CITY OF ST. GEORGE

ORDINANCE NO. 2020-12-001

AN ORDINANCE ADOPTING AMENDED AND UPDATED IMPACT FEE FACILITIES PLANS AND IMPACT FEE ANALYSES FOR CULINARY & IRRIGATION WATER, LOCAL & REGIONAL WASTEWATER, TRANSPORTATION, POWER, FIRE/EMS, AND POLICE; ADOPTING AMENDED AND UPDATED IMPACT FEES FOR SAID FACILITIES; ESTABLISHING CERTAIN POLICIES RELATED TO IMPACT FEES; ESTABLISHING SERVICE AREAS; AND/OR OTHER RELATED MATTERS

WHEREAS, City of St. George (the "City") is a political subdivision of the State of Utah, authorized and organized under the provisions of Utah law; and

WHEREAS, the City has legal authority, pursuant to Title 11, Chapter 36a Utah Code Annotated, as amended ("Impact Fees Act" or "Act"), to impose Impact Fees as a condition of development approval, which impact fees are used to defray capital infrastructure costs attributable to growth activity; and

WHEREAS, the City has historically assessed Impact Fees as a condition precedent to development approval in order to assign capital infrastructure costs to development in an equitable and proportionate manner; and

WHEREAS, the City properly noticed its intent to prepare the Impact Fee Facilities Plans ("IFFPs") and Impact Fee Analyses ("IFAs") for public facilities as defined in the Act, including Culinary & Irrigation Water, Local & Regional Wastewater, Transportation, Power, Fire/EMS, and Police Facilities; and

WHEREAS, the City has completed IFFPs and IFAs for Culinary & Irrigation Water, Local & Regional Wastewater, Transportation, Power, Fire/EMS, and Police Facilities which meet the requirements of State Law and City Ordinance; and

WHEREAS, the City and consultants retained by the City have reviewed and evaluated the land within the City boundaries and have determined the Service Area to be as follows:

- The Service Area for Culinary & Irrigation Water, Transportation, Fire/EMS, and Police include all areas within the City boundaries.

- The Service Area for Local Wastewater includes all areas within the City boundaries while the Service Area for Regional Wastewater includes all areas within the City, Ivins City, the City of Santa Clara, and Washington City.

- The Service Area for Power is shown in **Exhibit A.**

NOW THEREFORE, BE IT ORDAINED BY THE MUNICIPAL COUNCIL OF THE CITY OF ST. GEORGE, UTAH AS FOLLOWS:

SECTION 1 PURPOSE

This Impact Fee Ordinance establishes the City's Impact Fee policies and procedures and conforms to the requirements of the Utah Impact Fees Act, U.C.A § 11-36a ("the Act"). This Ordinance supersedes any prior Resolutions and Ordinances related to Culinary & Irrigation Water, Local & Regional Wastewater, Transportation, Power, Fire/EMS, and Police Facilities Impact Fees within their respective Service Area; provides a schedule of Impact Fees for differing types of land-use development, and sets forth direction for challenging, modifying and appealing Impact Fees.

SECTION 2 DEFINITIONS

Words and phrases that are defined in the Act shall have the same definition in this Impact Fee Ordinance. For purposes of this Ordinance, the following words and phrases shall have the following meanings:

1. "Impact Fee Facilities Plan" or "IFFP" means the City's Impact Fee Facilities Plans required by Section 11-36a-301 of the Act, which have been prepared in accordance with the Act and are to be adopted by passage of this Ordinance. The Impact Fee Facilities Plans are attached hereto as a part of **Exhibit B** and incorporated into this Ordinance by this reference.

2. "Development Activity" means any construction or expansion of building, structure or use, any change in use of building or structure, or any change in the use of land located within the Service Area that creates additional demand and need for Public Facilities.

3. "Development Approval" means any written authorization from the City that authorizes the commencement of Development Activity.

4. "City" means the City of St. George, a political subdivision of the State of Utah.

5. "Impact Fee" means a payment of money imposed upon Development Activity as a condition of development approval to mitigate the impact of the development on public infrastructure. "Impact Fee" includes development Impact Fees, but is not a tax, a special assessment, a hookup fee, a building permit fee, a fee for project improvements, or other reasonable permit or application fees.

6. "Impact Fee Analysis" or "IFA" means the City's written analysis required by Section 11-36a-303 of the Act. The Impact Fee Analyses are attached hereto as a part of Exhibit B and incorporated into this Ordinance by this reference.

7. "Project Improvements" shall have the same meaning as Utah Code Annotated § 11-36a-102(14) and includes but is not limited to site improvements and facilities that are planned and designed to provide service for development resulting from a Development Activity and are necessary for the use and convenience of the occupants or users of said Development Activity. "Project Improvements" do not include "System Improvements" as defined below.

8. "Proportionate Share" shall have the same meaning as Utah Code Annotated § 11-36a-102(15) and includes the cost of public facility improvements that is roughly proportionate and reasonably related to the service demands and needs of a Development Activity.

9. "Public Facilities" shall have the same meaning as Utah Code Annotated § 11-36a-102(16) and includes Culinary & Irrigation Water, Local & Regional Wastewater, Transportation, Power, Fire/EMS, and Police Facility and related infrastructure improvements of the City for the City-Wide Service Area.

10. "Service Area" refers to a geographic area designated by the City based on sound planning and engineering principles in which a defined set of the City's public facilities provides service. The Service Area for Culinary & Irrigation Water, Transportation, Fire/EMS, and Police include all areas within the City boundaries. The Service Area for Local Wastewater includes all areas within the City boundaries while the Service Area for Regional Wastewater includes all areas within the City boundaries, Ivins City, the City of Santa Clara, and Washington City. The Service Area for Power is shown in **Exhibit A**.

11. "System Improvements" shall have the same meaning as Utah Code Annotated § 11-36a-102(21) and includes both existing Public Facilities designed to provide services within the Service Area and to future Public Facilities identified in the IFFP that are intended to provide service to the Service Area. "System Improvements" do not include "Project Improvements" as defined above.

SECTION 3 WRITTEN IMPACT FEE ANALYSIS

1. Executive Summary. A summary of the IFA designed to be understood by a lay person (the "Executive Summary") is included in the attached **Exhibit B** and demonstrates the need for Impact Fees to be assessed on Development Activity. The Executive Summary has been available for public inspection at least ten (10) days prior to the adoption of this Ordinance.

2. Impact Fee Analysis. The City has commissioned the IFFPs and IFAs which identify the impacts upon Public Facilities required by anticipated Development Activity and the anticipated impacts on System Improvements required by anticipated Development Activity to maintain the established level of service for each Public Facility, demonstrate how such anticipated impacts are reasonably related to the anticipated Development Activity, estimate the proportionate share of the costs of impacts on System Improvements that are reasonably related to the Development Activity, and identify how the Impact Fees are calculated. Copies of the IFFPs and IFAs, as presented in **Exhibit B** hereto, have been available for public inspection at least ten (10) days prior to the adoption of this Ordinance.

3. Proportionate Share Analysis. In connection with the IFFPs and IFAs, the City has prepared a Proportionate Share analysis which analyzes whether or not the proportionate share of the costs of Public Facilities is reasonably related to the service demands and needs related to new Development Activity. The Proportionate Share analysis identifies, as applicable: (a) the costs of each existing Public Facility that has excess capacity to serve the anticipated development resulting from new Development Activity; (b) the cost of System Improvements for each Public Facility; (c) the manner of financing for each Public Facility (such as user charges, special assessments, bonded indebtedness, general taxes or funded grants) other than impact fees; (d) the relative extent to which Development Activity will contribute to financing the excess capacity of and System Improvements for each existing Public Facility by such means as user charges, special assessments or payment from the proceeds of general taxes; (e) the relative extent to which Development Activity will contribute to the cost of existing Public Facilities and System Improvements in the future; (f) the extent to which Development Activity is entitled to a credit against the Impact Fees because the Development Activity will dedicate System Improvements or Public Facilities that will offset the demand for System Improvements, inside or outside the proposed development; (g) any extraordinary costs in servicing the newly developed properties; and (h) the time- price differential inherent in fair comparisons of amounts paid at different times. A copy of the Proportionate Share analysis is included in the IFAs, which is included in **Exhibit B** and has been available for public inspection at least ten (10) days prior to the adoption of this Ordinance.

SECTION 4 IMPACT FEE FACILITIES PLAN

1. Impact Fee Facilities Plan. The City has developed the IFFPs which identify the existing levels of service, establish proposed levels of service, identify excess capacity to accommodate future growth at the proposed levels of service, identify demands placed upon existing Public Facilities by new development activity at the proposed levels of service, and identify the means by which the City will meet those growth demands. The City has chosen to use a planning horizon of six to ten years in preparing the IFFPs. The City has considered all revenue sources to finance the impacts on System Improvements, including grants, bonds, interfund loans, Impact Fees and anticipated dedication of System Improvements. The City's plan for financing System Improvements establishes that Impact Fees are necessary to maintain a proposed level of service that complies with Subsection 11-36a-302(1)(b) or 11-36a-302(1)(c) of the Act. The IFFPs have been prepared based on reasonable growth assumptions for the Service Area, and analyze the general demand characteristics of current and future users of the systems. Furthermore, the IFFPs identify the impact on System Improvements created by Development Activity and estimate the Proportionate Share of the costs of impacts on System Improvements that are reasonably related to new Development Activity. Said IFFPs are included in **Exhibit B** and are incorporated into this Ordinance by this reference.

SECTION 5 IMPACT FEE CALCULATIONS

1. Ordinance Enacting Impact Fees. The City Council will, by this Ordinance, approve Impact Fees in accordance with the IFFPs and IFAs.

a. Elements. In calculating the Impact Fees, the City has based all amounts on realistic estimates and the assumptions underlying those estimates are disclosed in the IFA, and the City has included the construction costs, land acquisition costs, costs of improvements, fees for planning, surveying, and engineering services provided for and directly related to the construction of System Improvements, and outstanding or future debt service charges if the City might use Impact Fees as a revenue stream to pay principal and interest on bonds or other obligations to finance the cost of System Improvements.

b. Notice and Hearing. In conjunction with the approval of this Ordinance, the City held a public hearing on December 3, 2020, gave public notice of the IFFPs and IFAs, said hearing and the City's intent to adopt this Ordinance at least ten (10) days before the date of said hearing by posting notice in at least three public places within the City, publishing notice in newspapers of general circulation in the City and on the Utah Public Notice Website, made a copy of this Ordinance, the IFFPs, the IFAs and the Executive Summaries available to the public on the City's website and at the City's offices, and placed copies of the IFFPs and Executive Summaries in each public library within the City, all in conformity with the requirements of Utah Code Annotated 11-36a-502. After the public hearing, the City Council adopted this Impact Fee Ordinance as presented herein.

c. Contents of the Ordinance. The Ordinance adopting or modifying an Impact Fee contains such detail and elements as deemed appropriate by the City Council, including designation of the Service Area within which the Impact Fee is to be calculated and imposed. The Ordinance herein includes (i) a schedule of Impact Fees to be imposed, and (ii) the formula to be used by the City in calculating Impact Fees.

d. Adjustments. The standard Impact Fee may be adjusted at the time the fee is assessed in response to unusual circumstances, to fairly allocate costs associated with impacts created by a Development Activity or project, or due to a request for a prompt and individualized impact fee review for the development activity of the state or a school district or charter school and an offset or credit for Public Facilities for which an impact fee has been or will be collected. The standard Impact Fee may also be adjusted to ensure that Impact Fees are imposed fairly for Development Activities attributable to low income housing or other development activities with broad public purposes. The Impact Fee assessed to a particular development may also be adjusted should the developer supply sufficient written studies and data to the City showing a discrepancy between the fee being assessed and the actual impact on the system.

e. Previously Incurred Costs. To the extent that new growth and Development Activity will be served by previously constructed improvements, the Impact Fee may include Public Facility costs and outstanding bond costs related to improvements previously incurred by the City. These costs may include all projects included in the

IFFPs which are under construction or completed but have not been utilized to their capacity, as evidenced by outstanding debt obligations. Any future debt obligations determined to be necessitated by growth activity may also be included to offset the costs of future capital projects.

2. Developer Credits. Development Activity may be allowed a credit against Impact Fees for any dedication of land for a System Improvement, any building and dedication of some or all of a System Improvement, any dedication of a Public Facility that the City and the developer agree will reduce the need for a System Improvement, or a dedication of land for, improvement to or new construction of any System Improvement by the developer if the facilities are System Improvements or are dedicated to the public and offset the need for an identified System Improvement.

3. Impact Fees Accounting. The City will establish a separate interest-bearing ledger account for each type of Public Facility for which an Impact Fee is collected, deposit all Impact Fees in the appropriate ledger account, retain the interest earned on each account in the ledger account, and otherwise conform to the accounting requirements provided in the Impact Fees Act. Impact Fees collected prior to the effective date of this Ordinance need not meet the requirements of this section.

   a. Reporting. At the end of each fiscal year, the City shall prepare a report pursuant to Utah Code Ann. §11-36a-601.

   b. Impact Fee Expenditures. The City may expend Impact Fees pursuant to Utah Code Ann. §11-36-602 only for System Improvements that are (i) identified in the IFFPs and (ii) for the specific Public Facility type for which the fee was collected.

   c. Time of Expenditure. Impact Fees collected pursuant to the requirements of this Ordinance are to be expended, dedicated or encumbered for a permissible use within six years of the receipt of those funds by the City, unless the City identifies in writing an extraordinary and compelling reason why the fees should be held longer than six (6) years and an absolute date by which the fees will be expended. Impact Fees will be expended on a First-In First-Out ("FIFO") basis, with the first funds received deemed to be the first funds expended.

4. Refunds. In accordance with Utah Code Annotated § 11-36a-603, the City shall refund any Impact Fees paid by a developer, plus interest actually earned, when (i) the developer does not proceed with the Development Activity and files a written request for a refund; (ii) the fees have not been spent or encumbered within the "Time of Expenditure" as defined herein; and (iii) no impact has resulted. An impact that would preclude a developer from a refund from the City may include any impact reasonably identified by the City, including, but not limited to, the City having sized facilities and/or paid for, installed and/or caused the installation of facilities based in whole or in part upon the developer's planned Development Activity even though that capacity may, at some future time, be utilized by another development.

5. Other Impact Fees. To the extent allowed by law, the City Council may negotiate or otherwise impose Impact Fees and other fees different from those currently charged. Those charges may, at the discretion of the City Council, include but not be limited to reductions or increases in Impact Fees, all or part of which may be reimbursed to the developer who installed improvements that service the land to be connected with the City's system.

6. Additional Fees and Costs. The Impact Fees authorized hereby are separate from and in addition to user fees and other charges lawfully imposed by the City and other fees and costs that may not be included as itemized component parts of the Impact Fee Schedule. In charging any such fees as a condition of development approval, the City recognizes that the fees must be a reasonable charge for the service provided.

7. Fees Effective at Time of Payment. Unless the City is otherwise bound by a contractual requirement, the Impact Fee shall be determined from the fee schedule in effect at the time of payment in accordance with the provisions of Section 6 below.

8. Imposition of Additional Fee or Refund after Development. Should any developer undertake Development Activities such that the ultimate density or other impact of the Development Activity is not revealed to the City either through inadvertence, neglect, a change in plans, or any other cause whatsoever, and/or the Impact Fee is not initially charged against all units or the total density within the development, the City shall be entitled to recover the total Impact Fee pursuant the IFFPs and IFAs from the developer or other appropriate person covering the density for which an Impact Fee was not previously paid.

SECTION 6 IMPACT FEE SCHEDULES

1. Fee Adoption. The City hereby adopts the following as the Impact Fees in the Service Area:

CULINARY & IRRIGATION WATER IMPACT FEE SCHEDULE

METER SIZE (IN)	IMPACT FEE PER METER SIZE
3/4	$1,996
1	$4,311
1 1/2	$14,311
2	$23,034
3	$51,896
4	$91,816
6	$207,584

LOCAL & REGIONAL WASTEWATER IMPACT FEE SCHEDULE

Connection Size	Regional Fee	Local Impact Fee	Total Impact Fee per Meter Size
3/4	$1,379	$137	$1,516
1	$2,978	$296	$3,274
1 1/2	$9,885	$982	$10,867
2	$15,910	$1,580	$17,490
3	$35,846	$3,560	$39,406
4	$63,420	$6,298	$69,718
6	$143,385	$14,239	$157,624

FIRE/EMS IMPACT FEE SCHEDULE

	Impact Fee per Unit
Residential	
Residential Single-Family (per dwelling unit)	$320
Residential Multi-Family (per dwelling unit)	$657
Residential Mobile Homes (per dwelling unit)	$187
Non-Residential	
Professional Office (per 1,000 square feet)	$270
Commercial (per 1,000 square feet)	$690
Manufacturing (per 1,000 square feet)	$130

POLICE IMPACT FEE SCHEDULE

	Impact Fee per Unit
Residential	
Residential Single-Family (per dwelling unit)	$95
Residential Multi-Family (per dwelling unit)	$243
Residential Mobile Homes (per dwelling unit)	$73
Non-Residential	
Professional Office (per 1,000 square feet)	$126
Commercial (per 1,000 square feet)	$333
Manufacturing (per 1,000 square feet)	$76

TRANSPORTATION IMPACT FEE SCHEDULE

ITE Code	ITE Classification	Units	Impact Fee Per Unit
Port & terminal (Land Uses 000-099)			
30	Truck Terminal	Acres	$4,092
Industrial (Land Uses 100-199)			
110	General Light Industrial	TSF Gross	$1,378
130	Industrial Park	TSF Gross	$875
140	Manufacturing	TSF Gross	$1,466
150	Warehousing	TSF Gross	$416
151	Mini Warehouse	TSF Gross	$372
160	Data Center	TSF Gross	$197
170	Utility	TSF Gross	$4,967
Residential (Land Uses 200-299)			
210	Single Family Homes	DU	$2,188
220	Multifamily Housing	DU	$1,225
221	Multifamily Housing (Mid-Rise)	DU	$963
225	Off-Campus Student Apartment	Bedrooms	$547
231	Mid-Rise Residential 1st-Floor Commercial	DU	$788
240	Mobile Home Park	DU	$1,006
251	Senior Adult Housing-Detached	DU	$656
252	Senior Adult Housing-Attached	DU	$569
253	Congregate Care	DU	$394
254	Assisted Living	Beds	$569
260	Recreational Homes	DU	$613
265	Timeshare	DU	$1,378
270	Residential PUD	DU	$1,510
Lodging (Land Uses 300-399)			
310	Hotel	Rooms	$1,313
311	All Suites Hotel	Rooms	$788
312	Business Hotel	Rooms	$700
320	Motel	Rooms	$831
330	Resort Hotel	Rooms	$897
Recreational (Land Uses 400-499)			
416	Campground/RV Park	Camp Sites	$459
430	Golf Course	Holes	$6,367
437	Bowling Alley	Lanes	$2,844
445	Multiplex Movie Theater	TSF Gross	$10,743
490	Tennis Courts	Courts	$9,211
492	Health/Fitness Club	TSF Gross	$7,549
495	Recreational Community Center	Gross Sq. Ft.	$5,054
Institutional (Land Uses 500-599)			
520	Elementary School	Students	$372
522	Middle/Junior High School	Students	$372
530	High School	Students	$306
534	Private School (K-8)	Students	$569

536	Private School (K-12)	Students	$372
537	Charter Elementary School	Students	$306
560	Church	TSF Gross	$1,072
565	Daycare Center	TSF Gross	$24,311
MEDICAL (LAND USES 600-699)			
610	Hospital	TSF	$2,122
620	Nursing Home	Beds	$481
630	Clinic	TSF	$7,177
OFFICE (LAND USES 700-799)			
710	General Office	TSF Gross	$2,516
712	Small Office Building	TSF Gross	$5,361
715	Single Tennant Office Building	TSF Gross	$3,741
720	Medical/Dental Office	TSF Gross	$7,570
730	Government Office Building	TSF Gross	$3,741
732	Post Office	TSF Gross	$24,527
750	Office Park	TSF Gross	$2,341
770	Business Park	TSF Gross	$459
RETAIL (LAND USES 800-899)			
812	Building Materials/Lumber	TSF Gross	$3,831
813	Free Standing Discount Superstore	TSF Gross	$6,821
814	Variety Store	TSF Gross	$12,721
816	Hardware/Paint Store	TSF Gross	$4,339
817	Nursery (Garden Center)	TSF Gross	$12,907
820	Shopping Center (Rate)	TSF Gross	$5,502
823	Factory Outlet Center	TSF Gross	$4,509
840	New Car Sales	TSF Gross	$5,317
841	Used Car Sales	TSF Gross	$8,205
842	RV Sales	TSF Gross	$1,685
843	Auto Parts Sales	TSF Gross	$6,124
848	Tire Store	Service Bays	$5,388
850	Supermarket (stand alone stores)	TSF Gross	$12,939
851	Convenien. Mkt. (Open 24 hrs)	TSF Gross	$41,907
853	Convenien. Mkt. with Gas Pumps	TSF Gross	$36,668
857	Discount Club	TSF Gross	$8,231
862	Home Improvement Superstore	TSF Gross	$2,651
863	Electronics Super Store	TSF Gross	$5,593
867	Office Supply Superstore	TSF Gross	$5,455
876	Apparel Store	TSF Gross	$7,662
881	Pharmacy/Drugstore with Drive-thru	TSF Gross	$11,482
882	Marijuana Dispensary	TSF Gross	$47,764
890	Furniture Store	TSF Gross	$535
899	Liquor Store	TSF Gross	$32,236
SERVICES (LAND USES 900-999)			
911	Walk-in Bank	TSF Gross	$19,905
912	Drive-in Bank	TSF Gross	$23,715
931	Quality Restaurant (not national chain)	TSF Gross	$9,557
932	High Turnover/Sit Down Restaurant	TSF Gross	$12,185
933	Fast Food without Drive Thru	TSF Gross	$37,205

934	Fast Food with Drive Thru	TSF Gross	$35,741
936	Coffee/Donut Shop without Drive Thru	TSF Gross	$47,668
936	Coffee/Donut Shop with Drive Thru	TSF Gross	$47,458
941	Quick Lubrication Vehicle Shop	Service Bays	$7,959
942	Auto Care Center	Service Bays	$4,748
944	Service Station	Fuel Position	$17,805
945	Serv. Station with Conven. Market	Fuel Position	$13,468
947	Self-Serve Car Wash	Wash Bays	$9,697
948	Automated Car Wash	Wash Bays	$118,699

POWER IMPACT FEE SCHEDULE

RESIDENTIAL IMPACT FEE	
SERVICE DESCRIPTION	IMPACT FEE
100 Amp - 240/120 V	$3,893
200 Amp - 240/120 V	$4,809
400 Amp - 240/120 V	$8,244

COMMERCIAL IMPACT FEE		
SERVICE DESCRIPTION	PANEL RATING	IMPACT FEE
Single Phase Service		
240/120 V	200	$6,529
	400	$13,058
Three Phase Service		
208Y/120 V	200	$13,068
	400	$26,136
	800	$52,273
	1,200	$78,409
	2,000	$130,682
480Y/277 V	200	$30,157
	400	$60,315
	800	$120,629
	1,200	$180,944
	2,000	$301,573

2. Maximum Supportable Impact Fees. The fee schedules included in the IFFPs and IFAs indicates the maximum Impact Fee set forth in **Exhibit B** which the City may impose on development within the defined Service Area and is based upon general demand characteristics and potential demand that can be created by each class of user. The City reserves the right under the Impact Fees Act to assess an adjusted fee to respond to unusual circumstances to ensure that fees are equitably assessed. Formulas that can be used to calculate this adjusted fee are set forth in **Exhibit B**.

SECTION 7 FEE EXCEPTIONS AND ADJUSTMENTS

1. Waiver for "Public Purpose". The City Council may, on a project by project basis, authorize exceptions or adjustments to the Impact Fees due from development for those projects the City Council determines to be of such benefit to the community as a whole to justify the exception or adjustment. Such projects may include facilities being funded by the state, school districts, charter schools, low income housing projects, or facilities of a temporary nature. The City Council may elect to waive or adjust Impact Fees in consideration of economic benefits to be received from the Development Activity.

2. Procedures. Applications for exceptions or adjustments are to be filed in writing with the City at the time the applicant first requests the extension of service to the applicant's development or property.

SECTION 8 APPEAL PROCEDURE

1. Subject to the time limitations as provided in Utah Code § 11-36a-702, any person or entity that has paid an Impact Fee pursuant to this Ordinance may challenge the Impact Fee as provided in Utah Code Ann. §11-36a-701 et seq., by filing:

    a. A written administrative appeal to the City, setting forth the name of the person or entity challenging the impact fee or fees, the specific impact fee or fees challenged, evidence that the impact fee or fees challenged have been paid by the person or entity, and alleged grounds for such challenge. A written administrative appeal containing the information set forth herein and filed with the City Recorder shall constitute the necessary document for filing an administrative appeal as provided in Utah Code Ann. § 11-36a-703(2)(a). An administrative appeal shall be considered and decided by the City Council within thirty (30) days after the day on which the appeal is filed;

    b. A request for arbitration as provided in Utah Code Ann. § 11-36a-705; or

    c. An action in district court.

SECTION 9 MISCELLANEOUS

1. Severability. If any section, subsection, paragraph, clause or phrase of this Impact Fee Ordinance shall be declared invalid for any reason, such decision shall not affect the remaining portions of this Impact Fee Ordinance, which shall remain in full force and effect, and for this purpose, the provisions of this Impact Fee Ordinance are declared to be severable.

2. Interpretation. This Impact Fee Ordinance has been divided into sections, subsections, paragraphs and clauses for convenience only and the interpretation of this Impact Fee Ordinance shall not be affected by such division or by any heading contained herein.

3. Effective Date. Except as otherwise specifically provided herein, this Impact Fee Ordinance shall not repeal, modify or affect any Impact Fee of the City in existence as of the effective date of this Ordinance, other than those expressly referenced in Section 1 above. All Impact Fees established, including amendments and modifications to previously existing Impact Fees, after the effective date of this Ordinance shall comply with the requirements of this Ordinance. This Ordinance shall take effect ninety (90) days after the day on which it is approved by the City Council.

Adopted and approved this 3rd day of December, 2020.

CITY OF ST. GEORGE

By: Jonathan T. Pike, Mayor

[Seal]

Voting:

Jimmie Hughes	Yea X Nay ___	
Michele Randall	Yea X Nay ___	
Bryan Smethurst	Yea ___ Nay ___	Absent
Dannielle Larkin	Yea X Nay ___	
Gregg McArthur	Yea X Nay ___	

Attest:

By: _____
City Recorder

Deposited in the office of the City Recorder this 3rd day of December 2020.

Recorded this 3rd day of December 2020.

EXHIBIT A

POWER SERVICE AREA

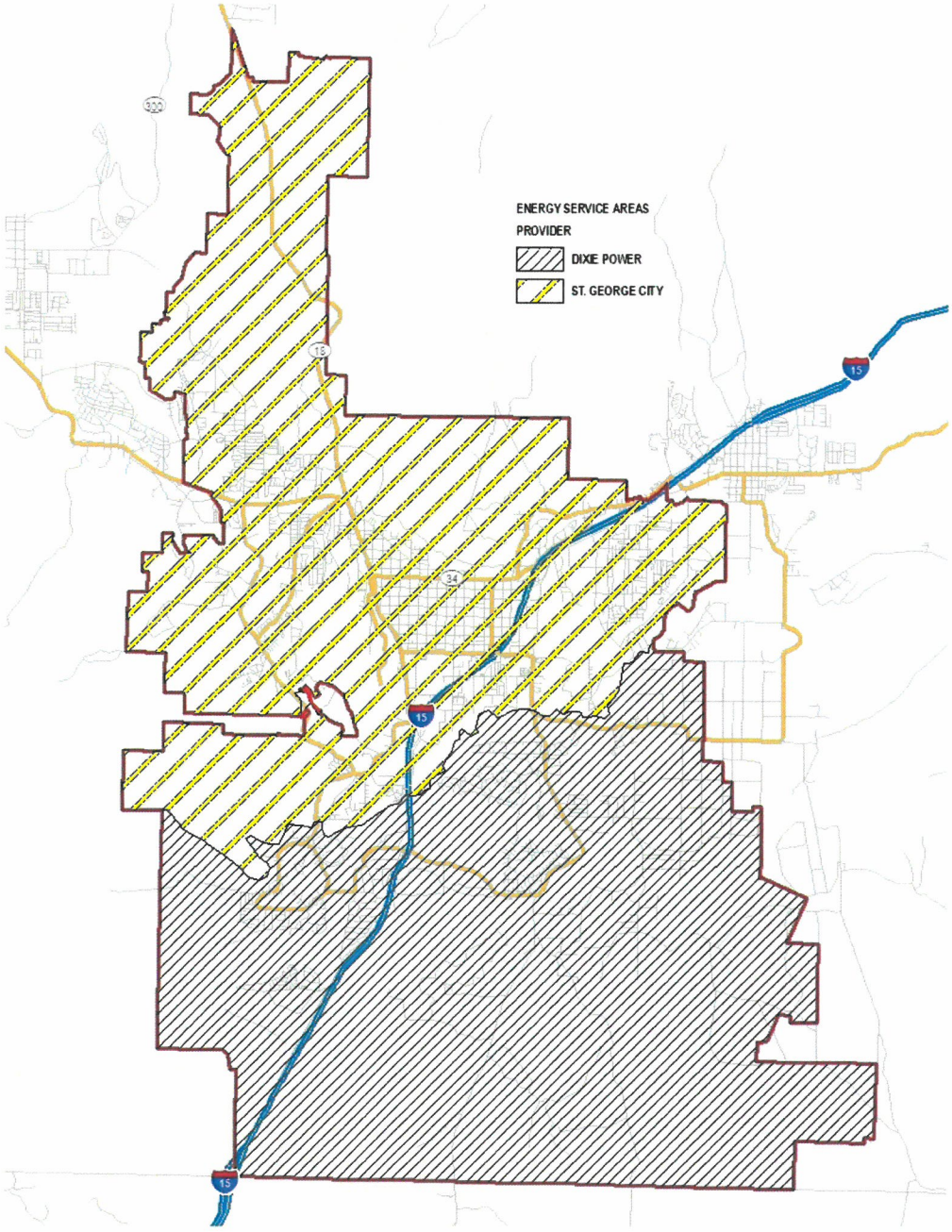

EXHIBIT B

IMPACT FEE FACILITIES PLANS & IMPACT FEE ANALYSES

IMPACT FEE ANALYSIS (IFA)

PURSUANT TO 11-36A, UTAH CODE

WATER FACILITIES

NOVEMBER 2020

CITY OF ST. GEORGE, UTAH

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IMPACT FEE CERTIFICATION

IFA CERTIFICATION

Lewis Young Robertson & Burningham, Inc. certifies that the Impact Fee Analysis prepared for Water Services:

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;
   d. offsets costs with grants or other alternate sources of payment; and,

3. Complies in each and every relevant respect with the Impact Fees Act.

LEWIS YOUNG ROBERTSON & BURNINGHAM, INC

SECTION 1: EXECUTIVE SUMMARY

The purpose of the Water Impact Fee Analysis ("IFA") is to fulfill the requirements established in Utah Code Title 11 Chapter 36a, the "Impact Fees Act", and assist the City of St. George (the "City") in financing and constructing necessary capital improvements for future growth. This document will address the future water infrastructure needed to serve the service area through the next ten years, as well as the appropriate impact fees the City may charge to new growth to maintain the existing level of service ("LOS"). The Water Impact Fee Facilities Plan ("IFFP") prepared by Bowen Collins and Associates in October 2020, as well as input from the City, provide much of the information utilized in this analysis.

- **Impact Fee Service Area:** The service area for water impact fees includes all areas within the City.
- **Demand Analysis:** The demand units utilized in this analysis are based on typical usage patterns measured in gallons per day ("gpd") and equivalent residential units ("ERUs") generated from land-use types. As residential and commercial growth occurs within the City, additional ERUs will be generated. The water capital improvements identified in this study are based on maintaining the existing LOS.
- **Level of Service:** The proposed LOS is based on the various system requirements for production, storage, conveyance, and secondary water system. This analysis does not consider a LOS for source improvements, since water supply is provided by Washington County Water Conservancy District ("WCWCD") and new development will be required to pay an impact fee to WCWCD. **SECTION 3** of this report further explains the LOS.
- **Excess Capacity:** A buy-in component for conveyance and storage is included in this analysis.
- **Capital Facilities Analysis:** A total of $29.4 million in conveyance and storage related costs are included in the calculation of the impact fee. All of these costs are considered system improvements necessary to maintain the existing LOS and meet the anticipated development activity over that same period of time.
- **Funding of Future Facilities:** This analysis assumes future growth-related facilities will be funded on a pay-as-you-go basis, utilizing impact fee and utility fee revenues.

PROPOSED WATER IMPACT FEE

The IFFP must meet the legislative requirements found in the Impact Fee Act if it is to serve as a working document in the calculation of 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 LOS.

WATER IMPACT FEE CALCULATION

The tables below illustrate the appropriate buy-in fee, the fee associated with projects occurring in the next ten years, and other costs related to the water impact fee. The proportionate share analysis determines the proportionate cost assignable to new development based on the proposed capital projects and the estimated ERU demand served by the proposed projects.

TABLE 1.1: IMPACT FEE PER ERU

	TOTAL COST	% TO IFFP GROWTH	COST TO GROWTH	ERU DEMAND SERVED	COST PER ERU	% OF TOTAL
Buy-In						
Culinary Conveyance	$57,189,315	12.70%	$7,263,043	19,469	$373	19%
Secondary Conveyance	$6,911,506	16.10%	$1,112,752	19,469	$57	3%
Culinary Storage	$8,277,668	12.20%	$1,009,619	19,469	$52	3%
Secondary Storage	$0	2.17%	$0	19,469	$0	0%
Subtotal: Buy-In	**$72,378,488**		**$9,385,414**		**$482**	**24%**
Future Facilities						0%
Future Culinary Conveyance	$28,865,000	38.05%	$10,984,426	19,469	$564	28%
Future Secondary Conveyance	$28,414,950	36.98%	$10,508,909	19,469	$540	27%
Future Culinary Storage	$8,463,000	26.66%	$2,256,031	19,469	$116	6%
Future Secondary Storage	$15,102,000	37.38%	$5,645,312	19,469	$290	15%
Professional Expense[1]	37,140	100.00%	$37,140	10,566	$4	0%
Subtotal: Future Facilities	**$80,882,090**		**$29,431,818**		**$1,514**	**76%**
Total	**$153,260,579**		**$38,817,232**		**$1,996**	**100%**

[1] 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 number of new ERUs in the next six years.

