

The Economics of Land Use



Final Report

Major Projects Financing Plan Fee Program Nexus Study Update

Prepared for:

City of Woodland

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1. INTRODUCTION AND EXECUTIVE SUMMARY

Background

The Major Projects Financing Plan (MPFP) Fee Program was established in the 1990s to fund backbone infrastructure and other public facilities required to serve development in the City of Woodland (City). Since the MPFP Fee Program was established, the City has adopted several periodic updates to the MPFP Fee Program to reflect changes in land uses, facilities requirements and costs, funding sources, and the fee calculation methodology. The last MPFP Fee Nexus Study Update and comprehensive MPFP Fee Program update were adopted by the City in December 2008. Since that time, annual MPFP Fee Program updates have occurred to adjust the MPFP Fees to reflect cost inflation.

The MPFP Fee Program development impact fees are collected at building permit issuance from developers of residential and commercial property. The City administers the MPFP Fee Program and collects the MPFP Fees.

Purpose

The purpose of this 2019 MPFP Fee Program Nexus Study Update (2019 Nexus Study Update) is to perform a comprehensive update to the MPFP Fee Program to account for updated development projections, development land use categories, density assumptions, facilities requirements, infrastructure costs, cost allocation factors, and the fee estimation methodology, and to establish the legally required findings to implement the updated fees. Each of the changes is summarized below and detailed in later chapters:

- **Development:** The City provided updated current development estimates as well as 2035 and buildout development projections. The 2035 and buildout projected development were based on the City's current 2035 General Plan, which was adopted in May 2017, as well as input from the City on the level of development that realistically would occur for various types of development.
- **Land Use Categories:** The City modified the residential land use categories and added several categories based on dwelling unit sizes and geographical locations.
- **Density Assumptions:** The City reviewed and modified the density assumptions used in the analysis. For example, the multifamily persons per household assumption was updated. In addition, density assumptions were established for the new land use categories.
- **Facilities Requirements and Costs:** The backbone infrastructure and other public facilities included in the MPFP Fee Program, as well as the costs of these facilities, were recently updated by the City. A detailed list of the MPFP Fee-funded facilities and estimated costs is included in **Chapter 3**.

- **Cost Allocation Factors:** The City reviewed and modified cost allocation factors by land use used in the fee estimates. In addition, new factors were determined for the new land use categories.
- **Fee Estimation Methodology:** Past MPFP Nexus Study Updates employed a cash flow methodology as the basis of allocating the infrastructure and other public facility costs to the various land uses and establishing fees. This report employs the more standard methodology of directly allocating remaining CIP costs that can be proportionately attributed to remaining City development.

The MPFP Fee Program is divided into the components listed below.

Updated in Report

- Roadways
- Wastewater Facilities
- General City
- Fire
- Police
- Library
- Parks
- Fee Administration
- Water (being eliminated from MPFP Fee Program and updated to a new Water Capacity Fee under a separate action)

Excluded from Report

- Storm Drainage

As shown above and detailed further below, the Storm Drainage component is not updated in this report, and the Water component is being eliminated from the MPFP Fee Program. Additionally, the Parks costs are not updated in this report, but the Parks Fees are updated to reflect cost allocation factor changes.

Surface Water and Water Fees

The City is separately preparing a study to implement a Water Capacity Fee that would fund improvements currently funded by the City Surface Water Fee and the MPFP Water Fee. Consequently, the current MPFP Water Fee component is being eliminated from the MPFP Fee Program. The new Water Capacity Fee will be considered for adoption under a separate City Council action.

Storm Drainage Fee

The Storm Drainage Fee is excluded from this report because an updated Storm Drainage Master Plan has not been completed. A new Storm Drainage Master Plan is needed before the storm drainage infrastructure needs can be re-evaluated and identified.

Parks Fee

The Parks costs are not updated in this report because the current Parks Master Plan has not yet been updated based on the City's recently completed 2035 General Plan. A new Parks Master Plan needs to be completed before the Parks improvements and costs to include in the MPFP Fee Program can be determined. This report keeps the single-family Parks Fee at the current level and recalculates the Parks Fees for all other residential land uses using new cost allocation factors and the cost allocation methodology detailed in **Chapter 4**. This cost allocation results in lower Parks fees for all land uses other than single-family and therefore a possible reduction in fee revenue. The City acknowledges that it will need to identify backfill funding for any resulting fee revenue deficits since the lower fees are not consistent with the most recent cost allocation performed in 2008 to establish the Parks Fees.

MPFP Update

This report details the updated land use categories, development projections, costs, and cost allocations that result in the proposed changes to the MPFP Fees, as well as the Assembly Bill (AB) 1600 nexus findings needed to update the MPFP Fees. The proposed fees and nexus finding requirements are summarized below.

Proposed Fees

Table 1 shows the proposed MPFP Fees per dwelling unit or nonresidential building square foot for each land use category. **Table 2**, **Table 3**, and **Table 4** are fee comparisons between the proposed and current MPFP Fees for single-family, retail, and office land uses, respectively.

AB 1600 Nexus Requirements

To update the MPFP Fees, the City is required to demonstrate the nexus between the projected new development in the City and the necessary backbone infrastructure and public facilities to be funded by the MPFP Fee Program. This nexus requirement was established under California AB 1600 legislation, as codified by California Government Section 66000 et seq. This law sets forth the procedural requirements for establishing and collecting development impact fees. These procedures require that "a reasonable relationship or nexus must exist between a governmental exaction and the purpose of the condition."¹

¹ William Abbott, Marian E. Moe, and Marilee Hanson, *Public Needs & Private Dollars*, page 109.

Table 1
2019 MPFP Nexus Study Update
MPFP Fees

Fee Category [1]	Pct.	Residential									
		Single-Family	Infill Single-Family	Multifamily	Small Multifamily	Infill Multifamily	Small Infill Multifamily	Corridor Multifamily	Small Corridor Multifamily	Downtown Multifamily	Small Downtown Multifamily
Fees Excluding Parks and Recreation		<i>Fee per Dwelling Unit</i>									
Roads		\$ 8,411	\$ 5,607	\$ 3,447	\$ 3,447	\$ 2,298	\$ 2,298	\$ 2,068	\$ 2,068	\$ 1,838	\$ 1,838
Wastewater		\$ 6,383	\$ 6,383	\$ 4,787	\$ 3,192	\$ 4,575	\$ 3,192	\$ 4,575	\$ 3,192	\$ 4,575	\$ 3,192
General City		\$ 853	\$ 853	\$ 640	\$ 427	\$ 612	\$ 427	\$ 612	\$ 427	\$ 612	\$ 427
Fire		\$ 2,889	\$ 2,889	\$ 1,733	\$ 1,155	\$ 1,685	\$ 1,155	\$ 1,685	\$ 1,155	\$ 1,685	\$ 1,155
Police		\$ 697	\$ 697	\$ 523	\$ 349	\$ 500	\$ 349	\$ 500	\$ 349	\$ 500	\$ 349
Library		\$ 533	\$ 533	\$ 399	\$ 266	\$ 382	\$ 266	\$ 382	\$ 266	\$ 382	\$ 266
Water [2]		\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Subtotal		\$ 19,766	\$ 16,962	\$ 11,529	\$ 8,836	\$ 10,052	\$ 7,687	\$ 9,822	\$ 7,457	\$ 9,592	\$ 7,227
Spring Lake											
Fees Excluding Parks and Recreation		\$ 19,766	NA	\$ 11,529	\$ 8,836	NA	NA	NA	NA	NA	NA
Parks and Recreation		\$ 4,330	NA	\$ 3,248	\$ 2,165	NA	NA	NA	NA	NA	NA
Spring Lake Subtotal		\$ 24,096	NA	\$ 14,777	\$ 11,001	NA	NA	NA	NA	NA	NA
Fee Administration	0.75%	\$ 181	NA	\$ 111	\$ 83	NA	NA	NA	NA	NA	NA
Spring Lake Total		\$ 24,277	NA	\$ 14,888	\$ 11,084	NA	NA NA NA NA NA				
Other Development											
Fees Excluding Parks and Recreation		\$ 19,766	\$ 16,962	\$ 11,529	\$ 8,836	\$ 10,052	\$ 7,687	\$ 9,822	\$ 7,457	\$ 9,592	\$ 7,227
Parks and Recreation		\$ 7,872	\$ 7,872	\$ 5,904	\$ 3,936	\$ 5,642	\$ 3,936	\$ 5,642	\$ 3,936	\$ 5,642	\$ 3,936
Other Subtotal		\$ 27,638	\$ 24,834	\$ 17,433	\$ 12,772	\$ 15,694	\$ 11,623	\$ 15,464	\$ 11,393	\$ 15,234	\$ 11,163
Fee Administration	0.75%	\$ 207	\$ 186	\$ 131	\$ 96	\$ 118	\$ 87	\$ 116	\$ 85	\$ 114	\$ 84
Other Total		\$ 27,845	\$ 25,020	\$ 17,564	\$ 12,868	\$ 15,812	\$ 11,710	\$ 15,580	\$ 11,478	\$ 15,348	\$ 11,247

[1] Excludes Surface Water & Drainage fees.

[2] The water fee is being removed from the MPFP Fee Program and updated to a water capacity fee in combination with the surface water fee.

Table 1
2019 MPFP Nexus Study Update
MPFP Fees

Fee Category [1]	Pct.	Nonresidential			
		Retail	Service	Office	Industrial
Fees Excluding Parks and Recreation		<i>Fee per 1,000 Building Square Feet</i>			
Roads		\$ 10,445	\$ 7,429	\$ 5,577	\$ 4,297
Wastewater		\$ 2,605	\$ 2,605	\$ 1,563	\$ 2,931
General City		\$ 569	\$ 569	\$ 711	\$ 237
Fire		\$ 1,685	\$ 1,685	\$ 1,926	\$ 1,123
Police		\$ 465	\$ 465	\$ 581	\$ 194
Library		\$ 0	\$ 0	\$ 0	\$ 0
Water [2]		\$ 0	\$ 0	\$ 0	\$ 0
Subtotal		\$ 15,769	\$ 12,753	\$ 10,358	\$ 8,782
Spring Lake					
Fees Excluding Parks and Recreation		\$ 15,769	\$ 12,753	\$ 10,358	\$ 8,782
Parks and Recreation		\$ 0	\$ 0	\$ 0	\$ 0
Spring Lake Subtotal		\$ 15,769	\$ 12,753	\$ 10,358	\$ 8,782
Fee Administration	0.75%	\$ 118	\$ 96	\$ 78	\$ 66
Spring Lake Total		\$ 15,887	\$ 12,849	\$ 10,436	\$ 8,848
Other Development					
Fees Excluding Parks and Recreation		\$ 15,769	\$ 12,753	\$ 10,358	\$ 8,782
Parks and Recreation		\$ 0	\$ 0	\$ 0	\$ 0
Other Subtotal		\$ 15,769	\$ 12,753	\$ 10,358	\$ 8,782
Fee Administration	0.75%	\$ 118	\$ 96	\$ 78	\$ 66
Other Total		\$ 15,887	\$ 12,849	\$ 10,436	\$ 8,848

fee sum

[1] Excludes Surface Water & Drainage fees.

[2] The water fee is being removed from the MPFP Fee Program and updated to a water capacity fee in combination with the surface water fee.

Table 2
2019 MPFP Nexus Study Update
MPFP Single-Family Fee Comparison

Fee Category [1]	Pct.	Single-Family Fee (per dwelling unit)			Pct. Difference
		Current effective 1/1/19	Proposed	Difference	
Fees Excluding Parks and Recreation					
Roads		\$ 6,319	\$ 8,411	\$ 2,092	33%
Wastewater		\$ 6,856	\$ 6,383	(\$ 473)	(7%)
General City		\$ 948	\$ 853	(\$ 95)	(10%)
Fire		\$ 1,461	\$ 2,889	\$ 1,428	98%
Police		\$ 1,250	\$ 697	(\$ 553)	(44%)
Library		\$ 58	\$ 533	\$ 475	819%
Water [2]		\$ 629	\$ 0	(\$ 629)	(100%)
Subtotal		\$ 17,521	\$ 19,766	\$ 2,245	13%
Spring Lake					
Fees Excluding Parks and Recreation		\$ 17,521	\$ 19,766	\$ 2,245	13%
Parks and Recreation		\$ 4,330	\$ 4,330	\$ 0	0%
Spring Lake Subtotal		\$ 21,851	\$ 24,096	\$ 2,245	10%
Fee Administration	0.75%	\$ 164	\$ 181	\$ 17	10%
Spring Lake Total		\$ 22,015	\$ 24,277	\$ 2,262	10%
Other Development					
Fees Excluding Parks and Recreation		\$ 17,521	\$ 19,766	\$ 2,245	13%
Parks and Recreation		\$ 7,872	\$ 7,872	\$ 0	0%
Other Development Subtotal		\$ 25,393	\$ 27,638	\$ 2,245	9%
Fee Administration	0.75%	\$ 190	\$ 207	\$ 17	9%
Other Development Total		\$ 25,583	\$ 27,845	\$ 2,262	9%

fee comp

[1] Excludes Surface Water and Drainage fees.

[2] The water fee is being removed from the MPFP Fee Program and updated to a water capacity fee in combination with the surface water fee.

Table 3
2019 MPFP Nexus Study Update
MPFP Retail Fee Comparison

Fee Category [1] [2]	Pct.	Retail Fee (per building square foot)			Pct. Difference
		Current effective 1/1/19	Proposed	Difference	
MPFP Fees					
Roads		\$ 7.73	\$ 10.45	\$ 2.72	35%
Wastewater		\$ 3.38	\$ 2.61	(\$ 0.78)	(23%)
General City		\$ 0.80	\$ 0.57	(\$ 0.23)	(29%)
Fire		\$ 0.98	\$ 1.69	\$ 0.71	72%
Police		\$ 1.03	\$ 0.47	(\$ 0.57)	(55%)
Library [3]		\$ 0.01	\$ 0.00	(\$ 0.01)	(100%)
Water [4]		\$ 0.16	\$ 0.00	(\$ 0.16)	(100%)
Subtotal		\$ 14.09	\$ 15.77	\$ 1.68	12%
Fee Administration	0.75%	\$0.11	\$0.12	\$0.01	12%
Total		\$ 14.20	\$ 15.89	\$ 1.69	12%

fee comp r

[1] Excludes Surface Water and Drainage fees.

[2] Nonresidential development not charged Parks fees.

[3] Nonresidential development not charged Library fees in proposed fee schedule.

[4] The water fee is being removed from the MPFP Fee Program and updated to a water capacity fee in combination with the surface water fee.

Table 4
2019 MPFP Nexus Study Update
MPFP Office Fee Comparison

Fee Category [1] [2]	Pct.	Office Fee (per building square foot)			Pct. Difference
		Current effective 1/1/19	Proposed	Difference	
MPFP Fees					
Roads		\$ 5.44	\$ 5.58	\$ 0.14	3%
Wastewater		\$ 2.81	\$ 1.56	(\$ 1.25)	(44%)
General City		\$ 0.91	\$ 0.71	(\$ 0.20)	(22%)
Fire		\$ 1.04	\$ 1.93	\$ 0.89	85%
Police		\$ 1.19	\$ 0.58	(\$ 0.61)	(51%)
Library [3]		\$ 0.01	\$ 0.00	(\$ 0.01)	(100%)
Water [4]		\$ 0.10	\$ 0.00	(\$ 0.10)	(100%)
Subtotal		\$ 11.50	\$ 10.36	(\$ 1.14)	(10%)
Fee Administration	0.75%	\$0.09	\$0.08	(\$0.01)	(10%)
Total		\$ 11.59	\$ 10.44	(\$ 1.15)	(10%)

fee comp o

[1] Excludes Surface Water and Drainage fees.

[2] Nonresidential development not charged Parks fees.

[3] Nonresidential development not charged Library fees in proposed fee schedule.

[4] The water fee is being removed from the MPFP Fee Program and updated to a water capacity fee in combination with the surface water fee.

