

City of East Palo Alto Development Impact Fee Program NEXUS STUDY



Prepared for
City of East Palo Alto
Prepared by
AECOM Sustainable Economics Group



MISSION STATEMENT

The City of East Palo Alto provides responsive, respectful, and efficient services to enhance the quality of life and safety of its multi-cultural community.

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LIST OF ACRONYMS

CIP Capital Improvement Program

DEPLAN Draft Engineering Plan for RBD

DU Dwelling Unit

DUA Dwelling Unit per Acre

EDA Economic Development Administration

EDI Economic Development Initiative

EIR Environmental Impact Report

FAR Floor-Area Ratio

GPD Gallons Per Day

HUD U.S. Department of Housing and Urban Development

OBAG One Bay Area Grant

PSF Per Square Foot

R&D Research and Development

RBD Ravenswood Business District (Ravenswood/4 Corners Specific Plan Area)

RSP Ravenswood/4 Corners Specific Plan/Program EIR

SF Square Foot

STAG State Tribal Assistance Grants

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Executive Summary

The primary purpose of this report is to provide the necessary technical documentation and nexus analyses supporting the adoption of an impact fee program in East Palo Alto.

Impact fees aim to ensure that new development contributes a fair share of funding to infrastructure improvements including parks and recreation, public facilities, water infrastructure, storm drainage, road improvements, and streetscape elements. To enact a fee program, a city must demonstrate a reasonable and proportional relationship between the fee rate and the impact of anticipated development. This study provides the proof of a nexus between the infrastructure burdens of development growth and the fee exaction.

East Palo Alto has developed a list of infrastructure projects necessary to support the anticipated new development over the next twenty years from several City documents including the Capital Improvement Program, the Ravenswood Business District/4 Corners Specific Plan, and the Draft Engineering Plan. Development impact fees are based on the capital cost allocation of these infrastructure projects to new and existing development. Costs are allocated to six land use types (town houses, multi-family housing, office space, R&D space, industrial space, and retail space) based either on service population or intensity of use (such as water infrastructure).

Impact fees are developed for two zones, recognizing the anticipated concentration of development in the Ravenswood Business District and its associated infrastructure requirements: the City of East Palo Alto as a whole; and the rezoned parcels within the Ravenswood Business District Specific Plan Area (RBD), a subset of the city. Citywide impact fees will include three infrastructure categories: Parks and Trails, Community Facilities, and Water Infrastructure (water supply). RBD-specific impact fees will include four infrastructure categories: Water Infrastructure (water distribution and water storage), Storm Drainage, Roadway Infrastructure, and Streetscape Infrastructure. Within the RBD, developers of rezoned parcels will be charged citywide impact fees as well as RBD-specific impact fees, to account for their broader infrastructure impacts on the city overall.

The following table outlines the recommended development impact fees, as calculated by the nexus analysis.

Summary of Recommended Development Impact Fees in East Palo Alto

Development Impact Fee	Town House (per DU ³)	Multi-Family (per DU ³)	Office (psf ⁴)	R&D (psf ⁴)	Industrial (psf ⁴)	Retail (psf ⁴)
Parks & Trails						
Citywide fee	n/a	n/a	\$0.87	\$0.37	\$0.25	\$0.51
RBD-specific fee	n/a	n/a	n/a	n/a	n/a	n/a
Fee charged to development outside RBD ²	\$0.00	\$0.00	\$0.87	\$0.37	\$0.25	\$0.51
Fee charged to development within RBD	\$0.00	\$0.00	\$0.87	\$0.37	\$0.25	\$0.51
Community Facilities						
Citywide fee	\$510	\$422	\$0.25	\$0.11	\$0.07	\$0.15
RBD-specific fee	n/a	n/a	n/a	n/a	n/a	n/a
Fee charged to development outside RBD	\$510	\$422	\$0.25	\$0.11	\$0.07	\$0.15
Fee charged to development within RBD	\$510	\$422	\$0.25	\$0.11	\$0.07	\$0.15
Water Infrastructure						
Citywide fee	\$1,003	\$784	\$0.44	\$1.49	\$1.45	\$0.62
RBD-specific fee	\$3,050	\$1,696	\$1.17	\$3.29	\$3.29	\$2.88
Fee charged to development outside RBD	\$1,003	\$784	\$0.44	\$1.49	\$1.45	\$0.62
Fee charged to development within RBD	\$4,053	\$2,480	\$1.61	\$4.78	\$4.74	\$3.50
Storm Drainage						
Citywide fee	n/a	n/a	n/a	n/a	n/a	n/a
RBD-specific fee	\$4,317	\$1,794	\$1.51	\$3.67	\$3.56	\$4.96
Fee charged to development not in RBD	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Fee charged to development within RBD	\$4,317	\$1,794	\$1.51	\$3.67	\$3.56	\$4.96
Roadway Infrastructure						
Citywide fee	n/a	n/a	n/a	n/a	n/a	n/a
RBD-specific fee	\$9,898	\$11,329	\$18.76	\$13.82	\$11.87	TBA^1
Fee charged to development outside RBD	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Fee charged to development within RBD	\$9,981	\$11,424	\$18.91	\$13.93	\$11.97	TBA ¹
Streetscape						
Citywide fee	n/a	n/a	n/a	n/a	n/a	n/a
RBD-specific fee	\$1,505	\$1,245	\$0.74	\$0.32	\$0.21	TBA^1
Fee charged to development outside RBD	\$0	\$0	\$0	\$0	\$0	\$0
Fee charged to development within RBD	\$1,505	\$1,245	\$0.74	\$0.32	\$0.21	TBA ¹
Total Fees						
Total fee charged to development outside RBD	\$1,513	\$1,206	\$1.56	\$1.97	\$1.77	\$1.28
Total fee charged to development within RBD	\$20,284	\$17,270	\$23.73	\$23.06	\$20.70	\$9.11

Source: AECOM, 2013

Notes:

^{1.} Refer to the Impact Fees by Real Estate Product Types section for a more detailed discussion of RBD-specific retail impact fees. In brief, no stand-alone retail is anticipated in the RBD in the 25-year planning horizon, so no impact fees are calculated for this land use for roadway and streetscape infrastructure (which is planned for a 25-year timeframe). In the event that stand-alone retail is developed in the RBD, RBD-specific roadway and streetscape impact fees must be calculated on a case-by-case basis.

^{2.} Residential component of Parks and Trails infrastructure fulfilled by Quimby Act fees.

^{3.} DU = dwelling unit

^{4.} Psf = per square foot

1. Introduction

PURPOSE

The primary purpose of this report is to provide the necessary technical documentation and nexus analyses supporting the adoption of an impact fee program in East Palo Alto. Impact fees will be developed for two zones.

One zone is the entire city (Figure 1). This zone includes fees for three infrastructure categories: Parks and Trails, Community Facilities, and Water Infrastructure (water supply component).

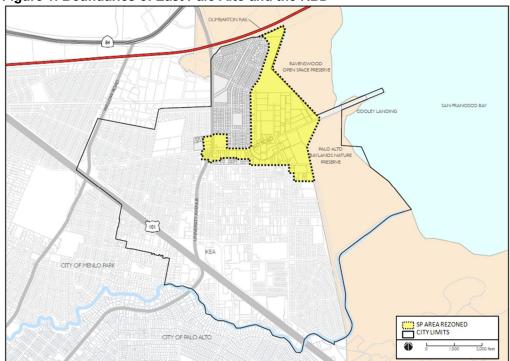
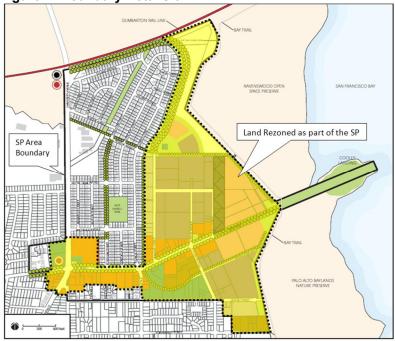


Figure 1: Boundaries of East Palo Alto and the RBD

The other zone is the Ravenswood Business District Specific Plan Area (RBD). This zone is limited to the rezoned parcels with the RBD (Figure 2, SP Area Rezoned), and includes fees for four infrastructure

categories: Water Infrastructure (water distribution and storage components), Storm Drainage, Roadway Infrastructure, and Streetscape Infrastructure. Within the RBD, developers of rezoned parcels will be charged citywide impact fees as well as RBD-specific impact fees.

Figure 2: Boundary Details of RBD



Impact fees aim to ensure that new development contributes a fair share of funding to infrastructure improvements including public facilities, parks and recreation, water infrastructure, storm drainage, and road improvements. To enact a fee program, a city must demonstrate a reasonable and proportional relationship between the fee rate and the impact of anticipated development. This study provides the proof of a nexus between the infrastructure burdens of development growth, and the fee exaction.

This nexus study summarizes the impact fee program, applicable to new development in the City of East Palo Alto. East Palo Alto anticipates significant population and employment growth between 2013 and 2035, necessitating significant new infrastructure and community facilities to support new development. Codifying development impact fees in a nexus study will provide clarity regarding project development costs, and will streamline fee allocation and fee collection, which will be particularly helpful for the City in light of extensive projected development. This nexus study also fulfills the policy directive (Policy UTIL-3.5) in the Ravenswood/4 Corners TOD Specific Plan that the City prepare a nexus study to identify financing for infrastructure improvements within the Ravenswood Business District Specific Plan Area (RBD).

NEXUS FEE BACKGROUND

City governments can charge development impact fees to developers, as a condition of development approval, to finance (or contribute to the financing of) infrastructure that the development requires, such as water supply, drainage, open space, or community facilities. A development impact fee is not a tax or special assessment, but rather a fee directly related to the cost of providing the public infrastructure needed to support that development. The fee amount must be reasonably related to the cost of the public infrastructure provided by the government collecting the fee; otherwise, the fee may be considered a special tax and subjected to two-thirds voter approval. Thus, development impact fees may not be levied to pay for existing infrastructure deficiencies, unrelated to the impacts of new development.

A jurisdiction must legislatively adopt findings of a reasonable relationship between the purpose of the fee and the impact created by the new development, as well as a proportional relationship between the amount of the fee and the amount of the impact, before enacting a development impact fee program.

Although local governments began levying impact fees in the 1920s as a way to finance infrastructure, in 1987, the California legislature passed the Mitigation Fee Act (Assembly Bill 1600, or the Act) to establish the principles governing impact fee exactions and, to some extent, to codify existing constitutional requirements. The related Government Code Sections 66000-66025 establish legal requirements to implement a development fee program for fees that meet the terms of the Act. According to the Act, to establish a development fee program, a jurisdiction must legislatively accept a nexus study that identifies:

- the purpose of any fees;
- how fees will be used:
- a reasonable relationship between the fee-funded public infrastructure and the type of development paying the fee; and
- a proportional relationship between the amount of the fee and the amount of the impact, or demand created by the new development paying the fee.

Development impact fees are common among Californian cities and are a well-accepted way to fund a variety of public infrastructure such as roads, sewer and water facilities, and community facilities (park buildings, libraries, and fire protection services) to accommodate new development.

East Palo Alto does not have a standard, legislated impact fees structure. Instead, impact fees are traditionally negotiated on a case-by-case basis, an approach that is more vulnerable to legal challenge and is more staff-intensive to administer. Project-specific fees imposed on an ad hoc basis must be supported by project-specific analyses of a nexus between the fees exacted and the development, and by project-specific analyses of rough proportionality between the fees exacted and the impact of the development. Under this process, the burden of proof of nexus is the responsibility of the government and is labor-intensive for city staff. In the event of a legal challenge, individual nexus justifications are scrutinized more stringently than generally applicable legislated fees.

In September 2012, East Palo Alto's City Council accepted the Ravenswood/4 Corners Transit Oriented Development Specific Plan (Specific Plan) which proposes a framework for transforming 350 acres in northeast East Palo Alto into a new downtown. The Specific Plan projects significant growth in the Specific Plan Area (RBD) in housing, employment, and non-residential space. This projected new growth will require significant investment in new or upgraded infrastructure, including water supply, drainage, roads, parks, libraries, and community centers. Development impact fees will help fund this development-necessitated infrastructure. However, with the volume of projected growth, the current case-by-case approach to charging fees is impractical; a standard fee system is more appropriate. With high growth (and a large number of development applications), a systematic, fair, and proportional process for applying fees is more legally defensible, as well as much easier and faster to administer.

Given the legal risks and bureaucratic challenges of the current impact fees, and the adoption of an ambitious plan for accelerated development and growth, East Palo Alto commissioned this nexus study to codify their development impact fee program. A uniform and legally defensible impact fee program will better support the projected development program.

2. Development Forecast

Demographic projections and land uses drive the demand for city public improvements, because, in general, the more people (either residents or employees), the higher the demand for city infrastructure and services. New development generates and accommodates the projected growth in population and employment and therefore is assigned the associated infrastructure costs for infrastructure that serves the increase in the local service population (see the following demographic projections write-up for an explanation of service population). East Palo Alto is projected to experience significant population and employment growth, especially given the development plan for the Ravenswood/4 Corners Specific Plan Area (RBD). The following section outlines the development growth assumptions and land use projections in East Palo Alto, given the RBD.

DEMOGRAPHIC PROJECTIONS

Demographic projections include population and employment projections for East Palo Alto. A detailed discussion of projection methodology is included in Appendix Table A - 3. summarizes the population and employment projections developed for East Palo Alto, at a citywide level, within the RBD, and in the city excluding the RBD (non-RBD).

A service population calculation is included in Table 1, based on the population and employment projections. Service population is a relatively standardized concept in economic modeling that determines the level of capital infrastructure demand placed on a given infrastructure from additional development. A city's total service population is calculated as one times the resident population plus half of the employment population (2:1 ratio).

This approach evaluates infrastructure demand based on both place of residence and place of work. Under this model, resident-employees (i.e. persons that both live and work in East Palo Alto) are counted twice, once for their home location, and once for where they work. This methodology accounts for the infrastructure need generated both at their place of work and at their place of residence (e.g. required roadways near their home and near their office). While employees require similar amounts of capital improvements (roads, storm drains, etc.) as residents, the employee factor has been discounted by 50 percent, to half that of residents. This reflects a conservative approach to their capital infrastructure demand. This 2:1 ratio serves as the basis for the service population calculation.

