# FIRE
# IMPACT FEE FACILITIES PLAN (IFFP)
# & IMPACT FEE ANALYSIS (IFA)

CITY OF ST. GEORGE, UTAH


FINAL ADOPTED

JULY 10, 2014

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**Certification for Impact Fee Facilities Plan and Impact Fee Analysis**

**IFFP Certification**

LYRB certifies that the attached impact fee facilities plan:

1. includes only the costs of public facilities that are:
    a. allowed under the Impact Fees Act; and
    b. actually incurred; or
    c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;
2. does not include:
    a. costs of operation and maintenance of public facilities;
    b. costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents;
    c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement; and,
3. complies in each and every relevant respect with the Impact Fees Act.

**IFA Certification**

LYRB certifies that the attached impact fee analysis:

1. includes only the costs of public facilities that are:
    a. allowed under the Impact Fees Act; and
    b. actually incurred; or
    c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;
2. does not include:
    a. costs of operation and maintenance of public facilities;
    b. costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents;
    c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement;
3. offsets costs with grants or other alternate sources of payment; and,
4. complies in each and every relevant respect with the Impact Fees Act.

**LYRB makes this certification with the following caveats**:

1. All of the recommendations for implementations of the IFFP made in the IFFP documents or in the IFA documents are followed by City Staff and elected officials.
2. If all or a portion of the IFFP or IFA are modified or amended, this certification is no longer valid.
3. All information provided to LYRB is assumed to be correct, complete, and accurate. This includes information provided by the City as well as outside sources.

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## SECTION 1: EXECUTIVE SUMMARY - FIRE IMPACT FEES

The purpose of the Fire Impact Fee Facilities Plan ("IFFP"), with supporting Impact Fee Analysis ("IFA"), is to fulfill the requirements established in Utah Code Title 11 Chapter 36a, the "Impact Fees Act", and help the City of St. George (the "City") plan necessary capital improvements for future growth. This document will address the future fire infrastructure needed to serve the City through the next five to ten years, as well as address the appropriate impact fees the City may charge to new growth to maintain the existing level of service ("LOS").

- **Service Area:** The service area for fire impact fees includes all areas within the City.

- **Demand Analysis:** The demand unit used for this analysis is calls for fire service. It is anticipated that the growth projected over the next five- to ten-year planning horizon, and through buildout, will impact the City's existing services through the increase in calls for service. Section 3 of this report outlines the growth in calls for service.

- **Level of Service:** The level of service for purposes of this analysis is the current building square feet per call. While the impact fee has been calculated based on the number of building square feet per call, level of service can also be measured in response times and road miles. The target response time for the Fire Department is four to six minutes or to be within 1.5 road miles from a fire station. However, the existing response time is slightly higher at approximately 6.27 minutes. Additional detail regarding level of service is found in Section 3.

- **Excess Capacity:** Fire facilities are not governed by traditional excess capacity analyses such as water and sewer systems. Instead, fire relies more on response time coverage and the geographic location of fire stations. Currently the average response time is approximately 6.27 minutes, thus the SGFD does not have any excess capacity to serve growth that continues to spread toward the outer-limits of the City's boundaries.

- **Future Capital Facilities:** Based on the calls for service outlined in this report, demand shows that the City needs to construct one new station of approximately 12,000 sq. ft. within the next ten years. The City is also planning on constructing a training facility and buying a new engine and aerial ladder within the next ten years. It is likely that additional stations will also be required to meet demand through buildout; however, the demand analysis shows that these additional stations will not be necessary within the IFFP planning horizon and thus are not included in this analysis. If the City determines that these future stations are needed within the next ten years due to growth in calls for service or level of service requirements, the impact fee will need to be revised to include these facilities.

## PROPOSED FIRE IMPACT FEE

The IFFP must properly complete the legislative requirements found in the Impact Fee Act if it is to serve as a working document in the calculation of appropriate impact fees. The calculation of impact fees relies upon the information contained in this analysis. Impact fees are then calculated based on many variables centered on proportionality share and level of service. The following paragraph describes the methodology used for calculating impact fees in this analysis.

### GROWTH-DRIVEN (PERPETUATION OF EXISTING LEVEL OF SERVICE)

The methodology utilized in this analysis is based on the increase, or **growth**, in demand. The growth driven method utilizes the existing level of service and perpetuates that level of service into the future. Impact fees are then calculated to provide sufficient funds for the entity to expand or provide additional facilities, as growth occurs within the community. Under this methodology, impact fees are calculated to ensure new development provides sufficient investment to maintain the current level of service (LOS) standards in the community.


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## FIRE IMPACT FEE CALCULATION

Fire impact fees were calculated assuming that 100% of the cost of future stations and apparatus will be attributed to new demand. The cost per call was determined by taking the total cost of all **new** stations and apparatus and dividing it over the total estimated number of calls the stations and apparatus will serve. A cost for professional services is then applied, which is the actual cost to update the IFFP and IFA. The City can use this portion of the impact fee to reimburse itself for the expense of updating the IFFP and IFA. The professional services cost is divided over the additional calls generated in the next six years. Section 5 further details the calculation of this impact fee.

