Report

Northeast Area Development Impact Fee Update

The Economics of Land Use

Prepared for:
City of Fairfield

Prepared by:
Economic & Planning Systems, Inc.

In association with:
Coastland Civil Engineering
Fehr & Peers
CBG

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EPS #191133

Economic & Planning Systems, Inc.
1330 Broadway
Suite 450
Oakland, CA 94612
510 841 9190 tel

Oakland
Sacramento
Denver
Los Angeles

www.epsys.com

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1. BACKGROUND

Introduction

This Report provides the 2022 update to the *City of Fairfield Northeast Area Development Impact Fee (Northeast Area fee).* The City's prior transportation impact fee *Northeast Area Nexus Study* was completed in 2013. This update provides the technical documentation to support the update of the Northeast Area fees consistent with the Mitigation Fee Act (Government Code Section 66000). This Report covers a number of different fee categories including some fees covering new development throughout the Northeast Area and others associated with the Train Station Specific Plan (TSSP) Area or parts of it. Most of these fees will fund a range of major infrastructure improvements and public facilities required to serve new development in the Northeast Area of City. The TSSP preparation cost recovery fee, established under Government Code Section 65456(a), is also updated as is the greenbelt fee that is required under pertinent environmental law. The fee categories include:

1) Transportation

2) Linear parks

3) Greenbelt preservation

4) Sewer

5) Storm Drainage

6) Train Station Specific Plan Additional Capital Improvements

7) Train Station Specific Plan Preparation Fee

This updated Report identifies infrastructure, capital facilities, and other cost items for each fee category, estimates updated costs for each of these items, establishes the nexus for imposing a fee on new development in the Northeast Area to pay for its fair share of these costs, and calculates fees on new development based on project costs and anticipated development levels. Note that the fees calculated in this Report are in addition to various citywide impact fees and fees of other agencies that will also apply to new development in the Northeast Area including:

- AB1600 Citywide fees for transportation, parks, urban design, and public facilities[1]
- Parkland Dedication
- Bedroom Tax

[1] A 2022 update to the Citywide Transportation Impact Fee has also been conducted. This report, under separate cover, establishes the updated Citywide Transportation Impact Fee. It is important to note that the updated Citywide transportation fee includes two components; a base fee that will apply to all new development in the City (including Northeast Area development) and a second component that will apply to new development outside of the Northeast Area that will ensure that this development contributes its fair share towards Northeast Area transportation improvements.

- Water and Sewer connection fees
- School District facilities
- County facilities

Purpose

About a decade ago, the City of Fairfield developed the Train Station Specific Plan (TSSP) to respond to and support the plans for a new train station project along the Capitol Corridor[2] at the corner of Peabody Road at Vanden Road in Fairfield. The Specific Plan covers approximately 2,970 acres of land near the station. In addition to new development within the TSSP, the City has long planned for growth to occur elsewhere in the broader Northeast Area of Fairfield. To support growth in this area of the City, improvement to public infrastructure and facilities are needed along with other specific investments.

Since the new investments were and are needed primarily to serve new growth in the Northeast Area, the City established the Northeast Area fee to ensure new development in the Northeast covered its appropriate share of the required public infrastructure and capital facilities. This Report updates the set of fees established, under the Mitigation Fee Act, in 2014. As indicated below, some of these fees apply to all new development in the entire Northeast Areas while other fees apply to portions of new growth in the TSSP subarea only.

Fee Category	**Geographic Application**
1) Transportation	Northeast-wide
2) Linear parks	Northeast-wide
3) Greenbelt Preservation	Northeast-wide
4) Sewer	Portion of the Northeast Area
5) Drainage	Portion of the Northeast Area
6) Train Station Specific Plan Additional Capital Improvements	All of TSSP subarea
7) Train Station Specific Plan Preparation Fee	All of TSSP subarea

Requirements of AB 1600

The updated Northeast Area development impact fees – transportation, linear parks, sewer, drainage, and additional TSSP capital improvements - if approved, will be adopted by the City Council as a resolution under the City's general police powers and under the Mitigation Fee Act Government Code Section 66000 et seq. established by AB 1600 in 1988. The Mitigation Fee Act

[2] The Capitol Corridor is an intercity passenger train service with 17 stations in eight Northern California counties from Auburn, Placer County through Fairfield, Solano, County and south to San Jose in Santa Clara County. The Fairfield station opened in November 2017.

applies to all local agencies, as defined in Government Code section 66000(c), to include cities (both general law and chartered), counties, special districts, school districts, other municipal public corporations, and political subdivisions of the State. The legislation was drafted to establish a uniform process for formulating, adopting, imposing, collecting, accounting for, and protesting fees. The Mitigation Fee Act describes necessary actions and limits associated with establishing nexus, adopting the fee, payment of the fee, updating the fee, fee credits and reimbursements, surplus funds, and fee protests. Selected critical points associated with fee use, estimation and establishment are described below.

Fee Estimation and Establishment

On a broad level, development impact fee programs must be consistent with the following:

1. The facilities to be built with the fee relates to the development subject to the fee, and
2. The fee cannot exceed the estimated reasonable cost of the development's proportionate share of the proposed facilities.

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 2022 fee update.

Use of Fee Revenues

Under Government Code 66000b a "fee" is defined as "a monetary exaction, other than a tax or special assessment…that is charged by a local agency to the applicant in connection with the approval of a development project for the purpose of defraying all or a portion of the cost of public facilities related to the development project."[3] Development impact fees provide funding for public capital improvements. The public facilities that can be funded by fees include public improvements and community amenities. Fees cannot be used for maintenance or services. Fees

[3] Abbott, William et al. (2012) *Exactions and Impact Fees in California*. Solano Press Books, Point Arena, California, p. 299.

can be used for any development project, defined as "any project undertaken for the purpose of development" (Government Code 66000a).

Update Procedures and Use of Funds

This Fee Update represents the first comprehensive update following from the original adoption of the Northeast Area Fee program in 2013. The City of Fairfield has updated the specific capital programs comprised of a listing of development impact fee eligible projects as a basis for the updated fee calculation. These individual projects may be altered or replaced over time (with other qualifying projects) as the City administers the Development Impact Fee Program and builds the infrastructure needed to serve new development in the Northeast.

The traffic component of the Northeast Area AB 1600 Fee Update was developed collaboratively by EPS, transportation consultants Fehr and Peers (F&P), Coastland Civil Engineering, and CBG, with extensive input and guidance from City staff. Other fee categories were developed by EPS with extensive input and guidance from City staff and Coastland Civil Engineering. The revised fee schedules included in this Nexus Study can, at the discretion of the City Council, be implemented through a revised Development Impact Fee resolution. The technical components of the update can also be used as a technical basis and guide for subsequent annual reviews and updates that may occur in the future.

Content of This Nexus Report

This Report is divided into five chapters:

- **Chapter 1 Background** provides a summary of the background and need for the analysis.
- **Chapter 2 Summary of Results** summarizes the results including the maximum and proposed fee levels.
- **Chapter 3 Development Forecast** describes the expected new development for the TSSP, the Northeast Area, and the City.
- **Chapters 4 Northeast Area-wide Transportation, Linear Park, and Greenbelt Preservation Fees** provides the necessary background for the transportation, linear park, and Greenbelt Preservation fees including project list, costs, cost allocation calculation for deriving the maximum fees, proposed fees, and nexus findings.
- **Chapter 5 Sewer, Storm Drainage, and Specific Plan Area Fees** provides the necessary background for fees which apply to only specific portions of development in the TSSP.

2. SUMMARY OF RESULTS

This chapter summarizes the proposed new Northeast Area fees. The technical analysis and justification for the proposed fee levels is provided in the subsequent chapters.

Northeast Area Transportation, Linear Park, and Greenbelt Preservation Impact Fees

Table 1 shows the maximum and proposed Northeast Area fees to fund improvements to the transportation network and linear parks and to preserve a greenbelt around the project area. Public entities may elect to charge lower fees for particular land uses, areas of the city, or across the board in the interest of achieving certain policy goals. As lower fee revenues are collected, other funding sources will need to be identified to fill any funding gaps created by setting fees below the maximum allowable levels. The maximum and proposed fees are the same for residential uses, with the full fee amounts allocated to residential uses proposed to be charged. The combined per unit fees for these three fee categories vary by zoned density and range from $14,237 for high-density residential uses to $23,722 for lower-density residential development. Costs for transportation facilities are allocated on a trip generation basis, linear park costs are allocated based on projected population, and greenbelt preservation costs are allocated based on developed acres.

Non-residential development in the Northeast Area pays transportation fees, but not linear parks or greenbelt preservation fees. The proposed commercial fees are significantly below the maximum calculated fees. As a policy matter, the City determined that the proposed commercial fees should be set below the maximum potential fees. Based on City input, the proposed fees for commercial uses are $4.27 per square foot. Industrial uses have been split into two subcategories – Warehouse / Distribution / Speculative (WDS) and Manufacturing. Proposed fees for WDS uses have been set at the maximum of $6.47 per square foot while proposed fees on Manufacturing uses are set at the lower $2.00 per square foot.

Detailed calculations determining the maximum and proposed fees are provided in **Chapter 4.** Note that Northeast Area development is subject to both the Northeast Development Impact fee as well as the Citywide Transportation Impact fee (updated in a separate technical report).

Table 1 Maximum and Proposed Transportation, Linear Park, and Greenbelt Preservation Fees

Development Type	Transportation		Linear Park		Greenbelt Preservation		Combined Fees	
	Maximum	Proposed[1]	Maximum	Proposed[1]	Maximum	Proposed[1]	Maximum	Proposed[1]
Residential (per unit)								
Residential Low/ Low Medium Density (RL/RLM)	$18,476	$18,476	$4,880	$4,880	$366	$366	$23,722	$23,722
Residential Medium Density (RM)	$14,042	$14,042	$4,339	$4,339	$183	$183	$18,564	$18,564
Residential High Density (RH)	$10,347	$10,347	$3,799	$3,799	$91	$91	$14,237	$14,237
Nonresidential (per sq. ft.)								
Overall Commercial	$70.25	$4.27	*N/A*		*N/A*		$70.25	$4.27
Industrial	$6.47	-	*N/A*		*N/A*		$6.47	-
WDS[2]	-	$6.47						$6.47
Manufacturing	-	$2.00						$2.00

[1] Proposed fee levels based on direction from City staff.

