



# Update of Elk Grove Roadway Fee Program Draft Nexus Report: September 2022



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## **EXECUTIVE SUMMARY**

### **BACKGROUND**

The City of Elk Grove (City) approved its first Roadway Fee Program on December 1, 2003. The City adopted updates of the Elk Grove Roadway Fee Program (EGRFP) in 2005, 2009, and, most recently, in the 2014 Nexus Study Update. This 2022 update (2022 Nexus Study) updates the 2014 Nexus Study, including changes to roadway facilities and improvements (based upon the 2019 Comprehensive General Plan Update), updated construction cost estimates, refinements in the cost allocation methodology, and changes to State regulatory frameworks for impact fees and traffic impact analysis.

This 2022 Nexus Study provides the City with the necessary technical documentation and required findings to support adoption of the updated EGRFP, which will apply to future development in the City. After discussing the nexus between new development and the facilities needed to serve the new development, this report presents transportation facilities and cost estimates, as well as the methodology for allocating program costs to future development, and steps through the procedure leading to the maximum justifiable impact fee that may be levied for each land use based on the proportionate share of the traffic impact of each land use.

### **PURPOSE OF THE ELK GROVE ROADWAY FEE PROGRAM**

This 2022 Nexus Study documents the relationship between new development in Elk Grove and the cost of transportation facilities to serve projected growth in the current (2022) City limits. The 2022 Nexus Study also presents the cost estimates of transportation facilities necessary for growth and the updated impact fees by land use type that would generate revenues equal to these costs.

As do most municipalities in California, the City requires new development to pay impact fees to fund the facilities necessary to serve the new development. For the past several decades, since the passage of Proposition 13 and other State fiscal measures that have reduced local revenues, most local revenue sources, such as property tax and sales tax, are used primarily for operations and maintenance and have not been a reliable source for capital funding. Federal and state assistance has not replaced the decline in local revenue sources. These funding shortfalls have been a significant contributing factor in declining facility standards (i.e., the ratio of facility capacity to service population), which has accelerated the rate of physical deterioration, increased operating costs, and reduced the efficiency of existing facilities and departments. Given these funding difficulties and in the face of continued growth, most California cities and counties have adopted impact fee programs to provide the necessary funding for the capital facilities needed to serve growth.

The Elk Grove Roadway Fee is authorized by the Mitigation Fee Act; as such, the Roadway Fee may only be charged to new development and must be based on the impact that new development will have on the transportation infrastructure. The purpose of the 2022 Nexus Study is to update the nexus (or reasonable relationship) between new development that occurs in the City and the need for additional roadway improvements and facilities as a result of this new development. This EGRFP update is based on the goals identified in the City's 2019 General Plan and the latest traffic model output.

This 2022 Nexus Study includes roadway improvements required to meet the transportation performance targets as growth occurs.

**UPDATES IN THE 2022 EGRFP**

The 2021 traffic model conducted for the EGRFP indicated road segments, intersections, and other components of the transportation network to be included in the EGRFP in order to conform to the General Plan's goals, policies, and Roadway Sizing Diagram. **Appendix A** includes the complete descriptions for road segments, bridges and culverts, intersections, highway and urban interchanges, auxiliary lanes, and rural roadways.

This 2022 Nexus Study also includes changes to impact fee regulatory requirements:

- Senate Bill (SB) 743 (Steinberg, 2013) shifted traffic impact analysis from level of service to vehicle miles traveled (VMT) as the key metric in measuring the impacts of development projects on the transportation network. As a result of the legislation, and recent implementation practices, project developers will now have to reduce VMT to mitigate significant transportation impacts. This update of the EGRFP conforms to SB 743 by allocating costs in rough proportion to the VMT generated by each unit of development. Incorporation of VMT as the impact metric is consistent with General Plan policies and the City's Climate Action Plan. Note, however, the EGRFP is not a VMT mitigation fee.
- Assembly Bill 602 (Grayson, 2021) requires the payment of impact fees on residential development to be based on the floor area of new housing rather than simply per unit. The 2022 Nexus Study divides the fee schedule for residential housing into the 8 floor area categories listed below, which includes two new categories of senior adult residential. Multifamily projects, depending upon size, are generally included in the "up to 1,200 sq. ft." category.

Traditional (includes both single and multi- family units)	Up to 1,200 sq. ft.
	greater than 1,200 to 1,400 sq. ft.
	greater than 1,400 sq. ft. to 1,700 sq. ft.
	greater than 1,700 sq. ft. to 2,000 sq. ft.
	greater than 2,000 sq. ft. to 2,700 sq. ft.
	greater than 2,700 sq. ft. to 3,400 sq. ft.
	greater than 3,400 sq. ft.
Senior Adult	greater than 1,000 sq. ft.
	Up to 1,000 sq. ft.

In addition to the above categorization of residential, the following changes were made to the land use categories:

- Auto Mall rate updated with local data and based upon acreage of project, rather than building size, as the site acreage is a better reflection of traffic generation since the retail stock is stored outdoors.
- Updated listing for gas stations and theaters, with theaters listed by seat, rather than screen.
- New listing for hospitals.

Other changes to the EGRFP include:

- Separate fees for transit-oriented development (TOD) are not included in the 2022 Nexus Study. There are no high-quality transit facilities (as that term is defined by the State) and, therefore, no direct benefit in trip reduction that would reduce the impact fee obligation of a development project.
- Fee schedules have been combined into one Citywide zone. All infrastructure that was contemplated in the prior community facilities districts (CFDs) that were the basis for the fee zones has been completed, all bonds have been repaid, and the CFDs are no longer on the tax roll.
- The Elk Grove Trails Master Plan, including bike paths and pedestrian trails, has been moved from the EGRFP to a separate impact fee component, and covered under a separate nexus study.

**HOUSING AND EMPLOYMENT FORECASTS**

This 2022 Nexus Study analyzes the growth in land use to a point in time when that land use as described in the General Plan has occurred. This future date is referred to as “Build Out”. A specific date in time is not identified in this report; rather it is an anticipated state that would occur at some point in the future, likely 20 years or more from the date of this Nexus Study. The build out state is based upon the General Plan land use designations established for properties that are within the City limits as of the date of this Study. This Study does not include any areas that are within the City’s Sphere of Influence but not within the City limits, or other lands outside the City limits but that are within the General Plan Planning Area, as that area is established in the General Plan.

**Table ES-1** shows the estimated existing, or Base Year (as of January 2022), level of development and Build Out housing and jobs (number of people who are employed in jobs located in Elk Grove, as opposed to the City residents who are employed) compared with City of Sacramento and Sacramento County.

**Table ES-1: Housing and Employment Projections**

Jurisdiction	Base Year		Build Out		Growth	
	Households	Jobs	Households	Jobs	Households	Jobs
Region	921,100	1,063,600	1,187,400	1,364,300	266,300	300,700
<b>City of Elk Grove<sup>1</sup></b>	<b>53,700</b>	<b>47,400</b>	<b>72,800</b>	<b>93,800</b>	<b>19,100</b>	<b>46,400</b>
City of Sacramento	194,500	308,700	268,000	365,000	73,500	56,300
Sacramento County	570,400	688,500	724,900	839,900	154,500	151,400

Source: Fehr & Peers, 2022.

<sup>1</sup>The EGRFP includes more growth in the City than assumed in SACOG’s Metropolitan Transportation Plan/Sustainable Communities Strategy. Therefore, region totals were adjusted based on the difference in City of Elk Grove growth.

**Jobs-to-Housing Ratio**

A comparison of jobs-to-housing ratios in the Sacramento region is presented in **Table ES-2**. The City currently has a jobs-to-housing balance that is below the regional balance (0.88 versus 1.15). Consequently, many workers must travel outside of the City for employment. However, planned growth (e.g., in growth areas including the Southeast Policy Area) is anticipated to result in more

employment in the City at levels greater than the regional average. This shift is anticipated to translate into Elk Grove having more jobs for residents and becoming a net importer of workers rather than an exporter. The regional jobs-to-housing balance is expected to remain the same in the base year and Build Out at 1.15. The changing jobs-to-housing ratio is reflected in the travel demand model, which predicts the origin and destination of future trips that are generated within the region.

**Table ES-2: Jobs-to-Housing Ratios**

Jurisdiction	Base Year	Build Out
Region	1.15	1.15
<b>City of Elk Grove</b>	<b>0.88</b>	<b>1.29</b>
City of Sacramento	1.59	1.36
Sacramento County	1.21	1.16

Source: Fehr & Peers, 2022.

**Table ES-3** summarizes land use growth for the City of Elk Grove, stated in terms of total households, school and college enrollment, and retail, service, and industrial employment.

**Table ES-3: Household, Enrollment, and Employment Growth**

Land Use	Scenarios		
	Base	Build Out	Growth
Households	53,698	72,782	19,084
Enrollment			
K through 12	38,648	52,383	13,735
College	300	300	0
Employment			
Education	3,333	4,518	1,185
Food	3,466	5,788	2,322
Government	1,184	2,778	1,594
Office	8,840	20,926	12,086
Other	90	90	0
Retail	8,105	17,243	9,138
Service	4,148	16,186	12,038
Medical	5,816	8,816	3,000
Industrial	12,419	17,445	5,026
Total Employment	47,401	93,790	46,389

**FUNDS NEEDED TO COMPLEMENT FEE PROGRAM**

The City completed an inventory of roadway improvement projects that would be necessary to implement the General Plan Roadway Sizing Diagram and provide safe and efficient use of the roadway in the City. Over \$1.047 billion in improvements were identified. Of these, approximately \$702.9 million were identified as relating to new development. The City estimates that it can reasonably expect to receive approximately 36 percent in third-party funding, or about \$255.5 million. Third-party funding sources are described in Chapter 3 under "Other Funding Sources." The remainder of the cost, \$447.4 million, is allocated as fee revenue that will be collected from new development as its fair share of the program cost. These costs are summarized in **Table ES-4**.

**Table ES-4: EGRFP Share of Total Cost by Type of Facility**

Transportation Facility Type	Full Cost Estimate (A)	Included in Program (B)	Deducted Cost Scenario		
			EGRFP Funding (C)	Percent Third-Party Funding (D = 100-C)	EGRFP Funded Cost (E = B*C) *
Roadway Segments	\$287,389,983	\$287,389,983	64.8%	35.2%	\$186,239,125
Roadway Intersections	\$221,318,041	\$221,318,041	79.7%	20.3%	\$176,412,778
Bridges/Culverts	\$23,878,964	\$23,878,964	100.0%	0.0%	\$23,878,964
Auxiliary Lanes	\$16,762,500	\$16,762,500	100.0%	0.0%	\$16,762,500
RR Grade Separations	\$363,591,000	\$41,668,000	38.4%	61.6%	\$15,998,380
Interchanges	\$134,300,000	\$111,900,000	25.2%	74.8%	\$28,143,000
<b>TOTAL</b>	<b>\$1,047,240,488</b>	<b>\$702,917,488</b>	<b>63.7%</b>	<b>36.3%</b>	<b>\$447,434,747</b>

\* Totals do not match due to rounding

PROPOSED EGRFP FEE SCHEDULE

Tables ES-5 summarizes the proposed schedule of EGRFP impact fees for each land use category based on the analysis in the 2022 Nexus Study. These fees include a 5.5 percent administrative fee, discussed in further detail in Chapter 4.

**Table ES-5: Proposed EGRFP Fees**

Land Use		Unit	EGRFP Fees
Residential	Traditional	Up to 1,200 sq. ft.	\$3,860.99
		greater than 1,200 to 1,400 sq. ft.	\$7,345.30
		greater than 1,400 sq. ft. to 1,700 sq. ft.	\$8,098.66
		greater than 1,700 sq. ft. to 2,000 sq. ft.	\$9,417.05
		greater than 2,000 sq. ft. to 2,700 sq. ft.	\$10,358.75
		greater than 2,700 sq. ft. to 3,400 sq. ft.	\$11,017.94
	Senior Adult	greater than 3,400 sq. ft.	\$11,677.14
		Up to 1,000 sq. ft.	\$2,542.60
Commercial	Shopping Center	Square Feet	\$8.66
	Auto Mall	Acres	\$23,448.44
	Gas Station w/Convenience Market	Fueling Positions	\$11,865.48
	Theater/Cinema	Seats	\$94.17
Office		Square Feet	\$9.13
Industrial		Square Feet	\$3.39
Hotel	Hotel/Motel	Rooms	\$1,412.56
Miscellaneous	Hospital	Beds	\$8,757.85
	Assembly	Square Feet	\$3.48
	Day Care Center	Square Feet	\$13.28
	Congregate Care Facility	Dwelling Units	\$941.70
	Assisted Living	Beds	\$1,224.22
	Private School (K-12)	Student	\$1,318.39

CURRENT EGRFP FEE SCHEDULE

The current EGRFP fee rate schedule is shown in **Table ES-6**. The rates are based on the 2014 Nexus Study and have been escalated automatically since adoption.

**Table ES-6: Current EGRFP Fees**

Land Use Category	Zone 1 (Elk Grove)	Zone 2 (Laguna)	Zone 3 (Laguna West)	Zone 4 (Lakeside)	Zone 5 (Stonelake)	Fee Application
RESIDENTIAL						
Single-Family (1 - 2 units)	\$11,247	\$9,443	\$8,230	\$5,825	\$10,993	per unit
Single-Family, Age-Restricted	\$4,358	\$3,740	\$3,458	\$2,733	\$4,285	per unit
Single-Family TOD <sup>1</sup>	\$10,124	\$8,496	\$7,410	\$5,245	\$9,892	per unit
Multifamily (3+ units attached)	\$7,815	\$6,393	\$5,736	\$4,076	\$7,642	per unit
Multifamily, Age-Restricted	\$4,343	\$3,723	\$3,441	\$2,718	\$4,267	per unit
Multifamily, TOD	\$5,860	\$4,790	\$4,301	\$3,055	\$5,731	per unit
COMMERCIAL						
General Commercial	\$10.18	\$7.36	\$7.06	\$3.22	\$9.89	per sq. ft.
Commercial TOD	\$9.63	\$6.92	\$6.66	\$3.01	\$9.34	per sq. ft.
Car Sales (new and used)	\$12.75	\$9.68	\$9.41	\$5.31	\$12.41	per sq. ft.
OFFICE						
Office	\$9.68	\$6.93	\$7.61	\$3.58	\$9.41	per sq. ft.
Office TOD	\$8.68	\$6.23	\$6.85	\$3.21	\$8.46	per sq. ft.
INDUSTRIAL	\$6.93	\$5.54	\$5.50	\$3.81	\$6.78	per sq. ft.
INSTITUTIONAL						
Assembly Use	\$6.81	\$5.69	\$4.95	\$3.54	\$6.68	per sq. ft.
Day/Child Care	\$25.24	\$21.21	\$18.52	\$13.13	\$24.81	per sq. ft.
Private School (K-12)	\$9.34	\$7.84	\$6.85	\$4.84	\$9.18	per sq. ft.
MISCELLANEOUS						
Gas Station	\$13,601	\$10,514	\$10,224	\$6,083	\$13,332	per fueling
Hotel /Motel	\$4,924	\$4,707	\$3,426	\$1,596	\$4,797	per room
Congregate Care	\$0.97	\$0.80	\$0.73	\$0.50	\$0.95	per sq. ft.
Health Club	\$6.71	\$5.61	\$4.93	\$3.47	\$6.60	per sq. ft.
Library	\$4.65	\$3.90	\$3.40	\$2.37	\$4.56	per sq. ft.

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## 1. INTRODUCTION

This 2022 Nexus Study presents an analysis of the transportation facilities needed to accommodate new development in Elk Grove and the use of development impact fees to fund the construction of these facilities. This chapter provides a brief overview of the use and practice of impact fees in California. This chapter also describes how the EGRFP was developed and applied to the future development projected in Elk Grove.

### TRANSPORTATION FINANCING IN CALIFORNIA

The changing fiscal landscape in California over the past four decades has steadily undercut the financial capacity of local governments to fund infrastructure needed for growth. Three dominant trends stand out:

- The passage of a string of tax limitation measures, starting with Proposition 13 in 1978 and continuing through the passage of Proposition 218 in 1996
- Declining popular support for bond measures to finance infrastructure for the next generation of residents and businesses
- Steep reductions in federal and state assistance

Faced with these trends and State and local legislation, cities and counties have had to shift the burden of funding infrastructure expansion from existing rate- and taxpayers to new development. This funding shift has been partly accomplished by the imposition of development impact fees, also known as public facility, capital facility, or mitigation fees. A key advantage of this approach in an era of voter approval requirements is that impact fees are not taxes and are thus exempt from the requirements of Proposition 218, needing only a majority vote of the legislative body for adoption.

In most local agencies that have implemented impact fee programs, new development pays close to the full cost required to ensure a funding source for the necessary infrastructure as growth occurs. If local agencies do not collect the full amount, the effect is often a decline in facility standards, though some communities are able to increase other revenue sources to compensate.

### STATUTORY AUTHORITY FOR THE EGRFP

In California, cities and counties rely on their authority to levy impact mitigation fees under the police powers granted by the California Constitution pursuant to the procedures of the Mitigation Fee Act, contained in Government Code Section 66000 et seq. The 2022 Nexus Study provides the necessary documentation for the City to adopt updated impact mitigation fees to fund the fair share cost of future development.

### EGRFP DEVELOPMENT PROCESS

The process for updating the EGRFP begins with an updated land use forecast based on regional housing and employment projections discussed in Chapter 2—Land Use Growth Assumptions. Using a travel demand model, the forecasted growth in land use is converted to VMT, based on rates for each land use type. The projected future travel on roadways is then compared with the

City's transportation performance targets to determine which roadways are adequate and which need improvement to meet the needs of the projected growth.

The transportation improvements are categorized into the following types of facilities:

- Roadways
- Intersections
- Bridges and Culverts
- Railroad Grade Crossings
- Highway/Urban Interchanges
- Auxiliary Lanes

In total, the 2022 EGRFP includes 165 transportation improvements projects.

The next step in the process is developing construction cost estimates for each project. Chapter 3 provides details on EGRFP costs.

#### PLAN-BASED COST ALLOCATION

The final step in the process is allocating the transportation facility improvements costs to future development. The EGRFP incorporates a plan-based fee methodology whereby the costs of planned future roadway facilities are allocated to future development based on the expected travel on the roadways generated by the future development.

The 2022 Nexus Study report outlines the methodology to allocate the costs of future roadway facilities on a basis proportionate to each future land use category's relative benefit received from such facilities.

