

**ST. GEORGE CITY COUNCIL MINUTES
WORK MEETING
MARCH 25, 2014, 8:00 A.M.
POLICE DEPARTMENT TRAINING ROOM**

PRESENT:

**Mayor Jon Pike
Councilmember Gil Almquist
Councilmember Jimmie Hughes
Councilmember Michele Randall
Councilmember Bowcutt
Councilmember Bette Arial
City Manager Gary Esplin
City Attorney Shawn Guzman
Budget and Financial Planning Manager Deanna Brklacich
City Recorder Christina Fernandez**

OPENING:

Mayor Pike called the meeting to order and welcomed all in attendance. The Pledge of Allegiance to the Flag was led by Chief Stratton the invocation was offered by citizen Ed Baca.

BUDGET OVERVIEW:

City Manager Gary Esplin presented a powerpoint presentation which covered the following topics: General Fund Revenues Budget - Fiscal Year 2014; Comparison of Revenues for the first Eight Months (July - Feb), Fiscal Years 2012, 2013, and 2014; Number of Building Permits Issued by Category, Comparison of January through December (for 2005 - 2013); Sales Tax Distribution Diagram; Monthly Average Sales Tax Remittance by Industry, Fiscal Year 2007 to 2013 is for 12 months, 2014 is for 6 months; Direct Point of Sale - Local Tax Remittance by Month, 5-Year Comparison by Calendar Year (2009 to 2011 Not Shown); Dept./Box Stores - Local Tax Remittance by Month 5-Year Comparison by Calendar Year (2009 to 2011 Not Shown); Retail, Fast Food & Restaurants - Local Tax Remittance by Month, 5-Year Comparison by Calendar Year (2009 to 2011 Not Shown); Hotels & Motels - Local Tax Remittance by Month, 5-Year Comparison by Calendar Year (2009 to 2011 Not Shown); New Car Sales - Local Tax Remittance by Month, 5-Year Comparison by Calendar Year (2009 to 2011 Not Shown); Furniture Stores - Local Tax Remittance by Month, 5-Year Comparison by Calendar Year (2009 to 2011 Not Shown); Lumber, Steel, Electrical, Plumbing Wholesale - Local Tax Remittance by Month, 5-Year Comparison by Calendar Year (2009 to 2011 Not Shown); 2013 Property Tax Distribution, St. George District (Tax Rate is .012246); Property Tax Distribution Comparison; General Fund - Top 10 Revenue Sources to Total Salaries & Benefits; General Fund Expenditures Budget, Fiscal Year 2014; General Fund - Distribution of Personnel, Materials & Supplies, Capital Outlays, and Transfers, Expenses for Fiscal Years 2006 to 2014; General Fund - Salaries & Benefits History; City of St. George General Overview of Fund Resources and Functions.

Ed Baca, citizen, inquired about the funds that were used for the new airport since the City did not sell the property from the old airport.

City Manager Gary Esplin responded in the TIF fund, there was a \$25 million bond of which \$15 million was originally allocated for the Mall Drive Bridge. The bond language stated that the funds could be used for transportation or road related projects, therefore, the \$15 million was used for the Airport. A total of \$29 million was needed - the City received \$10 million from the County, issued a bond on the transient room tax, and borrowed money from the Wastewater Treatment Plant that will be paid back at the State Treasurer's interest rate. He continued with the City of St. George General Overview of Funds Resources and Functions slide.

Ed Baca inquired how building roadways in new developments work. For example, prior to building Foremaster, the developer had to install the roads prior to building the homes. How is that different from what is happening in the Little Valley area.

City Manager Gary Esplin stated that the City participated with the developer of Foremaster. Little Valley Road and 2450 were already there when the property was annexed. The developers are required to build the roadways as they were needed for the

subdivisions. He continued with the powerpoint presentation which covered the following topics: Annual Challenges.

Mayor Pike called for a short recess.

DISCUSSION ON IMPACT FEE LAWS:

City Manager Gary Esplin stated that the City has been looking at the impact fees for approximately two years. In each of the Department's budgets, impact fees are allocated into a special fund. He explained that impact fee draft information is not distributed to the public prior to it being presented to the Mayor and City Council. Jason Burningham, with Lewis, Young, Robertson and Burningham, Inc, the City's financial advisor, will introduce the Councilmembers to impact fees.

Jason Burningham presented a powerpoint presentation which covered the following topics: 2013-2014 Impact Fees City of St. George; Introduction to Impact Fees; Impact Fee Process; Introduction to Impact Fees; Scope of Work, City of St. George; CULINARY WATER: Service Area; Demand Analysis; Level of Service (measured based on existing facilities; Existing Inventory and Excess Capacity; Calculation of Storage Buy-In; Calculation of Transmission Buy-In (Airport Waterline); Capital Facilities Analysis; Financial Resources and Revenues to Finance System; Culinary Water Impact Fee; Culinary Water Impact Fee Cash Flow. He had the Councilmembers turn to page 11 & 12 of the Culinary Water section in the Impact Fee binder referring to Table 5.1: Illustration of Capital Improvements. He continued with the powerpoint presentation covering the following topics: SANITARY SEWER: Service Area; Demand Analysis; Level of Service; Existing Inventory and Excess Capacity; Capital Facilities Analysis; Resources to Finance System Improvements; Capital Facilities NOT Included in Analysis; Sanitary Sewer Impact Fee; Sanitary Sewer Impact Fee Cash Flow. He had the Councilmembers turn to page 13 of the Sanitary Sewer Impact section in the Impact Fee binder referring to Table 5.1: Illustration of Capital Improvements Related to Growth. He continued with the powerpoint presentation covering the following topics: STORM DRAIN (IFA ONLY): Service Area; Demand Analysis; Level of Service; Existing Inventory and Excess Capacity; Capital Facilities Analysis; Resources to Finance System Improvements; Storm Drain Impact Fee per SF; Storm Drain Impact Fee by Land Use Type; and Storm Drain Impact Fee Cash Flow. He had the Councilmembers turn to page 10 of the Storm Drain section in the Impact Fee binder referring to Table 5.2: Summary of Percent Associated with New Development.

Mayor Pike called for a short recess.

Mr. Burningham continued with the powerpoint presentation which covered the following topics: TRANSPORTATION: Service Area; Demand Analysis; Level of Service; Existing Inventory and Excess Capacity; Capital Facilities Analysis; Resources to Finance System Improvements; Financing Revenues and Resources to Finance System Improvements; Transportation Impact Fee Cost per Trip; Transportation Impact Fees by Land Use Type (Residential); Transportation Impact Fees by Land Use Type (Other); Transportation Impact Fee Cash Flow. He had the Councilmembers turn to pages 18 - 21 of the Transportation section in the Impact Fee binder referring to Table A-1: Illustration of Capital Facilities and Estimated Cost and Table A-2: Illustration of Capital Facilities by Funding Source. He continued with the powerpoint presentation which covered the following topics: FIRE: Service Area; Demand Analysis; Existing Inventory and Excess Capacity; Level of Service; Capital Facilities Analysis; Financing Revenues and Resources to Finance System Improvements; Cost per Call Calculation; Fire Impact Fee; Fire Impact Fee Cash Flow. POLICE: Service Area; Demand Analysis; Level of Service; Existing Inventory and Excess Capacity; Capital Facilities Analysis; Financial Revenues and resources to Finance System Improvements; Police Impact Fee; Police Impact Fee Cash Flow. PARKS, RECREATION & OPEN SPACE: Service Area; Demand Analysis; and Existing Inventory; Level of Service; Excess Capacity; Capital Facilities Analysis; Resources to Finance System Improvements; Park Impact Fee. POWER: Service Area; Demand Analysis; Level of Service; Existing Inventory and Excess Capacity; Capital Facilities Analysis; Resources to Finance System Improvements; Energy Impact Fee per kW; Energy Impact Fee:

Residential Service; Energy Impact Fee Cash Flow; SUMMARY: Fee Per Residential Dwelling; and Comparative Analysis.

DISCUSSION ON THE FY 2014-15 BUDGET:

Finance Director Philip Peterson presented a powerpoint presentation which covered the following topics: Finance Department Organizational Chart; Utility Payment Options; Paperless Billings; Misc. Information.

Councilmember Bowcutt inquired if there is a database that shows which accounts have been written off as bad debt.

Mr. Peterson replied yes, there is a policy which states that if a customer has a bad debt, the customer either has to make arrangements or pay off the debt prior to obtaining new service. Staff tries to work with those that are in this situation. He continued with the powerpoint presentation which covered the following topics: Business Licenses.

Councilmember Almquist asked Mr. Peterson if the City could possibly go to a 2 year payment option for obtaining a business license.

Mr. Peterson replied that can happen if the City Council approves an ordinance allowing that.

City Manager Gary Esplin advised that cannot happen with a business license since a portion of the cost is based on the number of employees, but a rental license may be a possibility.

Mayor Pike inquired if citizens can utilize the City's new website for applying for services or obtaining a license.

Mr. Peterson stated that may be a possibility, however, the City requires that certain items with regards to applying for a business license, be seen in person. Additionally, when applying for a dog license, the City requires the applicant to provide proof of vaccinations as well as proof that the animal has been spayed or neutered.

Human Resources Manager Judith Mayfield presented a powerpoint presentation that covered the following topics: Organizational Chart; Human Resources Department Purpose Statement; HR Department Responsibilities; Recruitment, Hiring and Retention; Payroll Administration; Employee Benefits; Compensation, Performance, Organization, Development, Employee Relations; and Administrative Duties and Challenges.

City Attorney Shawn Guzman presented a powerpoint presentation that covered the following topics: Legal Services - Organization Chart; Legal Services; Legal Services - Criminal Cases; Justice Court Reimbursements; Court Reimbursements; Traffic School Reimbursements; Legal Services - Insurance; and Legal Services - Claims and Legal Services Staff.

Budget and Financial Planning Manager Deanna Brklacich presented an Administrative Services Organization Chart. The City has approximately 30,000 vendors and that the Purchasing Department receives approximately 650-850 invoices per month. The City allows departments to purchase items as needed. One of the goals for Connie Hood, Purchasing Manager, is to train employees on how to purchase items they need. She handed out a Budget Process Overview and reviewed the budget process. Additionally, she explained that there have been 3 flood events in the past few years. It took 5 years to complete the 2005 flood project which had 7 projects. The total cost to rebuild after the flood was approximately \$11 million. The City received \$4 million from FEMA, \$3.27 million from a State grant, various other small grants and the City's grant match was \$2 million. The 2010 floods had 80 projects and the cost was \$8.5 million; FEMA will fund \$6.6 million, there will be no funds received from the State, the City received \$600,000 in Federal Highway Funds and the City's portion was \$1.3 million.

City Manager Gary Esplin everyone of the projects involves about a full years worth of work. The funds to repair the damage were unfunded and unbudgeted.

Water Services Director Scott Taylor presented a powerpoint presentation covering the following topics: Mission Statement; Mottos; Water Services Department Info; Culinary Water Source (Acre - Ft) 2013; Water Services Department Core Management Team; Water Services Organization Chart; and Challenges.

Fire Chief Robert Stoker presented a powerpoint presentation covering the following topics: Mission Statement; Organizational Chart; Reserve Staff; Fire Districts & Response Areas; Fire Response Areas; Incident Response & Per Day; Fire Stations. He explained that the City is rated 4 for it's fire protection. One issue they are facing is that the Ledges is rated 10, which is the lowest level, since there is no fire station in that area. In October, the City Council approved an automatic aid agreement with Winchester Hills to assist with fire prevention. He stated that the City will run into the same problem in Little Valley and Desert Canyons.

Councilmember Bowcutt inquired could a fire station be built in the Ft. Pearce Industrial Park area that could service the Little Valley area.

Chief Stoker answered that staff is looking into that. He continued with the powerpoint presentation covering the following topics: Fire Department Apparatus; Engines; Reserve Fire Engines; Ladder Trucks & Squads; Training Programs; Fire Calls; Emergency Medical Technicians; Southwest Regional Response Team; Emergency Management; City Wide AED Placement; Assisting Other City Departments; Mutual Aid to Other Fire Departments; Fire Prevention and St. George City Fire Department.

City Manager Gary Esplin explained that in order to get hired as a full time firefighter, the individual has to be a reserve firefighter for at least 6 months with the City. All volunteers are fully certified and are required to attend training.

Councilmember Randall asked if the department would ever go from BLS certified to ALS certified.

Chief Stoker stated there is a plan to do that. While a number of the firefighters are advanced EMT's and some that are paramedics, all full time firefighters are EMT certified.

Mayor Pike inquired if a firefighter from another entity could be eligible for a full time position.

Chief Stoker advised the individual would have to live in the City and would have to be a reserve firefighter. There were some firefighters from Salt Lake City that wanted to do a lateral transfer. Doing that creates a number of internal inequities.

City Manager Gary Esplin explained as the reserve firefighters move up through the ranks, they learn what it is to be a volunteer firefighter and to appreciate the dedication and appreciation of the department.

Police Chief Marlon Stratton advised that the training room being used for today's meeting, becomes an Emergency Operations Center, in the event of a disaster.

City Manager Gary Esplin stated that does not happen very often, the last time was during the 2010 flood. It is an amazing experience to be involved in.

Chief Stratton presented a powerpoint presentation covering the following topics: Our Mission; Department Leadership; Patrol Division; Patrol; Patrol K9; S.W.A.T.; Negotiators; Community Action Teams (CAT); Honor Guard; Special Olympics Torch Run; Special Olympics Polar Plunge; Investigations Division; Detectives; Victim Services; Washington County Area Drug Task Force; Fraudulent Identity & Security Threats; Graffiti; Sex Trafficking; Administrative Services Department; Special Enforcement Division; and Communications Division and Inbound/Outbound Calls.

Mayor Pike inquired if there is evidence that shows the school resource officers have prevented crimes in the schools.

Chief Stratton stated yes, there has been a lot done to prevent different crimes. The officers work closely with the School Administration and routinely run drills in the event of a active shooter.

Mayor Pike called for a short recess.

Energy Services Director Phillip Solomon stated that St. George is becoming the largest municipal power provider in the State. There are 3 types of power utilities: co-ops, investor-owned utilities and municipal power. He presented a powerpoint presentation which covered the following topics: Energy Services; City of St. George Energy Services Department; Energy Services Department Organization Chart; St. George Energy Services Back Ground; and Resource Allocation 2013 and 2014 Substation, Construction.

City Manager Gary Esplin explained that with regard to resource allocation, the more power the City can generate, the less transmission cost there will be. In the past, the City had contingency plans for black outs. Nine months out of the year, the City can generate power itself.

Mr. Solomon stated that during the peak period, it is nice to turn on the generators to follow the peak.

Leisure Services Director Kent Perkins presented a powerpoint presentation that covered the following topics: Leisure Services Department Organization Chart; Mission Statement; Dixie Center; Map of the Dixie Center; Community Arts & Exhibits; Park Planning (Design). He showed the Trail & Road Master Plan 2011 Map, the Existing & Future Planned Community Parks Map and the Trail Master Plan Map. He continued with the powerpoint presentation that covered the following topics: Trail; Parks, Fields Phase IV - Concept Plan; Parks; Recreation - Special Events & Races; Recreation Center & Carousel; Recreation - Aquatics; Recreation - Softball; Recreation - Youth & Adult Sports; Recreation - Tennis & Pickleball; and Recreation - Nature & Adventure; Boards & Commissions and Priorities.

Support Services Manager Marc Mortensen presented a power point presentation which covered the following topics: Administration; Support Services; Guiding Principles; Mottos; Technology Services; Values of Technology Services; Mission Statement; Projects Recently or Nearly Completed; Tech Support; Techs; System & Networks; Web; GIS; Recent Projects; GIS Support; Fleet Services; Fleet Facts; City Vehicle Assets; Fleet' Primary Values; Inventory/Scheduling; Fleet Technicians; Facility Services; Facility Services Projects; and Maintenance and Custodial.

Public Works Director Cameron Cutler presented a powerpoint presentation covering the following topics: Public Works Department Organization Chart; Transportation Services; Streets Division; Airport; Suntran; and Engineering Services.

Community Development Services Director Matt Loo handed out a re-organization chart proposed for the Public Works Department and the Economic Development & Housing Department.

City Manager Gary Esplin outlined the re-organization being proposed in the Public Works Department.

The consensus of the Councilmembers is to proceed with the re-organization.

City Manager Gary Esplin outlined the proposal of creating a new department named Economic Development & Housing Department which Matt Loo would be the Director of.

Director of Golf Operations Colby Cowan presented a powerpoint presentation which covered the following topics: Golf Course Maintenance and Head Golf Professionals. Currently, the Golf Professionals are independent contractors.

City Manager Gary Esplin explained that the golf courses were put into the Enterprise Funds initially since they were generating money; however, since numerous other golf courses have been built in Washington County, they have been losing money. He questions which fund the golf courses should be a part of, the General Fund or the Enterprise Fund. The City has spent quite a bit of money on the golf courses. There is no debt, however there is a \$4 million deficit due to the cost of golf. He is proposing to adopt a plan to pay back the \$4 million. He explained that each year, \$500,000 is paid into the debt service for the Dixie Center which will be done in 2023. Beginning in 2024, that amount can be allocated to pay back the \$4 million deficit. This plan will solve the long term debt. To solve the short term debt, he suggests a re-organization within the golf courses. He outlined the proposed re-organization .

The consensus of the Councilmembers is to proceed with the re-organization.

The meeting then adjourned.

Christina Fernandez, City Recorder



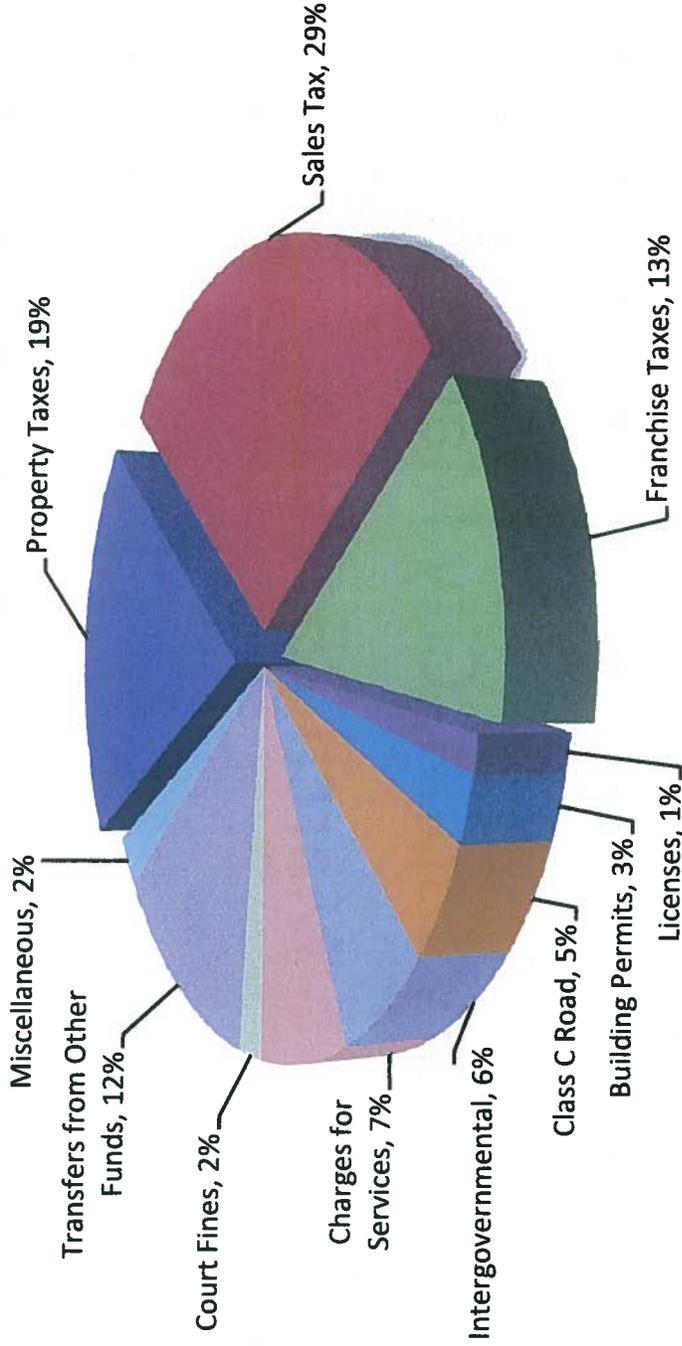
Budget Discussion for Fiscal Year 2014-15

Gary Esplin, City Manager

March 25, 2014



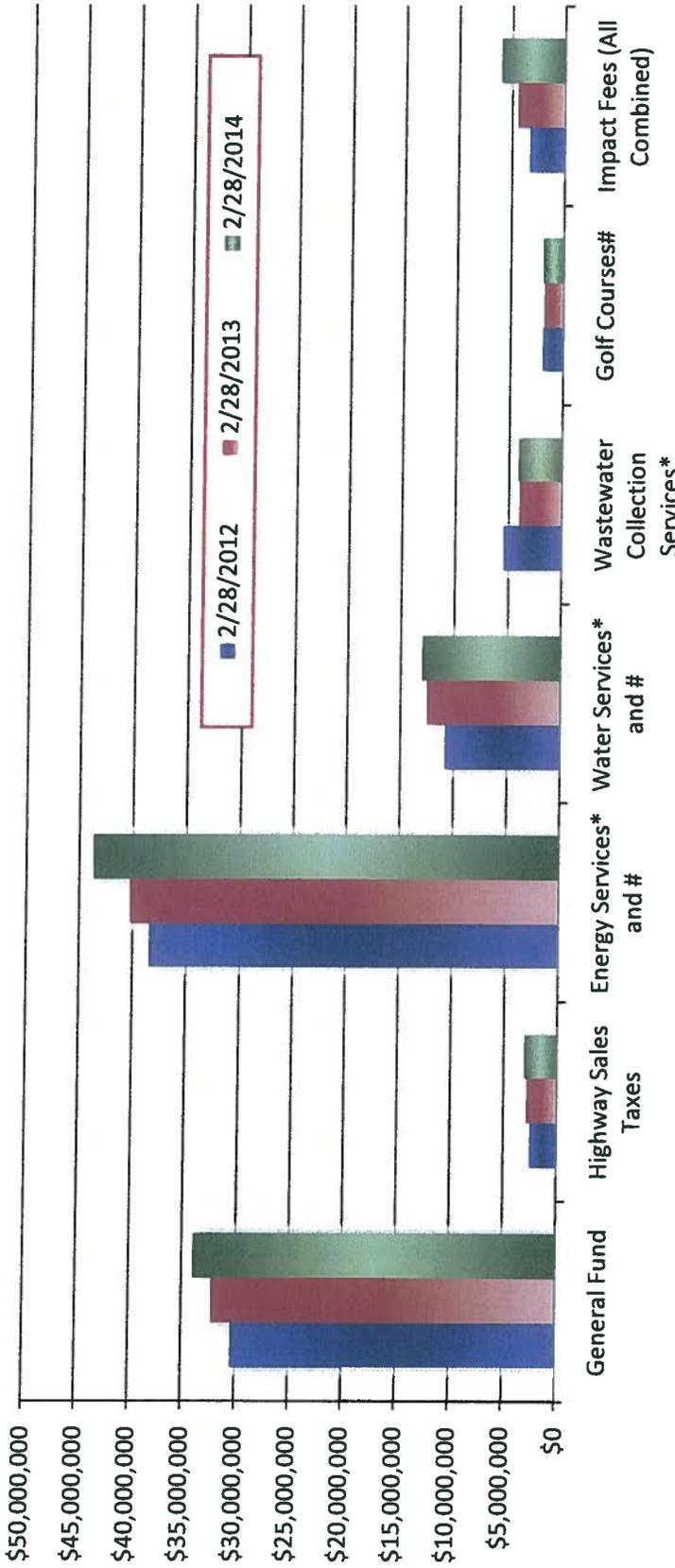
General Fund Revenues Budget - Fiscal Year 2014



	FY2013 Actual	FY2014 Adj. Budget
Property Taxes	\$9,483,767 20%	\$9,600,000 19%
Sales Tax	\$14,501,038 30%	\$14,500,000 29%
Franchise Taxes	\$6,624,225 14%	\$6,500,000 13%
Licenses	\$776,942 2%	\$732,000 1%
Building Permits	\$1,419,382 3%	\$1,300,000 3%
Class C Road Funds	\$2,410,786 5%	\$2,500,000 5%
Intergovernmental	\$2,412,807 5%	\$3,243,003 6%
Charges for Services	\$3,556,545 7%	\$3,608,690 7%
Court Fines	\$953,653 2%	\$1,017,000 2%
Transfers from Other Funds	\$4,229,281 9%	\$6,311,251 12%
Miscellaneous	\$1,207,240 3%	\$1,193,062 2%
	\$47,575,666 100%	\$50,505,006 100%



Comparison of Revenues for first Eight Months (July - Feb) Fiscal Years 2012, 2013, and 2014

