Report

City of Cupertino Transportation Impact Fee Nexus Study

The Economics of Land Use

Prepared for:

City of Cupertino

Prepared by:

Economic & Planning Systems, Inc.

and

Stantec Consulting Services, Inc.

August 2017

EPS #161085

Economic & Planning Systems, Inc.
One Kaiser Plaza, Suite 1410
Oakland, CA 94612
510 841 9190 tel
510 740 2080 fax

Oakland
Sacramento
Denver
Los Angeles

www.epsys.com

Table of Contents

1. Study Overview and Results 1

Introduction 1
Legal Context 1
Maximum Allowable Fee Schedule 2
Key Issues and Assumptions 3

2. Land Use and Growth Assumptions 4

Land Use Assumptions and Forecast 4
Travel Demand Assumptions and Forecasts 5

3. Transportation Improvements and Costs 7

Project Selection Criteria 7
Project List 7
Facility Cost Estimates 8

4. Nexus Analysis and Maximum Fee 9

Overview of Nexus Findings 9
Travel Demand Model and Cost Allocation 10
Maximum Fee Calculation 14

5. TIF Implementation and Administration 16

Approval Process 16
Fee Amount and Collection 16
Fee Credits, Reimbursements, and Exemptions 17
Annual Review, Accounting, and Updates 19
Securing Supplemental Funding 20

Appendices

Appendix A: Detailed TIF Project List and Costs Estimates

List of Tables

Table 1 Maximum Allowable Transportation Impact Fee 3

Table 2 General Plan Land Use Assumptions and Forecasts 4

Table 3 Trip Generation Assumptions 5

Table 4 Trip Generation Projections 6

Table 5 Summary of TIF Projects and Costs 8

Table 6 TIF Travel Demand Assumptions 12

Table 7 TIF Cost Allocation Assumptions and Calculations 14

Table 8 Maximum Fee per Trip 14

Table 9 Maximum TIF Schedule 15

1. STUDY OVERVIEW AND RESULTS

Introduction

This Transportation Impact Fee Nexus Study (Nexus Study) provides the City of Cupertino (City) with the necessary technical documentation to support the adoption of a new Citywide Transportation Impact Fee Program (TIF Program). Impact fees are one-time charges on new development collected and used by the City to cover the cost of capital facilities and infrastructure that are required to serve new growth.[1] The fees are typically collected upon issuance of a building permit or certificate of occupancy.

The City adopted an amended General Plan known as "General Plan: Community Vision 2015 - 2040" (The General Plan) on December 4, 2014. The General Plan specifically identifies the need to implement a TIF to fund needed transportation improvements necessary to accommodate and mitigate the impacts of future development in the City. To support the TIF program, the City must prepare a Nexus Study that will provide a legal basis for requiring development impact fees consistent with Mitigation Fee Act (AB 1600/ Government Code Section 66000 et seq.).

The Fee Program described in this Nexus Study is based on growth projections and transportation infrastructure requirements identified in the General Plan and supporting documents (e.g., Environmental Impact Report). This Nexus Study quantifies the potential allocation of the proposed transportation improvements to new growth in the City and calculates the maximum allowable transportation impact fee schedule by land use category. The City may decide to adopt fees below the maximum supportable level based on economic or policy considerations. Such fee reductions should be considered in conjunction with the availability of alternative sources of capital improvement funding.

Legal Context

This Nexus Study is designed to provide the necessary technical analysis to support a schedule of transportation impact fees to be established by an Impact Fee Act Fee Ordinance and Resolution. The Mitigation Fee Act allows the City to adopt, by resolution, the Transportation Impact Fee consistent with the supporting technical analysis and findings provided in this Report. The Resolution approach to setting the fee allows periodic adjustments of the fee amount that may be necessary over time, without amending the enabling ordinance.

Impact fee revenue can be collected and used to cover the cost of constructing capital and infrastructure improvements required to serve new development and growth in the City. As such impact fees must be based on a reasonable nexus, or connection, between new growth and development and the need for a new facility or improvement. Impact fee revenue cannot be used to cover the operation and maintenance costs of these or any other facilities and

[1] New development includes any construction activity that requires a building permit and creates additional impacts on the City's transportation infrastructure once completed (e.g., through additional travel demand or "trips").

infrastructure. In addition, impact fee revenue cannot be collected or used to cover the cost of existing needs/ deficiencies in the City transportation capital improvement network.

In establishing, increasing, or imposing a fee as a condition for the approval of a development project, Government Code 66001(a) and (b) state that the local agency must:

1. Identify the purpose of the fee;
2. Identify how the fee is to be used;
3. Determine how a reasonable relationship exists between the fee use and type of development project for which the fee is being used;
4. Determine how the need for the public facility relates to the type of development project for which the fee is imposed; and
5. Show the relationship between the amount of the fee and the cost of the public facility.

These statutory requirements have been followed in establishing this TIF, as documented in subsequent chapters. **Chapter 4** summarizes the specific findings that explain or demonstrate this nexus.

If the transportation impact fee is adopted, this Nexus Study and the technical information it contains should be maintained and reviewed periodically by the City to ensure Impact Fee accuracy and to enable the adequate programming of funding sources. To the extent that transportation improvement requirements, costs, and development potential changes over time, the Fee Program will need to be updated. Further information on the implementation and administration of the TIF program is provided in **Chapter 5**.

Maximum Allowable Fee Schedule

Table 1 shows the City's maximum transportation impact fee schedule by land use consistent with nexus requirements and the associated analysis contained in this Technical Report. These transportation impact fees apply to new residential and nonresidential development and cover the transportation improvement costs required to support new development after existing deficiencies and known other funding sources have been taken into account. The fee estimates also include a 2 percent fee program administration fee, consistent with Mitigation Fee Act program administrative costs in many other California jurisdictions.[2] The fees apply to all new development, except those exempted by the Ordinance of other means, such as approved under the terms of a Development Agreement.[3]

---

[2] The 2 percent administration cost is designed to cover expenses for preparation of the development impact fee study and subsequent updates as well as the required reporting, auditing, collection and other annual administrative costs involved in overseeing the program. Development impact fee programs throughout California have applied similar administrative charges.

[3] These individual Development Agreements specify the specific transportation improvements/ contributions to be made by these individual developments.

The adoption of the recommended fee schedule would result in fee revenues of about $59.8 million in today's dollar terms assuming full build-out of the General Plan consistent with current land use designations. An additional $134 million in revenues will be required from other funding sources to cover the full cost of the transportation facilities included in the fee calculations. In other words, the TIF is estimated to generate about 31 percent of the revenue needed to cover the future transportation improvements and facilities costs identified to mitigate growth impacts associated with build-out of the General Plan.

Table 1 Maximum Allowable Transportation Impact Fee

Land Use	Total TIF per Unit
Residential	
Single Family	**$5,968 / unit**
Multi-Family	**$3,700 / unit**
Non-residential	
Retail	**$9.60 / sqft.**
Office	**$16.81 / sqft.**
Hotel	**$3,272 / room**
Other	**$6,025 / trip**

Key Issues and Assumptions

The results of this analysis are based on a variety of conditions and assumptions regarding facility costs, service standards, growth projections, and facility demand. Assumptions are covered in detail in later chapters, though some of the key issues are summarized below:

- **Future Development and Trips**. The fee calculations were based on residential and nonresidential development projections, and associated trip generation. The most recently approved General Plan was the starting source for this information. In addition, the Cupertino Travel Demand model was utilized to conduct travel demand analysis.

- **Capital Improvement Program**. The list of transportation improvements included in the Fee Program focus on projects identified in existing City planning documents and supporting studies. As such, the Consultant Team will not seek to identify or plan entirely new transportation projects in the City.

- **Cost Estimates**. Stantec has developed or verified cost estimates for all of the transportation improvement projects identified herein. The cost estimates were based on assumptions about the planned right-of-way, roadway cross-sections, and landscaping treatments for each corridor. Assumptions were based on similar existing corridors within the City of Cupertino and the City's roadway design standards, and have been reviewed and confirmed by City staff.

- **Cost Allocation**. Transportation analysis conducted by Stantec (including Select Link Analysis) was used to determine the portion of transportation improvements costs to be included in the fee program. Only transportation improvement costs specifically required to support new development are included in the transportation impact fee calculation. In addition, funding for the identified transportation improvement projects from other sources was subtracted from the gross cost estimates.

2. LAND USE AND GROWTH ASSUMPTIONS

This chapter documents the land use and growth assumptions and forecasts that underlie the TIF calculations. These factors drive the traffic generation and attraction in the City of Cupertino and, in turn, are critical factors in determining how to allocate new transportation improvement costs between existing and new development and between different land uses.

Land Use Assumptions and Forecast

The existing and future land use estimates used in the TIF are based on the General Plan: Community Vision 2015 – 2040, approved in December 2014. Specifically, the land use assumptions summarized in **Table 2** were derived from Table LU-1 of the Land Use and Community Design Element and are categorized as follows:

Table 2 General Plan Land Use Assumptions and Forecasts

Land Use	Year		Growth (2014 - 2040)
	2014	2040	
Residential Units			
Single Family	15,117	16,172	1,055
Multi-Family[1]	6,295	7,122	827
Subtotal	21,412	23,294	1,882
Non-residential			
Retail (1,000 Sq. Ft.)	3,632	4,431	799
Office (1,000 Sq. Ft.)	8,916	11,470	2,554
Hotel (rooms)	1,116	1,429	313

[1] Multi-family Includes apartments, condos, duplexes and townhomes. The breakdown between single-and multi-family based on estimated from the Cupertino Travel Demand Model.

Sources: City of Cupertino Community Vision 2040, Table LU-1. Cupertino Travel Demand Model

- **Single-Family Residential**: This category refers to detached single-family homes. Traffic impact fees for new single-family residential development are applied on a per unit basis.
- **Multifamily Residential)**: This category covers apartments, townhomes, condos, duplexes and other multifamily housing in which walls are shared among units. Traffic impact fees for new construction of this type of residential development are applied on a per unit basis. The break-out between single-family and multifamily development is based on the Cupertino Travel Demand model.
- **Retail**: Retail development can include shopping centers, discount stores, nurseries, factory outlets, car sale lots, convenient stores, and specialty stores. Traffic impact fees for new construction of this type of development are applied on a square footage basis.

- **Office**: This category covers general offices, including professional and medical office development, government offices, and post offices. Traffic impact fees for this type of development are applied on a square footage basis.
- **Hotel**: This category includes hotels, motels, and other lodging facilities. Traffic impact fees for this type of development are applied on a per room basis.
- **Other**: This category is included as a catch-all to cover all other development activity in Cupertino that generates new travel demand or trips but is not included in one of the above categories. For example, it could include churches, private schools, entertainment venues (e.g., cinemas) and other development that is not easily categorized.

Travel Demand Assumptions and Forecasts

The land use forecasts documented above are used to estimate future travel demand, or trips, based on a variety of assumptions related to trip rates and lengths by land use category. These assumptions are summarized in **Table 3**.

