

FINAL DRAFT

NEXUS STUDY
for the
I-5 SUBREGIONAL CORRIDOR
MITIGATION PROGRAM

Prepared By



Prepared for:

City of West Sacramento
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1. EXECUTIVE SUMMARY

1.1. Overview

On June 25, 2014, SACOG, Caltrans and the Cities of West Sacramento, Elk Grove and Sacramento entered into a Memorandum of Understanding (MOU) agreeing to collectively prepare the I-5 Subregional Corridor Mitigation Program, (SCMP). The MOU (see **Appendix A**) arose from concerns expressed by Caltrans regarding the effects of increased development on congestion on the State Highway System. The MOU has resulted in the “SCMP Fee Program” that is documented in this Nexus Study.

The MOU defines boundaries of the subregional corridor as shown in **Figure 1** and includes all of the City of West Sacramento, all of the City of Elk Grove and the portions of the City of Sacramento that are south of the American River and west of Highway State Routes 51 and 99.

The MOU recognizes that the Cities of West Sacramento, Elk Grove and Sacramento may adopt the SCMP Fee Program either: 1) as a voluntary measure, where a project applicant whose project traffic reaches a “threshold of significance” for the impacts to the freeway mainline system may choose to pay a fee in lieu of preparing a traffic model analysis of the cumulative mainline freeway impacts and determining the specific mitigation for such project, or 2) as a mandatory development impact fee pursuant to the Mitigation Fee Act (Government Code section 66000 et seq.).

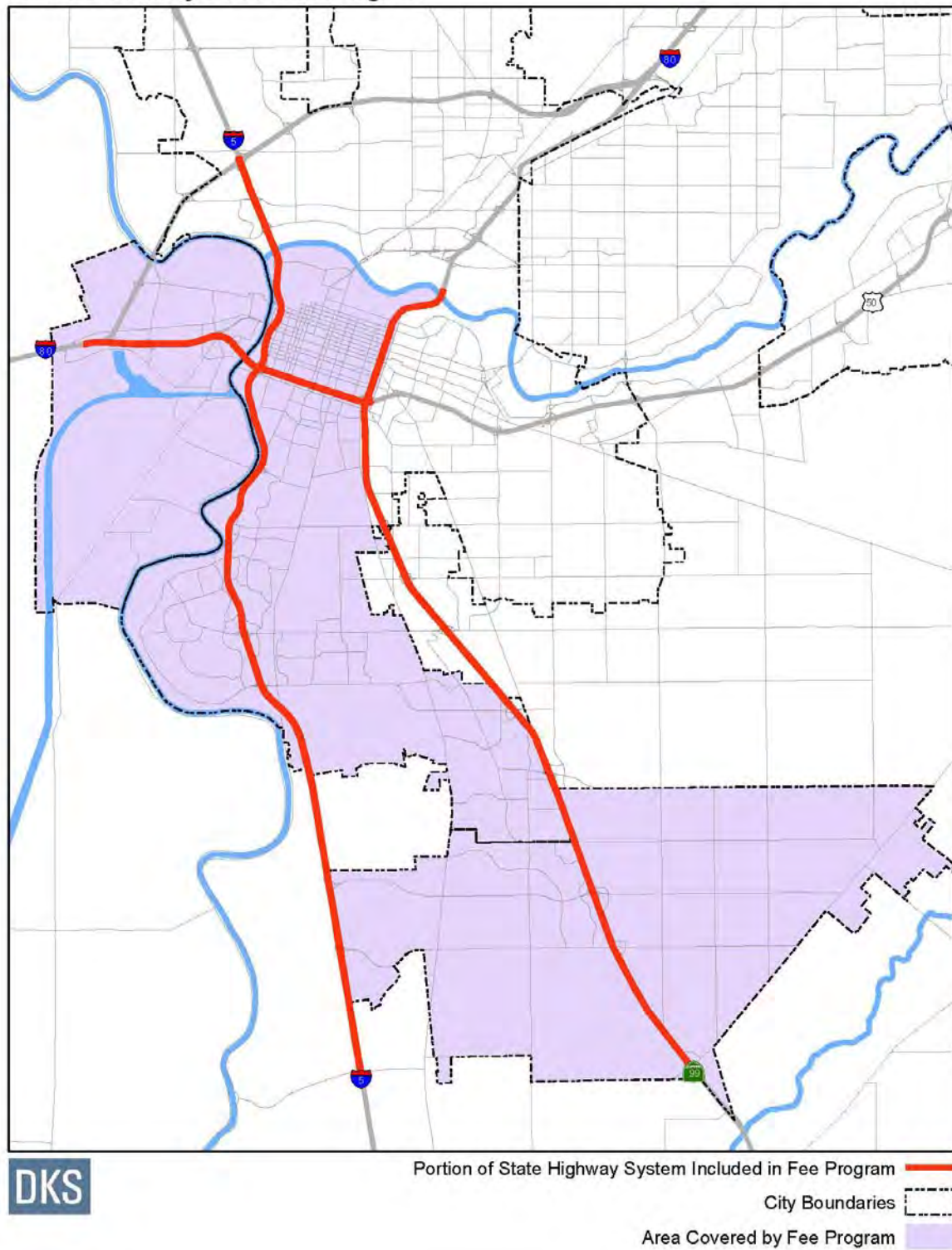
This Nexus Study report provides the necessary documentation to support adoption of the SCMP Fee Program by the three cities. After describing the need for the program and the nexus between new development and the selected projects needed to mitigate development impacts on the freeway system, this report calculates the maximum justifiable fee that may be levied for each land use type in each of four fee districts. Finally this report documents the funding levels and resulting fee rates that have been proposed by the SCMP “Working Group” along with key implementation elements for the fee programs adopted by each City.

1.2. Need for Subregional Corridor Mitigation Program

Individual development projects, in most cases, add limited amounts of traffic to the State Highway System. Yet studies show that the cumulative effects of regional development over a period of 10 to 20 years are significant increases in traffic volumes on the State Highway System, resulting in substantial increases in travel delay on an already burdened freeway system that serves everyone in the region. While local jurisdictions have been effective at using CEQA to mitigate development’s traffic impacts on the local roadway system, it has been more difficult to address impacts on the State Highway System, and improve issues related to the CEQA review process, cost uncertainty and schedule delays for development projects.

The SCMP Fee Program will advance the Cities’ implementation of improvements that will mitigate development’s impact on the State Highway System because 1) there will be agreement between local jurisdictions and Caltrans on the policies used in traffic impact studies, 2) the SCMP Fee Program will define appropriate and feasible mitigation measures, 3) the SCMP Fee Program will establish the mechanism for development funding of improvements either to the State Highway System or which benefit the freeway by providing local roadway and transit alternatives, and 4) the SCMP Fee Program will improve both the prospects of the proposed improvements being constructed and being delivered in a shorter time period.

Figure 1
Area Covered by SCMP Fee Program



In 2007, a Working Group was formed to develop appropriate strategies and a preliminary study was prepared, titled “Policy Recommendations for the Evaluation and Mitigation of Significant Impacts from Local Development Projects on the State Highway System” (DKS, April 2009). The recommended solution to the shortcomings in current practices involves the following elements:

- Moving away from “standards of significance” that focus on the level of service (“LOS”) of individual freeway segments and instead adopting standards related to impacts on overall delay on the freeway “system.”
- Having local governments recognize that all but small developments would have some impact on overall delay of the freeway “system” that serves the region and thus most development projects should participate in funding improvements that reduce system delay on a fair-share basis.
- Defining a feasible package of improvements that would be effective in reducing overall travel delay on the regional freeway system.
- Recognizing that having a feasible and effective method to actually implement a package of improvements that would provide clear overall benefits to the regional freeway system is better than the current methods that attempt to solve most individual freeway LOS impacts.
- Agreeing on fair-share development contributions to implement the defined set of mitigation measures and having the Cities of West Sacramento, Elk Grove and Sacramento adopt a fee program to collect this funding.
- Having Caltrans' review, acknowledge, and agree that payment of the adopted fees would adequately mitigate a development project’s impact on the State Highway System under CEQA.

1.3. Purpose of this Nexus Study

As a development impact fee, the SCMP Fee Program can only be charged to new development (projects requiring discretionary approvals) and must be based on the impact of the development on public facilities infrastructure – in this case the freeway system within the subregion called the “Fee Program Area” (see **Figure 1**). The purpose of this report is to demonstrate the nexus (or reasonable relationship) between development that occurs in the Fee Program Area and the need for additional improvements and facilities as a result of the development.

This Nexus Study includes transportation improvements that would reduce congestion (delay) on the portion of the State Highway System within the Fee Program Area. Some of these improvements are not on the freeway mainlines, but are parallel roadway or transit facilities that serve to reduce the number of vehicles traveling on the mainline, and thus help mitigate impacts on the State Highway System.

This study serves as the basis for the Cities of West Sacramento, Elk Grove and Sacramento to adopt development impact fees for a specific purpose (the I-5 Subregional Corridor Mitigation Program) under Assembly Bill (AB) 1600 legislation, as codified by the Mitigation Fee Act (California Government Code sections 66000 *et seq.*). This section of the Mitigation Fee Act sets forth the procedural requirements for establishing and collecting development impact fees. These procedures require that a reasonable relationship, or nexus, must exist between a governmental exaction and the purpose of the condition.

Required Nexus Findings

- Identify the purpose of the fee.

- Identify how the fee is to be used.
- Determine how a reasonable relationship exists between the fee's use and the type of development project on which the fee is imposed.
- Determine how a reasonable relationship exists between the need for the public facility and the type of development project on which the fee is imposed.
- Demonstrate a reasonable relationship between the amount of the fee and the cost of the public facility attributable to the development on which the fee is imposed.

These findings are addressed throughout this Nexus Study, and more specifically in **Section 6**.

1.4. Summary of SCMP Fee Program

The “causes” method was selected for the I-5 Subregional Corridor Mitigation Program since it fits the uniqueness of the program’s purpose, geography and facility usage/needs. Under this method, development within the Fee Program Area should pay a reasonable share of a selected set of improvements based on both the level of traffic delay reduction those improvements would cause on the State Highways System and that development’s share of the total year 2036 delay on the State Highway System. Based on this Nexus Study, new development’s share would be less than 10% of the overall improvement plan cost.

The selected method recognizes that there are “existing deficiencies” (i.e. LOS F conditions) on the State Highway System within the Fee Program Area. Since the cost share that is paid by “new development in the Fee Program Area” is based on its percentage share of total year 2036 delay on the State Highway System, delay caused by existing development is accounted for in the cost share for the proposed SCMP fee. Delay caused by growth outside the Fee Program Area is also accounted for in the cost share for the proposed SCMP fee.

The method used to estimate the cost share for new development in the Fee Program Area involves the following:

- Estimating the growth in development in the Fee Program Area (see Section 3.3)
- Estimating the total amount of delay on the State Highway System in the Fee Program Area under existing and 2036 conditions and determining how much of the growth in delay by 2036 is caused by growth within the Fee Program Area (see Section 3.4)
- Selecting transportation projects that would reduce delay on the State Highway System in the Fee Program Area (see Section 4)
- Estimating dwelling unit equivalent (DUE) rates that reflect both the type of development and its location based on its impact on delay on the State Highway System during peak periods (see Section 5.1)
- Estimating the growth in DUE’s in the Fee Program Area (see Section 5.2)
- Estimating the maximum amount of funding and maximum fee rates that could be justified by the Nexus Study (see Section 5.3)

1.5. Recommended Fee Rates

The total cost of the twelve selected transportation projects is about \$1.5 billion and about \$1.3 billion is currently unfunded, but the projects are included in SACOG’s Metropolitan Transportation

Plan/Sustainable Community Strategy (MTP/SCS) so they are eligible for future federal and state funding. The Nexus analysis indicates that the delay on the State Highway System that is due to growth in Fee Program Area is about 35 percent of total 2036 delay on the State Highway System. The maximum allowable funding from the SCMP Fee Program would be \$1.3 billion x 35%, or about \$448,664,000. With a growth of 47,860 DUEs in the Fee Program Area, the maximum cost per DUE would be \$9,374. The maximum allowable fee rates by land use type, shown in **Tables 13 through 15**.

However, the Working Group has reviewed the maximum allowable fee rates and has determined that those rates are excessively high. Instead, the Working Group is recommending that the estimated level of funding that should be imposed on new development be at lower level (\$135 million), with the balance of the required funding to construct the improvements would come from other sources as programmed by SACOG (as described in Appendix B) to provide funds needed for full mitigation. At this lower level, the cost per DUE is a maximum of \$2,821. The fee rates that result from this cost per DUE for each City is shown in **Tables 16 through 18**.

1.6. Implementation of the Program

The SCMP Fee Program will be individually proposed for adoption by the Cities West Sacramento, Elk Grove and Sacramento, and there is a benefit in establishing consistency between the adopting resolutions and procedures implemented by each City. **Section 7** of this Nexus Study addresses the following implementation issues:

- Caltrans will need to amend and the Cities of West Sacramento, Elk Grove and Sacramento will need to adopt traffic impact guidelines for establishing a threshold of significance for impacts to the State Highway System in the subregion.
- This Nexus Study applies a 3 percent allowance to fund administration costs.
- The allocation of funds collected by the SCMP Fee Program is to be determined by each city, with the improvement projects within their jurisdiction having first priority for funding. The SCMP Fee Program will be subject to automatic annual inflation adjustments, potential periodic updates, and a 5-year review requirement, which are described in Section 7.4.

1.7. Organization of Report

This report is divided into six sections including this **Introduction and Executive Summary**.

- **Section 2** outlines the need for the I-5 Subregional Corridor Mitigation Program.
- **Section 3** describes the Nexus methodology and future development assumptions in this report.
- **Section 4** describes the transportation projects and costs to be funded by the SCMP Fee Program.
- **Section 5** provides the maximum allowable fee rates and the recommended fee rates from the Working Group.
- **Section 6** provides the nexus findings for the development impact fees.
- **Section 7** describes the Working Group's recommendations on implementation of the SCMP Fee Program.

2 NEED FOR SUBREGIONAL CORRIDOR MITIGATION PROGRAM

2.1 Background

CEQA requires that the transportation impacts of local development projects be identified and that significant impacts be mitigated, including impacts to the State Highway System, to the extent feasible. In most cases, individual traffic impact studies are prepared to determine a project's impact on the State Highway System, and then an analysis of improvements and costs that could be imposed as mitigation. This process requires an expense of time and money, as well as uncertainty, for the project applicant, cities, and Caltrans. Additional time and expense is required to determine whether there are possible improvements or monetary contributions to fully mitigate or lessen the severity of the identified impacts.

