parking pricing policies for on-street and off-street facilities. Revenue from meters or parking garages could be used to finance on-going maintenance of bicycle and pedestrian facilities.

Local Gas Tax

The City of Emeryville could support local incremental increases in the State gas tax at either the countywide or multi-county level. This gas tax increases could be implemented in small three or four cent increments to support local transportation improvements.

Other Funding Sources

Local sales taxes, developer or public agency land dedications are other local options to generate funding for transportation projects. Creation of these potential sources usually requires substantial local support.

Countywide Funding Sources

Alameda County Measure B Bicycle and Pedestrian Program

Measure B is a half-cent sales tax that was passed in 1986 and reaffirmed by voters in 2000. Funds are distributed through the Alameda County Transportation Improvement Authority (ACTIA). Seventy-five percent of these funds are distributed to cities and the County based on population, while twenty-five percent is is allocated to the Measure B Bicycle and Pedestrian Countywide Discretionary Fund (CDF), which supports planning, projects and programs, including a competitive grant program.

Alameda County Vehicle Registration Fee

The Alameda County Vehicle Registration Fee was approved by the voters in 2010 and will generate approximately $11 million per year countywide. Five percent of these revenues are designated for pedestrian and bicycle projects, to be distributed based on population. In addition, 60 percent of the forecast funds are designated for Local Streets and Roads. Projects funded under this category must include complete streets elements in order to be eligible. The Alameda County Transportation Commission (ACTC) is administering these funds and is currently, as of July 2011, drafting revised master agreements for local agencies that will govern the expenditure of these funds.

Measure WW

In 2008, Contra Costa and Alameda County voters approved EBRPD's Measure WW, the "Regional Open Space, Wildlife, Shoreline and Parks Bond." This extension of a similar 1988 bond measure allocates $33 million specifically to trail projects in the county. In addition, the measure will provide $48 million directly to cities, the county and special park and recreation districts for their park and recreation needs, including trails and other non-motorized transportation projects.

- Measure WW: www.ebparks.org/ww

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Regional Funding Sources

Transportation for Livable Communities

MTC created the Transportation for Livable Communities (TLC) program in 1998. It provides technical assistance and funding to cities, counties, transit agencies and nonprofit organizations for capital projects and community-based planning that encourage multimodal travel and the revitalization of town centers and other mixed-use neighborhoods. The program funds projects that improve bicycling to transit stations, neighborhood commercial districts and other major activity centers.

- MTC's TLC program: www.mtc.ca.gov/planning/smart_growth/ tlc_grants.htm

Climate Action Program

In partnership with the Bay Area Air Quality Management District, Bay Conservation Development Commission and the Association of Bay Area Governments, MTC is sponsoring a transportation-oriented Climate Action Program, designed to reduce mobile emissions through various strategies, including a grant program. The grant program will provide funding for bicycle projects through new Safe Routes to School and Safe Routes to Transit programs, with total funding expected to be approximately $400 million. This funding will be in addition to the state and federal Safe Routes to School programs and MTC's existing Safe Routes to Transit program.

Safe Routes to Transit (SR2T)

SR2T is a grant-funding program that emerged out of the Bay Area's Regional Measure 2, which instituted a $1 toll increase on the Bay Area's seven state-owned toll bridges. Through the SR2T program, up to $20 million is to be allocated through 2013 on a competitive basis to programs, planning efforts and capital projects designed to reduce congestion on toll bridges by improving bicycling and walking access to regional transit services that serve toll-bridge corridors. Funds can be used for secure bicycle storage at transit nodes; safety enhancements and barrier removal for pedestrian or bicycle access to transit; and system-wide transit enhancements to accommodate bicyclists. The SR2T program is administered by two nonprofit organizations, TransForm and the East Bay Bicycle Coalition, with MTC serving as the fiscal agent. The program awarded approximately $12 million during its first three cycles, in 2005, 2007, and 2009. Applications for the 2011 funding cycle are due in August. The fifth and final funding cycle will occur in 2013.

- Bay Area Safe Routes to Transit funding program: www.transformca.org/campaign/sr2t

Regional Bikeway Network Program

MTC's "Regional Bicycle Plan for the San Francisco Bay Area" designates a regional bikeway network covering approximately 2,140 miles throughout the nine Bay Area counties. MTC has pledged $1 billion to fully fund this regional bikeway network (with the exception of links on toll bridges) and will create a funding program with the intention of completing construction of the network by 2035. This program was completed in 2009 and replaced the expired Regional Bicycle and Pedestrian Program. The Bay Trail through Emeryville is a part of the regional bikeway network. The South Bayfront Bridge and 65th Street Bridge are both identified for funding in the Plan.