Specifically, each local agency imposing a fee must:

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

Report Layout

This report is divided into six chapters and one appendix:

- **Chapter 1** includes this introduction and Executive Summary.
- **Chapter 2** details the land use assumptions and projections used in the MPFP Fee Program.
- **Chapter 3** details the MPFP Fee Program costs.
- **Chapter 4** details the cost allocation and fee calculations for each improvement type.
- **Chapter 5** presents the required AB 1600 nexus findings for each MPFP Fee Program component.
- **Chapter 6** describes how the MPFP Fees will be implemented and updated.
- **Appendix A** details the remaining debt service for wastewater and fire bonds.

2. LAND USES AND DEVELOPMENT PROJECTIONS

Introduction

This chapter summarizes the MPFP Fee Program land uses and development projections in the City. The current City General Plan (adopted May 16, 2017) considers development through a 2035 horizon. **Map 1** from the current General Plan shows the planned 2035 land uses.

Although this report calculates MPFP Fees based on development and infrastructure needs through 2035, development projections are estimated for 2035 and full City buildout (buildout). As detailed in later chapters, the buildout estimates are needed to determine the percentage of facility costs to include for improvements that are needed not only for development through 2035 but also for development through buildout.

The 2035 City General Plan includes development projections for 2035 and buildout. The development projections in this report are based on the General Plan projections and also include modifications made by the City.

The City modifications reflect reasonable amounts of growth for both timeframes, as well as additional information about the level of probable development, resulting in lower development projections than those in the General Plan. The City staff based their modifications on an analysis of past growth trends for the different development types and expectations about future market conditions. In addition, the City reduced or eliminated development projections for areas of the City where development would be unachievable without a flood solution. When a flood solution is more developed, and the associated infrastructure is known, then excluded land uses and the flood prevention projects could be added to the MPFP Fee Program. Finally, the City also excluded development associated with the reuse of existing development sites since these sites already paid MPFP Fees and would be exempt from future MPFP Fees.

In addition, after examining projected types of residential development in the City and the differing demands placed on various types of infrastructure by the different development types, the City decided to make several changes to the residential land use categories in the MPFP Fee Program. The nonresidential land uses remain unchanged (Retail, Service, Office, and Industrial).

Map 1

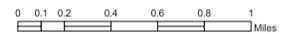


General Plan Land Use 2035

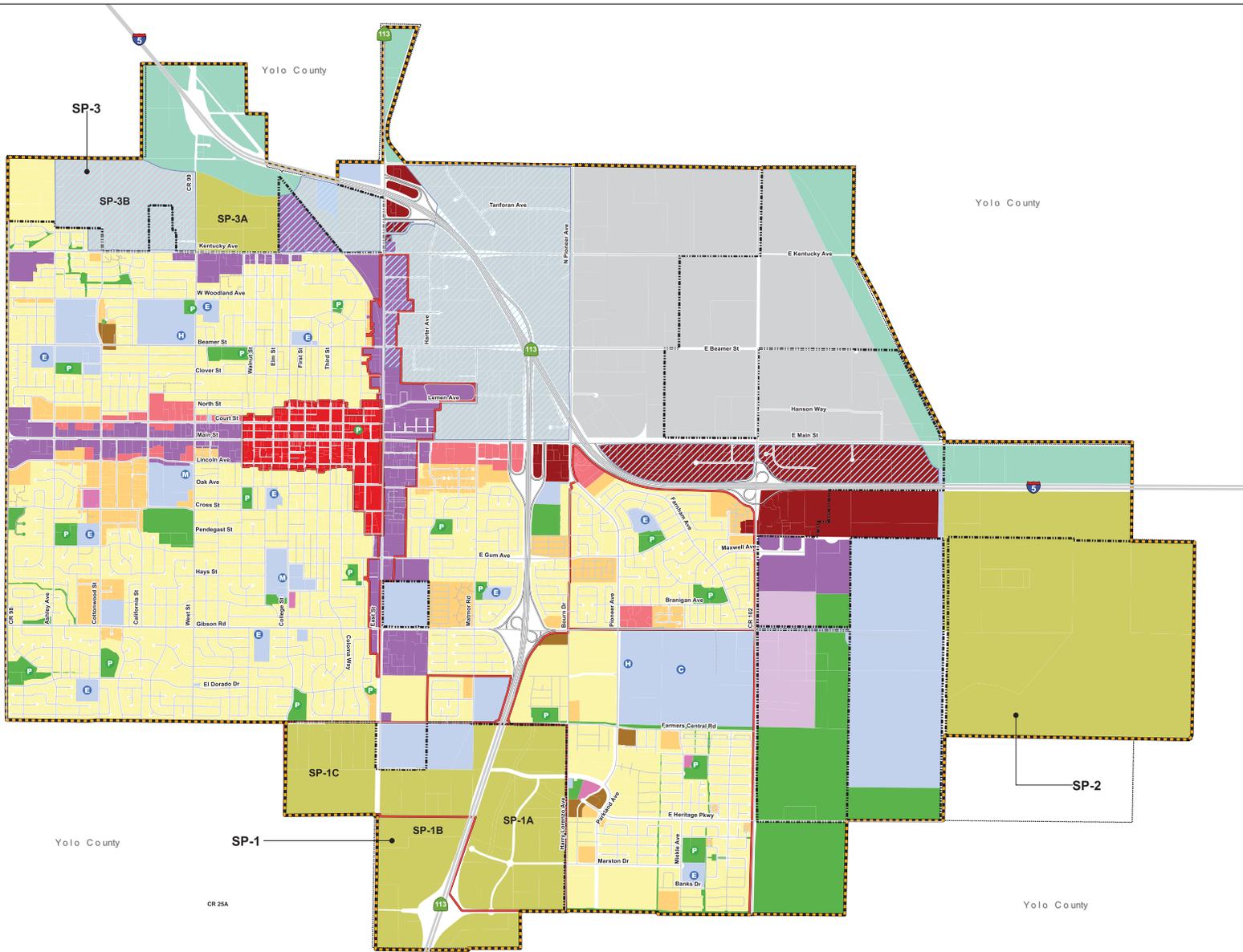
Land Use Designations

- Light Industrial Overlay (IF)
- Low Density Residential (LD)
- Medium Density Residential (MD)
- High Density Residential (HD)
- Downtown Mixed Use (DX)
- Corridor Mixed Use (CX)
- Neighborhood Commercial (NC)
- Community Commercial (CC)
- Regional Commercial (RC)
- Business Park (BP)
- Industrial (IN)
- Specific Plan (SP)
- Public/Quasi Public (PQ)
- Open Space (OS)
- Flood Study Area (FS)
- Urban Reserve (UR)

- City Boundary
 - Urban Limit Line
 - General Plan Boundary
 - Specific Plan Boundary
 - Downtown Specific Plan
- Schools**
 - Elementary School
 - Middle School
 - High School
 - College
 - Park



City of Woodland, May 2018
 Information Technology - GIS
 Source: Woodland Planning Dept



The proposed residential land uses include some changes to the single-family uses, as well as several new multifamily categories. The current and proposed MPFP Fee Program residential land uses are shown below:

Current

Single-Family
Downtown Single-Family
High Density Single-Family
Age Restricted Single-Family
Multifamily
Age Restricted Multifamily

Proposed

Single-Family
Infill Single-Family
Multifamily
Small Multifamily
Infill Multifamily
Small Infill Multifamily
Corridor Multifamily
Small Corridor Multifamily
Downtown Multifamily
Small Downtown Multifamily

The proposed land uses include the addition of land uses with geographical and size distinctions. The Infill, Corridor, and Downtown designations denote geographical areas that will be defined by the City. The Small designation denotes dwelling unit size. Small units are defined as units with up to 700 square feet of livable area, whether attached or unattached. As detailed in the list of land uses above, for each multifamily land use (Multifamily, Infill Multifamily, Corridor Multifamily, and Downtown Multifamily), a corresponding Small unit land use has been established.

The land uses designated as Small units or units with specific geographical designations have different density, size, and trip length assumptions, generally resulting in lower fees, as detailed in **Chapter 4**. Also, the Small units generally have lower fees than the corresponding land uses for more standard size units.

Table 5 shows the density assumptions for all land uses. These assumptions are dwelling units per acre, persons per household, and square feet per dwelling unit for residential land uses and floor to area ratio (FAR) and square feet per employee for nonresidential land uses.

Development Projections

Table 6 summarizes the projected growth in residential dwelling units and commercial building square feet in the City, both through 2035 and through buildout. **Table 6** also includes the corresponding projected growth in population and employees for the same time periods.

Table 7 shows the existing and projected growth in residential dwelling units in the City by City area. **Table 8** shows the existing and projected growth in commercial building square feet in the City by City area. It is important to show the Spring Lake Specific Plan (SLSP) development projections separately from the remainder of the City, as the SLSP area pays a different MPFP Park fee. **Table 9** provides backup for the existing and projected development estimates in **Tables 7** and **8**.

Table 5
2019 MPFP Nexus Study Update
Land Use, Population, and Employee Assumptions

Land Use Category	Units per Acre/FAR	Sq. Ft. per Employee	Persons per Household/ Employees per 1,000 bldg. sq. ft.	Square Feet per Dwelling Unit
<i>Formula</i>	<i>A</i>		<i>B</i>	
Residential	<u>units pre acre</u>		<u>persons per household</u>	
Single-Family	6		3.00	2,000
Infill Single-Family	6		3.00	2,000
Multifamily	20		2.25	900
Small Multifamily	20		1.50	600
Infill Multifamily	20		2.15	900
Small Infill Multifamily	20		1.50	600
Corridor Multifamily	20		2.15	900
Small Corridor Multifamily	20		1.50	600
Downtown Multifamily	20		2.15	900
Small Downtown Multifamily	20		1.50	600
<i>Formula</i>	<i>A</i>	<i>B</i>	<i>1,000/B</i>	
Nonresidential	<u>FAR</u>		<u>emp per 1,000 bldg. sq. ft.</u>	
Retail	0.30	500	2.00	
Service	0.30	500	2.00	
Office	0.50	400	2.50	
Industrial	0.40	1,200	0.83	

assump

Source: City of Woodland and EPS

Table 6
2019 MPFP Nexus Study Update
Remaining Development

Land Use	Estimated Projected Development				Estimated New Population/Employees				
	Through 2035		Through Buildout		PPH/ Sq. Ft./Emp.	Through 2035		Through Buildout	
	Dwelling Units	Building Square Feet	Dwelling Units	Building Square Feet		Population	Employees	Population	Employees
Residential									
Single-Family									
Single-Family	2,754		3,876		3.00	8,262		11,628	
Infill Single-Family	273		326		3.00	819		978	
Subtotal Single-Family	3,027		4,202			9,081		12,606	
Multifamily									
Multifamily	990		1,372		2.25	2,228		3,087	
Small Multifamily	174		242		1.50	261		363	
Infill Multifamily	29		206		2.15	62		443	
Small Infill Multifamily	0		168		1.50	0		252	
Corridor Multifamily	82		623		2.15	176		1,339	
Small Corridor Multifamily	75		510		1.50	113		765	
Downtown Multifamily	200		417		2.15	430		897	
Small Downtown Multifamily	175		345		1.50	263		518	
Subtotal Multifamily	1,725		3,883			3,532		7,663	
Total Dwelling Units	4,752		8,085			12,613		20,269	
Nonresidential									
Retail		271,189		497,180	500		542		994
Service		293,998		538,996	500		588		1,078
Office		387,679		710,745	400		969		1,777
Industrial		1,704,221		3,124,406	1,200		1,420		2,604
Total Building Square Feet		2,657,087		4,871,327			3,520		6,453

rem dev

Source: City of Woodland

Table 7
2019 MPFP Nexus Study Update
Estimated Existing and Remaining Dwelling Units by Area

Item	Dwelling Units			Total through Buildout
	Existing	Growth through 2035	Growth through Buildout	
Spring Lake Specific Plan				
Single-Family	1,790	1,364	1,364	3,154
Multifamily	300	616	689	989
Total	2,090	1,980	2,053	4,143
SP-1				
Single-Family	0	1,390	2,512	2,512
Multifamily	0	548	925	925
Total	0	1,938	3,437	3,437
Other				
Single-Family	13,241	0	0	13,241
Infill Single Family	0	273	326	326
Multifamily	5,370	0	0	5,370
Infill Multifamily	0	29	374	374
Corridor Multifamily	0	157	1,133	1,133
Downtown Multifamily	0	375	762	762
Total	18,611	834	2,595	21,206
TOTAL	20,701	4,752	8,085	28,786

res by area

Source: City of Woodland

Table 8
2019 MPFP Nexus Study Update
Estimated Existing and Remaining Building Square Feet by Area

Item	Building Square Feet			Total through Buildout
	Existing [1]	Growth through 2035 [2]	Growth through Buildout [3]	
Spring Lake				
Retail	0	8,882	26,646	26,646
Service	0	4,783	14,348	14,348
Total	0	13,665	40,994	40,994
Other				
Retail	2,571,745	262,307	470,534	3,042,279
Service	612,675	289,215	524,648	1,137,323
Office	1,592,617	387,679	710,745	2,303,362
Industrial	12,907,184	1,704,221	3,124,406	16,031,590
Total	17,684,221	2,643,422	4,830,333	22,514,554
TOTAL	17,684,221	2,657,087	4,871,327	22,555,548

nonres by area

Source: City of Woodland

[1] See Table 9.

[2] Total Spring Lake bldg. sq. ft. = 45,549*30% development; split between retail and service 65%/35%.
 Other sq. ft. calculated as remaining square feet from Table 6 less Spring Lake square feet.

[3] Total Spring Lake bldg. sq. ft. = 45,549*90% development; split between retail and service 65%/35%.
 Other sq. ft. calculated as remaining square feet from Table 6 less Spring Lake square feet.

Table 9
2019 MPFP Nexus Study Update
Summary of Existing and Remaining Development

Item	Existing as of 7/1/07	1/1/08 to 6/5/18	Existing as of 6/5/18 [1]	Growth			Total	
				2018-2035	2035+	Total	2035	Buildout
Residential Dwelling Units								
Single-Family								
Spring Lake	572	1,218	1,790	1,364	0	1,364	3,154	3,154
Other	NA	NA	13,241	1,663	1,175	2,838	14,904	16,079
Subtotal Single-Family			15,031	3,027	1,175	4,202	18,058	19,233
Multifamily								
Spring Lake	156	144	300	616	73	689	916	989
Other	NA	NA	5,370	1,109	2,085	3,194	6,479	8,564
Subtotal Multifamily			5,670	1,725	2,158	3,883	7,395	9,553
Total Units			20,701	4,752	3,333	8,085	25,453	28,786
<i>Percentage of 2035 Dwelling Units</i>			81%	19%				
<i>Percentage of Buildout Dwelling Units</i>			72%			28%		
Nonresidential Building Square Feet [2]								
Retail	2,487,375	84,370	2,571,745	271,189	225,991	497,180	2,842,934	3,068,925
Service	521,209	91,466	612,675	293,998	244,998	538,996	906,673	1,151,671
Office	1,517,235	75,382	1,592,617	387,679	323,066	710,745	1,980,296	2,303,362
Industrial	12,354,890	552,294	12,907,184	1,704,221	1,420,185	3,124,406	14,611,405	16,031,590
	16,880,709	803,512	17,684,221	2,657,087	2,214,240	4,871,327	20,341,308	22,555,548
Percentage of 2035 Building Square Feet			87%	13%			100%	
Percentage of Buildout Building Square Feet			78%			22%		100%

dev

Source: City of Woodland

[1] Existing Single-Family and Multifamily Units:

Total from CA Department of Finance as of 1/1/18.
Spring Lake based on City building permit data.
Other estimated as Total less Spring Lake.

[2] Nonresidential building square feet from 2011-2018 building permits; 2008-2010 data missing.

