Development Impact Mitigation Fee Update

For Essential Services Facilities, and Water and Wastewater Facility Participation Fees

Prepared for the

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EXECUTIVE SUMMARY

This report presents an analysis of the cost of essential services, water, and wastewater facilities to accommodate new development in Jackson. This report documents the justifiable impact fees that could be imposed on new development to recover that cost in accordance with state law in the following facility categories:

Essential Services Facilities
- Police
- Fire
- General Government Office Space

Facility Participation Charges

Wastewater
- Sewage Collection
- Wastewater Treatment

Water Facilities
- Water Storage and Distribution

BACKGROUND AND STUDY OBJECTIVES

This study documents the relationship between new development in Jackson and the cost of public facilities to serve growth through the year 2035. The study also provides estimates of the costs of facilities necessary for growth and calculates the updated facilities fees and charges by land use type that would generate revenues equal to these costs. The cost estimates of public facilities required to serve growth assume that new development will provide facilities that, at a minimum, will ensure the City can maintain its current level of service standards for these facilities.

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

In California, cities and counties rely on their authority to levy impact fees under the police powers granted by the California Constitution pursuant to the procedures of the Mitigation Fee Act, contained in Government Code Section 66000 et seq., and Facility Participation Charges for water and sewer systems in Sec. 66013. This report provides the necessary documentation for the adoption of Jackson's updated essential services impact fees, and the updated water, and wastewater facility participation charges.

POPULATION PROJECTIONS

Population and population growth are key factors in determining the need for new or expanded facilities. The population and employment projections to the year 2035 used in this analysis are summarized in **Table 1.1.** The projections use the 1.02 percent annual population growth rate from the Planning Department's analysis of growth in the City to 2035, which was based on the historical rate of population growth between the 2000 U.S. Census and the population estimated in 2017.

Table 1.1: Population, Employment, and Housing Projections

	2018	2035	Net Growth	Average Annual Growth Rate
Population	4,679	5,560	881	1.02%
Employment	2,763	3,690	927	1.7%
Housing				
Single-Family Units	1,423	1,691	268	
Multi-Family Units	484	572	88	
Mobile Homes	186	224	38	
Total	2,093	2,487	394	1.02%

FEE SCHEDULES AND REVENUES

Table 1.2 summarizes the current essential services facilities impact fees, and the water and wastewater facility participation charges. **Table 1.3** summarizes the corresponding schedule of fees or charges recommended for each facility category and within each land use category based on the analysis in this report.

Essential services facilities fees are calculated based on cost per capita and the household occupancy or employment occupancy factors as shown in **Table 1.4**. The essential services, to a large extent, are impacted by the number of residents or employees served. Therefore, the occupancy factors are key in determining the relationship between the need for facilities and new development paying the impact fees. The calculation of cost per capita is found in each of the subsequent chapters of this report.

Residential water and wastewater facility participation charges are calculated based on water use per dwelling unit (average 400 gallons per day for single-family homes). Nonresidential charges are based on the plumbing fixture units that are stated in building plans for new nonresidential structures. **Table 1.5** shows the proposed charges for water and wastewater.

Administrative Surcharge

This Impact study includes a 2 percent surcharge on the proposed impact fees and facility participation charges for the administration of the fee program. This surcharge is intended to recover the cost to calculate and collect the fee or charge for each building permit, to prepare the annual and five-year reports required by California Government Code Secs. 66006 and 66001(d)(1), prepare the adopting resolution and the public hearing notifications.

Table 1.2: Summary of Current Essential Facilities Impact Fees, and Water and Wastewater Facility Participation Charges

Facility Category	Single-Family (R-1)	Multi-Family (R-2)	Mobile Home (R-3/MHP)	Lodging	Office	Commercial/Retail	Industrial/ Warehouse	Public/ Institutional
	Fee per Dwelling Unit				*Fee per 1,000 Square Feet of Building Floor Area*			
Essential Services	$2,300.00	$2,450.00	$2,550.00	N/A	$450.00	$800.00	N/A	N/A
Wastewater[1]	$2,200.00	$2,100.00	$1,900.00	N/A	$800.00	$800.00	N/A	N/A
Water[1]	$2,060.00	$1,960.00	$1,860.00	N/A	$800.00	$800.00	N/A	N/A
Total Current Fees	**$6,560**	**$6,510**	**$6,310**		**$2,050**	**$2,400**	**$0**	**$0**

Table 1.3: Summary of Proposed Essential Facilities Impact Fees, Water and Wastewater Facility Participation Charges

	Single-Family	Multi-Family	Mobile Home	Lodging	Office	Commercial/Retail	Industrial/ Warehouse	Public/ Institutional
	Fee per Dwelling Unit			*Per Room*	*Fee per 1,000 Square Feet of Building Floor Area*			
Essential Services	$2,832.91	$2,652.09	$1,687.69	$433.98	$963.43	$642.29	$289.32	$1,157.28
Wastewater[1]	$7,119.36	$6,692.19	$4,271.61	$3,274.90	$2,847.74	$2,847.74	$2,847.74	$2,847.74
Water[1]	$2,059.88	$1,936.29	$1,235.93	$514.97	$823.95	$823.95	$823.95	$823.95
Sub-total	$12,012.15	$11,280.57	$7,195.23	$4,223.85	$4,635.13	$4,313.98	$3,961.01	$4,828.97
2% Admin. Charge	$240.24	$225.61	$143.90	$84.48	$92.70	$86.28	$79.22	$96.58
Total Proposed Fee	**$12,252.39**	**$11,506.18**	**$7,339.14**	**$4,308.33**	**$4,727.83**	**$4,400.26**	**$4,040.23**	**$4,925.55**

[1] Nonresidential fees are based on 1,000 square feet of floor area except for water and wastewater charges, which are based on plumbing fixture units (PFU). Shown here are the nonresidential charges assuming 6.4 fixture units (5/8" water meter); see **Tables 6.5** and **7.4**.

Table 1.4: Essential Services Cost per Capita and Proposed Fees

	Costs per Capita						
Land Use[1]	General Government Office	Police	Fire	Occupancy Factor[2]	Proposed Essential Services Fee	With Proposed 2 Percent Admin. Fee Surcharge	Current Fee
Residential							
Single Family	$370.87	$247.58	$587.04	2.35	$2,832.91	$2,889.57	$2,300.00
Multi-family	$370.87	$247.58	$587.04	2.20	$2,652.09	$2,705.13	$2,450.00
Mobile Home	$370.87	$247.58	$587.04	1.40	$1,687.69	$1,721.45	$2,550.00
Lodging (per room)[3]	$89.01	$59.42	$140.89	1.50	$433.98	$442.66	N/A
Nonresidential							
Office	$89.01	$59.42	$140.89	3.33	$963.43	$982.70	$450.00
Commercial/Retail	$89.01	$59.42	$140.89	2.22	$642.29	$655.13	$800.00
Industrial/Warehouse	$89.01	$59.42	$140.89	1.00	$289.32	$295.11	N/A
Public/Institutional	$89.01	$59.42	$140.89	4.00	$1,157.28	$1,180.42	N/A

[1] See Chapter 2 for land use definitions

[2] Household occupancy: persons per dwelling unit; nonresidential occupancy: employees per 1,000 square feet of floor area.

Table 1.5: Water and Wastewater Facility Participation Charges

Land Use[1]	Water Demand Factor	Water Facilities Fee, per Unit or 1,000 Sq. Ft.	With 2% Administrative Surcharge	Current Water Charge	Wastewater Demand Factor	Proposed Wastewater System Fee, per Unit or rooms.	With 2% Administrative Surcharge	Current Wastewater Charge
Residential, fee per Unit								
Single Family	1.00	$2,059.88	$2,101.08	$2,060.00	1.00	$7,119.36	$7,261.74	$2,200.00
Multi-family	0.94	$1,936.29	$1,975.01	$1,960.00	0.94	$6,692.19	$6,826.04	$2,100.00
Mobile Homes	0.60	$1,235.93	$1,260.65	$1,860.00	0.60	$4,271.61	$4,357.05	$1,900.00
Lodging (rooms)	0.25	$514.97	$525.27	N/A	0.46	$3,274.90	$3,340.40	N/A
Nonresidential								
Fee per Plumbing Fixture Unit		$128.74	$131.32	$125.00		$444.96	$453.86	$125.00

Projected Impact Fee and Facility Participation Charge Revenues

Total fee revenues that are projected to be collected based on the development forecasted to the year 2035 (in 2018 dollars) for all facility categories are summarized in **Table 1.6.**

Table 1.6: Projected Total Impact Fee Revenues to 2035

Facility Category	Projected Revenues from Proposed Fees and Charges	General Fund/Other Sources[2]	Program Total
Essential Services[1]	$1,329,662	$0	$1,329,662
Wastewater	$3,224,000	$16,926,000	$20,150,000
Water	$875,840	$4,598,160	$5,474,000
Sub-total	$5,429,502	$21,524,160	$26,953,662
2 Percent Surcharge	$108,590	N/A	
Total	**$5,538,092**		

[1] Essential Services is the sum of General Government, Fire and Police.