TABLE 1.2 shows the appropriate ERU multipliers for various meter sizes and is based on historic usage patterns for the different meter sizes.

TABLE 1.2: IMPACT FEE PER METER SIZE

METER SIZE (IN)	ERU MULTIPLIER	PROPOSED IMPACT FEE	EXISTING FEE	% CHANGE	$ CHANGE
3/4	1.00	$1,996	$1,211	65%	$785
1	2.16	$4,311	$2,616	65%	$1,696
1 1/2	7.17	$14,311	$8,683	65%	$5,628
2	11.54	$23,034	$13,975	65%	$9,059
3	26.00	$51,896	$31,486	65%	$20,410
4	46.00	$91,816	$55,706	65%	$36,110
6	104.00	$207,584	$125,944	65%	$81,640

ERU Multipliers are provided by the City of St. George and based on actual historic water use for the different meter sizes

NON-STANDARD WATER IMPACT FEES

The City reserves the right under the Impact Fees Act[2] to assess an adjusted fee that more closely matches the true impact that the land use will have upon the City's water system. The adjustment for Non-Standard Water Impact Fees is explained in Section 6 and could result in a different impact fee if evidence suggests a particular user will create a different impact than what is standard for its category. A developer may submit studies and data for a particular development and request an adjustment. The impact fee for non-standard development would be determined based on the water and storage utilization and according to the LOS variables presented in this report, calculated on a case-by-case basis.

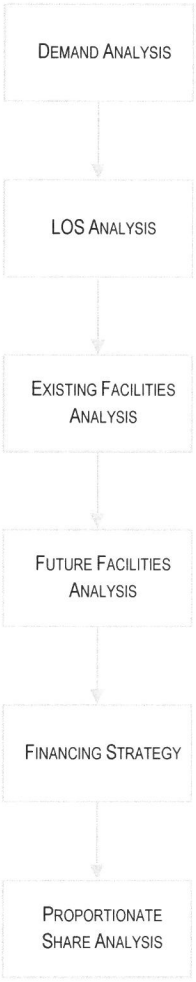
FORMULA FOR NON-STANDARD WATER IMPACT FEES:

Estimated ERU * Impact Fee per ERU ($1,996) = Impact Fee

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

SECTION 2: GENERAL IMPACT FEE METHODOLOGY

FIGURE 2.1: IMPACT FEE METHODOLOGY



The purpose of this study is to fulfill the requirements of the Impact Fees Act regarding the establishment of an IFA[3]. The IFFP, completed by Bowen Collins & Associates, 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, as well as the future improvements required to maintain the existing LOS. The purpose of the IFA is 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. The following elements are important considerations when completing an IFA.

DEMAND ANALYSIS

The demand analysis serves as the foundation for this analysis. 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 system facilities.

LEVEL OF SERVICE ANALYSIS

The demand placed upon existing public facilities by existing development is known as the existing LOS. Through the inventory of existing facilities, combined with population growth assumptions, this analysis identifies the LOS which is provided to a community's existing residents and ensures that future facilities maintain these standards.

EXISTING FACILITY INVENTORY

In order to quantify the demands placed upon existing public facilities by new development activity, the IFFP provides an inventory of the City's existing system improvements. The inventory does not include project improvements. 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. Any excess capacity identified within existing facilities can be apportioned to future 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 LOS. Any demand generated from new development that overburdens the existing system beyond the existing capacity justifies the construction of new facilities.

FINANCING STRATEGY

This analysis must also include a consideration of all revenue sources, including impact fees, debt issuance, alternative funding sources, and the dedication (aka donations) of system improvements, which may be used to finance system improvements.[4] 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.[5]

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 of the costs borne in the past and to be borne in the future (UCA 11-36a-302).

[3] UC 11-36a-301,302,303,304
[4] UC 11-36a-302(2)
[5] UC 11-36a-302(3)

SYSTEM VS. PROJECT IMPROVEMENTS

System improvements are defined as existing and future public facilities designed and intended to provide services to service areas within the community at large.[6] 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.[7] References to facilities, amenities, projects, etc. within this analysis are referring to System Improvements unless otherwise stated.

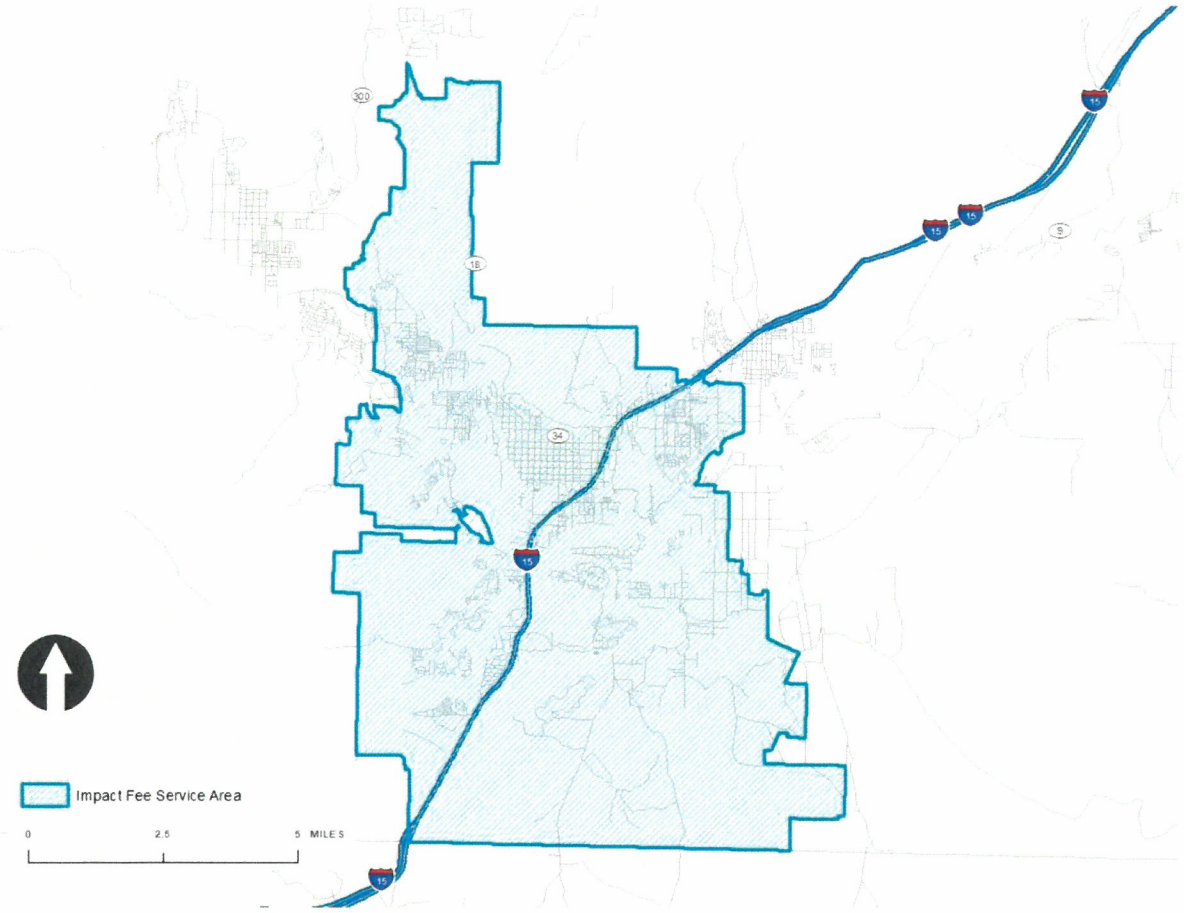
[6] UC 11-36a-102(20)
[7] UC 11-36a102(13)

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

SERVICE AREAS

Utah Code requires the impact fee enactment to establish one or more service areas within which impact fees will be imposed.[8] The impact fees identified in this document will be assessed to a single, city-wide service area.

FIGURE 3.1: WATER SERVICE AREA



It is anticipated that the growth projected over the next ten years, and through buildout, will impact the City's existing services. Culinary and secondary water infrastructure will need to be expanded in order to maintain the existing level of service ("LOS"). Impact fees are a logical and sound mechanism for funding growth-related infrastructure. The IFFP and this analysis are designed to accurately assess the true impact of a particular user upon the City's infrastructure and prevent existing users from subsidizing new growth. This analysis also ensures that new growth is not paying 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.

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

DEMAND UNITS

As shown in **TABLE 3.1**, the growth in ERUs is expected to reach 67,319 units by 2028. This represents an increase of 19,469 ERUs to the existing ERUs of 47,850 in 2018.

TABLE 3.1: CITY-WIDE ERU PROJECTIONS

YEAR	TOTAL ERUS[1]	PEAK DAY DEMAND (GAL/DAY)[2]
2018	47,850	65,005,119
2019	49,214	66,793,398
2020	50,690	68,735,005
2021	52,520	71,152,623
2022	54,416	73,916,154
2023	56,380	76,492,056
2024	58,416	79,363,484
2025	60,525	82,135,274
2026	62,710	85,006,893
2027	64,973	87,981,945
2028	67,319	91,064,257
2029	69,721	94,238,379
2030	72,209	97,524,943
2035	84,224	113,372,728
2040	96,153	129,088,119
2045	107,333	143,809,784
2050	112,987	151,278,700
2055	116,439	155,840,852

1. Total ERUs on culinary and secondary irrigation systems.
2. Combined peak day demand of culinary and secondary irrigation system.
Source: IFFP Table 6, p.10

LEVEL OF SERVICE STANDARDS

Impact fees cannot be used to finance an increase in the LOS to current or future users of system improvements. Therefore, it is important to identify the water LOS currently provided within the City to ensure that the new capacities of projects financed through impact fees do not exceed the established standard.

SOURCE

Since water supply is provided by WCWCD, this analysis does not consider a LOS for source improvements.

STORAGE

The IFFP identifies the LOS for storage based on equalization storage, fire suppression and emergency storage, for both the culinary and secondary systems (See **IFFP p. 3** and summarized in **TABLE 3.2**).

CONVEYANCE

The IFFP identifies the LOS for conveyance based on pressure, fire flow demands, and pipe velocities, for both the culinary and secondary systems (See **IFFP p. 4** and summarized in **TABLE 3.2**).

According to the IFFP, existing infrastructure was analyzed relative to needed improvements to develop the list of capital projects necessary to serve new growth. Generally, the system is at capacity resulting in needed future improvements. However, there is one specific waterline that has significant excess capacity. This excess capacity will be calculated in the next section.

As outlined in the IFFP, "performance standards are those standards that are used to design and evaluate the performance of facilities. While the Impact Fees Act includes "defined performance standard" as part of the LOS definition, this report will make a subtle distinction between performance standard and LOS. The performance standard will be considered the desired minimum level of performance for each component, while the existing LOS will be the actual current performance of the component. Thus, if the existing LOS is less than the performance standard, it represents a deficiency. If it is greater than the performance standard, it may indicate excess capacity."

TABLE 3.2: IFFP LOS VARIABLES

	EXISTING PERFORMANCE STANDARD	EXISTING LEVEL OF SERVICE[1]	PROPOSED LOS
Production Capacity			
Production Capacity (gpd/ERU)[1]	1,278	1,278	1,278
Culinary Water Storage			
Storage (gallons/ERU)[2, 3]	765	1,155	765
Secondary Irrigation Storage			
Storage (gallons/ERU)[3, 4]	870	1,312	870
Culinary Conveyance (Transmission, Pumping, and Conveyance)			
Peak Day Demand Pressure (psi) [5]	40	25	40
Peak Hour Demand Pressure (psi) [5]	30	22	30
Minimum Available Fire Flow at 20 psi during Peak Day Demand (psi)[5]	1,500	208	1,500

	EXISTING PERFORMANCE STANDARD	EXISTING LEVEL OF SERVICE[1]	PROPOSED LOS
Maximum Pipe Velocity under Peak Hour (feet per second) [5]	10	20	10
Secondary Irrigation Conveyance (Transmission, Pumping, and Distribution)			
Peak Day Demand Pressure (psi) [6]	40	66	40
Peak Hour Demand Pressure (psi) [6]	30	46	30
Maximum Pipe Velocity under Peak Hour (feet per second) [6]	10	12.8	10

1. Source capacity value shown for information only. The impact fee for source capacity is paid to the WCWCD through a separate impact fee.
2. Does not include fire flow storage, only equalization and emergency storage.
3. Provided for storage in the system as a whole.
4. Includes only equalization storage.
5. Because there are many transmission and distribution components, the value given is for the worst case only. All other components have a higher level of service with the vast majority meeting the desired performance standard.
6. Because there are many transmission and distribution components, the value given is for the worst case only. All other components have a higher level of service with the vast majority meeting the desired performance standard. The value shown for the secondary irrigation system is the minimum pressure within the part of the system that supplies pressurized irrigation. The secondary irrigation system contains a significant amount of low-pressure transmission piping/flood irrigation areas, but pressurized irrigation connections do not exist in these areas.

Source: IFFP Table 2-3, p.5-6

SECTION 4: EXISTING FACILITIES INVENTORY

EXCESS CAPACITY

The intent of the equity buy-in component is to recover the costs of the unused capacity in existing infrastructure from new development. This section addresses any excess capacity within the water system.

SOURCE

The City is part of the Washington County Water Conservancy District ("WCWCD"). Since joining the WCWCD Regional Pooling Agreement in 2006, the City does not collect impact fees to develop new water sources as the WCWCD is charged with developing new water sources to provide water for future growth. While the City utilizes some of its own existing sources of water, as well as purchase water from the WCWCD, there is no excess capacity associated with the source component.

STORAGE

The existing system has a combined culinary water storage capacity of 45,760,000 gallons for equalization/emergency and 6,808,000 for secondary water. A comparison of existing storage capacity relative to the future storage requirements per ERU illustrates excess capacity within the existing system, as well as a need to build additional capacity. Based on the LOS defined in the IFFP, demand in the IFFP planning window will utilize 12.2 percent of the available culinary water storage and 2.2 percent of the available secondary water storage.

TABLE 4.1: ILLUSTRATION OF EXISTING STORAGE EXCESS CAPACITY

	CUMULATIVE EQUALIZATION/EMERGENCY STORAGE REQUIREMENT (GALLONS)	USE OF EXISTING FACILITIES (GALLONS)	PERCENT USE OF EXISTING FACILITIES
Excess Culinary Water Storage Capacity			
Existing	30,280,000	30,280,000	66.2%
End of 10-Year Planning Window (2028)	39,613,400	5,581,300	12.2%
Growth Beyond 10-Year Window	68,230,000	9,898,700	21.6%
Total	**68,230,000**	**45,760,000**	**100.0%**
Excess Secondary Water Storage Capacity			
Existing	4,741,100	4,741,100	69.6%
End of 10-Year Planning Window (2028)	10,208,400	148,000	2.2%
Growth Beyond 10-Year Window	20,289,000	1,918,900	28.2%
Total	**20,289,000**	**6,808,000**	**100.0%**

Source: IFFP Table 4, p.8-9

The buy-in component is calculated using the original cost of existing assets as presented in the City's financial records. The original value of existing culinary storage facilities is estimated at $8,277,668. Many of the secondary storage improvements were funded by development or there is insufficient data related to original cost, as further described below. Therefore, no value related to secondary storage is included in this analysis.

CONVEYANCE

According to the IFFP, the growth during the 10-year planning window will use 12.7 percent of the available excess capacity within the culinary conveyance system and 16.1 percent of the available excess capacity within the secondary conveyance system. The buy-in component is calculated using the original cost of existing assets as presented in the City's financial records, with $57,189,315 total original value attributed to the culinary system and $6,911,506 attributed to the secondary system.

MANNER OF FINANCING EXISTING PUBLIC FACILITIES

The City has funded its existing capital infrastructure through a combination of different revenue sources, including impact fees, user fees, dedications, the issuance of debt, and grant monies. This analysis has removed all funding that has come from federal grants and donations to ensure that none of those infrastructure items are included in the LOS.

As discussed above, many of the secondary storage facilities were funded by development. A brief description of each facility follows.

- The St. George Golf Pond is a storage pond on the St. George Golf Course. The pond was constructed in the 1970's or early 1980's as part of the golf course, funded by the Bloomington Hills developer.
- The Entrada Pond is the Blackrock Pond on the Sunbrook Golf Course. It was constructed as part of the Sunbrook Golf Course, built by a developer and then turned over to the City.
- Sandberg Pond is a pond on the Washington/St. George border that has been there for several decades. In approximately 2002, the pond was re-constructed by the City, and a pump station added.
- Skyline Pond is by the water yard on Red Hills Parkway, constructed in the 1940's. There is no documentation for the cost of construction of the pond.
- Southgate Pond, located at Southgate Golf Course, was funded by development.
- East Bloomington is a concrete pond that was constructed and is owned by the Bloomington Water Company. The pond was constructed in approximately 2010. This pond was not paid for by the City.
- Little Valley is a concrete pond by the Sunrise Ridge Intermediate School and the Little Valley Ball Fields. This pond was funded as a joint project with Washington County School District and the Parks Department. No value for this pond is included in this impact fee.
- Snow Park is a concrete pond by Snow Park. It was constructed in approximately 1996 as a replacement pond at Dixie High School. This pond was funded through as a joint project with Washington County School District and the Parks Department. No value for this pond is included in this impact fee.
- The St. George Golf Tank is owned by the Bloomington Water Company facility. The City uses this tank for storage as a majority shareholder in the Company. It was constructed in the late 1970's or early 1980s and was recently re-constructed or refurbished in approximately 2012. This pond was not paid for by the City.
- Bloomington Hills Small Tank is a steel tank that is located south of the Desert Hills High School. It was constructed in approximately 2002. It was constructed at the same time as the culinary Bloomington Area Tank ("BAT") and thus included in that project.

SECTION 5: CAPITAL FACILITY ANALYSIS

The estimated costs attributed to new growth were analyzed based on existing development versus future development patterns, as well as through an analysis of flow data. From this analysis, a portion of future infrastructure costs were attributed to new growth and included in this impact fee analysis as shown in **TABLES 5.1-5.2.** The costs of capital projects related to curing existing deficiencies cannot be funded through impact fees and were not included in the calculation of the impact fees but are included in the capital improvement list shown below. Further details related to these projects can be found in the IFFP, p.12-13. A two percent annual construction inflation adjustment is applied to projects completed after 2019 (the base year cost estimate).

TABLE 5.1: ILLUSTRATION OF CULINARY WATER CAPITAL IMPROVEMENTS

PROJECT #	PROJECT DESCRIPTION	ESTIMATED TOTAL COST	% TO CURE EXISTING	% 10-YEAR GROWTH	% BEYOND 10-YEAR	COST TO 10-YEAR GROWTH
S3	3.5 MG Northern Gap Tank	$3,844,000	26.40%	28.60%	45.00%	$1,099,228
S4	2 MG Country Club Tank Replacement	$2,241,000	94.00%	4.20%	1.80%	$94,122
S5	2 MG Airport Redevelopment (Tech Ridge) Tank	$2,378,000	18.60%	44.70%	36.80%	$1,062,681
	Storage Subtotal	**$8,463,000**				**$2,256,031**
C1	City Creek to Ledges Pipeline	$2,842,000	9.60%	19.30%	71.10%	$547,673
C2	Ledges Main Line (Upsize)	$519,000	0%	21.30%	78.70%	$110,679
C3	The Lakes North Loop (Upsize)	$1,492,000	0%	56.30%	43.70%	$840,300
C6	Plantations Drive to Dixie Drive Waterline (Upsize)	$832,000	0%	28.60%	71.40%	$237,952
C7	Gap Tank Feed Line	$5,040,000	0%	31.60%	68.40%	$1,592,640
C8	Indian Hills Transmission Line (Upsize)	$718,000	18.60%	44.70%	36.80%	$320,860
C9	Indian Hills/Airport Redevelopment (Tech Ridge) Transmission Line (Upsize)	$353,000	18.60%	44.70%	36.80%	$157,749
C10	Foremaster Ridge Transmission Line Relocation	$800,000	59.30%	9.60%	31.10%	$76,586
C11	Riverside to Hilton Drive Transmission Line	$4,494,000	0%	33.10%	66.90%	$1,487,514
C14	Desert Color Southwest Loop (Upsize)	$1,587,000	0%	91.10%	8.90%	$1,446,526
C21	Sand Hollow Regional Pipeline -Washington Fields Road to 3000 E	$2,294,000	0%	27.20%	72.80%	$625,031
C22	Sand Hollow Regional Pipeline -Airport Connection	$1,307,000	0%	25.80%	74.20%	$337,640
C28	Southern Parkway Loop -14" Pipeline (Upsize)	$1,374,000	0%	82.40%	17.60%	$1,132,176
C29	Desert Canyons Reach 1 (Upsize)	$1,295,000	0%	55.90%	44.10%	$723,905
P1	City Creek to Ledges Pump Station	$1,346,000	9.60%	19.30%	71.10%	$259,383
P2	Indian Hills Pump Station	$943,000	18.60%	44.70%	36.80%	$421,408
P3	Airport Redevelopment (Tech Ridge) Pump Station	$1,319,000	18.60%	44.70%	36.80%	$589,435
P4	Dixie Drive Pump Station -Gunlock 1A to Gap Zone	$183,000	0.00%	31.60%	68.40%	$57,828
P6	Bloomington Hills Pump Station Upgrade	$127,000	0.00%	15.10%	84.90%	$19,141
	Conveyance Subtotal	**$28,865,000**				**$10,984,426**
	Total Improvements	**$37,328,000**				**$13,240,457**

Refer to Figure 7-6 of the Culinary Water Master Plan for more information on the location of each capital facilities project.
Source: IFFP Table 7, p. 12

TABLE 5.2: ILLUSTRATION OF SECONDARY WATER CAPITAL IMPROVEMENTS

PROJECT #	PROJECT DESCRIPTION	ESTIMATED TOTAL COST	% TO CURE EXISTING	% 10-YEAR GROWTH	% BEYOND 10-YEAR	COST TO 10-YEAR GROWTH
SS1	1.0 MG Hidden Valley Tank Replacement	$1,098,000	36.70%	12.00%	51.30%	$131,679
SS2	3.0 MG Commerce Drive Settling Pond	$2,014,000	0.00%	59.50%	40.50%	$1,198,959
SS3	1.3 MG New Entrada Storage Pond	$555,000	28.40%	12.50%	59.10%	$69,339
SS4	1.5 MG Stonecliff Storage Tank	$1,681,000	6.00%	68.10%	25.90%	$1,144,388
SS5	2.0 MG Desert Canyons Tank No. [1]	$2,241,000	0.00%	68.60%	31.40%	$1,536,888
SS6	Reuse Storage Pond	$3,809,000	30.30%	26.70%	43.00%	$1,017,003
SS7	1.5 MG Ledges Storage Tank	$1,784,000	0.00%	11.40%	88.60%	$203,376
SS8	1.9 MG Gap Irrigation Tank	$1,920,000	0.00%	17.90%	82.10%	$343,680
	Secondary Storage Subtotal	**$15,102,000**				**$5,645,312**
SC1	Ledges 12-inch Transmission Line (Upsize)[2]	$768,000	0.00%	11.40%	88.60%	$87,552

PROJECT #	PROJECT DESCRIPTION	ESTIMATED TOTAL COST	% TO CURE EXISTING	% 10-YEAR GROWTH	% BEYOND 10-YEAR	COST TO 10-YEAR GROWTH
SC2	Ledges 10-inch Tank Feed Line	$719,000	0.00%	11.40%	88.60%	$81,966
SC3	Ledges 12-inch Distribution Line (Upsize)	$575,000	0.00%	11.40%	88.60%	$65,550
SC4	Lava Field 12-inch Transmission Line	$1,080,000	0.00%	11.40%	88.60%	$123,120
SC5	Entrada 12-inch Transmission Line	$550,000	0.00%	11.40%	88.60%	$62,700
SC6	Divario 12-inch Transmission Line	$1,255,000	0.00%	17.90%	82.10%	$224,645
SC7	16-inch Gap Irrigation Tank Transmission Line	$934,000	0.00%	17.90%	82.10%	$167,186
SC8	14-inch Lago Vista Drive from Divario to West Tonaquint (northern half of project) (Upsize)	$198,000	0.00%	17.90%	82.10%	$35,442
SC9	8-inch West Tonaquint Transmission Line (Upsize, southeast half of project) (Upsize)	$157,000	0.00%	15.50%	84.50%	$24,294
SC11	8-inch 900 S Distribution Line -Little Valley (Upsize)	$42,000	0.00%	85.00%	15.00%	$35,720
SC12	8-inch 3000 E Distribution Line -Little Valley (Upsize)	$48,000	0.00%	85.00%	15.00%	$40,823
SC13	10-inch 2780 E Distribution Line	$96,000	0.00%	85.00%	15.00%	$81,646
SC14	12-inch 1450 S Transmission Line	$215,000	0.00%	85.00%	15.00%	$182,853
SC15	Stone Cliffs Tank 12-inch Feed Line	$364,300	6.00%	68.10%	25.90%	$248,007
SC16	10-inch 2200 S Distribution Line -Little Valley (Upsize)	$309,000	0.00%	85.00%	15.00%	$262,798
SC17	10-inch 3430 E Distribution Line (2200 S to 2450 S) -Little Valley (Upsize)	$157,000	0.00%	85.00%	15.00%	$133,525
SC18	10-inch 3430 E Distribution Line (2450 S to Horsemans Park) -Little Valley (Upsize)	$476,000	0.00%	85.00%	15.00%	$404,828
SC19	10-inch 3000 E Distribution Line from 2450 s to Horsemans Park Drive -Little Valley	$439,000	0.00%	85.00%	15.00%	$373,360
SC20	10-inch Horsemans Park Distribution Line from 3000 E to 3430 E	$303,000	0.00%	85.00%	15.00%	$257,695
SC21	6-inch 3000 E Distribution Line from Horsemans Park Drive to Crimson Ridge Drive	$129,000	0.00%	85.00%	15.00%	$109,712
SC23	18-inch Fort Pierce Wash Transmission Line	$1,198,000	0.00%	59.50%	40.50%	$713,184
SC24	18-inch Commerce Drive Crossing	$155,000	0.00%	59.50%	40.50%	$92,273
SC25	24-inch Reuse Facility Storage Pond Feed Line	$259,000	30.30%	26.70%	43.00%	$69,181
SC26	24-inch Pipe from Future Reuse Pond to Reuse Transmission Pipeline	$328,000	30.30%	26.70%	43.00%	$87,611
SC30	18-inch Desert Canyons Transmission Line (Settling Pond to tie in at existing 14-inch pipe)	$4,877,000	0.00%	59.50%	40.50%	$2,903,339
SC31	12-inch Desert Canyons Southern Parkway Crossing (Upsize)	$74,000	0.00%	29.50%	70.50%	$21,835
SC39	18-inch Desert Canyons Transmission Line (Desert Canyons Parkway, West Section)	$779,000	0.00%	29.50%	70.50%	$229,861
SC40	18-inch Desert Canyons Transmission Line (Desert Canyons Parkway, East Section) (Upsize)	$481,000	0.00%	29.50%	70.50%	$141,930
SC41	24-inch Desert Canyons Tank Feed Line	$1,369,000	0.00%	29.50%	70.50%	$403,953
SC42	Connect Little Valley Pump Station to Distribution System (12-inch pipe)	$48,000	6.00%	68.10%	25.90%	$32,677
SC43	18-inch Commerce Drive to Desert Color Transmission Line	$4,668,000	30.30%	26.70%	43.00%	$1,246,879
SP1	Upper Ledges Pump Station with 100,000 Gallon Storage Wet Well	$388,000	0.00%	11.40%	88.60%	$44,232
SP2	Intermediate Ledges Pump Station with 200,000 Gallon Storage Wet Well[3]	$711,100	0.00%	11.40%	88.60%	$81,065
SP3	Lower Ledges Pump Station 3	$628,550	0.00%	11.40%	88.60%	$71,655
SP4	Dixie Drive Pump Station	$541,000	0.00%	17.90%	82.10%	$96,839
SP6	Little Valley Pump Station	$479,000	6.00%	68.10%	25.90%	$326,093
SP7	Commerce Drive Settling Pond -Desert Canyons Pump Station	$743,000	0.00%	59.50%	40.50%	$442,317
SP8	Commerce Drive Settling Pond -Desert Color Pump Station	$708,000	30.30%	26.70%	43.00%	$189,115
SP10	SGWRF Reuse Pond Pump Station	$1,166,000	30.30%	26.70%	43.00%	$311,448
	Secondary Conveyance Subtotal	**$28,414,950**				**$10,508,909**
	Secondary Total Improvements	**$43,516,950**				**$16,154,221**

1. Refer to Figure 6-4 of the Secondary Irrigation Master Plan for more information on the location of each capital facilities project.
2. The Ledges Golf Course will be responsible for the cost to install an 8-inch transmission line and the City will fund the difference to upsize the line to 12-inch.
3. Estimated project cost shown is 65% of total project cost, which is the portion that the City will be responsible for funding. The facility will possess 2,000 gpm pumping capacity, but 700 gpm will be paid for and used by the Ledges Golf Course.
Source: IFFP Table 8, p.13

As shown above, a total of $13.2 million in culinary system improvements and $16.2 million in secondary system improvements, for a combined total of $29.4 million, are planned through 2028. The capital costs are further summarized based upon storage and distribution costs, as shown in **TABLE 5.3**, are included in the calculation of the impact fee.

TABLE 5.3: CIP COSTS BY FUNCTION

FUNCTION	ESTIMATED TOTAL COST	% TO CURE EXISTING	% 10-YEAR GROWTH	% BEYOND 10-YEAR	COST TO 10-YEAR GROWTH
Storage	$23,565,000	22.83%	33.53%	43.64%	$7,901,343
Distribution	$57,279,950	6.48%	37.52%	56.00%	$21,493,335
Total	**$80,844,950**				**$29,394,678**

The IFFP has determined the projects included in this analysis using capital project and engineering data, planning analysis and other information. The accuracy and correctness of this plan is contingent upon the accuracy of the data and assumptions. Any deviations or changes in the assumptions due to changes in the economy or other relevant information used by the City for this study may cause this plan to be inaccurate and may require modifications.

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.[9] Project improvements are improvements and facilities that are planned and designed to provide service for a specific development and considered necessary for the use and convenience of the occupants or users of that specific development.[10] This analysis only includes the costs of system improvements related to new growth within the proportionate share analysis.

FUNDING OF FUTURE FACILITIES

The IFFP must also include a consideration of all revenue sources, including impact fees and the dedication (donations) of system improvements, which may be used to finance system improvements.[11] 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.[12]

In considering the funding of future facilities, the City has determined the portion of future projects that will be funded by impact fees as growth-related, system improvements. Impact fees are an appropriate funding and repayment mechanism of the growth-related improvements. Where applicable, impact fees will offset the cost of future facilities. However, impact fees cannot be used to fund non-qualified expenses (i.e. the costs to cure existing deficiencies, to raise the LOS, to recoup more than the actual cost of system improvements, or the cost to fund overhead). Other revenues such as utility rate revenue, property taxes, grants, or loans can be used to fund these types of expenditures, as described below.

UTILITY RATE REVENUES

Utility rate revenues serve as the primary funding mechanism within enterprise funds. Rates are established to ensure appropriate coverage of all operations and maintenance expenses, as well as all non-growth related debt service and capital project needs.

PROPERTY TAX REVENUES

Property tax revenues are not specifically identified in this analysis as a funding source for growth-related capital projects, but inter-fund loans may be made from the general fund which will ultimately include some property tax revenues. Interfund loans will be repaid once sufficient impact fee revenues have been collected. The City follows Utah Code 10-6-132 which requires interest to be accrued on interfund loans.

GRANTS AND DONATIONS

Grants and donations are not currently contemplated in this IFFP. However, the impact fees will be adjusted if grants become available to reflect the grant monies received. A donor and the City may enter into a Development Agreement which may entitle the donor to a reimbursement for the value of the system improvements, up to the LOS, funded through impact fees if donations are made by new development.

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[9] UC 11-36a-102(20)
[10] UC 11-36a102(13)
[11] UC 11-36a-302(2)
[12] UC 11-36a-302(3)

IMPACT FEE REVENUES

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 LOS. Increases to an existing LOS cannot be funded with impact fee revenues. Impact fee revenues are generally considered non-operating revenues and help offset future capital costs.

DEBT FINANCING

In the event the City has not accumulated sufficient impact fees to pay for the construction of time-sensitive or urgent capital projects needed to accommodate new growth, the City must look to revenue sources other than impact fees for funding. 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 principal, interest, and costs of issuance.

This analysis assumes future growth-related facilities will be funded on a pay-as-you-go basis, utilizing impact fee and utility fee revenues.

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 percent 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, growth-related projects may be delayed, or other revenues such as general fund revenues or other fund's revenues and/or fund balance reserves may be used to make up any annual deficits. Any borrowed funds are to be repaid in their entirety through subsequent impact fees.

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 capital improvements related to new growth. In addition, alternative funding mechanisms are identified to help offset the cost of future capital improvements.

SECTION 6: WATER IMPACT FEE CALCULATION

The City currently provides culinary water and secondary water to its residents and businesses. As a result of new growth, the culinary and secondary water systems are in need of expansion to perpetuate the LOS that the City has historically maintained. The Water Impact Fee Facilities Plan ("IFFP") prepared by Bowen Collins and Associates in November 2019, as well as input from the City, provide much of the information utilized in this analysis.

PROPOSED WATER 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 LOS. The following paragraph describes the methodology used for calculating impact fees in this analysis.