[2] Warehouse / Distribution / Speculative. This and the Manufacturing development type create two subcategories into which new Industrial developments will be grouped.

Source: City of Fairfield; Economic & Planning Systems, Inc.

Northeast Subarea Fees

Sewer and Storm Drainage

Sewer and storm drain fees only apply by shed area corresponding to particular subareas in the Northeast Area. **Table 2** shows the proposed fees to fund improvements to the sewer and storm drainage infrastructure for certain areas of the TSSP area. The maximum and proposed fees are equivalent for all uses. All sewer and storm drainage facilities and associated costs are required to serve new development and hence allocated to new development. The improvements are associated with particular sewer and storm drainage sheds; all improvement costs located in a particular shed are allocated to that same shed. Within a particular shed, costs are allocated to residential and nonresidential uses based on sewer generation and impervious acres developed.

Additional Specific Plan Fees

There are an additional set of fees that apply more broadly to TSSP development. **Table 2** also shows the proposed fees to fund capital improvements serving TSSP development and fees reimbursing the City for costs to prepare the Specific Plan document and other planning efforts. The proposed Additional Train Station Specific Plan Fees are set at the calculated maximums. The capital improvement costs have been allocated on a population basis while the Plan preparation costs are allocated on a developed acres basis.

Table 2 Proposed Northeast-Area Sewer, Storm Drainage, and Other Fees

	Residential (Fee per Unit)			**Commercial**	**Industrial**
Fee Items[1]	Low / Low Medium Density (**RL / RLM**)	Medium Density (**RM**)	High Density (**RM**)	(Fee per Acre)	
Sewer					
Shed 1	$1,217	$974	$730	*N/A*	*N/A*
Shed 2	$3,301	$2,641	$1,981	*N/A*	*N/A*
Storm Drainage					
Shed Area 1	$3,975	*N/A*	*N/A*	*N/A*	*N/A*
Shed Areas 2, 3A, & 4	$6,225	$3,632	$2,075	$49,803	*N/A*
Shed Area 10	$5,511	$3,858	$1,837	*N/A*	*N/A*
Additional Train Station Specific Plan Fees					
Capital Improvements	$1,767	$1,571	$1,375	*N/A*	*N/A*
Specific Plan Planning	$1,648	$824	$412	*N/A*	*N/A*

[1] Proposed fee levels based on direction from City staff. Note that the various fees listed in the table will each apply to a different subset of the geographic areas contained in the Northeast Area. They should not be added together but should be estimated based on a specific project's location. Refer to relevant sections of the Report for more details.

Source: City of Fairfield; Economic & Planning Systems, Inc.

Detailed calculations determining the maximum and proposed fees are provided in **Chapter 5.** Note that Northeast Area development is subject to both the Northeast Development Impact fee as well as the Citywide Transportation Impact fee (updated in a separate technical report).

3. DEVELOPMENT FORECAST

Estimates of the maximum, nexus-supported Northeast Area Transportation and Linear Parks fees are, in part, driven by forecasts of new growth in the City of Fairfield. City staff developed a growth forecast for 2020 to 2040 based on a detailed review of developable land capacity, General Plan land use designations, zoning, development applications which have been filed with the City, and market expectations. City staff and F&P worked closely together to ensure that existing 2020 development and forecasted 2020 to 2040 growth was allocated appropriately to each traffic analysis zone (TAZ) in the City. Existing and new growth by TAZ was distinguished by development types (residential units and nonresidential square footage) and by geographic area (Northeast vs. Rest of City). These development allocations supported the modeling and analysis required to estimate maximum fees by land use and by area for the transportation fee update as well as the overall estimates of growth required for the parks fee update.

The growth forecasts for 2020 to 2040 are shown in **Table 3** for Fairfield, with growth in the Northeast Area (including the Fairfield Train Station Specific Plan area and the rest of the Northeast Area) shown separately. This growth is shown relative to 2020 levels in **Table 4**. Growth data is summarized below:

- **New Development Citywide.** A total of about 12,300 new residential units are forecast to be added in the City between 2020 and 2040. About 6.0 million new square feet of nonresidential development are forecast, including 4.5 million in industrial development and 1.5 million in office/medical development, service commercial, and retail uses.

- **New Development in the Northeast Area.**[4] New residential growth in the Northeast Area is expected to sum to about 7,400 units by 2040. These units represent about 60 percent of the total residential growth expected in Fairfield through 2040. While most of the nonresidential growth is expected outside of the Northeast Area, almost 1.1 million square feet of primarily new industrial space is expected to be developed.

- **Existing and New Development.** In 2020, Fairfield had over 38,000 residential units and more than 24 million square feet of nonresidential development as documented in the transportation model. As a point of reference, and as shown in **Table 4**, growth expected through 2040 is estimated to increase the City's residential development by over 30 percent and its nonresidential development base by 25 percent.

4 The following documents provide the full descriptions of land uses: (1) for new development occurring within the Northeast Area and outside of the Train Station Specific Plan (TSSP), land uses are as described in the General Plan Diagram and (2) for new development within the TSSP, the land uses are as described in the TSSP land use exhibit.

Table 3 Development Projections

Development Type	Northeast Area TSSP	Northeast Area Other NE	Northeast Area Total NE	Rest of City	Total City
Residential (Units)					
Residential Low / Low Medium Density (RL / RLM)	2,030	913	2,943	1,547	4,490
Residential Medium Density (RM)	1,212	624	1,836	0	1,836
Residential High Density (RH)	2,301	280	2,581	3,430	6,011
Total Residential	5,543	1,817	7,360	4,977	12,337
Nonresidential (Sq. Ft.)					
Retail[1]	0	19,102	19,102	33,704	52,806
Commercial[2]	46,555	23,954	70,508	888,241	958,750
Office / Medical	0	0	0	439,681	439,681
Industrial	1,000,000	0	1,000,000	3,520,192	4,520,192
Total Nonresidential	1,046,555	43,056	1,089,610	4,881,818	5,971,428

[1] Retail land use only includes those retail uses with high-trip generation rates such as fast food locations with drive-through services and gas stations.

[2] Commercial includes all other retail uses (all with relatively low trip generation rates).

Source: City of Fairfield; Economic & Planning Systems, Inc.

Table 4 Existing Development and 2040 Forecasted Development

Development Type	Existing City, 2020	Forecasted Growth 2020 - 2040	Total City, 2040	Percent Change 2020 - 2040
Residential Units	38,042	12,337	50,379	32%
Nonresidential (Sq. Ft.)				
Non-Industrial[1]	10,887,000	1,451,237	12,338,237	13%
Industrial	13,273,000	4,520,192	17,793,192	34%
Total Nonresidential	24,160,000	5,971,428	30,131,428	25%

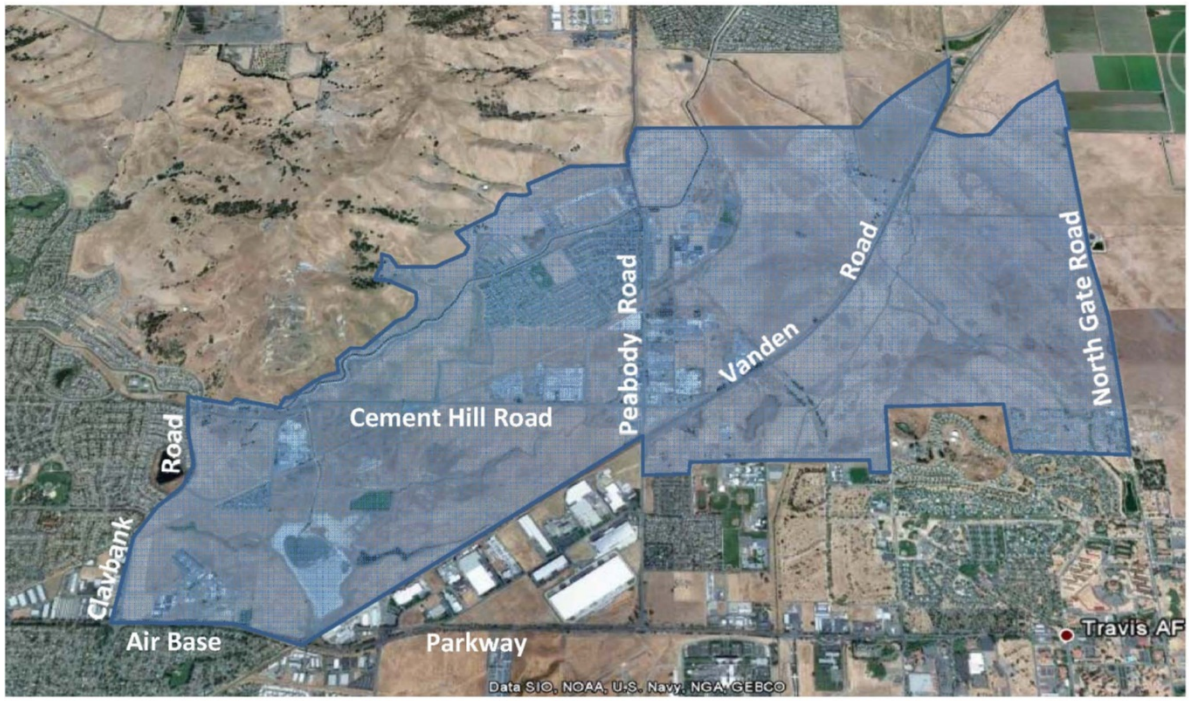
[1] Non-Industrial land uses include retail, office, and medical uses.

Source: City of Fairfield; Fehr and Peers; Economic & Planning Systems, Inc.