Individual development projects, in most cases, add limited amounts of traffic to the State Highway System. Yet studies show that the cumulative effects of regional development over a period of 10 to 20 years yield significant increases in traffic volumes on the State Highway System, resulting in substantial increases in travel delay on an already burdened freeway system that serves everyone in the region. A substantial portion of the freeway system is already congested and measures to reduce congestion, such as adding more lanes on many freeway segments, will be not be appropriate or feasible. Thus the Metropolitan Transportation Plan/Sustainable Community Strategy (MTP/SCS) includes improvements on only selected freeway mainline segments.

Rather than continuing down the current path, transportation professionals representing the Cities of West Sacramento, Sacramento and Elk Grove, plus Caltrans District 3, Caltrans Headquarters, Sacramento Area Council of Governments ("SACOG"), and Sacramento Regional Transit District were brought together to develop a better approach to mitigating impacts to the State Highway System by improving predictability and streamlining the process for project applicants and local agencies. The purpose of this Working Group was to create a systematic approach to mitigate impacts of new development on the State Highway System, which will be more cost effective, consistent, equitable, and predictable by providing more certainty for project applicants, participating cities and Caltrans.

The Working Group defined a set of recommendations to resolve those issues, including the following:

- Definition of a set of feasible improvements that would significantly reduce overall travel delay on the portion of the State Highway System that serves the Fee Program Area.
- The need to provide a simple method to calculate the "fair share" funding contribution that a development should pay to help implement the improvements necessary to mitigate the impacts.
- Caltrans' agreement that payment of the fee will adequately mitigate a development project's impact on the State Highway System under CEQA.
- That the Cities of Sacramento, West Sacramento and Elk Grove should modify their transportation guidelines on the evaluation and mitigation of impacts on the State Highway System in the Fee Program Area as necessary to be consistent with the SCMP Fee Program.

Caltrans reviews local development projects and land use change proposals for their potential impact to State highway facilities based on traffic impact studies (TIS) prepared by local governments under CEQA. To facilitate its review, Caltrans has prepared a *"Guide for the Preparation of Traffic Impact Studies"* (December 2002) to provide a starting point and a consistent basis in which Caltrans evaluates traffic impacts to State highway facilities. Some key points related to this Guide are:

- The Guide defines thresholds, based on the amount of project traffic assigned to a State highway facility, to determine when a Traffic Impact Study (“TIS”) is needed. The Guide does not have separate thresholds for a “significant impact” to the State highway facility.
- The Guide implies that if a development project adds any traffic (even one car) to a State Highway that is or in the future will be operating at an unacceptable level of service (LOS) without the project, it would cause a significant impact. Caltrans’ Transportation Concept Reports (TCRs) define the acceptable Concept LOS for each segment of the State Highway System.
- A substantial portion of the State Highway System covered by the Fee Program Area already operates at the unacceptable Concept LOS or worse conditions, and a larger portion would operate at unacceptable conditions under typical “cumulative conditions” used in environmental documents studying development impacts.
- Since most development projects in the Fee Program Area would add at least one car to a State Highway that is operating at an unacceptable Concept LOS (at least under cumulative conditions), it could be inferred from Caltrans’ Guide that all future development projects would cause a significant impact, triggering the need for a traffic study and evaluation of feasible mitigation.

Local governments also have guidelines for traffic impact studies which define thresholds for when a traffic study is required, and define standards for when a project causes a significant impact on various components of the transportation system, including the State Highway System. The TIS guidelines for the Cities of Sacramento, West Sacramento and Elk Grove differ from Caltrans Guide, as well as from each other. However, it is neither equitable nor feasible for a project adding minimal trips to the State Highway System (and considered to be causing a significant impact under CEQA) to pay for the traffic study and pay to construct the improvements necessary to bring the impact to a less than significant level.

The TIS guidelines used by Caltrans and by the Cities of Sacramento, West Sacramento and Elk Grove for this subregional area should be revised to reflect the 100 AM or PM peak hour vehicle trip-ends as the threshold of significance for impacts to the State’s freeway system.

2.2 Shortcomings of Current Practice

Current practices are not leading to the implementation of improvements to the State Highway System that will mitigate development’s impact because 1) there is disagreement between local jurisdictions and Caltrans on the metrics used in traffic impact studies, 2) it has been difficult to define appropriate and feasible mitigation measures, 3) there is no mechanism in place to fund improvements to the State Highway System or local improvements that will mitigate traffic impacts on the State Highway System, and 4) prospects of improvements on many freeway segments within this subregion ever being constructed by Caltrans remains uncertain.

There is disagreement between the local jurisdictions and Caltrans on the guidelines used in a Traffic Impact Study, particularly on the “standards of significance” that should be used to define a significant impact to the State Highway System. Local jurisdictions believe that the thresholds/standards used by Caltrans are too low and overstate impacts. As a result, local governments have been applying a different “standards of significance” for impacts on the State Highway System.

Due to Caltrans’ low “standard of significance” for impacts on the State Highway System, there are often cases where an EIR is prepared for a development project for the sole reason of a “significant” impact on the State Highway System.

When a TIS identifies that a development project would cause a traffic impact on the mainline freeway

system, it is often difficult to define an appropriate mitigation measure for the following reasons:

- The evaluation and mitigation practice related to the State Highway System focuses on the analysis and mitigation of individual segments of the State Highway System, which usually means evaluating the level of service (LOS) on a freeway segment between two interchanges including the level of service at the “merge and diverge” points where traffic using ramps flow onto or off of the freeway.
- Caltrans and SACOG do not have approved plans to add lanes to many freeway segments. Widening many freeway segments does not appear to be appropriate and/or feasible. The Metropolitan Transportation Plan/Sustainable Community Strategy (MTP/SCS) includes improvements on only selected freeway mainline segments.
- There has been insufficient information and uncertainty on which to base a feasible and viable mitigation measure to address the project’s impact on the State Highway System.
- There is no fee or other funding mechanism currently in place for future funding of improvements to the State Highway System.
- The prospects of improvements on many freeway segments ever being constructed remains uncertain due to funding priorities and on-going policy developments that may favor other approaches to addressing freeway congestion.

For these reasons, local jurisdictions have often concluded that appropriate mitigation measures cannot be defined and/or are speculative. Thus local agency CEQA documents may define the impacts of a development project on the State Highway System as “significant and unavoidable.”

3 NEXUS METHODOLOGY AND LAND USE ASSUMPTIONS

This section describes the rationale for the method that was selected to estimate development fees for the I-5 Subregional Corridor Mitigation Program.

3.1 Overview of Methodology

The two general ways of estimating “fair share” of improvement costs in a transportation fee program are:

1) Use of improvements or “usage” method is commonly used to determine “fair shares” of the cost for individual improvements. The use of each new or improved facility by trips from each “fee district” and from areas outside the area covered by the fee program is estimated (with separate estimates of trips from existing and new development) and the percentages of trips from each district are used to allocate costs.

The “usage” method does not appear appropriate for the I-5 Subregional Corridor Mitigation Program since the set of improvements that would reduce congestion on the State Highway System includes new or improved parallel transportation facilities (both roadway and transit) that are off the State Highway System. If the “usage” method is applied to allocate the cost of these “off-system” projects, then the cost allocation may not reflect how various types of development in each district would increase congestion on the State highway segments. The resulting fees may pose problems to selection of improvement projects and/or the acceptability of how fees differ by district.

2) Cause for improvements or “causes” method focuses on how various types of development in each district would cause the need for new or improved facilities. In the case of the I-5 Subregional Corridor Mitigation Program, it focuses on how development would cause increased congestion levels on the State Highway System. It requires techniques to calculate the relative difference in impact on the State Highway System for each development type and the location of that development

The “causes” method was selected for the I-5 Subregional Corridor Mitigation Program since it fits the uniqueness of the program’s purpose, geography and facility usage/needs. The I-5 Subregional Corridor Mitigation Program is different than most transportation fee programs, even those involving multiple jurisdictions, for the following reasons:

- The selected State highway segments that are the focus of the mitigation program are only a portion of the transportation system in the area covered by the SCMP Fee Program. They are also regional/inter-regional facilities and the increases in traffic on these highway segments will stem from growth over an area substantially larger than the Fee Program Area.
- Congestion already exists on the selected State highway segments but the cumulative effect of development within the Fee Program Area over the next 20 years will be significant increases in traffic volumes on the State Highway System, resulting in substantial increases in travel delay on an already burdened freeway system that serves everyone in the region.
- A set of improvements that could fully mitigate the impact of growth on the selected State highways would have a substantial cost and some direct improvements to that system may not be feasible. Therefore, the selected improvement package for the SCMP Fee Program will likely not fully mitigate the increase in congestion levels due to growth.
- The Working Group for I-5 Subregional Corridor Mitigation Program wants the fee calculations to not only reflect the typical trip generation differences between residential, commercial and industrial uses but also include the impact of smart growth and jobs/housing balancing.

Using a “causes” method, development in the Fee Program Area should pay a reasonable share of a selected set of improvements based on both the level of traffic delay reduction those improvements would provide on the State Highways System and that development’s share of the total 2036 delay on the State Highway System.

The selected method recognizes that there are “existing deficiencies” (i.e. LOS F conditions) on the State Highway System within the Fee Program Area. Since the cost share that is paid by “new development in the Fee Program Area” is based its percent share of total 2036 delay on the State Highway System, delay caused by existing development is accounted for. Delay caused by growth outside the Fee Program Area is also accounted for.

The method for estimating the cost share for new development in the Fee Program Areas involves the following:

- Estimating the growth in development in the Fee Program Area (see Section 3.3)
- Estimating the total amount of delay on the State highway System in the Fee Program Area under existing and 2036 conditions and determining how much of the growth in delay by 2036 is caused by growth with the Fee Program Area (see Section 3.4)
- Selecting transportation projects that would reduce delay on the State highway System in the Fee Program Area (see Section 4)
- Estimating dwelling unit equivalent (DUE) rates that reflect both the type of development and its location based on its impact on delay on the State highway system during peak periods (see Section 5.1)
- Estimating the growth in DUE’s in the Fee Program Area (see Section 5.2)
- Estimating the maximum amount of funding and maximum fee rates that could be justified by the Nexus Study (see Section 5.3)

3.2 Land Use Assumptions

Estimates of future development levels by type of development are significant variables used to determine how growth will impact congestion on the State Highway system and to calculate fee rates in this Nexus Study. The future development assumptions used in this Nexus Study represent latest development forecasts prepared by the Sacramento Area Council of Governments (SACOG) that are being used for update of the Metropolitan Transportation Plan / Stainable Community Strategy (MTP/SCS).

The Fee Program Area, shown in Figure 1, is a large area. As described in this Nexus Study, residential development in one portion of this area can have a different impact on congestion on the State Highway System than residential development in another portion of this area. This is also true for non-residential development. Therefore, the Fee Program Area has been divided into the four “districts,” shown in **Figure 2**, which cover the following:

- **District 1** is the central City of Sacramento plus portions of West Sacramento near the Sacramento River (i.e. West Sacramento’s Washington, Bridge and Pioneer Bluff districts)
- **District 2** is the City of West Sacramento except for the portion of the City included in District 1
- **District 3** is the portion of the City of Sacramento that is west of State Route 99 and south of

the Central City (i.e. south of Broadway)

- **District 4** is the entire City of Elk Grove

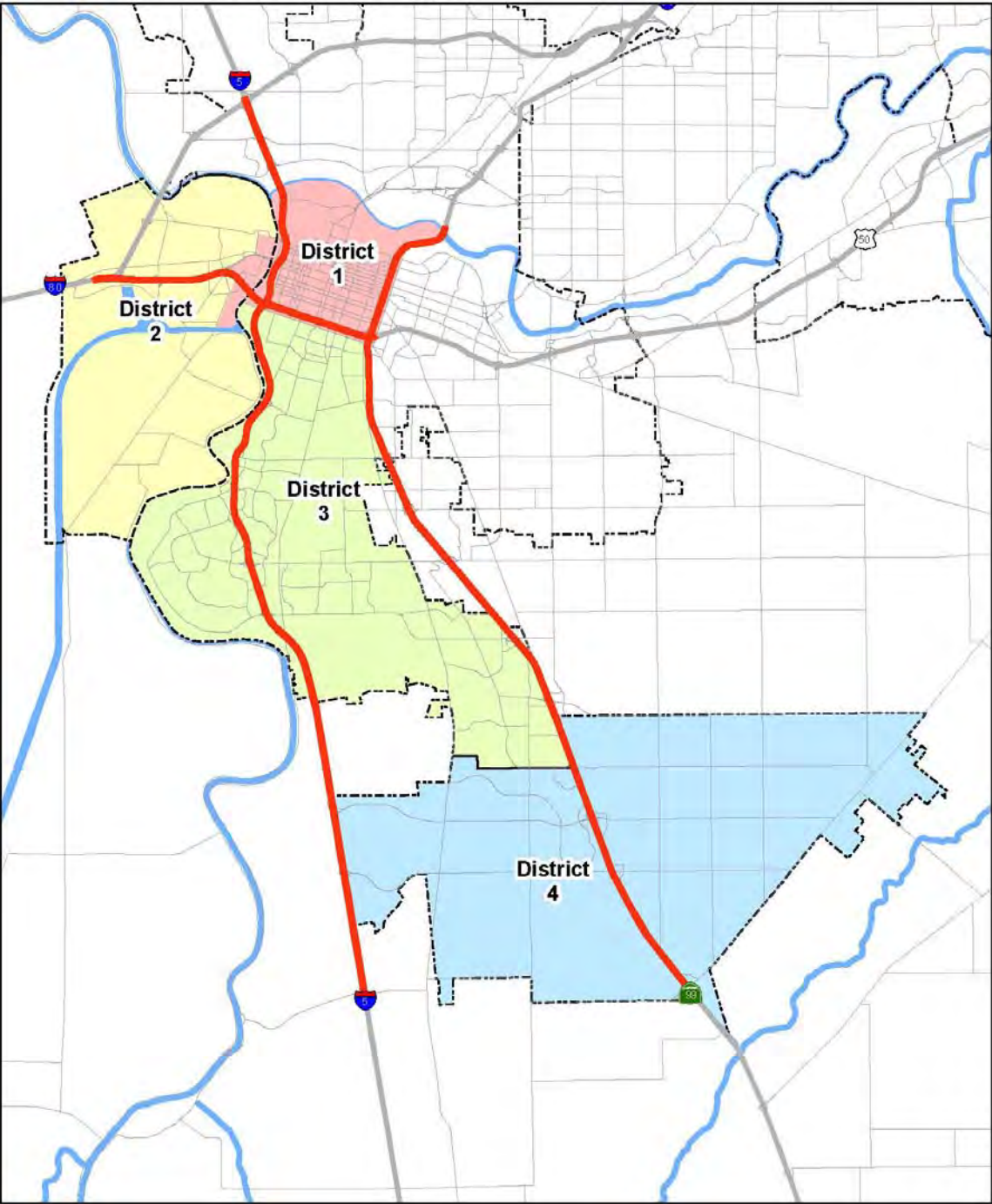
Table 1 shows development estimates in each of the four districts for 2012, the “base year” for the new MTP/SCS), while **Table 2** shows projected development levels by district for 2036, the “horizon year” for the new 2016 MTP/SCS). The horizon year for the 2012 MTP/SCS was 2035. **Table 3** shows the projected growth in housing units and employment between 2012 and 2036.