Table 3 Trip Generation Assumptions

Land Use	Primary Trips[1]	Diverted Trips[1]	Total Excluding Pass-by[1]	Avg. Trip Length[2]	Adjustment Factor[3]	ITE Category	Avg. PM Trips[4]	Trip Demand Factor[5]
Residential								
Single Family	86%	11%	97%	6.77	0.99	Single Family Detached (210)	1.00	0.99
Multi-Family	86%	11%	97%	6.77	0.99	Apartment (220)	0.62	0.61
Non-residential								
Retail	47%	31%	78%	3.65	0.43	Shopping Center (820)	3.71	1.59
Office	77%	19%	96%	12.93	1.87	General Office Building (710)	1.49	2.79
Hotel	58%	38%	96%	6.25	0.90	Hotel (310)	0.60	0.54

[1] Percent of total trips. Primary trips are trips with no midway stops, or "links." Diverted trips are linked trips whose distance adds at least one mile to the primary trip. Pass-by trips are links that do not add more than one mile to the total trip.

[2] In miles. Residential based on Home-Based "Total, personal travel", Retail based on "Home-Based Shop/Other", Hotel based on "Non-Home Based" trip lengths and Office based on "Home-Based Work High Income" trip length form City of Cupertino Travel Demand Model Year 2040 Travel forecasts.

[3] The trip adjustment factor equals the percent of non-pass-by trips multiplied by the average trip length and divided by the systemwide average trip length of 6.63 miles.

[4] Trips per dwelling unit, room or per 1,000 building square feet.

[5] The trip demand factor is the product of the trip adjustment factor and the average PM trips.

Sources: San Diego Association of the Goverments, Brief Guide of Vehicular Traffic Generation Rates for the San Diego Regions, April 2002; Institute of Traffic Engineers, Trip Generation, 9th Edition; Stantec.

Table 4 combines the travel demand assumptions presented in **Table 3** with the growth estimates summarized in **Table 2** to estimate the total growth in trips through build-out of the General Plan. As shown, this approach results in an estimated growth of 10,120 PM peak hour trips per day, which represents a 20 percent increase over existing levels.

Table 4 Trip Generation Projections

Land Use	Trip Demand Factor[1]	2014		2040		Growth (2014 - 2040)	
		Units	Trips	Units	Trips	Units	Trips
Residential Units							
Single Family	0.99	15,117	14,973	16,172	16,018	1,055	1,045
Multi-Family[2]	0.61	6,295	3,866	7,122	4,374	827	508
Subtotal		21,412	18,839	23,294	20,392	1,882	1,553
Non-residential							
Retail (1,000 Sq. Ft.)	1.59	3,632	5,786	4,431	7,059	799	1,273
Office (1,000 Sq. Ft.)	2.79	8,916	24,872	11,470	31,997	2,554	7,125
Hotel (rooms)	0.54	1,116	606	1,429	776	313	170
Subtotal			31,264		39,832		8,568
Total			50,103		60,223		**10,120**

[1] PM Trips per dwelling unit, per 1,000 building square feet, or per hotel room (see Table 3)

[2] Includes apartments, condos, duplexes, and townhomes.

Sources: Cupertino General Plan: Community Vision 2015 - 2040; Stantec.

3. TRANSPORTATION IMPROVEMENTS AND COSTS

This chapter describes the major roadway improvement projects required in the City of Cupertino as well as their cost estimates. The following chapter discusses the nexus-based cost allocations.

Project Selection Criteria

Development impact fees are derived from a list of specific capital improvement projects and associated costs that are needed in part or in full to accommodate new growth. Consequently, the capital improvements included in the fee program need to be described in sufficient detail to generate cost estimates. However, impact fee programs do not, in themselves, represent actual approval of a City plan or capital project (and as such do require clearance through the California Environmental Quality Act or CEQA).

Given the above consideration, the TIF Consultant Team recommends that as a baseline criterion, all transportation projects identified in existing City planning documents be considered for inclusion in the fee program. As such, the Consultant Team will not seek to identify or plan entirely new transportation projects in the City. Existing planning documents relied upon by the Consultant Team will include, without limitation, the recently approved General Plan: Community Vision 2015 – 2040, the 2016 Bicycle Transportation Plan, and other project related or area-specific planning documents.

The list of transportation projects identified in existing City planning documents will be further refined as follows:

- The TIF program will exclude any projects that are outside the City of Cupertino.
- The TIF program will exclude any projects where secured and dedicated funding source have already been established to cover the full cost.

Project List

As part of the Cupertino TIF and Nexus Study, Stantec has prepared a preliminary conceptual improvement list, as shown in **Table 5**. The improvements included in the list cover the intersections/segments where significant impact(s) were identified in the General Plan: Community Vision 2015 – 2040 Draft Environmental Impact Report (December 2014). In addition, the projects identified in the City of Cupertino 2016 Bicycle Transportation Plan are also included in the list, as shown in **Appendix A**. Transportation projects that have been identified as mitigations in CEQA documents for specific projects (e.g., Apple Campus 2, Marina Plaza, the Hamptons) have been excluded from the TIF. The completion of mitigations identified in these project specific EIR's would be placed as a condition upon, and paid by, the developer separate from the TIF.

None of the projects included in the TIF addresses existing deficiencies. Rather, they are a response to new development and limited to intersections currently operating at a level of service (LOS) within City's acceptable standards, but are expected to deteriorate to levels below City standards with proposed new developments. The Citywide sidewalk and bicycle facility

installations are also in response to new development and a need to encourage shifts to modes such as walking and biking so that the roadway system is not overtaxed.

Table 5 Summary of TIF Projects and Costs

TIF #	Project Name	Source	Project Cost[1]
1	SR 85 NB Ramps and Stevens Creek Blvd.	Community Vision 2015 – 2040	$536,000
2	Stelling Rd. and Stevens Creek Blvd.	Community Vision 2015 – 2040	$1,318,000
3	Sunnyvale-Saratoga Rd. / De Anza Blvd. / Homestead Rd.	Community Vision 2015 – 2040	$3,210,000
4	De Anza Blvd. and I-280 Ramps	Community Vision 2015 – 2040	$1,840,000
5	De Anza Blvd. and Stevens Creek Blvd.	Community Vision 2015 – 2040	$145,000
6	De Anza Blvd. and McClellan Rd. / Pacifica Dr.	Community Vision 2015 – 2040	$9,707,000
7	Wolfe Rd. and Homestead Rd.	Community Vision 2015 – 2040	$7,131,000
8	Wolfe Rd. and I-280 NB & SB Ramps	Community Vision 2015 – 2040	$76,300,000
9	Wolfe Rd.-Miller/Ave. and Stevens Creek Blvd.	Community Vision 2015 – 2040	$153,000
10	North Tantau Ave./Quail Ave. / Homestead Rd.	Community Vision 2015 – 2040	$145,000
11	Tantau Ave. and Stevens Creek Blvd.	Community Vision 2015 – 2040	$145,000
12	Monta Vista Sidewalk (Orange and Byrne)	Community Vision 2015 – 2040	$4,000,000
13	Monta Vista Sidewalk (McClellan)	Community Vision 2015 – 2040	$2,040,000
14	Bicycle Projects - Tier 1	Bicycle Transportation Plan	$38,611,000
15	Bicycle Projects - Tier 2	Bicycle Transportation Plan	$15,399,500
16	Bicycle Projects - Tier 3	Bicycle Transportation Plan	$33,168,500
	Total - Citywide Transportation Projects		**$193,849,000**

[1] See Appendix A for detailed project cost estimates.

Facility Cost Estimates

The cost estimates shown in **Table 5** above are based on assumptions about the planned right-of-way, roadway cross-sections, and landscaping treatments for each corridor. Assumptions were based on similar existing corridors within the City of Cupertino and the City's roadway design standards, and have been reviewed and confirmed by City staff. Detailed cost estimate sheets for each project are attached to this report as **Appendix A**.

4. NEXUS ANALYSIS AND MAXIMUM FEE

This chapter presents the nexus analysis and calculations for the maximum allowable TIF based on the land use projections and transportation improvements described previously.

Overview of Nexus Findings

A "nexus" or relationship between new development in City of Cupertino and transportation improvements and their costs must be established before incorporating transportation improvement costs into a transportation impact fee calculation. To determine the appropriate costs to include in the new transportation fee calculation, it is necessary to conduct a series of steps:

- **Identify Total Costs of Transportation Improvements**. The identification of the required transportation improvement projects and their associated costs is the first step (conducted in prior chapter)
- **Remove Existing Deficiencies**. Next, it is necessary to evaluate whether there is an existing deficiency at any of the project locations, and if so, the magnitude of that deficiency. Existing deficiencies are accounted for by reducing the project cost that is included in the Fee Program with funding required from other sources.
- **Determine Proportionate Allocation to New Development**. Once existing deficiencies are identified, it is necessary to determine the proportion of the remaining project cost that is attributable to new development in Cupertino, and therefore can be the subject of a fee program.
- **Account for Known Funding**. To the extent there is dedicated funding for any of the transportation improvements, this portion of costs should not be included in the transportation fee calculation. For this TIF calculation, funding from Measure B has been excluded.

The technical calculations described above and further detailed in subsequent sections establish the following nexus findings, consistent with the requirements of the Mitigation Fee Act.

Purpose

The fee will help maintain adequate levels of transportation service in Cupertino.

Use of Fee

Fee revenue will be used to fund City transportation improvements, including roadway, intersection, interchange, and traffic signal improvements, as well as the reimbursement of upfront investments from other City funds for transportation improvements required to serve future growth. The list of eligible transportation projects and costs are summarized in Chapter 3 and further detailed in the **Appendix A**.

Relationship

New development in the City of Cupertino will increase demands for and travel on the City's transportation network. Transportation fee revenue will be used to fund additional transportation capacity necessary to accommodate growth. New development will benefit from the increased transportation capacity.

Need

Each new development project will add to the incremental need for transportation capacity and improvements. The transportation improvements considered in this study are considered necessary to meet the City's future transportation needs.

Proportionality

The fee levels are tied to fair share cost allocations to new Citywide development based on the transportation model developed by VTA and adapted for this study purpose by Stantec.

Travel Demand Model and Cost Allocation

Travel Demand Assumptions and Methodology

In order to allocate TIF program costs equitably, the City of Cupertino General Plan travel demand model was applied to this nexus study. The City of Cupertino General Plan travel demand model was developed using the Santa Clara VTA countywide travel demand model with refined land use estimates for the City of Cupertino. The VTA model is a mathematical representation of travel demand based on the buildout of all of the cities within Santa Clara County, including Cupertino. The model uses socioeconomic data, such as number of jobs and households, for different geographic areas (transportation analysis zones) to predict the expected travel between places in the future.

The model is validated for the current socioeconomic data to predict current traffic volume, which is matched with the actual existing counts to calibrate the model. The calibrated model is then utilized to forecast future travel conditions based on the expected changes in the socioeconomic conditions in the future. The City of Cupertino General Plan model has 54 transportation analysis zones within the model to represent City. The 2040 socioeconomic data are generated by the ABAG and refined by VTA based on input from the City Planning Department. In this nexus study, Stantec has used this model to derive both average citywide and link-specific characteristics of vehicle travel demand including the following:

- Internal (trips that start and end in Cupertino)
- Internal/External (trips that have one end either beginning or ending in Cupertino)
- Through (trips that pass completely through Cupertino without stopping)

Only the trips starting or ending in Cupertino (i.e., Internal trips and Internal/External trips) would be responsible for the TIF program costs.