PLAN BASED (FEE BASED ON DEFINED CAPITAL IMPROVEMENT PLAN (CIP))

Impact fees can be calculated using a specific set of costs specified for future development. The improvements are identified in the IFFP or CIP as growth-related projects. The total project costs are divided by the total demand units the projects are designed to serve. Under this methodology, it is important to identify the existing LOS and determine any excess capacity in existing facilities that could serve new growth.

COMBINED WATER IMPACT FEE CALCULATION

The water impact fees proposed in this analysis will be assessed within all areas of the City. **TABLE 6.1** below illustrates the appropriate buy-in component, the fee associated with projects occurring in the next ten years and the applicable costs related to conveyance. The impact fee calculations also include the costs of constructing future water projects and the related improvements and any debt related expense. The proportionate share analysis determines the proportionate cost assignable to new development based on the proposed capital projects and the estimated ERU demand served by the proposed projects, in this case, the ERUs over the next ten years which are illustrated in **TABLE 3.1**.

TABLE 6.1: CALCULATION OF PROPORTIONATE IMPACT FEE

	TOTAL COST	% TO IFFP GROWTH	COST TO GROWTH	ERU DEMAND SERVED	COST PER ERU	% OF TOTAL
Buy-In						
Culinary Conveyance	$57,189,315	12.70%	$7,263,043	19,469	$373	19%
Secondary Conveyance	$6,911,506	16.10%	$1,112,752	19,469	$57	3%
Culinary Storage	$8,277,668	12.20%	$1,009,619	19,469	$52	3%
Secondary Storage	$0	2.17%	$0	19,469	$0	0%
Subtotal: Buy-In	**$72,378,488**		**$9,385,414**		**$482**	**24%**
Future Facilities						0%
Future Culinary Conveyance	$28,865,000	38.05%	$10,984,426	19,469	$564	28%
Future Secondary Conveyance	$28,414,950	36.98%	$10,508,909	19,469	$540	27%
Future Culinary Storage	$8,463,000	26.66%	$2,256,031	19,469	$116	6%
Future Secondary Storage	$15,102,000	37.38%	$5,645,312	19,469	$290	15%
Professional Expense[13]	37,140	100.00%	$37,140	10,566	$4	0%
Subtotal: Future Facilities	**$80,882,090**		**$29,431,818**		**$1,514**	**76%**
Total	**$153,260,579**		**$38,817,232**		**$1,996**	**100%**

A total of $38.8 million is identified as the necessary buy-in and future capital cost to maintain the LOS for new development activity within the next ten years. The cost to growth for excess capacity and future capital facilities is applied to the ERUs projected over the planning horizon.

The impact fee per meter size is illustrated in the **TABLE 6.2.**

[13] 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 number of new ERUs in the next six years.

TABLE 6.2: IMPACT FEE PER METER SIZE

METER SIZE (IN)	ERU MULTIPLIER	PROPOSED IMPACT FEE	EXISTING FEE	% CHANGE	$ CHANGE
3/4	1.00	$1,996	$1,211	65%	$785
1	2.16	$4,311	$2,616	65%	$1,696
1 1/2	7.17	$14,311	$8,683	65%	$5,628
2	11.54	$23,034	$13,975	65%	$9,059
3	26.00	$51,896	$31,486	65%	$20,410
4	46.00	$91,816	$55,706	65%	$36,110
6	104.00	$207,584	$125,944	65%	$81,640

ERU Multipliers are provided by the City of St. George and based on actual historic water use for the different meter sizes

NON-STANDARD CULINARY WATER IMPACT FEES

The City reserves the right under the Impact Fees Act[14] to assess an adjusted fee that more closely matches the true impact that the land use will have upon the City's water system. A developer may submit studies and data for a particular development and request an adjustment. This adjustment could result in a different impact fee if evidence suggests a particular user will create a different impact than what is standard for its category. The impact fee for non-standard development would be determined based on the water and storage utilization and according to the LOS variables presented in this report, calculated on a case-by-case basis.

FORMULA FOR NON-STANDARD SEWER IMPACT FEES:

Estimated ERU * Impact Fee per ERU ($1,996) = 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 should be spent only on those projects outlined in the IFFP as growth related costs to maintain the LOS.

PROPOSED CREDITS OWED TO DEVELOPMENT

Credits may be applied to developers who have constructed and donated system facilities to the City that are included in the IFFP in-lieu of impact fees. Credits for system improvements may be available to developers up to, but not exceeding, the amount commensurate with the LOS identified within this IFA. Credits will not be given for the amount by which system improvements exceed the LOS identified within this IFA. 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 system 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 two percent annual construction inflation adjustment is applied to projects completed after 2019 (the base year cost estimate).

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

IMPACT FEE ANALYSIS (IFA)

PURSUANT TO 11-36A, UTAH CODE

SANITARY SEWER FACILITIES

NOVEMBER 2020

CITY OF ST. GEORGE, UTAH

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IMPACT FEE CERTIFICATION

IFA CERTIFICATION

Lewis Young Robertson & Burningham, Inc. certifies that the Impact Fee Analysis prepared for sewer services:

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;
   d. offsets costs with grants or other alternate sources of payment; and,

3. Complies in each and every relevant respect with the Impact Fees Act.

LEWIS YOUNG ROBERTSON & BURNINGHAM, INC.

SECTION 1: EXECUTIVE SUMMARY

The purpose of the Sewer Impact Fee Analysis ("IFA") is to fulfill the requirements established in Utah Code Title 11 Chapter 36a, the "Impact Fees Act", and assist the City of St. George (the "City") in financing and constructing necessary capital improvements for future growth. This document will address the future sewer infrastructure needed to serve the service area through the next ten years, as well as the appropriate impact fees the City may charge to new growth to maintain the existing level of service ("LOS"). The Sewer Master Plan ("Master Plan") and the Sewer Impact Fee Facilities Plan ("IFFP"), both prepared by Bowen Collins and Associates in August 2019, as well as input from the City, provide much of the information utilized in this analysis.

- **Impact Fee Service Area:** The sewer collection and treatment service area include the City of St. George, Ivins City, City of Santa Clara, and Washington City. Certain components of the collection facilities serve only development within the City, whereas others serve the region. Therefore, there will be a regional fee for treatment and collection, and a local fee for collection.
- **Demand Analysis:** The demand units utilized in this analysis are based on typical usage patterns measured in gallons per day ("gpd") and equivalent residential units ("ERUs"). As residential and commercial growth occurs within the service area, additional ERUs will be generated. The sewer capital improvements identified in the IFFP are based on maintaining the current LOS as defined and measured by the City.
- **Level of Service:** LOS parameters are provided in the Master Plan and IFFP and summarized in **SECTION 3**.
- **Excess Capacity:** Based on the LOS of 247 gpd per ERU, the City's treatment facility is at 83.6 percent capacity, leaving 16.4 percent of the facility available for new development. Assuming the same LOS into the future, the excess capacity should serve an additional 11,289 ERUs. The City's collection system currently uses 49.9 percent of the system's overall capacity, with an additional 19.6 percent of available capacity expected to be used in the ten-year time horizon of this analysis, as discussed in the IFFP.
- **Capital Facilities Analysis:** The IFFP identifies over $113 million in improvements to the sewer system through buildout. The IFFP has identified the portions of each project that will serve existing development, new growth within the ten-year time frame of this analysis, and growth beyond the ten-year time horizon through ultimate buildout. Approximately $23.1 million of the total CIP will be considered in the calculation of the impact fees.
- **Debt Financing:** The City has plans to issue debt to fund a portion of the treatment facility expansion. The Impact Fee Act allows for the interest expense related to growth to be included in the calculation of the impact fee.
- **Funding of Future Facilities:** This analysis assumes future growth-related facilities will be funded on a pay-as-you-go basis when possible, utilizing impact fee and utility fee revenues to pay for capital facilities. The impact fees do include an interest component, assuming debt financing will be used to construct facilities when needed to serve development and repaid with impact fee revenues.

PROPOSED SEWER IMPACT FEE

The IFFP must meet the legislative requirements found in the Impact Fee Act if it is to serve as a working document in the calculation of 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 LOS.

SEWER IMPACT FEE CALCULATION

TABLES 1.1 and **1.2** illustrate the appropriate buy-in fee, the fee associated with projects occurring in the next ten years, and other costs related to the sewer impact fee. The proportionate share analysis determines the proportionate cost assignable to new development based on the proposed capital projects and the estimated ERU demand served by the proposed projects. It should be noted that development located outside of the City of St. George will pay just the regional fee, and development inside the City of St. George will pay both the regional and local impact fee.

TABLE 1.1: CALCULATION OF REGIONAL IMPACT FEE

REGIONAL FEE CALCULATION	ESTIMATED COST	% TO GROWTH	COST TO GROWTH	ERUS SERVED	COST PER ERU	% OF TOTAL FEE
Regional Treatment Buy-In	$20,409,056	16.4%	$3,347,541	25,951	$129	9.4%
Regional Collection Buy-In	$24,723,026	19.6%	$4,845,713	25,951	$187	13.5%
Future Regional Treatment Facilities	$71,170,000	25.2%	$17,960,618	25,951	$692	50.2%
Future Debt Expense	$18,629,825	25.2%	$4,701,464	25,951	$181	13.1%
Future Regional Collection Facilities	$41,043,000	11.9%	$4,878,607	25,951	$188	13.6%

REGIONAL FEE CALCULATION	ESTIMATED COST	% TO GROWTH	COST TO GROWTH	ERUS SERVED	COST PER ERU	% OF TOTAL FEE
Professional Expense[1]	$24,383	100.0%	$24,383	14,190	$2	0.1%
Total: Regional	**$175,999,290**		**$35,758,325**		**$1,379**	**100.0%**

TABLE 1.2: CALCULATION OF LOCAL IMPACT FEE

Local Fee Calculation	Estimated Cost	% to Growth	Cost to Growth	ERUs SERVED	Cost per ERU	% OF TOTAL FEE
Local Collection Buy-In	$10,346,994	19.6%	$2,028,011	17,078	$119	86.7%
Future Local Collection Facilities	$1,550,000	20.0%	$310,158	17,078	$18	13.3%
Total: Local	**$11,896,994**		**$2,338,169**		**$137**	**100.0%**

The impact fee per meter size is shown below.

TABLE 1.3: REGIONAL IMPACT FEE PER METER SIZE

CONNECTION SIZE	ERU MULTIPLIER*	PROPOSED REGIONAL FEE	EXISTING REGIONAL IMPACT FEE	% CHANGE	$ CHANGE
3/4	1.00	$1,379	$909	52%	$470
1	2.16	$2,978	$1,964	52%	$1,014
1 1/2	7.17	$9,885	$6,518	52%	$3,367
2	11.54	$15,910	$10,491	52%	$5,419
3	26.00	$35,846	$23,636	52%	$12,210
4	46.00	$63,420	$41,818	52%	$21,603
6	104.00	$143,385	$94,544	52%	$48,840

*Provided by the City of St. George and based on actual historic water use for the different meter sizes.

TABLE 1.4: LOCAL IMPACT FEE PER METER SIZE

CONNECTION SIZE	ERU MULTIPLIER*	PROPOSED LOCAL FEE	EXISTING LOCAL IMPACT FEE	% CHANGE	$ CHANGE
3/4	1.00	$137	$161	-15%	($24)
1	2.16	$296	$347	-15%	($51)
1 1/2	7.17	$982	$1,152	-15%	($170)
2	11.54	$1,580	$1,854	-15%	($274)
3	26.00	$3,560	$4,178	-15%	($618)
4	46.00	$6,298	$7,391	-15%	($1,093)
6	104.00	$14,239	$16,711	-15%	($2,472)

*Provided by the City of St. George and based on actual historic water use for the different meter sizes.

NON-STANDARD SEWER IMPACT FEES

The City reserves the right under the Impact Fees Act[2] to assess an adjusted fee that more closely matches the true impact that the land use will have upon the City's sewer system. This adjustment could result in a different impact fee if evidence suggests a particular user will create a different impact than what is standard for its category. The impact fee for non-standard development would be determined based on the water utilization (in gallons per day) divided by the average gallons per day per ERU (247), multiplied by the impact fee per ERU for each service area (local and/or regional), as shown below.

FORMULA FOR NON-STANDARD SEWER IMPACT FEES:

Estimated Usage/247 * Regional Impact Fee per ERU ($1,379) = Regional Impact Fee
Estimated Usage/247 * Local Impact Fee per ERU ($137) = Local Impact Fee

[1] 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 number of new ERUs in the next six years.
[2] UC 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 IFA[3]. The IFFP, completed by Bowen Collins & Associates, 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, as well as the future improvements required to maintain the existing LOS. The purpose of the IFA is 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. The following elements are important considerations when completing an IFA.

FIGURE 2.1: IMPACT FEE METHODOLOGY

DEMAND ANALYSIS

The demand analysis serves as the foundation for this analysis. 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 system facilities.

LEVEL OF SERVICE ANALYSIS

The demand placed upon existing public facilities by existing development is known as the existing LOS. Through the inventory of existing facilities, combined with the growth assumptions, this analysis identifies the LOS 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 analysis provides an inventory of existing system facilities. 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.

FINANCING STRATEGY

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.[4] 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.[5]

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 of the costs borne in the past and to be borne in the future (UCA 11-36a-302).

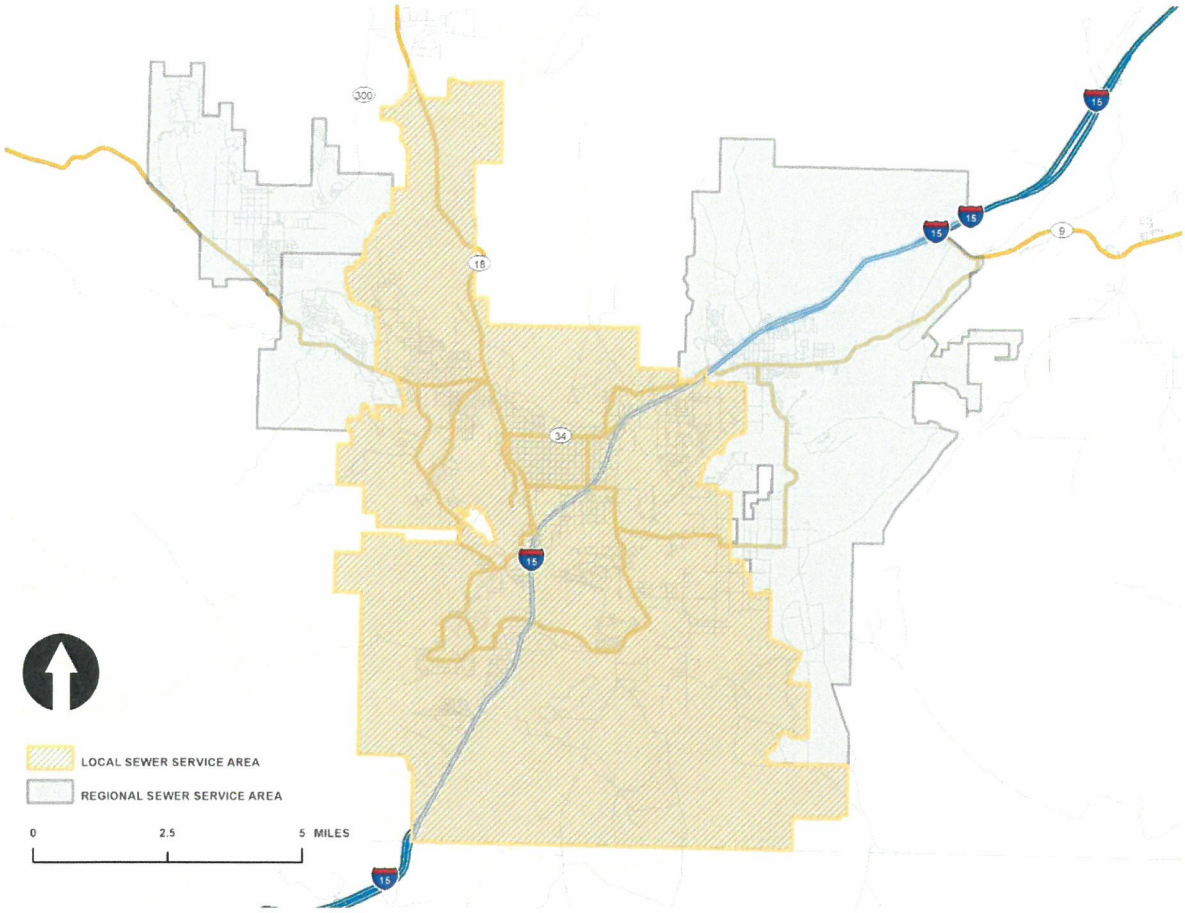
[3] UC 11-36a-301,302,303,304
[4] UC 11-36a-302(2)
[5] UC 11-36a-302(3)

SECTION 3: OVERVIEW OF SERVICE AREA AND DEMAND ANALYSIS

SERVICE AREA

Utah Code requires the impact fee enactment to establish one or more service areas within which impact fees will be imposed.[6] The sewer system is separated into two distinct systems: 1) the local sewer system, and 2) the regional sewer system. The local system service area includes only the City of St. George, whereas the regional system provides services to the regional area, including the City of St. George, Ivins City, the City of Santa Clara, and Washington City. For purposes of the impact fee, properties located within the City of St. George will pay both the local and regional portions of the impact fee, whereas properties located outside of St. George will only pay the regional portion.

FIGURE 3.1: SEWER IMPACT FEE SERVICE AREA



DEMAND UNITS

The demand unit utilized in this analysis is equivalent residential units ("ERUs"). The primary impact on the system will be growth in residential and commercial ERUs through development. As development occurs within the cities, it generates increased demand on the sewer system above the current demand. The system improvements identified in this study are designed to maintain the existing LOS for any new or redeveloped property within the City. If growth assumptions change substantially, the impact fee analysis should be updated to reflect these changes.

The sewer collection and treatment systems serve all of the City, as well as Washington City, Ivins City and the City of Santa Clara. Sewer flow from Washington, Ivins, and Santa Clara is conveyed through each city's sewer collection system and into the City

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

collection system at various locations. Sewer lines within St. George that covey flow from St. George and at least one other municipality are considered "regional facilities", while lines serving only the City are considered "local facilities". Based upon the projected increase in sewer flows, the total number of Local and Regional ERUs will increase by approximately 25,951, with 17,078 ERUs occurring within St. George through 2028 as shown in **TABLE 3.1**. Projections for population and ERUs were taken from projections in each city's Master Plan. The current ERUs have been identified by data provided by each of the cities.

TABLE 3.1: ERU PROJECTIONS

YEAR	CITY POPULATION	REGIONAL SERVICE AREA POPULATION	REGIONAL ERUS	LOCAL ERUS	TOTAL REGIONAL MGD
2018	98,028	142,537	57,537	41,974	14.21
2019	100,822	147,207	59,471	43,170	14.69
2020	103,851	152,195	61,478	44,466	15.19
2021	107,600	157,978	63,891	46,071	15.78
2022	111,484	163,987	66,401	47,734	16.40
2023	115,509	170,234	69,012	49,457	17.05
2024	119,679	176,728	71,727	51,242	17.72
2025	123,999	183,462	74,552	53,092	18.41
2026	128,475	190,462	77,320	55,009	19.10
2027	133,113	197,738	80,371	56,995	19.85
2028	137,919	205,302	83,488	59,052	20.62
		Change: 2018-2028	**25,951**	**17,078**	

The City has provided the ERU conversion multipliers shown in **TABLE 3.2**. These multipliers are representative of the actual historic water use for the different meter sizes.

TABLE 3.2: ILLUSTRATION ERU CONVERSION BASED ON METER SIZE

METER SIZE (IN)	ERU CONVERSION
3/4	1.00
1	2.16
1 1/2	7.17
2	11.54
3	26.00
4	46.00
6	104.00

Source: The City of St. George Water Department

LEVEL OF SERVICE STANDARDS

Impact fees cannot be used to finance an increase in the LOS to current or future users of capital improvements. Therefore, it is important to identify the LOS per ERU and ensure that the new capacities of system projects financed through impact fees will not exceed the established standard.

It is anticipated that the growth projected over the next ten years, and through buildout, will impact the City's existing services. Sewer infrastructure will need to be expanded in order to maintain the existing LOS. Impact fees are a logical mechanism for funding growth-related infrastructure. The IFFP and this analysis are designed to accurately assess the true impact of a particular user upon the City's infrastructure.

TREATMENT

The City of St. George has identified the LOS and existing performance standard on page three of the IFFP. The existing performance standard, or the treatment being used per ERU is 247 gpd, even though the amount available is 295 gpd. The proposed LOS established in the IFFP will be the performance standard, or 247 gpd/ERU.

COLLECTION

The City's Master Plan and IFFP establish that all sewer mains be designed such that the maximum depth of flow in the pipe does not exceed the depth equal to 75 percent of the pipe's hydraulic capacity, or a diameter ratio of 0.70. This standard was used for pipeline capacity evaluation and to determine the buy-in available in the existing collection system for future development.

SECTION 4: EXISTING FACILITIES INVENTORY

The intent of the equity buy-in component is to recover the costs of the unused capacity in existing infrastructure from new development. This section addresses any excess capacity within the sewer system.

EXCESS CAPACITY

TREATMENT

The St. George Water Reclamation Facility ("SGWRF") plant utilizes an oxidation ditch/extended aeration process that uses physical and biological processes to treat the sewage. Sewage is pulled through oxidation ditches and aeration basins, disinfected via UV treatment and cycled through a variety of other steps to remove 98 percent of contaminants in the water. Some of the treated water is pumped back up into the contributing communities, where it's used for sprinkler systems on golf courses, schools, parks and other facilities. Some is put back into the river. The leftover sludge is trucked off to a dump site at the county landfill. The City owns the Treatment Plant and the land on which it is located.

The Treatment Plant's total current capacity is 17 million gallons per day ("mgd"). Based on the LOS of 247 gallons per day ("gpd") per ERU, the City's treatment facility is at 83.6 percent capacity, leaving 16.4 percent of the facility available for new development. At the established LOS (247 gpd/ERU), the excess capacity should serve an additional 11,289 ERUs.

TABLE 4.1: ILLUSTRATION OF EXCESS TREATMENT CAPACITY

	CAPACITY (GALLONS PER DAY)	ERUS SERVED	% OF TOTAL
Existing Demand	14,211,639	**57,537**	83.6%
Buy-In Capacity for Future Growth	2,788,383	**11,289**	16.4%
Total Existing Capacity	17,000,000	**68,826**	

The buy-in component is derived from information provided by the engineer on the existing treatment system and future treatment capital improvements that will replace existing components. This analysis looks at the percentage of future replacement projects in the CIP taken from the IFFP and determines the cost of these improvements. This cost is then deducted from the current replacement value of the existing treatment system. The same reduction is then taken from the current value of the existing system, and the two figures are combined to provide an estimate of the value of the treatment system that can be included as the buy-in component of the treatment impact fee.

TABLE 4.2: DETERMINATION OF VALUE OF EXISTING TREATMENT FACILITY RELATED TO NEW GROWTH

Estimated Current Replacement Value of Existing Treatment Facilities	$88,948,956	Based on existing depreciation schedules (adjusted to today's dollars)
Proposed Treatment CIP	$71,170,000	From Sewer IFFP
% of CIP to replacement of Existing System Components	67%	Per Engineering Estimate
Total Amount Related to Replacing Existing System	$47,633,465	Line 1 multiplied by Line 3
CIP Replacement Cost as a Percentage of Est Current Value of System	54%	Line 4 divided by Line 1
Original Cost of Existing System	$43,939,069	Taken from Depreciation Schedule
Eligible Buy-in Cost	**$20,409,056**	**100% Minus Line 5 (54%) multiplied by Line 6**
Existing ERUs	57,537	Regional ERUs (See Table 3.1)
ERUs Served by Remaining Capacity	11,289	The existing treatment facility capacity is 17MGD or 68,826 ERUs. Subtracting 57,537 ERUs leaves 11,289 ERUs
Percent Excess Capacity	16.4%	11,289 Divided by 68,826
Buy-In Cost to Growth	**$3,347,541**	**$20,409,056 multiplied by 16.4%**

COLLECTION

While the LOS analysis completed for the IFFP shows there are some deficiencies in the existing collection system, these deficiencies are associated with a limited portion of the existing system, and overall, excess capacity does exist in the collection system. Therefore, the IFFP concludes there is excess capacity in the collection system to be considered in the impact fee calculation. Calculations completed by BC&A and included in the IFFP show that approximately 49.9% of the collection system

facilities are being used by existing users, leaving 50.1% of the system to be used by future development and a factor in the impact fee calculations. Based on growth projections, it is anticipated that approximately 19.6% of the remaining capacity will be used during the ten-year planning horizon, with the remaining 30.5% available for demands on the system beyond the ten-year planning window.

The buy-in component for collection facilities is based on the percentages shown in the paragraph above and calculated using the original cost of existing assets as presented in the City's financial records, plus any interest associated with outstanding debt to fund the existing facilities.

TABLE 4.3: DETERMINATION OF VALUE OF EXISTING COLLECTION FACILITIES RELATED TO NEW GROWTH

	LOCAL	REGIONAL	
Base Value of Existing Facilities	$10,346,994	$24,723,026	Based on existing depreciation schedules
Percent Excess Capacity	19.6%	19.6%	See description of collection excess capacity
Buy-in Cost to Growth	**$2,028,011**	**$4,845,713**	**Allocation of Existing System for Calculation of Buy-in**

MANNER OF FINANCING EXISTING PUBLIC FACILITIES

The City has funded its existing capital infrastructure through a combination of different revenue sources, including impact fees, user fees, and dedications.

SECTION 5: CAPITAL FACILITY ANALYSIS

The estimated costs attributed to new growth were analyzed based on existing development versus future development patterns, as well as through an analysis of flow data. From this analysis, a portion of future development costs were attributed to new growth and included in this impact fee analysis as shown in **TABLE 5.1.** The costs of capital projects related to curing existing deficiencies cannot be funded through impact fees and were not included in the calculation of impact fees. The table below describes the specific capital improvements necessary to meet the future growth needs anticipated to occur within the City and region in the next ten-year period.

TABLE 5.1: ILLUSTRATION OF CAPITAL IMPROVEMENTS RELATED TO GROWTH

PROJECT	DESCRIPTION	CONSTRUCTION YEAR COST	PERCENT TO 10-YR GROWTH	COST TO 10-YR GROWTH
Local Collection				
L2-Reach 2	Tonaquint Dr Sewer Main Replacement and Realignment	$180,000	3.3%	$5,853
L4	Commerce Drive Sewer Line Diversion	$469,000	10.0%	$47,011
L7	Sun River Lift Station Upgrades	$901,000	28.6%	$257,293
	Local Collection Improvement Subtotal	**$1,550,000**		**$310,158**
Regional Collection				
R1	Entrada Sewer Main Replacement (North Reach)	$343,000	9.2%	$31,653
R7	South Woodsview Circle Sewer Line Replacement	$515,000	29.8%	$153,717
R11-Reach1	Riverside Drive Sewer Main Replacement	$898,000	11.7%	$104,853
R14-Reach 1	Seegmiller Marsh/1450 S Sewer Line Replacement	$1,604,000	15.8%	$253,936
R16 - Reach 3	Fort Pierce Sewer Main Replacement	$1,532,000	12.3%	$189,174
R16 - Reach 4	Fort Pierce Sewer Main Replacement	$3,039,000	11.7%	$355,292
R16 - Reach 5	Fort Pierce Sewer Main Replacement	$1,675,000	11.3%	$189,614
R17	Bloomington Hills Sewer Main Parallel Line	$2,122,000	10.4%	$221,282
R19	Virgin River/Bloomington Sewer Interceptor Replacement	$14,148,000	11.7%	$1,652,108
R21	South Bloomington Interceptor Project	$14,293,000	11.3%	$1,621,393
R22	SGWRF Sewer Interceptor Replacement Project	$874,000	12.1%	$105,585
	Regional Collection Improvement Subtotal	**$41,043,000**		**$4,878,607**
	Total Collection Improvements	**$42,593,000**		**$5,188,765**
Regional Treatment				
T1	SGWRF Expansion Project (Phase 1)	$29,670,000	25.2%	$7,487,587
T2	SGWRF Expansion and Process Conversion	$41,500,000	25.2%	$10,473,031
	Regional Treatment Improvement Subtotal	**$71,170,000**		**$17,960,618**
Combined Total		**$113,763,000**		**$23,149,383**

The IFFP details the projects shown above and considered in the calculation of the impact fees. The engineers used capital project and engineering data, planning analysis and other information to determine the future needs of the service area, as well as the ability of the existing system to serve future development. All future capital project data, including project descriptions and estimated project costs, is included in the Master Plan and IFFP. The accuracy and correctness of this analysis is contingent upon the accuracy of the data and assumptions included therein. Any deviations or changes in the assumptions due to changes in the economy or other relevant information used by the City for this study may cause this plan to be inaccurate and require modifications.

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.[7] 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.[8] This analysis only includes the costs of system improvements related to new growth within the proportionate share analysis.

[7] UC 11-36a-102(20)
[8] 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 (donation) of system improvements, which may be used to finance system improvements.[9] 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.[10]

In considering the funding of future facilities, the City has determined the portion of future projects that will be funded by impact fees as growth-related, system improvements. Impact fees are an appropriate funding and repayment mechanism of the growth-related improvements. Where applicable, impact fees will offset the cost of future facilities. However, impact fees cannot be used to fund non-qualified expenses (i.e. the costs to cure existing deficiencies, to raise the LOS, to recoup more than the actual cost of system improvements, or to fund overhead cannot be included in the calculation of impact fees). Other revenues such as utility rate revenues, property taxes, grants, or loans can be used to fund these types of expenditures, as described below.

UTILITY RATE REVENUES

Utility rate revenues serve as the primary funding mechanism within enterprise funds. Rates are established to ensure appropriate coverage of all operations and maintenance expenses, as well as all non-growth related debt service and capital project needs.

PROPERTY TAX REVENUES

Property tax revenues are not specifically identified in this analysis as a funding source for growth-related capital projects, but inter-fund loans may be made from the general fund which will ultimately include some property tax revenues. Interfund loans will be repaid once sufficient impact fee revenues have been collected. The City follows Utah Code 10-6-132 which requires interest to be accrued on interfund loans.

GRANTS AND DONATIONS

Grants and donations are not currently contemplated in this IFFP. However, the impact fees will be adjusted if grants become available to reflect the grant monies received. A donor will be entitled to a reimbursement for the value of system improvements funded through impact fees if donations are made by new development.

IMPACT FEE REVENUES

Impact fees are a logical 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. Impact fee revenues are generally considered non-operating revenues and help offset future capital costs.

DEBT FINANCING

In the event the City has not accumulated sufficient impact fees to pay for the construction of time sensitive or urgent capital projects needed to accommodate new growth, the City must look to revenue sources other than impact fees for funding. 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.

The City will issue bonds to fund a portion of the expansion to the sewer treatment facility. This analysis assumes the City will borrow $30.090 million for this expansion, and the interest expenses attributable to the growth within the time frame of this analysis will be included in the calculation of the impact fee. Based on the final debt figures, the total interest expense associated with the debt is $18,629,825. Approximately $4.7 million is considered in the impact fee calculations, based on the proportion of the proposed treatment project applicable to growth within the ten-year horizon. The 2020 Sewer Revenue Debt Service figures are shown below.

TABLE 5.2: FINAL 2020 SEWER REVENUE BOND DEBT SERVICE FIGURES

DATE	PRINCIPAL	COUPON	INTEREST	TOTAL P+I	FISCAL TOTAL
05/21/2020	-	-	-	-	-
10/01/2020	-	-	505,375.00	505,375.00	-

[9] UC 11-36a-302(2)
[10] UC 11-36a-302(3)

DATE	PRINCIPAL	COUPON	INTEREST	TOTAL P+I	FISCAL TOTAL
04/01/2021	985,000.00	5.000%	699,750.00	1,684,750.00	2,190,125.00
10/01/2021	-	-	675,125.00	675,125.00	-
04/01/2022	840,000.00	5.000%	675,125.00	1,515,125.00	2,190,250.00
10/01/2022	-	-	654,125.00	654,125.00	-
04/01/2023	880,000.00	5.000%	654,125.00	1,534,125.00	2,188,250.00
10/01/2023	-	-	632,125.00	632,125.00	-
04/01/2024	925,000.00	5.000%	632,125.00	1,557,125.00	2,189,250.00
10/01/2024	-	-	609,000.00	609,000.00	-
04/01/2025	970,000.00	5.000%	609,000.00	1,579,000.00	2,188,000.00
10/01/2025	-	-	584,750.00	584,750.00	-
04/01/2026	1,020,000.00	5.000%	584,750.00	1,604,750.00	2,189,500.00
10/01/2026	-	-	559,250.00	559,250.00	-
04/01/2027	1,070,000.00	5.000%	559,250.00	1,629,250.00	2,188,500.00
10/01/2027	-	-	532,500.00	532,500.00	-
04/01/2028	1,125,000.00	5.000%	532,500.00	1,657,500.00	2,190,000.00
10/01/2028	-	-	504,375.00	504,375.00	-
04/01/2029	1,180,000.00	5.000%	504,375.00	1,684,375.00	2,188,750.00
10/01/2029	-	-	474,875.00	474,875.00	-
04/01/2030	1,240,000.00	5.000%	474,875.00	1,714,875.00	2,189,750.00
10/01/2030	-	-	443,875.00	443,875.00	-
04/01/2031	1,300,000.00	5.000%	443,875.00	1,743,875.00	2,187,750.00
10/01/2031	-	-	411,375.00	411,375.00	-
04/01/2032	1,365,000.00	5.000%	411,375.00	1,776,375.00	2,187,750.00
10/01/2032	-	-	377,250.00	377,250.00	-
04/01/2033	1,435,000.00	5.000%	377,250.00	1,812,250.00	2,189,500.00
10/01/2033	-	-	341,375.00	341,375.00	-
04/01/2034	1,505,000.00	5.000%	341,375.00	1,846,375.00	2,187,750.00
10/01/2034	-	-	303,750.00	303,750.00	-
04/01/2035	1,580,000.00	3.000%	303,750.00	1,883,750.00	2,187,500.00
10/01/2035	-	-	280,050.00	280,050.00	-
04/01/2036	1,630,000.00	3.000%	280,050.00	1,910,050.00	2,190,100.00
10/01/2036	-	-	255,600.00	255,600.00	-
04/01/2037	1,675,000.00	3.000%	255,600.00	1,930,600.00	2,186,200.00
10/01/2037	-	-	230,475.00	230,475.00	-
04/01/2038	1,725,000.00	3.000%	230,475.00	1,955,475.00	2,185,950.00
10/01/2038	-	-	204,600.00	204,600.00	-
04/01/2039	1,780,000.00	3.000%	204,600.00	1,984,600.00	2,189,200.00
10/01/2039	-	-	177,900.00	177,900.00	-
04/01/2040	1,835,000.00	3.000%	177,900.00	2,012,900.00	2,190,800.00
10/01/2040	-	-	150,375.00	150,375.00	-
04/01/2041	1,890,000.00	3.000%	150,375.00	2,040,375.00	2,190,750.00
10/01/2041	-	-	122,025.00	122,025.00	-
04/01/2042	1,945,000.00	3.000%	122,025.00	2,067,025.00	2,189,050.00
10/01/2042	-	-	92,850.00	92,850.00	-
04/01/2043	2,000,000.00	3.000%	92,850.00	2,092,850.00	2,185,700.00
10/01/2043	-	-	62,850.00	62,850.00	-
04/01/2044	2,065,000.00	3.000%	62,850.00	2,127,850.00	2,190,700.00
10/01/2044	-	-	31,875.00	31,875.00	-
04/01/2045	2,125,000.00	3.000%	31,875.00	2,156,875.00	2,188,750.00
Total	**$36,090,000.00**	**-**	**$18,629,825.00**	**$54,719,825.00**	**-**

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 percent 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 or user rate revenues may be used to make up any annual deficits. Any borrowed funds are to be repaid in their entirety through impact fees.

