



CITY OF RIVERBANK NEXUS FEE STUDY FINAL

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Prepared for
City of Riverbank

Prepared by
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EXECUTIVE SUMMARY

California Government Code §66000-66025, also referred to as the *Mitigation Fee Act*, sets forth the requirements for a California local government to levy a development impact fee. This report highlights the results of analysis conducted on proposed capital improvement projects and projected development over the duration of the City of Riverbank 2005-2025 General Plan (hereafter: the General Plan). This Study demonstrates that the City has established a nexus between the need for designated capital improvements, and the levying of the fee on new development under the General Plan into the future. The law requires that a nexus be established between the imposition of the fee and the proposed use of the fee revenues, including:

- 1) the purpose of the fee be identified;
- 2) the facilities or facilities plan for which the fee revenue will be used;
- 3) a determination of the relationship between the fees use and the type of development on which the fees are imposed;
- 4) determine the relationship between the need for the public facilities and the type of development on which the fees are imposed; and
- 5) the reasonable proportionality between the fee amount and the cost of the facilities being funded by the fee.

This report demonstrates that the requirements under the *Mitigation Fee Act* have been met. And, as a result, the City of Riverbank is justified in levying the fees on new development, should the City of Riverbank City Council adopt a Resolution pertaining to this report.

DEVELOPMENT FEE ZONE

The fees addressed in this report pertain to public infrastructure improvements needed to serve the Planning Area of the City of Riverbank, as described in the General Plan.

INFRASTRUCTURE COSTS

The costs of infrastructure projects associated with the water supply system, sewer collection system, and storm drain system were provided by City staff, based on current Capital Improvement Plan (CIP) estimates, as well as cost estimates included in the City’s utility master plans. Escalations in project costs linked to the Engineering News Record Construction Cost Index could be included in future fee increases approved by the Riverbank City Council.

PROJECTED DEVELOPMENT

AECOM prepared future development projections based on data developed during the General Plan, updated to reflect current and anticipated future conditions. Future projected development within the Planning Area of the City of Riverbank includes 10,730 new dwelling units and approximately 3.32 million net additional square feet of retail, office, and other non-residential development.

PROPOSED FEE LEVELS

The proposed impact fee levels justified by the findings in this report are shown in Table 1-1. Residential development impact fees for combined facilities range from approximately \$15,500 for higher-density development in a mixed-use context to \$36,100 for clustered rural residential development. Non-residential combined fees range from approximately \$14.33 per square foot of building space for industrial/business park uses to \$14.60 for commercial development (community commercial and mixed-use commercial).

Compared to existing fees, proposed fees are more detailed with respect to land use. Instead of just single- and multi-family categories, as with the existing program, the proposed fees have several different residential categories and the analysis is designed to reflect costs associated with different densities. The same is true on the non-residential side, where the Study includes additional non-residential categories to promote more accurate and representative costs for different land uses.

**TABLE 1-1
PROPOSED DEVELOPMENT IMPACT FEES**

Land Use	Water	Sewer	Storm Drainage	Parks/ Rec.	General Govt.	Traffic	5% Admin¹	Total
Residential	Per DU	Per DU						
Clustered Rural (RR)	\$13,486	\$5,023	\$7,632	\$3,442	\$1,246	\$3,551	\$1,719	\$36,099
Lower Density (LDR)	\$7,024	\$3,063	\$6,922	\$3,912	\$1,416	\$2,983	\$1,266	\$26,586
Medium Density (MDR)	\$6,743	\$2,558	\$2,794	\$3,353	\$1,213	\$2,628	\$964	\$20,253
Higher Density (HDR)	\$4,889	\$3,141	\$3,154	\$2,794	\$1,011	\$2,237	\$861	\$18,087
Mixed Use (Residential) (MU)	\$4,889	\$951	\$2,041	\$2,439	\$883	\$3,551	\$738	\$15,492
Non-Residential²	Per Square Foot	Per Square Foot						
Community Commercial (CC)	\$2.07	\$1.65	\$4.25	N/A	\$0.37	\$5.57	\$0.70	\$14.60
Mixed Use (Commercial) (MU)	\$2.08	\$1.66	\$4.22	N/A	\$0.37	\$5.79	\$0.71	\$14.82
Industrial/Business Park (I/BP)	\$2.06	\$1.40	\$4.16	N/A	\$0.27	\$5.76	\$0.68	\$14.33
Office (MU LU Classification)	\$2.03	\$1.29	\$4.08	N/A	\$0.51	\$3.51	\$0.57	\$11.98

Notes:

¹ The City's 2006 System Development Fee includes a 5% administrative fee to cover staff time analyzing, planning, tracking, and managing the City's fee program (see 2006 Study, page 14).

²Regional commercial uses have a traffic impact fee of \$5,768 per 1,000 square feet. Please see Chapter 4 for more detail. KSF = thousand square feet.

Source: ADE, Inc., AECOM, KD Anderson & Assoc.

Traffic fees were developed through a separate nexus study by KD Anderson & Associates and AECOM, which is incorporated here. Traffic impact fees are characterized according to General Plan land use classifications. For specific project types that are not well-represented by the intentionally broad land use classifications used in the General Plan, traffic fees can be calculated based on an average fee of \$2,789 per Dwelling Unit Equivalent (DUE), where each DUE is equal to 5.0 daily vehicle miles traveled (VMT) per unit.

EXEMPTIONS

California Government Code makes disaster reconstruction exempt from development impact fees. California Government Code also allows for affordable housing and senior housing development to be exempted from fees, although at the discretion of the local jurisdiction levying the fee. Fee exemptions are a policy matter for a local jurisdiction, and fee exemptions are typically considered relative to the public good provided by the project type exempted from the fee.

1. INTRODUCTION AND FEE METHODOLOGY

INTRODUCTION

The City of Riverbank has identified, through utility master plans prepared by Nolte Associates, Inc. (hereafter: Nolte), the City's Capital Improvement Plan, analysis under the General Plan, and specific analysis undertaken to support this Nexus Fee Study, the need for capital improvements to support development anticipated under the General Plan. The infrastructure required to serve new development and the fee associated with this infrastructure is based on the City's required level of service for residential and non-residential development. The City's preferred method of financing this infrastructure is development impact fees. The impact fees are used to pay for the cost of infrastructure.

The purpose of this Study is to provide the legally required justification for the revision of these fees, and the nexus for each fee, and the proposed use of that fee.

DEVELOPMENT IMPACT FEE REQUIREMENTS-AB 1600

Development impact fees are monetary exactions other than a tax or special assessment charged by a local governmental agency to a project applicant in connection with a proposed land development. The requirements for development impact fees were enacted by AB 1600 (1987) and are contained in California Government Code Section 66000-66025, also referred to as "*The Mitigation Fee Act*."

In this report, just as in the Government Code, the term "public facilities" "includes public improvements, public services, and community amenities." The law requires a "nexus" between the imposition of the fee and the proposed use of the fee revenues. As noted in the Executive Summary, the law requires:

- 1) the purpose of the fee be identified;
- 2) the facilities or facilities plan for which the fee revenue will be used;
- 3) determine the relationship between the fees use and the type of development on which the fees are imposed;
- 4) determine the relationship between the need for the public facilities and the type of development on which the fees are imposed; and
- 5) the reasonable proportionality between the fee amount and the cost of the facilities being funded by the fee.

Development impact fee studies must demonstrate that the aforementioned requirements have been met. There are different methods for determining facilities financed by an impact fee:

- 1) Existing facilities standard, where the ratio of existing facilities to existing development is used as the basis for new developments' fee level. This approach is not recommended in this Study.
- 2) Existing and new facilities standard, where the ratio of all existing plus planned facilities to total future facilities demand is used to calculate the fee. This approach is not recommended in this Study, as the methodology is more appropriately used when the

created facility both serves a need produced from community growth, as well as an existing need, such as that produced from an unsatisfactory existing facility.

- 3) The planned facilities standard, where a fee is based solely on the ratio of new facilities necessitated and paid for by new development. This approach is used in this Study, as it is most appropriate, given that the public facilities are those implemented to support new development.