Table 1: Population, Employment, and Service Population (2010 - 2035)

*	Zone	Growth (2010 – 2035)	Source/Calculation
Resident Population			
A	East Palo Alto	9,875	See Note 1
В	RBD	2,766	See Note 1
Employment Population			
C	East Palo Alto	7,814	See Note 1
D	RBD	4,851	See Note 1
Servic	e Population		
Е	East Palo Alto	13,782	A * 1 + C * 0.5 (see Note 2)
F	RBD	5,192	B * 1 + D * 0.5 (see Note 2)

Source: AECOM, 2013

Notes

DEVELOPMENT PROJECTIONS

Development projections for East Palo Alto include both residential and non-residential square footage build-out forecasts (Table 2). Citywide projections for housing and non-residential built square footage are given for a 25-year planning horizon. With the detailed development analysis done for the RBD, development projections for the RBD include more detail, with housing forecasts by type (townhouse or multi-family) and density, and non-residential forecasts by land acreage, built square footage, and floor-area ratio (FAR). A development scenario for a 50- to 80-year planning horizon is included, given that some infrastructure items (water infrastructure) are engineered for a longer lifecycle.

^{1.} Sociodemographic growth projections calculated as part of AECOM's Task 1 & 2 deliverable memorandum "Growth Assumptions and Benchmark Case Studies" Table 2). Please refer to Appendix Table A - 3 for a summary of the methodology. Sources include Ravenswood/4 Corners TOD Specific Plan EIR Table 5-1 "Comparison of Buildout Figures", and ABAG 2009 Citywide estimates.

^{2.} Refer to the above Demographic Projections section for a more detailed explanation of service population. In brief, service population is a concept in economics that accounts for the infrastructure demand of both residents (at their place of residence) and employees (at their place of work). As a conservative approach, the infrastructure demand of employees is discounted by half.

Table 2: Development Projections for 25-Year and 50-80 Year Planning Horizons

25 Year Planning Horizon - Gro	owth		
City of East Palo Alto			
	Acreage	Number	Density (DUA)
Housing Units	n/a	2,371	n/a
	Land SF	Built SF	<u>FAR</u>
Office	n/a	1,653,000	n/a
Industrial	n/a	240,000	n/a
R&D	n/a	156,000	n/a
Retail	n/a	353,000	n/a
RBD			
	<u>Acreage</u>	<u>Number</u>	Density (DUA)
Townhouses	1	19	25
Multi-Family Housing	20	816	41
	Land SF	Built SF	FAR
Office	901,000	1,250,000	1.5
Industrial	433,000	218,000	0.8
R&D	217,000	134,000	0.6
50-80 year Planning Horizon - 0	Growth		
RBD			
	Acreage	Number	Density (DUA)
Townhouses	10	204	20
Multi-Family Housing	23	1,083	50
	Land SF	Built SF	FAR
Office	1,192,000	1,568,922	1.5
Industrial	1,804,000	975,000	0.5
R&D	1,281,245	714,000	0.5
Retail	328,000	131,000	0.4

Source: City of East Palo Alto, 2013

PROJECTED INFRASTRUCTURE REQUIREMENTS

The list of required infrastructure projects to support new development was developed through various adopted plans and programs, including East Palo Alto's adopted ten-year Capital Improvement Program (CIP), the Ravenswood 4/Corners Specific Plan/Program EIR (RSP), and the Draft Engineering Plan for the RBD (DEPLAN). Community amenity projects include the construction of parks, trails, and open space, the construction of community facilities (for example, a library, a police department building, a health clinic expansion), and the construction of pedestrian-friendly streetscape (such as sidewalks with lighting, trees, sidewalk furniture). Other infrastructure projects include water, drainage, and roadway infrastructure. Water and drainage infrastructure projects include installation of water and storm drain pipes, emergency water storage facilities, and new water sources (establishment of a groundwater well and well rehabilitation). Roadway infrastructure includes the construction of new roads. A detailed

summary of the infrastructure projects is included in Appendix B: Detailed Project List. Table 3 summarizes the costs for all infrastructure projects necessary to support new development. The following sub-sections briefly outline each of the three source documents and plans (CIP, RSP, and DEPLAN).

Table 3: Infrastructure Project Costs List

Infrastructure Item	Project Cost	Associated Fees Charged in RBD or Citywide
Parks & Trails	\$51,027,000	Citywide
Community Facilities	\$41,815,000	Citywide
Water Infrastructure - Water Supply	\$5,400,000	Citywide
Water Infrastructure – Other (Distribution)	\$4,838,300	RBD
Water Infrastructure – Other (Storage)	\$5,000,000	RBD
Storm Drainage	\$15,413,400	RBD
Road Infrastructure	\$43,379,000	RBD
Streetscape	\$4,427,000	RBD
Sanitary	\$3,441,6200	No impact fees charged for sanitary

Source: City of East Palo Alto, CIP, RSP and DEPLAN

TEN-YEAR CAPITAL IMPROVEMENT PROGRAM (CIP) [ADOPTED 2013]

Since 2010, the City of East Palo Alto has undertaken annual capital planning to prioritize investments in capital projects. In June 2013, the City Council adopted the 2013/2014 ten-year CIP, which includes projects for water supply, water storage, parks and trails, and community facilities.¹

The CIP includes approximately \$46.5 million in gross infrastructure development costs. In terms of water infrastructure, the CIP includes water supply projects for two groundwater wells that would provide emergency and domestic groundwater, and a two-million gallon water storage project that would hold enough emergency water to serve new development. Several parks, trails and community facilities projects are included in the CIP to support new development as well. Table 4 summarizes all relevant CIP projects and costs.

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¹ The most recently adopted CIP is available online at http://www.ci.east-palo-alto.ca.us/DocumentCenter/View/558.

Table 4: Capital Improvement Project List for Impact Fee Consideration

Infrastructure Item	Description	Project Cost
Parks and Trails		\$8,978,000
Martin Luther King Jr. Park Improvements	PK-07	\$450,000
Joel Davis Park Improvements	PK-08	\$260,000
Park/Trail Adjacent to San Francisquito Creek	PK-10	\$3,250,000
Jack Farrell Park Improvements	PK-11	\$220,000
Baylands Park	PK-12	\$4,368,000
Bell Street Park Improvements	PK-13	\$430,000
Community Facilities		\$25,345,000
Community Facilities Master Plan	FA-01	\$100,000
Community Development Building	FA-02	\$90,000
2277 University Avenue Building	FA-03	\$10,000
Senior Center Building	FA-04	\$30,000
Police Department Building	FA-05	\$10,000,000
Corporation Yard Building	FA-06	\$100,000
New City Hall	FA-07	\$15,000,000
Media Center Improvement	-	\$15,000
Water Infrastructure		\$5,400,000 (Water Supply) \$5,000,000 (Other Water)
Water Supply Infrastructure	Gloria Well Assessment/Rehabilitation	\$2,000,000
Water Supply Infrastructure	2nd Groundwater Well	\$3,400,000
Water Storage Infrastructure	2 million gallon tank for (emergency) water storage	\$5,000,000
Cost Sub-Total		\$44,723,000

Source: City of East Palo Alto, 2013

RAVENSWOOD BUSINESS DISTRICT/4 CORNERS SPECIFIC PLAN (RSP)

The East Palo Alto City Council adopted the RBD/4 Corners Specific Plan (RSP) and certified the associated program EIR on September 4, 2012.²

The RSP and associated EIR identify many of the facilities required to support the development projected in the RBD, in particular traffic mitigations at various intersections, an arterial Loop Road connection to University Avenue, 30 acres of parks, five miles of new Class I trails, and community facilities. The original project lists were included as Attachment A in the Specific Plan, but the costs have been updated (2013) to approximately \$91 million in gross costs. Table 5 summarizes all RSP projects and costs.

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² The documents are available online at http://www.ci.east-palo-alto.ca.us/Archive.aspx?AMID=61.

Table 5: Ravenswood Business District/4 Corners Specific Plan Project List for Impact Fee Consideration

Infrastructure Item	Description	Project Cost
Parks and Trails		\$42,049,114
#1. Fordham Road - Improvements	#1, Fig 4-2	\$1,201,500
#2. Purdue Avenue - Trail Improvements	#2, Fig 4-2	\$176,175
#3. Trail Gap Closures	#3, Fig 4-2	\$1,058,400
#4. Hetch Hetchy ROW Trail	#4, Fig 4-2	\$338,877
#5. Bay Trail Con. Boardwalk (Spur to Bay Trail)	#5, Fig 4-2	\$2,970,000
#7. UP Rail Spur Trail Demeter to Bay Rd.	#7, Fig 4-2	\$1,282,500
#8. Bay Trail (Weeks to Bay Rd.)	#8, Fig 4-2	\$486,000
#10. UP Spur Trail- Pulgas Ave. to Bay Trail @ levee	#10, Fig 4-2	\$843,750
#11. Purdue Avenue Pedestrian Paseo	#11, Fig 4-2	\$1,130,625
#12. View Corridor Trail	#12, Fig 4-2	\$826,200
#13. Trail Along Romic (between Purdue and Bay)	#13, Fig 4-2	\$1,012,500
#14. Hetch Hetchy ROW Park	#14, Fig 4-2	\$3,071,250
#15. Bay Road Park	#15, Fig 4-2	\$10,530,000
#16. Bay & Univ. NE Corner	#16, Fig 4-2	\$211,702
#17. End of Weeks	#17, Fig 4-2	\$1,499,553
#18. Purdue Park	#18, Fig 4-2	\$3,577,500
4 Corners Plaza	#1, Fig 4-2	\$3,213,000
#19. Purdue Pedestrian Paseo	#19, Fig 4-2	\$1,005,583
#20. TBD small Park	#20, Fig 4-2	\$540,000
#21. TBD small Plaza	#21, Fig 4-2	\$324,000
#22. Cooley Landing	#22, Fig 4-2	\$6,750,000
Community Facilities		\$21,735,000
Purdue Recreation Center	Fig 4-1, p47-48	\$4,320,000
4 Corners Community Center	Fig 4-1, p47-48	\$8,640,000
Library	Fig 4-1, p47-48	\$3,510,000
Roadway Improvement Requirements		\$24,447,272
Loop Road	RBD arterial	\$22,346,672
EIR Traffic Mitigations	EIR Required	\$2,100,600
Cost Sub-Total		\$88,231,387

Source: City of East Palo Alto, 2013

DRAFT ENGINEERING PLAN RAVENSWOOD DISTRICT (DEPLAN)

The Draft Ravenswood Business District Engineering Plan (DEPLAN) was recommended for adoption by the Public Works and Transportation Commission and by the Planning Commission in December 2008 and February 2009, respectively. In April 2009, the East Palo Alto City Council adopted Resolution 2903, which adopted the DEPLAN as the basis of design for the Bay Road project. In 2013, Wilsey Ham updated the original DEPLAN cost estimates.³

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³ The DEPLAN is available at http://www.ci.east-palo-alto.ca.us/ArchiveCenter/ViewFile/Item/131.

Infrastructure work on roads, streetscape, utility undergrounding, storm drains, sanitary sewers, and water distribution is necessary for the development in the RBD, since the RBD does not currently have the infrastructure to support additional development. The DEPLAN represents the lowest cost alternative considered for infrastructure engineering for the RBD. The DEPLAN includes: (1) a gravity storm drain system that flows to the O'Connor Pump Station via an existing drainage canal between Runnymede Avenue and the O'Connor Pumping station detention pond; (2) a gravity sanitary sewer system that connects to the existing trunk line along the levee; (3) a water distribution system of 12-inch force main pipes throughout the district; (4) trenched and buried electric and telecommunication utilities; (5) some road work; and (6) streetscape improvements (based on the streetscape improvements built as part of Bay Road Phase I along Bay Road between University Avenue and Clarke Avenue).

The total cost for the DEPLAN improvements is approximately \$57 million.⁴ Table 6 summarizes all DEPLAN projects and costs.

Table 6: Draft Engineering Plan Project List for Impact Fee Consideration

Infrastructure Item	Description	Project Cost
Water Infrastructure - Other		\$4,838,327
Water Distribution Infrastructure	Network of water pipes in RBD	\$4,838,327
Storm Drainage		\$15,413,372
Storm Drainage Infrastructure	Storm drainage pipes in RBD	\$15,413,372
Sanitary Sewer Infrastructure		\$3,441,624
Sanitary Sewer Infrastructure	Sanitary sewer pipes and other sanitary service improvements in RBD	\$3,441,624
Roadway Improvement Requirements		\$18,931,655
Roadway improvements as per DEPLAN and RSP	Building street structure work in RBD	\$18,931,655
Streetscape Elements		\$4,427,134
Streetscape improvements	Pedestrian, aesthetic, and safety improvements	\$4,427,134
Cost Sub-Total		\$47,052,112

Source: City of East Palo Alto, 2013

⁴ Note that the cost has remained remarkably stable over time. In 2000, the RBD LLC, which represents landowners in the RBD, prepared a separate engineering study for infrastructure in the RBD. The 2000 estimate was \$29 million, which is approximately equivalent to \$55 million in 2013 dollars.

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3. Impact Fee Summary

INFRASTRUCTURE CATEGORIES

A nexus between development and impact fees will be determined for the following six infrastructure types:

- ♦ Parks and trails
- ♦ Public facilities
- Water infrastructure, including water supply, water storage, and water distribution
- ♦ Storm Drainage
- ♦ Roadway improvements
- ♦ Streetscape improvements

These infrastructure elements were identified by the City as the six areas where development – citywide and in the RBD – will require new capital investment. A detailed discussion of the impact fee determination for each infrastructure category is included in Chapter 0.

IMPACT FEE ZONES

To properly apportion infrastructure costs to the associated need, the nexus analysis uses two impact fee zones:

- one zone for the entire city (Figure 1), and
- one zone for the RBD (Figure 2).

Some facilities, such as parks, have citywide benefit and demand. For the infrastructure elements that impact the whole city, fees are charged citywide.

The RBD, where the majority of new development is anticipated, has significant backbone infrastructure requirements. For these infrastructure elements, impact fees are charged to developers building on

rezoned parcels within the RBD. That is, RBD-specific impact fees will be levied on projects on land that was rezoned as part of the RBD/4 Corners Specific Plan Area (RBD). ⁵

CITYWIDE IMPACT FEES

The impact fee program developed for three infrastructure categories will be assigned citywide:

- parks and trails;
- public facilities; and
- water infrastructure (water supply).

These infrastructure assets provide critical open space, water supply, and community facility infrastructure to the entire community and therefore capital costs are shared citywide.

RBD-SPECIFIC IMPACT FEES

Impact fees for four infrastructure categories will be charged only within the RBD:

- water infrastructure (distribution and storage);
- storm drainage;
- road improvements; and
- streetscape facilities.

