KERN COUNCIL OF GOVERNMENTS

REGIONAL TRANSPORTATION IMPACT MITIGATION FEE (RTIMF) NEXUS STUDY

MAY 21, 2012

WILLDAN Financial Services

FEHR & PEERS TRANSPORTATION CONSULTANTS

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Executive Summary

This report summarizes an analysis of the need for regional transportation facilities to support future development within Kern County through 2035. It is the County's intent that the costs representing future development's share of these facilities and improvements be imposed on that development in the form of a development impact fee, also known as a public facilities fee.

Background and Study Objectives

The primary policy objective of this regional transportation impact mitigation fee (RTIMF) program is to ensure that new development pays the capital costs associated with growth. The primary purpose of this report is to calculate and present fees that will enable the County to expand its inventory of regional transportation facilities – and therefore maintain its facilities standards – as new development leads to service population increases.

The County imposes regional transportation impact fees countywide under authority granted by the *Mitigation Fee Act* (*the Act*), contained in California Government Code Sections 66000 et seq. This report provides the necessary findings required by *the Act* for adoption of the fees presented in the fee schedule contained herein. The fees would also need to be adopted by the city councils in each of the incorporated cities in the County to implement the impact fees within those jurisdictions.

Use of Fee Revenues

Impact fee revenue must be spent on new facilities or the expansion of current facilities to serve new development. Fee revenues are programmed through the County's Regional Transportation Plan (RTP), from which projects are prioritized.

Methodology Used in This Study

The impact fees calculated in this study are based on maintaining a specified facility standard on roadways. The costs of facilities associated with growth required to maintain identified standards are allocated to new development using the 'planned facilities' approach. This approach allocates costs based on the ratio of planned facility costs to demand from new development.

Fee Schedule

Table E.1 summarizes the schedule of maximum justified regional transportation impact mitigation fees based on the analysis contained in this report.

Table E.1: Regional Transportation Impact Mitigation Fee Schedule

Land Use	Cost Per Trip	Trip Demand Factor	Fee[1]	Admin (2%)	Total Fee[1]	Fee / Sq. Ft.
Residential (per dwelling unit)						
Single Family	$ 300	1.12	$ 336	$ 7	$ 343	
Multi-family	300	0.69	207	4	211	
Nonresidential (per 1,000 square feet)						
Retail	300	1.53	459	9	468	0.47
Office	300	1.82	546	11	557	0.56
Industrial	300	0.24	72	1	73	0.07

[1] Fee per dwelling unit or thousand square feet of building space unless otherwise noted

Sources: Table 1 and Table 8; Willdan Financial Services.

1. Introduction

This study analyzes the need for regional transportation improvements to support growth in Kern County through 2035. This chapter provides a description of the technical approach chosen for the Regional Transportation Impact Mitigation Fee (RTIMF) and report organization.

Approach

Impact fees are calculated to help finance the cost of facilities required to accommodate growth. The *Mitigation Fee Act* requires that any agency adopting impact fees establish a reasonable nexus between the projected amount of new development, the public improvements (in this case, transportation improvements) needed to serve that development, and the amount of the fees. The five steps followed in this RTIMF update study and described in detail in the chapters that follow include:

1. Prepare projections of travel demand;
2. Identify facility standards;
3. Identify candidate facilities;
4. Determine new development's cost share;
5. Calculate the RTIMF by allocating new development's cost share per unit of development.

This report relies primarily on level of service (LOS) standards to establish a nexus between projected new development in the County and the need for improvements to roadways of regional importance. LOS is calculated based on the volume of traffic on a roadway or at an intersection compared to the capacity of the roadway or intersection. LOS "A," "B," and "C" suggest that delays are insignificant to acceptable. LOS "D" suggests delays are high and some short-term back-ups occur. LOS "E" and "F" suggest restricted speeds and significant delays as traffic volumes meet or exceed the capacity of the facility.

All of the cities within Kern County for which data was available set the minimum acceptable LOS at LOS C. There are some exceptions to this. In areas where roadway or intersection improvements would be difficult or unfeasible, the Cities of Delano, Tehachapi and Wasco allow roadways and intersections to operate at LOS D. Kern County sets the acceptable LOS at LOS D for most facilities, and LOS C for Caltrans facilities. However, it should be noted that in the Metropolitan Bakersfield, Rosamond and Tehachapi Specific Plan areas, LOS C is used by the County to identify deficiencies. The Kern County Congestion Management Agency (CMA) identifies the acceptable LOS as LOS E.

For purposes of this impact fee study, LOS C is used to identify deficiencies on facilities in all incorporated areas and Caltrans' facilities. LOS D is used to identify deficiencies for all County facilities not controlled by Caltrans.