NEXUS BETWEEN DEVELOPMENT AND PUBLIC FACILITIES REQUIREMENTS

Government Code 66001(4)(g) requires that *“a fee shall not include the costs attributable to existing deficiencies in public facilities, but may include the costs attributable to the increased demand for public facilities reasonably related to the development project in order to 1) refurbish existing facilities to maintain existing level of service, or 2) achieve an adopted level of service that is consistent with the general plan.”*

Fees imposed on new development should be proportional to the facilities cost attributed to service level and facilities increases resulting from new development. The portion of facilities expansion or replacement costs attributable to existing development should be financed through other sources. The existing facilities in Riverbank are adequate for the services provided to the existing population (or were adequate at the time existing impact fees were adopted, such as those for police and general government facilities). They will not be adequate in the future due to residential and commercial developments anticipated to occur within the City’s Planning Area.

In connection with the General Plan, the engineering firm, Nolte, was retained to determine the needs and create utility master plans for the water, storm drain, and sewer systems. The methodology used to derive the fees calculated in this Study is based on the expected costs of serving the projected growth under the General Plan, as identified in the utility master plans. The utility master plans are on file with the City of Riverbank for those interested in more detail.

KD Anderson & Associates also used General Plan land use forecasts to examine the need for transportation improvements. The land use forecasts presented in the General Plan have been updated to reflect current and anticipated conditions, and were used for the updated transportation analysis conducted to support this Study.

PUBLIC FACILITY DEMANDS AND COSTS

Each fee presented in this Nexus Study reflects the increased needs and demands associated with development within the City’s Planning Area. Those needs and demands are connected to the cost of providing those services.

The City is required to secure funding for the existing deficiencies portion of the new facilities required to correct the deficiencies in the current system. The City is prohibited from allocating any portion of facility costs associated with existing deficiencies. As stated above, the facility cost that will be included in the new fee amount reflect only infrastructure serving new development.

ORGANIZATION OF THE REPORT

Chapter 1 - describes the requirements under AB 1600 in order for a public agency to establish development impact fees, and the City of Riverbank's efforts to date with regard to determining the need for new infrastructure and the proposed development impact fees.

Chapter 2 - describes growth projections related to the demand for future facilities.

Chapter 3 - analyzes the service demand by land use based on demand factors provided in the City's utility master plans. This chapter also describes how the City's Capital Improvement Plan budget figures are used to allocate the cost for service to the appropriate land uses.

Chapter 4 - discusses the facility costs attributable to new development and the resulting fee levels that provide the "nexus" between the need for new facilities attributable to future development and the cost to provide those facilities by different land use categories.

Chapter 5 - summarizes how the fees and this Nexus Study adhere to the fundamental requirements under Government Code §66000 et. seq.

Chapter 6 - sets forth the requirements for the management of fees, reporting requirements, and expenditure of fees for capital projects subsequent to fee adoption (each of which is also prescribed under Government Code §66000 et. seq.).

2. DEVELOPMENT PROJECTIONS

GROWTH PROJECTIONS AS THE BASIS FOR THE FEE

The planning horizon for the facilities identified in that of the General Plan: 2025. New development that will occur between the commencement of the fee and the year 2025 represents the new development component served by the facilities identified in this Study. The fees are calculated to account for the project costs associated with projected new development by land use category.

LAND USE TYPES

The land use categories subject to the fee are consistent with the General Plan and the City’s utility master plans. Land uses are shown in Table 2-1, below.

RIVERBANK GROWTH PROJECTIONS

Development Assumptions. Approximately 10,730 new dwelling units could be accommodated within the City’s Planning Area, based on General Plan land use classifications. In addition, nearly 3.32 million square feet of non-residential building space could be accommodated to house retail and commercial services, industrial and office development, and other non-residential land uses.

**TABLE 2-1
LAND USE CHANGE, 2013-2025**

Residential Units	DUs/Sq.Ft.	Gross Acres	Net Acres
Clustered Rural (RR)	250	1,230	123
Lower Density (LDR)	4,410	1,260	882
Medium Density (MDR)	4,470	640	448
Higher Density (HDR)	1,430	122	110
Mixed Use (Residential) (MU)	170	13	9
Total Residential	10,730	3,270	1,570
Community Commercial (CC)	816,260	107	75
Mixed Use (Commercial) (MU)	410,630	54	38
Industrial/Business Park (I/BP)	1,834,940	240	168
Office (MU LU Classification)	254,940	33	23
Total Non-Residential	3,317,000	430	300

Note: All new dwelling units included the General Plan “Infill Opportunity Area” assumed to be higher-density units.
Source: AECOM

3. PROJECTED SERVICE DEMAND AND FACILITIES

WATER SUPPLY

Based on the in-depth analysis of Riverbank existing service levels, including citywide water billing information, Nolte prepared estimates of service demands associated with new development that could be accommodated under the General Plan

Table 3-1 presents the water demand factors in gallons per day (GPD) per dwelling unit for residential uses and per acre for non-residential uses. The table also provides a summary of water demand projections for Riverbank derived from the information presented in the City’s Water Supply Study and Water Master Plan.

**TABLE 3-1
PROJECTED WATER DEMAND**

Land Use			
Residential	Dwelling Units	GPD/DU	GPD
Clustered Rural (RR)	250	1,200	300,000
Lower Density (LDR)	4,410	625	2,756,250
Medium Density (MDR)	4,470	600	2,682,000
Higher Density (HDR)	1,430	435	622,050
Mixed Use (Residential) (MU)	170	435	73,950
Non-Residential	Net Acres	GPD/Non Res Net Ac.	GPD
Community Commercial (CC)	75	2,000	150,000
Mixed Use (Commercial) (MU)	38	2,000	76,000
Industrial/Business Park (I/BP)	168	2,000	336,000
Office (MU LU Classification)	23	2,000	46,000
Total			7,042,000

Source: ADE Inc., Nolte

In consultation with City staff, ADE and AECOM compiled a list of water system improvements needed to serve the projected demand shown in Table 3-2.

Many of the projects are identified in the Water Master Plan prepared by Nolte and others either remain from the City existing System Development Fee (SDF) program or are new additions from the City’s Capital Improvement Program (CIP). All dollar figures were escalated to 2014 dollars using the escalation factors shown in Table 3-2. Please see Appendix B for details on required improvements and cost estimates and Appendix C for fee reimbursement detail.

