

CITY OF MOUNTAIN VIEW
RESOLUTION NO.
SERIES 2022

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MOUNTAIN VIEW
TO ADOPT THE EAST WHISMAN PRECISE PLAN DEVELOPMENT IMPACT FEE NEXUS STUDY

WHEREAS, on November 5, 2019, the City Council adopted the East Whisman Precise Plan (“Precise Plan”), which allows new residential land uses and expanded commercial land uses, open spaces, and multi-modal connectivity in the East Whisman Area (“East Whisman”); and

WHEREAS, the Precise Plan identifies key public improvements needed in East Whisman to serve projected development in the area; and

WHEREAS, the Precise Plan includes a Funding Strategy that details how new public improvements in East Whisman could be funded to serve new development in the area; and

WHEREAS, the Funding Strategy identified the need for development impact fees as a key element to fund public improvements needed to serve new development in the Precise Plan area; and

WHEREAS, on April 22, 2022, at least 30 days prior to the date on which this Resolution was heard, a nexus study prepared by Willdan Financial Services, entitled “East Whisman Precise Plan Development Impact Fee Nexus Study,” and dated April 22, 2022, was placed on file and made available for public inspection on the City website and at the location identified in the notice of availability of the nexus study and public hearing mailed on April 22, 2022 to all interested parties requesting notice and all property owners in the Precise Plan area; and

WHEREAS, minor text changes were made to the nexus study, providing clarification and further explanation of the methodology used in response to questions and comments received during the public inspection period, which are reflected in the revised “East Whisman Precise Plan Development Impact Fee Nexus Study,” dated May 10, 2022 (“Nexus Study”); and

WHEREAS, the Nexus Study is attached hereto as Exhibit A and incorporated herein by reference; and

WHEREAS, the Nexus Study: (i) meets the requirements of Section 66016.5 of the Government Code; (ii) describes development impact fees (“Fees”) to be collected within the Precise Plan area for potable water facilities, transportation facilities, sewer facilities, and recycled water facilities that are necessary to fund public improvements associated with the development of the Precise Plan area; (iii) supports the finding that the Fees do not exceed the amount permitted by law; (iv) includes data indicating the amount of cost, or the estimated cost,

required to provide public facilities and the revenue sources anticipated to fund those public facilities, including General Fund revenues; and (v) provides the City Council with a basis for making the findings required by Section 66001(a) of the Government Code with respect to the adoption of Fees; and

WHEREAS, at least 30 days prior to the date this Resolution was heard, notice of the filing of the Nexus Study was provided to any persons or organizations who had requested such notice pursuant to Sections 66016.5 or 66019 of the Government Code or other applicable law; and

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

WHEREAS, at a duly noticed public hearing held at its May 24, 2022 Regular Meeting (“Public Hearing”), the City Council considered the Nexus Study and other matters related to the proposed Impact Fee; and

WHEREAS, the City Council has received and considered the Nexus Study, a Council report and any and all public comments, oral and written, received prior to or during the Public Hearing; and

WHEREAS, the City Council now desires to adopt the Nexus Study; and

WHEREAS, the adoption of the Nexus Study is not subject to the California Environmental Quality Act (CEQA) in that pursuant to CEQA Guidelines, Section 15378(b)(4), the creation of government funding mechanisms, which do not involve a commitment to any specific project which may cause a significant effect on the environment, is not identified as a “project” under CEQA. CEQA review shall be completed for each project prior to project approval and commitment of funds;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Mountain View:

1. Based on the facts and substantial evidence in the record, the Nexus Study is hereby adopted pursuant to Section 66016.5 of the Government Code.
2. The City Council finds that the findings set forth in Section 8 of the Nexus Study are true and correct.

RG/4/RESO
926-05-24-22r

Exhibit: A. Nexus Study

EAST WHISMAN PRECISE PLAN

DEVELOPMENT IMPACT FEE NEXUS STUDY

REVISED DRAFT

MAY 10, 2022



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Executive Summary

This report describes the development impact fees that would be needed to fully fund the costs of public improvements and facilities associated with the East Whisman Precise Plan (EWPP) of the City of Mountain View that are necessitated by development in the EWPP Area. Consistent with the EWPP it is the City's intent that the cost of future development's share of public facilities within the EWPP Area be imposed on that development in the form of a development impact fee. The public facilities included in this analysis are divided into the fee categories listed below:

- Transportation Facilities
- Potable Water Facilities
- Sewer Facilities
- Recycled Water Facilities

Background

East Whisman is a major employment center located on the eastern edge of Mountain View. The 412-acre Precise Plan Area is shown in **Figure 1**. The area is bounded by the U.S. 101 freeway and NASA Ames/Moffett Field to the north, Sunnyvale city limits to the east, the Central Expressway and South Whisman and Whisman Station Precise Plan areas to the south, and Whisman Road to the west. The Plan Area also includes the commercial area at the intersection of North Whisman and East Middlefield Roads, referred to as the "Village Center" in the General Plan and the Precise Plan. The Santa Clara Valley Transportation Authority (VTA) light rail line travels north-south through the Plan Area with one station located within the boundary (Middlefield Station) and two stations just outside the Plan Area (Whisman Station to the south and Bayshore/NASA Station to the north).

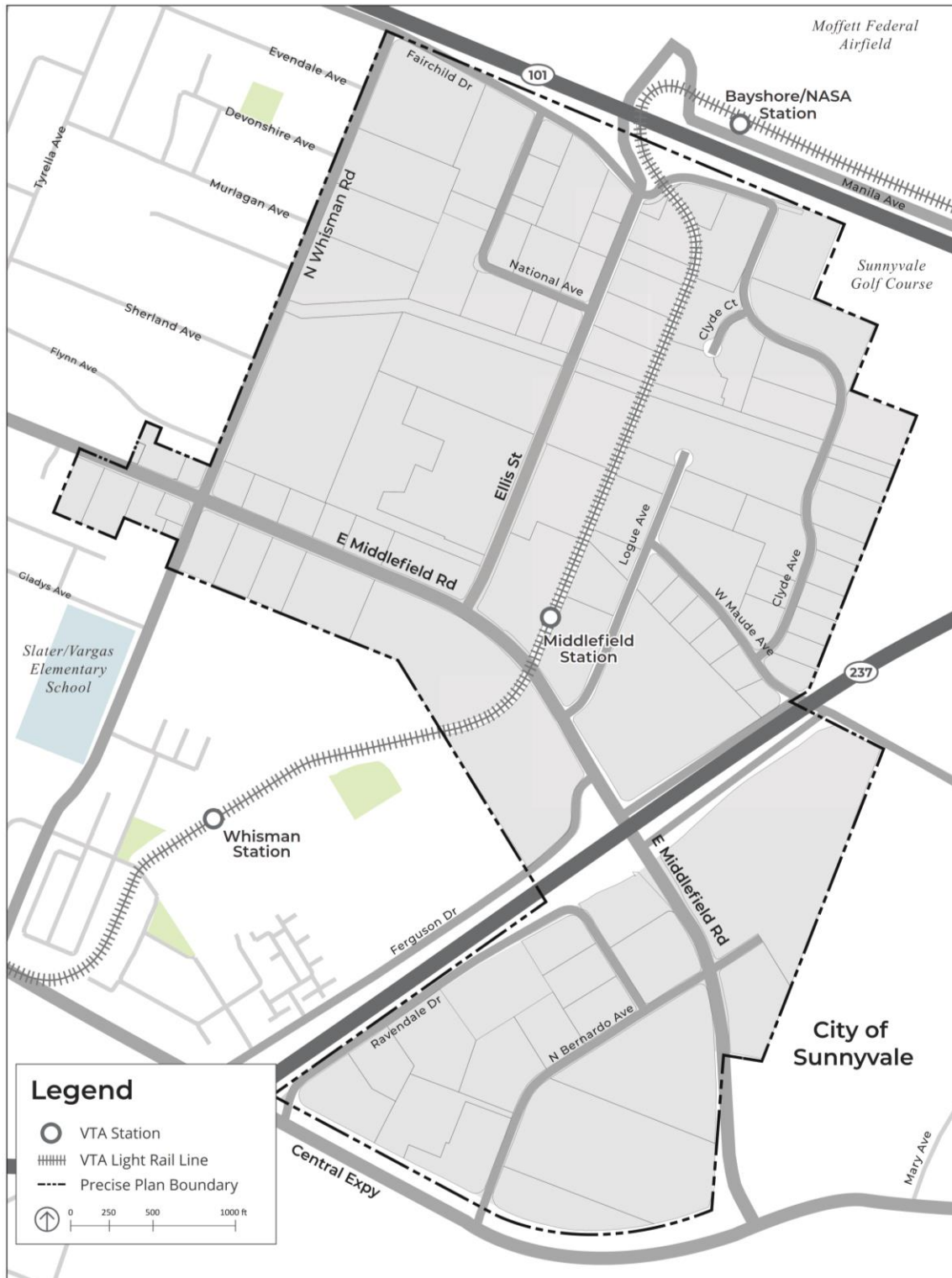
The EWPP guides land use and development decision-making processes for the area. The Precise Plan does not replace or augment building safety codes or other non-planning related codes. All applications for new construction, substantial modifications or improvements to existing buildings, and changes in land use will be reviewed for conformance with the Precise Plan. The Precise Plan was adopted under the authority of the City's Zoning Ordinance, which establishes Precise Plans as a tool to regulate land use and development where certain properties or conditions require specialized attention.

Study Objectives

The primary policy objective of a development impact fee program is to ensure that new development pays the capital costs incurred by the City associated with growth. The development impact fee funds the costs of new facilities, but is not used to fund operating and maintenance costs, which will be funded in the same manner as such costs for existing facilities (i.e. through user fees and tax revenues, which can be expected to increase as a result of the development of the EWPP Area). The primary purpose of this study is to calculate and present fees that will enable the City to expand its inventory of public facilities, as new development creates a need for additional public facilities and capital improvements in the EWPP Area.

When imposing a development impact fee, the City must comply with the requirements of the Mitigation Fee Act (California Government Code Section 66000 et seq.), including recently adopted requirements of AB 602. This report provides the findings required by the Act for adoption of the recommended fees.

Figure 1: East Whisman Precise Plan Area



Facility Standards and Costs

The **planned facilities** approach is used to calculate each of the impact fees included in this study. This approach allocates costs based on the ratio of planned facilities that serve new development to the increase in demand associated with new development. This approach is appropriate when specific planned facilities that only benefit new development can be identified, or when the specific “new development” share of specific facilities that benefit both existing and new development can be identified. Examples include specific street improvements designed to avoid an existing street falling to a deficient level of service as a result of new development or a sewer trunk line extension to a previously undeveloped area.

Use of Fee Revenues

Impact fee revenue will be spent on new facilities or expansion of current facilities to serve new development. Although not specifically defined in the Mitigation Fee Act, facilities can be generally defined as capital purchases with a useful life greater than five years. Impact fee revenue can be spent on capital facilities to serve new development, including but not limited to, land acquisition, construction of buildings, construction of infrastructure, the acquisition of vehicles or equipment, information technology, software licenses and equipment. *The planned facilities intended to be funded with impact fee revenue are detailed in each facility chapter of this report.*

Because the City cannot predict with certainty how and when development within the City will occur through buildout, the City may need to update and revise the project lists funded by the fees documented in this study. Any substitute projects should be funded within the same facility category, and the substitute projects must meet the same nexus and proportionality requirements of the Mitigation Fee Act and other relevant laws, regulations, and policies. The City can identify any changes to the projects funded by the impact fees when it updates the CIP. The impact fees can also be updated if significant changes to the projects funded by the fees are anticipated or if significant changes to the EWPP occur.