3. *BACKBONE INFRASTRUCTURE AND PUBLIC FACILITY COSTS*

Introduction

The MPFP Fee Program funds the cost of backbone infrastructure and public facilities required to serve new development in the City through 2035. These costs include estimated construction costs and outstanding debt service for improvement construction. In addition, the costs are adjusted to account for existing fund balances. Each MPFP Fee component is accounted for as a separate fund. For each component with a negative fund balance because of borrowing from other sources, the MPFP Fee-funded costs are increased by the amount of the fund balance. For each component with a positive fund balance, the MPFP Fee-funded costs are decreased by the fund balance.

Table 10 summarizes the MPFP Fee-Funded costs, including the improvement costs, debt service, and fund balance adjustments. In total, the MPFP Fees will fund approximately \$104 million in costs.

Note that, in addition to the improvement types shown in **Table 10**, the MPFP Fee Program also includes Water, Storm Drainage, and Parks components. As detailed in **Chapter 1**, Water fees are being eliminated from the MPFP Fee Program, Storm Drainage fees are not being updated in this report, and Parks fees are only being updated to account for changes in land uses and in DUE factors. As detailed in **Chapter 4**, the single-family Parks fees will remain at the current fee levels, and the multifamily fees will be updated based on relative DUE factors. Each improvement type included in **Table 10** is briefly described below:

- **Road Improvements:** expansion of existing roadway facilities, construction of new roadway facilities, and the preparation of related studies. Specific construction and expansion types include new streets, street widening, interchange improvements, traffic signal construction and modifications, intersection improvements, street calming facilities, and bike and pedestrian improvements.
- **Wastewater Facilities:** expansion and improvement of the existing wastewater treatment plant, as well as the preparation of related studies.
- **General City Facilities:** expansion of City buildings, including City Hall, the Civic Center, and the Municipal Services Center, as well as technology upgrades and the preparation of related planning studies.
- **Fire Facilities:** construction of two new fire stations in the southeast and northeast areas of the City that are needed to accommodate anticipated new development.

Table 10
2019 MPFP Nexus Study Update
MPFP-Funded Backbone Infrastructure and Public Facilities Cost Summary (2019 \$) [1]

Facility Type	MPFP Fee-Funded Costs through 2035			Net Cost
	Improvement Cost [2]	Plus Debt Service [3]	Fund Balance Adjustment [3]	
Roads	\$ 44,028,602	\$ 0	\$ 259,655	\$ 44,288,257
Wastewater	\$ 10,434,060	\$ 14,710,654	\$ 8,765,165	\$ 33,909,878
General City	\$ 5,695,515	\$ 0	(\$ 1,106,643)	\$ 4,588,872
Fire	\$ 13,685,699	\$ 954,597	\$ 447,055	\$ 15,087,351
Police	\$ 1,950,534	\$ 0	\$ 1,799,721	\$ 3,750,256
Library	\$ 2,690,835	\$ 0	(\$ 451,734)	\$ 2,239,101
Total	\$ 78,485,245	\$ 15,665,251	\$ 9,713,219	\$ 103,863,715

mpfp cost

Source: City of Woodland and EPS

[1] Excludes Parks. Parks single family fees remain unchanged and other Parks fees calculated using relative DUE factors. Updated remaining Parks costs not estimated.

[2] See Table 11.

[3] See Table 14.

- **Police Facilities:** construction of a new communications facility and a new animal shelter, the acquisition of police vehicles and equipment, and development of a new communications and records management system.
- **Library Facilities:** expansion of the main library and of the library materials collection.

The improvement, debt service, and fund balance adjustment cost estimates shown in **Table 10** are detailed further in the remainder of this chapter.

Improvement Costs

In 2018, the City completed an updated MPFP Capital Improvement Plan (CIP) that serves as the basis of the MPFP Fee Program facilities requirements and improvement costs. **Table 11** details the MPFP costs and calculates the amounts attributable to new development through 2035 and included in the MPFP Fee Program. The steps employed in **Table 11** to calculate the MPFP Fee-funded costs are shown below.

Total Estimated Costs through 2035

1. For each improvement, the total cost remaining to fund is shown in 2018 dollars and 2019 dollars. The 2018 amounts were updated to 2019 amounts using the same 2.9 percentage increase as was used for the annual MPFP Fee increase in 2019. This increase was based on the annual change in the Engineering News-Record Construction Cost Index (CCI).
2. Each project is identified as having a Project Spread of either 2035 or Buildout. This Project Spread is used to determine the percent of total costs funded through 2035. For the projects with a 2035 Project Spread, it is assumed that 100 percent of the costs will be funded by 2035. For the projects with a Buildout Project Spread, it is assumed that only a percentage of the costs will be incurred through 2035. The percentage is based on the estimated percentage of buildout development, as measured by dwelling unit equivalents (DUEs), that occurs by 2035. The DUEs are detailed in the next chapter.
3. For each project, the 2019 cost from step 1 is multiplied by the percentage from step 2, resulting in the total improvement cost through 2035.

Costs Allocated to New Development

1. For each project, the City estimated the percentage of the total cost through 2035 that is attributable to new development. For most improvements, this percentage is based on the City's knowledge of the improvement and judgement as to how much should be allocated to new development. For General City, Police, and Library improvements that have less than a 100 percent allocation to new development, however, the percentage is equal to the percentage of estimated projected new DUEs as compared to total DUEs. **Table 12** details the calculation of the percentages, and **Table 13** provides backup for the estimated existing DUEs for each facility type. The projected new DUE estimates are detailed in the next chapter. Note that these percentages could be subject to updates in future MPFP Fee updates depending upon the scope of the improvements at the time.

Table 11
2019 MPFP Nexus Study Update
Estimated MPFP-Funded Facility Costs

Project No.	Project Description	Project Spread	Total Estimated Costs through 2035				Costs Allocated to New Dev.			Notes
			Total Left to Fund 2018 \$	Total Left to Fund 2019 \$	Pct. through 2035	Total Cost through 2035	Pct..	Amount	MPFP Fee Funded	
<i>Percentage Increase [1] Formula</i>			A	2.9% B=A*2.9%	C	D=B*C	E	D*E		
General City Facilities										
City-1	City Hall Expansion/Civic Center Expansion	Buildout	\$ 15,000,000	\$ 15,435,000	60%	\$ 9,261,000	14%	\$ 1,296,540	\$ 1,296,540	
City-5	Municipal Service Center Expansion	Buildout	\$ 1,500,000	\$ 1,543,500	60%	\$ 926,100	100%	\$ 926,100	\$ 926,100	
City-6	Update Major Projects Financing Plan	2035	\$ 525,000	\$ 540,225	100%	\$ 540,225	100%	\$ 540,225	\$ 540,225	
City-100	Network Infrastructure	2035	\$ 100,000	\$ 102,900	100%	\$ 102,900	100%	\$ 102,900	\$ 102,900	
City-101	Planned System Upgrades/Major Process Enhancements	2035	\$ 2,500,000	\$ 2,572,500	100%	\$ 2,572,500	14%	\$ 360,150	\$ 360,150	
City-103	General Plan and Zoning	2035	\$ 3,000,000	\$ 3,087,000	100%	\$ 3,087,000	80%	\$ 2,469,600	\$ 2,469,600	
Subtotal General City Facilities			\$ 22,625,000	\$ 23,281,125		\$ 16,489,725		\$ 5,695,515	\$ 5,695,515	
Fire Facilities										
Fire-2	Southeast Area Fire Station	2035	\$ 12,000,000	\$ 12,348,000	100%	\$ 12,348,000	60%	\$ 7,408,800	\$ 7,408,800	
Fire-10	Southeast Area Fire Station (Phase 2)	Buildout	7,500,000	\$ 7,717,500	61%	\$ 4,707,675	40%	\$ 1,883,070	\$ 1,883,070	
Fire-106	Northeast Area Fire Station	Buildout	\$ 6,999,999	\$ 7,202,999	61%	\$ 4,393,829	100%	\$ 4,393,829	\$ 4,393,829	
Subtotal Fire Facilities			\$ 26,499,999	\$ 27,268,499		\$ 21,449,504		\$ 13,685,699	\$ 13,685,699	
Library: Facilities										
Lib-2	Main Library Expansion	2035	\$ 6,500,000	\$ 6,688,500	100%	\$ 6,688,500	18%	\$ 1,203,930	\$ 1,203,930	
Lib-3	Material Collection	2035	\$ 1,445,000	\$ 1,486,905	100%	\$ 1,486,905	100%	\$ 1,486,905	\$ 1,486,905	
Subtotal Library Facilities			\$ 7,945,000	\$ 8,175,405		\$ 8,175,405		\$ 2,690,835	\$ 2,690,835	
Police Facilities										
Pol-2	800 MHZ System	Buildout	\$ 3,375,750	\$ 3,473,647	60%	\$ 2,084,188	14%	\$ 291,786	\$ 291,786	
Pol-3	Police Vehicles	2035	\$ 702,000	\$ 722,358	100%	\$ 722,358	100%	\$ 722,358	\$ 722,358	
Pol-101	Communications and Records Management CAD & Mobile System	2035	\$ 1,700,000	\$ 1,749,300	100%	\$ 1,749,300	14%	\$ 244,902	\$ 244,902	
Pol-200	Communications Facility/YECA Facility	Buildout	\$ 5,000,000	\$ 5,145,000	60%	\$ 3,087,000	14%	\$ 432,180	\$ 432,180	
Pol-204	Animal Shelter	Buildout	\$ 3,000,000	\$ 3,087,000	60%	\$ 1,852,200	14%	\$ 259,308	\$ 259,308	
Subtotal Police Facilities			\$ 13,777,750	\$ 14,177,305		\$ 9,495,046		\$ 1,950,534	\$ 1,950,534	
Wastewater Facilities										
Wste-106	Wastewater Collection, Treatment and Disposal Master Plan	Buildout	\$ 500,000	\$ 514,500	60%	\$ 308,700	80%	\$ 246,960	\$ 246,960	
Wste-200	Aeration ditch #4 and RAS improvement	2035	\$ 9,900,000	\$ 10,187,100	100%	\$ 10,187,100	100%	\$ 10,187,100	\$ 10,187,100	
Subtotal Wastewater Facilities			\$ 10,400,000	\$ 10,701,600		\$ 10,495,800		\$ 10,434,060	\$ 10,434,060	
Water Facilities (combined with Surface Water development fee)			\$ 0	\$ 0		\$ 0		\$ 0	\$ 0	

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Table 11
2019 MPFP Nexus Study Update
Estimated MPFP-Funded Facility Costs

Project No.	Project Description	Project Spread	Total Estimated Costs through 2035				Costs Allocated to New Dev.			Notes
			Total Left to Fund 2018 \$	Total Left to Fund 2019 \$	Pct. through 2035	Total Cost through 2035	Pct..	Amount	MPFP Fee Funded	
<i>Percentage Increase [1]</i>				2.9%						
<i>Formula</i>			A	B=A*2.9%	C	D=B*C	E	D*E		
Road Improvements										
New Street Construction										
NSC-103	Construct Parkland Ave. from Matmor Rd. to East St.	Buildout	\$ 6,914,000	\$ 7,114,506	62%	\$ 4,426,646	50%	\$ 2,213,323	\$ 2,213,323	
Subtotal New Street Construction			\$ 6,914,000	\$ 7,114,506		\$ 4,426,646		\$ 2,213,323	\$ 2,213,323	
Street Widening										
SW-1(A)	Widen Kentucky Ave. from East St. to College St.	2035	\$ 5,908,000	\$ 6,079,332	100%	\$ 6,079,332	100%	\$ 6,079,332	\$ 2,237,046	
SW-1(B)	Widen Kentucky Ave. between College St. and West St.	2035	\$ 5,291,000	\$ 5,444,439	100%	\$ 5,444,439	100%	\$ 5,444,439	\$ 2,237,046	
SW-105	East Main St./Pioneer Ave. Intersection	Buildout	\$ 435,000	\$ 447,615	62%	\$ 278,506	100%	\$ 278,506	\$278,506	
SW-106	East Main St./CR 102 Intersection	Buildout	\$ 499,400	\$ 513,883	62%	\$ 319,738	100%	\$ 319,738	\$319,738	
SW-107	East Main St./Northbound I-5 off ramp Intersection	Buildout	\$ 193,400	\$ 199,009	62%	\$ 123,823	100%	\$ 123,823	\$123,823	
SW-2	Gibson frontage improvements, MPFP share (needs to be added to cap bud)	2035	\$ 119,000	\$ 122,451	100%	\$ 122,451	100%	\$ 122,451	\$122,451	
SW-202	Widen east side of CR 102 between Gibson Rd. and Farmer's Central Rd. (plus transition)	2035	\$ 1,663,000	\$ 1,711,227	100%	\$ 1,711,227	100%	\$ 1,711,227	\$1,711,227	
SW-204	Widen west side of CR 102 between Gibson Rd. and Farmers Central Rd. (plus transition)	2035	\$ 2,000,000	\$ 2,058,000	100%	\$ 2,058,000	100%	\$ 2,058,000	\$2,058,000	
SW-205	E Beamer St./CR 102 intersection modifications	Buildout	\$ 239,300	\$ 246,240	62%	\$ 153,210	100%	\$ 153,210	\$153,210	
SW-206	E Main St./East St. intersection modifications	Buildout	\$ 675,500	\$ 695,090	62%	\$ 432,485	100%	\$ 432,485	\$432,485	
SW-207	E Main St./SB SR 113 intersection modifications	Buildout	\$ 368,400	\$ 379,084	62%	\$ 235,866	100%	\$ 235,866	\$235,866	
SW-208	Gibson Rd./East St. intersection modifications	Buildout	\$ 2,061,000	\$ 2,120,769	62%	\$ 1,319,542	100%	\$ 1,319,542	\$1,319,542	
SW-300	Widen CR 102 between E Main St. and Beamer St.	Buildout	\$ 1,400,000	\$ 1,440,600	62%	\$ 896,341	100%	\$ 896,341	\$896,341	
SW-301	Widen CR 102 between Beamer St. and Kentucky Ave.	Buildout	\$ 2,800,000	\$ 2,881,200	62%	\$ 1,792,683	100%	\$ 1,792,683	\$ 0	
Subtotal Street Widening			\$ 23,653,000	\$ 24,338,937		\$ 20,967,643		\$ 20,967,643	\$ 12,125,282	
Transportation Planning										
TP-1	Update Master Plan/update traffic model	2035	\$ 400,000	\$ 411,600	100%	\$ 411,600	100%	\$ 411,600	\$ 411,600	
TP-2	Update Bikeway Plan	2035	\$ 200,000	\$ 205,800	100%	\$ 205,800	100%	\$ 205,800	\$ 205,800	
TP-3	Misc. Corridor, Feasibility & Planning Studies	2035	\$ 680,000	\$ 699,720	100%	\$ 699,720	100%	\$ 699,720	\$ 699,720	
Subtotal Transportation Planning			\$ 1,280,000	\$ 1,317,120		\$ 1,317,120		\$ 1,317,120	\$ 1,317,120	
Interchanges Grade Sep										
IGS-1	Expand the I-5/CR 102 interchange	Buildout	\$ 16,119,000	\$ 16,586,451	62%	\$ 10,320,090	67%	\$ 6,879,372	\$ 6,879,372	New dev. pct. could be
IGS-100	Construct I-5/SR 113 Freeway to Freeway Connectors	Buildout	\$ 60,000,000	\$ 61,740,000	62%	\$ 38,414,628	9%	\$ 3,500,000	\$ 3,500,000	100%, but City lowered
IGS-102	SR 113 Pedestrian/Bicycle Overcrossing	2035	\$ 4,500,000	\$ 4,630,500	100%	\$ 4,630,500	30%	\$ 1,389,150	\$ 1,389,150	pct. because of policy or
IGS-103	Expand the SR 113/CR 25A Interchange	2035	\$ 12,750,000	\$ 13,119,750	100%	\$ 13,119,750	25%	\$ 3,279,938	\$ 3,279,938	other funding sources.
Subtotal Interchanges Grade Sep			\$ 93,369,000	\$ 96,076,701		\$ 66,484,968		\$ 15,048,459	\$ 15,048,459	

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Table 11
2019 MPFP Nexus Study Update
Estimated MPFP-Funded Facility Costs