**TABLE 3-2
WATER SYSTEM FACILITIES TO SERVE PROJECTED DEMAND**

No.	Project Name	Project Identification	Original Hard Cost	Escalation Factor [a]	2014 Dollars	Soft Costs @35% [b]	Total Cost
1	Claribel Transmission Main (Prospectors/Claribel/Roselle)	WMP TMP#2	\$1,017,100	1.20	\$1,221,787	\$427,625	\$1,649,412
2	Water Well & Land- Central Riverbank (2)	WMP	2,965,000	1.20	\$3,561,693	\$1,246,592	\$4,808,285
3	2.0 MG Storage Tank/Booster Pump Station & Land - Central Riverbank	WMP	2,275,000	1.20	\$2,732,833	\$956,492	\$3,689,325
4	Water Well & Land - East Riverbank (6)	WMP	8,895,000	1.20	\$10,685,078	\$3,739,777	\$14,424,855
5	2.0 MG Storage Tank/Booster Pump Station & Land - East Riverbank (2)	WMP	4,550,000	1.20	\$5,465,666	\$1,912,983	\$7,378,650
6	Water Line Installation - Talbot/Kentucky	WMP TMP #3	329,500	1.20	\$395,810	\$138,534	\$534,344
7	Water Line - Patterson Road/Railroad Crossing Upgrade	WMP TMP #4	492,200	1.20	\$591,253	\$206,939	\$798,192
8	Water Line Installation - Roselle/Terminal Roselle Connection	WMP TMP #5	351,400	1.20	\$422,118	\$147,741	\$569,859
9	Water Line Installation - Van Dusen (Claus/Terminal)	WMP TMP #6	225,100	1.20	\$270,400	\$94,640	\$365,040
10	Water Line Installation - Claribel/Snedigar Inter-tie	WMP TMP #8	912,800	1.20	\$1,096,497	\$383,774	\$1,480,271
11	Water Study and Model	SDF	300,000	1.32	395,835		\$395,835
12	Water Main Installation - Townsend (Prince Edward to Claus)	SDF	113,000	1.32	149,098	\$52,184	\$201,282
13	Water Main Installation - Claus (California to Kentucky)	SDF	101,000	1.32	133,264	\$46,643	\$179,907
14	Water Main Installation - Claus (Santa Fe to California)	SDF	203,000	1.32	267,848	\$93,747	\$361,595
15	Water Main Installation - California (Central to Snediger)	SDF	113,000	1.32	149,098	\$52,184	\$201,282
16	Water Main Installation - Snediger (California to Santa Fe)	SDF	203,000	1.32	267,848	\$93,747	\$361,595
17	Water Main Installation - Patterson (Claus to Snediger)	SDF	176,000	1.32	232,223	\$81,278	\$313,501
18	Water Main Installation - Roselle (Glow to Claribel)	SDF	210,600	1.32	277,876	\$97,257	\$375,132
19	Water Main Installation - California (Central to Claus)	SDF	88,000	1.32	116,111	\$40,639	\$156,750
20	Water Main Installation - Central (California to Santa Fe)	SDF	210,600	1.32	277,876	\$97,257	\$375,132
21	Water Main Installation - Oakdale (Crawford to Morrill)	SDF	429,300	1.32	566,439	\$198,254	\$764,693
22	Water Main Replacement - Topeka - Eight to Claus/Santa Fe	CIP	159,777	1.05	167,933	\$58,776	\$226,709
23	Water Main Replacement - 2900 Block of Topeka	CIP	286,578	1.05	301,206	\$105,422	\$406,629
24	Shop and Lab	CIP	480,000	1.05	504,502	\$176,576	\$681,077
25	Water Main Replacement - Prospector's to Claribel/Roselle	CIP	104,948	1.05	110,305	\$38,607	\$148,912
26	TMP#7 - Patterson/Claus	WMP	354,600	1.20	\$425,962	\$149,087	\$575,048
27	West Side Water Supply Projects	WMP	16,410,000	1.20	\$19,712,437	\$6,899,353	\$26,611,790
28	SR 108 Distribution System	WMP TMP #9	819,400	1.20	\$984,300	\$344,505	\$1,328,806
29	West Side Water Distribution Mains	WMP	4,750,300	1.20	\$5,706,276	\$1,997,197	\$7,703,473
Total Water System Improvements			\$47,526,203		\$57,189,571	\$19,877,808	\$77,067,381
Fee Reimbursements							\$2,663,441
Less Current Fund Balance							(\$584,997)
Total							\$79,145,825

Source: City of Riverbank, Nolte. Notes: WMP refers to 2007 Water Master Plan by Nolte; SDF refers to 2006 System Development Fees; CIP refers to Capital Improvement Plan.

Notes: [a] Escalation factors derived from Engineering News Record Construction Cost Index for the San Francisco Area. The escalations occur over three time periods: 1.32 = Aug. 2005 to Aug. 2014; 1.20 = Aug. 2007 to Aug. 2014; 1.05 = Aug. 2013 to Aug. 2014.

[b] Soft costs consist of preliminary engineering, construction engineering, and contingency.

SEWER COLLECTION SYSTEM

As a part of the development of the Sewer Collection System Master Plan, Nolte developed wastewater generation factors for each land use identified in the General Plan. These demand factors were based, in part, on historical analysis. The demand factors were used, along with growth projections, to express existing and future wastewater demand. Demand factors are expressed in gallons of waste wastewater per day per dwelling unit (for residential) or per acre (for non-residential).

Table 3-3 below presents demand factors by land use and a summary of sewer flow projections derived from the information presented in the Sewer Collection System Master Plan.

The sewer system facilities needed to serve this demand are listed in Table 3-4. As with the water system improvements, some of the wastewater facilities were originally identified in the 2006 City System Development Fee (SDF) program and others are outlined in the Sewer Collection System Master Plan (SCSMP) by Nolte. ADE escalated all figures to 2014 dollars. Please see Appendix D for details on required improvements and cost estimates and Appendix C for fee reimbursement details.

**TABLE 3-3
PROJECTED SEWER FLOWS**

Land Use	Net Acres	GPD/ Net Acre	GPD
Residential			
Clustered Rural (RR)	123	1,000	123,000
Low Density (LDR)	882	1,500	1,323,000
Medium Density (MDR)	448	2,500	1,120,000
High Density (HDR)	110	4,000	440,000
Mixed Use (Residential) (MU)	9	1,760	16,000
Non-Residential			
Community Commercial (CC)	75	1,760	132,000
Mixed Use (Commercial) (MU)	38	1,760	66,800
Industrial/Business Park (I/BP)	168	1,500	252,000
Office (MU LU Classification)	23	1,400	32,200
Total			3,500,000

Source: ADE Inc., Nolte

**TABLE 3-4
SEWER SYSTEM FACILITIES TO SERVE PROJECTED DEMAND**

No.	Project Name	Project Identification	Original Hard Cost	Escalation Factor [a]	2014 Dollars	Soft Costs @35% [b]	Total Cost
1	Santa Fe/Claus Sewer Main	SDF	221,400	1.32	292,126	\$102,244	\$394,370
2	California Sewer Main	SDF	486,000	1.32	641,252	\$224,438	\$865,690
3	Roselle/Patterson Force Main	SDF	1,530,000	1.32	2,018,756	\$706,565	\$2,725,321
4	Sierra Main	SDF	332,100	1.32	438,189	\$153,366	\$591,555
5	Central Main (Mesa to Railroad)	SDF	132,894	1.32	175,347	\$61,371	\$236,718
6	Central Main (1,367 lf California Ave to Kentucky)	SDF	73,818	1.32	97,399	\$34,090	\$131,489
7	Stanislaus Street Trunk Sewer (1,500 lf of 18-inch pipe) Lower Reach	SCSMP	532,400	1.20	639,543	\$223,840	\$863,383
8	Cannery Area Trunk Sewer	SCSMP	1,302,000	1.20	1,564,021	\$547,408	\$2,111,429
9	Crawford Pump Station Upgrade and Force Main	SCSMP	900,000	1.20	1,081,121	\$378,392	\$1,459,513
10	Stanislaus Street Trunk Sewer (3,400 lf of 18-inch pipe) Upper Reach	SCSMP	1,206,800	1.20	1,449,663	\$507,382	\$1,957,045
11	New Stanislaus River Crossing	SCSMP	4,422,500	1.20	5,312,508	\$1,859,378	\$7,171,885
12	Crawford Road Trunk Sewer Upgrade	SCSMP	1,867,900	1.20	2,243,806	\$785,332	\$3,029,138
13	West Side Pump Station and Force Main	SCSMP	5,987,500	1.20	7,192,457	\$2,517,360	\$9,709,817
14	West Side Crawford Rd. Trunk Line Upgrade	SCSMP	2,082,000	1.20	2,500,993	\$875,348	\$3,376,340
Total Wastewater System Improvements			\$21,077,312		\$25,647,181	\$8,976,513	\$34,623,693
Fee Reimbursements							\$1,367,313
Less Current Balance							(\$209,828)
Total							\$35,781,178

Source: City of Riverbank, Nolte

Notes: SDF refers to the 2006 System Development Fee; SCSMP refers to Sewer Collection System Master Plan by Nolte

[a] Escalation factors derived from Engineering News Record Construction Cost Index for the San Francisco Area. The escalations occur over two time periods: 1.32 = Aug. 2005 to Aug. 2014; 1.20 = Aug. 2007 to Aug. 2014.

[b] Soft costs consist of preliminary engineering, construction engineering, and contingency.

STORM DRAIN SYSTEM

A hydraulic analysis of the existing storm drain system, including topographic information, was performed by Nolte, as part of development of the Storm Drain System Master Plan. The analysis identified drainage basin size requirements and other elements of service levels in each drainage area.