Development Impact Fee Schedule Summary

Table E.1. summarizes the development impact fees that meet the City’s identified needs and comply with the requirements of the Mitigation Fee Act.

Table E.1: Maximum Justified Impact Facilities Fee Summary

Land Use	Transportation Facilities	Potable Water Facilities	Sewer Facilities	Recycled Water Facilities	Total
Office/R&D/Industrial (per 1,000 Sq. Ft.)	\$ 5,351	\$ 299	\$ 923	\$ 4,177	\$ 10,750
Retail (per 1,000 Sq. Ft.)	13,059	299	618	4,177	18,153
Hotel (per Room)	2,505	231	618	3,213	6,567
<i>Residential (per DU, by Bedrooms)</i>					
Studio	\$ 1,278	\$ 193	\$ 517	\$ 900	\$ 2,888
1	1,496	223	609	1,028	3,356
2	2,281	344	923	1,607	5,155
3	2,762	416	1,117	1,928	6,223
Per Additional Bedroom	392	58	157	257	864

Sources: Tables 3.5, 4.7, 5.8 and 6.6.

Other Funding Needed

Impact fees cannot fund costs associated with remedying existing deficiencies in public facilities, but may include the costs attributable to the increased demand for public facilities reasonably related to the development project. This means that the development impact fee levied against parcels in the EWPP Area cannot fund the share of new projects needed to serve existing development or new development that is not subject to the fee.

As shown in **Table E.2**, approximately \$96.8 million in additional funding is anticipated to be needed to complete the facilities the City currently plans to develop, if fees are adopted at the maximum justified fee level. The “Additional Funding Projected” column shows non-impact fee funding projected to be needed to complete the improvements partially funded by impact fees. These facilities are needed partially to remedy existing deficiencies and partly to accommodate new development.

To the extent that the City adopts fees that are lower than the maximum justified amount, the non-impact fee funding projections would increase. To the extent that development (i) has occurred since the 2017 impact fee baseline or (ii) is subject to agreements that limit the amount of impact fees that can be charged, the projected impact fee revenue would decrease, and the additional funding projections would increase.

Potential sources of revenue include, but are not limited to, existing or new general fund revenues, existing or new taxes, special assessments, bond proceeds, grants and public/community benefits required in connection with the Precise Plan.

Table E.2: Non-Impact Fee Funding Projected

Fee Category	Total Project Cost	Total Projected Impact Fee Revenue¹	Additional Funding Projected
Transportation Facilities	\$ 62,810,000	\$ 26,129,174	\$ 36,680,826
Potable Water Facilities	3,590,300	2,500,600	1,089,700
Sewer Facilities	9,792,300	6,987,898	2,804,402
Recycled Water Facilities	<u>75,300,000</u>	<u>19,068,525</u>	<u>56,231,475</u>
Total	\$ 151,492,600	\$ 54,686,197	\$ 96,806,403

¹ Projected impact fee revenue listed includes fee revenue associated with 355 E Middlefield and 400 Logue. These were approved prior to the adoption of the proposed fee and may not be subject to the proposed fees. After accounting for credits for demolished existing uses, these two projects account for \$3,135,998 in projected impact fee revenue. Should these projects not be subject to the fees, this amount would need to be funded from other sources.

Sources: Tables 3.3, 3.4, 4.5, 5.6, 6.3 and 6.5.

1. Introduction

This report presents an analysis of the need for public facilities to accommodate new development in the EWPP Area. This chapter provides background for the study and explains the study approach under the following sections:

- Study Objectives;
- Fee Program Maintenance;
- Study Methodology; and
- Organization of the Report.

Study Objectives

The primary policy objective of a development impact fee program is to ensure that new development pays the capital costs needed to accommodate growth. The EWPP Funding Strategy section of the Implementation chapter of the Precise Plan identifies guidelines for the funding of capital improvements within the Precise Plan: “Each new development will satisfy project related requirements for impact fees, related off-site improvements, and other funding sources.”

The primary purpose of this report is to set forth an impact fee program for the EWPP Area based on the most current available facility plans and growth projections. The maximum justified fees are projected to enable the City to expand its inventory of public facilities as new development creates increases in service demands. This report supports the EWPP funding strategy guideline stated above.

The City is subject to the limitations contained in the Mitigation Fee Act (the “Act”). This report provides the necessary findings required by the Act for adoption of the fees presented in the fee schedules presented in this report.

The EWPP Area is forecast to see significant growth through buildout. This growth will create an increase in demand for public services and the facilities required to deliver them. Given the revenue challenges described above, it has been proposed to use a development impact fee program to ensure that new development funds its share of facility costs associated with growth. This report makes use of the most current available growth forecasts and facility plans to create the EWPP impact fee program to ensure that the impact fees accurately reflect the facility needs resulting from new development.

Fee Program Maintenance

Once a fee program has been adopted it must be properly maintained to ensure that the revenue collected adequately funds the facilities needed by new development. To avoid collecting inadequate revenue, the inventories of existing facilities and costs for planned facilities must be updated periodically for inflation, and the fees recalculated to reflect the higher costs. The use of established indices for each facility included in the inventories (land, buildings, and equipment), such as the Engineering News-Record, is common to accurately adjust the impact fees. For a list of recommended indices, see Chapter 7.

While fee updates using inflation indices are appropriate for annual or periodic updates to ensure that fee revenues keep up with increases in the costs of public facilities, it is recommended to conduct more extensive updates of the fee documentation and calculation (such as this study) when significant new data on growth forecasts and/or facility plans become available. For further detail on fee program implementation, see Chapter 7.

Study Methodology

Development impact fees are calculated to fund the cost of facilities required to accommodate growth. The six steps followed in this development impact fee study include:

1. **Estimate existing development and future growth:** Identify a base year for existing development and a growth forecast that reflects increased demand for public facilities;
2. **Identify facility standards:** Determine the facility standards used to plan for new and expanded facilities. In this case the applicable standards used to identify needed facilities and infrastructure necessary to accommodate new development are documented in the EWPP EIR and accompanying technical appendices. These documents are available in the office of the City Clerk and incorporated herein for reference;
3. **Determine facilities required to serve new development:** Estimate the total amount of planned facilities, and identify the share required to accommodate new development. Similar to the facility standards in Step 2, the facilities needed to accommodate new development were identified and documented in the EWPP EIR and accompanying technical appendices;
4. **Determine the cost of facilities required to serve new development:** Estimate the total amount and the share of the cost of planned facilities required to accommodate new development;
5. **Calculate fee schedule:** Allocate facilities costs per unit of new development to calculate the development impact fee schedule; and
6. **Alternative funding needs:** Determine if any non-impact fee funding is required to complete projects.

New Development Facility Needs and Costs

This study identifies facility needs and costs to serve new development. This was a two-step process: (1) identify total facility needs, and (2) allocate to new development its fair share of those needs. The facility needs were identified in the EWPP EIR and accompanying technical appendices. This study uses the planned facilities method to allocate costs and calculate fees. This method is summarized below:

Planned Facilities Method

The planned facilities method allocates costs based on the ratio of allocated facility costs to demand from new development as follows:

$$\frac{\text{Allocated Cost of Planned Facilities}}{\text{New Development Demand}} = \text{cost per unit of demand}$$

This method is appropriate when planned facilities will entirely serve new development, or when a fair share allocation of planned facilities to new development can be estimated. An example of the former is a sewer trunk line extension to a previously undeveloped area. Under this method new development will fund the expansion of facilities at the standards used in the applicable planning documents. **This approach is used for all the fees in this report.**

Organization of the Report

The determination of a development impact fee begins with the selection of a planning horizon and development of growth projections. These projections are used throughout the analysis of different facility categories and are summarized in Chapter 2.

Chapters 3 through 6 identify facility standards and planned facilities, allocate the cost of planned facilities between new development and other development, and identify the appropriate development impact fee for each of the following facility categories:

- Transportation Facilities
- Potable Water Facilities
- Wastewater Facilities
- Recycled Water Facilities

Chapter 7 details the procedures that the City must follow when implementing a development impact fee program. Impact fee program adoption procedures are found in California Government Code Sections 66016 through 66018.

Recommended findings required for adoption of the maximum justified development impact fees in accordance with the Mitigation Fee Act are set forth in Chapter 8.

2. Growth Forecasts

Growth projections are used as indicators of demand to determine facility needs and allocate those needs between existing and new development. This chapter explains the source for the growth projections used in this study based on a 2017 base year and a planning horizon of buildout of the EWPP Area. The year 2017 is used as a baseline to be consistent with the EWPP Environmental Impact Report (EIR) and the mitigation identified in that document needed to serve projected growth.

Estimates of existing development and projections of future growth are critical assumptions used throughout this report. These estimates are used as follows:

- The estimate of existing development in 2017 is used as an indicator of existing facility demand.
- The estimate of total development at buildout is used as an indicator of future demand to determine total facilities needed to accommodate growth and remedy existing facility deficiencies.
- Estimates of growth from 2017 through buildout are used to (1) allocate facility costs between new development and existing development, and (2) estimate total fee revenues.

The demand for public facilities is based on the dwelling units, nonresidential building square footage and hotel rooms creating the need for the facilities.

Land Use Types

To ensure a reasonable relationship between each fee and the type of development paying the fee, growth projections distinguish between different land use types. The land use types for which impact fees have been calculated for are defined below.

- **Office / R&D / Industrial:** Office, research and development and industrial land uses.
- **Retail:** All retail and service (including restaurants) land uses.
- **Hotel:** All commercial lodging development.
- **Residential dwelling units:** All residential dwelling units (Includes single family homes, townhomes, apartments, and condominiums).

Some developments may include more than one land use type, such as a mixed-use development with both residential and retail uses. In those cases, the facilities fee would be calculated separately for each land use type.

The City has the discretion to determine which land use type best reflects a development project's characteristics for purposes of imposing an impact fee and may adjust fees for special or unique uses to reflect the impact characteristics of the use. If a project results in the intensification of use, the City would charge the project the difference in fees between the existing low intensity use and the future high intensity use.

Land Use Scenario

Table 2.1 shows the estimated number of nonresidential building square feet, hotel rooms and residential dwelling units within the EWPP Area, both in 2017 and at buildout. 2017 is used as the impact fee calculation baseline because this is the amount of development assumed in the EWPP EIR. Some of this development has already been approved, including 700 East Middlefield Road,

600 Ellis Street, 355-415 East Middlefield Road and 400 Logue Avenue. These four developments are included in the change, not in the baseline. The first two projects have development agreements that require payment of this fee, up to a maximum amount. The latter two may or may not be subject to the fee depending on the status of their vested rights at the time of development.

Table 2.1: East Whisman Precise Plan Impact Fee Land Use Scenario

Land Use Type	Fee Baseline (2017)	Cumulative Precise Plan	Change (2017 to Buildout)
<i>Nonresidential Square Feet (1,000's)</i>			
Office/R&D/Industrial	6,443	8,896	2,453
Retail	54	154	100
Subtotal	6,497	9,050	2,553
<i>Hotel Rooms</i>	-	200	200
<i>Residential Dwelling Units</i>			
Single Family Residential	1	100	99
Multi-Family Residential	-	4,970	4,970
Total Residential	1	5,070	5,069

Source: City of Mountain View.