Table 1: 2012 Land Use									
District ¹	Residential Units			Employment					
	SF	MF	Total	Retail	Office	Medical	Industrial	Educ	Total
1	2,444	17,356	19,800	9,103	53,783	11,931	15,336	186	90,340
2	14,013	4,575	18,588	4,834	5,696	516	11,069	1,001	23,116
3	54,662	16,971	71,633	13,546	10,849	5,775	6,647	4,853	41,669
4	46,353	5,428	51,781	14,692	7,908	742	5,327	3,137	31,804
Total	117,472	44,330	161,802	42,175	78,235	18,964	38,378	9,177	186,928
Source: SACOG Draft 2016 MTP/SCS					See Figure 2 for Fee District boundaries				

Table 2: 2036 Land Use									
District	Residential Units			Employment					
	SF	MF	Total	Retail	Office	Medical	Industrial	Educ	Total
1	9,433	40,005	49,438	15,876	91,930	14,967	23,553	495	146,822
2	18,726	8,687	27,413	8,107	15,224	1,581	14,614	1,751	41,277
3	60,035	26,052	86,087	17,240	13,903	6,648	7,743	5,474	51,008
4	56,610	9,845	66,455	21,318	13,337	5,156	8,037	3,820	51,668
Total	144,804	84,589	229,393	62,540	134,394	28,353	53,948	11,540	290,775
Source: SACOG Draft 2016 MTP/SCS					See Figure 2 for Fee District boundaries				

Table 3: 2012 to 2036 Growth									
District	Residential Units			Employment					
	SF	MF	Total	Retail	Office	Medical	Industrial	Educ	Total
1	6,989	22,649	29,638	6,772	38,148	3,037	8,217	309	56,482
2	4,713	4,112	8,825	3,273	9,528	1,065	3,545	750	18,162
3	5,374	9,081	14,455	3,695	3,054	873	1,097	621	9,339
4	10,257	4,417	14,674	6,626	5,430	4,415	2,711	683	19,864
Total	27,333	40,259	67,592	20,366	56,159	9,389	15,570	2,363	103,848
Source: SACOG Draft 2016 MTP/SCS					See Figure 2 for Fee District boundaries				

Figure 2
Fee Districts For the SCMP Fee Program



Development impact fees for non-residential uses are based on the square footage of new buildings, not estimated employment. Thus SACOG’s estimated employment growth needs to be converted into an estimate of the growth in building square feet.

During the recent recession, particularly between 2008 and 2012, vacancy rates for retail, office and industrial uses increased significantly. As the economy improves, a significant amount of growth in employment will occur as “backfill” in vacant building space. Development impact fees can only be charged on new development and when there is a change of use and/or expansion of existing buildings. Therefore, an estimate of the percent of employment growth that will occur as backfill and the percent that will occur in new buildings is required. SACOG staff assisted in estimating the percentage of 2012 to 2036 employment growth that would occur as backfill. Those estimates are shown in **Table 4**.

Table 4: Percent of Growth that is Backfill							
District	Residential Units		Employment				
	Single Family	Multi Family	Retail	Office	Medical	Industrial	Education
1	0%	0%	89%	51%	0%	45%	53%
2	0%	0%	8%	31%	33%	100%	0%
3	0%	0%	0%	100%	13%	100%	100%
4	0%	0%	0%	0%	1%	22%	52%
Source: SACOG See Figure 2 for Fee District boundaries							

The estimated percent of backfill (**Table 4**) was applied to the estimated employment growth (**Table 3**) to estimate the employment growth in new buildings (see **Table 5**). Then estimates of average square feet per employee were applied to the estimated employment growth to project the amount of square footage that would occur by development type in each district – which is shown in **Table 6**.

Table 5: 2012 to 2036 Growth Adjusted for Backfill								
District	Residential Units			Employment				
	Single Family	Multi Family	Total	Retail	Office & Medical	Industrial	Education	Total
1	6,989	22,649	29,638	748	21,698	4,498	147	27,090
2	4,713	4,112	8,825	3,022	7,310	0	750	11,082
3	5,374	9,081	14,455	3,695	756	0	0	4,451
4	10,257	4,417	14,674	6,626	9,779	2,117	327	18,849
Total	27,333	40,259	67,592	14,091	39,543	6,614	1,224	61,472
Source: DKS Associates, 2015 See Figure 2 for Fee District boundaries								

3.3 Travel Demand Model

SACOG’s travel demand model was used to analyze 1) how development of various types and location would impact traffic delay on a selected portion of the State Highway System and 2) how various transportation projects would help reduce congestion on that selected portion of the State Highway System.

Table 6: 2012 to 2036 Growth with Employment converted to square feet								
District	Residential Units			1,000 square feet (KSF)			Assumed Employment Density	
	Single Family	Multi Family	Total	Retail	Office & Medical	Industrial	Land Use	Sq. Ft. per Employee
1	6,989	22,649	29,638	374	6,075	2,699	Retail	500
2	4,713	4,112	8,825	1,511	2,047	0	Office/Med	280
3	5,374	9,081	14,455	1,847	212	0	Industrial	600
4	10,257	4,417	14,674	3,313	2,738	1,270		
Total	27,333	40,259	67,592	7,045	11,072	3,969		
Notes: Non-residential building area estimated from square feet per employee assumptions See Figure 2 for Fee District boundaries Source: DKS Associates, 2015								

SACOG’s primary model is the “Sacramento Regional Activity-Based Simulation Model” or “SACSIM.”

SACSIM covers the six- county SACOG region and includes four sub-models for predicting travel demand. The major sub-model is “DAYSIM,” which is an advanced-practice, activity-based tour sub-model for predicting household-generated travel. DAYSIM is a state-of-the-art demand micro-simulation, which represents travel activities as “tours” or series of trips connecting the activities a person engages in during the course of a normal day. DAYSIM allows for much more detailed representation of key factors influencing household-generated travel, such as detailed characteristics of land use in the region, age of residents, household income, cost of fuel, and other factors.

SACSIM also includes a more conventional, state-of-practice sub-model for predicting commercial vehicle travel. Two classes of commercial vehicles are modeled: 2-axle commercial vehicles, and 3-plus-axle commercial vehicles. Two-axle commercial vehicles include a wide range of vehicles, ranging from a passenger vehicle, which might be used to transport a computer repair person and their tools and equipment to an office to perform a repair, to a relatively small truck delivering produce to a restaurant or store. Three-plus-axle commercial vehicles also include a wide array of vehicles, ranging from medium-sized delivery trucks to large, 5-axle tractor-trailer combinations. The common element tying these vehicles together is that they are used to transport goods and services, and are not used for personal travel (household-generated) travel.

SACSIM also includes state-of-practice sub-models for predicting air passenger ground access to the Sacramento International Airport, and for predicting external travel (including travel by residents of the region to locations outside the region, residents outside the region traveling to locations within the region, and travel which goes through the region, but does not stop within the region).

Travel demand (vehicle or passenger trips) estimated using SACSIM are combined for assignment to detailed computer representations of the regions highway and transit networks using state-of-practice software and programs. The resulting assignments are used for evaluation of VMT on roadways, and evaluation of congested travel.

The analysis period of SACSIM is a “typical weekday.” A typical weekday is intended to represent weekday conditions during a non-summer month (i.e., a time period when most workers are at work, rather than on vacation, and when schools are normally in session). Where annual or other time periods

are required, typical weekday estimates of travel are scaled up to represent those time periods. Within the typical weekday, are four demand periods: AM peak period (7:00-10:00AM); midday period (10:00AM to 3:00PM); PM peak period (3:00-6:00PM); and the late evening/overnight period (6:00PM to 7:00AM).

An overview of the SACSIM is included in Appendix C-4 of the MTP/SCS, with comprehensive documentation available at SACOG during the comment period. This model, used by numerous agencies in the six- county SACOG region, uses inputs such as land use, social economic factors, roadway networks, distance and congestion to generate traffic forecasts.

3.4 Vehicle Delay

Average travel speeds on a typical freeway segment are insensitive to the volume on the segment under low to moderate flows rates (i.e., LOS A, B and C conditions) and then gradually reduce to about 50 mph as traffic volumes increase and the LOS on that freeway worsens to LOS E conditions. When the traffic volume (and the “density of vehicles”) on typical freeway segment gets close to its capacity, where LOS F conditions begin, travel speeds experience a steep decline and approach about 35 mph. Once traffic volumes (and the “density of vehicles”) exceed capacity, “stop-and-go” conditions cause much lower average travel speeds and a small amount of additional vehicles can add a significant amount of delay for all vehicles traveling on that segment of freeway.

“Delay” in general refers to time wasted traveling on congested facilities. However, to quantify that delay requires some presumption of what time it should take to travel on a particular route, or a standard travel time which drivers and passengers should expect. Setting a standard by which delay can be quantified is a subjective exercise. For example, some might define a standard travel time as “free-flow” or totally uncongested conditions. The standard for freeways by this definition might be 60 mph or higher, and the “standard” travel time would be 1 minute for a one-mile stretch of freeway. If the actual travel speed, with congestion, was 40 mph, the travel time would be 1.5 minutes, and the delay for each driver and passenger in that condition would be 30 seconds. Others may define the standard as modest or “tolerable” level of congestion. For the same one-mile stretch of freeway, 35 mph could be used as the standard for measurement of delay. With the same 40 travel speed in the previous example, no delay would be experienced, because the actual speed is higher than the standard.

SACOG defines congestion as conditions where the volume on a roadway is equal to or greater than its capacity (i.e., the volume-to-capacity ratio is 1.0 or greater), which is LOS F conditions. On a freeway, average travel speeds in LOS F conditions are typically below 35 mph.

Vehicle-hours of delay (VHD) is a measure of congestion where the average delay per vehicle (typically during an hour period) for roadway segment is multiplied by the number of vehicles traveling on that segment. For this Nexus Study, vehicle-hours of delay on the freeway system within the Fee Program Area were estimated for delay beyond conditions where a freeway segment is at its capacity (i.e., the beginning of Level of Service F conditions, when the volume-to-capacity ratio equals 1.0).

The analysis of delay was based on the SACSIM model used for the adopted 2012 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS), which has a horizon year of 2035.

Table 7 shows the estimated total amount of delay on the State highway System within the Fee Program Area under existing and 2035 conditions. It also shows how much of the total growth in delay by 2035 is caused by growth within the Fee Program Area ($2,180 / 2,983 = 73\%$).

Construction of all the selected transportation improvements would reduce delay on the State Highway

System within the Fee Program Area by approximately the amount of delay caused by new development within the Fee Program Area. The amount of delay on the State Highway System caused by projected development within the Fee Program Area represents about 35 percent of the total delay in 2035 from all sources – including existing land uses and projected new development outside the Fee Program Area. This is shown in the following calculation:

$$2,180 / 6,283 = 35\%$$

Recognizing that there are “existing deficiencies” (i.e. LOS F conditions) on the State Highway System within the Fee Program Area but new development adds to existing system delay, it is logical that new development could pay up to 35 percent of the cost of the improvements that would reduce delay on the State Highway System.

Table 7: Delay on State Highway System within the Fee Program Area	
	Vehicle-Hours of Delay
Existing delay	3,300
Total 2035 delay (without selected transportation improvements)	6,283
Increase in delay by 2035 due to regional growth	2,983
Increase in delay by 2035 due to growth in Fee Program Area	2,180
Decrease in 2035 delay due to implementation of selected improvements	-1,944
Source: DKS Associates, 2015	

4 SELECTED IMPROVEMENT PROJECTS

This section summarizes the selected improvements projects, their costs, vehicle-hours of delay benefits and the level of funding provided by the SCMP Fee.

4.1 Selected Improvement Projects

The transportation projects that were selected to be included in SCMP Fee Program are listed in **Table 8**. All of these improvements are included within the MTP/SCS. The SCMP Fee Program would not fully fund the improvements, so other revenue sources would need to be secured before any transportation improvement project could be implemented. As shown in Appendix B, SACOG has a Financial Plan to fully fund the 2016 Metropolitan Transportation Plan /Sustainable Communities Strategy (MTP/SCS) using a variety of revenue assumptions including development contributions and future voter approved tax measures. This Plan outlines how all of the improvements in MTP/SCS, including all of the improvements in the SCMP Fee Program, could be financed by 2036. Nonetheless, by creating an additional source of funding, the SCMP Fee Program would result in the SCMP transportation improvements being implemented more quickly than they might be without the SCMP Fee Program, thus mitigating for development project impacts on the State Highway System.

The estimated costs and amount of funding from other funding sources were provided by the Cities of West Sacramento, Elk Grove, and Sacramento. The twelve transportation improvement projects are estimated to cost about \$1.5 billion, with about \$1.3 billion is to be funded by future federal and state sources, as identified in the MTP/SCS.

4.2 Benefits of the Improvement Projects

While the selected transportation improvements may have a variety of benefits, the improvements listed in **Table 8** are selected for this SCMP Fee Program because they would improve overall performance on the affected State Highway System by (1) diverting traffic to new parallel roadways and bridges, (2) attracting trips to new parallel transit facilities/services and (3) improving freeway capacity/operations through new HOV and auxiliary lanes and ramp metering. The reason each improvement was selected is summarized in **Table 9**.

The twelve improvements to be funded by the SCMP were selected based on their ability to reduce congestion on the freeway system within the Project Area. The analysis of individual improvements indicates that eleven of the selected improvements would, by themselves, reduce delay on the freeway in the Project Area during peak periods (see **Table 10**).