TABLE 1.1: PROPOSED FIRE/EMS IMPACT FEE SCHEDULES

| | CALLS PER UNIT | COST PER CALL | IMPACT FEE PER UNIT | 2006 FEE | % CHANGE |
|---|---|---|---|---|---|
| **Residential** | | | | | |
| Residential Single-Family (per dwelling unit) | 0.084 | $2,259 | $190 | $216 | -12% |
| Residential Multi-Family (per dwelling unit)[1] | 0.124 | $2,259 | $280 | $101 | 177% |
| **Non-Residential** | | | | | |
| Professional Office (per 1,000 square feet) | 0.164 | $3,907 | $641 | $192 | 234% |
| Commercial (per 1,000 square feet) | 0.098 | $3,907 | $383 | $185 | 107% |
| Manufacturing (per 1,000 square feet) | 0.008 | $3,907 | $31 | $63 | -51% |

## NON-STANDARD IMPACT FEES

The City reserves the right under the Impact Fees Act to assess an adjusted fee that more closely matches the true impact that the land use will have upon public facilities.[2] This adjustment could result in a higher or lower impact fee if the City determines that a particular user may create a different impact than what is standard for its land use. To determine the impact fee for a non-standard use, the City should use the following formula:

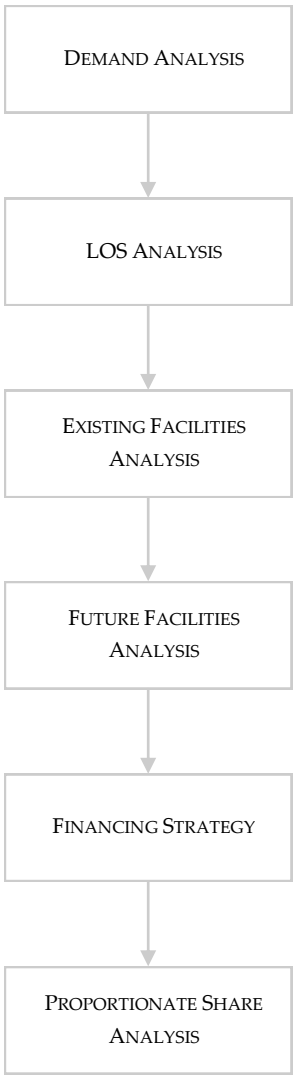
**Total Calls (per Specified Land Use) * Cost per Call**

[1] Since the number of calls per unit as shown in Table 3.3 is the same for mobile homes as multi-family units, the mobile homes category has been combined with the multi-family category.
[2] 11-36a-402(1)(c)

# SECTION 2: GENERAL IMPACT FEE METHODOLOGY

The purpose of this study is to fulfill the requirements of the Impact Fees Act regarding the establishment of an IFFP and IFA. The IFFP is designed to identify the demands placed upon the City's existing facilities by future development and evaluate how these demands will be met by the City. The IFFP is also intended to outline the improvements which are intended to be funded by impact fees. The IFA is designed to proportionately allocate the cost of the new facilities and any excess capacity to new development, while ensuring that all methods of financing are considered. Each component must consider the historic level of service provided to existing development and ensure that impact fees are not used to raise that level of service. The following elements are important considerations when completing an IFFP and IFA.

FIGURE 2.1: IMPACT FEE METHODOLOGY




## DEMAND ANALYSIS

The demand analysis serves as the foundation for the IFFP. This element focuses on a specific demand unit related to each public service – the existing demand on public facilities and the future demand as a result of new development that will impact public facilities.

## LEVEL OF SERVICE ANALYSIS

The demand placed upon existing public facilities by existing development is known as the existing "Level of Service" ("LOS"). Through the inventory of existing facilities, combined with the growth assumptions, this analysis identifies the level of service which is provided to a community's existing residents and ensures that future facilities maintain these standards. Any excess capacity identified within existing facilities can be apportioned to new development. Any demand generated from new development that overburdens the existing system beyond the existing capacity justifies the construction of new facilities.

## EXISTING FACILITY INVENTORY

In order to quantify the demands placed upon existing public facilities by new development activity, the Impact Fee Facilities Plan provides an inventory of the City's existing system improvements. To the extent possible, the inventory valuation should consist of the following information:

- Original construction cost of each facility;
- Estimated date of completion of each future facility;
- Estimated useful life of each facility; and,
- Remaining useful life of each existing facility.

The inventory of existing facilities is important to properly determine the excess capacity of existing facilities and the utilization of excess capacity by new development.

## FUTURE CAPITAL FACILITIES ANALYSIS

The demand analysis, existing facility inventory and LOS analysis allow for the development of a list of capital projects necessary to serve new growth and to maintain the existing system. This list includes any excess capacity of existing facilities as well as future system improvements necessary to maintain the level of service. Any demand generated from new development that overburdens the existing system beyond the existing capacity justifies the construction of new facilities.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## FINANCING STRATEGY – CONSIDERATION OF ALL REVENUE SOURCES

This analysis must also include a consideration of all revenue sources, including impact fees, future debt costs, alternative funding sources and the dedication of system improvements, which may be used to finance system improvements.[3] In conjunction with this revenue analysis, there must be a determination that impact fees are necessary to achieve an equitable allocation of the costs of the new facilities between the new and existing users.[4]

## PROPORTIONATE SHARE ANALYSIS

The written impact fee analysis is required under the Impact Fees Act and must identify the impacts placed on the facilities by development activity and how these impacts are reasonably related to the new development. The written impact fee analysis must include a proportionate share analysis, clearly detailing each cost component and the methodology used to calculate each impact fee. A local political subdivision or private entity may only impose impact fees on development activities when its plan for financing system improvements establishes that impact fees are necessary to achieve an equitable allocation to the costs borne in the past and to be borne in the future (UCA 11-36a-302).