[2] Funds identified under General Fund/Other Sources is a City obligation to the program including revenues from user fees and, in some cases, grant funds.

FUNDS NEEDED TO COMPLEMENT FEE PROGRAM

Government Code Section 66000 prohibits using impact fees to remedy an existing facility deficiency. Impact fees imposed on new development may pay for two forms of capital improvements:

> (1) Additional facilities needed to accommodate growth and maintain the current standard of service; or,
>
> (2) Facilities that provide an increase in the level of service or standard, if existing development also pays for its fair share of facilities needed to raise the standard.

The analysis contained in this report indicates that in the wastewater, and water facilities categories existing users would benefit from planned capital improvements. Therefore, existing development is obligated to pay for its fair share of the improvements. The charges presented in this report for these facilities may be imposed on new development only if existing development provides the funding necessary to augment existing facilities from sources other than the facility participation charge revenues. These funds may come from grants, user fees, taxes, and assessments imposed on current residents. In the wastewater and water categories, substantial funding (up to 85 percent) is expected from the wastewater and water utility rate revenues for these services and possibly grant funds. The level of funding required from existing development is listed under General Fund/Other Sources in **Table 1.6**. If the entire fee program as presented herein is adopted, the total amount the City and its current residents would need to contribute is

approximately $21.5 million from sources other than charge revenues in order to provide facilities to existing residents at the same level of service proposed for new development.

ADDITIONAL CONSIDERATIONS

The City at its sole discretion may reduce the recommended impact fees or charges for one or more categories. However, the recommended fees are established based on the infrastructure required by new development. By reducing fees, it is inevitable that, over time, there will be a continued reduction in the levels of service provided by the public facilities funded by the impact fees or charges, unless other funds are used to replace these revenues. Alternatively, the City may consider the following ways to reduce the effect the fees may have on land development in the city, while leaving the fee rates and standards of service intact:

- Phase in the fee increases over two or more years to provide time for the real estate market to adjust. However, the net loss of revenue during the phase-in period may not be passed on to future development.

- Defer the impact fees to a later date. The City may elect to grant a deferral of payment until units are sold or leased. For residential units, impact fees are not payable until the date of the final inspection or issuance of a certificate of occupancy, whichever comes first, according to Government Code Section 66007. Notwithstanding state law, it is not uncommon for cities to collect the fees at issuance of a building permit, which they may do if certain facility financing requirements are met. These requirements are explained in Chapter 8 under Compliance Requirements, Collection of Fees. If the City chooses to defer impact fees to a point in time after issuance of a building permit or certificate of occupancy, suitable security should be obtained to ensure future payment of the fee, through a surety bond, letter of credit, provisions in the escrow agreements, or a lien hold as appropriate.

Fee Updates

This impact fee study and the recommended fees assume a given level of development activity over the study period. The development that occurs will result in different impacts and fee revenues than those projected in this study. For that reason, regular updates are recommended to adjust the growth impact fee to match the needs created by actual development.

1. INTRODUCTION

This report presents an analysis of the need and related cost of public facilities to accommodate new development in Jackson. This chapter explains the study approach and summarizes results under the following sections:

- Public Facilities Financing in California
- Mitigation Fee Act and Required Findings
- Organization of the Report
- Facility Standards, Level of Service, and Deficiencies

PUBLIC FACILITIES FINANCING IN CALIFORNIA

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

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

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

Some fee programs address only a few specific facilities, such as traffic, fire, or storm drainage. Other programs are comprehensive, funding a variety of facility categories from parks and recreation improvements to expanding or refurbishing city office space to meet the needs of future growth.

In most local agencies that have implemented impact fee programs, new development pays close to the full cost required to maintain existing level of service standards as growth occurs. If local agencies do not collect the full amount, the effect is often a decline in facility standards, though some communities are able to increase other revenue sources to compensate. In another rather typical situation, a city's general plan may state that, as a policy, a certain level of service should be maintained for a given service or public facility. However, the current level of service for that facility is less than the stated general plan policy. In that event the city will have, in effect, a deficiency which must be remedied in order to collect fees from new development

commensurate with the policy standard. The deficiency must be remedied using funds other than impact fee revenues and new development cannot be required to pay for an increase in the level of service for the benefit of existing development, unless existing development is committed to paying its share of the cost.

MITIGATION FEE ACT AND REQUIRED FINDINGS

Because of the growing use of impact fees after the passage of Proposition 13 and concern over inconsistencies in their application, the California state legislature passed the Mitigation Fee Act, starting with Assembly Bill 1600 in 1988. The act, contained in California Government Code Section 66000 et seq., establishes ground rules for the imposition and ongoing administration of impact fee programs. The act became law in April 1989 and requires local governments to document the following when adopting an impact fee:

1) Identify the purpose of the fee.

2) Identify the use of fee revenues.

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

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

5) Determine a reasonable relationship between the amount of the fee and the cost of the facility attributable to development paying the fee.

This report complies with California Government Code Sections 66000 et seq., and 66013 (for water and wastewater facilities), by providing the required documentation for the above findings and determinations that establish the basis for imposition of the recommended fees and charges contained herein.

The fundamental premise of the Mitigation Fee Act is that the burden of the impact fees cannot total more than the actual cost of the public facility needed to serve the development paying the fee. Also, fee revenues can only be used for their intended purposes. In addition, the act has specific accounting and reporting requirements, both annually and after every five-year period, for the use of fee revenues. These requirements are covered in more detail in Chapter 8 of this report.

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

ORGANIZATION OF THE REPORT

Chapter 2 presents the population and employment assumptions used for the public facilities fee analysis. Chapters 3 through 7 are devoted to documenting the potential impact fee or facility participation charges for each of the following facility categories:

Essential Services
- Police
- Fire
- General Government Office Space

Facility Participation Charges
Wastewater Facilities
- Sewage Collection
- Wastewater Treatment

Water Facilities
- Water Storage and Distribution

Each chapter is generally organized using the following sections to clearly document the requirements of the Mitigation Fee Act discussed above.

- The chapter begins with identifying the purpose of the fee by stating the types of facilities that would be funded.

- An Existing and Future Planned Facilities Inventory summarizes the investment of existing development in this type of facility to date and identifies future planned facilities, if any.

- The Service Population defines what type of development requires this type of facility, whether (1) only residents, or (2) residents and businesses (measured by employment). It also projects the service population growth or demand for facility capacity anticipated to occur over the planning horizon.

- The section titled Facility Standards and Unit Costs establishes a reasonable relationship between the need for the fee and the impacts caused by new development. This section also estimates the cost per capita for facilities to accommodate growth, which establishes the relationship between the amount and use of fee revenues and the type of development paying the fee. This section also estimates the total facilities costs associated with new development over the planning horizon, equal to the revenues that would be collected through the impact fee.

Finally, Chapter 8 summarizes the fee implementation procedures and recommendations for the ongoing administration of the fee program. The recommendations are provided to ensure compliance with the Mitigation Fee Act and to ensure that fees are updated in the future for construction cost inflation, a change in the standards, or changes in development assumptions.

FACILITY STANDARDS, LEVEL OF SERVICE, AND DEFICIENCIES

Throughout this report the words "standard" and "level of service" are used (at times interchangeably) to describe the level of investment in capital facilities that are needed to serve the community. A standard is defined as the adopted policy or benchmark that the City would like to achieve for any particular facility. For example, the floor area of police or fire station space per officer or firefighter would be a standard. On the other hand, level of service refers to the actual level of benefit that the current population experiences. Level of service may be different

from the standard for a given facility. When the existing level of service is less than the standard—in other words, when the facility is over capacity relative to the stated or policy standard—a deficiency exists for that facility. If the opposite is the case—if there is a surplus of capacity—the City may recoup a portion of its investment in that facility that is available to serve new development. Frequently there is no stated policy standard for a given facility, in which case the existing level of service becomes the de facto "current standard" and the terms may be interchangeable.

New development alone cannot be asked to improve the level of service provided by those facilities that serve both new and existing development. Additionally, new development alone cannot correct an existing facility deficiency. Either way, facility standards cannot be increased compared to the existing level of service solely by imposing impact fees on new development.

By policy, the City of Jackson can adopt its own reasonable facility standards to reduce, maintain, or increase the existing facility standard. However, basing an impact fee on a standard that is higher than the existing level of service is fair to new development only if the City were to use alternative funds to increase the capacity in facilities that benefit existing development. This extra funding is needed to correct the existing deficiency.