Table 8: MTP/SCS Improvement Projects to Be Funded by SCMP Fee Program				
Project	Description	Cost (\$ million)		Assumed Funding from Fee Program (\$million)
		Total	Unfunded	
Transit				
DNA-MOS2	Extend Rail from Richards Blvd to Natomas Center	561	551	6.3
Street Car	Streetcar network connecting the Intermodal Terminal in Downtown Sacramento to West Sacramento (Phase 1); South to R Street and Broadway corridors (Phase 2).	135	67.5	20
Elk Grove Intercity Rail Station	Construct parking lot, platform and passenger shelter for intercity passenger station	26	22.5	6
Hi Bus from CRC to Elk Grove	Enhanced bus corridor 8.5 miles along Bruceville Rd to Big Horn to Kammerer at SR 99	37.8	37.8	10
Local Roadway				
Kammerer Rd	Construct 4 lane parkway from I-5 to Highway 99	86	35	12
American River Crossing	New bridges across the American River	150	150	6.3
Richards/ Railyards	Reconstruct I-5/ Richards Blvd interchange plus feasibility & pre-environmental studies for I-5/ Richards Blvd interchange, 7th St. widening and 6th St. extension to Richards Blvd1	100	100	9.4
Sacramento River Crossings	New two bridges across the Sacramento River	190	110	30
Freeway				
I-5 HOV	HOV Lanes from Elk Grove Blvd to US 50	200	187.3	35
I-5 Ramp Meters & Detection	Ramp Meters from Elk Grove Blvd to Sutterville Road	11.4	11.4	
I-5 Auxiliary/ Transition Lane	Aux Ln. Florin to Pocket; Aux Ln. U.S. 50 connector-ramp to Sutterville Rd off-ramp; Aux Ln. U.S. 50 entrance to P St. on-ramp; Trans Lane Garden Hwy off-ramp to Garden Hwy on-ramp	19.9	19.9	
SR 99 Auxiliary/ Transition Lanes	SB Aux Lane Laguna Blvd to Elk Grove Blvd; NB Trans Lane Florin Rd to 47th Ave; NB Trans Lane 47th Ave to Fruitridge Rd; SB Trans. Lane MLK Blvd to 47th Ave	15	15	
Total		1,532	1,307	135
Sources: Cities of West Sacramento, Elk Grove and Sacramento, 2015				

Table 9: Reasons Why Selected Improvements would Reduce Delay on State Highway System	
Improvement Project	Reason for Benefit to State Highway System
Transit	
DNA-MOS2	These transit routes parallel Project Area freeways. Their riders will reduce auto travel on Project Area freeways as well as some local roadways with the Project Area
Street Car	
Elk Grove Intercity Rail Station	
Hi Bus from CRC to Elk Grove	
Local Roadways	
Kammerer Rd	Provides new connection between I-5 and SR 99, which will reduce congestion on the Project Area freeways
American River Crossing	This new connection, parallel to I-5, will reduce traffic volumes and congestion on I-5 between I-80 and US 50
Richards / Railyards	These improvements will reduce traffic congestion on I-5 near Richards Blvd
Sacramento River Crossings	The new connections will reduce traffic volumes and congestion on US 50 on/near the Pioneer Bridge
Freeways	
I-5 HOV	HOV lanes will increase ridesharing during peak periods and increase capacity on I-5, which will reduce delay on I-5, shift some traffic from parallel roadways and thereby also reduce delay on SR 99
I-5 Ramp Meters & Detection Station	Improve traffic operations and thus reduce delay on I-5
I-5 Auxiliary Lanes & Transition Lane	Improve traffic operations and thus reduce delay on I-5, shifting some traffic from parallel roadways and thereby also reducing delay on SR 99
SR 99 Auxiliary/Transition Lanes	Improve traffic operations and thus reduce delay on SR 99, shifting some traffic from parallel roadways and thereby also reducing delay on I-5
Source: DKS Associates, 2015.	

Table 10: Change in Delay on Freeway System during Peak Periods Due to Selected Transportation Improvements to be Funded by the SCMP

Year	Scenario		Vehicle-Hours of Delay on Project Area Freeways					
			In Level of Service F			Beyond Free-flow		
			Delay	Change from 2008 Baseline	Change from 2035 Baseline	Delay	Change from 2008 Baseline	Change from 2035 Baseline
2008	Baseline		3,269			13,845		
2035	Baseline (Without Selected Improvements)		6,283	3,015			7403	
	With All Selected Improvements		4,340	1,071	-1,944	18,269	4,424	-2,979
	With Individual Selected Improvements	DNA-MOS2	6,271	3,003	-12		7,393	-10
		Street Car	6,235	2,966	-48		7,353	-50
		Hi Bus from CRC to Elk Grove	6,218	2,950	-65		7,297	-106
		Kammerer Rd	6,274	3,005	-10		7,358	-45
		American River Crossing	6,212	2,944	-71		7,310	-93
		Richards/ Railyards	6,216	2,947	-68		7,332	-71
		Sacramento River Crossings	5,300	2,031	-983		6,167	-1,236
		I-5 HOV	5,709	2,441	-574		6,298	-1,105
		I-5 Auxiliary Lanes	6,161	2,892	-122		7,221	-182
		I-5 Ramp Meters	6,266	2,997	-17		7,361	-42
		SR 99 Auxiliary Lanes	6,260	2,992	-23		7,383	-20

Notes:

- See Figure 1 for Fee Program Area boundary and freeway segments within Fee Program Area
- Peak Periods are 7 AM to 10 AM and 3 PM to 6 PM
- Construction of the Elk Grove Intercity Rail Station is one of the selected improvements but the SACSIM regional model cannot provide forecasts of transit services that travel in/out of the region.

Source: DKS Associates, 2015.

5 FEE RATE CALCULATIONS

5.1 DUE Rates

A “dwelling unit equivalent” or “DUE” rate is assigned to each type of development within each fee district. For the “causes” analysis, DUE rates are numerical measures of how the combination of development type and location contribute to peak period delay on portions of the State Highway System with the Fee program Area.

SACOG has two travel demand models: SACMET, a state-of-the-practice four-step model that has been used by SACOG for developing the regional transportation plan since the early 1990’s and SACSIM, a state-of-the-art activity-based model that SACOG recently developed.

For the purpose of the DUE rate analysis, SACOG’s activity-based travel forecasting model (SACSIM) was used because of the model’s ability to predict and distinguish the primary purpose of a trip “tour” from intermediate stops within a tour. Unlike the SACMET model, SACSIM is a “tour-based” model that tracks trips from primary origin to primary destination, including stops along the way.

For example, stopping for coffee on one’s way to work would be an intermediate stop; whereas the primary purpose of the trip is defined as a home-to-work trip. Similar to the concept of “pass by trips”, the DUE calculation assumes that most intermediate stops would not add vehicle-miles of travel (VMT) to the State Highway System. Each primary trip purpose was identified at SACOG’s “parcel” level by trip origin and trip destination for three basic classifications (residential, retail, and non-retail). Standard ITE PM Peak trip generation rates were then used to split residential into single-family or multi-family housing and to proportion non-retail into office and industrial/other categories.

Peak period (3 hours in both the AM and PM peak commute periods) vehicle hours of delay on the selected portion of the State Highway System were tracked for all trip origin-destination combinations. Vehicle delay was calculated using the SACSIM model. Existing year roadway and transit networks were used to capture the impacts from growth on today’s State Highway System.

To isolate the impacts by development type and the location of development, separate model runs were made, adding a set quantity of new development in each run. For example, one run could measure the impact of adding 100 dwelling units to District 1 and subsequent runs would add the same number of dwelling units to each of the other districts. Those runs were followed by four model runs that add 100 retail employees to one of the four districts and four runs that add 100 office/industrial employees to each district.

The advantage of a delay calculation is its ability to quantify impacts based not only on trip length but also trip direction. For example, an AM commute trip from Elk Grove to Downtown Sacramento would have a heavier impact to the State Highway System than an AM commute trip from Downtown Sacramento to Elk Grove, yet both commute trips have approximately the same travel distance on the State Highway System. The heavier impact is due to the freeway’s congestion being a directional problem on many of the selected freeway segments. The DUE rate also captures the effects of a district having an over or under supply of retail or total jobs for the number of houses in that district.

The estimate DUE rates are shown in **Table 11**. DUE rates were scaled such that a single family dwelling unit in the Elk Grove District (District 4) is equal to 1.00. **Table 11** shows that a residential unit in Elk Grove has a higher impact on the State Highway System, and thus higher DUE rate, than a residential unit

in the Sacramento Central City. Conversely, 1,000 square feet of office space in Elk Grove has a lower impact on the State Highway System, than 1,000 square feet of office space in the Sacramento Central City.

Table 11: DUE Rates I-5 Subregional Corridor Mitigation Program (SCMP)						
Land Uses		Unit	DUE Rates			
			District 1	District 2	District 3	District 4
			Sacramento Central City & West Sacramento Riverfront	Remainder of West Sacramento	Land Park/ South Sacramento/ Pocket	Elk Grove
Residential	Single Family	DU	0.49	0.43	0.71	1.00
	Multi-family	DU	0.30	0.26	0.44	0.62
Retail	General Commercial	ksf	0.93	0.74	0.81	0.34
Office	General Office	ksf	0.92	0.66	0.59	0.23
Industrial	General Light Industrial	ksf	0.65	0.46	0.41	0.16
Notes: See Figure X for Fee District boundaries KSF = 1,000 square feet Source: DKS Associates, 2015.						

5.2 Estimated Growth in DUEs

The DUE rates in **Table 11** were applied to the estimated growth in development by land use type to estimate the growth in DUEs through 2035, which is shown in **Table 12**. It shows that a growth of about 47,860 DUEs is expected by 2035.

5.3 Maximum Allowable Fee Rates

The total cost of the twelve selected transportation projects is about \$1.496 billion and about \$1.307 billion is unfunded. The Nexus analysis indicates that the delay on the State Highway System that is due to growth in Fee Program Area is about 35 percent of total 2035 delay on the State Highway System. The maximum allowable funding from the SCMP Fee Program would be \$1.307 billion x 35%, or about \$448,664,000. With a growth of 47,860 DUEs in the Fee Program Area (see **Table 12**), the maximum cost per DUE would be \$9,374. The maximum allowable fee rates by land use type, shown in **Tables 13 through 15**, is based on the estimated DUE rates (see **Table 11**).

The Cities of West Sacramento and Elk Grove have existing fee programs and the City of Sacramento will soon adopt its own. The land use categories used by each city in their fee programs are different. It would be difficult for a city to use different land use categories for a subregional fee program than the city's fee program. Therefore, it was decided that each city can use the same land use categories as its own citywide fee program as long as the DUE rates for each land use category are consistent with the DUE rates that were estimated using the SACSIM model for the basic land use categories (residential, retail, and non-retail)

Table 12: Estimated Growth in DUEs						
	District	Residential (DU)		Non-Residential (KSF)		
		Single Family	Multi-Family	Retail	Office & Medical	Industrial
Units	1	6,989	22,649	374	6,075	2,699
	2	4,713	4,112	1,511	2,047	0
	3	5,374	9,081	1,847	212	0
	4	10,257	4,417	3,313	2,738	1,270
	Total	27,333	40,259	7,045	11,072	3,969
DUE per Unit	1	0.49	0.30	0.93	0.92	0.65
	2	0.43	0.26	0.74	0.66	0.46
	3	0.71	0.44	0.81	0.59	0.41
	4	1.00	0.62	0.34	0.23	0.16
DUEs	1	3,425	6,795	348	5,589	1,754
	2	2,027	1,069	1,118	1,351	0
	3	3,815	3,996	1,496	125	0
	4	10,257	2,738	1,126	630	203
	Total	19,524	14,598	4,089	7,695	1,957
	All Uses	47,863				
Source: DKS Associates, 2015						

Land Uses		Unit	District 1		District 2	
			DUE Rate	Fee Rate	DUE Rate	Fee Rate
Residential	700 sq. ft. or less	DU	0.30	\$2,812	0.26	\$2,437
	701 to 1,110 sq. ft.		0.43	\$4,031	0.38	\$3,562
	1,101 to 2,500 sq. ft.		0.49	\$4,593	0.43	\$4,031
	Greater than 2,500 sq. ft.		0.57	\$5,343	0.50	\$4,687
Retail	100,000 sq. ft. or less	1,000 sq. ft.	0.62	\$5,812	0.49	\$4,593
	Greater than 100,000 sq. ft.		0.93	\$8,718	0.74	\$6,937
	Heavy Commercial		0.40	\$3,750	0.32	\$3,000
	Furniture Store		0.19	\$1,781	0.15	\$1,406
	Restaurant		0.66	\$6,187	0.53	\$4,968
	Restaurant with drive thru		2.29	\$21,466	1.82	\$17,061
Recreational	Movie Theater		0.64	\$5,999	0.51	\$4,781
	Health Club		0.62	\$5,812	0.49	\$4,593
Lodging	Hotel/Motel	Room	0.26	\$2,437	0.21	\$1,969
Office	150,000 sq. ft. or less	1,000 sq. ft.	0.92	\$8,624	0.66	\$6,187
	150,001 to 300,000 sq. ft.		1.13	\$10,593	0.81	\$7,593
	Greater than 300,000 sq. ft.		1.26	\$11,811	0.90	\$8,437
Medical	Hospital		0.92	\$8,624	0.66	\$6,187
	Nursing Home/ Congregate Care		0.18	\$1,687	0.13	\$1,219
Institutional	Schools	Student	0.01	\$94	0.01	\$94
	Day Care		0.01	\$94	0.01	\$94
	Church	1,000 sq. ft.	0.05	\$469	0.02	\$187
Industrial / Other	Light Industrial		0.65	\$6,093	0.46	\$4,312
	Heavy Industrial		0.45	\$4,218	0.32	\$3,000
	Warehousing		0.31	\$2,906	0.22	\$2,062

Source: DKS Associates, 2015

Table 14: Maximum Allowable Fee Rates – City of Elk Grove (District 4) I-5 Subregional Corridor Mitigation Program (with Cost per DUE = \$9,374)				
Land Uses		Units	DUE Rate	Fee Rate
Residential	Single-Family (1-2 units)	DU	1.00	\$9,374
	Single-Family Age Restricted		0.39	\$3,656
	Single Family TOD		0.90	\$8,437
	Multi-Family		0.62	\$5,812
	Multi-Family Age Restricted		0.32	\$3,000
	Multi Family TOD		0.46	\$4,312
Commercial	Commercial ³	1,000 sq. ft.	0.34	\$3,187
	Commercial TOD		0.32	\$3,000
	Car Sales		0.25	\$2,344
Office	Office		0.23	\$2,156
	Office TOD		0.21	\$1,969
Industrial	Industrial		0.16	\$1,500
Institutional	Assembly Use		0.02	\$187
	Day/Child Care		0.06	\$562
	Private School		0.02	\$187
Miscellaneous	Congregate Care Facility		0.02	\$187
	Health Club		0.16	\$1,500
	Library		0.05	\$469
	Gas Station	Fuel Position	0.35	\$3,281
	Hotel/Motel	Room	0.09	\$844
Source: DKS Associates, 2015				