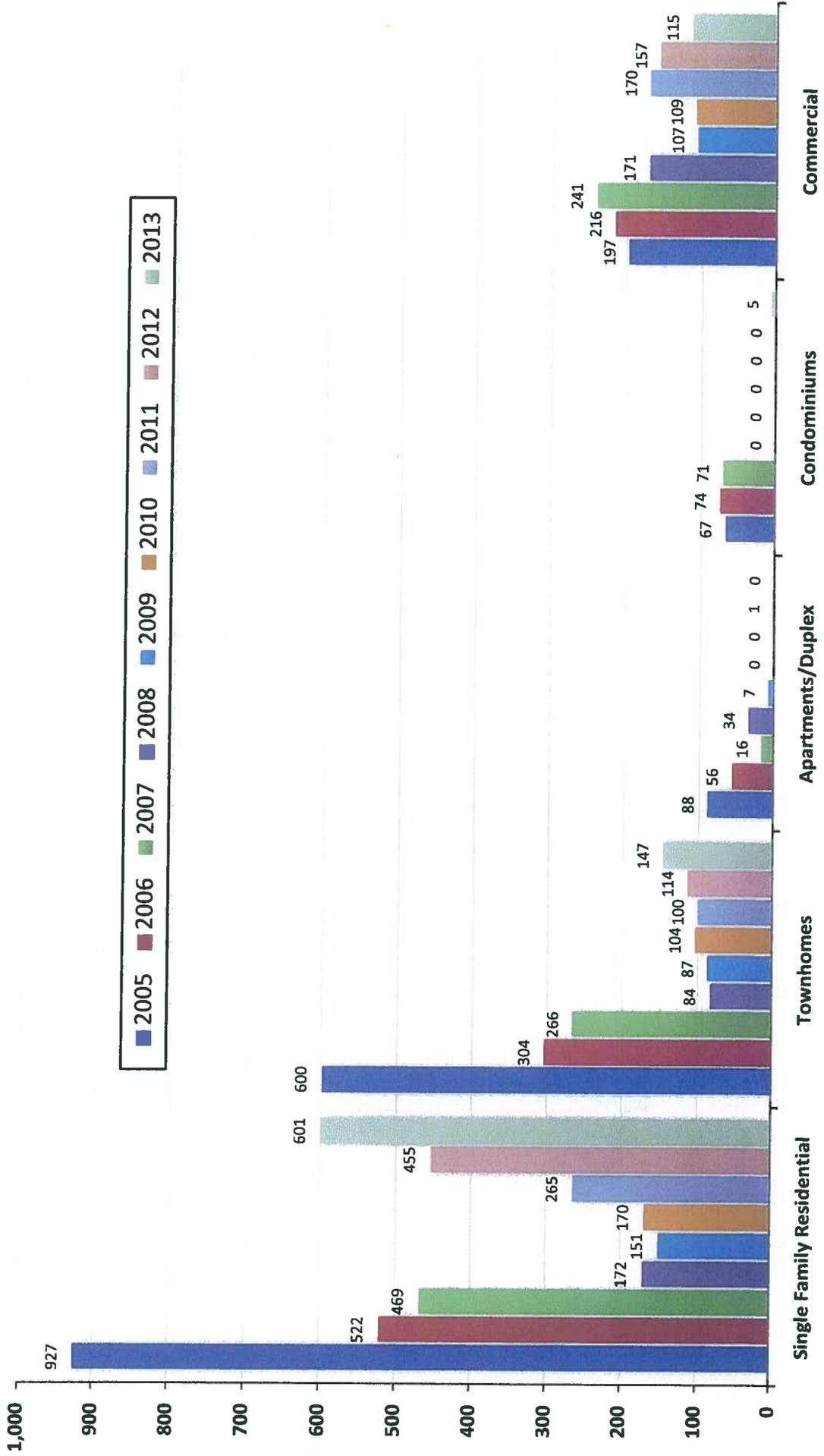


FUND	EIGHT MONTHS ENDED		Increase (Decrease)	2012 to 2013		2013 to 2014		2012 to 2014	
	2/28/2012	2/28/2013		2/28/2014	% of change	% of change	% of change		
General Fund	30,528,139	32,377,577	33,991,831	1,614,254	6.06%	1,614,254	4.99%	1,614,254	11.35%
Highway Sales Taxes	2,577,348	2,863,503	3,113,483	249,980	11.10%	249,980	8.73%	249,980	20.80%
Energy Services* and #	38,546,848	40,278,508	43,793,781	3,515,273	4.49%	3,515,273	8.73%	3,515,273	13.61%
Water Services* and #	10,852,040	12,604,559	12,996,090	391,531	16.15%	391,531	3.11%	391,531	19.76%
Wastewater Collection Services*	5,488,538	4,054,466	4,184,190	129,724	-26.13%	129,724	3.20%	129,724	-23.76%
Golf Courses#	1,970,020	1,864,103	1,945,165	81,062	-5.38%	81,062	4.35%	81,062	-1.26%
Impact Fees (All Combined)	3,408,732	4,549,388	6,083,751	1,534,363	33.46%	1,534,363	33.73%	1,534,363	78.48%

* with impact fees
w/o interfund transfers or bond proceeds

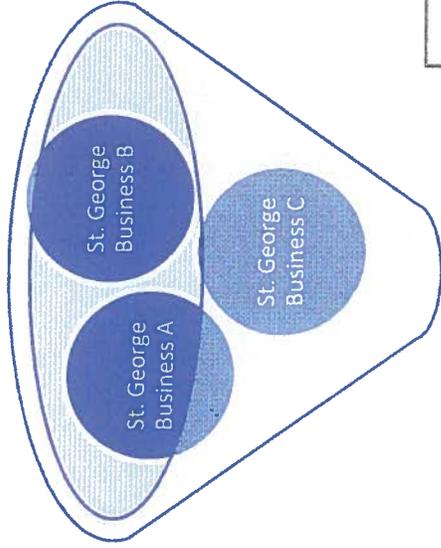


Number of Building Permits Issued by Category Comparison of January through December (for 2005 - 2013)

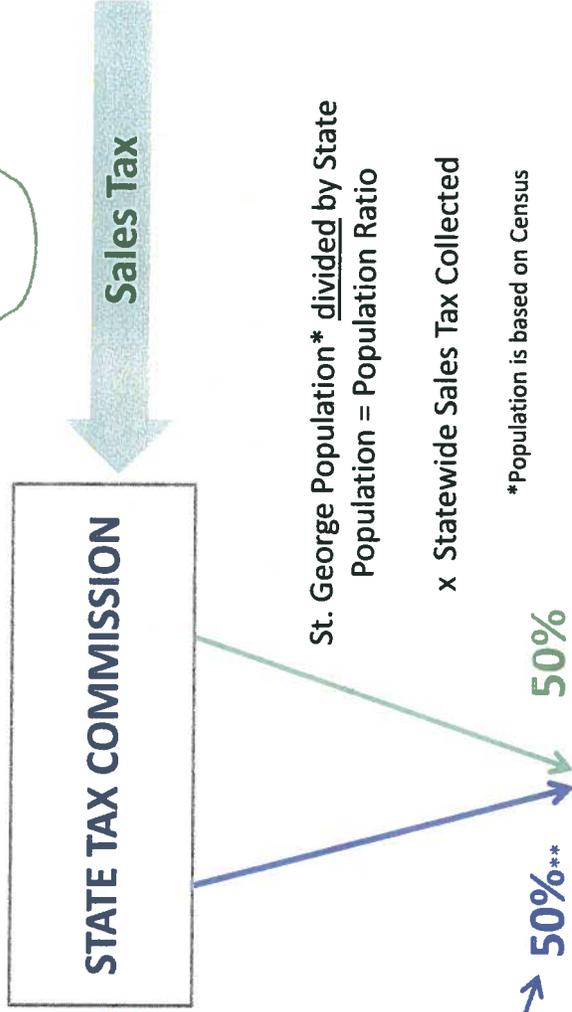
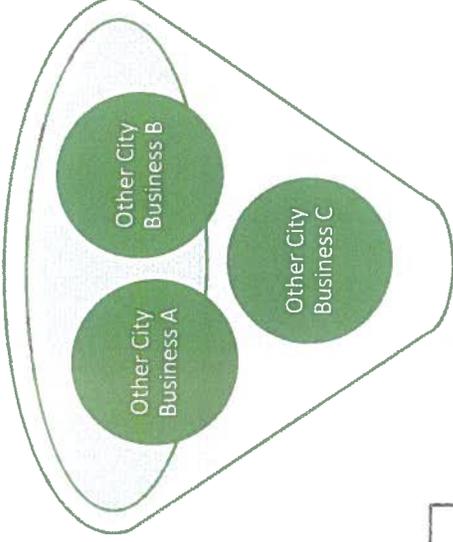


SALES TAX DISTRIBUTION DIAGRAM

POINT OF SALE - ST. GEORGE BUSINESSES



PROPORTION OF STATEWIDE SALES BASED ON POPULATION



- State Sales & Use Tax 4.70%
- County Option Sales Tax 0.25%
- Highway Option Tax 0.30%
- Local Option Sales Tax 1.00% → 50%**

$$\frac{\text{St. George Population}^*}{\text{Population}} \times \text{Statewide Sales Tax Collected}$$

*Population is based on Census

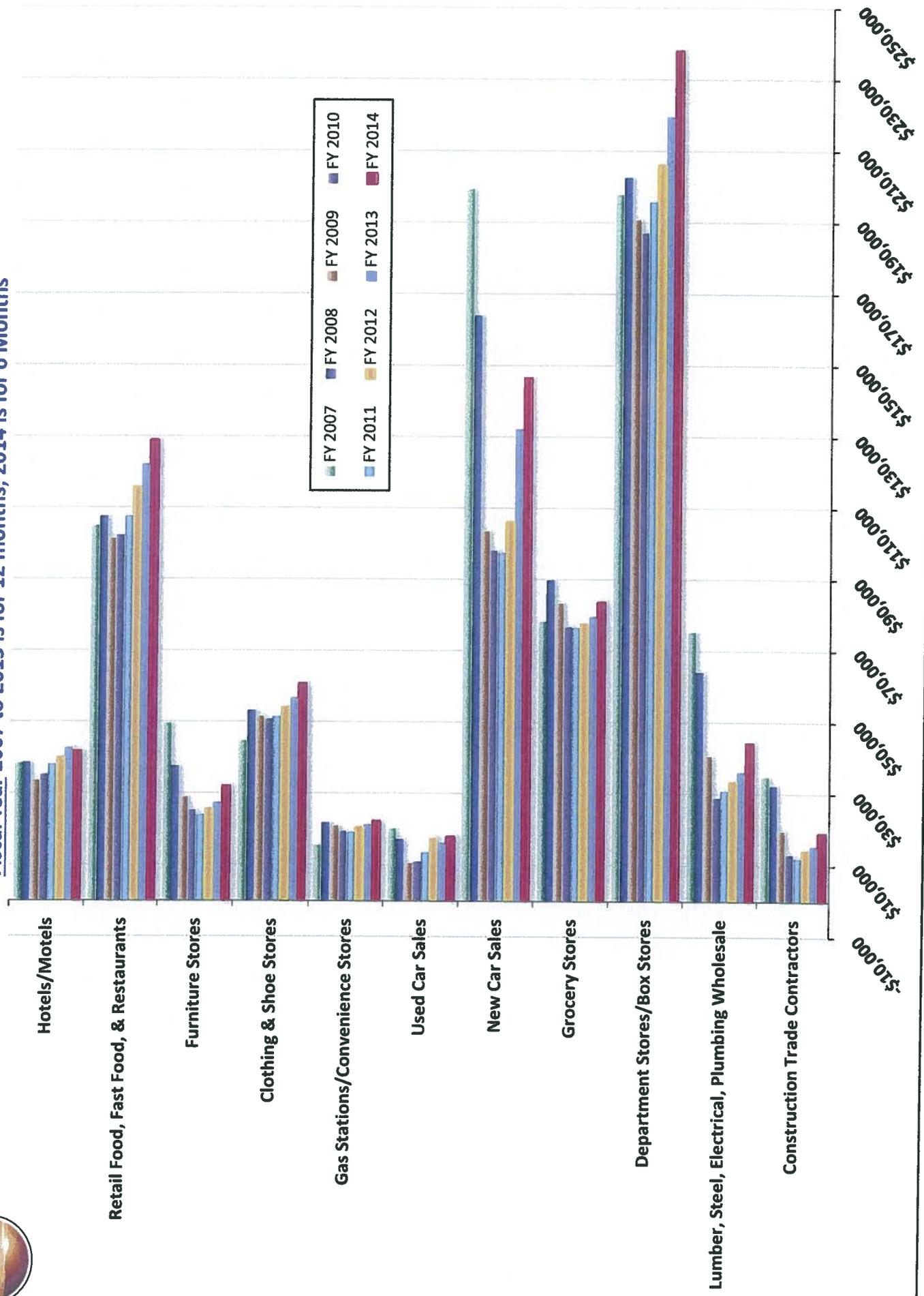
**Other 50% basically goes into the Statewide portion

= Monthly Sales Tax Distribution

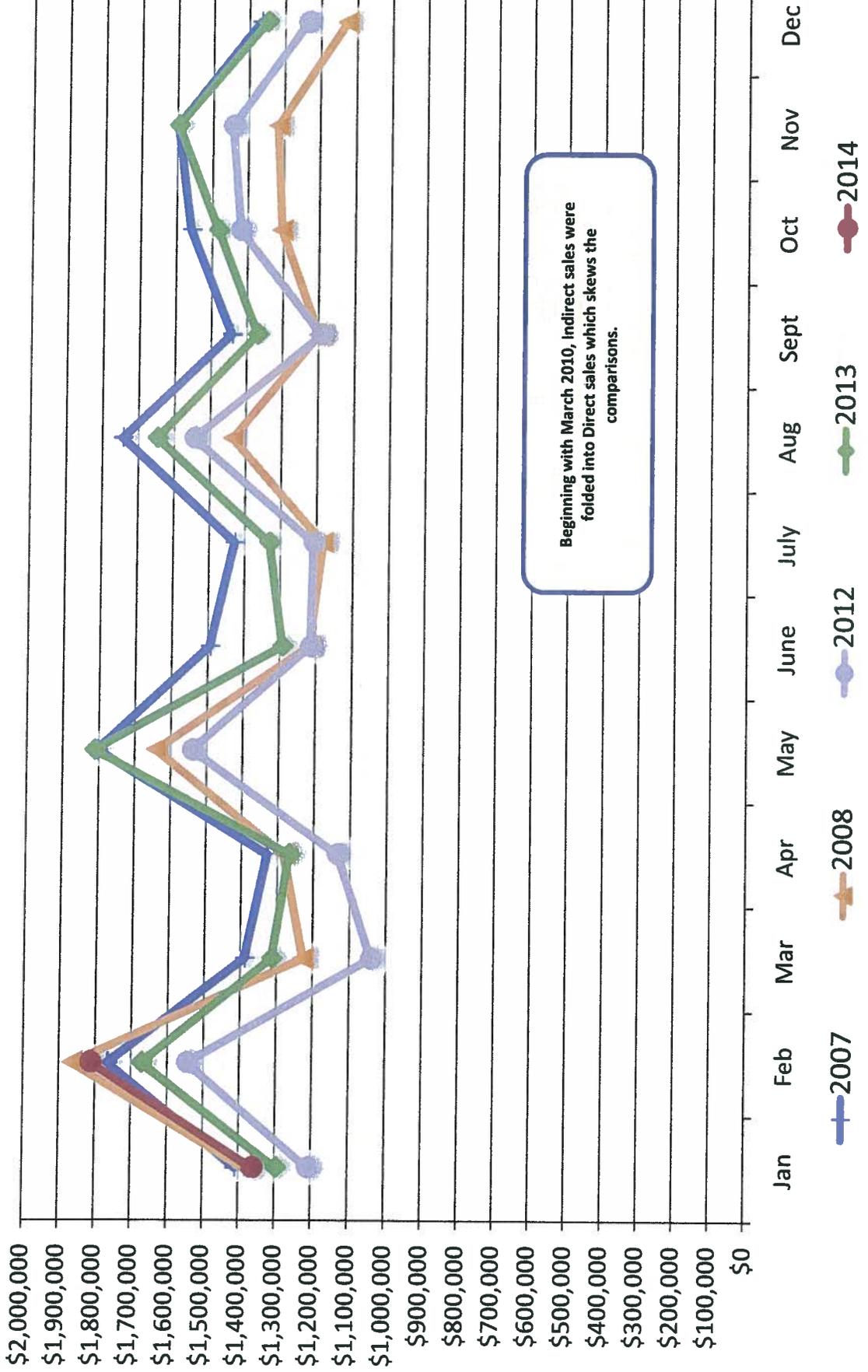




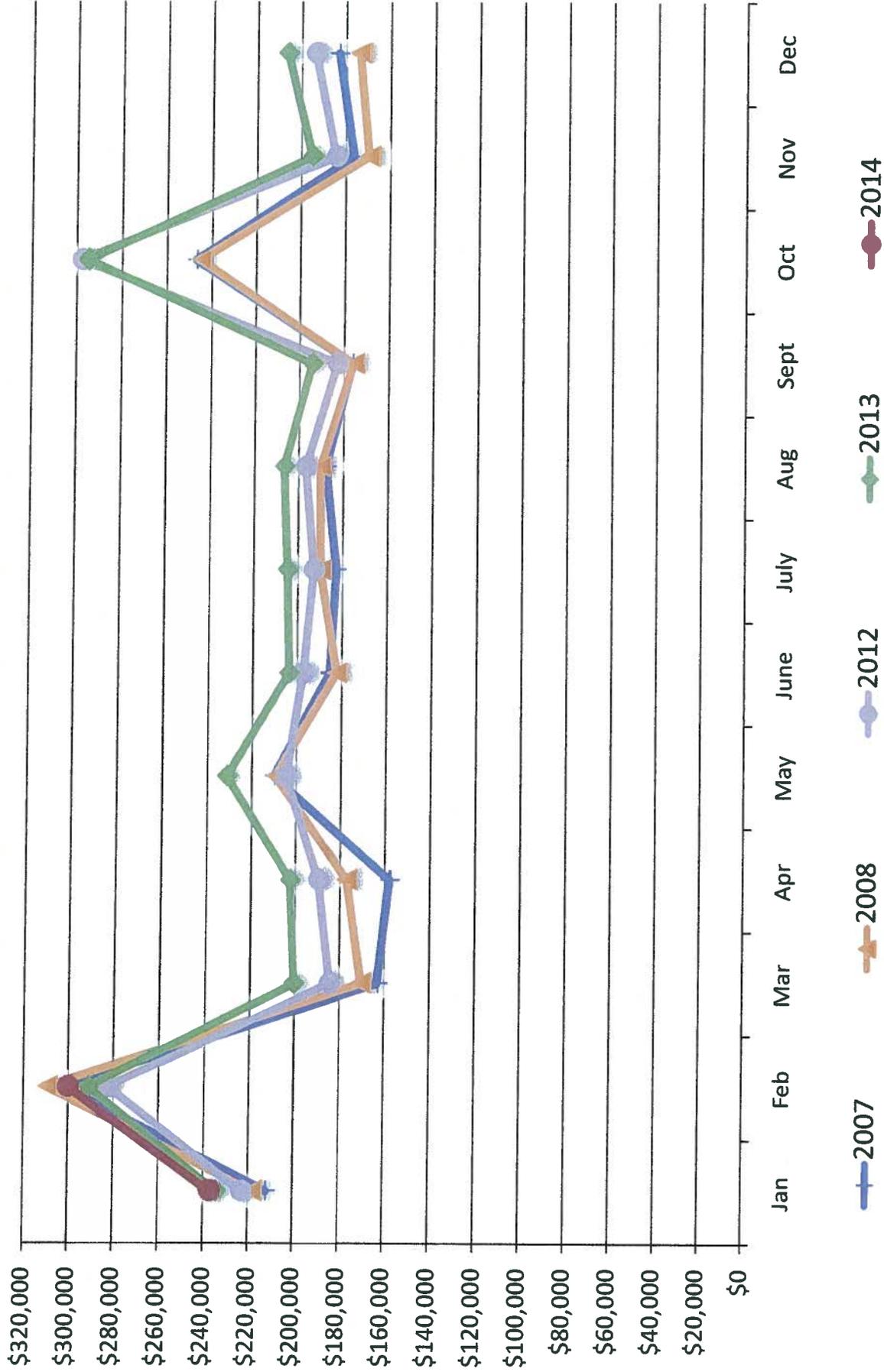
Monthly AVERAGE Sales Tax Remittance by Industry
Fiscal Year 2007 to 2013 is for 12 months; 2014 is for 6 Months



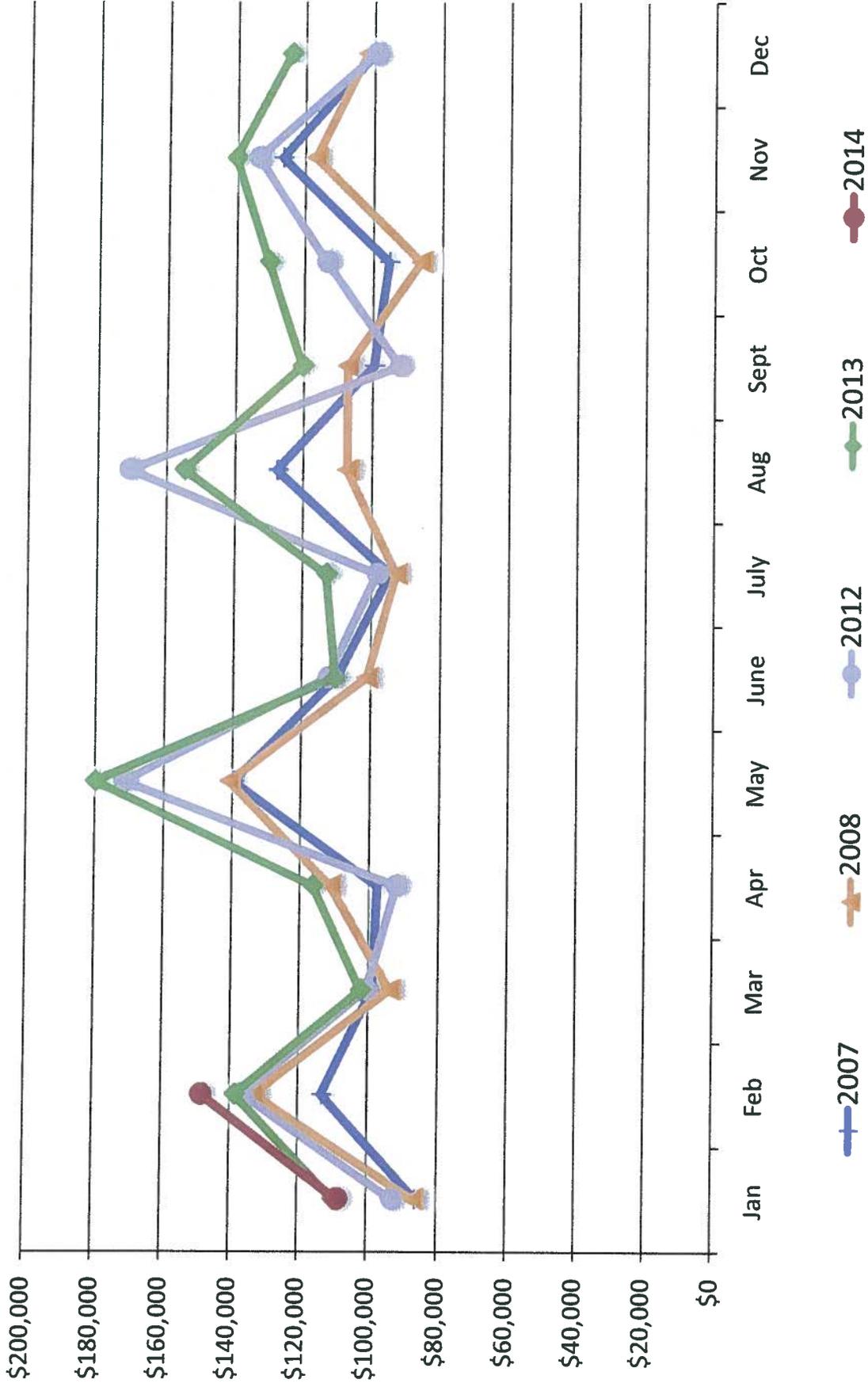
Total Direct Point of Sale - Local Tax Remittance by Month 5-Year Comparison by Calendar Year (2009 to 2011 Not Shown)



**Dept./Box Stores - Local Tax Remittance by Month
5-Year Comparison by Calendar Year (2009 to 2011 Not Shown)**

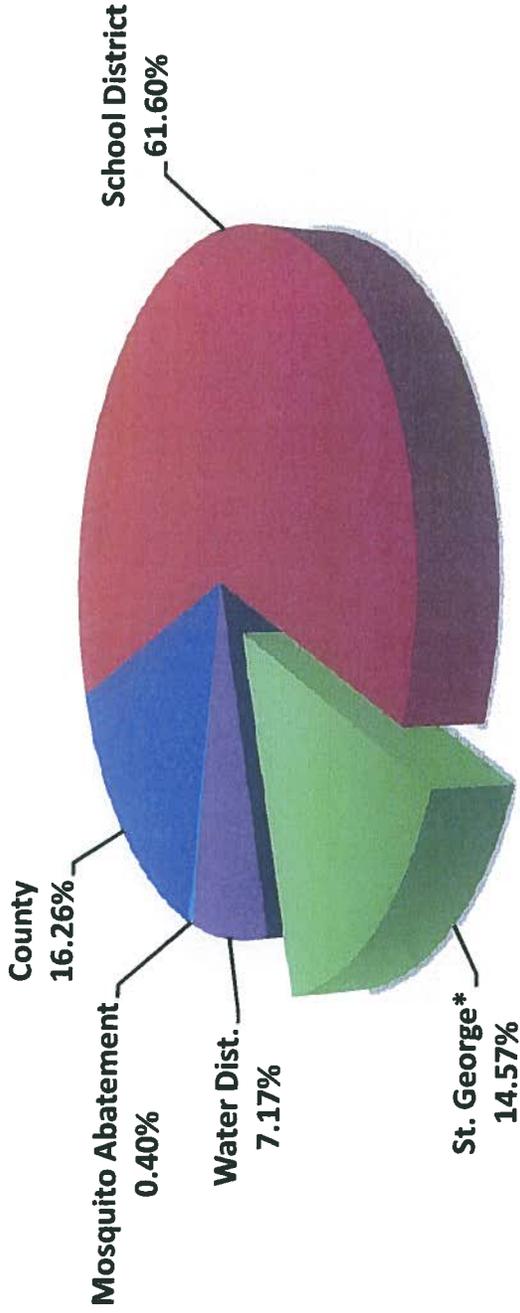


**Retail, Fast Food & Restaurants - Local Tax Remittance by Month
5-Year Comparison by Calendar Year (2009 to 2011 Not Shown)**