This study uses two basic approaches for establishing facility standards:

- The existing level of service method uses a standard based on the ratio of existing facilities to the current service population. Under this approach, new development funds the expansion of facilities at the same level of service, or current standard, currently enjoyed by the service population (residents and workers) in existing development. This approach results in no facility deficiencies attributable to existing development. This method is used for the essential services (police, fire, and general government).
- The engineering standard approach is based on standards adopted by the City and/or standard engineering or planning criteria. This method is used for water and wastewater. The basic approach is to maintain the appropriate level of service as defined by accepted planning and engineering practice for treatment plants, water, and sewer lines. Any costs related to existing deficiencies may not be passed on to new development but must be funded by water and sewer user fees or the General Fund.

Use of these standards is not meant to label them as City policy. Indeed, many jurisdictions consider their existing levels of service to be deficient compared to the policies stated in their general plans. The City of Jackson may, as a policy decision, raise any facility standard, and in doing so, possibly create a deficiency relative to the existing level of service.

2. GROWTH PROJECTIONS

INTRODUCTION

Estimates of existing development (number and type of housing and commercial floor area) and projections of growth are used throughout the chapters that follow in this report. Current residential population estimates are based on the latest California Department of Finance county/city estimate dated January 2018. Current employment (jobs in the city as opposed to employed residents who live in the city but may work elsewhere) is derived from the U.S. Economic Census.

OCCUPANCY RATES

The use of occupancy rates ensures a reasonable relationship between the increase in service population and the amount of the fee. To do this, the fee must vary by the estimated service population generated by a specific development project. Developers pay the fee based on the number of additional housing units or building square feet, so the fee analysis must convert service population estimates to these measures of project size to derive a fee per unit of development. This conversion is done with average occupancy factors by land use category, shown in **Table 2.1**.

Table 2.1: Occupancy Assumptions

Land Use	Occupancy Rate		Employees per 1,000 Square Feet or rooms
Residential[1]			
Single-Family	2.35	persons per dwelling unit	—
Multi-Family	2.20	persons per dwelling unit	—
Mobile Home	1.40	persons per dwelling unit	—
Nonresidential[2]			
Office	300	building square feet per worker	3.33
Retail/Commercial	450	building square feet per worker	2.22
Hotel Rooms	0.08	rooms per worker	12.00
Industrial	1,000	building square feet per worker	1.00
Public/Gov't/Institutional /Health Services	250	building square feet per worker	4.00

[1] Based on American Community Survey 5-yr. Estimates, 2007-2011, Tables B25032 and B25033, adjusted for current occupied units and population.
[2] Building area per worker factors are based on the Employment Density Summary Report (Natelson Company 2001).

Employment occupancies—workers per nonresidential floor area—are based on values suggested in the Employment Density Summary Report by the Natelson Company (2001), a report that is used in impact fee studies throughout California.

POPULATION, HOUSING, AND EMPLOYMENT ESTIMATES

The 2035 projections for occupied housing, population, and employment are based on annual average growth rates for population and employment in Jackson. The population and housing estimates are summarized in **Table 2.2.**

Table 2.2: Population, Employment, and Housing Projections

	2018	2035	Net Projected Growth[2]	Annual Average Growth Rates
Population[1]	4,679	5,560	881	1.02%
Employment[3]				
Office/Professional	378	487	109	1.5%
Retail	537	636	99	1.0%
Lodging and Hospitality	562	712	150	1.4%
Government	35	41	6	0.9%
Health Services	1,156	1,702	546	2.3%
Other (agriculture, manufacturing, wholesale, etc.)	94	112	18	1.0%
Total Employment	2,763	3,690	927	1.7%
Housing[4]				
Single Family[5]	1,423	1,691	268	
Multi-Family Units[6]	484	572	88	
Mobile Homes	186	224	38	
Total Occupied Units	2,093	2,487	394	1.02%
Overall Occupancy	2.24	2.24	2.24	

[1] Current population for City of Jackson is the California Department of Finance (DOF) estimate, Table E-5, 1/1/2018.

[2] Population growth is based on the growth rate that occurred in Jackson between the 2000 U.S. Census and the 2017 estimate. Employment growth is based on California Employment Development Department average annual growth rates for industries in the Mother Lode region (counties of Amador, Calaveras, Mariposa, and Tuolumne) for the period 2014 to 2024.

[3] Current employment estimates are from the U.S. Census Bureau, 2012 Economic Census, Table EC1200A1, 2/9/2016.

[4] Current housing estimates from DOF Table E-5 1/1/2018, occupied units.

[5] Estimate of occupied units, detached and attached single-family dwelling units.

[6] Estimate of occupied units, including duplex, townhomes and apartments.

The modest population and employment growth rates of about 1.02 percent and 1.7 percent, respectively, are reasonable and are consistent with 2035 population projections for Jackson by the Amador County Recreation Area in its recent in-lieu fee nexus study Note that the net growth in housing units is also based on a constant percentage growth rate and not on total buildout of the City or its sphere of influence. The assumed 1.7 percent employment growth rate is also consistent with the average employment growth in Amador County over the recent past 10 years,

which includes the period of declining employment during the Great Recession and the recovery that followed (Amador County 2015). These population estimates are used as follows:

- Estimates of future growth are used to provide a rough estimate of the total amount of public facilities required to accommodate growth over the planning horizon.
- Estimates of existing population and land development are used to determine current facility standards; for example, square feet of public buildings per capita or average daily water use and wastewater generation.
- Future employment estimates are used to establish the level of service and facilities that are applicable to future nonresidential development.

LAND USE CATEGORIES

Measuring the impact of growth requires defining land use types to summarize different categories of new development. The land use types used in this analysis are defined below.

- **Single-Family:** Detached and attached (townhomes and condominiums) one-family dwelling units.
- **Multi-Family:** Dwelling units such as duplexes and condominiums (unless considered attached townhomes), apartments, and dormitories.
- **Mobile Homes:** Includes manufactured housing units located in mobile home parks.
- **Lodging:** All hotel and motel development.
- **Commercial/Retail:** All commercial development, restaurants, services and retail stores.
- **Office:** All professional office buildings, medical and dental, research and development centers, and business parks.
- **Industrial:** All manufacturing, fabrication, food processing, motor vehicle repair, warehousing, truck yards and warehousing terminals, and distribution centers. May also include business parks, research and development space, including "back office" uses, and ancillary employee-serving retail and services.
- **Public and Institutional:** All government, public education, hospitals, and residential care facilities.

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

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

The amount of impact fees payable should be evaluated prior to the issuance of a building permit and be based on the information in the permit application, including number and type of units, intended occupancy, and floor area per occupancy. In a single-use structure, the total of the fees would be the sum of each of the products of the fee rate for each facility category multiplied by the number of units or the floor area (1,000-square-foot increments) in the structure. For a mixed-use project, wherein more than one use will occupy a single permitted structure, an impact fee calculation would apply the appropriate fee rate to each portion of the structure containing an identified use. For a commercial-residential structure, the applicable residential fee rates would be applied to each residential unit (the unit may be defined as either a single-family or multi-family unit depending on the type of construction) and the applicable nonresidential rates will be applied to each unit of nonresidential floor area.

SERVICE POPULATION

Different types of development use public facilities at different rates in relation to each other, depending on the services provided. In each chapter below, a specific service population is identified for each facility type to reflect this. The service population is calculated by weighting one land use category against another based on each category's demand for services.

Different service populations are used to estimate impacts for different types of fees. To measure existing development and future growth, this report uses:

- Citywide residents and workers for public facilities, such as city administration, fire, and police facilities.
- Dwelling units and building square feet to estimate water use and wastewater generation.

The specific service population for each facility category is shown separately in each chapter of this report. When residents and workers are part of the same service population, it is reasonable to assume that one resident places greater demand on public services and associated facilities than one worker. Therefore, workers are factored for purposes of determining their relative demand and the demand nonresidential development has on public facilities.

3. POLICE FACILITIES

This chapter summarizes the analysis of the need for police facilities, vehicles, and equipment to accommodate new development. The chapter documents a reasonable relationship between new development and the potential justified impact fee for the funding of such facilities and vehicles.

POLICE FACILITIES SERVICE POPULATION

The police facilities serve both residents and workers in Jackson. **Table 3.1** shows the estimated service population for 2018 and 2035. In calculating the service population, residents are weighted at 1.0, while workers are weighted at 0.24 to reflect lower per capita service demand. Nonresidential buildings are typically unoccupied at certain parts of the day, so it is reasonable to assume that average per-worker demand on services is less than average per-resident demand.