This report also relies upon the results of select link analysis. Select link analysis identifies where the traffic that will be using each roadway segment is coming from and going to. The 2006 Kern

Council of Governments (Kern COG) travel demand model was used in this analysis for several purposes, including LOS and select link analysis.

Given the projected impacts of new development, without mitigation many of the facilities included in this fee program are forecast to fail to meet LOS standards by 2035. These conclusions are determined from Kern COG model analysis performed by Fehr & Peers, and documented in this report.

Organization

This working paper is divided into six chapters:

- Chapter 1, **Introduction** (this chapter): Summarizes the general technical approach used in the study;
- Chapter 2, **Trip Demand and Growth Projections**: Describes the growth projections used to estimate future demand and translates the growth into trip demand measures;
- Chapter 3, **Projects and Project Costs:** Details the projects that are included in the RTIMF Program;
- Chapter 4, **Cost Allocation and Fee Calculation:** Describes the results of traffic modeling and the determination of development's share of cost for roadway facilities; Details maximum justified impact fees for traffic facilities;
- Chapter 5, **Implementation**: Provides guidelines for the implementation and ongoing maintenance of the public facilities fee program;
- Chapter 6, ***Mitigation Fee Act* Findings:** summarizes the five statutory findings required for adoption of the proposed fees in accordance with the *Mitigation Fee Act* (codified in *California Government Code* Sections 66000 through 66025).

2. Trip Demand and Growth Projections

This chapter describes the estimates of trip demand for transportation facilities. The 2006 Kern COG travel demand model provided the estimates of the amounts of growth expected during the planning horizon of the RTIMF. These land use projections are later converted to vehicle trips to provide a measure of travel demand.

Trip Generation by Land Use

Vehicle trips (trips) are used as a measure of demand on transportation facilities by various land uses. Trip volumes quantify the need for improvements to selected road segments. A traffic model is used because it is an accurate way of identifying trip volume from existing and projected land uses on various existing and proposed road segments, and as part of an overall transportation system.

This study uses daily level of service (LOS) output from the Kern COG travel demand model to identify improvements and allocate costs by land use category. The share of roadway improvement costs allocated to each unit of new development is based on the relative amount of new trip demand generated by that development.

As new development generates increased vehicle trips for the County's transportation network, additional capacity in the system will be needed in the form of the improvements described in this report. Allocation of cost by land use incorporates rates of trip generation, relative shares of pass-by and diverted trips, and relative trip length, by major land use category.

Trip generation rates are applied to development projections to allocate improvement costs by land use type. The trip generation rates used for this analysis are based on years of study of major land use categories by the Institute of Transportation Engineers:

- Single family
- Multi-family
- Retail
- Office
- Industrial

The following adjustments are made to vehicle trip generation rates to better estimate travel demand by type of land use:

- Pass-by trips are deducted from the trip generation rate. Pass-by trips are defined as intermediate stops between an origin and a final destination that require no diversion from the route, such as stopping to get gas on the way to work.
- The trip generation rate is weighted by the relative length of trips for a specific land use category compared to the average length of all trips.

These factors vary by land use category. **Table 1** shows trip generation rates, adjustments, and a final trip demand factor by major land use category. The trip demand factors incorporate PM peak hour trip generation rates, relative shares of pass-by and diverted trips, and relative trip length by

land use. Note that trip demand factor data from the San Diego Association of Governments (SANDAG) is used because it identifies pass-by and diverted trip factors, as well as average trip length. This demand factor data is not specifically available for Kern County at this time. The SANDAG data is often cited in traffic fee studies in California.

Table 1: Trip Rate Adjustment Factors

	Primary Trips[1]	Diverted Trips[1]	Total Excluding Pass-by[1]	Average Trip Length[2]	Adjust-ment Factor[3]	ITE Category	PM Peak Hour Trips[4]	Trip Demand Factor[5]
	A	*B*	*C = A + B*	D	*E = (C x D) / Systemwide Avg. Trip Length*		*F*	*G = E x F*
Residential								
Single Family	86%	11%	97%	7.9	1.11	Single Family Housing (210)	1.01	1.12
Multi-family	86%	11%	97%	7.9	1.11	Apartment (220)	0.62	0.69
Nonresidential								
Retail	47%	31%	78%	3.6	0.41	Shopping Center (820)	3.73	1.53
Office	77%	19%	96%	8.8	1.22	General Office Building (710)	1.49	1.82
Industrial	79%	19%	98%	9.0	1.28	General Heavy Industrial (120)	0.19	0.24

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

[2] In miles.

[3] The trip adjustment factor equals the percent of non-pass-by trips multiplied by the average trip length and divided by the systemwide average trip length of 6.9 miles.