#### TRAVEL DEMAND MODEL

The transportation improvements needed to serve future development in the City were determined through traffic forecasts generated by the City's travel demand model, which is a focused version of the Sacramento Area Council of Governments' (SACOG) SACSIM 2015 travel demand model. The City and its traffic consultant, Fehr & Peers, have periodically updated the traffic modeling to reflect revised inputs. The traffic forecasts for this 2022 Nexus Study reflect the most up-to-date assumptions on future development and the future transportation system.

The EGRFP project list includes new roadway facilities or improvements to existing facilities that are needed to accommodate greater traffic volumes because of new development, aligning the roadway sizing with the policies of the General Plan.

The EGRFP primarily funds the construction of center lanes and medians for the City's arterial roadways. However, in certain, very limited circumstances, funding for roadway frontage improvements is included to comply with the General Plan policy of avoiding "zipper streets" where the number of travel lanes and/or the existence of bike lanes and sidewalks changes in the middle of a roadway segment, a change that can negatively affect safety.

TRANSPORTATION PERFORMANCE TARGETS

A key objective of the EGRFP is achievement of the policy goals of Elk Grove's General Plan. Policies MOB-1-2 and MOB-1-3 include roadway performance targets (RPTs) that are reflected in **Figure 1: Transportation Network Diagram** (Figure 3.7 of the General Plan).

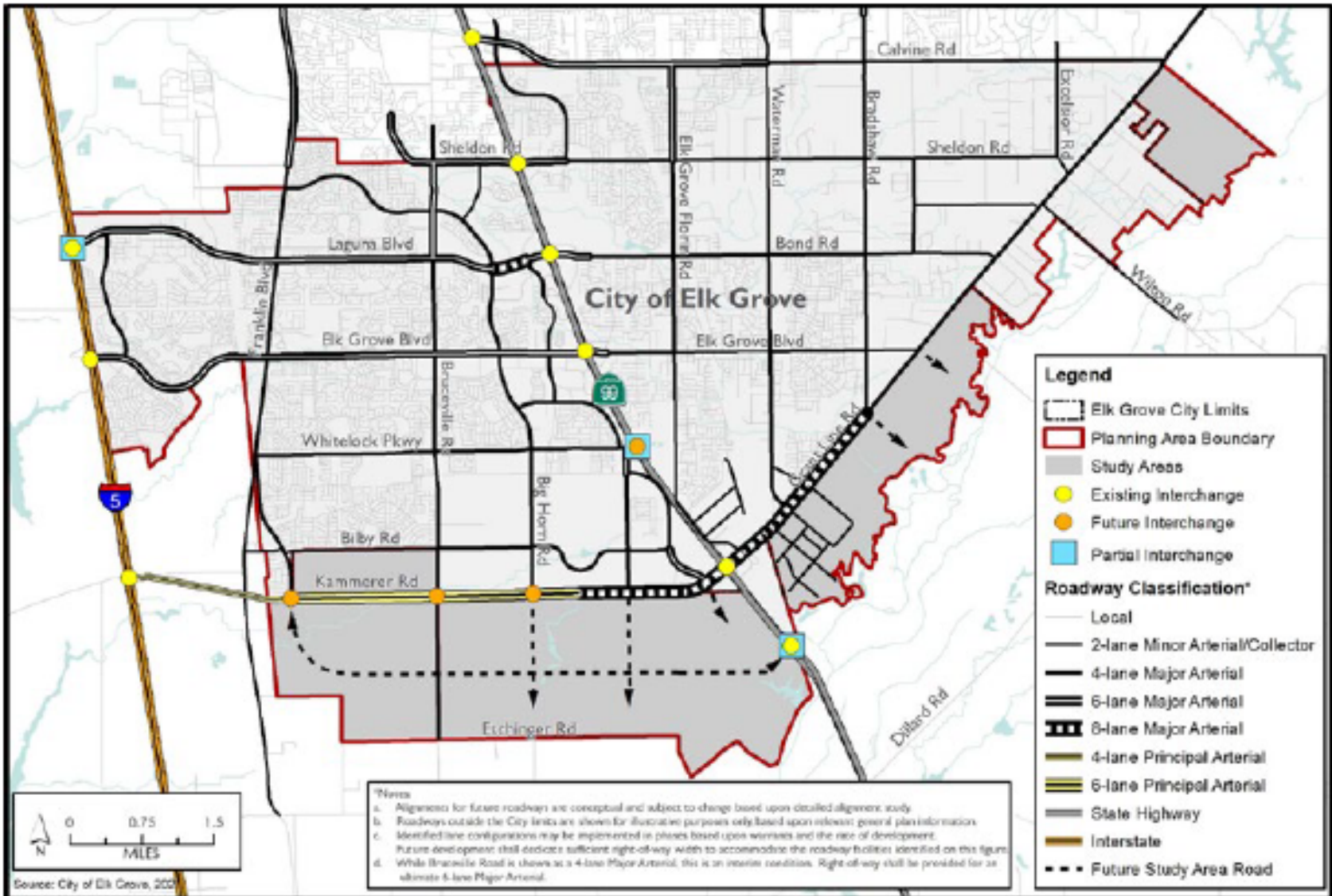


Figure 1 – General Plan Transportation Network Diagram

The RPTs provide guidance for intersection operations and road segment traffic design capacities and apply to major roadways (collectors, arterials, expressways, and freeways) and associated intersections. The RPTs also apply to pedestrian and bicycle mobility.

The objective of the EGRFP is to implement RPT policies by establishing a fee program that collects the appropriate share of funding from new development needed to construct roadway and intersection improvements necessary to meet the applicable performance targets. The transportation performance targets are outlined in Chapter 4.

#### **PRINCIPLE OF IMPACT FEE NEXUS STUDIES**

The fundamental impact fee principle is that future land developers cannot be required to shoulder the entire burden of achieving the performance targets of those transportation facilities that are shared by existing traffic or future traffic with an origin or destination outside Elk Grove's City limits. The costs of improvements that are shared in this way must be adjusted so that developers pay only a fair share of the costs. The fees proposed for the 2022 Nexus Study are adjusted to conform to the impact fee principle.

#### **ORGANIZATION OF THE REPORT**

As indicated above, Chapter 2 presents the land use growth assumptions used for the 2022 EGRFP Nexus Study. Chapter 3 presents the transportation improvements, the improvement project cost estimates, and criteria for including projects in the EGRFP. Chapter 4 outlines the process of allocating the cost of the improvements to new development and calculating the fee.

Chapter 5 provides the nexus findings needed to adopt the updated EGRFP fees. Finally, Chapter 6 summarizes the fee implementation procedures and recommendations for the ongoing administration of the fee. The recommendations are provided to ensure compliance with the Mitigation Fee Act and that fees are updated in the future for construction cost inflation, a change in the standards, or changes in development assumptions.

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## 2. LAND USE GROWTH ASSUMPTIONS

### INTRODUCTION

Estimates of future development in the 2022 Nexus Study area are key variables used to: 1) determine roadway facility requirements needed to achieve RPT as future development occurs; and 2) calculate EGRFP fee rates. The future development assumptions used in this 2022 Nexus Study represent the projected growth anticipated through buildout of the land uses identified in the City General Plan (comprehensively updated February 2019/last amended December 2021). This 2022 Nexus Study is based on the latest development assumptions for existing and future land uses within the current City limits.

The estimates of the growth in development were based on the following:

- The estimate of existing development in the 2014 Nexus Study was updated to 2022 conditions, which is based upon building permit activity on an annual basis as report by the City's Development Services Department.
- Assumed General Plan buildout development level densities for residential development and floor area assumptions for nonresidential were used for the purpose of apportioning costs to all land use categories.
- For approved development projects and those development projects that have applications pending for development, the planned residential units or nonresidential square footages were included as part of the General Plan buildout assumptions.

### LAND USE

#### Land Use Categories

Measuring the impact of growth on the transportation network requires the definition of a series of land use types that best represent the growth in land development forecast over the study period. Land uses are expressed in dwelling units for residential uses and square feet of floor area for nonresidential uses. The actual number of residential units and floor area for each nonresidential use can only be estimated based on expected population and employment growth for residential and nonresidential development, respectively. The population and employment projections provide the basis for a high-level estimate of the future absorption of new housing and nonresidential floor area.

When conducting a traffic impact analysis of specific land development proposals, the analysis is based on the travel demand characteristics of the proposed project. These characteristics include the number of daily trips generated (outgoing and incoming), percentage of trips occurring during the morning and afternoon peak periods, the length of trips, and the percentage of trips that are primary, diverted, or pass-by. For a macro-level analysis such as this 2022 Nexus Study, generalized groups of land uses are considered with the same characteristics applied to every subtype of land use within the group. Therefore, the impacts of new development are the aggregate impacts of all the various types of land uses within the EGRFP land use groups, which are defined as follows.

**Residential:** All residential uses, which are divided into two sub-categories as follows:

- **Traditional:** Includes a wide range of residential development, including, but not limited to, detached and attached single unit (i.e., single family) and two-unit (i.e., two family) development, as well as multiunit (i.e., multifamily) development. This listing is divided into seven sub-listings based upon the total square footage of the unit. This listing includes both market rate and affordable units but excludes units that are age restricted (see Senior Adult) and assistive and congregate care facilities, which are separately listed.
- **Senior Adult:** Housing restricted to identified age groups, typically 55+. In accordance with the square foot approach, the EGRFP fee schedule includes two categories of Senior Adult Housing: less than and up to 1,000 square feet and greater than 1,000 square feet.

**Commercial:** All general and specialty commercial, retail, food service, and similar development, which is divided into the following sub-categories:

- **Shopping Center:** Includes all retail uses, including grocery and dry good stores, department stores, bicycle sales and repair, and other uses engaging in retail sales, as well as restaurants, bars, nightclubs, and other establishments serving food and/or beverage for on or off-site consumption (with or without a drive through). Also includes vehicle repair or other services when independent of a fueling station or auto sales use. Also includes bank branches, fitness and gym uses, commercial recreation facilities (e.g., indoor amusement/entertainment, commercial recreation), private studios (e.g., dance, karate), and specialized education and training facilities.
- **Auto Mall:** Uses involving the sale or lease of automobiles, recreational vehicles, boats and other personal watercraft, motorcycles, or other similar vehicles. Includes on-site repair and service operations for those vehicles/crafts.
- **Fueling Station:** Uses involving the sale and dispensing of vehicle fuel (e.g., gasoline, diesel, hydrogen). Includes convenience market, vehicle car wash, electric vehicle charging stations (when the primary use of the site and not an ancillary activity) and similar uses when part of the same operation.
- **Theater/Cinema:** Facilities for assembly and group entertainment including civic theaters and facilities for "live" theater and concerts, exhibition and convention halls, motion picture theaters, public and semi-public auditoriums, and similar public assembly uses. Includes ancillary restaurant activity (e.g., in-seat dining, tradition concession sales)

**Office:** Professional, financial, insurance, administrative space, call centers, and medical offices.

**Industrial:** All manufacturing, fabrication, and food processing. This category may also encompass business parks, research, and development space, including "back office" or ancillary office activity, and ancillary employee-serving retail services. This land use category also includes mini-storage and other warehouse, distribution, and logistics services.

**Hotel/Motel:** Uses that provide for overnight accommodations for the traveling public.

### **Institutional**

- **Hospital:** Facilities engaged primarily in providing diagnostic services, and extensive medical treatment, including surgical and other hospital services
- **Assembly:** A facility operated by any person, entity, or organization for gatherings of a group of people to engage in social, civic, or entertainment activities including, but not limited to, worship, weddings, parties, dances, civic organization events, and community

## 2. LAND USE GROWTH ASSUMPTIONS

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events, and accessory uses on the same site, such as living quarters for staff, and child day care facilities where authorized by the same type of land use permit required for the facility itself.

- Day Care Center: A day care facility other than a family day care home, and includes infant centers, preschools, extended day care facilities, and school age childcare centers.
- Private School (K-12): Any privately owned and operated elementary school, middle school, secondary school, high school, or other institution providing academic instruction for students from kindergarten through twelfth (12th) grade.

### Miscellaneous

- Congregate Care Facility: A facility that provides an organized day program of therapeutic, social, and skilled nursing health activities and services and where services are provided on a less-than 24-hour basis.
- Assisted Living: A facility where varying levels and intensities of care and supervision, protective supervision, or personal care are provided, based upon their varying needs, as determined in order to be admitted and to remain in the facility. These facilities provide care, supervision and assistance with activities of daily living, such as bathing and grooming. They may also provide incidental medical services under special care plans. Common names for these types of facilities include, but are not limited to, assisted living facilities, retirement homes, and board and care homes. If a unit has no access to medical services or personal care it is classified as residential.

### Land Use Forecast/Absorption

A land use forecast and absorption analysis is conducted to provide an estimate of the potential annual EGRFP fee revenues. Based on records of residential and commercial permits issued for the three-year period between January 1, 2016, and December 31, 2018, the annual permits going forward is estimated.

### Residential

Permits were issued for 1,572 units (single family, duplex, mobile homes, and manufactured homes) with an average floor area estimated to be about 2,300 sq. ft. Therefore, the average number of permits for homes issued in one year is approximately 524 with a combined floor area of 1.20 million square feet. Note: the issued permit data include 1 manufactured home and 5 mobile homes and 48 senior housing units in duplexes.

### Multifamily

Building permits were issued for 141 units in 7 apartment projects during the 3-year period. Based on the project valuations and an average valuation cost of \$180 per square foot, it is estimated that the total gross floor area of these projects is 72,000 square feet. The annual average is 47 units and 24,000 square feet.

### Commercial, Office, Retail

The total floor area of 29 commercial permits of all types issued during the 3-year period is estimated at approximately 320,000 square feet, or about 11,000 square feet per permit. The annual average of new commercial floor area is therefore about 100,000 square feet per year.

### Shopping Center

Included in the above commercial permits-issued data are two shopping centers of 152,000 and 7,020 square feet. Due to this small sample size, an annual average for shopping center growth may be far from accurate. However, the retail trip generation rate in the EGRFP fee schedule is based on a 100,000-square-foot shopping center under the assumption that most new retail will locate within a shopping center of approximately this size. Therefore, it is reasonable to expect 100,000 square feet of new commercial in one year given the recent permit activity.

### Other Land Use Categories

- Hospital Assembly
- Day Care Center
- Congregate Care Facility
- Assisted Living
- Private School (K-12)

Except for Private Schools (one facility in 2019), the available records do not indicate permits were issued for these categories. Some permits, identified generically as commercial, may have included one or more of these categories.

### Applying the Impact Fees to Development Projects Involving More Than One Land Use

Some development projects may include more than one land use category, such as a mixed-use development with both residential and commercial uses. In these cases, the impact fee would be calculated separately for each land use category contained within the project.

The amount of impact fees payable should be evaluated prior to the issuance of a building permit and be based on the information in the permit application, including number and size and type of units, intended occupancy, and floor area per occupancy. In a single-use structure, the total of the fees would be the sum of each of the products of the fee rate for each facility category multiplied by the number of units or the floor area in the structure. For a mixed-use project, where more than one use will occupy a single permitted structure, an impact fee calculation would apply the appropriate fee rate to each portion of the structure containing an identified use. For a commercial-residential structure, the applicable residential fee rates would be applied to each residential unit (based upon the size of each unit) and the applicable nonresidential rates would be applied to each square foot of nonresidential floor area.

### SERVICE POPULATION

Different types of development generate impacts on the transportation network at different rates in relation to each other, primarily due to the residential or employment populations (service populations) associated with the type of development. The trip generation rates used in traffic impact analysis and this 2022 Nexus Study serve as an indirect measure of the impact that service population has on the transportation network. Trip generation is an indirect measure in the sense that the residential impact is largely related to the number of occupants of a household (there being a small but not insignificant proportion of service trips generated by a household during the day), whereas the trips to a business are composed of workers (usually two trips per day) and customers, whose origins are the residential neighborhoods within the business's market area. For

## 2. LAND USE GROWTH ASSUMPTIONS

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that reason, it is necessary to adjust commercial generation rates by the new trip factor so that trip lengths to commercial uses are not overstated.

The effect that household occupancy has on VMT is incorporated in this 2022 Nexus Study through the new fee schedule that applies different fee rates according to the range of the home sizes, as well as the average length of trips. Studies conducted in the Sacramento region and data from US Census Bureau's American Community Survey were used to make correlations between trips and income, then between income and home size.<sup>1</sup> The final correlation between trips and home size is the basis for the residential EGRFP fees.

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<sup>1</sup> The 2018 SACOG Regional Transportation Study includes a household travel survey of the six-county SACOG region. The household travel survey data includes various sociodemographic characteristic variables (e.g., the number of household residents and household income) and travel behavior variables (e.g. number of trips, trip purpose, and travel modes). Fehr & Peers used the results of this survey to produce household trip generation rate estimates. The household travel survey did not include questions regarding the size of the dwelling unit. However, the results of the 2011 American Housing Survey for the Sacramento Metropolitan Area contain detailed information on dwelling unit square footage and other sociodemographic characteristic variables, including the number of household residents and household income. The City of Elk Grove parcel database contains living area for single-family residential development and parcel (i.e., lot size.)

**3. EGRFP PROJECTS AND PROJECT COST ESTIMATES**

CURRENT EGRFP

The 2014 Nexus Study was accepted and the EGRFP fee schedule was approved on September 24, 2014. The total cost of roadway and trail improvements allocated to the fee, net of adjustments, was approximately \$291 million (2014 dollars). The improvements on the 2014 list that have been completed are not included in this 2022 Nexus Study. Also, with the 2019 General Plan amendment, several projects are no longer supported by the General Plan and were removed, while others have been added to the program. Also note, trail improvements are no longer included in the EGRFP and have been moved into a new Active Transportation Fee Program.

UPDATED EGRFP PROJECT COSTS

A complete listing of the updated EGRFP transportation projects by facility type is included in **Appendix A**. The cost summary for each type is presented in **Table 3.1**, which also shows the cost allocated to the EGRFP (future development's fair share).