[3] 11-36a-302(2)
[4] 11-36a-302(3)


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# SECTION 3: OVERVIEW OF SERVICE AREA, DEMAND, AND LOS

## SERVICE AREA

Utah Code requires the impact fee enactment to establish one or more service areas within which impact fees will be imposed.[5] The impact fee identified in this document will be assessed to a single city-wide service area.

### DEVELOPMENT BY ZONING CLASS

Table 3.1 summarizes the City's existing and future residential dwelling units, and the developed and undeveloped non-residential land-uses.

TABLE 3.1: DEVELOPMENT BY ZONING CLASS

| | MEASUREMENT | DEVELOPED | UNDEVELOPED | TOTAL |
|---|---|---|---|---|
| **Residential** | | | | |
| Residential Single-Family | Units | 24,892 | 27,371 | 52,263 |
| Residential Multi-Family | Units | 7,331 | 2,335 | 9,666 |
| Mobile Homes | Units | 1,310 | 47 | 1,357 |
| **Total: Residential** | | **33,533** | **29,754** | **63,287** |
| **Non Residential** | | | | |
| Professional Office | Per 1,000 Sq. Ft. | 572 | 456 | 1,027 |
| Commercial | Per 1,000 Sq. Ft. | 10,639 | 13,568 | 24,208 |
| Manufacturing | Per 1,000 Sq. Ft. | 7,844 | 6,510 | 14,353 |
| **Total: Non Residential** | | **19,055** | **20,534** | **39,588** |

*Source: City of St. George, LYRB, American Community Survey (ACS) 2010*

The IFFP, in conjunction with the IFA, is designed to accurately assess the true impact of a particular user upon the City's infrastructure and prevent existing users from subsidizing new growth or for new growth to pay for existing system deficiencies. Impact fees should be used to fund the costs of growth-related capital infrastructure based upon the historic funding of the existing infrastructure and the intent of the City to equitably allocate the costs of growth-related infrastructure in accordance with the true impact that a user will place on the system.

## DEMAND UNITS

This element focuses on the specific demand unit related to fire services, which will be calls for service.[6] The demand analysis identifies the existing demand on public facilities and the future demand as a result of new development that will impact public facilities. The demand analysis also provides projected annual growth in demand units over the planning horizon of the IFFP. Existing call data was analyzed in relation to the current land-use within the City to determine the current level of service by land-use type. Call data was collected from 2009 through 2011 to determine the average calls for residential and non-residential development.

TABLE 3.2: HISTORIC FIRE CALL DATA BY LAND USE CATEGORY

| LAND USE | FIRE CALLS 2009-2011 | 3 YEAR AVERAGE # OF CALLS |
|---|---|---|
| Residential Single-Family (per dwelling unit) | 6,245 | 2,082 |
| Residential Multi-Family (per dwelling unit) | 2,736 | 912 |
| Mobile Homes (per dwelling unit) | 486 | 162 |
| Professional Office (per 1,000 square feet) | 282 | 94 |
| Commercial (per 1,000 square feet) | 3,122 | 1,041 |
| Manufacturing (per 1,000 square feet) | 187 | 62 |
| **Total Calls:** | **13,058** | **4,353** |

[5] UC 11-36a-402(a)

[6] Fire call means a call which initiates the deployment of fire apparatus and fire fighters to a location within the City


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TABLE 3.3: RATIO OF CALLS PER DEVELOPED UNIT

| | DEVELOPED UNITS | HISTORIC AVG. ANNUAL CALLS | CALLS PER DEVELOPED UNIT |
|---|---|---|---|
| Residential Single-Family (per dwelling unit) | 24,892 | 2,082 | 0.084 |
| Residential Multi-Family (per dwelling unit) | 7,331 | 912 | 0.124 |
| Mobile Homes(per dwelling unit) | 1,310 | 162 | 0.124 |
| Professional Office (per 1,000 square feet) | 572 | 94 | 0.164 |
| Commercial (per 1,000 square feet) | 10,639 | 1,041 | 0.098 |
| Manufacturing (per 1,000 square feet) | 7,844 | 62 | 0.008 |
| **Total** | **52,588** | **4,353** | |

In all, an annual average of 4,353 calls for service were attributed to residential and non-residential development (not including calls placed from public land-uses – i.e. government buildings, parks, etc. – and calls that cannot be traced to identifiable land-uses).

The call ratio analysis establishes the existing level of service for residential and non-residential land-uses. A review of existing business in the City shows a mix of business types including building materials, home furnishings, food stores, general merchandise, automotive dealers, gasoline service stations, eating and drinking establishments, communications, motion pictures, wholesale trade, miscellaneous retail, amusement and recreation, electric, gas, and sanitary services, hotels and other lodging. This suggests the call data is based on a variety of business that reflects a cross-section of the types of business that will likely continue to develop in the City.

The City's future growth will impact the fire department's ability to provide adequate fire protection throughout the City. Future development will 1) increase the calls for service, 2) affect acceptable response times as a result of geographic expansion of the City's developed areas, and 3) contribute to increased roadway congestion resulting in decreased response times.