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

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

Sources: San Diego Association of Governments, Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, July 1998; Institute of Traffic Engineers, Trip Generation, 8th Edition; Willdan Financial Services.

Housing and Employment Growth

The planning horizon for this analysis is 2035. The nexus analysis uses 2035 Kern COG travel demand model data to estimate new development's demand for transportation improvements.

Base year (2010) assumptions for population and dwelling units are based on the California Department of Finance's (DOF) estimates. Total base year employment assumptions are based on data from the California Employment Development Department (EDD), and are allocated to land use categories in proportions from the 2035 Kern COG travel demand model. Employees are converted to equivalent amounts of building square feet in order to develop impact fees that are charged per square foot for nonresidential land uses.

Planning horizon (2035) projections for population, dwelling units and employees are all based on the Kern COG travel demand model. All demographic assumptions are shown for the County as a whole.

Table 2 lists the 2010 and 2035 land use assumptions used in the nexus analysis. This study does not require that all projected growth occur within the study's planning horizon. Whether this amount of new development occurs prior to 2035 or after 2035, the need for transportation improvements included in the RTIMF Program and the impact fee revenues that flow with new

development are mutually supportive. No funding threshold or particular improvement is tied to any specific calendar year.

Table 2: Land Use Scenario

	2010	2035	Growth (2010 to 2035)
Population [1]			
Household Population	801,529	1,264,082	462,553
Dwelling Units [1]			
Single Family	205,494	304,295	98,801
Multi Family	76,241	112,897	36,656
Total	281,735	417,192	135,457
Employees [2]			
Retail	106,938	176,039	69,101
Office	86,116	141,762	55,646
Industrial	86,745	142,798	56,053
Total	279,800	460,599	180,800
Equivalent Building Square Feet (1,000) [3]			
Retail	25,800	42,500	16,700
Office	63,300	104,200	40,900
Industrial	264,000	434,500	170,500
Total	353,100	581,200	228,100

1 Household population, dwelling units for 2010 from CA DOF. 2035 estimate from Kern COG 2006 Travel Demand Model.
2 Total employees for 2010 from CA EDD, allocated to land use categories in proportions from Kern COG Travel Demand Model. 2035 estimate from Kern COG 2006 Travel Demand Model.

[3] Based on the following employee per 1,000 square feet assumptions: Retail - 4.14, Office - 1.36, Industrial - 1.06. Assumptions used are from the Natelson Company's Employment Density Study report for a developing suburban county.

Sources: Kern COG 2006 Travel Demand Model, Table E-5, California Department of Finance, 2010; California Employment Development Department, September 2010; The Natelson Company, Inc., Employment Density Study Summary Report,

Growth in Trip Demand Through 2035

Based on the trip demand factors shown in Table 1, and the growth projections in Table 2, **Table 3** calculates the projected travel demand growth in the County between 2010 and 2035. These trip demand "unit" totals are calculated by multiplying the trip demand factors by the development projections from Table 2.

Table 3: Land Use Scenario and Total Trips

Land Use	Trip Demand Factor	2010 Land Use Units / 1,000 SF	2010 Land Use Trips	2035 Land Use Units / 1,000 SF	2035 Land Use Trips	Growth Units / 1,000 SF	Growth Trips
Residential (Units)							
Single Family	1.12	205,494	230,153	304,295	340,810	98,801	110,657
Multi-family	0.69	76,241	52,606	112,897	77,899	36,656	25,293
Subtotal		281,735	282,759	417,192	418,709	135,457	135,950
Nonresidential (1,000 sq. ft.)							
Retail	1.53	25,800	39,474	42,500	65,025	16,700	25,551
Office	1.82	63,300	115,206	104,200	189,644	40,900	74,438
Industrial	0.24	264,000	63,360	434,500	104,280	170,500	40,920
Subtotal		353,100	218,040	581,200	358,949	228,100	140,909
Total			**500,799**		**777,658**		**276,859**
Growth's Share of Total 2035 Trips							35.6%

Sources: Tables 1 and 2; Kern COG; Willdan Financial Services.

3. Projects and Project Costs

This chapter presents a description of the transportation improvement projects and the costs of the projects included in the RTIMF program.

Roadway Widening Project Selection

Roadway widening projects included in this fee program were identified through several steps. Due to the regional nature of the fee program, potential project segments were limited to routes of regional significance. Generally, routes of regional significance are roadways that have 'intra-regional significance.' They consist of highways and major arterials that connect major population areas within the County to each other.