Table 15: Maximum Allowable Fee Rates – City of Sacramento (Districts 1 and 3) I-5 Subregional Corridor Mitigation Program (with Cost per DUE= \$9,374)						
Land Uses		Unit	District 1		District 3	
			DUE Rate	Fee Rate	DUE Rate	Fee Rate
Residential	Single-Family	DU	0.49	\$4,593	0.71	\$6,656
	Multi-Family		0.30	\$2,812	0.44	\$4,125
	Senior (Age-restricted)		0.08	\$750	0.11	\$1,031
Retail	General Retail	1,000 sq. ft.	0.93	\$8,718	0.81	\$7,593
	Restaurant		0.66	\$6,187	0.57	\$5,343
Office/Med	Office		0.92	\$8,624	0.59	\$5,531
	Hospital		0.92	\$8,624	0.59	\$5,531
Schools	Primary		0.03	\$281	0.02	\$187
	Secondary		0.03	\$281	0.02	\$187
	College		0.03	\$281	0.02	\$187
Industrial	Light Industrial		0.65	\$6,093	0.41	\$3,843
	Heavy Industrial		0.49	\$4,593	0.31	\$2,906
	Warehouse		0.31	\$2,906	0.02	\$187
Miscellaneous	Church/Assembly		0.02	\$187	0.02	\$187
	Movie Theater		0.93	\$8,718	0.81	\$7,593
	Gas Station	Fuel Position	0.66	\$6,187	0.58	\$5,437
Lodging	Hotel/Motel	rooms	0.26	\$2,437	0.23	\$2,156
Source: DKS Associates, 2015						

5.4 Proposed Fee Rates

The Working Group has reviewed the maximum allowable fee rates shown in **Tables 13 through 15** and have determined that those rates are excessively high. Thus they have decided that the estimated level of funding that would be raised from the maximum allowable rates (\$449 million) cannot be achieved. Instead, the Working Group is recommending that the estimated level of funding that should be imposed on new development be at a lower level (\$135 million) and the balance of the required funding to construct the improvements would come from other sources as programmed by SACOG to provide funds needed for full mitigation. Appendix B provides SACOG's Financial Plan for the 2016 Metropolitan Transportation Plan /Sustainable Communities Strategy (MTP/SCS), which outlines how all of the improvements in MTP/SCS, including all of the improvements in the SCMP Fee Program, could be financed by 2036 using a variety of revenue assumptions including development contributions and future voter approved tax measures.

Therefore, Caltrans and the Cities of West Sacramento, Elk Grove and Sacramento have identified the minimum level of acceptable funding (\$135 million) from the SCMP Fee Program, which is shown in in **Table 8**.

The cost per DUE that would provide this level of funding is \$2,821. The fee rates that result from this cost per DUE for each city is shown in **Tables 16 through 18**.

5.5 Program Equity

The SCMP Fee Program will collect fees in three jurisdictions and will help fund transportation improvements in those three jurisdictions. The Working Group raised a concern that the funding collected in a jurisdiction would go to fund improvements in another jurisdiction and/or that the funding collected in a jurisdiction was larger than the benefits received by that jurisdiction.

To address this concern, **Table 19** was prepared that compares the estimated improvement funding that would come to each jurisdiction to estimated SCMP fees that would be collected by that jurisdiction. Some of the improvement projects (such as streetcar and Sacramento River crossings) are shared between the Cities of Sacramento and West Sacramento. Improvements on the State Highway System would benefit all three jurisdictions, even if they are located in the adjacent City.

Table 19 shows that the estimated amount of fees collected in each jurisdiction should be about equal to the funding / benefits received each jurisdiction. Thus the SCMP Fee Program has an equitable level of funding by jurisdiction.

It should be noted that the estimated percent of fees collected from each jurisdiction is the same as the estimated percent of State Highway System delay that will be caused by the projected level of development in each jurisdiction. That is, the projected level of development in the Cities of West Sacramento, Elk Grove and Sacramento will cause 20%, 31% and 49% of the total State Highway System delay, respectively.

Table 16: Proposed Fee Rates – City of West Sacramento (Districts 1 and 2)
I-5 Subregional Corridor Mitigation Program
 (with Cost per DUE = \$2,821)

Land Uses		Unit	District 1		District 2	
			DUE Rate	Fee Rate	DUE Rate	Fee Rate
Residential	700 sq. ft. or less	DU	0.30	\$846	0.26	\$733
	701 to 1,110 sq. ft.		0.43	\$1,213	0.38	\$1,072
	1,101 to 2,500 sq. ft.		0.49	\$1,382	0.43	\$1,213
	Greater than 2,500 sq. ft.		0.57	\$1,608	0.50	\$1,411
Retail	100,000 sq. ft. or less	1,000 sq. ft.	0.62	\$1,749	0.49	\$1,382
	Greater than 100,000 sq. ft.		0.93	\$2,624	0.74	\$2,088
	Heavy Commercial		0.40	\$1,128	0.32	\$903
	Furniture Store		0.19	\$536	0.15	\$423
	Restaurant		0.66	\$1,862	0.53	\$1,495
	Restaurant with drive thru		2.29	\$6,460	1.82	\$5,134
Recreational	Movie Theater		0.64	\$1,805	0.51	\$1,439
	Health Club		0.62	\$1,749	0.49	\$1,382
Lodging	Hotel/Motel	Room	0.26	\$733	0.21	\$592
Office	150,000 sq. ft. or less	1,000 sq. ft.	0.92	\$2,595	0.66	\$1,862
	150,001 to 300,000 sq. ft.		1.13	\$3,188	0.81	\$2,285
	Greater than 300,000 sq. ft.		1.26	\$3,554	0.90	\$2,539
Medical	Hospital		0.92	\$2,595	0.66	\$1,862
	Nursing Home/Congregate Care		0.18	\$508	0.13	\$355
Institutional	Schools	Student	0.01	\$28	0.01	\$28
	Day Care		0.01	\$28	0.01	\$28
	Church	1,000 sq. ft.	0.05	\$141	0.02	\$56
Industrial / Other	Light Industrial		0.65	\$1,834	0.46	\$1,298
	Heavy Industrial		0.45	\$1,269	0.32	\$903
	Warehousing		0.31	\$875	0.22	\$621

Source: DKS Associates, 2015

Table 17: Proposed Fee Rates – City of Elk Grove (District 4) I-5 Subregional Corridor Mitigation Program (with Cost per DUE = \$2,821)				
Land Uses		Units	DUE Rate	Fee Rate
Residential	Single-Family (1-2 units)	DU	1.00	\$2,821
	Single-Family Age Restricted		0.39	\$1,100
	Single Family TOD		0.90	\$2,539
	Multi-Family		0.62	\$1,749
	Multi-Family Age Restricted		0.32	\$903
	Multi Family TOD		0.46	\$1,298
Commercial	Commercial ³	1,000 sq. ft.	0.34	\$959
	Commercial TOD		0.32	\$903
	Car Sales		0.25	\$705
Office	Office		0.23	\$649
	Office TOD		0.21	\$592
Industrial	Industrial		0.16	\$451
Institutional	Assembly Use		0.02	\$56
	Day/Child Care		0.06	\$169
	Private School		0.02	\$56
Miscellaneous	Congregate Care Facility		0.02	\$56
	Health Club		0.16	\$451
	Library		0.05	\$141
	Gas Station	Fuel Position	0.35	\$987
	Hotel/Motel	Room	0.09	\$254
Source: DKS Associates, 2015				

Table 18: Proposed Fee Rates – City of Sacramento (Districts 1 and 3) I-5 Subregional Corridor Mitigation Program (with Cost per DUE= \$2,821)						
Land Uses		Unit	District 1		District 3	
			DUE Rate	Fee Rate	DUE Rate	Fee Rate
Residential	Single-Family	DU	0.49	\$1,382	0.71	\$2,003
	Multi-Family		0.30	\$846	0.44	\$1,241
	Senior (Age-restricted)		0.08	\$226	0.11	\$310
Retail	General Retail	1,000 sq. ft.	0.93	\$2,624	0.81	\$2,285
	Restaurant		0.66	\$1,862	0.57	\$1,608
Office/Med	Office		0.92	\$2,595	0.59	\$1,664
	Hospital		0.92	\$2,595	0.59	\$1,664
Schools	Primary		0.03	\$85	0.02	\$56
	Secondary		0.03	\$85	0.02	\$56
	College		0.03	\$85	0.02	\$56
Industrial	Light Industrial		0.65	\$1,834	0.41	\$1,157
	Heavy Industrial		0.49	\$1,382	0.31	\$875
	Warehouse		0.31	\$875	0.02	\$56
Miscellaneous	Church/Assembly		0.02	\$56	0.02	\$56
	Movie Theater		0.93	\$2,624	0.81	\$2,285
	Gas Station	Fuel Position	0.66	\$1,862	0.58	\$1,636
Lodging	Hotel/Motel	rooms	0.26	\$733	0.23	\$649
Source: DKS Associates, 2015						

Table 19: Comparison of Estimated Improvement Funding to Estimated Fees Collected by Jurisdiction

Project	Assumed Project Funding from Fee Program (\$million)	Percent of Funds from SCMP Fee Program			Funding (\$ million) from SCMP Fee Program		
		Sacramento	West Sacramento	Elk Grove	Sacramento	West Sacramento	Elk Grove
Transit							
DNA-MOS2	6.3	100%			6.3	0	0
Streetcar	20	67%	33%		13.4	6.6	0
Elk Grove Intercity Rail Station	6			100%	0	0	6.0
Hi Bus from CRC to Elk Grove	10			100%	0	0	10.0
Local Roadway							
Kammerer Rd	12			100%	0	0	12.0
American River Crossing	6.3	100%			6.3	0	0
Richards/ Railyards	9.4	100%			9.4	0	0
Sacramento River Crossings	30	50%	50%		15.0	15.0	0
Freeway							
I-5 HOV	35	45%	15%	40%	15.75	5.25	14.00
I-5 Ramp Meters & Detection							
I-5 Auxiliary/ Transition Lane							
SR 99 Auxiliary/ Transition Lanes							
Total	135	49%	20%	31%	66	27	42
Estimated Amount of Fees Collected by 2036 ¹		49%	20%	31%	66	27	42
¹ Based on estimated growth (see Table 6) and recommended fee rates (see Tables 13A through 13C)							
Source: DKS Associates, 2015							

6 NEXUS FINDINGS

6.1 Authority

This report has been prepared to establish the SCMP Fee Program in accordance with the procedural guidelines established in AB1600, which is codified in California Government Section 66000 et seq. This code section sets forth the procedural requirements for establishing and collecting development impact fees. The procedures require that a "reasonable relationship or nexus must exist between a governmental exaction and the purpose of the condition."¹

¹Specifically, each local agency imposing a fee must:

- Identify the purpose of the fee.
- Identify how the fee is to be used.
- Determine how a reasonable relationship exists between the fee's use and the type of development project on which the fee is imposed.
- Determine how a reasonable relationship exists between the need for the public facility and the type of development project on which the fee is imposed.
- Demonstrate a reasonable relationship between the amount of the fee and the cost of the public facility or portion of the public facility attributable to the development on which the fee is imposed.

6.2 Summary of Nexus Findings

The development impact fee to be collected for each new development is calculated based on the impact that development will have on increasing delay on a selected portion of the State Highway System based on the type of development and its location (district) within the area covered by the SCMP Fee Program. With this approach, the following findings are made concerning the nexus between the amount of the fee and impacts it serves to mitigate:

Purpose of Fee

The purpose of the proposed SCMP Fee Program is:

To help fund a set of transportation improvements in the Metropolitan Transportation Plan / Sustainable Community Strategy (MTP/SCS) that would reduce delay on the State Highway System and thereby help mitigate the impacts of new development on congestion levels on the State Highway System

Use of Fees

The fees charged to new development will be used to fund transportation improvements that will reduce traffic delay on the State Highway System and thus accommodate future traffic projected as a result of new development. All of the improvement projects that would be funded by the SCMP Fee Program are part of the Metropolitan Transportation Plan / Sustainable Community Strategy (MTP/SCS).

¹ Public Needs & Private Dollars; (July 1993), William Abbott, Marian E. Moe, and Marilee Hanson, page 109.

Relationship between Use of Fees and Type of Development

New development in the Fee Program Area will have both a direct and a cumulative impact on delay and congestion on the State Highway System within the Fee Program Area. Construction of the selected transportation projects will reduce delay on this portion of the State Highway System and thereby help reduce the impact caused by new development in the Fee Program Area.

Relationship between Need for Facility and Type of Project

Each new residential and nonresidential development project in the Fee Program Area will add an incremental amount of delay to traffic on the State Highway System during peak periods, and each of the selected transportation improvements will decrease the delay on the State Highway System caused by new development.

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

Currently, the State Highway System within the Fee Program Area is congested during peak periods and thus has existing deficiencies. However, new growth will cause additional delay on the State Highway System and should pay a fair share of improvements that could reduce delay - but no more than existing delay levels.

Construction of all the selected transportation improvements would reduce delay on the State Highway System within the Fee Program Area by approximately the amount of delay caused by new development within the Fee Program Area. All the improvements in the SCMP Fee Program are included in Metropolitan Transportation Plan /Sustainable Communities Strategy (MTP/SCS), While SACOG's Financial Plan for the MTP/SCS (see Appendix B) shows how these improvements could be funded by 2036 (using a variety of revenue assumptions including development contributions and future voter approved tax measures), by creating an additional source of funding, the SCMP Fee Program would result in the SCMP transportation improvements being implemented more quickly than they might be without the SCMP Fee Program, thus mitigating for development project impacts on the State Highway System.

The amount of delay on the State Highway System caused by projected development within the Fee Program Area represents about 35 percent of the total delay in 2036 from all sources – including existing land uses and projected new development outside the Fee Program Area. It is logical that new development could pay up to 35 percent of the cost of the improvements that would reduce delay on the State Highway System.