Table 3.1: Police Service Population

	Residents	Workers	Factored Workers	Total Service Population
Existing (2018)	4,679	2,763	663	5,342
New Development (2018–2035)	881	927	222	1,103
Total	5,560	3,690	885	6,445
Weighting factor	*1.00*	*0.24*		

[1] The resident-to-worker weighting factor is calculated by dividing a 40-hour workweek into 168 total hours in a week.

EXISTING POLICE FACILITIES

The Jackson Police Department operates out of a City-owned building located at 33D Broadway. Vehicles and equipment with a service life of at least five years that are essential to providing police protection services may also be considered as impacted facilities. The Police Department vehicles and equipment included in this study are summarized in **Table 3.2**, along with the current value of these assets.

Table 3.2: Police Vehicles and Equipment

Description	Year Acquired	Service Life (years)	Original Cost[1]	Current Value[2]
SMART TRAILER	1996	20	$14,000	$700
FORD CROWN VICTORIA	1999	10	$25,000	$1,250
FORD AMBULANCE	1997	15	$15,000	$750
CHEVROLET PICKUP	1999	10	$9,895	$490
FORD CROWN VICTORIA	2007	10	$21,211	$1,060
FORD 500	2006	15	$23,997	$1,200
FORD EXPEDITION	2007	10	$28,044	$1,400
KTM 640CC MOTORCYCLE	2002	5	$6,000	$300
FORD CROWN VICTORIA	2007	10	$24,968	$1,250
HONDA MOTORCYCLE	2007	5	$16,946	$850
FORD CROWN VICTORIA	2004	10	$6,500	$330
CHEVY IMPALA	2009	10	$25,448	$2,540
CHEVY IMPALA	2009	10	$25,447	$2,540
CHEVY CAPRICE	2011	10	$35,922	$10,780
DODGE CHARGER	2008	10	$22,548	$1,130
		Total Current Value		**$26,570**
		Current Service Population		5,342
		Current Value per Capita		**$4.97**

[1] Updated costs from City of Jackson 2016 General Government Auto List
[2] Straight-line depreciated value; 5% of original value if fully depreciated

POLICE FACILITIES STANDARDS AND UNIT COSTS

This section discusses the standard used to determine the future needs for police facilities.

Current per Capita Standards

Police Department standards have been developed in this study for station area and police vehicles. The standards are used to ensure equity between the level of existing police facilities and equipment and the cost of these items for which new development should be responsible. **Table 3.3** shows the current standard for station floor area, based on the current floor area and the current service population in 2018. **Table 3.3** also shows the current standard for officers per 1,000 service population, which is calculated as 1.68. These current standard factors are used determine the of additional floor area, and the number patrol cars, motorcycles and personal gear needed to serve growth. The use of the current standard for police officers is not intended to establish or imply that the current number of officers per 1,000 population is City Council policy.

Table 3.3: Police Facilities and Equipment – Existing Inventory and Current Standard

Current Police Department Offices, 33D Broadway	2,688 sq. ft.
Current Service Population[1]	5,342
Current Standard per capita (2,688 sq. ft. /5,342)	0.50 sq. ft.
Current Officers (sworn positions)	9
Current Patrol Vehicles	11
Current Motorcycles	2
Current Service Population	5,342
Current Standard of FTE officers per 1,000 service population	1.68
Current Standard for Patrol Vehicles per officer	1.22
Current Standard for Motorcycles per officer	0.22

[1] Includes residential population and factored workers

Source: City of Jackson 2016

Police Facilities for New Development and Planned Standard

Table 3.4 shows the calculations for determining the additional space and equipment needed by the Police Department to serve the projected growth. The current floor area standard (0.50 square feet per capita) is multiplied by the estimated service population growth (1,103) to estimate the additional needed floor area of 552 square feet. This additional space will accommodate up to two additional officers needed for growth based on the current standard of 1.68 officers per 1,000 persons. The additional floor area of 552 square feet conforms to the standard for police facilities by the *American Architectural Institute Standards*, which recommends about 300 square feet of gross floor area per full-time equivalent officer. The cost of future development's share of the additional facilities is shown in **Table 3.4** and is based on $300 per square foot, which includes construction costs, furnishings, land purchase, site development, and contingencies. At the current standard, new development will therefore pay $273,086 for additional police station floor area, vehicles, and personal equipment (e.g., communications, body-cam, weapon, Kevlar vest).

COST PER CAPITA

The last column in **Table 3.4** shows new development's share of the cost of additional floor area, vehicles, and equipment needed to serve growth. **Table 3.4** also includes a charge for current value (depreciated value) of the police vehicles. This "buy-in" charge represents the value of the investment in police vehicles that will benefit new development. **Table 3.4** calculates the cost per capita by dividing the total cost by the projected growth in the service population.

USE OF FEE REVENUES

The police facilities impact fee revenues may be used to purchase and improve land to construct new facilities, upgrade or expand existing facilities, purchase vehicles and equipment with a minimum five-year life span, enhance the utility of existing systems, and/or perform refurbishment within the parameters allowed by Government Code Section 66000.

Table 3.4: Police Facilities Standard and Total and Cost Per Capita

	Service Populations and Standards	Cost per Sq. Ft or per item[1]	Total Cost for New Development	Cost per Capita for Growth
Current service population[1]	5,342			
Space Needs				
Planned Facility Standard per capita	0.50 sq. ft.			
Service Population Growth	1,103			
Additional space needed for growth (0.50 sq. ft. per cap. X 1,103)	552 sq. ft.	$300	$165,600	$150.14
Vehicle and Equipment Needs				
Buy-in charge for existing vehicles			$5,486	$4.97
Additional personal equipment for law enforcement needed for growth (1.68 officer per 1,000 service population)[2]	2	$6,000	$12,000	$10.88
Patrol vehicles per officer	1.22			
Additional patrol vehicles needed for growth	2	$45,000	$90,000	$81.60
Motorcycles per officer	0.22			
Additional motorcycles needed for growth	0	$25,000	$0	$0.00
Total Law Enforcement Costs for Growth			**$273,086**	**$247.58**

[1] Cost of new construction including land acquisition and site improvements. Cost of new vehicles based on typical purchase prices for vehicles plus equipment.

[2] Note that the number of additional officers is rounded up and the number of additional patrol vehicles rounded down.

4. FIRE PROTECTION FACILITIES

This chapter summarizes the analysis of the need for fire facilities to accommodate new development. The chapter documents a reasonable relationship between new development and the potential justified impact fee for funding such facilities.

FIRE FACILITIES SERVICE POPULATION

The Jackson Fire Department provides fire protection services, emergency medical services, rescue services, fire prevention services, and public education services to residential and nonresidential populations within the Jackson city limits. The fire service population is calculated in **Table 4.1** in the same manner as for police services, with the impact of the nonresidential population also factored at 24 percent of the residential population.

Table 4.1: Fire Protection Service Population

	Residents	Workers	Factored Workers	Total Service Population
Existing (2018)	4,679	2,763	663	5,342
New Development (2018–2035)	881	927	222	1,103
Total	5,560	3,690	885	6,445
Weighting factor	*1.00*	*0.24*		

[1] The resident-to-worker weighting factor is calculated by dividing a 40-hour workweek into 168 total hours in a week.

EXISTING FIRE PROTECTION ASSETS

The City of Jackson owns and operates the fire stations in **Table 4.2**, and the fire equipment and vehicles listed in **Table 4.3**. Firefighting vehicles and equipment are included in the facility costs because they represent essential capital investment needed to provide fire protection services and have at least a five-year service life.

Table 4.2: Fire Stations

	Floor Area Sq. Ft.
Station No.131, 175 Main Street	2,050
Station No. 2, 10600 Argonaut Drive	4,130
Total	6,180
Current Service Population	5,342
Standard floor area per capita	1.16

FIRE FACILITIES STANDARDS AND PER CAPITA COSTS

To ensure equity between the service level of existing facilities and the facilities for which new development is responsible, a per capita facility standard is calculated based on existing fire stations and firefighting equipment. The standard, shown in **Table 4.4**, which uses the existing level of service method, assumes that fire protection facilities and equipment will be needed to serve new development at the current ratio of fire facilities to the total residential and worker populations in terms of square feet or cost per capita. This method is appropriate when the current

facilities are deemed adequate to serve the current population. Use of the existing level of service to calculate the impact fee ensures that new development pays only for the facilities which are equivalent to those provided to existing development. **Table 4.4** also shows the total cost per capita of fire protection facilities required for new development to the year 2035.