**Table 3.1: EGRFP Projects Allocated Cost Summary**

Transportation Facility Type	Full Cost Estimate	Included in Program	Allocated Cost Scenario		
			EGRFP Funding	Percent Third Party Funding	EGRFP Cost Coverage*
Roadway Segments	\$287,389,983	\$287,389,983	64.8%	35.2%	\$186,239,125
Roadway Intersections	\$221,318,041	\$221,318,041	79.7%	20.3%	\$176,412,778
Bridges/Culverts	\$23,878,964	\$23,878,964	100.0%	0.0%	\$23,878,964
Auxiliary Lanes	\$16,762,500	\$16,762,500	100.0%	0.0%	\$16,762,500
RR Grade Separations	\$363,591,000	\$41,668,000	38.4%	61.6%	\$15,998,380
Interchanges	\$134,300,000	\$111,900,000	25.2%	74.8%	\$28,143,000
<b>TOTAL</b>	<b>\$1,047,240,488</b>	<b>\$702,917,488</b>	<b>63.7%</b>	<b>36.3%</b>	<b>\$447,434,747</b>

\*Totals do not match due to rounding

The roadway improvement cost estimates include, but are not limited to, most probable engineering estimates of the following items. The unit costs for these items are summarized in **Appendix B**:

- Roadway excavation
- Asphalt paving
- Median curb and landscaping
- Signing and striping
- Storm drain system
- Traffic signal interconnect
- Streetlights
- Right-of-way (where adequate existing right-of-way does not exist)
- Design and engineering

- Environmental mitigation/construction stormwater management
- Roadway improvement costs also include the following soft cost assumptions:
  - 10 percent for staking, permits, inspection, and testing.
  - 15 percent for engineering/surveying.
  - 20 percent for cost contingency.

Before the improvement costs are allocated to future development, the costs included in the program were adjusted by the following factors for purposes of calculating the EGRFP fees:

- Assumed funding from other agencies;
- Grant funding;
- EGRFP projects funded by the City; and
- Projects funded or constructed by developers as project exactions for direct impacts.

These funding sources are described in the section below entitled “Other Funding Sources.”

Detailed EGRFP project cost estimates for all facility types are in **Attachment B** of the 2022 Nexus Study.

#### EGRFP Project Criteria

The EGRFP project list has been updated to reflect the current list of roadway facilities required to serve the City's General Plan buildout (within current 2022 City limits). The updated project list is based on specific roadway standards and design criteria and reflects the policy decisions of the City Council. The following documents provide the nexus and criteria used to determine whether an improvement would be included in the updated EGRFP.

- General Plan Policies MOB-1-1, 1-2, 1-3, 3-1, 6-1, 7-5, 7-6,
- Laguna Ridge Specific Plan
- Southeast Policy Area Community Plan and Special Planning Area
- Southeast Industrial Area Specific Plan
- Eastern Elk Grove Community Plan and the Triangle Special Planning Area
- The Rural Area Community Plan
- Old Town Special Planning Area
- Rural Roads Policy and Improvement Standards
- Grant Line Road Precise Plan (public draft)
- Interstate 5 and State Route 99 Highway Concept Reports
- Whitelock Parkway Interchange concept design
- Caltrans Fix I-5 project
- Caltrans State Route 99 Auxiliary Lane plans
- Sacramento City and Sacramento County General Plans
- Sacramento County Roadway Fee Program

The following Mobility Element policies are cited as EGRFP Nexus criteria. **Appendix A** indicates the applicable policy and/or set of policies:

**Policy MOB-1-1:** Achieve State-mandated reductions in VMT by requiring land use and transportation projects to comply with the following metrics and limits. These metrics and limits shall be used as thresholds of significance in evaluating projects subject to CEQA.

**Policy MOB-1-2:** Consider all transportation modes and the overall mobility of these modes when evaluating transportation design and potential impacts during circulation planning.

**Policy MOB-1-3:** Strive to implement the roadway performance targets (RPT) for operations of roadway segments and intersections, while balancing the effectiveness of design requirements to achieve the targets with the character of the surrounding area as well as the cost to complete the improvement and ongoing maintenance obligations. The Transportation Network Diagram reflects the implementation of the RPT policy at a macro level; the City will consider the specific design of individual segments and intersections in light of this policy and the guidance in the Transportation Network Diagram.

**Policy MOB-3-1:** Implement a balanced transportation system using a layered network approach to building complete streets that ensure the safety and mobility of all users, including pedestrians, cyclists, motorists, children, seniors, and people with disabilities.

**Policy MOB-6-1:** Plan and pursue funding to construct strategic grade-separated crossings of rail lines, prioritizing available funds using appropriate metrics.

**Policy MOB-7-4:** Require new development projects to provide funding or to construct roadway/intersection improvements to implement the City's Transportation Network Diagram. The payment of adopted roadway development or similar fees, including the City Roadway Fee Program and the voluntary I-5 Subregional Fee shall be considered compliant with the requirements of this policy with regard to those facilities included in the fee program,

**Policy MOB-7-5:** Assist Caltrans in implementing improvements to Interstate 5 and State Route 99 within the City as outlined in the most recent Caltrans Transportation Concept Report.

**Policy MOB-7-6:** Support efforts to develop the Capital Southeast Connector, providing a regional roadway connection from Interstate 5 and State Route 99 to US 50. The City will work with the Capital Southeast Connector Joint Powers Authority in implementing the planned roadway improvements.

**Policy MOB-7-8:** Support and use infrastructure improvements and technological advancements such as intelligent transportation management tools to facilitate the movement and security of goods throughout the City in an efficient manner.

The transportation projects included in the EGRFP are growth-serving projects, which are needed to accommodate future development. In general, growth-serving projects are those projects not required were it not for new development and associated traffic demand. For instance, an existing roadway facility may be adequate to serve existing traffic demand. However, new development may require the roadway to be extended or widened to meet the City's RPT. In that case, the full cost of the improvement is included in the EGRFP. If the traffic analysis indicates a roadway segment will operate within the performance target even with traffic from anticipated growth, no additional improvements to the roadway are planned and thus no cost is included in the EGRFP.

The Mitigation Fee Act precludes a fee program from requiring new development to pay the full cost of improvements to achieve the performance target if the roadway currently falls below the target. New development cannot be responsible for bringing roadways within performance targets. However, new anticipated development may cause the facility's operation to worsen. In these instances, it is acceptable to require new development to fund the costs of improvement up to, but not beyond, new development's impact.

For the 2022 Nexus Study, each roadway improvement identified in the Transportation Network Diagram was analyzed to determine whether the project was needed to accommodate new development and therefore should be included in the EGRFP.

The 2022 EGRFP update includes 165 transportation projects that reflect the policy direction of the City's General Plan, based on the land use growth projections in Chapter 2 and traffic volume forecasts presented in Chapter 4. The project list is based on the transportation system performance analysis (discussed in Chapter 4) and includes projects from transportation programming studies for transportation infrastructure projects and planning studies conducted for development projects in the City.

#### PROJECTS INCLUDED IN SACRAMENTO COUNTY TRAFFIC DEVELOPMENT FEE

The Sacramento County Traffic Development Fee Program includes roadway improvements that are along the City's shared boundary with the County. These include the widening of Calvine Road from Auberry Drive to Grant Line Road, and Grant Line Road from State Route 99 to Calvine Road. Revenue from the County program has been factored into the EGRFP update.

#### OTHER FUNDING SOURCES

The City must rely on funding sources other than the impact fee revenues for a portion of the total cost of the transportation improvements to reduce the net amount of roadway facility costs allocated to new development. **Table ES-4** summarizes the percentage of the amount of other funding sources ("Third-Party Sources") by major roadway facility.

Other funding sources include the following:

- Sacramento Transportation Authority (STA) Measure A
- STA development impact fee
- Regional, State, and Federal sources
- Private developer contributions
- City/other funding

These sources are described in more detail below.

#### Measure A and the STA Development Impact Fee

In November 2004, Sacramento County voters renewed the Measure A sales tax that helps fund local and regional transportation improvements. Along with the Measure A renewal, local jurisdictions in Sacramento County adopted the STA development impact fee to help

fund local and regional transportation projects. In February 2009, the City adopted a resolution imposing the STA fee on future development in the City.

#### Regional, State, and Federal Funding

A variety of governmental funding sources exist for transportation projects, including, but not limited to, State Gas Tax, the Local Highway Safety Improvement Program (HSIP), Congestion Mitigation and Air Quality Improvement (CMAQ), and Federal grant programs (e.g., RISE, BUILD, TIGER). These grant programs are managed by various regional, State, and Federal agencies, including the SACOG, Caltrans, the California Transportation Commission, Federal Highway Administration, and others.

Grant programs are competitive, and it is difficult to estimate the funding that will ultimately be awarded to an applicant. For that reason, this 2022 Nexus Study only assumes the "3<sup>rd</sup> Party Funding" amounts listed in **Table 3.1**, which may include grant funding.

#### EGRFP PROJECTS FUNDED BY DEVELOPERS/SPECIAL DISTRICTS

Land development projects may be required to construct certain segments of EGRFP projects as part of subdivision conditions of approval to meet access and circulation requirements. In some cases, developers may construct the facility and form a special district to finance the improvements (e.g., a Mello-Roos community facilities district). Where a developer constructs a facility that extends beyond the specified limits of the development project's conditions, a credit against the EGRFP fees may be issued or a reimbursement mechanism may be created to allow future development that would benefit from the improvement to contribute to the financing of the project.

#### ADDITIONAL COSTS AND ADJUSTMENTS TO EGRFP PROJECT COST ESTIMATES

Except for a few, very specific situations, the estimates for the EGRFP projects remove the cost of frontage improvements to account for the construction of frontage improvements (outer lanes, curb, gutter and sidewalk, parkway, and right-of-way landscaping) by developers of adjacent undeveloped parcels as a project exaction. Estimates for EGRFP improvement projects therefore include only the two inner lanes, and medians, if part of the applicable street standard.

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## 4. ROADWAY FEE CALCULATION AND COST ALLOCATION METHODOLOGY

The EGRFP fees are calculated on the basis of the proportional share of transportation network cost to new development. Improvement costs necessary to address the necessary improvements are allocated to the land uses in proportion to the projected share in terms of the trip rate and VMT generated by each land use over the planning horizon. The core of the cost allocation methodology is forecasting the traffic demand in trips generated on each of the EGRFP facility segments. This chapter outlines the process of establishing traffic demand as the basis for calculating the fee.

### TRAVEL DEMAND FROM NEW DEVELOPMENT

The purpose of the EGRFP is to determine the fair-share cost of the transportation improvements that may be allocated to new development in accordance with the Section 66000 of the California Government Code and the City's General Plan Policy MOB-7-4. The cost allocation begins with the determination of the transportation facilities necessary to support new development, which is accomplished through traffic modeling as described below.

### TRAFFIC MODEL DEVELOPMENT

Traffic volume forecasts for the 2022 EGRFP update were developed using a modified version of SACOG's SACSIM 2015 travel demand forecasting (TDF) model that was developed for the preparation and analysis of the City of Elk Grove General Plan Update (2019). The forecasting process included: 1) updating the base year model to represent January 1, 2020, conditions; 2) calibration and validation of the base year model; and 3) development of Build Out travel demand forecasts.

#### Traffic Volume Forecasts

Traffic volume forecasts for the EGRFP were developed using the following procedures and included the development of daily roadway segment traffic volume forecasts and AM and PM peak hour intersection turning movement forecasts (i.e., for select intersections):

Build Out Land Use – The EGRFP Build Out land use was developed by modifying the General Plan buildout forecasts, developed for the General Plan update, to include only the EGRFP area, which includes the 2022 City limits. Specifically, land use growth in the West, South, East (exclusive of the 2021 annexation area), and North Study Areas were removed.

Build Out Network – The EGRFP transportation network was developed using an iterative process. The process began with **Figure 1: General Plan Transportation Network** (General Plan Figures 3-6: Transportation Network Diagram and 3-7: Roadway Sizing Diagram) and included the following steps:

1. Analysis of Roadway Performance – Analyzed roadway network performance using the City's daily roadway traffic design targets.
2. Network Adjustment – Adjusted the roadway transportation network based on the roadway performance.

3. Reanalysis of Roadway Performance – Reanalyzed roadway network performance.
4. Forecasts Adjustment – Adjusted the daily and peak hour traffic volume forecasts using the difference-method/growth-increment procedure, which adds the increment of forecasted growth between the validated base year model and the updated EGRFP Build Out model to existing counts. For new roadway segments, direct model output was used and rounded to the nearest 100 trips.

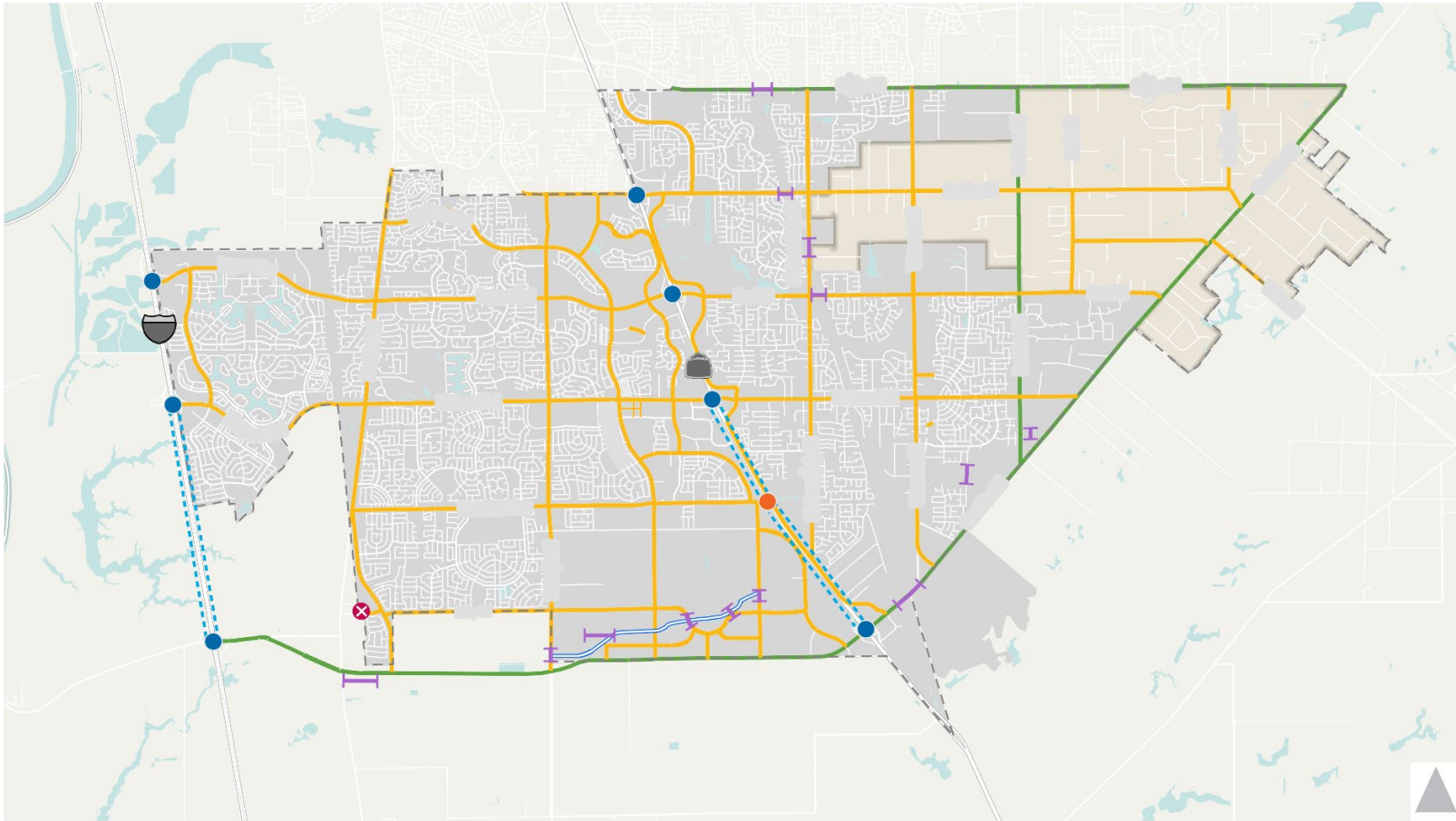
### Traffic Shares

Roadway segment traffic shares were developed for EGRFP roadways that may have shared funding between the City and other jurisdictions (e.g., Sacramento County, Sacramento City).

Funding for improvements on Bradshaw Road, Calvine Road, Grant Line Road, and Kammerer Road may be shared with Sacramento County and other local agencies, since a large share of traffic on these facilities will have at least one trip end in Sacramento County. These improvements will benefit planned development in the County by providing access to regional destinations. Therefore, a key component of establishing the nexus for these facilities is understanding the share of traffic on a study facility by jurisdiction.

TDF models are a convenient tool for fee program analysis, since they model the interaction of residential and nonresidential land use at a regional level, which helps to establish the nexus between new development and the transportation infrastructure needed to support it. SACOG's SACSIM TDF model was applied to generate traffic shares for the plan area roadways shown on **Figure 2**. The SACSIM TDF model (i.e., instead of the EGRFP TDF model) was used since it provides a market level of development that is forecast to occur in the next 20 years, consistent with the region's Metropolitan Transportation Plan/Sustainable Communities Strategy.

A common modeling technique called a select zone analysis was applied within the model to estimate the future traffic volume on each roadway link that is generated by land uses in the EGRFP area. On each model link that represents the location of an EGRFP project, the future traffic volume attributable to the EGRFP area was compared to the overall future traffic volume, thereby calculating the share of the link's usage that can be attributed to the land uses in Elk Grove, City of Sacramento, Sacramento County, and all "other" jurisdictions in the region. The traffic shares for Bradshaw Road, Calvine Road, Grant Line Road, and Kammerer Road are shown in **Table 4.1**.