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.

SECTION 6: SEWER IMPACT FEE CALCULATION

The calculation of impact fees relies upon the information contained in this analysis. Impact fees are calculated based on many variables centered on proportionality and LOS. The City currently provides sewer services to the residents and businesses of the City of St. George, Washington City, City of Santa Clara, and Ivins City. As a result of new growth, the sewer system is in need of expansion to perpetuate the LOS that the City has historically maintained. The *Sewer Master Plan* and the *Sewer Impact Fee Facilities Plan*, both dated Augusts 2019, outline the recommended capital projects that will maintain the established LOS.

PROPOSED SEWER 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 LOS. The following paragraph describes the methodology used for calculating impact fees in this analysis.

PLAN BASED (FEE BASED ON DEFINED CAPITAL IMPROVEMENT PLAN)

Impact fees can be calculated using a specific set of costs specified for future development. The improvements are identified in the IFFP as growth related projects. The total project costs are divided by the total demand units the projects are designed to serve. Under this methodology, it is important to identify the existing LOS and determine any excess capacity in existing facilities that could serve new growth.

SEWER IMPACT FEE CALCULATION

The sewer impact fees proposed in this analysis will be assessed based on the service areas defined in this analysis. **TABLE 6.1 AND 6.2** below illustrates the appropriate buy-in component, the fee associated with projects occurring in the next ten years, future debt expense associated with funding the future projects, and other applicable costs related to both the collection and treatment systems.

TABLE 6.1: CALCULATION OF REGIONAL IMPACT FEE

REGIONAL FEE CALCULATION	ESTIMATED COST	% TO GROWTH	COST TO GROWTH	ERUS SERVED	COST PER ERU	% OF TOTAL FEE
Regional Treatment Buy-In	$20,409,056	16.4%	$3,347,541	25,951	$129	9.4%
Regional Collection Buy-In	$24,723,026	19.6%	$4,845,713	25,951	$187	13.5%
Future Regional Treatment Facilities	$71,170,000	25.2%	$17,960,618	25,951	$692	50.2%
Future Debt Expense	$18,629,825	25.2%	$4,701,464	25,951	$181	13.1%
Future Regional Collection Facilities	$41,043,000	11.9%	$4,878,607	25,951	$188	13.6%
Professional Expense[11]	$24,383	100.0%	$24,383	14,190	$2	0.1%
Total: Regional	**$175,999,290**		**$35,758,325**		**$1,379**	**100.0%**

TABLE 6.2: CALCULATION OF LOCAL IMPACT FEE

Local Fee Calculation	Estimated Cost	% to Growth	Cost to Growth	ERUs SERVED	Cost per ERU	% OF TOTAL FEE
Local Collection Buy-In	$10,346,994	19.6%	$2,028,011	17,078	$119	86.7%
Future Local Collection Facilities	$1,550,000	20.0%	$310,158	17,078	$18	13.3%
Total: Local	**$11,896,994**		**$2,338,169**		**$137**	**100.0%**

[11] 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 number of new ERUs in the next six years.

The regional and local impact fee per meter size is shown below in **TABLE 6.3 AND 6.4**.

TABLE 6.3: REGIONAL IMPACT FEE PER METER SIZE

CONNECTION SIZE	ERU MULTIPLIER*	PROPOSED REGIONAL FEE	EXISTING REGIONAL IMPACT FEE	% CHANGE	$ CHANGE
3/4	1.00	$1,379	$909	52%	$470
1	2.16	$2,978	$1,964	52%	$1,014
1 1/2	7.17	$9,885	$6,518	52%	$3,367
2	11.54	$15,910	$10,491	52%	$5,419
3	26.00	$35,846	$23,636	52%	$12,210
4	46.00	$63,420	$41,818	52%	$21,603
6	104.00	$143,385	$94,544	52%	$48,840

*Provided by the City of St. George and based on actual historic water use for the different meter sizes.

TABLE 6.4: LOCAL IMPACT FEE PER METER SIZE

CONNECTION SIZE	ERU MULTIPLIER*	PROPOSED LOCAL FEE	EXISTING LOCAL IMPACT FEE	% CHANGE	$ CHANGE
3/4	1.00	$137	$161	-15%	($24)
1	2.16	$296	$347	-15%	($51)
1 1/2	7.17	$982	$1,152	-15%	($170)
2	11.54	$1,580	$1,854	-15%	($274)
3	26.00	$3,560	$4,178	-15%	($618)
4	46.00	$6,298	$7,391	-15%	($1,093)
6	104.00	$14,239	$16,711	-15%	($2,472)

*Provided by the City of St. George and based on actual historic water use for the different meter sizes.

NON-STANDARD SEWER IMPACT FEES

The City reserves the right under the Impact Fees Act[12] to assess an adjusted fee that more closely matches the true impact that the land use will have upon the City's sewer system. This adjustment could result in a different impact fee if evidence suggests a particular user will create a different impact than what is standard for its category. The impact fee for non-standard development would be determined based on the water utilization (in gallons per day) divided by the average gallons per day per ERU (247), multiplied by the impact fee per ERU for each service area (local and/or regional), as shown below.

FORMULA FOR NON-STANDARD SEWER IMPACT FEES:

Estimated Usage/247 * Regional Impact Fee per ERU ($1,379) = Regional Impact Fee
Estimated Usage/247 * Local Impact Fee per ERU ($137) = Local 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 within 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.

PROPOSED CREDITS OWED TO DEVELOPMENT

Credits may be applied to developers who have constructed and donated system facilities to the City that are included in the IFFP in-lieu of impact fees. Credits for system improvements may be available to developers up to, but not exceeding, the amount commensurate with the LOS identified within this IFA. Credits will not be given for the amount by which system improvements exceed the LOS identified within this IFA. 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 system 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.

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

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 two percent annual construction inflation adjustment is applied to projects completed after 2019 (the base year cost estimate).

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

PURSUANT TO 11-36A, UTAH CODE

FIRE FACILITIES

NOVEMBER 2020

CITY OF ST. GEORGE, UTAH

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IMPACT FEE FACILITIES PLAN & ANALYSIS CERTIFICATION

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.

LEWIS YOUNG ROBERTSON & BURNINGHAM, INC.

SECTION 1: EXECUTIVE SUMMARY

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 assist the City of St. George (the "City") in financing and constructing necessary fire capital improvements for future growth. This document will address the future infrastructure needed to serve the City through the next ten years, as well as the appropriate impact fees the City may charge to new growth to maintain the level of service ("LOS"). The City has provided much of the information utilized in this report.

- **Impact Fee Service Area:** The service area ("Service Area") includes all of the City and is defined in **SECTION 3**.
- **Demand Analysis:** The demand unit used for this analysis is calls for fire services generated from development within the Service Area. It is anticipated that future growth will affect the City's existing services through the increase in calls for service. **SECTION 3** of this report outlines the growth in calls for service and illustrates the calls per developed unit calculations.
- **Level of Service:** The LOS for this analysis is based on an average call per land-use type, as well as an estimate of public facilities square feet ("SF") per call. Response times were also considered in planning for future facilities. Additional details regarding LOS are found in **SECTION 3**.
- **Existing Facilities and Excess Capacity:** This analysis uses the Plan Based Methodology for calculating the impact fees, and assumes existing facilities are at capacity for the purposes of impact fee calculations. Future facility costs will be allocated to new development based on the growth-related calls for service anticipated within the IFFP planning horizon.
- **Outstanding Debt:** The City does not have any outstanding debt related to fire facilities and apparatus to consider in this analysis.
- **Future Capital Facilities:** The costs of future system improvements related to new growth and funded with future impact fees are estimated at $12.72 million for three new fire stations, to expand existing stations, the relocation of the dispatch center, and for three new fire apparatus.
- **Funding of Future Facilities:** No financing costs are considered in this analysis and thus it assumes all future facilities will be funded on a cash basis.

PROPOSED IMPACT FEES

The IFFP must meet the legislative requirements found in the Impact Fees Act if it is to serve as a working document in the calculation of 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 LOS.

FIRE IMPACT FEE CALCULATION

Based on the growth-related projects, a cost per call for fire services is determined. Historic call volumes are taken from various land use categories, as determined by the City, and the number of calls per unit of development within each land use category is calculated. The fee per call is then applied to the calls per unit for residential and commercial users, as shown in **TABLE 1.1.**

TABLE 1.1: FIRE PROPORTIONATE SHARE ANALYSIS

	IMPACT FEE ELIGIBLE COST TO FIRE	CALLS SERVED	COST PER CALL
Station Expansion	$10,944,644	2,647	$4,135
Relocation of Dispatch Center	$71,458	4,628	$15
Professional Expense*	$9,675	1,218	$8
Facilities Total	**$11,025,778**		**$4,158**
Apparatus**			
New Apparatus	$1,693,727	1,642	$1,032
Apparatus Total	**$1,693,727**		**$1,032**
Total Impact Fee Cost per Call (Residential)	**$11,025,770**		**$4,158**
Total Impact Fee Cost per Call (Non-Residential)	**$12,719,505**		**$5,190**

* The professional expense is allocated to demand in the next six years. The impact fee analysis should be updated within the 6-year horizon.
** The apparatus portion can only be assessed to non-residential development. See Utah Code 11-36a-202(2)(a)(i)

TABLE 1.2 illustrates the proposed impact fee by land-use type. It is important to note that a political subdivision or private entity may not impose an impact fee on residential development to pay for a fire suppression vehicle. As a result, there is a separate cost per call calculated for residential land uses and non-residential land uses in relation to the fire impact fees.

TABLE 1.2: PROPOSED FIRE/EMS IMPACT FEE SCHEDULE

LAND USE CATEGORY	COST PER CALL	CALLS PER UNIT	TOTAL FIRE IMPACT FEE PER UNIT	EXISTING IMPACT FEE	% CHANGE	$ CHANGE
Single Family (per unit)	$4,158	0.08	$320	$190	68%	$130
Multi-Family (per unit)	$4,158	0.16	$657	$280	135%	$377
Mobile Homes	$4,158	0.05	$187	$280	-33%	-$93
Commercial (per 1,000 SF)	$5,190	0.13	$690	$383	80%	$307
Office (per 1,000 SF)	$5,190	0.05	$270	$641	-58%	-$371
Industrial (per 1,000 SF)	$5,190	0.03	$130	$31	316%	$99

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.[1] This adjustment could result in a different 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:

FIRE NON-STANDARD CALCULATION

Residential Fire Impact Fee

Calls per Unit x $4,158 = Recommended Impact Fee

Non-Residential Fire Impact Fee

Calls per Unit x $5,190 = Recommended Impact Fee

[1] 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 IFA[2]. 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, as well as the future improvements required to maintain the existing LOS. The purpose of the IFA is 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. The following elements are important considerations when completing an IFA.

FIGURE 2.1: IMPACT FEE METHODOLOGY

DEMAND ANALYSIS

The demand analysis serves as the foundation for this analysis. 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 system facilities.

LEVEL OF SERVICE ANALYSIS

The demand placed upon existing public facilities by existing development is known as the existing LOS. Through the inventory of existing facilities, combined with the growth assumptions, this analysis identifies the LOS which is provided to a community's existing residents and ensures that future facilities maintain these standards.

EXISTING FACILITY INVENTORY

In order to quantify the demands placed upon existing public facilities by new development activity, the analysis provides an inventory of existing **system** facilities. 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. Any excess capacity identified within existing facilities can be apportioned to 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.

FINANCING STRATEGY

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 of the costs borne in the past and to be borne in the future (UCA 11-36a-302).

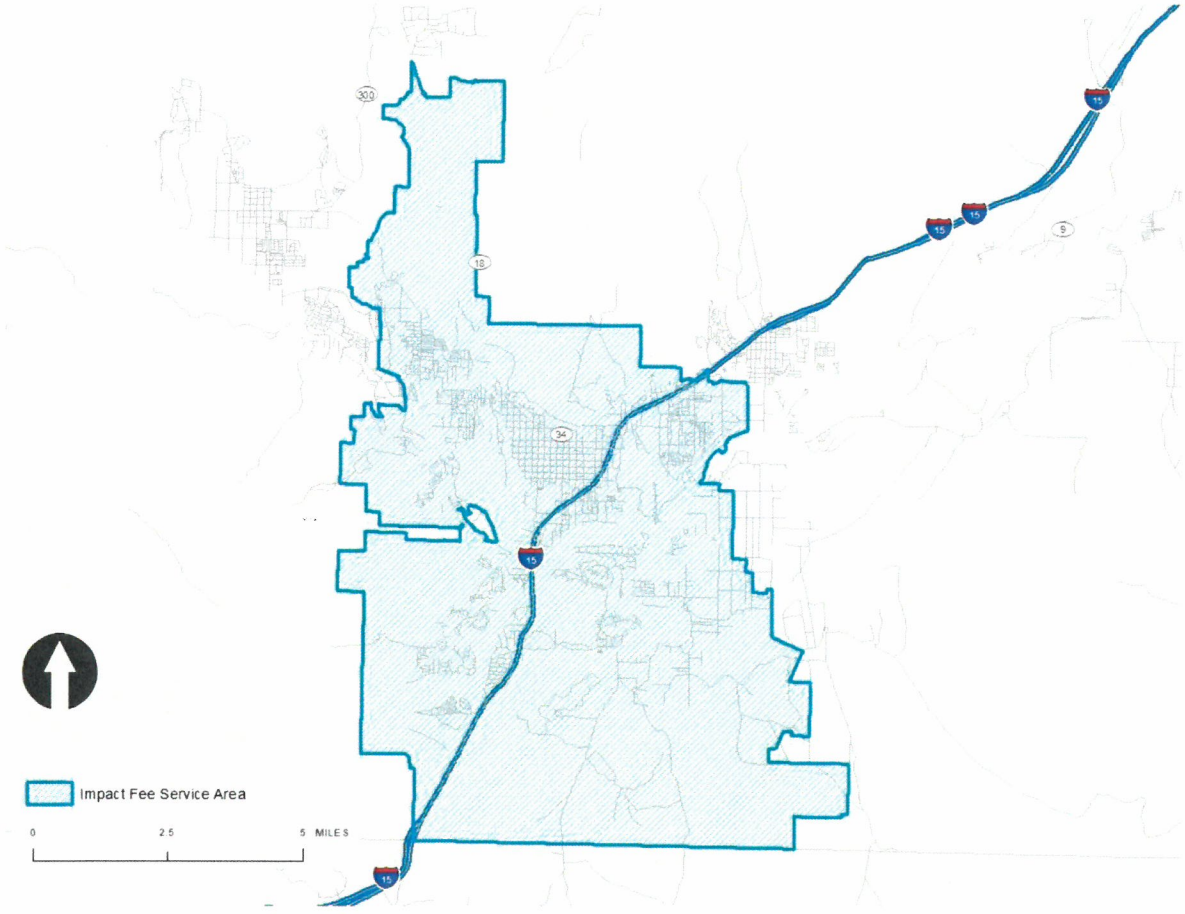
[2] UC 11-36a-301,302,303,304
[3] UC 11-36a-302(2)
[4] UC 11-36a-302(3)

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 City's fire impact fees are assessed to all properties located within the City boundaries as shown in **FIGURE 3.1**. The City's dispatch center serves both police and fire services, as well as demand outside City boundaries. As such, this facility will be evaluated based on regional funding vs. local funding to ensure proportionality.

FIGURE 3.1: ST. GEORGE PUBLIC SAFETY SERVICE AREA



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

DEMAND UNITS

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. 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 ANALYSIS

This section focuses on the specific demand units related to fire services, which will be calls for service. The demand analysis focuses on two main elements:

1. The existing demand on public facilities; and,
2. The future demand as a result of new development that will impact public facilities.

To do this, two data sets are utilized: existing land-use data and calls for service. **TABLE 3.1** shows the breakdown of calls by land use type, specifically the number of calls per dwelling unit for residential land and per 1,000 SF for non-residential land. LYRB evaluated call data from 2015-2017, as this was the most recent call data available at the time this study was initiated. For purposes of calculating levels of service, 2017 call data was utilized.

TABLE 3.1: FIRE CALLS PER LAND USE TYPE

LAND USE TYPE	DEVELOPED UNITS	2017 CALLS	EXISTING LOS (CALLS PER DEVELOPED UNIT)
RESIDENTIAL	**UNITS**	**FIRE CALL DATA**	
Single Family Residential	30,879	2,374	0.08
Multi-Family Residential	7,296	1,156	0.16
Mobile Homes	1,325	60	0.05
Total Residential	**39,500**	**3,590**	
NON-RESIDENTIAL	**PER 1,000 SF**	**FIRE CALL DATA**	
Commercial	8,631	1,150	0.13
Office	2,904	152	0.05
Industrial	4,792	118	0.03
Total Non-Residential	**16,327**	**1,420**	
Combined Total		**5,010**	

A total of 5,010 calls for service were attributed to residential and non-residential development (not including calls placed from public land-uses or calls that cannot be traced to identifiable land-uses). Based on the estimated population, there are a total of .05 calls per capita. The level of service does not include calls outside City boundaries. This serves as the basis for the demand calculation in this analysis.

It is anticipated that new growth in the Service Area will increase call volumes as well as response times, which will in turn impact the City's existing facilities. Fire services will need to be expanded in order to maintain the existing LOS as development continues throughout the City. The IFFP, in conjunction with the impact fee analysis, are designed to accurately assess the true impact of a particular user upon the City's infrastructure. Projections of call data on a per capita basis into the future suggest the City will receive an increase of 2,211 fire calls by the year 2029. These additional calls will require additional staffing in each department, along with additional facilities to handle the increase in staff. Response times to calls are critical. As such, the City has put great effort into future planning to ensure that as growth continues, response times are not compromised, and the Fire Department is still able to provide the same service to future development as additional demands are placed on the system.

TABLE 3.2: PROJECTED CALLS FOR SERVICE

YEAR	POPULATION	ADJUSTED CALLS	ANNUAL % CHANGE
2017	95,349	5,010	
2018	98,028	5,151	2.73%
2019	**100,822**	**5,298**	**2.77%**
2020	103,851	5,457	2.92%
2021	107,600	5,654	3.48%
2022	111,484	5,858	3.48%

YEAR	POPULATION	ADJUSTED CALLS	ANNUAL % CHANGE
2023	115,509	6,069	3.48%
2024	119,679	6,288	3.48%
2025	123,999	6,515	3.48%
2026	128,475	6,751	3.48%
2027	133,113	6,994	3.48%
2028	137,919	7,247	3.48%
2029	**142,898**	**7,508**	**3.48%**
2030	148,056	7,779	3.48%

LEVEL OF SERVICE STANDARDS

The LOS for purposes of this analysis is the current building square feet per call. 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 facilities may be needed within this horizon. Should this occur, the impact fee will need to be revised to evaluate proportionate impact.

Impact fees cannot be used to finance an increase in the LOS to current or future users of capital improvements. Therefore, it is important to identify the LOS within the Service Area to ensure that the new capacities of projects financed through impact fees do not exceed the established standard.

TABLE 3.1 above illustrates the existing calls for service by land use type, while **TABLE 3.3** shows the existing square footage LOS. The current square footage LOS is calculated as follows: Existing Facility SF to Service Area (48,510) / Current Estimated 2019 Calls (5,298) = 9.16 SF / call. The adopted LOS is 11.20 SF per call (as defined in the 2014 Fire IFFP and IFA), which exceeds the current LOS. The temporary decline in the current LOS is a result of the increasing call volumes from 2014 relative to existing facility SF and the reality that facilities are not incrementally expanded each year to maintain the LOS. Typically, entities will collect impact fee revenues and other funding over time to construct facilities at a future point, which causes a fluctuation in the LOS in any given year. Impact fee revenues have been collected to maintain the 2014 LOS, but the facilities have yet to be constructed. Thus, impact fee fund balances will be used to maintain the adopted LOS, with future development maintaining the LOS through continued impact fee collections. As shown in **TABLE 3.3**, the City has existing deficiency of 10,823 SF. This is not a true deficiency, as the City has collected impact fees to maintain the LOS but has yet to construct the facilities. As a result, the impact fee fund balance will be used to pay for a portion of the proposed facilities to maintain the LOS.

TABLE 3.3: FIRE SF LOS

	GENERAL FIRE FACILITIES
Total Current SF (per Table 4.1)	48,754
Adjustment for Calls Outside Service Area	99.5%*
SF Allocated to Service Area	48,510
Total LOS Calls (Est. 2019)	5,298
SF per Call	9.16
Adopted LOS SF per Call (2014 Analysis)	**11.20**
SF Need to Maintain Adopted LOS	**59,333**
Excess Capacity/(Deficiency)	**(10,823)**
Projected Calls in IFFP Planning Horizon	2,211
New Facility SF Needed	24,761

*Approximately 0.5 percent of the fire calls for service occur outside the Service Area. This proportion of all of the proposed facilities is removed from the facility cost when assigning cost to growth.

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 LOS calculated in this report (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. **SECTION 5** identifies the new facilities needed for growth.

SECTION 4: EXISTING FACILTIES INVENTORY

This section of the analysis is intended to summarize the existing public facilities related to fire services. The Impact Fees Act allows the City to recover the costs of buildings from all development activities; and also to recover the cost of fire suppression vehicles which have an original cost of over $500,000 from non-residential development as determined by a proportionate share analysis. The City of St. George Fire Department covers approximately 75 square miles and serves approximately 100,000 residents and over 16 million SF of non-residential building space (commercial, office, industrial, etc.). The Department includes seven stations, located geographically throughout the City of St. George, which respond to fires, EMS calls, hazmat incidents, technical rescues, vehicle extractions, and other calls for assistance as needed within the city boundaries. In addition, the Department serves as backup on large incidents within the county. The Department also performs inspections for compliance with fire codes and provides advanced EMT services for the City.

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

- Station #1: 51 S. 1000 E. (Will Be Replaced)
- Station #2: 155 N. Main Street (No Longer Active, Will Be Replaced)
- 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

Station #1 and Station #2 are included in this analysis to illustrate the historic provided LOS. The City anticipates replacing these facilities. The SF associated with the replacement of these facilities is not included in the calculation of the impact fee.

VALUE OF EXISTING FACILITIES

Based upon the City's fixed asset schedule, the existing fire facilities are valued at approximately $9.9 million, based on original cost, as shown in **TABLE 4.1**. The Fire Department currently shares two facilities with the Police Department, which are Stations 7 and 8, thus only the percent used by the Fire Department are included in the square footage and cost estimates that are factored into the LOS.

TABLE 4.1: DESCRIPTION AND VALUE OF EXISTING FIRE FACILITIES & APPARATUS

DESCRIPTION OF FACILITIES	TOTAL SF	TOTAL FIRE SF	% OF STATION	ORIGINAL COST	COST TO FIRE
Station #1*	10,000	10,000	100%	$379,698	$379,698
Station #2*	6,500	6,500	100%	$239,301	$239,301
Station #3	2,435	2,435	100%	$215,684	$215,684
Station #4	2,700	2,700	100%	$150,000	$150,000
Station #5	2,435	2,435	100%	$206,637	$206,637
Station #6	5,000	5,000	100%	$409,421	$409,421
Station #7	10,355	8,284	80%	$1,201,061	$960,848
Station #8	12,000	11,400	95%	$2,381,083	$2,262,029
Total Existing Facilities	**51,425**	**48,754**		**$5,182,885**	**$4,823,619**
Station 1, Pierce Heavy Duty Aerial Ladder Truck				$896,962	$896,962
Station 1, Pierce Pumper				$571,637	$571,637
Station 3, Pierce Pumper				$516,521	$516,521
Station 6, Pierce Velocity Fire Truck				$674,863	$674,863
Station 7, Pierce ladder/platform				$774,097	$774,097
Station 7, Pierce Velocity Fire Truck				$674,863	$674,863
Station 8, Pierce Velocity Fire Truck				$674,863	$674,863
Total Existing Apparatus**				**$4,783,806**	**$4,783,806**
Combined Total				**$9,966,691**	**$9,607,425**

* Station #1 and #2 will be eliminated with the construction of the proposed new facilities. Station #2 is no longer in service. These facilities are included above to show the historic square footage provided to existing residents for purposes of determining LOS. The impact fee will be adjusted to remove any replacement square footage.
** Note: Included in this total is the additional apparatus in service with an original value greater than $500K.

EXCESS CAPACITY

This analysis uses the Plan Based Methodology for calculating the impact fees (discussed further in **SECTION 5**), and assumes existing facilities are at capacity for the purposes of impact fee calculations. **TABLE 3.3** illustrates that new facilities are needed to maintain the adopted LOS. Future facility costs will be allocated to new development based on the growth-related calls for service anticipated within the IFFP planning horizon.

MANNER OF FINANCING EXISTING INFRASTRUCTURE

The existing public safety infrastructure and apparatus has been funded through a combination of different revenue sources, including general fund revenues, impact fees, and capital equipment leases. Therefore, the City's existing LOS standards have been funded by the City's existing residents. The City does not anticipate receiving revenues from other entities (i.e. grants, federal or state funds, other contributions, etc.) to fund new facilities.

SECTION 5: CAPITAL FACILITY ANALYSIS

The City of St. George has provided information for the 10-year planning horizon including capital project information, planning analysis and other information that has been compiled to prepare this IFFP and IFA. The City has provided all future capital project data including project descriptions and estimated project costs. The following paragraph describes the methodology used for calculating impact fees in this analysis.

PLAN BASED (FEE BASED ON DEFINED CAPITAL IMPROVEMENT PLAN)
Impact fees can be calculated using a specific set of costs specified for future development. The improvements are identified in the IFFP or CIP as growth-related projects. The total project costs are divided by the total demand units the projects are designed to serve. Under this methodology, it is important to identify the existing LOS and determine any excess capacity in existing facilities that could serve new growth. As stated in **SECTION 4**, this analysis assumes existing facilities are at capacity for the purposes of impact fee calculations. Furthermore, the LOS discussion in **SECTION 3** illustrates the City will need to construct additional facilities to maintain the adopted LOS.

SUMMARY OF FUTURE CAPITAL PROJECTS

Based upon the projected growth throughout the City, City staff has identified future facilities and apparatus that must be constructed or acquired over the next ten years to serve future development within the planning horizon. The costs of these projects are detailed in **TABLES 5.1-5.3**. The projects listed in the table below have a useful life of more than ten years. 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 two percent annual construction inflation adjustment is applied to projects completed after 2019 (the base year cost estimate).

TABLE 5.1 illustrates the new facility SF added to the City, while applying a credit for the replacement of existing SF, as this is not impact fee eligible. Based on this analysis, a total of 44,780 SF is being added to the system.

TABLE 5.1: SUMMARY OF FUTURE CAPITAL FACILITIES SF ALLOCATION

FACILITIES OR ENGINES	CONSTRUCTION YEAR	TOTAL SQ. FT.	% NEW SF	NEW SF	SF Funded with Current Impact Fee Funds	Added Capacity SF
Stations						
Station #9 (Little Valley/Fort Pierce)	2020	12,000	100%	12,000	3,129	8,871
Station #10 (Desert Canyon)	2023	12,000	100%	12,000	3,129	8,871
Station #11 (Ledges)	2025	12,000	100%	12,000	3,129	8,871
City Center Station (Main Street)	2027	22,000	25%	5,500	1,434	4,066
Station Subtotal		**58,000**		**41,500**	**10,823**	**30,677**
Apparatus						
Little Valley Apparatus	2020	NA	100%	-	-	-
Desert Canyon Apparatus	2023	NA	100%	-	-	-
Ledges Apparatus	2025	NA	10%*	-	-	-
Apparatus Subtotal		**NA**		-	-	-
Dispatch Center						
Relocation of Dispatch	2021	5,660	58%	3,280	-	3,280
Dispatch Subtotal		**5,660**		**3,280**	**-**	**3,280**
Total				**44,780**		**33,957**

*According to the City, the apparatus for the station will primarily serve residential development, with 10% attributed to non-residential development.

As stated in **SECTION 3**, the LOS for this analysis is based on calls for service by land use type and the existing building square footage LOS, with a combination of existing impact fee funds and proposed new facilities will be needed to maintain the proposed LOS. The proposed new facilities will add new square footage to maintain the LOS for development that has paid impact fees since 2014 and for new development. Approximately, 10,823 SF of building space and a portion of future apparatus will be needed to maintain the LOS for historic development, which will be paid with existing impact fee fund balances. The remaining 33,957 SF is considered added capacity.

TABLE 5.2 further refines the analysis by allocating the percent of each facility relative to fire services (a portion of Station #9 and Station #10 will serve as satellite space for police facilities and is included in the police impact fee). The analysis also removes the percentage of each facility that is allocated to calls outside the service area (an estimated 0.5 percent of calls are responded to outside the service area). The final cost and SF allocated to growth within the service area relative to fire services is $14,889,608 and 30,185 SF, respectively.

TABLE 5.2: SUMMARY OF FUTURE CAPITAL FACILITIES COSTS

FACILITIES OR ENGINES	ESTIMATED COST	CONSTRUCTION YEAR COST	COST TO GROWTH	% TO FIRE	SF TO FIRE	% TO SERVICE AREA	GROWTH COST TO FIRE & SERVICE AREA	SF TO ST. GEORGE DEMAND
Stations								
Station #9 (Little Valley/Fort Pierce)	$3,600,000	$3,672,000	$3,672,000	95%	8,427	99.5%	$3,470,958	8,385
Station #10 (Desert Canyon)	$3,600,000	$3,896,756	$3,896,756	95%	8,427	99.5%	$3,683,409	8,385
Station #11 (Ledges)	$3,600,000	$4,054,185	$4,054,185	100%	8,871	99.5%	$4,033,914	8,826
City Center Station (Main Street)	$5,670,000	$6,643,309	$1,660,827	100%	4,066	99.5%	$1,652,523	4,045
Station Subtotal	**$16,470,000**	**$18,266,250**	**$13,283,768**		**29,790**		**$12,840,804**	**29,641**
Apparatus								
Little Valley Apparatus	$815,000	$815,000	$815,000	100%		99.5%	$810,925	
Desert Canyon Apparatus	$981,000	$1,061,866	$1,061,866	100%		99.5%	$1,056,557	
Ledges Apparatus	$981,000	$1,104,765	$110,477	100%		99.5%	$109,924	
Apparatus Subtotal	**$2,777,000**	**$2,981,631**	**$1,987,343**				**$1,977,406**	
Dispatch Center								
Relocation of Dispatch	$1,549,553	$1,631,492	$431,492	17%	546	99.5%	$71,458	543
Dispatch Subtotal	**$1,549,553**	**$1,631,492**	**$431,492***				**$71,458**	**543**
Total	**$20,796,553**	**$22,879,373**	**$15,702,603**		**29,790**		**$14,889,688**	**30,185**

*$1.2M of the Dispatch Center Relocation will be funded from the Dispatch Center Reserve Fund. The remaining $431,492 (26.45%) is the amount that needs to be recovered through impact fees over the next 20-year period.

In addition to new stations, the City anticipates the need for new apparatus and relocating the existing dispatch center. The proposed dispatch center will increase capacity by approximately 58 percent based on the planned sizing of the new facility as compared to the existing center, as shown above. When determining the proportionate cost to new growth, several factors were considered. First, based on call data, 83 percent of the calls for service are related to police, with 17 percent related to fire. This distribution is used to allocate the dispatch center to the respective services. Second, the City will use $1.2M of dispatch center reserve fund revenues to fund the dispatch center relocation. The remaining $431,492 (26.45 percent) is the amount that needs to be recovered through impact fees over the next 20-year period. Finally, approximately 0.5 percent of all fire calls for service are responded to outside the Service Area. This percentage is removed from all facility and apparatus costs when assigning costs to growth. The total remaining impact fee eligible costs are shown in **TABLE 5.3**.