Fehr & Peers then used the travel demand model to identify roadway segments on routes of regional significance that operate below the minimum acceptable level of service. Roadway segment operations were assessed based on daily operations. The model was used to assess deficiencies both with and without Regional Transportation Plan (RTP) roadway improvements. Roadway segments that were deficient in the base year were identified in the first scenario. The first scenario includes 2035 land use assumptions and roadway improvements identified in the RTP. A second model run in which the 2035 land use scenario was added to the existing roadway network (without RTP improvements) was used to identify deficiencies resulting from no mitigation.

The results of Fehr & Peers' effort is detailed in the September 23, 2011 Deficiency Analysis. Projects selected for this analysis are a subset of those identified in the Deficiency Analysis. To avoid funding overlaps, projects that are fully funded with other funding sources or partially funded with other local impact fee revenues are not included in this analysis. Four roadway widening projects met the criteria to be at least partially funded through this fee.

Roadway Widening Project Costs

Cost estimates used for the roadway widening projects in this study were developed by Willdan Engineering specifically for use in this analysis. The analysis assumes an urban construction cost of $1,900,000 per lane mile of roadway in addition to a cost of $350 per lineal foot for median, curb, gutter, sidewalk, traffic signals, signage, striping, and street lighting. The construction cost estimates also include a 25 percent contingency. Support costs (project approval, environmental documentation, plans, specifications, and estimates) are estimated at 30 percent of the construction cost. Structures widening costs are assumed to be $200 per square foot.[1] Right of way costs vary by jurisdiction, and are noted in the following table.

Cost estimates for the four roadway widening projects are shown in **Table 4**.

[1] Caltrans "Comparative Bridge Costs" January, 2010.

Table 4: Roadway Widening Project Costs

Segment	Zone	Total Length (ft)	Existing Classification	Future Classification	Construction Cost[1]	Support Costs[2]	Right of Way (Residential)[3]	Right of Way (Nonres.)[3]	Right of Way Land[3]	Total ROW Acquisition Cost[3]	Structures Costs[4]	Total Cost
1. SR 43 Enos/Beech - 7th Standard Rd to Lerdo Highway	Sub	20,000	2 Lane Major Arterial	4 Lane Major Arterial	$ 17,992,424	$ 5,397,727	$ 4,620,000	$ 8,640,000	$ 126,000	$ 13,386,000	$ -	$ 36,776,152
2. Inyokern Rd (SR 178) - SR 14 to US 395	Rural	26,000	2 Lane Major Arterial	4 Lane Major Arterial	23,390,152	7,017,045	-	-	15,600	15,600	528,000	30,950,797
3. SR-43 -7th Standard to Stockdale Hwy	Sub/Rural	34,600	2 Lane Major Arterial	4 Lane Major Arterial	31,126,894	9,338,068	252,000	504,000	50,400	806,400	-	41,271,362
4. SR-58 - SR-223 to Bealville	Rural	7,600	4 Lane Expressway	6 Lane Expressway	6,837,121	2,051,136	-	-	18,240	18,240	-	8,906,498
Total		88,200			$ 79,346,591	$ 23,803,977	$ 4,872,000	$ 9,144,000	$ 210,240	$ 14,226,240	$ 528,000	$ 117,904,808

Notes: Acquisition costs vary by urban, suburban, rural, desert; reduced to square foot values. Analysis assumes 24 feet of right-of-way (ROW) for two lanes; 12 feet per side (varies).

[1] Urban construction cost - $1,900,000 per lane mile of roadway + $350 per lineal foot (median, curb, gutter, sidewalk, traffic signals, signage, striping, street lighting); includes 25% contingency.

[2] Support costs (PA/ED+PS&E) are estimated at 30% support of construction cost.