The water, drainage, and road infrastructure assets will be constructed specifically to serve the RBD, providing critical backbone infrastructure to support new development in the RBD. Streetscape is a local amenity and will benefit the RBD only. Therefore, the impact fees for these infrastructure facilities will be charged only within the RBD.

IMPACT FEES BY REAL ESTATE PRODUCT TYPES

Impact fees vary by real estate product type, and this nexus considers six different land uses:

- ♦ Townhouse (residential)
- ♦ Multi-Family (residential)
- ♦ Office (non-residential)
- ♦ R&D (non-residential)
- ♦ Industrial (non-residential)
- ◆ Retail (non-residential)

In general, retail uses in the RBD are projected to occur only within mixed-use housing projects in the 25-year planning horizon, and separate retail RBD-specific impact fees (for roadways and streetscape)

⁵ Note that not all land area within the RBD was rezoned (Figure 1). RBD impact fees will not apply to the existing single family zoning in the University Village neighborhood.

are not calculated for retail space, on top of the residential project impact fees. For the 50- to 80-year planning horizon, some stand-alone retail is projected to develop, and therefore RBD-specific water infrastructure impact fees for retail have been calculated. If stand-alone retail is developed in the RBD, case-by-case impact fees for roadway and streetscape infrastructure will need to be calculated. Some retail development is projected for East Palo Alto, outside of the RBD, so impact fees for the citywide categories (parks and trails, and community facilities) are calculated.

SUMMARY OF MAXIMUM SUPPORTABLE NEXUS FEES

This nexus analysis first calculated the maximum supportable fees that the City of East Palo Alto could charge to development. These fees (Table 7) assume that development will pay fees to account for 100 percent of development's allocated share of infrastructure costs.

However, the City, in several cases, should adopt a lower fee as appropriate (Table 86). Where existing or dedicated funding streams defray the infrastructure project cost, the nexus fees charged to a developer can be lower than the fees in Table 7. Where funding sources to meet the City's allocated share of infrastructure costs are not yet identified, the City must charge a lower impact fee, commensurate with the proportion of the City's share for which the City has identified funding. Chapter 5 (Additional Funding Sources and City Contributions) outlines these impact fee reductions in more detail.

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⁶ Note that although the fee reductions shown in Table 8 are calculated by evenly distributing the fee discount across all land uses, the fee reductions do not need to be evenly distributed across all uses. The City could choose to reduce non-residential-use fees only, maintaining the residential-use fees. Chapter 5 (Committed City Funds) contains a more detailed discussion.

Table 7: Summary of Maximum Supportable Nexus Fees

Development Impact Fee	Town House (per DU)	Multi-Family (per DU)	Office (psf)	R&D (psf)	Industrial (psf)	Retail (psf)
Parks & Trails						
Citywide fee	n/a	n/a	\$2.35	\$1.00	\$0.67	\$1.39
RBD-specific fee	n/a	n/a	n/a	n/a	n/a	n/a
Fee charged to development outside RBD ²	\$0.00	\$0.00	\$2.35	\$1.00	\$0.67	\$1.39
Fee charged to development within RBD	\$0.00	\$0.00	\$2.35	\$1.00	\$0.67	\$1.39
Community Facilities						
Citywide fee	\$3,895	\$3,222	\$1.92	\$0.82	\$0.55	\$1.14
RBD-specific fee	n/a	n/a	n/a	n/a	n/a	n/a
Fee charged to development not in RBD	\$3,895	\$3,222	\$1.92	\$0.82	\$0.55	\$1.14
Fee charged to development within RBD	\$3,895	\$3,222	\$1.92	\$0.82	\$0.55	\$1.14
Water Infrastructure						
Citywide fee	\$1,003	\$784	\$0.44	\$1.49	\$1.45	\$0.62
RBD-specific fee	\$3,050	\$1,696	\$1.17	\$3.29	\$3.29	\$2.88
Fee charged to development not in RBD	\$1,003	\$784	\$0.44	\$1.49	\$1.45	\$0.62
Fee charged to development within RBD	\$4,053	\$2,480	\$1.61	\$4.78	\$4.73	\$3.49
Storm Drainage						
Citywide fee	n/a	n/a	n/a	n/a	n/a	n/a
RBD-specific fee	\$5,792	\$2,407	\$2.02	\$4.92	\$4.77	\$6.65
Fee charged to development not in RBD	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Fee charged to development within RBD	\$5,792	\$2,407	\$2.02	\$4.92	\$4.77	\$6.65
Roadway Infrastructure						
Citywide fee	n/a	n/a	n/a	n/a	n/a	n/a
RBD-specific fee	\$11,967	\$13,698	\$22.68	\$16.71	\$14.36	TBA ¹
Fee charged to development not in RBD	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Fee charged to development within RBD	\$11,967	\$13,698	\$22.68	\$16.71	\$14.36	TBA ¹
Streetscape						
Citywide fee	n/a	n/a	n/a	n/a	n/a	n/a
RBD-specific fee	\$3,457	\$2,859	\$1.71	\$0.73	\$0.49	TBA ¹
Fee charged to development not in RBD	\$0	\$0	\$0	\$0	\$0	\$0
Fee charged to development within RBD	\$3,457	\$2,859	\$1.71	\$0.73	\$0	TBA ¹
Total fee charged to development not in RBD	\$4,899	\$4,006	\$4.71	\$3.31	\$2.67	\$3.14
Total fee charged to development within RBD	\$29,165	\$24,665	\$32.28	\$28.95	\$25.57	\$12.66

Source: AECOM, 2013

Notes:

^{1.} Refer to the Impact Fees by Real Estate Product Types section for a more detailed discussion of RBD-specific retail impact fees. In brief, no stand-alone retail is anticipated in the RBD in the 25-year planning horizon, so no impact fees are calculated for this land use for roadway and streetscape infrastructure (which is planned for a 25-year timeframe). In the event that stand-alone retail is developed in the RBD, RBD-specific roadway and streetscape impact fees must be calculated on a case-by-case basis.

^{2.} Residential component of Parks and Trails infrastructure fulfilled by Quimby Act fees.

Table 8: Summary of Recommended Development Impact Fees

Development Impact Fee	Town House (per DU)	Multi-Family (per DU)	Office (psf)	R&D (psf)	Industrial (psf)	Retail (psf)
Parks & Trails						
Citywide fee	n/a	n/a	\$0.87	\$0.37	\$0.25	\$0.51
RBD-specific fee	n/a	n/a	n/a	n/a	n/a	n/a
Fee charged to development outside RBD ²	\$0.00	\$0.00	\$0.87	\$0.37	\$0.25	\$0.51
Fee charged to development within RBD	\$0.00	\$0.00	\$0.87	\$0.37	\$0.25	\$0.51
Community Facilities						
Citywide fee	\$510	\$422	\$0.25	\$0.11	\$0.07	\$0.15
RBD-specific fee	n/a	n/a	n/a	n/a	n/a	n/a
Fee charged to development outside RBD	\$510	\$422	\$0.25	\$0.11	\$0.07	\$0.15
Fee charged to development within RBD	\$510	\$422	\$0.25	\$0.11	\$0.07	\$0.15
Water Infrastructure						
Citywide fee	\$1,003	\$784	\$0.44	\$1.49	\$1.45	\$0.62
RBD-specific fee	\$3,050	\$1,696	\$1.17	\$3.29	\$3.29	\$2.88
Fee charged to development outside RBD	\$1,003	\$784	\$0.44	\$1.49	\$1.45	\$0.62
Fee charged to development within RBD	\$4,053	\$2,480	\$1.61	\$4.78	\$4.74	\$3.50
Water Infrastructure						
Citywide fee	n/a	n/a	n/a	n/a	n/a	n/a
RBD-specific fee	\$4,317	\$1,794	\$1.51	\$3.67	\$3.56	\$4.96
Fee charged to development outside RBD	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Fee charged to development within RBD	\$4,317	\$1,794	\$1.51	\$3.67	\$3.56	\$4.96
Roadway Infrastructure						
Citywide fee	n/a	n/a	n/a	n/a	n/a	n/a
RBD-specific fee	\$9,898	\$11,329	\$18.76	\$13.82	\$11.87	TBA ¹
Fee charged to development outside RBD	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Fee charged to development within RBD	\$9,981	\$11,424	\$18.91	\$13.93	\$11.97	TBA ¹
Streetscape						
Citywide fee	n/a	n/a	n/a	n/a	n/a	n/a
RBD-specific fee	\$1,505	\$1,245	\$0.74	\$0.32	\$0.21	TBA ¹
Fee charged to development outside RBD	\$0	\$0	\$0	\$0	\$0	\$0
Fee charged to development within RBD	\$1,505	\$1,245	\$0.74	\$0.32	\$0.21	TBA ¹
Total Fees						
Citywide subtotal	\$1,822	\$1,461	\$1.71	\$2.03	\$1.81	\$1.37
RBD-specific subtotal	\$18,770	\$16,064	\$22.17	\$21.09	\$18.93	\$7.83
Total fee charged to development outside RBD	\$1,513	\$1,206	\$1.56	\$1.97	\$1.77	\$1.28
Total fee charged to development within RBD	\$20,284	\$17,270	\$23.73	\$23.06	\$20.70	\$9.11

Source: AECOM, 2013

Notes:

^{1.} Refer to the Impact Fees by Real Estate Product Types section for a more detailed discussion of RBD-specific retail impact fees. In brief, no stand-alone retail is anticipated in the RBD in the 25-year planning horizon, so no impact fees are calculated for this land use for roadway and streetscape infrastructure (which is planned for a 25-year timeframe). In the event that stand-alone retail is developed in the RBD, RBD-specific roadway and streetscape impact fees must be calculated on a case-by-case basis.

^{2.} Residential component of Parks and Trails infrastructure fulfilled by Quimby Act fees.

OTHER EXISTING OR POTENTIAL CITY IMPACT FEES

East Palo Alto currently charges Quimby Act fees for recreation and open space, is exploring potential fees for affordable housing, and will charge sanitary sewer fees. These fees are discussed in the following sub-sections.

QUIMBY ACT FEES

The City currently levies park and open space fees on residential development, as per the Quimby Act, California Government Code Section 66477 and Ordinance 145, adopted July 29, 1992. This report recommends that Quimby Act fees remain in place on residential development. This study establishes the nexus for an impact fee for parks and open space to be levied on non-residential development.

AFFORDABLE HOUSING FEES

In terms of affordable housing fees, options exist for residential in-lieu fees and commercial linkage fees. The following sub-sections explore both of these options for East Palo Alto.

Affordable Housing In-Lieu Fees

The City is exploring the possibility of levying an affordable housing in-lieu fee on residential development to support the production of affordable housing units. The approximate maximum potential affordable housing fee is \$23 per square foot for each residential unit. The law allows cities to charge the maximum amount or a lower amount. The in-lieu fee would be approximately \$23,000 per unit for a 1,000 square foot townhome and \$18,975 for an 875-square-foot multi-family unit. The proposed in-lieu fee is being considered since aspects of the City's Below Market Rate Ordinance were invalidated in a recent State Supreme Court decision.⁷ A separate affordable housing nexus analysis would need to be undertaken to determine the impact fee amounts more precisely and defensibly.

Affordable Housing Commercial Linkage Fee

A non-residential affordable housing fee may be levied in the form of a commercial linkage fee. East Palo Alto is not pursuing a commercial linkage fee for affordable housing, however, because of the need for significant backbone infrastructure. Cities add commercial linkage fees to successful commercial areas with existing infrastructure – for example, the City of Menlo Park levies an affordable housing commercial linkage fee of \$14 per square foot on a thriving commercial sector with most backbone infrastructure in place. In East Palo Alto, a commercial linkage fee would discourage commercial development, which is counter-productive to the City's goals.

EAST PALO ALTO SANITARY SEWER DISTRICT (EPASD) DISCUSSION

Table 3 includes approximately \$3.4 million in sanitary sewer improvements for the RBD in the DEPLAN. Most of the RBD is within the boundary of the East Palo Alto Sanitary District (EPASD), which is an independent special district. In addition, the Facciola property, located at the northern terminus of Demeter Street, is in the separate West Bay Sanitation District.

⁷ Palmer/Sixth Street Properties v. City of Los Angeles 2009 W.L. 2170637 (Cal. App. July 22, 2009)

The City will not levy impact fees for sanitary sewer infrastructure because it falls under the jurisdiction of the EPASD. EPASD will recover costs through connection fees or some other mechanism levied by EPASD. However, a theoretical impact fee will be roughly calculated as a proxy for potential sanitary sewer costs, to help fully represent development costs.

SUMMARY OF QUIMBY, AFFORDABLE HOUSING, AND SANITARY SEWER ESTIMATED FEES Although Quimby fees, affordable housing in-lieu fees, and sanitary sewer connection fees are not technically impact fees, this study includes estimates of these potential other fees (Table 9) to represent the full burden of all fees on development. The methodology used to arrive at these fee estimates is included in Appendix D: Non-Impact Fee Estimate Determinations.

Table 9: Other Potential or Existing City Fees (Non-Impact Fees)

Other City Fee Estimates (Non-Impact Fees)	Town House (per DU)	Multi-Family (per DU)	Office (psf)	R&D (psf)	Industrial (psf)	Retail (psf)	
Quimby Act							
Citywide fee	\$8,210	\$8,210	n/a	n/a	n/a	n/a	
RBD-specific fee	n/a	n/a	n/a	n/a	n/a	n/a	
Fee charged to development outside RBD	\$8,210	\$8,210	\$0.00	\$0.00	\$0.00	\$0.00	
Fee charged to development within RBD	\$8,210	\$8,210	\$0.00	\$0.00	\$0.00	\$0.00	
Affordable Housing In-Lieu Fee							
Citywide fee	\$23,000	\$18,975	n/a	n/a	n/a	n/a	
RBD-specific fee	n/a	n/a	n/a	n/a	n/a	n/a	
Fee charged to development outside RBD	\$23,000	\$18,975	\$0.00	\$0.00	\$0.00	\$0.00	
Fee charged to development within RBD	\$23,000	\$18,975	\$0.00	\$0.00	\$0.00	\$0.00	
Sanitary Sewer							
Citywide fee	n/a	n/a	n/a	n/a	n/a	n/a	
RBD-specific fee	\$877	\$670	\$0.35	\$1.23	\$1.20	\$0.53	
Fee charged to development outside RBD	\$0	\$0	\$0	\$0	\$0	\$0	
Fee charged to development within RBD	\$877	\$670	\$0.35	\$1.23	\$1.20	\$0.53	

Source: City of East Palo Alto, AECOM, 2013

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4. Detailed Impact Fee Calculations

This chapter describes the nexus calculation for each impact fee category and land use type. Note that for each fee calculation, four percent of the infrastructure construction cost is included to cover administrative services. Administrative costs include City expenses to operate the impact fee program, generate annual reports, and perform updates to the nexus study every five years as required under AB 16000 (Chapter 6, Ongoing Administration contains more specifics about administrative requirements).