2013 Property Tax Distribution St. George District (Tax Rate is .012246)



*2.27% is for the Recreation Bond (G.O. Bond) approved in 1996 and does not go into General Fund revenues

Comparison of General Operations Tax Rates

Rank	Entity Name	2013
1	Hildale	0.008502
2	LaVerkin	0.002750
3	Hurricane	0.002690
4	Enterprise	0.002610
5	Apple Valley	0.002209
6	Santa Clara	0.002096
7	Ivins	0.001981
8	Washington City	0.001621
9	New Harmony	0.001541
10	St. George (not including G.O. Bond)	0.001505
11	Virgin	0.001445
12	Rockville	0.001435
13	Toquerville	0.001323
14	Leeds	0.000983
15	Springdale	0.000393



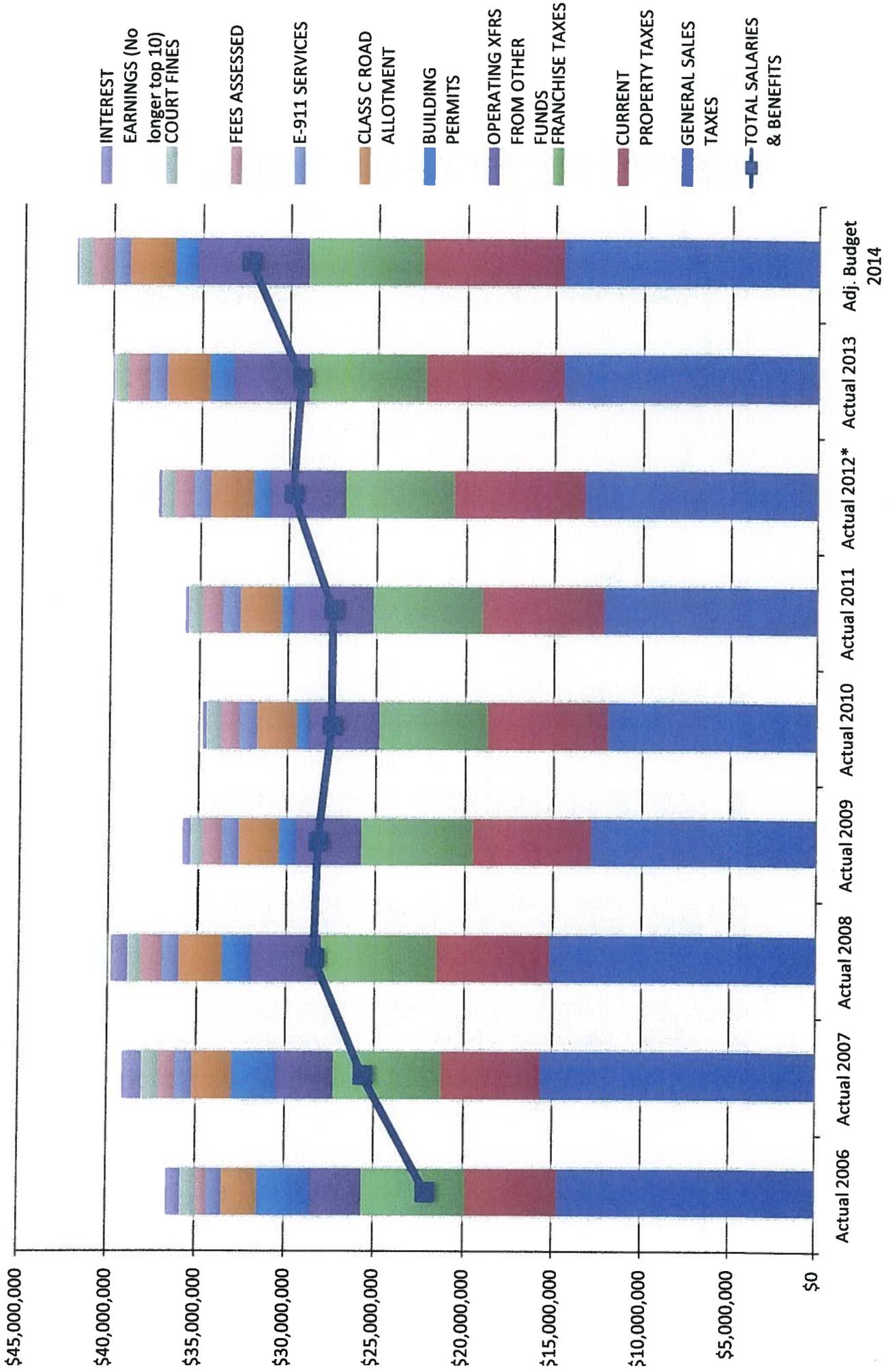
Property Tax Distribution Comparison



*St. George percentage and rate includes G.O. Bond levy

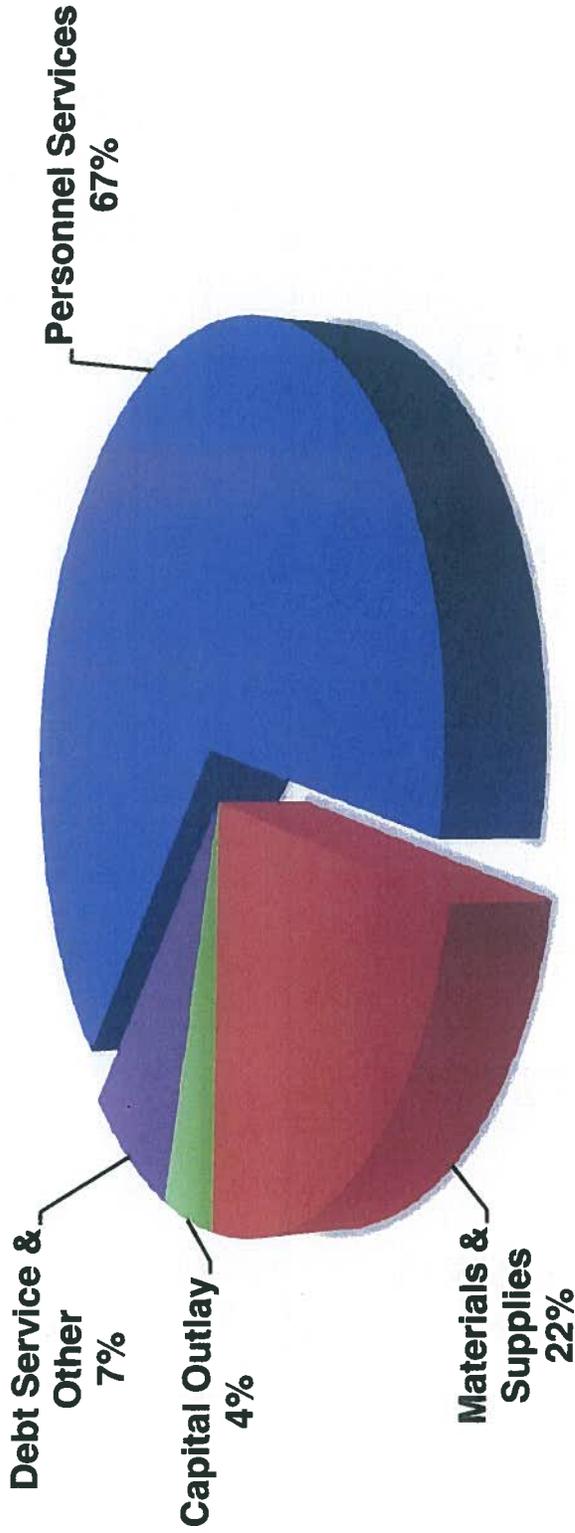


General Fund - Top 10 Revenue Sources to Total Salaries & Benefits





General Fund Expenditures Budget Fiscal Year 2014



EXPENDITURES

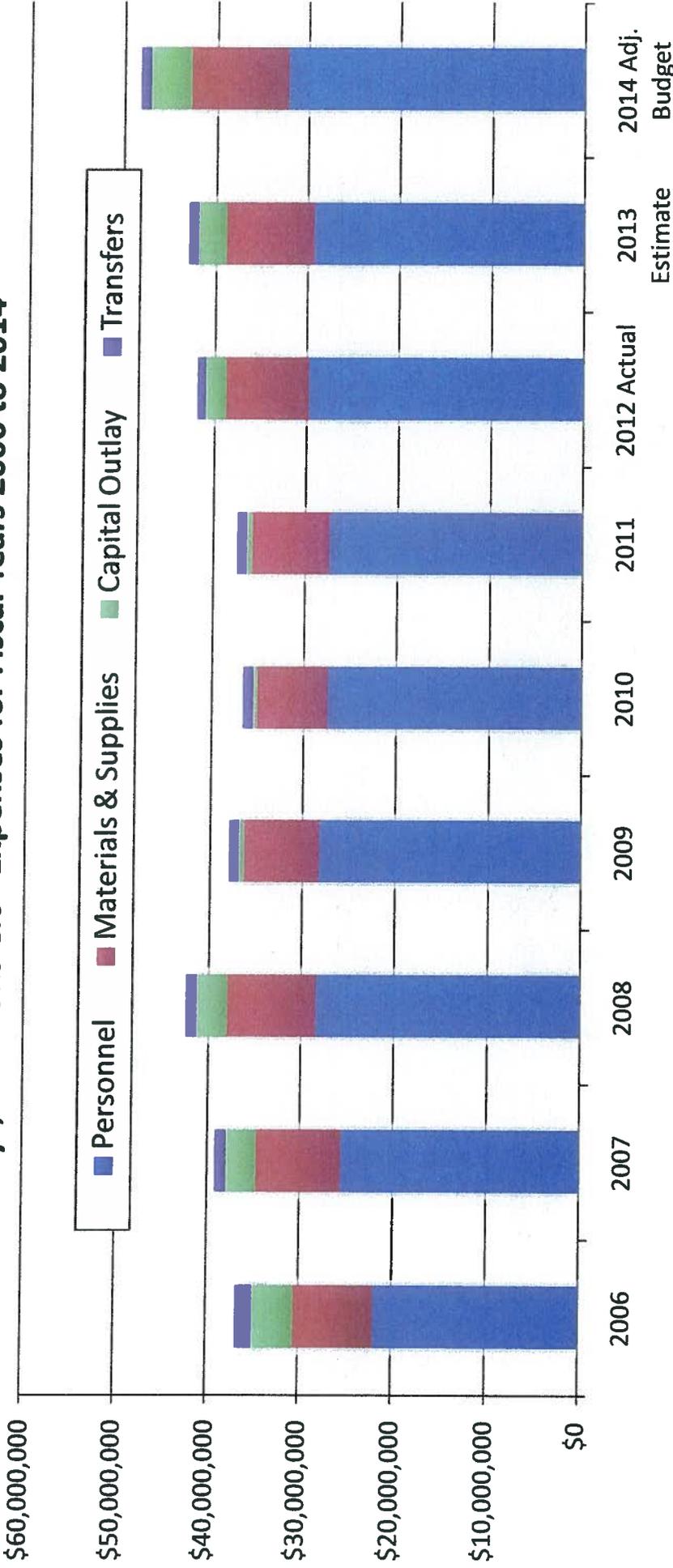
FY2014 Adj. Budget

FY2013 Actual

Personnel Services	\$32,290,448	\$29,344,091	67%	63%
Materials & Supplies	\$9,675,426	\$8,716,161	22%	19%
Capital Outlay	\$4,466,515	\$3,219,974	4%	7%
Debt Service & Other	\$4,072,617	\$5,280,068	7%	11%
TOTAL	<u>\$50,505,006</u>	<u>\$46,560,294</u>	<u>100%</u>	<u>100%</u>



General Fund - Distribution of Personnel, Materials & Supplies, Capital Outlays, and Transfers* Expenses for Fiscal Years 2006 to 2014

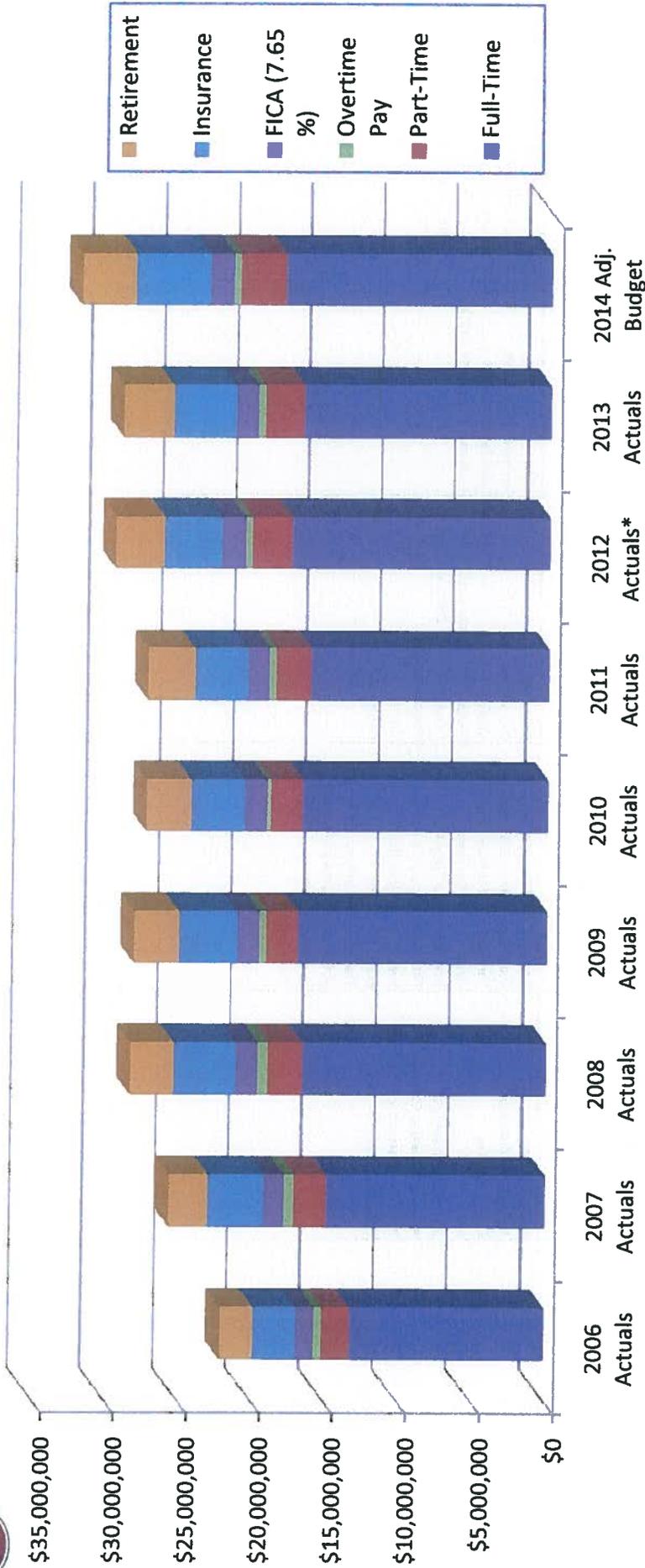


	2006	2007	2008	2009	2010	2011	2012	2013	2014 Adj. Budget
Personnel	Amount 22,098,689	Amount 25,655,063	Amount 28,423,851	Amount 28,258,068	Amount 27,499,650	Amount 27,481,197	Amount 29,775,626	Amount 29,344,091	Amount 32,290,448
Materials & Supplies	% 60%	% 65%	% 67%	% 74%	% 75%	% 73%	% 71%	% 68%	% 67%
Capital Outlay	Amount 4,495,952	Amount 3,272,067	Amount 9,609,128	Amount 8,103,070	Amount 7,588,855	Amount 8,289,568	Amount 9,048,479	Amount 9,529,229	Amount 10,511,577
Transfers	% 12%	% 8%	% 23%	% 2%	% 1%	% 2%	% 5%	% 7%	% 9%
	Amount 1,782,000	Amount 1,172,000	Amount 1,105,626	Amount 1,080,420	Amount 1,092,180	Amount 967,000	Amount 967,000	Amount 967,000	Amount 1,067,000
	% 5%	% 3%	% 3%	% 3%	% 3%	% 3%	% 2%	% 2%	% 2%
	Amount 36,912,764	Amount 39,190,663	Amount 42,497,584	Amount 38,046,153	Amount 36,625,624	Amount 37,410,516	Amount 41,968,633	Amount 43,060,295	Amount 48,335,540
	100%	100%	100%	100%	100%	100%	100%	100%	100%

*Transfers are net of the year-end, one-time transfer as chart is intended to show annual ongoing and necessary operating expenses.



General Fund - Salaries & Benefits History



*2012 includes 27 pay periods (vs. 26 standard)

	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Actuals	2012 Actuals*	2013 Actuals	2014 Adj. Budget	2014 Budget % of Total
Full-Time	\$13,227,678	\$14,909,764	\$16,615,102	\$17,044,585	\$16,783,718	\$16,292,640	\$17,718,606	\$16,933,050	\$18,319,432	57%
Part-Time	\$1,859,165	\$2,236,755	\$2,385,606	\$2,182,737	\$2,239,806	\$2,460,928	\$2,806,397	\$2,749,902	\$3,124,598	10%
Overtime Pay	\$578,063	\$663,015	\$738,597	\$490,237	\$283,824	\$451,577	\$444,986	\$496,512	\$497,750	2%
FICA (7.65 %)	\$1,171,009	\$1,336,323	\$1,483,843	\$1,491,248	\$1,440,237	\$1,407,389	\$1,550,202	\$1,497,900	\$1,596,297	5%
Insurance	\$2,994,915	\$3,840,594	\$4,211,829	\$3,976,969	\$3,711,266	\$3,687,173	\$3,938,801	\$4,280,024	\$5,045,372	16%
Retirement	\$2,267,859	\$2,668,612	\$2,988,874	\$3,072,292	\$3,040,812	\$3,181,492	\$3,316,635	\$3,386,703	\$3,706,999	11%
Total Salaries & Benefits	\$22,098,689	\$25,655,063	\$28,423,851	\$28,258,068	\$27,499,663	\$27,481,199	\$29,775,627	\$29,344,091	\$32,290,448	100%
Amount Increase (Decrease) from Prior Year	\$2,251,425	\$3,556,374	\$2,768,788	(\$165,783)	(\$758,405)	(\$18,464)	\$2,294,428	(\$431,536)	\$2,946,357	
% Increase from Prior Year	11.34%	16.09%	10.79%	-0.58%	-2.68%	-0.07%	8.35%	-1.45%	10.04%	
# of Approved Full-Time Positions	339	377	398	394	385	376	378	387	400	
% Increase from Prior Year	10.42%	11.21%	5.57%	-1.01%	-2.28%	-2.34%	0.53%	2.38%	3.36%	

City of St. George
General Overview of Fund Resources and Functions

Fund Function	GENERAL FUND	ENTERPRISE FUNDS	CAPITAL PROJECTS FUNDS (CPF)	SPECIAL REVENUE FUNDS	DEBT SERVICE FUNDS	REDEVELOPMENT AGENCY (RDA/EDA/CDA)
Primary operating fund that accounts for all financial resources of the general govt. except those accounted for in another fund.	Business-type activities where customers or applicants are charged a fee or rate to use, or directly benefit from goods, services, or privileges provided.	Funds used to account for financial resources to be used for the acquisition or construction of major capital facilities. (*Note: Impact Fees are technically Special Revenue Funds yet shown as Capital Projects for Budget Presentation Purposes)	Funds to account for revenues and resources that are legally restricted at a federal, state, or local level regarding the types of activities or projects for which the resources can be used.	Debt service funds are used to account for the accumulation of resources for, and the payment of, general long-term debt principal and interest.	Specific geographic districts are created by formal agreement of taxing agencies who forego their property tax revenues for a time certain to fund economic incentives and improvements to create business friendly environments.	Revenues are collections of real and personal property taxes collected from properties within each specified development area.
Revenues may or may not be tied to a specific activity or responsibility. Many functions provided do not have a direct, corresponding revenue (fire, police, streets, parks, etc.)	Revenues are generally charged based on the customer's usage.	Financial resources of capital projects funds come from several different sources, including bonds, federal and state grants, and appropriations from the general or special revenue funds.	Revenues are typically grants, matching fund appropriations from other funds, donations/fundraising activities, etc.	Revenues are generally transfers in from funds which benefited from the projects, or via voter-approved tax collections.	Property Taxes from each District Interest Earnings	Property Taxes from each District Interest Earnings
Sales Taxes Property Taxes Franchise Taxes Licenses Permits Registration, Participation, Entrance Fees	Utility Rates Admission Fees	Impact Fees Grants Appropriations from Other Funds	Grants Appropriations from Other Funds	Property Tax Collections Appropriations from Other Funds	Special Assessments Recreation G.O. Bonds Sales Tax Road Bond Replacement Airport (TRCC Bonds)	Downtown Redevelopment Ft. Pierce EDA #1 Ft. Pierce EDA #2 Ft. Pierce CDA Dixie Center EDA
Mayor & City Council City Manager Human Resources Administrative Services Finance Technology Services Building Operations Fleet Management Legal Code Enforcement Elections Police Dispatch Fire Development Services/Planning Comm. Building Inspection Public Works Admin./Engineering Streets Airport Leisure Services Admin. Parks Park Design Recreation (Sports, Softball, Races, etc.) Community Arts (PCA, Opera House) Marathon Cemetery Pool & Sand Hollow Aquatics Center	Water Services Wastewater Collection Energy Services Golf Solid Waste (Garbage) Municipal Building Authority Regional Wastewater Treatment Drainage Utility	General Capital Projects Economic Development Fund Park Impact* (See Note above) Street Impact* (See Note above) Drainage Impact* (See Note above) Fire Impact* (See Note above) Police Impact* (See Note above) Public Works CPF Transportation Improv. Fund (TIF) Special Improvement Dist. Replacement Airport Flood Projects	Dixie Center Airport PFC Fees CDBG Museum Permanent Acquisition Johnson Dinosaur Discovery Site Housing Program SunTran Perpetual Care	Dixie Center Airport PFC Fees CDBG Museum Permanent Acquisition Johnson Dinosaur Discovery Site Housing Program SunTran Perpetual Care	Dixie Center Airport PFC Fees CDBG Museum Permanent Acquisition Johnson Dinosaur Discovery Site Housing Program SunTran Perpetual Care	Dixie Center Airport PFC Fees CDBG Museum Permanent Acquisition Johnson Dinosaur Discovery Site Housing Program SunTran Perpetual Care

Annual Challenges:

- Health Insurance
- Retirement Rates
- Employee Salary Adjustments
- New Employee Requests
- Capital Outlay Requests
- Other

2013-2014 IMPACT FEES

CITY OF ST. GEORGE

1

LEWIS YOUNG ROBERTSON & BURNINGHAM, INC.
MARCH 2014

THE CITY OF ST. GEORGE, MISSISSIPPI
PUBLIC UTILITIES DEPARTMENT
WATER AND SEWERAGE DEPARTMENT



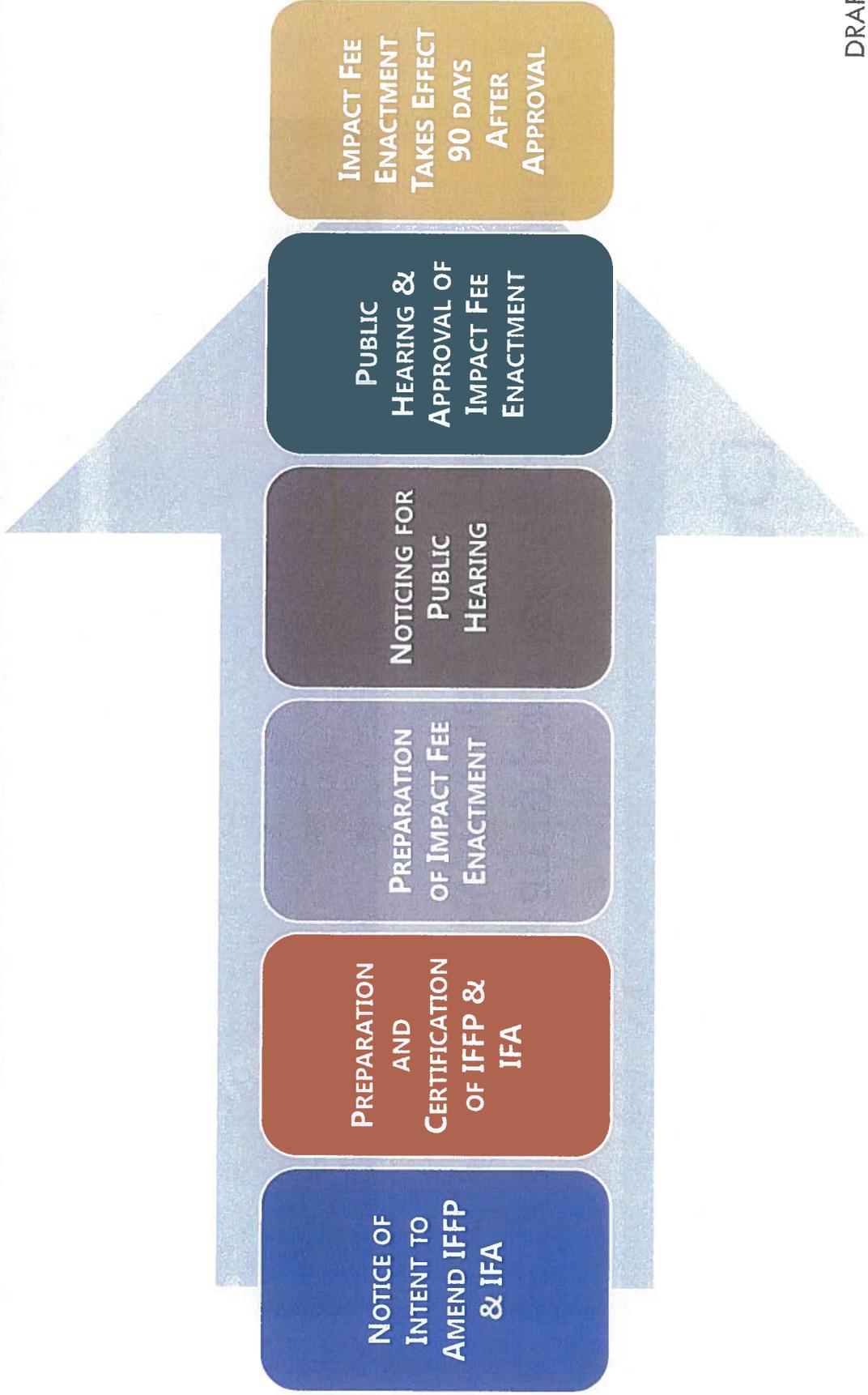
DRAFT
NOT FOR DISTRIBUTION

INTRODUCTION TO IMPACT FEES

2

- **IMPACT FEES:** payment of money imposed upon new development activity as a condition of development approval to mitigate the impact of the new development on public infrastructure.
- Utah Code Title 11 Chapter 36A, the “Impact Fees Act” outlines the requirements to establish impact fees.