SACOG's SACSIM travel demand model identified the amount of delay that each land use type in each fee district would cause on the State Highway System within the Fee Program Area. This information allowed DUE rates to be established where the delay for each land use type in each district was compared to single family dwelling unit in District 4 (Elk Grove), which was assigned a DUE rate of 1.0. The DUE rates allowed calculation of a maximum justifiable fee for each unit of new residential development and for each 1,000 square feet of new nonresidential development in each district that reflects the relative traffic impact on the State Highway System.

7 IMPLEMENTATION

7.1 CEQA Analyses

Caltrans and the Cities of West Sacramento, Elk Grove and Sacramento will need to amend their traffic impact guidelines as necessary to recognize the agreements reached as part of the I-5 Subregional Corridor Mitigation Program, (SCMP).

Under a voluntary fee program, a project applicant whose project traffic reaches the “threshold of significance” (discussed below) may choose to pay the fee in lieu of preparing a traffic model analysis of the mainline freeway impacts, or (ii) as a mandatory development impact fee pursuant to the Mitigation Fee Act (Government Code section 66000 et seq.). If a City adopts a mandatory program, the analysis of freeway impacts will follow Method 1, described below. If a City adopts a voluntary program, a development project applicant could choose between the two methods to evaluate and mitigate impacts on the freeway mainline. These methods are outlined below.

Method 1: Pay Subregional Freeway Mitigation Fee

Under this method, a development project located within the Fee Program Area would use the following “standard of significance” for impacts on the State’s freeway mainline:

The development project would cause a significant impact on the freeway mainline if it causes a significant increase in total peak period travel delay on the State’s freeway system within the subregion. A significant increase in freeway system delay would be caused by development projects that would generate a net increase of at least 100 AM or PM peak hour vehicle trip-ends. Project’s that would generate fewer than 100 peak hour vehicle trip-ends would not cause a significant congestion impact on the State’s mainline freeway system.

A development project within the Project Area that generates this level of new traffic demand will add some traffic to the freeway mainline with the Project Area, thereby contributing to the overall peak period travel delay on the freeway system.

The analysis of the selected projects for the SCMP Fee Program (see Section 4) shows that these projects would reduce total peak period travel delay on the State’s freeway system within the subregion. Therefore, Caltrans would consider the fees as an adequate mitigation for freeway mainline impacts under both existing and cumulative conditions.

If a development project elects to pay the fees, Caltrans agrees that the development project applicant would not be required to conduct a detailed analysis of freeway mainline impacts, including freeway mainline LOS analysis, “merge and diverge” analysis and weaving analysis on the mainline under either existing and cumulative conditions. Caltrans would further agree that payment of the fee constitutes adequate mitigation.

With the selected threshold (a net increase of 100 AM or PM peak period vehicle trip-ends), a traffic impact study (TIS) would be required under the traffic impact guidelines for all three cities. In the TIS, the development project applicant would still be required to evaluate and mitigate significant impacts to intersections where freeway ramps meet local roadways, including the following:

- Intersection LOS impacts;
- Determining if traffic added by a development project would cause off-ramp traffic to back-up onto the freeway mainline; and

- Determining if the development project would cause a significant safety issue in the vicinity of the intersection.

Caltrans agrees that payment of the SCMP fee under this program would adequately mitigate a development project's impact on the mainline portion of the State Highway System under CEQA with the exception of potential significant impacts that could be identified at intersections where freeway ramps meet local roadways (as discussed above).

Before any transportation project funded by the SCMP Fee Program is developed, the impacts of that improvement project would be subject to environmental review under CEQA and possibly NEPA for projects with a federal nexus.

Method 2:

As an alternative to paying the SCMP fee, a development project applicant could instead elect to evaluate traffic impacts in a detailed traffic impact study (TIS) that covers impacts on the freeway mainline. Under this method, the TIS must follow Caltrans' guidelines, which currently are outlined in the "Guide for the Preparation of Traffic Impact Studies" (December 2002). Under the current guidelines, a development project that generates more than 100 peak hour trips assigned to the State freeway system would need to include a detailed analysis of impacts on the State's freeway mainline, (including freeway mainline LOS analysis, "merge and diverge" analysis and, if appropriate, weaving analysis on the mainline) in a development project's traffic impact study. The City where the development project is located would consult with Caltrans regarding the scope of the traffic analysis.

As with Method 1, an evaluation of intersections where freeway ramps meet local roadways would need to be conducted including an LOS analysis and determining if traffic added by a development project would cause off-ramp traffic to back-up onto the freeway mainline and/or a significant a safety issue in the vicinity of the intersection.

Under Method 2, a significant impact would be mitigated by identifying a feasible measure acceptable to Caltrans that would lessen the identified impacts. The City where the development project is located may consult with Caltrans regarding the applicable mitigation measure(s) if the resulting analysis demonstrates that the project's impacts could create potentially significant adverse impact on the freeway mainline operations. The City will consider imposing such mitigation measures as part of the conditions of approval for the project at the time the project and the CEQA document is approved.

7.2 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
- The cost of justification analyses, legal support, and other costs of annual, periodic and five- year updates to the
- Costs associated with the establishment and on-going administration of an effective system of fee credits and cash reimbursements.

Administration charges typically range from 1.0 percent up to 5.0 percent. This Nexus Study

applies a 3 percent allowance to fund administration costs.

7.3 Allocation of Fees

The process that will be used to allocate funds collected from the SCMP Fee Program is outlined in the MOU and summarized below.

Annually, after adoption of the SCMP Fee Program, each City will prepare an annual report and provide a copy to all of the other cities which includes the amount of the fees that the City has collected and its proposed allocation of such funding for projects in the SCMP.

It may take many years to collect enough fees to assist in funding the costs of a project in the SCMP and many projects in that plan may not be ready for construction for a period of time after fees have been collected due to the need to secure additional funding. In addition, there may be delays in construction of the projects included in the SCMP due to the need to prepare engineering plans and undertake environmental review. For these and other reasons, a City may propose in its annual report to continue to accumulate the fees for a specified period of time and not to expend the funds that have been collected.

The first priority for each City in allocating fees it has collected is to apply those funds towards construction of SCMP projects which are located within the jurisdictional boundaries of that City, or closest thereto, so as to benefit the new developments within that City which either paid the fee in accordance with the provisions of the Mitigation Fee Act voluntarily.

Cities acknowledge that some of the projects in the SCMP are to be constructed by another City, Caltrans, or Regional Transit. The working group shall meet annually to make recommendations on the allocation of the fees collected for projects. Each City will consider those recommendations and determine whether to allocate all or a portion of the fees it has collected to another City, Caltrans, or Regional Transit to assist in funding a project within their respective jurisdiction. If there are no projects or no remaining projects in the SCMP in a City, that City must nonetheless allocate the fees it has collected to another City, Caltrans or Regional Transit to fund a project in the SCMP. Transfer of such funding may require those parties to enter into a project improvement agreement to specify the terms for transfer of such funds, or a City may transmit such funds to SACOG for appropriation for a project in another City, Caltrans or to Regional Transit which is included in the SCMP.

7.4 Fee Program Update

The SCMP Fee Program will be subject to automatic annual inflation adjustments, potential periodic updates, and a 5-year review requirement. The purpose of each update is described in this section.

Automatic Annual Inflation Adjustment

The cost estimates presented in this report are in “constant” 2015 dollars. That is, the costs of improvements that will be constructed in the future do not include estimated increases from 2015 costs to reflect inflation. To remain consistent, the Cities of West Sacramento, Elk Grove, and Sacramento will automatically each year adjust the costs and fees to account for inflation (or deflation) of construction, right-of-way acquisition, and environmental or design costs in accordance with their own ordinances.

Periodic Fee Updates

The SCMP Fee Program presented in this report is based on the improvement cost estimates, funding source information, administrative cost estimates, and land use information available at this time. After the fees presented in this report are established, the Cities of West Sacramento, Elk Grove, and Sacramento should conduct periodic reviews of the assumptions used as the basis of this Nexus Study to determine if any updates to the fees are warranted.

Periodic Updates of the SCMP fees would need to be agreed upon by all three cities and are subject to each City's approval of a revised Nexus Study. Any changes to the fee based on the periodic update will be presented to each City Council for approval before an increase or decrease in the fee.

Five-Year Review

Fees will be collected from new development in each City immediately; use of these funds, however, may need to wait until a sufficient fund balance can be accrued. According to Government Code Section 66006, a City is required to deposit, invest, account for, and expend the fees in a prescribed manner. The fifth fiscal year following the first deposit into the Fee account or fund and every 5 years thereafter, the City is required to make all of the following findings with respect to that portion of the account or fund remaining unexpended:

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

The City must refund the unexpended or uncommitted revenue portion of the fee for which a need could not be demonstrated in the above findings, unless the administrative costs exceed the amount of the refund.

7.5 Implementing Ordinances/Resolutions

The proposed fee would be adopted by each City through one or more ordinances or resolutions authorizing collection of the fee and through one or more fee resolutions establishing the fee. The fee in each City will be effective per the timing adopted in the ordinances or resolutions. The new ordinances or resolutions should reference the automatic inflation adjustment factor discussed in this section.

7.6 Fee Administration

The SCMP 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 Cities of West Sacramento, Elk Grove, and Sacramento are required to deposit, invest, account for, and expend the fees in a prescribed manner.

7.7 Exemptions, Reimbursements and Credits

Under a voluntary fee program, a development project that does not reach the “threshold of significance” (a net increase of 100 AM or PM peak period vehicle trip-ends) would be exempt from the SCMP Fee. This threshold is equivalent to the traffic volume generated by the net increase of about 100 single-family dwelling units. Most minor construction activities, such as replacement/reconstruction of a one residential unit or additions/alterations to one residential unit would not meet this threshold.

Other exemptions may be permitted in accordance with state and local laws, and each City’s adopted ordinances and policies.

Other Land Uses

The SCMP Fee Program identifies fee rates for the major land use categories identified in the fee programs used by each City. Specialized land uses may have unique trip generation rates and/or impacts on the State Highway System. In these cases, the City may require a project-specific traffic study, or will calculate the appropriate fee based on information derived from the SACOG’s SACSIM model. Each City will identify who will review the specialized development and decide on an applicable fee.

Reimbursement to Developers

Cities may enter into agreements to reimburse a developer for eligible expenses for covered facilities in the improvement plan that they construct in accordance with each City’s own policies.

APPENDIX A: MEMORANDUM OF UNDERSTANDING

MEMORANDUM OF UNDERSTANDING

Implementation Plan for the I-5 Freeway Subregional Corridor Mitigation Program

This MEMORANDUM OF UNDERSTANDING ("Agreement") is made and entered into this 25 day of June, 2014, ("Execution Date") by and between the City of Sacramento, a municipal corporation ("Sacramento"), the City of West Sacramento, a municipal corporation ("West Sacramento"), and the City of Elk Grove, a municipal corporation ("Elk Grove"), which are referred to herein individually as "City" and collectively as "Cities;" and the California Department of Transportation, a state agency ("Caltrans") and the Sacramento Area Council of Governments, a joint powers entity ("SACOG"). All of the foregoing entities are referred to herein individually as "Party" and collectively as "Parties."

RECITALS

A. Due to the concerns of all the Parties regarding the projected future cumulative mainline freeway traffic impacts from new developments located within the jurisdictional boundaries of Cities along the Interstate 5 freeway ("Freeway Subregional Corridor"), staff from Cities and Caltrans (the "working group") met over a four year period and Cities collectively funded a study by DKS Associates dated April 30, 2009, titled: "Policy Recommendations for the Evaluation and Mitigation of Significant Impacts from Local Development Projects on the State Highway System" (the "Freeway Subregional Corridor Study"), regarding measures to mitigate potential impacts.

B. The Freeway Subregional Corridor extends generally from the American River on the north, the western boundary of the City of West Sacramento on the west, the southern boundary of the City of Elk Grove on the south and Highway 99 on the east. The study area was divided into four districts, with territory within Sacramento (District 1 and 3), West Sacramento (District 2) and Elk Grove (District 4).

C. DKS Associates modeled the cumulative mainline traffic impacts on the I-5 freeway from future developments within the Freeway Subregional Corridor. Based on this information, the working group identified planned transportation improvements in SACOG's Regional Transportation Plan ("RTP") which would best relieve traffic congestion within the Freeway Subregional Corridor. Caltrans has not adopted plans to add lanes to the I-5 freeway in this corridor to expand capacity, other than adding high occupancy vehicles lanes (the "Freeway Improvements") to encourage carpooling and use of bus transit. The Freeway Subregional Corridor Study identified roadway and river crossing projects (the "Local Roadway Improvements") as planned by the Cities

and set out in the RTP, and the Sacramento Regional Transit District's ("Regional Transit") proposed extension of its light rail system to Natomas (the "Transit Improvements"), all of which will serve as alternative routes for intra-city and inter-city travel. The selected Freeway, Local Roadway and Transit Improvements are referred to herein as the "Subregional Improvement Plan."

D. The Freeway Subregional Corridor Study, with input from the working group and SACOG, evaluated the estimated costs and anticipated funding sources for all of the projects included in the Subregional Improvement Plan, identified the funding shortfall, determined the fair share cost of these projects caused by the additional traffic from new development, and recommended mitigation fees (the "Subregional Impact Fee") to fund such fair share costs based on the development project's location and type of land uses.

E. On July 13, 2009, Caltrans, through its District 3 Director, approved the recommendations set out in the Freeway Subregional Corridor Study. Caltrans' letter stated that the recommended Subregional Impact Fee to help fund the costs of the projects in the Subregional Improvement Plan would lessen the cumulative mainline traffic impacts caused by new development located within the Freeway Subregional Corridor, and that Caltrans anticipates that it would accept such fees as adequate freeway congestion mitigation for cumulative traffic impacts under the California Environmental Quality Act ("CEQA"), subject to its review and acceptance of the EIR as referenced below.

F. SACOG and the working group will conduct environmental review of the Subregional Improvement Plan and Subregional Impact Fee to analyze whether implementation of such projects would mitigate the cumulative mainline freeway traffic impacts from new development within the Freeway Subregional Corridor.

NOW, THEREFORE, based on the Recitals set forth above and the Parties' desire to undertake efforts in a cooperative manner to implement the Subregional Improvement Plan and address how the identified projects are to be funded with the Subregional Impact Fee collected by each City, the Parties agree as follows:

AGREEMENT

1. Modification of Subregional Improvement Plan. The Parties shall meet to determine if there needs to be any changes to the Freeway, Local Roadway and Transit Improvements included in the Subregional Improvement Plan based on current information with regard to the status and funding of the projects in that plan. The refined

Subregional Improvement Plan will be used as the project definition for preparation of the Environmental Impact Report (EIR).