PARKS AND TRAILS

PURPOSE

Recreation and open space is a common, City-provided public amenity. East Palo Alto, like most cities, aims to provide adequate quality open space – through parks and trails – for the broader public health and quality of life of its citizens and workforce. In addition to providing opportunities for physical activity and interaction with the natural environment, East Palo Alto aims to conserve the natural open space resources in the city. The Baylands, the shoreline, San Francisquito Creek, significant tree stands, and so on, represent natural resources, with habitat and ecosystem implications, that the City aims to preserve and protect, through parks and trails projects. The Conservation and Open Space Element of East Palo Alto's General Plan outlines these City goals and objectives.

NEXUS METHODOLOGY

As new development occurs, it attracts new residents and employees, who, in turn, require new (or expanded and improved) open space. This relationship between new development, an influx of residents and workers, and an additional demand for parks and trails provides the nexus for an impact fee.

In recognition of this infrastructure need, the City of East Palo Alto included parks and trails projects in the CIP and RSP to augment open space in East Palo Alto. The CIP and RSP contain 29 parks and trails projects with a gross cost of approximately \$53 million, including new parks and five miles of new trails in the RBD, trails along San Francisquito Creek, and construction of the Hetch Hetchy trail and park.

The cost for this parks and trails infrastructure will be shared across the service population, since both residents and workers access parks and trails for recreation, commuting, and interaction with nature. With a small land area of just over two and a half square miles, *distribution* of parks, trails and public facilities within the city is largely an immaterial concern, since a park, trail or public facility anywhere within the city would generally be accessible to all residents and employees. Rather, the adequate *provision* of parks, trails, and public facilities is the primary infrastructure need. As a corollary, the network of parks, trails, and public facilities in East Palo Alto can be considered a citywide asset: any parks, trails, and public facilities within the RBD would benefit, not just the RBD, but the rest of the city as well; any parks, trails, and public facilities outside of the RBD would benefit, not just the rest of the city, but the RBD as well. For this reason, as noted in Chapter 0, impact fees for parks and trails, and public facilities will be charged citywide, on non-residential development, with new development paying its fair share.⁸

The projected new service population by 2035 – a direct result of new development – represents 32 percent of the total service population in 2035, and will therefore be responsible for 32 percent of the gross cost for parks and trails projects (approximately \$16.8M, including a 4 percent administrative fee). To apportion the gross cost for which new development is responsible among commercial square footage, the \$16.8M is divided by new service population and multiplied by the average commercial density (service population per square footage). Table 10 shows the impact fee calculation and the maximum supportable impact fees for parks and trails infrastructure.

⁸ Residential development is charged for parks and trails infrastructure via Quimby Act fees.

Table 10: Impact Fee Calculation for Parks and Trail Facilities

*	Measure	Value	Source / Calculation	
Serv	ce Population			
A	Total projected service population (2035)	43,513	Appendix Table A - 2	
В	Total new service population (2010-2035)	13,782	Table 1	
С	New growth as % of total service population (2035)	32%	B/A	
Cost				
D	Total cost for additional parks and trails infrastructure	\$51,027,114	Table 3	
Е	Cost attributable to new service population	\$16,162,153	D * C	
F	Cost attributable to new service population, with 4% administrative fee	\$16,808,629	E * 1.04	
G	Unit cost for parks and trails infrastructure (\$ / service population unit)	\$1,219.61	F/B	
Com	mercial Unit Conversions			
I	Office (square footage / service population)	520	Appendix Table A - 1	
J	R&D (square footage / service population)	1220	Appendix Table A - 1	
K	Industrial (square footage / service population)	1820	Appendix Table A - 1	
L	Retail (square footage / service population)	880	Appendix Table A - 1	
Non-	Residential Nexus Fee Maximums			
Office (\$/SF)		\$2.35	G/H	
R&D (\$/SF)		\$1.00	G/I	
Indu	strial (\$/SF)	\$0.67	G/J	
Reta	il (\$/\$F)	\$1.39	G / K	

Source: AECOM, 2013

COMMUNITY FACILITIES

PURPOSE

A rich civic realm includes the provision of a variety of community facilities, from public safety institutions such as police departments, to educational amenities such as libraries, to governance buildings such as City Hall, to quality of life services such as senior centers. The Land Use Element of East Palo Alto's General Plan explicitly states a goal to provide adequate public facilities and services for its residents and workforce.

NEXUS METHODOLOGY

As new development occurs, it attracts new residents and employees, who, in turn, require new (or expanded and improved) community facilities. This relationship between new development, an influx of residents and workers, and an additional demand for community facilities provides the nexus for an impact fee.

In recognition of this infrastructure need, the City of East Palo Alto included community facility projects in the CIP and RSP to augment community facilities in East Palo Alto. The CIP and RSP contain 12 projects, with a gross cost of approximately \$49 million. These projects include a new police department building, a Recreation Center at Purdue and Demeter, a 4 Corners Community Center, and a library expansion.

The cost for these community facilities will be shared across the service population, since both residents and workers use police services, libraries, and so on. As noted in Chapter 0, impact fees are charged citywide, on residential and non-residential development, with new development paying its fair share.

The new service population by 2035 – a direct result of new development – represents 32 percent of the total service population in 2035, and will therefore be responsible for 32 percent of the gross cost for community facilities projects (approximately \$15.5M, including a 4 percent administrative fee). To apportion the gross cost for which new development is responsible among residential or commercial square footage, the per-person cost (\$15.5M divided by new service population) is multiplied by average residential or commercial densities. Table 11 shows the impact fee calculation and the maximum supportable impact fees for community facilities.

Table 11: Impact Fee Calculation for Community Facilities

*	Measure	Value	Source / Calculation
Ser	vice Population		
A	Total projected service population (2035)	43,513	Appendix Table A - 2
В	Total new service population (2010-2035)	13,782	Table 1
C	New growth as % of total service population (2035)	32%	B / A
Cos	t		
D	Total cost for additional community facilities	\$41,815,000	Table 3
E	Cost attributable to new service population	\$13,244,340	D * C
F	Cost attributable to new service population, with 4% administrative fee	\$13,774,113	E * 1.04
G	Unit cost for community facilities (\$ / service population)	\$999	F / B
Res	idential Unit Conversions		
Н	Townhouse (service population / DU)	3.9	Appendix Table A - 1
I	Multi-Family (service population / DU)	3.2	Appendix Table A - 1
Cor	nmercial Unit Conversions		
J	Office (square footage / service population)	520	Appendix Table A - 1
K	R&D (square footage / service population)	1220	Appendix Table A - 1
L	Industrial (square footage / service population)	1820	Appendix Table A - 1
M	Retail (square footage / service population)	880	Appendix Table A - 1
Res	idential Nexus Fee Maximums		
Tov	vnhouse (\$ / DU)	\$3,895	G * H
Mu	lti-Family (\$ / DU)	\$3,222	G * I
Nor	n-Residential Nexus Fee Maximums		
Off	ice (\$/SF)	\$1.92	G/J
R&	D (\$/SF)	\$0.82	G/K
Ind	ustrial (\$/SF)	\$0.55	G/L
Ret	ail (\$/\$F)	\$1.14	G/M

Source: AECOM, 2013

WATER INFRASTRUCTURE

PURPOSE

Water services are critical infrastructure for urban function: central water supply and water pipe networks provide water to buildings and homes; and water storage supplies firefighting efforts during fire incidents. Water connections (from centralized supplies) are common, City-provided public services. East Palo Alto, like most cities, aims to provide adequate water infrastructure, as stated in the Land Use Element of their General Plan and in the policy directives of the Ravenswood/4 Corners TOD Specific Plan (Goal UTIL-3 and subsequent policies).

NEXUS METHODOLOGY

As new development occurs, it attracts new residents and employees, who, in turn, require new (or expanded and improved) water infrastructure. This relationship between new development, an influx of residents and workers, and an additional demand for water infrastructure provides the nexus for an impact fee.

In recognition of this infrastructure need, the City of East Palo Alto included water infrastructure projects in the CIP and DEPLAN to augment water infrastructure in East Palo Alto. The CIP identifies a water supply project of approximately \$5.4M. The CIP and DEPLAN include water distribution and water storage totaling approximately \$4.8M and \$5.0M, respectively.

The costs for these water infrastructure projects will be shared across land use types, based on demand and usage. The gross project cost will be divided by capacity (e.g. gallons per day) to arrive at a unit cost. Typical usage rates per land use type will be used to derive an impact fee from the unit costs, where usage for water supply and distribution systems is described in gallons per day, and usage for storage systems is described in land acres. Appendix Table C - 3 includes more detail on the usage and demand calculations and assumptions.

Table 12, Table 13, and Table 15 show the impact fee calculation and the maximum supportable impact fees for the components of the water infrastructure impact fee.

As noted in Chapter 0, water supply projects benefit the entire city – since the additional water reserves will be available to the entire city – an impact fee for water supply will be charged citywide. Identified public water supply improvements include upgrades to Gloria Way Well and the development of an additional well, both of which (together) will generate approximately 1.4 million gallons per day for the city as a whole. Therefore, an impact fee for water supply infrastructure should be charged citywide, with new development paying its fair share of the new infrastructure. All other water infrastructure projects – distribution pipes from central supply and emergency storage – are specific to the RBD,

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⁹ Usage for emergency water storage is described in land acres to denote the relative burden on the storage system. Emergency water is used for firefighting, and therefore city land acreage is a relevant usage proxy. Unlike water distribution systems which have differential usage by building type, emergency water storage is used at the same rate (during firefighting) by all properties, with the only difference being how much area must be covered.

engineered particularly to support new development in the RBD. Without sufficient water infrastructure, development envisioned under the RBD cannot be approved, as described in the Certified EIR. Therefore, an RBD-specific water infrastructure impact fee (in addition to the citywide water supply fee) is charged within the RBD for water infrastructure (distribution and emergency storage components).

Table 12: Impact Fee Nexus Calculation for Water Infrastructure – Water Supply (Citywide)

*	Measure	Value	Source / Calculation
Capa	city / Demand		
A	Capacity of new water supply infrastructure (gpd²)	1,455,357	See Note 1
В	% of demand on new water supply infrastructure by new development	100%	See Note 1
Cost			
C	Total cost for water supply infrastructure	\$5,400,000	Table 3
D	Cost attributable to new service population, with 4% administrative fee	\$5,616,000	D * B * 1.04
Е	Unit cost for water supply infrastructure (\$ / gpd)	\$3.86	D/A
Resid	lential Unit Conversions		
F	Townhouse (gpd / DU)	260	Appendix Table A - 1
G	Multi-Family (gpd / DU)	203	Appendix Table A - 1
Com	mercial Unit Conversions		
Н	Office (gpd / sf)	0.11	Appendix Table A - 1
I	R&D (gpd / sf)	0.39	Appendix Table A - 1
J	Industrial (gpd / sf)	0.38	Appendix Table A - 1
K	Retail (gpd / sf)	0.16	Appendix Table A - 1
Resid	lential Nexus Fee Maximums		
Town	nhouse (\$ / DU)	\$1,003	E*F
Mult	i-Family (\$ / DU)	\$784	E * G
Non-	Residential Nexus Fee Maximums		
Offic	e (S/SF)	\$0.44	E * H
R&D	(\$/SF)	\$1.49	E * I
Indu	strial (\$/SF)	\$1.45	E * J
Reta	il (\$/SF)	\$0.62	E * K

Source: AECOM, 2013

Notes:

^{1. 2010} Urban Water Management Plan, Updated April 2013, page 53, Table 5-4.

^{2.} GPD = gallons per day

Table 13: Impact Fee Nexus Calculation for Water Infrastructure Impact Fee - Water Distribution (RBD)

*	Measure	Value	Source / Calculation
Cap	acity / Demand		
A	Demand for water distribution infrastructure (gpd) in RBD from new development	1,116,968	Appendix Table C - 3
Cost			
В	Total cost for water distribution infrastructure	\$4,838,327	Table 3
С	Unit cost for water distribution infrastructure, with 4% administrative fee (\$ / gpd)	\$4.50	B / A * 1.04
Resi	dential Unit Conversions		
D	Townhouse (gpd / DU)	260	Appendix Table C - 3
Е	Multi-Family (gpd / DU)	203	Appendix Table C - 3
Com	mercial Unit Conversions		
F	Office (gpd / sf)	0.11	Appendix Table C - 3
G	R&D (gpd / sf)	0.39	Appendix Table C - 3
Н	Industrial (gpd / sf)	0.38	Appendix Table C - 3
I	Retail (gpd / sf)	0.16	Appendix Table C - 3
Resi	dential Nexus Fee Maximums		
Tow	nhouse (\$ / DU)	\$1,171	C * D
Mul	ti-Family (\$ / DU)	\$915	C * E
Non	Residential Nexus Fee Maximums		
Offic	ce (\$/\$F)	\$0.51	C * F
R&I) (\$/SF)	\$1.74	C * G
Indu	strial (\$/SF)	\$1.69	C * H
Reta	il (\$/SF)	\$0.72	C * I

Source: AECOM, 2013

Table 14: Impact Fee Nexus Calculation for Water Infrastructure Impact Fee - Water Storage (RBD)

*	Measure	Value	Source / Calculation
Capa	city / Demand		
A	Water storage tank capacity required for new development in SPA (MG)	2	East Palo Alto Water System Master Plan
В	Total projected acreage of new development (50-80 yr. planning horizon)	138	Table 2
Cost			
С	Total cost for water storage tank	\$5,000,000	Table 3
D	Per-acre cost for water storage tank (with 4% administrative fee)	\$37,578	C * 1.04 / B
Resid	lential Unit Conversions		
Е	Townhouse (total acreage)	10	Table 2
F	Townhouse (DU)	204	Table 2
G	Multi-Family (total acreage)	23	Table 2
Н	Multi-Family (DU)	1083	Table 2
Com	mercial Unit Conversions		
I	Office (total sf)	1,191,947	Table 2
J	Office (built sf)	1,568,922	Table 2
K	R&D (total sf)	1,281,245	Table 2
L	R&D (built sf)	713,622	Table 2
M	Industrial (total sf)	1,803,529	Table 2
N	Industrial (built sf)	974,764	Table 2
О	Retail (total sf)	327,571	Table 2
P	Retail (built sf)	131,028	Table 2
Resid	lential Nexus Fee Maximums		
Tow	nhouse (\$ / DU)	\$1,879	D*E/F
Mul	ti-Family (\$ / DU)	\$781	D*G/H
Non-	Residential Nexus Fee Maximums		
Offic	e (S/SF)	\$0.66	D*I/43,560/J
R&I	O (\$/SF)	\$1.55	D * K / 43,560 / L
Indu	strial (\$/SF)	\$1.60	D * M / 43,560 / N
Reta	il (\$/SF)	\$2.16	D * O / 43,560 / P

Source: AECOM, 2013

STORM DRAINAGE

PURPOSE

Storm drainage is critical infrastructure to prevent flooding of streets during rain events and are a common, City-provided public service. East Palo Alto aims to provide adequate storm drainage for new development in the RBD, as stated in the policy directives of the Ravenswood/4 Corners TOD Specific Plan (Goal UTIL-3 and subsequent policies).