TABLE 5.3: COST OF FUTURE CAPITAL FACILITIES RELATED TO GROWTH

FACILITIES OR ENGINES	GROWTH COST TO FIRE & SERVICE AREA	Less Impact Fee Funds	Total Impact Fee Eligible Cost	Demand Served
Stations				
Station #9 (Little Valley/Fort Pierce)	$3,470,958	($524,151)	$2,946,807	
Station #10 (Desert Canyon)	$3,683,409	($556,233)	$3,127,176	
Station #11 (Ledges)	$4,033,914	($578,705)	$3,455,209	
City Center Station (Main Street)	$1,652,523	($237,071)	$1,415,452	
Station Subtotal	**$12,840,804**	**($1,896,160)**	**$10,944,644**	**2,647***
Apparatus				
Little Valley Apparatus	$810,925	($116,335)	$694,590	
Desert Canyon Apparatus	$1,056,557	($151,574)	$904,983	
Ledges Apparatus	$109,924	($15,770)	$94,154	
Apparatus Subtotal	**$1,977,406**	**($283,678)**	**$1,693,727**	**1,642****
Dispatch Center				
Relocation of Dispatch	$71,458	$0	$71,458	
Dispatch Subtotal	**$71,458**	**$0**	**$71,458**	**4,628*****
Total	**$14,889,688**	**($2,179,838)**	**$12,709,830**	

* The demand served for the new stations is calculated based on the impact fee eligible SF of 29,641 divided by the LOS of 11.2 SF per call.
** Demand served for apparatus is calculated using the estimated value of existing apparatus in today's dollars (2019) of $5,465,652 divided by estimated 2019 calls for service of 5,298. This produces a value of $1,032 per call. The total impact fee eligible apparatus cost ($1,693,727) is then divided by $1,032 to determine calls served.
*** The Dispatch Center is anticipated to serve development for the next 20 years. This represents the new fire calls in the next 20 years.

FUTURE APPARATUS ACQUISITION

In addition to physical facilities, the Impact Fees Act[6] allows for the inclusion of fire suppression vehicles costing in excess of $500,000 in the calculation of the impact fee. It should be noted, however, that these costs can only be allocated to non-residential development. The City anticipates the need to acquire additional fire apparatus during the 10-year time frame of this analysis.

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.[7] 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.[8] The Impact Fee Analysis may only include the costs of system improvements related to new growth within the proportionate share analysis.

FUNDING OF FUTURE FACILITIES

Public safety facilities are generally funded using the following resources:

PROPERTY TAX REVENUES

Property tax revenues are available to the City to fund repair and replacement needs, operations and maintenance, cure deficiencies and provide interim funds as needed for growth-related projects. If property taxes are used to fund growth-related projects, impact fee revenues can be used to pay back these funds.

GRANTS AND DONATIONS

The City does not anticipate receiving grants or donations to fund system improvements currently contemplated in this IFFP. However, the impact fees will be adjusted if grants become available, to reflect the grant monies received. A donor may be entitled to a reimbursement for the value of the system improvements funded through impact fees if donations are made by new development. **SECTION 6** further addresses proposed credits available to development.

IMPACT FEE REVENUES

Impact fees are charged to ensure that new growth pays its proportionate share of the costs for the development of public

[6] 11-36a-102(17)
[7] 11-36a-102(20)
[8] 11-36a102(13)

infrastructure. Impact fee revenues can also be attributed to the future expansion of public infrastructure if the revenues are used to maintain an existing LOS. Increases to an existing LOS cannot be funded with impact fee revenues. Impact fee revenues are generally considered non-operating revenues and help offset future capital costs.

DEBT FINANCING

In the event the City has not accumulated sufficient impact fees to pay for the construction of time sensitive or urgent capital projects needed to accommodate new growth, the City must look to revenue sources other than impact fees for funding. 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 City does not anticipate utilizing debt financing for this 10-Year Plan and therefore no financing costs are included in this analysis.

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 percent of the growth-related facilities identified in the proportionate share analysis as presented in the IFA. Even so, there may be years that actual impact fee revenues cannot cover the annual growth-related expenses. In those years, growth-related projects may be delayed, or other revenues such as general fund revenues may be borrowed to make up any annual deficits. Any borrowed funds are to be repaid in their entirety through subsequent impact fees.

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.

SECTION 6: FIRE IMPACT FEE CALCULATION

PROPOSED IMPACT FEES

The calculation of impact fees relies upon the information contained in this analysis. Impact fees are calculated based on many variables centered on proportionality and LOS. The proposed future facilities contemplated in this analysis will be needed to serve new development in the Service Area. As a result, this analysis uses a "plan-based" methodology. Impact fees can be calculated using a specific set of costs specified for future development. The improvements are identified in the IFFP or CIP as growth-related projects. The total project costs are divided by the total demand units the projects are designed to serve. Under this methodology, it is important to identify the existing LOS and determine any excess capacity in existing facilities that could serve new growth. **TABLE 6.1** illustrates the proportionate share analysis and cost per call calculations for fire facilities.

TABLE 6.1: FIRE PROPORTIONATE SHARE ANALYSIS

	IMPACT FEE ELIGIBLE COST TO FIRE	CALLS SERVED	COST PER CALL
Station Expansion	$10,944,644	2,647	$4,135
Relocation of Dispatch Center	$71,458	4,628	$15
Professional Expense*	$9,675	1,218	$8
Facilities Total	**$11,025,778**		**$4,158**
Apparatus**			
New Apparatus	$1,693,727	1,642	$1,032
Apparatus Total	**$1,693,727**		**$1,032**
Total Impact Fee Cost per Call (Residential)	**$11,025,778**		**$4,158**
Total Impact Fee Cost per Call (Non-Residential)	**$12,719,505**		**$5,190**

* The professional expense is allocated to demand in the next six years. The impact fee analysis should be updated within the 6-year horizon.
** The apparatus portion can only be assessed to non-residential development. See Utah Code 11-36a-202(2)(a)(i)

TABLE 6.2 illustrates the proposed impact fee by land-use type and by function. It is important to note that a political subdivision or private entity may not impose an impact fee on residential development to pay for a fire suppression vehicle. As a result, there is a separate fire cost per call calculated for residential land uses and non-residential land uses.

TABLE 6.2: PROPOSED FIRE/EMS IMPACT FEE SCHEDULE

LAND USE CATEGORY	COST PER CALL	CALLS PER UNIT	TOTAL FIRE IMPACT FEE PER UNIT	EXISTING IMPACT FEE	% CHANGE	$ CHANGE
Single Family (per unit)	$4,158	0.08	$320	$190	68%	$130
Multi-Family (per unit)	$4,158	0.16	$657	$280	135%	$377
Mobile Homes	$4,158	0.05	$187	$280	-33%	-$93
Commercial (per 1,000 SF)	$5,190	0.13	$690	$383	80%	$307
Office (per 1,000 SF)	$5,190	0.05	$270	$641	-58%	-$371
Industrial (per 1,000 SF)	$5,190	0.03	$130	$31	316%	$99

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.[9] This adjustment could result in a different 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:

FIRE NON-STANDARD CALCULATION
Residential Fire Impact Fee
Calls per Unit x $4,158 = Recommended Impact Fee
Non-Residential Fire Impact Fee
Calls per Unit x $5,190 = Recommended Impact Fee

[9] 11-36a-402(1)(c)

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 within six years after each impact fee is paid. Impact fees collected in the next five to six years should be spent or encumbered on only those projects outlined in the IFFP as growth related costs to maintain the LOS or to reimburse existing development for excess capacity used.

PROPOSED CREDITS OWED TO DEVELOPMENT

Development may receive a credit for the construction and/or donation of system improvements to the City that are included in the IFFP. Credits for system improvements may be available to developers up to, but not exceeding, the amount commensurate with the LOS identified within this Impact Fee Analysis. Credits will not be given for the amount by which system improvements exceed the LOS identified within this Impact Fee Analysis. This situation does not apply to developer exactions or system 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.

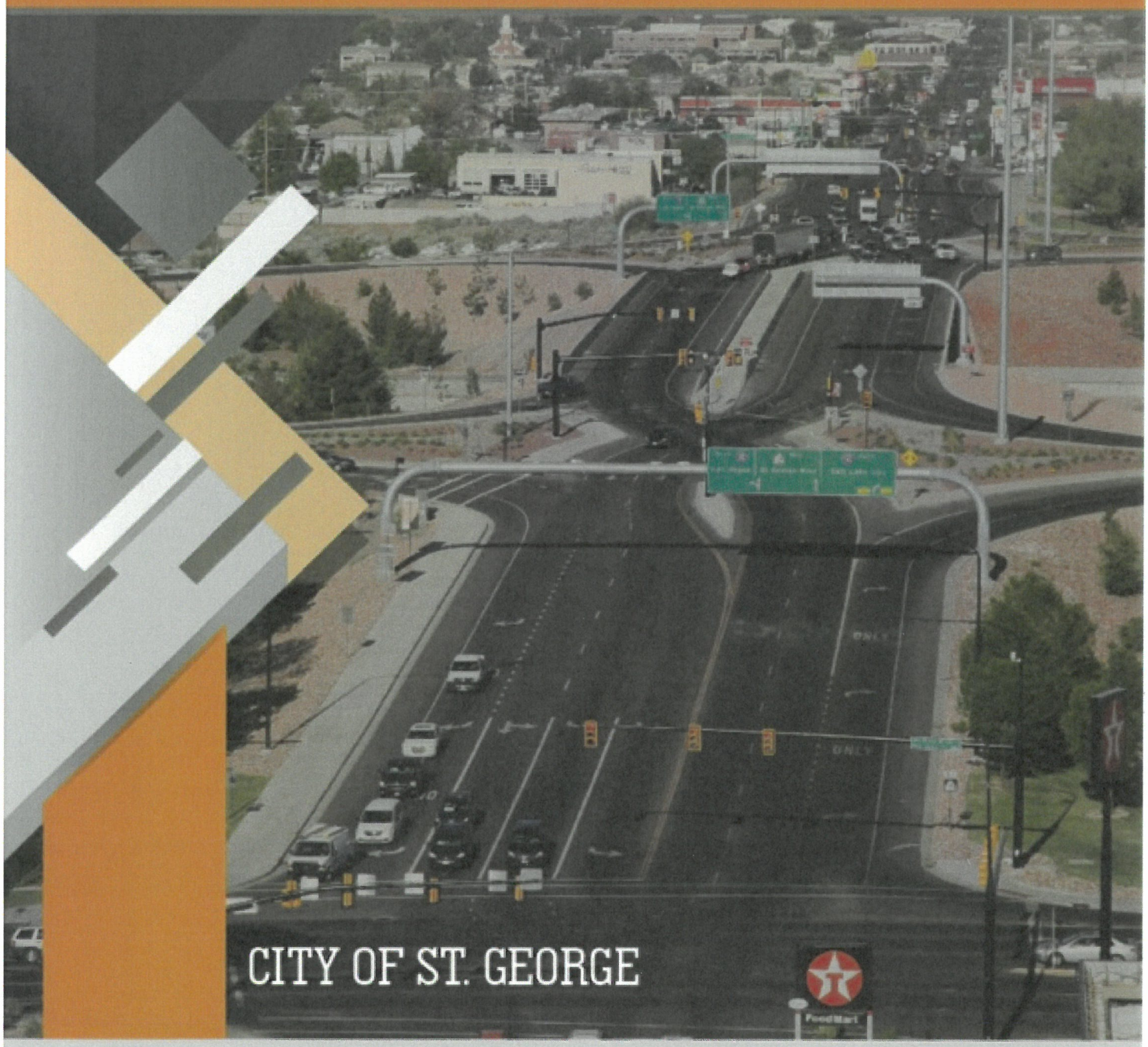
In the situation that a developer chooses to construct facilities found in the IFFP in-lieu of impact fees, the decision must be made through negotiation with the developer and the City on a case-by-case basis.

GROWTH-DRIVEN EXTRAORDINARY COSTS

This analysis identities the known impact fee eligible costs related to growth. The City does not anticipate any other 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 two percent annual construction inflation adjustment is applied to projects completed after 2019 (the base year cost estimate).



Traffic Impact Fee Analysis

April 2020

HORROCKS ENGINEERS

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EXECUTIVE SUMMARY

The purpose of this report is to present the impact fee calculation methodology for the roadway facilities. The proposed impact fee was calculated based upon the future roadway improvements identified in the St. George Transportation Master Plan (TMP) that can be attributed to projected future development over the next six years. The projected future development growth was determined by evaluating issued residential and commercial building permits. The permits for the various developments were converted to a single family equivalent (SFE) in terms of trips generated in the PM peak hour (see Table 3 for further details). For purposes of this study it was assumed that St. George will continue to experience similar type growth over the next six years as development continues.

The SFE impact fee was calculated by dividing the city responsible roadway improvement costs by the projected future SFE development units over the next six years.

The recommended single family detached housing impact fee of $2,188 represents a 142% increase from the current impact fee of $905.

Table 1 identifies the recommended impact fee schedule for various land-uses.

Table 1: Proposed Land Use Impact Fees

ITE CODE	LAND USE	UNITS	DEMAND INDEX (single family equivalent)*	IMPACT FEE COST PER UNIT
PORT & TERMINAL (Land Uses 000-099)				
030	Truck Terminal	Acres	1.87	$ 4,092
INDUSTRIAL (Land Uses 100-199)				
110	General Light Industrial	TSF Gross	0.63	$ 1,378
130	Industrial Park	TSF Gross	0.40	$ 875
140	Manufacturing	TSF Gross	0.67	$ 1,466
150	Warehousing	TSF Gross	0.19	$ 416
151	Mini Warehouse	TSF Gross	0.17	$ 372
160	Data Center	TSF Gross	0.09	$ 197
170	Utility	TSF Gross	2.27	$ 4,967
RESIDENTIAL (Land Uses 200-299)				
210	Single Family Homes	DU	1.00	$ 2,188
220	Multifamily Housing (Low-Rise)	DU	0.56	$ 1,225
221	Multifamily Housing (Mid-Rise)	DU	0.44	$ 963
225	Off-Campus Student Apartment	Bedrooms	0.25	$ 547
231	Mid-Rise Residential 1st-Floor Com	DU	0.36	$ 788
240	Mobile Home Park	DU	0.46	$ 1,006
251	Senior Adult Housing-Detached	DU	0.30	$ 656
252	Senior Adult Housing-Attached	DU	0.26	$ 569
253	Congregate Care	DU	0.18	$ 394
254	Assisted Living	Beds	0.26	$ 569
260	Recreational Homes	DU	0.28	$ 613
265	Timeshare	DU	0.63	$ 1,378
270	Residential PUD	DU	0.69	$ 1,510
LODGING (Land Uses 300-399)				
310	Hotel	Rooms	0.60	$ 1,313
311	All Suites Hotel	Rooms	0.36	$ 788
312	Business Hotel	Rooms	0.32	$ 700
320	Motel	Rooms	0.38	$ 831
330	Resort Hotel	Rooms	0.41	$ 897
RECREATIONAL (Land Uses 400-499)				
416	Campground/RV Park	Camp Sites	0.21	$ 459
430	Golf Course	Holes	2.91	$ 6,367
437	Bowling Alley	Lanes	1.30	$ 2,844
445	Multiplex Movie Theater	TSF Gross	4.91	$ 10,743
490	Tennis Courts	Courts	4.21	$ 9,211
492	Health/Fitness Club	TSF Gross	3.45	$ 7,549
495	Recreational Community Center	TSF Gross	2.31	$ 5,054
INSTITUTIONAL (Land Uses 500-599)				
520	Elementary School	Students	0.17	$ 372
522	Middle/Juniour High School	Students	0.17	$ 372
530	High School	Students	0.14	$ 306
534	Private School (K-8)	Students	0.26	$ 569
536	Private School (K-12)	Students	0.17	$ 372
537	Charter Elementary School	Students	0.14	$ 306
560	Church	TSF Gross	0.49	$ 1,072
565	Daycare Center	TSF Gross	11.12	$ 24,331
MEDICAL (Land Uses 600-699)				
610	Hospital	TSF Gross	0.97	$ 2,122
620	Nursing Home	Beds	0.22	$ 481
630	Clinic	TSF Gross	3.28	$ 7,177

* TSF: Thousand Square Feet

* DU: Dwelling Unit

Table 1: Proposed Land Use Impact Fees (continued)

ITE CODE	LAND USE	UNITS	DEMAND INDEX (single family equivalent)*	IMPACT FEE COST PER UNIT
OFFICE (Land Uses 700-799)				
710	General Office	TSF Gross	1.15	$ 2,516
712	Small Office Building	TSF Gross	2.45	$ 5,361
715	Single Tennant Office Building	TSF Gross	1.71	$ 3,741
720	Medical/Dental Office	TSF Gross	3.46	$ 7,570
730	Government Office Building	TSF Gross	1.71	$ 3,741
732	Post Office	TSF Gross	11.21	$ 24,527
750	Office Park	TSF Gross	1.07	$ 2,341
770	Business Park	TSF Gross	0.21	$ 459
RETAIL (LAND USES 800-899)				
812	Building Materials/Lumber	TSF Gross	1.75	$ 3,831
813	Free Standing Discount Superstore	TSF Gross	3.12	$ 6,821
814	Variety Store	TSF Gross	5.81	$ 12,721
816	Hardware/Paint Store	TSF Gross	1.98	$ 4,339
817	Nursery (Garden Center)	TSF Gross	5.90	$ 12,907
820	Shopping Center (Rate)	TSF Gross	2.51	$ 5,502
823	Factory Outlet Center	TSF Gross	2.06	$ 4,509
840	New Car Sales	TSF Gross	2.43	$ 5,317
841	Used Car Sales	TSF Gross	3.75	$ 8,205
842	RV Sales	TSF Gross	0.77	$ 1,685
843	Auto Parts Sales	TSF Gross	2.80	$ 6,124
848	Tire Store	Service Bays	2.46	$ 5,388
850	Supermarket (stand alone stores)	TSF Gross	5.91	$ 12,939
851	Convenien. Mkt. (Open 24 hrs)	TSF Gross	19.15	$ 41,907
853	Convenien. Mkt w/ Gas Pumps	TSF Gross	16.76	$ 36,668
857	Discount Club	TSF Gross	3.76	$ 8,231
862	Home Improvement Superstore	TSF Gross	1.21	$ 2,651
863	Electronics Super Store	TSF Gross	2.56	$ 5,593
867	Office Supply Superstore	TSF Gross	2.49	$ 5,455
876	Apparel Store	TSF Gross	3.50	$ 7,662
881	Pharmacy/Drugstore w/ Drive-thru	TSF Gross	5.25	$ 11,482
882	Marijuana Dispensory	TSF Gross	21.83	$ 47,764
890	Furniture Store	TSF Gross	0.24	$ 535
899	Liquor Store	TSF Gross	14.73	$ 32,236
SERVICES (LAND USES 900-999)				
911	Walk-in Bank	TSF Gross	9.10	$ 19,905
912	Drive-in Bank	TSF Gross	10.84	$ 23,715
931	Quality Restaurant (not national chair	TSF Gross	4.37	$ 9,557
932	High Turnover/Sit Down Rest	TSF Gross	5.57	$ 12,185
933	Fast Food w/o Drive Thru	TSF Gross	17.00	$ 37,205
934	Fast Food with Drive Thru	TSF Gross	16.34	$ 35,741
936	Coffee/Donut Shop w/o Drive Thru	TSF Gross	21.79	$ 47,668
936	Coffee/Donut Shop with Drive Thru	TSF Gross	21.69	$ 47,458
941	Quick Lubrication Vehicle Shop	Service Bays	3.64	$ 7,959
942	Auto Care Center	Service Bays	2.17	$ 4,748
944	Service Station	Fuel Position	8.14	$ 17,805
945	Serv.Station w/ Conven.Mkt	Fuel Position	6.16	$ 13,468
947	Self Serve Car Wash	Wash Bays	4.43	$ 9,697
948	Automated Car Wash	Wash Bays	54.25	$ 118,699

* TSF: Thousand Square Feet

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Table 2: Proposed Land Use Impact Fees (continued)

ITE CODE	LAND USE	UNITS	DEMAND INDEX (single family equivalent)*	IMPACT FEE COST PER UNIT
OFFICE (Land Uses 700-799)				
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RETAIL (LAND USES 800-899)				
812	Building Materials/Lumber	TSF Gross	1.75	$ 3,831
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857	Discount Club	TSF Gross	3.76	$ 8,231
862	Home Improvement Superstore	TSF Gross	1.21	$ 2,651
863	Electronics Super Store	TSF Gross	2.56	$ 5,593
867	Office Supply Superstore	TSF Gross	2.49	$ 5,455
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* TSF: Thousand Square Feet

* DU: Dwelling Unit

INTRODUCTION

Impact fees are a way for a community to obtain funds to assist in the construction of infrastructure improvements that are needed to serve new growth. The premise behind impact fees is that if no new development was allowed, the existing infrastructure would adequately serve the existing level of development in the city. Therefore, new development should pay for the fraction of improvements that are required because of new growth. Impact fees are assessed for many types of infrastructure and facilities that are provided by a community such as roads, sewer, water, parks and trails.

According to state law, impact fees cannot be used to correct existing deficiencies in a system, only to fund growth-related capital improvements.

There are many ways to quantify the impact of new growth on the transportation system in St. George City. The method used in this study to assess the impact is to consider all the needed transportation improvements identified in the Transportation Master Plan (TMP) and then eliminate the cost of those improvements that are necessary to correct existing deficiencies.

St. George City presently assesses transportation impact fees from new development. This allows transportation related costs to be assessed to new development based on the proportional impact of new development.

In calculating the impact fees, the PM peak hour is used as it typically includes larger background/commuter traffic volumes. The typical residential unit is then assigned as a base factor for the other types of development. During the average PM peak hour it will account for approximately one trip on the roadway network.

PROJECTED FUTURE GROWTH

To determine the amount of development that will occur in St. George City over the next six years the following steps were followed:

- Obtain the record of permits issued for various developments from January 2017 to December 2019. Impact fee studies will often establish a future growth trend based on the recent history of issued building permits. The past 3 years, the City has experienced a strong trend of building that has consisted of both residential and commercial growth activity such as retail, office space, and manufacturing. Much has been done in the downtown Main Street plaza with high density residential and commercial space. Building permit information is shown in Table 3.

- Determine the PM peak hour trip generation rate for each land-use type using the ITE TRIP GENERATION MANUAL 10th Edition.

- Adjust the trip generation rate in terms of heavy vehicles percentage (it was assumed that 1 heavy vehicle would be equivalent to 2 passenger vehicles based on information obtained from the Transportation Research Board's Highway Capacity Manual) and primary trips. The primary trip adjustment eliminates trips to various land-uses that are

pass-by trips or diverted trips. A typical trip that is not adjusted with an adjustment factor assumes that a trip is made from one destination to another, with the intent that the destination is the reason for the trip. In an adjusted trip, an intermediate stop is made before the final destination is reached, such as a bank, post office, fast food, gasoline, etc. These adjustments are called pass-by trip adjustments and are represented in the primary trip adjustment. The primary trip adjustment also contains internal capture adjustments. When primary trip percentages are taken, they are generally derived from the Institute of Transportation Engineers' Trip Generation Handbook.

- To compare how vehicle trips from each land use impact the roadway system, each land use is measured next to a single family home to determine how many effective single family homes equate to a given type of land use. For instance, the trips generated by a 5,000 sq. ft. medical building is equivalent to the trips generated by 18 single family homes. Therefore, we calculate a demand index factor for each land use based on the single family unit as the base factor by dividing the effective trip end for the land-use by the single family unit effective trip end, which is 1.0 per single family home, according to the Trip Generation Handbook, cited above. This produces the Single Family Equivalent unit, or SFE unit.

- Multiply the demand index for each land-use by the number of permits issued on an average year for the land use. The sum of the SFE units for the various land-uses is then multiplied by six to determine the projected number of SFE units expected over the next six years in St. George City when calculating the cost for six years of projects.

Based upon the methodology used above it is projected that St. George City will experience approximately 14,030 SFE units of growth over the next six years.

ROADWAY IMPROVEMENT PROJECTS

A list of roadway improvement projects were taken from the St. George City Transportation Master Plan completed in 2019. Recommended improvements are separated into 0 to 6 year improvements, 7 to 15 year improvements and 16 to 30 year improvements. A detailed cost estimate for each project was performed and can be found in the appendix of the Plan, along with a determination of what portion or percentage would be eligible for impact fees.

Table 2: SINGLE FAMILY EQUIVALENT (SFE) DEMAND INDEX

APPLICABLE ITE CODE	LAND USE	UNITS	ITE TRIPS ENDS PER UNIT (PM peak hour)	PASS-BY TRIPS %	PASS-BY TRIP ADJUSTMENT	PRIMARY TRIP ADJUSTMENT	EFFECTIVE TRIP ENDS PER UNIT	DEMAND INDEX (single family equivalent)
PORT & TERMINAL (Land Uses 000-099)								
030	Truck Terminal	Acres	1.87	0%	1.00	1.00	1.87	1.87
INDUSTRIAL (Land Uses 100-199)								
110	General Light Industrial	TSF Gross	0.63	0%	1.00	1.00	0.63	0.63
130	Industrial Park	TSF Gross	0.4	0%	1.00	1.00	0.40	0.40
140	Manufacturing	TSF Gross	0.67	0%	1.00	1.00	0.67	0.67
150	Warehousing	TSF Gross	0.19	0%	1.00	1.00	0.19	0.19
151	Mini Warehouse	TSF Gross	0.17	0%	1.00	1.00	0.17	0.17
160	Data Center	TSF Gross	0.09	0%	1.00	1.00	0.09	0.09
170	Utility	TSF Gross	2.27	0%	1.00	1.00	2.27	2.27
RESIDENTIAL (Land Uses 200-299)								
210	Single Family Homes	DU	1	0%	1.00	1.00	1.00	1.00
220	Multifamily Housing (Low-Rise)	DU	0.56	0%	1.00	1.00	0.56	0.56
221	Multifamily Housing (Mid-Rise)	DU	0.44	0%	1.00	1.00	0.44	0.44
225	Off-Campus Student Apartment	Bedrooms	0.25	0%	1.00	1.00	0.25	0.25
231	Mid-Rise Residential 1st-Floor Commercial	DU	0.36	0%	1.00	1.00	0.36	0.36
240	Mobile Home Park	DU	0.46	0%	1.00	1.00	0.46	0.46
251	Senior Adult Housing-Detached	DU	0.3	0%	1.00	1.00	0.30	0.30
252	Senior Adult Housing-Attached	DU	0.26	0%	1.00	1.00	0.26	0.26
253	Congregate Care	DU	0.18	0%	1.00	1.00	0.18	0.18
254	Assisted Living	Beds	0.26	0%	1.00	1.00	0.26	0.26
260	Recreational Homes	DU	0.28	0%	1.00	1.00	0.28	0.28
265	Timeshare	DU	0.63	0%	1.00	1.00	0.63	0.63
270	Residential PUD	DU	0.69	0%	1.00	1.00	0.69	0.69
LODGING (Land Uses 300-399)								
310	Hotel	Rooms	0.6	0%	1.00	1.00	0.60	0.60
311	All Suites Hotel	Rooms	0.36	0%	1.00	1.00	0.36	0.36
312	Business Hotel	Rooms	0.32	0%	1.00	1.00	0.32	0.32
320	Motel	Rooms	0.38	0%	1.00	1.00	0.38	0.38
330	Resort Hotel	Rooms	0.41	0%	1.00	1.00	0.41	0.41
RECREATIONAL (Land Uses 400-499)								
416	Campground/RV Park	Camp Sites	0.21	0%	1.00	1.00	0.21	0.21
430	Golf Course	Holes	2.91	0%	1.00	1.00	2.91	2.91
437	Bowling Alley	Lanes	1.3	0%	1.00	1.00	1.30	1.30
445	Multiplex Movie Theater	TSF Gross	4.91	0%	1.00	1.00	4.91	4.91
490	Tennis Courts	Courts	4.21	0%	1.00	1.00	4.21	4.21
492	Health/Fitness Club	TSF Gross	3.45	0%	1.00	1.00	3.45	3.45
495	Recreational Community Center	TSF Gross	2.31	0%	1.00	1.00	2.31	2.31
INSTITUTIONAL (Land Uses 500-599)								
520	Elementary School	Students	0.17	0%	1.00	1.00	0.17	0.17
522	Middle/Juniour High School	Students	0.17	0%	1.00	1.00	0.17	0.17
530	High School	Students	0.14	0%	1.00	1.00	0.14	0.14
534	Private School (K-8)	Students	0.26	0%	1.00	1.00	0.26	0.26
536	Private School (K-12)	Students	0.17	0%	1.00	1.00	0.17	0.17
537	Charter Elementary School	Students	0.14	0%	1.00	1.00	0.14	0.14
560	Church	TSF Gross	0.49	0%	1.00	1.00	0.49	0.49
565	Daycare Center	TSF Gross	11.12	0%	1.00	1.00	11.12	11.12
610	Hospital	TSF	0.97	0%	1.00	1.00	0.97	0.97
620	Nursing Home	Beds	0.22	0%	1.00	1.00	0.22	0.22
630	Clinic	TSF	3.28	0%	1.00	1.00	3.28	3.28
OFFICE (Land Uses 700-799)								
710	General Office	TSF Gross	1.15	0%	1.00	1.00	1.15	1.15
712	Small Office Building	TSF Gross	2.45	0%	1.00	1.00	2.45	2.45
715	Single Tennant Office Building	TSF Gross	1.71	0%	1.00	1.00	1.71	1.71
720	Medical/Dental Office	TSF Gross	3.46	0%	1.00	1.00	3.46	3.46
730	Government Office Building	TSF Gross	1.71	0%	1.00	1.00	1.71	1.71
732	Post Office	TSF Gross	11.21	0%	1.00	1.00	11.21	11.21
750	Office Park	TSF Gross	1.07	0%	1.00	1.00	1.07	1.07
770	Business Park	TSF Gross	0.42	50%	50%	1.00	0.21	0.21
RETAIL (LAND USES 800-899)								
812	Building Materials/Lumber	TSF Gross	2.06	15%	0.85	1.00	1.75	1.75
813	Free Standing Discount Superstore	TSF Gross	4.33	28%	0.72	1.00	3.12	3.12
814	Variety Store	TSF Gross	6.84	15%	0.85	1.00	5.81	5.81
816	Hardware/Paint Store	TSF Gross	2.68	26%	0.74	1.00	1.98	1.98
817	Nursery (Garden Center)	TSF Gross	6.94	15%	0.85	1.00	5.90	5.90
820	Shopping Center (Rate)	TSF Gross	3.81	34%	0.66	1.00	2.51	2.51
823	Factory Outlet Center	TSF Gross	2.29	10%	0.90	1.00	2.06	2.06
840	New Car Sales	TSF Gross	2.43	0%	1.00	1.00	2.43	2.43
841	Used Car Sales	TSF Gross	3.75	0%	1.00	1.00	3.75	3.75
842	RV Sales	TSF Gross	0.77	0%	1.00	1.00	0.77	0.77
843	Auto Parts Sales	TSF Gross	4.91	43%	57%	1.00	2.80	2.80
848	Tire Store	Service Bays	3.42	28%	72%	1.00	2.46	2.46
850	Supermarket (stand alone stores)	TSF Gross	9.24	36%	64%	1.00	5.91	5.91
851	Convenien. Mkt. (Open 24 hrs)	TSF Gross	49.11	61%	39%	1.00	19.15	19.15
853	Convenien. Mkt w/ Gas Pumps	TSF Gross	49.29	66%	34%	1.00	16.76	16.76
857	Discount Club	TSF Gross	4.18	10%	90%	1.00	3.76	3.76
862	Home Improvement Superstore	TSF Gross	2.33	48%	52%	1.00	1.21	1.21
863	Electronics Super Store	TSF Gross	4.26	40%	60%	1.00	2.56	2.56
867	Office Supply Superstore	TSF Gross	2.77	10%	90%	1.00	2.49	2.49
876	Apparel Store	TSF Gross	4.12	15%	85%	1.00	3.50	3.50
881	Pharmacy/Drugstore w/ Drive-thru	TSF Gross	10.29	49%	51%	1.00	5.25	5.25
882	Marijuana Dispensory	TSF Gross	21.83	0%	100%	1.00	21.83	21.83
890	Furniture Store	TSF Gross	0.52	53%	47%	1.00	0.24	0.24
899	Liquor Store	TSF Gross	16.37	10%	90%	1.00	14.73	14.73
SERVICES (LAND USES 900-999)								
911	Walk-in Bank	TSF Gross	12.13	25%	75%	1.00	9.10	9.10
912	Drive-in Bank	TSF Gross	20.45	47%	53%	1.00	10.84	10.84
931	Quality Restaurant (not national chain)	TSF Gross	7.8	44%	56%	1.00	4.37	4.37
932	High Turnover/Sit Down Rest	TSF Gross	9.77	43%	57%	1.00	5.57	5.57
933	Fast Food w/o Drive Thru	TSF Gross	28.34	40%	60%	1.00	17.00	17.00
934	Fast Food with Drive Thru	TSF Gross	32.67	50%	50%	1.00	16.34	16.34
936	Coffee/Donut Shop w/o Drive Thru	TSF Gross	36.31	40%	60%	1.00	21.79	21.79
936	Coffee/Donut Shop with Drive Thru	TSF Gross	43.38	50%	50%	1.00	21.69	21.69
941	Quick Lubrication Vehicle Shop	Service Bays	4.85	25%	75%	1.00	3.64	3.64
942	Auto Care Center	Service Bays	2.17	0%	100%	1.00	2.17	2.17
944	Service Station	Fuel Position	14.03	42%	58%	1.00	8.14	8.14
945	Serv.Station w/ Conven.Mkt	Fuel Position	13.99	56%	44%	1.00	6.16	6.16
947	Self Serve Car Wash	Wash Bays	5.54	20%	80%	1.00	4.43	4.43
948	Automated Car Wash	Wash Bays	77.5	30%	70%	1.00	54.25	54.25

* TSF: Thousand Square Feet
* DU: Dwelling Unit

It was assumed, based on City practices, that developers will typically pay for improvements on the outside twenty-six feet of right-of-way on each side of the road (one lane of asphalt plus curb, gutter, and sidewalk) while the City would be responsible for the remainder. Based upon the cost estimate it is anticipated that the cost to complete the projected roadway improvements over the next six years is $152,060,000 with $30,699,028 (20%) being eligible for impact fees. The current State impact fee law only allows the collection of impact fees for the projects that are anticipated to be built during the next six years, so these eligible costs will be spread among the SFE's that are projected for the next six years.