Residential Occupant Densities

Residential impact fees in this report are calculated based on the number of bedrooms in a dwelling unit. Occupant density assumptions ensure a reasonable relationship between the size of a development project, the increase in facilities demand associated with the project, and the amount of the fee.

Persons per bedroom assumptions ensure a reasonable relationship between the size of a dwelling unit and the residents, and therefore demand for new facilities. For residential development, the fee is based on the number of bedrooms in each additional housing unit, so the fee schedule must convert facilities demand estimates to these measures of bedrooms per dwelling unit and number of dwelling units in the project.

This conversion is done with average household size factors that vary by bedrooms proposed in the dwelling unit, shown in **Table 2.2**. The data series that was used to statistically establish these household size factors is from the 2019 American Housing Survey (AHS), the most recent AHS data available. Willdan used AHS data from the Pacific Division to estimate the persons per bedroom. This estimate of persons per bedroom for the Pacific Division was then adjusted based on difference in average multifamily unit density for Mountain View compared to the Pacific Division as calculated from the latest American Community Survey (ACS) data. These adjustments were necessary because data for the City of Mountain View is not specifically available from the AHS, and the ACS does not provide data at the granularity needed to estimate these factors for the City.

The occupant density assumptions in Table 2.2 are used in each chapter to scale estimates of demand per average dwelling unit to demand per dwelling unit by number of bedrooms. The

project EIR and transportation analysis assumed 2.08 residents per dwelling unit. This figure was derived by dividing the 10,570 projected residents associated with the project, by 5,070 total dwelling units in the project. Estimates of trip generation, water flow generation, wastewater flow generation and recycled water flow generation per dwelling unit can be divided by 2.08 to estimate demand generated by a single resident. Demand per resident is then multiplied by residents per dwelling unit, by number of bedrooms to determine demand per dwelling unit, by number of bedrooms.

Table 2.2: Occupant Density

Number of Bedrooms	Residents per Dwelling Unit
Studio	1.17
1	1.37
2	2.09
3	2.53
Per Additional Bedroom	0.36

Sources: Tables B25024 and B25033 from the U.S. Census Bureau, 2019 American Community Survey 1-Year Estimates; 2019 American Housing Survey; Willdan Financial Services.

3. Transportation Facilities

This chapter details an analysis of the need for transportation facilities to accommodate new development. The chapter documents a reasonable relationship between new development and the impact fee for funding of these facilities.

Trip Demand

The need for transportation facilities is based on the trip demand placed on the system by development. A reasonable measure of demand is the number of average daily vehicle trips, adjusted for the type of trip. Vehicle trip generation rates are a reasonable measure of demand on the City's system of street improvements because vehicle trips are the greatest source of congestion and other impacts, which alternative modes are meant in part to mitigate.

AM peak hour trip generation rates are used to estimate demand and allocate the fees because the capacity of transportation infrastructure must be designed to accommodate demand when traffic peaks, which is during the weekday AM commute hour.

An adjustment is made to trip generation rates to calculate trip demand. Pass-by trips are deducted from the trip generation rate for retail uses. Pass-by trips are intermediate stops between an origin and a destination that require no significant diversion from the route, such as stopping to get gas on the way to work. This adjustment allows for a holistic quantification of trip demand that takes trip characteristics beyond trip generation rates into account for fee calculation purposes.

The EWPP includes stringent new provisions to reduce the number of commute trips generated by office uses. Therefore, this report assigns such uses developed under the plan a somewhat lower trip generation factor per 1,000 square feet than is assigned to buildings in existence at the baseline year. **Appendix Table A.1** displays the amount of existing and new office development within the EWPP Area and the associated trip rates.

Table 3.1 shows the calculation of trip demand factors by land use category based on the adjustments described above for both existing and new development.

Table 3.1: AM Peak Hour Trip Rates

Land Use	Pass-by Trips ¹	AM Peak Hour Trip Rates		Adjusted Trip Rate	
		Existing	New	Existing	New
Office/R&D/Industrial (per KSF)	0%	0.995	0.833	0.995	0.833
Retail (per KSF)	34%	3.080	3.080	2.033	2.033
Hotel (per Room)	0%	0.390	0.390	0.390	0.390
Residential Average (per DU)	0%	0.360	0.360	0.360	0.360
<i>Residential (per DU, by Bedrooms)²</i>					
Studio	0%	0.199	0.199	0.199	0.199
1	0%	0.233	0.233	0.233	0.233
2	0%	0.355	0.355	0.355	0.355
3	0%	0.430	0.430	0.430	0.430
Per Additional Bedroom	0%	0.061	0.061	0.061	0.061

Note: KSF = 1,000 square feet.

¹ Percent of total trips. A pass-by trip is made as an intermediate stop on the way from an origin to a primary trip destination without a route diversion. Pass-by trips are not considered to add traffic to the road network. Assumption based on ITE data.

² Assumes 0.17 AM peak hour trips per resident. Residents per dwelling unit by number of bedrooms shown in Table 2.2.

Sources: East Whisman Precise Plan, p.48; Memorandum: East Whisman Precise Plan – Project Trip Estimates, Fehr & Peers, May 10, 2019; Institute of Traffic Engineers, Trip Generation Handbook, 3rd Edition; Table 2.2, Willdan Financial Services.

Trip Demand Growth

The planning horizon for this analysis is buildout. **Table 3.2** lists the existing and buildout land use assumptions used in this study. The trip demand factors calculated in Table 3.1 are multiplied by the existing and future dwelling units, building square feet and hotel rooms to determine the increase in trip demand attributable to new development. Existing trip rates are used to calculate existing trip demand, and the new trip rates are used to calculate the trip demand associated with new development. In total, new development will generate 38.9% of trips at buildout.

Table 3.2: Land Use Scenario and Trip Demand

	Baseline			New Development			Buildout	
	Trip Rate	KSF/DU/ Rooms	Trips	Trip Rate	KSF/DU/ Rooms	Trips	KSF/DU/ Rooms	Trips
Office/R&D/Industrial (KSF)	0.995	6,443	6,411	0.833	2,453	2,043	8,896	8,454
Retail (KSF)	2.033	54	110	2.033	100	203	154	313
Hotel (per Room)	0.390	-	-	0.390	200	78	200	78
Residential (per DU)	0.360	1	-	0.360	5,069	1,825	5,070	1,825
Total			6,521			4,149		10,670
Share of Trips at Buildout			61.1%			38.9%		100%

Note: KSF = 1,000 square feet.

Sources: Tables 2.1 and 3.1.

Planned Facilities

Table 3.3 lists the transportation projects included in this analysis. The projects were identified from the EWPP Project Level Transportation Analysis. Cost estimates for the projects were developed by Fehr & Peers for use in this analysis. **Figure 2** displays the location of the planned transportation improvements.

The projects costs are allocated to new development as follows:

- Costs of projects serving all development in the EWPP Area are allocated 38.9% to the impact fee based on the new development's share of trips at buildout. This includes, but is not limited, to all freeway under crossings, SFPUC and VTA crossings, mid-block crossings, bike lanes, buffered bike lanes, wayfinding, and cycle tracks. 38.9% is used because it represents new development's share of total trip demand within the EWPP Area at buildout. These improvements are primarily needed to facilitate travel by trips that begin and/or end within the EPPA Area.
- Costs of projects that are needed to maintain an acceptable LOS as new development occurs are partially allocated to the impact fee based on the EWPP Area's share of future trip volumes. This was calculated by comparing the trip volume generated by new development in the EWPP Area to the trip volume generated by new development outside the EWPP Area at each specific improvement. Fehr & Peers provided estimates of the EWPP Area's share of the AM peak hour traffic volume increase for each intersection included in the analysis. AM peak hour traffic volumes were used to correspond with the AM peak hour trip rates used to allocate the fees.
- Intersection 10 is allocated 100% to new development because the intersection operates at an acceptable LOS under existing and cumulative conditions but falls to an unacceptable LOS under cumulative plus project conditions.

Table 3.3: Transportation Improvement Project Costs

Project ¹	Cost Estimate	Allocation to New Development	Cost Allocated to New Development
<u>Freeway Pedestrian/Bicycle Undercrossing</u>			
5. State Route 237 Undercrossing	\$ 10,000,000	38.9%	\$ 3,890,000
6. Highway 101/ Ellis Street Undercrossing Improvements	4,700,000	38.9%	1,828,300
Subtotal	\$ 14,700,000		\$ 5,718,300
<u>SFPUC, VTA/CPUC Crossings</u>			
7. Multi-use Path/ LRT crossing	\$ 10,000,000	38.9%	\$ 3,890,000
8. Street A/SFPUC crossing	50,000	38.9%	19,450
9. Street D/SFPUC crossing	1,200,000	38.9%	466,800
Subtotal	\$ 11,250,000		\$ 4,376,250
<u>Mid-Block Crossings²</u>			
13. Middlefield/ Street A crossing	\$ 450,000	38.9%	\$ 175,050
15. Bernardo/ Greenway crossing	340,000	38.9%	132,260
Subtotal	\$ 790,000		\$ 307,310
<u>Bike Lanes</u>			
16. Fairchild bike lanes	\$ 840,000	38.9%	\$ 326,760
<u>Buffered Bike Lanes²</u>			
17. East Middlefield Road	\$ 3,050,000	38.9%	\$ 1,186,450
18. North Whisman Road	2,320,000	38.9%	902,480
19. National Avenue	1,040,000	38.9%	404,560
20. Ellis Street	1,130,000	38.9%	439,570
21. Clyde Court	530,000	38.9%	206,170
22. Logue Avenue	750,000	38.9%	291,750
23. Clyde Avenue	1,040,000	38.9%	404,560
24. Ravendale Avenue	1,340,000	38.9%	521,260
25. Bernardo Avenue	1,020,000	38.9%	396,780
Subtotal	\$ 12,220,000		\$ 4,753,580
<u>Cycle Tracks²</u>			
27. SR 237 WB collector distributor cycle tracks	\$ 3,090,000	38.9%	\$ 1,202,010
Subtotal	\$ 3,090,000		\$ 1,202,010
<u>Pedestrian Streetscape Improvements / Wayfinding</u>			
	\$ 5,370,000	38.9%	\$ 2,088,930
<u>Intersections (From Project-Level Transportation Analysis)³</u>			
Intersection 1: Ellis and Manila	\$ 1,900,000	10.2%	\$ 193,894
Intersection 4: Ellis and Fairchild ⁴	2,900,000	85.2%	2,469,677
Intersection 9: Middlefield and Whisman	1,800,000	77.6%	1,397,549
Intersection 10: Middlefield and Ellis	2,000,000	100.0%	2,000,000
Intersection 27: Moffett and Middlefield	3,100,000	22.8%	705,651
Intersection 39: Whisman and 237	2,850,000	45.1%	1,285,000
Subtotal	\$ 14,550,000		\$ 8,051,771
Total	\$ 62,810,000		\$ 26,824,911

¹ Project numbering corresponds with numbering from Precise Plan. Intersection numbering consistent with numbering from Project-Level Transportation Analysis.