Bay Trail Grants

The San Francisco Bay Trail Project—a non-profit organization administered by the Association of Bay Area Governments—provides grants to plan, design, and construct segments of the Bay Trail. The amount, and even availability, of Bay Trail grants vary from year to year, depending on whether the Bay Trail Project has identified a source of funds for the program. In recent years, grants have been made using funds from Proposition 84, the 2006 Clean Water, Parks and Coastal Protection Bond Act; however, this is a limited-term source of funds.

- Bay Trail grants: www.baytrail.org/grants.html

Transportation Fund for Clean Air (TFCA)

TFCA is a grant program administered by the Bay Area Air Quality Management District (BAAQMD). The purpose of the program, which is funded through a $4 surcharge on motor vehicles registered in the Bay Area, is to fund projects and programs that will reduce air pollution from motor vehicles. Eligible projects include including the purchase or lease of clean air vehicles; shuttle and feeder bus service to train stations; ridesharing programs to encourage carpool and transit use; bicycle facility improvements such as bike lanes, bicycle racks, and lockers; arterial management improvements to speed traffic flow on major arterials; smart growth projects; and transit information projects to enhance the availability of transit information. Grant awards are generally made on a first-come, first-served basis to qualified projects. Funding for projects is also available through the TFCA's County Program Manager Fund. Under that sub-program, 40 percent of TFCA revenues collected in each Bay Area county is returned to that county's congestion management agency (CMA) for allocation (the Alameda County CMA in Emeryville's case). Applications are made directly to the CMAs, but must also be approved by the BAAQMD.

- TFCA Bicycle Facility Program: www.baaqmd.gov/pln/grants_and_incentives/bfp/index.htm

- TFCA County Program Manager Fund: www.baaqmd.gov/pln/grants_and_incentives/tfca/cpm_fund.htm

Proposition 84

Proposition 84 is administered by the California Strategic Growth Council and is known as the Urban Greening for Sustainable Communities Grant Program. This Proposition provides grants to local jurisdictions to create new urban greening plans and projects that will guide the development of urban parks and landscaping. Grants from this source could be used to support green streets and landscape restoration projects. This grant source includes programs for both planning grants and project grants. The 2011 2nd Cycle project concept applications were due in June 2011 with full grant applications due in Fall of 2011. A third cycle will be announced in 2012/13.

- http://sgc.ca.gov/docs/funding/Solicitation_Notice_UG_2nd_Round_4.25.11.pdf

- http://sgc.ca.gov/docs/funding/UGProjects_FAQ_R2.final_4.22.11.pdf

Statewide Funding Sources

Below is a list of Statewide Funding sources available for transportation related improvements.

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Proposition 1B Transportation Infrastructure Bond

Proposition 1B is a statewide bond passed by the voters of California in 2006 to provide money for transportation improvements. This money can be used for such activities as improving rail-highway crossings, retrofitting local bridges, modernizing transit services, as well as provide matching funds for locally nominated projects.

Proposition 1C Housing/Transit Oriented Development Bonds

Proposition 1C is a statewide bond passed by the voters of California to provide money for affordable housing and transit oriented development. Of this bond, $850 million is available in grants for the development of public infrastructure projects that facilitate or support infill housing construction. This program has been used previously to finance construction of roadways as well as pedestrian and bicycle facilities to support affordable housing and transit oriented development.

Transportation Enhancements (TE)

Under the Transportation Enhancements program, California receives approximately $60 million per year from the federal government to fund projects and activities that enhance the surface transportation system. The program funds projects under 12 eligible categories, including the provision of bike lanes, trails, bicycle parking and other bicycling facilities; safety-education activities for pedestrians and bicyclists; landscaping and other scenic beautification projects; and the preservation of abandoned railway corridors and their conversion to trails for non-motorized transportation. In California, 75 percent of TE funding is distributed by the regional transportation planning agencies. For the Bay Area, MTC allocates the money through its TLC program. The remaining 25 percent is allocated by Caltrans at the district level.