4. NORTHEAST-WIDE TRANSPORTATION, LINEAR PARK AND GREENBELT PRESERVATION FEES

This chapter presents the methodology and fee calculations for the Northeast Area transportation, linear park, and Greenbelt Preservation fees. **Figure 1** below illustrates the boundaries of this area. This chapter describes the necessary "nexus" between new development in the Northeast Area of Fairfield and the new transportation improvements and linear parks, as required under Government Code Section 66000 (AB 1600). An update to the Citywide Transportation AB1600 fees is provided in a separate technical report.

Figure 1 Northeast Area Fee Boundary Map (Illustrative)



Transportation and Linear Park Fees

Nexus Findings

Nexus findings are provided below addressing: 1) the purpose of the fee and a related description of the facility for which fee revenue will be used; 2) the specific use of fee revenue; 3) the relationship between the facility and the type of development; 4) the relationship between the need for the facility and the type of development; and 5) the relationship between the amount of the fee and the proportionality of cost specifically attributable to development. The technical calculations described in the sections below are consistent with these nexus findings/requirements.

Transportation

Purpose

The fee will help provide adequate levels of transportation service in the Northeast Area of Fairfield.

Use of Fee

Fee revenue will be used to fund transportation improvements in the Northeast Area, mainly consisting of new roadways. A representative list of transportation projects and costs is included in the next section of this chapter.

Relationship

New development in the Northeast Area of Fairfield will increase demands for and travel on Northeast transportation improvements. Northeast transportation fee revenue will be used to fund additional transportation capacity to serve new Northeast development.

Need

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

Proportionality

The fee levels are tied to fair share cost allocations to new Northeast development as determined by F&P in their transportation model.

Linear Park

Purpose

The fee will support the development of linear parks in the Northeast Area of the City.

Use of Fee

Fee revenue will be used to fund linear parks in the Northeast Area. A representative list of projects and costs is included in the next section of this chapter.

Relationship

New development in the Northeast Area of Fairfield will generate demand for linear parks. Linear park fee revenue will be used to fund the development of linear parks in the Northeast of the City to serve new Northeast resident.

Need

Each new development project will add to the incremental need for parks. The linear park improvements considered in this study are considered necessary to help meet the parks and recreation needs for the Northeast Area of the City.

Proportionality

The fee levels are tied to fair share cost allocations to new Northeast development based on the population expected to be added through new residential development. New employees are not expected to add significant demand for park facilities.

Technical Fee Calculations

The technical derivation of the maximum nexus-supported Northeast transportation and linear parks fees is provided below. The technical calculations follow nexus requirements and focus on the need for the improvements and the fair share apportionment to new development.

Table 5 shows the City's list of transportation and linear park improvement projects expected to be required, in part or in whole, to serve new development in the Northeast Area of City between 2020 and 2040. The gross cost is estimated at $272 million. The table also shows specific non-fee funding that has already been identified for some improvements. This funding is deducted from the total improvement costs to determine the net costs. The total identified funding sums to $60 million, leaving a total net improvement cost of $212 million. Transportation project costs were provided by Coastland and the City of Fairfield Public Works Department, and Linear Park project costs were provided by CBG.

Table 6 reports the basis by which the net costs shown in the previous table are allocated to new development. Transportation costs are allocated based on new development's relative contribution to demand for transportation improvements, based on the number of peak car trips projected during the PM-peak hours. Linear park costs are allocated on a per capita basis based on the expected primary driver of use and demand for linear parks.

Table 5 Transportation and Linear Park Total and Net Costs

Improvement Item	Gross Improvement Cost[1]	Identified Outside Funding[2]	Net Improvement Costs
Transportation			
Roadways			
Manuel Campos Parkway	$51,688,991	$8,501,466	$43,187,525
Vanden Road	$57,746,000	$23,640,167	$34,105,833
Peabody Road	$37,013,000	$9,521,750	$27,491,250
New Cannon Road	$62,930,000	$5,130,000	$57,800,000
McCrory Road Extension	$14,398,000	$5,807,000	$8,591,000
Roadways Subtotal	$223,775,991	$52,600,383	$171,175,608
Northeast Traffic Signal Improvements	$8,260,547	$0	$8,260,547
Reimbursable Northeast Prior Projects			
Viking Lane	$1,259,000	$1,259,000	$0
Manuel Campos (N. Texas to Dover)	$5,087,000	$5,087,000	$0
Peabody (St. Gobain)	$1,408,000	$1,408,000	$0
Reimbursables Subtotal	$7,754,000	$7,754,000	$0
Transportation Subtotal	**$239,790,538**	**$60,354,383**	**$179,436,155**
Linear Parks			
Clay Bank Road to Portland Drive	$3,106,028	$0	$3,106,028
Portland Drive to Walters Road	$3,536,489	$0	$3,536,489
Walters Road to Peabody	$6,432,960	$0	$6,432,960
Peabody to Lake Trail	$3,609,499	$0	$3,609,499
Linear Park Trail to Vanden Road	$4,164,150	$0	$4,164,150
Vanden Road to Center School	$4,180,304	$0	$4,180,304
Lake Park Trail to New Canon Road	$5,220,027	$0	$5,220,027
Vanden Bridge Allowance	$1,885,000	$0	$1,885,000
Linear Parks Subtotal	$32,134,458	$0	$32,134,458
Total Transportation and Linear Parks Cost	**$271,924,996**	**$60,354,383**	**$211,570,613**

[1] Transportation cost estimates by Coastland and City staff, Linear Park costs provided by CBG. All cost figures in 2022 dollars.
[2] Outside funding sources include county, regional, state, and federal transportation resources. Funding for improvements at project approvals may occur if the need for a specific improvement (typically traffic signals) is triggered by the project seeking approval.

Source: City of Fairfield; Coastland; Economic & Planning Systems, Inc.

Table 6 Transportation and Linear Parks Allocation Factor Descriptions

Improvement Item	Net Improvement Costs	Allocation Factor	Source
Transportation			
Roadways	$171,175,608	PM Peak Hour Trip Rates	Fehr & Peers Transportation Analysis (Appendix A)
Reimbursables	$0		
Traffic Signals	$8,260,547		
Transportation Subtotal	**$179,436,155**		
Linear Parks	**$32,134,458**	Persons per Unit	Census, ACS 2015-2019 Est.
Total Transportation and Linear Parks Cost	**$211,570,613**		

Source: City of Fairfield; Coastland; Economic & Planning Systems, Inc.

Maximum Transportation Fees

The net transportation costs of about $180 million were allocated between different sources of travel demand based on the findings of the F&P traffic analysis. These findings were used to allocate the appropriate costs to the Northeast Fee program and the Citywide Fee program. There are two primary steps in the cost allocation process as described below.

Step 1: Allocate Northeast Transportation Improvement Costs to Northeast Fee Program and Citywide Fee Program based on Traffic Analysis.

The F&P analysis findings included the following:

- Northeast transportation projects would not be required but for the new development in the City so all costs were allocated to new development.
- Northeast transportation projects will primarily serve new northeast development but will also serve development elsewhere in the City.
- About two-thirds of trips from new Fairfield development are expected to be generated by Northeast Fairfield development (see **Appendix A).**
- One-third of trips are expected from new development elsewhere in the City of Fairfield (see **Appendix A).**

Table 7 illustrates this two-third/one-third split of the Northeast projects. As a result of this split, of the $180 million in net Northeast transportation improvement costs, about two-thirds of the costs, $120 million, are allocated to new development in the Northeast. The remaining one-

third of Northeast Transportation costs associated with new development in the rest of the City is allocated to the Citywide Fee Program (documented in a separate Report).

Table 7 Cost Allocation to Fee Program

Improvement Item	Net Improvement Costs[1]	Percent Allocation[2] to: Northeast Development Fee[3] *Northeast Growth*	Percent Allocation[2] to: Citywide Fee Program[4] *Rest of City Growth, Non-Northeast*
Northeast Projects			
Northeast Roadways[5]			
Manuel Campos Parkway	$43,187,525		
Vanden Road	$34,105,833		
Peabody Road	$27,491,250	**67%**	**33%**
Peabody Road - County Segment	$0		
New Canon Road	$57,800,000		
McCrory Road Extension	$8,591,000		
Northeast Roadways Total	$171,175,608	$114,117,072	$57,058,536
Northeast Traffic Signals	$8,260,547	67%	33%
Northeast Traffic Signals Total		$5,507,031	$2,753,516
Total Northeast	**$179,436,155**	**$119,624,104**	**$59,812,052**

(1) Costs after identified outside funding has been subtracted from the total project costs, see **Table 5**.

(2) Percent allocations are based on a review of the traffic model for the City and broader region.

(3) Northeast Fee Program is the subject of this Report. The costs in these columns are carried through the rest of the Report.

(4) Costs allocated to the Citywide Fee Program are further documented in a separate report. The costs in this column are not carried forward in this Report in terms of calculating the fee.

(5) See Appendix B for traffic analysis which is the basis for the one-third/two-thirds cost split to Citywide Development Fee and Northeast Area fee.

Source: Coastland; Fehr & Peers; Economic & Planning Systems, Inc.

Step 2: Derive Average Cost per Trip

PM peak hour trip generation rates by land use category are used to determine the number of trips generated by new development by 2040. See **Appendix A** for details on trip generation rates. The 2040 development projections for the Northeast Area (**Table 3**) are multiplied by each land use's trip generation rate to derive the total number of new trips generated by 2040. The development projections for non-Northeast Area development are not carried forward as they are unnecessary for the Northeast Area fee calculations. **Table 8** multiplies the development projections from **Table 3** by the relevant trip generation rates to arrive at the total number of trips generated by development area. As shown, 6,474 additional trips are projected to be generated by new Northeast Area development by 2040.