IMPACT FEE PROCESS



INTRODUCTION TO IMPACT FEES

- Before imposing an impact fee, each local political subdivision or private entity shall prepare:



IMPACT FEE FACILITIES PLAN (IFFP)

Identifies the demands placed upon the City's existing facilities by future development and evaluates how these demands will be met by the City. Outlines the improvements which are intended to be funded by impact fees.



IMPACT FEE ANALYSIS (IFA)

Proportionately allocates the cost of the new facilities and any excess capacity to new development, while ensuring that all methods of financing are considered.

INTRODUCTION TO IMPACT FEES

5

- The following elements are important considerations when completing an IFFP and IFA:



SCOPE OF WORK

CITY OF ST. GEORGE

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- IFFP and IFA for the Following:
 - ▣ Culinary Water
 - ▣ Sanitary Sewer
 - ▣ Storm Drain (*LYRB completed IFA; Bowen & Collins completed IFFP*)
 - ▣ Transportation
 - ▣ Public Safety (Fire, EMS & Police)
 - ▣ Parks, Recreation & Open Space
 - ▣ Power

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CULINARY WATER

CULINARY WATER

- **Service Area:**
 - Single City-wide service area for culinary water impact fees.

- **Demand Analysis:**
 - Equivalent Residential Units (ERUs) expected to increase from **32,035 ERUs** (beginning 2013) to **43,052 ERUs** (beginning 2023).
 - Represents an increase of 11,017 ERUs. (AAGR = 3%)

- **Level of Service (measured based on existing facilities):**
 - Storage: 1,487 gallons per day (gpd) per ERU for storage (includes indoor, outdoor, emergency, and fire).
 - Distribution: 1,085 gpd per ERU for transmission and major distribution (peak day demand).

CULINARY WATER

□ **Existing Inventory and Excess Capacity:**

- **Source:** Water supply is currently provided by Washington County Water Conservancy District (WCWCD).
- **Storage:** Total capacity is 58.30 million gallons (MG), and the City is currently using 47.65 MG. Thus, excess capacity is **10.65 MG, serving 7,160 ERUs.**
 - The ERU's projected for the planning horizon is 11,017. Thus an additional 5.7 MG of storage will be needed in order to accommodate the anticipated development activity (new growth).
- **Transmission and Major Distribution:** Generally the system is at capacity resulting in needed future improvements. However, one specific line has significant excess capacity. The Airport Waterline can serve an additional **4,543 ERUs.**

CULINARY WATER

▣ Calculation of Storage Buy-In:

TANK	VOLUME (MGD)	GPD	ERUS SERVED (BASED ON LOS)
Total Storage Needed (2013)	47.65	47,650,000	32,035
Existing Storage Capacity	58.30	58,300,000	39,195
Excess Capacity	10.65	10,650,000	7,160
ERUs in Planning Horizon (2013-2023)			
		Difference	11,017
			3,846
			5,737,576
New Storage Needed (Gal) at 1,487 gpd/ERU			

Base Value of Existing Facilities	\$6,860,870	Based on existing depreciation schedules (incurred original costs)
Total Value of Existing Facilities	\$6,860,870	
Percent Excess Capacity	18.3%	ERUs Served by Excess Capacity / Total Existing Storage Capacity ERUs
Buy-in Cost to Growth	\$1,253,319	Calculation of Buy-in does not include the future capital cost to provide the additional 5.7 MG of storage

CULINARY WATER

▣ Calculation of Transmission Buy-In (Airport Waterline):

CAPACITY ANALYSIS	ERUS
Capacity	4,645
Current Demand	102
Excess Capacity	4,543
% Excess Capacity	97.8%
<i>Source: The City of St. George Water Services Department</i>	

Base Value of Existing Facilities	\$1,235,366	Source: Water Services Department
Total Value of Existing Facilities	\$1,235,366	
Percent Excess Capacity	97.8%	See Table 4.5: ERUs Served by Excess Capacity / Total Existing Capacity ERUs
Buy-in Cost to Growth	\$1,208,238	

CULINARY WATER

□ **Capital Facilities Analysis:**

- Total of **\$17.9 million** in future capital improvements identified.
- **\$7.1 million** is identified in the IFFP as City-funded, **growth related** improvements needed within the next ten years to maintain the existing level of service (LOS).

Project	2013 Construction Cost Total	Cost to Growth	Percent within IFFP Window	Cost to Impact Fee
Source Total:	\$2,799,557	\$0	0%	\$0
Distribution Total:	\$6,058,514	\$3,915,060	100%	\$3,915,060
Flow Control Total:	\$119,520	\$119,520	100%	\$119,520
Storage Total:	\$8,760,903	\$5,274,363	56%	\$2,938,064
Booster Pump Stations Total:	\$204,020	\$204,020	100%	\$204,020
Total Costs	\$17,942,514	\$9,512,963		\$7,176,664

CULINARY WATER

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- **Financial Resources and Revenues to Finance System Improvements:**

- Anticipated that future projects will be constructed using impact fee revenues and utility rate revenues.
- The current capital finance plan does not anticipate any bond financing but rather will be paid on a pay-as-you-go basis.

CULINARY WATER

- Culinary Water Impact Fee:**
- Total fee per ERU is calculated at **\$878.**

	TOTAL COST	COST TO GROWTH	Percent within IFFP Window	Cost to Impact Fee within IFFP Window	ERUS SERVED ¹	FEE PER ERU
Excess Capacity						
Storage Excess Capacity	\$6,860,870	\$1,253,319	100%	\$1,253,319	11,017	\$114
Distribution Excess Capacity	\$1,235,366	\$1,208,238	100%	\$1,208,238	11,017	\$110
Future Capital Projects						
Storage	\$8,760,903	\$5,274,363	56%	\$2,928,064	11,017	\$267
Distribution	\$6,058,514	\$3,915,060	100%	\$3,915,060	11,017	\$355
Flow Control	\$119,520	\$119,520	100%	\$119,520	11,017	\$11
Booster Pumps	\$204,020	\$204,020	100%	\$204,020	11,017	\$19
Other						
Professional Expense	\$9,675	\$9,675		\$9,675	6,216	\$2
Impact Fee Fund Balance	\$0	\$0			0	\$0
Total	\$23,248,868	\$11,984,195		\$9,647,896		\$878

¹ -Excess Capacity & Future Capital Projects is spread over the amount of ERUs in the IFFP planning horizon. Professional Expense is spread over the ERUs projected in the next six years.

CULINARY WATER

□ **Culinary Water Impact Fee:**

- Total fee per ERU is calculated at **\$878**. Other multipliers will apply as described in the table below.

METER SIZE (IN)	ERU MULTIPLIER	PROPOSED IMPACT FEE PER METER SIZE	EXISTING IMPACT FEE	% CHANGE
3/4	1.00	\$878	\$1,432	-39%
1	2.16	\$1,896	\$2,387	-21%
1 1/2	7.17	\$6,295	\$4,774	32%
2	11.54	\$10,132	\$7,638	33%
3	26.00	\$22,828	\$16,708	37%
4	46.00	\$40,388	\$28,643	41%
6	104.00	\$91,312	\$59,672	53%

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

CULINARY WATER

Culinary Water Impact Fee Cash Flow:

YEAR	EST. ERUS	NEW ERUS	IMPACT FEE PER ERU	EST. IMPACT FEE REVENUE	IMPACT FEE CAPITAL OUTLAY	CUMULATIVE IMPACT FEE REVENUE	TOTAL CAPITAL OUTLAY
2013	32,035						
2014	32,996	961	\$878	\$843,802	\$1,462,480	(\$618,678)	\$3,424,910
2015	33,986	990	\$878	\$869,116	\$2,862,496	(\$2,612,059)	\$3,808,639
2016	35,006	1,020	\$878	\$895,189	\$1,043,695	(\$2,760,564)	\$1,146,725
2017	36,056	1,050	\$878	\$922,045	\$156,169	(\$1,994,688)	\$312,337
2018	37,137	1,082	\$878	\$949,706	\$707,067	(\$1,752,048)	\$1,149,279
2019	38,251	1,114	\$878	\$978,198	\$0	(\$773,851)	\$3,184,560
2020	39,399	1,148	\$878	\$1,007,544	\$0	\$233,693	\$1,635,006
2021	40,581	1,182	\$878	\$1,037,770	\$0	\$1,271,463	\$0
2022	41,798	1,217	\$878	\$1,068,903	\$3,281,056	(\$940,690)	\$3,281,056
2023	43,052	1,254	\$878	\$1,100,970	\$0	\$160,280	
Total		11,017		\$9,673,243	\$9,512,963		\$17,942,514

Historic Impact Fee Revenues and Estimated ERUs

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Impact Fees	\$4,537,600	\$3,090,650	\$1,945,386	\$837,761	\$423,680	\$439,322	\$398,451	\$798,830	\$1,006,109
Estimate of ERUs	2,017	1,374	1,358	585	296	307	278	554	703

* St. George City Budget Documents, <http://www.sao.state.ut.us/igr/municipal/2013/13mbstgc.pdf>

SANITARY SEWER

SANITARY SEWER

- **Service Area:**
 - For purposes of the City’s sanitary sewer system there will be two service areas:
 - **Local Wastewater Division:** Treatment and collection infrastructure that specifically serves the development within the City.
 - **Regional Wastewater Division:** Treatment and collection infrastructure that serves development within the City of St. George, Ivins City, the City of Santa Clara, and Washington City.

- **Demand Analysis:**
 - Equivalent Residential Units (ERUs) expected to increase from **36,959 ERUs** (beginning 2013) to **49,669 ERUs** (ending 2023).
 - Represents an **increase** in ERUs by **12,711**.

SANITARY SEWER

- **Level of Service:**

- **Treatment:** Typical daily usage per ERU is estimated at **282 gallons**.
- **Collection:** While there may be capacity within individual collection lines, on an aggregated basis the system is at capacity and is based on the treatment level of service.

- **Existing Inventory and Excess Capacity:**

- **Treatment:** Total capacity is 17 MG, and the service area is using 10.4 MG. Thus, the **excess capacity** in the treatment facility is **6.6 MG** and should serve **23,325 ERUs**.
- **Collection:** No buy-in component related to collection.

SANITARY SEWER

- **Capital Facilities Analysis:**
 - **Local Wastewater Division:** Total of **\$1.6 million** identified as needed collection improvements within St. George service area, all of which is considered growth related.
 - **Regional Wastewater Division:** Total of **\$1.7 million** is collection improvements for the Regional Service Area, all of which is considered growth related.

- **Resources to Finance System Improvements:**
 - Assumed pay-as-you-go basis. Does not include a debt component. Utility rates and impact fees are anticipated to be the primary funding sources for this capital improvement program.

SANITARY SEWER

□ **Capital Facilities NOT Included in Analysis:**

□ The Master Plan estimates that the Regional Reclamation Facility will need to be capable of treating 25 mgd as the average annual daily flow by 2030. However, changes in market conditions suggest that the Facility will need to be capable of treating 25 mgd by 2040. Currently, plant capacity is 17 mgd. Therefore an additional 8 mgd of treatment capacity, (52 percent additional capacity) will need to be provided. Annual average daily wastewater flows for 2012 are estimated at 10 mgd (2013 estimated at 10.4 mgd). Treatment of these flows requires the use of three of the four existing oxidation ditches. The fourth ditch will remain unused until plant flows reach 75 percent plant capacity, or approximately 12.75 mgd.

□ Based on the population projections at the time the Master Plan was completed, the flow was estimated to reach 12.75 mgd by the end of 2012. However, changes in market conditions suggest the regional plant will not reach this capacity until sometime after 2019.

□ The 2008 cost estimate for the installation of the fine bubble diffusers was estimated at \$56.7 Million to expand to 25 mgd, but this cost will retrofit the whole plant. The City has \$11 million to help fund this project and will finance the rest. **However due to the timing of this facility near the end of the impact fee facilities plan window, the costs are not included in this analysis. Should growth estimates accelerate, the impact fees in this analysis should be revised to consider these necessary improvements.**

SANITARY SEWER

Sanitary Sewer Impact Fee

- Total fee per ERU estimated at **\$909** for **Regional** and **\$161** for **Local** for a total of **\$1,070**.

REGIONAL FEE CALCULATION	ESTIMATED COST	PERCENT TO GROWTH	COST TO GROWTH	ERUS SERVED	COST PER ERU
Treatment Buy-In (Including COI)	\$46,480,972	38.7%	\$17,984,533	23,325	\$771
Future Collection (Regional)	\$1,754,572	100.0%	\$1,754,572	12,711	\$138
Professional Expense	\$9,675	100.0%	\$9,675	7,172	\$1
Subtotal: Regional	\$48,235,544		\$19,739,105		\$909
LOCAL FEE CALCULATION	ESTIMATED COST	PERCENT TO GROWTH	COST TO GROWTH	ERUS SERVED	COST PER ERU
Future Collection (Local)	\$1,654,317	100.0%	\$1,654,317	10,296	\$161
Subtotal: Local	\$1,654,317		\$1,654,317		\$161
Combined Total Impact Fee					\$1,070

SANITARY SEWER

Sanitary Sewer Impact Fee

- Total fee per ERU estimated at \$161 for Local and \$909 for Regional for a total of \$1,070. The multipliers will apply as described in the table below.

CONNECTION SIZE	ERU MULTIPLIER	REGIONAL FEE	LOCAL IMPACT FEE	TOTAL PROPOSED IMPACT FEE PER METER SIZE	EXISTING TOTAL IMPACT FEE	% CHANGE
3/4	1.00	\$909	\$161	\$1,070	\$1,877	-43%
1	2.16	\$1,964	\$347	\$2,311	\$3,714	-38%
1 1/2	7.17	\$6,518	\$1,152	\$7,670	\$7,429	3%
2	11.54	\$10,491	\$1,854	\$12,345	\$11,886	4%
3	26.00	\$23,636	\$4,178	\$27,814	\$26,001	7%
4	46.00	\$41,818	\$7,391	\$49,209	\$44,573	10%
6	104.00	\$94,544	\$16,711	\$111,255	\$92,860	20%

Multipliers provided by the City of St. George and are representative of the actual historic water use for difference meter sizes.

SANITARY SEWER

Sanitary Sewer Impact Fee Cash Flow:

Discrepancy Due to Buy-In¹

YEAR	EST. ERUS	NEW ERUS	IMPACT FEE PER ERU	EST. IMPACT FEE REVENUE	IMPACT FEE CAPITAL OUTLAY	CUMULATIVE IMPACT FEE REVENUE	TOTAL CAPITAL OUTLAY
2013	36,959			\$0			
2014	38,067	1,109	\$1,070	\$1,186,104	\$0	\$1,186,104	\$0
2015	39,209	1,142	\$1,070	\$1,221,687	\$1,901,466	(\$679,779)	\$1,901,466
2016	40,386	1,176	\$1,070	\$1,258,338	\$0	\$1,258,338	\$0
2017	41,597	1,212	\$1,070	\$1,296,088	\$0	\$1,296,088	\$0
2018	42,845	1,248	\$1,070	\$1,334,971	\$0	\$1,334,971	\$0
2019	44,130	1,285	\$1,070	\$1,375,020	\$0	\$1,375,020	\$0
2020	45,454	1,324	\$1,070	\$1,416,270	\$1,507,422	(\$91,152)	\$1,507,422
2021	46,818	1,364	\$1,070	\$1,458,758	\$0	\$1,458,758	\$0
2022	48,223	1,405	\$1,070	\$1,502,521	\$0	\$1,502,521	\$0
2023	49,669	1,447	\$1,070	\$1,547,597	\$0	\$1,547,597	\$0
Total				\$13,597,354	\$3,408,889		\$3,408,889

Historic Impact Fee Revenues and Estimated ERUs

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Impact Fees	\$3,642,594	\$3,116,126	\$2,586,991	\$1,417,350	\$811,071	\$884,922	\$921,568	\$1,391,074	\$1,884,309
Estimate of ERUs	3,140	2,686	1,378	755	432	472	491	741	1,004

* St. George City Budget Documents, <http://www.sao.state.ut.us/igr/municipal/2013/13mbstgpc.pdf>

1 – The additional impact fee revenue associated with buy-in will be used by the City to stabilize user rates and reimburse current users for funds used to finance growth-driven infrastructure. **DRAFT**

STORM DRAIN (IFA ONLY)

STORM DRAIN (IFA ONLY)

- **Service Area:**
 - Single City-wide service area for storm drain impact fees.
- **Demand Analysis:**
 - Demand unit used in analyzing impact fees for storm water is **impervious surface area** (square footage).

	IMPERVIOUS SURFACE (SQ. FT.)	NEW IMPERVIOUS SURFACE (SQ. FT.)	CUMULATIVE NEW GROWTH
2013	204,961,664		
2014	211,110,514	6,148,850	
2015	217,259,363	6,148,850	12,297,700
2016	223,408,213	6,148,850	18,446,550
2017	229,557,063	6,148,850	24,595,400
2018	235,705,913	6,148,850	30,744,250
2019	241,854,763	6,148,850	36,893,099
2020	248,003,613	6,148,850	43,041,949
2021	254,152,463	6,148,850	49,190,799
2022	260,301,313	6,148,850	55,339,649
2023	266,450,163	6,148,850	61,488,499

STORM DRAIN (IFA ONLY)

□ **Level of Service:**

- The IFFP identifies the future storm drain system improvements that are needed to manage the runoff caused by 10-year and 100 year events. Therefore, the City's storm drain infrastructure is sized to safely and adequately manage runoff from the storm intensities and durations indicated in the IFFP (*as prepared by Bowen, Collins & Associates*).

□ **Existing Inventory and Excess Capacity:**

- A buy-in component is not contemplated in this analysis as it was determined that there does not, or it is extremely difficult to determine, if excess capacity exists within the system improvements.

STORM DRAIN (IFA ONLY)

- **Capital Facilities Analysis:**
 - Total estimated capital improvement needs equal **\$16.4 million** within IFFP
 - Approximately **\$7.8 million** is identified as capital improvements funded through **impact fees** (*the difference will be funded by the developer*).

- **Resources to Finance System Improvements:**
 - Assumed pay-as-you-go basis using storm water fees and impact fees.

STORM DRAIN (IFA ONLY)

□ **Storm Drain Impact Fee per SF:**

STORM DRAIN PROPORTIONATE SHARE ANALYSIS	GROWTH RELATED COSTS	FUTURE IMP. SURFACE	COST PER SF
Future Storm Drain Projects	\$7,840,458	61,488,499	\$0.128
Professional Expenses	\$9,675	36,893,099	\$0.00026
Impact Fee Fund Balance	(\$1,659,259)	61,488,499	(\$0.027)
Total	\$6,190,874		\$0.101

STORM DRAIN (IFA ONLY)

□ **Storm Drain Impact Fee by Land Use Type:**

	TOTAL IMP. SURFACE (SF)	COST PER IMP. SF	PROPOSED IMPACT FEE PER UNIT	2006 IMPACT FEE	% CHANGE
Residential (per Dwelling)					
Residential Single Family	5,082	\$0.101	\$512	\$444	15%
Residential Multi-Family & Mobile Homes	3,267	\$0.101	\$329	\$286	15%
Non-Residential (per 1,000 SF)					
Commercial/Office	950	\$0.101	\$96	\$83	15%
Industrial	900	\$0.101	\$91	\$79	15%

STORM DRAIN (IFA ONLY)

Storm Drain Impact Fee Cash Flow:

YEAR	EST. IMP. SF	NEW IMP. SF	IMPACT FEE PER SF	EST. IMPACT FEE REVENUE	ESTIMATE OF IMPACT FEE CAPITAL OUTLAY	CUMULATIVE IMPACT FEE REVENUE
2013	204,961,664					\$1,659,259
2014	211,110,514	6,148,850	\$0.101	\$619,732	\$699,110	\$1,579,881
2015	217,259,363	6,148,850	\$0.101	\$619,732	\$91,800	\$2,107,814
2016	223,408,213	6,148,850	\$0.101	\$619,732	\$78,045	\$2,649,501
2017	229,557,063	6,148,850	\$0.101	\$619,732	\$2,773,643	\$495,591
2018	235,705,913	6,148,850	\$0.101	\$619,732	\$597,652	\$517,671
2019	241,854,763	6,148,850	\$0.101	\$619,732	\$1,282,212	(\$144,809)
2020	248,003,613	6,148,850	\$0.101	\$619,732	\$515,477	(\$40,553)
2021	254,152,463	6,148,850	\$0.101	\$619,732	\$1,129,339	(\$550,160)
2022	260,301,313	6,148,850	\$0.101	\$619,732	\$635,158	(\$565,585)
2023	266,450,163	6,148,850	\$0.101	\$619,732	\$38,022	\$16,125
Total		61,488,499		\$6,197,324	\$7,840,458	

Historic Impact Fee Revenues and Estimated ERUs

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Impact Fees	\$871,387	\$885,179	\$757,193	\$594,429	\$295,689	\$140,392	\$184,413	\$239,733	\$438,540
Estimate of Imp SF	11,809,037	11,995,946	8,660,548	6,798,902	3,382,003	1,605,762	2,109,261	2,741,995	5,015,890

* St. George City Budget Documents, <http://www.sao.state.ut.us/igr/municipal/2013/13mbstfgc.pdf>

TRANSPORTATION

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TRANSPORTATION

- **Service Area:**
 - Single City-wide service area for the transportation impact fees.

- **Demand Analysis:**
 - Demand unit is **trip generation** - based upon each land use category's impact and road usage characteristics expressed in the number of trips generated.
 - Growth in **new trips** through 2023 is estimated at **151,830**.

TRIPS BY TYPE	2013	2018	2023
Pass-By	21,665	26,734	33,973
IX - XI	114,550	140,695	170,058
Internal	222,381	246,801	270,542
Total Trips	580,977	661,031	745,115
Growth in Trips			164,138
<hr/>			
Trip Productions and Attractions in St. George	559,312	634,297	711,142
Growth in New Trips within St. George (IFFP)			151,830

TRANSPORTATION

Level of Service:

- Development that will increase traffic volumes on collector and arterial road intersections will be required to make improvements to maintain at least a **LOS D** during peak hours. Most of the City's roadways currently maintain this standard.