Using information presented in the Storm Drain System Master Plan, Table 3-5 presents design volumes by land use, in terms of acre-feet per year, per net acre of new development.

**TABLE 3-5
PROJECTED STORMWATER RUNOFF BY LAND USE CATEGORY**

Land Use	Net Acres	Run-off/Ac.	Annual Acre-Feet
Residential			
Clustered Rural (RR)	123	.09	11
Low Density (LDR)	882	.20	176
Medium Density (MDR)	448	.16	72
High Density (HDR)	110	.24	26
Mixed Use (Residential) (MU)	9	.26	2
Non-Residential			
Community Commercial (CC)	75	.26	20
Mixed Use (Commercial) (MU)	38	.26	10
Industrial/Business Park (I/BP)	168	.26	44
Office (MU LU Classification)	23	.26	6
Total			367

Source: ADE Inc.

Table 3-6 identifies the storm drain facilities needed to handle the projected runoff from future development. Most of these costs are derived from the Storm Drain Master Plan (SDMP) by Nolte. However, City staff has helped to identify where projects would also address existing deficiencies in the storm drain system (denoted with a “*” in the table). In these cases, only a portion of the cost of the facility is allocated to new development for purposes of the impact fee, as denoted by the percentage with the “*”. The allocation to new development represents the portion of the improvement necessary to serve new development. ADE escalated all costs to 2014 dollars. Please see Appendix E for details on required improvements and cost estimates, and Appendix C for fee reimbursement details.

**TABLE 3-6
STORM DRAIN SYSTEM FACILITIES TO SERVE PROJECTED DEMAND**

No.	Project Name	Project Identification	Original Hard Cost	Allocation to New Development	Escalation Factor [b]	2014 Dollars	Soft Costs @35% [c]	Total Cost	
1	Connect OID Snedigar Pipeline to Storm Drain System	SDMP	\$42,200 [a]	100%	\$42,200	1.05	\$44,354	\$15,524	\$59,878
2	First Street Basin Reconstruction	SDMP	\$926,000 [a]	10%	\$92,600	1.05	\$97,327	\$34,064	\$131,391
3	Analysis of Eighth Street System	SDMP	\$31,300	100%	\$31,300	1.05	\$32,898		\$32,898
4	Analysis of Candlewood Storm Drain System	SDMP	\$31,300	100%	\$31,300	1.05	\$32,898		\$32,898
5	Analysis of System Downstream of First Street Basin	SDMP	\$31,300	100%	\$31,300	1.05	\$32,898		\$32,898
6	Installation of 10 Dry Wells Throughout the City	CIP	\$75,000	100%	\$75,000	1.05	\$78,828	\$27,590	\$106,418
7	Design & Construction of Eighth Street System Improvements	SDMP	\$1,985,785	100%	\$1,985,785	1.20	\$2,385,415	\$834,895	\$3,220,310
8	Upsize Pipeline along Patterson, Fifth, Stanislaus, and Seventh Streets	SDMP	\$592,000	10%	\$59,200	1.20	\$71,114	\$24,890	\$96,004
9	Stormwater Outfall Study/Treatment	CIP	\$2,000,000	10%	\$200,000	1.05	\$210,209	\$73,573	\$283,782
10	Storm Drain Basin - Central Riverbank	SDMP	\$4,624,000	10%	\$462,400	1.20	\$555,456	\$194,410	\$749,865
11	Storm Drain Basin - West Riverbank	SDMP	\$18,041,000	100%	\$18,041,000	1.20	\$21,671,668	\$7,585,084	\$29,256,752
12	Storm Drain Basin - East Riverbank	SDMP	\$14,265,000	100%	\$14,265,000	1.20	\$17,135,765	\$5,997,518	\$23,133,283
Total Storm Drain System Improvements			\$42,644,885		\$35,317,085		\$42,348,829	\$14,787,548	\$57,136,377
Fee Reimbursements									\$6,806,515
Less Current Balance									(\$287,188)
Total									\$63,655,704

Source: City of Riverbank, Nolte

Notes: Some of the projects listed also partially address existing deficiencies. Both the percentage and total cost for new development is identified in the table above based on the benefit of each improvement to new development. SDMP refers to Storm Drain Master Plan by Nolte; CIP refers to the City's Capital Improvement Plan.

[a] Original Master Plan cost estimates revised in current City CIP.

[b] Escalation factors derived from Engineering News Record Construction Cost Index for the San Francisco Area. The escalations occur over two time periods: 1.20 = Aug. 2007 to Aug. 2014; 1.05 = Aug. 2013 to Aug. 2014.

[c] Soft costs consist of preliminary engineering, construction engineering, and contingency.

RECREATION AND GENERAL GOVERNMENT FACILITIES

Demand for parks and recreation facilities is related to the residential population, while other types of City services are also provided to non-residential development. Table 3-7 below indicates the projected residential population associated with the new residential development, as well as the anticipated jobs supported by commercial, office, and industrial development. Jobs are used as an indicator of demand for general government facilities for non-residential uses, but the level of demand is assumed to be half that of the residential population for the purposes of this Study. The new “Service Population” projected for Riverbank is 36,218, which accounts for half the new jobs, along with 100 percent of the new resident population.

Tables 3-8 and 3-9 identify facilities needed to serve new development and associated costs in 2014 dollars.

**TABLE 3-7
POPULATION AND EMPLOYMENT CALCULATIONS**

Residential	No. Units	Persons Per Household	Population	Service Population	Percent of Total
Clustered Rural (RR)	250	3.08	770	770	2%
Low Density (LDR)	4,410	3.50	15,435	15,435	46%
Medium Density (MDR)	4,470	3.00	13,410	13,410	40%
High Density (HDR)	1,430	2.50	3,575	3,575	11%
Mixed Use (Residential) (MU)	170	2.18	371	371	1%
Total Residential	10,730		33,561	33,561	100%
Non-Residential	KSF	Sq.Ft. per Job	Jobs	Service Population (0.5 x Total)	Percent of Total
Community Commercial (CC)	816	550	1,484	742	2%
Mixed Use (Commercial) (MU)	411	550	747	373	1%
Industrial/Business Park (I/BP)	1,835	750	2,447	1,223	3%
Office (MU LU Classification)	255	400	637	319	1%
Total Non-Residential	3,317		5,315	2,657	7%
Total				36,218	100%

Note: KSF = thousand square feet.

Source: ADE, Inc. and AECOM.

**TABLE 3-8
CITY OF RIVERBANK GROWTH-RELATED PARKS FACILITY NEEDS**

Proj. No.	Description	Amenities	Original Base Cost	Escalation Factor [a]	Cost (\$2014)	Soft Costs @35% [b]	Total Cost
1,2,3	18-20 Acre Sports Complex, Eastside	Sports Fields, Community Bldg, Restroom/Concession Bldg., Parking; Shade Structure	\$4,230,000	1.32	\$5,581,268	\$1,953,444	\$7,534,712
5	Silva Park Phase II, Westside	Play Ground, Picnic Areas	\$400,000	1.32	\$527,779	\$184,723	\$712,502
6	8-Acre Park, Eastside	Sport Fields; Picnic Shelter Area; Playground/Courts	\$1,088,000	1.32	\$1,435,560	\$502,446	\$1,938,006
20	Phase II Sports Complex on 11 City-owned acres (Morrill)	Soccer Fields; BMX Area	\$2,080,000	1.32	\$2,744,453	\$960,559	\$3,705,012
20b	Phase III West Side Regional Sports Complex Addition [c]	Soccer Fields; Parking	n/a	n/a	\$2,475,000	\$866,250	\$3,341,250
21	Dog Park	Responsible for 33%	\$9,240	1.32	\$12,192	\$4,267	\$16,459
22	7-Acre Park, Westside	Ball Fields; Courts; Playground (\$1,088,000 - Responsible for 33%)	\$359,040	1.32	\$473,735	\$165,807	\$639,542
24	Neighborhood Park	24 acres improvements - curb/gutter, utilities, playground equipment, and landscaping	\$8,280,000	1.00	\$8,280,000	\$2,898,000	\$11,178,000
25	3 acre Aquatics Center	Swimming pool, kids play pool, restroom locker area, parking and shed structure		1.00	\$5,000,000	\$1,750,000	\$6,750,000
26	Trails and Class I Bike Paths	AC, decomposed granite and dirt trails citywide. Lighting where appropriate.		1.00	\$1,000,000	\$350,000	\$1,350,000
27	City-Wide Parks Master Plan			1.00	\$200,000	\$70,000	\$270,000
Total			\$16,446,280		\$25,254,987	\$8,839,245	\$37,435,483
Less Fee Revenue Balance							(\$207,666)
Fee Reimbursements							\$479,201
Grand Total							\$37,510,061

Source: City of Riverbank, ADE Inc.