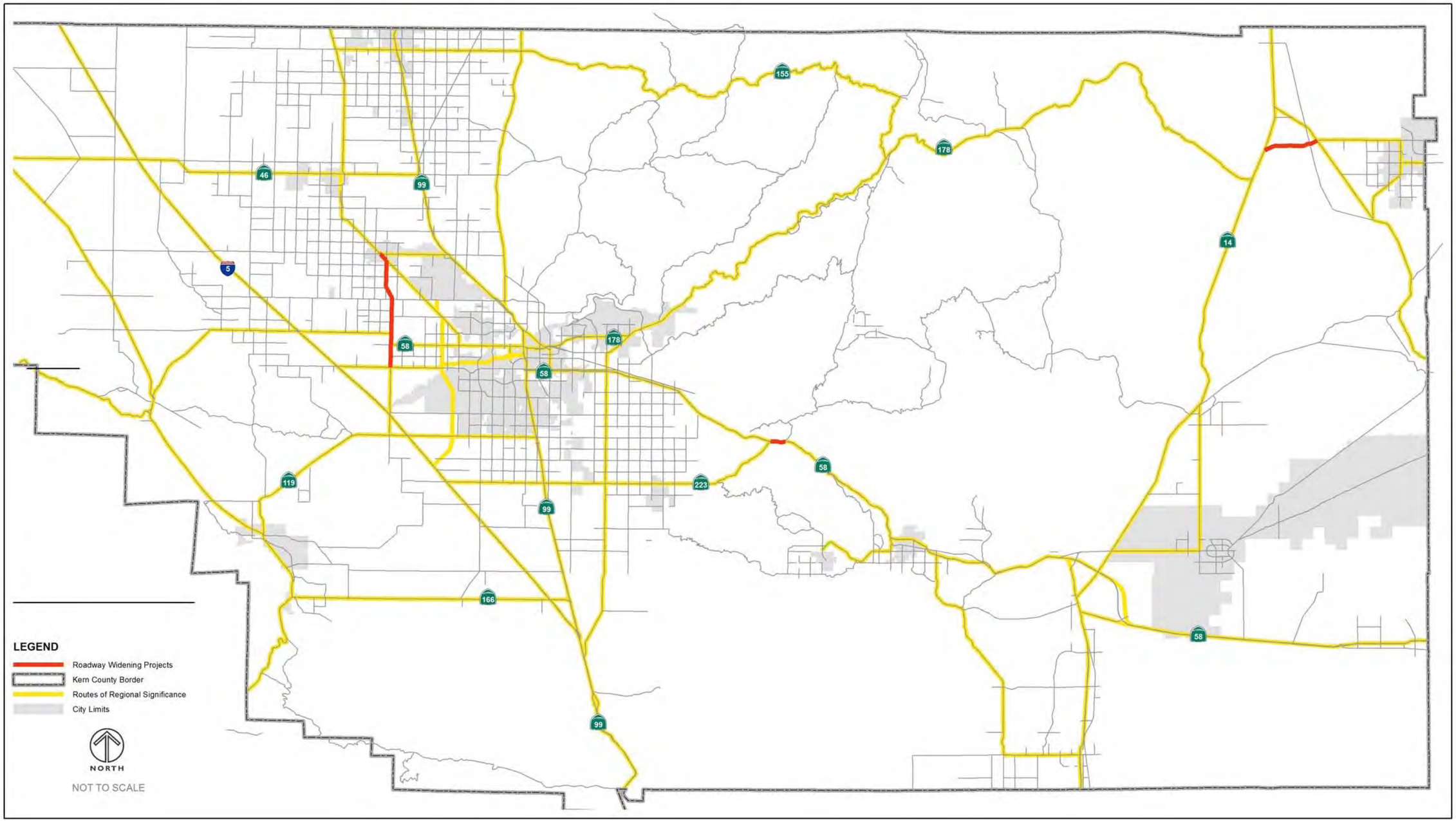
[3] Bakersfield urban residential value @ $90/sf; Urban non residential value @ $150/sf; source: S. Selway, Caltrans D6 ROW on 8/31/2011.
Urban land cost assumed to be 30% of developed non residential land rate.
Suburban residential land value $55/sf; non residential $60 to $75/sf
Rural residential improved land assumed +/- $3.50/sf.
Rural agricultural value if water available is $9,000 to $12,000 per acre, assumed +/- $0.25/sf
Rural unimproved desert value $1,000 pre acre, assumes $0.025/sf.

[4] Structures widening cost from Caltrans "Comparitive Bridge Costs" Jan. 2010 - used $200/sq. ft

Sources: "Kern COG Performance Deficiency and High Accident Locations: Memorandum, Fehr & Peers October 15, 2010; Kern COG; Urban Crossroads; Caltrans; Zillow.com; Willdan Engineering; Willdan Financial Services.

Project Map

Figure 1 shows all of the RTIMF project segments.



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Kern COG Regional Transportation Impact Mitigation Fee Projects
FIGURE 1

4. Cost Allocation and Fee Calculation

This first half of this chapter documents a reasonable relationship between increased travel demand from new development within the County and the share of roadway improvement costs that are associated with the need to accommodate that growth. The second part of this chapter describes the traffic impact mitigation fee calculations.

Impact of Growth on Transportation Facilities

The analysis of how growth impacts transportation facilities that are included in the RTIMF was accomplished by running the following three scenarios in the Kern COG travel demand model:

- Base year land uses the 2006 Kern COG travel demand model;
- 2035 land uses with no improvements to the road network (*2035 Without Improvements* scenario); and
- 2035 land uses with RTP improvements added to the road network (*2035 With Improvements* scenario).

Changes in the performance of roadways between scenarios inform the RTIMF Program's allocation of costs between new and existing development. The metric of performance used in the RTIMF is level of service (LOS). LOS data is used from the model runs to allocate the total cost of each project to the RTIMF program.