In order to determine the demand placed upon existing public facilities by new development, this analysis projects the additional call volume that undeveloped land-uses will generate. An in-depth analysis has been prepared to determine the number of developed units or acres of land in each zoning category, and the number of calls per unit or acre of land has been assigned to each land-use category. As shown in Table 3.4, the future fire calls are projected based upon the number of historic calls within each land-use category.

The fire call projections include fire calls to private land-uses within the City only. Therefore, calls placed from public land-uses, including government buildings, parks, etc., calls that cannot be traced to identifiable land-uses, and calls outside of the City have not been included in the fire call projections shown in Table 3.4.

TABLE 3.4: FIRE CALL PROJECTIONS

| | CALLS PER UNIT | UNDEVELOPED UNITS | ADDITIONAL ANNUAL CALLS TO BUILDOUT |
|---|---|---|---|
| **Residential** | | | |
| Residential Single-Family (per dwelling unit) | 0.084 | 27,371 | 2,299 |
| Residential Multi-Family (per dwelling unit) | 0.124 | 2,335 | 290 |
| Mobile Homes (per dwelling unit) | 0.124 | 47 | 6 |
| **Sub-Total Residential** | | | **2,595** |
| **Non-Residential** | | | |
| Professional Office (per 1,000 square feet) | 0.164 | 456 | 75 |
| Commercial (per 1,000 square feet) | 0.098 | 13,568 | 1,330 |
| Manufacturing (per 1,000 square feet) | 0.008 | 6,510 | 52 |
| **Sub-Total Non-Residential** | | | **1,457** |
| **Total** | | **50,288** | **4,052** |


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As shown in Table 3.4, the City anticipates an additional annual 4,052 calls through buildout.[7] Thus, the total annual calls at buildout are expected to be approximately 8,405.[8] Table 3.5 shows a forecast of calls from 2011 through buildout. Approximately 966 of these calls will occur within the planning horizon (2013-2023).

TABLE 3.5: FORECASTED CALLS

| YEAR | CALLS | ANNUAL % CHANGE |
|---|---|---|
| 2011* | 4,353 | 1.95% |
| 2012 | 4,438 | 1.95% |
| 2013 | 4,524 | 1.95% |
| 2014 | 4,613 | 1.95% |
| 2015 | 4,703 | 1.95% |
| 2016 | 4,795 | 1.95% |
| 2017 | 4,889 | 1.95% |
| 2018 | 4,984 | 1.95% |
| 2019 | 5,082 | 1.95% |
| 2020 | 5,181 | 1.95% |
| 2021 | 5,282 | 1.95% |
| 2022 | 5,385 | 1.95% |
| 2023 | 5,491 | 1.95% |
| 2024 | 5,598 | 1.95% |
| 2025 | 5,707 | 1.95% |
| 2030 | 6,287 | 1.95% |
| 2035 | 6,926 | 1.95% |
| 2040 | 7,630 | 1.95% |
| 2045 | 8,405 | 1.95% |
| **Calls added 2011-2045** | **4,052** | |
| **Calls added 2013-2023 (IFFP Horizon)** | **966** | |
| **Calls added 2013-2019 (6 Yr Professional Expense Horizon)** | **557** | |

*2011 call volume is the historic average annual call total shown in Table 3.3

## LEVEL OF SERVICE STANDARDS

**The level of service for purposes of this analysis is the current building square feet per call.** Level of service can also be described in terms of response time and road miles as discussed below. While the impact fee has been calculated to meet the demand in calls for service over the next ten years, the City may determine that additional stations may be needed within this horizon based on an analysis of response times and road miles. Should this occur, the impact fee will need to be revised to include the new facilities and show an analysis of response time and road miles.

Impact fees cannot be used to finance an increase in the level of service to current or future users of the infrastructure. Based on the historic call data shown above there is approximately 4,353 calls annually. This equates to 11.20 sq. ft. of existing facilities per call.

[7] The City estimates the average annual population growth to be three percent based on data from Census 2010 and the Governor's Office of Planning and Budget (GOPB). The City estimates buildout population to be approximately 200,000. At a growth rate of three percent annually, the City will likely reach buildout in 2045, thus the 4,052 additional annual calls until buildout have been spread evenly from 2011 until 2045.

[8] This is calculated by taking the historic average annual call total shown in Table 3.3 and adding the additional annual calls to buildout shown in Table 3.4.


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TABLE 3.6: FIRE FACILITIES LEVEL OF SERVICE AND NEEDS ASSESSMENT

| | FIRE FACILITIES |
|---|---|
| Total Current Sq. Ft. | 48,754 |
| Average Annual Calls | 4,353 |
| Sq. Ft./Call (Level of Service) | 11.20 |
| Future Calls to Buildout | 4,052 |
| Additional Square Feet Needed | 45,382 |

Based on the historic level of service, a total of 45,382 new square feet will be necessary to serve new development and maintain the same proportionality of square footage at buildout. This is based on 11.20 sq. ft. per call as identified above.

## TARGET LEVEL OF SERVICE (RESPONSE TIME AND ROAD MILES)

The target response for service for the fire department is **four to six minutes or to be within 1.5 road miles from a station**. The time portion of the response is recommended through state and National Fire Protection Association (NFPA) standards. The mileage portion of the response time is the standard that Insurance Services Office (ISO) uses for insurance grading purposes. The department has master planned general station locations using the 1.5 mile guideline for future expansion of station sites.