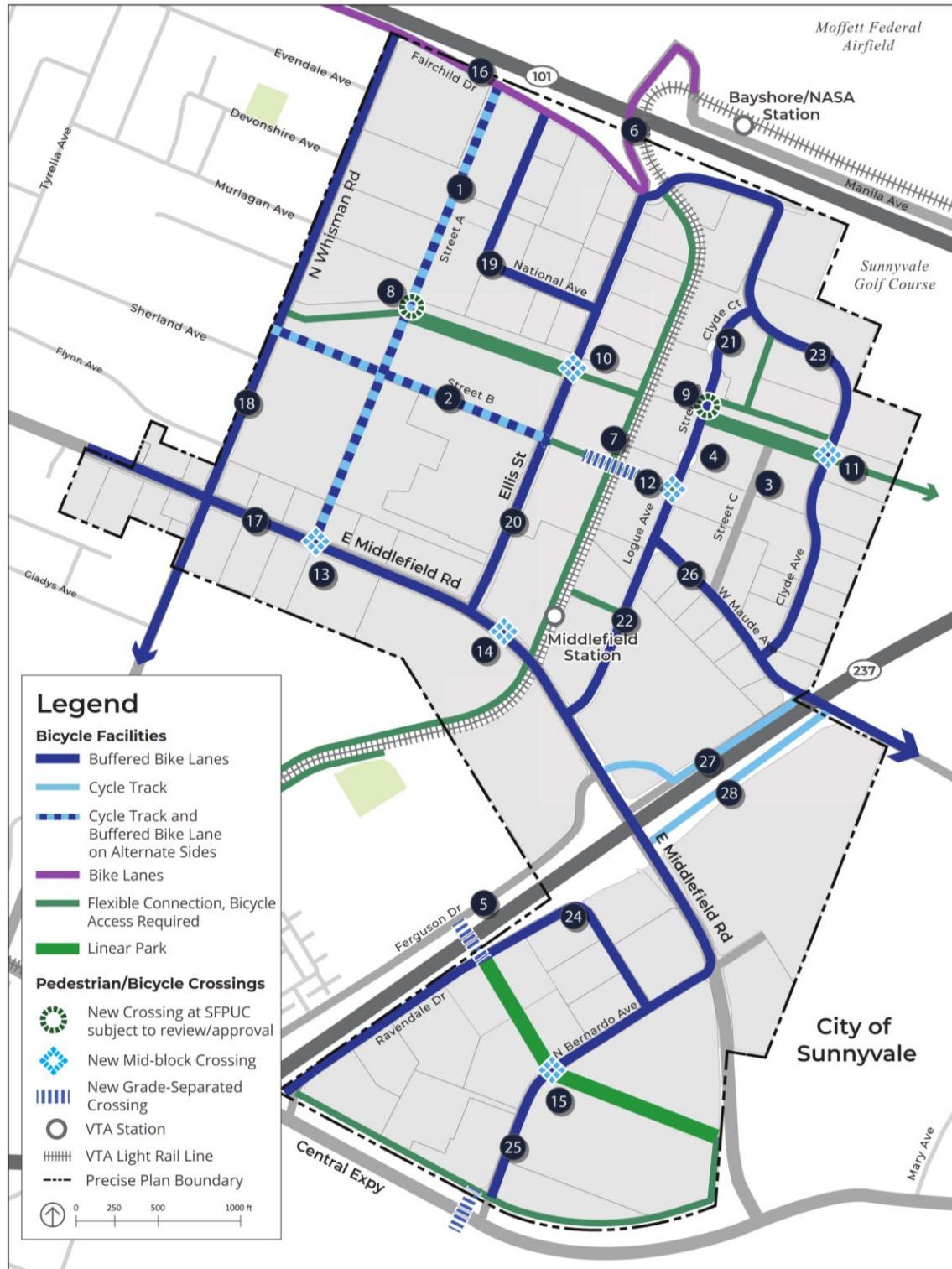
² Mid-block crossing projects #10, #11, #12 and #14, buffered bike lane project # 26, cycle track project # 28, and portions of #17, #20, #22 and #23 are not included in this list of projects and not incorporated into the fee calculations. These projects are proposed to be built with redevelopment projects.

³ Allocation of responsibility between EWPP Area and new development outside of the EWPP Area prepared by Fehr & Peers for use in this analysis. Based on AM peak hour volumes.

⁴ Since the EIR was completed, the city has done significant design work on this intersection for bike and pedestrian improvements. During the initial stages of the Nexus Study the City Traffic Engineer reviewed the proposed improvements and determined that the proposed improvements (Converting the southbound approach to include one additional through lane) could be incorporated into the Nexus Study.

Source: East Whisman Precise Plan; East Whisman Project-Level Transportation Analysis; Fehr & Peers; Table 3.2, Willdan Financial Services.

Figure 2: Transportation Project Map



Fee per Trip Demand Unit

Every impact fee consists of a dollar amount, representing the value of facilities, divided by a measure of demand. In this case, all fees are first calculated as a cost per trip demand unit. Then these amounts are translated into housing unit (cost per unit) and nonresidential space (cost per 1,000 square feet or hotel room) fees by multiplying the cost per trip by the trip generation rate for each land use category. These amounts are reflected in the fee schedule.

Table 3.4 displays the calculation of the cost the cost per trip demand unit. Allocated costs from Table 3.3 are summarized in the table by improvement category. Note that several of the buffered bike lane projects were also identified in the City’s Multimodal Impact Fee, which was adopted in 2018. To avoid double counting those costs in this analysis, the assumed bike lane costs from the Multimodal Impact Fee study were adjusted to 2022 dollars using the Engineering News Record’s Construction Cost Index (CCI), then subtracted from the costs allocated to new development in the EWPP Area.

The net costs are divided by the growth in trip demand from Table 3.2 to determine the cost per trip attributable to new development. These figure drives the fee calculation.

Table 3.4: Cost per Trip to Accommodate Growth

<i>Costs Allocated to New Development</i>	
Freeway Pedestrian/Bicycle Undercrossing	\$ 5,718,300
SFPUC, VTA/CPUC Crossings	4,376,250
Mid-Block Crossings	307,310
Bike Lanes	326,760
Buffered Bike Lanes	4,753,580
Cycle Tracks	1,202,010
Pedestrian Streetscape Improvements / Wayfinding	2,088,930
Intersections	8,051,771
Total	\$ 26,824,911
Less: Citywide Multimodal Impact Fee Project Overlap ¹	695,737
Net Cost Allocated to New Development	\$ 26,129,174
New Development Trip Generation	4,149
Cost per Trip	\$ 6,298

¹ Project cost of \$600,000 adjusted from August, 2018 to April, 2022 using the Engineering News Record’s Construction Cost Index.

Sources: Engineering News Record, CCI; Tables 3.2 and 3.4, Willdan Financial Services.

Fee Schedule

Table 3.5 details the maximum justified transportation facilities fees. The City can adopt any fee amount up to this maximum. The maximum justified fees are based on the costs per trip identified in Table 3.4. The cost per trip is multiplied by the “new” trip demand factors in Table 3.1 to determine a fee per unit of new development. The total fee includes a two percent (2%) administrative charge to fund costs that include: a standard overhead charge applied to all City programs for legal, accounting, and other departmental and administrative support, and fee

program administrative costs including revenue collection, revenue, and cost accounting, mandated public reporting, and fee justification analyses.

In Willdan’s experience with impact fee programs, two percent of the base fee is a reasonable estimate of the City’s cost to administer the fee program, including adoption, implementation, and updates. The administrative charge should be reviewed and adjusted during comprehensive impact fee updates to ensure that revenue generated from the charge sufficiently covers, but does not exceed, the administrative costs associated with the fee program.

Table 3.5: Maximum Justified Transportation Facilities Impact Fee Schedule

Land Use	A	B	C = A x B		D = C x 0.02	E = C + D	E / 1,000
	Cost per Trip	AM Peak Hour Trip Rate	Base Fee ¹	Admin Charge ^{1, 2}	Total Fee ¹	Fee per Sq. Ft.	
Office/R&D/Industrial (per 1,000 Sq. Ft.)	\$ 6,298	0.83	\$ 5,246	\$ 105	\$ 5,351	\$ 5.35	
Retail (per 1,000 Sq. Ft.)	6,298	2.03	12,803	256	13,059	13.06	
Hotel (per Room)	6,298	0.39	2,456	49	2,505	n/a	
<i>Residential (per DU, by Bedrooms)</i>							
Studio	\$ 6,298	0.20	\$ 1,253	\$ 25	\$ 1,278	n/a	
1	6,298	0.23	1,467	29	1,496	n/a	
2	6,298	0.36	2,236	45	2,281	n/a	
3	6,298	0.43	2,708	54	2,762	n/a	
Per Additional Bedroom	6,298	0.06	384	8	392	n/a	

¹ Fee per 1,000 square feet of nonresidential space, per hotel room or per residential dwelling unit.

² Administrative charge of 2.0 percent for (1) legal, accounting, and other administrative support and (2) impact fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

Sources: Tables 3.1 and 3.4.

4. Potable Water Facilities

This chapter details an analysis of the need for potable water system facilities to accommodate growth within the EWPP Area. It documents a reasonable relationship between new development and water facilities impact fees to fund water facilities that serve new development.

Water Demand

Estimates of new development and its consequent increased water demand provide the basis for calculating the potable water facilities fee. The need for water facilities improvements is based on the water demand placed on the system by development. A typical measure of demand is a flow generation rate, expressed as the number of gallons per day generated by a specific type of land use. Flow generation rates are a reasonable measure of demand on the City's system of water improvements because they represent the average rate of demand that will be placed on the system per land use designation.

Table 4.1 shows the calculation of equivalent dwelling unit (EDU) demand factors based on flow generation by land use category. The flow generation estimates come from the EWPP Utility Impact Study prepared as a part of the project EIR. Estimates of flow generation are expressed per 1,000 square feet for office, R&D, industrial and retail land uses, per room for hotels and per dwelling unit for residential dwelling units.

Note that the water flow generation factors and corresponding EDU factors from the project EIR have been divided between potable and recycled water demand. The potable water flow generation factors and the recycled water flow generation factors also used in Chapter 6 sum to the total water flow generation by land use from the project EIR. Based on input from City staff, the analysis assumes that 50% of the office/R&D/industrial, retail and hotel water demand, and 25% of residential demand will be non-potable (recycled) water. The costs of the recycled water system are discussed later in this study.

Flow generated by each land use is then compared to the flow generated by the average residential dwelling unit to calculate equivalent dwelling units (EDU). EDU factors express water flow from each land use in terms of the flow generated by the average dwelling unit. This allows for a calculation of water demand in uniform service units and allows for an equitable allocation of facility costs.

Table 4.1: Water Demand by Land Use

Land Use	Total Water Flow Generation	Potable Water Flow Generation	Recycled Water Flow Generation	Potable Water EDU Factor	Recycled Water EDU Factor	Total EDU Factor
Office/R&D/Industrial (per 1,000 Sq. Ft.)	130	65	65	0.87	2.60	1.30
Retail (per 1,000 Sq. Ft.)	130	65	65	0.87	2.60	1.30
Hotel (per Room)	100	50	50	0.67	2.00	1.00
Residential Average (per DU)	100	75	25	1.00	1.00	1.00
<i>Residential (per DU, by Bedrooms) ¹</i>						
Studio	56	42	14	0.56	0.56	0.56
1	65	49	16	0.65	0.64	0.65
2	100	75	25	1.00	1.00	1.00
3	121	91	30	1.21	1.20	1.21
Per Additional Bedroom	17	13	4	0.17	0.16	0.17

¹ Assumes 36 gallons of potable water flow, and 12 gallons of recycled water flow per day per resident. Estimates of residents per dwelling unit by number of bedrooms are shown in Table 2.2.

Sources: Table 3.16-2: Future Water Demand in the Precise Plan Area, Integrated Final Environmental Impact Report, 2020; City of Mountain View; Willdan Financial Services.