Table 4.3: Fire Protection Vehicles and Equipment

Vehicle Description	Year Acquired	Service Life (years)	Original Cost[1]	Current Value[1]	Equipment On-board Current Value[2]
CHEVROLET SILVERADO	2000	15	$10,780	$500	$38,100
STUDEBAKER FIRE TRUCK	1929	20	$20,000	$1,000	$49,100
CHEVROLET SILVERADO	2003	15	$16,040	$0	$61,100
FORD CHASSIS & SQUAD BODY	2005	20	$136,548	$47,800	$21,900
FORD EXPEDITION	2003	15	$9,320	$500	$6,300
INTERNATIONAL FIRETRUCK	1998	20	$140,000	$7,000	$85,330
HME FIRE TRUCK	2006	20	$300,620	$120,200	$65,100
KENWORTH T-300	2008	20	$139,100	$69,600	Included
HME FIRE TRUCK	2009	20	$347,838	$191,300	Included
PIERCE FIRE TRUCK	1990	20	$100,000	$5,000	$17,300
FORD EXPEDITION	2014	15	$57,523	$42,200	Included
INTERSTATE ENCLOSED TRAILER	2014	20	$950	$800	N/A
			Total Value	**$485,900**	**$344,230**

[1] Original costs from City of Jackson

[2] Straight-line depreciated value; minimum 5% of original cost for fully depreciated items.

Table 4.4: Fire Protection Standards and Total Costs

Item	Floor Area Sq. Ft.	Current Per Capita Standard and costs	Total and Per Capita Cost
Fire Department Structures			
Station No.131, 175 Main Street	2,050		
Station No. 2, 10600 Argonaut Drive	4,130		
	6,180		
Current Service Population and standard floor area per capita	5,342	1.16 sq. ft.	
Service Population Growth	1,103		
Additional space needed for growth (1.16 sq. ft. per cap. X 1,103)	1,279	$300	$383,700
Fire Department Vehicles and Equipment			
Vehicles			$485,900
Equipment On-board			$344,230
Total Current Value of Vehicles and Equipment			$830,130
Current cost per capita Vehicles and Equipment ($830,130/5,342)			$155.40

The cost of personal protection equipment required for the additional firefighting staff is presented in **Table 4.5.** The total cost is based on the cost for each set of turnout gear and the projected additional firefighters based on the current staffing per 1,000 service population.

Table 4.5: Other Fire Protection Equipment

Description	No. of Items[1]	Cost per Item	Total Cost of Equipment for Growth
Protective Clothing & Equipment[1]	6	$6,000	$36,000
Breathing Apparatus[2]	6	$9,400	$56,400
			$92,400
Projected Growth in Service Population			1,103
Cost per Capita for New Development ($92,400/1,103)			$83.77
Current Firefighters (including chief, assistant chief, captains, engineers, and volunteer firefighters)[3]		27	
Current Service Population (Residents + Factored Workers)		5,342	
Firefighters per 1,000 Service Population		5.05	
Projected Growth in Service Population		1,103	
Additional Positions for Growth[4]		6	

[1] Projected additional items based on firefighters needed for growth.
[2] Total cost of all breathing equipment is approximately $253,000, or $9,400 per firefighter.
[3] Municipal Service Review (Amador County LAFCO 2013)
[4] The number of additional positions is rounded up
Source: Jackson Fire Department email correspondence

Table 4.6: Fire Protection Cost per Capita

	Total Cost for New Development	Cost Per Capita
Fire Stations, cost for additional space	$383,700	
Projected Growth in Service Population	1,103	$348.87
Fire Vehicles and Equipment		$155.40
Other Fire Equipment for New Development		$83.77
Cost per Capita for New Development		**$587.04**
Total Cost for New Development		$647,505

FIRE FACILITIES FOR NEW DEVELOPMENT AND USE OF FEE REVENUES

The fire protection impact fee revenues may be used to purchase land for future expansions and/or to construct new facilities, upgrade existing facilities, purchase vehicles and equipment with a minimum five-year life span, enhance the utility of existing systems, and/or perform refurbishment within the parameters allowed by Government Code Section 66000.

5. General Government Facilities and Equipment

This chapter summarizes the analysis of the general government facilities and equipment needed to accommodate new development. The analysis documents a reasonable relationship between new development and the potential justified impact fee for funding such facilities.

General Government Facilities Service Population

The general government facilities serve both residents and workers in Jackson.

Table 5.1 shows the estimated service populations for 2018 and projected for 2035. As was done for police and fire protection in calculating the service population, residents are weighted at 1.0 and workers are weighted at 0.24 to reflect the relatively lower per capita service demand of workers who may not live in the city.

Table 5.1: General Government Service Population

	Residents	Workers	Factored Workers	Total Service Population
Existing (2018)	4,679	2,763	663	5,342
New Development (2018–2035)	881	927	222	1,103
Total	5,560	3,690	885	6,445
Weighting factor	*1.00*	*0.24*		

[1] The resident-to-worker weighting factor is calculated by dividing a 40-hour workweek into 168 total hours in a week.

Existing Municipal Facilities

The City of Jackson owns and operates the general government facilities listed in **Table 5.2** and the vehicles and equipment in **Table 5.3**.

Table 5.2: General Government Facilities Inventory

Facility	Existing Floor Area (Square Feet)
City Hall, 33 Broadway	2,952
Corporation Yard	
Office	3,000
Storage Building	864
Total Floor Area	**6,456**

Source: City of Jackson 2016

Table 5.3: General Government Vehicles and Equipment Inventory and Values

Description	Year Acquired	Original Cost	Service Life (years)	Current Value[1]
Public Works Department				
CHEVY PICKUP	2003	$20,350	15	$1,000
FORD 4 X 4 TRUCK	2003	$22,000	15	$1,100
GMC TRUCK - 10 WHEEL	1985	$65,000	20	$3,300
GMC DUMP TRUCK	2000	$22,000	20	$2,200
CHEVY TRUCK SILVERADO	2003	$17,608	15	$900
CHEVY SILVERADO	2007	$29,931	15	$8,000
JOHNSTON STREET SWEEPER	2006	$151,371	20	$60,500
FORD TRUCK	2001	$17,032	15	$900
FORD TRUCK	2001	$17,032	15	$900
FORD F-550 W/LIFT	2007	$32,116	20	$14,500
FORD TRUCK	1993	$12,000	15	$600
BACKHOE (shared with Water Dept.)	2009	$40,000	20	$22,000
CHEVY SILVERADO	2014	$27,258	15	$20,000
FORD RANGER (Building Dept.)	2005	$17,185	15	$2,300
	Total Current Value			**$138,200**
	Current Service Population			5,342
	Current Value per Capita			**$25.87**

[1] Straight-line depreciated values. Minimum 5% of original cost for fully depreciated units.

GENERAL GOVERNMENT FACILITIES STANDARDS AND UNIT COSTS

To ensure equity between the level of existing facilities and the facilities for which new development is responsible, a per capita facility standard is used. The standard, as shown in **Table 5.4**, is based on the existing level of service method, which assumes that general government facilities vehicles and equipment will be needed to serve new development at the current ratio of those facilities to the present total resident and factored worker populations. This method is appropriate when the current facilities are deemed adequate to serve the current service population. Use of the existing level of service to calculate the impact fee ensures that new development pays only for those facilities that are equivalent to those provided to existing development.

Table 5.4: General Government Standards and per Capita Costs

Item	Total Floor Area/Total Cost	Cost per Square Foot	Replacement/Current Value	Current Standard per capita	Additional Space Needed for Growth	Current Cost/Value per capita
Current Service Population:	5,342			Service Population Growth:	1,103	
Facilities						
General Government Office	2,952 sq. ft.	$300	$885,600	0.55 sq. ft.	607 sq. ft.	$165.00
Corporation yard[1]						
Office	3,000 sq. ft.	$300	$900,000	0.56 sq. ft.	618 sq. ft.	$168.00
Storage	864 sq. ft.	$75	$64,800	0.16 sq. ft.	176 sq. ft.	$12.00
				Facilities cost per capita:		$345.00
Vehicles and Equipment			$138,200			$25.87
Total value of existing General Government assets:			$1,988,600			
Total per capita cost Government Facilities, Vehicles & Equipment						**$370.87**
Service population growth 2018 - 2035:				1,103		
Total Cost for New Development				$409,070		

[1]Includes storage and mechanics bays, storage and auxiliary buildings

USE OF FEE REVENUES

The general government impact fee revenues may be used to construct new facilities, upgrade existing facilities, purchase vehicles and equipment with a minimum five-year life span, enhance the utility of existing technology systems, and/or perform refurbishment within the parameters allowed by Government Code Section 66000.

6. WASTEWATER

This chapter pertains to the collection and treatment facilities required to provide sanitary sewer service to new development in Jackson. The City owns and maintains all wastewater facilities used in the city, including sewer mains, pump stations, and treatment facilities.