## EXISTING LEVEL OF SERVICE (RESPONSE TIME AND ROAD MILES)

While the City's target response time is four to six minutes, actual response time may be slightly higher due to the nature of fire incidents, as shown in the table below. Weighted average response time is approximately 6.27 minutes.

TABLE 3.7: EXISTING LEVEL OF SERVICE (RESPONSE TIME)

| NATURE | RESPONSE TIME |
|---|---|
| Fire-Alarm | 0:06:29 |
| Fire-Brush | 0:06:53 |
| Fire-Other | 0:06:54 |
| Fire-Structure | 0:05:56 |
| Fire-Trash | 0:04:43 |
| Fire-Vehicle | 0:07:17 |
| *Source: City of St. George Dispatch, 2011* | |

Approximately 74 percent of fire calls are within 1.5 road miles of at least one fire station.[9]

Challenges that face the department to achieve the response goals are the rapid growth rate that occurs in areas that are beyond the desired distances and how quickly the impact fee fund allows for the construction of the needed stations.

As traffic congestion increases and new developed areas require fire protection services, the fire department will need to construct new facilities to ensure the existing response times and service levels remain the same. While the level of service calculated above (based on sq. ft. per call) is intended to ensure that facilities similar to existing facilities are built for future development, the location and timing of the new facilities should be based on response times.

[9] City of St. George, GIS


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# SECTION 4: EXISTING FACILITIES ANALYSIS

The St. George Fire Department ("SGFD") currently operates the following stations:

- Station 1: 51 S. 1000 E.
- Station 2: 155 N. Main Street
- Station 3: 2315 S. River Road
- Station 4: 3521 S. Manzanita Rd.
- Station 5: 100 N. Dixie Drive
- Station 6: 184 N. 2450 E.
- Station 7: 1912 W. 1800 N.
- Station 8: 1096 W. Bluegrass Way

Appendix A includes a map of the location of each existing fire station. The following outlines the City's fire services and future capital needs.

## VALUE OF EXISTING FIRE INFRASTRUCTURE

In order to quantify the demands placed upon existing public facilities by new development activity, the Impact Fee Facilities Plan provides an inventory of the City's existing facilities. To the extent possible, the inventory valuation should consist of the following information:

- Original construction cost of each existing capital facility;
- Estimated useful life of each facility; and,
- Remaining useful life of each existing facility.

The inventory of existing facilities is important to properly determine the excess capacity of existing facilities and the utilization of excess capacity by new development. The following table outlines the existing fire facilities inventory. The Fire Department currently shares two facilities with the Police Department, thus only the percent of Stations 7 and 8 used by the Fire Department are included in the square footage and cost estimates that make up the impact fee.

TABLE 4.1: ORIGINAL COST OF EXISTING FACILITIES AND APPARATUS >$500,000

| DESCRIPTION | DATE IN SERVICE | EST. LIFE | TOTAL STATION SQ. FT. | % OF STATION (FIRE) | TOTAL FIRE SQ. FT. | ORIGINAL COST | COST TO FIRE |
|---|---|---|---|---|---|---|---|
| Station 1 | 1986 | 50 | 10,000 | 100% | 10,000 | $379,698 | $379,698 |
| Station 2 | 1936 | 50 | 6,500 | 100% | 6,500 | $239,301 | $239,301 |
| Station 3 | 1990 | 50 | 2,435 | 100% | 2,435 | $215,684 | $215,684 |
| Station 4 | 1973 | 50 | 2,700 | 100% | 2,700 | $150,000 | $150,000 |
| Station 5 | 1990 | 50 | 2,435 | 100% | 2,435 | $206,637 | $206,637 |
| Station 6 | 1998 | 50 | 5,000 | 100% | 5,000 | $409,421 | $409,421 |
| Station 7 | 2003 | 50 | 10,355 | 80% | 8,284 | $1,201,061 | $960,848 |
| Station 8 | 2011 | 50 | 12,000 | 95% | 11,400 | $2,381,083 | $2,262,029 |
| **Subtotal Facilities** | | | **51,425** | | | | **$4,823,619** |
| Station 1, Pierce Pumper | 2008 | 15 | | | | $516,521 | $516,521 |
| Station 7, Pierce ladder/platform | 2006 | 15 | | | | $774,097 | $774,097 |
| **Subtotal Apparatus** | | | | | | | **$1,290,618** |
| **Total Existing Improvements** | | | | | | | **$6,114,237** |


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It should be noted that the Station 1, Pierce Pumper (engine) and the Station 7, Pierce ladder (aerial ladder) only serve commercial development. Thus, these apparatus serve approximately 1,197 calls (see Table 3.3 non-residential calls). Because the City can only use impact fees to perpetuate the same level of service into the future, any future engines or aerial ladders will be expected to serve an additional 1,197 calls.

### EXCESS CAPACITY

Fire facilities are not governed by traditional excess capacity analyses such as water and sewer systems. Instead, fire relies more on response time coverage and the geographic location of fire stations. The SGFD located fire stations in areas that enable emergency units to respond to a call placed from any area within the City in four to six minutes. Currently the average response time is approximately 6.27 minutes, thus the SGFD does not have any excess capacity to serve growth that continues to spread toward the outer-limits of the City's boundaries. It is anticipated that additional stations will be required in the next five to ten years to allow the SGFD to meet the current LOS for response times.