Table 8 Total Trip Generation by 2040

Development Type	New Trips per Unit / 1,000 Sq. Ft.[1]	Northeast Area
Growth		
Residential (Units)		
Residential Low / Low Medium Density (RL / RLM)		2,943
Residential Medium Density (RM)		1,836
Residential High Density (RH)		2,581
Total Residential		7,360
Nonresidential (Sq. Ft.)		
Retail[2]		19,102
Commercial[3]		70,508
Office / Medical		0
Industrial		1,000,000
Total Non-Residential		1,089,610
Trips[4]		
Residential (Units)		
Residential Low / Low Medium Density (RL / RLM)	1.00	2,943
Residential Medium Density (RM)	0.76	1,395
Residential High Density (RH)	0.56	1,445
Total Residential		5,784
Nonresidential (Sq. Ft.)		
Retail[2]	10.38	198
Commercial[3]	2.02	142
Office / Medical	1.63	0
Industrial	0.35	350
Total Non-Residential		691
Total Trips		**6,474**

[1] Trip generation rates from Fehr & Peers traffic modeling, see **Appendix A**.

[2] Retail land use only includes those retail uses with high-trip generation rates such as fast food locations with drive-through services and gas stations.

[3] Commercial includes all other retail uses (all with relatively low trip generation rates).

[4] Multiplies growth values by relevant New Trips per Unit / 1,000 Sq. Ft. values.

Source: Fehr & Peers; Economic & Planning Systems, Inc.

An average cost per trip is derived for the portion of the Northeast Area Projects cost allocated to Northeast Area development ($119,624,104) by dividing this cost by the trip generation total for Northeast Area development (6,474 new trips). As shown in **Table 9,** this results in an average cost of $18,476 per trip.

Table 9 Average Cost per Trip – Northeast Area Developments

Item	NE Area Project Costs Allocated to NE Area Dev.
Total CIP Cost[1]	$119,624,104
New Trips Generated by Projected Area Growth[2]	6,474
Average Cost per Trip	**$18,476**

[1] Per **Table 7**. Represents total Northeast Area Project costs allocated to Northeast Area development.
[2] Per **Table 8**.

Source: Economic & Planning Systems, Inc.

Step 3: Aggregate Retail, Commercial, and Office / Medical Uses into Single Category

For nonresidential development, Northeast Area fees are charged to either "Commercial" or "Industrial" uses, where Commercial uses encompass the three land uses that have thus far been referred to as Retail, Commercial, and Office / Medical. Since this generalized, aggregated Commercial land use category does not have a specific traffic generation rate, it is necessary to derive one prior to proceeding to the next step. **Table 10** demonstrates this calculation, with the sum of projected new Retail, Commercial, and Office / Medical development in the Northeast Area being divided by the sum total of new trips generated by these three uses to arrive at a weighted average trip generation rate of 3.80. This value is carried forward to the next step to determine maximum fee levels.

Table 10 Aggregated Commercial Trip Generation Rate

Item	NE Area Nonresidential Land Uses			Total
	Retail	Commercial	Office / Medical	
Projected New Development Square Feet (in thousands)[1]	19.102	70.508	0	89.610
New Trips Generated[1]	198	142	0	341
Trip Generation Rate (per 1,000 Sq. Ft.)[2]	10.38	2.02	1.63	**3.80**

[1] Per **Table 8**.

[2] The Total value (3.80) represents the weighted average of the Trip Generation Rates of each of the three land uses included in this aggregated Commercial land use category. It is found by dividing the 341 generated trips by the 89.61 thousands of new square feet of development.

Source: Economic & Planning Systems, Inc.

Step 4: Derive Northeast Area Development Fee Levels Based on Trips by Land Use

Trip generation rates are a common measure of demand for new transportation infrastructure. See **Appendix A** for details on trip generation rates by land use category. **Table 11** documents how each land use category's trip generation rate is used to arrive at the maximum Northeast Area fee levels for Northeast Area development. The average cost per trip calculated in **Table 9** is carried into **Table 11** where it is multiplied by each land use category's specified trip generation rate. For each Residential Low / Low Medium Density (RL / RLM) unit built in the Northeast Area, the maximum nexus-justified Northeast Area fee level is $18,476. Note that the values shown in **Table 11** don't represent the full maximum transportation fee burden that can be charged to Northeast Area development, as the Citywide transportation fee still applies (documented in a separate report).

Table 11 Maximum Fee Calculation by Land Use Based on Trip Generation

Development Type	New Trips per Unit / 1,000 Sq. Ft.[1]	Maximum NE Area Transportation Fees for NE Area Development[2]
Baseline Cost per Trip[3]		**$18,476**
Residential (Per Unit)		
Residential Low / Low Medium Density (RL / RLM)	1.00	**$18,476**
Residential Medium Density (RM)	0.76	**$14,042**
Residential High Density (RH)	0.56	**$10,347**
Nonresidential (Per Sq. Ft.)		
Commercial	3.80	**$70.25**
Industrial	0.35	**$6.47**

[1] Trip generation rates from Fehr & Peers traffic modeling, see **Appendix A**. See **Table 10** for derivation of Commercial rate.

[2] Values in this column derived by multiplying the Baseline Cost per Trip by each land use category's specific trip generation rate. Note that Nonresidential trip generation rates are per-1,000 square feet but maximum fee levels shown are converted to a per-square foot basis.

[3] Per **Table 9**.

Source: Economic & Planning Systems, Inc.

Maximum Linear Park Fees

The linear park costs of $32 million are allocated among the development prototypes on a per capita basis. **Table 12** reports the expected number of persons per household built in the Northeast Area. As shown, at build out the Northeast Area is expected to house about 21,400 people.

Table 12 Linear Park Allocation: Persons per Unit Calculation

Residential Development in Northeast Area	Projected New Units	Persons Per HH[1]	Total Population
Residential Low/ Low Medium Density (RL/RLM)	2,943	3.25	9,566
Residential Medium Density (RM)	1,836	2.89	5,306
Residential High Density (RH)	2,581	2.53	6,530
Total	**7,360**		**21,402**

[1] Persons per Household (PPH) values based on population and housing data from the 2015-2019 American Community Survey 5-year estimates for Fairfield. RL/RLM density has been assigned the average PPH for single family housing in Fairfield while the RH uses are assigned the average PPH for multifamily housing in buildings with 5 or more units in Fairfield. RM uses are assigned an average between RL/RLM and RH.

Source: U.S. Census Bureau, 2015-2019 American Community Survey; Economic & Planning Systems, Inc.

Table 13 reports the distribution of new population by development type and shows the maximum fee calculations. The highest proportion of the population is expected to reside in the RL/RLM residential type, with 45 percent, 25 percent is projected for the RM category, and 31 percent is expected in the RH units. **Table 13** shows the linear park net costs allocated among the three residential development types based on each type's generation of new residents. Based on the number of units projected in each category, a maximum fee level is estimated for linear parks.

Table 13 Linear Park Maximum Fee Calculation

Residential Development in Northeast Area	Total Population[1]	% Cost Distribution[2]	Cost Allocation[3]	Maximum Fee per Unit[4]
Residential Low/ Low Medium Density (RL/RLM)	9,566	45%	$14,362,563	**$4,880**
Residential Medium Density (RM)	5,306	25%	$7,967,319	**$4,339**
Residential High Density (RH)	6,530	31%	$9,804,576	**$3,799**
Total	21,402	100%	$32,134,458	

[1] per **Table 12**.

[2] Cost Distribution based on population distribution by development type.

[3] Allocates total cost per **Table 6** by % Cost Distribution.

[4] Divides Cost Allocation values by total units in **Table 12**.

Source: Economic & Planning Systems, Inc.

Proposed Fees

Public entities can choose to set capital facilities fees at a rate lower than the maximum that may be charged. As lower fee revenues are collected, other funding sources will need to be identified to fill the gap left from setting fees below the maximum allowable. City staff have recommended that the Northeast transportation development impact fees should be set at the maximum for residential uses and below the maximum for some nonresidential uses. Linear parks fees are set at the maximum supportable level. Based on this direction, **Table 14** reports the maximum supportable fees based on nexus criteria and the proposed fees based on City policy direction.

Table 14 Maximum and Proposed Transportation and Linear Park Fees

Item	Transportation + Linear Park Fees					
	Transportation		Linear Park		Total Both Fees	
	Maximum	Proposed[1]	Maximum	Proposed[1]	Maximum	Proposed[1]
Residential (Per Unit)						
Residential Low / Low Medium Density (RL / RLM)	$18,476	$18,476	$4,880	$4,880	$23,357	$23,357
Residential Medium Density (RM)	$14,042	$14,042	$4,339	$4,339	$18,382	$18,382
Residential High Density (RH)	$10,347	$10,347	$3,799	$3,799	$14,146	$14,146
Nonresidential (Per Sq. Ft.)						
Commercial	$70.25	$4.27	*N/A*	*N/A*	$70.25	$4.27
Industrial	$6.47	-	*N/A*	*N/A*	$6.47	-
WDS[2]	-	$6.47	*N/A*	*N/A*	$6.47	$6.47
Manufacturing	-	$2.00	*N/A*	*N/A*	$6.47	$2.00

[1] Proposed fee levels based on direction from City staff.

[2] Warehouse / Distribution / Speculative. This and the Manufacturing development type create two subcategories into which new Industrial developments will be grouped.

Source: City of Fairfield; Economic & Planning Systems, Inc.

Greenbelt Fees

In the mid-1990's, the Solano/Vacaville/Fairfield Joint Powers Authority (JPA) was established. The JPA designated a greenbelt preservation area in response to State and federal environmental laws and placed requirements on residential development in the Northeast Area of the City to contribute towards the permanent protection of the greenbelt area. These mitigation obligations were included in the prior Northeast Area fee described in Chapter 1. As part of the prior Northeast Area Fee report, the City determined that the greenbelt preservation obligation associated with proposed new development in the Northeast of the City is for the acquisition of conservation easements of 200 acres at an estimated cost of $7,000 per acre (consistent with prior 2003 cost estimates). This cost estimate has been adjusted consistent with the Consumer Price Index to arrive at an updated cost figure. Areas to be preserved are generally on the west and east side of Peabody Pool currently preserved either via conservative easement or Development Agreement. As a result, new residential development in the Northeast Area will be required to fund $1.6 million through a greenbelt fee. This cost was allocated between residential land use categories based on a measure of their relative land disturbance (expected residential densities) and results in the fees shown in **Table 15**.