2. Preparation of EIR. SACOG will be responsible as a lead agency for preparation of a program-level Environmental Impact Report in compliance with CEQA for the Subregional Improvement Plan. The purpose of the EIR is to analyze whether the Subregional Impact Fee is an appropriate measure to mitigate cumulative impacts of new development on the State Highway System. Each Party shall cooperate with SACOG in providing information and reviewing the administrative draft EIR for accuracy. The costs of the EIR preparation shall be shared equally by Cities, subject to approval of the SACOG's budget for the EIR preparation. An EIR cost sharing agreement between the Cities and SACOG will be needed before the EIR is prepared. After certification of the EIR by SACOG, Sacramento, West Sacramento and Elk Grove shall rely on the EIR as a responsible agency in supporting that Party's actions to fund the Subregional Improvement Plan if they adopt the Subregional Impact Fee.

3. Plan Approval and Fee Adoption. If SACOG certifies the EIR for the Subregional Improvement Plan, each City may individually take action to approve the Subregional Improvement Plan and adopt the Subregional Impact Fee. The Subregional Impact Fee may be adopted either: (i) as a voluntary measure, where a project applicant whose project traffic reaches the threshold of significance may choose to pay the fee in lieu of preparing a traffic model analysis of the cumulative mainline freeway impacts, or (ii) as a mandatory development impact fee pursuant to the Mitigation Fee Act (Government Code section 66000 *et seq.*).

A. Regardless of whether the Subregional Impact Fee is adopted as a voluntary measure or mandatory development impact fee, the fee would only apply to those development projects which: (i) may generate mainline traffic volumes on the I-5 freeway system within the Freeway Subregional Corridor which would exceed the threshold of significance as adopted by each City, in reliance on Caltrans guidance, and (ii) are not exempt from environmental review or traffic impact analysis under the CEQA Guidelines (CA Code of Regulations, Title 14 Chapter 3). If a project does not meet the thresholds, then no mitigation is required, the fee program does not apply. Caltrans agrees that: (i) if the Cities comply with the terms of this Agreement and a project applicant complies with the fee program for a particular project, or (ii) a project does not trigger the thresholds and therefore is not required to pay a fee, Caltrans will not challenge the lack of a cumulative mainline traffic impact study or the adequacy of the mitigation for such impacts for that project.

B. If a City adopts the Subregional Impact Fee as a voluntary measure and an applicant decides not to comply with the Subregional Impact Fee program, even though the project's traffic impacts will exceed the threshold of significance as adopted by that City, then the City will: (i) require a traffic model analysis of the cumulative mainline freeway impacts for that development project as part of the preparation of the applicable CEQA document for that project; (ii) consult with Caltrans regarding the scope of such traffic analysis and the applicable mitigation measures if the resulting analysis demonstrates that the project's impacts could create potentially significant adverse impacts on the freeway mainline operations under future cumulative conditions; and (iii) consider imposing such mitigation measures as part of the conditions of approval for the project at the time the project and the CEQA document is approved.

C. Each City may adopt the voluntary or mandatory Subregional Impact Fee in consideration of the information in the Freeway Subregional Corridor Study, as well as any additional information that it may rely upon. The City may adjust the amount of the fees from those in the Freeway Subregional Corridor Study based on: (i) the land use categories applicable within each City's zoning ordinance, and (ii) whether the City previously adopted development impact fees which already include the fair share costs of one or more of the projects in the Subregional Improvement Plan. In addition, the working group may recommend to each City to increase or decrease the amount of the fees on an annual basis to account for changes in construction costs, the scope of the project and its estimated costs, and changes in project funding from other sources, all in compliance with the provisions of the Mitigation Fee Act.

D. If the Subregional Impact Fee is paid by the project applicant, whether on a voluntary or mandatory basis, Caltrans will provide written verification to the City, upon request from that City, that the payment of the fee satisfies Caltrans as to that project's obligation under CEQA to mitigate its cumulative mainline traffic impacts on the State Highway System.

4. Allocation of Fees. Annually, after adoption of the Subregional Impact Fee as described in Section 2, above, each City will prepare an annual report and provide a copy to all of the other Parties which includes the amount of the fees that the City has collected and its proposed allocation of such funding for projects in the Subregional Improvement Plan.

A. The Parties acknowledge that it may take many years to collect enough fees to assist in funding the costs of a project in the Subregional Improvement Plan as set out in the Freeway Subregional Corridor Study, and that many projects in that plan may not be ready for construction for a period of time after fees have been collected

due to the need to secure additional funding. In addition, there may be delays in construction of the projects included in the Subregional Improvement Plan due to the need to prepare engineering plans and undertake environmental review. For these and other reasons, the Parties acknowledge that a City may propose in its annual report to continue to accumulate the fees for a specified period of time and not to expend the funds that have been collected.

B. The Parties acknowledge that the first priority for each City in allocating fees it has collected is to apply those funds towards construction of projects in the Subregional Improvement Plan which are located within the jurisdictional boundaries of that City, or closest thereto, so as to benefit the new developments within that City which either paid the fee in accordance with the provisions of the Mitigation Fee Act or voluntarily.

C. Cities acknowledge that some of the projects in the Subregional Improvement Plan are to be constructed by another City, Caltrans, or Regional Transit. The working group shall meet annually to make recommendations on the allocation of the fees collected for projects. Each City will consider those recommendations and determine whether to allocate all or a portion of the fees it has collected to another City, Caltrans, or Regional Transit to assist in funding a project within their respective jurisdiction. If there are no projects or no remaining projects in the Subregional Improvement Plan in a City, that City must nonetheless allocate the fees it has collected to another City, Caltrans or Regional Transit to fund a project in the Subregional Improvement Plan. Transfer of such funding may require those Parties to enter into a project improvement agreement to specify the terms for transfer of such funds, or a City may transmit such funds to SACOG for appropriation for a project in another City, Caltrans or to Regional Transit which is included in the Subregional Improvement Plan.

D. SACOG may rely on the Cities' annual reports in determining funding allocations which may be needed when preparing its annual Metropolitan Transportation Improvement Plan for those projects which are included in the Subregional Improvement Plan, so as to facilitate construction of such projects which are supported by all of the other Parties.

4. Project Development. In regards to the delivery of projects included in the Subregional Improvement Plan, the Parties agree as follows:

A. Each Party will encourage public awareness and undertake public outreach efforts to involve the public in the planning and environmental review processes in which the Parties are engaged for their respective projects included in the

Subregional Improvement Plan which are to be approved and/or constructed by that Party.

B. Each Party may use the products of any technical studies and reports generated by another Party in a manner consistent with its respective obligations. Each Party is responsible for making its own determination as to the usefulness or as to the propriety of its use of or reliance upon the work product of the other Party. Neither Party represents or warrants that its work product is or will be sufficient for the purposes to which another Party may wish to apply that work product. This Agreement does not reduce, expand, transfer, or alter in any way any of the statutory or regulatory authorities or responsibilities of any Party hereto. Neither Party is delegating any rights, duties, or responsibilities to any other Party under this Agreement.

5. Term. This Agreement is effective after execution by all of the Parties and shall continue in effect until terminated by all of the Parties through mutual agreement. Any Party may terminate this Agreement in regards to respective obligations of that Party under this Agreement upon providing 30 days' advance written notice delivered to the other Parties.

6. Other Provisions. This Agreement may be executed in counterparts. This Agreement does not create a joint venture, partnership, or any other relationship of association among the Parties. Nothing contained herein is intended, nor shall this Agreement be construed, as an agreement to benefit any third parties. This Agreement embodies the entire agreement of the Parties in relation to the matters contained herein, and no other understanding whether verbal, written or otherwise exists among the Parties.

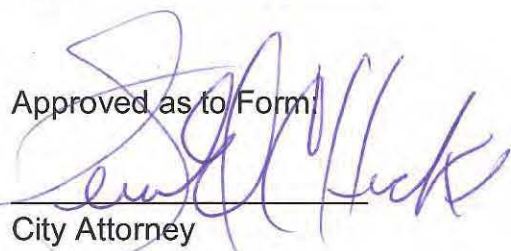
[Signature pages follow]

IN WITNESS WHEREOF, the Parties have entered into this Agreement as of the last date set out below:

CITY OF SACRAMENTO

By: 
Name:
Title:

Date: 6-18-14

Approved as to Form:

City Attorney

ATTEST


City Clerk 7-22-14

CITY OF WEST SACRAMENTO

By: [Signature]

Name:

Title:

Date: 6/18/2014

Approved as to Form:

[Signature]

City Attorney

ATTEST

[Signature]

City Clerk

CITY OF ELK GROVE

By: Laura S. Gill

Name: Laura S. Gill

Title: City Manager

Date: 6/26/14

Approved as to Form:

[Signature]

City Attorney

ATTEST

[Signature]

City Clerk, JASON LINDGREN

DATED: JUNE 27, 2014



CALIFORNIA DEPARTMENT OF TRANSPORTATION

By: Jody Jones
Name:
Title: District 3 Director
Date: 5/22/14

Approved as to Form:

[Signature]
Attorney

SACRAMENTO AREA COUNCIL OF GOVERNMENTS

By: [Signature]
Name: Mike McKeever
Title: CEO
Date: 8/14/14

Approved as to Form:

[Signature]
Attorney

ATTEST

[Signature]
Dep. Clerk

APPENDIX B: SACOG'S FINANCIAL PLAN FOR THE METROPOLITAN TRANSPORTATION PLAN & SUSTAINABLE COMMUNITIES STRATEGY

All the improvements in the SCMP Fee Program are included in Metropolitan Transportation Plan /Sustainable Communities Strategy (MTP/SCS), As stated in the SACOG's Financial Plan for the MTP/SCS, provided in this appendix, "the MTP/SCS must be financially constrained, meaning that the amount of funding programmed must not exceed the amount of funding estimated to be reasonably available within the planning period", which is 2036. To meet this requirement, the revenue assumptions in SACOG's Financial Plan are based on existing federal and state sources of funding and existing or SACOG Board-approved sources of local funding for transportation purposes.

Appendix B-1

Financial Plan

2016 Metropolitan Transportation Plan & Sustainable Communities Strategy

Plan Finances

The funding to support the transportation investments in the MTP/SCS comes from a number of federal, state, and local sources, each with specific purposes and restrictions. The dollar amounts are presented in both current year (2015) dollars and nominal or “year of expenditure” values. The MTP/SCS provides current year dollars to illustrate the magnitude of investments in terms of the 2015 fiscal year. However, federal statute requires regional transportation plans to provide costs and revenues in “year of expenditure” dollars. Accordingly, the discussions below provide dollar values first in current year terms, followed in parentheses by “year of expenditure” (YOE) values.

In total, SACOG forecasts \$35.0 billion in revenues (\$46.7 billion YOE) over the planning period. On average, this comes out to approximately \$1.6 billion (\$2.1 billion YOE) per year over 22 years.

Conversion between Current Year (2015) and Year of Expenditure (YOE) Dollars

The federal Moving Ahead for Progress in the 21st Century Act (MAP-21) requires that all cost estimates be escalated to year of expenditure or nominal values to reflect both the decrease in purchasing power of today’s dollar and the increase in costs for maintaining and building the transportation system over time. The average rate of inflation used in the MTP/SCS is 2.7 percent. The first five years of the plan uses an inflation rate consistent with the California Legislative Analyst’s Office assumptions used in the 2014-15 Budget: California’s Fiscal Outlook. Following fiscal year 2020, the MTP/SCS assumes a slight increase in the inflation rate annually until reaching the historical average of 3.2 percent and then maintains this average through the rest of the planning period. Table 1.1 below illustrates the inflation rate assumptions for each year of the MTP/SCS.

Table B1.1. MTP/SCS Inflation Rate Assumptions

	2015	2016-2019	2020	2021-2026	2027-2036
Inflation rate	1.7%	1.9%	2.0%	Previous year + 0.2%	3.2%

2015 through 2020 based on California Legislative Analyst’s Office assumptions in *The 2014-15 Budget: California’s Fiscal Outlook*

On the revenue side, the nominal rate of growth for each funding source is determined by extrapolating recent trends, either on a straight line basis or in some cases using a trend curve. This methodology yields revenues in YOE dollars, which are then de-escalated using the inflation rates described above to yield current year dollars.

On the expenditure side, project sponsors provide SACOG with project costs in current year dollars, which are then uniformly escalated to YOE dollars using the inflation rate described above through the assumed completion timeframe for the project.

Summary of Revenue Sources and Assumptions

The MTP/SCS must be financially constrained, meaning that the amount of funding programmed must not exceed the amount of funding estimated to be reasonably available within the planning period. To meet this requirement, the revenue assumptions in the plan are based on existing federal and state sources of funding and existing or SACOG Board-approved sources of local funding for transportation purposes. Each funding source is extrapolated at historic rates of growth or by reasonable assumptions about future trends to determine the total amount of that source that will be available for implementation of the MTP/SCS. Attachments A and B describe the available revenues for each funding source over five and six year increments throughout the planning period. In developing the MTP/SCS, SACOG has taken into consideration both transportation funding revenues and the costs of building, operating, and maintaining the regional transportation system over 22 years (Federal FFY 2014-15 through FY 2035-36).

Federal Funding

Federal funding assumptions are derived from the annual apportionments provided to SACOG by the federal government or from historical funding levels. MAP-21, which was signed into law in 2012, sets the program structure and distribution formulas for federal transportation funds. SACOG projects funding from both the Federal Highway Administration and Federal Transit Administration Programs listed below, with revenue assumptions outlined in Table B1.2.

Federal Highway Administration Programs

- Regional Surface Transportation Program (RSTP)
- Congestion Mitigation and Air Quality Program (CMAQ)
- Other federal discretionary programs

Federal Transit Administration Programs

- Section 5307 Urbanized Area Formula Program
- Section 5309 Fixed-Guideway Capital Investment Grants
- Section 5310 Enhanced Mobility of Seniors & Individuals with Disabilities
- FTA 5311 Formula Grants for Rural Area
- FTA 5337 State of Good Repair Grants
- FTA 5339 Bus and Bus Facilities

Table B1.2. Federal Revenue Sources and Assumptions

Federal Source	MTP/SCS
Congestion Mitigation and Air Quality (CMAQ)	Base Year: 2015 Key Assumptions: SACOG region will continue to receive CMAQ funds in a manner consistent with historical apportionments. Growth: 5% annual growth.
Regional Surface Transportation Program (RSTP)	Base Year: 2015 Key Assumptions: SACOG region will continue to receive RSTP funds in a manner consistent with historical apportionments. Growth: 5% annual growth.
FTA Funds: 5307, 5310, 5311, 5337, 5339	Base Year: 2015 Key Assumptions: SACOG region will continue to receive FTA funds in a manner consistent with historical apportionments. Growth: 4% annual growth.
FTA 5309 Fixed-Guideway Capital Investment Grants	Base Year: N/A Key Assumptions: Presume continuation of FTA grants for rail expansion projects at 50% of new rail capital project costs.