[a] Escalation factors derived from Engineering News Record Construction Cost Index for the San Francisco Area. 1.32 = Aug. 2005 to Aug. 2014; 1.00 = 2014 dollars.

[b] Soft costs consist of preliminary engineering, construction engineering, and contingency.

[c] Phase III West Side Regional Sports Complex Addition is a new project that was not included in the 2006 System Development Fee Report. This project assumes 10 acres of land costing \$150,000 per acre, \$345,000 per acre for improvements, and that half of the cost will be paid by regional storm drainage fees collected from developments west of Oakdale Road in a Specific Plan Area.

**TABLE 3-9
CITY OF RIVERBANK GROWTH-RELATED GENERAL GOVERNMENT FACILITY NEEDS**

No.	Description	% New Growth	Units of Measure	Units of Cost (\$2014) [a]	Physical Quantities	Improvement Cost	Soft Costs @ 35% [b]	ROW Acres	ROW Cost Per Acres	ROW Cost	Total Cost
1	Administration and Police Training Facility	100%	SF	\$300	8,000	\$2,400,000	\$840,000	1	\$150,000	\$150,000	\$3,390,000
2	Administration Facility City Hall	100%	SF	\$300	15,200	\$4,560,000	\$1,596,000	1	\$150,000	\$150,000	\$6,306,000
4	Parking Facility	33%	Spaces	\$10,700	200	\$706,200	\$247,170	2	\$150,000	\$99,000	\$1,052,370
5	Vehicles	100%	LS	\$2,012,700		\$2,012,700					\$2,012,700
6	General Plan/EIR	100%	LS	\$1,890,000	1	\$1,890,000					\$1,890,000
8	Recreation/Museum Expansion	33%	SF	\$300	1,500	\$148,500	\$51,975				\$200,475
Total											\$14,851,545
Less Fee Revenue Balance											(\$202,670)
Grand Total											\$14,648,875

Source: City of Riverbank.

SF = square feet. LS = lump sum.

[a] Units costs have been escalated to 2014 dollars based on factors derived from Engineering News Record Construction Cost Index for the San Francisco Area. 1.32 = Aug. 2005 to Aug. 2014.

[b] Soft costs consist of preliminary engineering, construction engineering, and contingency.

TRAFFIC

ANALYSIS OF FUTURE DEFICIENCIES

Future development in Riverbank will result in additional vehicular traffic on existing streets and new streets. Travel demand was evaluated as a part of the General Plan and General Plan Environmental Impact Report (EIR), as well as other traffic studies. Relevant information from these documents has been incorporated into this Study, as appropriate.

Trip Generation. Land use change information was used to derive estimates of afternoon (pm) peak-hour trip generation resulting from anticipated development. Applicable trip generation rates account for the “new” travel and reflect discount for “pass-by” trips diverted to retail uses. Pass-by trips are those that are not planned, but occur as motorists pass by, as a matter of convenience. Table 3-10 identifies p.m. peak-hour trip generation rates used for this analysis, as well as the number of trip ends generated by new development. As noted in Table 3-10, the amount of vehicular traffic associated with residential uses varies with density.

**TABLE 3-10
RESIDENTIAL TRIP GENERATION RATES**

Residential Land Use Classification	PM Peak-Hour Rate per Unit
Clustered Rural (RR)	0.94 – 1.00
Lower Density (LDR)	0.82 – 0.89
Medium Density (MDR)	0.71 – 0.79
Higher Density (HDR)*	0.59 – 0.68

Note: *Higher-density units occur both in the HDR and the Mixed-Use land use classification in the City’s General Plan.
Source: KD Anderson & Associates.

Trip Length. Roadway utilization also accounts for the length of trips made during the p.m. peak hour. The average trip length varies for each land use category. Commute trips are the primary activity associated with p.m. peak-hour travel by residential development, and because many commute trips in this region are long, the average trip length for residential uses is 5.0 miles. Conversely, trip lengths associated with retail uses reflect the size of the trade area, which can be relatively small for local retail establishments. Table 3-11 identifies the average trip lengths for the land use categories in this analysis. The combination of trip rates and trip lengths is used to determine the overall Vehicle Miles Traveled (VMT) for anticipated development.

Dwelling Unit Equivalents (DUE). To identify the applicable traffic impact fee, it was necessary to identify a VMT estimate for the “typical” single-family detached dwelling unit. This estimate is considered the dwelling unit equivalent (DUE) for the purposes of this analysis and other land use types are expressed in terms of a proportion of the DUE.

Project List. The City will need circulation improvements to deliver levels of service established in the General Plan, including new roads, roadway improvements, signalization, and intersection modifications. Table 3-12 identifies improvements needed to accommodate new development. The total cost is \$44,398,421 to accommodate new development. The traffic mitigation fee fund has a current balance of \$3,707,102 and owes reimbursements totaling \$2,717,727 to developers who have already constructed improvements. The net traffic impact fee is \$43,409,046. See Appendix F for a map of transportation improvements and Appendix C for reimbursement details.

**TABLE 3-11
PROJECTED TRAVEL DEMAND ASSOCIATED WITH NEW DEVELOPMENT**

Land Use		Units	PM Trips per Unit	PM Trips	Average Trip length (miles)	VMT	DUEs
Residential – Dwelling Units (DUs)							
Clustered Rural (RR)	DUs	250	1	250	5	1,250	312.50
Low-Density (LDR)	DUs	4,410	0.84	3,704	5	18,522	4,630.50
Medium-Density (MDR) ¹	DUs	4,470	0.74	3,308	5	16,539	4,134.75
Higher-Density Residential (HDR) ²	DUs	1,600	0.63	1,008	5	5,040	1,259.82
Total New Residential		10,730		8,720		41,351	10,338
Non-Residential – Thousands of sq.ft. of building space (KSF)							
Commercial (CC, MU) ³	KSF	770	2.64	2,034	2.97	6,041	1,510
Regional Commercial ⁴	KSF	456	2.72	1,241	3	3,724	931
Office ⁵	KSF	255	1.59	405	5.1	2,067	517
Industrial/Business Park (I/BP)	KSF	1,835	0.97	1,780	5.1	9,077	2,268
Total Non-Residential		3,317		5,461		20,910	5,226

Notes: ¹Includes units in the Infill Opportunity Area.

²Includes higher-density dwelling units within the context of a mixed-use project. For mixed-use projects, fees are to be calculated by adding per-unit fee amounts for all proposed land uses, taking into account any appropriate reductions for trip internalization in consultation with the City.

³The commercial category includes commercial developed in the Mixed Use land use classification.

⁴Regional commercial development is located and designed to draw customers from a broader market area. Regional commercial development is defined as commercial development occurring on a site of at least 30 acres in land area.

⁵Office is not a General Plan land use designation, but a type of use to be referenced and used, as appropriate, to calculate the traffic impact fee. This use could occur in different land use classifications, but is assumed mostly to occur in the Mixed-Use land use classification.

Source: KD Anderson & Associates, AECOM, ADE.