Table 15 Greenbelt Preservation Fee Calculation

Residential Development Type	Forecasted New NE Area Units	Average Dwelling Units per Acre[1]	Forecasted Acres Developed	% Cost Distribution	Cost Allocation[2]	Maximum Fee per Unit
Residential Low/ Low Medium Density (RL/RLM)	2,943	6	491	65.3%	$1,075,691	**$366**
Residential Medium Density (RM)	1,836	12	153	20.4%	$335,537	**$183**
Residential High Density (RH)	2,581	24	108	14.3%	$235,844	**$91**
Total	7,360		751	100.0%	$1,647,072	

[1] Per City staff estimates.

[2] Total greenbelt costs are based on values from the 2013 Fee Study inflated using the Consumer Price Index.

Source: City of Fairfield; Economic & Planning Systems, Inc.

5. SEWER, STORM DRAINAGE, AND SPECIFIC PLAN AREA FEES

This chapter presents the methodology and fee calculations for new fees applicable to subareas within the Northeast Area. This includes capital facilities fees under the Mitigation Fee Act to fund sewer and storm drainage improvements in specific sheds within the Northeast Area, as well as fees required to fund a range of other capital facility improvements specifically within the Train Station Specific Plan Area. It also includes a Specific Plan fee, under Government Code 65456(a), to defray the costs of preparing the Specific Plan.

Sewer and Storm Drainage Fees

Nexus Findings

Nexus findings are provided below addressing: 1) the purpose of the fee and a related description of the facility for which fee revenue will be used; 2) the specific use of fee revenue; 3) the relationship between the facility and the type of development; 4) the relationship between the need for the facility and the type of development; and 5) the relationship between the amount of the fee and the proportionality of cost specifically attributable to development. The specific categories for each of the following departments/facilities are presented below:

Sewer

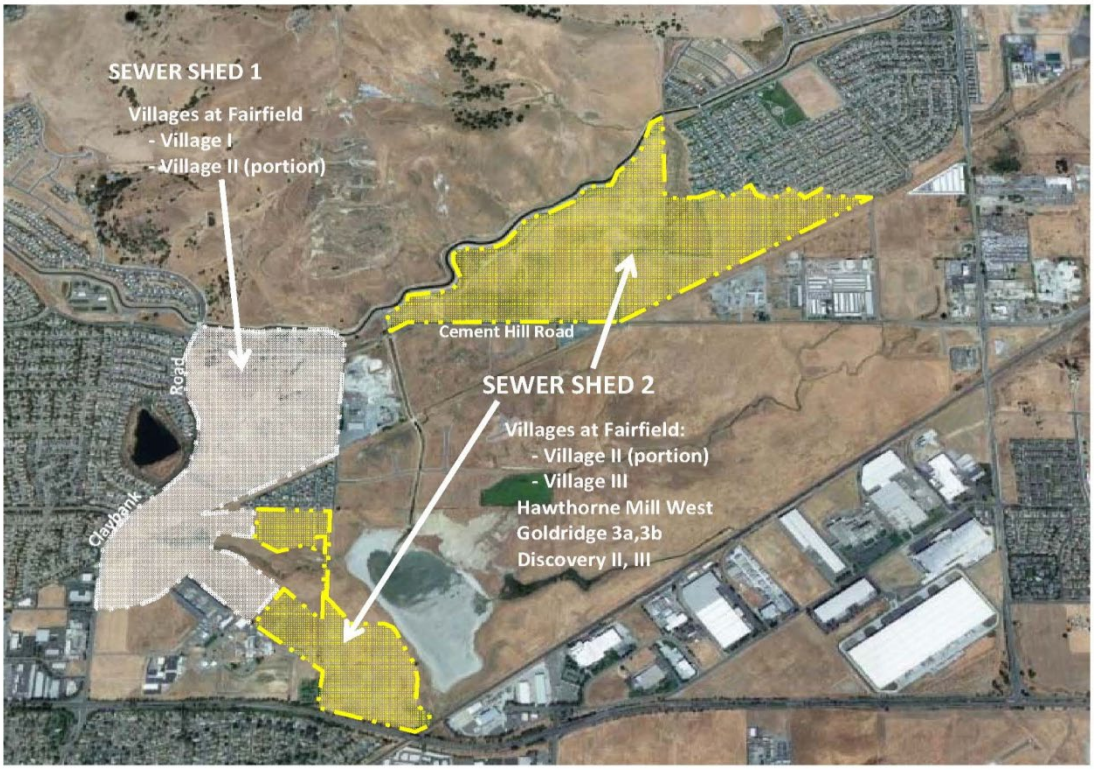
Purpose

The fee will provide the necessary sewer facilities in different sewer sheds within the TSSP Area.

Geography

Figure 2 illustrates the geographic areas where the sewer fee will apply. Note that areas to which the fees do not apply either are not in need of upgrades or will be supplying sewer facilities outside of the fee program.

Figure 2 Sewer Shed Fee Boundaries Map (Illustrative)



Use of Fee

Fee revenue will be used to fund development of a new sewer trunk line and a pump system.

Relationship

New TSSP development will increase the demand for sanitary sewer flow. Fee revenue will be used to fund the necessary sewer facilities.

Need

Each new development project will be hooked up to the City's sanitary sewer infrastructure. New growth in Sheds 1 and 2 will need access to a new trunk line while growth in Shed 2 will also need access to a pump system.

Proportionality

All identified improvements and costs are directly associated with new development in specific sewer sheds. Fee levels for development within the sewer sheds are directly tied to the cost of sewer facilities required with costs allocated between land uses based on sewer generation factors.

Storm Drainage

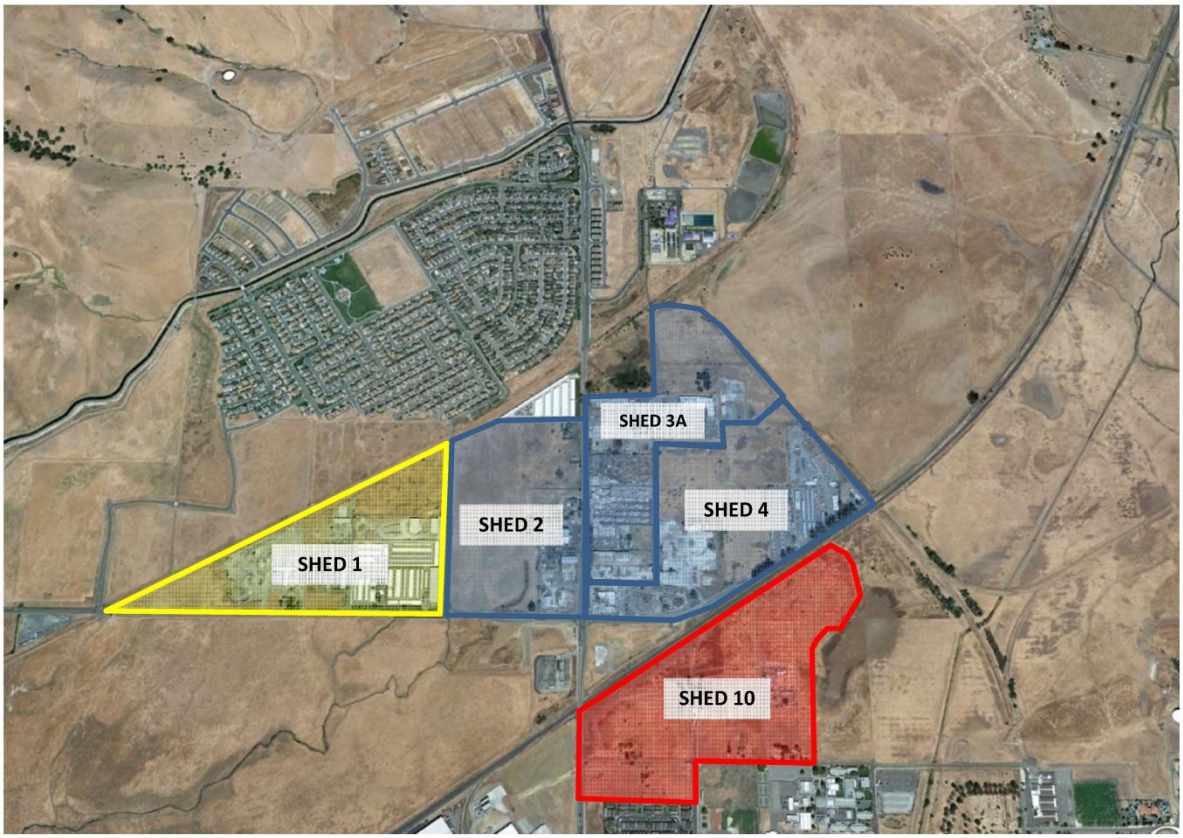
Purpose

The fee will provide the necessary storm drainage facilities for new development in specific storm drainage sheds in the Northeast Area.

Geography

Figure 3 illustrates the geographic areas where storm drain fees will apply. Note that areas to which the fees do not apply either have sufficient drainage capacity or will construct required facilities outside of the fee program.

Figure 3 Storm Drainage Fee Boundaries Map (Illustrative)



Use of Fee

Fee revenue will be used to fund development of new storm drainage basins.

Relationship

New development in the respective storm drainage sheds will increase impervious development and drive the demand for storm water detention and treatment in the specific shed.

Need

Each new development project will include the conversion of uncovered land to impervious land which will create storm water runoff. New storm drainage basins are needed to retain and treat the storm water.

Proportionality

All identified improvements and costs are directly associated with new development in specific storm drainage sheds. Fee levels for development within storm drainage sheds are directly tied to the cost of the required storm drainage facilities with costs allocated between land uses based on expected impervious development.