Project No.	Project Description	Project Spread	Total Estimated Costs through 2035				Costs Allocated to New Dev.			Notes
			Total Left to Fund 2018 \$	Total Left to Fund 2019 \$	Pct. through 2035	Total Cost through 2035	Pct..	Amount	MPFP Fee Funded	
<i>Percentage Increase [1]</i>				2.9%						
<i>Formula</i>			A	B=A*2.9%	C	D=B*C	E	D*E		
New Traffic Signals										
NTS-9	Install traffic signal at Lincoln Ave. and California St.	Buildout	\$ 470,000	\$ 483,630	62%	\$ 300,915	100%	\$ 300,915	\$ 300,915	
NTS-10	Install traffic signal at Beamer St. and California St.	2035	\$ 470,000	\$ 483,630	100%	\$ 483,630	100%	\$ 483,630	\$ 483,630	
NTS-12	Install traffic signal at Lincoln Ave. and Cottonwood St.	Buildout	\$ 470,000	\$ 483,630	62%	\$ 300,915	100%	\$ 300,915	\$ 300,915	
NTS-13	Install traffic signal at Cottonwood St. and Beamer St.	2035	\$ 470,000	\$ 483,630	100%	\$ 483,630	100%	\$ 483,630	\$ 483,630	
NTS-20	Install traffic signal at Kentucky Ave. and Cottonwood St.	2035	\$ 470,000	\$ 483,630	100%	\$ 483,630	100%	\$ 483,630	\$ 483,630	
NTS-24	Install traffic signal at Gibson Rd. and CR 98	Buildout	\$ 470,000	\$ 483,630	62%	\$ 300,915	100%	\$ 300,915	\$ 300,915	
NTS-101	Install traffic signal at Farnham Ave. and Maxwell Ave.	Buildout	\$ 470,000	\$ 483,630	62%	\$ 300,915	100%	\$ 300,915	\$ 300,915	
NTS-102	Install traffic signal at Kincheloe Dr. and Maxwell Ave.	Buildout	\$ 470,000	\$ 483,630	62%	\$ 300,915	100%	\$ 300,915	\$ 300,915	
NTS-107	Install traffic signal at Kentucky Ave. and CR 102	2035	\$ 470,000	\$ 483,630	100%	\$ 483,630	100%	\$ 483,630	\$ 483,630	
NTS-109	Install traffic signal at Palm Ave. and Kentucky Ave.	Buildout	\$ 470,000	\$ 483,630	62%	\$ 300,915	100%	\$ 300,915	\$ 300,915	
NTS-114	Install traffic signal at East Main St./Douglas Ave.	Buildout	\$ 470,000	\$ 483,630	62%	\$ 300,915	100%	\$ 300,915	\$ 300,915	
NTS-200	Install traffic signal at College St. and Cross St.	Buildout	\$ 470,000	\$ 483,630	62%	\$ 300,915	100%	\$ 300,915	\$ 300,915	
NTS-202	Traffic signal at Ashley Ave. and Gibson Rd.	Buildout	\$ 470,000	\$ 483,630	62%	\$ 300,915	100%	\$ 300,915	\$ 300,915	
NTS-203	Traffic signal at E Main St. and Freeway Dr.	2035	\$ 470,000	\$ 483,630	100%	\$ 483,630	100%	\$ 483,630	\$ 483,630	
NTS-204	Traffic signal at Kentucky Ave. and Cleveland St.	2035	\$ 470,000	\$ 483,630	100%	\$ 483,630	100%	\$ 483,630	\$ 483,630	
NTS-300	Traffic signal at E Gibson Rd./Harry Lorenzo Ave.	2035	\$ 800,000	\$ 823,200	100%	\$ 823,200	100%	\$ 823,200	\$ 823,200	
Subtotal New Traffic Signals			\$ 7,850,000	\$ 8,077,650		\$ 6,433,211		\$ 6,433,211	\$ 6,433,211	
Traffic Signal Modifications										
TSM-201	Signal modifications at East Gibson Rd and Matmor Rd.	2035	\$ 180,000	\$ 185,220	100%	\$ 185,220	100%	\$ 185,220	\$ 185,220	
TSM-202	Signal Modifications, provide protected left turns	Buildout	\$ 2,350,000	\$ 2,418,150	62%	\$ 1,504,573	100%	\$ 1,504,573	\$ 1,504,573	
TSM-203	Citywide TIS improvements	2035	\$ 2,300,000	\$ 2,366,700	100%	\$ 2,366,700	100%	\$ 2,366,700	\$ 2,366,700	
Subtotal Traffic Signal Modifications			\$ 4,830,000	\$ 4,970,070		\$ 4,056,493		\$ 4,056,493	\$ 4,056,493	
Spot Intersection Improvements										
SII-100	School Related Crossing Improvements	2035	\$ 2,559,999	\$ 2,634,239	100%	\$ 2,634,239	15%	\$ 395,136	\$ 395,136	
Subtotal Spot Intersection Improvements			\$ 2,559,999	\$ 2,634,239		\$ 2,634,239		\$ 395,136	\$ 395,136	
Public Works Street Calming										
TC-200	Traffic calming on the Maxwell/Farnham/Gum corridor	Buildout	\$ 384,000	\$ 395,136	62%	\$ 245,854	100%	\$ 245,854	\$ 245,854	
TC-201	Traffic calming - general	2035	\$ 640,000	\$ 658,560	100%	\$ 658,560	100%	\$ 658,560	\$ 658,560	
Subtotal Public Works Street Calming			\$ 1,024,000	\$ 1,053,696		\$ 904,414		\$ 904,414	\$ 904,414	

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Table 11
2019 MPFP Nexus Study Update
Estimated MPFP-Funded Facility Costs

Project No.	Project Description	Project Spread	Total Estimated Costs through 2035				Costs Allocated to New Dev.			Notes
			Total Left to Fund 2018 \$	Total Left to Fund 2019 \$	Pct. through 2035	Total Cost through 2035	Pct..	Amount	MPFP Fee Funded	
<i>Percentage Increase [1]</i>				2.9%						
<i>Formula</i>			A	B=A*2.9%	C	D=B*C	E	D*E		
Bike/Pedestrian										
BPF-1	Add bike routes to system	2035	\$ 957,000	\$ 984,753	100%	\$ 984,753	30%	\$ 295,426	\$ 295,426	
BPF-200	Pedestrian/Bicycle crossing improvements	2035	\$ 256,000	\$ 263,424	100%	\$ 263,424	100%	\$ 263,424	\$ 210,739	
BPF-201	Construct sidewalk on south side of Gibson from east of Matmor to SR 113 northbound ramps	2035	\$ 320,000	\$ 329,280	100%	\$ 329,280	100%	\$ 329,280	\$ 329,280	
Subtotal Bike/Pedestrian			\$ 1,533,000	\$ 1,577,457		\$ 1,577,457		\$ 888,130	\$ 835,445	
Traffic Engineering Services										
TES-100	Traffic Engineering Services-annual	2035	\$ 679,999	\$ 699,719	100%	\$ 699,719	100%	\$ 699,719	\$ 699,719	
Subtotal Traffic Engineering Services			\$ 679,999	\$ 699,719		\$ 699,719		\$ 699,719	\$ 699,719	
Subtotal Road Improvements			\$ 143,692,998	\$ 147,860,095		\$ 109,501,909		\$ 52,923,648	\$ 44,028,602	
GRAND TOTAL			\$ 224,940,747	\$ 231,464,029		\$ 175,607,390		\$ 87,380,292	\$ 78,485,245	

cost detail

Source: City of Woodland

[1] Percentage increase equal to the percentage increase in the MPFP Fee from 2018 to 2019, which was based on the change in the CCI.

Table 12
2019 MPFP Nexus Study Update
Existing and New DUEs Summary - General City, Police, and Library

Improvement Type	Existing DUEs	2035 DUEs			
		New	Total	Existing Pct.	New Pct.
<i>Formula</i>	<i>A</i>	<i>B</i>	<i>C=A+B</i>	<i>A/C</i>	<i>B/C</i>
General City	33,262	5,378	38,640	86%	14%
Police	33,262	5,378	38,640	86%	14%
Library	19,284	4,204	23,488	82%	18%

due pct

Source: City of Woodland and EPS

Table 13
2019 MPFP Nexus Study Update
Existing DUEs - General City, Police, and Library

Land Use Category	Existing Units/ Bldg. Sq. Ft.	General City		Police		Library	
		DUE Factor	Existing DUEs	DUE Factor	Existing DUEs	DUE Factor	Existing DUEs
<i>Formula</i>	<i>A</i>	<i>B</i>	<i>A*B</i>	<i>C</i>	<i>A*C</i>	<i>D</i>	<i>A*D</i>
Residential	<u>units</u>	<u>per unit</u>		<u>per unit</u>		<u>per unit</u>	
Single-Family	15,031	1.00	15,031	1.00	15,031	1.00	15,031
Multifamily	5,670	0.75	4,253	0.75	4,253	0.75	4,253
Subtotal	20,701		19,284		19,284		19,284
Nonresidential	<u>bldg. sq. ft.</u>	<u>per 1,000 sq. ft.</u>		<u>per 1,000 sq. ft.</u>			
Retail	2,571,745	0.67	3,740	0.67	3,740	NA	0
Service	612,675	0.67	981	0.67	981	NA	0
Office	1,592,617	0.83	1,637	0.83	1,637	NA	0
Industrial	12,907,184	0.28	7,621	0.28	7,621	NA	0
Subtotal	17,684,221		13,978		13,978		0
TOTAL			33,262		33,262		19,284
2035 Percentage of Total							

e dues

Source: City of Woodland and EPS

2. The percentage from the previous step is multiplied by the total estimated cost through 2035 resulting in the total cost through 2035 that is attributable to new development.
3. For most improvements, the MPFP Fee-Funded cost is equal to the estimated cost attributable to new development. For some Road improvements, however, a portion of the new development costs are funded by other sources.
4. For each improvement type, costs are summed across improvements to result in the total estimated costs by improvement type. As detailed in **Table 11** and summarized in **Table 10**, the MPFP Fee-Funded costs total an estimated \$78.5 million.

Outstanding Debt Service and Fund Balances

As discussed at the beginning of this chapter, the MPFP Fee-Funded costs include outstanding debt service and fund balance adjustments for each improvement type in addition to the improvement costs. **Table 14** details the MPFP Fee-Funded debt service and fund balance adjustments. This table includes two sections. The first section shows the total debt service and fund balance adjustments by improvement type. The second section shows the amount that is allocated to new development through 2035 and included in the MPFP Fee Program. In total, the MPFP Fee Program includes an estimated \$15.7 million of outstanding debt service and \$9.7 million in fund balance costs.

Debt Service

The City has issued both wastewater and fire bonds, for which there is outstanding debt service. **Appendix A** provides the detailed debt service calculations. For each bond, the annual remaining debt service is detailed, and the present value of the remaining debt service is calculated to estimate the total remaining debt service in 2019 dollars. The total debt service amounts shown on **Table 14** reflect the present value estimates from **Appendix A**.

Sixty percent of the total Wastewater debt service on **Table 14** is allocated to new development through 2035 based on the percentage of total remaining Wastewater DUEs estimated to develop through 2035. This percentage reduction is applied because the bond-funded Wastewater improvements will benefit development through full City buildout, not just development through 2035. The DUE estimates are detailed in the next chapter.

One hundred percent of the total Fire debt service on **Table 14** is allocated to new development because the bond-funded Fire improvements are needed to serve new development through 2035.

Fund Balance Adjustments

As discussed earlier in this chapter, a negative current fund balance results in an increase to the MPFP costs, and a positive fund balance results in a decrease to the MPFP costs. As with the debt service, for each improvement type, either all of the fund balance adjustment or a specific percentage of it is allocated to new development through 2035 and included in the MPFP Fee-Funded costs.

Table 14
2019 MPFP Nexus Study Update
Debt Service and Fund Balances Funded by Development through 2035 [1]

Facility Type	Total Debt Service and Fund Balance Costs			Allocation to Development through 2035			
	Debt Service [2]	Fund Balance Adjustment	Total	Percentage [2]	Debt Service	Fund Balance Adjustment	Total
Roads	\$ 0	\$ 259,655	\$ 259,655	100%	\$ 0	\$ 259,655	\$ 259,655
Wastewater	\$ 24,517,756	\$ 14,608,608	\$ 39,126,364	60%	\$ 14,710,654	\$ 8,765,165	\$ 23,475,818
General City	\$ 0	(\$ 1,106,643)	(\$ 1,106,643)	100%	\$ 0	(\$ 1,106,643)	(\$ 1,106,643)
Fire	\$ 954,597	\$ 447,055	\$ 1,401,652	100%	\$ 954,597	\$ 447,055	\$ 1,401,652
Police	\$ 0	\$ 2,999,536	\$ 2,999,536	60%	\$ 0	\$ 1,799,721	\$ 1,799,721
Library	\$ 0	(\$ 451,734)	(\$ 451,734)	100%	\$ 0	(\$ 451,734)	(\$ 451,734)
Total	\$ 25,472,353	\$ 16,756,476	\$ 42,228,829		\$ 15,665,251	\$ 9,713,219	\$ 25,378,470

ds bal

Source: City of Woodland and EPS

[1] Excludes Parks. Parks costs not estimated.

[2] See Table A-1 for wastewater debt service and Table A-2 for fire debt service.

[3] 100% for improvements sized for 2035; ratio of 2035 to buildout DUEs for improvements generally sized for buildout. See Table 16.

For improvement types where most of the improvements are needed to facilitate development through 2035, 100 percent of the fund balance adjustment is allocated to new development through 2035, whereas for improvement types where most of the improvements will benefit development through buildout, a lesser percentage is allocated to new development through 2035. One hundred percent of the fund balance adjustments are allocated to new development through 2035 for all facility types except Wastewater and Police facilities. For these two facility types, the percentage of the total costs allocated to new development through 2035 is based on the percentage of total remaining DUEs estimated to develop through 2035. The DUE estimates are detailed in the next chapter.

4. COST ALLOCATION AND MPFP FEE UPDATE

Introduction

For each improvement type, the MPFP Fees are estimated by allocating MPFP Fee-Funded costs (detailed in the previous chapter) to the various land uses based on each land use's relative demand for the improvement type. In addition, the City charges an administration fee to administer the MPFP Fee Program. The proposed MPFP Fees, including the administration fee, were summarized in **Table 1** in the first chapter.

The specific steps in allocating the costs and estimating the fees for each improvement type are outlined below:

1. Determine the MPFP Fee Program costs. These costs were detailed in the previous chapter.
2. Determine the Dwelling Unit Equivalent (DUE) factor for each land use that serves as a measure of demand placed on the improvement relative to the demand of a single-family dwelling unit.
3. For each land use, multiply the DUE factor by the number of remaining dwelling units or nonresidential building square feet to derive the total facility demand, measured by total DUEs.
4. Use the DUE estimates from step 3 to calculate the percentage distribution of total demand across land uses.
5. Allocate the improvement costs to the individual land uses based on each land use's percentage of total facility demand.
6. For each land use, divide the allocated cost by the number of dwelling units or building square feet to determine the fee per unit or square foot.

Summary of Results

The DUE factors, total DUEs, and cost allocation results for all improvement types are summarized in **Tables 15** through **17**.

DUE Factors

Table 15 summarizes the DUE factors by improvement type and land use. Both the basis for the DUE factors and the actual DUE factors are shown in **Table 15**.

For each improvement type, the cost allocation methodology is consistent with the methodology used in the 2008 Nexus Study Update, but some of the DUE Factors have changed because of changes made by the City to underlying assumptions used in estimating the DUE factors. As most of the underlying assumptions have not been updated since the early 2000s, the City evaluated current market conditions and compared City assumptions to common assumptions throughout the region to determine reasonable updates to the analysis assumptions.