Table 3: FUTURE GROWTH IN ST. GEORGE CITY

ITE CODE	LAND USE	UNITS	DEMAND INDEX (single family equivalent)*	# OF UNITS FOR PERMITS ISSUED FOR PAST 3 YEARS**	AVERAGE # OF UNITS/YEAR	AVERAGE # OF SFE UNITS/YEAR
PORT & TERMINAL (Land Uses 000-099)						
030	Truck Terminal	Acres	1.87	**0**	0	0
INDUSTRIAL (Land Uses 100-199)						
110	General Light Industrial	TSF Gross	0.63	**67**	21	13
130	Industrial Park	TSF Gross	0.4	**5**	2	1
140	Manufacturing	TSF Gross	0.67	**140**	44	30
150	Warehousing	TSF Gross	0.19	**678**	214	41
151	Mini Warehouse	TSF Gross	0.17	**360**	114	19
160	Data Center	TSF Gross	0.09	**0**	0	0
170	Utility	TSF Gross	2.27	**0**	0	0
RESIDENTIAL (Land Uses 200-299)						
210	Single Family Homes	DU	1	3042	960	960
220	Multifamily Housing (Low-Rise)	DU	0.56	**134**	42	24
221	Multifamily Housing (Mid-Rise)	DU	0.44	**0**	0	0
225	Off-Campus Student Apartment	Bedrooms	0.25	**0**	0	0
231	Mid-Rise Residential 1st-Floor Commercia	DU	0.36	**0**	0	0
240	Mobile Home Park	DU	0.46	**13**	4	2
251	Senior Adult Housing-Detached	DU	0.3	**0**	0	0
252	Senior Adult Housing-Attached	DU	0.26	**0**	0	0
253	Congregate Care	DU	0.18	**0**	0	0
254	Assisted Living	Beds	0.26	**303**	96	25
260	Recreational Homes	DU	0.28	**0**	0	0
265	Timeshare	DU	0.63	**0**	0	0
270	Residential PUD	DU	0.69	**684**	216	149
LODGING (Land Uses 300-399)						
310	Hotel	Rooms	0.6	**342**	108	65
311	All Suites Hotel	Rooms	0.36	**0**	0	0
312	Business Hotel	Rooms	0.32	**0**	0	0
320	Motel	Rooms	0.38	**0**	0	0
330	Resort Hotel	Rooms	0.41	**0**	0	0
RECREATIONAL (Land Uses 400-499)						
416	Campground/RV Park	Camp Sites	0.21	**132**	42	9
430	Golf Course	Holes	2.91	**0**	0	0
437	Bowling Alley	Lanes	1.3	**0**	0	0
445	Multiplex Movie Theater	TSF Gross	4.91	**0**	0	0
490	Tennis Courts	Courts	4.21	**0**	0	0
492	Health/Fitness Club	TSF Gross	3.45	**21**	6	22
495	Recreational Community Center	TSF Gross	2.31	**26**	8	19

Table 3: FUTURE GROWTH IN ST. GEORGE CITY (continued)

ITE CODE	LAND USE	UNITS	DEMAND INDEX (single family equivalent)*	# OF UNITS FOR PERMITS ISSUED FOR PAST 3 YEARS**	AVERAGE # OF UNITS/YEAR	AVERAGE # OF SFE UNITS/YEAR
INSTITUTIONAL (Land Uses 500-599)						
520	Elementary School	Students	0.17	**0**	0	0
522	Middle/Juniour High School	Students	0.17	**0**	0	0
530	High School	Students	0.14	**0**	0	0
534	Private School (K-8)	Students	0.26	**0**	0	0
536	Private School (K-12)	Students	0.17	**0**	0	0
537	Charter Elementary School	Students	0.14	**0**	0	0
560	Church	TSF Gross	0.49	**107**	34	16
565	Daycare Center	TSF Gross	11.12	**0**	0	0
MEDICAL (Land Uses 600-699)						
610	Hospital	TSF Gross	0.97	**109**	35	34
620	Nursing Home	Beds	0.22	**0**	0	0
630	Clinic	TSF Gross	3.28	**0**	0	0
OFFICE (Land Uses 700-799)						
710	General Office	TSF Gross	1.15	**200**	63	73
712	Small Office Building	TSF Gross	2.45	**0**	0	0
715	Single Tennant Office Building	TSF Gross	1.71	**130**	41	70
720	Medical/Dental Office	TSF Gross	3.46	**132**	42	144
730	Government Office Building	TSF Gross	1.71	**0**	0	0
732	Post Office	TSF Gross	11.21	**0**	0	0
750	Office Park	TSF Gross	1.07	**0**	0	0
770	Business Park	TSF Gross	0.21	**0**	0	0
RETAIL (LAND USES 800-899)						
812	Building Materials/Lumber	TSF Gross	1.75	**6**	2	3
813	Free Standing Discount Superstore	TSF Gross	3.12	**0**	0	0
814	Variety Store	TSF Gross	5.81	**56**	18	102
816	Hardware/Paint Store	TSF Gross	1.98	**15**	5	9
817	Nursery (Garden Center)	TSF Gross	5.90	**0**	0	0
820	Shopping Center (Rate)	TSF Gross	2.51	**6**	2	4
823	Factory Outlet Center	TSF Gross	2.06	**0**	0	0
840	New Car Sales	TSF Gross	2.43	**19**	6	15
841	Used Car Sales	TSF Gross	3.75	**0**	0	0
842	RV Sales	TSF Gross	0.77	**0**	0	0
843	Auto Parts Sales	TSF Gross	2.80	**1**	0	1
848	Tire Store	Service Bays	2.46	**0**	0	0
850	Supermarket (stand alone stores)	TSF Gross	5.91	**3**	1	5
851	Convenien. Mkt. (Open 24 hrs)	TSF Gross	19.15	**0**	0	0
853	Convenien. Mkt w/ Gas Pumps	TSF Gross	16.76	**31**	10	164
857	Discount Club	TSF Gross	3.76	**0**	0	0
862	Home Improvement Superstore	TSF Gross	1.21	**0**	0	0
863	Electronics Super Store	TSF Gross	2.56	**0**	0	0
867	Office Supply Superstore	TSF Gross	2.49	**0**	0	0
876	Apparel Store	TSF Gross	3.50	**0**	0	0
881	Pharmacy/Drugstore w/ Drive-thru	TSF Gross	5.25	**2**	1	3
882	Marijuana Dispensory	TSF Gross	21.83	**0**	0	0
890	Furniture Store	TSF Gross	0.24	**52**	16	4
899	Liquor Store	TSF Gross	14.73	**0**	0	0
SERVICES (LAND USES 900-999)						
911	Walk-in Bank	TSF Gross	9.10	**0**	0	0
912	Drive-in Bank	TSF Gross	10.84	**9**	3	30
931	Quality Restaurant (not national chain)	TSF Gross	4.37	**10**	3	14
932	High Turnover/Sit Down Rest	TSF Gross	5.57	**15**	5	26
933	Fast Food w/o Drive Thru	TSF Gross	17.00	**0**	0	0
934	Fast Food with Drive Thru	TSF Gross	16.34	**31**	10	162
936	Coffee/Donut Shop w/o Drive Thru	TSF Gross	21.79	**0**	0	0
936	Coffee/Donut Shop with Drive Thru	TSF Gross	21.69	**0**	0	0
941	Quick Lubrication Vehicle Shop	Service Bays	3.64	**0**	0	0
942	Auto Care Center	Service Bays	2.17	**4**	1	3
944	Service Station	Fuel Position	8.14	**8**	3	21
945	Serv.Station w/ Conven.Mkt	Fuel Position	6.16	**12**	4	23
947	Self Serve Car Wash	Wash Bays	4.43	**0**	0	0
948	Automated Car Wash	Wash Bays	54.25	**2**	1	34
	Total # of Single Family Equivalent Units/Year					2,338
	Total # of Single Family Equivalent Units Over the Next 6 Years					14,030

** Demand Index obtained from ITE Trip Generation Manual, 10th Edition, 2020*

*** From Residential and Commercial permits from January 2017 to February 2020*
TSF Gross = Thousand Square Feet
DU = Dwelling Unit

Table 4: 0 to 6 Year Roadway Projects Cost Estimate

Project No.	Recommended Improvement	Estimated Construction Cost (2020)	% Impact Fee	Impact Fee Total
Phase I (0 to 6 years)				
5	3000 East	$ 2,034,000	20%	$ 406,800
14	Quarry Ridge Drive, Phase 1	$ 2,180,000	30%	$ 654,000
20	Commerce Drive	$ 3,321,000	30%	$ 996,300
22	Temple Trail Drive Phase 1	$ 1,147,000	10%	$ 114,700
3	3000 East	$ 3,045,000	50%	$ 1,552,950
1	700 South	$ 95,000	50%	$ 48,450
2	100 South	$ 127,000	50%	$ 64,770
9	Washington Parkway - environmental study	$ 500,000	10%	$ 51,000
13	Southern Hills Parkway Phase 1	$ 3,327,000	30%	$ 1,018,062
15	1450 South Extension over the Virgin River to Dixie Drive, environmental study	$ 400,000	20%	$ 81,600
24	White Dome Frontage Road	$ 3,624,000	10%	$ 369,648
25	1450 South	$ 1,462,000	10%	$ 149,124
35	Southern Parkway Frontage Road	$ 7,693,000	30%	$ 2,354,058
4	Airport Road	$ 2,692,000	10%	$ 274,584
11	Little Valley Road	$ 1,007,000	30%	$ 314,184
12	Plantations Drive, Phase I	$ 6,166,000	30%	$ 1,960,788
16	Wal-Mart / Home Depot	$ 2,487,000	10%	$ 263,622
10	Sunset Boulevard	$ 52,000	80%	$ 44,928
12.1	Plantations Drive, Phase III - construct new road thru Burgess Property to Dixie Drive	$ 3,016,000	30%	$ 977,184
21	I-15 - widen to 6 lanes between MP 6 & MP 8	$ 40,080,000	0%	$ -
23	Washington Parkway	$ 19,632,000	5%	$ 1,079,760
30	1450 South Extension over the Virgin River	$ 26,636,000	5%	$ 1,464,980
19	Plantations Drive, Phase II	$ 1,046,000	10%	$ 117,152
34	Crimson Ridge Road	$ 5,091,000	20%	$ 1,140,384
	Corridor Studies	$ 200,000	100%	$ 200,000
	Corridor Preservation/ROW Acquisition	$ 4,800,000	100%	$ 4,800,000
	Traffic Signals, Roundabouts & Intersection Improvements	$ 6,000,000	100%	$ 6,000,000
	Development Matching Projects	$ 1,200,000	100%	$ 1,200,000
	Traffic Control Center Upgrades	$ 600,000	100%	$ 600,000
	Access Management	$ 1,200,000	100%	$ 1,200,000
	Bike Lanes	$ 1,200,000	100%	$ 1,200,000
Phase I (0 to 6 years) Subtotal:		$ 152,060,000		$ 30,699,028

PROPOSED IMPACT FEE POLICY

In calculating the SFE impact fee, all 0 to 6 year impact fee eligible roadway costs are divided by the projected SFE units over the next six years. The fee is derived by using SFE's calculated by ITE rates and primary trip adjustments as stated in the ITE Trip Generation Manual.

Table 5 summarizes the result of this calculation:

Table 5: Recommended Impact Fee Cost

Impact Fee Alternatives	Impact Fee Eligible Amount	SFE's	Impact Fee
All Projects in the 0 to 6 year timeframe, divided by adjusted SFE rates	$30,699,028	14,030	$2,188

This fee represents the maximum SFE impact fee that can be charged. However, the actual fee assessment may be set at a lower rate, as determined by the City Council.

COMPARISON OF OLD FEES TO PROPOSED FEES

The prior St. George City Traffic Impact Fee Study recommended an impact fee of $905 per single family residential unit. This study proposes $2,188, an increase of 142% of the current fee.

EXAMPLE CALCULATION

The following equation is to be used in calculating the impact fee:

Number of Land Use Units * Impact Fee Cost per Unit (taken from Table 1: Proposed Land Use Impact Fees) = Assessed Transportation Impact Fee

For example, using Table 1, the transportation impact fee for a 3,890 sq. ft. office building would be calculated in the following way:

$$(3,890/1,000) * \$2,516 = \$9,787$$

CONCLUSION

St. George City presently assesses transportation impact fees from new development. This allows transportation related costs to be assessed to the new development based on the proportional impact. It is important that the assessed impact fees are regularly updated to insure that the required roadway improvement costs attributed to growth and development can be met.

The recommended SFE impact fee of $2,188 will fully fund the City portion of roadway projects attributed to growth. However, it is appropriate to charge impact fees to correspond to what is decided to be funded.

CERTIFICATION

According to state law, this report has been prepared in accordance with Utah Code Title 11 Chapter 36 titled "Impact Fees Act". This report relies upon the planning, engineering, land use and other source data provided by the City and their designees and all results and projections are founded upon this information.

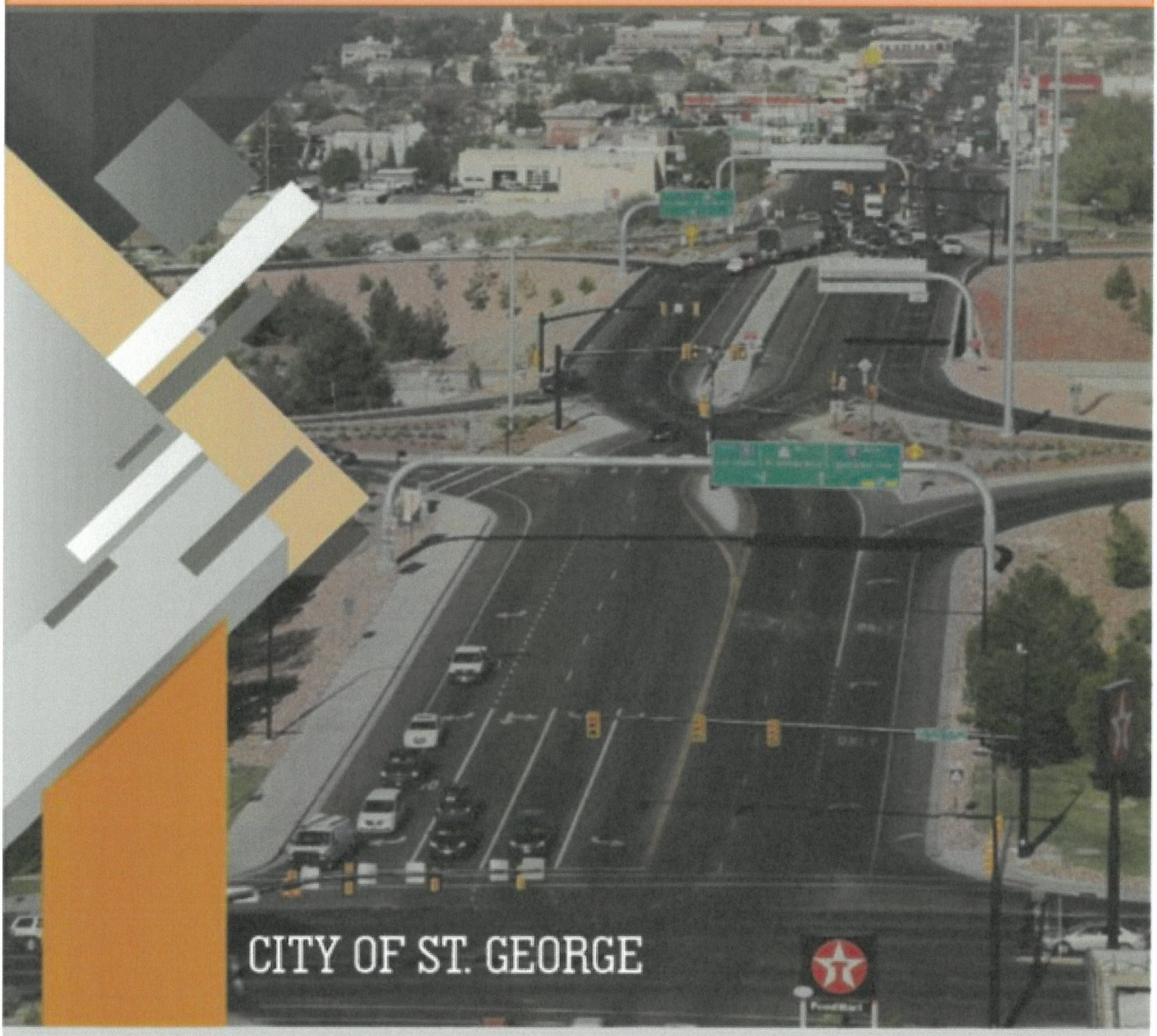
In accordance with Utah Code Annotate, 11-36a-306(1), Horrocks Engineers, certifies that this impact fee analysis:

1. Includes only the cost of public facilities that are:
    a. Allowed under the Impact Fees Act; and
    b. Actually incurred; or
    c. Are projected to be incurred or encumbered within six years of the day on which each impact fee is paid;
2. Does not include:
    a. Costs of operation and maintenance of public facilities
    b. Cost of qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service 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.

This certification is made with the following limitations:

1. All of the recommendations for implementing this IFA are followed in their entirety by the City.
2. If any portion of the IFA is modified or amended in any way, this certification is no longer valid.

All information presented and used in the creation of this IFA is assumed to be complete and correct, including any information received from the City of other outside sources.



Traffic Impact Fee Facilities Plan

October 2020

HORROCKS ENGINEERS

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Executive Summary

The purpose of an Impact Fee Facilities Plan (IFFP) is to identify public facilities that are needed to accommodate development and to determine which projects may be funded with impact fees. Utah law requires communities to prepare an IFFP prior to preparing an impact fee analysis and establishing an impact fee. According to Title 11, Chapter 36a-302 of the Utah Code, the IFFP is required to identify the following:

- *The existing level of service*
- *A proposed level of service*
- *Any excess capacity to accommodate future growth at the proposed level of service*
- *The demands placed on existing public facilities by new development*
- *A proposed means by which the local political subdivision will meet those demands*
- *A general consideration of all potential revenue sources to finance the impacts on system improvements*

Level of Service is defined as "the defined performance standard or unit of demand for each capital component of a public facility within a service area." The LOS of a roadway segment or intersection is used to determine if capacity improvements are necessary. The proposed level of service provides a standard for future roadway conditions to be evaluated against. This standard will determine whether or not a roadway will need improvements or not.

There are many ways to quantify the impact of new growth on the transportation system in the City of St. George. The method used in this study to assess the impact is to consider all the needed transportation improvements identified in the Transportation Improvement Plan (TIP) and then eliminate the cost of those improvements that are necessary to correct existing deficiencies. This study used a history of building permits and projected the number of Single Family Equivalent (SFE) permits to be expected in the next six years to determine what pressures will be placed on the transportation system due to development. Based upon the methodology described in this study it is projected that St. George City will experience approximately 14,030 SFE units of growth over the next six years, as shown in **Table 4**.

The projects required to maintain the desired level of service for the roadway network in 2050 were derived in the Master Traffic and Transportation Plan (MTP) and outlined in the TIP. These projects will need to be constructed at various times from the present through 2050. However, for the purposes of this IFFP, only projects that will be completed within the next six years will be considered. **Table 3** shows the projects that are forecasted to be needed in the next six years. This table includes all of the projects regardless of their eligibility for impact fee expenditure. The portion of the project, which is impact fee eligible is indicated in the **% Impact Fee** and **Impact Fee Total** columns. Level Of Service capacity of roadways and intersections has been calculated in the TMP and have indicated where capacity is needed in the future. By projecting the trips that will be generated by new development and dividing these trips by the impact fee eligible costs, the fee per trip can be calculated and is shown in the IFA. All possible revenue sources have been considered as a means of financing transportation capital improvements

needed as a result of new growth. Potential revenue sources that could be used to fund transportation needs as a result of new development is discussed.

Introduction

The purpose of an Impact Fee Facilities Plan (IFFP) is to identify public facilities that are needed to accommodate development and to determine which projects may be funded with impact fees. Utah law requires communities to prepare an IFFP prior to preparing an impact fee analysis and establishing an impact fee. According to Title 11, Chapter 36a-302 of the Utah Code, the IFFP is required to identify the following:

- *The existing level of service*
- *A proposed level of service*
- *Any excess capacity to accommodate future growth at the proposed level of service*
- *The demands placed on existing public facilities by new development*
- *A proposed means by which the local political subdivision will meet those demands*
- *A general consideration of all potential revenue sources to finance the impacts on system improvements*

This analysis incorporates the information provided in the Transportation Master Plan (TMP) regarding the upcoming demands on the existing infrastructure facilities that will require improvements to accommodate future growth and provide an acceptable LOS. Reference should be made to the TMP for additional information on the evaluation methodology and how the projections were made.

This section focuses on the improvements that are projected to be needed over the next ten years. Utah law requires that any impact fees collected for those improvements be spent within six years of being collected. Only capital improvements are included in this plan; all other maintenance and operation costs are assumed to be covered through the City's General Fund as tax revenues increase as a result of additional development.

Existing Level of Service (11-36a-302.1.a.i)

According to the Impact Fee Act, level of service is defined as "the defined performance standard or unit of demand for each capital component of a public facility within a service area." The LOS of a roadway segment or intersection is used to determine if capacity improvements are necessary. LOS is measured on a roadway segment using its daily traffic volume and at an intersection based on the average delay per vehicle. A standard of LOS C for roadways is the acceptable LOS for St. George City. This allows for speeds at or near free-flow speeds, but with less freedom to maneuver. Table 2, below, compares LOS with volume-to-capacity ratios (v/c), which is how the TMP reports LOS. At intersections, LOS C means that vehicles should not have to wait more than one cycle to proceed through the intersection and experience delays less than 35 seconds, according to the Highway Capacity Manual 2010. Table 2 below summarizes the maximum capacities used by St. George City.

Table 1: LOS C Capacity Criteria in Vehicles per Day

CMP Level of Service Criteria for Arterials[a] Based on Volume-to-Capacity Ratios

Level of Service	Description	V/C[b]
A	Free-flow conditions with unimpeded maneuverability. Stopped delay at signalized intersection is minimal.	0.00 to 0.60
B	Reasonably unimpeded operations with slightly restricted maneuverability. Stopped delays are not bothersome.	0.61 to 0.70
C	Stable operations with somewhat more restrictions in making mid-block lane changes than LOS B. Motorists will experience appreciable tension while driving.	0.71 to 0.80
D	Approaching unstable operations where small increases in volume produce substantial increases in delay and decreases in speed.	0.81 to 0.90
E	Operations with significant intersection approach delays and low average speeds.	0.91 to 1.00
F	Operations with extremely low speeds caused by intersection congestion, high delay, and adverse signal progression.	Greater Than 1.00

[a] For arterials that are multilane divided or undivided with some parking, a signalized intersection density of four to eight per mile, and moderate roadside development.
[b] Volume-to-capacity ratio.

≥ greater than or equal to.
< less than.

Source: Transportation Research Board, *Highway Capacity Manual, Special Report 209* (Washington, D.C., 1994).

Table 2: LOS C Capacity Criteria in Vehicles per Day

Lanes	Arterial	Collector
2	NA	5,000
3	11,500	10,000
5	26,500	NA
7	40,000	NA

Intersection Standards

The performance of intersections has a large effect on the Level of Service of the roadway network. In St. George, intersections can have no control, be stop controlled, roundabouts, traffic signals, or be controlled in another way. The level of service for each type of intersection is calculated in a different way. Intersection improvements will be necessary in order to maintain the desired level of service. Planning ahead, by coordinating the placement of intersection features, such as reserving rights-of-way for roundabouts, with roadway construction before the placement of the actual roundabout and other

elements, is a way to mitigate the costs of these intersection improvements. The costs of these intersection improvements has been included in the roadway network cost estimates included in Table 3.

The total costs for the full installation of these intersection improvements may be postponed depending on the specific needs of the intersections in the future based on on-going analysis.

Trips

The unit of demand for transportation impact is the pm peak hour trip. A pm peak hour trip is defined by the Institute of Transportation Engineers (ITE) as a single or one-directional vehicle movement to or from a site between the hours of 4pm and 6pm. The total traffic impact of a new development can be determined by the sum of the total number of trips generated by a development during the pm peak hour. This trip generation number or impact can be estimated for an individual development using the ITE Trip Generation Manual (currently 10th edition). This publication uses national data studied over decades to assist traffic engineering professionals to determine the likely impact of new development on transportation infrastructure.

There is a minor discrepancy in the way ITE calculates trips and the way trips or roadway volumes are calculated in the travel demand modelling used in the St. George MTP. This discrepancy is explained by the model roadway volumes and capacities being calculated using daily traffic volumes rather than trips on the roadway. Essentially this means that a travel demand model "trip" or unit of volume is counted once as a vehicle leaves home, travels on the road network and then arrives at work. This vehicle will only be counted as it travels on the roadway network. The ITE Trip Generation method uses driveway counts as its measure of a trip. Therefore a vehicle making the same journey will be counted once as it leaves home and once again as it arrives at work for a total of 2 trips. This can be rectified simply by adjusting the ITE Trip Generation rates by one half.

Table 3: 0 to 6-Year Roadway Project Cost Estimates

Project No.	Recommended Improvement	Estimated Construction Cost (2020)	% Impact Fee	Impact Fee Total
Phase I (0 to 6 years)				
5	3000 East	$ 2,034,000	20%	$ 406,800
14	Quarry Ridge Drive, Phase 1	$ 2,180,000	30%	$ 654,000
20	Commerce Drive	$ 3,321,000	30%	$ 996,300
22	Temple Trail Drive Phase 1	$ 1,147,000	10%	$ 114,700
3	3000 East	$ 3,045,000	50%	$ 1,552,950
1	700 South	$ 95,000	50%	$ 48,450
2	100 South	$ 127,000	50%	$ 64,770
9	Washington Parkway - environmental study	$ 500,000	10%	$ 51,000
13	Southern Hills Parkway Phase 1	$ 3,327,000	30%	$ 1,018,062
15	1450 South Extension over the Virgin River to Dixie Drive, environmental study	$ 400,000	20%	$ 81,600
24	White Dome Frontage Road	$ 3,624,000	10%	$ 369,648
25	1450 South	$ 1,462,000	10%	$ 149,124
35	Southern Parkway Frontage Road	$ 7,693,000	30%	$ 2,354,058
4	Airport Road	$ 2,692,000	10%	$ 274,584
11	Little Valley Road	$ 1,007,000	30%	$ 314,184
12	Plantations Drive, Phase I	$ 6,166,000	30%	$ 1,960,788
16	Wal-Mart / Home Depot	$ 2,487,000	10%	$ 263,622
10	Sunset Boulevard	$ 52,000	80%	$ 44,928
12.1	Plantations Drive, Phase III - construct new road thru Burgess Property to Dixie Drive	$ 3,016,000	30%	$ 977,184
21	I-15 - widen to 6 lanes between MP 6 & MP 8	$ 40,080,000	0%	$ -
23	Washington Parkway	$ 19,632,000	5%	$ 1,079,760
30	1450 South Extension over the Virgin River	$ 26,636,000	5%	$ 1,464,980
19	Plantations Drive, Phase II	$ 1,046,000	10%	$ 117,152
34	Crimson Ridge Road	$ 5,091,000	20%	$ 1,140,384
	Corridor Studies	$ 200,000	100%	$ 200,000
	Corridor Preservation/ROW Acquisition	$ 4,800,000	100%	$ 4,800,000
	Traffic Signals, Roundabouts & Intersection Improvements	$ 6,000,000	100%	$ 6,000,000
	Development Matching Projects	$ 1,200,000	100%	$ 1,200,000
	Traffic Control Center Upgrades	$ 600,000	100%	$ 600,000
	Access Management	$ 1,200,000	100%	$ 1,200,000
	Bike Lanes	$ 1,200,000	100%	$ 1,200,000
Phase I (0 to 6 years) Subtotal:		$ 152,060,000		$ 30,699,028

System Improvements and Project Improvements

As described in the TMP, there are four primary classifications of roads, including local streets, collectors, arterials, and expressways such as the future Northern Beltway. St. George City classifies street facilities based on the relative amounts of through and land-access service they provide. Local streets primarily serve land-access functions, while expressways are primarily meant for mobility. Each classification may have a variable amount of lanes, which is a function of the expected traffic volume and serves as the greatest measure of roadway capacity.

Improvements to collectors and arterials are considered "system improvements" according to the Utah Impact Fee Law, as these streets serve users from multiple developments. System improvements include anything from back of curb to back of curb, including curb and gutter, asphalt, road base, and sub-surface storm water drain utilities, as well as lighting, signing, and noise walls for collectors and arterials. These projects are eligible to be funded with impact fees and are included in this IFFP.

Proposed Level of Service (11-36a-302.1.a.ii)

The proposed level of service provides a standard for future roadway conditions to be evaluated against. This standard will determine whether or not a roadway will need improvements or not. According to the Utah Impact Fee Law, the proposed level of service may:

1. Diminish or equal the existing level of service
2. Exceed the existing level of service if, independent of the use of impact fees, the political subdivision or private entity provides, implements, and maintains the means to increase the existing level of service for existing demand within six years of the date on which new growth is charged for the proposed level of service; or
3. Establish a new public facility if, independent of the use of impact fees, the political subdivision or private entity provides, implements, and maintains the means to increase the existing level of service for existing demand within six years of the date on which new growth is charged for the proposed level of service.

This IFFP will not make any changes to the existing level of service, and LOS C will be the standard by which future growth will be evaluated.

Existing Capacity to Accommodate Future Growth (11-36a-302.1.a.iii)

There are many ways to quantify the impact of new growth on the transportation system in St. George City. The method used in this study to assess the impact is to consider all the needed transportation improvements identified in the Transportation Improvement Plan and then eliminate the cost of those improvements that are necessary to correct existing deficiencies.

To determine the amount of development that will occur in St. George City over the next six years the following steps were followed:

- Obtain the record of permits issued for various developments from January 2017 to December 2019. Impact fee studies will often establish a future growth trend based on the recent history of issued building permits. The past 3 years, the City has experienced a strong trend of building that has consisted of both residential and commercial growth activity such as retail, office space, and manufacturing. Much has been done in the downtown Main Street plaza with high density residential and commercial space. Building permit information is shown in Table 4.

- Determine the PM peak hour trip generation rate for each land-use type using the ITE TRIP GENERATION MANUAL 10th Edition.

- Adjust the trip generation rate in terms of heavy vehicles percentage (it was assumed that 1 heavy vehicle would be equivalent to 2 passenger vehicles based on information obtained from the Transportation Research Board's Highway Capacity Manual) and primary trips. The primary trip adjustment eliminates trips to various land-uses that are pass-by trips or diverted trips. A typical trip that is not adjusted with an adjustment factor assumes that a trip is made from one destination to another, with the intent that the destination is the reason for the trip. In an adjusted trip, an intermediate stop is made before the final destination is reached, such as a bank, post office, fast food, gasoline, etc. These adjustments are called pass-by trip adjustments and are represented in the primary trip adjustment. The primary trip adjustment also contains internal capture adjustments. When primary trip percentages are taken, they are generally derived from the Institute of Transportation Engineers' Trip Generation Handbook.

- To compare how vehicle trips from each land use impact the roadway system, each land use is measured next to a single family home to determine how many effective single family homes equate to a given type of land use. For instance, the trips generated by a 5,000 sq. ft. medical building is equivalent to the trips generated by 18 single family homes. Therefore, we calculate a demand index factor for each land use based on the single family unit as the base factor by dividing the effective trip end for the land-use by the single family unit effective trip end, which is 1.0 per single family home, according to the Trip Generation Handbook, cited above. This produces the Single Family Equivalent unit, or SFE unit. See Table 4.

- Multiply the demand index for each land-use by the number of permits issued on an average year for the land use. The sum of the SFE units for the various land-uses is then multiplied by six to determine the projected number of SFE units expected over the next six years in St. George City when calculating the cost for six years of projects, shown in Table 4.

Based upon the methodology used above it is projected that St. George City will experience approximately 14,030 SFE units of growth over the next six years.