Sewer and Storm Drainage Fees

Sewer costs across two shed areas (1 and 2) sum to about $4.5 million. Storm drainage basin costs for several shed areas total $9.9 million. These cost estimates are derived based on values from the 2013 Fee Study inflated to 2021 using the Consumer Price Index. **Table 16** provides the cost estimates and allocation factors used for each cost category. Subsequent tables and text describe these factors in more detail. Note that the City does not expect to secure any outside funding for these improvements so all the costs will be allocated to the maximum fee calculation.

Table 16 Sewer and Storm Drainage Program Costs

Improvement Item	Improvement Cost	Allocation Factor[1]
Sewer Systems		
Sewer System Serving Sheds 1 and 2	$1,883,348	Sewer generation factor
Sewer System Serving Shed 2 only	$2,588,629	based on unit size
Total Sewer Systems	**$4,471,977**	
Storm Drainage Basins		
Shed 1 Area Basin	$1,292,000	Impervious acres
Sheds 2, 3A, and 4 Area Basin	$6,367,000	generated by
Shed 10 Area Basin	$2,239,000	development
Total Storm Drainage Basins	**$9,898,000**	

[1] per City of Fairfield in consultation with EPS.

Source: City of Fairfield; CBG; Coastland; Economic & Planning Systems, Inc.

Table 17 reports the maximum fee per unit for sewer facilities, based on a sewer generation factor. As shown, the largest residential category in terms of square footage (RL/RLM) has been assigned the highest sewer factor. This is because these larger units are expected to house more people and people generate sewer demand. The sewer factors were developed by EPS in consultant with City staff. Based on the number of units in Sheds 1 and 2 and the sewer factors, the maximum fee per unit is shown for the system that serves both sheds (Clay Bank bypass sewer and trunk downstream of a new force main). The force main and trunk upstream of the force main costs are also shown allocated to units in Shed 2 only, due to the need for the facility in that area only. The maximum fees for sewer improvements range from $730 to $1,217 in Shed 1 and from $1,981 to $3,301 in Shed 2.

Table 17 Sewer Maximum Fee/Proposed Fee

Facility	Unit Type	Sewer Factor[1]	Shed 1 DUs[2]	Shed 2 DUs[2]	Total Dwelling Units	Sewer Units	Total Costs / Costs per Unit Type[3]	Maximum Fee per DU
Sewer System Serving Both Shed 1 and Shed 2								
	RL / RLM	1.00	133	747	880	880	$1,071,191	**$1,217**
	RM	0.80	215	409	624	499	$607,657	**$974**
	RH	0.60	0	280	280	168	$204,500	**$730**
	Total		348	1,436	1,784	1,547	$1,883,348	
Sewer System Serving Shed 2 Only								
	RL / RLM	1.00	-	747	747	747	$1,556,678	**$2,084**
	RM	0.80	-	409	409	327	$681,854	**$1,667**
	RH	0.60	-	280	280	168	$350,096	**$1,250**
	Total			1,436	1,436	1,242	$2,588,629	
Maximum / Proposed Sewer Fees								
Shed 1								
	RL / RLM							**$1,217**
	RM							**$974**
	RH							**$730**
Shed 2								
	RL / RLM							**$3,301**
	RM							**$2,641**
	RH							**$1,981**

[1] Sewer factors reflect the amount of sewer demand expected for that land use category, relative to other categories. In this table, the RL/RLM category has been assigned a factor of 1.00 and the other development types are assigned factors based on their expected sewer demand relative to the RL category. RM and RH units are smaller on average than those in the RL/RLM category and thus house fewer people, resulting in a lower sewer demand. The factors were developed in consultation with City staff.
[2] City staff provided estimates of the number of Dwelling Units expected in each Shed.
[3] Total Costs from **Table 16** are allocated in this column based on the proportion of Sewer Units attributed to each Unit Type.

Source: City of Fairfield; CBG; Coastland; Economic & Planning Systems, Inc.

Table 18 reports the maximum fee per unit for storm drainage basins, based on the amount of acreage that will become impervious to storm water due to development. Shed areas 1, 2, 3A, 4, and 10 have planned development across about 250 acres. This results in 175 acres of new impervious surfaces that will create storm water runoff. Costs to develop storm water basins are spread across the development types, based on their contributions to the 175 impervious acres. Maximum fees for residential units in these sheds range from $1,837 to $6,225. The maximum fee for commercial uses in shed areas 2, 3A, and 4 is $49,803 per developed acre.

Table 18 Storm Drainage Maximum Fee/Proposed Fee

Area / Development Category	Area (acres)[1]	Percent Impervious[2]	Impervious Acres[3]	Basin Cost[4]	Cost per Impervious Acre[5]	Average Units per Acre[6]	Total Units	Maximum Fee per Unit / per Nonres. Acre[7]
Shed Area 1								
RL / RLM	54.17	60%	32.50			6.0	325	**$3,975**
RM	0.00	70%	0.00			-	0	**$0**
RH	0.00	80%	0.00	$1,292,000	$39,751	-	0	**$0**
Commercial	0.00	80%	0.00			-	0	**$0**
Industrial	0.00	80%	0.00			-	0	**$0**
Total	54.17		32.50				325	
Shed Areas 2, 3A, and 4								
RL / RLM	19.23	60%	11.54			6.0	115	**$6,225**
RM	27.04	70%	18.93			12.0	324	**$3,632**
RH	53.01	80%	42.41	$6,367,000	$62,254	24.0	1,272	**$2,075**
Commercial	36.75	80%	29.40			-	37	**$49,803**
Industrial	0.00	80%	0.00			-	0	**$0**
Total	136.03		102.27				1,749	
Shed Area 10								
RL / RLM	4.00	60%	2.40			6.0	24	**$5,511**
RM	42.04	70%	29.43			10.0	420	**$3,858**
RH	11.00	80%	8.80	$2,239,000	$55,110	24.0	264	**$1,837**
Commercial	0.00	80%	0.00			-	0	**$0**
Industrial	0.00	80%	0.00			-	0	**$0**
Total	57.04		40.63				708	

[1] Area is the total land area anticipated to be developed, by shed and by land use category.
[2] The percent impervious refers to the proportion of the land expected to be developed that is projected to be impervious to storm water (i.e., paved). These percentages were developed in consultation with City staff.
[3] Impervious acres is equal to the number of acres to be developed multiplied by the percent impervious factor.
[4] per **Table 16**.
[5] Basin cost divided by number of impervious acres.
[6] Density estimated by City staff for this geography.
[7] Maximum fee shown is per residential dwelling unit or per commercial/industrial developed acre.

Source: City of Fairfield; CBG; Coastland; Economic & Planning Systems, Inc.

Additional Train Station Specific Plan Capital Improvement Fee

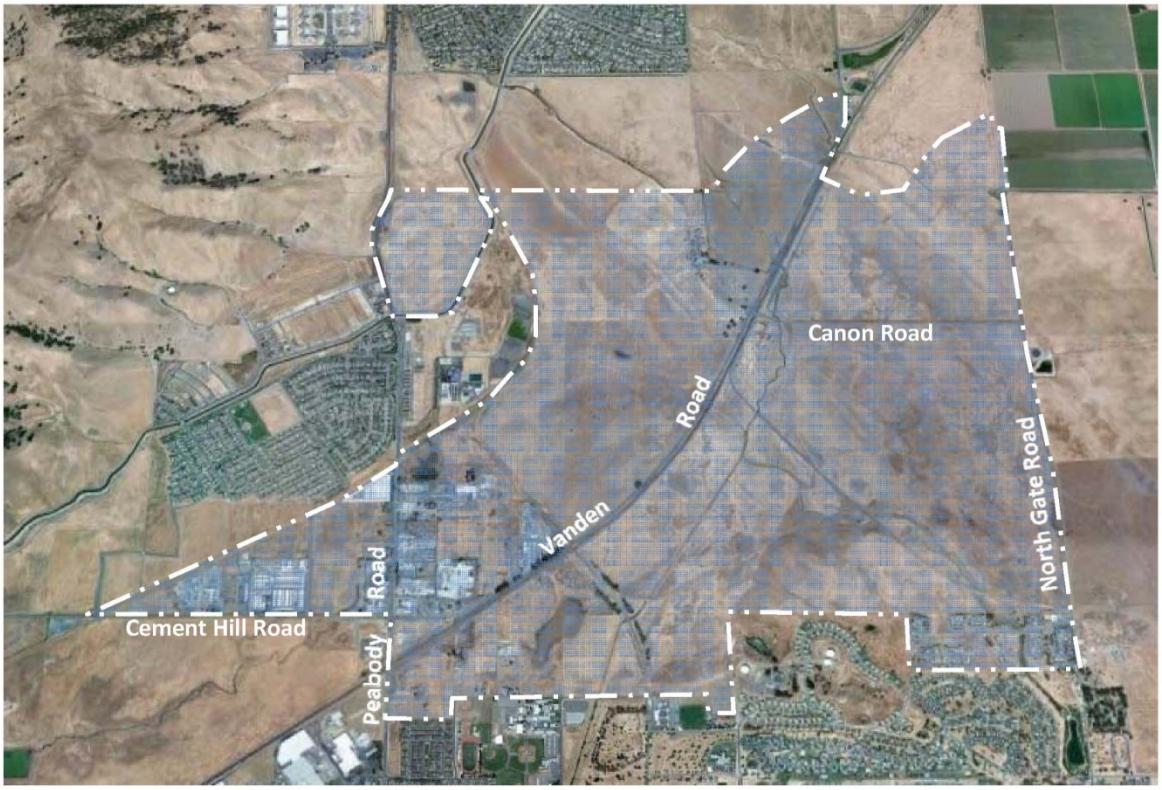
Purpose

The TSSP capital improvement fee will fund a number of public improvements required in the TSSP Area.

Geography

Figure 4 illustrates the Train Station Specific Plan area where the capital improvement fee will apply. These areas are those most benefited by the improvements.