EDU Generation by New Development

Table 4.2 shows the estimated potable water EDU generation within the EWPP from new development through buildout. The EDU factors from Table 4.1 are multiplied by the land use assumptions from Chapter 2 to estimate total EDUs in the base year, at the planning horizon and for new development. Because the EWPP Area is not currently served by recycled water, the total water EDU factor is used to calculate EDUs in the base year. For new development the potable water EDU factor is used to estimate EDUs because it is assumed that recycled water will be used to meet a share new development’s total demanded water needs.

Table 4.2: Potable Water Facilities Equivalent Dwelling Units

Land Use	Baseline			New Development			Buildout	
	KSF/DU/ Rooms	EDU Factor	EDUs	KSF/DU/ Rooms	EDU Factor	EDUs	KSF/DU/ Rooms	EDUs
Office/R&D/Industrial	6,443	1.30	8,376	2,453	0.87	2,134	8,896	10,510
Retail	54	1.30	70	100	0.87	87	154	157
Hotel (per Room)	-	1.00	-	200	0.67	134	200	134
Residential (per DU)	1	1.00	1	5,069	1.00	5,069	5,070	5,070
Total			8,447			7,424		15,871
Share of EDUs at Buildout			53.2%			46.8%		100%

Sources: Tables 2.1 and 4.1.

Facility Needs and Costs

Table 4.3 displays the unit costs used to estimate the cost of the improvements needed to serve new development. The unit cost estimates, including contingencies, were provided by the City for use in the analysis based on recent costs.

Table 4.3: Potable Water Facilities Unit Costs

Pipe Size	Construction Cost (\$/linear foot)	Construction Contingency (30%)	Estimated Construction Cost	Engineering Cost (20%)	Construction Management (10%)	Project Admin. (7.5%)	Total Capital Improvement Cost per Linear Foot
8"	410	\$ 130	\$ 540	\$ 110	\$ 60	\$ 50	\$ 760
12"	440	140	580	120	60	50	810

Source: City of Mountain View.

Table 4.4 uses the unit cost estimates from Table 4.3 and the quantities identified in the EWPP Utility Impact study and Precise Plan to estimate the cost of needed potable water facilities. The projects identified in the EWPP Utility Impact study are needed to mitigate fire flow requirements both within and outside of the project area.

Table 4.5 allocates the cost of facilities from Table 4.4 to new development as follows:

- Projects that are needed to rectify existing conditions in the base year are not allocated to the impact fee.
- Projects that solely expand existing, non-deficient infrastructure to directly provide additional capacity required by new development are allocated 100% to the impact fees.

Figure 3 reproduces a figure from the EWPP Utility Impact Study which displays the locations of potable water CIP projects.

Table 4.4: Potable Water Facilities Cost Estimates

Project Location	2030 GPUUIS CIP #	Description	Existing Length (Feet)	Diameter (Inches)	CIP Diameter (inches)	Unit Cost per Linear Foot	Estimated Project Cost
<i>Water System Improvements from General Plan UIS</i>							
E Evelyn Ave, between Kittyhawk Way and Ferry Morse Way	24	Install new pipe	65	-	12	\$ 810	\$ 52,650
Central Expy, between Ravendale and N Bernardo Ave	35	Install new pipe	1,550	-	12	810	1,255,500
Whisman Station Dr, between Miranet Ave and Beverly St	36	Install new pipe	400	-	8	760	304,000
Easy St, Central Expy, and Ada Ave	37	Upsize	970	8	12	810	785,700
Flynn Ave, west of N Whisman Rd	39	Upsize	370	6	8	760	281,200
E-W portion of National Ave	43	Upsize	745	8	12	810	603,450
Clyde Ct	44	Upsize	380	8	12	810	307,800
Total			4,480				\$3,590,300

Sources: Table 35, East Whisman Precise Plan; Table 4.3, Willdan Financial Services.

Table 4.5: Potable Water Facilities Costs to Serve New Development

Project Location	2030 GPUUIS CIP #	Estimated Project Cost	Allocation to EWPP New Development	Cost Allocated to New Development
<i>Water System Improvements from General Plan UIS</i>				
E Evelyn Ave, between Kittyhawk Way and Ferry Morse Way ¹	24	\$ 52,650	100.0%	\$ 52,650
Central Expy, between Ravendale and N Bernardo Ave ³	35	1,255,500	100.0%	1,255,500
Whisman Station Dr, between Miranet Ave and Beverly St ²	36	304,000	0.0%	-
Easy St, Central Expy, and Ada Ave ²	37	785,700	0.0%	-
Flynn Ave, west of N Whisman Rd ³	39	281,200	100.0%	281,200
E-W portion of National Ave ³	43	603,450	100.0%	603,450
Clyde Ct ³	44	307,800	100.0%	307,800
Total		\$ 3,590,300		\$ 2,500,600

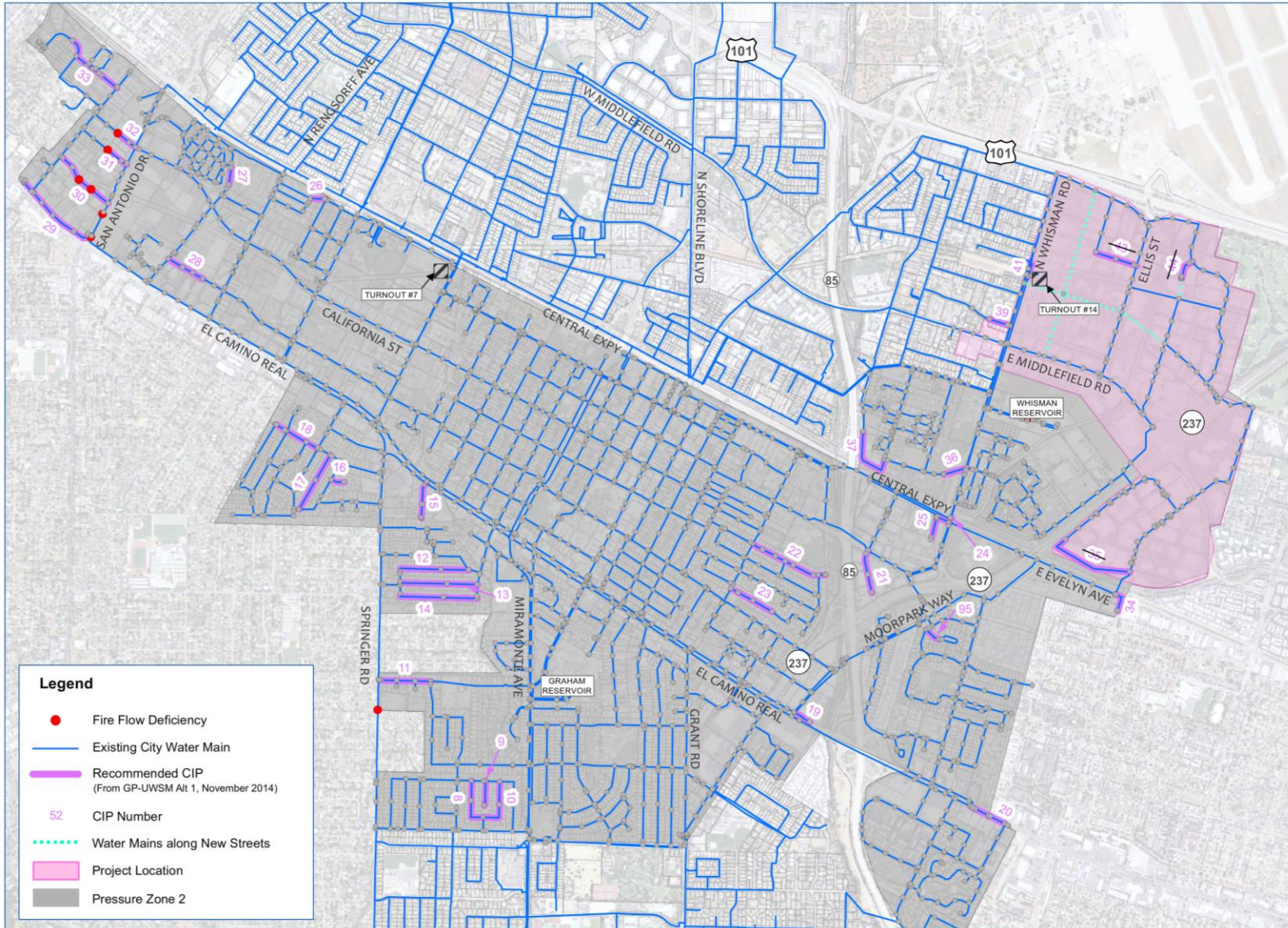
¹ Not currently deficient. Outside project area, allow s for more connectivity across Evelyn Avenue

² These projects are needed to address existing deficiencies outside of the Precise Plan.

³ These projects are included because they are water lines that directly connect to parcels within the Project area. Not currently deficient.

Sources: Table 3.16-2: Future Water Demand in the Precise Plan Area, East Whisman Precise Plan Draft EIR; General Plan Update Utility Impact Study, p. 11; Table 4.4, Willdan Financial Services.

Figure 3: Potable Water Facilities CIP



Cost per EDU

Table 4.6 calculates a cost per potable water EDU by dividing the total cost allocated to new development identified in Table 4.4 by the growth in EDUs identified in Table 4.2. This cost per EDU drives the impact fee calculation.

Table 4.6: Cost per EDU

Cost Allocated to New Development	\$	2,500,600
New Development EDUs		<u>7,424</u>
Cost per EDU	\$	337

Sources: Tables 4.2 and 4.5.

Fee Schedule

The maximum justified fee for potable water facilities is shown in **Table 4.7**. The cost per EDU is converted to a fee per unit of new development based on the EDU factors shown in Table 4.1. The total fee includes an administrative charge to fund costs that include: (1) a standard overhead charge applied to all City programs for legal, accounting, and other departmental and administrative support, (2) capital planning, programming, project management costs associated with the share of projects funded by the facilities fee, and (3) fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

In Willdan’s experience with impact fee programs, two percent of the base fee adequately covers the cost of fee program administration. The administrative charge should be reviewed and adjusted during comprehensive impact fee updates to ensure that revenue generated from the charge sufficiently covers, but does not exceed, the administrative costs associated with the fee program.

Table 4.7: Potable Water Facilities Impact Fee

Land Use	A	B	C = A x B	D = C x 0.02	E = C + D	F = E / 1,000
	Cost per EDU	EDU Factor	Base Fee ¹	Admin Charge ^{1, 2}	Total Fee ¹	Fee per Sq. Ft.
Office/R&D/Industrial (per 1,000 Sq. Ft.)	\$ 337	0.87	\$ 293	\$ 6	\$ 299	\$ 0.30
Retail (per 1,000 Sq. Ft.)	337	0.87	293	6	299	0.30
Hotel (per Room)	337	0.67	226	5	231	n/a
<i>Residential (per DU, by Bedrooms)</i>						
Studio	\$ 337	0.56	\$ 189	\$ 4	\$ 193	n/a
1	337	0.65	219	4	223	n/a
2	337	1.00	337	7	344	n/a
3	337	1.21	408	8	416	n/a
Per Additional Bedroom	337	0.17	57	1	58	n/a

¹ Fee per 1,000 square feet of nonresidential space, per hotel room or per residential dwelling unit.

² Administrative charge of 2.0 percent for (1) legal, accounting, and other administrative support and (2) impact fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

Sources: Tables 4.1 and 4.6.