**Figure 2 - EGRFP Project Area**

- Program Roadway
- Program Roadway (Shared with Sacramento County)
- Study Interchange (Existing)
- Study Interchange (Future)
- ⊗ Eliminate At-Grade Railroad Crossing
- - - Auxiliary Lanes
- ┌ Program Bridge/Culvert/Railroad Grade Separation
- Shed-C Drainage Channel
- City of Elk Grove City Limits
- Rural Elk Grove Area
- Study Area
- Column Break

Source: Fehr & Peers, 2022

Table 4.1: Traffic Shares for Shared Roadways

Roadway	Segment		Traffic Share				
	From	To	City of Elk Grove	City of Sacramento	Sacramento County	Other	Total
Bradshaw Road	Vintage Park Drive	Calvine Road	31.4%	4.5%	56.0%	8.1%	100%
	Calvine Road	Sheldon Road	35.1%	1.4%	54.7%	8.8%	100%
	Sheldon Road	Bond Road	25.6%	0.6%	57.4%	16.4%	100%
	Bond Road	Elk Grove Boulevard	25.2%	0.7%	56.6%	17.5%	100%
	Elk Grove Boulevard	Grant Line Road	27.7%	0.3%	52.9%	19.1%	100%
Calvine Road	Power Inn Road	Elk Grove Florin Road	11.1%	30.1%	54.8%	4.0%	100%
	Elk Grove Florin Road	Waterman Road	19.8%	19.1%	57.2%	3.9%	100%
	Waterman Road	Bradshaw Road	16.6%	17.4%	61.6%	4.4%	100%
	Bradshaw Road	Vineyard Road	21.3%	14.5%	57.7%	6.5%	100%
	Vineyard Road	Excelsior Road	20.0%	14.7%	58.6%	6.8%	100%
	Excelsior Road	Grant Line Road	18.2%	17.4%	55.6%	8.9%	100%
Grant Line Road	Sloughhouse Road	Calvine Road	28.8%	3.6%	47.6%	20.0%	100%
	Calvine Road	Sheldon Road	31.8%	0.6%	45.7%	21.9%	100%
	Sheldon Road	Bond Road	29.0%	2.4%	49.8%	18.8%	100%
	Bond Road	Elk Grove Boulevard	33.7%	0.0%	42.5%	23.8%	100%
	Elk Grove Boulevard	Bradshaw Road	25.5%	0.2%	49.5%	24.8%	100%
	Bradshaw Road	Waterman Road	27.9%	1.2%	46.5%	24.5%	100%
	E. Stockton Boulevard	Waterman Road	37.7%	1.4%	39.7%	21.3%	100%
	E. Stockton Boulevard	SR 99	44.8%	2.8%	33.3%	19.1%	100%
Kammerer Road	I-5	Franklin Boulevard	35.2%	5.0%	24.4%	35.4%	100%
	Franklin Boulevard	Willard Parkway	35.2%	5.0%	24.4%	35.4%	100%
	Willard Parkway	Bruceville Road	35.2%	5.0%	24.4%	35.4%	100%
	Bruceville Road	Big Horn Boulevard	37.9%	2.8%	28.8%	30.5%	100%
	Big Horn Boulevard	Lotz Parkway	44.1%	1.1%	28.8%	25.9%	100%
	Bruceville Road	Promenade Parkway	51.8%	0.8%	27.1%	20.3%	100%
	Promenade Parkway	SR 99	62.1%	6.1%	20.6%	11.3%	100%

## TRIP GENERATION FACTORS

The share of traffic from a new land development project and its effect on the transportation network is directly related to the number of vehicular trips that the project generates. Different types of land use generate substantially different rates. In the Elk Grove travel demand model, the trips produced by all the land uses in each of the model's traffic analysis zones are summed up and the total is then converted to a dwelling unit equivalent (DUE). The DUE describes relative travel generated by different land uses to the travel generated by a single-family residential dwelling unit. Travel, as represented by VMT, is calculated based on the PM peak hour trip generation, trip length, and percentage of trips generated that are new trips—that is, trips that are not pass-by or trips that are not diverted from an origin to destination trip. The DUE rates provide a basis for allocating the cost of the transportation infrastructure being funded by the EGRFP to different land use development, relative to the amount of travel generated by the land use.

This 2022 Nexus Study uses the afternoon peak-period trip generation rates and typical trip lengths vehicle for major land use categories published by the Institute of Transportation Engineers (ITE), to calculate the VMT and the DUE rates in **Table 4.2** for each category.

Comparing the DUE rates in **Table 4.2** indicates, for example, that a multifamily dwelling unit would have 41 percent of the impact that a single-family dwelling unit would. Similarly, 1,000 square feet of retail land use (e.g., shopping center) would have 53 percent greater impact than a single-family dwelling unit.

**Table 4.2: Trip Generation Factors**

Land Use Category		Unit	PM Peak Hour Trip Generation Rate <sup>1</sup>	Trip Length (miles) <sup>2</sup>	Percent New Trips <sup>2</sup>	VMT	DUE Rate
Residential	Single Family <sup>3</sup>	Dwelling Unit	0.94	5.0	100%	4.70	1.00
	Multifamily <sup>4</sup>		0.39	5.0	100%	1.95	0.41
Retail <sup>5</sup>	1,000 Square Feet		5.64	2.4	53%	7.17	1.53
Office <sup>6</sup>			2.69	4.5	92%	11.14	2.37
Industrial			0.65	5.1	92%	3.05	0.65

Source: Fehr & Peers, 2022

<sup>1</sup> ITE, Trip Generation Manual, 11th Edition

<sup>2</sup> Trip Generation Handbook (3rd Edition), ITE Journal, May 1992

<sup>3</sup> Single family trip generation rate based on dwelling size range of 1,800 to 2,000 square feet.

<sup>4</sup> Multifamily trip generation rates based on dwelling size range of up to 1,200 square feet.

<sup>5</sup> Retail trip generation rate based on 100,000-square-foot shopping center.

<sup>6</sup> Office rate shown is a blend of ITE land use categories 710 and 720.

EGRFP Trip Generation Rates and Total DUE

The general trip generation factors in **Table 4.2** are used to determine the specific trip generation rates that are used to calculate the fee for each land use type in the EGRFP. The fee is determined by first finding the total DUE that will be generated by the future projected development. Using the projected growth in dwelling units and employment growth indicated in **Table ES-3** the DUE for each major land use category is calculated in **Table 4.3** . The projected number of employees are converted to floor area using industry standard employment density factors as indicated.

**Table 4.3: Total DUE Growth**

Land Use Category	Employees	Employment Density Factor (Sq. Ft. per employee)	Planned Growth, Units/Floor Area (1,000 sq. ft.)	DUE Factor	Total DUE Growth
Residential	N/A	N/A	Single-family: 15,284	1.00	15,284
	N/A	N/A	Multi-family: 3,800	0.41	1,558
Retail <sup>1</sup>	23,498	450	10,574	1.53	16,178
Office <sup>2</sup>	17,865	275	4,913	2.37	11,644
Industrial	5,026	1,200	6,031	0.65	3,920
				<b>Total</b>	<b>48,584</b>

<sup>1</sup> Retail includes food and service sectors

<sup>2</sup> Office includes education, government, and medical

TRANSPORTATION PERFORMANCE TARGETS

Transportation system performance follows the procedures outlined in the City of Elk Grove Transportation Analysis Guidelines (adopted February 2019/updated December 2019), which establishes the protocol for the analysis of the transportation system based on current state-of-practice methodologies for maintaining consistency with General Plan policy in regard to RPTs. Roadway and intersection performance targets are outlined below.

General Plan Policy MOB-1-3 includes performance targets for intersections and roadways. The objective of Policy MOB-1-3 is to balance the effectiveness of design requirements to achieve the targets with the character of the surrounding area as well as the cost to complete the improvement and ongoing maintenance obligations. The City strives to implement the roadway segment and intersection performance targets.

Road Segment Performance Targets

Study roadway segments were analyzed by comparing the daily roadway segment traffic volumes and forecasts to the average daily traffic volume design targets summarized in **Table 4.4**.

Table 4.4: Performance Targets for Roadways

Facility Type	Number of Lanes	Median	Speed (mph)	Average Daily Traffic Design Target (Number of Vehicles)
Arterial or Arterial\ Collector	2	No	25	13,600
			30	14,600
			35	15,700
			40	16,600
			45	17,700
			55	18,600
		Yes	25	14,300
			30	15,600
			35	16,500
			40	17,500
	4	No	45	18,600
			55	19,600
			30	29,800
			35	31,600
	4	Yes	40	33,500
			45	35,300
			30	31,400
			35	33,300
	5	Yes	40	35,300
			45	37,200
6	Yes	45	45,600	
		30	46,400	
		35	48,900	
		40	51,500	
7	Yes	45	54,000	
		45	59,400	
8	Yes	45	64,800	
		55	72,000	
Expressway	4	Yes	55	64,800
	6	Yes	55	97,200
Freeway	4	Yes	55+	74,400
	6	Yes	55+	111,600
	8	Yes	55+	148,800

Source: City of Elk Grove Transportation Analysis Guidelines (adopted February 2019/updated December 2019)

Intersection Performance Targets

**Table 4.5: Performance Targets for Intersections**

Intersection Control	(Delay in Seconds)
Stop (Side-Street & All-Way)	< 35.1
Signal	< 55.1
Roundabout	< 35.1

Source: City of Elk Grove Transportation Analysis Guidelines (adopted February 2019/updated December 2019)

Intersection improvements included in the EGRFP are based largely on:

- Corresponding roadway improvements presented in **Appendix A**;
- Analysis conducted for the City's General Plan; and
- Analysis conducted for other infrastructure and land use planning studies conducted for projects in the City, such as the Southeast Policy Area (see the complete list of applicable studies provided in Chapter 3).

As planned development occurs in the City, traffic growth will affect operations on improved study corridors that are built to their General Plan designation. However, while significant capacity improvements (e.g., roadway widening) may not be feasible or desirable, operational improvements at intersections may be available to improve performance in response to traffic growth from new development. Operational improvements may include the following:

- Traffic signal timing modifications
- Turn lane modifications
- Increased turn pocket storage
- Changes to intersection phasing
- Traffic signal equipment upgrades

The exact nature and scope of future improvements necessary to accommodate planned growth are difficult to determine with certainty, since the location and rate of development is not known.

Therefore, to support the development of generalized intersection improvement costs, detailed intersection analysis was conducted at 27 intersections located on Elk Grove Boulevard, Laguna Boulevard, and Bond Road. The operations analysis was conducted using the Synchro/SimTraffic software, which implements the methodologies contained in the Highway Capacity Manual, 6th Edition (Transportation Research Board, 2016). Appendix F of the Fehr & Peers EGRFP Update Report (on file with the City) summarizes the results of the detailed intersection operations analysis, outlines the operational improvements tested, and includes the detailed operations analysis output.

PLAN-BASED COST ALLOCATION METHOD

The 2022 Nexus Study evaluates and allocates the costs of the roadway facilities required to serve future development in the City. The study uses a plan-based fee methodology whereby the costs of planned future roadway facilities are allocated to future development anticipated to benefit from those facilities. To determine these future roadway facilities, the travel demand model considered the existing roadway facilities, the RPTs, and projected future development that may impact each facility. Based on these factors, it was determined whether existing facilities will be adequate to meet the travel demands of future development, or if improvements would be required to achieve the transportation performance targets set forth in the General Plan as future development occurs.

ROADWAYS COST FOR NEW DEVELOPMENT (FAIR SHARE)

The 2022 Nexus Study outlines the methodology to allocate the costs of future roadway facilities on a proportionate basis to each future land use category's relative benefit received from such roadway facilities. The 2022 Nexus Study estimates future development and evaluates the requisite improvements to serve the projected development. Other funding sources needed to fund the difference between the total cost of the improvements and the cost that may be allocated to new development were deducted as "Third Party" in **Table 3.1**. The net costs were then allocated proportionately to future development based on relative demand for roadway facilities as determined by the trip generating characteristics of each land use category expressed in DUE, as shown in **Table 4.6**.

**Table 4.6: EGRFP Cost per DUE**

Improvement Category	EGRFP Funded Cost	Total DUE	Average Cost per DUE
Roadways	\$186,239,125	48,584	\$3,833
Intersections	\$176,412,778		\$3,631
Bridges & Culverts	\$23,878,964		\$491
Railroad Grade Crossings	\$16,762,500		\$345
Highway/Urban Interchanges	\$15,998,380		\$329
Auxiliary Lanes	\$28,143,000		\$579
<b>Total</b>	<b>\$447,434,747</b>		<b>\$9,210</b>

Note: The costs listed in this table are before applying any existing fund balance or credit/reimbursement agreements, which reduce the cost per DUE. Totals and calculations may not equal due to rounding.

EGRFP DUE RATES

**Table 4.7** shows the calculation of DUE rates for an expanded list of EGRFP land uses using the trip generation factors in **Table 4.2**. This shows how the residential land uses are categorized according to ranges of square feet and how the fee would be applied to different nonresidential land uses, like theaters, for example, based on the number of seats.

**Table 4.7: DUE Rate per EGRFP Land Use Category**

Land Use		Unit	ITE Land Use Code	PM Peak Hour Trip Generation Rate	New Length	New Trips	VMT	DUE Rate	
7Residential	Traditional	Up to 1,200 Sq. Ft.	Dwelling Size	221	0.39	7.3	100%	2.85	0.41
		> 1,200 Sq. Ft. to 1,400 Sq. Ft.		See Note 1	0.73	7.3	100%	5.33	0.78
		> 1,400 Sq. Ft. to 1,700 Sq. Ft.		210	0.81	7.3	100%	5.91	0.86
		> 1,700 Sq. Ft. to 2,000 Sq. Ft.		See Note 1	0.94	7.3	100%	6.86	1.00
		> 2,000 SF to 2,700 Sq. Ft. Sq. Ft.			1.03	7.3	100%	7.47	1.10
		-greater than 2,700 sq. ft. to 3,400 sq. ft.		1.10	7.3	100%	8.03	1.17	
	> 3,400 Sq. Ft.	1.17	7.3	100%	8.54	1.24			
	Senior Adult	Up to 1,000 Sq. Ft.	Dwelling Size	252	0.25	7.3	100%	1.83	0.27
> 1,000 Sq. Ft.		251		0.30	7.3	100%	2.19	0.32	
Commercial	Shopping Center		1,000 Sq. Ft.	820	4.61	2.2	62%	6.29	0.92
	Auto Mall		Acres	See Note 2	12.50	1.8	76%	17.10	2.49
	Gas Station w/Convenience Market		Fueling Positions	945	22.76	1.9	20%	8.65	1.26
	Theater/Cinema		Seats	445	0.10	1.6	53%	0.085	0.01
Office		1,000 Sq. Ft.	710	1.44	5.0	92%	6.62	0.97	
Industrial		1,000 Sq. Ft.	110	0.65	4.1	92%	2.45	0.36	
Hotel	Hotel/Motel		Rooms	312	0.31	4.7	71%	1.03	0.15
Miscellaneous	Hospital		Beds	610	1.69	4.9	77%	6.38	0.93
	Assembly		1,000 Sq. Ft.	560	0.49	5.7	90%	2.51	0.37
	Day Care Center		1,000 Sq. Ft.	565	11.12	2.9	30%	9.67	1.41
	Congregate Care Facility		Dwelling Units	253	0.18	4.9	75%	0.66	0.10
	Assisted Living		Beds	254	0.24	4.9	75%	0.88	0.13
	Private School (K-12)		Students	534	0.19	6.2	80%	0.94	0.14

<sup>1</sup>Trip generation for single-family land use (i.e., by building area) developed using data from the 2018 SACOG Regional Transportation Study, 2011 American Housing Survey (for the Sacramento Metropolitan Area), and trip generation rates from ITE, Trip Generation Manual, 11th Edition, for single family land use (Code 210).

<sup>2</sup>Trip generation from StreetLight Data daily trip ends for Elk Grove Auto Mall (9/1/2018 to 10/31/2018). StreetLight data was verified using vehicle trip generation counts collected at Elk Grove Auto Mall (3/13/2006 through 3/16/2006). PM peak hour calculated using the ratio of peak-to-daily trip generation for ITE Land Use Code 840 (Automobile Sales-New).

Note: Totals and calculations may not equal due to rounding.

CURRENT EGRFP FUND BALANCE

City staff has reviewed the current EGRFP fund and identified that, after adoption of this update, there will be a remaining fund balance of \$26,253,431. This fund balance is subtracted from the total EGRFP cost to determine the final total DUE rate (see **Table 4.8**).

CREDITS AND REIMBURSEMENTS

City staff has reviewed the current EGRFP fund and identified that there are outstanding EGRFP credits of \$12,484,633. These outstanding credits are added to the total EGRFP cost to determine the final total DUE rate (see **Table 4.8**). The addition is made because this cost is due from future development to reimburse prior projects that constructed improvements in excess of the project's requirement (over-sized improvements) that provide a benefit to all new development.

**Table 4.8: Program Totals and Cost per DUE**

Item	Value
Total EGRFP Cost (Table 4.6)	\$447,434,747.26
Less Current EGRFP Fund Balance	(\$26,253,431)
Plus, Outstanding Credits and Reimbursement	\$12,484,633
<b>Total Program Cost</b>	<b>\$433,665,949</b>
Total DUE	48,584
<b>Net Cost per DUE</b>	<b>\$8,926.11</b>

Note: Totals and calculations may not equal due to rounding.

EGRFP ADMINISTRATION CHARGE

Development impact fee programs may include the cost of administering the program that funds the construction of public facilities necessary to serve new development, including these:

- The administrative costs of assessing, collecting, cost accounting, and public reporting of the EGRFP pursuant to Government Code 66006.
- The cost of justification analyses, legal support, and other costs of annual, periodic, and five-year updates to the EGRFP.
- Costs associated with the establishment and ongoing administration of an effective system of fee credits and cash reimbursements.
- Costs of capital planning and programming for the EGRFP, which includes costs associated with a capital program manager, a civil engineer, and public works analyst.
- City-led project contingency.
- Fee formation and update costs.

As an existing fee program, the City has historical data (provided in **Table 4.9**) that can be reviewed to understand the administrative costs associated with the Roadway Fee Program. The

#### **4. ROADWAY FEE CALCULATION AND COST ALLOCATION**

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following details these costs. In total, the City will assess an Administration Charge of 5.50% for each dollar of fee assessed on new development, which does not exceed the City's cost.