LOS is calculated based on the volume of traffic on a roadway or at an intersection compared to the capacity of the roadway segment. LOS "A," "B," and "C" suggest that delays are insignificant to acceptable. LOS "D" suggests tolerable delays although traffic is significant and some short-term back-ups occur. LOS "E" and "F" suggest restricted speeds and significant delays as traffic volumes meet or exceed the capacity of the facility.

Existing Deficiencies

Existing roadways that do not meet the identified LOS standards are considered existing deficiencies. All projects included in this study either a) meet the applicable roadway level of service standards in the base year, or b) have an identified existing deficiency share of costs that will not be funded with impact fee revenue. The share identified as an existing deficiency is equal to existing development's trip demand, relative to total trip demand in 2035.

For each roadway widening project included in the RTIMF, **Table 5** identifies existing LOS, future LOS with no Regional Transportation Plan (RTP) projects, and future LOS with RTP projects. Without the mitigation, these segments would ultimately have an unacceptable LOS. Project costs with no existing deficiencies are allocated 100% to new development. For those projects with an existing deficiency, Table 5 also documents the allocation to existing development (deficiency share), if applicable. Projects for segments which are currently deficient (operating below level of service C), but for which the project does not improve the existing level of service, are also allocated entirely to new development.

Table 5: Roadway Segment Level of Service

Segment	Total Length (ft)	Existing Lanes	Future Lanes	Existing Conditions (2010) LOS	Existing Conditions (2010) Deficiency?	Future (2035) with RTP Projects LOS	Deficiency Share[1]	Share Allocated to New Development
1. SR 43 Enos/Beech - 7th Standard Rd to Lerdo Highway	20,000	2	4	Acceptable	No	F	0.0%	100.0%
2. Inyokern Rd (SR 178) - SR 14 to US 395[2]	26,000	2	4	E-F	Yes	E-F	0.0%	100.0%
3. SR-43 -7th Standard to Stockdale Hwy	34,600	2	4	D-F	Yes	Acceptable	64.4%	35.6%
4. SR-58 - SR-223 to Bealville	7,600	4	6	D	Yes	Acceptable	64.4%	35.6%
Total	88,200							

[1] Kern County and its incorporated cities have an established level of service standard of C. For those segments that are currently deficient, only the share of project costs equal to new development's growth in trips relative to all trips at the planning horizon is charged to new development in the form of an impact fee (276,859 growth in trips / 777,658 = 35.6%). The cost of segments that are not currently deficient is fully funded by impact fees.

[2] This project is currently deficient because it is operating below a level of service standard C. However, because this project does not bring the level of service any higher than the existing level of service, no deficiency share is allocated to exisitng development.

Sources: Kern COG Traffic Model; Fehr & Peers.

Select Link Analysis

Select link runs of the travel demand model were conducted for each of the roadway widening projects included in the RTIMF. A select link analysis identifies where the traffic that will be using each roadway segment is coming from and going to. With this information, the fair share of the cost of the improvement can be allocated to new development within and outside of the County. For fee assignment purposes, there are four categories of trips identified through each select link process:

1. Trips that both start and end in Kern County;
2. Trips that have an origin in Kern County, and a destination outside the County;
3. Trips that have an origin outside the Kern County, and a destination in the County;
4. Trips that have neither an origin nor a destination in Kern County, but are using a County roadway to pass through the County.

Trip types that fall into Category 4 are "external" trips, and are not subject to the fee program. Although these through trips take up capacity on the roadway and thereby contribute to the need for the improvement, local development cannot be held responsible for the impact of external traffic on the transportation system. The proportion of external trips on the selected link is applied to the cost of the improvement, and that portion of the improvement cost is not included in the impact fee program. The portion of the improvements that cannot be funded by local development must be to be covered with other local, state, and federal funding sources.

All other trip types with an origin, destination or both in Kern County are subject to the fee program as these trips are related to future development in the County. **Table 6** documents the share external trips using each segment, which cannot be included in this impact fee.

Table 6: Allocation of External Trips on Roadway Segments

Segment	Impact Fee Share	External Trip Share
1. SR 43 Enos/Beech - 7th Standard Rd to Lerdo Highway	99.5%	0.5%
2. Inyokern Rd (SR 178) - SR 14 to US 395	96.4%	3.6%
3. SR-43 - Lerdo Hwy to Centennial Corridor	100.0%	0.0%
4. SR-58 - SR-223 to Bealville	59.7%	40.3%

Sources: Kern COG Traffic Model; Fehr & Peers.