Figure 4 TSSP Capital Improvement Fee Boundary Map (Illustrative)



Use of Fee

Fee revenue will be used to fund a range of public improvements, including a civic boulevard, bridges, and gateways and entries.

Relationship

The new public improvements will serve new TSSP residents.

Need

The public improvements are called for in the TSSP adopted under State law and through substantial community input.

Proportionality

All identified TSSP capital improvements will directly serve new TSSP development. The fee levels are tied to fair share cost allocations to new development based on the population expected to be added through new residential development. New employees are not expected to add significant demand for park facilities.

Additional Train Station Specific Plan Fees

TSSP Capital Improvement Fee

Total capital improvements planned for the Train Station Specific Plan area, as shown in **Table 19,** sum to $8.7 million. There is no other identified funding for these items, leaving a net Specific Plan capital improvement cost of $8.7 million. These remaining costs were allocated to new TSSP residential development based on a persons-per-unit basis. The estimated Specific Plan capital improvement fees are shown in **Table 20.**

Table 19 Additional Specific Plan Capital Improvement Costs

Item	Gross Improvement Costs[1]	Other Funding	Net Costs
Additional Specific Plan Costs			
Capital Improvements			
Civic Boulevard	$1,028,244	-	-
Joseph Gerevas Bridge	$1,850,603	-	-
Train Station Enhancement	$1,176,480	-	-
Neighborhood Center	$294,120	-	-
3 Community Gateways	$1,764,720	-	-
3 Major Neighborhood Entries	$529,416	-	-
4 Minor Neighborhood Entries	$470,592	-	-
Great Park Bike & Ped Bridge over Union Creek	$364,709	-	-
Trunk Sewer Main	$1,176,480	-	-
Total	**$8,655,363**	**$0**	**$8,655,363**

[1] Per 2013 Fee Study values inflated using Consumer Price Index.

Source: City of Fairfield; Economic & Planning Systems, Inc.

Table 20 Additional Specific Plan Capital Improvement Fees

Fee Category / Residential Development Type	Forecasted New TSSP Units	Persons per Unit[1]	Forecasted Population	% Cost Distribution	Cost Allocation[2]	Maximum Fee per Unit
Capital Improvements						
RL/RLM	2,030	3.25	6,598	41.4%	$3,586,534	**$1,767**
RM	1,212	2.89	3,503	22.0%	$1,904,128	**$1,571**
RH	2,301	2.53	5,822	36.6%	$3,164,701	**$1,375**
Total	5,543		15,922	100.0%	$8,655,363	

[1] Persons per Household (PPH) values based on population and housing data from the 2015-2019 American Community Survey 5-year estimates for Fairfield. RL/RLM density has been assigned the average PPH for single family housing in Fairfield while the RH uses are assigned the average PPH for multifamily housing in buildings with 5 or more units in Fairfield. RM uses are assigned an average between RL/RLM and RH.

[2] Total value per **Table 19**, distributed to residential development types via their respective values in the % cost distribution column.

Source: City of Fairfield; Economic & Planning Systems, Inc.

Specific Plan Preparation Costs

Under California Government Code 65456(a), the City can impose a Specific Plan Fee to defray the costs of preparing the Specific Plan and supporting documents. Fee revenue will be used to reimburse the City for expenses incurred during the preparation of the *TSSP* and supporting documentation.

Total Specific Plan and related planning costs, as shown in **Table 21**, sum to $5.5 million. The Cannon Station Development Agreement required a $179,400 contribution to cover commercial and industrial contributions to the Specific Plan preparation costs. These contributions from industrial and commercial development will cover about three percent of these costs, leaving a net Specific Plan preparation cost of $5.3 million. These remaining costs were allocated to new TSSP residential development and based on an estimate of relative land development (using average residential densities). The estimated Specific Plan fees are shown in **Table 22**.

Table 21 Additional Specific Plan Planning Costs

Item	Gross Costs	Other Funding[1]	Net Costs
Additional Specific Plan Costs			
Planning Cost Recovery			
Specific Plan Cost Allowance	$5,176,512	-	-
LAFCO Annexation Allowance	$294,120	-	-
Total	**$5,470,632**	**$179,428**	**$5,291,204**

[1] Per 2013 Fee Study values inflated using Consumer Price Index.
[2] Includes contributions from commercial and industrial new development, per a development agreement with the City.

Source: City of Fairfield; Economic & Planning Systems, Inc.

Table 22 Additional Specific Plan Planning Costs Maximum/Proposed Fee

Fee Category / Residential Development Type	Forecasted New TSSP Units	Average D.U. per Acre[1]	Forecasted Acres Developed	Percent Cost Distribution	Cost Allocation	Maximum Fee per Unit
Capital Improvements						
RL/RLM	2,030	6	338	63.2%	$3,344,848	**$1,648**
RM	1,212	12	101	18.9%	$998,511	**$824**
RH	2,301	24	96	17.9%	$947,844	**$412**
Total	5,543		535	100.0%	$5,291,204	

[1] Dwelling Units per Acre based on City staff estimates.
[2] Total greenbelt costs are based on values from the 2013 Fee Study inflated using the Consumer Price Index.

Source: City of Fairfield; Economic & Planning Systems, Inc.

APPENDIX A:

Traffic Model Detail (Fehr & Peers)

FEHR PEERS

Memorandum

Date:	January 26, 2022
To:	Teifion Rice-Evans and Luke Foelsch, EPS
From:	Ellen Poling and Mackenzie Watten, Fehr & Peers
Subject:	**Fairfield Traffic Impact Fee Program Update – Transportation Analysis**

WC20-3687

Introduction

The purpose of this memorandum is to describe technical work Fehr & Peers prepared in support of Fairfield's updated traffic impact fee. Specifically, this memorandum documents the analytical approach for determining the nexus between the fees and the local transportation impacts created by anticipated development in Fairfield. The memo addresses the steps in the analytical process used to determine nexus, including identification of existing deficiencies, assumptions about existing and future land uses, categorization of transportation improvement projects, modeling procedures, and determination of fair-share contributions from new development. The most up-to-date versions of the available analytical tools and techniques were used to ensure the highest level of consistency with current standards.

Existing Deficiencies

Impact fees are intended to capture the fair-share contributions from new development to cover the costs associated with providing public facilities and services for that development. As such, the fees are not intended to correct existing deficiencies in the public facilities or services. In order to evaluate the current status of the City's transportation system and determine whether there are any existing deficiencies at intersections or along roadway segments included in the fee program, the project team reviewed the most recent transportation studies conducted in the City, including the *Heart of Fairfield Specific Plan EIR* (2017), and requested deficiency information from city staff. This review and consultation indicated that none of the projects in the updated fee program have current deficiencies. Therefore, the nexus analysis for the fee update did not incorporate any existing deficiencies. A description of how deficiency analysis is incorporated into a nexus analysis is included as Attachment A, for information.

Land Use Assumptions

One of the key elements of the impact fee calculation is estimating the growth in land use between now and 2040. The City of Fairfield provided detailed growth forecasts for the entire city that were then allocated into traffic analysis zones (TAZs) in the Fairfield Travel Demand Model.[2]

Table 1 shows the anticipated growth in Fairfield between 2020 and 2040, divided into the two geographic areas of the Northeast Area and the remainder of the City. The definitions of these areas were based on conversations with Fairfield staff to fairly allocate the cost of providing transportation infrastructure to new developments in different parts of the city, and the amounts of growth anticipated in the Northeast Area and in the Rest of the City were provided by City staff. Overall, Table 1 shows that the Northeast Area is expected to add 7,300 new housing units, one million square feet of industrial uses, and about 90,000 square feet of retail and commercial uses. The rest of the city, including the Heart of Fairfield Specific Plan area, is anticipated to add just under 5,000 housing units, about 3.5 million square feet of industrial uses, about 922,000 square feet of retail and commercial uses, and about 440,000 square feet of office and medical office uses.

Table 1: Projected Land Use Growth in Fairfield

Land Use Category	Northeast Area	Rest of City
Single Family Dwelling Units	4,779	1,547
Multi-Family Dwelling Units	2,581	3,430
Retail[1] (1,000 square feet)	19.102	33.704
Office/Medical Office (1,000 square feet)	0	439.681
Service Commercial[1] (1,000 square feet)	70.508	888.241
Industrial (1,000 square feet)	1,000	3,520.192

Note: [1] The Retail category includes high-trip-generating retail uses. The Service Commercial category contains low-trip-generating retail uses, hospitality uses such as hotels, and relatively low-volume services such as auto repair shops.
Source: City of Fairfield, EPS, and Fehr & Peers, March 2021.

In addition to growth within the city, additional growth in the nearby City of Suisun City was also accounted for. These growth forecasts were based on the model adjustments made as part of the Suisun City 2035 General Plan (2015). Also, through trips (that is, trips that pass through Fairfield but do not either begin or end in Fairfield) were estimated using the Fairfield Travel Demand Model.

[2] TAZs are block-sized geographic areas that are used in the Fairfield Travel Demand Model to summarize existing and future land uses. There are approximately 400 TAZs in the model.

Transportation Improvement Projects

The City of Fairfield provided a comprehensive list of transportation improvement projects that are to be included in the updated impact fee program; these projects are listed in **Table 2** (please see the fee program nexus report for the project costs and other details).

Table 2: Transportation Improvement Projects for Inclusion in Fee Program

Project	Description/Scope
Interchange Projects	
I-80/SR 12 at Red Top Road/Business Center Drive	Interchange
I-80 at Green Valley Road	Interchange
I-80 at Suisun Valley Road	Interchange
Roadway Improvement Projects	
Manuel Campos Parkway	Dover Street to Peabody Road
Vanden Road	Peabody Road to Fairfield City Limits
Peabody Road	Air Base Parkway to Vanden Road
New Canon Road	Vanden Road to North Gate Road
McCrory Road Extension	New Canon Road to McCrory Road
West Texas Complete Streets	Beck Avenue to Pennsylvania Avenue
Intelligent Transportation Systems	N/A
Intersection Improvement Projects	
Air Base Parkway at Walters Road	N/A
Air Base Parkway at Clay Bank Road	N/A
Air Base Parkway at Dover Avenue	N/A
New Signals	N/A
Signal Upgrades	N/A

Source: City of Fairfield, 2012.