NEXUS METHODOLOGY

As new development occurs, it attracts new residents and employees, who, in turn, require new (or expanded and improved) storm drainage. This relationship between new development, an influx of residents and workers, and an additional demand for storm drainage provides the nexus for an impact fee.

In recognition of this infrastructure need, the City of East Palo Alto included storm drainage projects in the DEPLAN, totaling approximately \$15.4M.

The costs for these storm drainage infrastructure projects will be shared across land use types, based on demand and usage, for which impervious acres are a proxy. The gross project cost will be divided by impervious acres of new development to arrive at a unit cost. Typical impervious footprints per land use type will be used to derive an impact fee from the unit costs. Appendix Table C - 3 includes more detail on the impervious acres calculations and assumptions. Table 14 show the impact fee calculation and the maximum supportable impact fees for the components of the water infrastructure impact fee.

As noted in Chapter 0, storm drainage infrastructure impact fees are charged within the RBD only, as all drainage infrastructure serves new development in the RBD. Therefore, new development within the RBD will support the cost of RBD storm drainage infrastructure – with a storm drainage impact fee chargeable only within the RBD.

Note that it is the stated intent of the City to require all development to connect to the City storm drainage system. In rare and unique cases, a development may propose the construction of a private and separate storm drainage system as part of the City entitlement process. Approval of a private system may occur, provided:

- The City Engineer, following the submittal of engineered plans and specifications along with pertinent analyses, has determined that the system is functional and will provide equal or greater protection to property and the general public than connection to the public storm drain system; and
- ◆ Applicant has obtained and provided evidence of the issuance of all necessary regulatory permits from the BCDC, Army Corp Engineers, Fish and Wildlife, and other regulatory agencies, copies of which must be are to be filed with the City Engineer.
- The conditions of approval shall include the recording of the following language on the title: "This property shall drain its storm drain runoff through the outfall system. This property shall not drain into the City

Storm Drain system." (If, at a future date, the property owner wants to connect to the City storm drain system, the property owner must seek and obtain approval from the City Engineer and pay storm drain impact fees, as determined in the development impact fee program.) The City Engineer may require plans, specifications and analyses of proposed connection. Following issuance of an Engineering Permit, the applicant shall be responsible for construction of connection and abandonment of existing facilities."

♦ The conditions of approval shall also include a requirement that the property owner enter into a hold harmless agreement in a form acceptable to the City Attorney. The agreement shall acknowledge that the property owner is responsible for maintaining all structures, conducting regular inspections, submitting inspection reports to the City and maintaining all permits. Further, the property owner is responsible for any and all fines and costs associated with non-compliance with permits or violation of the Clean Water Act.

Table 15: Impact Fee Nexus Calculation for Storm Drainage Impact Fee (RBD)

*	Measure	Value	Source / Calculation
Ser	vice Population		
A	Impervious acres (correlated to demand for storm drain infrastructure) in RBD from new development	125	Appendix Table C - 3
Cos	t		
В	Total cost for storm drain infrastructure in RBD	\$15,413,372	Table 3
С	Unit Cost for storm drain infrastructure, with 4% administrative fee (\$ / impervious acre)	\$128,710.85	B / A * 1.04
Res	idential Unit Conversions		
D	Townhouse (impervious acres / DU)	0.05	Appendix Table C - 3
Е	Multi-Family (impervious acres / DU)	0.02	Appendix Table C - 3
Cor	nmercial Unit Conversions		
F	Office (built sf / impervious acre)	63,707	Appendix Table C - 3
G	R&D (built sf / impervious acre)	26,159	Appendix Table C - 3
Н	Industrial (built sf / impervious acre)	26,958	Appendix Table C - 3
I	Retail (built sf / impervious acre)	19,360	Appendix Table C - 3
Res	idential Nexus Fee Maximums		
Tov	wnhouse (\$ / DU)	\$5,792	C * D
Mu	lti-Family (\$ / DU)	\$2,407	C * E
Nor	1-Residential Nexus Fee Maximums		
Off	ice (\$/\$F)	\$2.02	C / F
R&	D (\$/SF)	\$4.92	C/G
Ind	ustrial (\$/SF)	\$4.77	C/H
Ret	ail (\$/SF)	\$6.65	C/I

Source: AECOM, 2013

ROADWAY INFRASTRUCTURE

PURPOSE

Roadway infrastructure is a common, City-provided public facility. East Palo Alto, like most cities, aims to provide adequate roads for its citizens and workforce for general transportation and safety. The Ravenswood/4 Corners Specific Plan EIR explicitly states the City's goal to provide adequate road infrastructure, and the City's obligation to provide traffic mitigation measures through roadway infrastructure improvements.

NEXUS METHODOLOGY

As new development occurs, it attracts new residents and employees, who, in turn, require new (or expanded and improved) roadway infrastructure. This relationship between new development, an influx of residents and workers, and an additional demand for roads provides the nexus for an impact fee.

In recognition of this infrastructure need, the City of East Palo Alto included roadway infrastructure projects in the CIP and the DEPLAN to augment roads in the RBD. The CIP and the DEPLAN call for street building and paving, construction of the Loop Road, and traffic mitigations as per the EIR, with a gross cost of approximately \$43.4M.

The costs for these roadway projects will be shared across land use types, based on number of trips. The gross project cost will be divided by the total number of expected trips to arrive at a per-trip cost. Impact fees for residential and non-residential space will be determined by multiplying the per-trip cost by the trip generation rate for a particular land use type. Appendix Table C - 4 includes more detailed information about the number of trips per residential dwelling unit and per non-residential square foot, based on the Institute of Transportation Engineers (ITE) handbook. As noted in Chapter 0, roadway infrastructure impact fees are charged within the RBD only, as all roadway infrastructure serves new development in the RBD. Projects within the RBD are required to accommodate the projected traffic volumes from new development in the RBD. Therefore, new development within the RBD will support the cost of RBD road infrastructure – with a roadway impact fee chargeable only within the RBD.

Note that the nexus fee can be modified per development, if a development-specific traffic impact study demonstrates a different trip generation rate. In this case, the nexus fee is calculated as the per-trip unit cost for roadway improvements multiplied by the trip generation rate for the particular development. In the absence of a traffic impact study, the nexus fee will apply. Table 16 shows the impact fee calculation and the maximum supportable impact fees for roadway infrastructure in the RBD.

Table 16: Impact Fee Nexus Calculation for Roadway Infrastructure Impact Fee (RBD)

		-	• •
	Measure	Value	Source / Calculation
Cap	acity / Demand		
A	Gross number of trips in RBD	21,902	Appendix Table C - 4
Cost			
В	Total cost for roadway improvements / street structure in RBD	\$43,378,927	Table 3
С	Unit cost for roadway improvements, with 4% administrative fee (\$ / trip)	\$2,059.81	B / A * 1.04
Resi	dential Unit Conversions		
Е	Townhouse (trips / DU)	5.81	Appendix Table C - 4
F	Multi-Family (trips / DU)	6.65	Appendix Table C - 4
Com	nmercial Unit Conversions		
G	Office (trips / Ksf) ¹	11.01	Appendix Table C - 4
Н	R&D (trips / Ksf) ¹	6.97	Appendix Table C - 4
I	Industrial (trips / Ksf) ¹	8.11	Appendix Table C - 4
Resi	dential Nexus Fee Maximums		
Tow	nhouse (\$ / DU)	\$11,967	C * E
Mul	ti-Family (\$ / DU)	\$13,698	C * F
Non	-Residential Nexus Fee Maximums		
Offic	ce (\$/SF)	\$22.68	C * G / 1000
R&I	O (\$/SF)	\$14.36	C* H / 1000
Indu	strial (\$/SF)	\$16.71	C * I / 1000

Source: AECOM, 2013

Note:

^{1.} Ksf is 1,000 square feet.

STREETSCAPE INFRASTRUCTURE

PURPOSE

Streetscape infrastructure encompasses a wide range of right-of-way facilities that play an important role in the City's creation of public realm and non-motorized transportation. Constructing sidewalks with street trees, street lighting, benches, and street furniture, impacts safety, sidewalk space as social space, pedestrian aesthetic, and active transportation. The Land Use Element of East Palo Alto's General Plan explicitly states an objective to strengthen the condition of streetscape and public areas with landscaping, signs, benches, and street lighting to produce a 'sense of place' and community in public streetscape. East Palo Alto aims to provide adequate streetscape for its citizens and workforce.

NEXUS METHODOLOGY

As new development occurs, it attracts new residents and employees, who, in turn, require new (or expanded and improved) streetscape infrastructure. This relationship between new development, an influx of residents and workers, and an additional demand for streetscape infrastructure provides the nexus for an impact fee.

In recognition of this infrastructure need, the City of East Palo Alto included streetscape infrastructure projects in the DEPLAN to augment sidewalks in the RBD. The DEPLAN sidewalk paving, street tree planting, sidewalk lighting installations, and street furniture, with a gross cost of approximately \$4.6 million.

The costs for these roadway projects will be shared across the service population within the RBD, since both residents and employees use sidewalk facilities to walk, commute, and travel. As noted in Chapter 0, streetscape infrastructure impact fees are charged within the RBD only, as all streetscape infrastructure in the RBD is a local amenity that serves new development in the RBD. Dividing the gross cost by the growth in service population within the RBD yields a per-person cost. Impact fees are calculated by multiplying the per-person cost by residential and non-residential densities. Table 17 shows the impact fee calculation and the maximum supportable impact fees for streetscape infrastructure in the RBD.

Table 17: Fee Calculation for Maximum Supportable Streetscape Infrastructure Impact Fee

	• • • • • • • • • • • • • • • • • • • •	•	
*	Measure	Value	Source / Calculation
Ser	vice Population		
A	Total new service population in RBD (2010 - 2035)	5,192	Table 1
Cos	it		
В	Total cost for streetscape infrastructure in RBD	\$4,427,134	Table 3
C	Unit cost for streetscape infrastructure, with 4% administrative fee (\$ / service population)	\$886.88	B / A * 1.04
Res	idential Unit Conversions		
D	Townhouse (service population / DU)	3.9	Appendix Table A - 1
Е	Multi-Family (service population / DU)	3.2	Appendix Table A - 1
Coı	nmercial Unit Conversions		
F	Office (square footage / service population)	520	Appendix Table A - 1
G	R&D (square footage / service population)	1220	Appendix Table A - 1
Н	Industrial (square footage / service population)	1820	Appendix Table A - 1
Res	idential Nexus Fee Maximums		
Tov	vnhouse (\$ / DU)	\$3,457	C * D
Mu	lti-Family (\$ / DU)	\$2,859	C * E
Noı	n-Residential Nexus Fee Maximums		
Off	ice (\$/\$F)	\$1.71	C/F
R&	D (\$/SF)	\$0.73	C/G
Ind	ustrial (\$/SF)	\$0.49	C/H

Source: AECOM, 2013

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Additional Funding Sources and City Contributions

The section will consider the City's share of infrastructure costs and the impacts of committed funds already allocated to particular infrastructure projects.

REQUIRED CITY CONTRIBUTION

The nexus analysis derives the maximum supportable development impact fees that may be charged based on development's identified impact on future infrastructure needs. In some cases, new development is responsible for the entire cost of new infrastructure (i.e. roadway improvements and streetscape); in other cases, new development is responsible for a proportional share of new infrastructure (i.e. parks and trails, community facilities, and water infrastructure). In the latter case, where development's fair share is a portion of the cost of new infrastructure, East Palo Alto's current service population is responsible for the remaining share. The City must furnish the cost of the existing service population's fair share. Table 18 shows the infrastructure cost, development's fair share (i.e. the estimated impact fee revenue) and the existing service population's fair share (i.e. the required City contribution).

Table 18: Share of Infrastructure Costs Borne by New Development and the City of East Palo Alto

Infrastructure Item	Project Cost	Estimated Maximum Impact Fee Revenue	Required City Contribution ¹
Parks & Trails	\$51,027,000	\$4,712,000	\$48,168,000
Community Facilities	\$41,815,000	\$9,919,000	\$33,172,000
Water Infrastructure - Water Supply	\$5,400,000	\$3,725,600	\$1,741,000
Water Infrastructure - Other (Distribution)	\$4,838,000	\$5,018,000	\$0
Water Infrastructure - Other (Storage)	\$5,000,000	\$5,200,000	\$0
Storm Drainage	\$15,413,000	\$16,030,000	\$0
Road Infrastructure	\$43,379,000	\$45,114,000	\$0
Streetscape	\$4,427,000	\$4,753,000	\$0

Source: East Palo Alto, AECOM, 2013

Notes:

[•] All values are rounded to the nearest thousand.

^{1.} The required City's contribution represents the difference between the project cost and the estimated maximum impact fee revenue. Note that in some cases there is some rounding error, although the required City's contribution is reported as \$0. The City's required contribution includes the 4% administrative fee, which also accounts for some of the discrepancy between the project cost and the impact fee revenue, where the latter is greater than the former.

COMMITTED CITY FUNDS

The City of East Palo Alto has some monies already allocated to various infrastructure projects. These committed funds come from a variety of sources, including grants and federal funding. Table 19 outlines the existing committed funds; more detailed information is included in Appendix F: Committed Funding Details.