WASTEWATER GENERATION

The current average dry weather flow (ADWF) in the wastewater system is estimated to be approximately 400,000 gallons per day (0.40 mgd) according to the 9-year average flow reported in the Wastewater Treatment Plant (WWTP) Preliminary Design Report prepared by West-Yost Associates (2018).

The WWTP was designed in 1984 with capacity to treat up to 0.71 mgd ADWF. The ADWF capacity indicates the volume of wastewater that can be treated over a typical 24-hour period during the dry season. Over the years, primarily due to changes in wastewater discharge permit requirements, the plant has fallen out of compliance with discharge regulations. The City is going forward with major improvements to bring the plant into compliance. However, the improvements will result in an ADWF treatment capacity of only 0.43 mgd and not the original 0.71 mgd. The specific reasons for this loss of capacity were outlined in an August 16, 2018, memorandum from West-Yost Associates:

- 1984–2000**:** The pollutants that the WWTP was required to treat and/or monitor included biochemical oxygen demand (BOD), total suspended solids (TSS), pH, total coliform bacteria, settleable solids, and chlorine residual.
- 2000: New limitations were added for ammonia, nitrate, chlorine residual, and turbidity. In addition, more stringent limitations were applied for BOD, TSS, and total coliform bacteria.
- 2007: More stringent limits were required for ammonia. New limits were also added for variety of metals (e.g., copper, silver, zinc, iron, manganese), long-chain organics (e.g., disinfection byproducts, diazinon, tetrachloroethene), and effluent toxicity.
- 2013: More stringent limitations were required for nitrate and disinfection byproducts.

Peak-hour wet weather flow (PHWWF) is another important treatment capacity factor. PHWWF is the flow from sewer connections during the morning and evening peak hours (the diurnal flow), combined with the contribution to flow from high groundwater (infiltration) and the inflow of water into the collection system during rain events. It has been estimated that the WWTP was originally sized for a PHWWF of up to 3.5 mgd. Prior to the improvement program, due to problems with filters, the WWTP plant could not handle 3.5 mgd PHWWF, resulting in diversion of effluent to Jackson Creek. The WWTP improvements include new filters that will provide a reliable PHWWF of up to 4.0 mgd.

WASTEWATER IMPROVEMENTS COST

Major improvements to the Jackson WWTP were identified in the West-Yost memorandum. The memo recommends needed reconstruction, replacements, and rehabilitation in several areas to

comply with regulatory requirements and prevent discharge of effluent to Jackson Creek. These improvements and costs are listed in **Table 6.1.**

Table 6.1 WWTP Compliance Improvements

Item	Cost (2018)
Plant Earthwork and Sitework	$589,000
Plant Process Yard Piping	$1,083,000
Oxidation Ditch Improvements	$628,000
Tertiary Filters	$997,000
UV Disinfection	$1,746,000
Dewatering Improvements	$782,000
Drainage Pump Station	$149,000
MCC Electrical Building	$202,000
Electrical/Instrumentation	$1,731,000
Sludge Pump Room	$200,000
Engineer's Opinion of Probable Cost (for comparison)	$8,107,000
Low Bidder (Auburn Constructors)	$7,762,300
Construction Contingency 10%	$776,230
Total Construction Costs	$8,538,530
Engineering, Administration	
EIR and Addenda (PMC and MBI)	$310,353
Project Report (Stantec)	$93,000
Analytical Laboratory (Caltest)	$49,598
Design	$894,374
Design - Bid Review Services	$10,000
Engineering Services During Construction	$537,853
Construction Management	$1,231,420
SCADA Programming	$77,623
Engineering Support Services	$200,000
Administration	$10,000
Total Estimated Project Cost	**$11,952,751**

Source: West-Yost Associates 2018

PROJECTION OF WASTEWATER TREATMENT DEMAND

The demand for WWTP capacity was estimated using the 1.02 percent annual population growth rate, which is consistent which the previous chapters of this report. The 1.02 percent rate was derived from U.S. Census Bureau data for the City of Jackson for the period 2000 to 2017.[1] **Table 6.2** shows the estimated existing and projected future wastewater treatment demand by land use.

[1] The 1.02% growth rate was presented to the City Council in the Growth Projections memo from the Planning Department dated August 27, 2018.

Table 6.2: Projected Wastewater Generation

Land Use	Existing Residential, Units/Nonresidential, 1,000 square feet or Rooms	Growth 2018-2035 Residential, Units/Nonresidential	Total	EDU Factor Residential, per unit/ Nonresidential, per 1,000 sq. ft.	EDU 2018	EDU Growth	EDU 2035	Estimated Current Gallons per Day (average dry weather flow)	Gallons per Day Growth	Gallons per Day 2035
Residential (in units)										
Single-family	1,423	268	1,691	1.00	1,423	268.19	1,691	247,602	46,665	294,267
Multi-family	484	91	575	0.94	455	85.70	541	79,170	14,912	94,082
Mobile homes	186	35	221	0.60	112	20.78	133	19,488	3,616	23,104
Nonresidential (1,000 square feet or rooms)								346,260		
Office	100	33	133	0.29	29	9.45	38	5,046	1,644	6,690
Commercial/retail	230	44	274	0.29	67	12.90	80	11,658	2,245	13,903
Lodging/Hotel (Rooms)	300	13	313	0.46	138	5.75	144	24,012	1,001	25,013
Industrial/Warehouse	20	18	38	0.34	7	5.96	13	1,218	1,037	2,255
Government/Institutional/School	280	138	418	0.32	90	44.12	134	15,660	7,677	23,337
								57,594		
Total					2,321	452.85	2,774	403,854	78,796	482,650

Wastewater flow assumptions

Residential:	Current	Growth increment	Assumed per capita flow rate	PPH	2018 population	Estimated current average dry weather flow @ 74 gpd/pc residential only*		
Single-family (1 EDU)[1]	174 gpd/du	178 gpd/du	74 gpd/capita	2.35	4,679	346,246	387.82	AF/yr
Multi-family	163 gpd/du	156 gpd/du	74 gpd/capita	2.20			61.39	AF/yr
Mobile Home	104 gpd/du	107 gpd/du	74 gpd/capita	1.40			449.21	AF/yr
Nonresidential:						54,810		
Office	50 gpd/1,000 sf					401,056		
Commercial/Retail	50 gpd/1,000 sf							
Lodging	80 gpd/room							
Industrial/Warehouse	60 gpd/1,000 sf							
Government/Public/Institution	55 gpd/1,000 sf	total all uses						

* 80-85 average gallons per person per day household use is typical for planning purposes; current estimated flow (for residential uses) for Jackson is therefore somewhat below typical.

Table 6.2 indicates a need for 0.483 mgd ADWF capacity by 2035. The current ADWF capacity of the plant has been estimated to be 0.430 mgd. Assuming the current ADWF rate of 0.40 mgd, approximately 30,000 gallons of daily capacity remains. This is sufficient for approximately 170 additional single-family connections to the plant. The projections to the year 2035 indicate capacity is needed for 453 equivalent single-family dwelling units (EDUs). The cost of a WWTP capacity expansion project expected to be needed by 2035 has not been estimated. A Wastewater System Master Plan is recommended to determine the best way to provide the additional capacity and to estimate the cost.

WASTEWATER IMPROVEMENT COST ALLOCATION

Wastewater collection and improvement costs are allocated to new development and existing residents and businesses (City's share) according to the extent to which each set of users benefit from the investment in improvements. New development is allocated a 16 percent share of the cost for wastewater collection system improvements, a wastewater system capital projects reserve, the WWTP Compliance Project, the WWTP financing, and the Master Plan. The City's share of these costs is 84 percent. These allocations are based on the percentage of total 2035 ADWF that is projected to be generated by new development versus the estimated current ADWF. New development will benefit proportionately from a fully-compliant WWTP and capital projects that maintain the current level of service. Existing users will pay their share of the capital improvements and the WWTP Compliance project and financing costs through sewer rates. The cost for wastewater collection system improvements are primarily to remedy infiltration and infill of groundwater and surface water into the system, which will preserve capacity in the collection system and the WWTP that is available for future development.

Table 6.3 shows the allocated costs and the cost per EDU for new development based on the projected new EDUs shown in **Table 6.2.**

Table 6.3: Summary of Wastewater System Improvement Costs

	Current Project Costs (2018 dollars)	Cost Allocation New Development/City	New Development Cost	City Cost
Wastewater System Improvements				
Wastewater Collection System Improvements[1]	$1,650,000	.16/1.0	$264,000	$1,386,000
WWTP Compliance Improvements	$12,000,000	.16/.84	$1,920,000	$10,080,000
WWTP Compliance Financing Cost[2]	$3,420,000	.16/.84	$547,200	$2,872,800
Wastewater Master Plan	$250,000	.16/.84	$40,000	$210,000
Capital Projects Reserve	$2,830,000	.16/.84	$452,800	$2,377,200
Total Wastewater Improvements	$20,150,000		$3,244,000	$16,926,000
		EDU Growth 2018-2035	452.85	
		Cost per EDU for Wastewater System Improvements	**$7,119.36**	
		Cost per Fixture Unit[3]	**$444.96**	

[1] Present discounted value of recommended annual funding of the wastewater capital reserve for and the sewer collection system improvements, 2018 Update to City of Jackson 2016 and 2014 Wastewater Rate Study (Stantec 2018).