**TABLE 3-12
TRANSPORTATION IMPROVEMENTS**

Improve- ment Number	Location	Improvement	Construction Costs	Soft Costs @ 35% [a]	Right-of- Way Acquisition Cost	Total Cost
1 (cost includes 1, 2, and 9)	Callander Avenue (SR 108) / Santa Fe Street	Widen intersection to ultimate configuration and construct traffic signal	\$2,944,000	\$1,030,400	\$ -	\$3,974,400
2	Callander Avenue (SR 108) / Patterson Road	Reconstruct intersection to create 2nd northbound lane (either through or right turn lane), modify traffic signal	See 1	See 1	See 1	See 1
3 (cost includes 3, 4, 5, 10, and 12)	Patterson Road / Roselle Avenue	Reconstruct intersection to ultimate configuration, construct traffic signal, widen BNSF railroad crossing	\$3,717,000	\$1,300,950	\$ -	\$5,017,950
4	Patterson Road / First Street	Reconstruct intersection to ultimate configuration, construct traffic signal, coordinate with BNSF crossings	See 3	See 3	See 3	See 3
5	Patterson Road / Third Street	Reconstruct intersection to ultimate configuration, construct traffic signal, coordinate with BNSF crossings	See 3	See 3	See 3	See 3
6	Patterson Road / Eighth Street	Reconstruct intersection to ultimate configuration, construct traffic signal, coordinate with BNSF crossings	\$1,032,000	\$361,200	\$ -	\$1,393,200
7	Atchison St (SR 108) /Claus Road	Construct traffic signal	\$428,000	\$149,800	\$ -	\$577,800
8	Santa Fe Street / First Street	Widen intersection to provide left turn lanes and add all-way stop	\$79,000	\$27,650	\$ -	\$106,650
9	Patterson Rd-Callander Avenue (SR 108)	Widen SR 108 to 4 lanes from Jackson Street to BNSF overcrossing	See 1	See 1	See 1	See 1
10	Patterson Road	Widen to 4 lanes from Roselle Avenue to First Street	See 3	See 3	See 3	See 3
11	1st Street	Reconstruct 1st Street north of SR 108 to add southbound right turn lane and modify traffic signal	\$226,000	\$79,100	\$ -	\$305,100
12	Patterson Road	Widen to 4 lanes from 1st St to Terminal Ave	See 3	See 3	See 3	See 3
13	Santa Fe Street Extension	Extend Santa Fe Street beneath the BNSF railroad line to connect to Callander Avenue (SR 108)	n/a	n/a	n/a	\$6,500,000
14	SR 108	Widen to 4 lanes from McHenry Ave to Coffee Road	\$1,850,185.19	\$647,565	\$0.00	\$2,497,750
15	SR 108	Widen to 4 lanes from Coffee Road to Oakdale Road	\$1,680,465.48	\$588,163	\$0.00	\$2,268,628
16	SR 108	Widen to 4 lanes from Oakdale Road to Jackson Street	\$343,371.68	\$120,180	\$0.00	\$463,552
17	SR 108	Widen to 4 lanes from Santa Fe Street to 1st Street	\$338,705.61	\$118,547	\$0.00	\$457,253
18	SR 108	Widen to 4 lanes from Claus Road to Snediger Road	\$1,460,070.54	\$511,025	\$0.00	\$1,971,095
22	Claribel Road	Widen to 4 lanes from Squire Wells Way to Roselle Avenue	\$533,211.60	\$186,624	\$0.00	\$719,836
23	Claribel Road	Widen to 4 lanes from Roselle Avenue to Terminal Avenue	\$544,344.84	\$190,521	\$0.00	\$734,866
24	Claribel Road	Widen to 4 lanes from Terminal Avenue to Claus Road	\$662,072.83	\$231,725	\$0.00	\$893,798

**TABLE 3-12
TRANSPORTATION IMPROVEMENTS**

Improvement Number	Location	Improvement	Construction Costs	Soft Costs @ 35% [a]	Right-of-Way Acquisition Cost	Total Cost
25	Claribel Road	Widen to 4 lanes from Claus Road to Eleanor Avenue	\$1,349,969.32	\$472,489	\$0.00	\$1,822,459
26	Patterson Road	Widen to 4 lanes from Terminal Avenue to Snediger Road	\$1,156,615.39	\$404,815	\$0.00	\$1,561,431
27	Roselle Avenue	Build to ultimate configuration from Patterson Road to Claribel Road	\$999,737.03	\$349,908	\$72,144.00	\$1,421,789
28	Claus Road	Widen to 4 lanes from SR 108 to Patterson Road	\$338,769.87	\$118,569	\$72,920.61	\$530,260
29	Claus Road	Widen to 4 lanes from Townsend Street to Claribel Road	\$433,850.13	\$151,848	\$0.00	\$585,698
30	SR 108 / Coffee Road	Construct Traffic Signal				\$300,000
31	Retail Access / Claribel Road	Construct Traffic Signal				\$300,000
32	Roselle Avenue / Glow Road	Construct Traffic Signal				\$300,000
33	Patterson Road / Terminal Avenue	Construct Traffic Signal				\$300,000
34	Patterson Road / Snediger Road	Construct Traffic Signal				\$300,000
35	Claus Road / California Avenue	Construct Traffic Signal				\$300,000
36	Claus Road / Kentucky Avenue	Construct Traffic Signal				\$300,000
37	Claribel Road / Eleanor Avenue	Construct Traffic Signal				\$300,000
38	Patterson Road & Snediger Road	RR Xing Improvements (2006 "System Development Fee Study")				\$311,566
39	Patterson Road West of Terminal Ave	RR Xing Improvements (2006 "System Development Fee Study")				\$311,566
40	Coffee Road north of SR 108; at proposed shopping center NW of intersection of Claribel and Oakdale Roads; west of Coffee; halfway between Oakdale and Coffee Roads at the City limits	Bridge Widening (2006 "System Development Fee Study")				\$3,303,293
41	Hetch Hetchy Trailway System	Trail System Improvements (2006 "System Development Fee Study")				\$428,403
42	Stanislaus River Park Trail	Trail System Improvements (2006 "System Development Fee Study")				\$428,403
43	Morrill Road to Claribel Road	Utility relocation (2006 "System Development Fee Study")				\$1,209,075
44	Claus Road between SR 108 and Claribel Road	Utility relocation (2006 "System Development Fee Study")				\$1,902,600
45	Claribel Road/Terminal Avenue	Construct Traffic Signal				\$300,000
Total	Transportation Improvements					\$44,398,421
	Fee Reimbursements					\$2,717,727
	Less Current Balance					(\$3,707,102)
TOTAL						\$43,409,046

[a] Soft costs consist of preliminary engineering, construction engineering, and contingency

4. FEE CALCULATION

This section presents the development of the fee nexus. The nexus links projected development across land use types to the need for public infrastructure.

UTILITIES

The fee nexus for water, sewer, and storm drainage infrastructure is based on the proportion of demand generated by each land use and the cost for facilities to serve the demand, as indicated in the previous chapter. The parks and recreation, general government facilities, and traffic fees are calculated through separate processes that are described further below.

The water demand per unit tends to be lower on a per-unit basis for higher-density units compared to lower-density units. The fees per unit for higher-density and mixed-use units, which are assumed to be higher density, are approximately \$4,900, while medium-density and lower-density units are approximately \$6,800 to \$7,000 per unit (Table 4-1). Water fees for clustered rural residential units are nearly twice as high at \$13,500. The fees for non-residential uses are all less than \$2,100 per 1,000 square feet of building space.

**TABLE 4-1
WATER FEE CALCULATIONS**

Residential	Water Demand (gal./day/unit)	Water Demand (gal./day)	Percent of Total	Fair Share Facilities Cost	No. Units	Fee per Unit
Clustered Rural (RR)	1,200	300,000	4%	\$3,371,614	250	\$13,495
Lower Density (LDR)	625	2,756,250	39%	\$30,976,702	4,410	\$7,024
Medium Density (MDR)	600	2,682,000	38%	\$30,142,228	4,470	\$6,743
Higher Density (HDR)	435	622,050	9%	\$6,991,041	1,430	\$4,889
Mixed Use (Residential) (MU)	435	73,950	1%	\$831,103	170	\$4,889
Non-Residential	Water Demand (gal./day/acre)				KSF	Fee per KSF
Community Commercial (CC)	2,000	150,000	2%	\$1,685,807	816	\$2,066
Mixed Use (Commercial) (MU)	2,000	76,000	1%	\$854,142	411	\$2,078
Industrial/Business Park (I/BP)	2,000	336,000	5%	\$3,776,207	1,835	\$2,058
Office (MU)	2,000	46,000	1%	\$517,301	255	\$2,027
Total		7,042,250	100.0%	\$79,145,825		

Note: "gal." = gallons.