Table 15
2019 MPFP Nexus Study Update
Summary of Dwelling Unit Equivalent Factors

Land Use Category	Roads	Wastewater	General City	Fire	Police	Library	Parks & Recreation
Source:	Table 18	Table 20	Table 22	Table 24	Table 26	Table 28	Table 30
DUE Factor Basis	Vehicle Miles Travelled	Gallons per Day	Population/ Employees	Population/Employees & Building Square Feet	Population/ Employees	Population	Population
Residential	per dwelling unit						
Single-Family	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Infill Single-Family	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Multifamily	0.41	0.75	0.75	0.60	0.75	0.75	0.75
Small Multifamily	0.41	0.50	0.50	0.40	0.50	0.50	0.50
Infill Multifamily	0.27	0.72	0.72	0.58	0.72	0.72	0.72
Small Infill Multifamily	0.27	0.50	0.50	0.40	0.50	0.50	0.50
Corridor Multifamily	0.25	0.72	0.72	0.58	0.72	0.72	0.72
Small Corridor Multifamily	0.25	0.50	0.50	0.40	0.50	0.50	0.50
Downtown Multifamily	0.22	0.72	0.72	0.58	0.72	0.72	0.72
Small Downtown Multifamily	0.22	0.50	0.50	0.40	0.50	0.50	0.50
Nonresidential	per 1,000 building square feet						
Retail	1.24	0.41	0.67	0.58	0.67	NA	NA
Service	0.88	0.41	0.67	0.58	0.67	NA	NA
Office	0.66	0.24	0.83	0.67	0.83	NA	NA
Industrial	0.51	0.46	0.28	0.39	0.28	NA	NA

due sum

Source: City of Woodland and EPS

The changes made by the City are detailed in the remainder of this section.

Persons per Household

The multifamily factor was updated, and factors were established for the new multifamily land use categories as shown in the table below. An analysis of multifamily persons per household assumptions used for new development by similar jurisdictions in the region resulted in factors that generally ranged from 1.75 to 2.25 persons per household. Therefore, the City reduced its standard multifamily factor from 2.50 to 2.25 persons per household and assumed correspondingly fewer persons per household for the other smaller multifamily unit types. The persons per household factors are used in the cost allocations for all improvement types except Roads. The changes result in multifamily MPFP Fees that are lower relative to the single-family fees than in the previous study.

Persons per Household

Land Use	2008 Nexus Study Update	2019 Nexus Study Update
Multifamily	2.50	2.25
Small Multifamily	NA	1.50
Small Infill Multifamily	NA	1.50
Small Corridor Infill Multifamily	NA	1.50
Infill Multifamily	NA	2.15
Corridor Infill Multifamily	NA	2.15
Downtown Multifamily	NA	2.15

Square Feet per Employee

Adjustments were made to square feet per employee factors for all nonresidential uses as shown in the table below. These changes were based on a review of assumptions used by other jurisdictions in the region and on the type of expected development. The most significant change was made for Industrial development, as it is anticipated that new Industrial development will tend to be include more office space, resulting in fewer square feet per employee. The square feet per employee factors are used in the General City, Fire, and Police cost allocations.

Square Feet per Employee

Land Use	2008 Nexus Study Update	2019 Nexus Study Update
Retail	400	500
Service	444	500
Office	350	400
Industrial	1,600	1,200

Floor to Area Ratio and Wastewater Gallons per Day

Adjustments were made to Floor to Area Ratios (FARs) for all nonresidential uses except Industrial as shown in the table below. These changes were based on a review of assumptions used by other jurisdictions in the region and on the type of expected development. It is expected that new development will be designed with a more efficient use of space, resulting in higher FARs. The FARs are used only in the Wastewater cost allocations.

In addition, the City evaluated typical development for the Service industry and concluded that Service development was similar to Office and Retail development in terms of wastewater generation. Consequently, the City modified the gallons per day (GPD) assumption for the Service land use category from 1,500 GPD to 1,200 GPD, to be consistent with the Retail and Office factors. These changes resulted in identical Wastewater cost allocation factors for Retail and Service uses, a lower Office factor, and no change in the Industrial factor.

FAR

Land Use	2008 Nexus Study Update	2019 Nexus Study Update
Retail	0.25	0.30
Service	0.25	0.30
Office	0.30	0.50
Industrial	0.40	0.40

Road Cost Allocation Factors

The City made some changes to the Roads cost allocation assumptions as shown below.

PM Peak Trip Rates

The multifamily trip rates were all changed to 0.50 based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition. These changes represent a decrease from the multifamily rate of 0.89 assumed in the 2008 Nexus Study Update. The trip rate for single-family uses is based on the City Travel Demand model and was not changed.

Trip Lengths

The trip lengths for Infill, Corridor, and Downtown uses (and the corresponding Small uses) are two-thirds of the greenfield trip length based on their locations that are closer to the center of town.

Mode Split

Mode Split was added as a factor in the Roads cost allocation. The Mode Split percentage represents the percentage of trips that are by automobile vs. another form of transportation such as bus, pedestrian, or bicycle. The Mode Split percentage was set to 100 percent for all uses except the Corridor and Downtown uses, which were assumed to have Mode Split percentages of 90 percent and 80 percent respectively. These percentages result in proportionate reductions of in the cost allocation factors for Corridor and Downtown land uses.

Total DUEs

Table 16 summarizes the total new DUEs projected for 2035 and buildout by improvement type and land use. For each improvement type, the 2035 DUEs as a percentage of buildout DUEs is also shown. This percentage was used in the previous chapter to estimate costs through 2035 for improvements with a buildout time frame.

Cost Allocation

Table 17 summarizes the cost allocations by improvement type and land use. The residential values are expressed per dwelling unit, and the nonresidential values are expressed per 1,000 building square feet. These values are equivalent to the proposed MPFP Fees by component.

Cost Allocation by Component

The remainder of this chapter details the cost allocation for each MPFP Fee component.

Roads

Table 18 details the DUE factors for Road improvements. The DUE factors are established using vehicle miles traveled to measure relative demand by land use. For each land use, the vehicle miles traveled are calculated as a combination of an estimated trip rate, percentage of total trips made by automobile, trip length, and percentage of trips considered to be newly originated trips. As expected, land use types with more people per dwelling unit or nonresidential building square foot tend to have higher DUE factors. In addition, the DUE factors for dwelling units in the Downtown, Corridor, and Infill areas have shorter assumed trip lengths, resulting in lower DUE factors. Development in the Downtown and Corridor areas are also assumed to have some trips that are not by automobile, also leading to lower DUE factors.

Table 19 details the Roads cost allocation using the DUE factors from **Table 18** and the methodology outlined at the beginning of this chapter.

Table 16
2019 MPFP Nexus Study Update
Summary of DUEs

Land Use Category	Units/Bldg. Sq. Ft.		Roads			Wastewater			General City		
	2035	Buildout	DUE	2035	Buildout	DUE	2035	Buildout	DUE	2035	Buildout
			Factor	DUEs	DUEs	Factor	DUEs	DUEs	Factor	DUEs	DUEs
<i>Formula</i>	a	b	c	a*c	b*c	d	a*d	b*d	e	a*e	b*e
Residential	<u>units</u>	<u>units</u>	<u>per unit</u>			<u>per unit</u>			<u>per unit</u>		
Single-Family	2,754	3,876	1.00	2,754	3,876	1.00	2,754	3,876	1.00	2,754	3,876
Infill Single-Family	273	326	0.67	182	217	1.00	273	326	1.00	273	326
Multifamily	990	1,372	0.41	406	562	0.75	743	1,029	0.75	743	1,029
Small Multifamily	174	242	0.41	71	99	0.50	87	121	0.50	87	121
Infill Multifamily	29	206	0.27	8	56	0.72	21	148	0.72	21	148
Small Infill Multifamily	0	168	0.27	0	46	0.50	0	84	0.50	0	84
Corridor Multifamily	82	623	0.25	20	153	0.72	59	446	0.72	59	446
Small Corridor Multifamily	75	510	0.25	18	125	0.50	38	255	0.50	38	255
Downtown Multifamily	200	417	0.22	44	91	0.72	143	299	0.72	143	299
Small Downtown Multifamily	175	345	0.22	38	75	0.50	88	173	0.50	88	173
Subtotal	4,752	8,085		3,542	5,302		4,204	6,756		4,204	6,756
Nonresidential	<u>bldg. sq. ft.</u>	<u>bldg. sq. ft.</u>	<u>per 1,000 sq. ft.</u>			<u>per 1,000 sq. ft.</u>			<u>per 1,000 sq. ft.</u>		
Retail	271,189	497,180	1.24	337	617	0.41	111	203	0.67	181	331
Service	293,998	538,996	0.88	260	476	0.41	120	220	0.67	196	359
Office	387,679	710,745	0.66	257	471	0.24	95	174	0.83	323	592
Industrial	1,704,221	3,124,406	0.51	871	1,596	0.46	782	1,435	0.28	473	868
Subtotal	2,657,087	4,871,327		1,724	3,161		1,108	2,031		1,173	2,151
TOTAL				5,266	8,463		5,312	8,788		5,378	8,907
2035 Percentage of Total				62%			60%			60%	

Source: City of Woodland and EPS

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Table 16
2019 MPFP Nexus Study Update
Summary of DUEs

Land Use Category	Fire			Police			Library		
	DUE Factor	2035 DUEs	Buildout DUEs	DUE Factor	2035 DUEs	Buildout DUEs	DUE Factor	2035 DUEs	Buildout DUEs
<i>Formula</i>	<i>f</i>	<i>a*f</i>	<i>b*f</i>	<i>g</i>	<i>a*g</i>	<i>b*g</i>	<i>h</i>	<i>a*h</i>	<i>b*h</i>
Residential	<u>per unit</u>			<u>per unit</u>			<u>per unit</u>		
Single-Family	1.00	2,754	3,876	1.00	2,754	3,876	1.00	2,754	3,876
Infill Single-Family	1.00	273	326	1.00	273	326	1.00	273	326
Multifamily	0.60	594	823	0.75	743	1,029	0.75	743	1,029
Small Multifamily	0.40	70	97	0.50	87	121	0.50	87	121
Infill Multifamily	0.58	17	120	0.72	21	148	0.72	21	148
Small Infill Multifamily	0.40	0	67	0.50	0	84	0.50	0	84
Corridor Multifamily	0.58	48	363	0.72	59	446	0.72	59	446
Small Corridor Multifamily	0.40	30	204	0.50	38	255	0.50	38	255
Downtown Multifamily	0.58	117	243	0.72	143	299	0.72	143	299
Small Downtown Multifamily	0.40	70	138	0.50	88	173	0.50	88	173
Subtotal		3,972	6,258		4,204	6,756		4,204	6,756
Nonresidential	<u>per 1,000 sq. ft.</u>			<u>per 1,000 sq. ft.</u>			<u>per 1,000 sq. ft.</u>		
Retail	0.58	158	290	0.67	181	331		0	0
Service	0.58	171	314	0.67	196	359		0	0
Office	0.67	258	474	0.83	323	592		0	0
Industrial	0.39	663	1,215	0.28	473	868		0	0
Subtotal		1,251	2,293		1,173	2,151		0	0
TOTAL		5,223	8,551		5,378	8,907		4,204	6,756
2035 Percentage of Total		61%			60%			62%	

due sum2

Source: City of Woodland and EPS

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Table 17
2019 MPFP Nexus Study Update
Cost Allocation Summary

Land Use Category	Roads	Wastewater	General City	Fire	Police	Library	Parks Spring Lake	Parks Other
Source:	Table 19	Table 21	Table 23	Table 25	Table 27	Table 29	Table 31	Table 32
Residential	<i>per dwelling unit</i>							
Single-Family	\$ 8,411	\$ 6,383	\$ 853	\$ 2,889	\$ 697	\$ 533	\$ 4,330	\$ 7,872
Infill Single-Family	\$ 5,607	\$ 6,383	\$ 853	\$ 2,889	\$ 697	\$ 533	NA	\$ 7,872
Multifamily	\$ 3,447	\$ 4,787	\$ 640	\$ 1,733	\$ 523	\$ 399	\$ 3,248	\$ 5,904
Small Multifamily	\$ 3,447	\$ 3,192	\$ 427	\$ 1,155	\$ 349	\$ 266	\$ 2,165	\$ 3,936
Infill Multifamily	\$ 2,298	\$ 4,575	\$ 612	\$ 1,685	\$ 500	\$ 382	NA	\$ 5,642
Small Infill Multifamily	\$ 2,298	\$ 3,192	\$ 427	\$ 1,155	\$ 349	\$ 266	NA	\$ 3,936
Corridor Multifamily	\$ 2,068	\$ 4,575	\$ 612	\$ 1,685	\$ 500	\$ 382	NA	\$ 5,642
Small Corridor Multifamily	\$ 2,068	\$ 3,192	\$ 427	\$ 1,155	\$ 349	\$ 266	NA	\$ 3,936
Downtown Multifamily	\$ 1,838	\$ 4,575	\$ 612	\$ 1,685	\$ 500	\$ 382	NA	\$ 5,642
Small Downtown Multifamily	\$ 1,838	\$ 3,192	\$ 427	\$ 1,155	\$ 349	\$ 266	NA	\$ 3,936
Nonresidential	<i>per 1,000 building square feet</i>							
Retail	\$ 10,445	\$ 2,605	\$ 569	\$ 1,685	\$ 465	NA	NA	NA
Service	\$ 7,429	\$ 2,605	\$ 569	\$ 1,685	\$ 465	NA	NA	NA
Office	\$ 5,577	\$ 1,563	\$ 711	\$ 1,926	\$ 581	NA	NA	NA
Industrial	\$ 4,297	\$ 2,931	\$ 237	\$ 1,123	\$ 194	NA	NA	NA
	<i>alloc sum</i>							

Source: City of Woodland and EPS

Table 18
2019 MPFP Nexus Study Update
Dwelling Unit Equivalent Factors - Roads

Roads

Land Use Category	PM Peak Hour Trip Rate [1]	Mode Split (Auto Trips %)	Trip Length (Miles) [2]	Percentage of New Trips [3]	VMT per Unit or 1,000 Bldg. Sq. Ft. [4]	DUE Factor
Formula	A	B	C	D	$E=A*B*C*D$	E/E for single fam.
Residential	<u>per unit</u>				<u>per unit</u>	<u>per unit</u>
Single-Family	1.22	100%	3.17	100%	3.87	1.00
Infill Single-Family	1.22	100%	2.11	100%	2.58	0.67
Multifamily	0.50	100%	3.17	100%	1.59	0.41
Small Multifamily	0.50	100%	3.17	100%	1.59	0.41
Infill Multifamily	0.50	100%	2.11	100%	1.06	0.27
Small Infill Multifamily	0.50	100%	2.11	100%	1.06	0.27
Corridor Multifamily	0.50	90%	2.11	100%	0.95	0.25
Small Corridor Multifamily	0.50	90%	2.11	100%	0.95	0.25
Downtown Multifamily	0.50	80%	2.11	100%	0.85	0.22
Small Downtown Multifamily	0.50	80%	2.11	100%	0.85	0.22
Nonresidential	<u>per 1,000 sq. ft.</u>				<u>per 1,000 sq. ft.</u>	<u>per 1,000 sq. ft.</u>
Retail	3.81	100%	1.91	66%	4.80	1.24
Service	2.71	100%	1.91	66%	3.42	0.88
Office	1.15	100%	2.23	100%	2.56	0.66
Industrial	0.89	100%	2.22	100%	1.98	0.51

due road

Sources: City, Fehr & Peers, and EPS. The City provided the mode split and PM peak hour trip rates. Fehr & Peers provided the trip length and percent new trips data.

[1] The single family PM peak hour trip rates are from the City Travel Demand Model. The trip rates for the remainder of the land uses are from the *ITE Trip Generation Manual, 10th Edition, ITE, 2017, as detailed below.*

- Single-Family: Derived from City of Woodland Travel Demand Model
- Multifamily: Average of Multifamily Low-Rise (ITE Code 220) and Multifamily Mid-Rise (ITE Code 221)
- Retail: Shopping Center (ITE Code 820)
- Office: General Office Building (ITE Code 710)
- Service: Special Retail Center (ITE Code 814 from the *ITE Trip Generation Manual, 8th Edition, 2008*)
- Industrial: Average of Industrial Park (ITE Code 130) and High-Cube Fulfillment Center Warehouse (ITE Code 155)

[2] Estimated using City of Woodland Travel Demand Model; residential infill and downtown trip length set to 2/3 of single-family length.