Table 4: Future Growth in St. George City

ITE CODE	LAND USE	UNITS	DEMAND INDEX (single family equivalent)*	# OF UNITS FOR PERMITS ISSUED FOR PAST 3 YEARS**	AVERAGE # OF UNITS/YEAR	AVERAGE # OF SFE UNITS/YEAR
PORT & TERMINAL (Land Uses 000-099)						
030	Truck Terminal	Acres	1.87	**0**	0	0
INDUSTRIAL (Land Uses 100-199)						
110	General Light Industrial	TSF Gross	0.63	**67**	21	13
130	Industrial Park	TSF Gross	0.4	**5**	2	1
140	Manufacturing	TSF Gross	0.67	**140**	44	30
150	Warehousing	TSF Gross	0.19	**678**	214	41
151	Mini Warehouse	TSF Gross	0.17	**360**	114	19
160	Data Center	TSF Gross	0.09	**0**	0	0
170	Utility	TSF Gross	2.27	**0**	0	0
RESIDENTIAL (Land Uses 200-299)						
210	Single Family Homes	DU	1	3042	960	960
220	Multifamily Housing (Low-Rise)	DU	0.56	**134**	42	24
221	Multifamily Housing (Mid-Rise)	DU	0.44	**0**	0	0
225	Off-Campus Student Apartment	Bedrooms	0.25	**0**	0	0
231	Mid-Rise Residential 1st-Floor Commercia	DU	0.36	**0**	0	0
240	Mobile Home Park	DU	0.46	**13**	4	2
251	Senior Adult Housing-Detached	DU	0.3	**0**	0	0
252	Senior Adult Housing-Attached	DU	0.26	**0**	0	0
253	Congregate Care	DU	0.18	**0**	0	0
254	Assisted Living	Beds	0.26	**303**	96	25
260	Recreational Homes	DU	0.28	**0**	0	0
265	Timeshare	DU	0.63	**0**	0	0
270	Residential PUD	DU	0.69	**684**	216	149
LODGING (Land Uses 300-399)						
310	Hotel	Rooms	0.6	**342**	108	65
311	All Suites Hotel	Rooms	0.36	**0**	0	0
312	Business Hotel	Rooms	0.32	**0**	0	0
320	Motel	Rooms	0.38	**0**	0	0
330	Resort Hotel	Rooms	0.41	**0**	0	0
RECREATIONAL (Land Uses 400-499)						
416	Campground/RV Park	Camp Sites	0.21	**132**	42	9
430	Golf Course	Holes	2.91	**0**	0	0
437	Bowling Alley	Lanes	1.3	**0**	0	0
445	Multiplex Movie Theater	TSF Gross	4.91	**0**	0	0
490	Tennis Courts	Courts	4.21	**0**	0	0
492	Health/Fitness Club	TSF Gross	3.45	**21**	6	22
495	Recreational Community Center	TSF Gross	2.31	**26**	8	19

Table 4: Future Growth in St. George City (con't)

INSTITUTIONAL (Land Uses 500-599)						
520	Elementary School	Students	0.17	**0**	0	0
522	Middle/Juniour High School	Students	0.17	**0**	0	0
530	High School	Students	0.14	**0**	0	0
534	Private School (K-8)	Students	0.26	**0**	0	0
536	Private School (K-12)	Students	0.17	**0**	0	0
537	Charter Elementary School	Students	0.14	**0**	0	0
560	Church	TSF Gross	0.49	**107**	34	16
565	Daycare Center	TSF Gross	11.12	**0**	0	0
MEDICAL (Land Uses 600-699)						
610	Hospital	TSF	0.97	**109**	35	34
620	Nursing Home	Beds	0.22	**0**	0	0
630	Clinic	TSF	3.28	**0**	0	0
OFFICE (Land Uses 700-799)						
710	General Office	TSF Gross	1.15	**200**	63	73
712	Small Office Building	TSF Gross	2.45	**0**	0	0
715	Single Tennant Office Building	TSF Gross	1.71	**130**	41	70
720	Medical/Dental Office	TSF Gross	3.46	**132**	42	144
730	Government Office Building	TSF Gross	1.71	**0**	0	0
732	Post Office	TSF Gross	11.21	**0**	0	0
750	Office Park	TSF Gross	1.07	**0**	0	0
770	Business Park	TSF Gross	0.21	**0**	0	0
RETAIL (LAND USES 800-899)						
812	Building Materials/Lumber	TSF Gross	1.75	**6**	2	3
813	Free Standing Discount Superstore	TSF Gross	3.12	**0**	0	0
814	Variety Store	TSF Gross	5.81	**56**	18	102
816	Hardware/Paint Store	TSF Gross	1.98	**15**	5	9
817	Nursery (Garden Center)	TSF Gross	5.90	**0**	0	0
820	Shopping Center (Rate)	TSF Gross	2.51	**6**	2	4
823	Factory Outlet Center	TSF Gross	2.06	**0**	0	0
840	New Car Sales	TSF Gross	2.43	**19**	6	15
841	Used Car Sales	TSF Gross	3.75	**0**	0	0
842	RV Sales	TSF Gross	0.77	**0**	0	0
843	Auto Parts Sales	TSF Gross	2.80	**1**	0	1
848	Tire Store	Service Bays	2.46	**0**	0	0
850	Supermarket (stand alone stores)	TSF Gross	5.91	**3**	1	5
851	Convenien. Mkt. (Open 24 hrs)	TSF Gross	19.15	**0**	0	0
853	Convenien. Mkt w/ Gas Pumps	TSF Gross	16.76	**31**	10	164
857	Discount Club	TSF Gross	3.76	**0**	0	0
862	Home Improvement Superstore	TSF Gross	1.21	**0**	0	0
863	Electronics Super Store	TSF Gross	2.56	**0**	0	0
867	Office Supply Superstore	TSF Gross	2.49	**0**	0	0
876	Apparel Store	TSF Gross	3.50	**0**	0	0
881	Pharmacy/Drugstore w/ Drive-thru	TSF Gross	5.25	**2**	1	3
882	Marijuana Dispensory	TSF Gross	21.83	**0**	0	0
890	Furniture Store	TSF Gross	0.24	**52**	16	4
899	Liquor Store	TSF Gross	14.73	**0**	0	0
SERVICES (LAND USES 900-999)						
911	Walk-in Bank	TSF Gross	9.10	**0**	0	0
912	Drive-in Bank	TSF Gross	10.84	**9**	3	30
931	Quality Restaurant (not national chain)	TSF Gross	4.37	**10**	3	14
932	High Turnover/Sit Down Rest	TSF Gross	5.57	**15**	5	26
933	Fast Food w/o Drive Thru	TSF Gross	17.00	**0**	0	0
934	Fast Food with Drive Thru	TSF Gross	16.34	**31**	10	162
936	Coffee/Donut Shop w/o Drive Thru	TSF Gross	21.79	**0**	0	0
936	Coffee/Donut Shop with Drive Thru	TSF Gross	21.69	**0**	0	0
941	Quick Lubrication Vehicle Shop	Service Bays	3.64	**0**	0	0
942	Auto Care Center	Service Bays	2.17	**4**	1	3
944	Service Station	Fuel Position	8.14	**8**	3	21
945	Serv.Station w/ Conven.Mkt	Fuel Position	6.16	**12**	4	23
947	Self Serve Car Wash	Wash Bays	4.43	**0**	0	0
948	Automated Car Wash	Wash Bays	54.25	**2**	1	34
Total # of Single Family Equivalent Units/Year						2,338
Total # of Single Family Equivalent Units Over the Next 6 Years						14,030

** Demand Index obtained from ITE Trip Generation Manual, 10th Edition, 2020*

*** From Residential and Commercial permits from January 2017 to February 2020*

TSF Gross = Thousand Square Feet

DU = Dwelling Unit

Table 5: Single Family Equivalent (SFE) Demand Index

APPLICABLE ITE CODE	LAND USE	UNITS	ITE TRIPS ENDS PER UNIT (PM peak hour)	PASS-BY TRIPS %	PASS-BY TRIP ADJUSTMENT	PRIMARY TRIP ADJUSTMENT	EFFECTIVE TRIP ENDS PER UNIT	DEMAND INDEX (single family equivalent)
PORT & TERMINAL (Land Uses 000-099)								
030	Truck Terminal	Acres	1.87	0%	1.00	1.00	1.87	1.87
INDUSTRIAL (Land Uses 100-199)								
110	General Light Industrial	TSF Gross	0.63	0%	1.00	1.00	0.63	0.63
130	Industrial Park	TSF Gross	0.4	0%	1.00	1.00	0.40	0.40
140	Manufacturing	TSF Gross	0.67	0%	1.00	1.00	0.67	0.67
150	Warehousing	TSF Gross	0.19	0%	1.00	1.00	0.19	0.19
151	Mini Warehouse	TSF Gross	0.17	0%	1.00	1.00	0.17	0.17
160	Data Center	TSF Gross	0.09	0%	1.00	1.00	0.09	0.09
170	Utility	TSF Gross	2.27	0%	1.00	1.00	2.27	2.27
RESIDENTIAL (Land Uses 200-299)								
210	Single Family Homes	DU	1	0%	1.00	1.00	1.00	1.00
220	Multifamily Housing (Low-Rise)	DU	0.56	0%	1.00	1.00	0.56	0.56
221	Multifamily Housing (Mid-Rise)	DU	0.44	0%	1.00	1.00	0.44	0.44
225	Off-Campus Student Apartment	Bedrooms	0.25	0%	1.00	1.00	0.25	0.25
231	Mid-Rise Residential 1st-Floor Commercial	DU	0.36	0%	1.00	1.00	0.36	0.36
240	Mobile Home Park	DU	0.46	0%	1.00	1.00	0.46	0.46
251	Senior Adult Housing-Detached	DU	0.3	0%	1.00	1.00	0.30	0.30
252	Senior Adult Housing-Attached	DU	0.26	0%	1.00	1.00	0.26	0.26
253	Congregate Care	DU	0.18	0%	1.00	1.00	0.18	0.18
254	Assisted Living	Beds	0.26	0%	1.00	1.00	0.26	0.26
260	Recreational Homes	DU	0.28	0%	1.00	1.00	0.28	0.28
265	Timeshare	DU	0.63	0%	1.00	1.00	0.63	0.63
270	Residential PUD	DU	0.69	0%	1.00	1.00	0.69	0.69
LODGING (Land Uses 300-399)								
310	Hotel	Rooms	0.6	0%	1.00	1.00	0.60	0.60
311	All Suites Hotel	Rooms	0.36	0%	1.00	1.00	0.36	0.36
312	Business Hotel	Rooms	0.32	0%	1.00	1.00	0.32	0.32
320	Motel	Rooms	0.38	0%	1.00	1.00	0.38	0.38
330	Resort Hotel	Rooms	0.41	0%	1.00	1.00	0.41	0.41
RECREATIONAL (Land Uses 400-499)								
416	Campground/RV Park	Camp Sites	0.21	0%	1.00	1.00	0.21	0.21
430	Golf Course	Holes	2.91	0%	1.00	1.00	2.91	2.91
437	Bowling Alley	Lanes	1.3	0%	1.00	1.00	1.30	1.30
445	Multiplex Movie Theater	TSF Gross	4.91	0%	1.00	1.00	4.91	4.91
490	Tennis Courts	Courts	4.21	0%	1.00	1.00	4.21	4.21
492	Health/Fitness Club	TSF Gross	3.45	0%	1.00	1.00	3.45	3.45
495	Recreational Community Center	TSF Gross	2.31	0%	1.00	1.00	2.31	2.31
INSTITUTIONAL (Land Uses 500-599)								
520	Elementary School	Students	0.17	0%	1.00	1.00	0.17	0.17
522	Middle/Junior High School	Students	0.17	0%	1.00	1.00	0.17	0.17
530	High School	Students	0.14	0%	1.00	1.00	0.14	0.14
534	Private School (K-8)	Students	0.26	0%	1.00	1.00	0.26	0.26
536	Private School (K-12)	Students	0.17	0%	1.00	1.00	0.17	0.17
537	Charter Elementary School	Students	0.14	0%	1.00	1.00	0.14	0.14
560	Church	TSF Gross	0.49	0%	1.00	1.00	0.49	0.49
565	Daycare Center	TSF Gross	11.12	0%	1.00	1.00	11.12	11.12

APPLICABLE ITE CODE	LAND USE	UNITS	ITE TRIPS ENDS PER UNIT (PM peak hour)	PASS-BY TRIPS %	PASS-BY TRIP ADJUSTMENT	PRIMARY TRIP ADJUSTMENT	EFFECTIVE TRIP ENDS PER UNIT	DEMAND INDEX (single family equivalent)
MEDICAL (Land Uses 600-699)								
610	Hospital	TSF	0.97	0%	1.00	1.00	0.97	0.97
620	Nursing Home	Beds	0.22	0%	1.00	1.00	0.22	0.22
630	Clinic	TSF	3.28	0%	1.00	1.00	3.28	3.28
OFFICE (Land Uses 700-799)								
710	General Office	TSF Gross	1.15	0%	1.00	1.00	1.15	1.15
712	Small Office Building	TSF Gross	2.45	0%	1.00	1.00	2.45	2.45
715	Single Tennant Office Building	TSF Gross	1.71	0%	1.00	1.00	1.71	1.71
720	Medical/Dental Office	TSF Gross	3.46	0%	1.00	1.00	3.46	3.46
730	Government Office Building	TSF Gross	1.71	0%	1.00	1.00	1.71	1.71
732	Post Office	TSF Gross	11.21	0%	1.00	1.00	11.21	11.21
750	Office Park	TSF Gross	1.07	0%	1.00	1.00	1.07	1.07
770	Business Park	TSF Gross	0.42	50%	50%	1.00	0.21	0.21
RETAIL (LAND USES 800-899)								
812	Building Materials/Lumber	TSF Gross	2.06	15%	0.85	1.00	1.75	1.75
813	Free Standing Discount Superstore	TSF Gross	4.33	28%	0.72	1.00	3.12	3.12
814	Variety Store	TSF Gross	6.84	15%	0.85	1.00	5.81	5.81
816	Hardware/Paint Store	TSF Gross	2.68	26%	0.74	1.00	1.98	1.98
817	Nursery (Garden Center)	TSF Gross	6.94	15%	0.85	1.00	5.90	5.90
820	Shopping Center (Rate)	TSF Gross	3.81	34%	0.66	1.00	2.51	2.51
823	Factory Outlet Center	TSF Gross	2.29	10%	0.90	1.00	2.06	2.06
840	New Car Sales	TSF Gross	2.43	0%	1.00	1.00	2.43	2.43
841	Used Car Sales	TSF Gross	3.75	0%	1.00	1.00	3.75	3.75
842	RV Sales	TSF Gross	0.77	0%	1.00	1.00	0.77	0.77
843	Auto Parts Sales	TSF Gross	4.91	43%	57%	1.00	2.80	2.80
848	Tire Store	Service Bays	3.42	28%	72%	1.00	2.46	2.46
850	Supermarket (stand alone stores)	TSF Gross	9.24	36%	64%	1.00	5.91	5.91
851	Convenien. Mkt. (Open 24 hrs)	TSF Gross	49.11	61%	39%	1.00	19.15	19.15
853	Convenien. Mkt w/ Gas Pumps	TSF Gross	49.29	66%	34%	1.00	16.76	16.76
857	Discount Club	TSF Gross	4.18	10%	90%	1.00	3.76	3.76
862	Home Improvement Superstore	TSF Gross	2.33	48%	52%	1.00	1.21	1.21
863	Electronics Super Store	TSF Gross	4.26	40%	60%	1.00	2.56	2.56
867	Office Supply Superstore	TSF Gross	2.77	10%	90%	1.00	2.49	2.49
876	Apparel Store	TSF Gross	4.12	15%	85%	1.00	3.50	3.50
881	Pharmacy/Drugstore w/ Drive-thru	TSF Gross	10.29	49%	51%	1.00	5.25	5.25
882	Marijuana Dispensory	TSF Gross	21.83	0%	100%	1.00	21.83	21.83
890	Furniture Store	TSF Gross	0.52	53%	47%	1.00	0.24	0.24
899	Liquor Store	TSF Gross	16.37	10%	90%	1.00	14.73	14.73
SERVICES (LAND USES 900-999)								
911	Walk-in Bank	TSF Gross	12.13	25%	75%	1.00	9.10	9.10
912	Drive-in Bank	TSF Gross	20.45	47%	53%	1.00	10.84	10.84
931	Quality Restaurant (not national chain)	TSF Gross	7.8	44%	56%	1.00	4.37	4.37
932	High Turnover/Sit Down Rest	TSF Gross	9.77	43%	57%	1.00	5.57	5.57
933	Fast Food w/o Drive Thru	TSF Gross	28.34	40%	60%	1.00	17.00	17.00
934	Fast Food with Drive Thru	TSF Gross	32.67	50%	50%	1.00	16.34	16.34
936	Coffee/Donut Shop w/o Drive Thru	TSF Gross	36.31	40%	60%	1.00	21.79	21.79
935	Coffee/Donut Shop with Drive Thru	TSF Gross	43.38	50%	50%	1.00	21.69	21.69
941	Quick Lubrication Vehicle Shop	Service Bays	4.85	25%	75%	1.00	3.64	3.64
942	Auto Care Center	Service Bays	2.17	0%	100%	1.00	2.17	2.17
944	Service Station	Fuel Position	14.03	42%	58%	1.00	8.14	8.14
945	Serv.Station w/ Conven.Mkt	Fuel Position	13.99	56%	44%	1.00	6.16	6.16
947	Self Serve Car Wash	Wash Bays	5.54	20%	80%	1.00	4.43	4.43
948	Automated Car Wash	Wash Bays	77.5	30%	70%	1.00	54.25	54.25

* TSF: Thousand Square Feet
* DU: Dwelling Unit

Demands Placed on Facilities by New Development (11-36a-302.1.a.iv)

To meet the requirements of the Utah Impact Fee law to "identify demands placed upon existing public facilities by new development activity at the proposed level of service" and "identify the means by which the political subdivision or private entity will meet those growth demands", the following steps were completed:

1. **Existing Demand-** The traffic demand at the present time was estimated using traffic counts and population data.
2. **Existing Capacity**- The capacity of the current roadway network was estimated using the calculated LOS using volume to capacity ratios (v/c).
3. **Existing Deficiencies-** The deficiencies in the current network were identified by comparing the LOS of the roadways to the LOS standard.
4. **Future Demand-** The future demand on the network was estimated using development projections.
5. **Future Deficiencies-** The deficiencies in the future network were identified by comparing the calculated future LOS with the LOS standard through capacity maps.
6. **Recommended Improvements-** Recommendations that will help meet future demands were made.

These steps were the basis for the TIP and are detailed in the report.

Conversions of Growth and Development Projections to Trip Generations

The basis of the future travel demand was projected using the City of St. George's Water Department projections. The inputs to the model consist of socio-economic and land use data provided by the DMPO and the City. The outputs from the model include peak hour trips and daily traffic volumes on each of the roadways in the network.

Infrastructure Required to Meet Demands of New Development (11-36a-302.1.a.v)

6-Year Improvement Plan

The projects required to maintain the desired level of service for the roadway network in 2050 were outlined in the TMP. These projects will need to be constructed at various times from the present through 2050. However, for the purposes of this IFFP, only projects that will be completed within the next six years will be considered. Table 3 shows the projects that are forecasted to be needed in the next six years. This table includes all of the projects regardless of their eligibility for impact fee expenditure. The portion of the project, which is impact fee eligible is indicated in the % Impact Fee and Impact Fee Total columns.

Project Cost Attributable to Future Growth

Table 3 shows the project costs attributable to new growth as a percentage of the total project costs as defined in the previous section. Each project in Table 3 exists due to future growth but the cost that should be shared by new development through the assessment of impact fees varies depending on the owner of the road, the funding available, and the roadway classification. Where the project is likely to be completed using MPO funding, the St. George City impact fee eligible portion of the project is only the amount of money the City will need to find as their required "matching funds". Road widening projects are considered 100% impact fee eligible as any work on these roads will only be needed as

only be needed as volumes increase as a result of new development. Cost participation for city-owned roads are variable depending on the road classification and development yet to occur. The cost attributable to new growth and potentially impact fee eligible is defined as the portion of the roadway cross section in excess of the standards for a local road. This is based on the premise that a local road cross section serves the needs of the localized development which directly access the new road. It was assumed, based on City practices, that developers will typically pay for improvements on the outside twenty-six feet of right-of-way on each side of the road (one lane of asphalt plus curb, gutter, and sidewalk) while the City would be responsible for the remainder. This portion will be paid for by the individual development, which accesses the new road. Any improvements beyond the local street cross section would be considered a capacity improvement for the entire city as a whole and is therefore impact fee eligible. The City responsibility cost for each new road is determined as the percentage of the total project cost beyond a local street classification.

Project Cost Attributable to 6-Year Growth

Using the travel demand model mentioned previously it is possible to estimate the number of PM trips originating or terminating in St. George for the existing and future conditions. The difference between the future PM trips and the existing PM trips (the number of new trips in the City) becomes the denominator in the equation used to calculate the impact fee cost per PM peak hour trip for new development.

Level Of Service capacity of roadways and intersections has been calculated in the TMP and have indicated where capacity is needed in the future. By projecting the trips that will be generated by new development and dividing these trips by the impact fee eligible costs, the fee per trip can be calculated.

Proposed Means to Meet Demands of New Development (11-36a-302.2)

All possible revenue sources have been considered as a means of financing transportation capital improvements needed as a result of new growth. This section discusses the potential revenue sources that could be used to fund transportation needs as a result of new development.

Transportation routes often span multiple jurisdictions and provide regional significance to the transportation network. As a result, other government jurisdictions or agencies often help pay for such regional benefits. Those jurisdictions and agencies could include the Federal Government, the State Government or UDOT, or DMPO. The City will need to continue to partner and work with these other jurisdictions to ensure the adequate funds are available for the specific improvements necessary to maintain an acceptable LOS. The City will also need to partner with adjacent communities to ensure corridor continuity across jurisdictional boundaries (i.e., arterials connect with arterials; collectors connect with collectors, etc.).

Funding sources for transportation are essential if St. George City recommended improvements are to be built. The following paragraphs further describe the various transportation funding sources available to the City.

Federal Funding

Federal monies are available to cities and counties through the federal-aid program. UDOT administers the funds. In order to be eligible, a project must be listed on the five-year Statewide Transportation Improvement Program (STIP).

The Surface Transportation Program (STP) funds projects for any roadway with a functional classification of a collector street or higher as established on the Functional Classification Map. STP funds can be used for both rehabilitation and new construction. The Joint Highway Committee programs a portion of the STP funds for projects around the state in urban areas. Another portion of the STP funds can be used for projects in any area of the state at the discretion of the State Transportation Commission. Transportation Enhancement funds are allocated based on a competitive application process. The Transportation Enhancement Committee reviews the applications and then a portion of the application is passed to the State Transportation Commission. Transportation enhancements include 12 categories ranging from historic preservation, bicycle and pedestrian facilities and water runoff mitigation. Other federal and state trail funds are available from the Utah State Parks and Recreation Program.

The DMPO accepts applications for federal funds every November through local and regional government jurisdictions. The DMPO Technical Advisory Committee and Transportation Executive Committee select projects for funding annually. The selected projects form the Transportation Improvement Program (TIP). In order to receive funding, projects should include one or more of the following aspects:

- *Congestion Relief – spot improvement projects intended to improve Levels of Service and/or reduce average delay along those corridors identified in the Regional Transportation Plan as high congestion areas*
- *Mode Choice – projects improving the diversity and/or usefulness of travel modes other than single occupant vehicles*
- *Safety – improvements to vehicular, pedestrian, and bicyclist safety*

State/County Funding

The distribution of State Class B and C Program monies is established by State Legislation and is administered by the State Department of Transportation. Revenues for the program are derived from State fuel taxes, registration fees, drivers license fees, inspection fees, and transportation permits. Seventy-five percent of these funds are kept by UDOT for their construction and maintenance programs. The rest is made available to counties and cities.

Class B and C funds are allocated to each city and county by a formula based on population, centerline miles, and land area. Class B funds are given to counties, and Class C funds are given to cities and towns. Class B and C funds can be used for maintenance and construction projects; however, thirty percent of those funds must be used for construction or maintenance projects that exceed $40,000. The remainder of these funds can be used for matching federal funds or to pay the principal, interest, premiums, and reserves for issued bonds.

In 2005 the state senate passed a bill providing for the advance acquisition of right-of-way for highways of regional significance. This bill would enable cities in the county to better plan for future transportation needs by acquiring property to be used as future right-of-way before it is fully developed and becomes extremely difficult to acquire. UDOT holds on account the revenue generated by the local corridor preservation fund but the county is responsible to program and control monies. In order to qualify for preservation funds, the City must comply with the Corridor Preservation Process found at the flowing link ***www.udot.utah.gov/public/ucon***. Currently, St. George City uses Class C funding for their transportation projects.

City Funding

Some cities utilize general fund revenues for their transportation programs. Another option for transportation funding is the creation of special improvement districts. These districts are organized for the purpose of funding a single specific project that benefits an identifiable group of properties. Another source of funding used by cities includes revenue bonding for projects intended to benefit the entire community.

Private interests often provide resources for transportation improvements. Developers construct the local streets within subdivisions and often dedicate right-of-way and participate in the construction of

collector/arterial streets adjacent to their developments. Developers can also be considered a possible source of funds for projects through the use of impact fees. These fees are assessed as a result of the impacts a particular development will have on the surrounding roadway system, such as the need for traffic signals or street widening.

General fund revenues are typically reserved for operation and maintenance purposes as they relate to transportation. However, general funds could be used if available to fund the expansion or introduction of specific services. Providing a line item in the City budgeted general funds to address roadway improvements, which are not impact fee eligible is a recommended practice to fund transportation projects should other funding options fall short of the needed amount.

General obligation bonds are debt paid for or backed by the City's taxing power. In general, facilities paid for through this revenue stream are in high demand amongst the community. Typically, general obligation bonds are not used to fund facilities that are needed as a result of new growth because existing residents would be paying for the impacts of new growth. As a result, general obligation bonds are not considered a fair means of financing future facilities needed as a result of new growth.

Certain areas might require different needs or methods of funding other than traditional revenue sources. A Special Assessment Area (SAA) can be created for infrastructure needs that benefit or encompass specific areas of the City. Creation of the SAA may be initiated by the municipality by a resolution declaring the public health, convenience, and necessity requiring the creation of a SAA. The boundaries and services provided by the district must be specified and a public hearing held prior to creation of the SAA. Once the SAA is created, funding can be obtained from tax levies, bonds, and fees when approved by the majority of the qualified electors of the SAA. These funding mechanisms allow the costs to be spread out over time. Through the SAA, tax levies and bonding can apply to specific areas in the City needing to benefit from the improvements.

Interfund Loans

Since infrastructure must generally be built ahead of growth, it must sometimes be funded before expected impact fees are collected. Bonds are the solution to this problem in some cases. In other cases, funds from existing user rate revenue will be loaned to the impact fee fund to complete initial construction of the project. As impact fees are received, they will be reimbursed. Consideration of these loans will be included in the impact fee analysis and should be considered in subsequent accounting of impact fee expenditures.

Developer Dedications and Exactions

Developer dedications and exactions can both be credited against the developer's impact fee analysis. If the value of the developer dedications and/or extractions are less than the developer's impact fee liability, the developer will owe the balance of the liability to the city. If the dedications and/or extractions of the developer are greater than the impact fee liability, the city must reimburse the developer the difference.

Developer Impact Fees

Impact fees are a way for a community to obtain funds to assist in the construction of infrastructure improvements resulting from and needed to serve new growth. The premise behind impact fees is that

if no new development occurred, the existing infrastructure would be adequate. Therefore, new developments should pay for the portion of required improvements that result from new growth. Impact fees are assessed for many types of infrastructures and facilities that are provided by a community, such as roadway facilities. According to state law, impact fees can only be used to fund growth related system improvements.

Necessity of Improvements to Maintain Level of Service

According to State statue, impact fees must only be used to fund projects that will serve needs caused by future development. They are not to be used to address present deficiencies. Only projects that address future needs are included in this IFFP. This ensures a fair fee since developers will not be expected to address present deficiencies.

Impact Fee Certification (11-36a-306)

According to state law, this report has been prepared in accordance with Utah Code Title 11 Chapter 36 titled "Impact Fees Act". This report relies upon the planning, engineering, land use and other source data provided by the City and their designees and all results and projections are founded upon this information.

In accordance with Utah Code Annotate, 11-36a-306(1), Horrocks Engineers, certifies that this impact fee facilities plan:

1. Includes only the cost of public facilities that are:
    a. Allowed under the Impact Fees Act; and
    b. Actually incurred; or
    c. Are projected to be incurred or encumbered within six years of the day on which each impact fee is paid;
2. Does not include:
    a. Costs of operation and maintenance of public facilities
    b. Cost of qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service 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.

This certification is made with the following limitations:

1. All of the recommendations for implementing this IFFP of IFA are followed in their entirety by the City.
2. If any portion of the IFFP is modified or amended in any way, this certification is no longer valid.

All information presented and used in the creation of this IFFP is assumed to be complete and correct, including any information received from the City of other outside sources.

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

PURSUANT TO 11-36A, UTAH CODE

ENERGY FACILITIES

NOVEMBER 2020

CITY OF ST. GEORGE, UTAH

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IMPACT FEE FACILITIES PLAN & ANALYSIS CERTIFICATION

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.

LEWIS YOUNG ROBERTSON & BURNINGHAM, INC.

SECTION 1: EXECUTIVE SUMMARY

The purpose of the Municipal Power 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 assist the City of St. George (the "City") in financing and constructing necessary capital improvements for future growth. This document will address the future infrastructure needed to serve the City through the next ten years, as well as the appropriate impact fees the City may charge to new growth to maintain the level of service ("LOS"). The City provided much of the information utilized in this report.

- **Impact Fee Service Area:** The municipal power service area ("Service Area") covers a portion of the City and is defined in **SECTION 3**. The remaining portion of the City is served by the Dixie Power Cooperative. The City's electric system serves a majority of the commercial businesses within St. George.
- **Demand Analysis:** The proposed impact fees are based upon the costs of capital infrastructure that will be necessary to serve new development. A total of 26,330 additional kilowatts ("kWs") of demand will be generated within the current Service Area. See **SECTION 3** for details regarding growth in kW and equivalent residential units ("ERUs").
- **Level of Service:** The power LOS, as defined by the City of St. George Energy Services Department, is based on the diversified kW for residential and non-residential development. Diversified kW is defined as the summed individual peak demand or coincidental peak, which is the average peak demand of a sample of customers. **SECTION 3** provides the diversified kW by service description. New facilities are designed to maintain the diversified kW LOS.
- **Excess Capacity:** The City does not have excess capacity to generate energy during peak periods. Short-term market purchases are required to supply energy during peak periods. There is excess capacity within the Green Valley transmission line and substation that is available for growth, the actual cost of which is included in the impact fee calculation.[1]
- **Capital Facilities Analysis:** The costs of future system improvements related to growth and funded with impact fees are estimated at $20 million. This does not include the buy-in component, the impact fee fund balance or professional expense.
- **Funding of Future Facilities:** At the request of the City, no financing costs are included in this analysis and thus assumes all future facilities will be funded on a cash basis.

PROPOSED POWER IMPACT FEE

PLAN BASED (FEE BASED ON DEFINED CAPITAL IMPROVEMENT PLAN)

Impact fees can be calculated using a specific set of costs specified for future development. The improvements are identified in the IFFP, Capital Facilities Plan ("CFP") or Capital Improvement Plan ("CIP") as growth related projects. The total project costs are divided by the total demand units the projects are designed to serve. Under this methodology, it is important to identify the existing LOS and determine any excess capacity in existing facilities that could serve new growth.

POWER IMPACT FEE CALCULATION

Based on the growth-related projects, as well as the applicable buy-in fee, the cost per new kW is shown in **TABLE 1.1**. The fee per kW is then applied to the general usage statistics for residential and non-residential users, as shown in **TABLE 1.2** through **1.3.**

TABLE 1.1: ILLUSTRATION OF COST PER NEW KW

POWER PROJECTS	TOTAL COSTS WITHIN IFFP HORIZON	AVERAGE % GROWTH RELATED & IMPACT FEE FUNDED	GROWTH RELATED & IMPACT FEE FUNDED COSTS	GROWTH RELATED KW	COST PER NEW KW
Green Valley Buy-In[1]	$11,680,125	35%	$4,100,502	26,330	$156
Future Generation Additions	$7,420,293	-	-	26,330	-
Future Distribution and Transmission	$31,164,141	64%	$19,996,843	26,330	$759
Professional Expense[2]	$9,675	100%	$9,675	26,330	$1
Total[3]	**$50,274,234**		**$24,107,021**		**$916**

[1] The Green Valley transmission and substation were built to serve the west side load and provide backup to the Skyline and River substations. Due to economies of scale and transformer size, a 75 MW transformer was installed with a future bay and additional transformer pad to the west side. The current remaining capacity of these facilities is 32,868 kW and a value of $5,118,768. The capacity of this project will serve beyond the 10-year span of this study; therefore, the costs are apportioned accordingly.

[2] 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 these expenses.

[3] As of June 30, 2019 the electric utility impact fee fund balance was negative $2,056,553. The negative balance is not included in this analysis.

TABLE 1.2: ILLUSTRATION OF RESIDENTIAL IMPACT FEE

SERVICE DESCRIPTION	EST. KW	COST PER KW	PROPOSED IMPACT FEE	2014 IMPACT FEE	% CHANGE	$ CHANGE
100 Amp - 240/120 V	4.25	$916	$3,893	$3,646	7%	$247
200 Amp - 240/120 V	5.25	$916	$4,809	$4,504	7%	$305
400 Amp - 240/120 V	9.00	$916	$8,244	$7,721	7%	$523

TABLE 1.3: ILLUSTRATION OF NON-RESIDENTIAL (COMMERCIAL) IMPACT FEE

SERVICE DESCRIPTION	PANEL RATING	EST. AVERAGE DIVERSIFIED KVA*	ESTIMATED DIVERSIFIED KW	COST PER KW	PROPOSED IMPACT FEE	2014 IMPACT FEE	% CHANGE	$ CHANGE
Single Phase Service								
240/120 V	200	7.92	7.13	$916.00	$6,529	$6,115	7%	$414
	400	15.84	14.26	$916.00	$13,058	$12,230	7%	$828
Three Phase Service								
208Y/120 V	200	15.85	14.27	$916.00	$13,068	$12,239	7%	$829
	400	31.70	28.53	$916.00	$26,136	$24,479	7%	$1,657
	800	63.41	57.07	$916.00	$52,273	$48,958	7%	$3,315
	1,200	95.11	85.60	$916.00	$78,409	$73,437	7%	$4,972
	2,000	158.52	142.67	$916.00	$130,682	$122,395	7%	$8,287
480Y/277 V	200	36.58	32.92	$916.00	$30,157	$28,245	7%	$1,912
	400	73.16	65.85	$916.00	$60,315	$56,490	7%	$3,825
	800	146.32	131.69	$916.00	$120,629	$112,980	7%	$7,649
	1,200	219.49	197.54	$916.00	$180,944	$169,469	7%	$11,475
	2,000	365.81	329.23	$916.00	$301,573	$282,449	7%	$19,124

*Diversified kVA is defined as the summed individual peak demand or coincidental peak, which is the average peak demand of a sample of customers.

NON-STANDARD IMPACT FEES

The proposed fees are based upon growth in kWs. 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.[4] A developer may submit studies and data for a particular development and request an adjustment. 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.

Estimated kW Diversified Usage * $916

[4] UC 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 IFA[5]. 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, as well as the future improvements required to maintain the existing LOS. The purpose of the IFA is 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. The following elements are important considerations when completing an IFA.

FIGURE 2.1: IMPACT FEE METHODOLOGY

DEMAND ANALYSIS

The demand analysis serves as the foundation for this analysis. 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 system facilities.

LEVEL OF SERVICE ANALYSIS

The demand placed upon existing public facilities by existing development is known as the existing LOS. Through the inventory of existing facilities, combined with the growth assumptions, this analysis identifies the LOS which is provided to a community's existing residents and ensures that future facilities maintain these standards.

EXISTING FACILITY INVENTORY

In order to quantify the demands placed upon existing public facilities by new development activity, the IFFP provides an inventory of the City's existing system facilities. The inventory does not include project improvements. 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. Any excess capacity identified within existing facilities can be apportioned to future 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.