LOS	ARTERIAL (ADTS)	COLLECTOR (ADTS)
LOS A	5,500	5,000
LOS B	7,500	7,000
LOS C	10,000	9,000
LOS D (minimum standard)	11,500	10,500
LOS E	15,000	13,500

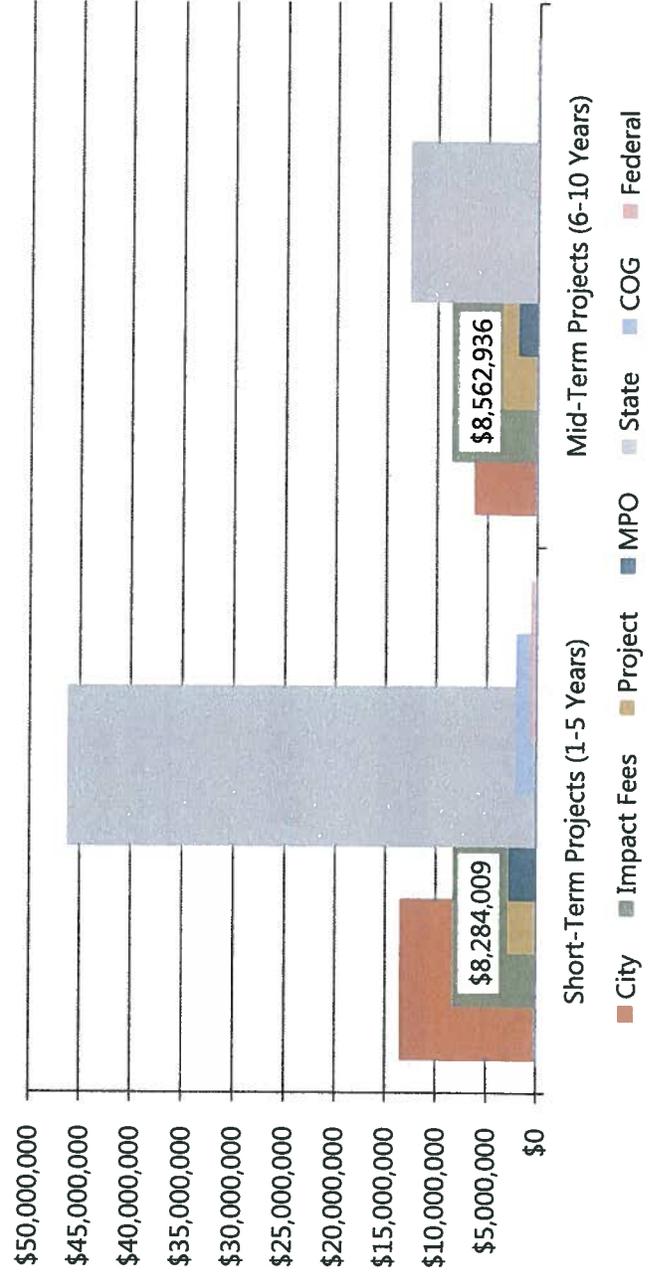
Existing Inventory and Excess Capacity:

- No buy-in component is calculated in this analysis.

TRANSPORTATION



- **Capital Facilities Analysis:**
 - Total of **\$109.3 million** identified as new capital costs.
 - **\$18.2 million** of the total costs is anticipated to be **growth related** with **\$16.8 million** funded through **impact fees** (this accounts for the pass-by trips).
- **Resources to Finance System Improvements:**
 - Assumed pay-as-you-go basis. Does not include a debt component.



TRANSPORTATION

Financing Revenues and Resources to Finance System Improvements

CFP COSTS BY SOURCE	SHORT-TERM PROJECTS (1-5 YEARS)	MID-TERM PROJECTS (6-10 YEARS)	TOTAL
City	\$13,522,938	\$6,303,778	\$19,826,716
Impact Fees	\$8,284,009	\$8,562,936	\$16,846,944
Project	\$2,840,761	\$3,503,651	\$6,344,412
MPO	\$2,289,936	\$1,904,175	\$4,194,111
State	\$46,254,161	\$12,798,394	\$59,052,555
COG	\$2,047,388	\$216,571	\$2,263,960
Federal	\$589,332	\$259,886	\$849,218
Total	\$75,828,524	\$33,549,392	\$109,377,916

TRANSPORTATION

□ Transportation Impact Fee Cost per Trip

TRANSPORTATION CAPITAL PROJECTS	GROWTH RELATED COSTS	FUTURE TRIPS	COST PER TRIP
Future Roadway Projects	\$16,846,944	151,830	\$110.96
Professional Expenses	\$9,675	86,692	\$0.11
Impact Fee Fund Balance	(\$2,498,912)	151,830	(\$16.46)
Net Impact Fee Cost per Trip	\$14,357,707		\$94.61

TRANSPORTATION

□ Transportation Impact Fees by Land Use Type (Residential):

ITE CLASSIFICATION	WEEKDAY TRIPS	PASS-BY ADJUST.	ADJUSTMENT FACTOR	ADJUSTED TRIPS	PROPOSED FEE	EXISTING FEE	% CHANGE
Residential (per Unit)							
Single Family Homes (210)	9.57		1.00	9.57	\$905	\$754	20%
Multi-Family (220)	6.65		1.00	6.65	\$629	\$529	19%
Mobile Home Park(240)	4.99		1.00	4.99	\$472	\$393	20%

TRANSPORTATION

Transportation Impact Fees by Land Use Type (Other):

ITE CLASSIFICATION	WEEKDAY TRIPS	PASS-BY ADJUST.	ADJUSTMENT FACTOR	ADJUSTED TRIPS	PROPOSED FEE	EXISTING FEE	% CHANGE
Lodging (per room)							
Hotel	8.17		1.00	8.17	\$773	\$562	38%
Motel	5.63		1.00	5.63	\$533	\$574	-7%
Non Residential (per 1,000 Sq. Ft.)							
Church	9.11		1.00	9.11	\$862	\$574	50%
Supermarket	102.24	36%	1.00	65.43	\$6,191	\$1,622	282%
Fast Food With Drive Thru	496.12	50%	1.00	248.06	\$23,470	\$6,025	290%
Quality Restaurant	89.95	44%	1.00	50.37	\$4,766	\$4,959	-4%
Drive-In Bank	148.15	47%	1.00	78.52	\$7,429	\$3,882	91%
Convenience. Mkt W/ Gas Pumps	845.60	66%	1.00	287.50	\$27,201	\$4,556	497%
General Commercial/Shopping Center	42.94	34%	1.00	28.34	\$2,681	\$2,705	-1%
Specialty Retail Center	44.32		1.00	44.32	\$4,193	\$1,745	140%
General Office	11.01		1.00	11.01	\$1,042	\$867	20%
General Light Industrial	6.97		1.00	6.97	\$659	\$549	20%
Auto Parts	61.91	43%	1.00	35.29	\$3,339	\$3,901	-14%
Medical/Dental Office	36.13		1.00	36.13	\$3,418	\$2,845	20%
Business Park	12.76		1.00	12.76	\$1,207	\$1,005	20%
New Car Sales	33.34		1.00	33.34	\$3,154	\$2,101	50%
Free Standing Discount Super	53.13	28%	1.00	38.25	\$3,619	\$1,654	119%
Hardware/Paint Store	51.29	26%	1.00	37.95	\$3,591	\$2,424	48%
Home Improvement Store	29.80	48%	1.00	15.50	\$1,466	\$1,408	4%
Electronic Superstore	45.04	40%	1.00	27.02	\$2,557	\$2,483	3%
Apparel Store	66.40		1.00	66.40	\$6,282	\$2,615	140%
Manufacturing	3.82		1.00	3.82	\$361	\$301	20%

TRANSPORTATION

Transportation Impact Fee Cash Flow:

YEAR	CUMULATIVE TRIPS	NEW ERUS	IMPACT FEE PER ERU	EST. IMPACT FEE REVENUE	ESTIMATE OF IMPACT FEE CAPITAL OUTLAY	CUMULATIVE IMPACT FEE REVENUE	ESTIMATE OF TOTAL CAPITAL OUTLAY (CITY) ¹	DIFFERENCE (TOTAL CAPITAL LESS IMPACT FEE CAPITAL OUTLAY)
2013	559,312					\$2,498,912		
2014	572,907	1,421	\$905	\$1,286,282	\$3,830,484	(\$45,290)	\$14,321,800	\$10,491,316
2015	586,833	1,455	\$905	\$1,317,548	\$0	\$1,272,257	\$0	\$0
2016	601,097	1,491	\$905	\$1,349,574	\$136,285	\$2,485,546	\$147,333	\$11,048
2017	615,708	1,527	\$905	\$1,382,378	\$1,949,212	\$1,918,712	\$2,924,097	\$974,886
2018	630,674	1,564	\$905	\$1,415,980	\$2,378,486	\$956,206	\$4,413,717	\$2,035,231
2019	646,004	1,602	\$905	\$1,450,398	\$4,958,703	(\$2,552,098)	\$10,137,517	\$5,178,815
2020	661,707	1,641	\$905	\$1,485,653	\$1,698,356	(\$2,764,801)	\$2,452,510	\$754,154
2021	677,791	1,681	\$905	\$1,521,765	\$1,482,454	(\$2,725,489)	\$1,808,371	\$325,917
2022	694,265	1,722	\$905	\$1,558,755	\$85,992	(\$1,252,726)	\$1,114,837	\$28,845
2023	711,142	1,763	\$905	\$1,596,644	\$326,973	\$16,944	\$353,479	\$26,506
Total				\$14,364,977	\$16,846,944		\$36,673,661	\$19,826,716

Historic Impact Fee Revenues and Estimated ERUs

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Impact Fees	\$1,387,582	\$1,099,964	\$943,609	\$1,117,832	\$497,153	\$319,677	\$457,161	\$518,224	\$799,786
Estimate of ERUs	1,850	1,467	1,252	1,483	660	424	607	687	1,061

* St. George City Budget Documents, <http://www.sao.state.ut.us/igr/municipal/2013/13mbstgpc.pdf>

1 – Total Capital Outlay is the amount funded from Impact Fees and other City revenue sources.

FIRE

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DRAFT

FIRE

- Service Area:**
 - Single City-wide service area for fire impact fees.
- Demand Analysis:**
 - Demand unit is calls for fire service
 - Historic average annual private City calls **4,353**
 - Projected private calls to build-out is an additional annual **4,052**

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

1 - GIS data from the City of St. George

2 - Three year average of calls (2009-2011)

FIRE

Existing Inventory and Excess Capacity:

- Original cost of existing fire stations and apparatus is **\$6.1 million**
- No excess capacity
- Demand Summary:

FIRE FACILITIES	
Total Current Sq. Ft.	48,754
Average Annual Total Calls	4,353
Sq. Ft./Call	11.20

Level of Service:

- 11.20 square feet per call
- Other Level of Service measurements (*Response Times and Road Miles*)
 - Target response is four to six minutes or to be within 1.5 road miles from a station
 - Actual weighted average response time is approximately 6.27 minutes and approximately 74 percent of fire calls are within 1.5 road miles of at least one fire station.

FIRE

- **Capital Facilities Analysis:**

- Total of **\$5,186,969** is identified as new **impact fee eligible** capital costs to Fire Facilities (*Police are expected to use approximately five percent of each new station constructed.*)

- **Financing Revenues and Resources to Finance System Improvements:**

- Fire Department is currently planning to fund all future facilities on a pay-as-you-go basis and will use impact fees and general fund revenues.

FIRE

- Fire Impact Fee**
- Assumes 100% of new stations will be attributed to development activity (new growth)

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

FIRE

Fire Impact Fee Cash Flow:

YEAR	ESTIMATED CALLS	NEW CALLS	EST. IMPACT FEE REVENUE	ESTIMATE OF IMPACT FEE CAPITAL OUTLAY	CUMULATIVE IMPACT FEE REVENUE	EST. OF TOTAL CAPITAL OUTLAY
2013	4,524		-	-	-	
2014	4,613	88	252,124	-	\$252,124	-
2015	4,703	90	257,051	-	\$509,176	-
2016	4,795	92	262,074	2,864,237	(\$2,092,987)	2,864,237
2017	4,889	94	267,196	-	(\$1,825,791)	-
2018	4,984	96	272,417	1,261,212	(\$2,814,586)	1,261,212
2019	5,082	97	277,740	1,061,520	(\$3,598,366)	1,061,520
2020	5,181	99	283,168	-	(\$3,315,198)	-
2021	5,282	101	288,701	-	(\$3,026,497)	-
2022	5,385	103	294,343	-	(\$2,732,154)	-
2023	5,491	105	300,095	-	(\$2,432,059)	-
Total			2,754,910	5,186,969		5,186,969

Historic Impact Fee Revenues

	2005	2006	2007	2008	2009	2010	2011	2012
Impact Fees	\$114,062	\$123,639	\$150,528	\$93,696	\$74,386	\$34,363	\$47,326	\$61,549

POLICE

Service Area:

- Single City-wide service area for police impact fees.

Demand Analysis:

- Demand unit is calls for police service
- Historic average annual private City calls **18,341**
- Projected private calls to build-out is an additional annual **17,848**

	DEVELOPED UNITS ¹	HISTORIC CALLS ²	CALLS PER DEVELOPED UNIT
Residential Single-Family (per dwelling unit)	24,892	7,875	0.316
Residential Multi-Family (per dwelling unit)	7,331	3,256	0.444
Mobile Homes(per dwelling unit)	1,310	632	0.483
Professional Office (per 1,000 square feet)	572	128	0.224
Commercial (per 1,000 square feet)	10,639	6,006	0.565
Manufacturing (per 1,000 square feet)	7,844	444	0.057
Total	52,588	18,341	

1 - GIS data from the City of St. George

2 - Three year average of calls (2009-2011)

POLICE

- **Level of Service:**

- Target level of service is 1 officer per 1,000 residents
- Actual level of service is 1.39 officers per 1,000 residents and 389 Sq. Ft. of floor space per officer
- Demand Summary:

POLICE FACILITIES	
Total Current Sq. Ft.	40,449
Average Annual Total Calls	18,341
Sq. Ft./Call	2.21

- **Existing Inventory and Excess Capacity:**

- Original cost of existing police facilities is **\$3.9 million**

POLICE

□ **Capital Facilities Analysis:**

- No separate additional police facilities have been proposed for the IFFP planning horizon.
- However, police will occupy approximately **600 Sq. Ft.** at a future fire station amounting to approximately **\$113,333**.

□ **Financial Revenues and Resources to Finance System Improvements:**

- The Police Department will fund all future facilities on a pay-as-you-go basis and will use impact fees and general fund revenues.

POLICE

Police Impact Fee

- Assumes new development pays a portion of all existing and new stations.

	ESTIMATED COST	IF ELIGIBLE	COST TO IMPACT FEES	CALLS SERVED ²	COST PER CALL
Existing Facilities	\$3,967,757	100%	\$3,967,757	18,613	\$213
Outstanding Debt (Interest Only) ¹	\$881,860	100%	\$881,860	18,613	\$47
Future Facilities	\$113,333	100%	\$113,333	18,613	\$6
Total			\$4,962,950		\$267
Professional Expense			\$9,675	2,432	\$4
Total Impact Fee Cost per Call					\$271

¹ - In 1998, the Series 1998A Bonds were issued and used to retire and refund the Authority's outstanding Lease Revenue Bonds, Series 1996B. The public safety portion of the total refunded amount was approximately 34 percent. Therefore, approximately 34 percent of the total interest cost for the Series 1998B Bonds is applied in the calculation of the police impact fee.

² - The cost for Existing Facilities, Outstanding Debt, and Future Facilities is spread over the total existing calls (18,341) plus the total number of new calls the new police space will serve (600 Sq. Ft. / 2.21 Sq. Ft. per Call = 272). Professional Expense is spread over the total new calls in six years.

	COST PER CALL	CALLS PER UNIT	PROPOSED IMPACT FEE	EXISTING IMPACT FEE	% CHANGE
Residential Single-Family	\$271	0.316	\$86	\$109	-22%
Residential Multi-Family	\$271	0.444	\$120	\$49	145%
Mobile Homes	\$271	0.483	\$131	\$57	129%
Professional Office	\$271	0.224	\$61	\$68	-11%
Commercial	\$271	0.565	\$153	\$95	61%
Manufacturing/Industrial	\$271	0.057	\$15	\$6	157%

POLICE

□ **Police Impact Fee Cash Flow:**

YEAR	ESTIMATED CALLS	NEW CALLS	EST. IMPACT FEE REVENUE	ESTIMATE OF IMPACT FEE CAPITAL OUTLAY	CUMULATIVE IMPACT FEE REVENUE
2013	19,089				
2014	19,474	385	104,298	-	\$104,298
2015	19,867	393	106,404	-	\$210,702
2016	20,268	401	108,552	113,333	\$205,921
2017	20,678	409	110,744	-	\$316,665
2018	21,095	417	112,980	-	\$429,645
2019	21,521	426	115,261	-	\$544,906
2020	21,956	435	117,588	-	\$662,494
2021	22,399	443	119,962	-	\$782,456
2022	22,851	452	122,384	-	\$904,840
2023	23,312	461	124,855	-	\$1,029,695
Total			1,143,028	113,333	

Historic Impact Fee Revenues								
	2005	2006	2007	2008	2009	2010	2011	2012
Impact Fees	\$114,062	\$123,639	\$150,528	\$93,696	\$74,386	\$34,363	\$47,326	\$61,549

PARKS, RECREATION & OPEN SPACE

- **Service Area:**
 - Single City-wide service area for parks, recreation and open space impact fees.

- **Demand Analysis:**
 - Demand unit is population.
 - City's current population is approximately **79,657**.
 - 2023 population is estimated at 107,052 (**increase of 27,395 people**).

Growth-driven method utilizes the existing level of service and perpetuates that level of service into the future.

PARKS, RECREATION & OPEN SPACE

Existing Inventory:

PARKS	TOTAL ACREAGE	LESS GIFTED	FINAL ACRES	CITY OWNED ACRES	ESTIMATED LAND VALUE FOR CITY OWNED ACRES	2013 EST. IMPROV. VALUE
Neighborhood Parks	130.15	53.35	76.80	56.81	\$2,840,250	\$11,586,806
Community Parks	276.31	186.80	89.51	89.51	\$4,475,500	\$26,928,200
Undeveloped Park Land	244.96	150.67	94.29	94.29	\$4,714,500	\$0
Trailheads	5.80	1.80	4.00	4.00	\$200,000	\$1,159,930
Total Parks	657.22	392.62	264.60	244.61	\$12,230,250	\$39,674,936
TRAILS	TOTAL MILES	CITY FUNDED MILES	ESTIMATED LAND VALUE	2013 EST. IMPROV. VALUE		
Regional Trails (paved)	36.38	18.10	\$0.00	\$3,062,816		
Total Trail Ways	36.38	18.10	\$0.00	\$3,062,816		

PARKS, RECREATION & OPEN SPACE

- **Level of Service:**
 - The level of service consists of two components:
 - The land value per capita (or the cost to purchase the land in 2013); and
 - The improvement value per capita for each type of park improvement.

	TOTAL LAND VALUE	LAND VALUE PER CAPITA	TOTAL IMPROVEMENT VALUE	IMPROVEMENT VALUE PER CAPITA	TOTAL VALUE PER CAPITA
Neighborhood Parks	\$2,840,250	\$36	\$11,586,806	\$145	\$181
Community Parks	\$4,475,500	\$56	\$26,928,200	\$338	\$394
Undeveloped Park Land	\$4,714,500	\$59	\$0	\$0	\$59
Trailheads	\$200,000	\$3	\$1,159,930	\$15	\$17
Regional Trails - Paved	\$0.00	\$0	\$3,062,816	\$38	\$38
Total	\$12,230,250	\$154	\$42,737,752	\$537	\$690

Notes:
 -Per capital value based on 2013 population of 79,657
 -Land costs are estimated conservatively using recent comparable land sales in the area.

***Value** is equal to the current cost of purchasing land or improvements in today's dollars.

PARKS, RECREATION & OPEN SPACE

Excess Capacity:

BUY-IN DETERMINATION	FUNDING MECHANISM	FINAL COST	% INCLUDED IN IFA	BUY-IN COMPONENT	BUILT DATE	USEFUL LIFE	POPULATION SERVED	PER PERSON
Recreation Center	53% City funded from Capital Projects Fund and Impact Fees (47% funded from GO Bonds)*	\$2,247,907	53%	\$1,188,498	1996	30	116,978	\$10
Hydro Tube for Public Swimming Pool	100% City funded	\$100,000	100%	\$100,000	1985	37	103,934	\$1
Maintenance Building	100% City funded	\$260,600	100%	\$260,600	2013	5	95,114	\$3
Public Swimming Pool	Received 50/50 grant	\$373,885	50%	\$186,943	1974	50	110,263	\$2
Total Buy-In		\$4,499,709						\$16

Notes:

*Approximately \$1,059,409 of the Recreation Center was funded by GO Bonds and thus is not included in the calculated impact fee.

**Sand Hollow Aquatic Center is not included in the excess capacity analysis as 100% of the facility was funded by participation money and GO Bonds (Series 1999, Series 2004 Refunding, and Series 2010 Refunding).

PARKS, RECREATION & OPEN SPACE

□ **Capital Facilities Analysis:**

- Based on the expected changes in population through 2023, the City will need to invest approximately **\$18.9 million** in parkland and trails.

□ **Resources to Finance System Improvements:**

- The general fund and impact fees will continue to be a source of revenue for park improvements
- The City also foresees receiving some revenues from other entities *(i.e. grants, federal or state funds, other contributions, etc.)* to fund new facilities. *(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 level of service.)*

PARKS, RECREATION & OPEN SPACE

Park Impact Fee:

	LAND VALUE PER CAPITA	VALUE OF IMPROVEMENTS PER CAPITA	TOTAL VALUE PER CAPITA
Parks			
Neighborhood Parks	\$36	\$145	\$181
Community Parks	\$56	\$338	\$394
Undeveloped Park Land	\$59	\$0	\$59
Trailheads	\$3	\$15	\$17
Trails			
Regional Trails - Paved	\$0	\$38	\$38
Other			
Buy-In Component			\$16
Professional Services Expense		\$9,675	\$1
Estimate of Impact Fee Per Capita			\$706

IMPACT FEE PER HH	PERSONS PER HH	PROPOSED FEE PER HH	EXISTING FEE PER HH	% CHANGE
Single Family	3.09	\$2,182	\$2,730	-20%
Multi Family	2.02	\$1,427	\$2,828	-50%

ENERGY

- **Service Area:**

- Single service area that matches the service area for the St. George municipal electric system.

- **Demand Analysis:**

- Existing (2012) kW usage estimated at **176,000 kW**. By 2022, usage is estimated to reach **221,068 kW**, for a total of **41,068 new kW** within the planning horizon. This is based on the change in undeveloped land within the city-wide service area.

ENERGY

- **Level of Service:**
 - Level of service based on average load per ERU of **6.69 kW**s.

- **Existing Inventory and Excess Capacity:**
 - The City has issued debt to finance existing generation resource additions. However, since these additions do not contain excess capacity, the debt service for these bond issues is not included in the impact fees.

 - However, approximately **67 percent** of the Green Valley substation has capacity available to serve new growth. The cost of this substation has been included in the impact fees.

GREEN VALLEY	
Total Capacity	75 MW
Actual Capacity Used	25 MW 33%
Remaining (Buy-In) Capacity	50 MW 67%

ENERGY

- **Capital Facilities Analysis:**

- Total of **\$36.9 million** in capital costs for power facilities needed through the next nine years.
- The **cost related to growth is \$29.5 million** which represents approximately 80 percent of the total projects identified.

- **Resources to Finance System Improvements:**

- At the request of the City, no financing costs are included in this analysis. The energy department will use impact fees and utility rates to finance the capital program identified in the IFPP.

ENERGY

□ Energy Impact Fee per kW

POWER PROJECTS	TOTAL COSTS WITHIN IFFP HORIZON	% RELATED TO GROWTH	GROWTH RELATED COSTS	GROWTH RELATED KW ¹	COST PER NEW KW
Capital Projects					
Generation Additions	\$2,452,897	50%	\$1,226,448	41,068	\$29.86
Distribution and Transmission	\$34,509,165	82%	\$28,307,799	41,068	\$689.29
Sub-Total Capital Projects Cost	\$36,962,061		\$29,534,247		\$719.16
Buy-In					
Green Valley Transmission Line	\$11,680,125	67%	\$7,786,750	50,000	\$155.73
Sub-Total Buy-In Cost	\$11,680,125		\$7,786,750		\$155.73
Miscellaneous					
Professional Expenses	\$9,675	100%	\$9,675	25,054	\$0.39
Sub-Total Miscellaneous Cost	\$9,675		\$9,675		\$0.39
Total	\$48,651,861		\$37,330,672		\$875.28

¹ - Capital Project cost is spread over the kW growth in the IFFP horizon (through 2022). The Buy-In cost is spread over the remaining capacity available in the Green Valley Transmission Line. Professional Expense cost is spread over the kW growth in the next six years.

ENERGY

□ **Energy Impact Fee: Residential Service**

SERVICE DESCRIPTION	EST. KW	COST PER KW	ESTIMATED IMPACT FEE	EXISTING IMPACT FEE	% CHANGE
100 Amp - 240/120 V	4.25	\$875	\$3,720	\$2,790	33%
200 Amp - 240/120 V	5.25	\$875	\$4,595	\$3,446	33%
400 Amp - 240/120 V	9.00	\$875	\$7,878	\$5,908	33%

Note: Tables for commercial service have not been included in this presentation. However, the % change in the impact fee for commercial is also an increase of 33%.