5. Sewer Facilities Fees

This chapter details an analysis of the need for sewer facilities to accommodate growth within the EWPP Area. It documents a reasonable relationship between new development and a sewer facilities impact fee to fund sewer facilities that serve new development.

Sewer Demand

Estimates of new development and its consequent increased wastewater demand provide the basis for calculating the sewer facilities fee. The need for sewer facilities improvements is based on the wastewater demand placed on the system by development. A typical measure of demand is a flow generation rate, expressed as the number of gallons per day generated by a specific type of land use. Flow generation rates are a reasonable measure of demand on the City's system of wastewater improvements because they represent the average rate of demand that will be placed on the system per land use designation.

Table 5.1 shows the calculation of equivalent dwelling unit (EDU) demand factors based on flow generation by land use category. The flow generation estimates come from the City's General Plan Update Utility Impact Study. Estimates of flow generation are expressed per 1,000 square feet for office, R&D, industrial and retail land uses, per room for hotels and per dwelling unit for residential dwelling units.

Flow generated by each land use is then compared to the flow generated by the average residential dwelling unit to calculate equivalent dwelling units (EDU). EDU factors express wastewater flow from each land use in terms of the flow generated by the average dwelling unit. This allows for a calculation of wastewater demand in uniform service units and allows for an equitable allocation of facility costs.

Table 5.1: Wastewater Demand by Land Use

Land Use	Flow Generation (GPD)	EDU Factor
Office/R&D/Industrial (per 1,000 Sq. Ft.)	150	1.00
Retail (per 1,000 Sq. Ft.)	100	0.67
Hotel (per Room)	100	0.67
Residential (per Dwelling Unit)	150	1.00
<i>Residential (per DU, by Bedrooms)¹</i>		
Studio	84	0.56
1	99	0.66
2	150	1.00
3	182	1.21
Per Additional Bedroom	26	0.17

¹ Assumes 72 gallons of flow per day per resident. Estimates of residents per dwelling unit by number of bedrooms shown in Table 2.2.

Sources: Table 2-2 - Sewer Generation Factors from Residential and Non-Residential Sources, General Plan Update Utility Impact Study; Willdan Financial Services.

EDU Generation by New Development

Table 5.2 shows the estimated EDU generation from new development through buildout. The EDU factors from Table 5.1 are multiplied by the land use assumptions from presented in Chapter 2 to estimate total EDUs in the base year, at the planning horizon and for new development.

Table 5.2: Wastewater Facilities Equivalent Dwelling Units

Land Use	EDU Factor	Baseline		New Development		Buildout	
		KSF/DU/ Rooms	EDUs	KSF/DU/ Rooms	EDUs	KSF/DU/ Rooms	EDUs
Office/R&D/Industrial	1.00	6,443	6,443	2,453	2,453	8,896	8,896
Retail	0.67	54	36	100	67	154	103
Hotel (per Room)	0.67	-	-	200	134	200	134
Residential (per DU)	1.00	1	1	5,069	5,069	5,070	5,070
Total			6,480		7,723		14,203
Share of EDUs at Buildout			45.6%		54.4%		100%

Sources: Tables 2.1 and 5.1.

Facility Needs and Costs

Table 5.3 displays the unit costs used to estimate the cost of the improvements needed to serve new development. The unit cost estimates, including contingencies, were provided by the City for use in the analysis based on recent costs.

Table 5.3: Sewer Facilities Unit Costs

Pipe Size	Replacement Unit Construction Cost (\$/linear foot)	Construction Contingency (30%)	Estimated Construction Cost	Engineering Cost (20%)	Construction Management (10%)	Project Admin. (7.5%)	Total Capital Improvement Cost per Linear Foot
<i>Gravity Main Unit Costs</i>							
8"	\$ 410	\$ 130	\$ 540	\$ 110	\$ 60	\$ 50	\$ 760
12"	440	140	580	120	60	50	810
15"	610	190	800	160	80	60	1,100
18"	690	210	900	180	90	70	1,240
21"	750	230	980	200	100	80	1,360

Source: City of Mountain View.

Table 5.4 identifies the planned sewer facilities identified in the EWPP Utility Impact Study, displays the estimated project costs based on the unit costs identified in Table 5.3.

Figure 4 reproduces a figure from the EWPP Utility Impact Study which displays the locations of sewer CIP projects.

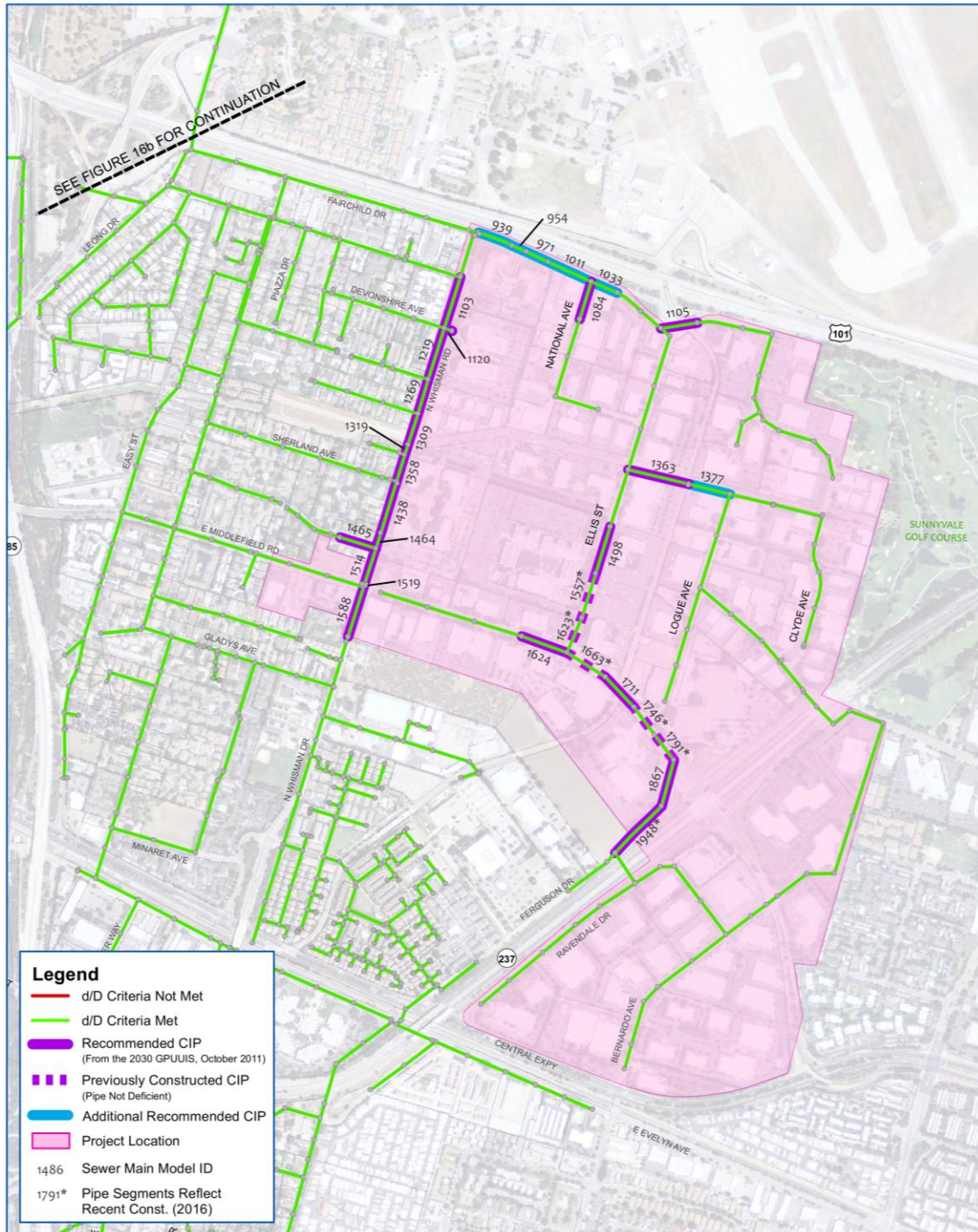
Table 5.4: Project Cost Estimates

Project Location	2030 GPUUIS CIP #	Description	Length (Feet)	Existing Diameter (Inches)	CIP Diameter (inches)	Unit Cost per Linear Foot	Estimated Project Cost
<i>Sanitary System Improvements from General Plan Utility Impact Study</i>							
N Whisman Rd between Skyview Ct and Evandale Ave	72	Upsize	3,060	12	15	\$ 1,100	\$ 3,366,000
Flynn Ave west of N Whisman Rd	75	Upsize	301	6	8	760	228,760
N Whisman Road and Devonshire Ave	77	Upsize	65	15	18	1,240	80,600
Ferguson Dr south of E Middlefield Rd	78	Upsize	923	10	12	810	747,630
E Middlefield Rd from Ferguson Dr through Ellis St ¹	79	Upsize	906	10	15	1,100	996,600
Ellis St North of E Middlefield Rd	80	Upsize	1,083	12	15	1,100	1,191,300
Easement between Ellis St and B St	81	Upsize	504	10	12	810	408,240
Fairchild Dr from Ellis St to B St	82	Upsize	297	10	12	810	240,570
National Ave south of Fairchild Dr	83	Upsize	319	8	15	1,100	350,900
Subtotal			7,458				\$ 7,610,600
<i>Precise Plan Sanitary System Improvements</i>							
1. North Whisman Road and Devonshire Avenue		Upsize	65	-	15	\$ 1,100	\$ 71,500
2. Easement between Ellis Street and Street B		Upsize	342	10	15	1,100	376,200
3. Fairchild Drive between Ellis Street and North Whisman Road		Upsize	1,275	18	21	1,360	1,734,000
Subtotal			1,682				\$ 2,181,700
Total			9,140				\$ 9,792,300

¹ Diameter listed as 12" / 15". Analysis assumes 15" for cost estimating purposes.

Sources: Table 5-4, East Whisman Precise Plan Utility Impact Study; Table 37, East Whisman Precise Plan; Table 5.3, Willdan Financial Services.

Figure 4: Sewer Facilities CIP



Existing Deficiencies

Projects that are needed to rectify existing conditions in the base year are not allocated to the impact fee. The EWPP Utility Impact Study identified deficient segments in the base year of the analysis. **Table 5.5** identifies the existing deficient segments for the projects included in this analysis. The existing deficient share of each project is calculated based on the deficient length relative to the total pile length for a given project.

Table 5.5: Existing Deficiencies

GPUU IS CIP # Description	Existing Deficient Length (Feet)	Total Length (Feet)	Existing Deficiency Share
72 N Whisman Rd between Skyview Ct and Evandale Ave	1,950	3,060	63.7%
75 Flynn Ave west of N Whisman Rd	301	301	100%
77 N Whisman Road and Devonshire Ave	65	65	100%
78 Ferguson Dr south of E Middlefield Rd	-	923	0%
79 E Middlefield Rd from Ferguson Dr through Ellis St	-	906	0%
80 Ellis St North of E Middlefield Rd	-	1,083	0%
81 Easement between Ellis St and B St	-	504	0%
82 Fairchild Dr from Ellis St to B St	-	297	0%
83 National Ave south of Fairchild Dr	319	319	100%

Source: Table 5-4, East Whisman Precise Plan Utility Impact Study; Willdan Financial Services.

Table 5.6 displays the allocation of sewer project costs to new development. The deficient share of projects identified in Table 5.5 is subtracted from the estimated project costs identified in Table 5.4. The net costs are allocated to the impact fee. The sewer projects funded by the impact fees have been sized solely to serve development within the EWPP Area and are not oversized to serve other future development.