Allocation of Roadway Widening Project Costs

The analysis contained above in Table 6 enables the allocation of costs to external trips for roadway widening projects. The LOS data contained in Table 5 demonstrates which projects are currently deficient. **Table 7** allocates the RTIMF share of each project as follows:

1. For each roadway widening project, the external trip share from Table 6 is subtracted from the total project cost from Table 4 to determine the Kern County share of each project;
2. For those projects with existing deficiencies, the deficiency share of each project is subtracted from the Kern County share to determine the RTIMF share of each project.

Table 7: Allocation of External Trip Share, and Roadway Widening Project Costs

Project	A Total Cost	B External Trip Share	C = A - B Kern County Share	D Deficiency Share	E = C - D TIMF Share
1. SR 43 Enos/Beech - 7th Standard Rd to Lerdo Highway	$ 36,776,152	$ 183,881	$ 36,592,271	$ -	$ 36,592,271
2. Inyokern Rd (SR 178) - SR 14 to US 395	30,950,797	1,114,229	29,836,568	-	29,836,568
3. SR-43 -7th Standard to Stockdale Hwy	41,271,362	-	41,271,362	26,578,757	14,692,605
4. SR-58 - SR-223 to Bealville	8,906,498	3,589,319	5,317,179	3,424,263	1,892,916
Total	$ 117,904,808	$ 4,887,428	$ 113,017,380	$ 30,003,021	$ 83,014,360

Note: Costs rounded to the nearest $100.

Sources: Tables 4, 5 and 6; Kern COG 2011 Final Regional Transportation Plan, July 15, 2010; Willdan Financial Services.

Fee per Trip Demand Unit

Every impact fee consists of a dollar amount, or the cost of projects that can be funded by a fee, divided by a measure of development. In the case of the RTIMF, all fees are first calculated as a cost per trip demand unit. Then these amounts are translated into housing unit ($/unit) and employment space ($/1,000 square feet) by multiplying the cost per trip by the trip generation rate for each land use category. These amounts become the fee schedule

The RTIMF cost per trip is calculated for all land uses, simply by dividing the total costs allocated to new development from Table 7 by the growth in trip demand. The calculation of cost per trip is shown in **Table 8.**

Table 8: Cost Per Trip

Allocated Roadway Widening Costs	*A*	$	83,014,360
Total New Trips	*B*		276,859
Cost per Trip	*C = A / B*	$	300

Sources: Tables 3, and 7; Willdan Financial Services.

Based on the cost per trip calculated above in Table 8, **Table 9** shows the transportation impact mitigation fee schedule, by land use. The fee for a given land use is calculated by multiplying the cost per trip by the trip demand factor for that land use from Table 1.

Table 9: Regional Transportation Impact Mitigation Fee Schedule

Land Use	Cost Per Trip	Trip Demand Factor	Fee[1]	Admin (2%)	Total Fee[1]	Fee / Sq. Ft.
Residential (per dwelling unit)						
Single Family	$ 300	1.12	$ 336	$ 7	$ 343	
Multi-family	300	0.69	207	4	211	
Nonresidential (per 1,000 square feet)						
Retail	300	1.53	459	9	468	0.47
Office	300	1.82	546	11	557	0.56
Industrial	300	0.24	72	1	73	0.07

[1] Fee per dwelling unit or thousand square feet of building space unless otherwise noted

Sources: Table 1 and Table 8; Willdan Financial Services.

An administrative charge of two percent of the total impact fee is also calculated in Table 9. The administrative charge funds costs that include: (1) a standard overhead charge applied to COG or County programs for legal, accounting, and other departmental and countywide or citywide administrative support, (2) impact fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses. Revenue from the administrative charge should be tracked and compared against actual costs. Adjustments in the percentage collected for the administrative component should be made if warranted.

5. Implementation

Impact Fee Program Adoption Process

Impact fee program adoption procedures are found in the *California Government Code* section 66016. Adoption of an impact fee program requires the Board of Supervisors to follow certain procedures including holding a public meeting. Data, such as an impact fee report, must be made available at least 10 days prior to the public meeting. The County's legal counsel should be consulted for any other procedural requirements as well as advice regarding adoption of an enabling ordinance and/or a resolution. After adoption there is a mandatory 60-day waiting period before the fees go into effect.

Inflation Adjustment

Kern COG should keep its impact fee program up to date by periodically adjusting the fees for inflation. Such adjustments should be completed regularly to ensure that new development will fully fund its share of needed facilities.

There are no inflation indices that are specific to Kern County. We recommend that the **Engineering News Record's Building Cost Index (BCI)** be used for adjusting project costs for inflation.

While fee updates using inflation indices are appropriate for periodic updates to ensure that fee revenues keep up with increases in the costs of public facilities, Kern COG will also need to conduct more extensive updates of the fee documentation and calculation (such as this study) when significant new data on growth forecasts and/or facility plans and costs become available. Note that decreases in index value will result in decreases to fee amounts.