Modeling Procedures

The Fairfield Travel Demand Model was updated as part of this work to reflect the 2020 land uses and network for the base year, in collaboration with City staff. The 2040 model was developed to include the land use growth and network improvements described above. Details about the travel demand forecasting model's structure, assumptions, and limitations are described in the *City of Fairfield Travel Demand Forecasting Model: Final Model Development Report* (Fehr & Peers, 2011).

The travel demand forecasting model was run for the 2020 and 2040 scenarios to determine the share of growth in traffic volumes on all of the transportation facilities listed in Table 2 that is attributable to new development in Fairfield. The projects were divided into two sections: those that would be part of the Northeast Fee area, and those that would be part of the Citywide Fee area; please refer to the fee program nexus report for more information on the distinction between these two fee programs.

For those projects that are to be included in the Northeast Fee area, shown in **Table 3**, the travel model was used to determine the proportionate share of traffic usage on those facilities that was generated by new growth in the Northeast Area versus new growth in the rest of the City. It is important to note that the Northeast Area is currently relatively undeveloped, so the future infrastructure improvements are primarily planned to serve new growth in that area. As noted above, existing deficiencies were also considered, but no information on existing deficiencies was provided as part of this analysis. The projects in the Northeast Fee area had varied percentage share results between the Northeast area development and citywide development. Overall the findings support the retention of the uniform split of two-thirds (67%) Northeast Fee and one-third (33%) Citywide Fee to all of the projects listed in Table 3, consistent with the findings for the 2013 fee nexus study.

Table 3: Northeast Fee Area Projects and Trip Percentages

Project Location	Description	Percentage Share Attributable to:		
		NE Fee Area	City Fee Area	Existing Deficiency
Roadway Improvement Projects				
Manuel Campos Parkway	Dover Street to Peabody Road	67%	33%	0%
Vanden Road	Peabody Road to Fairfield City Limits	67%	33%	0%
Peabody Road	Air Base Parkway to Fairfield City Limits	67%	33%	0%
New Canon Road	Vanden Road to North Gate Road	67%	33%	0%
McCrory Road Extension	New Canon Road to McCrory Road	67%	33%	0%

Source: Fehr & Peers, 2012

For those projects that are to be included in the Citywide fee program, shown in **Table 4**, the travel model was used to determine the proportionate share of traffic usage on those facilities generated by new growth in the City and growth from outside of Fairfield. Because these percentage share results varied quite widely between different projects, it was decided to use the results in Table 4 directly for each individual project. Please refer to the fee program nexus report for more detail on how these percentage shares were applied in the fee calculations.

Table 4: Citywide Fee Area Projects and Trip Percentages

Project Location	Description	Percentage Share Attributable to:		
		Citywide Growth	Existing Deficiencies	Growth from Outside Fairfield
Interchange Projects				
I-80/SR 12 at Red Top Road	Interchange	65%	0%	35%
I-80 at Green Valley Road	Interchange	98%	0%	2%
I-80 at Suisun Valley Road	Interchange	100%	0%	100%
Roadway Improvement Projects				
West Texas Complete Streets	N/A	97%	0%	3%
Intelligent Transportation Systems	N/A	100%	0%	0%
Intersection Improvement Projects				
Air Base Parkway at Walters Road	N/A	72%	0%	28%
Air Base Parkway at Clay Bank Road	N/A	89%	0%	11%
Air Base Parkway at Dover Avenue	N/A	83%	0%	17%
New Signals	N/A	100%	0%	0%
Signal Upgrades	N/A	100%	0%	0%

Source: Fehr & Peers, March 2021

Trip Generation Equivalents

Impact fees are charged to a wide range of land use types, and there must be a mechanism by which the different land uses are treated equitably with respect to the burden each places on the transportation system. A common method to determine an equitable distribution of fees across land use types is by taking account of the trip generation rates and percentages of pass-by trips attributable to different land uses.

For the purposes of this evaluation, trip generation rates from the Institute of Transportation Engineers' *Trip Generation Manual, 10th Edition* were used to apportion the relative trip contribution potential of different land uses. **Table 5** shows the PM peak hour trip generation rate for each land use category, as well as the percentage of new trips (as opposed to "pass-by" trips which are made opportunistically during a primary trip between origin and destination) attributable to each category from a commonly-accepted reference document on this subject, the San Diego Association of Governments *Brief Guide of Vehicular Traffic Generation Rates* (April 2002). These figures are multiplied together to determine the number of new trips per unit of

development for each of the standard land use categories (per dwelling unit for residential uses, and per thousand square feet for non-residential uses).

Table 5: Calculation of Trip Generation Equivalents by Land Use Category

Land Use	Unit[1]	PM Peak Hour Trip Rate[2] (a)	% New Trips[3] (b)	New Trips per Unit (a * b)
Single-Family Residential	DU	1.00	100	1.00
Multi-Family Residential	DU	0.56	100	0.56
Retail	KSF	20.76	50	10.38
Office / Medical	KSF	2.33	70	1.63
Service Commercial	KSF	4.04	50	2.02
Industrial	KSF	0.41	85	0.35

Notes:
DU = dwelling unit; KSF = thousands of square feet.
ITE, Trip *Generation, 10th Edition*. Rates referenced include: Single Family (Use 201); Multi-Family (Use 221); Retail (Use 820); Service Commercial (Uses 820, 848 and 857); Office/Medical Office (Uses 710 and 720); Industrial (Uses 110 and 150).
SANDAG Brief Guide of Vehicular Traffic Generation Rates, April 2002.
Source: Fehr & Peers, March 2021.

Note that, for development in the Heart of Fairfield Specific Plan area, the dwelling unit equivalents were reduced by 12 percent to reflect the analysis conducted for that Specific Plan EIR, which indicated that the density and mixed-use characteristics of the Specific Plan development would reduce external vehicle trip making by 12 percent; i.e., those trips would be made by bus, walking of bicycling.

Conclusions

This memorandum summarizes the key technical approaches used to allocate the cost of the transportation improvements to the new development in the City of Fairfield. A method was presented to demonstrate a nexus between transportation projects and impact fees in the City. In addition, trip rates were calculated to assist in equitably distributing fees across land use categories. Application of the methodologies described in this memorandum will ensure that the transportation project costs are equitably distributed to different types of development in relation to their relative demands on the transportation system.

Attachment

A – Existing Deficiency Process in Nexus Studies

ATTACHMENT A: EXISTING DEFICIENCY PROCESS IN NEXUS STUDIES

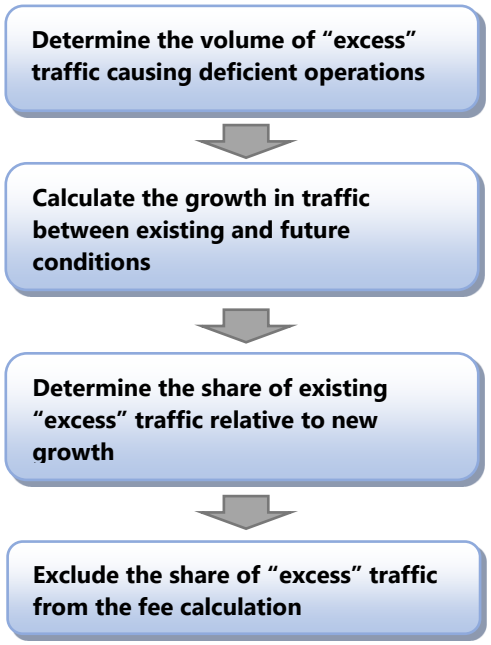
Note: This overview references the current Fairfield General Plan (2002), because the General Plan Update had not started when the Fairfield Fee Update work was performed. As stated in the memorandum, no existing deficiencies were identified for this fee update cycle.

Impact fees are intended to capture the fair-share contributions from new development to cover the costs associated with providing public facilities and services for that development. As such, the fees are not intended to correct existing deficiencies in the public facilities or services. The following process describes how existing deficiencies are identified and extracted from the proportional share calculations in a nexus analysis.

To measure and describe the operational status of the local roadway network, transportation engineers and planners commonly use a grading system called level of service (LOS). Level of service is a description of a facility's operation, ranging from LOS A (indicating free-flow traffic conditions with little or no delay) to LOS F (representing over-saturated conditions where traffic flows exceed design capacity, resulting in long queues and delays).

The City's General Plan (June 2002) contains policy direction about what constitutes acceptable operations on the City's street network. The policy direction states that it is the City's desire to "maintain a PM peak hour level of service of 'D' or better for arterial streets, level of service 'C' or better for collector streets, and 'B' or better for local streets..." Given that the focus of the traffic impact fee is on arterial streets, the existing deficiency assessment would be based on the LOS D standard.

If an existing deficiency is identified, a methodology to account for the deficiency within the nexus calculation is applied. The basic elements of the existing deficiency calculation are summarized in the flowchart below.



As shown in the flowchart on the preceding page, at project locations where there is an existing deficiency, the number of "excess" trips that causes the intersection to operate at LOS E or F is calculated. The Synchro traffic operations software is typically used for excess traffic calculation. This number of excess trips is next added to the total number of new trips associated with land use growth between the base year and the forecast year at the subject location. Next, the share of existing deficiency traffic relative to new traffic growth is calculated. This existing deficiency traffic share is then excluded from the traffic impact fee so that new growth is not subject to paying for existing traffic deficiencies.

To help put the methodology described above into perspective, consider the following examples. In locations where there is no existing deficiency, all of the new development trip growth is allocated to the fee and therefore the entire project cost is attributable to new development (with the exception of any through trips). At locations with existing deficiencies, the existing deficiency share of new traffic growth is applied to the project cost and excluded from the fee. The graphic below uses a hypothetical example to demonstrate how the existing deficiency share is calculated.