Table 6 illustrates the average citywide characteristics of vehicle travel demand. These methodologies would be applied to determine the percentage of the project costs that could be funded through the TIF program. Generally, two allocation methodologies were applied as follows:

- Citywide Average - the cost allocation would be based on the average citywide characteristics of vehicle travel demand, which were determined for all the roadway segments within the City of Cupertino boundary as an average. The City-wide average is used where the traffic model does not provide sufficient detailed to estimate the origin and destination of trips associated with a particular transportation facility or improvement. As shown in **Table 6**, this method would be applied for all the freeway interchange projects, sidewalk projects, and bicycle projects.

- Select Link - the cost allocation would be based on link-specific characteristics of vehicle travel demand for the project-related links (I.e., all the approaching and departure roadway segments of the intersection). This methodology is applied where the traffic model can be used to estimate specific travel demand characteristics associated with particular transportation facilities and improvements. As shown in **Table 6**, this method is applied for all the City-owned intersection projects.

Table 6 TIF Travel Demand Assumptions

TIF #	Project Name	Cost Allocation Methodology	Trip Type[1, 2]				Share Allocated to New Development[3]
			I-I	I-X	X-I	X-X	
1	SR 85 NB Ramps and Stevens Creek Blvd.	Citywide Avg.	5.7%	22.9%	21.5%	49.8%	50.2%
2	Stelling Road and Stevens Creek Blvd.	Select Link	13.1%	32.5%	39.9%	14.5%	85.5%
3	Sunnyvale-Saratoga Rd./De Anza Blvd. and Homestead Rd.	Select Link	2.3%	20.3%	24.5%	52.9%	47.1%
4	De Anza Blvd. and I-280 Ramps	Citywide Avg.	5.7%	22.9%	21.5%	49.8%	50.2%
5	De Anza Blvd. and Stevens Creek Blvd.	Select Link	9.9%	30.5%	33.4%	26.2%	73.8%
6	De Anza Blvd. and McClellan Road/Pacifica Dr.	Select Link	6.4%	25.9%	29.3%	38.4%	61.6%
7	Wolfe Road and Homestead Road	Select Link	1.1%	19.8%	18.7%	60.4%	39.6%
8	*Wolfe Road and I-280 NB & SB Ramps*[2]	Citywide Avg.	5.7%	22.9%	21.5%	49.8%	50.2%
9	Wolfe Road-Miller/Ave. and Stevens Creek Blvd.	Select Link	7.1%	39.3%	31.5%	22.1%	77.9%
10	North Tantau Ave./Quail Ave. and Homestead Rd.	Select Link	0.1%	19.6%	19.2%	61.1%	38.9%
11	Tantau Avenue and Stevens Creek Blvd.	Select Link	3.3%	40.2%	34.8%	21.7%	78.3%
12	Monta Vista Sidewalk (Orange and Byrne)	Citywide Avg.	5.7%	22.9%	21.5%	49.8%	50.2%
13	Monta Vista Sidewalk (McClellan)	Citywide Avg.	5.7%	22.9%	21.5%	49.8%	50.2%
14	Bicycle Projects - Tier 1	Citywide Avg.	5.7%	22.9%	21.5%	49.8%	50.2%
15	Bicycle Projects - Tier 2	Citywide Avg.	5.7%	22.9%	21.5%	49.8%	50.2%
16	Bicycle Projects - Tier 3	Citywide Avg.	5.7%	22.9%	21.5%	49.8%	50.2%

[1] I-I = trips that start and end in Cupertino, I-X = trips that originate in Cupertino and end elsewhere, X-I = trips that originate elsewhere but end in Cupertino, X-X = trips that pass-through Cupertion but do not end or originate there.
[2] Travel demand analysis is documented in Stantec November, 2016 memo, "Land Use Projections, Traffic Analysis, Costs Estimates, and Travel Demand Model Analysis for Cupertino Traffic Impact Fee (TIF) / Nexus Study.
[3] Excludes through trips (X-X), or those that do not originate or end in Cupertino.

As shown, approximately 49.8 percent of the trips using Cupertino roadway facilities would pass through Cupertino completely without stopping. Therefore, approximately 50.2 percent of the project costs would be funded through the TIF program using the Citywide Average approach described above. This allocation percentage is applied for all the freeway interchange intersection projects, sidewalk projects, and bicycle projects.

As shown, for the Select Link analysis, the proportion of transportation improvement costs allocated to new development varies by facility or improvement. Generally, approximately 14.5 percent to 38.4 percent of the trips using the approaching or departure roadway segments of the intersection would pass through Cupertino without stopping. For the three intersections along Homestead Road on the north border of Cupertino, such percentage goes up to between 52.9 percent and 61.1 percent. In summary, approximately 38.9 percent to 85.5 percent of the project costs would be funded through the TIF program for the city-owned intersection projects.

TIF Cost Allocation

The TIF nexus analysis allocates costs based on (1) the amount attributable to new versus existing development, (2) the proportion of trips with at least one trip end in the City (i.e. excludes through trips), and (3) the amount covered by secured funding sources. As described in **Chapter 3**, none of the projects included in the TIF addresses existing deficiencies. Rather, they are a response to new development and limited to intersections currently operating at a level of service (LOS) within City's acceptable standards, but are expected to deteriorate to levels below City standards with proposed new developments. The Citywide sidewalk and bicycle facility installations are also in response to new development and a need to encourage shifts to modes such as walking and biking so that the roadway system is not overtaxed. Consequently, the entire TIF project list was selected to only include improvements attributable to new development.

The cost allocated to new development is based on the analysis described above and summarized in **Table 6**. In addition, the analysis assumes that the Santa Clara County Transportation Infrastructure Tax, approved by the voters in November 2016, and private developer funding will cover 100 percent of the costs for the Wolfe Road/I-280 interchange improvements. Consequently, the costs of these improvements, estimated to be about $76.3 million, have been excluded from the TIF calculation.

Table 7 illustrates the net impact of the cost allocations described above. As shown, overall this nexus analysis allocates approximately $59.78 million in transportation improvement cost to the TIF. The amount represents about 31 percent of the approximately $193.9 million in future transportation infrastructure costs considered in this analysis.

Table 7 TIF Cost Allocation Assumptions and Calculations

TIF #	Project Name	Total Project Cost[1]	Share Allocated to New Development	Cost Allocated To TIF Program
1	SR 85 NB Ramps and Stevens Creek Blvd.	$536,000	50.2%	$268,809
2	Stelling Road and Stevens Creek Blvd.	$1,318,000	85.5%	$1,126,890
3	Sunnyvale-Saratoga Road/De Anza Blvd. and Homestead Rd.	$3,210,000	47.1%	$1,511,910
4	De Anza Blvd. and I-280 Ramps	$1,840,000	50.2%	$922,777
5	De Anza Blvd. and Stevens Creek Blvd.	$145,000	73.8%	$107,010
6	De Anza Blvd. and McClellan Road/Pacifica Dr.	$9,707,000	61.6%	$5,979,512
7	Wolfe Road and Homestead Road	$7,131,000	39.6%	$2,823,876
8	*Wolfe Road and I-280 NB & SB Ramps*[2]	*$76,300,000*	*0.0%*	*$0*
9	Wolfe Road-Miller/Ave. and Stevens Creek Blvd.	$153,000	77.9%	$119,187
10	North Tantau Ave./Quail Ave. and Homestead Rd.	$145,000	38.9%	$56,405
11	Tantau Avenue and Stevens Creek Blvd.	$145,000	78.3%	$113,535
12	Monta Vista Sidewalk (Orange and Byrne)	$4,000,000	50.2%	$2,006,038
13	Monta Vista Sidewalk (McClellan)	$2,040,000	50.2%	$1,023,079
14	Bicycle Projects - Tier 1	$38,611,000	50.2%	$19,363,783
15	Bicycle Projects - Tier 2	$15,399,500	50.2%	$7,722,995
16	Bicycle Projects - Tier 3	$33,168,500	50.2%	$16,634,318
	Total - Citywide Transportation Projects	**$193,849,000**	**30.8%**	**$59,780,125**

[1] See Table 5 and Appendix A.

[2] Since the costs of these projects are to be covered entirely by Measure B, they are excluded from the traffic impact fee calculationsremoved from the Impact Fee Calculations.

Maximum Fee Calculation

Table 8 shows the maximum supportable transportation impact fee per trip. The maximum fee per trip is calculated by dividing the aggregate fee program cost of $59.78 million (see **Table 7**) by the total number of trips generated by new development, or 10,120 (see **Table 4**). The results in an average TIF per peak hour trip of $5,907.

Table 8 Maximum Fee per Trip

Category	Formula	Amount
Fee Program Share of Planned Transportation Facility Costs	**a**	$59,780,125
Growth in PM Trips	**b**	10,120
Cost per Trip	**= a / b**	**$5,907**

Source: EPS and Stantec.

Finally, **Table 9** calculates the maximum TIF for each land use category specified in the General Plan. The maximum allowable fee by land use includes a 2 percent charge needed to cover the administrative cost of administering the TIF program. The maximum supportable fees are the fee levels that would generate sufficient fee revenues to cover the full TIF cost allocation of $59.78 million. As discussed below, decisions to charge fees below the maximum fee will result in funding gaps that would need to be covered by other funding sources.

Table 9 Maximum TIF Schedule

Land Use	Cost Per Trip	Trip Demand Factor[1]	Raw Fee	Admin Charge[2]	Total TIF per Unit
Residential					
Single Family	$5,907	0.99	$5,851	2%	**$5,968 / unit**
Multi-Family	$5,907	0.61	$3,627	2%	**$3,700 / unit**
Non-residential					
Retail	$5,907	1.59	$9.41	2%	**$9.60 / sqft.**
Office	$5,907	2.79	$16.48	2%	**$16.81 / sqft.**
Hotel	$5,907	0.54	$3,207	2%	**$3,272 / room**
Other	$5,907	1.00	$5,907	2%	**$6,025 / trip**

[1] PM Trips per dwelling unit, per 1,000 building square feet, or per hotel room.

[2] Administrative charge of 2.0 percent of "raw" TIF for legal, accounting, and other administrative costs (e.g. revenue collection, mandated public reporting, and Nexus Analysis).

5. TIF IMPLEMENTATION AND ADMINISTRATION

This chapter describes implementation and administrative issues and procedures to be addressed in the TIF Ordinance and Nexus Study. It addresses matters related to TIF approval, program administration (e.g., fee amount, collection and accounting procedures, exemptions, etc.), and securing supplemental funding.

Approval Process

The TIF and corresponding fee schedule will need to be adopted by City Resolution and Ordinance. The City TIF Ordinance will allow the City Council to adopt a fee schedule consistent with supporting technical analysis and findings provided in this Report. The Ordinance approach to setting the TIF fee will allows periodic adjustments of the fee amount that may be necessary over time, without amending the enabling Ordinance.