### MANNER OF FINANCING EXISTING PUBLIC FACILITIES

The City's existing facilities have been funded by existing development through impact fees and general fund revenues. The City has received no State and/or Federal grants to fund existing fire/EMS capital infrastructure.

Funding the future improvements through impact fees places a similar burden upon future users. The City's objective is to fairly and equitably recover the costs of new growth-related infrastructure and eligible apparatus from new development. This implies that new growth will be expected to pay its fair share of the costs incurred for facilities that serve new growth.

### CAPACITY FOR GROWTH IN FIRE STATIONS

As development continues to occur within the City, the need for vehicles and firefighters will increase which will force the City to construct additional fire stations. Future development will also increase response times as a result of increased congestion, traffic signaling and changes in speed limits.


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## SECTION 5: CAPITAL FACILITY ANALYSIS

The demand analysis anticipates an additional 966 calls within the next ten years. Based on these calls the following station and apparatus will allow the SGFD to meet that demand. While the location of the proposed station is shown in the table below, should future development necessitate alternative locations for this station, the Fire Department may divert impact fee funds to the appropriate area. The Fire Department estimates that approximately five percent of each station built in the future will serve the Police Department.

TABLE 5.1: ESTIMATED COST OF FUTURE FACILITIES AND APPARATUS >$500,000

| FACILITIES OR ENGINES | YEAR | TOTAL STATION SQ. FT. | % OF STATION (FIRE) | TOTAL FIRE SQ. FT. | CONSTRUCTION YEAR COST | COST TO FIRE | ANNUAL DEMAND (CALLS) SERVED |
|---|---|---|---|---|---|---|---|
| **Facilities** | | | | | | | |
| Southeast Station (Little Valley/Fort Pierce) | 2016 | 12,000 | 95% | 11,400 | $2,266,662 | $2,153,329 | 1,018 |
| Training Center | 2019 | 5,000 | 100% | 5,000 | $1,061,520 | $1,061,520 | 8,405 |
| **Engines** | | | | | | | |
| Engine/Pumper | 2016 | | | | $710,908 | $710,908 | 1,197 |
| **Ladders** | | | | | | | |
| Aerial ladder | 2018 | | | | $1,261,212 | $1,261,212 | 1,197 |
| **Total** | | **17,000** | | **16,400** | **$5,300,302** | **$5,186,969** | |

Table 5.1 also shows the annual demand (or calls) served by the future facilities and apparatus. The following details how the demand was calculated:

- Southeast Station: Calculated by dividing the total square feet of the new station by the level of service shown in Table 3.6 (11.20 square feet per call).
- Training Center: The training center is anticipated to serve existing and future residents, thus the total demand served is the total number of calls anticipated at buildout.[10]
- Engine/Pumper: The City currently owns one engine that serves an estimated 1,197 non-residential calls. Assuming the same level of service, an additional engine would serve the same number of non-residential calls.
- Aerial Ladder: The City currently owns one aerial ladder that serves an estimated 1,197 non-residential calls. Assuming the same level of service, an additional ladder would serve the same number of non-residential calls.

## SYSTEM VS. PROJECT IMPROVEMENTS

System improvements are defined as existing and future public facilities that are intended to provide services to service areas within the community at large.[11] Project improvements are improvements and facilities that are planned and designed to provide service for a specific development (resulting from a development activity) and considered necessary for the use and convenience of the occupants or users of that development.[12] The Impact Fee Analysis may only include the costs of impacts on system improvements related to new growth within the proportionate share analysis. Since fire services serve the entire community, the construction of fire safety buildings are considered system improvements.

[10] The historic average calls shown in Table 3.3 (4,353) plus additional calls for buildout shown in Table 3.4 (4,052).
[11] UC 11-36a-102(20)
[12] UC 11-36a102(13)

## FUNDING OF FUTURE FACILITIES

The IFFP must also include a consideration of all revenue sources, including impact fees and the dedication (developer donated) of system improvements, which may be used to finance system improvements.[13] In conjunction with this revenue analysis, there must be a determination that impact fees are necessary to achieve an equitable allocation of the costs of the new facilities between the new and existing users.[14]

The City does not anticipate any donations from new development for future system-wide capital improvements related to fire facilities.

### PROPERTY TAX REVENUES

Property tax revenues are not specifically identified in this analysis as a funding source for capital projects, but inter-fund loans can be made from the general fund which will ultimately include some property tax revenues. Inter-fund loans may be repaid once sufficient impact fee revenues have been collected. The City does not currently assess interest on money borrowed from the general fund; however, the City may adopt a policy to do so.

### GRANTS AND DONATIONS

It has been assumed that the City will pay for all fire facilities using impact fee or general fund dollars. Should the City receive grant money to fund fire facilities, the impact fees will need to be adjusted accordingly to reflect the grant monies received. A donor will be entitled to a reimbursement for the value of the improvements funded through impact fees if donations are made by new development. Section 6 further addresses developer donations.