[3] Average percent new trips based on *Trip Generation Handbook, ITE, March 2001.*

[4] VMT = Vehicle Miles of Travel.

Table 19
2019 MPFP Nexus Study Update
Cost Allocation - Roads

Roads

Land Use Category	DUE Factor	2035 Allocation				
		Units/ Bldg. Sq. Ft.	DUEs	Percentage of Total DUEs	Cost	Cost per Unit/ 1,000 Bldg. Sq. Ft.
Residential	<i>per unit</i>	<i>units</i>				<i>per unit</i>
Single-Family	1.00	2,754	2,754	52%	\$ 23,162,783	\$8,411
Infill Single-Family	0.67	273	182	3%	\$ 1,530,729	\$5,607
Multifamily	0.41	990	406	8%	\$ 3,412,496	\$3,447
Small Multifamily	0.41	174	71	1%	\$ 599,772	\$3,447
Infill Multifamily	0.27	29	8	0%	\$ 66,641	\$2,298
Small Infill Multifamily	0.27	0	0	0%	\$ 0	\$2,298
Corridor Multifamily	0.25	82	20	0%	\$ 169,591	\$2,068
Small Corridor Multifamily	0.25	75	18	0%	\$ 155,113	\$2,068
Downtown Multifamily	0.22	200	44	1%	\$ 367,676	\$1,838
Small Downtown Multifamily	0.22	175	38	1%	\$ 321,717	\$1,838
Subtotal		4,752	3,542	67%	\$ 29,786,518	
Nonresidential	<i>per 1,000 sq. ft.</i>	<i>bldg. sq. ft.</i>				<i>per 1,000 sq. ft.</i>
Retail	1.24	271,189	337	6%	\$ 2,832,582	\$10,445
Service	0.88	293,998	260	5%	\$ 2,184,230	\$7,429
Office	0.66	387,679	257	5%	\$ 2,162,134	\$5,577
Industrial	0.51	1,704,221	871	17%	\$ 7,322,792	\$4,297
Subtotal		2,657,087	1,724	33%	\$ 14,501,739	
TOTAL			5,266	100%	\$ 44,288,257	

alloc road

Source: City of Woodland and EPS

Wastewater

Table 20 details the DUE factors for Wastewater improvements. The DUE factors are established using wastewater generated, as measured in gallons per day (GPD), to estimate relative demand by land use. 75 GPD per person is assumed for all residential uses, so larger dwelling units with a greater number of assumed persons per household have more demand and higher DUE factors. For nonresidential uses, the relative demand and DUE factors are affected by the FAR and the assumed GPD per acre, with uses with greater values having more demand and higher DUE factors.

Table 21 details the Wastewater cost allocation using the DUE factors from **Table 20** and the methodology outlined at the beginning of this chapter.

General City

Table 22 details the DUE factors for General City improvements. The DUE factors are established using population and employees, as measured by persons per household and employees per 1,000 square feet, to estimate relative demand by land use. Larger dwelling units with a greater number of assumed persons per household have more demand and higher DUE factors. For nonresidential uses, the uses with a greater number of assumed employees per building square foot will have greater estimated demand and higher DUE factors.

Table 23 details the General City cost allocation using the DUE factors from **Table 22** and the methodology outlined at the beginning of this chapter.

Fire

Table 24 details the DUE factors for Fire improvements. The DUE factors are established using a combination of population and employees and building square feet to estimate relative demand by land use. Both new persons generated and new building square feet result in increased demand for fire facilities. Additional people result in additional medical calls, and additional building area results in additional fire calls. For each land use, the demand attributable to population and employees is measured by assumed persons per household and employees per 1,000 square feet, while the demand attributable to building square feet is measured by assumed square feet per dwelling unit and nonresidential building square feet. Two sets of DUE factors are estimated, one using population and employees as the demand measure, and the other using building square feet as the demand measure. For each land use, the two factors are averaged to result in the Fire DUE factor.

Table 25 details the Fire cost allocation using the DUE factors from **Table 24** and the methodology outlined at the beginning of this chapter.

Police

Table 26 details the DUE factors for Police improvements. The DUE factors are equivalent to the General City DUE Factors. They are established using population and employees, as measured by persons per household and employees per 1,000 square feet, to estimate relative demand by

**Table 20
2019 MPFP Nexus Study Update
Dwelling Unit Equivalent Factors - Wastewater**

Wastewater

Land Use Category	Persons per Household	FAR	Gallons per Day (GPD)			DUE Factor
			GPD per Acre [1]	GPD per Person [1]	GPD per Unit or 1,000 Bldg. Sq. Ft.	
<i>Formula</i>	<i>A</i>			<i>B</i>	<i>C=B/A</i>	<i>C/C for single fam.</i>
Residential					<i>per unit</i>	<i>per unit</i>
Single-Family	3.00			75	225.0	1.00
Infill Single-Family	3.00			75	225.0	1.00
Multifamily	2.25			75	168.8	0.75
Small Multifamily	1.50			75	112.5	0.50
Infill Multifamily	2.15			75	161.3	0.72
Small Infill Multifamily	1.50			75	112.5	0.50
Corridor Multifamily	2.15			75	161.3	0.72
Small Corridor Multifamily	1.50			75	112.5	0.50
Downtown Multifamily	2.15			75	161.3	0.72
Small Downtown Multifamily	1.50			75	112.5	0.50
<i>Formula</i>		<i>A</i>	<i>B</i>		<i>C=B/(A*43,560/1,000)</i>	<i>C/C for single fam.</i>
Nonresidential					<i>per 1,000 sq. ft.</i>	<i>per 1,000 sq. ft.</i>
Retail		0.30	1,200		91.8	0.41
Service		0.30	1,200		91.8	0.41
Office		0.50	1,200		55.1	0.24
Industrial		0.40	1,800		103.3	0.46

due ww

Source: City of Woodland and EPS

[1] Based on the technical report evaluating General Plan impacts on the City's Water Pollution Control Facility, prepared by Nexgen Utility Management January 2015, Table 3-3.

Table 21
2019 MPFP Nexus Study Update
Cost Allocation - Wastewater

Wastewater

Land Use Category	DUE Factor	2035 Allocation				
		Units/ Bldg. Sq. Ft.	DUEs	Percentage of Total DUEs	Cost	Cost per Unit/ 1,000 Bldg. Sq. Ft.
Residential	<i>per unit</i>	<i>units</i>				<i>per unit</i>
Single-Family	1.00	2,754	2,754	52%	\$ 17,579,042	\$6,383
Infill Single-Family	1.00	273	273	5%	\$ 1,742,585	\$6,383
Multifamily	0.75	990	743	14%	\$ 4,739,448	\$4,787
Small Multifamily	0.50	174	87	2%	\$ 555,329	\$3,192
Infill Multifamily	0.72	29	21	0%	\$ 132,662	\$4,575
Small Infill Multifamily	0.50	0	0	0%	\$ 0	\$3,192
Corridor Multifamily	0.72	82	59	1%	\$ 375,113	\$4,575
Small Corridor Multifamily	0.50	75	38	1%	\$ 239,366	\$3,192
Downtown Multifamily	0.72	200	143	3%	\$ 914,910	\$4,575
Small Downtown Multifamily	0.50	175	88	2%	\$ 558,521	\$3,192
Subtotal		4,752	4,204	79%	\$ 26,836,976	
Nonresidential	<i>per 1,000 sq. ft.</i>	<i>bldg. sq. ft.</i>				<i>per 1,000 sq. ft.</i>
Retail	0.41	271,189	111	2%	\$ 706,469	\$2,605
Service	0.41	293,998	120	2%	\$ 765,888	\$2,605
Office	0.24	387,679	95	2%	\$ 605,960	\$1,563
Industrial	0.46	1,704,221	782	15%	\$ 4,994,585	\$2,931
Subtotal		2,657,087	1,108	21%	\$ 7,072,903	
TOTAL			5,312	100%	\$ 33,909,878	

alloc ww

Source: City of Woodland and EPS

Table 22
2019 MPFP Nexus Study Update
Dwelling Unit Equivalent Factors - General City

General City

Land Use Category	Persons per Household/ Employees per 1,000 bldg. sq. ft.	DUE Factor
Formula	A	A/A for single fam.
Residential	<u>persons per household</u>	<u>per unit</u>
Single-Family	3.00	1.00
Infill Single-Family	3.00	1.00
Multifamily	2.25	0.75
Small Multifamily	1.50	0.50
Infill Multifamily	2.15	0.72
Small Infill Multifamily	1.50	0.50
Corridor Multifamily	2.15	0.72
Small Corridor Multifamily	1.50	0.50
Downtown Multifamily	2.15	0.72
Small Downtown Multifamily	1.50	0.50
Nonresidential	<u>emp per 1,000 sq. ft.</u>	<u>per 1,000 sq. ft.</u>
Retail	2.00	0.67
Service	2.00	0.67
Office	2.50	0.83
Industrial	0.83	0.28

due gc

Source: City of Woodland and EPS

Table 23
2019 MPFP Nexus Study Update
Cost Allocation - General City

General City

Land Use Category	DUE Factor	2035 Allocation				
		Units/ Bldg. Sq. Ft.	DUEs	Percentage of Total DUEs	Cost	Cost per Unit/ 1,000 Bldg. Sq. Ft.
Residential	<i>per unit</i>	<i>units</i>				<i>per unit</i>
Single-Family	1.00	2,754	2,754	51%	\$ 2,350,058	\$853
Infill Single-Family	1.00	273	273	5%	\$ 232,958	\$853
Multifamily	0.75	990	743	14%	\$ 633,594	\$640
Small Multifamily	0.50	174	87	2%	\$ 74,239	\$427
Infill Multifamily	0.72	29	21	0%	\$ 17,735	\$612
Small Infill Multifamily	0.50	0	0	0%	\$ 0	\$427
Corridor Multifamily	0.72	82	59	1%	\$ 50,147	\$612
Small Corridor Multifamily	0.50	75	38	1%	\$ 32,000	\$427
Downtown Multifamily	0.72	200	143	3%	\$ 122,310	\$612
Small Downtown Multifamily	0.50	175	88	2%	\$ 74,666	\$427
Subtotal		4,752	4,204	78%	\$ 3,587,707	
Nonresidential	<i>per 1,000 sq. ft.</i>	<i>bldg. sq. ft.</i>				<i>per 1,000 sq. ft.</i>
Retail	0.67	271,189	181	3%	\$ 154,275	\$569
Service	0.67	293,998	196	4%	\$ 167,251	\$569
Office	0.83	387,679	323	6%	\$ 275,680	\$711
Industrial	0.28	1,704,221	473	9%	\$ 403,960	\$237
Subtotal		2,657,087	1,173	22%	\$ 1,001,166	
TOTAL			5,378	100%	\$ 4,588,872	

alloc gc

Source: City of Woodland and EPS

Table 24
2019 MPFP Nexus Study Update
Dwelling Unit Equivalent Factors - Fire

Fire

Land Use Category	Population/Employees			Building Square Feet			DUE Factor
	Persons per Household/ Employees per 1,000 bldg. sq. ft.	Weighting	Weighted DUE	Square Feet per Unit or 1,000 bldg. sq. ft.	Weighting	Weighted DUE	
<i>Formula</i>	<i>A</i>	<i>B</i>	<i>C=A/A for sf*B</i>	<i>D</i>	<i>E</i>	<i>F=D/D for sf*E</i>	<i>C+F</i>
Residential	<i>per unit</i>			<i>per unit</i>			
Single-Family	3.00	50%	0.50	2,000	50%	0.50	1.00
Infill Single-Family	3.00	50%	0.50	2,000	50%	0.50	1.00
Multifamily	2.25	50%	0.38	900	50%	0.23	0.60
Small Multifamily	1.50	50%	0.25	600	50%	0.15	0.40
Infill Multifamily	2.15	50%	0.36	900	50%	0.23	0.58
Small Infill Multifamily	1.50	50%	0.25	600	50%	0.15	0.40
Corridor Multifamily	2.15	50%	0.36	900	50%	0.23	0.58
Small Corridor Multifamily	1.50	50%	0.25	600	50%	0.15	0.40
Downtown Multifamily	2.15	50%	0.36	900	50%	0.23	0.58
Small Downtown Multifamily	1.50	50%	0.25	600	50%	0.15	0.40
Nonresidential	<i>per 1,000 sq. ft.</i>			<i>per 1,000 sq. ft.</i>			
Retail	2.00	50%	0.33	1,000	50%	0.25	0.58
Service	2.00	50%	0.33	1,000	50%	0.25	0.58
Office	2.50	50%	0.42	1,000	50%	0.25	0.67
Industrial	0.83	50%	0.14	1,000	50%	0.25	0.39

due fire

Source: City of Woodland and EPS

45

Table 25
2019 MPFP Nexus Study Update
Cost Allocation - Fire

Fire

Land Use Category	DUE Factor	2035 Allocation				
		Units/ Bldg. Sq. Ft.	DUEs	Percentage of Total DUEs	Cost	Cost per Unit/ 1,000 Bldg. Sq. Ft.
Residential	<i>per unit</i>	<i>units</i>				<i>per unit</i>
Single-Family	1.00	2,754	2,754	53%	\$ 7,955,436	\$2,889
Infill Single-Family	1.00	273	273	5%	\$ 788,611	\$2,889
Multifamily	0.60	990	594	11%	\$ 1,715,878	\$1,733
Small Multifamily	0.40	174	70	1%	\$ 201,052	\$1,155
Infill Multifamily	0.58	29	17	0%	\$ 48,867	\$1,685
Small Infill Multifamily	0.40	0	0	0%	\$ 0	\$1,155
Corridor Multifamily	0.58	82	48	1%	\$ 138,175	\$1,685
Small Corridor Multifamily	0.40	75	30	1%	\$ 86,661	\$1,155
Downtown Multifamily	0.58	200	117	2%	\$ 337,013	\$1,685
Small Downtown Multifamily	0.40	175	70	1%	\$ 202,208	\$1,155
Subtotal		4,752	3,972	76%	\$ 11,473,902	
Nonresidential	<i>per 1,000 sq. ft.</i>	<i>bldg. sq. ft.</i>				<i>per 1,000 sq. ft.</i>
Retail	0.58	271,189	158	3%	\$ 456,972	\$1,685
Service	0.58	293,998	171	3%	\$ 495,406	\$1,685
Office	0.67	387,679	258	5%	\$ 746,588	\$1,926
Industrial	0.39	1,704,221	663	13%	\$ 1,914,484	\$1,123
Subtotal		2,657,087	1,251	24%	\$ 3,613,449	
TOTAL			5,223	100%	\$ 15,087,351	

alloc fire

Source: City of Woodland and EPS

Table 26
2019 MPFP Nexus Study Update
Dwelling Unit Equivalent Factors - Police

Police

Land Use Category	Persons per Household/ Employees per 1,000 bldg. sq. ft.	DUE Factor
<i>Formula</i>	<i>A</i>	<i>A/A for single fam.</i>
Residential	<u><i>persons per household</i></u>	<u><i>per unit</i></u>
Single-Family	3.00	1.00
Infill Single-Family	3.00	1.00
Multifamily	2.25	0.75
Small Multifamily	1.50	0.50
Infill Multifamily	2.15	0.72
Small Infill Multifamily	1.50	0.50
Corridor Multifamily	2.15	0.72
Small Corridor Multifamily	1.50	0.50
Downtown Multifamily	2.15	0.72
Small Downtown Multifamily	1.50	0.50
Nonresidential	<u><i>emp per 1,000 sq. ft.</i></u>	<u><i>per 1,000 sq. ft.</i></u>
Retail	2.00	0.67
Service	2.00	0.67
Office	2.50	0.83
Industrial	0.83	0.28

due pol

Source: City of Woodland and EPS

land use. Larger dwelling units with a greater number of assumed persons per household have more demand and higher DUE factors. For nonresidential uses, the uses with a greater number of assumed employees per building square foot will have greater estimated demand and higher DUE factors.