The TIF Ordinance will clearly define the TIF program policies and procedures as discussed further below. The TIF program policies and procedures may differ from other City development impact fees (e.g., the Parks Fee and Affordable Housing fee).

Fee Amount and Collection

As noted, the actual fee levels by land use will need to be approved by the City Council but cannot exceed the maximum allowable fees calculated herein. Other fee collection considerations are described below.

Applicable Land Uses

All new development that occurs within the City of Cupertino, except as specifically exempted by the TIF Ordinance, shall pay the TIF based on an approved Fee Schedule made available by the City and updated periodically. The amount will vary by land use, as described in the Nexus Study. While the maximum fee amount will be determined by the AB 1600 Nexus Study, the City may elect to charge less for a variety of reasons.

It is possible that certain projects may not fit neatly into the land use categories defined in the fee schedule (see **Table 9**). In cases where such ambiguity exists, the City Manager or an authorized representative will need to make a determination as to the applicable fees. The Fee Ordinance can articulate guidelines for resolving discrepancies and/or disputes. For example, it may include the option for applicants to furnish information or analysis that will justify their project's inclusion in a particular land use category and/or a lower fee based on verifiable trip generation rates or other factors.

Fee Escalation

The City Fee Ordinance will allow for an automatic adjustment of the TIF to keep pace with inflation adjusted increases in construction cost. This allows the fee level to keep pace with inflation without requiring an annual approval process. This adjustment is based on cost indices published by the Engineering News Record (ENR), a source widely used in the construction industry, and by many jurisdictions as a basis for making annual inflation adjustments to

their development impact fees. ENR's CCI has been published consistently every month since 1913 for 20 U.S. cities and a national average of the 20 cities. As such it is one of the most reliable and consistent indices that track trends in construction costs.

Timing of Payment

While the City TIF Ordinance will specify the timing for TIF payments, the generally accepted practice in Cupertino, and most other California cities, is to have the fee payment due upon issuance of a building permit, unless otherwise indicated or allowed.

Fee Credits, Reimbursements, and Exemptions

Impact fee programs frequently allow developers subject to the fee to obtain fee credits, reimbursements, and/or adjustments under certain and limited circumstances as determined by the City's Impact Fee Ordinance. Fee credits, reimbursements, or adjustments are generally not allowed by right but rather should be subject to discretionary review and approval by the City to ensure that they are warranted and appropriate.

Fee Credits

Impact fee ordinances frequently allow for fee credits if a developer provides a particular facility or improvement that replaces facilities that would have otherwise been funded in whole or in part by the TIF. For example, the City may elect to offer a fee credit to developers who provide transportation related improvements, consistent with those specified in the current TIF program. The fee credit is usually equal to the most current cost estimate of the infrastructure item (as defined by annual cost review or other recent evaluation of cost) regardless of the actual cost to construct. The City's Ordinance will allow for fee credits under specific terms.

Fee Reimbursements

Fee reimbursements are typically considered for developers who contribute more funding and/or build and dedicate infrastructure items that exceed their proportional obligation, especially if the project funded is a priority project. Such reimbursements should be provided as fee revenue becomes available and should include a reasonable factor for interest earned on the reimbursable amount. It should not compromise the implementation of other priority capital projects. A provision for including such interest payments as additional costs in subsequent fees can also be included in the Ordinance.

Fee Exemptions and Other Adjustments

The City may elect not to impose fees for certain categories of development or on project by project basis, though alternative funding sources to offset a loss in fee revenue should be considered in this context. Likewise, the City may enter into a Development Agreement that specifically exempts or adjusts all or a portion of the City fees, including its application.

Generally speaking, cities consider waiving all or portions of a fee if it can be determined that a proposed project will have minimal or no impact on the improvements or facilities for which the Fee is collected. Additionally, cities sometimes allow for fee exemptions for certain types of uses such as projects developed for use by not-for-profit organizations or other public benefits (e.g., affordable housing). By way of example, jurisdictions often exempt or adjust fees for the following types of projects, subject to City review and approval.

1. Any internal or external alteration or addition to an existing structure that increases total floor area (including outside storage) by more than a specified percent (e.g. 10). This exemption may not apply when the alteration or addition facilitates a change to more intensive use (e.g. one that generates additional vehicle trip). Some jurisdictions have further specified the number of expansions permitted under this exemption (e.g. no more than one expansion may qualify for this exemption in any ten (10) year period).

2. Any replacement or reconstruction of any structure that is damaged or destroyed as a result of fire, flood, explosion, wind, earthquake, riot, or other calamity or act of God. This exemption would not apply to the portion of a building replaced or reconstructed that exceeds the documented total floor area or change the use at the time of its destruction.

3. Any structure has been vacant for less than a specified period of time (e.g., one to three years), assuming the new tenant(s) are of a similar nature in terms of their impact on capital facilities.

4. New development that replaces existing development may be eligible for a Fee adjustment to the extent that the facilities to be funded by the new development are already provided to the existing development provided the existing development has not been removed more than one year. For example, a 20,000 square foot office building that is replaced by a 40,000 square foot office building could receive up to a 50 percent credit in the Fee (20/40 = 50%). City staff will determine the amount of the Fee credit at the time a site plan is submitted to the City. If a structure is replaced with a denser land use, such as replacing single family residences with a commercial building, an incremental fee will generally apply.

5. Any replacement of a structure and use, in kind, providing that the property owner can document that the structure was legally in existence at the time the Fee was adopted.

6. Residential accessory structures, as defined by the Cupertino Municipal Code (CMC).

7. Public facilities, as defined by the CMC.

8. Any temporary structure approved in accordance with the CMC for a period not to exceed a specified period (e.g. thirty (30) days in any calendar year). In some cases, temporary buildings that are authorized for more than thirty (30) days in any calendar year shall be required to pay the Fee. But when the building is removed at a later date, the Fee, or a portion thereof, may be refunded or credited to a permanent structure in the Project Area. All refunds are subject to a deduction of appropriate administration fees.

9. Upon approval by the City Council of the City of Cupertino, a portion of the fee may be reduced for housing development approved for very low-income occupants, as defined by the State Department of Housing and Community Development (HCD), in accordance with CMC (affordable housing incentives).

The following are examples of times that the Fee may be collected for land uses that could be potentially classified as exempt from the fees.

1. Any project listed as exempt but which nonetheless, in the opinion of the City Manager, increases the demand upon city facilities funded by the Fee. The City Manager may pro-rate

the amount of the fee based upon the project's anticipated impact upon the subject facility or facilities.

2. Illegal facilities and buildings, constructed prior to the adoption of the Fee, which consequently obtain a building permit to legitimize the facility or building, shall pay the applicable Fee.

3. Accessory residential structures that are converted to a separate residential dwelling unit shall pay the Fee for multifamily development as long the primary residence remains on the property.

Annual Review, Accounting, and Updates

Annual review

This Nexus Study and the technical information it contains should be maintained and reviewed periodically by the City as necessary to ensure TIF accuracy and to enable the adequate programming of funding sources. To the extent that improvement requirements, costs, or development potential changes over time, the TIF will need to be updated. Specifically, AB 1600 (at Gov. C. §§ 66001(c), 66006(b)(1)) stipulates that each local agency that requires payment of a fee make specific information available to the public annually within 180 days of the last day of the fiscal year. This information includes the following:

- A description of the type of fee in the account
- The amount of the fee
- The beginning and ending balance of the fund
- The amount of fees collected and interest earned
- Identification of the improvements constructed
- The total cost of the improvements constructed
- The fees expended to construct the improvement
- The percent of total costs funded by the fee

If sufficient fees have been collected to fund the construction of an improvement, the agency must specify the approximate date for construction of that improvement. Because of the dynamic nature of growth and infrastructure requirements, the City should monitor development activity, the need for infrastructure improvements, and the adequacy of the fee revenues and other available funding. Formal annual review of the Fee Program should occur, at which time adjustments should be made. Costs associated with this monitoring and updating effort are included in the Impact Fee as an administrative charge.

Surplus Funds

AB 1600 also requires that if any portion of a fee remains unexpended or uncommitted in an account for five years or more after deposit of the fee, the City Council shall make findings once each year: (1) to identify the purpose to which the fee is to be put, (2) to demonstrate a reasonable relationship between the fee and the purpose for which it was charged, (3) to identify all sources and amounts of funding anticipated to complete financing of incomplete improvements, and (4) to designate the approximate dates on which the funding identified in (3) is expected to be deposited into the appropriate fund.

If adequate funding has been collected for a certain improvement, an approximate date must be specified as to when construction on the improvement will begin. If the findings show no need for the unspent funds, or if the conditions discussed above are not met, and the administrative costs of the refund do not exceed the refund itself, the local agency that has collected the funds must refund them.

Internal Loaning of Funds

Inter-fund loans may be used from time to time to facilitate the construction of TIF facilities. Any such loan shall be made in accordance with applicable law, as interpreted by the City Attorney of the City of Cupertino, and all funds shall be placed in separate accounts on either a facility or geographic basis. The additional following requirements are also placed on inter-fund loans:

- Funds may be transferred between accounts to expedite the construction of critical projects/facilities.
- A mechanism to repay accounts shall be established.
- Inter-fund loan repayments shall take precedence over reimbursements to developers.

Five-Year Update

Fees will be collected from new development within the City immediately; however, use of these funds may need to wait until a sufficient fund balance can be accrued. Per Government Code Section 66006, the City is required to deposit, invest, account for, and expend the fees in a prescribed manner. The fifth fiscal year following the first deposit into the Fee account or fund, and every five years thereafter, the City is required to make all of the following findings with respect to that portion of the account or fund remaining unexpended:

- Identify the purpose for which the fee is to be put;
- Demonstrate a reasonable relationship between the fee and the purpose for which it is charged;
- Identify all sources and amounts of funding anticipated to complete financing in incomplete improvements; and
- Designate the approximate dates on that the funding referred to in the above paragraph is expected to be deposited in the appropriate account or fund.

Once sufficient funds have been collected to complete the specified projects, the City must commence construction within 180 days. If they fail to do this, the City is required to refund the unexpended portion of the fee and any accrued interest to the then current owner.

Securing Supplemental Funding

The Impact Fee is not appropriate for funding the full amount of all capital costs identified in this Fee Study. The City will have to identify funding and pay for improvements related to existing and new developments and improvements not funded by the Fee Program or any other established funding source. Indeed, as part of the adoption of the fee, the City is likely to adopt a finding that it will obtain and allocate funding from various other sources for the fair share of

the costs of improvements identified in this Report that are not funded by the Fee Program. Examples of such sources include the following:

- **Assessments and Special Taxes**. The City could fund a portion of capital facilities costs using assessments and special taxes. For example, the establishment of a Mello-Roos Community Facilities District would allow the City to levy a special tax to pay debt service on bonds sold to fund construction of capital facilities or to directly fund capital facilities.

- **Federal, State or reginal Funds**. The City might seek and obtain grant of matching funds from Federal, State and/or regional sources to help offset the costs of required capital facilities and improvements. For example, the current TIF assumes Measure B revenue will be used to cover the costs of I-280/Wolfe Road Interchange even though a portion of these are attributable to new development. As part of its funding effort, the City should research and monitor these outside revenue sources and apply for funds as appropriate.