### IMPACT FEE REVENUES

Impact fees are a valid mechanism for funding growth-related infrastructure. Impact fees are charged to ensure that new growth pays its proportionate share of the costs for the development of public infrastructure. Impact fee revenues can also be attributed to the future expansion of public infrastructure if the revenues are used to maintain an existing level of service. Increases to an existing level of service cannot be funded with impact fee revenues. Analysis is required to accurately assess the true impact of a particular user upon the City infrastructure and to prevent existing users from subsidizing new growth.

### DEBT FINANCING

The Impact Fees Act allows for the costs related to the financing of future capital projects to be legally included in the impact fee. This allows the City to finance and quickly construct infrastructure for new development and reimburse itself later from impact fee revenues for the costs of issuing debt. However, the Fire Department is currently planning to fund all future facilities on a pay-as-you-go basis, thus no financing costs are included in the impact fee analysis relative to funding future capital improvements or eligible apparatus. Should the City incur additional cost as a result of the need to issue debt, the impact fee should be updated to account for this cost.

## EQUITY OF IMPACT FEES

Impact fees are intended to recover the costs of capital infrastructure that relate to future growth. The impact fee calculations are structured for impact fees to fund 100% of the growth-related facilities identified in the proportionate share analysis as presented in the impact fee analysis. Even so, there may be years that impact fee revenues cannot cover the annual growth-related expenses. In those years, other revenues such as general fund revenues will be used to make up any annual deficits. Any borrowed funds are to be repaid in their entirety through impact fees.

[13] UC 11-36a-302(2)
[14] UC 11-36a-302(3)

## NECESSITY OF IMPACT FEES

An entity may only impose impact fees on development activity if the entity's plan for financing system improvements establishes that impact fees are necessary to achieve parity between existing and new development. This analysis has identified the improvements to public facilities and the funding mechanisms to complete the suggested improvements. Impact fees are identified as a necessary funding mechanism to help offset the costs of new capital improvements related to new growth. In addition, alternative funding mechanisms are identified to help offset the cost of future capital improvements.


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# SECTION 6: FIRE IMPACT FEE CALCULATION

The written impact fee analysis relies upon the information contained in this document. The following briefly discusses the methodology for calculating fire impact fees.

## PROPOSED FIRE IMPACT FEES

The fire/EMS impact fees proposed in this analysis will be assessed within all areas of the City. The impact fee assumes that 100% of the cost of new stations and apparatus (i.e. engine/pumper, aerial ladder truck, etc.) will be attributed to new demand.

The cost per call for facilities, engines, and ladders is found in Table 5.1 and is the basis for the maximum impact fees per land use category shown in Table 5.2.

TABLE 5.1: ESTIMATE OF IMPACT FEE COSTS PER CALL

| | ESTIMATED COST TO FIRE | IF ELIGIBLE | COST TO IMPACT FEES | CALLS SERVED | COST PER CALL |
|---|---|---|---|---|---|
| **Future Stations and Facilities** | | | | | |
| Southeast Station (Little Valley/Fort Pierce) | $2,153,329 | 100% | $2,153,329 | 1,018 | $2,116 |
| Training Center | $1,061,520 | 100% | $1,061,520 | 8,405 | $126 |
| **Total Stations and Facilities** | | | | | **$2,242** |
| **Future Engines** | | | | | |
| Engine/Pumper | $710,908 | 100% | $710,908 | 1,197 | $594 |
| **Total Engines** | | | | | **$594** |
| **Future Ladders** | | | | | |
| Aerial ladder | $1,261,212 | 100% | $1,261,212 | 1,197 | **$1,054** |
| **Total Ladders** | | | | | **$1,054** |
| **Other Expenses** | | | | | |
| Professional Expense[15] | | | $9,675 | 557 | $17 |
| **Total Other Expenses[16]** | | | | | **$17** |

The cost per call is then multiplied by the actual demand unit of measurement, or calls per unit for each development type as shown in table 5.2. The total cost per call for residential includes the cost per call for facilities and professional expense. The total cost per call for non-residential includes the cost per call for facilities, engines, ladders, and professional expense.

TABLE 5.2: RECOMMENDED FIRE/EMS IMPACT FEE SCHEDULE

| | CALLS PER UNIT | COST PER CALL | IMPACT FEE PER UNIT | 2006 FEE | % CHANGE |
|---|---|---|---|---|---|
| **Residential** | | | | | |
| Residential Single-Family (per dwelling unit) | 0.084 | $2,259 | $190 | $216 | -12% |
| Residential Multi-Family (per dwelling unit)[17] | 0.124 | $2,259 | $280 | $101 | 177% |
| **Non-Residential** | | | | | |
| Professional Office (per 1,000 square feet) | 0.164 | $3,907 | $641 | $192 | 234% |
| Commercial (per 1,000 square feet) | 0.098 | $3,907 | $383 | $185 | 107% |
| Manufacturing (per 1,000 square feet) | 0.008 | $3,907 | $31 | $63 | -51% |

[15] This is the actual cost to update the IFFP and IFA. The City can use this portion of the impact fee to reimburse itself for the expense of updating the IFFP and IFA. The cost is divided over the additional calls generated in the next six years.
[16] Since the impact fee fund balance is negligible, it has not been included in the calculation of the impact fees.
[17] Since the number of calls per unit as shown in Table 3.3 is the same for mobile homes as multi-family units, the mobile homes category has been combined with the multi-family category.