FINANCING STRATEGY

This analysis must also include a consideration of all revenue sources, including impact fees, debt issuance, alternative funding sources, and the dedication (aka donations) of system improvements, which may be used to finance system improvements.[6] 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.[7]

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 of the costs borne in the past and to be borne in the future (UCA 11-36a-302).

SYSTEM VS. PROJECT IMPROVEMENTS

System improvements are defined as existing and future public facilities designed and intended to provide

[5] UC 11-36a-301,302,303,304
[6] 11-36a-302(2)
[7] 11-36a-302(3)

services to service areas within the community at large.[8] 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.[9] References to facilities, amenities, projects, etc. within this analysis are referring to System Improvements unless otherwise stated.

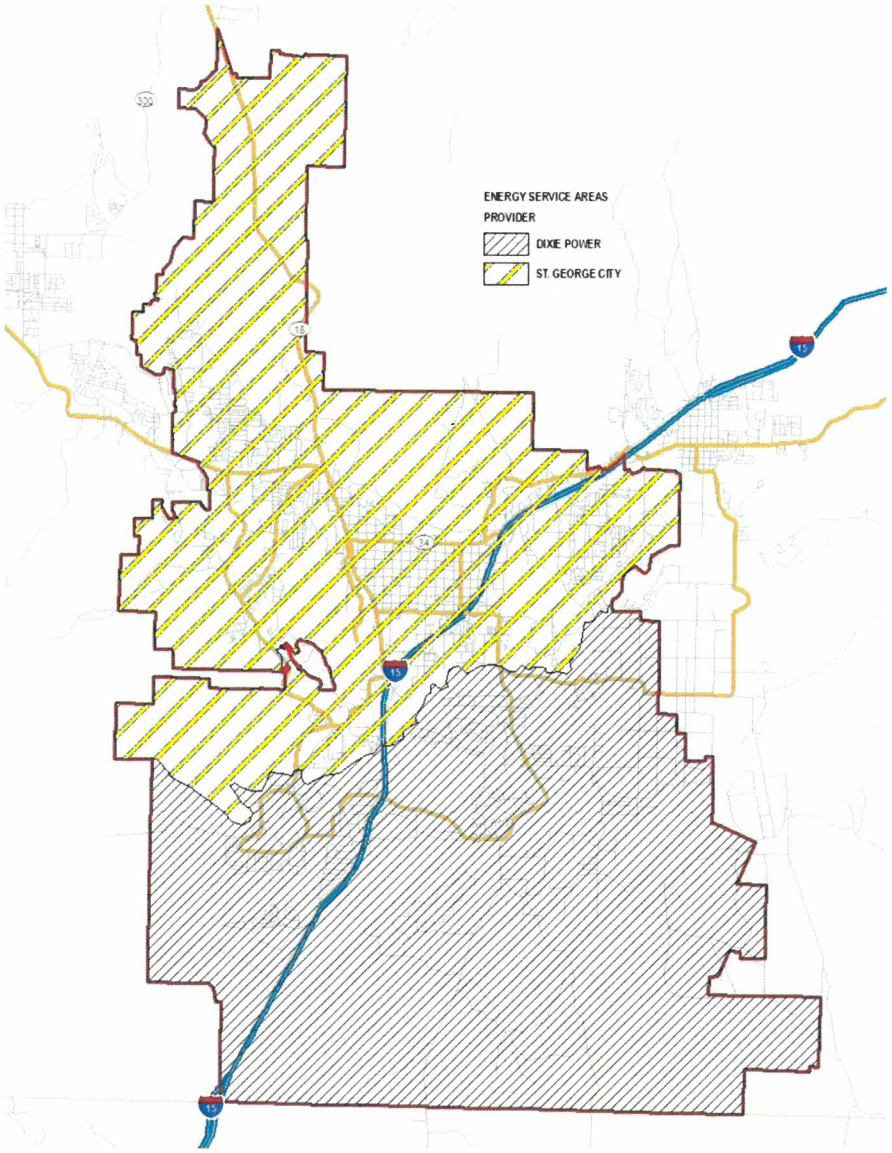
[8] 11-36a-102(20)
[9] 11-36a102(13)

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.[10] The City's electrical system serves properties located north of the Virgin River and is outlined in **FIGURE 3.1**. A portion of the City is served by the Dixie Power Cooperative. The City's electric system serves approximately 85.4 percent of residential customers and the majority of the commercial businesses within the City of St. George. The City of St. George Energy Service Department has determined the recommended capital projects that will maintain the established LOS. All information regarding the existing power LOS, projected system load growth, future power capital projects, and proposed power impact fee relates to the City of St. George Municipal Power and the area served by the City of St. George Municipal Energy Services Department.

FIGURE 3.1: ST. GEORGE MUNICIPAL POWER SERVICE AREA



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

DEMAND UNITS

The City of St. George Municipal Power system is in need of expansion to perpetuate the LOS that the City has historically maintained as new growth and development activity continue to occur within the area served by the City of St. George Municipal Energy Services Department. Although the City-wide growth is anticipated to increase at an average annual rate of approximately 3.6 percent over the next ten years, a portion of the growth is anticipated to occur outside of the City of St. George Municipal Energy Services Department's Service Area and therefore the growth in kW reflects a lower annual percent change (See **TABLES 3.1** and **3.2**).

DEMAND UNITS

To accurately determine the portion of the costs of future capital infrastructure that should be included in the impact fees, this analysis projects the future growth in kilowatts (kW) and ERUs. The demand unit used in the calculation of the power impact fees is the estimated summer peak load, or power capacity, measured kW. The summer peak values are used because the City's power system is required by the Federal Energy Regulatory Commission (FERC) and the North American Electric Reliability Corporation (NERC) to meet national reliability standards, which dictate the required design load levels. The City of St. George Energy Services Department has projected the existing and future kWs within the Service Area through 2029. **TABLE 3.2** summarizes the projected annual increase in kWs within the Service Area.

TABLE 3.1: PROJECTED GROWTH IN POPULATION (CITY-WIDE)

YEAR	POPULATION	% CHANGE IN POPULATION
2019	100,822	
2020	103,851	3.00%
2021	107,600	3.61%
2022	111,484	3.61%
2023	115,509	3.61%
2024	119,679	3.61%
2025	123,999	3.61%
2026	128,475	3.61%
2027	133,113	3.61%
2028	137,919	3.61%
2029	142,898	3.61%
10-Year Demand	**42,076**	

TABLE 3.2: PROJECTED GROWTH IN KILOWATTS IN SERVICE AREA

YEAR	LOAD	CHANGE IN KW	PERCENT CHANGE IN KW
2019	191,020	-	-
2020	193,500	2,480	1.30%
2021	196,020	2,520	1.30%
2022	198,560	2,540	1.30%
2023	201,150	2,590	1.31%
2024	203,760	2,610	1.30%
2025	206,410	2,650	1.30%
2026	209,090	2,680	1.30%
2027	211,810	2,720	1.30%
2028	214,560	2,750	1.30%
2029	217,350	2,790	1.30%
10-Year Demand		**26,330**	**1.30%**

It is anticipated that the growth will impact the City's existing services. Power facilities will need to be expanded in order to maintain the existing LOS. The IFFP, in conjunction with the impact fee analysis, are designed to accurately assess the true impact of a particular user upon the City's infrastructure.

LEVEL OF SERVICE STANDARDS

Impact fees cannot be used to finance an increase in the LOS to current or future users of capital improvements. Therefore, it is important to identify the power LOS within the Service Area to ensure that the new capacities of projects financed through impact fees do not exceed the established standard. The power LOS, as defined by the City of St. George Energy Services Department, is based on the diversified kW for residential and non-residential development. Diversified kW is defined as the summed individual peak demand or coincidental peak, which is the average peak demand of a sample of customers. The tables below illustrate the diversified kW by service description. New facilities are designed to maintain the diversified kW LOS. A comparison of estimated demand for residential customers confirms the adopted LOS shown below. According to the City, residential classes account for approximately 140,984 kW and based upon 25,214 residential customers, which produces an average kW load of 5.59 per residential account.

TABLE 3.3: RESIDENTIAL LEVEL OF SERVICE

SERVICE DESCRIPTION	EST. KW
100 Amp - 240/120 V	4.25
200 Amp - 240/120 V	5.25
400 Amp - 240/120 V	9.00

TABLE 3.4: NON-RESIDENTIAL LEVEL OF SERVICE

SERVICE DESCRIPTION	PANEL RATING	100% PANEL KVA	AVG PANEL LOADING	AVG PEAK DEMAND @ PANEL (KVA)	EST. CUSTOMER CLASS DIVERSITY	EST. AVERAGE DIVERSIFIED KVA	ESTIMATED DIVERSIFIED KW (1)
Single Phase Service							
240/120 V	200	48	30%	14.40	55%	7.92	7.13
	400	96	30%	28.80	55%	15.84	14.26
Three Phase Service							
208Y/120 V	200	72	40%	28.82	55%	15.85	14.27
	400	144	40%	57.64	55%	31.70	28.53
	800	288	40%	115.29	55%	63.41	57.07
	1,200	432	40%	172.93	55%	95.11	85.60
	2,000	721	40%	288.21	55%	158.52	142.67
480Y/277 V	200	166	40%	66.51	55%	36.58	32.92
	400	333	40%	133.02	55%	73.16	65.85
	800	665	40%	266.04	55%	146.32	131.69
	1,200	998	40%	399.06	55%	219.49	197.54
	2,000	1,663	40%	665.11	55%	365.81	329.23

(1) Based on a Power Factor of 90%

SECTION 4: EXISTING FACILTIES INVENTORY

This section is intended to summarize the existing public facilities related to power services. Generally, existing assets are separated into two areas: (1) Power Resources (aka Generation); and, (2) City Transmission and Distribution System Improvements.

VALUE OF EXISTING POWER INFRASTRUCTURE

Based upon the City's 2018 electric utility depreciation schedule, the existing power system is valued at approximately $162 million, based on original cost, as shown in **TABLE 4.1**.

TABLE 4.1: VALUE OF EXISTING POWER SYSTEM

ITEM	ORIGINAL COST
Building	$85,640,858
Equipment	$8,100,546
Improvements	$10,374,415
Land	$351,726
System	$57,809,597
Total	**$162,277,141**

EXCESS CAPACITY

POWER RESOURCES

Careful management and planning of the City's power energy resources is critical to maintain a reliable electrical system and keep costs to a minimum. The cost of the power that the City must either purchase or generate is the largest component of the Energy Services budget. **TABLE 4.2** illustrates the existing resources available to the City, including market purchases.

TABLE 4.2: EXISTING POWER RESOURCES

GENERATION TYPE	SOURCE	2018 MW
Coal	Deseret Generation and Transmission Base	50
Hydro	Western Area Power Authority - Colorado River Storage Project (CRSP)	15
Hydro	Jordanelle Hydro	4
Natural Gas	City of St. George Millcreek #1	40
Natural Gas	City of St. George Millcreek #2	40
Renewables	Solar - City of St. George SunSmart Program/Power Purchase Agreement (PPA)	4
Market	Western Area Power Authority Spot Market	5
Sub Total	**Before Real Time Market**	**158**
	Real Time	**33**
Grand Total	**Total after Market**	**191**
	2018 Peak Load	**191**
	Excess Capacity	**-**

The shape of an electrical system's load indicates the type of resources that are needed to supply the load. The City's system is summer peaking, which is caused by the heavy air conditioning load during hot summer days. This indicates that there is excess capacity in the system during the winter months but no excess capacity in the summer months. In fact, the City often has to go to the market to purchase power when demand peaks at a level higher than City sources are able to provide. In 2005 and 2008 the City added an additional 77 MW of capacity with Millcreek #1 and Millcreek #2. The City has historically followed a policy to purchase up to 25MW from the market, at which point an additional generation resource is constructed. Based on the 2018 Peak Load and available capacity, it is anticipated that additional generation resources will be required in the IFFP planning timeframe. Additional Sources include the Solar SunSmart Program Power Purchase Agreement and other Power Purchase Agreements. The City may need to construct additional power generation facilities near 2028 or 2029. Due to the uncertainty related to the timing of these facilities, they have been excluded from this analysis. The City should periodically review the IFFP and IFA to determine if additional generation resources will be needed.

CITY TRANSMISSION & DISTRIBUTION FACILITIES

The City maintains a network of transmission and distribution infrastructure. While segments of this infrastructure may have excess capacity, it is difficult to quantify the excess capacity within individual transmission and distribution lines or segments. The system operates as a whole and provides for reliability through a level of redundancy which allows one area to back up another in the event of an outage. The Green Valley Transmission Line and Substation is one exception and has been included as a buy-in component in the impact fee. The cost of the Green Valley infrastructure was approximately $11,680,125 with a total capacity of 75 MW. In constructing substations and transmission lines, it is not practical to build only to meet current growth/load due to economies of scale. Thus, the Green Valley system was built at an optimal level related to cost. The substation only has one transformer with room to expand with the addition of a second transformer. The Green Valley area is an identified growth area and will be fed out of the new Green Valley system.

MANNER OF FINANCING EXISTING INFRASTRUCTURE

St. George Energy Services has funded its existing capital infrastructure through a combination of different revenue sources, including user fee revenues, service fees, impact fees, and bond issues. Therefore, the City's existing LOS standards have been funded by the City's existing residents. The City anticipates that it may receive some donations from new development to fund a specific improvement (project improvement), thus the cost of this improvement has been removed from the impact fees. Also, the City does not foresee receiving revenues from other entities (i.e. grants, federal or state funds, other contributions, etc.) to fund new facilities.

SECTION 5: CAPITAL FACILITY ANALYSIS

The City of St. George Energy Services Department has provided capital project and engineering data, planning analysis, and other information related to future capital needs. The accuracy and correctness of this plan is contingent upon the accuracy of the data and assumptions. Any deviations or changes in the assumptions due to changes in the economy or other relevant information used by the City for this study may cause this plan to be inaccurate and may require modifications.

SUMMARY OF FUTURE CAPITAL PROJECTS

Based upon the projected increase in kWs and demand on the system, the City has identified the future power capital projects that must be constructed over the next ten years to serve future development. The costs of these projects are summarized in **TABLE 5.1** and detailed in **TABLE 5.3** and **5.4**. The percentage of the total cost that is attributable to growth is based upon information provided by the City's Energy Services Department. All of the projects listed in the table below have a life expectancy of more than 10 years. In addition, projects listed as "additions" or "improvements" only include the cost of added capacity to serve new growth and does not include the cost to replace the existing improvement.

TABLE 5.1: SUMMARY OF FUTURE POWER CAPITAL PROJECT COSTS

SERVICE	COST OF FUTURE CAPITAL PROJECTS *	AVERAGE % OF TOTAL COSTS TO GROWTH & IMPACT FEES**	TOTAL COSTS TO GROWTH & IMPACT FEE
Generation Additions	$7,420,293	0%	$0
Distribution and Transmission	$31,164,141	64%	$19,996,843

** The Cost of Future Capital Projects includes two percent annual construction inflation.*

***Generation additions are being allocated at zero percent to growth. Based on the 2018 Peak Load and available capacity, it is anticipated that additional generation resources will be required in the IFFP planning timeframe. Additional Sources include the Solar SunSmart Program Power Purchase Agreement and other Power Purchase Agreements. The City may need to construct additional power generation facilities near 2028 or 2029. Due to the uncertainty related to the timing of these facilities, they have been excluded from this analysis. The City should periodically review the IFFP and IFA to determine if additional generation resources will be needed.*

The projected resource needs for the next several years is detailed in the following paragraphs. The estimated costs of future capital projects are based on historical experience with the system and projected growth patterns for the system. The proposed capital projects are separated into three areas: **(1) Power Resource Improvements (aka Generation), (2) City Transmission and Distribution System Improvements, and (3) Jointly Owned Main Transmission System Improvements**.

POWER RESOURCE IMPROVEMENTS

The City anticipates the need for an additional 26 MW of power through 2029 as shown in **TABLE 5.2**. This is partly due to the elimination of the Deseret Generation and Transmission Base, as well as an increase in demand over time. Additional sources include the Solar SunSmart Program Power Purchase Agreement and other Power Purchase Agreements. The City may need to construct additional power generation facilities near 2028 or 2029. Due to the uncertainty related to the timing of these facilities, they have been excluded from this analysis. The City should periodically review the IFFP and IFA to determine if additional generation resources will be needed.

TABLE 5.2: FUTURE GENERATION NEEDS OF MW

Type	JULY	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Coal	Deseret Generation and Transmission Base	50	50	50	50	50	-	-	-	-	-	-
Coal	Base Product Purchase	-	-	-	-	-	30	30	30	30	30	30
Hydro	AHP - Colorado River Storage Project (CRSP)	15	15	15	15	15	15	15	15	15	15	15
Hydro	Jordanelle Hydro	4	4	4	4	4	4	4	5	6	7	7
Natural Gas	City of St. George Millcreek #1	40	40	40	40	40	40	40	40	40	40	40
Natural Gas	City of St. George Millcreek #2	40	40	40	40	40	40	40	40	40	40	40
Renewables	Solar (SunSmart Program/PPA)	4	4	4	34	34	34	34	34	34	34	34
Market	WRP	5	5	5	5	5	5	5	5	5	5	5
PPA	Additional as PPA (Summer Peak)	-	-	-	-	20	20	20	20	20	20	20
Sub Total	**Before Real Time Market**	**158**	**158**	**158**	**188**	**208**	**188**	**188**	**189**	**190**	**191**	**191**
	Peak Load	**191**	**194**	**196**	**199**	**201**	**204**	**206**	**209**	**212**	**215**	**217**
	Real Time Market Supply	33	36	38	11	(7)	16	18	20	22	24	26

There are several additional generation improvements (shown in **TABLE 5.3**) identified by the City for repair and replacement of existing infrastructure. 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 two percent annual construction inflation adjustment is applied to projects completed after 2018 (the base year cost estimate). As stated above, due to the uncertainty related to the timing of these facilities, they have been excluded from this analysis.

TABLE 5.3: FUTURE GENERATION ADDITIONS

POWER PROJECTS	CONSTRUCTION YEAR	ESTIMATED COST	CONSTRUCTION YEAR COSTS	% TO GROWTH	COST TO GROWTH	% IMPACT FEE FUNDED	SUBTOTALS
Generation Additions*	2020	$4,061,000	$4,225,064	0%	$0	0%	$0
Generation Additions	2021	$361,000	$383,096	0%	$0	0%	$0
Generation Additions	2022	$361,000	$390,758	0%	$0	0%	$0
Generation Additions	2023	$295,000	$325,704	0%	$0	0%	$0
Generation Additions	2024	$295,000	$332,218	0%	$0	0%	$0
Generation Additions	2025	$295,000	$338,862	0%	$0	0%	$0
Generation Additions	2026	$295,000	$345,640	0%	$0	0%	$0
Generation Additions	2027	$295,000	$352,552	0%	$0	0%	$0
Generation Additions	2028	$295,000	$359,603	0%	$0	0%	$0
Generation Additions	2029	$295,000	$366,795	0%	$0	0%	$0
Total Resources		**$6,848,000**	**$7,420,293**	**0%**	**$0**	**0%**	**$0**

*Estimated cost related to the overhaul of Millcreek I generator.

CITY TRANSMISSION & DISTRIBUTION IMPROVEMENTS

Due to the increasing system loads, improvements to the system will be required in order to maintain the LOS and deliver the increased load demand to the City's electrical customers, as shown in **TABLE 5.4** below. Improvements to various components of the system will be required to meet all of the FERC/NERC reliability standards.

TABLE 5.4: FUTURE TRANSMISSION AND DISTRIBUTION IMPROVEMENTS

POWER PROJECTS	CONST. YEAR	ESTIMATED COST	CONSTRUCTION YEAR COSTS	% TO GROWTH	COST TO GROWTH	% IMPACT FEE FUNDED	SUBTOTALS
Meters	2020	$245,550	$255,470	100%	$255,470	100%	$255,470
Meters	2021	$125,000	$132,651	100%	$132,651	100%	$132,651
Meters	2022	$125,000	$135,304	100%	$135,304	100%	$135,304
Meters	2023	$125,000	$138,010	100%	$138,010	100%	$138,010
Meters	2024	$125,000	$140,770	100%	$140,770	100%	$140,770
Meters	2025	$125,000	$143,586	100%	$143,586	100%	$143,586
Meters	2026	$125,000	$146,457	100%	$146,457	100%	$146,457
Meters	2027	$125,000	$149,387	100%	$149,387	100%	$149,387
Meters	2028	$125,000	$152,374	100%	$152,374	100%	$152,374
Meters	2029	$125,000	$155,422	100%	$155,422	100%	$155,422
AMI Metering	2025	$1,500,000	$1,723,029	0%	$0	0%	$0
Distribution Upgrades	2020	$316,800	$329,599	50%	$164,799	100%	$164,799
Distribution Upgrades	2021	$341,800	$362,721	50%	$181,360	100%	$181,360
Distribution Upgrades	2022	$416,800	$451,158	50%	$225,579	100%	$225,579
Distribution Upgrades	2023	$241,800	$266,967	50%	$133,483	100%	$133,483
Distribution Upgrades	2024	$316,800	$356,768	50%	$178,384	100%	$178,384
Distribution Upgrades	2025	$241,800	$277,752	50%	$138,876	100%	$138,876
Distribution Upgrades	2026	$316,800	$371,182	50%	$185,591	100%	$185,591
Distribution Upgrades	2027	$241,800	$288,973	50%	$144,487	100%	$144,487
Distribution Upgrades	2028	$316,800	$386,177	50%	$193,089	100%	$193,089
Distribution Upgrades	2029	$241,800	$300,648	50%	$150,324	100%	$150,324
Misc. Equipment	2020	$835,000	$868,734	30%	$260,620	100%	$260,620
Misc. Equipment	2021	$735,000	$779,988	30%	$233,996	100%	$233,996
Misc. Equipment	2022	$885,000	$957,952	30%	$287,386	100%	$287,386
Misc. Equipment	2023	$905,000	$999,193	30%	$299,758	100%	$299,758

POWER PROJECTS	CONST. YEAR	ESTIMATED COST	CONSTRUCTION YEAR COSTS	% TO GROWTH	COST TO GROWTH	% IMPACT FEE FUNDED	SUBTOTALS
Misc. Equipment	2024	$835,000	$940,346	30%	$282,104	100%	$282,104
Misc. Equipment	2025	$585,000	$671,981	30%	$201,594	100%	$201,594
Misc. Equipment	2026	$605,000	$708,854	30%	$212,656	100%	$212,656
Misc. Equipment	2027	$435,000	$519,865	30%	$155,960	100%	$155,960
Misc. Equipment	2028	$385,000	$469,313	30%	$140,794	100%	$140,794
Misc. Equipment	2029	$605,000	$752,241	30%	$225,672	100%	$225,672
Transmission Upgrades and New	2020	$3,575,000	$3,719,430	100%	$3,719,430	100%	$3,719,430
Transmission Upgrades and New	2021	$125,000	$132,651	100%	$132,651	100%	$132,651
Transmission Upgrades and New	2022	$125,000	$135,304	100%	$135,304	100%	$135,304
Transmission Upgrades and New	2023	$125,000	$138,010	100%	$138,010	100%	$138,010
Transmission Upgrades and New	2024	$625,000	$703,852	100%	$703,852	100%	$703,852
Transmission Upgrades and New	2025	$625,000	$717,929	100%	$717,929	100%	$717,929
Transmission Upgrades and New	2026	$125,000	$146,457	100%	$146,457	100%	$146,457
Transmission Upgrades and New	2027	$125,000	$149,387	100%	$149,387	100%	$149,387
Transmission Upgrades and New	2028	$125,000	$152,374	100%	$152,374	100%	$152,374
Transmission Upgrades and New	2029	$125,000	$155,422	100%	$155,422	100%	$155,422
Substations -Upgrades and Additions	2020	$103,500	$107,681	95%	$102,297	100%	$102,297
Substations -Upgrades and Additions	2021	$1,303,500	$1,383,285	95%	$1,314,120	100%	$1,314,120
Substations -Upgrades and Additions	2022	$103,500	$112,032	95%	$106,430	100%	$106,430
Substations -Upgrades and Additions	2023	$78,500	$86,670	95%	$82,337	100%	$82,337
Substations -Upgrades and Additions	2024	$1,278,500	$1,439,799	95%	$1,367,809	100%	$1,367,809
Substations -Upgrades and Additions	2025	$1,578,500	$1,813,200	95%	$1,722,540	100%	$1,722,540
Substations -Upgrades and Additions	2026	$78,500	$91,975	95%	$87,376	100%	$87,376
Substations -Upgrades and Additions	2027	$1,278,500	$1,527,926	95%	$1,451,530	100%	$1,451,530
Substations -Upgrades and Additions	2028	$1,278,500	$1,558,484	95%	$1,480,560	100%	$1,480,560
Substations -Upgrades and Additions	2029	$78,500	$97,605	95%	$92,725	100%	$92,725
SCADA Misc.	2020	$625,000	$650,250	20%	$130,050	100%	$130,050
SCADA Misc.	2021	$175,000	$185,711	20%	$37,142	100%	$37,142
SCADA Misc.	2022	$175,000	$189,426	20%	$37,885	100%	$37,885
SCADA Misc.	2023	$175,000	$193,214	20%	$38,643	100%	$38,643
SCADA Misc.	2024	$175,000	$197,078	20%	$39,416	100%	$39,416
SCADA Misc.	2025	$175,000	$201,020	20%	$40,204	100%	$40,204
SCADA Misc.	2026	$175,000	$205,040	20%	$41,008	100%	$41,008
SCADA Misc.	2027	$175,000	$209,141	20%	$41,828	100%	$41,828
SCADA Misc.	2028	$175,000	$213,324	20%	$42,665	100%	$42,665
SCADA Misc.	2029	$175,000	$217,591	20%	$43,518	100%	$43,518
Total Distribution and Transmission		**$27,733,550**	**$31,164,141**	**64%**	**$19,996,843**	**100%**	**$19,996,843**

JOINTLY OWNDED MAIN TRANSMISSION SYSTEM IMPROVEMENTS

The main transmission system which supplies power to Washington County (the "County") is owned and operated by several utilities and organizations. Over the past several years, the utilities in the County have spent considerable time and effort to develop system plans to serve the increasing loads supplied by the various County utilities ("Joint Plan System"). The results of these cooperative efforts will be a more reliable electrical system, which also minimizes overall costs of the system by reducing the need for duplicate facilities. This cooperative effort has been referred to as the "one system plan-Joint System Plan", meaning that the planning and installation of main transmission infrastructure for the County will be developed similar to the approach as if a single utility served all of the loads in the County. The City receives its power supply from two transmission systems, UAMPS and PacifiCorp. Most of the joint transmission improvements are put into the rate base because they become an operating expense due to the City not having direct ownership or debt obligations. Thus, these improvements are not included in the capital requirements for the City.

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. One example of a project improvement is The Ledges transmission line which has not been included in the calculation of the impact fee. However, impact fees will be used for the substations, etc. since these are considered system improvements.

FUNDING OF FUTURE FACILITIES

Future facilities are generally funded using the following resources:

UTILITY RATE REVENUES

Utility rate revenues serve as the primary funding mechanism within enterprise funds. Rates are established to ensure appropriate coverage of all operations and maintenance expenses, debt service coverage, and capital project needs not related to growth.

GRANTS AND DONATIONS

The City does not anticipate receiving grants or donations to fund improvements currently contemplated in this IFFP. However, the impact fees will be adjusted if grants become available to reflect the grant monies received. A donor may be entitled to a reimbursement for the value of the system improvements funded through impact fees if donations are made by new development. **SECTION 6** further addresses proposed credits available to development.

IMPACT FEE REVENUES

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. Impact fee revenues are generally considered non-operating revenues and help offset future capital costs.

DEBT FINANCING

In the event the City has not accumulated sufficient impact fees to pay for the construction of time sensitive or urgent capital projects needed to accommodate new growth, the City must look to revenue sources other than impact fees for funding. 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 City does not anticipate utilizing debt financing for this plan and therefore no financing costs are included in this analysis.

EQUITY OF IMPACT FEES

Impact fees are intended to recover the costs of system improvements (infrastructure) that relate to future growth. The impact fee calculations are structured for impact fees to fund 100 percent 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 actual impact fee revenues cannot cover the annual growth-related expenses. In those years, growth-related projects may be delayed, or other revenues such as general utility rate revenues may be borrowed to make up any annual deficits. Any borrowed funds are to be repaid in their entirety through subsequent impact fees.

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.

[11] 11-36a-102(20)
[12] 11-36a102(13)

SECTION 6: POWER IMPACT FEE CALCULATION

PROPOSED POWER IMPACT FEES

The calculation of impact fees relies upon the information contained in this analysis. Impact fees are calculated based on many variables centered on proportionality and LOS. The following paragraph briefly discusses the methodology for calculating impact fees.

PLAN BASED (FEE BASED ON DEFINED CIP)

Impact fees can be calculated using a specific set of costs specified for future development. The improvements are identified in the IFFP, CFP or CIP as growth related projects. The total project costs are divided by the total demand units the projects are designed to serve. Under this methodology, it is important to identify the existing LOS and determine any excess capacity in existing facilities that could serve new growth.

POWER IMPACT FEE CALCULATION

Based on the growth-related projects, as well as the applicable buy-in fee, the cost per new kW is estimated at $916, as shown in **TABLE 6.1**.

TABLE 6.1: ILLUSTRATION OF COST PER NEW KW

POWER PROJECTS	TOTAL COSTS WITHIN IFFP HORIZON	AVERAGE % GROWTH RELATED & IMPACT FEE FUNDED	GROWTH RELATED & IMPACT FEE FUNDED COSTS	GROWTH RELATED KW	COST PER NEW KW
Green Valley Buy-In[1]	$11,680,125	35%	$4,100,502	26,330	$156
Future Generation Additions	$7,420,293	-	-	26,330	-
Future Distribution and Transmission	$31,164,141	64%	$19,996,843	26,330	$759
Professional Expense[13]	$9,675	100%	$9,675	26,330	$1
Total[14]	**$50,274,234**		**$24,107,021**		**$916**

The fee per kW is then applied to the general usage statistics for residential and commercial users, as shown in the **TABLE 6.2** and **TABLE 6.3** below.

TABLE 6.2: ILLUSTRATION OF RESIDENTIAL IMPACT FEE

SERVICE DESCRIPTION	EST. KW	COST PER KW	PROPOSED IMPACT FEE	2014 IMPACT FEE	% CHANGE	$ CHANGE
100 Amp - 240/120 V	4.25	$916	$3,893	$3,646	7%	$247
200 Amp - 240/120 V	5.25	$916	$4,809	$4,504	7%	$305
400 Amp - 240/120 V	9.00	$916	$8,244	$7,721	7%	$523

TABLE 6.3: ILLUSTRATION OF COMMERCIAL IMPACT FEE

SERVICE DESCRIPTION	PANEL RATING	EST. AVERAGE DIVERSIFIED KVA*	ESTIMATED DIVERSIFIED KW	COST PER KW	PROPOSED IMPACT FEE	2014 IMPACT FEE	% CHANGE	$ CHANGE
Single Phase Service								
240/120 V	200	7.92	7.13	$916.00	$6,529	$6,115	7%	$414
	400	15.84	14.26	$916.00	$13,058	$12,230	7%	$828
Three Phase Service								
208Y/120 V	200	15.85	14.27	$916.00	$13,068	$12,239	7%	$829
	400	31.70	28.53	$916.00	$26,136	$24,479	7%	$1,657
	800	63.41	57.07	$916.00	$52,273	$48,958	7%	$3,315
	1,200	95.11	85.60	$916.00	$78,409	$73,437	7%	$4,972
	2,000	158.52	142.67	$916.00	$130,682	$122,395	7%	$8,287
480Y/277 V	200	36.58	32.92	$916.00	$30,157	$28,245	7%	$1,912
	400	73.16	65.85	$916.00	$60,315	$56,490	7%	$3,825
	800	146.32	131.69	$916.00	$120,629	$112,980	7%	$7,649

[13] 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 these expenses.
[14] As of June 30, 2019 the electric utility impact fee fund balance was negative $2,056,553. The negative balance is not included in this analysis.

SERVICE DESCRIPTION	PANEL RATING	EST. AVERAGE DIVERSIFIED KVA*	ESTIMATED DIVERSIFIED KW	COST PER KW	PROPOSED IMPACT FEE	2014 IMPACT FEE	% CHANGE	$ CHANGE
	1,200	219.49	197.54	$916.00	$180,944	$169,469	7%	$11,475
	2,000	365.81	329.23	$916.00	$301,573	$282,449	7%	$19,124

*Diversified kVA is defined as the summed individual peak demand or coincidental peak, which is the average peak demand of a sample of customers.

NON-STANDARD IMPACT FEES

The proposed fees are based upon growth in kWs. 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.[15] A developer may submit studies and data for a particular development and request an adjustment. 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.

Estimated kW Diversified Usage * $916

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 or encumbered on only those projects outlined in the IFFP as growth related costs to maintain the LOS or to reimburse existing development for excess capacity used.

PROPOSED CREDITS OWED TO DEVELOPMENT

Credits may be applied to developers who have constructed and donated system facilities to the City that are included in the IFFP in-lieu of impact fees. Credits for system improvements may be available to developers up to, but not exceeding, the amount commensurate with the LOS identified within this IFA. Credits will not be given for the amount by which system improvements exceed the LOS identified within this IFA. 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 system 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 two percent annual construction inflation adjustment is applied to projects completed after 2019 (the base year cost estimate).

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

CERTIFICATION OF CITY OF ST. GEORGE
ORDINANCE NO. 2020-12-001

Pursuant to Utah Code §10-3-713, I hereby certify that on the 3rd day of December, 2020, the St. George City Council passed Ordinance No. 2020-12-001 and that said ordinance was posted at the St. George City Offices, 175 E. 200 N., the Washington County Library 88 W. 100 S., and the Washington County Administrative Offices, 197 E. Tabernacle on December 8, 2020.

Christina Fernandez
St. George City Recorder