- **General Fund Revenues**. In any given year, the City could allocate a portion of its General Fund revenues for discretionary expenditures. Depending on the revenues generated relative to costs and City priorities, the City may allocate General Fund revenues to fund capital facilities costs not covered by the Fee Program or other funding sources.

- **Other Grants and Contributions.** A variety of grants or contributions from private donors could help fund a number of capital facilities. For example, private foundations and/or charity organizations may provide money for certain bicycle and pedestrian facilities.

APPENDIX A:

Detailed TIF Project List and Costs Estimates

Stantec

Memo

To:	Julie Chiu Associate Civil Engineer City of Cupertino	From:	Joy Bhattacharya Stantec Consulting Ltd.
File:	Technical Memorandum – Cost Estimate for Cupertino Traffic Impact Fee (TIF)/Nexus Study	Date:	July 18, 2017

Reference: Technical Memorandum – Cost Estimate for Cupertino Traffic Impact Fee (TIF)/Nexus Study

The City of Cupertino adopted an amended General Plan known as "General Plan: Community Vision 2015 - 2040." on December 4, 2014. The City is also in the process of developing the TIF Program to fund the roadway infrastructure improvements that are necessary to mitigate impacts to accommodate future growth. To support the TIF program, the City needs to prepare a Nexus Study that will serve as the basis for requiring development impact fees under AB 1600 legislation.

As part of the Cupertino TIF and Nexus Study, a TIF project list has been proposed. The projects included in the list cover the intersections / segments where significant impact(s) were identified in the General Plan: Community Vision 2015 – 2040 Draft Environmental Impact Report (December 2014). In addition, the projects identified in the City of Cupertino 2016 Bicycle Transportation Plan are also included in the list.

The list of transportation projects identified in these existing planning documents was further refined as follows:

- The TIF program excluded any projects that are outside the City of Cupertino
- The TIF program excluded any projects where secured and dedicated funding source have already been established to cover the full cost (e.g. projects identified as mitigation in CEQA documents for Apple Campus 2, Marina Plaza and the Hamptons).

Stantec conducted a cost estimate for each proposed TIF project. The cost includes all of the elements and activities necessary to complete the project (e.g. engineering, property acquisition, construction). **Table 1** shows the proposed TIF projects along with the cost estimates. **Appendix** illustrates the cost estimate details for each proposed TIF project.

As part of the Project No. 4 in **Table 1**, a significant impact was identified at the intersection of De Anza Boulevard and I-280 SB Ramps in the General Plan: Community Vision 2015 -2040 Draft Environmental Impact Report (DEIR) under the 2040 plus Project conditions. However, no mitigation measures were provided in the DEIR. By using the volumes provided in the DEIR, Stantec developed the mitigation measures for this intersection and included it as part of the overall cost estimates.

Reference: Technical Memorandum – Cost Estimate for Cupertino Traffic Impact Fee (TIF)/Nexus Study

Table 1 – Cupertino TIF & Nexus Study Project List

Project No.	Intersection	General Plan Mitigation Measures	Construction Cost
1	SR 85 NB Ramps and Stevens Creek Boulevard [1]	Add an exclusive northbound left-turn lane.	$536,000
2	Stelling Road and Stevens Creek Boulevard [1]	Add a second exclusive eastbound left-turn lane; right-turns would share the bike lane.	$1,318,000
3	Sunnyvale-Saratoga Road/De Anza Boulevard and Homestead Road [1]	Widen De Anza Blvd to 4 lanes in each direction or install triple left-turn lanes.	$3,210,000
4	De Anza Boulevard and I-280 Ramps [1]	De Anza Boulevard and I-280 NB Ramps: Restripe De Anza Blvd in the SB direction to provide room for right-turn vehicles to be separated from through traffic; paint a bike box at the front of lane. De Anza Boulevard and I-280 SB Ramps: Add a second eastbound left-turn lane and two additional eastbound right-turn lanes on the I-280 SB off-ramp.	$1,840,000
5	De Anza Boulevard and Stevens Creek Boulevard [1]	Restripe westbound Stevens Creek to provide room for right turn vehicles to be separated from through traffic; paint a bike box at the front of the lane.	$145,000
6	De Anza Boulevard and McClellan Road/Pacifica Drive [1]	Realign (currently offset) such that McClellan Rd and Pacifica Dr legs are across from each other; double left-turn lanes may be required to be added to De Anza Blvd.	$9,707,000
7	Wolfe Road and Homestead Road [1]	Add a third southbound through lane and a southbound exclusive right-turn lane; add a third westbound though lane, an addition of a westbound exclusive right-turn lane, and an additional westbound exclusive right-turn lane; add an additional eastbound through lane, an additional eastbound receiving lane on Homestead, and a second eastbound exclusive left-turn lane.	$7,131,000
8	Wolfe Road and I-280 NB Ramp & SB Ramp [2]	Add a third northbound through lane and extended north of the interchange; may pursue a redesign of the interchange to go from a partial cloverleaf design to a diamond design.	$76,300,000

Reference: Technical Memorandum – Cost Estimate for Cupertino Traffic Impact Fee (TIF)/Nexus Study

Table 1 – Cupertino TIF & Nexus Study Project List

Project No.	Intersection	General Plan Mitigation Measures	Construction Cost
9	Wolfe Road-Miller/Avenue and Stevens Creek Boulevard [1]	Restripe the westbound leg to provide room so that right turn vehicles could be separated from through vehicles; paint a bike box at the front of the lane.	$153,000
10	North Tantau Avenue/Quail Avenue and Homestead Road [1]	Restripe the southbound leg to provide a separate left turn lane; require the removal of on-street parking near the intersection.	$145,000
11	Tantau Avenue and Stevens Creek Boulevard [1]	Add a separate left-turn lane to northbound Tantau Ave.	$145,000
12	Monta Vista Sidewalk (Orange and Byrne) [4]		$4,000,000
13	Monta Vista Sidewalk (McClellan) [4]		$2,040,000
14	Bicycle Projects Tier 1 [3]		$38,611,000
15	Bicycle Projects Tier 2 [3]		$15,399,500
16	Bicycle Projects Tier 3 [3]		$33,168,500
Total			**$193,849,000**

Notes:

1. Based on Stantec's ballpark opinion of cost estimate using the industry standards.

2. Based on cost estimates included in the I-280 and Wolfe Road Alternative Analysis Study Report, October 4, 2016.

3. Based on cost estimates included in the City of Cupertino 2016 Bicycle Transportation Plan, Appendix F and revised by City of Cupertino.

4. Based on cost estimates provided by the City of Cupertino.

Source: Stantec, 2017

Appendix – Cost Estimates

ENGINEER'S ESTIMATE:
Project Name: SR 85 NB Ramps and Stevens Creek Boulevard Left-Turn Lane

Prepared by: A. Ha Date: October 20, 2016

Item	Work Description	Unit	Qty.	Unit Price	Total Price
1	Mobilization	LS	1	$ 45,000.00	$45,000
2	Traffic control	LS	1	$ 45,000.00	$45,000
3	Demolition, clearing & grubbing	LS	1	$ 20,000.00	$20,000
4	Remove existing AC	SF	1,000	$5.00	$5,000
5	Install new curb ramps	EA	1	$4,100.00	$4,100
6	New PCC curb & gutter	LF	50	$37.00	$1,850
7	New AC	SF	7,000	$10.00	$70,000
8	New PCC S/W	SF	200	$11.00	$2,200
9	Roadway Excavation	LS	1	$ 20,000.00	$20,000
10	Striping & Signing	LS	1	$ 15,000.00	$15,000
11	Traffic signal modifications	LS	1	$ 35,000.00	$35,000
12	Irrigation & Landscaping Modifications	LS	1	$ 10,000.00	$10,000
13	Imported Borrow	CY	1,560	$ 50.00	$78,000
	SUBTOTAL:				**$351,150**

Subtotal-- Bid Items		**$351,150**
Construction Contingency (assume 15%)	15%	$52,672.50
Testing, Staking	5%	$17,557.50
Construction Management	13%	$45,649.50
Subtotal: Construction		**$115,879.50**
Design	12%	$42,138.00
Engineering Studies	3%	$10,534.50
Environmental	3%	$10,534.50
Construction Engineering	1.5%	$5,267.25
		$68,474.25
TOTAL PROJECT		**$535,504**
Proposed CIP Budget Amount		**$536,000**
Total Design & Admin	$184,353.75	

Assumptions:
Future demand for Left-turn lane is 500' long by 12' wide
New curb return, sidewalk, and curb ramp to be installed
Relocate existing 1-B pole with ped signal and ped push button
Imported borrow of 6 feet in depth over proposed left-turn lane

ENGINEER'S ESTIMATE:
Project Name: Stelling Road and Stevens Creek Boulevard Left-Turn Lane

Prepared by: A. Ha Date: October 20, 2016

Item	Work Description	Unit	Qty.	Unit Price	Total Price
1	Mobilization	LS	1	$ 50,000.00	$50,000
2	Traffic control	LS	1	$ 45,000.00	$45,000
3	Demolition, clearing & grubbing	LS	1	$ 20,000.00	$20,000
4	Remove existing AC	SF	400	$ 5.00	$2,000
5	Relocate luminaire/utility pole	EA	3	$ 10,000.00	$30,000
6	PG&E Coordination	LS	1	$ 5,000.00	$5,000
7	New PCC median	SF	3,000	$ 11.00	$33,000
8	New AC	SF	4,800	$ 10.00	$48,000
9	Relocate overhead utilities	LS	1	$ 50,000.00	$50,000
10	Roadway Excavation	LS	1	$ 20,000.00	$20,000
11	Striping & Signing	LS	1	$ 15,000.00	$15,000
12	Traffic signal modifications	LS	1	$ 150,000.00	$150,000
13	Irrigation & Landscaping Modifications	LS	1	$ 20,000.00	$20,000
14	Right-of-Way Take	LS	1	$ 500,000.00	$500,000
	Total Construction Cost				$488,000
	SUBTOTAL:				**$988,000**

Subtotal-- Bid Items		**$988,000**

Construction Contingency (assume 15%)	15%	$73,200.00
Testing, Staking	5%	$24,400.00
Construction Management	13%	$63,440.00
Subtotal: Construction		**$161,040.00**
Design	12%	$58,560.00
Engineering Studies	3%	$14,640.00
Environmental	3%	$14,640.00
Construction Engineering	1.5%	$7,320.00
PG&E Design	15.0%	$73,200.00
		$168,360.00
TOTAL PROJECT		**$1,317,400**
Proposed CIP Budget Amount		**$1,318,000**
Total Design & Admin	$329,400.00	

Assumptions:
Future demand for Left-turn lane is 400' long by 12' wide
Modify median
Relocate luminaires/utility poles and overhead utility lines
Traffic signal modification

ENGINEER'S ESTIMATE:
Project Name: Sunnyvale-Saratoga Road/De Anza Boulevard and Homestead Road Add 2 Lanes