Table 27 details the Police cost allocation using the DUE factors from **Table 26** and the methodology outlined at the beginning of this chapter.

Library

Table 28 details the DUE factors for Library improvements. Library costs are not allocated to nonresidential development, as it is thought that employees generally do not use the library facilities. The residential DUE factors are established using persons per household to estimate relative demand by land use. Larger dwelling units with a greater number of assumed persons per household have more demand and higher DUE factors.

Table 29 details the Library cost allocation using the DUE factors from **Table 28** and the methodology outlined at the beginning of this chapter.

Parks

Table 30 details the DUE factors for Parks improvements. The DUE factors are equivalent to the Library DUE factors. Like Library costs, Parks costs are not allocated to nonresidential development, as it is thought that employees generally do not use the park facilities. The residential DUE factors are established using persons per household to estimate relative demand by land use. Larger dwelling units with a greater number of assumed persons per household have more demand and higher DUE factors.

As discussed earlier in **Chapter 1** and **Chapter 3**, the Parks costs are not updated in this report because the current Parks Master Plan has yet to be updated to reflect the City's recently completed 2035 General Plan. The current Single-Family Parks Fee is to remain in place, and the Parks Fee for each other residential land use is calculated as the DUE factor multiplied by the Single-Family Fee. The updated DUE Factors for non-single-family residential uses are lower than the past DUE factors, resulting in lower Parks fees for all other residential land uses, which therefore may result in a reduction in fee revenue. The City acknowledges that it will need to identify backfill funding for any resulting fee revenue deficits since the lower fees are not consistent with the most recent cost allocation performed in 2008 to establish the Parks Fees.

There are two different Parks Fee schedules, one for the SLSP, and the other for the rest of the City. **Table 31** details the SLSP Park Fees. Note that many of the residential land uses do not exist in the SLSP, so no fees are calculated for those land uses. **Table 32** details the Park Fees for all other areas of the City.

Table 27
2019 MPFP Nexus Study Update
Cost Allocation - Police

Police

Land Use Category	DUE Factor	2035 Allocation				
		Units/ Bldg. Sq. Ft.	DUEs	Percentage of Total DUEs	Cost	Cost per Unit/ 1,000 Bldg. Sq. Ft.
Residential	<i>per unit</i>	<i>units</i>				<i>per unit</i>
Single-Family	1.00	2,754	2,754	51%	\$ 1,920,585	\$697
Infill Single-Family	1.00	273	273	5%	\$ 190,385	\$697
Multifamily	0.75	990	743	14%	\$ 517,805	\$523
Small Multifamily	0.50	174	87	2%	\$ 60,672	\$349
Infill Multifamily	0.72	29	21	0%	\$ 14,494	\$500
Small Infill Multifamily	0.50	0	0	0%	\$ 0	\$349
Corridor Multifamily	0.72	82	59	1%	\$ 40,983	\$500
Small Corridor Multifamily	0.50	75	38	1%	\$ 26,152	\$349
Downtown Multifamily	0.72	200	143	3%	\$ 99,958	\$500
Small Downtown Multifamily	0.50	175	88	2%	\$ 61,021	\$349
Subtotal		4,752	4,204	78%	\$ 2,932,053	
Nonresidential	<i>per 1,000 sq. ft.</i>	<i>bldg. sq. ft.</i>				<i>per 1,000 sq. ft.</i>
Retail	0.67	271,189	181	3%	\$ 126,081	\$465
Service	0.67	293,998	196	4%	\$ 136,686	\$465
Office	0.83	387,679	323	6%	\$ 225,300	\$581
Industrial	0.28	1,704,221	473	9%	\$ 330,136	\$194
Subtotal		2,657,087	1,173	22%	\$ 818,203	
TOTAL			5,378	100%	\$ 3,750,256	

alloc pol

Source: City of Woodland and EPS

Table 28
2019 MPFP Nexus Study Update
Dwelling Unit Equivalent Factors - Library

Library

Land Use Category	Persons per Household	DUE Factor
Formula	A	A/A for single fam.
Residential		<i>per unit</i>
Single-Family	3.00	1.00
Infill Single-Family	3.00	1.00
Multifamily	2.25	0.75
Small Multifamily	1.50	0.50
Infill Multifamily	2.15	0.72
Small Infill Multifamily	1.50	0.50
Corridor Multifamily	2.15	0.72
Small Corridor Multifamily	1.50	0.50
Downtown Multifamily	2.15	0.72
Small Downtown Multifamily	1.50	0.50
Nonresidential [1]	NA	NA

due lib

Source: City of Woodland and EPS

[1] Nonresidential development not charged library fee.

Table 29
2019 MPFP Nexus Study Update
Cost Allocation - Library

Library

Land Use Category	DUE Factor	2035 Allocation				
		Units/ Bldg. Sq. Ft.	DUEs	Percentage of Total DUEs	Cost	Cost per Unit/ 1,000 Bldg. Sq. Ft.
Residential	<i>per unit</i>	<i>units</i>				<i>per unit</i>
Single-Family	1.00	2,754	2,754	66%	\$ 1,466,680	\$533
Infill Single-Family	1.00	273	273	6%	\$ 145,390	\$533
Multifamily	0.75	990	743	18%	\$ 395,428	\$399
Small Multifamily	0.50	174	87	2%	\$ 46,333	\$266
Infill Multifamily	0.72	29	21	0%	\$ 11,068	\$382
Small Infill Multifamily	0.50	0	0	0%	\$ 0	\$266
Corridor Multifamily	0.72	82	59	1%	\$ 31,297	\$382
Small Corridor Multifamily	0.50	75	38	1%	\$ 19,971	\$266
Downtown Multifamily	0.72	200	143	3%	\$ 76,334	\$382
Small Downtown Multifamily	0.50	175	88	2%	\$ 46,599	\$266
Subtotal		4,752	4,204	100%	\$ 2,239,101	
Nonresidential	<i>per 1,000 sq. ft.</i>	<i>bldg. sq. ft.</i>				<i>per 1,000 sq. ft.</i>
Retail	NA	271,189	0	0%	\$ 0	NA
Service	NA	293,998	0	0%	\$ 0	NA
Office	NA	387,679	0	0%	\$ 0	NA
Industrial	NA	1,704,221	0	0%	\$ 0	NA
Subtotal		2,657,087	0	0%	\$ 0	
TOTAL			4,204	100%	\$ 2,239,101	

alloc lib

Source: City of Woodland and EPS

Table 30
2019 MPFP Nexus Study Update
Dwelling Unit Equivalent Factors - Parks

Parks

Land Use Category	Persons per Household	DUE Factor
<i>Formula</i>	A	A/A for single fam.
Residential		<i>per unit</i>
Single-Family	3.00	1.00
Infill Single-Family	3.00	1.00
Multifamily	2.25	0.75
Small Multifamily	1.50	0.50
Infill Multifamily	2.15	0.72
Small Infill Multifamily	1.50	0.50
Corridor Multifamily	2.15	0.72
Small Corridor Multifamily	1.50	0.50
Downtown Multifamily	2.15	0.72
Small Downtown Multifamily	1.50	0.50
Nonresidential [1]	NA	NA

due park

Source: City of Woodland and EPS

[1] Nonresidential development not charged park fee.

Table 31
2019 MPFP Nexus Study Update
Fee Calculation - Spring Lake Parks

Spring Lake
Parks

Land Use Category	DUE Factor	MPFP Fee
<i>Formula</i>	<i>A</i>	<i>A*Single-Family Fee</i>
Residential		
	<i>per unit</i>	
Single-Family	1.00	\$ 4,330
Infill Single-Family	NA	NA
Multifamily	0.75	\$ 3,248
Small Multifamily	0.50	\$ 2,165
Infill Multifamily	NA	NA
Small Infill Multifamily	NA	NA
Corridor Multifamily	NA	NA
Small Corridor Multifamily	NA	NA
Downtown Multifamily	NA	NA
Small Downtown Multifamily	NA	NA
Nonresidential		
Retail	NA	NA
Service	NA	NA
Office	NA	NA
Industrial	NA	NA
Subtotal		
TOTAL		

alloc park sl

Source: City of Woodland and EPS

Table 32
2019 MPFP Nexus Study Update
Fee Calculation - Other Parks

Other Parks

Land Use Category	DUE Factor	MPFP Fee
<i>Formula</i>	<i>A</i>	<i>A*Single-Family Fee</i>
Residential		
	<i>per unit</i>	
Single-Family	1.00	\$ 7,872
Infill Single-Family	1.00	\$ 7,872
Multifamily	0.75	\$ 5,904
Small Multifamily	0.50	\$ 3,936
Infill Multifamily	0.72	\$ 5,642
Small Infill Multifamily	0.50	\$ 3,936
Corridor Multifamily	0.72	\$ 5,642
Small Corridor Multifamily	0.50	\$ 3,936
Downtown Multifamily	0.72	\$ 5,642
Small Downtown Multifamily	0.50	\$ 3,936
Nonresidential		
Retail	NA	NA
Service	NA	NA
Office	NA	NA
Industrial	NA	NA

alloc park other

Source: City of Woodland and EPS

Administration

In addition to the MPFP Fees for each backbone infrastructure and public facility component discussed above, the City charges a fee to administer the MPFP Fee Program. For each land use, the Administration fee is calculated as 0.75 percent of the sum of the other MPFP Fees. The Administration Fee funds the administration, oversight, and implementation of the MPFP Fee Program, including administration of any credit and reimbursement agreements. The Administration Fee will include adequate funding to cover all City costs. The Administration Fee is included in the fee summary table in **Chapter 1**.

5. AB 1600 NEXUS FINDING

Authority

This report has been prepared to update the MPFP Fees in accordance with the procedural guidelines established in AB 1600, which are codified in California Government Section 66000 et. seq. These code sections set forth the procedural requirements for establishing and collecting development impact fees. The procedures require that a "reasonable relationship or nexus must exist between a governmental exaction and the purpose of the condition."² Specifically, each local agency imposing a fee must:

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

Nexus Findings

For each MPFP Fee component, the fees to be collected by land use are calculated based on the proportionate share of the total facility use that each land use represents. Using this approach results in legally justifiable development impact fees. This section details the nexus findings for each MPFP Fee component that is addressed in this report.

Roads

Purpose of Fee

New development in the City will result in an increase in the service population and, therefore, in the demand placed on the City's transportation infrastructure. The purpose of the MPFP Road Fee is to provide funding to maintain adequate levels of service on public roads and freeway interchanges through the expansion of existing roadway facilities and construction of new roadway facilities.

² *Public Needs & Private Dollars*; William Abbott, Marian E. Moe, and Marilee Hanson, page 109.

Use of Fee

The MPFP Road Fees will be used to construct and expand roadway facilities to accommodate future traffic volumes projected as a result of new development. Roadway improvements include new streets, street widening, interchange improvements, traffic signal construction and modifications, intersection improvements, street calming facilities, and bike and pedestrian improvements.

Relationship Between Use of Fee and Type of Development

The MPFP Road Fees will be used to expand and improve the roadway system to adequately serve an increased service population as the result of new development. A reasonable relationship exists between the use of the Road Fees and the residential and nonresidential development on which the fees are imposed because the fees will be used to expand the roadway system to serve the new residents and employees generated by the new development.

Relationship Between Need for Facility and Type of Development

New residential and commercial development in the City will generate new residents and employees that will result in new vehicular trips and the need for additional roadway capacity to maintain adequate levels of service. A reasonable relationship exists between the need for roadway improvements and the type of new residential and nonresidential development projects because the capacity of the roadway system must be expanded to accommodate the new development types that will place an increased demand on the roadway system.

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

The total cost of improvements funded by the MPFP Road Fee is allocated among the projected new residential and nonresidential land uses in the City through 2035 based on the relative demand each land use is anticipated to place upon the improvements. Cost allocation factors based on vehicle miles travelled are used to measure the relative demand generated by each land use and to allocate the roadway costs across all benefitting land uses in the City. A reasonable relationship exists between the amount of the MPFP Road Fees and the costs of the facilities attributable to the new residential and nonresidential development on which the fees are imposed because the fees are derived using appropriate cost allocation factors as measures of the proportional demand generated by each development type.

Wastewater

Purpose of Fee

New development in the City will result in an increase in the service population and, therefore, in the demand placed on the City's wastewater infrastructure. The purpose of the MPFP Wastewater Fee is to provide funding to expand and improve the wastewater system to adequately serve the expanded service population.

Use of Fee

The MPFP Wastewater Fees will be used to construct and expand wastewater facilities to accommodate increased demand projected as a result of new development. Wastewater

improvements include the expansion and improvement of the existing wastewater treatment plant. The fees will also be used to fund the preparation of related studies.

Relationship Between Use of Fee and Type of Development

The MPFP Wastewater Fees will be used to expand and improve the wastewater infrastructure to adequately serve an increased service population as the result of new development. A reasonable relationship exists between the use of the Wastewater Fees and the residential and nonresidential development on which the fees are imposed because the fees will be used to expand the wastewater infrastructure to serve the new residents and employees generated by the new development.

Relationship Between Need for Facility and Type of Development

New residential and commercial development in the City will generate new residents and employees that will result in the need for additional wastewater system capacity to continue to provide adequate service to the City's service population. A reasonable relationship exists between the need for wastewater improvements and the type of new residential and nonresidential development projects because the capacity of the wastewater system must be expanded to accommodate the new development types that will place an increased demand on the wastewater system.

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

The total cost of improvements funded by the MPFP Wastewater Fee is allocated among the projected new residential and nonresidential land uses in the City through 2035 based on the relative demand each land use is anticipated to place upon the improvements. Cost allocation factors based on wastewater generated, as measured in gallons per day, are used to measure the relative demand generated by each land use and to allocate the wastewater costs across all benefitting land uses in the City. A reasonable relationship exists between the amount of the MPFP Wastewater Fees and the costs of the facilities attributable to the new residential and nonresidential development on which the fees are imposed because the fees are derived using appropriate cost allocation factors as measures of the proportional demand generated by each development type.

General City

Purpose of Fee

New development in the City will result in an increase in the service population and, therefore, in the demand placed on the City's public facilities, such as City Hall and the Civic Center. The purpose of the MPFP General City Fee is to provide funding to expand and improve the City facilities to adequately provide services to the expanded service population.

Use of Fee

The MPFP General City Fee revenue will be used to expand and improve City public facilities to accommodate increased demand projected as a result of new development. General City improvements include expansion of City buildings, including City Hall, the Civic Center, and the

Municipal Services Center, as well as technology upgrades and the preparation of related planning studies.

Relationship Between Use of Fee and Type of Development

The MPFP General City Fees will be used to expand and improve City buildings to provide adequate space and amenities to serve an increased service population as the result of new development. A reasonable relationship exists between the use of the General City Fees and the residential and nonresidential development on which the fees are imposed because the fees will be used to expand the City buildings to serve the new residents and employees generated by the new development.

Relationship Between Need for Facility and Type of Development

New residential and commercial development in the City will generate new residents and employees that will result in the need for additional City building space and improvements to continue to provide adequate service to the City's service population. A reasonable relationship exists between the need for General City improvements and the type of new residential and nonresidential development projects because City buildings must be expanded and improved to accommodate the new development types that will place an increased demand on these facilities.

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

The total cost of improvements funded by the MPFP General City Fee is allocated among the projected new residential and nonresidential land uses in the City through 2035 based on the relative demand each land use is anticipated to place upon the improvements. Cost allocation factors based on new population and employees resulting from new development are used to measure the relative demand generated by each land use and to allocate the General City costs across all benefitting land uses in the City. A reasonable relationship exists between the amount of the MPFP General City Fees and the costs of the facilities attributable to the new residential and nonresidential development on which the fees are imposed because the fees are derived using appropriate cost allocation factors as measures of the proportional demand generated by each development type.