[2] State Revolving Fund 30-year loan at 1.7% amount for WWTP improvements.

[3] Cost per fixture unit based on 16 fixture units for a typical single-family home (1 EDU).

RESIDENTIAL WASTEWATER FACILITY PARTICIPATION CHARGE SCHEDULE

The proposed wastewater facilities charges for residential uses are presented in **Table 6.4**.

Table 6.4: Wastewater Facility Participation Charges for Residential Uses

Land Use	Wastewater Demand Factor	Proposed Wastewater System Fee, per Unit or Rooms	Current Wastewater Fee
Residential, per unit			
Single Family	1.00	$7,119.36	$2,200.00
Multi-family	0.94	$6,692.19	$2,100.00
Mobile Homes	0.60	$4,271.61	$1,900.00
Lodging/Hotel (per room)	0.460	$3,274.90	N/A

NONRESIDENTIAL WASTEWATER FACILITY PARTICIPATION CHARGE SCHEDULE

The wastewater facility participation charges for nonresidential development in Jackson are based on the number of plumbing fixture units (PFU). Assuming 16 PFUs for a typical single-family home, the cost for one PFU is in direct proportion to the single-family fee: $7,119.36/16 = $444.96.

An alternative method of calculating the wastewater charge is based on the size of the water meter installed (or recommended to be installed, based on a project's fixture unit analysis). **Table 6.5** lists typical meter sizes and corresponding water use factors in terms of a standard 1-inch meter serving a single-family home. The alternate fee schedule is equivalent to $444.96 per PFU. PFUs are proportional to the adjusted equivalency factor. In other words, a 2-inch meter may serve up to 51.2 PFU (3.2 x 16) Therefore the fee for a building needing a 2-inch meter based on fixture units would be $444.96 x 51.2 = $22,782.

Table 6.5: Wastewater Facility Participation Charges for Nonresidential Uses

Size of Meter	Factor	Adjusted Equivalency Factor[1]	PFU	Fee per Meter Size	Current Total Fee Based on $125/PFU
5/8 inch[2]	1	0.4	6.4	$2,847.74	$800
1 inch	2.5	1	16	$7,119.36	$2,000
1-1/2"	5	2	32	$14,238.71	$4,000
2"	8	3.2	51.2	$22,781.94	$6,400
3"	16	6.4	102.4	$45,563.87	$12,800
4"	25	10	160	$71,193.55	$20,000
6"	50	20	320	$142,387.10	$40,000
8"	80	32	512	$227,819.37	$64,000
10"	115	46	736	$327,490.34	$92,000
12"	215	86	1376	$612,264.55	$172,000

[1] Based on meter capacity, the equivalency factor is adjusted for a 1-inch meter which is standard for a single-family home with 16 PFUs (for a 1-1/2" meter the equivalency factor is 5/2.5).

[2] 5/8" meters installed for high-density residential and small nonresidential uses

Source: American Water Works Association; Tables 12.5a and 12.5b

USE OF WASTEWATER FACILITY PARTICIPATION CHARGE REVENUES

Wastewater charge revenues may be used for the proportional share of the wastewater collection system improvements the WWTP Compliance Project improvements allocated to new development, the Wastewater System Master Plan, or for capacity expansion or sanitary sewer service extension projects benefiting new development as may be identified in the Wastewater System Master Plan.

7. WATER FACILITIES

This chapter pertains to the water storage and distribution facilities needed to provide domestic and fire service water to new development in Jackson.

WATER SUPPLY AND DEMAND

Jackson purchases treated domestic water from the Amador Water Agency, sourced from the Mokelumne River. The City Water Department maintains storage reservoirs, pumping stations, fire hydrants, and water distribution pipelines. Water fund revenues have been invested in significant improvements to the water system infrastructure over the past few years. A five-year Capital Improvement Program (CIP) is adopted by the City Council with each budget to protect this investment. Major water distribution projects completed in recent years have included, but are not limited to, replacement of large main lines in Church Street, Court Street, Bright Street, Pitt Street, Center Street, Mason Street, Golf Course Road, and Pine Street. These improvements have replaced small steel mains with larger mains designed to improve water line reliability and fire flow and maintain water quality.

Based on an average household water use of approximately 400 gallons per day, as reported in the Amador Water Agency Urban Water Management Plan (UWMP), the city's total average daily water demand in 2015 was estimated to be approximately 890,000 gallons. The projected water demand for 2035 based on this usage and the projected growth is calculated in **Table 7.1**.

As was done for the projected demand for wastewater facilities, the 2018–2035 growth in water demand in Jackson is based on a 1.02 percent annual rate.

WATER SYSTEM IMPROVEMENTS

The City's five-year CIP identified several water distribution system improvements that would be needed to maintain the current level of service and accommodate anticipated growth. The budgeted cost of water line improvements is $781,000. For this study it is projected that the City will budget and spend a similar amount in subsequent 5-year CIPs. A new water storage tank will be needed to improvement existing service and provide for future growth. The total projected improvement costs, including a Water System Master Plan are shown in **Table 7.2**. The improvement costs are allocated between the current population's share of the cost and the cost to provide capacity to new development. It is estimated that approximately 16 percent of the water use in 2035 will be used by new development. Therefore, the equitable allocation of cost between new and existing development is 16 percent/84 percent.

Table 7.1: Current and Projected Water System Demand

Land Use	Existing Dwelling Units, 1,000 sq. ft. or Rooms	Growth 2018-2035 Units, 1,000 sq. ft. or Rooms	Total 2035	Equivalent Dwelling Unit (EDU) Water Use Demand Factor[1]	Existing Water Use in EDU	Growth in EDU	Total EDU 2035	Current Estimated Demand, mgd	Increase due to Growth, mgd	Total 2035, mgd	Percentage from Growth
Residential (in units)											
Single-Family	1,423	268	1,691	1.00	1,422.31	268.19	1,691.00	0.568	0.107	0.676	16%
Multi-Family	484	91	575	0.94	454.80	85.70	540.50	0.182	0.034	0.216	16%
Mobile Homes	186	35	221	0.60	111.82	20.78	132.60	0.045	0.008	0.053	16%
Nonresidential (in 1,000 square feet or rooms)											
Office	100	33	133	0.290	29.00	9.64	38.45	0.012	0.004	0.015	25%
Commercial/retail	230	44	274	0.290	66.70	12.90	79.60	0.027	0.005	0.032	16%
Lodging/Hotel (Rooms)	300	13	313	0.250	75.00	3.13	78.13	0.030	0.001	0.031	4%
Industrial Park/Warehouse	20	18	38	0.160	3.20	1.60	4.80	0.001	0.00	0.002	33%
Public/Institutional	280	138	418	0.170	47.60	23.440	71.04	0.019	0.01	0.028	33%
Total					2,210.93	425.19	2,636.12	0.883	0.170	1.053	16%

[1] The water use factor converts each unit of land use to an equivalent dwelling unit (EDU) which represents the water use of the land use in terms of the amount of water used by a single-family household: about 400 gallons per day.

Water Use Assumptions:

Residential	Assumed average use			Growth increment	PPH	2018 population		current average flow @170 gpdpc residential
SFD	399.50 gpd/du	170 gpd/capita	0.45 acre-feet/yr.	170.00 gpd/capita	2.35	4,679	residentail	800,000
MF	374.00 gpd/du	170 gpd/capita			2.20		non-res.	88,489
MH	238.00 gpd/du	170 gpd/capita			1.40			888,489
Non-residential	use based on AF/ac and floor area ratio		Floor Area Ratio					
Office	117 gpd/1,000 sf	2.0 AF/AC/YR	0.35					88,489
Commercial/Retail:	117 gpd/1,000 sf	2.0 AF/AC/YR	0.35					888,489
Lodging	100 gpd/room							995.17 ac-ft/yr
Industrial/Warehouse	66 gpd/1,000 sf	1.6 AF/AC/YR	0.5					
Public/Government/Institutional	68 gpd/1,000 sf	1.0 AF/AC/YR	0.30					

WATER SYSTEM IMPROVEMENTS COST PER EDU

Tables 7.2 also calculates the cost per EDU for new development. An EDU represents a unit of development with approximately the same water use as a single-family home, which has an EDU of one. For example, a multiple family unit, which on average uses about 94 percent of the water as a single-family home, has an EDU water factor of 0.94.