4. ROADWAY FEE CALCULATION AND COST ALLOCATION

Table 4.9: Historical Administrative Costs Compared to Fee Revenue

	Fiscal Year 2015	Fiscal Year 2016	Fiscal Year 2017	Fiscal Year 2018	Fiscal Year 2019	Fiscal Year 2020	Fiscal Year 2021	Fiscal Year 2022	8-year Average
<b>Revenue</b>									
Base Fee (excludes admin fee)	\$ 4,149,726	\$ 4,727,478	\$ 2,598,810	\$8,050,146	\$8,667,109	\$9,373,809	\$11,720,789	\$7,957,617	<b>\$7,155.685.37</b>
<b>Expenses - Finance Administration</b>									
Bank Fees	\$12,235	\$12,720	\$9,787	\$18,807	\$12,865.00	\$22,183.00	\$34,306.00	\$30,000.00	<b>\$19,112.88</b>
Salaries and Benefits (City Staff)	\$-	\$-	\$524	\$28,344	\$30,465	\$20,627	\$20,057	\$21,261	<b>\$15,159.69</b>
Administration (Consultant Charges)	\$-	\$8,040	\$6,374	\$16,734	\$23,490	\$24,865	\$12,127	\$83,120	<b>\$21,843.87</b>
Fee Program Updates	\$-	\$-	\$-	\$-	\$500,000	\$-	\$-	\$0	<b>\$62,500.00</b>
<b>Total</b>	<b>\$12,235.02</b>	<b>\$20,760.02</b>	<b>\$16,683.77</b>	<b>\$63,885.95</b>	<b>\$566,820.67</b>	<b>\$67,674.73</b>	<b>\$66,490.37</b>	<b>\$134,381</b>	<b>\$118,616.44</b>
<b>As Percent of Base Fee</b>	<b>0.29%</b>	<b>0.44%</b>	<b>0.64%</b>	<b>0.79%</b>	<b>6.54%</b>	<b>0.72%</b>	<b>0.57%</b>	<b>1.69%</b>	<b>1.66%</b>
<b>Expenses - CIP Program Administration</b>									
Salaries, Benefits, and Consultant Costs	\$189,440.02	\$251,049.00	\$300,905.00	\$442,938.45	\$839,135.00	\$565,405.85	\$587,438.00	\$325,160.00	<b>\$437,683.92</b>
<b>As Percent of Base Fee</b>	<b>4.57%</b>	<b>5.31%</b>	<b>11.58%</b>	<b>5.50%</b>	<b>9.68%</b>	<b>6.03%</b>	<b>5.01%</b>	<b>4.09%</b>	<b>6.12%</b>

### *Financial Administration*

Financial administration includes the management costs of the Program attributable to the City's Finance Department, including proportional salaries and benefits of staff assigned to the program, bank fees for holding the program assets, and consultant fees associated with, among other things, fund administration and conducting special rate calculations. Over the previous eight years (Fiscal Year 2015 through Fiscal Year 2022) these costs have averaged \$118,616. When compared to the average annual base fee revenue, this cost is 1.66% of program base revenue (i.e., base fees charged, exclusive of any administrative fee currently collected). Therefore, the City will impose a Financial Administration charge of 1.5% for each dollar of fee assessed on new development.

### *CIP Program Administration*

As mentioned, the costs for capital planning and programming for projects listed in the Fee Program, including staff and consultant time, may be charged to the Program. Referred to as Capital Improvement Program (CIP) Program Administration, these charges include salaries and benefits for the City's CIP Manager, various staff engineers, and administrative staff. It also includes consultant costs for various program functions, including but not limited to, management of the CIP, support on grant applications for projects listed in the Roadway Fee Program, and initial scoping of projects prior to project initiation. These combined costs are subject to the City's Cost Allocation Method, which assigns the total CIP Program costs on a percent basis to the various potential funding sources, including Roadway Fee, based upon the total construction costs and funding sources. For Fiscal Year 2022, for example, the total Administration costs were approximately \$1,478,000, with approximately 22%, or \$325,160, allocated to the Roadway Fee Program. Across the eight fiscal years analyzed, the average CIP Program Administration costs of \$437,683 represented 6.12% of program base revenue. Therefore, the City will impose a CIP Program Administration charge of 4.0% for each dollar of fee assessed on new development.

### PROPOSED EGRFP FEES

The proposed EGRFP fees are determined as the product of the DUE rates for each land use shown in **Table 4.7** multiplied by the average cost per DUE of \$8,926.11 from **Table 4.8**. The EGRFP fees are based on the total future development and the allocated fair share cost of transportation improvements. The proposed EGRFP fees, including the administrative charge are shown in **Table 4.10**.

4. ROADWAY FEE CALCULATION AND COST ALLOCATION

Table 4.10: Proposed EGRFP Fee Schedule

Land Use		Unit	EGRFP Fees	With Admin Fee <sup>1</sup>	
Residential	Traditional	Up to 1,200 sq. ft.	\$3,659.71	\$3,860.99	
		greater than 1,200 to 1,400 sq. ft.	\$6,962.37	\$7,345.30	
		greater than 1,400 sq. ft. to 1,700 sq. ft.	\$7,676.45	\$8,098.66	
		greater than 1,700 sq. ft. to 2,000 sq. ft.	\$8,926.11	\$9,417.05	
		greater than 2,000 sq. ft. to 2,700 sq. ft.	\$9,818.72	\$10,358.75	
		greater than 2,700 sq. ft. to 3,400 sq. ft.	\$10,443.55	\$11,017.94	
		greater than 3,400 sq. ft.	\$11,068.38	\$11,677.14	
	Senior Adult	Up to 1,000 sq. ft.	Dwelling Unit	\$2,410.05	\$2,542.60
greater than 1,000 sq. ft.		\$2,856.36		\$3,013.45	
Commercial	Shopping Center		Square Feet	\$8.21	\$8.66
	Auto Mall		Acres	\$22,226.01	\$23,448.44
	Gas Station w/Convenience Market		Fueling Positions	\$11,246.90	\$11,865.48
	Theater/Cinema		Seats	\$89.26	\$94.17
Office		Square Feet	\$8.66	\$9.13	
Industrial		Square Feet	\$3.21	\$3.39	
Hotel	Hotel/Motel		Rooms	\$1,338.92	\$1,412.56
Miscellaneous	Hospital		Beds	\$8,301.28	\$8,757.85
	Assembly		Square Feet	\$3.30	\$3.48
	Day Care Center		Square Feet	\$12.59	\$13.28
	Congregate Care Facility		Dwelling Units	\$892.61	\$941.70
	Assisted Living		Beds	\$1,160.39	\$1,224.22
	Private School (K-12)		Student	\$1,249.66	\$1,318.39

<sup>1</sup> Note: Totals and calculations may not equal due to rounding.

<sup>2</sup> Multi-family units are those units less than 1,200 square feet.

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## 5. NEXUS FINDINGS

### AUTHORITY

In California, cities and counties rely on their authority to levy public facilities fees under the police powers granted by the California Constitution pursuant to the procedures of the Mitigation Fee Act, contained in Government Code Section 66000 et seq.. This Nexus Study provides the necessary documentation for the City to adopt the updated Roadway Fee Program.

### MITIGATION FEE ACT AND REQUIRED FINDINGS

Because of the growing use of impact fees after the passage of Proposition 13 and concern over inconsistencies in their application, the California State legislature passed the Mitigation Fee Act, with AB 1600 in 1987. The act, currently contained in California Government Code Section 66000 et seq., establishes ground rules for the imposition and ongoing administration of development fee programs. The act became effective in January 1989.

### ASSEMBLY BILL 602 REQUIREMENTS

Assembly Bill 602 ("AB 602") added Government Code Section, 66016.5(a) pertaining to impact fees, which requires that on and after January 1, 2022, a local agency that conducts an impact fee nexus study shall follow all of the following specific standards and practices:

1. *"Before the adoption of an associated development fee, an impact fee nexus study shall be adopted"*

Adoption of this Nexus Study will satisfy this requirement.

2. *"When applicable, the nexus study shall identify the existing level of service for each public facility, identify the proposed new level of service, and include an explanation of why the new level of service is appropriate"*

As part of the development in the City's 2019 General Plan, the City comprehensively updated its Circulation policies around roadway sizing and improvements, to more closely align with Senate Bill 743 (SB 743), which, along with guidance from the State Governor's Office of Planning and Research, eliminates the use of Level of Service as a metric for determining environmental impacts of a proposed project under the California Environmental Quality Act (CEQA). With this change, and as implemented in this Nexus Study, the City's Roadway Fee Program is no longer a CEQA mitigation fee.

However, AB 602 requires that the City evaluate the needs for facility improvement based upon a level of service. Consistent with SB 743, the City has established Roadway Performance Targets in the General Plan, which function similar to traditional level of service. The Performance Targets establish average daily traffic volumes for different roadway sizes and configurations. Roadway sizing (i.e., land count configuration, median condition) is then determined based upon the projected average daily traffic levels as calculated from the City's traffic model, which includes both Base Year and Future/Buildout land uses. In certain circumstances, the City may approve deviations from the Performance Targets, where a lesser level of roadway sizing (i.e., fewer lanes) are

provided in response to local conditions, including existing development, historic or environmental resources, or other factors as provided in the General Plan. A similar series of metrics are provided for intersection conditions (stop sign, traffic signal, roundabout), with targets based upon the delay (in seconds) condition. Where an intersection performs at a delay level that exceeds the Performance Target, improvements are warranted to reduce the delay.

As part of the General Plan, all arterial and collector roadways (i.e., Roadway Fee Program Roadways) were analyzed to determine the necessary roadway sizing and intersection conditions at Buildout). The City Council then approved reductions in lane configurations and intersection type consistent with the General Plan policies and the City's Rural Roads Policy. These decisions, which are documented in the General Plan, where the foundation of improvements described in this Nexus Study. The Nexus Study then analyzes the costs associated with completing the improvements and assigns a fair share of this costs to new development, pursuant to the Mitigation Fee Act. This Nexus Study does not incorporate, nor propose, any changes in the level of service or the performance characteristics of the City's roadways from that provided in the General Plan (including the Transportation Plan, Roadway Sizing, and Performance Targets).

3. *"A nexus study shall include information that supports the local agency's actions, as required by subdivision (a) of Section 66001".*

Section 66001 (a) states that: *"In any action establishing, increasing, or imposing a fee as a condition of approval of a development project by a local agency, the local agency shall do all of the following:"*

- 1) *Identify the purpose of the fee.*

The purpose of the EGRFP is to provide a funding mechanism to support new roadway improvements necessary to serve new development throughout the City. The facilities identified and incorporated into the EGRFP are provided for in the City's General Plan, various area plans and specific plans, and are necessary to implement the City's Performance Targets.

- 2) *Identify the use of fee revenues.*

The fees charged to new development will be used to fund needed additions and improvements to roadways and other transportation improvements to accommodate future traffic volumes projected as a result of new development. Roadway additions and improvements include road widening and reconstruction, intersection signalization, railroad overcrossings, ITS, and interchange improvements.

- 3) *Determine a reasonable relationship between the fee's use and the type of development paying the fee.*

New development in the City will affect the operation and capacity of the City's roadways and, pursuant to the City's General Plan, improvements are necessary. Completion of the necessary roadway improvements will ensure that the increased traffic volume on City roadways caused by new development will not result in undesired roadway operational performance.

- 4) *Determine a reasonable relationship between the need for the fee and the type of development paying the fee.*

Each new residential and nonresidential development project in the City will add to the incremental need for transportation facility improvements, and each new development will benefit from the new transportation facility capacity. For new development to occur during the planning horizon of the City's General Plan, roadway improvements identified by the City's traffic model will be necessary to maintain acceptable operations.

- 5) *Relationship between Amount of Fees and Cost of or Portion of Facility Attributed to Development on Which Fee is Imposed*

The City's traffic model identified transportation improvements necessary to serve new development. Roadway improvements needed to serve new development were identified and the cost of these improvements was estimated. Construction of the roadway and intersection improvements will serve new development in the City. The cost of these improvements to be funded by new development in the City are allocated to each benefiting land use using a cost allocation method that measures the relative benefit for each land use. The costs were allocated using a plan-based allocation that factored in trip generation rates, vehicle miles traveled and trip length, and cumulative development potential under the General Plan. The result is a maximum justifiable fee for each new residential and nonresidential development that reflects the relative traffic impact on the roadway system.

4. *"If a nexus study supports the increase of an existing fee, the local agency shall review the assumptions of the nexus study supporting the original fee and evaluate the amount of fees collected under the original fee."*

The 2022 Nexus Study process included a review of the 2014 EGRFP Nexus Study and the supporting technical documentation, including the descriptions of proposed improvements and cost estimates. An evaluation was made of the original fee amount and a determination was made for each improvement whether: 1) the improvement had been completed; 2) was no longer required due to changes in land use; or 3) that the improvement should be carried over to the 2022 EGRFP with a revised cost estimate. The list of facilities and roadway improvements was also updated based upon the City's 2019 General Plan (updated since the 2014 EGRFP Nexus Study was prepared and adopted).

Depending upon the land use category, the proposed fee may be more or less than the existing fee. This is based on several factors, including: 1) changes in the existing and buildout land use assumptions, which incorporate changes from the 2019 General Plan Update; 2) changes in trip rates by land use as provided in the latest ITE Trip General Manual, which has been updated since the 2014 Nexus Study; 3) the addition of trip length (e.g., Vehicle Miles Traveled) into the calculation methodology to account for the relationship between different use types and their influence in increasing roadway sizes; 4) the elimination of the fee program zones and consolidation into a single zone; and 5) the segmentation of the residential fee rates based upon the requirements of AB 602 to base the fee for residential uses on dwelling

unit size. Table ES-6 illustrates the existing fee rates and table ES-5 illustrates the proposed fee rates.

5. *“A nexus study adopted after July 1, 2022, shall calculate a fee imposed on a housing development project proportionately to the square footage of proposed units of the development. A local agency that imposes a fee proportionately to the square footage of the proposed units of the development shall be deemed to have used a valid method to establish a reasonable relationship between the fee charged and the burden posed by the development.” A nexus study is not required to comply with this requirement if the local agency makes certain findings, which are described in Government Code Section 66016.5(5)(B)..”*

This Nexus Study complies with the requirement that the fee for residential development projects be calculated on the basis of square footage of the units by creating a fee schedule consisting of 8 floor area categories. The proposed fee schedule applies different fee rates according to the range of the home sizes, as well as the average length of trips for each home size category. Studies conducted in the Sacramento region by the Sacramento Area Council of Governments (e.g., the 2020 Metropolitan Transportation Plan and accompanying SACSIM 19 Traffic Model) and an analysis by the City's traffic consultant Fehr & Peers, along with data from US Census Bureau's American Community Survey were used to make correlations between trip rates and income, then between income and home size. The final correlation between trip rates and home size is the basis for the residential EGRFP fees.

This Nexus Study provides the technical documentation to support the above findings and determinations that establish the basis for imposing the increased fees as recommended.

This Nexus Study and the recommended fee schedule also conforms to the fundamental premise of the Mitigation Fee Act is that the burden of the impact fees cannot total more than the actual cost of the public facility needed to serve the development paying the fee. Also, fee revenues can only be used for their intended purposes. In addition, the Act has specific accounting and reporting requirements, both annually and after every five-year period, for the use of fee revenues. These requirements are covered in more detail in Chapter 6 of this report.

In addition, the impact fee revenues may not be used for staffing, operations, and maintenance of either existing or new facilities.

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## 6. IMPLEMENTATION

This chapter identifies tasks that the City will complete when implementing the fee program.

The EGRFP presented in this report is based on the best improvement cost estimates, funding source information, administrative cost estimates, and land use information available at this time. If costs change significantly, if the type or amount of new development changes, if other assumptions significantly change, or if other funding becomes available (as a result of legislative action on State and local government finance, for example), the fee program should be updated accordingly.

After the fees presented in this report are established, the City will conduct periodic reviews of roadway improvement costs and other assumptions used as the basis of the 2022 Nexus Study. Based on these reviews, the City may make necessary adjustments to the fee program through subsequent fee program updates.

### INFLATION ADJUSTMENT

For most of the projects, the costs in this report are shown in 2021 dollars based on the consultant's experience and actual construction costs of similar City-constructed improvements where available. To ensure that the fee program stays current with the prevailing cost of construction, the proposed fee will be automatically adjusted by the City annually to account for the inflation (or deflation) of construction, right-of-way acquisition, environmental, and design costs. Elk Grove Municipal Code Section 16.95.060 (A), which pertains to the EGRFP, provides that fee adjustments shall occur automatically on January 1st of each calendar year. Adjustments in the amount of the estimated construction costs of providing the specified road fee program facilities will be adjusted automatically based upon the average three-year adjustment in the Caltrans Cost Index. The adjustment will be based on a three (3) year moving average of the for the second (2nd) quarter of the year, or equivalent, as determined by the Finance Director. For example, the adjustment for January 2023 will be determined by calculating the average change for the previous three (3) prior year's indices, beginning with the second quarter of years June 30, 2019 to June 30, 2020, June 30, 2020 to June 30, 2021, and June 30, 2021 to June 30, 2022. The resulting value will be the adjustment factor that will be applied to the Roadway fee in January 2023.

### IMPLEMENTING ORDINANCES/RESOLUTIONS

The proposed fee would be adopted by the City through one or more ordinances authorizing collection of the fee and through one or more fee resolutions establishing the fee. The City has established Elk Grove Municipal Code Chapter 16.95 (Development Impact Fees), which establishes the City Roadway Impact Fee. That chapter will be updated to rename that fee the Elk Grove Roadway Fee Program, as that title is used in this report.

The fee will be effective 60 days following the City's final action on the ordinances authorizing collection of the fee and on the fee resolutions establishing the fee. The new ordinance and resolution should reference the automatic inflation adjustment factor discussed in this section.

### FEE ADMINISTRATION

The Roadway Fee will be collected from new development in areas subject to the fee at the time of the building permit issuance; use of these funds may need to wait until a sufficient fund balance

can be accrued. According to Government Code Section 66000, the City is required to deposit, invest, account for, and expend the fees in a prescribed manner.

#### **FEE EXEMPTIONS , REDUCTIONS, AND WAIVERS**

The EGRFP may be reduced under certain circumstances. Any exemptions or reduction in fees will be based on the City's independent analysis and review of the subject property.

The 2022 Nexus Study carries forward the exemptions, reductions, and waivers as determined in the 2014 Nexus Study. Except as otherwise provided herein, all determinations regarding the application of the exemptions listed in this section, along with determining any special fee calculations as allowed under this section, shall be made by the City Finance Director or their designee. Specific reductions or waivers provided in this section shall be made by the City Council as provided.

#### **Public Agencies**

All federal and state agencies, public school districts, facilities of the Cosumnes Community Services District (including fire stations and park sites), and the City will be exempt from the Roadway Fee. Other non-City public agencies shall be subject to payment of the Roadway Fee; however, the City may choose to waive some or all of the Roadway Fee in certain cases.

#### **Replacement/Reconstruction**

Any replacement or reconstruction (no change in use) of any residential unit or any nonresidential structure that is damaged or destroyed as a result of fire, flood, explosion, wind, earthquake, riot, or other calamity, or act of God shall be exempt from the Roadway Fee. However, if the replacement or reconstructed residential unit exceeds the documented total number of units or unit size of the damaged/destroyed residential structure, or the replacement or reconstructed nonresidential building exceeds the documented total floor area of the damaged/destroyed building, the excess units or building square footage is subject to the Roadway Fee.