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### NON-STANDARD FIRE IMPACT FEES

The City reserves the right under the Impact Fees Act to assess an adjusted fee that more closely matches the true impact that the land use will have upon fire facilities.[18] This adjustment could result in a higher impact fee if the City determines that a particular user may create a greater impact than what is standard for its land use. The City may also decrease the impact fee if the developer can provide documentation evidence, or alternative-credible analysis that the proposed impact will be lower than normal. The formula for determining a non-standard impact fee, assuming the fair share approach, is found below.

FORMULA FOR NON-STANDARD FIRE/EMS IMPACT FEES:

**Residential Fire Impact Fee**
**Calls per Residence x $2,259 = Recommended Impact Fee**

**Non-Residential Fire Impact Fee**
**Calls per Unit / (Bldg. Sq. Ft./1,000) x $3,907 = Recommended Impact Fee**

## CONSIDERATION OF ALL REVENUE SOURCES

The Impact Fees Act requires the proportionate share analysis to demonstrate that impact fees paid by new development are the most equitable method of funding growth-related infrastructure. See Section 5 for further discussion regarding the consideration of revenue sources.

## EXPENDITURE OF IMPACT FEES

Legislation requires that impact fees should be spent or encumbered with six years after each impact fee is paid. Impact fees collected in the next five to six years should be spent only on those projects outlined in the IFFP as growth related costs to maintain the LOS.

## PROPOSED CREDITS OWED TO DEVELOPMENT

The Impact Fees Act requires that credits be paid back to development for future fees that will pay for growth-driven projects included in the Impact Fee Facilities Plan that would otherwise be paid for through user fees. Credits may also be paid to developers who have constructed and donated facilities to that City that are included in the IFFP in-lieu of impact fees. This situation does not apply to developer exactions or improvements required to offset density or as a condition of development. Any project that a developer funds must be included in the IFFP if a credit is to be issued.

In the situation that a developer chooses to construct facilities found in the IFFP in-lieu of impact fees, the decision must be made through negotiation with the developer and the City on a case-by-case basis.

## GROWTH-DRIVEN EXTRAORDINARY COSTS

The City does not anticipate any extraordinary costs necessary to provide services to future development.

## SUMMARY OF TIME PRICE DIFFERENTIAL

The Impact Fees Act allows for the inclusion of a time price differential to ensure that the future value of costs incurred at a later date are accurately calculated to include the costs of construction inflation. A one percent annual construction inflation adjustment is applied to projects completed after 2013 (the base year cost estimate).

[18] UC 11-36a-402(1)(c)

## APPENDIX A: MAP OF EXISTING FIRE STATIONS


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Fire Stations
1-1/2 Miles
Rivers
City Limits

1
2
3
4
5
6
7
8

U-18 FWAY
LONG SKY DR
U-18
4400 N ST
4200 N ST
TRADA TRL
CHACO TRL
ANASAZI TRL
TUWEAP DR
2500 W ST
1800 N ST
SNOW CANYON PKWY
2100 W ST
1650 W ST
DIXIE DOWNS RD
1375 N ST
1250 M ST
1130 N ST
SUNSET BLVD
670 N ST
540 N ST
VALLEY VIEW DR
1210 W ST
STONEBRIDGE DR
EMERALD DR
SUNBROOK DR
RAINIER DR
PLANTATIONS DR
740 S ST
BLUFF ST
DIAGONAL ST
300 W ST
MAIN ST
AIRPORT RD
ST GEORGE BLVD
100 S ST
200 S ST
300 S ST
400 S ST
500 S ST
600 S ST
700 S ST
100 E ST
200 E ST
700 E ST
1000 E ST
1100 E ST
1200 E ST
900 S ST
1160 S ST
SUNLAND DR
INDIAN HILLS DR
DIXIE DR
HILTON DR
770 E ST
660 E ST
900 E ST
COTTONWOOD SPRINGS RD
770 N ST
1700 E ST
MIDDLETON DR
REDCLIFFS DR
850 N ST
700 N ST
RED HILLS PKWY
2000 E ST
2200 E ST
2450 E ST
2790 E ST
2900 E ST
3050 E ST
40 N ST
140 S ST
EAST RIDGE DR
1470 E ST
MALL DR
RIVERSIDE DR
FOREMASTER DR
1450 S ST
2670 E ST
2780 E ST
3000 E ST
LIZZIE LN
1710 S ST
COBALT DR
FT PIERCE DR
2000 S ST
3210 E ST
2330 S ST
2350 E ST
2580 E ST
2450 S ST
3430 E ST
RUSTIC DR
SEEGMILLER DR
2800 S ST
TAMARISK DR
BRIGHAM RD
2150 E ST
2710 E ST
BENTLEY RD
LITTLE VALLEY RD
3000 E ST
BANDED HILLS DR
3850 S ST
COMMERCE DR
1630 E ST
RIVER RD
AIRPORT PKWY
1370 W ST
1200 W ST
LEGACY DR
2025 S CIR
SIR MONTE DR
I-15 FWY
ESCALANTE DR
SUGAR LEO RD
PIONEER RD
APEX MINE RD
NAVAJO DR
PAIUTE RD
3780 S ST
MULBERRY DR
BLUEGRASS WAY
SUN RIVER PKWY
ANGEL ARCH DR
SOUTHERN PKWY

N
W
E
S

Date: 6/12/2012