Table 5.6: Cost Allocation to New Development

Project Location	2030	Estimated Project Cost	Deficiency	Allocation to New Development	Cost
	GPUUIS CIP #				Allocated to New Development
<i>Sanitary System Improvements from General Plan Utility Impact Study</i>					
N Whisman Rd between Skyview Ct and Evandale Ave	72	\$ 3,366,000	63.7%	36.3%	\$ 1,221,858
Flynn Ave West of N Whisman Rd	75	228,760	100.0%	0.0%	-
N Whisman Road and Devonshire Ave	77	80,600	100.0%	0.0%	-
Ferguson Dr South of E Middlefield Rd	78	747,630	0.0%	100.0%	747,630
E Middlefield Rd from Ferguson Dr through Ellis St	79	996,600	0.0%	100.0%	996,600
Ellis St North of E Middlefield Rd	80	1,191,300	0.0%	100.0%	1,191,300
Easement between Ellis St and B St	81	408,240	0.0%	100.0%	408,240
Fairchild Dr from Ellis St to B St	82	240,570	0.0%	100.0%	240,570
National Ave South of Fairchild Dr	83	350,900	100.0%	0.0%	-
Subtotal		\$ 7,610,600			\$ 4,806,198
<i>Precise Plan Sanitary System Improvements</i>					
1. North Whisman Road and Devonshire Avenue		\$ 71,500	0.0%	100.0%	\$ 71,500
2. Easement between Ellis Street and Street B		376,200	0.0%	100.0%	376,200
3. Fairchild Drive between Ellis Street and North Whisman Road		1,734,000	0.0%	100.0%	1,734,000
Subtotal		\$ 2,181,700			\$ 2,181,700
Total		\$ 9,792,300			\$ 6,987,898

Sources: Tables 5.4 and 5.5.

Cost per EDU

The cost of planned facilities allocated to new development from **Table 5.7** is divided by the total growth in EDUs to determine a cost per EDU. This cost per EDU drives the impact fee calculation.

Table 5.7: Cost per EDU

Cost Allocated to New Development	\$ 6,987,898
New Development EDUs	7,723
Cost per EDU	\$ 905

Sources: Tables 5.2 and 5.6.

Fee Schedule

The maximum justified fees for sewer facilities are shown in **Table 5.8**. The cost per EDU is converted to a fee per unit of new development based on the EDU factors shown in Table 5.1. The total fee includes an administrative charge to fund costs that include: (1) a standard overhead charge applied to all City programs for legal, accounting, and other departmental and administrative support, (2) capital planning, programming, project management costs associated with the share of projects funded by the facilities fee, and (3) fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

In Willdan’s experience with impact fee programs, two percent of the base fee adequately covers the cost of fee program administration. The administrative charge should be reviewed and adjusted during comprehensive impact fee updates to ensure that revenue generated from the charge sufficiently covers, but does not exceed, the administrative costs associated with the fee program.

Table 5.8: Maximum Justified Sewer Facilities Impact Fee Schedule

Land Use	A	B	C = A x B	D = C x 0.02	E = C + D	F = E / 1,000
	Cost per EDU	EDU Factor	Base Fee ¹	Admin Charge ^{1, 2}	Total Fee ¹	Fee per Sq. Ft.
Office/R&D/Industrial (per 1,000 Sq. Ft.)	\$ 905	1.00	\$ 905	\$ 18	\$ 923	\$ 0.92
Retail (per 1,000 Sq. Ft.)	905	0.67	606	12	618	0.62
Hotel (per Room)	905	0.67	606	12	618	n/a
<i>Residential (per DU, by Bedrooms)</i>						
Studio	\$ 905	0.56	\$ 507	\$ 10	\$ 517	n/a
1	905	0.66	597	12	609	n/a
2	905	1.00	905	18	923	n/a
3	905	1.21	1,095	22	1,117	n/a
Per Additional Bedroom	905	0.17	154	3	157	n/a

¹ Fee per 1,000 square feet of nonresidential space, per hotel room or per residential dwelling unit.

² Administrative charge of 2.0 percent for (1) legal, accounting, and other administrative support and (2) impact fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification

Sources: Tables 5.1 and 5.7.

6. Recycled Water Facilities

This chapter details an analysis of the need for recycled water facilities to accommodate growth within the EWPP Area. It documents a reasonable relationship between new development and recycled water facilities impact fees to fund recycled water facilities that serve new development.

Recycled Water Demand

Estimates of new development and its consequent increased water demand provide the basis for calculating the recycled water facilities fee. The need for recycled water facilities improvements is based on the demand for recycled water placed on the system by development. A typical measure of demand is a flow generation rate, expressed as the number of gallons per day generated by a specific type of land use. Flow generation rates are a reasonable measure of demand on the City's system of recycled water improvements because they represent the average rate of demand that will be placed on the system per land use designation.

Table 6.1 shows the calculation of equivalent dwelling unit (EDU) demand factors based on flow generation by land use category. The flow generation estimates were developed with guidance from City staff. Estimates of flow generation are expressed per 1,000 square feet for office, R&D, industrial and retail land uses, per room for hotels and per dwelling unit for residential dwelling units.

As noted in the potable water facilities fee chapter, recycled water flow generation factors are assumed to be a component of total water flow. The recycled water flow generation factors presented here and the potable water flow generation factors presented in Chapter 4 sum to the total water flow generation by land use from the project EIR. Based on input from City staff, the analysis assumes that 50% of the office/R&D/industrial, retail and hotel water demand, and 25% of residential demand will be non-potable.

Flow generated by each land use is compared to the flow generated by the average dwelling unit to calculate equivalent dwelling units (EDU). EDU factors express water flow from each land use in terms of the flow generated by the average dwelling unit. This allows for a calculation of water demand in uniform service units and allows for an equitable allocation of facility costs.

Table 6.1: Recycled Water Demand by Land Use

Land Use	Flow Generation	
	(GPD)	EDU Factor
Office/R&D/Industrial (per 1,000 Sq. Ft.)	65	2.60
Retail (per 1,000 Sq. Ft.)	65	2.60
Hotel (per Room)	50	2.00
Residential (Average per Dwelling Unit)	25	1.00
<i>Residential (per DU, by Bedrooms)¹</i>		
Studio	14	0.56
1	16	0.64
2	25	1.00
3	30	1.20
Per Additional Bedroom	4	0.16

¹ Assumes 12 gallons of flow per day per resident. Residents per dwelling unit by number of bedrooms shown in Table 2.2.

Sources: Future Water Demand in the Precise Plan Area; East Whisman Draft EIR; City of Mountain View; Willdan Financial Services.

EDU Generation by New Development

Table 6.2 shows the estimated EDU generation within the EWPP Area from new development through buildout. The EDU factors from Table 6.1 are multiplied by the land use assumptions associated with new EWPP Area development. Since the area is not currently served by recycled water, existing development does not generate any demand for recycled water facilities and no EDUs currently exist.

Table 6.2: Recycled Water Facilities Equivalent Dwelling Units

Land Use	Baseline			New Development			Buildout	
	KSF/DU/ Rooms	EDU Factor	EDUs	KSF/DU/ Rooms	EDU Factor	EDUs	KSF/DU/ Rooms	EDUs
Office/R&D/Industrial	6,443	-	-	2,453	2.60	6,378	8,896	6,378
Retail	54	-	-	100	2.60	260	154	260
Hotel (per Room)	-	-	-	200	2.00	400	200	400
Residential (per DU)	1	-	-	5,069	1.00	5,069	5,070	5,069
Total			-			12,107		12,107
Share of EDUs at Buildout			0.0%			100.0%		100%

Sources: Tables 2.1 and 6.1.

Facility Needs and Costs

Table 6.3 displays the cost of the identified recycled water facilities needed to serve the EWPP Area and the City as a whole. There are two general categories of costs in the table:

1. Citywide Costs – these costs are needed to serve the entire City, including the EWPP Area. A proportional share of these costs will be allocated to the EWPP recycled water impact fee.
2. EWPP Costs – these are costs specific to the EWPP Area (such as pipes which are needed specifically to connect the EWPP Area to the City’s recycled water treatment infrastructure and a tank located in the EWPP Area). The EWPP piping will serve the EWPP Area plus a small number of properties along the routed recycled water lines. Recycled water demand for these costs totals 0.93 MGD, 0.85 MGD from the EWPP Area and 0.08 from properties along the route. These costs will be allocated to EWPP through the recycled water impact fee.

Table 6.3: Recycled Water Facilities Costs

Item	Total Capital Cost (Millions)	Citywide Costs	EWPP Costs
Piping	\$ 26.20	\$ 6.80	\$ 19.40
Storage Tank	39.10	17.80	21.30
Booster Pumping	10.00	2.80	7.20
Total	\$ 75.30	\$ 27.40	\$ 47.90

Source: Recycled Water Feasibility Study Update, Project 18-71.

Figure 5 reproduces a figure from the draft Recycled Water Master Plan which displays the locations of recycled water CIP projects.

Figure 5: Recycled Water Facilities CIP

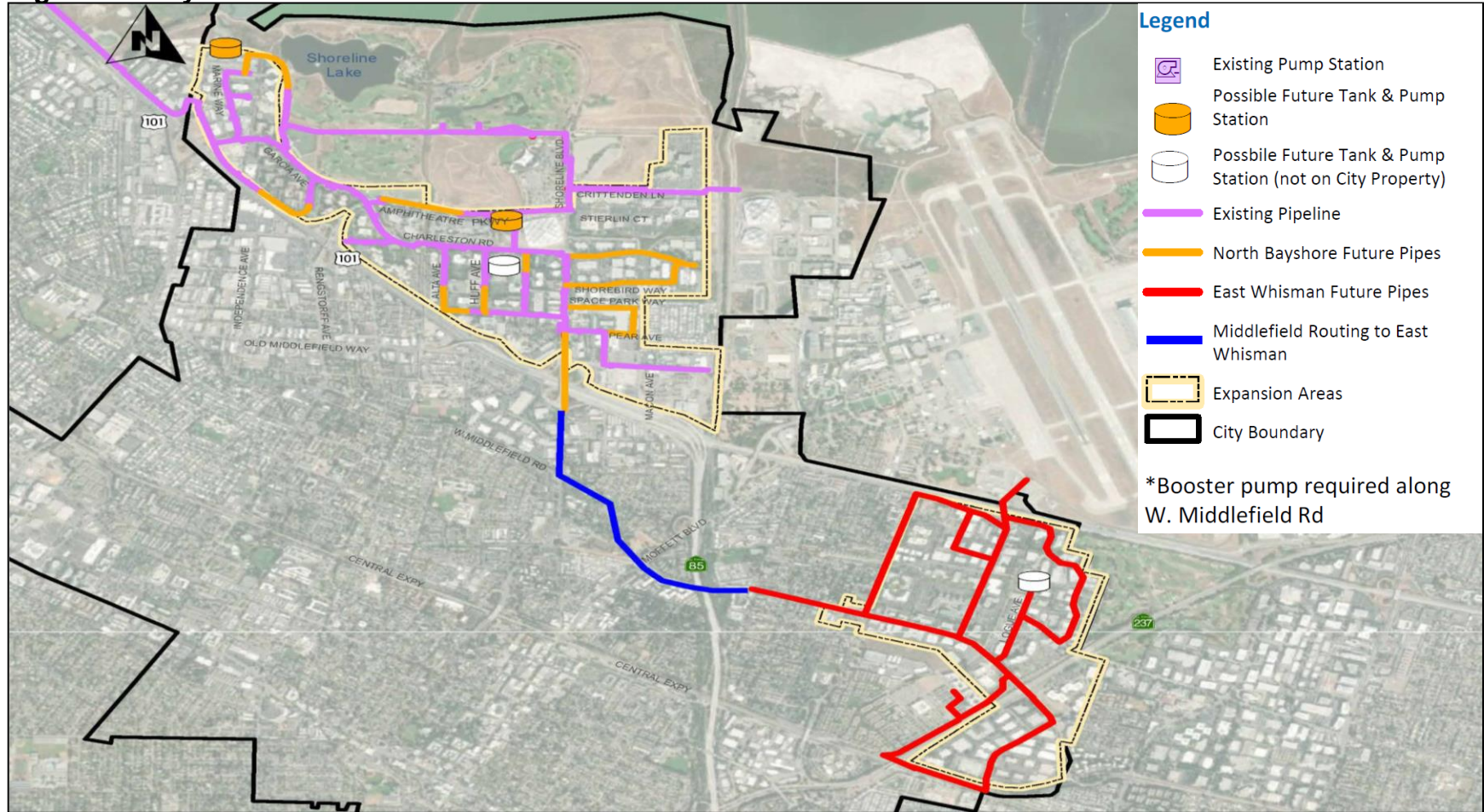


Table 6.4 calculates a cost per EDU for new development in the EWPP Area in three steps:

1. The total costs associated with new citywide development, and new development in the EWPP Area identified in Table 6.3, respectively, are divided by the average daily capacity accommodated by each category of improvements to determine a cost per gallon of capacity per day.
2. The cost per gallon of capacity per day is multiplied by the gallons of flow per day per EDU to determine a cost per EDU.
3. The costs per EDU for citywide costs and EWPP costs are summed to determine a total cost per EDU for recycled water facilities.

Table 6.4: Cost per EDU

<u>Citywide Costs</u>	
Total Project Cost	\$ 27,400,000
Total Average Day Demand (MGD) ¹	2.39
Cost per GPD	\$ 11.46
GPD per EDU	25
Cost per EDU	\$ 287
<u>EWPP Piping Costs</u>	
Total Project Cost	\$ 47,900,000
Total Average Day Demand (MGD) ^{1, 2}	0.93
Cost per GPD	\$ 51.51
GPD per EDU	25
Cost per EDU	\$ 1,288
Total Cost per EDU	\$ 1,575

¹ Total average day demand identified in *Recycled Water Feasibility Update*.

² EWPP represents 0.85 MGD of average daily demand. Demands along the route represent 0.08 MGD.

Sources: Recycled Water Feasibility Study Update, Project 18-71; City of Mountain View Public Works Department, *Recommended Recycled Water Expansion Alternative based on the Recycled Water Feasibility Study Update Memorandum*, February 9, 2022; Tables 6.1 and 6.3, Willdan Financial Services.

Projected Fee Revenue

Table 6.5 displays a projection of recycled water impact fee revenue. The total cost per EDU from Table 6.4 is multiplied by the growth in EDUs from Table 6.2 to determine the fee revenue generated by new development in the EWPP Area.

Table 6.5: Projected Fee Revenue

Total Cost per EDU	\$ 1,575
Growth in EWPP EDUs	12,107
Projected Fee Revenue	\$ 19,068,525

Sources: Tables 6.2 and 6.4.

Fee Schedule

The maximum justified fee for recycled water facilities is shown in **Table 6.6**. The cost per EDU is converted to a fee per unit of new development based on the EDU factors shown in Table 6.1. The total fee includes an administrative charge to fund costs that include: (1) a standard overhead charge applied to all City programs for legal, accounting, and other departmental and administrative support, (2) capital planning, programming, project management costs associated with the share of projects funded by the facilities fee, and (3) fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

In Willdan's experience with impact fee programs, two percent of the base fee adequately covers the cost of fee program administration. The administrative charge should be reviewed and adjusted during comprehensive impact fee updates to ensure that revenue generated from the charge sufficiently covers, but does not exceed, the administrative costs associated with the fee program.

Table 6.6: Maximum Justified Recycled Water Facilities Impact Fee Schedule

Land Use	A	B	C = A x B	D = C x 0.02	E = C + D	F = E / 1,000
	Cost per EDU	EDU Factor	Base Fee ¹	Admin Charge ^{1, 2}	Total Fee ¹	Fee per Sq. Ft.
Office/R&D/Industrial (per 1,000 Sq. Ft.)	\$ 1,575	2.60	\$ 4,095	\$ 82	\$ 4,177	\$ 4.18
Retail (per 1,000 Sq. Ft.)	1,575	2.60	4,095	82	4,177	4.18
Hotel (per Room)	1,575	2.00	3,150	63	3,213	n/a
<i>Residential (per DU, by Bedrooms)</i>						
Studio	\$ 1,575	0.56	\$ 882	\$ 18	\$ 900	n/a
1	1,575	0.64	1,008	20	1,028	n/a
2	1,575	1.00	1,575	32	1,607	n/a
3	1,575	1.20	1,890	38	1,928	n/a
Per Additional Bedroom	1,575	0.16	252	5	257	n/a

¹ Fee per 1,000 square feet of nonresidential space, per hotel room or per residential dwelling unit.² Administrative charge of 2.0 percent for (1) legal, accounting, and other administrative support and (2) impact fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

Sources: Tables 6.1 and 6.4.

8. Mitigation Fee Act Findings

This chapter recommends findings to be made by the City Council to comply with the requirements of the Mitigation Fee Act.

- *Identify the purpose of the fee (§66001(a)(1) of the Act).*

The four proposed fees are designed to recover from new development in the East Wiseman Precise Plan Area the cost of providing, respectively, Transportation Facilities, Potable Water Facilities, Sewer Facilities and Recycled Water Facilities that are necessary to serve such new development. The fees do not allocate to new development any portion of facility cost that remediates existing deficiencies, rather than allowing service to new development.

- *Identify the use to which the fees will be put. If the use is financing facilities, the facilities shall be identified. That identification may, but need not, be made by reference to a capital improvement plan as specified in §65403 or §66002, may be made in applicable general or specific plan requirements, or may be made in other public documents that identify the facilities for which the fees are charged (§66001(a)(2) of the Act).*

The fees will be used, respectively, to fund Transportation Facilities, Potable Water Facilities, Sewer Facilities and Recycled Water Facilities that are either identified the East Whisman Project-Level Transportation Analysis, East Whisman Precise Plan Utility Impact Study, and City of Mountain View Recycled Water Feasibility Study Update, or are identified as providing Transportation, Potable Water, Sewer or Recycled Water services to the Precise Plan Area. Proceeds of each of the four fees will be separately accounted for, and each fee will be used only for its respective service.

- *Determine the reasonable relationship between the fees' use and the type of development project on which the fees are imposed (§66001(a)(3) of the Act).*

New residential and nonresidential development will generate trips and will require water and wastewater service. As described in more detail in this Study, the proposed fees will enable the City to accommodate these trips and to provide water and wastewater services to the new development. The City will accommodate the water service demands in the EWPP area with a combination of potable and non-portable facilities. It will accommodate the trip demands in the EWPP Area with a combination of vehicular, bicycle, pedestrian, and multi-modal facilities. Consequently, there is a reasonable relationship between the use of the proposed fees and the types of development on which the fees will be imposed.

- *Determine the reasonable relationship between the need for the public facilities and the types of development on which the fees are imposed (§66001(a)(4) of the Act).*

The facilities that will be funded are each either (i) needed to connect new development in the EWPP to the City's existing infrastructure network or (ii) needed to expand the capacity of existing infrastructure so that it can accommodate service demands or trips from the new development. Each new development project is charged only for the share of the cost of the new facilities that is proportionate to the trips generated, or water or sewer service demanded, by the project. Costs associated with remediating existing deficiencies in service or providing service to future development outside of the EWPP area have not been include in the fees. Trip generation and service demand has been calculated for each type of development based on the development's land use characteristics. Consequently, there is a reasonable relationship between the need for the identified public facilities and the types of development on which the fees are imposed.

- *Determine how there is a reasonable relationship between the fees amount and the cost of the facilities or portion of the facilities attributable to the development on which the fee is imposed (§66001(b) of the Act).*

The amount of the fee had been calculated on a per trip (transportation) or volumetric (water, sewer) basis. Therefore, each development will pay only for the cost of accommodating the number of trips, or the volume of water or sewer service, that the development is anticipated to generate. Consequently, there is a reasonable relationship between the fee amounts and the cost of the facilities or portion of the facilities attributable to the development on which the fee is imposed.

- *Findings relating to Section 66016.5 of the Act.*

The fees proposed by this study for housing development projects are not directly based on the square footage of each dwelling unit included in the housing development. Instead, fees are scaled based on the anticipated number of residents of each dwelling unit, as estimated based on the number of bedrooms in the dwelling unit.

This measure was chosen because:

1. Dwelling unit square footage is not an appropriate metric of water or sewer use because (i) the indoor water and sewer use of a dwelling is not proportional to the floor area of the unit but to the number of individuals who use the bathroom, kitchen and laundry facilities of the unit, (ii) a dwelling unit does not generate trips based on its size, but on its occupancy, and (iii) the common area landscaping water use of a development is based on the square footage of landscaping, not the interior square footage of the dwelling unit, and common area open space is required on a per person/per unit basis rather than a per square foot basis
2. A fee based on projected occupancy (based on number of bedrooms) bears a reasonable relationship to the burden posed by the development upon the City's water, sewer, and transportation capacity because (for the reasons described above), trip generation and water and sewer service demand is best estimated based on occupancy.
3. This fee structure supports smaller developments and ensure that smaller developments are not charged disproportionate fees, because dwelling units with less bedrooms (and therefore a lower projected occupancy) will generate a lower fee than dwelling units with more bedrooms. Furthermore, each development will pay only for the number of dwelling units it contains, meaning that a small building with less dwelling units will pay less than a larger building with more dwelling units of the same size.

Appendix

Appendix Table A.1 displays the amount of existing and new office development within the EWPP Area and the associated trip rates.

Appendix Table A.1: Office Trip Rates and Building Square Feet

	AM Peak Hour Trips per KSF	KSF
Net new office	0.833	2,453
Existing and replaced office	0.995	6,443
Total Average from PP	0.950	8,896

Source: East Whisman Precise Plan – Project Trip Estimates.

In general, the “Baseline” trip generation estimates used in this nexus analysis may differ from the “Background” trip generation estimates in the Precise Plan EIR for several reasons:

1. Baseline office trip generation in the nexus study is less than Precise Plan Background office trip generation, since the nexus study Baseline assumes some reduction over time of existing buildings’ office trips (through Precise Plan measures, trip internalization and some new enforcement).
2. The nexus study combines office, industrial and R&D into a single land use category, and corresponding trip generation rate, for the purpose of calculating and allocating fee responsibility.
3. The nexus study Baseline also includes some residential dwelling units and floor area that were included in the Precise Plan Cumulative Baseline (Transfer of Development Rights projects).
4. Residential trip generation estimates differ because the EIR analyzed a larger geography. Some traffic analysis zones (TAZ) used for traffic modeling extended beyond the Precise Plan and included other units outside of the Precise Plan boundaries.
5. Retail trip generation rates are different to incorporate a reduction for pass-by trips.