State Funding

Senate Bill 45 (SB 45) establishes the program structure and distribution formulas for most state transportation funds. The MTP/SCS assumes state funding will continue in a manner consistent with SB 45. Additionally, every two years, the California Transportation Commission (CTC) approves a STIP Fund Estimate that details the distribution of funding for state transportation programs that pass through the State Highway Account over a six-year period. The MTP/SCS's assumptions for state revenues, shown in Table B1.3, are derived primarily from the 2014 State Transportation Improvement Program Fund Estimate (STIP-FE).

The state funding programs assumed in the MTP/SCS include:

- State Highway Operations and Protection Program - (SHOPP)
- State Transportation Improvement Program - (STIP) including;
 - Interregional - ITIP
 - Regional - RTIP
- State Cap and Trade Program
- State Transit Assistance - (STA)

- Intercity Rail
- State Highway Maintenance
- Proposition 1B- Public Transportation Modernization, Improvement, and Service Enhancement Account Program (PTMISEA)

Table B1.3. State Revenue Sources and Assumptions

State Source	MTP/SCS
State Highway Operations and Protection Program (SHOPP)	Base Year: 2014 Key Assumptions: Based on transfers from the State Highway Account (SHA), Federal Trust Fund, and the new excise tax on gasoline. Includes adjustments resulting from ABX8 6 and ABX8 9 (Gas Tax Swap) including 12% of the revenues generated by the new excise tax on gasoline following transfers for bond debt service. Growth: 1.3% average annual growth
Interregional Transportation Improvement Program (STIP- ITIP)	Base Year: 2014 Key Assumptions: ITIP will continue to receive 25% of the total STIP allocations from the Federal Highway Trust Fund, State Highway Account, Public Transportation Account Growth: 5.6% average annual growth
Regional Transportation Improvement Program (STIP- RTIP)	Base Year: 2014 Key Assumptions: RTIP will continue to receive 75% of the total STIP allocations from the Federal Highway Trust Fund, State Highway Account, Public Transportation Account and the new excise tax on gasoline. Growth: 5.6% average annual growth
State Cap and Trade Program	Base Year: 2015 Key Assumptions: Cap and Trade revenues are made up of the 35% of auction proceeds that are allocated to Affordable Housing & Sustainable Communities, Intercity Rail, and Low Carbon Transit Programs. The region's capture of these revenues assumes SACOG member agencies receive revenues roughly equivalent the region's share of statewide population Growth: 5% average annual growth
State Transit Assistance	Base Year: 2014 Key Assumptions: STA will continue to receive funding from sales

	taxes on diesel fuels consistent with current funding formulas. Growth: 5% average annual growth
Intercity Rail (Operations)	Base Year: 2013 Key Assumptions: ITIP portion of Intercity Rail capital revenues included in the ITIP assumptions above. Intercity Rail Operations based on historical share of state resources to CCJPA and San Joaquin. Growth: 4.9% average annual growth
State Highway Maintenance	Base Year: 2014 Key Assumptions: State Highway Maintenance will continue to receive transfers from the State Highway Account at an escalating rate indexed to inflation. Growth: 2.8 % average annual growth.
Highway Bridge Program	Base Year: 2015 Key Assumptions: The region will continue to receive highway bridge program reimbursements for eligible activities that rehabilitate and replace structurally deficient bridges.
State Discretionary	Base Year: N/A Key Assumptions: Assumes the region will capture roughly 5% of statewide competitive discretionary program funding. Growth: 2.5% average annual growth

Local Funding

Local revenues are based on historical funding from local sources for each city, county, transportation commission, and transit operator in the region. Local funding sources provide the majority of the funds that support the MTP/SCS and include:

- Local Transportation Fund (LTF)
- Sacramento County Measure A - (1/2-cent)
- Sacramento County Measure B - (1/2-cent)
- Placer County Sales Tax – (1/2 cent)
- Gas Tax Subventions
- Gas Tax Swap (Excise Tax Subventions)
- Local Streets and Roads

- Developer In-Kind
- Transit Fares

Note on Local-Option County Sales Tax in the MTP/SCS

All of the local revenues assumed in the MTP/SCS are based on the continuation of existing funding mechanisms with the exception of two new local option countywide sales tax measures in Sacramento County and Placer County. Measure B would institute a new ½-cent sales tax equivalent to support road maintenance and transit operations within the county of Sacramento. Placer County is also pursuing a new ½ cent sales tax measure to support transportation investments in that county. While one or both of these local option measures may go forward in 2016 or 2018, the draft MTP/SCS takes a conservative approach by not including any new revenue in the plan assumptions until 2020 and then continuing through the end of the planning horizon in 2036.

Table B1.4. Local Revenue Sources and Assumptions

	MTP/SCS
Local Transportation Fund (LTF)	Base Year: 2014 Key Assumptions: ¼-percent general sales tax for transportation will remain in place at existing rate. Growth: 3.5% annual average growth
Measure A	Base Year: 2014 Key Assumptions: ½-cent general sales tax in Sacramento County will remain in place at existing rate. Growth: 3.5% annual average growth
Measure B	Base Year: N/A Key Assumptions: Equivalent of 1/2-percent general sales tax will begin in 2020 and last through 2036. Growth: 3.5% annual average growth
Placer ½ cent sales tax	Base Year: N/A Key Assumptions: Equivalent of 1/2-percent general sales tax will begin in 2020 and last through 2036. Growth: 3% annual average growth
Gas Tax Subventions	Base Year: 2014

	Key Assumptions: Subventions will continue to flow to cities and counties based on existing formulas. Growth: Revenues remain flat
Price-based Gasoline Excise Tax Subventions	Base Year: 2014 Key Assumptions: 44% of the revenues generated by the new excise tax on gasoline (after reductions for debt service payments) will flow to local streets and roads. The state will adjust the excise tax annually to compensate for the loss of the gasoline sales tax. Growth: 6% average annual growth
Local Streets and Roads	Base Year: 2012 Key Assumptions: Based on 10-year historical average of budget information provided by local jurisdictions to the California State Controller. Contains all revenues from local sources dedicated to local streets and roads. Nominal Growth Rate: 2% average annual growth
Developer In-Kind	Base Year: 2012 Key Assumptions: Developer investments in new roadways keep pace with housing growth over the life of the plan. Growth: 5% annual average growth
Transit Fare revenues	Base Year: 2012 Key Assumptions: Based on SACOG ridership projections and average fare per rider. Assumes future fare increases keep pace with inflation. Average fare per rider increases as more choice riders that pay closer to full fares increases from \$1.08 in 2012 to \$1.24 in 2036 (in 2015 dollars). The regional farebox recovery rate increases from 25% in 2012 to 38% in 2036 based on the increases in average fare per rider and a shift in transit mode share from 1.2% in 2012 to 2.9% in 2036.

Attachment A: Revenue Projections (in millions of nominal dollars)

	FFY 2015- 2020	FFY 2021- 2025	FFY 2026- 2030	FFY 2031- 2036	Total
Federal					
Federal Highway & Other	\$509	\$528	\$674	\$1,059	\$2,771
-Congestion Mitigation and Air Quality - (CMAQ)	\$177	\$184	\$235	\$369	\$964
-Regional Surface Transportation Program - (RSTP)	\$165	\$166	\$212	\$333	\$876
-Federal Discretionary Programs	\$167	\$178	\$228	\$358	\$931
Federal Transit	\$361	\$272	\$517	\$922	\$2,072
-FTA 5307 - Urbanized Area Formula Program	\$163	\$163	\$199	\$296	\$821
-FTA 5309 - Fixed-Guideway Capital Investment Grants	\$89	\$0	\$186	\$430	\$705
-FTA 5310 - Enhanced Mobility of Seniors & Individuals with Disabilities	\$20	\$20	\$24	\$36	\$101
-FTA 5311 - Formula Grants for Rural Area	\$10	\$10	\$12	\$18	\$49
-FTA 5337 - State of Good Repair Grants	\$62	\$62	\$76	\$113	\$312
-FTA 5339 - Bus and Bus Facilities	\$17	\$16	\$20	\$30	\$83
Federal Subtotal	\$870	\$800	\$1,191	\$1,981	\$4,843
	FFY 2015- 2020	FFY 2021- 2025	FFY 2026- 2030	FFY 2031- 2036	Total
State					
State Highway Operations and Protection Program - (SHOPP)	\$922	\$791	\$870	\$1,154	\$3,737
State Transportation Improvement Program - (STIP)	\$305	\$377	\$521	\$827	\$2,030
-Interregional - IIP	\$73	\$91	\$125	\$199	\$489
-Regional - RIP	\$231	\$287	\$396	\$628	\$1,542
State Cap and Trade Program	\$239	\$332	\$332	\$399	\$1,303
State Transit Assistance - (STA)	\$107	\$110	\$143	\$244	\$605
Intercity Rail	\$196	\$213	\$270	\$422	\$1,101
State Highway Maintenance	\$489	\$460	\$535	\$763	\$2,247
PTMISEA	\$40	\$0	\$0	\$0	\$40
Highway Bridge Program	\$148	\$166	\$193	\$275	\$782
State Discretionary	\$196	\$192	\$223	\$314	\$925
State Subtotal	\$2,643	\$2,641	\$3,087	\$4,399	\$12,770

Local	FFY 2015- 2020	FFY 2021- 2025	FFY 2026- 2030	FFY 2031- 2036	Total
Sales Tax	\$1,291	\$2,333	\$2,757	\$3,994	\$10,375
-Local Transportation Fund (LTF)	\$459	\$461	\$548	\$797	\$2,265
-Sacramento County Measure A - (1/2%)	\$675	\$674	\$801	\$1,165	\$3,315
-Sacramento County Measure B - (1/2%)	\$61	\$674	\$801	\$1,165	\$2,701
-Placer County Sales Tax - (1/2%)	\$97	\$523	\$607	\$867	\$2,094
Gas Tax Subventions	\$387	\$313	\$315	\$376	\$1,391
Gas Tax Swap (Excise Tax Subventions)	\$214	\$278	\$409	\$681	\$1,583
Local Streets and Roads	\$1,820	\$1,691	\$1,867	\$2,499	\$7,878
Developer In-Kind	\$841	\$926	\$1,193	\$1,894	\$4,853
Transit Fares	\$335	\$450	\$779	\$1,460	\$3,024
Local Subtotal	\$4,890	\$5,990	\$7,320	\$10,903	\$29,104
Federal, State, and Local Total	\$8,402	\$9,431	\$11,598	\$17,170	\$46,602

Attachment B: Revenue Projections (in millions of 2010 dollars)

Federal	FFY 2015- 2020	FFY 2021- 2025	FFY 2026- 2030	FFY 2031- 2036	Total
Federal Highway & Other	\$485	\$446	\$490	\$646	\$2,067
-Congestion Mitigation and Air Quality - (CMAQ)	\$169	\$155	\$170	\$225	\$719
-Regional Surface Transportation Program - (RSTP)	\$157	\$140	\$154	\$203	\$654
-Federal Discretionary Programs	\$159	\$151	\$165	\$218	\$694
Federal Transit	\$344	\$229	\$371	\$563	\$1,508
-FTA 5307 - Urbanized Area Formula Program	\$156	\$138	\$144	\$181	\$619
-FTA 5309 - Fixed-Guideway Capital Investment Grants	\$85	\$0	\$131	\$263	\$479
-FTA 5310 - Enhanced Mobility of Seniors & Individuals with Disabilities	\$19	\$17	\$18	\$22	\$76
-FTA 5311 - Formula Grants for Rural Area	\$9	\$8	\$9	\$11	\$37
-FTA 5337 - State of Good Repair Grants	\$59	\$52	\$55	\$69	\$235
-FTA 5339 - Bus and Bus Facilities	\$16	\$14	\$15	\$18	\$62
Federal Subtotal	\$830	\$675	\$861	\$1,210	\$3,575
State	FFY 2015- 2020	FFY 2021- 2025	FFY 2026- 2030	FFY 2031- 2036	Total
State Highway Operations and Protection Program - (SHOPP)	\$880	\$668	\$633	\$706	\$2,888
State Transportation Improvement Program - (STIP)	\$290	\$318	\$378	\$505	\$1,491
-Interregional - IIP	\$70	\$77	\$91	\$121	\$359
-Regional - RIP	\$220	\$241	\$287	\$383	\$1,132
State Cap and Trade Program	\$239	\$281	\$242	\$244	\$1,007
State Transit Assistance - (STA)	\$102	\$93	\$104	\$149	\$447
Intercity Rail	\$187	\$179	\$196	\$257	\$820
State Highway Maintenance	\$466	\$389	\$389	\$466	\$1,710
PTMISEA	\$39	\$0	\$0	\$0	\$39
Highway Bridge Program	\$141	\$140	\$140	\$168	\$589
State Discretionary	\$187	\$162	\$162	\$192	\$703

State Subtotal	\$2,532	\$2,230	\$2,244	\$2,688	\$9,694
Local	FFY 2015- 2020	FFY 2021- 2025	FFY 2026- 2030	FFY 2031- 2036	Total
Sales Tax	\$1,223	\$1,970	\$2,004	\$2,439	\$7,636
-Local Transportation Fund (LTF)	\$437	\$390	\$398	\$487	\$1,712
-Sacramento County Measure A - (1/2%)	\$643	\$569	\$582	\$711	\$2,506
-Sacramento County Measure B - (1/2%)	\$55	\$569	\$582	\$711	\$1,918
-Placer County Sales Tax - (1/2%)	\$88	\$442	\$442	\$530	\$1,501
Gas Tax Subventions	\$370	\$265	\$230	\$230	\$1,094
Gas Tax Swap (Excise Tax Subventions)	\$204	\$234	\$297	\$416	\$1,150
Local Streets and Roads	\$1,735	\$1,429	\$1,358	\$1,529	\$6,052
Developer In-Kind	\$801	\$781	\$866	\$1,155	\$3,602
Transit Fares	\$319	\$379	\$563	\$890	\$2,150
Local Subtotal	\$4,652	\$5,056	\$5,318	\$6,658	\$21,685
Federal, State, and Local Total	\$8,014	\$7,961	\$8,423	\$10,556	\$34,955