Bicycle Transportation Account (BTA)

The BTA is a Caltrans-administered program that provides funding to cities and counties for projects that improve the safety and convenience of bicycle commuting. Eligible projects include secure bike parking; bike-carrying facilities on transit vehicles; installation of traffic-control devices that facilitate bicycling; planning, design, construction and maintenance of bikeways that serve major transportation corridors; and elimination of hazards to bike commuters. In fiscal year 2010/11, the BTA provided $7.2 million for projects throughout the state. To be eligible for BTA funds, a city or county must prepare and adopt a bicycle transportation plan that meets the requirements out-lined in Section 891.2 of the California Streets and Highways Code.

- Bicycle Transportation Account: www.dot.ca.gov/hq/LocalPrograms/bta/btawebPage.htm

Safe Routes to School (SR2S)

California's Safe Routes to Schools program (SR2S) is a Caltrans-administered grant-funding program established in 1999 (and extended in 2007 to the year 2013). Eligible projects include bikeways, walkways, crosswalks, traffic signals, traffic-calming applications, and other infrastructure projects that improve the safety of walking and biking routes to elementary, middle and high schools, as well as "incidental" education, enforcement and encouragement activities. Planning projects, on the other hand, are not eligible. The most recent cycle of funding was released in April 2011, with approximately $42 million available for funding through 2013.

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- Caltrans Safe Routes to School program: www.dot.ca.gov/hq/LocalPrograms/saferoutes/saferoutes.htm

Transportation Development Act (TDA), Article 3

TDA Article 3 is perhaps the most readily available source of local funding for transit, pedestrian, and bicycle projects. TDA funds are derived from a statewide quarter-cent retail sales tax. This tax is returned to the county of origin and distributed to the cities and county on a population basis. Under TDA Article 3, two percent of each entity's TDA allocation is set aside for pedestrian and bicycle projects; this generates approximately $3 million in the Bay Area annually. Eligible projects include the design and construction of walkways, bike paths and bike lanes, and safety education programs. According to MTC Resolution 875, these projects must be included in an adopted general plan or pedestrian and bicycle plan and must have been reviewed by the relevant city or county pedestrian and bicycle advisory committee.

MTC's Procedures and Project Evaluation Criteria for the TDA Article 3 program: www.mtc.ca.gov/funding/STA-TDA/RES-0875.doc

State Transportation Improvement Program (STIP)

Every two years, the California Transportation Commission program funds for a variety of projects that relieve congestion on state highways and local streets, including transit construction projects. Seventy-five percent of STIP funds are distributed to the counties. The remaining 25 percent is programmed for intercity highway and rail improvements.

Public Transportation Account (PTA) and State Transit Assistance (STA) Program

PTA revenues accrue from a sales tax on gasoline and diesel fuel. Fifty percent of all PTA revenues go to the STA Program, which provides funds for public transit operations and for regional transit projects. STA funds are allocated to the region based upon two factors: (1) fifty percent based on population and (2) fifty percent based on fare revenues from the prior fiscal year.

Highway Safety Improvement Program (HISP)

In 2009, the HISP replaced the Hazard Elimination Safety program which provided funds to eliminate or reduce the number and severity of traffic collisions on public roads and highways. Cities and counties compete for HES funds by submitting candidate projects to Caltrans for review and analysis. Caltrans prioritizes these projects statewide and approves priority projects for funding through its annual HISP program plan. Historically, only about 20 percent of applications are approved for funding. In February 2011, Caltrans released the fourth cycle of projects approved for funding. The list contained 179 projects totaling nearly $75 million in federal funds.

Federal Funding Sources

Below is a list of Federal Funding sources available for transportation related improvements.

Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU)

SAFETEA-LU provides funding for roads, transit, safety, and environmental enhancements. These are generally state and local improvements for highways and bridges that accommodate

additional modes of transit. Improvements include capital costs, publicly-owned intercity facilities, and pedestrian and bicycle facilities. This legislation also includes a Safe Routes to School program, with funding for projects that improve pedestrian and bicycle access and safety around primary and middle schools. Cities, counties, and transit operators can apply for SAFETEA-LU funds. An 11.5 percent local match is required for these funds. Several key SAFETEA-LU programs include the following:

- *Surface Transportation Program Fund, Section 1108 (STP)* – STP are block grant funds that are used for roads, bridges, transit capital, and bicycle projects. SAFETEA-LU allows the transfer of funds from other SAFETEA-LU programs to the STP Fund. Cities, counties, metropolitan planning organizations (MPO), and transit operators can apply for STP funds.