Table 19: Committed Funding Amounts and Sources for Infrastructure Projects

Infrastructure Item	Project Cost	Estimated Maximum Impact Fee Revenue	Required City Contribution ¹	Committed Funds	Source of Committed Funds
Parks & Trails	\$51,027,000	\$4,712,000	\$48,168,000	\$5,042,000	Proposition 84
Community Facilities	\$41,815,000	\$9,919,000	\$33,172,000	\$0	N/A
Water Infrastructure	\$15,238,000	\$13,943,600	\$1,741,000	\$1,633,000	(As below)
Water Infrastructure - Water Supply	\$5,400,000	\$3,725,600	\$1,741,000	\$1,008,000	STAG³ funds
Water Infrastructure - Other (Distribution)	\$4,838,000	\$5,018,000	\$0	\$625,000	Impact fees from DKB housing
Water Infrastructure - Other (Storage)	\$5,000,000	\$5,200,000	\$0	\$0	N/A
Storm Drainage	\$15,413,000	\$16,030,000	\$0	\$3,925,000	STAG ³ funds One Bay Area grant (OBAG) Federal Transportation Earmark grant ² HUD EDI Grant ⁴
Road Infrastructure	\$43,379,000	\$45,114,000	\$0	\$7,500,000	Federal Transportation Earmark grant ²
Streetscape	\$4,427,000	\$4,753,000	\$0	\$2,500,000	Federal Transportation Earmark grant ²

Source: AECOM, City of East Palo Alto, 2013

Notes:

The development impact fees calculated in Chapter 4 (Detailed Impact Fee Calculations) represent the maximum supportable fee burden that could be charged to new development for which there is a reasonable and proportional relationship. Where committed funds exist for a particular infrastructure category in an amount above the City's required contribution, the City can remit a portion of development's burden. The 'excess' committed fund monies – i.e. those above the City's fair share – can be used to discount development's fair share, reducing development impact fees. Given the required City contributions and committed fund amounts in Table 19, this report recommends that the City adopt discounted impact fees for storm drainage, roadway infrastructure, and streetscape infrastructure. The discounted fees (Table 20) are calculated using the same methodology as outlined in Chapter 4 (Detailed Impact Fee Calculations), except that the project costs are reduced by the amount of the excess committed funds. That is, the fee discount is distributed evenly across all land uses. Note that, alternatively, the City could choose to distribute the fee discount unevenly across land uses, for example,

[•] All values are rounded to the nearest thousand.

^{1.} The required City's contribution represents the difference between the project cost and the estimated maximum impact fee revenue. Note that in some cases there is some rounding error, although the required City's contribution is reported as \$0.

^{2.} The Federal Transportation Earmark grant stipulates that federal money constitute 80 percent of the funding amount, and the local entity (City of East Palo Alto in this case) provide the remaining 20 percent of funds.

^{3.} State Tribal Assistance Grant

 $^{4.\} U.S.\ Department\ of\ Housing\ and\ Urban\ Development\ (HUD)\ Economic\ Development\ Initiative\ (EDI)\ Grant$

using the 'excess' monies to reduce the fees for non-residential uses only. This type of preferential fee discounting would incentivize certain development types over others.

Table 20: Discounted Impact Fees, Accounting for Committed Fund Monies

Development Impact Fee	Town House (per DU)	Multi-Family (per DU)	Office (psf)	R&D (psf)	Industrial (psf)	Retail (psf)
Storm Drainage						
Discounted RBD-specific fee	\$4,317	\$1,794	\$1.51	\$3.67	\$3.56	\$4.96
Maximum supportable RBD-specific fee	\$5,792	\$2,407	\$2.02	\$4.92	\$4.77	\$6.65
Roadway Infrastructure						
Discounted RBD-specific fee	\$9,898	\$11,329	\$18.76	\$13.82	\$11.87	TBA
Maximum supportable RBD-specific fee	\$11,967	\$13,698	\$22.68	\$14.36	\$16.71	TBA
Streetscape						
Discounted RBD-specific fee	\$1,505	\$1,245	\$0.74	\$0.32	\$0.21	TBA
Maximum supportable RBD-specific fee	\$3,457	\$2,859	\$1.71	\$0.73	\$0.49	TBA

Source: AECOM, 2013

Notes:

ESTIMATED OTHER FUNDS

For both parks and trails infrastructure and community facilities, the City has not yet fully identified all funding sources to furnish their proportional share. Some funding sources have been identified as noted in Table 21. For parks and trails infrastructure, some funds will come from Quimby Act fees; for community facilities, the City estimates that it will be able to raise funds to cover approximately 50 percent of the cost per library project, 20 percent of the cost per community center project, and 0 percent of the cost per other community facility project.

[•]To calculate discounted fees, the same methodology as described in Chapter 4 is used, except that the infrastructure cost is reduced by the amount of the committed funds.

[•] Committed funds within the water infrastructure category are assumed to be fluid to some extent among the various components of the water infrastructure category (water supply, water distribution, storm drainage, and storage). That is, the funds from the OBAG grant and the local impact fees from DKB homes are assumed to be flexible in their allocation within the water infrastructure category. The fee discount comes from the reduction on storm drainage infrastructure cost derived from the committed fund allocation for storm drainage projects (less the OBAG).

Table 21: Estimated Other Funds to Cover Remaining City Contribution Requirement

ТҮРЕ	Project Cost	Estimated Maximum Impact Fee Revenue	Committe d Funds	Estimated Other Funds	Outstanding City Contribution Requirement (incl. 4% administrative fee)	Source of Estimated Other Funds
	A	В	C	D	E = A - (B + C + D)	
Parks and Trails	\$51,027,000	\$4,694,000	\$5,042,000	\$12,115,000	\$31,029,361	Estimate of Quimby Act fee revenue ¹
Community Facilities	\$41,815,000	\$9,919,000	\$0	\$4,247,000	\$28,825,000	See details below.
Community Facilities Master Plan	\$100,000	n/a	n/a	\$0	\$0	No source of other funds
Community Development Building	\$90,000	n/a	n/a	\$0	\$0	No source of other funds
2277 University Avenue Building	\$10,000	n/a	n/a	\$0	\$0	No source of other funds
Senior Center Building	\$30,000	n/a	n/a	\$0	\$0	No source of other funds
Police Department Building	\$10,000,000	n/a	n/a	\$0	\$0	No source of other funds
Corporation Yard Building	\$100,000	n/a	n/a	\$0	\$0	No source of other funds
New City Hall	\$15,000,000	n/a	n/a	\$0	\$0	No source of other funds
Media Center Improvement	\$15,000	n/a	n/a	\$0	\$0	No source of other funds
Purdue Recreation Center	\$4,320,000	n/a	n/a	\$864,000	n/a	City estimated ability to raise funds for 20% of cost
4 Corners Community Center	\$8,640,000	n/a	n/a	\$1,728,000	n/a	City estimated ability to raise funds for 20% of cost
Library	\$3,510,000	n/a	n/a	\$1,755,000	n/a	City estimated ability to raise funds for 50% of cost

Source: AECOM, City of East Palo Alto, 2013

Notes:

Table 22 shows the percentage of the required contribution for which the City has identified funding. The remaining funding requirements have yet to be identified. As such, the City will discount the development impact fees proportionally. The City will reduce the maximum supportable development impact fees to the same proportion as the City's identified funding relative to the City's fair share contribution requirement. Because the City can only feasibly provide 37 percent of its share for Parks and Trails and 13 percent of its share for Community Facilities, the development impact fees for Parks and Trails and Community Facilities are reduced to 37 percent and 13 percent, respectively, of the maximum supportable fees. Table 22 shows the reduced development impact fees. These fees and allocations will be re-evaluated in the development fee update (mandated every five years). Should the City identify additional funds to contribute to Parks and Trails and/or Community Facilities, the City could increase development fees accordingly to account for its proportionate share of total infrastructure costs.

[•] Project costs for individual community facilities do not include the 4% administrative fee. The administrative fee is added to the total cost.

^{1.} Quimby Act fees represent the burden on new residential development to fund parks and trails infrastructure. The Quimby Act fee revenue is estimated as the difference between new developments share of parks and trails infrastructure (\$16,809,000 as per Table 10) and the share of parks and trails infrastructure paid for by non-residential development (\$4,694,000 as per Table 20). This assumes that impact fees cover new non-residential development's share of parks and trails infrastructure and Quimby fees cover new residential development's share. This assumption is conservative, given the estimated Quimby Act fee of \$8,210 per DU, and the anticipation of 2,371 new DU citywide.

Table 22: Feasible City Contribution to Parks and Trails and Community Facilities Infrastructure

ТҮРЕ	City Contribution Requirement ¹	Feasible City Contribution (Committed and Estimated Funds) ²	Percent of Requirement Contribution Provided by City ³
Parks and Trails	\$48,186,000	\$17,156,639	37%
Community Facilities	\$28,825,000	\$4,347,000	13%

Notes:

- 1. The City Contribution Requirement is the difference between the total cost (including the administrative margin) and the estimated impact fee revenue.
- 2. Feasible City Contribution is the sum of committed funds and estimated funds. In the case of Parks and Trails, the sum represents Proposition 84 funds and Quimby Act fee revenue estimates. In the case of Community Facilities, the sum represents the estimated funds, as outlined in Table 20.
- 3. The Percent of Required Contribution Provided by City is the Feasible City Contribution divided by the City Contribution Requirement.

Table 23: Reduced Impact Fees for Parks and Trails and Community Facilities

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Development Impact Fee	Town House (per DU)	Multi-Family (per DU)	Office (psf)	R&D (psf)	Industrial (psf)	Retail (psf)
Parks and Trails ¹						
Discounted fee (citywide)	n/a	n/a	\$0.87	\$0.37	\$0.25	\$0.51
Maximum supportable fee (citywide)	n/a	n/a	\$2.35	\$1.00	\$0.67	\$1.39
Community Facilities ²						
Discounted fee (citywide)	\$510	\$422	\$0.25	\$0.11	\$0.07	\$0.15
Maximum supportable fee (citywide)	\$4,386	\$3,628	\$2.16	\$0.92	\$0.62	\$1.28

Notes:

- 1. The maximum supportable parks and trails fees discounted by 37%, to reflect the percentage of identified City funding to date.
- 2. The maximum supportable community fees discounted by 13%, to reflect the percentage of identified City funding to date.

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Administration and Implementation

There are several implementation and administration issues related to the nexus study and impact fees, including administrative activities and costs, annual escalation factors, credits and reimbursements, and potential deferral for economic or policy reasons. These administrative items are discussed in this chapter.

ANNUAL ESCALATION/PERIODIC UPDATES

The construction costs used to calculate infrastructure project costs (Table 3) are in 2013 dollars, but every year, construction costs have generally increased (i.e. on average construction costs have increased by 7.1 percent from 2010 to 2013 – Turner Building Cost Index). To account for this construction cost inflation, impact fees must be adjusted commensurately each year. As an escalation mechanism, impact fees will be increased each year by the change in the San Francisco Construction Cost Index (CCI) as reported in the Engineering News Record.

The Nexus Study must be updated approximately every 5 years to account for changes in the project list, the scope of projects, other funding sources, demographics, and land use. Citywide impact fees will likely be significantly updated upon completion of the 2013 General Plan Update. The cost for regular updates is encapsulated in the 4 percent administrative cost added to each project.

SPECIALIZED DEVELOPMENT PROJECTS

Some specialized development projects may not fit within the land uses identified in this nexus study. Furthermore, some of the land uses might have significantly different impacts than the traditional land uses considered as part of this study. For example, the nexus study assumes an employment density for office space of one employee per 250 square feet of building space. However, social media firms often utilize a higher employment density of one employee for every 150 square feet of building space. The higher employee density might have additional impacts that warrant a specialized analysis. Another example might be a building that generates a very different number of trips, based on an individualized traffic impact assessment, than the standard assumed in the nexus study based on the ITE manual. The

City reserves the right to review land uses that have impacts that are different from industry standards relied upon in this nexus study and determine an applicable ad hoc fee via a Development Agreement.

ONGOING ADMINISTRATION

The Government Code requires the City to report every year and every fifth year certain financial information regarding the fees. The City must make the following information from the previous fiscal year available within 180 days after the last day of that fiscal year.

- A brief description of the type of fee in the account or fund;
- The amount of the fee;
- The beginning and ending balance in the account or fund;
- The amount of the fee collected and the interest earned;
- An identification of each public improvement for which fees were expended and the amount of the expenditures;
- A description of each inter-fund transfer or loan made from the account and when it will be repaid;
 and
- ♦ Identification of any refunds made once it is determined that sufficient monies have been collected to fund all fee-related projects.

The City must make this information available for public review and present it at the next regularly scheduled public meeting not less than 15 days after this information is made available to the public.

For the fifth year following the first deposit into the account or fund, and every five years thereafter, the City must make the following findings with respect to any remaining funds in the fee account, regardless of whether those funds are committed or uncommitted.

- ◆ The purpose to which the fee is allocated;
- A reasonable relationship between the fee and the purpose for which it is charged;
- All sources and amounts of funding anticipated to fill any financing shortfalls;
- The approximate dates on which funding is expected to be deposited into the fee account.

The five-year report must be made public within 180 days after the end of the City's fiscal year, and must be reviewed at the next regularly scheduled public meeting. If the City does not disclose these findings, the law may require that the City refund the money, on a prorated basis, to the then current-record owners of the development project.

FEE CREDITS OR REIMBURSEMENTS

The City may provide fee credits to developers who dedicate land or construct facilities. Fee credits may be provided up to the planned cost of the improvement cited in the improvement plan, subject to

periodic inflation adjustments or the actual cost paid by the developer, whichever is lower. Prior to approving a credit for work constructed by the developer, the City Engineer shall approve the plans to ensure consistency with the City's engineering, design, and planning standards. For construction cost overruns, only that amount shown in the applicable improvement plan, subject to periodic inflation adjustments, should be credited. The City will evaluate the appropriate fee credit or reimbursement based on the value of the dedication or improvement. Fee credits will be determined by the City on a case-by-case basis and through a development agreement.

IMPACT FEE DEFERRAL OR WAIVER

The City might find it advantageous to defer or waive fees for economic or policy reasons.

Typically, impact fees are paid prior to receiving the building permit, which represents a significant expense in the project prior to the project generating revenue. Cities occasionally allow developers to defer payment of the impact fees until prior to the Certificate of Occupancy, when the project is more likely to be generating revenue. This nexus study recommends mandating payment at time of building permit, which is the norm, but reserving the right to defer the fees in special circumstances.

Cities also occasionally waive specific impact fees, particularly during times of economic downturn, as a development incentive. The fees could be waived for a building size target (e.g. fee waiver for the first 500,000 square feet), or for a certain building valuation, based on building permits (e.g. fee waiver for the first \$20 million of permit valuation). This nexus study recommends mandating payment, but reserving the right to waive fees in special circumstances.