Source: Water demand data from the Water Master Plan, Table 3-3, p. 3-6.

The wastewater fees have a similar pattern. The wastewater fees range from approximately \$1,000 for higher-density dwelling units in mixed-use environment to \$5,000 for clustered residential (Table 4-2). For non-residential development, wastewater fees would be between approximately \$1,300 and \$1,700, depending on the land use.

The storm water fees are shown in Table 4-3, and range from approximately \$2,000 higher-density dwelling units in mixed-use environment to \$7,600 for cluster residential down. The non-residential fees are all below \$4,200 per 1,000 square feet.

**TABLE 4-2
WASTEWATER FEE CALCULATIONS**

Residential	Wastewater Demand (gal./day/acre)	Wastewater Generation (gal/day)	Percent of Total	Fair Share Facilities Cost	No. Units	Fee per Unit
Clustered Rural (RR)	100	123,000	4%	\$1,255,688	250	\$5,023
Lower Density (LDR)	1,500	1,323,000	38%	\$13,506,299	4,410	\$3,063
Medium Density (MDR)	2,500	1,120,000	32%	\$11,433,904	4,470	\$2,558
Higher Density (HDR)	4,000	440,000	13%	\$4,491,891	1,430	\$3,141
Mixed Use (Residential) (MU)	1,760	15,840	0.5%	\$161,708	170	\$951
Non-Residential						Fee per KSF
					KSF	
Community Commercial (CC)	1,760	132,000	4%	\$1,335,712	816	\$1,651
Mixed Use (Commercial) (MU)	1,760	66,880	2%	\$676,761	411	\$1,661
Industrial/Business Park (I/BP)	1,500	252,000	7%	\$2,549,995	1,835	\$1,402
Office (MU)	1,760	32,200	1%	\$325,833	255	\$1,289
Total		3,504,920	100%	\$37,781,178		

**TABLE 4-3
STORMWATER FEE CALCULATIONS**

Residential	Stormwater Generation (acre-feet)	Percent of Total	Fair Share Facilities Cost	No. Units	Fee per Unit
Clustered Rural (RR)	11	3%	\$1,907,937	250	\$7,632
Lower Density (LDR)	176	48%	\$30,526,986	4,410	\$6,922
Medium Density (MDR)	72	20%	\$12,488,313	4,470	\$2,794
Higher Density (HDR)	26	7%	\$4,509,668	1,430	\$3,154
Mixed Use (Residential) (MU)	2	1%	\$346,898	170	\$2,041
Non-Residential					Fee per KSF
				KSF	
Community Commercial (CC)	20	5%	\$3,468,976	816	\$4,251
Mixed Use (Commercial) (MU)	10	3%	\$1,734,488	411	\$4,220
Industrial/Business Park (I/BP)	44	12%	\$7,631,747	1,835	\$4,159
Office (MU)	6	2%	\$1,040,693	255	\$4,081
Total	367	100%	\$63,655,704		

PARKS AND RECREATION AND GENERAL GOVERNMENT FACILITIES

Parks and recreation fees are charged to residential development only, on the basis of population per unit factors. The calculations are shown in Table 4-4, and result in fees ranging from approximately \$2,400 per unit for mixed-use units to approximately \$3,900 per unit for lower-density residential development.

**TABLE 4-4
PARKS AND RECREATION FEE CALCULATIONS**

Residential	Population	Percent of Total	Fair Share Facilities Cost	No. Units	Fee per Unit
Clustered Rural (RR)	770	2%	\$849,604	250	\$3,442
Lower Density (LDR)	15,435	46%	\$17,251,208	4,410	\$3,912
Medium Density (MDR)	13,410	40%	\$14,987,930	4,470	\$3,353
Higher Density (HDR)	3,575	11%	\$3,995,664	1,430	\$2,794
Mixed Use (Residential) (MU)	371	1%	\$414,655	170	\$2,439
Total Residential	33,561	100%	\$37,030,860		

The fees for general government facilities and vehicles, as well as the City Hall and preparation of the General Plan are based on service population per dwelling unit and per 1,000 square feet of non-residential space. The fee calculations are shown in Table 4-5 and result in residential fees ranging from approximately \$890 per unit for mixed-use residential to approximately \$1,400 per unit for lower-density residential development. The non-residential fees range from approximately \$270 per thousand square feet for industrial development to approximately \$500 per thousand square feet for office development.

**TABLE 4-5
GENERAL GOVERNMENT FEE CALCULATION**

Residential	No. Units	Population	Service Population	Percent of Total	Fair Share Facilities Cost	Fee Per Unit
Clustered Rural (RR)	250	770	770	2%	\$311,437	\$1,246
Lower Density (LDR)	4,410	15,435	15,435	43%	\$6,242,901	\$1,416
Medium Density (MDR)	4,470	13,410	13,410	37%	\$5,423,861	\$1,213
Higher Density (HDR)	1,430	3,575	3,575	10%	\$1,445,959	\$1,011
Mixed Use (Residential) (MU)	170	371	371	1%	\$150,056	\$883
Non-Residential	KSF	Jobs	Service Population	Percent of Total	Fair Share Facilities Cost	Fee per KSF
Community Commercial (CC)	816	1,484	742	2%	\$300,112	\$368
Mixed Use (Commercial) (MU)	411	747	373	1%	\$150,865	\$367
Industrial/Business Park (I/BP)	1,835	2,447	1,223	3%	\$494,659	\$270
Office (MU)	255	637	319	1%	\$129,024	\$506
Total			36,218	100.0%	\$14,714,948	

TRAFFIC FEE

IMPROVEMENT COSTS / FUNDING SOURCES

Cost Estimates

Methodology / Assumptions. The estimated costs for identified improvements do not include costs related to upgrades to water, drainage, or sewer systems, since this would involve “double counting.”

Estimates / Allocations. Table 3-12 identifies the costs of identified improvements. As shown the total cost for improvements is \$44.4 million dollars, but with reimbursements collected under the existing fee program and the existing traffic fee fund balance, the cost basis for the new fee is \$44.2 million.

Other Funding Sources

The extent to which funds other than Riverbank traffic impact fees will be available to help pay for identified improvements has been accounted for in the project cost estimates. Possible funding sources include:

1. Fees already collected from the existing City traffic fee program;
2. Improvements required without reimbursement of approved projects as California Environmental Quality Act (CEQA) mitigation;
3. Funds collected through the updated Regional Traffic Impact Fee that may be applied to projects in Riverbank;
4. Fronting Developer Responsibilities; and
5. Continuing public funds available to the City through Stanislaus Council of Governments (StanCOG) and/or Caltrans.

The impact fees may need to be updated if additional sources of funding become available in the future.

Mitigation Requirements. The City does not have approved projects that are specifically conditioned to install any of the identified circulation system improvements without reimbursement.

Projects in Regional Traffic Impact Fee. The Regional Traffic Mitigation Fee (RTMF) may include roadway improvement projects in the City. Since the RTMF is in development as of the writing of this document, it is not possible to know what projects may be included. The impact fees may need to be updated if funding become available in the future through the regional fee program.

Santa Fe Street BNSF Undercrossing. In California, railroad grade separations are typically constructed using funding assembled from local funds, railroad contribution, and funding administered by the California Public Utilities Commission (CPUC) Railroad Crossing Safety Account (HRCSA). The CPUC Grade Separation Program is a State funding program to provide grade separation for highway-rail crossings. It is possible that funding through CPUC would be available for the Santa Fe undercrossing, but this Study does not assume any specific level of funding.