Prepared by: A. Ha Date: October 20, 2016

Item	Work Description	Unit	Qty.	Unit Price	Total Price
1	Mobilization	LS	1	$ 45,000.00	$45,000
2	Traffic control	LS	1	$ 45,000.00	$45,000
3	Demolition, clearing & grubbing	LS	1	$ 45,000.00	$45,000
4	Remove existing AC	SF	1,000	$ 5.00	$5,000
5	Install new curb ramps	EA	4	$ 4,100.00	$16,400
6	New PCC curb & gutter	LF	2,000	$ 37.00	$74,000
7	New AC	SF	24,000	$ 10.00	$240,000
8	New PCC S/W	SF	10,000	$ 11.00	$110,000
9	Storm Drain Improvements	LS	1	$ 40,000.00	$40,000
10	Roadway Excavation	LS	1	$ 30,000.00	$30,000
11	Striping & Signing	LS	1	$ 15,000.00	$15,000
12	Traffic signal modifications	LS	1	$380,270.00	$380,270
13	Irrigation & Landscaping Modifications	LS	1	$ 35,000.00	$35,000
14	Relocate luminaire	EA	6	$ 5,000.00	$30,000
15	Relocate utilities	LS	1	$ 10,000.00	$10,000
16	Right-of-way take	SF	6,000	$ 250.00	$1,500,000
	SUBTOTAL (CONSTRUCTION):				**$1,120,670**
	SUBTOTAL (WITH ROW):				**$2,620,670**

Subtotal-- Bid Items	**$2,620,670**

Construction Contingency (assume 15%)	15%	$168,100.50
Testing, Staking	5%	$56,033.50
Construction Management	13%	$145,687.10
Subtotal: Construction		**$369,821.10**
Design	12%	$134,480.40
Engineering Studies	3%	$33,620.10
Environmental	3%	$33,620.10
Construction Engineering	1.5%	$16,810.05
		$218,530.65
TOTAL PROJECT		**$3,209,022**
Proposed CIP Budget Amount		**$3,210,000**
Total Design & Admin	$588,351.75	

Assumptions:
NB lane is 400' long; SB lane is 600' long
New curb & gutter, sidewalk, and curb ramp to be installed
Traffic signal modification
Right-of-way take

ENGINEER'S ESTIMATE:
Project Name: De Anza Boulevard and I-280 NB Ramp Right-Turn Lane

Prepared by: A. Ha Date: October 20, 2016

Item	Work Description	Unit	Qty.	Unit Price	Total Price
1	Mobilization	LS	1	$ 30,000.00	$30,000
2	Traffic control	LS	1	$ 30,000.00	$30,000
3	Demolition, clearing & grubbing	LS	1	$ 15,000.00	$15,000
4	Remove existing AC	SF	500	$ 5.00	$2,500
5	New AC	SF	6,000	$ 10.00	$60,000
6	New PCC curb & gutter	LF	500	$ 37.00	$18,500
7	Roadway Excavation	LS	1	$ 10,000.00	$10,000
8	Striping & Signing	LS	1	$ 15,000.00	$15,000
9	Irrigation & Landscaping Modifications	LS	1	$ 10,000.00	$10,000
10	Signal Modifications	LS	1	$ 50,000.00	$50,000
	SUBTOTAL:				**$241,000**

Subtotal-- Bid Items		**$241,000**
Construction Contingency (assume 15%)	15%	$36,150.00
Testing, Staking	5%	$12,050.00
Construction Management	13%	$31,330.00
Subtotal: Construction		**$79,530.00**
Design	12%	$28,920.00
Engineering Studies	3%	$7,230.00
Environmental	3%	$7,230.00
Construction Engineering	1.5%	$3,615.00
		$46,995.00
TOTAL PROJECT		**$367,525**
Proposed CIP Budget Amount		**$368,000**
Total Design & Admin	$126,525.00	

Assumptions:
Right-turn lane is 950' long
Modify 500' of median to fit proposed striping
No ulititly conflicts
Traffic signal equipment upgrade

ENGINEER'S ESTIMATE:

Project Name: De Anza Boulevard and I-280 SB Ramp 1 EB Left Turn Lane, 2 EB Right-Turn Lane

Prepared by: A. Ha Date: November 2, 2016

Item	Work Description	Unit	Qty.	Unit Price	Total Price
1	Mobilization	LS	1	$ 45,000.00	$45,000
2	Traffic control	LS	1	$ 45,000.00	$45,000
3	Demolition, clearing & grubbing	LS	1	$ 20,000.00	$20,000
4	Remove existing AC	SF	1,000	$5.00	$5,000
5	Install new curb ramps	EA	3	$4,100.00	$12,300
6	New PCC curb & gutter	LF	100	$37.00	$3,700
7	New AC	SF	24,200	$10.00	$242,000
8	New PCC S/W	SF	200	$11.00	$2,200
9	Roadway Excavation	LS	1	$ 50,000.00	$50,000
10	Striping & Signing	LS	1	$ 20,000.00	$20,000
11	Traffic signal modifications	LS	1	$ 200,000.00	$200,000
12	Irrigation & Landscaping Modifications	LS	1	$ 50,000.00	$50,000
13	Imported Borrow	CY	5,400	$ 50.00	$270,000
	SUBTOTAL:				**$965,200**

Subtotal-- Bid Items		**$965,200**
Construction Contingency (assume 15%)	15%	$144,780.00
Testing, Staking	5%	$48,260.00
Construction Management	13%	$125,476.00
Subtotal: Construction		**$318,516.00**
Design	12%	$115,824.00
Engineering Studies	3%	$28,956.00
Environmental	3%	$28,956.00
Construction Engineering	1.5%	$14,478.00
		$188,214.00
TOTAL PROJECT		**$1,471,930**
Proposed CIP Budget Amount		**$1,472,000**
Total Design & Admin	$506,730.00	

Assumptions:
1 EB Left-turn & 2 EB Right-turn lanes are 550'
Modify in Caltrans Right of Way
No ulititly conflicts
Traffic signal equipment upgrade

Note: Used Hot Mix AC SF unit price from 2013 Caltrans Cost Data pp. 155 Item Code #394090.
Note: Estimated Imported Borrow unit price from 2013 Caltrans Cost Data pp. 93-94 Item Code #198010.

ENGINEER'S ESTIMATE:
Project Name: De Anza Boulevard and Stevens Creek Boulevard Right-Turn Lane

Prepared by: A. Ha Date: September 30, 2016

Item	Work Description	Unit	Qty.	Unit Price	Total Price
1	Mobilization	LS	1	$ 15,000.00	$15,000
2	Traffic control	LS	1	$ 15,000.00	$15,000
3	Striping & Signing	LS	1	$ 15,000.00	$15,000
4	Traffic signal modification	LS	1	$50,000.00	$50,000
	SUBTOTAL:				**$95,000**

Subtotal-- Bid Items	**$95,000**

Construction Contingency (assume 15%)	15%	$14,250.00
Testing, Staking	5%	$4,750.00
Construction Management	13%	$12,350.00
Subtotal: Construction		**$31,350.00**
Design	12%	$11,400.00
Engineering Studies	3%	$2,850.00
Environmental	3%	$2,850.00
Construction Engineering	1.5%	$1,425.00
		$18,525.00
TOTAL PROJECT		**$144,875**
Proposed CIP Budget Amount		**$145,000**

Total Design & Admin $49,875.00

Assumptions:
Right-turn lane is 350' long
Striping includes Green Lanes and Bike Box
Signal Modification include equipment upgrades

ENGINEER'S ESTIMATE:
Project Name: De Anza Boulevard and McClellan Road/Pacifica Drive Re-alignment

Prepared by: A. Ha Date: October 20, 2016

Item	Work Description	Unit	Qty.	Unit Price	Total Price
1	Mobilization	LS	1	$ 80,000.00	$80,000
2	Traffic control	LS	1	$ 75,000.00	$75,000
3	Demolition, clearing & grubbing	LS	1	$ 200,000.00	$200,000
4	Remove existing AC	SF	12,500	$5.00	$62,500
5	Install new curb ramps	EA	4	$4,100.00	$16,400
6	New PCC curb & gutter	LF	700	$37.00	$25,900
7	New AC	SF	9,400	$10.00	$94,000
8	New PCC S/W	SF	12,900	$11.00	$141,900
9	Roadway Excavation	LS	1	$ 200,000.00	$200,000
10	Striping & Signing	LS	1	$ 20,000.00	$20,000
11	Traffic signal modifications	LS	1	$ 250,000.00	$250,000
12	Irrigation & Landscaping Modifications	LS	1	$ 50,000.00	$50,000
13	Relocate luminaire	EA	2	$ 5,000.00	$10,000
14	Relocate utilities	LS	1	$ 150,000.00	$150,000
15	Backfill	CY	6,700	$ 40.00	$268,000
16	Right-of-way take	SF	18,000	$ 400.00	$7,200,000
	SUBTOTAL (CONSTRUCTION):				$1,643,700
	SUBTOTAL(WITH ROW):				**$8,843,700**

Subtotal-- Bid Items		**$8,843,700**
Construction Contingency (assume 15%)	15%	$246,555.00
Testing, Staking	5%	$82,185.00
Construction Management	13%	$213,681.00
Subtotal: Construction		**$542,421.00**
Design	12%	$197,244.00
Engineering Studies	3%	$49,311.00
Environmental	3%	$49,311.00
Construction Engineering	1.5%	$24,655.50
		$320,521.50
TOTAL PROJECT		**$9,706,643**
Proposed CIP Budget Amount		**$9,707,000**
Total Design & Admin	$862,942.50	

Assumptions:
Re-alignment of Pacifica Dr; 300' adjusted
New curb & gutter, sidewalk, and curb ramp to be installed
Traffic signal modification
Right-of-way take Gas Station and parking lot; Unit cost based on adjacent price/sq ft lot area

ENGINEER'S ESTIMATE:
Project Name: Wolfe Road and Homestead Road Add 5 Lanes

Prepared by: A. Ha Date: October 20, 2016

Item	Work Description	Unit	Qty.	Unit Price	Total Price
1	Mobilization	LS	1	$ 75,000.00	$75,000
2	Traffic control	LS	1	$ 75,000.00	$75,000
3	Demolition, clearing & grubbing	LS	1	$ 60,000.00	$60,000
4	Remove existing AC	SF	1,100	$5.00	$5,500
5	Install new curb ramps	EA	8	$4,100.00	$32,800
6	New PCC curb & gutter	LF	1,800	$37.00	$66,600
7	New AC	SF	30,600	$10.00	$306,000
8	New PCC S/W	SF	9,000	$11.00	$99,000
9	Roadway Excavation	LS	1	$ 50,000.00	$50,000
10	Striping & Signing	LS	1	$ 15,000.00	$15,000
11	Traffic signal modifications	LS	1	$ 300,000.00	$300,000
12	Irrigation & Landscaping Modifications	LS	1	$ 30,000.00	$30,000
13	Relocate luminaire	EA	7	$ 5,000.00	$35,000
14	Relocate utilities	LS	1	$ 100,000.00	$100,000
15	Right-of-way take	SF	15,900	$ 250.00	$3,975,000
	SUBTOTAL (CONSTRUCTION):				**$1,249,900**
	SUBTOTAL (WITH ROW):				**$5,224,900**