Fire

Purpose of Fee

New development in the City will result in an increase in the service population and, therefore, in the demand for the services of the City's Fire Department. The purpose of the MPFP Fire Fee is to provide funding to construct new fire stations that are needed to provide adequate fire fighting and emergency medical services to the expanded service population.

Use of Fee

The MPFP Fire Fee will be used to construct new facilities needed to accommodate increased demand projected as a result of new development. Two new fire stations are planned in the southeast and northeast areas of the City.

Relationship Between Use of Fee and Type of Development

The MPFP Fire Fees will be used to construct two new fire stations that are needed to serve an increased service population as the result of new development. A reasonable relationship exists between the use of the Fire Fees and the residential and nonresidential development on which the fees are imposed because the fees will be used to construct new fire stations needed to serve the new residents and employees generated by the new development.

Relationship Between Need for Facility and Type of Development

New residential and commercial development in the City will generate new residents and employees that will result in the need for additional fire stations to continue to provide adequate service to the City's service population. A reasonable relationship exists between the need for fire stations and the type of new residential and nonresidential development projects because new fire stations must be constructed to accommodate the new development types that will place an increased demand on Fire Department services.

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

The total cost of improvements funded by the MPFP Fire Fee is allocated among the projected new residential and nonresidential land uses in the City through 2035 based on the relative demand each land use is anticipated to place upon the improvements. Cost allocation factors based on new population and employees resulting from new development are used to measure the relative demand generated by each land use and to allocate the fire station construction costs across all benefitting land uses in the City. A reasonable relationship exists between the amount of the MPFP Fire Fees and the costs of the facilities attributable to the new residential and nonresidential development on which the fees are imposed because the fees are derived using appropriate cost allocation factors as measures of the proportional demand generated by each development type.

Police

Purpose of Fee

New development in the City will result in an increase in the service population and, therefore, in the demand for the services provided the City's Police Department. The purpose of the MPFP Police Fee is to provide funding for additional facilities, equipment, and vehicles that are needed to provide police services to the expanded service population.

Use of Fee

The MPFP Police Fee will be used for facility improvements and the acquisition of equipment and vehicles needed to accommodate increased demand for police services as a result of new development. The improvements include construction of a new communications facility and a new animal shelter, the acquisition of police vehicles and equipment, and development of a new communications and records management system.

Relationship Between Use of Fee and Type of Development

The MPFP Police Fees will be used to expand and improve police facilities and to acquire equipment and vehicles needed to serve an increased service population as a result of new

development. A reasonable relationship exists between the use of the Police Fees and the residential and nonresidential development on which the fees are imposed because the fees will be used for facility improvements, equipment, and vehicles needed to provide service to the new residents and employees generated by the new development.

Relationship Between Need for Facility and Type of Development

New residential and commercial development in the City will generate new residents and employees that will result in the need for additional police facilities to continue to provide adequate service to the City's service population. A reasonable relationship exists between the need for police department improvements and the type of new residential and nonresidential development projects because Police Department facilities must be constructed and equipment and vehicles acquired to accommodate the new development types that will place an increased demand on the Police Department services.

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

The total cost of improvements funded by the MPFP Police Fee is allocated among the projected new residential and nonresidential land uses in the City through 2035 based on the relative demand each land use is anticipated to place upon the improvements. Cost allocation factors based on new population and employees resulting from new development are used to measure the relative demand generated by each land use and to allocate the police improvement costs across all benefitting land uses in the City. A reasonable relationship exists between the amount of the MPFP Police Fees and the costs of the facilities attributable to the new residential and nonresidential development on which the fees are imposed because the fees are derived using appropriate cost allocation factors as measures of the proportional demand generated by each development type.

Library

Purpose of Fee

New development in the City will result in an increase in the service population and, therefore, in the use of the library facilities. The purpose of the MPFP Library Fee is to provide funding for library expansion that is needed to provide library services to the expanded service population.

Use of Fee

The MPFP Library Fee will be used for library improvements and materials needed to accommodate increased demand for library services as a result of new development. The improvements include expansion of the main library and the library materials collection.

Relationship Between Use of Fee and Type of Development

The MPFP Library Fees will be used to expand the library and library materials collection to serve an increased service population as the result of new development. A reasonable relationship exists between the use of the Library Fees and the residential development on which the fees are imposed because the fees will be used for the library and materials collection expansion needed to serve the new residents generated by the new development.

Relationship Between Need for Facility and Type of Development

New residential development in the City will generate new residents that will result in the need for the expansion of the library and the library materials collection to continue to provide adequate service to the City's residents. A reasonable relationship exists between the need for library improvements and the type of new residential development projects because the library facilities and materials collection must be expanded to accommodate the new development types that will place an increased demand on library services.

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

The total cost of improvements funded by the MPFP Library Fee is allocated among the projected new residential land uses in the City through 2035 based on the relative demand each land use is anticipated to place upon the improvements. Cost allocation factors based on new population resulting from new development are used to measure the relative demand generated by each land use and to allocate the library improvement costs across all benefitting land uses in the City. A reasonable relationship exists between the amount of the MPFP Library Fees and the costs of the facilities attributable to the new residential development on which the fees are imposed because the fees are derived using appropriate cost allocation factors as measures of the proportional demand generated by each development type.

Parks

Note that the Parks Fee costs are not updated in this report. There are two separate sets of Parks Fees, one for the SLSP (SLSP Parks Fees), and one for the rest of the City (Other Parks Fees). The proposed Parks Fees for the single-family land uses are equivalent to the current fees, while the proposed Parks Fees for multifamily uses have been adjusted to reflect new land uses and cost allocation factors. Nonresidential development does not pay a Parks Fee.

Purpose of Fee

New development in the City will result in an increase in the service population and, therefore, in the use of the City's parks and recreation facilities. The purpose of the MPFP Parks Fee is to provide funding for park improvements and land acquisition that are needed to maintain the City's standards for providing parks and recreation facilities to the expanded service population.

Use of Fee

The MPFP Parks Fee will be used for park construction and land acquisition needed to accommodate increased demand for parks as a result of new development.

Relationship Between Use of Fee and Type of Development

The MPFP Parks Fees will be used to construct park facilities needed to serve an increased service population as the result of new development. A reasonable relationship exists between the use of the Parks Fees and the residential development on which the fees are imposed because the fees will be used to expand the parks system to serve the new residents generated by the new development.

Relationship Between Need for Facility and Type of Development

New residential development in the City will generate new residents that will result in the need for additional parks to continue to provide the City's standard level of service to its residents. A reasonable relationship exists between the need for park improvements and the type of new residential development projects because the parks system must be expanded to accommodate the new development types that will place an increased demand on parks.

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

The Parks costs are not updated in this report, so a new cost allocation was not performed. As described above, there are two separate sets of MPFP Parks Fees, the SLSP Parks Fees and the Other Parks Fees. Both sets of Parks Fees were established based on cost allocations performed in previous Nexus Study Updates and have been updated over the years for annual inflationary increases.

In the prior cost allocations, the total cost of improvements funded by the Parks Fees were allocated among the projected new residential land uses in the City based on the relative demand each land use was anticipated to place upon the improvements. Cost allocation factors based on new population resulting from new development were used to measure the proportional demand generated by each land use and to allocate the Parks improvement costs across all benefitting land uses in the City. A reasonable relationship exists between the amount of the MPFP Parks Fees and the costs of the facilities attributable to the new residential development on which the fees are imposed because the fees were derived using appropriate cost allocation factors as measures of the proportional demand generated by each development type.

In this Nexus Study Update, the proposed Single-Family fees are kept at the current levels. Cost allocation factors based on new population resulting from new development are used to measure the proportional demand generated by each land use and to calculate fees for all multifamily benefitting land uses in the City (see previous chapter).

6. IMPLEMENTATION

Introduction

The MPFP Fees presented in this 2019 Nexus Study Update are based on the best cost estimates and land use information available at the time the report was prepared. If costs, development projections, or funding sources other than development impact fees change significantly, the fees should be adjusted accordingly. The proposed updated MPFP Fees must be adopted by the City Council by City Resolution. The proposed fees are shown in **Table 1** of this report.

The MPFP Fee Program applies to all development in the City. All new residential and nonresidential commercial development that occurs in the City shall pay the MPFP Fees in effect at the time that a building permit is issued.

The remainder of this chapter provides a brief summary of the key implementation and administrative elements for the MPFP Fee Program.

Fee Program Updates

Annual Inflation Update

The MPFP Fee Program includes annual adjustments to account for the inflation of public facilities design, construction, installation, and acquisition costs unless there is a Periodic Update in the same year. In January of each calendar year, the MPFP Fees will be increased by the average of the San Francisco and 20-city CCI as reported in the ENR for the 12-month period ending in October of the previous year. This Nexus Study Update contains cost estimates in 2019 dollars.

Periodic Update for Significant Adjustments

The City will periodically update MPFP Fees because of the following types of changes:

- Changes in land use categories.
- Changes in development projections.
- Changes in backbone infrastructure and public facility requirements.
- New cost estimates.
- New funding source data.
- Changes in cost allocation factors.
- Changes in the methodology for computing the MPFP Fees.

Reviews and Accounting

Annual Review

This report and the technical information it contains should be maintained and reviewed periodically by the City as necessary to ensure the accuracy of the MPFP Fee estimates and to enable the adequate programming of funding sources. To the extent that improvement

requirements, costs, or development potential change over time, the MPFP Fee program will need to be updated. Specifically, AB 1600 (at Gov. C. §§ 66001(c), 66006(b)(1)) stipulates that each local agency that requires payment of a fee make specific information available to the public annually within 180 days of the last day of the fiscal year, including the follow items:

- A description of the type of fee in the account.
- The amount of the fee.
- The beginning and ending balance of the fund.
- The amount of fees collected and interest earned.
- Identification of the improvements constructed.
- The total cost of the improvements constructed.
- The fees expended to construct the improvement.
- The percent of total costs funded by the fee.

If sufficient fees have been collected to fund the construction of an improvement, the agency must specify the approximate date for construction of that improvement. Because of the dynamic nature of growth and infrastructure requirements, the City should monitor development activity, the need for infrastructure improvements, and the adequacy of the fee revenues and other available funding. Formal annual review of the MPFP Fee Program should occur, at which time necessary adjustments should be made to the MPFP Fee Program.

Surplus Funds

AB 1600 requires that if any portion of a fee remains unexpended or uncommitted in an account for five years or more after deposit of the fee, the City Council shall make findings once each year: (1) to identify the purpose to which the fee is to be put, (2) to demonstrate a reasonable relationship between the fee and the purpose for which it was charged, (3) to identify all sources and amounts of funding anticipated to complete financing of incomplete improvements, and (4) to designate the approximate dates on which the funding identified in (3) is expected to be deposited into the appropriate fund.

If adequate funding has been collected for a certain improvement, an approximate date must be specified as to when construction on the improvement will begin. If the findings show no need for the unspent funds or if the conditions discussed above are not met, and the administrative costs of the refund do not exceed the refund itself, the local agency that has collected the funds must refund them.

Five-Year Update

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

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

Once sufficient funds have been collected to complete the specified projects, the City must commence construction within 180 days. If it fails to do this, the City is required to refund the unexpended portion of the fee and any accrued interest to the then current owners.



APPENDIX A: Outstanding Bond Debt Service

Table A-1	Wastewater Remaining Debt Service—2014 Refunding Bonds
Table A-2	Fire Remaining Debt Service—2014 Fire and Park Refunding Bonds

Table A-1
2019 MPFP Nexus Study Update
Wastewater Remaining Debt Service - 2014 Refunding Bonds

Fiscal Year	Remaining Debt Service			MPFP Portion of Remaining Debt Service			Discounted Total
	2005 Bond	2002 Bond	Total	2005 Bond	2002 Bond	Total	
<i>Percentage</i>				42.8%	100%		3%
2019	\$ 1,094,350	\$ 1,448,000	\$ 2,542,350	\$ 468,382	\$ 1,448,000	\$ 1,916,382	\$ 1,916,382
2020	\$ 1,089,100	\$ 1,446,500	\$ 2,535,600	\$ 466,135	\$ 1,446,500	\$ 1,912,635	\$ 1,856,927
2021	\$ 1,088,100	\$ 1,453,250	\$ 2,541,350	\$ 465,707	\$ 1,453,250	\$ 1,918,957	\$ 1,808,801
2022	\$ 1,081,100	\$ 1,452,750	\$ 2,533,850	\$ 462,711	\$ 1,452,750	\$ 1,915,461	\$ 1,752,918
2023	\$ 1,088,350	\$ 1,450,250	\$ 2,538,600	\$ 465,814	\$ 1,450,250	\$ 1,916,064	\$ 1,702,398
2024	\$ 1,089,100	\$ 1,445,750	\$ 2,534,850	\$ 466,135	\$ 1,445,750	\$ 1,911,885	\$ 1,649,209
2025	\$ 1,088,600	\$ 1,449,250	\$ 2,537,850	\$ 465,921	\$ 1,449,250	\$ 1,915,171	\$ 1,603,925
2026	\$ 1,081,850	\$ 1,455,250	\$ 2,537,100	\$ 463,032	\$ 1,455,250	\$ 1,918,282	\$ 1,559,739
2027	\$ 1,084,100	\$ 1,453,500	\$ 2,537,600	\$ 463,995	\$ 1,453,500	\$ 1,917,495	\$ 1,513,688
2028	\$ 1,084,850	\$ 1,454,250	\$ 2,539,100	\$ 464,316	\$ 1,454,250	\$ 1,918,566	\$ 1,470,421
2029	\$ 1,089,100	\$ 1,447,250	\$ 2,536,350	\$ 466,135	\$ 1,447,250	\$ 1,913,385	\$ 1,423,738
2030	\$ 1,091,600	\$ 1,447,750	\$ 2,539,350	\$ 467,205	\$ 1,447,750	\$ 1,914,955	\$ 1,383,404
2031	\$ 1,082,350	\$ 1,455,250	\$ 2,537,600	\$ 463,246	\$ 1,455,250	\$ 1,918,496	\$ 1,345,594
2032	\$ 1,081,850	\$ 1,454,250	\$ 2,536,100	\$ 463,032	\$ 1,454,250	\$ 1,917,282	\$ 1,305,576
2033	\$ 2,699,600	\$ 0	\$ 2,699,600	\$ 1,155,429	\$ 0	\$ 1,155,429	\$ 763,875
2034	\$ 2,698,600	\$ 0	\$ 2,698,600	\$ 1,155,001	\$ 0	\$ 1,155,001	\$ 741,351
2035	\$ 2,698,800	\$ 0	\$ 2,698,800	\$ 1,155,086	\$ 0	\$ 1,155,086	\$ 719,812
	\$ 23,311,400	\$ 20,313,250	\$ 43,624,650	\$ 9,977,279	\$ 20,313,250	\$ 30,290,529	\$ 24,517,756

ww bonds

Source: City of Woodland and EPS

Table A-2
2019 MPFP Nexus Study Update
Fire Remaining Debt Service - 2014 Fire and Park Refunding Bonds

Fiscal Year	Total	Remaining Debt Service		Fire
		Fire [1]	Parks [1]	Debt Service Discounted Total
Percentage		8.6075%	91.3925%	3%
2019	\$ 1,533,867	\$ 132,028	\$ 1,401,840	\$ 132,028
2020	\$ 1,533,866	\$ 132,028	\$ 1,401,839	\$ 128,182
2021	\$ 1,533,867	\$ 132,028	\$ 1,401,840	\$ 124,449
2022	\$ 1,533,867	\$ 132,028	\$ 1,401,839	\$ 120,824
2023	\$ 1,533,866	\$ 132,028	\$ 1,401,839	\$ 117,305
2024	\$ 1,533,867	\$ 132,028	\$ 1,401,840	\$ 113,888
2025	\$ 1,533,867	\$ 132,028	\$ 1,401,840	\$ 110,571
2026	\$ 1,533,867	\$ 132,028	\$ 1,401,839	\$ 107,351
	\$ 12,270,936	\$ 1,056,221	\$ 11,214,715	\$ 954,597

fire bonds

Source: City of Woodland and EPS

[1] Percentage distribution provided by City.