If a residential or nonresidential structure is replaced with an alternative land use, such as replacing an office building with a retail building, then City staff will determine the appropriate Roadway Fee adjustment to reflect the different trip characteristics of the original and new land uses.

#### **Additions/Alterations/Modifications/Temporary Facilities**

The following rules shall apply to additions, alterations, modifications, and temporary facilities.

1. Accessory Dwelling Units and Junior Accessory Dwelling Units shall not be assessed a fee under the EGRFP.
2. Additions to residential structures where the total square footage of the dwelling remains within a fee category range, provided no change in use occurs and a second full kitchen is not added, shall not be charged a fee. If the square footage of the dwelling increases into a new fee category range, the difference of the two fee category ranges shall be collected prior to building permit issuance.
3. Except as otherwise provided, when an existing residential dwelling is converted into two primary units, or a new primary dwelling is added to the property, that new unit shall be assessed a fee consistent with the provisions of this Nexus Study.

4. Additions to multifamily residential structures that are not part of a mixed-use type project, provided no change in use occurs and no additional units result.
5. Supporting use square footage in multi-unit residential projects, such as the office and recreation areas required to directly serve the multifamily project, shall not be subject to a fee. The residential unit fee will provide the full mitigation required in multi-unit residential projects.
6. Non-habitable residential structures including, but not limited to, decks, pools and spas, pool cabanas, sheds, and detached garages shall not be assessed a fee. An attached garage shall/shall not count towards the square footage of the dwelling.
7. Mobile or manufactured homes that are not the primary residents and have no permanent foundation shall not be assess a fee.

### **Reductions and Waivers**

The City may reduce or waive the Roadway Fee for a development project if it can be determined that the proposed project will have reduced or no impact on any facility for which the Roadway Fee is collected. If a development project is found to have no impact such project may be exempted from the fees. If a project has characteristics that indicate its impacts on a public facility or infrastructure system will be significantly and permanently smaller than the average impact used to calculate impact fees in this Study, the fees may be reduced accordingly at the City's sole discretion.

The City may base its determination for fee reductions or waivers on evidence presented to the City by the project applicant that demonstrate one or more of the following conditions:

- The project will have substantially less residential occupancy or employment density than the assumptions indicated in this study for the proposed land use.
- Due to the nature of the project, such as location, anticipated use, expected market, and/or customer base, there is justifiable reason to expect less demand on transportation facilities. The applicant may provide evidence or cite authoritative sources which indicate that, for their specific project, one or more of the factors used in this Nexus Study (e.g., occupancy, trip generation, vehicle miles traveled) are lower than given for the general categories of this study.

The City shall review the evidence and make a recommendation to City Council of its findings and whether the impact fee may be reduced or waived for the development project.

In some cases, the City may desire to voluntarily waive or reduce impact fees that would otherwise apply to a project to promote goals such as affordable housing, economic development, or the provision of benefits that apply to the public at large. Such a waiver or reduction may not result in increased costs to other development projects and is allowable only if the City offsets the lost revenue from other funding sources.

### **Required Fees**

Below are examples of instances in which the Roadway Fee may be required for land uses that potentially could be classified as exempt from the fees:

1. Any project listed above that would otherwise be exempt from the fee (including both ministerial and discretionary projects), but which nonetheless, in the determination of the City Council, increases the demand on City facilities funded by the Roadway Fee may be subject to the fee. In determining to impose such fee, the City Council may impose the entire fee or pro rate the amount of the fee based on the project's demonstrated impact on the subject facility or facilities. Unlawfully constructed facilities and buildings, constructed before the adoption of the Roadway Fee, which later obtain a building permit consistent with applicable law to legitimize the facility or building, may be subject to the applicable fee. For discretionary projects, this determination may be made as part of the project approvals or at a subsequent meeting. For ministerial projects, the determination shall be made prior to issuance of the building permit after review and recommendation by the Finance Director and Development Services Director.
2. Shell buildings, meaning the construction of the exterior of the building with limited or no interior improvements (e.g., unfinished floors, limited electrical and plumbing) and with or without a heating, ventilation, and air conditioning (HVAC) system:
  - The full Roadway Fee can be made payable at the time the building permit for the shell building is obtained.
  - The incremental difference between the intended and actual use of any shell building may be collected on any building permit for tenant improvements.
3. Accessory residential structures that are converted to a Primary Residential Dwelling Unit and are not considered Accessory Dwelling Units or Junior Accessory Dwelling Units may be subject to the Roadway Fee as provided in this Nexus Study. A conversion shall be considered an Accessory Dwelling Unit or Junior Accessory Dwelling Unit if it conforms to EGMC Chapter. 23.90, and will not be subject to the Roadway Fee. A unit constructed pursuant to EGMC Chapter 23.30 shall be subject to the Roadway Fee.
4. Temporary buildings that are authorized for more than 30 days in any calendar year may be subject to the fee when converted to permanent use, as determined by the Finance Director.
5. The reconstruction of a building destroyed as a result of fire, flood, explosion, wind, earthquake, riot, or other calamity, or act of God, which has been vacant for more than five years.
6. That portion of the reconstruction of a building destroyed as a result of fire, flood, explosion, wind, earthquake, riot, or other calamity, or act of God, which is greater than the documented total number of units or square footage that was or would have been previously subject to the City's EGRFP.

### **Other Land Uses**

The EGRFP identifies Roadway Fee for the major land use categories identified by the City's traffic model. Specialized land uses may have unique trip generation rates, and in these cases, the City may require a project-specific traffic study and may calculate the applicable fee based on information derived from the traffic model. For specialized development projects, the City Finance Director or his/her designee, in conjunction with the Development Services Director and City Traffic

Engineer, will review traffic generation rates applicable to the specialized development and decide on an applicable fee.

### **Credit for Replacement of Existing Buildings**

Portions of the City are already developed. New development that replaces existing development is eligible for a fee credit to the extent that the facilities to be funded by the new development are already provided to the existing development. For example, a four-unit apartment complex that is replaced by an eight-unit apartment complex could receive up to a 50 percent credit in the fee ( $4/8 = 50$  percent). The City's Finance Director, in consultation with the Development Services Director, will determine the amount of the fee credit at the time a site plan is submitted to the City.

### **FEE CREDIT AND REIMBURSEMENT TO DEVELOPERS**

As is typical with development impact fee programs, many of the public infrastructure facilities are needed up-front before adequate revenue from the fee collection would be available to fund such improvements. Consequently, some type of private funding may be necessary to pay for the public improvements when they are needed. This private financing may be in the form of land-secured bonds, developer equity, or other form of private financing.

In cases where a private party (e.g., developer) has advance-funded an eligible EGRFP facility, the party will be due a reimbursement from the EGRFP. Reimbursements will be provided under the following conditions:

- Developer-installed improvements shall be considered for reimbursement. Only funds collected from the Roadway Fee shall be used to reimburse a developer who installed eligible roadway facility improvements identified in this report.
- The value of any developer-installed improvement for fee credit or reimbursement purposes shall be based on the lesser of the actual cost of eligible facilities (as determined at the sole discretion of the City via a review of the construction contract and payments made, plus an allowance determined by the City for soft costs directly associated with the facility design and construction) or the total eligible facility costs based on the cost schedule and estimate set forth in the EGRFP, subject to an automatic annual inflation adjustment described previously in this section.
- All construction contracts, construction work, and requests for reimbursement are performed in conformance with the most current City "Reimbursement Policies and Procedures for Privately Constructed Public Facilities," (Reimbursement Policies) available from the City.
- The reimbursement may be in the form of fee credits or cash reimbursements as described in more detail herein.

### **Credit and Reimbursement Implementation Process**

Once all criteria are met, fee credits up to 60 percent of the base fee obligation may be used to offset fees when payable at building permit issuance. To obtain fee credits, the public facility project must meet all criteria and developers must apply to the City before payment of fees on the first unit associated with final development approval. The City maintains the flexibility to

allocate fee credits in a manner it chooses. Fee credits granted shall be on a per unit or per square-foot basis for all development projects. In no event will a party be granted fee credits against the administrative portion of the fee.

Cash reimbursements will be due to developers who have advance-funded a facility (or facilities) in excess of their proportionate share for such a facility. In this instance, developers would first obtain fee credits, up to their allocation requirement for a facility, and then await reimbursement from fee revenue collections from other fee payers.

The use of accumulated fee revenues shall be used in the following priority order:

1. Critical projects as defined by the City.
2. Repayment of reimbursement to private developers for the construction of EGRFP projects.

To obtain reimbursements, developers must enter into a reimbursement agreement with the City. Reimbursements will be paid and/or credit balances established only after the City accepts the subject public facility improvements and the developer has complied with the Reimbursement Policies or its equivalent replacement document. It is important to note that reimbursements are an obligation of the EGRFP and not an obligation of the City General Fund or other operating funds.

#### **IMPACT FEE PROGRAM ADOPTION PROCESS**

Impact fee program adoption procedures are found in California Government Code Section 66016–66019. Adoption of this impact fee program requires the City Council to follow certain procedures, including holding a public hearing with at least 30 days' notice for the hearing (Gov. Code § 66016.5(a)(7)). The City shall notify any member of the public that requests notice of intent to begin an impact fee nexus study of the date of the hearing.

Mailed notice 14 days prior to the public hearing is required for those individuals who request such notification. Data, such as this impact fee report and referenced material, must be made available at least 10 days prior to the public hearing. Any new or increased fees would be effective 60 days after adoption.

#### **PROGRAMMING REVENUES AND PROJECTS WITH THE CAPITAL IMPROVEMENT PLAN (CIP)**

The City will update its CIP to identify specific projects and program fee revenues to those projects. Use of the CIP in this manner documents a reasonable relationship between new development and the use of fee revenues.

For the planning period of the CIP, the City shall allocate all existing fund balances and projected fee revenue to facilities projects. The City shall plan its CIP expenditures at least five years in advance and show where all collected development impact fee revenues will be spent. The City can hold funds in a project account for longer than five years, if necessary, to collect sufficient funds to complete a given project. See Compliance Requirements below for the specific CIP update requirements stated in Government Code Section 62000.

### FUNDS NEEDED TO COMPLEMENT IMPACT FEE PROGRAM

In adopting the fees presented in this report, additional funds will need to be identified to fund the share of costs not related to new development. **Tables ES-4** and **3.1** identify the facilities studied in this report and the projected impact fee revenues. The Percent Third-Party Funding column identifies the additional funding that the City needs to obtain for the facilities shown to cover, among other things, the City's share related to existing development.

### COMPLIANCE REQUIREMENTS

The California Mitigation Fee Act (Government Code Section 66000 et seq.) mandates procedures for administration of impact fee programs, including collection, accounting, refunds, updates, and reporting. The City must comply with the annual and five-year reporting requirements. For facilities to be funded with a combination of impact fees and other revenues, the City must identify the source and amount of the other revenues. The City must also identify when the other revenues are anticipated to be available to fund the project. The City's compliance obligations vis-à-vis the act include but are not limited to the following specific requirements:

**Collection of Fees.** Section 66007 provides that a local agency shall not require payment of fees by developers of residential projects prior to the date of final inspection or issuance of a certificate of occupancy, whichever comes first. In a residential development of more than one dwelling unit, the local agency may choose to collect fees either for individual units or for phases upon final inspection, or for the entire project upon final inspection of the first dwelling unit when it is completed. The local agency may require the payment of those fees or charges at an earlier time if:

- A. The local agency determines that the fees or charges will be collected for public improvements or facilities for which an account has been established and funds appropriated and for which the local agency has adopted a proposed construction schedule or plan prior to final inspection or issuance of the certificate of occupancy; or
- B. The fees are to reimburse the local agency for expenditures previously made. "Appropriated," as used in this section, means authorization by the governing body of the local agency for which the fee is collected to make expenditures and incur obligations for specific purposes.

**Earmarking of Fee Revenues.** Section 66006 mandates that the City deposit fees for the improvements in a separate capital facilities account or fund in a manner to avoid any commingling of the fees with other revenues and funds of the City, except for temporary investments. Fees must be expended solely for the purpose for which they were collected. Interest earned on the fee revenues must also be placed in the capital account and used for the same purpose. The Mitigation Impact Fee Act is not clear as to whether depositing fees "for the improvements" refers to a specific capital improvement or a class of improvements (e.g., fire or police facilities). The City intends to place all fee revenue into a single, exclusive account fund.

**Reporting.** Section 66006 requires that once each year, within 180 days of the close of the fiscal year, the City must make available to the public the following information for each account established to receive impact fee revenues:

1. The amount of the fee.
2. The beginning and ending balance of the account or fund.
3. The amount of the fees collected, and interest earned.
4. Identification of each public improvement on which fee revenues were expended and the amount of the expenditures on each improvement, including the percentage of the cost of the public improvement that was funded with fee revenues.
5. Identification of the approximate date by which the construction of a public improvement will commence, if the City determines sufficient funds have been collected for financing of an incomplete public improvement.
6. A description of each interfund transfer or loan made from the account or fund, including interest rates, repayment dates, and a description of the improvements on which the transfer or loan will be expended.
7. The amount of any refunds or allocations made pursuant to Section 66001, paragraphs (e) and (f).

The above information must be reviewed by the City Council at its next regularly scheduled public meeting, but not less than 15 days after the statements are made public.

**Findings and Refunds.** Section 66001 requires that, for the fifth fiscal year following the first deposit of any impact fee revenue into an account or fund as required by Section 66006, and every five years thereafter, the City must make all the following findings for any fee revenues that remain unexpended, whether committed or uncommitted:

1. Identify the purpose to which the fee will be put.
2. Demonstrate the reasonable relationship between the fee and the purpose for which it is charged.
3. Identify all sources and amounts of funding anticipated to complete financing of incomplete improvements for which the impact fees are to be used.
4. Designate the approximate dates on which the funding necessary to complete financing of those improvements will be deposited into the appropriate account of fund.

**Updating of the Impact Fee Nexus Study.** Per California Government Code Section 66016.5(a)(8), impact fee nexus studies shall be updated at least every eight years, from the period beginning on January 1, 2022.

The City may use the impact fee nexus study template developed by the California Department of Housing and Community Development pursuant to Section 50466.5 of the Health and Safety Code to update the nexus study.

**Annual Update of Capital Improvement Plan.** Section 66002 provides that if the City adopts a CIP to identify the use of impact fees, that program must be adopted and annually updated by a

resolution of the governing body at a noticed public hearing. The City maintains two CIPs: one includes the programming of all projects funded or partly funded by impact fee revenues (which is contained in this Nexus Study in Appendix A and the EGRFP Cost Estimate by Mark-Thomas dated Feb. 10, 2022) and the other is the 5-year CIP that is adopted annually during the City budget process.

## APPENDIX A: EGRFP TRANSPORTATION PROJECTS

Note: For additional details on these estimates, see the report *Elk Grove Roadway Fee Program: Unit Costs and Cost Estimate Assumptions* by Mark Thomas, dated June 28, 2022, on file with the City.

### EGRFP ROADWAYS

ID	Roadway	Limits/Location	Description	Cost	Nexus (see Nexus Key)
R-1.0	Big Horn Boulevard	Whitelock Parkway to Bilby Road	New Segment - Construct 2 Center Lanes and Median	\$225,700	1
R-2.0		Bilby Road to Shed C Culvert	New Segment - Construct 2 Center Lanes and Median	\$77,000	1
R-3.0		Shed C Culvert to Collector 2	New Segment - Construct 2 Center Lanes and Median	\$0 <sup>1</sup>	1
R-4.0		Collector 2 to Kammerer Road	New Segment - Construct 2 Center Lanes and Median	\$717,370	1
R-5.0	Big Timber	Elk Grove Boulevard to Civic Center Drive	Extend Street (gap segment) at 2 Lanes	\$674,280	2
R-6.0	Bilby Road	Bruceville Road to Big Horn Boulevard	New Segment - Construct 2 Center Lanes and Median	\$660,400	1
R-7.0		Big Horn Boulevard to Road B	New Segment - Construct 2 Center Lanes and Median	\$221,940	1
R-8.0		Road B to Shed C Culvert	New Segment - Construct 2 Center Lanes and Median	\$0	1
R-9.0		Shed C Culvert to Collector 1	New Segment - Construct 2 Center Lanes and Median	\$2,374,370	1
R-10.0		Collector 1 to Lotz Parkway	New Segment - Construct 2 Center Lanes and Median	\$1,842,080	1
R-11.0		Lotz Parkway to Promenade Parkway	New Segment - Construct 2 Center Lanes and Median	\$365,260	1
R-12.0	Bond Road	E. Stockton Boulevard to Elk Grove-Florin Road	Construct Raised Median	\$397,660	1
R-13.0	Bradshaw Road	Bond Road to Stone Springs Drive/Kapalua Ln	Existing Segment - Construct 2 Center Lanes and Median	\$541,749	3
R-14.0		Stone Springs Drive/Kapalua Lane to Elk Grove Boulevard	Existing Segment - Construct 2 Center Lanes and Median	\$3,223,356	3
R-15.0		Elk Grove Boulevard to Ridgerock Drive	Existing Segment - Construct 2 Center Lanes and Median	\$2,037,781	3
R-16.0		Ridgerock Drive to Grant Line Road	Existing Segment - Construct 2 Center Lanes and Median	\$812,046	3

<sup>1</sup> Segments listed as having "\$0" cost are included as a placeholder to indicate continuity whereas the segment, in reality, has no actual length.