- *National Highway System Fund (NHS)* – NHS funds provide for an interconnected system of principal arterial routes. The goal of the program is to afford access to major population centers, international border crossings, and transportation systems, meet national defense requirements, and serve interstate and inter-regional travel. Facilities must be located and designed pursuant to an overall plan developed by each metropolitan planning organization (MPO) and state, and incorporated into the RTP. Both state and local governments can apply for NHS funds. A 20 percent local or state match is required for these funds.

- *Congestion Mitigation and Air Quality Improvement Program, Section 1110 (CMAQ)* – CMAQ funds are available for projects that will help attain National Ambient Air Quality Standards (NAAQS) identified in the 1990 Federal Clean Air Act Amendments. Projects must be located within jurisdictions in non-attainment areas. Cities, counties, MPO, state, and transit operators can apply for SAFETEA-LU funds. An 11.5 percent local or state match is required for these funds. Note that this program will likely be discontinued.

- *Transportation Enhancements Program, Section 1201 (TE)* – The TE Program is a 10 percent fund set aside from the STP. Projects must have a direct relationship to the intermodal transportation system through function, proximity, or impact. This program has 12 activities that are eligible for funding. Local, regional, and state public agencies, special districts, non-profit and private organizations can apply for TE funds. Cities, counties, or transit operators must sponsor and administer the proposed projects. A 12 percent local match is required for these funds. Additional detail on this program is provided below, relating to the Statewide distribution from the TE Program.

- *Bridge Repair and Replacement Program (BRRP)* – BRRP funds are available for bridge rehabilitation and replacement. Bridge projects must be incorporated into the Regional Transportation Improvement Program (RTIP). Cities may apply for these funds.

- *National Recreational Trails Fund, Section 1112* – Funds are available for recreational trails. Projects must be consistent with a Statewide Comprehensive Outdoor Recreation Plan (SCORP). Projects include development of urban trail links, maintenance of existing trails, restoration of trails damaged by use, trail facility development, provision of access for people with disabilities, administrative costs, environmental and safety education programs, acquisition of easements, fee simple title for property, and construction of new trails. Private individuals/organizations, cities, counties, and other governmental agencies can apply for these funds. There are no specific local match requirements for these funds.

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- *National Highway Safety Act, Section 402* – The Highway Safety Program is a non-capital safety project grant program under which states may apply for funds for certain approved safety programs and activities. Eligible states must adopt a Highway Safety Plan (HSP) reflecting state highway problems. State departments, cities, counties, and school districts may apply for these funds. No local match is required.

- *Transit Enhancement Activity, Section 3003* – The Transit Enhancement Activity fund can be used for a variety of transportation activities including improving pedestrian and bicycle access to mass transportation, landscape and scenic beautification, historic preservation, and environmental mitigation. Regional transportation planning agencies, state, and local agencies may apply for these funds. A 5 percent local match is required for these funds.

- *Highway Safety, Research, and Development Fund, Section 2003* – This fund can be used to study and research multi-modal transportation safety. Projects must be incorporated into the RTIP. Cities, counties, and state agencies can apply for these funds. A 25 percent local match is required for these funds.

- *Section 3 Mass Transit Capital Grants* – This fund can be used for to improve mass transit station areas including access to the station. States, regional, local governments, and transit operators can apply for these funds. A 10 percent local match is required for bicycle related projects using these funds.

Safe Routes to Schools

The Federal Safe Routes to Schools (SRTS) program, established by Section 1404 in SAFETEA-LU, is funded at approximately $150 million dollars annually, through Federal-aid highway funds. The Federal Highway Administration (FHWA) apportions funds annually to each state, with California receiving on average, $23 million dollars per year. The program emphasizes the 5E's – education, encouragement, engineering, enforcement, and evaluation; therefore, both infrastructure and programmatic projects are eligible for funding; however, only projects located within a two mile radius of elementary and middle schools are eligible. The third cycle of funds is expected to launch in early 2011 with a call for projects. No local match is required to receive program funds.

- Federal Safe Routes to School program: http://www.dot.ca.gov/hq/LocalPrograms/saferoutes/srts.htm

CONCLUSION

With the future uncertain for Redevelopment Agencies, alternative funding sources will be required to fund the planned transportation infrastructure in Emeryville. The updated TIF will be a key source for funding new transportation infrastructure projects but there are also a variety of other local, regional, statewide, and federal grants that are available. Potential local funding sources include creating a Mello-Roos district or using private development to fund specific projects or operations and maintenance. Regional, statewide, and federal funding mechanisms include a variety of grants available through Alameda County, the MTC, as well as the state and federal governments.