Typically, deferred or waived fees are fees for 'quality of life' infrastructure (such as parks and streetscape), and not backbone infrastructure (such as storm drains and water supply). Note also that the City cannot waive or defer the EIR traffic mitigations – a subset of the roadway infrastructure projects. EIR traffic mitigation projects represent approximately 5 percent of the cost for all roadway infrastructure projects (refer to Roadway Infrastructure Requirements in Appendix B: Detailed Project List). Any potential roadway impact fee waiver may not waive the 5 percent for EIR traffic mitigation: Specific Plan Policy TRA-2.5 states that the City shall prepare a nexus study for traffic mitigation in the Specific Plan/Program EIR. The impact fee is necessary to mitigate traffic impacts, and waiving the fee for EIR traffic mitigations would require amending the certified Program EIR.

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Appendix A: Assumptions Underlying Demographic Information

Appendix Table A - 1: Population and Employment Density Assumptions

*	Measure	Value	Source / Comments
A	Townhouse (persons / DU)	3.9	Calculated given that the new population in the RBD (2766) must equal the townhouse density multiplied by the number of townhouse DU plus the multi-family density multiplied by the number of multi-family DU i.e. Solve 2766 = (TH density) * 19 + (MF density) * 835
В	Multi-Family (persons / DU)	3.2	As above (A)
C	SF / unit (Townhouse)	1,000	City of East Palo Alto
D	SF / unit (Multi-Family)	875	City of East Palo Alto
Е	Resident per service population	1	Standard weight for resident in service population calculation
F	Service population / unit (Townhouse)	3.9	E*A
G	Service population / unit (Multi-Family)	3.2	E*B
Н	SF / employee (Office)	260	Calculated given that the new employment projections must equal the commercial density multiplied by commercial square footage i.e. 7814 = (office density) * 1,653,150 + (R&D density) * 156,495 + (industrial density) * 240,349 + (retail density) * 353.317
I	SF / employee (R&D)	610	As above (H)
J	SF / employee (Industrial)	910	As above (H)
K	SF / employee (Retail)	440	As above (H)
L	Employee per service population unit	0.5	Standard weight for employee in service population calculation
M	SF / service population unit (Office)	500	L*H
N	SF / service population unit (R&D)	1220	L*I
О	SF / service population unit (Indistrial)	1820	L*J
P	SF / service population unit (Retail)	880	L*K

Appendix Table A - 2: Assumptions for Population, Employment, and Service Population Projections (2010 - 2035)

*	Measure	Value	Source / Comments
Α	East Palo Alto Population (2010)	28,273	American Community Survey (ACS) 2011 3-year Estimate for East Palo Alto
В	East Palo Alto Population Growth (2010 - 2035)	9,875	See table below (Appendix Table A - 3)
С	RBD Population Growth (2010 - 2035)	2,766	See table below (Appendix Table A - 3)
D	Non-RBD Population Growth	7,109	See table below (Appendix Table A - 3)
Е	East Palo Alto Employment (2010)	2,915	OnTheMap.com, 2011
F	East Palo Alto Employment Growth (2010 - 2035)	7,814	See table below (Appendix Table A - 3)
G	RBD Employment Growth (2010 - 2035)	4,851	See table below (Appendix Table A - 3)
Н	Non-RBD Employment Growth (2010 - 2035)	2,963	See table below (Appendix Table A - 3)
I	East Palo Alto Service Population (2035)	43,513	Standard service population calculation: (A + B) * 1 + (E + F) * 0.5
J	East Palo Alto Service Population Growth (2010 - 2035)	13,782	B * 1 + F * 0.5
K	RBD Service Population Growth (2010 - 2035)	5,192	C * 1 + G * 0.5
L	Non-RBD Service Population Growth (2010 - 2035)	8,591	J - K

Appendix Table A - 3: Housing, Population, and Employment Projection Calculations

Revised Growth Assumptions (2010 - 2035)						
	Proposed Plan at Buildout (RBD)	No Project Alternative at Buildout (RBD)	New Growth From Proposed Plan (RBD)	ABAG-Projected Growth in East Palo Alto (City)	Revised Growth in East Palo Alto with Proposed Plan (City)	Rest of City Growth Assumptions (Rest of City)
*	[A]	[B]	[C] (A-B)	[D]	[E] (C+D)	[F] (F-A)
Housing Units	835	474	361	2010	2371	1536
Population	2766	1591	1175	8700	9875	7109
Employees	4851	1537	3314	4500	7814	2963

Sources: Ravenswood/4 Corners TOD Specific Plan EIR Table 5-1 "Comparison of Buildout Figures"; ABAG 2009 Citywide estimates Notes:

[•] ABAG 2009 projections for East Palo Alto are based on planning information provided in 2006. As such, the 2035 ABAG projections for population, housing, and employment in East Palo Alto do not account for zoning changes in the RBD made in 2012 – and therefore underestimate population, housing, and employment growth, based on East Palo Alto's current long-range planning. Using the build-out and 'no project' alternative projections from the Ravenswood/4 Corners TOD Specific Plan EIR, ABAG projections can be updated to reflect the planned growth. Columns A, E, and F represent housing, population and job growth from 2010 through 2035 in the RBD, East Palo Alto, and the remainder of the city, respectively.

APPENDIX B: DETAILED PROJECT LIST

Appendix Table B - 1: Detailed Project List

ТҮРЕ	Reference Document	Description	Gross Project Cost
Parks and Trails		1	
Martin Luther King Jr. Park Improvements	CIP	PK-07	\$450,000
Joel Davis Park Improvements	CIP	PK-08	\$260,000
Park/Trail Adjacent to San Francisquito Creek	CIP	PK-10	\$3,250,000
Jack Farrell Park Improvements	CIP	PK-11	\$220,000
Baylands Park	CIP	PK-12	\$4,368,000
Bell Street Park Improvements	CIP	PK-13	\$430,000
#1. Fordham Road - Improvements	RSP	#1, Fig 4-2	\$1,201,500
#2. Purdue Avenue - Trail Improvements	RSP	#2, Fig 4-2	\$176,175
#3. Trail Gap Closures	RSP	#3, Fig 4-2	\$1,058,400
#4. Hetch Hetchy ROW Trail	RSP	#4, Fig 4-2	\$338,877
#5. Bay Trail Con. Boardwalk (Spur Trail to Ravenswood Pres)	RSP	#5, Fig 4-2	\$2,970,000
#7. UP Rail Spur Trail Demeter to Bay Rd.	RSP	#7, Fig 4-2	\$1,282,500
#8. Bay Trail (Weeks to Bay Rd.)	RSP	#8, Fig 4-2	\$486,000
#10. UP Spur Trail- Pulgas Ave. to Bay Trail @ levee	RSP	#10, Fig 4-2	\$843,750
#11. Purdue Avenue Pedestrian Paseo	RSP	#11, Fig 4-2	\$1,130,625
#12. View Corridor Trail	RSP	#12, Fig 4-2	\$826,200
#13. Trail Along Romic (between Purdue and Bay)	RSP	#13, Fig 4-2	\$1,012,500
#14. Hetch Hetchy ROW Park	RSP	#14, Fig 4-2	\$3,071,250
#15. Bay Road Park	RSP	#15, Fig 4-2	\$10,530,000
#16. Bay & Univ. NE Corner	RSP	#16, Fig 4-2	\$211,702
#17. End of Weeks	RSP	#17, Fig 4-2	\$1,499,553
#18. Purdue Park	RSP	#18, Fig 4-2	\$3,577,500
4 Corners Plaza	RSP	#1, Fig 4-2	\$3,213,000
#19. Purdue Pedestrian Paseo	RSP	#19, Fig 4-2	\$1,005,583
#20. TBD small Park	RSP	#20, Fig 4-2	\$540,000
#21. TBD small Plaza	RSP	#21, Fig 4-2	\$324,000
#22. Cooley Landing	RSP	#22, Fig 4-2	\$6,750,000
Community Facilities			
Community Facilities Master Plan	CIP	FA-01	\$100,000
Community Development Building	CIP	FA-02	\$90,000
2277 University Avenue Building	CIP	FA-03	\$10,000
Senior Center Building	CIP	FA-04	\$30,000
Police Department Building	CIP	FA-05	\$10,000,000
Corporation Yard Building	CIP	FA-06	\$100,000

ТУРЕ	Reference Document	Description	Gross Project Cost
New City Hall	CIP	FA-07	\$15,000,000
Media Center Improvement	CIP	-	\$15,000
Purdue Recreation Center	RSP	Fig 4-1, p47-48	\$4,320,000
4 Corners Community Center	RSP	Fig 4-1, p47-48	\$8,640,000
Library	RSP	Fig 4-1, p47-48	\$3,510,000
Water Infrastructure			
Water Supply Infrastructure	CIP	Gloria Well Assessment/Rehabilitation	\$2,000,000
Water Supply Infrastructure	CIP	2nd Groundwater Well	\$3,400,000
Water Distribution Infrastructure	DEPLAN	Network of water pipes in RBD	\$4,838,327
Storm Drainage Infrastructure	DEPLAN	Storm drainage pipes in RBD	\$15,413,372
Sanitary Sewer Infrastructure	DEPLAN	Sanitary sewer pipes and other sanitary service improvements in RBD	\$3,441,624
Water Storage Infrastructure	CIP	2 million gallon tank for (emergency) water storage	\$5,000,000
Roadway Infrastructure Requirements			
Roadway improvements as per DEPLAN and RSP	DEPLAN	Building street structure work in RBD	\$18,931,655
Loop Road	RSP/DEPLAN	Construction of arterial road in RBD	\$22,346,672
EIR Traffic Mitigations	RSP/DEPLAN	Intersection traffic mitigations required by EIR	\$2,100,600
Streetscape Elements			
Streetscape improvements	DEPLAN	Pedestrian, aesthetic, and safety improvements	\$4,427,134

Source: City of East Palo Alto

Note: Estimated other funding includes Quimby Act fee estimates for Parks and Trails infrastructure.

Appendix Table C - 1: Land Use Assumptions for 25-Year and 50-80 Year Planning Horizons

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25-year planning horizon	RBD ¹			East Palo A	East Palo Alto (entire city)		
RBD	<u>Acreage</u>	Number	Density (DUA)	Acreage	Number ²	Density (DUA) ²	
Townhouses	n/a	19	25	n/a	1.555	n/a	
Multi-Family Housing	n/a	816	41	n/a	816	40	
	Land SF	Built SF	<u>FAR</u>	Land SF	Built SF ³	<u>FAR</u>	
Office	900,930	1,249,900	1.5	n/a	1,653,150	n/a	
Industrial	432,636	217,836	0.8	n/a	240,349	n/a	
R&D	216,983	133,983	0.6	n/a	156,496	n/a	
Retail	0	0	n/a	n/a	353,317	n/a	
50-80 year planning horizon	RBD			East Palo Alto (entire city)			
	<u>Acreage</u>	Number	Density (DUA)	Acreage	Number	Density (DUA)	
Townhouses	10	204	20	n/a	n/a	n/a	
Multi-Family Housing	23	1,083	50	n/a	n/a	n/a	
	Land SF	Built SF	<u>FAR</u>	Land SF	Built SF	<u>FAR</u>	
Office	1,191,947	1,568,922	1.5	n/a	n/a	n/a	
Industrial	1,803,529	974,764	0.5	n/a	n/a	n/a	
R&D	1,281,245	713,622	0.5	n/a	n/a	n/a	
Retail	327,571	131,028	0.4	n/a	n/a	n/a	

Sources: AECOM, City of East Palo Alto, Ravenswood/4 Corners TOD Specific Plan EIR Notes:

Appendix Table C - 2: Impervious Factor for Storm Drainage Calculations

*	Value	Source
Impervious Factor	0.9	Impervious factor provided by City of East Palo Alto

^{1.} All RBD values for acreage, land square footage, built square footage, number of dwelling units, density, and floor-area-ratio provided by the City of East Palo Alto

^{2.} Number of housing units in East Palo Alto (entire city) taken from AECOM's Task 1 memorandum (Task 1: Growth Assumptions and Benchmark Case Studies). All housing units outside of RBD are assumed to be townhouses with a density of 40 DUA.

^{3.} Values for built square footage in East Palo Alto are taken from the Ravenswood/4 Corners TOD Specific Plan EIR. Industrial and R&D square footages for the entire city are assumed to be the RBD square footage plus half the balance of the combination 'Industrial / R&D' square footage

Appendix Table C - 3: Water Demand Assumptions for Water, Storm Drainage, and Sanitary Sewer (50-80 Year Planning Horizon)

Residential	Acres ¹	Impervious Acres ²	Number of DU ¹	Demand (gpd / DU) ³	Total Demand (gpd) ⁴	Percent of Demand ⁵	Sanitary % ⁶
Townhouses	10	9	204	260	52,936	5%	92%
Multi-Family Housing	23	20	1,083	203	219,948	20%	90%
Non-Residential	Land SF ¹	Impervious Acres ²	Built SF ¹	Demand (gpd / sf) ³	Total Demand (gpd) ⁴	Percent of Demand ⁵	Sanitary % ⁶
Office	1,191,947	25	1,568,922	0.11	178,687	16%	84%
Industrial	1,803,529	37	974,764	0.39	376,770	34%	87%
R&D	1,281,245	26	713,622	0.38	267,661	24%	87%
Retail	327,571	7	131,028	0.16	20,965	2%	90%

Sources: AECOM, City of East Palo Alto

Notes:

- 1. Values for acres, land square footage, built square footages, and number of dwelling units is taken from Appendix Table C-1.
- 2. Impervious acres for residential units are calculated as the number of acres multiplied by the impervious factor; impervious acres for non-residential units are calculated as the land square footage divided by 43,560 (to convert to acres), multiplied by the impervious factor.
- 3. Water demand is provided by the City of East Palo Alto
- 4. Total demand for residential is calculated as the number of dwelling units multiplied by demand; total demand for non-residential is calculated as the built square footage multiplied by demand.
- 5. Percent of demand is calculated as the total demand for a particular land use over the sum of total demand for all land use types.
- 6. Sanitary demand percentage is provided by the City of East Palo Alto. Note that sanitary demand is typically taken as a percentage of water demand.

Appendix Table C - 4: RBD Trip Totals and Generation Rates (25-Year Planning Horizon)

Residential	ITE Code ¹	<u>DU</u> ²	Trips Per Unit ¹	Total Trips ³
Townhouses	230	19	5.81	109
Multi-Family Housing	220	816	6.65	5427
Non-Residential	ITE Code ¹	Built SF ²	Trips Per 1000 SF ¹	Total Trips ³
Office	710	1,249,900	11	13761
Industrial	110	217,836	7	1518
R&D	760	133,983	8	1087

Sources: AECOM, City of East Palo Alto

Notes

- 1. ITE codes and trip generation rates are provided by the City of East Palo Alto.
- 2. Dwelling unit and built square footage numbers are taken from Appendix Table C-1.
- 3. Total trips is calculated as the number of dwelling units multiplied by the trip generation rate.