ENERGY

Energy Impact Fee Cash Flow:

YEAR	EST. KW	NEW KW	IMPACT FEE PER KW	EST. IMPACT FEE REVENUE	ESTIMATE OF IMPACT FEE CAPITAL OUTLAY	CUMULATIVE IMPACT FEE REVENUE	TOTAL CAPITAL PLAN LESS IMPACT FEE CAPITAL OUTLAY ¹
2012	176,000						
2013	180,000	2,000	\$875	\$1,750,556	\$897,178	\$853,378	\$1,139,452
2014	183,000	3,000	\$875	\$2,625,834	\$2,586,313	\$892,899	\$3,074,418
2015	187,000	4,000	\$875	\$3,501,112	\$3,123,050	\$1,270,960	\$3,492,454
2016	191,000	4,000	\$875	\$3,501,112	\$5,323,600	-\$551,528	\$6,763,822
2017	195,011	4,011	\$875	\$3,510,740	\$1,989,661	\$969,550	\$2,276,007
2018	199,964	4,953	\$875	\$4,335,496	\$4,003,973	\$1,301,074	\$5,678,946
2019	205,043	5,079	\$875	\$4,445,618	\$3,530,010	\$2,216,681	\$3,840,687
2020	210,251	5,208	\$875	\$4,558,536	\$2,320,076	\$4,455,142	\$2,807,463
2021	215,592	5,340	\$875	\$4,674,323	\$3,216,855	\$5,912,610	\$4,839,741
2022	221,068	5,476	\$875	\$4,793,051	\$2,543,531	\$8,162,130	\$3,049,071
Total				\$37,696,377	\$29,534,247		\$36,962,061

¹ - These capital costs could be paid with user rates or buy-in impact fee revenue.

Historic Impact Fee Revenues and Estimated ERUs

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Impact Fees	\$2,916,771	\$2,675,739	\$2,741,642	\$2,241,959	\$1,273,488	\$843,653	\$1,315,694	\$1,161,101	\$1,282,874
Estimate of kws	4,443	4,076	4,176	3,415	1,940	1,285	2,004	1,769	1,954

* St. George City Budget Documents, <http://www.sao.state.ut.us/lgr/municipal/2013/13mbstgpc.pdf>

SUMMARY

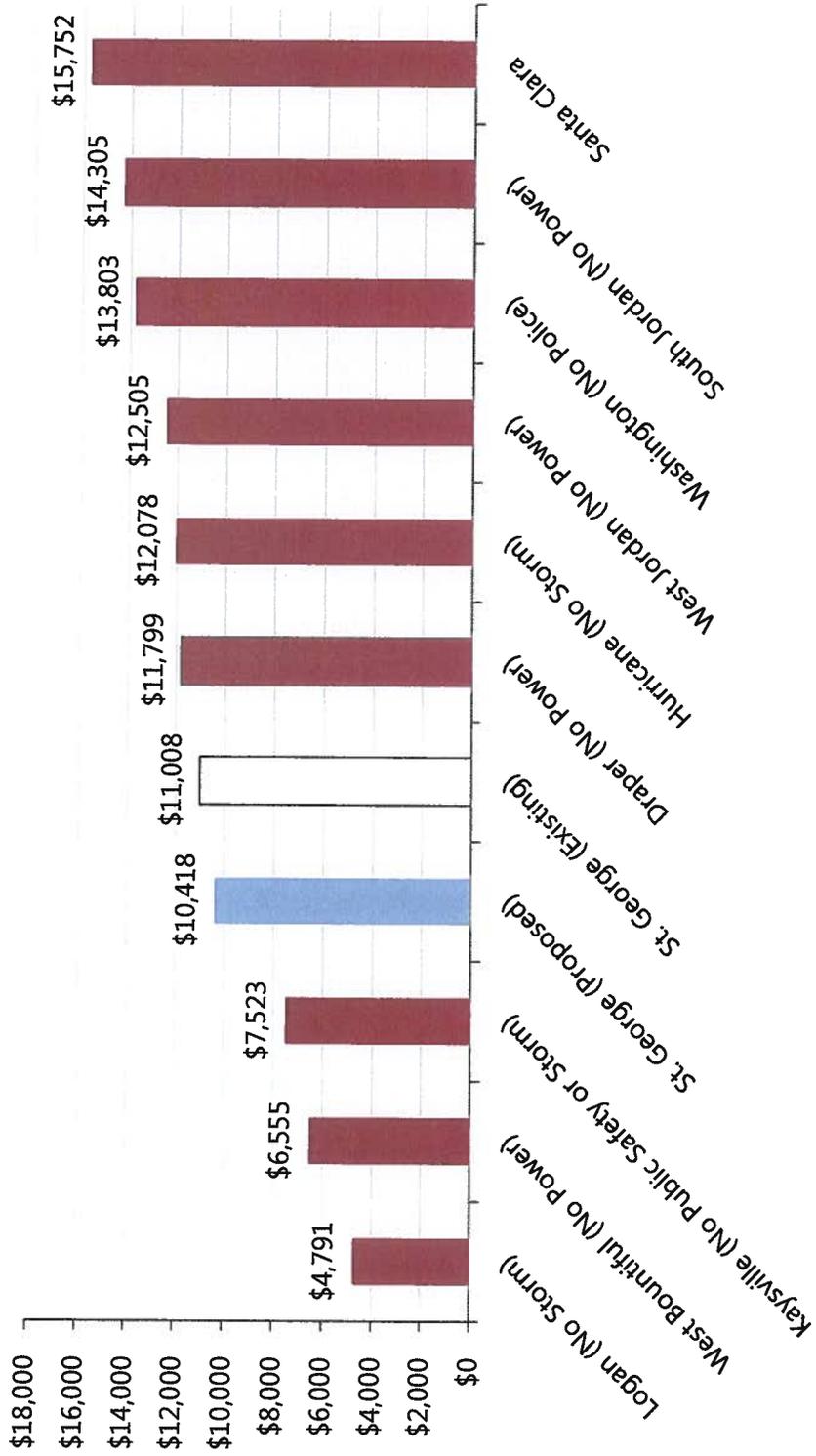
□ Fee Per Residential Dwelling

Illustration of Fee Per Residential Unit	Proposed Fee	Change	Current Fee	Notes
Parks	\$2,182	(\$548)	\$2,730	Based on Single Family Unit
Fire	\$190	(\$26)	\$216	Based on Single Family Unit
Police	\$86	(\$23)	\$109	Based on Single Family Unit
Water	\$878	(\$554)	\$1,432	Based on Single Family 3/4" Meter
Wastewater	\$1,070	(\$807)	\$1,877	Based on Single Family 3/4" Meter
Storm Water	\$512	\$68	\$444	Based on Single Family Unit
Power	\$4,595	\$1,149	\$3,446	Based on 48 kva (200 amp) Single Phase Service
Transportation	\$905	\$151	\$754	Based on Single Family Unit
Total Combined	\$10,418	(\$590)	\$11,008	
Percent Change	-5%			

SUMMARY

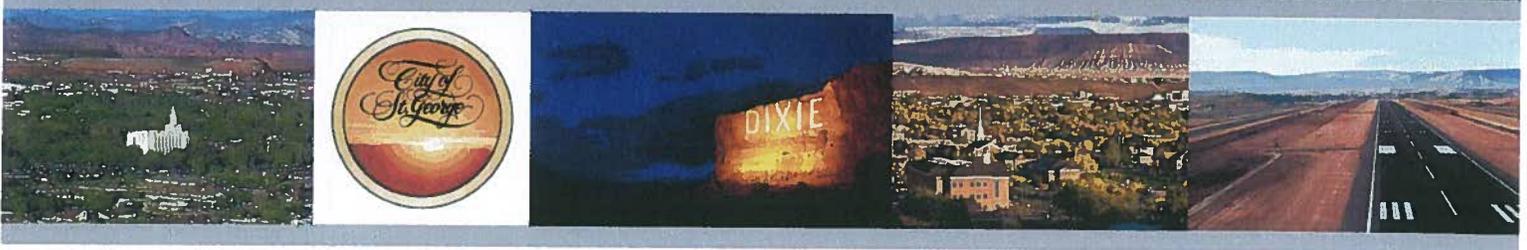


Comparative Analysis



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

CITY OF ST. GEORGE, UTAH



NOVEMBER 2013

DRAFT

DATED 3.25.14


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SECTION 1: EXECUTIVE SUMMARY

The purpose of the Culinary Water Impact Fee Facilities Plan ("IFFP"), with supporting Impact Fee Analysis ("IFA"), is to fulfill the requirements established in Utah Code Title 11 Chapter 36a, the "Impact Fees Act", and help the City of St. George (the "City") plan necessary capital improvements for future growth. This document will address the future culinary water infrastructure needed to serve the City through the next six to ten years, as well as the appropriate impact fees the City may charge to new growth to maintain the level of service ("LOS"). The 2011 Culinary Water Distribution System Capital Facilities Plan ("CFP") along with updated information from the City provides much of the information utilized in the analysis for the purposes of calculating impact fees.

- Impact Fee Service Area:** The service area for culinary 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 culinary water capital improvements identified in this study are based on maintaining the current level of service.
- Level of Service:** The storage level of service is approximately 1,487 gpd¹/ERU (based on total 2013 storage requirements of 47.65 million gallons (MG) divided by the 2013 ERUs of 32,035). The distribution level of service is based on 1,085gpd¹ based on peak daily demand. This analysis does not consider a level of service for source improvements, since water supply is provided by Washington County Water Conservancy District. Section 3 of this report further explains the level of service.
- Excess Capacity:** The buy-in cost to growth calculated for storage is approximately \$1,253,319. The buy-in cost to growth for distribution is approximately \$1,208,238.
- Capital Facilities Analysis:** A total of \$7,176,664 is identified as growth related improvements needed over the next ten years. All of these costs are considered system improvements necessary to maintain the existing level of service.
- 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.
- Planning Horizon:** The planning horizon is considered to be ten years beginning in 2013.

PROPOSED CULINARY WATER IMPACT FEE

The culinary water impact fees proposed in this analysis will be assessed within all areas of the City. The tables below illustrate the appropriate buy-in component and the fee associated with projects occurring within the next ten years related to storage and distribution. The proportionate share analysis determines the proportionate cost assignable to new development based on the proposed capital projects and the estimated ERUs served by the proposed projects.

TABLE 1.1: IMPACT FEE PER ERU

	TOTAL COST	COST TO GROWTH	PERCENT WITHIN IFFP WINDOW	COST TO IMPACT FEE	ERUS SERVED	FEE PER ERU
Excess Capacity						
Storage Excess Capacity	\$6,860,870	\$1,253,319	100%	\$1,253,319	11,017	\$114

¹ Gallons per day (gpd)



	TOTAL COST	COST TO GROWTH	PERCENT WITHIN IFFP WINDOW	COST TO IMPACT FEE	ERUS SERVED	FEE PER ERU
Distribution Excess Capacity	\$1,235,366	\$1,208,238	100%	\$1,208,238	11,017	\$110
Future Storage						
Storage	\$8,760,903	\$5,274,363	56%	\$2,928,064	11,017	\$267
Future Distribution						
Distribution	\$6,058,514	\$3,915,060	100%	\$3,915,060	11,017	\$355
Flow Control	\$119,520	\$119,520	100%	\$119,520	11,017	\$11
Booster Pumps	\$204,020	\$204,020	100%	\$204,020	11,017	\$19
Other						
Professional Expense ²	\$9,675	\$9,675	100%	\$9,675	6,216	\$2
Total	\$23,248,868	\$11,984,195		\$9,647,896		\$878

TABLE 1.2: IMPACT FEE PER METER SIZE

METER SIZE (IN)	ERU MULTIPLIER	IMPACT FEE PER METER SIZE	EXISTING IMPACT FEE	% CHANGE
3/4	1.00	\$878	\$1,432	-39%
1	2.16	\$1,896	\$2,387	-21%
1 1/2	7.17	\$6,295	\$4,774	32%
2	11.54	\$10,132	\$7,638	33%
3	26.00	\$22,828	\$16,708	37%
4	46.00	\$40,388	\$28,643	41%
6	104.00	\$91,312	\$59,672	53%

ERU multipliers were provided by the City of St. George and are representative of the 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 to assess an adjusted fee that more closely matches the true impact that the land use will have upon public facilities.³ This adjustment could result in a higher or lower impact fee if the City determines that a particular user may create a different impact than what is standard for its land use. To determine the impact fee for a non-standard use, the City should use the following formula:

FORMULA FOR NON-STANDARD WATER IMPACT FEES:⁴

$$\text{Estimated Usage (gpd)} / 1,085 \text{ (gpd/ERU)} * \$878 = \text{Impact Fee}$$

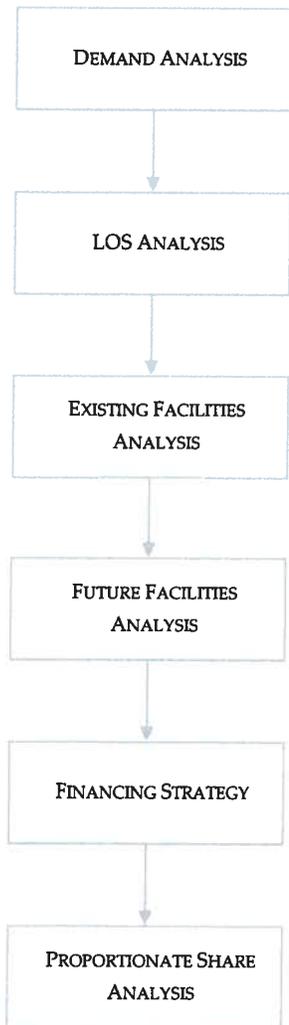
² This is the actual cost to update the IFFP and IFA. The City can use this portion of the impact fee to reimburse itself for the expense of updating the IFFP and IFA. The cost is divided over the ERUs added in the next six years.

³ 11-36a-402(1)(c)

⁴ 1,085 gpd/ERU is the peak daily demand.

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

DEMAND ANALYSIS

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

LEVEL OF SERVICE ANALYSIS

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

EXISTING FACILITY INVENTORY

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

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

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

FUTURE CAPITAL FACILITIES ANALYSIS

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



FINANCING STRATEGY – CONSIDERATION OF ALL REVENUE SOURCES

This analysis must also include a consideration of all revenue sources, including impact fees, future debt costs, alternative funding sources and the dedication of system improvements, which may be used to finance system improvements.⁵ 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.⁶

PROPORTIONATE SHARE ANALYSIS

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

⁵ 11-36a-302(2)

⁶ 11-36a-302(3)



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.⁷ The impact fees identified in this document will be assessed to a single, city-wide service area.

It is anticipated that the growth projected over the next five to ten years, and through buildout, will impact the City's existing services. Culinary water infrastructure will need to be expanded in order to maintain the existing level of service. Impact fees are a logical and sound mechanism for funding growth-related infrastructure. The CFP 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 isn't 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.

DEMAND UNITS

As shown in Table 3.1, the growth in ERUs is expected to reach 43,052 units by 2023. This represents an increase of 11,017 ERUs from 2013. Table 3.2 shows the ERU multipliers as determined by the City of St. George based on actual historic water use for the different meter sizes.

TABLE 3.1: CITY-WIDE ERU PROJECTIONS

YEAR	EST. ERUs
2013	32,035
2014	32,996
2015	33,986
2016	35,006
2017	36,056
2018	37,137
2019	38,251
2020	39,399
2021	40,581
2022	41,798
2023	43,052
2024	44,344
2025	45,674
2030	52,949
2040	71,159

Source: 2013 ERUs were provided by the City of St. George. A growth rate of three percent was used to project ERUs through 2040. Three percent is a reasonable estimate based on historic population growth as shown in the Census 2010 and the GOPB.

TABLE 3.2: ILLUSTRATION ERU CONVERSION

METER SIZE (IN)	ERU MULTIPLIER
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: Provided by the City of St. George

LEVEL OF SERVICE STANDARDS

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

⁷ UC 11-36a-402(a)



SOURCE

Since water supply is provided by Washington County Water Conservancy District ("WCWCD"), this analysis does not consider a level of service for source improvements.

STORAGE

Table 3.3 shows the current gpd/ERU for indoor, outdoor, emergency, and fire storage as defined in the 2011 Culinary Water Distribution System CFP. Using these criteria and the ERUs for 2013, the level of service for storage has been calculated in Table 3.4 and is estimated to be 1,487 gpd/ERU.⁸

TABLE 3.3: STORAGE LEVEL OF SERVICE (LOS)

	GPD/ERU
Indoor Storage	400
Outdoor Storage	480
Emergency Storage	540
Fire Storage	180,000 gallons per pressure zone
Source: 2011 Culinary Water Distribution System CFP, page 7-2	

TABLE 3.4: STORAGE LEVEL OF SERVICE (LOS)

	# ERU's	# ZONES	STORAGE REQUIREMENTS (MILLION GALLONS)			FIRE	TOTAL STORAGE (MILLION GALLONS)	AVG. GPD/ERU
			INDOOR	OUTDOOR	EMERGENCY			
2013	32,035	12	12.81	15.38	17.30	2.16	47.65	1,487

DISTRIBUTION

The CFP identifies the distribution level of service of 1,085 gallons per day (gpd), based on the peak daily demand per year from 2008 through 2010.⁹

According to the CFP, 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.

⁸ These numbers are calculated by multiplying the number of ERUs (32,035) by the storage LOS in Table 3.3 and dividing by 1,000,000. For example, the Indoor Storage LOS is calculated by multiplying 32,035 by 400 and then dividing by 1,000,000 which equals 12.81 MG (million gallons).

⁹ 2011 Culinary Water Distribution System Capital Facilities Plan, page 4-1 & 4-2.



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 culinary water system.

SOURCE

There is no excess capacity associated with the source component.

STORAGE

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 of 1,487 gpd/ERU, the City's storage needs in 2013 total 47.65 MG. The total capacity of the existing system is 58.3 MG, for a difference of 10.65 MG. Assuming the same LOS (1,487 gpd/ERU), the excess capacity should serve 7,160 ERUs. However, the growth projections indicate approximately 11,017 new ERUs over the planning horizon. As a result, an additional 5.7 MG of storage capacity will need to be provided within the impact fee planning horizon. The City has currently planned 10.3 MG of storage capacity during the planning horizon, which is shown in this report. However, since only 5.7 MG of storage will be required, only 55.7 percent of the costs of the future storage facility will be included in the calculation of the impact fee.

TABLE 4.3: ILLUSTRATION OF EXCESS CAPACITY AND NEW STORAGE REQUIREMENTS

TANK	VOLUME (MGD)	GPD	ERUS SERVED
Total Storage (2013)	47.65	47,650,000	32,035
Existing Storage Capacity	58.30	58,300,000	39,195
Excess Capacity	10.65	10,650,000	7,160
		ERUs in Planning Horizon	11,017
		Difference	3,857
		New Storage Needed (Gal) at 1,487 gpd/ERU	5,737,576

The buy-in component is calculated using the original cost of existing assets as presented in the City's financial records.

TABLE 4.4: DETERMINATION OF VALUE OF EXISTING STORAGE FACILITIES RELATED TO NEW GROWTH

Base Value of Existing Facilities	\$6,860,870	Based on existing depreciation schedules
Total Value of Existing Facilities	\$6,860,870	
Percent Excess Capacity	18.3%	See Table 4.3: ERUs Served by Excess Capacity / Total Existing Storage Capacity ERUs
Buy-in Cost to Growth	\$1,253,319	Calculation of Buy-in does not include the future capital cost to provide the additional 5.7 MG of storage

DISTRIBUTION

According to the CFP, 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. The Airport Waterline was installed to serve the airport and future connections. The City has determined that approximately 97.8 percent of the waterline has excess capacity which would serve an additional 4,543 ERUs.



TABLE 4.5: ILLUSTRATION OF EXCESS CAPACITY FOR AIRPORT WATERLINE

CAPACITY ANALYSIS	ERUS
Capacity	4,645
Current Demand	102
Excess Capacity	4,543
% Excess Capacity	97.8%

Source: The City of St. George Water Services Department

The buy-in component is calculated using the original cost of the waterline.

TABLE 4.6: DETERMINATION OF VALUE OF EXISTING AIRPORT WATERLINE RELATED TO NEW GROWTH

Base Value of Existing Facilities	\$1,235,366	Source: Water Services Department
Total Value of Existing Facilities	\$1,235,366	
Percent Excess Capacity	97.8%	See Table 4.5: ERUs Served by Excess Capacity / Total Existing Capacity ERUs
Buy-in Cost to Growth	\$1,208,238	

The buy-in cost to growth identified in the table above will be applied to the new development anticipated over the IFFP horizon. In addition to this excess capacity, new development will require additional distribution system improvements. The cumulative value of excess capacity and future facilities will be necessary to serve new development and will be spread over the number of ERUs anticipated in the next ten years.

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 level of service.



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 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 the impact fees.

There are several projects listed under future capital improvements in the following section that relate to improvements to the City's water source. Since joining the WCWCD Regional Pooling Agreement in 2006, the City does not collect impact fees to develop new water sources. The WCWCD is charged with developing new water sources to provide water for future growth. The City does, however, utilize its own existing sources of water, as well as purchase water from the WCWCD. The "Source" projects listed under the Capital Improvements are to improve some of the City's existing water sources. Over time, a groundwater well will gradually lose capacity and require rehabilitation to restore its original capacity. The projects listed are to rehabilitate and restore some of the City's own water sources to their original capacity. These projects are not funded by nor attributed to new growth.

TABLE 5.1: ILLUSTRATION OF CAPITAL IMPROVEMENTS

PROJECT	CONSTRUCTION YEAR	2013 CONSTRUCTION COST	CONSTRUCTION YEAR COST	% FUNDED BY DEVELOPER	% TO NON-GROWTH	% TO GROWTH AND CITY FUNDED
Source (Wells)						
Sunbrook #1 Well Rehab	2016	\$100,000	\$103,030	0%	100%	0%
Gunlock #6 Re-Drill	2019	\$1,000,000	\$1,061,520	0%	100%	0%
Millcreek Well #3 Re-Drill	2020	\$1,225,000	\$1,313,366	0%	100%	0%
Sunbrook Well #3 Equipment	2020	\$300,000	\$321,641	0%	100%	0%
Subtotal:		\$2,625,000	\$2,799,557			
Distribution Lines						
Bloomington Hills Upper Tank Loop Line	2014	\$180,000	\$181,800	0%	0%	100%
City Center Waterline Replacement and Upsize	2014	\$325,000	\$328,250	0%	100%	0%
3050 East Waterline Replacement	2015	\$280,000	\$285,628	0%	100%	0%
Re-Use Extension to River Road	2014	\$536,000	\$541,360	50%	0%	50%
Mall Drive Bridge Waterline Crossing	2015	\$490,000	\$499,849	0%	25%	75%
Dixie Downs Waterline Replacement and Upsize	2015	\$420,000	\$428,442	0%	100%	0%
Mall Drive Bridge Irrigation Line Crossing	2015	\$420,000	\$428,442	0%	25%	75%
Trails Development Connection to Ledges	2017	\$300,150	\$312,337	50%	0%	50%
Plantations Pipeline	2018	\$420,750	\$442,212	100%	0%	0%
Upper Ft. Pierce Industrial Park Tank and Booster Pump (PIPELINE)	2015	\$423,594	\$432,108	0%	0%	100%
Ft. Pierce - Airport Connection	2018	\$622,750	\$654,517	0%	0%	100%
White Dome Water Tank	2022	\$500,000	\$546,843	0%	0%	100%
Sand Hollow Pipeline Connection to 2000 S	2016	\$948,000	\$976,725	0%	0%	100%
Subtotal:		\$5,866,244	\$6,058,514			

Flow Control Valves (PRV, PSV, ALT, etc.)						
Ft. Pierce - Airport Connection	2018	\$50,000	\$52,551	0%	0%	100%
Sand Hollow Pipeline Connection to 2000 South	2016	\$65,000	\$66,970	0%	0%	100%
Subtotal:		\$115,000	\$119,520			
Storage						
Industrial Tank Replacement & Expansion	2014	\$2,000,000	\$2,020,000	0%	50%	50%
Stone Cliff Tank	2014	\$350,000	\$353,500	0%	0%	100%
2 MG Storage Tank	2019	\$2,000,000	\$2,123,040	0%	0%	100%
Upper Ft. Pierce Industrial Park Tank	2015	\$1,500,000	\$1,530,150	0%	0%	100%
White Dome Water Tank	2022	\$2,500,000	\$2,734,213	0%	0%	100%
Subtotal:		\$8,350,000	\$8,760,903			
Booster Pump Stations						
Upper Ft. Pierce Booster Pump	2015	\$200,000	\$204,020	0%	0%	100%
Subtotal:		\$200,000	\$204,020			
Total Capital Projects		\$17,156,244	\$17,942,514			

Source: St. George Culinary Water Distribution CFP (2011), p. 9-5, Update provided by City in 2013

As shown above, a total of \$17,942,514 in system improvements is planned through 2023. Table 5.2 illustrates the capital improvements that are planned related to new growth to maintain the existing LOS.