Subtotal-- Bid Items	**$6,474,800**

Construction Contingency (assume 15%)	15%	$187,485.00
Testing, Staking	5%	$62,495.00
Construction Management	13%	$162,487.00
Subtotal: Construction		**$412,467.00**
Design	12%	$149,988.00
Engineering Studies	3%	$37,497.00
Environmental	3%	$37,497.00
Construction Engineering	1.5%	$18,748.50
		$243,730.50
TOTAL PROJECT		**$7,130,998**
Proposed CIP Budget Amount		**$7,131,000**
Total Design & Admin	$656,197.50	

Assumptions:
SB Right-Lane 300'; WB Thru-Lane 350'; WB Right-Lane 200'; EB Thru-Lane 300'; EB Left-Lane 400'
New curb & gutter, sidewalk, and curb ramp to be installed
Traffic signal modification
Right-of-way take

ENGINEER'S ESTIMATE:
Project Name: Wolfe Road and I-280 NB Ramp Diamond Interchange

Prepared by: A. Ha Date: October 20, 2016

Item	Work Description	Unit	Qty.	Unit Price	Total Price
1	Diamond Interchange	LS	1	$ 38,150,000.00	$38,150,000
	SUBTOTAL:				**$38,150,000**

Subtotal-- Bid Items **$38,150,000**

Construction Contingency (assume 15%)	15%	
Testing, Staking	5%	
Construction Management	13%	
Subtotal: Construction		
Design	12%	
Engineering Studies	3%	
Environmental	3%	
Construction Engineering	1.5%	
TOTAL PROJECT		**$38,150,000**
Proposed CIP Budget Amount		**$38,150,000**
Total Design & Admin	$0.00	

Assumptions:
Estimate for Partial Cloverleaf = $76.3 Million (from I-280 Wolfe Alter Analysis Report 10/4/16)

ENGINEER'S ESTIMATE:
Project Name: Wolfe Road and I-280 SB Ramp Diamond Interchange

Prepared by: A. Ha Date: October 20, 2016

Item	Work Description	Unit	Qty.	Unit Price	Total Price
1	Diamond Interchange	LS	1	$ 38,150,000.00	$38,150,000
	SUBTOTAL:				**$38,150,000**

Subtotal-- Bid Items **$38,150,000**

Construction Contingency (assume 15%)	15%	
Testing, Staking	5%	
Construction Management	13%	
Subtotal: Construction		
Design	12%	
Engineering Studies	3%	
Environmental	3%	
Construction Engineering	1.5%	
TOTAL PROJECT		**$38,150,000**
Proposed CIP Budget Amount		**$38,150,000**
Total Design & Admin	$0.00	

Assumptions:
Estimate for Partial Cloverleaf = $76.3 Million (from I-280 Wolfe Alter Analysis Report 10/4/16)

ENGINEER'S ESTIMATE:
Project Name: Wolfe Road-Miller/Avenue and Stevens Creek Boulevard Right-Turn Lane

Prepared by: A. Ha Date: October 20, 2016

Item	Work Description	Unit	Qty.	Unit Price	Total Price
1	Mobilization	LS	1	$ 15,000.00	$15,000
2	Traffic control	LS	1	$ 15,000.00	$15,000
3	Striping & Signing	LS	1	$ 20,000.00	$20,000
4	Traffic signal modification	LS	1	$50,000.00	$50,000
	SUBTOTAL:				**$100,000**

Subtotal-- Bid Items	**$100,000**

Construction Contingency (assume 15%)	15%	$15,000.00
Testing, Staking	5%	$5,000.00
Construction Management	13%	$13,000.00
Subtotal: Construction		**$33,000.00**
Design	12%	$12,000.00
Engineering Studies	3%	$3,000.00
Environmental	3%	$3,000.00
Construction Engineering	1.5%	$1,500.00
		$19,500.00
TOTAL PROJECT		**$152,500**
Proposed CIP Budget Amount		**$153,000**
Total Design & Admin	$52,500.00	

Assumptions:
Right-turn lane is 450' long
Striping includes Green Lanes and Bike Box
Signal Modification include equipment upgrades

ENGINEER'S ESTIMATE:
Project Name: North Tantau Avenue/Quail Avenue and Homestead Road Left-Turn Lane

Prepared by: A. Ha Date: October 20, 2016

Item	Work Description	Unit	Qty.	Unit Price	Total Price
1	Mobilization	LS	1	$ 15,000.00	$15,000
2	Traffic control	LS	1	$ 15,000.00	$15,000
3	Striping & Signing	LS	1	$ 15,000.00	$15,000
4	Signal Modifications	LS	1	$ 50,000.00	$50,000
	SUBTOTAL:				**$45,000**

Subtotal-- Bid Items	**$95,000**

Construction Contingency (assume 15%)	15%	$14,250.00
Testing, Staking	5%	$4,750.00
Construction Management	13%	$12,350.00
Subtotal: Construction		**$31,350.00**
Design	12%	$11,400.00
Engineering Studies	3%	$2,850.00
Environmental	3%	$2,850.00
Construction Engineering	1.5%	$1,425.00
		$18,525.00
TOTAL PROJECT		**$144,875**
Proposed CIP Budget Amount		**$145,000**
Total Design & Admin	$49,875.00	

Assumptions:
Left Turn lane can be added in existing pavement width
Signal Modifications for southbound movement

ENGINEER'S ESTIMATE:
Project Name: Tantau Avenue and Stevens Creek Boulevard Left-Turn Lane

Prepared by: A. Ha Date: October 20, 2016

Item	Work Description	Unit	Qty.	Unit Price	Total Price
1	Mobilization	LS	1	$ 15,000.00	$15,000
2	Traffic control	LS	1	$ 15,000.00	$15,000
3	Striping & Signing	LS	1	$ 15,000.00	$15,000
4	Signal Modifications	LS	1	$ 50,000.00	$50,000
	SUBTOTAL:				**$95,000**

Subtotal-- Bid Items	**$95,000**

Construction Contingency (assume 15%)	15%	$14,250.00
Testing, Staking	5%	$4,750.00
Construction Management	13%	$12,350.00
Subtotal: Construction		**$31,350.00**
Design	12%	$11,400.00
Engineering Studies	3%	$2,850.00
Environmental	3%	$2,850.00
Construction Engineering	1.5%	$1,425.00
		$18,525.00
TOTAL PROJECT		**$144,875**
Proposed CIP Budget Amount		**$145,000**

Total Design & Admin $49,875.00

Assumptions:
Left Turn Lane can be placed in existing width.
Signal modifications to add left turn lane signal head.

Cuptertino Traffic Impact Fee & Nexus Study Project List - Bicycle Projects

Project No.	Project	Location	Start	End	Notes	Miles	Total Score	Rounded Cost	Source
Tier 1									
1	Class IV Protected Bikeway	Stevens Creek Blvd	Foothill Blvd	Tantau Ave	--	3.43	91	$7,200,000	Cupertino Bicycle Transportation Plan & City of Cupertino
2	Class IV Protected Bikeway	McClellan Rd	Byrne Ave	De Anza Blvd	--	1.43	80	$5,000,000	Cupertino Bicycle Transportation Plan & City of Cupertino
3	Grade Separated Crossing Study	Highway 85 Crossing	Grand Ave	Mary Ave	--	0	71	$20,000,000	Cupertino Bicycle Transportation Plan & City of Cupertino
4	Class I Path	Union Pacific Trail	Prospect Rd	SBtlvedvens Creek	--	2.1	71	$1,678,000	Cupertino Bicycle Transportation Plan
5	Class IV Separated Bikeway	Finch Ave	Phil Ln	Stevens Creek Blvd	--	0.45	69	$1,090,000	Cupertino Bicycle Transportation Plan & City of Cupertino
6	Class I Path	I-280 Channel Bike Path	Mary Ave/Meteor Dr	Tantau Ave/Vallco Pkwy	--	2.87	61	$2,293,000	Cupertino Bicycle Transportation Plan & City of Cupertino
7	Bike Boulevard Implementation Phase 1							$1,350,000	City of Cupertino
Tier 2									
8	Class II Buffered Bike Lane	De Anza Blvd	Homestead Rd	Bollinger Rd	--	1.73	65	$242,000	Cupertino Bicycle Transportation Plan
9	Class IV Separated Bikeway	Stelling Rd	Prospect Rd	250 South of McClellan Rd	--	1.45	65	$580,000	Cupertino Bicycle Transportation Plan & City of Cupertino
10	Class IV Separated Bikeway	Stelling Rd	250 South of McClellan Rd	Alves Dr	--	0.71	64	$1,714,000	Cupertino Bicycle Transportation Plan & City of Cupertino
11	Class IV Separated Bikeway	Blaney Ave	Bollinger Rd	Homestead Rd	--	1.91	64	$766,000	Cupertino Bicycle Transportation Plan & City of Cupertino
12	Class IV Separated Bikeway	Stevens CreekBlvd	Foothill Blvd	St Joseph Ave	--	0.62	63	$248,000	Cupertino Bicycle Transportation Plan & City of Cupertino
13	Class IV Separated Bikeway	Stelling Rd	Alves Dr	Homestead Rd	--	0.84	63	$248,000	Cupertino Bicycle Transportation Plan & City of Cupertino
14	Class I Path	Amelia Ct/Varian Way Connector	Amelia Ct	Varian Way	--	0.05	63	$100,000	Cupertino Bicycle Transportation Plan
15	Grade Separated Crossing Study	Carmen Rd	Stevens Creek Blvd - South Side	Stevens Creek Blvd - North Side	--	0	62	$10,000,000	Cupertino Bicycle Transportation Plan & City of Cupertino
16	Class II Bike Lane	Vista Dr	Forest Ave	SBtlvedvens Creek	--	0.24	60	$15,000	Cupertino Bicycle Transportation Plan
17	Class II Buffered Bike Lane	Bollinger Rd	De Anza Blvd	Lawrence Expy	--	2	56	$278,000	Cupertino Bicycle Transportation Plan
18	Class II Buffered Bike Lane	Mary Ave	Stevens Creek Blvd	Meteor Dr	--	0.71	55	$100,000	Cupertino Bicycle Transportation Plan
19	Class II Buffered Bike Lane	Miller Ave	Bollinger Rd	Calle de Barcelona	--	0.48	54	$67,000	Cupertino Bicycle Transportation Plan
20	Configure Intersection	Infinite Loop	Merritt Dr	--	Improve signage/striping to delineate bike/ped space in connector	0	54	$2,000	Cupertino Bicycle Transportation Plan
21	Class II Buffered Bike Lane	Homestead Rd	Mary Ave	Wolfe Rd	--	1.97	52	$276,000	Cupertino Bicycle Transportation Plan
22	Class II Buffered Bike Lane	Prospect Rd	De Anza Blvd	Stelling Rd	--	0.42	49	$59,000	Cupertino Bicycle Transportation Plan
23	Configure Intersection	McClellan Rd	Rose Blossom Dr	--	Facilitate through bike travel to De Anza	0	49	$20,000	Cupertino Bicycle Transportation Plan
24	Trail Crossing	Homestead Rd	Mary Ave	--	Redesign intersection of Homestead at Mary to better facilitate bicycles exiting Mary Ave bridge path	0	49	$10,000	Cupertino Bicycle Transportation Plan
25	Class III Bike Route	Hyde Ave Bike Route (#6)	Hyde Ave at Shadygrove Dr	Hyde Ave at Bollinger Rd	--	0.24	49	$500	Cupertino Bicycle Transportation Plan