Other Regular Public Funding. There are three regular sources of public funds for circulation system improvements that are generally available to Stanislaus County and the City of Riverbank:

federal, State, and local. State and federal funds for transportation improvements are generally channeled through the State Transportation Improvement Program (STIP), which is administered by the California Transportation Commission (CTC). The CTC allocates the share of statewide funding to Stanislaus County, which StanCOG then allocates among individual projects.

The City has identified Congestion Management/Air Quality (CMAQ) funding for one candidate improvement project in the City. Improvements to the Patterson Road / Roselle Avenue intersections and railroad crossing are programmed for the year 2014/2015 and 2015/2016, and the funds provided (\$650,000) would be applied to the overall costs identified for that location. While the City expects to receive CMAQ funding for other intersection improvements, these projects address existing deficiencies that are not covered by the City Traffic Impact Fee.

TRAFFIC IMPACT FEE

As shown in Table 4-6, the costs attributed to the fee program are divided by the total estimated Dwelling Unit Equivalents (DUEs) (Table 3-11 above) to create a baseline fee per DUE. As indicated, the baseline is \$2,789 per DUE.

**TABLE 4-6
TRAFFIC IMPACT FEE PER DUE**

Description	Average Fee Calculation
Total costs allocated to local fee	\$43,409,046
Total anticipated DUEs	15,564
Cost per DUE	\$2,789

While the overall development of the “per-DUE” fee is based on land use types, the application of the fee to specific development projects will need to account for the characteristics of each project. Table 4-7 indicates the average fees for the General Plan land use types.

**TABLE 4-7
TRAFFIC IMPACT FEES BY LAND USE CATEGORY**

Residential	Per Unit
Clustered Rural (RR)	\$3,486
Lower Density (LDR)	\$2,928
Medium Density (MDR)	\$2,580
Higher Density (HDR and MU)	\$2,196
Non-Residential	Per KSF
Commercial (CC, MU) ^a	\$5,470
Regional Commercial (CC) ^b	\$5,695
Office (MU)	\$5,655
Industrial/Business Park (I/BP)	\$3,447

Note: ^a The commercial category includes commercial developed in the Mixed Use land use classification. ^b Regional commercial development is located and designed to draw customers from a broader market area. Regional commercial development is defined as commercial development occurring on a site of at least 30 acres in land area.

5. MITIGATION FEE ACT (AB 1600) FINDINGS

Requirements for the adoption of a new fee, fee accounting, and other requirements of local agencies levying the fees are detailed in the Government Code §66000 et. seq. The following sections address the City of Riverbank's adherence to the *Mitigation Fee Act*.

5.1 PURPOSE OF THE FEE (GOV. CODE SEC 66001(A)(1))

It is a generally accepted California local government financial objective that new development contributes to the cost of new public facilities necessary to serve such development. The City of Riverbank has current development impact fees for the same purpose.

The purpose of the proposed development impact fees are to provide a legally allowable funding source generated by new development for infrastructure to serve that development and the service demands associated with the residential and non-residential development in Riverbank.

5.2 USE OF FEE REVENUES (GOV. CODE SEC 66001(A)(2))

The *Mitigation Fee Act* requires that specific public facilities use of the fee revenues needs to be identified, either through the CIP process, General or Specific Plans, or other official public documentation. Facilities funded by the fee need to be located within the City.

5.3 DETERMINE BENEFIT RELATIONSHIP (GOV. CODE SEC 66001(A)(3))

ADE has reviewed extensive analyses of projected demands and needs of the services provided by land use, as well as the 2005-2025 Riverbank General Plan projections of development growth. Facilities funded by the revised fees will allow the City to provide the services needed and demanded by future developments. In addition, the fees calculated in this report are based solely on costs that can be attributed to new development.

5.4 DETERMINE BURDEN RELATIONSHIP (GOV. CODE SEC 66001(A)(4))

This Study demonstrates the facilities demand generated by new development. Chapter 3 provides a description of the methodology for the projected development growth in Riverbank. Service demands and needs analyzed in Chapter 2 are also factored into the determination of the burden that new development places on the demand for services.

5.5 FEE PROPORTIONALITY (GOV. CODE SEC 66001(B))

Government Code §6601(b) requires that there be a reasonable proportionality between the fee levels and the cost of the new facilities as a result of projected new development. The magnitude of a particular developer's fee would be dependent upon the magnitude of the proposed development. The fees established in this report are designed to have been allocated proportional to the cost of providing services to development projects, taking into account their proposed use, size, and scale.

6. IMPLEMENTATION

INFLATION ADJUSTMENTS

As noted throughout the nexus study, construction cost estimates for the infrastructure and facilities included in the fees have been escalated to 2014 dollars using the Engineering New Record Construction Cost Index (CCI) for the San Francisco area. This source should be used to update the fees annually. In addition, any increase in land acquisition costs can be estimated with the use of a qualified property appraisal. Any fee adjustments above existing levels, either through annual CCI increases or adjustments to land and construction costs, require approval by the governing body – in this case, by Resolution of the Riverbank City Council.

ANNUAL REPORTING REQUIREMENTS

Subsequent to the adoption of the new fee, *The Mitigation Fee Act (§66006)* requires that the governing body produce an annual report that, within 180 days after the last day of each fiscal year, provides the following information:

- 1) a brief description of the fee;
- 2) the amount of the fee;
- 3) the beginning and ending balance of the fund account;
- 4) amount of fees collected and interest earned;
- 5) identification of each public improvement on which the fees were expended and the percentage funded by fee revenues;
- 6) construction timing update and whether or not the fee revenues have fully funded the project; and
- 7) a description of each inter-fund transfer or loan made from the fee account, including the public improvement on which the transferred fund will be expended, or refunds made for unexpended funds generated beyond the cost of the capital project.

In addition, *The Mitigation Fee Act (§66001(d))* requires that for the fifth fiscal year following the first deposits into the fee account after fee adoption, and every five years thereafter, the governing body shall make findings that:

- 1) state the fee purpose;
- 2) demonstrate the reasonable relationship between the fee and the purpose for the fee;
- 3) identify the sources of funding to be used to finance the capital project; and
- 4) designate the approximate dates the funding will be deposited into the specific fee fund.

It is important that the City adhere to the annual and five-year reporting requirements, and that the sources and uses of the fee revenues, in conjunction with other project revenues, be accurately accounted for and described in the annual and five-year reports.

FEE REVENUE AND EXPENDITURE ACCOUNTING

The Mitigation Fee Act also requires a deposit of fees paid to any project to be accounted for separately from other development impact fee funds and projects. There should be no comingling of development fee revenues. Impact fee funds must be programmed within five years of receipt; however, the City can hold funds in a project account for longer than five years, if necessary, if construction has yet to begin. Fee revenues can also be re-programmed, as needed, if infrastructure facilities plans must be revised due to changing conditions. In this instance, however, the fees must stay within the same impact fee account (facility type).

FEE COORDINATION WITH CAPITAL IMPROVEMENT PROJECTS

The necessary infrastructure improvement projects were determined based on the projected demand expected from current development projections through the General Plan horizon of 2025. The CIP budget process is a mechanism for the City to use to maintain the accurate accounting of the construction projects and fee revenues as required under *The Mitigation Fee Act*.

FEE EXEMPTIONS

Fee exemption policies various across different California jurisdictions. Government Code §66011 specifically exempts reconstruction of residential, commercial, or industrial development destroyed as a result of a natural disaster declared by the Governor. The portion of a disaster redevelopment that existed prior to the disaster is exempt from a development impact fee. New square footage above what existed prior to the natural disaster is subject to the fee.

In addition, the Government Code also generally allows local jurisdictions to reduce or waive fees for affordable or senior housing projects. Unlike disaster reconstruction, affordable or senior housing exemptions under California law are a policy matters for consideration by local jurisdictions. Other exemptions are also policy matters for consideration by local jurisdictions. Additional exemptions allowed beyond those prescribed by law generally reflect consideration of the public good provided by the subject project type.