**EGRFP Roadways (continued)**

<b>ID</b>	<b>Roadway</b>	<b>Limits/Location</b>	<b>Description</b>	<b>Cost</b>	<b>Nexus (see Nexus Key)</b>
R-17.0	Bruceville Road	Sheldon Road to Big Horn Boulevard	Existing Segment - Widen from 4 to 6 Lanes	\$6,194,020	1
R-18.0		Big Horn Boulevard to Laguna Boulevard	Restripe with project to north	\$415,490	1
R-19.0		Whitelock Parkway to Poppy Ridge Road	Existing Segment - Construct 2 Center Lanes and Median; Median is 36 feet wide; relocate 69kV line in median; restripe section in front of apartments and shopping centers at north and south ends	\$51,510	1
R-20.0		Poppy Ridge Road to Machado Ranch Drive	Existing Segment - Construct 2 Center Lanes and Median; Median is 36 feet wide; relocate 69kV line in median; restripe section in front of apartments and shopping centers at north and south ends	\$715,151	1
R-21.0		Machado Ranch Drive to Boa Nova Drive	Existing Segment - Construct 2 Center Lanes and Median; Median is 36 feet wide; relocate 69kV line in median; restripe section in front of apartments and shopping centers at north and south ends	\$474,100	1
R-22.0		Boa Nova Drive to Bilby Road	Existing Segment - Construct 2 Center Lanes and Median; Median is 36 feet wide; relocate 69kV line in median; restripe section in front of apartments and shopping centers at north and south ends	\$474,690	1
R-23.0		Bilby Road to Shed C Culvert	Existing Segment - Construct 2 Center Lanes and Median	\$3,408,054	1
R-24.0		Shed C Culvert to New Kammerer	Construct new 2 Center Lanes and Median	\$0	1
R-25.0		Calvine Road	Cliffcrest Drive to Elk Grove-Florin Road	Existing Segment - Widen Roadway from 4 to 6 Lanes	\$2,834,715
R-26.0	Elk Grove-Florin Road to Waterman Road		Existing Segment - Widen Roadway from 4 to 6 Lanes	\$2,806,439	1
R-27.0	Collector 1	Kammerer to Bilby	2-lane commercial collector	\$822,752	1
R-28.0	Collector 2	Kammerer Road to Big Horn	2-lane commercial collector	\$1,916,680	1
R-29.0		Big Horn Boulevard to Bilby	2-lane commercial collector	\$2,982,989	1

**EGRFP Roadways (continued)**

<b>ID</b>	<b>Roadway</b>	<b>Limits/Location</b>	<b>Description</b>	<b>Cost</b>	<b>Nexus (see Nexus Key)</b>
R-30.0	Collector 3	Bilby to Lotz Parkway	2-lane commercial collector	\$2,341,690	1
R-31.0	East Park Drive	Lockford Way to Waterman Road	Extend Street (gap segment) 2 lanes residential	\$405,885	1
R-32.0	Elevate Road A	Elk Grove Blvd to Civic Center Drive	New Street	\$1,601,620	2
R-33.1	Elevate Road B	Big Horn Boulevard to Big Timber	New Street	\$1,565,200	2
R-33.2		Big Timber to Eastern Lot Line	New Street	\$552,060	2
R-34.0	Elk Grove Boulevard	E. Stockton Boulevard to Elk Grove-Florin Road	Construct Raised Median	1,163,910	1
R-35.0		Bradshaw Road to Grant Line Road	Existing Segment – Reconstruct with shoulders and bike lane per section and realign for new Grant Line Intersection	\$483,733	1
R-36.0	Elk Grove Florin Road	Bond Road to Elk Grove Boulevard	Construct Raised Median	\$1,557,230	4
R-37.0	Grant Line Road	SR 99 NB Ramps to UPRR	Existing Segment - Widen from 6 to 8 Lanes	\$645,140	4
R-38.1		UPRR to Waterman (Phase 1)	Complete north side frontage improvement per notes (Phase 1 of 8-Lane Project)	\$853,968	4
R-38.2		UPRR to Waterman (Phase 2)	Existing Segment – Construct Outside Lanes. Widen Roadway from 4 to 6 Lanes (Phase 2 of 8-Lane Project)	\$367,410	4
R-38.3		UPRR to Waterman (Phase 3)	Existing Segment – Construct Outside Lanes. Widen Roadway from 6 to 8 Lanes (Phase 3 of 8-Lane Project)	\$227,860	4
R-39.1		Waterman Road to Bradshaw Road (Phase 1)	Existing Segment - Widen Roadway from 2 to 4 Lanes	\$7,344,180	4
R-39.2		Waterman Road to Bradshaw Road (Phase 2)	Existing Segment - Widen Roadway from 4 to 6 Lanes	\$11,203,490	4
R-40.0		Bradshaw Road to Elk Grove Boulevard	Existing Segment - Widen Roadway from 2 to 4 Lanes	\$10,402,724	4

**EGRFP Roadways (continued)**

<b>ID</b>	<b>Roadway</b>	<b>Limits/Location</b>	<b>Description</b>	<b>Cost</b>	<b>Nexus (see Nexus Key)</b>
R-41.1	Kammerer Road	I-5 to Franklin Boulevard (Phase 1)	New Segment - Construct 2-Lane Roadway (4-Lane Right-of-Way)	\$33,632,439	4
R-41.2		I-5 to Franklin Boulevard (Phase 2)	New Segment - Construct 4-Lane Roadway	\$5,849,550	4
R-42.1		Willard Parkway to Bruceville Road (Phase 1)	New Segment - Construct 2-Lane Roadway (4-Lane Right-of-Way)	\$23,714,035	4
R-42.2		Willard Parkway to Bruceville Road (Phase 2)	New Segment - Construct 4-Lane Roadway	\$12,574,050	4
R-43.1		Bruceville Road to Big Horn Boulevard (Phase 1)	Existing Segment – Construct 2 Center Lanes and Median. Widen Roadway from 2 to 6 Lanes (Phase 1 of 6-Lane Project)	\$6,877,378	4
R-43.2		Bruceville Road to Big Horn Boulevard (Phase 2)	Existing Segment – Construct Middle Lanes for a total of 4 Lanes (Phase 2 of 6-Lane Project)	\$1,519,750	4
R-43.3		Bruceville Road to Big Horn Boulevard (Phase 3)	Existing Segment – Construct Outside Lanes for a total of 6 Lanes (Phase 3 of 6-Lane Project)	\$6,935,980	4
R-44.1		Big Horn Boulevard to Lent Ranch Parkway (Phase 1)	Existing Segment – Construct 2 Center Lanes and Median. Widen Roadway from 2 to 6 Lanes (Phase 1 of 6-Lane Project)	\$5,899,440	4
R-44.2		Big Horn Boulevard to Lent Ranch Parkway (Phase 2)	Existing Segment – Construct Middle Lanes for a total of 4 Lanes (Phase 2 of 6-Lane Project)	\$1,661,410	4
R-44.3		Big Horn Boulevard to Lent Ranch Parkway (Phase 3)	Existing Segment – Construct Outside Lanes for a total of 6 Lanes (Phase 3 of 6-Lane Project)	\$8,846,050	4
R-45.0		Promenade Parkway to SR 99 SB Ramps	Existing Segment - Widen from 6 to 8 Lanes	\$3,360,567	4

**EGRFP Roadways (continued)**

<b>ID</b>	<b>Roadway</b>	<b>Limits/Location</b>	<b>Description</b>	<b>Cost</b>	<b>Nexus (see Nexus Key)</b>
R-46.0	Laguna Grove Drive	Existing Terminus to Laguna Springs	2-lane commercial collector	\$1,028,862	1
R-47.1	Lotz Parkway	Whitelock Parkway to Promenade Parkway/Poppy Ridge Road (Phase 1)	New Segment - Construct 2 Center Lanes and Median. Widen Roadway from 2 to 6 Lanes (Phase 1 of 6-Lane Project)	\$1,248,009	1
R-47.2		Whitelock Parkway to Promenade Parkway/Poppy Ridge Road (Phase 2)	New Segment - Construct Middle Lanes for a total of 4 Lanes (Phase 2 of 6-Lane Project)	\$473,270	1
R-47.3		Whitelock Parkway to Promenade Parkway/Poppy Ridge Road (Phase 3)	New Segment - Construct Outside Lanes for a total of 6 Lanes (Phase 3 of 6-Lane Project)	\$2,446,560	1
R-48.0		Promenade Parkway to Road A/Kyler Road	New Segment - Construct 2 Center Lanes and Median	\$1,530,920	1
R-49.0		Road A/Kyler Road to Shed C Culvert	New Segment - Construct 2 Center Lanes and Median	\$0	1
R-50.0		Shed C Culvert to Bilby Road	New Segment - Construct 2 Center Lanes and Median	\$119,680	1
R-51.0		Bilby Road to Collector 3	New Segment - Construct 2 Center Lanes and Median	\$1,190,770	1
R-52.0		Collector 3 to Kammerer	New Segment - Construct 2 Center Lanes and Median	\$269,880	1
R-53.0		Monetta Drive	Existing terminus to Longleaf Drive	Extend Street (gap segment) 2 lane commercial	\$1,236,001
R-54.0	Parsons Landing	Two Harbors Drive to Apple Mill Road	Extend Street (gap segment) 2 lane residential	\$268,694	1
R-55.0	Promenade Parkway	Lotz Parkway/Poppy Ridge Road to SMUD Substation	Existing Segment – Construct 4 lanes with Median	\$4,111,434	1
R-56.0	Railroad Street	Existing terminus to Dino Drive	Extend Street (gap segment) 2 lane commercial	\$2,792,860	2
R-57.0	Waterman Road	Elk Grove Boulevard to Parsons Landing Street	Existing Segment – Complete 4-Lane Project (Frontage Improvement and Striping)	\$85,260	1

**EGRFP Roadways (continued)**

ID	Roadway	Limits/Location	Description	Cost	Nexus (see Nexus Key)
R-58.0	Waterman Road	Parsons Landing Street to Dino Drive/Mainline	Existing Segment - Construct 2 Center Lanes and Median	\$155,840	1
R-59.0		Dino Drive/Mainline to Kent Street	Existing Segment – Reconstruct as 2 lanes with median	\$895,040	1
R-60.1		Kent Street to Brinkman Court	Existing Segment – Reconstruct as 2 lanes with median	\$318,110	1
R-60.2		Brinkman Court to Mosher Road	Existing Segment – Reconstruct as 2 lanes with median	\$1,741,793	1
R-61.0		Mosher Road to Waterman Court	Existing Segment – Reconstruct as 2 lanes with median	\$1,366,630	1
R-62.0		Bond Road to South End of Cemetery	Existing Segment – Reconstruct as 2 lanes with median	\$5,335,182	1
R-63.0		South End of Cemetery to Rancho Drive	Existing Segment – Reconstruct as 2 lanes with median	\$1,242,917	1
R-64.0		Rancho Drive to Cruz Court	Existing Segment – Reconstruct as 2 lanes with median	\$110,867	1
R-65.0		500 feet south of Brown Road to Calvine Road	Improve to 2 lanes (gap segment)	\$1,277,800	1
R-66.0		Willard Parkway	Epoch Drive to Kammerer Road	Construct 2 center lanes and median	\$1,267,290
R-67.0	Mosher Road Extension (A Street)	Grant Line Road to B Street	Construct 2 Lanes and Center Turn-lane	\$2,880,870	1
R-68.0	Waterman Road Extension (B Street)	Grant Line Road to A Street	Construct 2 Center Lanes and Median	\$4,512,260	1
R-69.0	A Street	B Street to E Street	Construct 2 Center Lanes and Median	\$2,098,610	1
R-70.0	Bond Road	Bradshaw Road to Bader Road	Existing Segment – Reconstruct divided 2 Lane facility	\$1,404,393	1
R-71.0		Bader Road to Grant Line Road	Existing Segment – Reconstruct divided 2 Lane facility	\$2,697,988	1
R-72.0	Bradshaw Road	Calvine Road to Rural Elk Grove Area Boundary (North)	Existing Segment - Widen from 2 to 4 Lanes with Median	\$4,883,440	1
R-73.0		Rural Elk Grove Area Boundary (North) to Middle School	Existing Segment - Widen from 2 to 4 Lanes with Median	\$1,200,915	1

**EGRFP Roadways (continued)**

<b>ID</b>	<b>Roadway</b>	<b>Limits/Location</b>	<b>Description</b>	<b>Cost</b>	<b>Nexus (see Nexus Key)</b>
R-74.0	Bradshaw Road	Middle School to Bond Road	Existing Segment - Widen from 2 to 4 Lanes with Median	\$1,166,710	1
R-75.1	Calvine Road	Bradshaw Road to Vineyard Road	Existing Segment - Widen Roadway from 2 to 4 Lanes	\$2,384,050	7
R-75.2		Vineyard Road to Grant Line Road	Existing Segment - Widen Roadway from 2 to 4 Lanes	\$8,356,950	7
R-76.0	Elk Grove Florin Road	Sheldon Road to Animal Care Center	Shoulder Improvements	\$938,320	14
R-77.0		Campbell Road to Bond Road	Shoulder Improvements	\$0	14
R-78.0	Grant Line Road	Elk Grove Boulevard to Equestrian Drive	Existing Segment - Widen Roadway from 2 to 4 Lanes	\$4,892,110	15
R-79.0		Equestrian Drive to Bond Road	Existing Segment - Widen Roadway from 2 to 4 Lanes	\$1,591,180	4
R-80.0		Bond Road to Wilton Road	Existing Segment - Widen Roadway from 2 to 4 Lanes	\$3,046,810	4
R-81.0		Wilton Road to Aleilani Lane	Existing Segment - Widen Roadway from 2 to 4 Lanes	\$0	4
R-82.0	Grant Line Road	Aleilani Lane to Sheldon Road	Existing Segment - Widen Roadway from 2 to 4 Lanes	\$426,290	4
R-83.0		Sheldon Road to Graybill Lane	Existing Segment - Widen Roadway from 2 to 4 Lanes	\$2,270,600	4
R-84.0		Graybill Lane to Calvine Road	Existing Segment - Widen Roadway from 2 to 4 Lanes	\$4,067,860	15
R-85.0	Sheldon Road	Elk Grove Florin to Waterman Road	Shoulder improvements and add 2-way left turn lane	\$4,057,760	14
R-86.0		Waterman Road to Grant Line Road	Shoulder Improvements	\$14,516,147	14
R-87.0	Waterman Road	Sheldon Road to 500 ft south of Brown Road	Shoulder Improvements	\$628,720	14
<b>Total Roadways:</b>				<b>\$287,389,983</b>	

**EGRFP HIGHWAY/URBAN INTERCHANGES**

<b>ID</b>	<b>Roadway</b>	<b>Limits/Location</b>	<b>Description</b>	<b>Cost</b>	<b>Nexus (see Nexus Key)</b>
H-1.0	SR 99	SR 99 / Whitelock Parkway Interchange	Construct 4-Lane Diverging Diamond Interchange	\$94,700,000	City of Elk Grove General Plan (Policy MOB-1-3, MOB-7-5). The interchange was identified in the Laguna Ridge Specific Plan (LRSP) as a recommended improvement (LRSP FEIR, June 2004). In 2008, an addendum to the General Plan EIR amended the roadway sizing diagram to add the interchange and Policy CI-11-Action 2 was added. The interchange is mitigation for Southeast Policy Area (SEPA), Mitigation Measure 5.13.5a of the SEPA Strategic Plan FEIR (June 2014).
H-2.0	Hood Franklin Road	I-5 / Hood Franklin Road Interchange	Modify Interchange - Maintain L-9 Configuration with Ramp-Terminal Intersection	\$16,800,000	10
H-3.0	Elk Grove Boulevard	I-5 / Elk Grove Boulevard	Extend southbound off-ramp storage	\$400,000	11
H-4.0	Kammerer Road	Kammerer/Big Horn	Design and ROW preservation only	\$8,400,000	10
H-5.0		Kammerer/Bruceville	Design and ROW preservation only	\$7,900,000	10
H-6.0		Kammerer/Willard Parkway	Design and ROW preservation only	\$6,100,000	10

**Total Urban Interchanges Cost: \$134,300,000**

## EGRFP INTERSECTIONS

ID	Roadway	Limits/Location	Description	Cost	Nexus (see Nexus Key)
I-1.0	Big Horn	Big Horn Boulevard/Poppy Ridge Road	Install Traffic Signal 2X4	\$3,170,500	1
I-2.0		Big Horn Boulevard/Spoonwood/Machado Ranch Dr	Install Traffic Signal 2X4	\$4,121,500	1
I-3.0		Big Horn Boulevard/Elifa Road/Road A	Install Traffic Signal 2X4	\$4,121,500	1
I-4.0		Big Horn Boulevard/Collector 2	Install Traffic Signal 2X4	\$4,175,941	1
I-5.0		Big Horn Boulevard/Red Elk Drive	Install Traffic Signal 2X4	\$861,000	1
I-6.1	Bilby Road	Bilby Road/Bruceville Road	Signal Modification (Protected Phasing)	\$2,152,500	1
I-6.2		Bilby Road/Bruceville Road (Phase2)	Signal Modification 4X4	\$2,682,400	1
I-7.0		Bilby Road/Tillia Road	Install Traffic Signal 2X4	\$3,001,300	1
I-8.0		Bilby Road/Big Horn Boulevard	Install Traffic Signal 4X4	\$3,673,500	1
I-9.0		Bilby Road/Road B (West)	Install Traffic Signal 2X4	\$2,771,200	1
I-10.0		Bilby Road/Collector 1	Install Traffic Signal 2X4	\$3,414,300	1
I-11.0		Bilby Road/Road B (East)	Install Traffic Signal 2X4	\$3,025,100	1
I-12.0	Bond Road	Bilby Road/Lotz Parkway	Install Traffic Signal 4X4	\$5,326,300	1
I-13.0		Bond Road/Grant Line Road	Signal Modification 2X4	\$3,224,200	4
I-14.0	Bradshaw Road	Bradshaw Road/Stone Springs	Install Traffic Signal 2x4	\$2,742,500	3
I-15.0		Bradshaw Road/Rockridge Dr	Install Traffic Signal 2x4	\$2,090,500	3
I-16.0	Bruceville Road	Bruceville Road/Elifa Road/Boa Nova Drive	Install Traffic Signal 2x4	\$2,837,100	1
I-17.0		Bruceville Road/Quail Run Lane/Poppy Ridge Road	Modify to Expanded 2x4 Intersection	\$2,444,600	1
I-18.0		Bruceville Road/Machado Dairy Drive	Modify to Expanded 2x4 Intersection	\$3,304,900	1
I-19.0	Calvine Road	Calvine Road/Excelsior Road	Install Traffic Signal 4X2	\$3,847,000	7
I-20.0	East Stockton Boulevard	East Stockton Boulevard/Union Park Way	Install Traffic Signal 2x2	\$790,800	1
I-21.0		East Stockton Boulevard/Elkmont Way	Install Traffic Signal 2x2	\$692,600	1