TABLE 5.2: ILLUSTRATION OF CAPITAL IMPROVEMENTS RELATED TO GROWTH

PROJECT	% TO GROWTH AND CITY FUNDED	TOTAL IMPACT FEE ELIGIBLE COST
Source (Wells)		
Sunbrook #1 Well Rehab	0%	\$0
Gunlock #6 Re-Drill	0%	\$0
Millcreek Well #3 Re-Drill	0%	\$0
Sunbrook Well #3 Equipment	0%	\$0
Subtotal:		\$0
Distribution Lines		
Bloomington Hills Upper Tank Loop Line	100%	\$181,800
City Center Waterline Replacement and Upsize	0%	\$0
3050 East Waterline Replacement	0%	\$0
Re-Use Extension to River Road	50%	\$270,680
Mall Drive Bridge Waterline Crossing	75%	\$374,887
Dixie Downs Waterline Replacement and Upsize	0%	\$0
Mall Drive Bridge Irrigation Line Crossing	75%	\$321,332
Trails Development Connection to Ledges	50%	\$156,169
Plantations Pipeline	0%	\$0
Upper Ft. Pierce Industrial Park Tank and Booster Pump (PIPELINE)	100%	\$432,108
Ft. Pierce - Airport Connection	100%	\$654,517
White Dome Water Tank	100%	\$546,843
Sand Hollow Pipeline Connection to 2000 S	100%	\$976,725
Subtotal:		\$3,915,060
Flow Control Valves (PRV, PSV, ALT, etc.)		
Ft. Pierce - Airport Connection	100%	\$52,551
Sand Hollow Pipeline Connection to 2000 South	100%	\$66,970



PROJECT	% TO GROWTH AND CITY FUNDED	TOTAL IMPACT FEE ELIGIBLE COST
Subtotal:		\$119,520
Storage		
Industrial Tank Replacement (expanded to add 2 MG)	50%	\$1,010,000
Stone Cliff Tank	100%	
2 MG Storage Tank	100%	
Upper Ft. Pierce Industrial Park Tank (2 MG)	100%	\$1,530,150
White Dome Water Tank (4 MG)	100%	\$2,734,213
Subtotal:		\$5,274,363
Booster Pump Stations		
Upper Ft. Pierce Booster Pump	100%	\$204,020
Subtotal:		\$204,020
Total Capital Projects		\$9,512,963

Source: St. George Culinary Water Distribution CFP (2011), p. 9-5, Update provided by City in 2013

The City has determined the projects included in this IFFP using capital project and engineering data, planning analysis and other information. The City has provided all future capital project data including project descriptions and estimated project costs. 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.¹⁰ 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.¹¹ 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.¹² 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.¹³

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 level of service, to recoup more than the actual cost of system improvements, the cost to fund overhead cannot be included in the calculation of impact fees. Other revenues such as utility rate revenue, property taxes, grants, or loans can be used to fund these types of expenditures, as described below.

¹⁰ UC 11-36a-102(20)

¹¹ UC 11-36a-102(13)

¹² 11-36a-302(2)

¹³ 11-36a-302(3)



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 fund non-growth related 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 can be made from the general fund which will ultimately include some property tax revenues. Inter-fund loans will be repaid once sufficient impact fee revenues have been collected. The City does not currently assess interest on money borrowed from the general fund; however, the City may adopt a policy to do so.

GRANTS AND DONATIONS

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 the system improvements funded through impact fees if donations are made by new development.

IMPACT FEE REVENUES

Impact fees have become 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. Analysis is required to accurately assess the true impact of a particular user upon the City infrastructure and to prevent existing users from subsidizing new growth. Impact fee revenues are generally considered non-operating revenues and help offset future capital costs.

DEBT FINANCING

In the event the City has not amassed 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 and interest.

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% 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 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: CULINARY WATER 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 level of service. The City currently provides culinary water to its residents and businesses. As a result of new growth, the culinary system is in need of expansion to perpetuate the level of service that the City has historically maintained. The 2011 Culinary Water Distribution System Capital Facilities Plan, and updates, provided by the City outline the recommended capital projects that will maintain the established level of service.

PROPOSED CULINARY 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 level of service. The following paragraphs describe 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, 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 level of service and determine any excess capacity in existing facilities that could serve new growth.

CULINARY WATER IMPACT FEE CALCULATION

The culinary water impact fees proposed in this analysis will be assessed within all areas of the City. The tables below illustrate the appropriate buy-in component, the fee associated with projects occurring in the next six to ten years and the applicable costs related to the conveyance of new water sources. 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.

TABLE 6.1: CALCULATION OF PROPORTIONATE IMPACT FEE

	TOTAL COST	COST TO GROWTH	PERCENT WITHIN IFFP WINDOW	COST TO IMPACT FEE	ERUs SERVED	FEE PER ERU
Excess Capacity						
Storage Excess Capacity	\$6,860,870	\$1,253,319	100%	\$1,253,319	11,017	\$114
Distribution Excess Capacity	\$1,235,366	\$1,208,238	100%	\$1,208,238	11,017	\$110
Future Storage						
Storage	\$8,760,903	\$5,274,363	56%	\$2,928,064	11,017	\$267
Future Distribution						
Distribution	\$6,058,514	\$3,915,060	100%	\$3,915,060	11,017	\$355
Flow Control	\$119,520	\$119,520	100%	\$119,520	11,017	\$11
Booster Pumps	\$204,020	\$204,020	100%	\$204,020	11,017	\$19
Other						
Professional Expense ¹⁴	\$9,675	\$9,675	100%	\$9,675	6,216	\$2
Total	\$23,248,868	\$11,984,195		\$9,647,896		\$878

¹⁴ 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 ERUs added in the next six years.

A total of \$9.6 million is identified as the necessary buy-in and future capital cost to maintain the level of service 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 (11,017).

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

TABLE 6.2: IMPACT FEE PER METER SIZE

METER SIZE (IN)	ERU MULTIPLIER	IMPACT FEE PER METER SIZE	EXISTING IMPACT FEE	% CHANGE
3/4	1.00	\$878	\$1,432	-39%
1	2.16	\$1,896	\$2,387	-21%
1 1/2	7.17	\$6,295	\$4,774	32%
2	11.54	\$10,132	\$7,638	33%
3	26.00	\$22,828	\$16,708	37%
4	46.00	\$40,388	\$28,643	41%
6	104.00	\$91,312	\$59,672	53%

ERU multipliers were provided by the City of St. George and are representative of the actual historic water use for the different meter sizes.

NON-STANDARD CULINARY WATER IMPACT FEES

The City reserves the right under the Impact Fees Act¹⁵ to assess an adjusted fee that more closely matches the true impact that the land use will have upon the City's culinary water 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 peak daily demand (1,085 gpd/ERU), multiplied by the impact fee per ERU, as shown below.

FORMULA FOR NON-STANDARD WATER IMPACT FEES:

$$\text{Estimated Usage (gpd)} / 1,085 \text{ (gpd)} * \$878 = \text{Impact Fee}$$

CONSIDERATION OF ALL REVENUE SOURCES

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

EXPENDITURE OF IMPACT FEES

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

PROPOSED CREDITS OWED TO DEVELOPMENT

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

¹⁵ UC 11-36a-402(1)(c)



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.

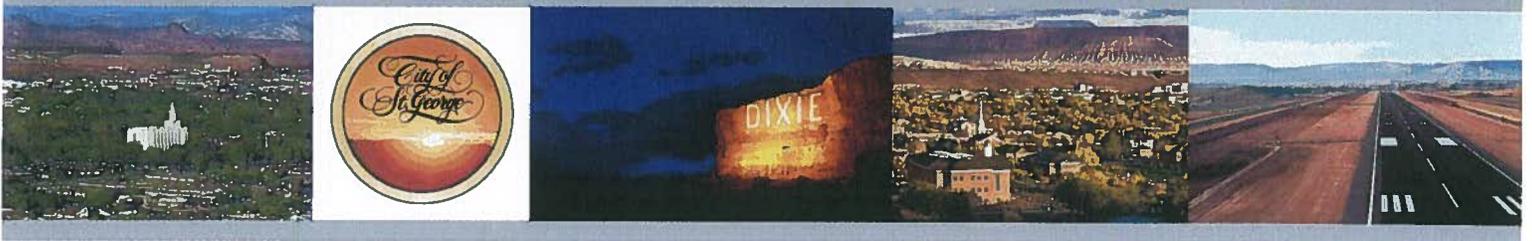
SUMMARY OF TIME PRICE DIFFERENTIAL

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 one percent annual construction inflation adjustment is applied to projects completed after 2013 (the base year cost estimate).

DRAFT

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

CITY OF ST. GEORGE, UTAH



NOVEMBER 2013

DRAFT

DATED 3.25.14


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SECTION 1: EXECUTIVE SUMMARY

The purpose of the Sanitary Sewer Impact Fee Facilities Plan ("IFFP"), with supporting Impact Fee Analysis ("IFA"), is to fulfill the requirements established in Utah Code Title 11 Chapter 36a, the "Impact Fees Act", and help the City of St. George (the "City") plan necessary capital improvements for future growth. This document will address the future sanitary sewer infrastructure needed to serve the service area through the next six to ten years, as well as the appropriate impact fees the City may charge to new growth to maintain the level of service ("LOS"). The 2008 Regional Treatment Master Plan and the 2010 Wastewater Collection Master Plan and Capital Facility Plan ("CFP"), as well as updates from the City, provide much of the information utilized in this analysis.

- **Impact Fee Service Area:** The wastewater system is separated into two distinct systems: 1) The Local Wastewater Division, and 2) the Regional Wastewater Division. The Local Wastewater System serves development within the City of St. George, whereas the Regional System serves the City of St. George, Ivins City, the City of Santa Clara, and Washington 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). As residential and commercial growth occurs within the City, additional ERUs will be generated. The sewer capital improvements identified in this study are based on maintaining the current level of service as defined by the City.
- **Level of Service:** For **treatment**, the typical unit usage parameters are provided by the City of St. George Water Department. Typical daily usage per ERU is estimated at 282 gallons. The base impact fee and standard level of service recommended in this analysis will be discussed in terms of the number of gallons of flow of effluent per day. The **collection** system level of service was analyzed relative to needed improvements to develop the list of capital projects necessary to serve new growth. While there may be capacity within individual collection lines throughout the City, generally the system is at capacity resulting in needed future improvements. The CFP identifies the portion of future improvements allocated to new growth. The LOS for **collection** improvements is based on the level of service per ERU defined for treatment.
- **Excess Capacity:** Based on the LOS of 282 gallons per day (gpd) per ERU, the City's treatment facility is at 61 percent capacity, leaving 39 percent of the facility available for new development. Assuming the same LOS (282 gpd/ERU), the excess capacity should serve 23,325 ERUs. The impact fee analysis does not include a buy-in component related to collection.
- **Capital Facilities Analysis:** A total of \$1,654,317 is identified as needed collection improvements within the City and \$1,754,572 in collection improvements within the region. In addition, the City estimates that additional fine bubble diffusers will be necessary to expand the existing facility capacity to 25 million gallon (mgd), which will retrofit the entire plant. The City has \$11 million to help fund this project and will finance the rest. **However, due to the timing of this facility near the end of the impact fee facilities plan window, the costs are not included in this analysis. Should growth estimates accelerate, the impact fees in this analysis should be revised to consider these necessary improvements.**
- **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.
- **Planning Horizon:** The planning horizon is considered to be ten years beginning in 2013.

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 level of service. 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, CIP 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 level of service and determine any excess capacity in existing facilities that could serve new growth.

SEWER IMPACT FEE CALCULATION

The tables below illustrate the appropriate buy-in component, the fee associated with projects occurring in the next six to ten years and the applicable costs related to collection. 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: CALCULATION OF PROPORTIONATE IMPACT FEE

REGIONAL FEE CALCULATION	ESTIMATED COST	PERCENT TO GROWTH	COST TO GROWTH	ERUS SERVED	COST PER ERU
Treatment and COI (Regional Buy-In)	\$46,480,972	38.7%	\$17,984,533	23,325	\$771
Collection (Regional Component)	\$1,754,572	100.0%	\$1,754,572	12,711	\$138
Professional Expense ¹	\$9,675	100.0%	\$9,675	7,172	\$1
Subtotal: Regional	\$48,235,544		\$19,739,105		\$909
LOCAL FEE CALCULATION	ESTIMATED COST	PERCENT TO GROWTH	COST TO GROWTH	ERUs	COST PER ERU
Collection (Local Component)	\$1,654,317	100.0%	\$1,654,317	10,296	\$161
Subtotal: Local	\$1,654,317		\$1,654,317		\$161
Combined Total Impact Fee					\$1,070

The impact fee per meter size is shown below.

TABLE 1.2: IMPACT FEE PER METER SIZE

CONNECTION SIZE	ERU MULTIPLIER*	REGIONAL FEE	LOCAL IMPACT FEE	TOTAL IMPACT FEE PER METER SIZE	EXISTING TOTAL IMPACT FEE	% CHANGE
3/4	1.00	\$909	\$161	\$1,070	\$1,877	-43%
1	2.16	\$1,964	\$347	\$2,311	\$3,714	-38%
1 1/2	7.17	\$6,518	\$1,152	\$7,670	\$7,429	3%
2	11.54	\$10,491	\$1,854	\$12,345	\$11,886	4%
3	26.00	\$23,636	\$4,178	\$27,814	\$26,001	7%
4	46.00	\$41,818	\$7,391	\$49,209	\$44,573	10%
6	104.00	\$94,544	\$16,711	\$111,255	\$92,860	20%

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

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.

**NON-STANDARD SEWER IMPACT FEES**

The City reserves the right under the Impact Fees Act to assess an adjusted fee that more closely matches the true impact that the land use will have upon public facilities.² This adjustment could result in a higher or lower impact fee if the City determines that a particular user may create a different impact than what is standard for its land use. The impact fee for non-standard development would be determined based on the water utilization (in gallons per day) divided by the average effluent gallons per day per ERU (282), multiplied by the impact fee per ERU, as shown below.

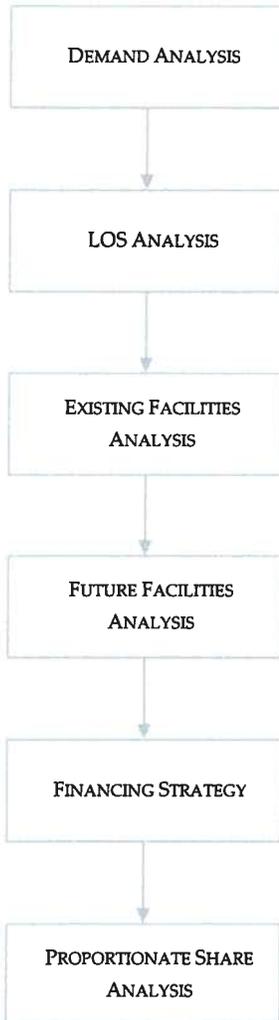
FORMULA FOR NON-STANDARD SEWER IMPACT FEES:

$$\text{Estimated Usage}/282 * \text{Impact Fee per ERU} = \text{Impact Fee}$$

² 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 IFFP and IFA. The IFFP is designed to identify the demands placed upon the City's existing facilities by future development and evaluate how these demands will be met by the City. The IFFP is also intended to outline the improvements which are intended to be funded by impact fees. The IFA is designed to proportionately allocate the cost of the new facilities and any excess capacity to new development, while ensuring that all methods of financing are considered. Each component must consider the historic level of service provided to existing development and ensure that impact fees are not used to raise that level of service. The following elements are important considerations when completing an IFFP and IFA.

DEMAND ANALYSIS

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

LEVEL OF SERVICE ANALYSIS

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

EXISTING FACILITY INVENTORY

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

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

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

FUTURE CAPITAL FACILITIES ANALYSIS

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

**FINANCING STRATEGY – CONSIDERATION OF ALL REVENUE SOURCES**

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

PROPORTIONATE SHARE ANALYSIS

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

³ 11-36a-302(2)

⁴ 11-36a-302(3)

SECTION 3: OVERVIEW OF SERVICE AREA AND DEMAND ANALYSIS

SERVICE AREAS

Utah Code requires the impact fee enactment to establish one or more service areas within which impact fees will be imposed.⁵ The wastewater system is separated into two distinct systems: 1) the local wastewater system, and 2) the regional wastewater system. The local system encompasses improvements only within the City of St. George, whereas the regional system includes improvements that are in 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.

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 level of service. Impact fees are a logical mechanism for funding growth-related infrastructure. The CFP and this analysis are designed to accurately assess the true impact of a particular user upon the City's infrastructure.

DEMAND UNITS

The Local Wastewater Division currently receives wastewater from approximately 29,936 ERUs. The Regional Wastewater System currently receives wastewater from approximately 36,959 ERUs located in St. George, Ivins, Washington, and Santa Clara. Based upon the projected increase in wastewater usage, the total number of Local and Regional ERUs will increase by approximately 12,711, with 10,296 ERUs occurring within St. George through 2023 as shown in Figure 3.1. Projections for population and ERUs assume three percent growth as identified in Census data and the Governor's Office of Planning and Budget (GOPB) projections. The initial ERUs have been identified using 2010 and 2011 flow data and applying the level of service of 282 average gpd/ERU.

TABLE 3.1: CITY-WIDE ERU PROJECTIONS

YEAR	CITY POPULATION	REGIONAL SERVICE AREA POPULATION	REGIONAL ERUS	LOCAL ERUS	TOTAL REGIONAL MGDs
2013	79,657	115,887	36,959	29,936	10,422,318
2014	82,046	119,985	38,067	30,835	10,734,987
2015	84,508	124,228	39,209	31,760	11,057,037
2016	87,043	128,433	40,386	32,712	11,388,748
2017	89,654	132,781	41,597	33,694	11,730,410
2018	92,344	137,275	42,845	34,705	12,082,323
2019	95,114	141,922	44,130	35,746	12,444,792
2020	97,967	146,726	45,454	36,818	12,818,136
2021	100,906	152,065	46,818	37,923	13,202,680
2022	103,934	157,598	48,223	39,060	13,598,761
2023	107,052	163,332	49,669	40,232	14,006,723
Change: 2013-2023			12,711	10,296	

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.

⁵ 11-36a-402(a)



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 level of service to current or future users of capital improvements. This practice would place an unfair funding scenario on new users for the purpose of establishing a level of service that is higher than what current users have demanded of the system. Therefore, it is important to identify the level of service per wastewater ERU and ensure that the new capacities of system projects financed through impact fees will not exceed the established standard.

TREATMENT

The City of St. George has identified the level of service in the *2010 Wastewater Master Plan and Capital Facilities Plan* ("Master Plan"). On page 8 of the Master Plan it identifies the average flow rate for residential development to be 100 gallons per day per person. Using the average household size of 2.82 as identified in Census 2010 data, the level of service is calculated to be 282 average gallons per day per ERU.

The wastewater level of service is typically calculated based on average gallons per day while the culinary water source level of service is calculated based on peak gallons per day. The reason for this difference is due to the fact that wastewater effluent can be stored and treated at a later date, whereas culinary water systems must be constructed and designed to serve peak demand.

COLLECTION

According to the CFP, existing infrastructure was analyzed relative to needed improvements to develop the list of capital projects necessary to serve new growth. While there may be capacity within individual collection lines throughout the City, generally the system is at capacity resulting in needed future improvements. The CFP identifies the portion of future improvements allocated to new growth. The LOS for collection improvements is based on the level of service per ERU defined above.



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 Water Reclamation and Treatment Plant is an oxidation ditch treatment system comprised primarily of preliminary treatment units, aeration basins, secondary clarifiers and ultraviolet disinfection units. The Treatment Plant was originally designed to process five million gallons per day. The Treatment Plant has experienced several phases of expansion which increased the Treatment Plant's total capacity to 17 million gallons per day (mgd). The City owns the Treatment Plant and the land on which it is located.

A comparison of existing treatment capacity relative to the future treatment requirements per ERU illustrates excess capacity within the existing system. Based on the LOS of 282 gallons per day (gpd) per ERU, the City's treatment facility is at 61 percent capacity, leaving 39 percent of the facility available for new development. Assuming the same LOS (282 gpd/ERU), the excess capacity should serve 23,325 ERUs.

TABLE 4.1: ILLUSTRATION OF EXCESS TREATMENT CAPACITY

	CAPACITY (MGD)	ERUS SERVED	% OF TOTAL
Existing Demand	10,422,318	36,959	61%
Buy-In Capacity for Future Growth	6,577,682	23,325	39%
Total Existing Capacity	17,000,000	60,284	

The buy-in component is 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 4.2: DETERMINATION OF VALUE OF EXISTING TREATMENT FACILITY RELATED TO NEW GROWTH

Base Value of Existing Facilities	\$42,917,982	Based on existing depreciation schedules
Interest Component	\$3,562,990	Series 1993B & Series 2004 Debt (See Tables 4.3 & 4.4)
Total Value of Existing Facilities	\$46,480,972	
Percent Excess Capacity	39%	See Table 4.1: ERUs Served by Excess Capacity (23,325) / Total Existing Storage Capacity (60,284 ERUs)
Buy-in Cost to Growth	\$17,984,533	Calculation of Buy-in

COLLECTION

The impact fee analysis does not include a buy-in component related to collection. Thus the existing facilities are not analyzed.

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 and the issuance of debt.

The City issued 1993B Sewer Revenue Bonds used for treatment capacity expansion, which was outstanding at the time of this analysis. Table 4.3 shows the total interest cost for the Series 1993B Bonds.



TABLE 4.3: ILLUSTRATION OF OUTSTANDING DEBT SERIES 1993B

\$2,749,000 ST. GEORGE, UTAH SEWER REVENUE BONDS SERIES 1993B					
YEAR	PRINCIPAL	COUPON	INTEREST	TOTAL	
6/15/03	\$188,000	3.50%	\$96,215	\$284,215	
6/15/04	195,000	3.50%	89,635	284,635	
6/15/05	202,000	3.50%	82,810	284,810	
6/15/06	209,000	3.50%	75,740	284,740	
6/15/07	216,000	3.50%	68,425	284,425	
6/15/08	224,000	3.50%	60,865	284,865	
6/15/09	231,000	3.50%	53,025	284,025	
6/15/10	239,000	3.50%	44,940	283,940	
6/15/11	248,000	3.50%	36,575	284,575	
6/15/12	257,000	3.50%	27,895	284,895	
6/15/13	265,000	3.50%	18,900	283,900	
6/15/14	275,000	3.50%	9,625	284,625	
Totals:	\$2,749,000		\$664,650	\$3,413,650	

In 2004 the City issued the Series 2004 Sewer Revenue Refunding Bonds. These bonds refunded the 1997A Bonds which were used for the expansion of the wastewater treatment plant and increased capacity from 8.5 MGD to 17 MGD. The total interest cost for these bonds is shown in Table 4.4.

TABLE 4.4: ILLUSTRATION OF OUTSTANDING DEBT SERIES 2004

\$7,015,000 ST. GEORGE, UTAH SEWER REVENUE REFUNDING BONDS SERIES 2004					
YEAR	PRINCIPAL	COUPON	INTEREST	TOTAL P&I	FISCAL TOTAL
1/1/05			255,415	255,415	255,415
7/1/05			166,575	166,575	
1/1/06			166,575	166,575	333,150
7/1/06			166,575	166,575	
1/1/07			166,575	166,575	333,150
7/1/07			166,575	166,575	
1/1/08			166,575	166,575	333,150
7/1/08	650,000	4.00%	166,575	816,575	
1/1/09			153,575	153,575	970,150
7/1/09	670,000	4.50%	153,575	823,575	
1/1/10			138,500	138,500	962,075
7/1/10	700,000	5.00%	138,500	838,500	
1/1/11			121,000	121,000	959,500
7/1/11	740,000	5.00%	121,000	861,000	
1/1/12			102,500	102,500	963,500
7/1/12	775,000	4.00%	102,500	877,500	
1/1/13			87,000	87,000	964,500
7/1/13	805,000	5.00%	87,000	892,000	
1/1/14			66,875	66,875	958,875
7/1/14	850,000	5.00%	66,875	916,875	
1/1/15			45,625	45,625	962,500
7/1/15	890,000	5.00%	45,625	935,625	
1/1/16			23,375	23,375	959,000
7/1/16	935,000	5.00%	23,375	958,375	
1/1/17					958,375



\$7,015,000 ST. GEORGE, UTAH SEWER REVENUE REFUNDING BONDS SERIES 2004						
YEAR	PRINCIPAL	COUPON	INTEREST	TOTAL P&I	FISCAL TOTAL	
Totals:	\$7,015,000	\$0	\$2,898,340	\$9,913,340	\$9,913,340	

The treatment system is designed to serve 17 mgd, or a total of 60,284 ERUs (calculated by dividing the total capacity by the existing level of service, or 17 mgd/282 gpd). The interest costs are included in the buy-in component of this analysis, as shown in Table 4.2. It is assumed that the principal amount is included in the "Base Value of Existing Facilities" line item in Table 4.2.

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.

TABLE 5.1: ILLUSTRATION OF CAPITAL IMPROVEMENTS RELATED TO GROWTH

	YEAR	2013 COST	CONSTRUCTION YEAR COST	% TO GROWTH	COST TO GROWTH
Regional Sewer Lines					
Mall Drive Bridge Sewer	2015	\$555,000	\$566,156	100%	\$566,156
15" St. James Outfall Sewer Line	2015	\$388,000	\$395,799	100%	\$395,799
30" St. George Ford Outfall Sewer Line	2015	\$777,000	\$792,618	100%	\$792,618
Total		\$1,720,000	\$1,754,572		\$1,754,572
Local (St. George) Sewer Lines					
Astragalus 18" Sewer Line	2015	\$82,000	\$83,648	100%	\$83,648
Replace 8" Line Through Entrada Golf Course with 10" Line	2015	\$62,000	\$63,246	100%	\$63,246
Remove and Upsize 8", 10", and 12" Sewer Lines in Tonaquint Drive	2020	\$291,000	\$311,991	100%	\$311,991
18" Fort Pierce Sewer Line Segment 1	2020	\$1,115,000	\$1,195,431	100%	\$1,195,431
Total		\$1,550,000	\$1,654,317		\$1,654,317

The City has determined the projects included in this Impact Fee Facilities Plan using capital project and engineering data, planning analysis and other information. The City has provided all future capital project data including project descriptions and estimated project costs. 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.