Table 7.2: Water System Improvements and Cost per EDU

Project/Description	Improvement Costs (2016 dollars)[1]	Cost Allocation New Development/City	New Development Cost	City cost
Water System Capital Improvements				
Water lines	$3,124,000	.16/.84	$499,840	$2,624,160
Water Storage Tank	$2,000,000	.16/84	$320,000	$1,680,000
Water system debt outstanding	$250,000	.16/.84	$40,000	$210,000
Water System Master Plan	$100,000	.16/.84	$16,000	$84,000
Total Cost	$5,474,000		$875,840	$4,598,160
		Growth in EDUs 2018-2035	425.19	
		Cost per EDU	**$2,059.88**	
		Cost per Fixture Unit[2]	**$128.74**	

[1] City of Jackson Water Department; 2016-2021 Water System CIP costs of $781,000 are assumed to be budgeted every five years until 2035.

[2] Cost per fixture unit based on 16 fixture units for a typical single-family home.

RESIDENTIAL WATER FACILITY PARTICIPATION CHARGE SCHEDULE

In **Table 7.3,** the water facilities charges are calculated for each type of new development.

Table 7.3: Water Facility Participation Charges for Residential Uses

Land Use[1]	Water Demand Factor	Water Facilities Fee, per Unit or Rooms	Current Water Fees
Residential			
Single Family	1.00	$2,059.88	$2,060.00
Multi-family	0.94	$1,936.29	$1,960.00
Mobile Homes	0.60	$1,235.93	$1,860.00
Lodging (rooms)	0.25	$514.97	N/A

NONRESIDENTIAL WATER FACILITY PARTICIPATION CHARGE SCHEDULE

The water facility participation charges for nonresidential development in Jackson are based on the number of PFUs. A typical single-family home will have 16 PFUs. The cost for one PFU is proportional to the cost per EDU. At $2,059.88 per EDU, the cost per PFU is $128.74.

An alternative method of calculating a water charge for nonresidential is based on the size of the water meter installed (or recommended to be installed, based on a project's fixture unit analysis).

Table 7.4 lists typical meter sizes and corresponding water use factors in terms of a standard 1-inch meter. The 1-inch meter is the standard for single-family homes and therefore corresponds to the cost per EDU of the planned water system improvements. The charges for the other meter sizes are stated in terms of the water facility cost of a 1-inch meter. The fee for a 5/8-inch meter is given in the case of small nonresidential uses and be may applied to high-density or low occupancy per unit residential uses, where installation of a meter less than 1 inch is allowed. The alternate charge schedule is equivalent to $128.74 per PFU if PFUs are proportional to the adjusted equivalency factor. In other words, a 2-inch meter may serve up to 51.2 PFU (3.2 x 16) the fee for a building needing a 2-inch meter based on fixture units would be $128.74 X 51.2 = $6,592.

Table 7.4: Water Facility Participation Charge Schedule for Nonresidential

Size of Meter (inches)	Factor	Adjusted Equivalency Factor[1]	PFU	Proposed Fee per Meter Size	Current Total Fee (based on $125/PFU)
5/8[2]	1	0.4	6.4	$823.95	$800
1	2.5	1	16	$2,059.88	$2,000
1½	5	2	32	$4,119.76	$4,000
2	8	3.2	51.2	$6,591.62	$6,400
3	16	6.4	102.4	$13,183.23	$12,800
4	25	10	160	$20,598.80	$20,000
6	50	20	320	$41,197.60	$40,000
8	80	32	512	$65,916.16	$64,000
10	115	46	736	$94,754.47	$92,000
12	215	86	1,376	$177,149.67	$172,000

[1] Based on meter capacity, the equivalency factor is adjusted for a 1-inch meter which is standard for a single-family home with 16 PFUs (for a 1-1/2" meter the equivalency factor is 5/2.5).

[2]5/8" meters installed for high-density residential and small nonresidential uses

Source: American Water Works Association; Tables 12.5a and 12.5b

USE OF WATER FACILITY PARTICIPATION CHARGE REVENUES

Water facility participation charge revenues may be used for any improvement that enhances water distribution and/or storage capacity, or water service extension projects listed in the City's Water System CIP that may serve new development. The use of the revenues for a Water Master Plan, which will recommend water use efficiency measures, is a prudent allocation of fee revenues that benefits both existing and new development.

8. IMPLEMENTATION

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

IMPACT FEE PROGRAM ADOPTION PROCESS

Impact fee program adoption procedures are found in California Government Code Section 66000 et seq. Adoption of an impact fee program requires the City Council to follow certain procedures, including holding a public hearing. Mailed notice 14 days prior to the public hearing is required only for those individuals who request such notification. Data, such as this impact fee report and referenced material, must be made available at least 10 days prior to the public hearing. The City's legal counsel should inform the City of any other procedural requirements as well as advice regarding adoption of an enabling ordinance and/or a resolution. After adoption, there is a mandatory 60-day waiting period before the fees go into effect, unless an urgency ordinance, valid for 30 days, is adopted making certain findings regarding the urgency being claimed. The ordinance must be readopted at the end of the first period (and possibly at the end of the second period, depending on City Council meeting dates) to cover the next 30 days and therefore the entire 60-day waiting period. Fees adopted by urgency go into effect immediately. This procedure must also be followed for fee increases.

PROGRAMMING REVENUES AND PROJECTS WITH THE CIP

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

For the planning period of the CIP, the City should allocate all existing fund balances and projected fee revenue to facilities projects. The City should plan its CIP expenditures at least five years in advance and show where all collected development impact fee revenues will be spent. The City can hold funds in a project account for longer than five years if necessary to collect sufficient funds to complete a given project. See Compliance Requirements below for the specific CIP update requirements stated in Government Code Section 66002.

FUNDS NEEDED TO COMPLEMENT IMPACT FEE PROGRAM

In adopting the fees as presented in this report, additional funds will need to be identified to fund the share of costs not related to new development. **Table 1.5** identifies the funding projected by new development versus funding that needs to be provided by other sources for the improvements. The General Fund/Other Sources column identifies the funding amount for each category that the City needs to obtain to cover the City's share of improvements.

INFLATION ADJUSTMENT

For most of the projects, the costs in this report are shown in 2018 dollars based on the consultant's experience and actual construction costs where available. To ensure that the fee program stays current with the prevailing cost of construction, the City should identify appropriate inflation indexes in the fee ordinance and include an automatic annual inflation adjustment in the fee ordinance for those facilities or systems that have not been completed. In addition, for those facilities for which the City is recouping funds for having built in excess capacity, no annual adjustment factor is recommended. For these projects, the annual adjustment factor is not necessary because the facilities have been constructed and the costs have been incorporated into the analysis.

A construction cost index can be based on the City's recent capital project experience or taken from any reputable source, such as the Engineering News Record.

COMBINING FEES

Each facility category has been presented separately for analysis and reporting. However, fees may be combined into two or more fee categories at the City's discretion to facilitate administration.

COMPLIANCE REQUIREMENTS

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

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

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

Fee Exemptions, Reductions, and Waivers. If a development project is found to have no impact on facilities for which fees are charged, such project must be exempted from the fees. If a project has characteristics that indicate its impacts on a public facility or infrastructure system will be significantly and permanently smaller than the average impact used to calculate impact fees in this study, the fees should be reduced accordingly.

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

Credit for Improvements by Developers. If the City requires a developer, as a condition of approval, to construct facilities or improvements for which impact fees have been or will be charged, the impact fee imposed on that development project for that type of facility must be adjusted to reflect a credit for the cost of facilities or improvements constructed or otherwise provided by the developer. If the reimbursement would exceed the amount of the fee to be paid by the development for that type of facility, the City may seek to negotiate a reimbursement agreement with the developer.

Earmarking of Fee Revenues. Section 66006 mandates that the City "deposit … fees for the improvement in a separate capital facilities account or fund in a manner to avoid any commingling of the fees with other revenues and funds of the City, except for temporary investments." Fees must be expended solely for the purpose for which they were collected.

Interest earned on the fee revenues must also be placed in the capital account and used for the same purpose. The Mitigation Impact Fee Act is not clear as to whether depositing fees "for the improvements" refers to a specific capital improvement or a class of improvements (e.g., fire or police facilities). Recommended practice is for the City is to maintain separate funds or accounts for impact fee revenues by facility category, but not necessarily for individual projects.

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

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

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

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

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

Annual Update of Capital Improvement Plan. Section 66002 provides that if the City adopts a CIP to identify the use of impact fees, that program must be adopted and annually updated by a resolution of the governing body at a noticed public hearing. The alternative is to identify improvements in other public documents, such as an Impact Fee Nexus Study itself.

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