Cuptertino Traffic Impact Fee & Nexus Study Project List - Bicycle Projects

Project No.	Project	Location	Start	End	Notes	Miles	Total Score	Rounded Cost	Source
26	Class I Path	Regnart Creek Path	Pacifica Dr	Estates Dr	--	0.83	48	$664,000	Cupertino Bicycle Transportation Plan
27	Reconfigure wall/fence	Wheaton Dr	Perimeter Rd	--	Connect bike blvd to proposed bike path on Perimeter road, requires creating gap in existing wall	0	47	$10,000	Cupertino Bicycle Transportation Plan
Tier 3									
28	Class II Bike Lane	Rainbow Dr	Bubb Rd	Stelling Rd	--	0.5	46	$33,000	Cupertino Bicycle Transportation Plan
29	Class I Path	Perimeter Rd	Stevens Creek Blvd	I-280 Channel Bike Path	--	0.59	44	$470,000	Cupertino Bicycle Transportation Plan
30	Class III Bike Route	mary Ave to Vallco Mall Bike Route (#7)	Memorial Park	End of Wheaton Dr	--	1.77	44	$4,000	Cupertino Bicycle Transportation Plan
31	Class III Bike Route	Tantau Ave Bike Route (#9)	Tantau Ave at Bollinger Rd	Tantau Ave at Barnhart Ave	--	0.41	44	$500	Cupertino Bicycle Transportation Plan
32	Class III Bike Route	Rose Blossom/Huntridge BikeRoute (#8)	Rose Blossom Dr at McClellan Rd	Huntridge Ln at De Anza Blvd	--	0.41	43	$1,000	Cupertino Bicycle Transportation Plan
33	Class I Path	Wilson Park	Rodrigues Ave	Wilson Park Path	--	0.03	42	$50,000	Cupertino Bicycle Transportation Plan
34	Class III Bike Boulevard	Stevens Creek Bike Blvd (#6)	San FernandoAve at OrangeAve	Carmen Rd atStevens CreekBlvd	--	1.12	42	$47,000	Cupertino Bicycle Transportation Plan
35	Configure Intersection	Blaney Ave	Wheaton Dr	--	Enhance bicycle crossing across Wheaton	0	41	$50,000	Cupertino Bicycle Transportation Plan
36	Class II BufferedBike Lane	Foothill Blvd	Stevens CreekBlvd	McClellan Rd	--	0.55	41	$77,000	Cupertino Bicycle Transportation Plan
37	Configure Intersection	Stelling Rd	Rainbow Dr	--	Study removal of slip lanes, study potential for protected intersection	0	40	$150,000	Cupertino Bicycle Transportation Plan & City of Cupertino
38	Class II Buffered Bike Lane	Homestead Rd	Wolfe Rd	Tantau Ave	--	0.49	40	$69,000	Cupertino Bicycle Transportation Plan
39	Class II Buffered Bike Lane	Wolfe Rd	Stevens Creek Blvd	I-280 Channel Bike Path	--	0.4	39	$56,000	Cupertino Bicycle Transportation Plan
40	Class I Path	Jollyman Park	Stelling Rd	Dumas Dr	--	0.15	39	$119,000	Cupertino Bicycle Transportation Plan
41	Reconfigure wall/fence	Imperial Ave	Alcazar Ave	--	Create gap in fence to connect bike routes	0	39	$20,000	Cupertino Bicycle Transportation Plan
42	Class II Buffered Bike Lane	Foothill Blvd	Stevens Creek Blvd	I-280 N Offramp	--	0.96	39	$135,000	Cupertino Bicycle Transportation Plan
43	Class III Bike Boulevard	Foothill toStevens Creek Bike Blvd (#3)	Foothill Blvd at Starling Dr	Carmen Rd at Stevens Creek Blvd	--	0.99	38	$50,000	Cupertino Bicycle Transportation Plan
44	Class II Buffered Bike Lane	Lazaneo Dr	Bandley Dr	De Anza Blvd	--	0.09	38	$13,000	Cupertino Bicycle Transportation Plan
45	Class II Buffered Bike Lane	Wolfe Rd	Perimeter Rd	Homestead Rd	--	0.62	38	$86,000	Cupertino Bicycle Transportation Plan
46	Class II Buffered Bike Lane	Bubb Rd	McClellan Rd	Stevens Creek Blvd	--	0.53	37	$74,000	Cupertino Bicycle Transportation Plan
47	Grade Separated Crossing Study	UPRR West Cupertino Crossing	Hammond Snyder Loop Trail	Stevens Creek Blvd	--	0	37	$15,000,000	Cupertino Bicycle Transportation Plan & City of Cupertino
48	Bike/Ped Bridge Enhancement	Mary Ave Ped Bridge	I280	--	Improved signage/stripingto delineate bike/ped space on Mary Ave bridge	0	37	$20,000	Cupertino Bicycle Transportation Plan
49	Class I Path	Developmen t Bike Path	SBtlvedvens Creek	Mary Ave	--	0.13	35	$102,000	Cupertino Bicycle Transportation Plan
50	Class II Buffered Bike Lane	Miller Ave	Calle de Barcelona	Stevens Creek Blvd	--	0.39	35	$54,000	Cupertino Bicycle Transportation Plan
51	Class II Buffered Bike Lane	Tantau Ave	Stevens CreekBlvd	Pruneridge Ave	--	0.65	35	$91,000	Cupertino Bicycle Transportation Plan

Cuptertino Traffic Impact Fee & Nexus Study Project List - Bicycle Projects

Project No.	Project	Location	Start	End	Notes	Miles	Total Score	Rounded Cost	Source
52	Trail Crossing	McClellan Rd	Union Pacific Railroad Path	--	Coordinate crossing with signal.	0	34	$10,000	Cupertino Bicycle Transportation Plan
53	Class II Bike Lane	Pacifica Dr	De Anza Blvd	Torre Ave	--	0.17	33	$11,000	Cupertino Bicycle Transportation Plan
54	Freeway interchange enhancement	Wolfe Rd	I-280 Overpass	--	Add green paint tointerchange approaches, stripe bike lane through interchange intersection	0	30	$15,000,000	Cupertino Bicycle Transportation Plan & City of Cupertino
55	Class I Path	Aquino Creek Trail	Sterling/Barnhart Park	Calvert Dr	--	0.37	30	$294,000	Cupertino Bicycle Transportation Plan
56	Class I Path	Aquino Creek Trail	South of I280	Stevens Creek Blvd	--	0.17	30	$138,000	Cupertino Bicycle Transportation Plan
57	Class II Buffered Bike Lane	Vallco Pkwy	Tantau Ave	Perimeter Rd	--	0.3	30	$42,000	Cupertino Bicycle Transportation Plan
58	Class II Bike Lane	Dr/Stevens Creek Blvd Connector	Campus Dr	Stevens Creek Blvd	--	0.11	30	$7,000	Cupertino Bicycle Transportation Plan
59	Class III Bike Route	Stevens CreekBlvd Bike Route (#5)	Grand Ave atAlhambra Ave	Peninsula Ave atStevens Creek Blvd	--	0.19	30	$1,000	Cupertino Bicycle Transportation Plan
60	Class II Buffered Bike Lane	Rainbow Dr	De Anza Blvd	Stelling Rd	--	0.57	28	$79,000	Cupertino Bicycle Transportation Plan
61	Class III Bike Route	Civic Center to Creekside Park Bike Route (#2)	Torre Ave at Rodrigues Ave	Estates Dr at Creekside Park Path	--	1.24	28	$3,000	Cupertino Bicycle Transportation Plan
62	Class III Bike Route	Garden Gate EMleemmoernitaal rPyatrok Bike Route (#4)	GArnenenAlrebaof r DDrr at	Memorial Park	--	0.42	26	$1,500	Cupertino Bicycle Transportation Plan
63	Freeway interchange enhancement	De Anza Blvd	Hwy 85 Overpass	--	Add green paint tointerchange approaches, stripe bike lane through interchange intersection	0	26	$40,000	Cupertino Bicycle Transportation Plan
64	Trail Crossing	Bubb Rd	Union Pacific Railroad Path	--	Coordinate crossing with signal.	0	25	$10,000	Cupertino Bicycle Transportation Plan
65	Freeway interchange enhancement	Stevens Creek Blvd	Hwy 85 Overpass	--	Add green paint to interchange approaches, stripe bike lane through interchange intersection	0	25	$40,000	Cupertino Bicycle Transportation Plan
66	BCilkase s Llla nBeuffered	Tantau Ave	Pruneridge Ave	Homestead Rd	--	0.37	25	$52,000	Cupertino Bicycle Transportation Plan
67	Freeway interchange enhancement	De Anza Blvd	I-280 Overpass	--	Add green paint tointerchange approaches, stripe bike lane through interchange intersection	0	24	$40,000	Cupertino Bicycle Transportation Plan
68	Class II Buffered Bike Lane	Stevens Canyon Rd	McClellan Rd	Rancho Deep Cliff Dr	--	0.23	24	$33,000	Cupertino Bicycle Transportation Plan
69	Class II Buffered Bike Lane	Bollinger Rd	200 feet East of Westlynn Way	De Foe Dr	--	0.18	24	$26,000	Cupertino Bicycle Transportation Plan
70	Class I Path	Linda Vista Park/Deep Cliff Golf Course	Linda Vista Park Parking Lot off Linda Vista Dr	McClellan Rd	--	0.46	24	$366,000	Cupertino Bicycle Transportation Plan
71	Class II Buffered Bike Lane	Pruneridge Ave	Tantau Ave	City Limits - East	--	0.07	22	$9,000	Cupertino Bicycle Transportation Plan
72	Configure Intersection	Portal Ave	Wheaton Dr	--	2015 Bike Plan Update, study roundabout conversion	0	20	$150,000	Cupertino Bicycle Transportation Plan

Cuptertino Traffic Impact Fee & Nexus Study Project List - Bicycle Projects

Project No.	Project	Location	Start	End	Notes	Miles	Total Score	Rounded Cost	Source
73	Class II Bike Lane	Cristo Rey Dr	150 feet East of Cristo Rey Pl	Roundabout	--	0.57	19	$37,000	Cupertino Bicycle Transportation Plan
74	Class III Bike Route	Westlynn/Fallenleaf Bike Route (#11)	Bollinger Rd at Westlynn Way	Fallenleaf Ln at De Anza Blvd	--	0.37	18	$1,000	Cupertino Bicycle Transportation Plan
75	Class III Bike Route	Foothill Blvd Bike Route (#3)	Palm Ave at Scenic Blvd	Lockwood Dr at Stevens Creek	--	0.81	16	$1,500	Cupertino Bicycle Transportation Plan
76	Class III Bike Route	Union Pacific to Hwy 85 Bike Route (#10)	September Dr at McClellan Rd	Jamestown Dr at Prospect Rd	--	1.48	13	$5,000	Cupertino Bicycle Transportation Plan