APPENDIX D: NON-IMPACT FEE ESTIMATE DETERMINATIONS

Appendix Table D - 1: Calculations and Assumptions for Quimby Act Fee Estimate

	Quimby Act Calculation	Assumptions	Source
A	Average Persons Per Household	3.59	US Census
В	Acreage Mandate	3 acres / 1000 persons	Ordinance 145
С	Amount of Land Required (sf / DU)	469	A * B * 43560
D	Land Costs PSF	\$35	City of East Palo Alto ¹
Е	Land Costs Per Unit	\$16,420	C * D
F	50% Credit For Private Open Space	(\$8.210)	E * -0.5
G	Net Quimby Act Per Unit	\$8,210	E - F

Note: Quimby Act fee estimate assumptions provided by the City of East Palo Alto, 2013

Appendix Table D - 2: Calculations and Assumptions for Affordable Housing In-Lieu Fee Estimate

	Affordable Housing Calculation	Assumptions	Source
A	SF / unit (Townhouse)	1,000	Given by City of East Palo Alto
В	SF / unit (Multi-Family)	875	Given by City of East Palo Alto
С	Affordable Housing In-Lieu Unit Fee (\$ / sf)	23	Given by City of East Palo Alto
D	Affordable Housing In-Lieu Fee (Townhouse)	\$23,000	A * C
Е	Affordable Housing In-Lieu Fee (Multi-Family)	\$18,975	See Note # 1

Notes:

^{1.} Land cost based on the Ravenswood Specific Plan Fiscal Impact Analysis (Table 10-2), but modified to account for land value increase since the analysis was concluded.

^{1. \$18,975} was given as Affordable Housing In-Lieu fee estimate by the City of East Palo Alto. This value assumes a per square foot cost of \$21.68.

Appendix Table D - 3: Calculations and Assumptions for Sanitary Sewer Fee Estimate

*	Measure	Value	Source / Calculation			
Capac	city / Demand					
A	Demand for sanitary sewer infrastructure in RBD from new development (gpd)	976,275	Calculated from Appendix Table C - 3 (see Note # 1			
Cost						
В	Total cost for sanitary sewer infrastructure	\$3,441,624	Table 3			
С	Unit cost for sanitary sewer infrastructure, with 4% administrative fee (\$ / gpd)	\$3.67	B / A * 1.04			
Reside	ential Unit Conversions					
D	Townhouse (gpd / DU)	239	Calculated from Appendix Table C - 3 (see Note # 2)			
E	Multi-Family (gpd / DU)	183	Calculated from Appendix Table C - 3 (see Note # 2)			
Comn	nercial Unit Conversions					
F	Office (gpd / sf)	0.10	Calculated from Appendix Table C - 3 (see Note # 2)			
G	R&D (gpd / sf)	0.34	Calculated from Appendix Table C - 3 (see Note # 2)			
Н	Industrial (gpd / sf)	0.33	Calculated from Appendix Table C - 3 (see Note # 2)			
I	Retail (gpd / sf)	0.14	Calculated from Appendix Table C - 3 (see Note # 2)			
Reside	ential Nexus Fee Maximums					
Town	house (\$ / DU)	\$877	C * D			
Multi-	Family (\$ / DU)	\$670	C*E			
Non-F	Residential Nexus Fee Maximums					
Office	(\$/SF)	\$0.35	C*F			
R&D	(\$/SF)	\$1.23	C * G			
Indus	trial (\$/SF)	\$1.20	C * H			
Retail	(\$/SF)	\$0.53	C * I			

Notes:

- 1. Calculated from the data in Appendix Table C 3 as the sum of total water demand (gpd) multiplied by the sanitary percent
- 2. Calculated from the data in Appendix Table C 3 as the water demand (gpd / DU, or gpd / sf) multiplied by the sanitary percent

Calculating the fees (impact fees and other fees) per project basis is important for the assessing the feasibility of development, and for understanding the proportionate share of each fee category. The following appendix will outline prototypical projects per land use type, approximate per-project fees, and consider the fee proportions by fee type, focusing on development projects in the RBD.

PROTOTYPICAL DEVELOPMENTS

Development prototypes for residential and non-residential space assume single-acre developments, with the densities and FARs from the 25-year planning horizon (Table 2).¹⁰

DEVELOPMENT FEES (IMPACT AND OTHERWISE)

Appendix Table E - 1 below shows all fees to which a development in East Palo Alto would be subject. Note that a development in the RBD will be subject to RBD-specific fees, as well as citywide fees. A development not in the RBD would be subject only to citywide fees. Because development is projected to occur primarily in the RBD, this analysis will only examine potential developments in the RBD. Note also that because no stand-alone retail is included in the 25-year planning horizon, retail fees and retail development are excluded.

Prototypical Development Size per Development Type

1 Tototypical Bevelopment Gize per Bevelopment Type							
Development Type	Typical Acreage for Project (acres)	DUA / FAR	DU/SF A*B				
Residential	A	В					
Townhome Development	1	25	25				
Multi-Family Development	1	41	41				
Non-Residential	A	В	A * B * 43,560				
Office Development	1	1.5	65,340				
R&D Development	1	0.6	26,898				
Industrial Development	1	0.8	32,670				
Retail Development	1	0.4	17,424				

Note: DUA: Dwelling unit per acre; FAR: floor-area ratio; DU: Dwelling unit

¹⁰ The table below summarizes the assumed prototypical projects for residential and non-residential development.

Appendix Table E - 1: Fee Burden for Development within RBD

	Recommended Impact Fee and Other Estimated Fees in the RBD					
Category for Impact Fee	Townhouse (per DU) Multi-Family (per DU)		Office (psf)	R&D (psf)	Industrial (psf)	
Fees Calculated Under this Effort						
Parks Trails (citywide only)	n/a	n/a	\$0.87	\$0.37	\$0.25	
Community Facilities (citywide only)	\$510	\$422	\$0.25	\$0.11	\$0.07	
Water Infrastructure (citywide + RBD-specific)	\$4,317	\$1,794	\$1.51	\$3.67	\$3.56	
Roadway Infrastructure (RBD-specific only)	\$9,981	\$11,424	\$18.91	\$13.93	\$11.97	
Streetscape (RBD-specific only)	\$1,505	\$1,245	\$0.74	\$0.32	\$0.21	
Subtotal	\$20,284	\$17,270	\$23.73	\$23.06	\$20.70	
Other City Impact Fees						
Sanitary Sewer (estimates of potential fees in RBD)	\$877	\$670	\$0.35	\$1.23	\$1.20	
Quimby Act (citywide estimate)	\$8,210	\$8,210	n/a	n/a	n/a	
Affordable Housing In-Lieu Fee (citywide estimate of potential fees)	\$23,000	\$18,975	n/a	n/a	n/a	
Subtotal	\$32,087	\$27,855	\$0.35	\$1.23	\$1.20	

Source: AECOM, City of East Palo Alto, 2013

FEE BURDEN ESTIMATES FOR DEVELOPMENT

Using the estimated fees and prototypical developments, an approximate per-acre fee burden¹¹ for various types of development can be determined (Appendix Table E - 2). Note that these developments are assumed to occur in the RBD, where the majority of development is projected to happen in East Palo Alto.

It is useful to understand the relative percentage of each type of fee for each real estate product type. Appendix Table E - 2 has a breakdown by fee type for each product type, which is graphed in Appendix Figure E - 1 and Appendix Figure E - 2 (for residential and non-residential development respectively).

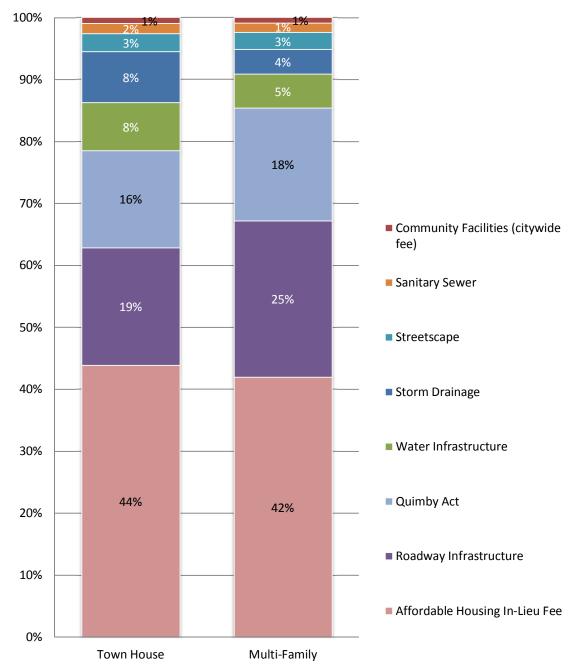
¹¹ Fee burden is determined as a per-acre fee, since each prototypical development is assumed to be a one-acre development.

Appendix Table E - 2: Tabulation of Proportional Per-Acre Fee Burden on Development, by Fee Type

\$1,311,333	\$1,311,333 \$1,834,112		\$656,409	\$718,510
Townhouse	Multi-Family	Office	R&D	Industrial
44%	42%	0%	0%	0%
19%	25%	78%	57%	54%
16%	18%	0%	0%	0%
8%	5%	7%	20%	22%
8%	4%	6%	15%	16%
3%	3%	3%	1%	1%
1%	1%	1%	0%	0%
2%	1%	1%	5%	5%
0%	0%	4%	2%	1%
	Townhouse 44% 19% 16% 8% 8% 3% 1% 2%	Townhouse Multi-Family 44% 42% 19% 25% 16% 18% 8% 5% 8% 4% 3% 3% 1% 1% 2% 1%	Townhouse Multi-Family Office 44% 42% 0% 19% 25% 78% 16% 18% 0% 8% 5% 7% 8% 4% 6% 3% 3% 3% 1% 1% 1% 2% 1% 1%	Townhouse Multi-Family Office R&D 44% 42% 0% 0% 19% 25% 78% 57% 16% 18% 0% 0% 8% 5% 7% 20% 8% 4% 6% 15% 3% 3% 1% 1% 1% 0% 2% 1% 1% 5%

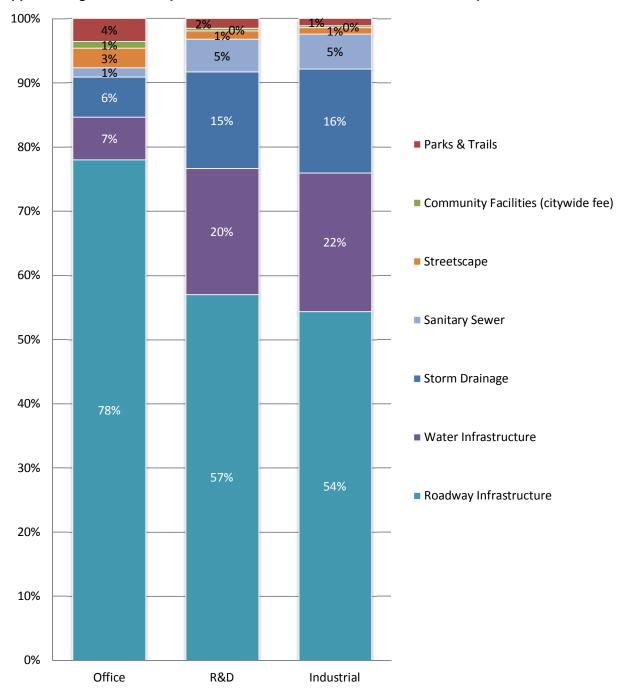
Source: AECOM, 2013

Appendix Figure E - 1: Proportional Fee Burden on Residential Development



The breakdown of fees by proportion of total fee burden is similar between townhouse developments and multi-family developments. For both, affordable housing in-lieu fees constitute a significant proportion (42 to 44 percent), Quimby Act fees constitute about 16 to 18 percent, and sanitary sewer fees constitute only about 1 or 2 percent. In terms of impact fees, roadway infrastructure impact fees constitute approximately 19 to 25, water infrastructure impact fees constitute 5 to 8 percent, storm drainage impact fees constitute 4 to 8 percent, and streetscape and community facility impact fees constitute under 5 percent.

Appendix Figure E - 2: Proportional Fee Burden on Non-Residential Development



The breakdown of fee burdens across non-residential development is relatively uniform. For all non-residential developments – office, R&D, and industrial developments – roadway infrastructure comprises well over half of the fee burden proportionally. Water infrastructure and storm drainage impact fees constitute another 13 percent to 38 percent. The remaining fees and impact fees constitute less than 10 percent of the fee burden.

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Committed funds for various infrastructure projects comes from a variety of sources, primarily grant monies. The tables below show the breakdown of committed funds and sources.

Appendix Table F - 1: Details and Sources of Committed Funding for East Palo Alto Infrastructure Projects

	Federal Transportati on Earmark Grant (FTEG)	Required Local Match for FTEG ¹	One Bay Area Grant (OBAG)	Local Impact Fees ²	HUD EDI Grant ³	State Tribal Assistance Grants (STAGs)	Prop. 84	Total
Roadway (DEPLAN)	\$6,000,000	\$1,500,000						\$7,500,000
Streetscape (DEPLAN)	\$2,000,000	\$500,000						\$2,500,000
Sanitary Sewer (DEPLAN)								\$0
Water Infrastructure								\$5,889,535
Supply (Gloria Well Assessment/Rehab)						\$749,000		\$749,000
Storm Drain (DEPLAN)	\$1,500,000	\$375,000	\$1,000,000		\$250,000	\$1,390,535		\$4,515,535
Water Distribution (DEPLAN)				\$625,000				\$625,000
Parks & Trails (Cooley Landing)							\$5,042,000	\$5,042,000

Notes:

- 1. FTEG requires a local match representing 20 percent of the total funding amount.
- 2. Local impact fees collected from DKB homes
- 3. The U.S. Department of Housing and Urban Development (HUD) Economic Development Initiative (EDI) grant

Appendix Table F - 2: Details of STAG Funding

The state of the s				
Water Supply Funding				
2009 EPA STAG	\$1,067,000	Total		
Expenditure to date	(\$318,000)	Costs for feasibility analysis, design, and environmental work		
Remaining funds for construction	\$749,000	Remainder		
Storm Drainage Funding				
2008 EPA STAG	\$788,000	Total		
2010 EPA STAG	\$848,000	Total		
Expenditure to date	(\$219,316)	Cost of design and environmental work		
Expenditure to date (\$26,149)		Cost of additional design and environmental work		
Remaining funds for construction \$1,390,535		Remainder		