The steps necessary to update fees for inflation are explained below:

To update the RTIMF for inflation, the steps are as follows:

1. Identify the percent change in planned facilities cost since last update based on changes in the Engineering News Record's Building Cost Index (BCI).
2. Modify the cost each planned facility (the cost allocated to the RTIMF in Table 7) by the percent change identified in Step 1.
3. Divide the total cost of projects allocated to the RTIMF calculated in Step 2, by the growth in trips identified in Table 3 to determine the updated cost per trip.
4. Multiply the cost per trip calculated in Step 3 by the trip demand factors identified in Table1 to determine the fee for each land use.

Once all of the fees have been inflated, multiply the sum of all the fees, per land use, by two percent (2%) to determine the administrative charge. Future updates to the fee program should review the administrative fee to ensure that it fully covers the cost of administering the fee program.

Reporting Requirements

Kern COG will comply with the annual and five-year reporting requirements of the *Mitigation Fee Act* found in Government Code Sections 66001 and 66006. For facilities to be funded by a combination of public fees and other revenues, identification of the source and amount of these non-fee revenues is essential. Identification of the timing of receipt of other revenues to fund the facilities is also important.

Programming Revenues and Projects with the RTP

Kern COG maintains County's RTP to plan for future infrastructure needs. The RTP identifies costs and phasing for specific capital projects. The use of the RTP in this manner documents a reasonable relationship between new development and the use of those revenues.

Kern COG may decide to alter the scope of the planned projects or to substitute new projects as long as those new projects continue to represent an expansion of the County's facilities. If the total cost of facilities varies from the total cost used as a basis for the fees, the County should consider revising the fees accordingly.

6. Mitigation Fee Act Findings

Public facilities fees are one-time fees typically paid when a building permit is issued and imposed on development projects by local agencies responsible for regulating land use (cities and counties). To guide the widespread imposition of public facilities fees the State Legislature adopted the *Mitigation Fee Act* (the *Act*) with Assembly Bill 1600 in 1987 and subsequent amendments. The *Act,* contained in *California Government Code* Sections 66000 through 66025, establishes requirements on local agencies for the imposition and administration of fee programs. The *Act* requires local agencies to document five findings when adopting a fee.

The five statutory findings required for adoption of the maximum justified public facilities fees documented in this report are presented in this chapter and supported in detail by the report that follows. All statutory references are to the *Act.*

Purpose of Fee

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

Development impact fees are designed to ensure that new development will not burden the existing service population with the cost of facilities required to accommodate growth. The purpose of the fees proposed by this report is to implement this policy by providing a funding source from new development for capital improvements to serve that development. The fees advance a legitimate interest by enabling Kern COG to provide regional transportation facilities to new development.

Use of Fee Revenues

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

Fees proposed in this report, if enacted by the County, would be used to fund expanded regional transportation facilities to serve new development. Facilities funded by these fees are designated to be located within the County.

Benefit Relationship

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

We expect that the County will restrict fee revenue to the acquisition of land, construction of facilities, and purchase of related equipment and facilities used to serve new development. Facilities funded by the fees are expected to provide a countywide network of facilities accessible to the additional residents and workers associated with new development. Under *the Act*, fees are not intended to fully fund planned facilities needed to correct existing deficiencies. Thus, a

reasonable relationship can be shown between the use of fee revenue and the new development residential and non-residential use classifications that will pay the fees.

Burden Relationship

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

Facilities need is based on a facility standard that represents the demand generated by new development for those facilities. Demand is measured by a single facility standard that can be applied across land use types to ensure a reasonable relationship to the type of development. In this case, the fee program seeks to maintain a level of service standard on the County's regional roadways. See the *Existing Deficiencies* section of Chapter 4 for a complete description of the standards maintained by this fee program.

The standards used to identify growth needs are also used to determine if planned facilities will partially serve the existing service population by correcting existing deficiencies. This approach ensures that new development will only be responsible for its fair share of planned facilities, and that the fees will not unfairly burden new development with the cost of facilities associated with serving the existing service population.

Proportionality

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

The reasonable relationship between each facilities fee for a specific new development project and the cost of the facilities attributable to that project is based on the estimated new development growth the project will accommodate. Fees for a specific project are based on the project's size or increase in the number of vehicle trips. Larger new development projects can result in a higher service population resulting in higher fee revenue than smaller projects in the same land use classification. Thus, the fees ensure a reasonable relationship between a specific new development project and the cost of the facilities attributable to that project.

See the *Trip Generation by Land Use* section in Chapter 2 for a description of how trip demand factors are determined for different types of land uses. See the *Fee Schedule* section the same chapter for a presentation of the proposed facilities fees.