**EGRFP Intersections (continued)**

<b>ID</b>	<b>Roadway</b>	<b>Limits/Location</b>	<b>Description</b>	<b>Cost</b>	<b>Nexus (see Nexus Key)</b>
I-22.0	Elk Grove Boulevard	Elk Grove Boulevard/Grant Line Road	Install Traffic Signal 2X4	\$3,316,300	4
I-23.0		Elk Grove Boulevard/Bradshaw Road	Install Traffic Signal 2X4	\$5,283,600	1
I-24.0		Elk Grove Boulevard/Kent Street	Install Traffic Signal 2X2	\$2,472,300	1
I-25.0		Elk Grove Boulevard/Big Timber	Install Traffic Signal 2X6	\$2,049,700	1
I-26.0		Elk Grove Boulevard/SR 99 SB On-Ramp	Construct dedicated right-turn lane from eastbound Elk Grove Boulevard to southbound SR 99 on-ramp	\$663,000	1
I-27.0	Grant Line Road	Grant Line Road/Calvine Road	Modify signal to 4x4	\$2,811,600	6
I-28.0		Grant Line Road/Graybill Lane	Install Traffic Signal 2X4	\$5,838,200	6
I-29.0		Grant Line Road/Sheldon Road	Modify signal 2x4	\$5,822,400	4
I-30.0		Grant Line Road/Aleilani Lane	Install Traffic Signal 2X4	\$4,478,400	4.
I-31.0		Grant Line Road/Wilton Road	Roundabout or modify signal to 2x4	\$4,600,500	4
I-32.0		Grant Line Road/Bradshaw Road	Install Traffic Signal 4X4	\$3,783,000	6
I-33.1		Mosher Road/Grant Line Road	Install Traffic Signal 2X4	\$2,294,500	6
I-33.2		Mosher Road/Grant Line Road	Install Traffic Signal 2X8	\$1,486,300	6
I-34.1		Grant Line/Waterman Road	Restripe Existing 4X4	\$1,733,000	6
I-34.2		Grant Line/Waterman Road	Expand Intersection to 4X6	\$440,000	6
I-34.3		Grant Line/Waterman Road	Widen Intersection to 4X8	\$1,545,500	6
I-35.1	Kammerer Road	Kammerer Road/Lotz Parkway	Install Side-Street Stop 2X2	\$3,244,500	6
I-35.2		Kammerer Road/Lotz Parkway	Install Traffic Signal 4X4	\$2,385,900	6
I-35.3		Kammerer Road/Lotz Parkway	Widen Intersection to 4X8	\$4,913,800	6
I-36.1		Kammerer Rod/Collector 1	Install Side-Street Stop 2X2	\$3,144,400	6
I-36.2		Kammerer Rod/Collector 1	Install Traffic Signal 2X4	\$756,600	6
I-36.3		Kammerer Rod/Collector 1	Widen Intersection to 2X8	\$3,255,300	6
I-37.1		Kammerer Road/Big Horn Boulevard	Install Side-Street Stop 2X2	\$2,901,700	6
I-37.2		Kammerer Road/Big Horn Boulevard	Install Traffic Signal 4X4	\$2,397,900	6
I-37.3		Kammerer Road/Big Horn Boulevard	Widen Intersection to 4X6	\$3,437,100	6
I-38.1		Kammerer Road/Collector 2	Install Traffic Signal 2X4	\$3,261,100	6
I-38.2	Kammerer Road/Collector 2	Widen Intersection 2X4	\$786,600	6	

**EGRFP Intersections (continued)**

ID	Roadway	Limits/Location	Description	Cost	Nexus (see Nexus Key)
I-38.3	Kammerer Road	Kammerer Road/Collector 2	Install Traffic Signal 2X6	\$2,407,600	6
I-39.1		Kammerer Road/Bruceville Road	Install All-Way Stop 2X2	\$2,745,100	6
I-39.2		Kammerer Road/Bruceville Road	Install Traffic Signal 4X4	\$2,221,700	6
I-39.3		Kammerer Road/Bruceville Road	Widen Intersection 4X6	\$2,816,200	6
I-40.0		Kammerer Road/Willard Parkway	Install Traffic Signal 4X4	\$5,732,100	6
I-41.0		Kammerer Road/Franklin Boulevard	Install Traffic Signal 2x4	\$5,314,500	6
I-42.0	Laguna Boulevard	Laguna Boulevard/Laguna Springs Drive	Install Westbound-to-Northbound Right-Turn Lane	\$2,555,300	1
I-43.0		Laguna Boulevard/SR 99 Southbound Off-Ramp	Install free right-turn lane from SR 99 southbound ramps to westbound Laguna Boulevard	\$950,000	1
I-44.0	Lotz Parkway	Lotz Parkway/Road A/Kyler Road	Install Traffic Signal 2x4	\$4,106,400	1
I-45.0		Lotz Parkway/Serra Estrela Drive	Install Traffic Signal 2x4	\$2,448,400	1
I-46.0		Lotz Parkway/Ponta Delgada Drive	Install Traffic Signal 2x4	\$3,029,500	1
I-47.0	Mosher Road	Mosher Road/Waterman	Realign intersection to tangent and install traffic signal 2x4	\$3,442,800	1
I-48.0		Mosher Road/Rhone River	Install Traffic Signal 2X2	\$2,526,700	1
I-49.0	Promenade Parkway	Promenade Parkway/Lotz Parkway/Poppy Ridge Road	Install Traffic Signal 4X6	\$6,275,600	1
I-50.0	Power Inn Road	Power Inn Road/Geneva Pointe Drive	Install Traffic Signal 2X4	\$971,200	1
I-51.0	Waterman Road	Waterman Road/Rancho Drove	Install Traffic Signal 2x4	\$4,284,800	1
I-52.0		Waterman Road/Parsons Landing	Install Traffic Signal 2x4	\$1,229,500	1
I-53.0		Waterman Road/Dino/Mainline	Install Traffic Signal 2x4	\$1,479,300	1
I-54.0		Waterman Road/Kent Street	Install Traffic Signal 2x4	\$3,150,000	1
I-55.0		Waterman Road/Silverado Drive	Install traffic circle 2x2	\$3,483,400	1
I-56.0	Whitelock Parkway	Whitelock Parkway/Lotz Parkway	Install Traffic Signal 4X6	\$3,306,700	1
I-57.0		Whitelock Parkway/Cape Verde Drive	Install Traffic Signal 2x4	\$1,149,800	1
I-58.0		Whitelock Parkway/Lousada Drive	Install Traffic Signal 2x4	\$1,143,400	1

**EGRFP Intersections (continued)**

ID	Roadway	Limits/Location	Description	Cost	Nexus (see Nexus Key)
I-59.0	A Street	A Street/E Street	Construct 4X2 Intersection	\$5,387,300	1
I-60.0	A Street	A Street/B Street	Construct 4X4 Intersection	\$5,067,500	1
I-61.0	Carinata Drive	Carinata Drive/Whitelock Parkway	Install Traffic Signal 4X2	\$518,800	1
I-62.0	Various Roadways	Various Signals	Signal Modification (Signal Timing, Signal Phasing, Turn Lane Storage, etc.)	\$0	8

**Total Intersection Cost: \$221,318,041**

**EGRFP BRIDGES AND CULVERTS**

ID	Roadway	Limits/Location	Description	Cost	Nexus (see Nexus Key)
B-1.0	Lotz Parkway	In SEPA, Shed C	112' x 84' Box Culvert	\$4,330,870	2
B-2.0	Road B	In SEPA, Road B at Shed C	78' x 64' Box Culvert	\$2,621,320	2
B-3.0	Bilby Road	In SEPA, Bilby at Shed C	Two 86' x 44'-3 3/4" Slab on Pile Bridges	\$4,725,318	2
B-4.0	Big Horn Boulevard	In SEPA, Big Horn at Shed C	Two 86' x 44'-3 3/4" Slab on Pile Bridges	\$4,725,318	2
B-5.0	Bruceville Road	In SEPA, Bruceville Road at Shed C	31' x 124' Box Culvert	\$3,365,568	2
B-6.0	LRSP Outfall	In SEPA, Crossing the LRSP outfall	23' x 52' Box Culvert	\$1,372,290	2
B-7.0	Wyland Drive	In East Elk Grove, Wyland Drive crossing Elk Grove Creek	50' x 52' Box Culvert	\$1,711,540	2
B-8.0	Elk Grove Creek	In Elk Grove Triangle, Culvert over Elk Grove Creek tributary	50' x 52' Box Culvert	\$1,026,740	2

**Total Bridges and Culverts Cost \$23,878,964**

**EGRFP Railroad Crossings**

ID	Roadway	Limits/Location	Description	Cost	Nexus (see Nexus Key)
G-1.0	Bilby Road	Bilby Road / UPRR	Eliminate Crossing	\$611,000	9
G-2.0	Bond Road	Bond Road / UPRR	4-Lane Grade Separation	\$94,239,000	9
G-3.0	Calvine Road	Calvine Road / UPRR	6-Lane Grade Separation	\$64,589,000	9
G-4.0	Elk Grove Florin Road	Elk Grove Florin Road / UPRR	4-Lane Grade Separation	\$104,689,000	9
G-5.0	Grant Line Road	Grant Line Road / UPRR	Widen overcrossing from 4 lanes to 8 lanes	\$12,678,000	9
G-6.0	Sheldon Road	Sheldon Road / UPRR	4-Lane Grade Separation	\$58,406,000	9
G-7.0	Kammerer Road	Franklin Boulevard to Willard Parkway UPRR	UPRR crossing from intersection to intersection, 2 lanes with ROW for future restriping to 4 lanes	\$28,379,000	9

**Total Railroad Crossings Cost    \$363,591,000**

**EGRFP AUXILIARY LANES**

ID	Roadway	Limits/Location	Description	Cost	Nexus (see Nexus Key)
A-1.0	SR 99 (A-1.0, A-2.0, A-6.0, & A-7.0 are included in Whitelock Pkwy Interchange. A-3.0, A-4.0, & A-5.0 are part of a grant received by the City)	NB SR 99 - Grant Line Road to Whitelock Parkway	Construct Interchange-to-Interchange Auxiliary Lane	-	12
A-2.0		NB SR 99 - Whitelock Parkway to Elk Grove Boulevard	Construct Interchange-to-Interchange Auxiliary Lane	-	12
A-3.0		NB SR 99 - Elk Grove Boulevard to Bond Road	Construct Interchange-to-Interchange Auxiliary Lane	-	12
A-4.0		NB SR 99 - Bond Road to Sheldon Road	Construct Interchange-to-Interchange Auxiliary Lane	-	12

**EGRFP Auxiliary Lanes (continued)**

<b>ID</b>	<b>Roadway</b>	<b>Limits/Location</b>	<b>Description</b>	<b>Cost</b>	<b>Nexus (see Nexus Key)</b>
A-5.0		NB SR 99 - Sheldon Road to Calvin Road	Construct Interchange-to-Interchange Auxiliary Lane	-	12
A-6.0		SB SR 99 - Elk Grove Boulevard to Whitelock Parkway	Construct Interchange-to-Interchange Auxiliary Lane	-	12
A-7.0		SB SR 99 - Whitelock Parkway to Grant Line Road	Construct Interchange-to-Interchange Auxiliary Lane	\$2,361,000	12
A-8.0	I-5	NB I-5 – Hood Franklin Road to Elk Grove Boulevard	Construct Interchange-to-Interchange Auxiliary Lane	\$6,678,500	13
A-9.0		SB I-5 – Elk Grove Boulevard to Hood Franklin Road	Construct Interchange-to-Interchange Auxiliary Lane	\$7,723,000	13

**Total Auxiliary Lanes Cost: \$16,762,500**

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## **NEXUS KEY**

1. City of Elk Grove General Plan (Policy MOB-1-3).
2. City of Elk Grove General Plan (Policy MOB-1-1, Policy MOB-1-2, Policy MOB-1-3, Policy MOB-3-1).
3. City of Elk Grove General Plan (Policy MOB-1-3). Shared facility with Sacramento County.
4. City of Elk Grove General Plan (Policy MOB-1-3, Policy MOB-7-6). The facility is part of the Capital Southeast Connector.
5. City of Elk Grove General Plan (Policy MOB-1-3, Policy MOB-3-1, Policy MOB-6-1, Policy MOB-7-6).
6. City of Elk Grove General Plan (Policy MOB-1-3, Policy MOB-3-1, Policy MOB-7-6). The facility is part of the Capital Southeast Connector and is included in the Sacramento County Traffic Development Fee SCTDF)
7. City of Elk Grove General Plan (Policy MOB-1-3). Shared facility with Sacramento County and is included in the SCTDF.
8. City of Elk Grove General Plan (Policy MOB-1-3, Policy MOB-7-8).
9. City of Elk Grove General Plan (Policy MOB-1-3, Policy MOB-3-1, Policy MOB-7-6).
10. City of Elk Grove General Plan (Policy MOB-1-3, Policy MOB-7-5, Policy MOB-7-6). The facility is part of the Capital Southeast Connector.
11. City of Elk Grove General Plan (Policy MOB-1-3, MOB-7-5).
12. City of Elk Grove General Plan (Policy MOB-1-3, MOB Policy-7-5). Caltrans District 3 State Route 99. Transportation Concept Report (July 2017)
13. City of Elk Grove General Plan (Policy MOB-1-3, Policy MOB-7-5) Caltrans District 3 I-5 Transportation Concept Report (July 2017).
14. City of Elk Grove General Plan (Policy MOB-1-3, Policy MOB-3-1).
15. City of Elk Grove General Plan (Policy MOB-1-3, Policy MOB-7-6). The facility is part of the Capital Southeast Connector and is included in the SCTDF.

## APPENDIX B: UNIT COSTS FOR STREET IMPROVEMENTS

	ITEM DESCRIPTION	UNIT	2020 COST
<b>1</b>	<b>EARTHWORK</b>		
1.1	ROADWAY EXCAVATION	CY	\$30.00
1.2	IMPORT FILL (GRADE SEPARATIONS ONLY)	CY	\$40.00
<b>2</b>	<b>DRAINAGE</b>		
2.1	MODIFYING EXISTING STORM DRAINAGE	LF	\$100.00
2.2	NEW STORM DRAIN LATERALS AND INLETS	N/A	INCLUDED IN 'MINOR ITEMS'
2.3	DRAINAGE (AUX LANE COSTS ONLY)	LS	SEE AUX LANE DETAILED ESTIMATES
<b>3</b>	<b>PAVEMENT</b>		
3.1	ASPHALT CONCRETE	TON	\$90.00
3.2	AGGREGATE BASE	CY	\$60.00
3.3	SIDEWALK	SF	\$12.00
3.4	CURB AND GUTTER	LF	\$45.00
3.5	MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$17.00
3.6	TEXTURED PAVING (ROUNDBOUT COSTS ONLY)	LF	\$17.00
3.7.1	THERMOPLASTIC PAVEMENT MARKINGS	LF	\$5.00
3.7.2	THERMOPLASTIC TRAFFIC STRIPE	LF	\$1.00
<b>4</b>	<b>MISCELLANEOUS</b>		
4.1	TRAFFIC SIGNAL	LS	\$300,000.00
4.2	TRAFFIC SIGNAL MODIFICATIONS	LS	\$250,000.00
4.3	TRAFFIC SIGNAL REMOVAL (ROUNDBOUT COSTS ONLY)	LS	\$125,000.00
4.4	STREET LIGHTS / ELECTROLIERS	EA	\$10,000.00
4.5	FIBER OPTIC CABLE	LF	\$56.00
4.6	NETWORK SYSTEM EQUIPMENT	EA	\$15,000
4.7	LANDSCAPING	SF	\$10.00
4.8	SIGNING AND STRIPING (ROUNDBOUT COSTS ONLY)	LS	\$50,000.00
4.9	OVERHEAD SIGNS (AUX LANE COSTS ONLY)	EA	\$250,000.00
4.1	MIDWEST GUARDRAIL SYSTEM (AUX LANE COSTS ONLY)	LF	\$38.00
4.11	FENCE (TYPE CL-6) (AUX LANE COSTS ONLY)	LF	\$23.00
4.12	CONCRETE BARRIER (TYPE 60) WITH TYPE CL-6 FENCE (AUX LANE COSTS)	LF	\$110.00
4.13	REMOVE FENCE (AUX LANE COSTS ONLY)	LF	\$20.00
4.14	REMOVE BARRIER (AUX LANE COSTS ONLY)	LF	\$50.00
4.15	EMBANKMENT EARTHWORK (AUX LANE COSTS ONLY)	CY	\$15.00
4.16	CONSTRUCTION STAGING (AUX LANE COSTS ONLY)	LS	SEE AUX LANE DETAILED ESTIMATES
<b>5</b>	<b>MINOR ITEMS</b>		
5.1	GREENFIELD MINOR ITEMS	%	10%
5.2	DEVELOPED AREA MINOR ITEMS	%	10%
<b>6</b>	<b>STRUCTURES</b>		
6.1	BRIDGES (Slab on Pile)	SF	\$275
6.2	BOX CULVERTS	SF	\$200
6.3	CULVERTS (INTERSECTION COSTS)	LF	\$500
6.4	RETAINING WALL (INTERSECTION COSTS)	SF	\$150
6.5	AT-GRADE RAILROAD CROSSING DECOMMISSION	LS	[Estimated per location, see Detailed Estimates]
6.6	GRADE SEPARATED RAILROAD CROSSING*	LS	[Estimated per location, see Detailed Estimates]
<b>7</b>	<b>CONTINGENCY</b>	%	20%
<b>8</b>	<b>ENGINEERING &amp; MANAGEMENT</b>		
8.1	ENGINEERING AND SURVEYING	%	15.0%
8.2	STAKING, PERMITTING, AND INSPECTION	%	10.0%
8.3	CALTRANS COORDINATION (ONLY ON APPLICABLE ESTIMATES)	%	3.0%
<b>9</b>	<b>RIGHT-OF-WAY &amp; EASEMENTS</b>		
9.1.1	GREENFIELD RIGHT-OF-WAY	SF	\$2.25
9.1.2	DEVELOPED AREA RIGHT-OF-WAY	SF	\$9.25
9.2.1	GREENFIELD EASEMENT	SF	\$2.25
9.2.2	DEVELOPED AREA EASEMENT	SF	\$9.25
9.3.1	GREENFIELD ACQUISITION SOFT COST (LENGTH OF PARCEL LINE)	LF	\$40
9.3.2	DEVELOPED AREA ACQUISITION SOFT COST (LENGTH OF PARCEL LINE)	LF	\$120
9.4	SEVERANCE DAMAGES	LS	[Estimated per location, see Detailed Estimates]
	R/W CONTINGENCY	%	10%
<b>10</b>	<b>UTILITY RELOCATION</b>	%	2% - 20%
<b>11</b>	<b>ENVIRONMENTAL MITIGATION</b>	%	3% - 5%
<b>LEGEND:</b> CY = Cubic Yard, LF = Linear Feet, SF = Square Feet, % = Percent of Total Project Cost INT = Intersection, EA = Each, LS = Lump Sum			

Source: Technical Memorandum June 28, 2022 Mark Thomas