FUTURE CAPITAL IMPROVEMENTS NOT CONSIDERED IN THIS ANALYSIS

The Master Plan estimates that the Regional Reclamation Facility will need to be capable of treating 25 mgd as the average annual daily flow by 2030. However, changes in market conditions and technical advancements suggest that the Facility will need to be capable of treating 25 mgd by 2040. Currently, plant capacity is 17 mgd. Therefore an additional 8 mgd of treatment capacity, (52 percent additional capacity) will need to be provided. Annual average daily wastewater flows for 2012 are estimated at 10 mgd. Treatment of these flows requires the use of three of the four existing oxidation ditches. The fourth ditch will remain unused until plant flows reach 75 percent plant capacity, or approximately 12.75 mgd.

Based on the population projections at the time the Master Plan was completed, the flow was estimated to reach 12.75 mgd by the end of 2012. However, changes in market conditions and technology suggest the regional plant will not reach this capacity until sometime after 2019.

By planning plant modifications before flows require the use of the fourth ditch, the St. George Regional Water Reclamation Facility ("SGRWRF") will be able to make necessary process changes without adversely effecting current operations. For this reason, the City has chosen to prepare this expansion master plan, and if appropriate, begin modifications before they could cause treatment process interruptions or upsets.

The City staff is currently considering changing the treatment process at the SGRWRF from extended aeration to a version of staged aeration activated sludge. This modification would include installation of fine bubble diffusers in the oxidation ditches and the addition of a clarifier, return activated sludge/waste activated sludge



(RAS/WAS) pumping, and solids handling capacity. Similar modifications have been successfully completed at the Henderson WRF, in Henderson, Nevada, and are also being implemented at the South Valley WRF, in West Jordan, Utah.

By installing fine bubble diffusers and modifying related facilities and systems, these facilities have been able to reduce their hydraulic retention time (HRT) by as much as half, effectively doubling the treatment capacity. The City previously reduced the HRT of the SGRWRF and would not be able to enjoy a 100 percent increase in plant capacity by making these modifications. However, if the conversion from extended aeration oxidation ditch treatment to modified staged aeration allowed a reduction of the HRT to 10 hours, for example, a 28 percent increase in capacity could be realized, equaling an additional 6.5 mgd capacity. That would reduce the amount of future expansion that would need to take place to only 1.5 mgd to reach 25 mgd at year 2040.

The 2008 cost estimate for the installation of the fine bubble diffusers was estimated at \$56.7 Million to expand to 25 mgd, but this cost will retrofit the whole plant. The City has \$11 million to help fund this project and will finance the rest. **However due to the timing of this facility near the end of the impact fee facilities plan window, the costs are not included in this analysis. Should growth estimates accelerate, the impact fees in this analysis should be revised to consider these necessary improvements.**

In addition, the CFP and this analysis are based on the hydraulic capacity of the treatment plant (17 MGD). There is also another component of the treatment plant capacity, which is the "loading" capacity. This is the capacity of the treatment plant to process the biochemical oxygen demand (BOD) and total suspended solids (TSS) of the effluent. While the treatment plant is capable of processing 17 MGD of sewage (based on an average household sewage), if larger industrial users, which add more BOD or TSS to the system than the average residential user, were to be added to the system, the plant may not handle the full 17 MGD. Currently, the hydraulic capacity and "loading" capacity are fairly equal, but this may change in the future. **Future changes in loading capacity may necessitate an update to the CFP and 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.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 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 (donation) of system improvements, which may be used to finance system improvements.⁸ 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.⁹

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 level of service, 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 utility rate revenues, property taxes, grants, or loans can be used to fund these types of expenditures, as described below.

⁶ 11-36a-102(20)

⁷ 11-36a102(13)

⁸ 11-36a-302(2)

⁹ 11-36a-302(3)



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.

PROPERTY TAX REVENUES

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

GRANTS AND DONATIONS

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. Analysis is required to accurately assess the true impact of a particular user upon the City infrastructure and to prevent existing users from subsidizing new growth. 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.

We have assumed that construction of needed facilities in this plan will proceed on a pay-as-you-go basis. Therefore, the impact fees in this analysis do not include a debt component. Inter-fund loans can be made from the general fund which will be repaid once sufficient impact fee revenues have been collected.

EQUITY OF IMPACT FEES

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

DRAFT



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 level of service. The City currently provides sewer services to its residents and businesses. As a result of new growth, the sewer system is in need of expansion to perpetuate the level of service that the City has historically maintained. The *2008 Regional Treatment Master Plan* and the *2010 Wastewater Collection Master Plan and Capital Facility Plan*, as well as updates from the City, outline the recommended capital projects that will maintain the established level of service.

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 level of service. 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, 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 level of service 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. The tables below illustrate the appropriate buy-in component, the fee associated with projects occurring in the next six to ten years and the applicable costs related to collection. 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 6.1: CALCULATION OF PROPORTIONATE IMPACT FEE

REGIONAL FEE CALCULATION	ESTIMATED COST	PERCENT TO GROWTH	COST TO GROWTH	ERUS SERVED	COST PER ERU
Treatment and COI (Regional Buy-In)	\$46,480,972	38.7%	\$17,984,533	23,325	\$771
Collection (Regional Component)	\$1,754,572	100.0%	\$1,754,572	12,711	\$138
Professional Expense ¹⁰	\$9,675	100.0%	\$9,675	7,172	\$1
Subtotal: Regional	\$48,235,544		\$19,739,105		\$909
LOCAL FEE CALCULATION	ESTIMATED COST	PERCENT TO GROWTH	COST TO GROWTH	ERUS	COST PER ERU
Collection (Local Component)	\$1,654,317	100.0%	\$1,654,317	10,296	\$161
Subtotal: Local	\$1,654,317		\$1,654,317		\$161
Combined Total Impact Fee					\$1,070

The impact fee per meter size is shown below.

¹⁰ 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

CONNECTION SIZE	ERU MULTIPLIER*	REGIONAL FEE	LOCAL IMPACT FEE	TOTAL IMPACT FEE PER METER SIZE	EXISTING TOTAL IMPACT FEE	% CHANGE
3/4	1.00	\$909	\$161	\$1,070	\$1,877	-43%
1	2.16	\$1,964	\$347	\$2,311	\$3,714	-38%
1 1/2	7.17	\$6,518	\$1,152	\$7,670	\$7,429	3%
2	11.54	\$10,491	\$1,854	\$12,345	\$11,886	4%
3	26.00	\$23,636	\$4,178	\$27,814	\$26,001	7%
4	46.00	\$41,818	\$7,391	\$49,209	\$44,573	10%
6	104.00	\$94,544	\$16,711	\$111,255	\$92,860	20%

*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 Act¹¹ 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 (282), multiplied by the impact fee per ERU, as shown below.

FORMULA FOR NON-STANDARD SEWER IMPACT FEES:

$$\text{Estimated Usage}/282 * \text{Impact Fee per ERU}$$

CONSIDERATION OF ALL REVENUE SOURCES

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

EXPENDITURE OF IMPACT FEES

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

PROPOSED CREDITS OWED TO DEVELOPMENT

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

¹¹ 11-36a-402(1)(c)



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

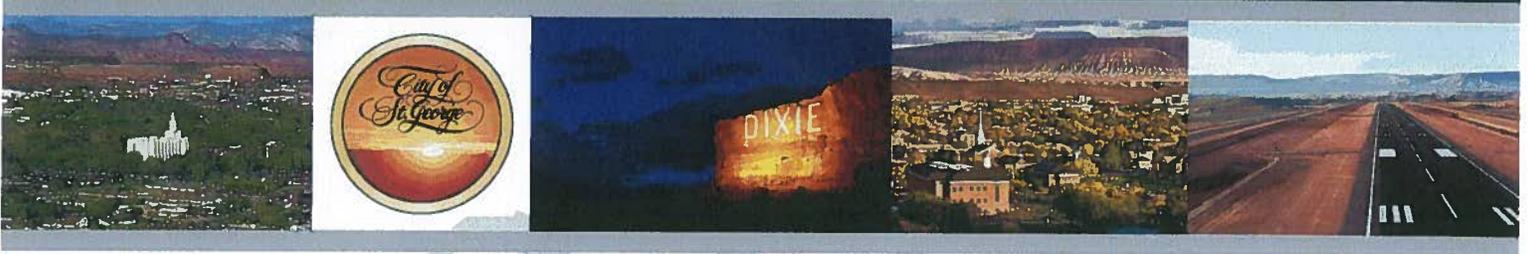
SUMMARY OF TIME PRICE DIFFERENTIAL

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

DRAFT

STORM DRAIN IMPACT FEE ANALYSIS (IFA)

CITY OF ST. GEORGE, UTAH



JANUARY 2013

DRAFT
DATED 3.25.14


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SECTION 1: EXECUTIVE SUMMARY

The purpose of the Storm Drain Impact Fee Analysis ("IFA"), is to fulfill the requirements established in Utah Code Title 11 Chapter 36a, the "Impact Fees Act", and help the City of St. George (the "City") plan necessary capital improvements for future growth. This document will determine the appropriate impact fees the City may charge to new growth to maintain the level of service ("LOS"), as defined in the City's 2013 Storm Drain Impact Fee Facilities Plan ("IFFP"), prepared by Bowen Collins & Associates, Inc ("BC&A").

- **Impact Fee Service Area:** The service area for storm drain impact fees includes all areas within the City.
- **Demand Analysis:** The demand units utilized in this analysis are based on undeveloped residential and commercial land and the new impervious surface (measured in square feet) generated from these land use types. As residential and commercial growth occurs within the City, additional impervious surface will generate additional run-off. The storm drain capital improvements identified in the IFFP are based on maintaining the current level of service.
- **Level of Service:** Impact fees cannot be used to finance an increase in the level of service to current or future users of capital improvements. The IFFP identifies the future storm drain system improvements that are needed to manage the runoff caused by 10-year and 100-year events. Therefore, the City's storm drain infrastructure is sized to safely and adequately manage runoff from the storm intensities and durations indicated in the Impact Fee Facilities Plan.
- **Excess Capacity:** A buy-in component is not contemplated in this analysis.
- **Capital Facilities Analysis:** The total estimated construction year cost for capital projects needed in the next ten years equals \$16.3 million. Approximately \$7.8 million has been identified as growth related capital improvements that will be funded by the City.
- **Funding of Future Facilities:** This analysis assumes future growth related facilities will be funded on a pay-as-you-go basis.

PROPOSED STORM DRAIN IMPACT FEE

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

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, CFP ("Capital Facilities Plan") or CIP ("Capital Improvement Plan") as growth related projects. The total project costs are divided by the total demand units anticipated in the next 10 years. Under this methodology, it is important to identify the existing level of service and determine any excess capacity in existing facilities that could serve new growth.

STORM DRAIN IMPACT FEE CALCULATION

The total cost identified as growth related and funded is then applied to the total future impervious square feet served over the IFFP horizon. This results in a cost per square foot (sf) of \$.101.



TABLE 1.1: ILLUSTRATION OF IMPACT FEE PER SF

STORM DRAIN PROPORTIONATE SHARE ANALYSIS	GROWTH RELATED COSTS	FUTURE IMP. SURFACE	COST PER SF
Future Storm Drain Projects	\$7,840,458	61,488,499	\$0.128
Professional Expense ¹	\$9,675	36,893,099	\$0.00026
Impact Fee Fund Balance ²	(\$1,659,259)	61,488,499	(\$0.027)
Total	\$6,190,874		\$0.101

The cost per sf is then applied to the land use data for each type of land use, as shown below.

TABLE 1.2: FEE BY LAND USE TYPE

	TOTAL IMP. SURFACE (SF)	COST PER IMP. SF	IMPACT FEE PER UNIT	2006 IMPACT FEE	% CHANGE
Residential (per Dwelling)					
Residential Single Family	5,082	\$0.101	\$512	\$444	15%
Residential Multi-Family & Mobile Homes	3,267	\$0.101	\$329	\$286	15%
Non-Residential (per 1,000 SF)					
Commercial/Office	950	\$0.101	\$96	\$83	15%
Industrial	900	\$0.101	\$91	\$79	15%

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.³ This adjustment could result in a higher or lower impact fee if the City determines that a particular user may create a different impact than what is standard for its land use. To determine the impact fee for a non-standard use, the City should use the following formula:

$$\text{Total Impervious Surface} * \text{Cost per Impervious SF } (\$.101)$$

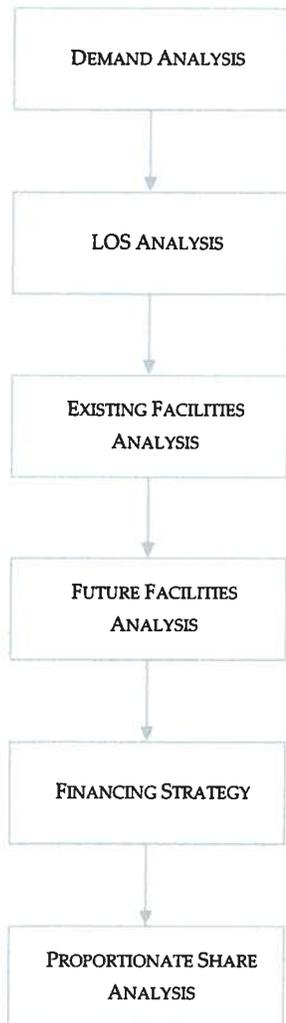
¹ This is the actual cost to update and IFA. The City can use this portion of the impact fee to reimburse itself for the expense of updating the IFA. The cost is divided over the total future impervious surface anticipated in the next six years.

² The FY 2013 Impact Fee Fund balance totaled \$1,659,259. The City anticipates that this amount will be spent on projects listed in the IFFP.

³ 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 IFFP and IFA. The IFFP is designed to identify the demands placed upon the City's existing facilities by future development and evaluate how these demands will be met by the City. The IFFP is also intended to outline the improvements which are intended to be funded by impact fees. The IFA is designed to proportionately allocate the cost of the new facilities and any excess capacity to new development, while ensuring that all methods of financing are considered. Each component must consider the historic level of service provided to existing development and ensure that impact fees are not used to raise that level of service. The following elements are important considerations when completing an IFFP and IFA.

DEMAND ANALYSIS

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

LEVEL OF SERVICE ANALYSIS

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

EXISTING FACILITY INVENTORY

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

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

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

FUTURE CAPITAL FACILITIES ANALYSIS

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

**FINANCING STRATEGY – CONSIDERATION OF ALL REVENUE SOURCES**

This analysis must also include a consideration of all revenue sources, including impact fees, future debt costs, alternative funding sources and the dedication (donation) 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 to the costs borne in the past and to be borne in the future (UCA 11-36a-302).

⁴ 11-36a-302(2)

⁵ 11-36a-302(3)



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

The 2013 IFFP identifies important components that are essential to complete a proportionate share analysis. The following summarizes the IFFP elements utilized in this 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 service area for storm drain impact fees includes all areas within the City. This document identifies capital projects that will help to maintain the same level of service enjoyed by existing residents into the future.

It is anticipated that the growth projected over the next six to ten years will impact the City's existing services. Public facilities will need to be expanded in order to maintain the existing level of service. 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.

DEMAND UNITS

The demand unit used in this analysis is impervious surface square footage. As residential and commercial growth occurs within the City, the impervious surface within the City will increase, resulting in additional runoff. The storm drain capital improvements identified in this study are based on maintaining the current level of service as defined in the IFFP. The proposed impact fees are based upon the projected growth in impervious surface which is used as a means to quantify the impact that future users will have upon the City's system. Table 3.1 illustrates the current impervious square footage in the City. By 2023, it is estimated that impervious square feet will grow by 61,488,499 square feet. This is approximately 30 percent growth over the next ten years.

TABLE 3.1: ILLUSTRATION OF DEMAND UNITS

LAND USE	DEVELOPED ACREAGE	AVG. UNITS PER ACRE	POST DEVELOPMENT % IMPERVIOUS	ESTIMATE OF IMPERVIOUS SF EXISTING
Residential Single Family	6,650	3	35%	101,392,540
Residential Multi-Family & Mobile Homes	875	8	60%	22,855,941
Commercial/Office	1,268	N/A	95%	52,475,849
Industrial	720	N/A	90%	28,237,334
	9,513			204,961,664

Source: LYRB, GIS data from City of St. George

*Agriculture and open space acres have been excluded as these are primarily pervious surface areas.

TABLE 3.2: ILLUSTRATION OF GROWTH IN DEMAND

	IMPERVIOUS SURFACE	NEW IMPERVIOUS SURFACE	CUMULATIVE NEW GROWTH
2013	204,961,664		
2014	211,110,514	6,148,850	
2015	217,259,363	6,148,850	12,297,700
2016	223,408,213	6,148,850	18,446,550
2017	229,557,063	6,148,850	24,595,400
2018	235,705,913	6,148,850	30,744,250
2019	241,854,763	6,148,850	36,893,099
2020	248,003,613	6,148,850	43,041,949
2021	254,152,463	6,148,850	49,190,799

⁶ 11-36a-402(a)



	IMPERVIOUS SURFACE	NEW IMPERVIOUS SURFACE	CUMULATIVE NEW GROWTH
2022	260,301,313	6,148,850	55,339,649
2023	266,450,163	6,148,850	61,488,499

LEVEL OF SERVICE STANDARDS

Impact fees cannot be used to finance an increase in the level of service to current or future users of capital improvements. Therefore, it is important to identify the storm water level of service to ensure that the capacities of projects financed through impact fees do not exceed the established standard. The storm water level of service, as defined within the IFFP on p.5, is identified below.

- ☒ Streets – Where storm drains are not adequate to convey the 100-year, 3-hour design storm, streets may be used to convey the additional runoff to adequate downstream conveyance facilities. The 100-year flood flows in streets should be contained within street right-of-way and adjacent drainage easements.
- ☒ Storm Drains - Conveyance capacity of storm drain pipes shall be sized for a minimum of the 10-year, 3-hour design flood.
- ☒ Culverts - All culvert crossings under a roadway shall be designed to convey the 100-year storm unless otherwise approved. The minimum culvert diameter shall be 24 inches.
- ☒ Bridges - Free-span bridges must pass the 100-year event with a minimum of 2.0 feet of freeboard. No significant increases are allowed in upstream water levels.
- ☒ Open Channels - All open channels must be designed as permanent in nature and have a minimum freeboard of 1 foot. They must be designed as generally low maintenance facilities and must have adequate maintenance access for the entire length.
- ☒ Storage Facilities - Detention facilities will generally be used to prevent local increases in the 10-year, 24-hour and the 100-year, 24-hour peak flows, or the 100-year 3-hour storm, whichever case requires the largest volume.
- ☒ Floodplains - Any alteration of the floodplain is not permitted unless the proposed use can be shown to have no significant negative influence on the flood conveyance, the floodplain, or the alteration itself. Hydrologic, hydraulic, erosion, and geomorphologic studies will be required of developments adjacent to floodplains.
- ☒ Erosion Control – All drainage that leaves a new development shall be adequately addressed to mitigate all erosion on adjacent properties.
- ☒ Irrigation Ditches – In general, irrigation ditches shall not be used as outfall points for drainage systems.



SECTION 4: EXISTING FACILITIES INVENTORY

EXCESS CAPACITY

No buy-in component is calculated in this analysis. Capital projects required to maintain existing service levels, as a result of new growth, are considered impact fee eligible projects.

VALUE OF EXISTING STORM DRAIN INFRASTRUCTURE

Since a buy-in component is not included in this analysis, the value of existing infrastructure has not been calculated.

MANNER OF FINANCING EXISTING PUBLIC FACILITIES

The City has funded existing facilities using several revenue sources including general fund revenues (property taxes, sales taxes, etc.), grants, donations, impact fee revenues and debt. The City anticipates these funding mechanisms will be available for the funding of future facilities. As shown in the next section, the City has determined the portion of future projects that will be funded by impact fees as growth-related, system improvements, as well as alternative funding mechanism related to future facilities.



SECTION 5: CAPITAL FACILITY ANALYSIS

Impact fees cannot be used to finance an increase in the level of service to current or future users of capital improvements. Therefore, it is important to maintain the levels of service within the City that have historically been maintained. The future capital projects have been designed to maintain the existing level of service for future development, and repair and replacement projects have been excluded from the calculation of impact fees.

The IFFP identifies a total of \$27.5 million in capital projects of which \$15.3 million is necessary within the next ten years. With the inclusion of an inflationary component of one percent for all projects completed after 2012 the total cost of capital projects necessary within ten years is approximately \$16.3 million. Tables 5.1 and 5.2 summarize the cost to growth for these projects based on the cost allocation in the IFFP. The construction year cost to growth of \$7.8 million is included in the calculation of the impact fee as growth related capital improvements funded by the City.

TABLE 5.1: SUMMARY OF STORM DRAIN CAPITAL IMPROVEMENT PLAN

PROJECT	ESTIMATED 2012 TOTAL COST	% OF PROJECTS COMPLETED 1-5 YEARS	% OF PROJECTS COMPLETED 6-10 YEARS	ESTIMATED COST WITHIN 10 YEARS	ESTIMATED CONSTRUCTION YEAR (1-5 YEARS)	ESTIMATED CONSTRUCTION YEAR (6-10 YEARS)	ESTIMATED CONSTRUCTION YEAR COST (WITHIN 10 YEARS)*
3000 E Sub-Main	\$3,140,000	38%	40%	\$2,449,200	2018	2020	\$2,626,674
Cottam Bench	\$220,000	90%	10%	\$220,000	2015	2019	\$227,587
Indian Hills Drive	\$3,745,000	30%	15%	\$1,685,250	2014	2019	\$1,748,354
Washington Fields Backbone	\$8,210,000	30%	15%	\$3,694,500	2017	2021	\$3,935,511
East City Proper	\$2,130,000	0%	20%	\$426,000		2023	\$475,275
Horseman Park	\$1,730,000	25%	65%	\$1,557,000	2018	2019	\$1,664,724
Rimrock Wash	\$4,014,900	30%	40%	\$2,810,430	2017	2020	\$3,004,935
West City Proper	\$2,370,000	0%	20%	\$474,000		2021	\$518,407
Developer Matching	\$1,000,000	50%	50%	\$1,000,000	2017	2022	\$1,077,816
River & Wash Upgrades	\$1,000,000	50%	50%	\$1,000,000	2016	2022	\$1,072,613
Total Capital Improvements	\$27,559,900			\$15,316,380			\$16,351,895

Source: 2013 Storm Drain IFFP page 7 and the City of St. George for Construction Year

*Includes inflationary component of one percent.

TABLE 5.2: SUMMARY OF PERCENT ASSOCIATED WITH NEW DEVELOPMENT

PROJECT	% CITY COST	% ASSOCIATED WITH PROJECT	% ASSOCIATED WITH NEW DEVELOPMENT (NEW GROWTH)	CONSTRUCTION YEAR COST TO GROWTH (WITHIN 10 YEARS)
3000 E Sub-Main	30%	50%	20%	\$525,335
Cottam Bench	25%	30%	45%	\$102,414
Indian Hills Drive	28%	11%	61%	\$1,066,496
Washington Fields Backbone	12%	8%	80%	\$3,148,409
East City Proper	92%	0%	8%	\$38,022
Horseman Park	25%	0%	75%	\$1,248,543
Rimrock Wash	10%	76%	14%	\$420,691
West City Proper	90%	0%	10%	\$51,841
Developer Matching	0%	0%	100%	\$1,077,816
River & Wash Upgrades	35%	50%	15%	\$160,892
Total				\$7,840,458



SYSTEM VS. PROJECT IMPROVEMENTS

System improvements are defined as existing public facilities designed to provide services to service areas within the community at large 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 impacts on 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 (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 (see Tables 5.1, 5.2 and the IFFP).

The IFFP completed by BC&A provides all future capital project data including estimated project costs. The accuracy and correctness of this IFA is contingent upon the accuracy of the IFFP. Any deviations or changes in the assumptions due to changes in the economy or other relevant information included in the IFFP may cause this plan to be inaccurate and require modifications.

CONSIDERATION OF ALTERNATIVE FUNDING MECHANISMS

Property tax revenues are considered in this analysis as a funding source for capital projects. The City has identified the projects that will be paid through general fund revenues. Specific grants or donations have not been contemplated in this IFA. If additional grants become available, the impact analysis should be updated 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. Section 6 further addresses proposed credits owed to development.

In the event the City has not amassed 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.

We have assumed that construction of needed facilities in this plan will proceed on a pay-as-you-go basis. Therefore, the impact fees in this analysis do not include a debt component. Inter-fund loans can be made from the general fund which will be repaid once sufficient impact fee revenues have been collected.

EQUITY OF IMPACT FEES

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

⁷ 11-36a-102(20)

⁸ 11-36a-102(13)

⁹ 11-36a-302(2)

¹⁰ 11-36a-302(3)



NECESSITY OF IMPACT FEES

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

DRAFT



SECTION 6: STORM DRAIN 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 level of service.

PROPOSED STORM DRAIN IMPACT FEE

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 as growth related projects. The total project costs are divided by the total demand units anticipated in the next 10 years. Under this methodology, it is important to identify the existing level of service and determine any excess capacity in existing facilities that could serve new growth.

STORM DRAIN IMPACT FEE CALCULATION

The total cost identified as growth related and funded is then applied to the total future impervious square feet served over the IFFP horizon. This results in a cost per square foot of \$.101.

TABLE 6.1: ILLUSTRATION OF IMPACT FEE PER SF

STORM DRAIN PROPORTIONATE SHARE ANALYSIS	GROWTH RELATED COSTS	FUTURE IMP. SURFACE	COST PER SF
Future Storm Drain Projects	\$7,840,458	61,488,499	\$0.128
Professional Expense ¹¹	\$9,675	36,893,099	\$0.00026
Impact Fee Fund Balance ¹²	(\$1,659,259)	61,488,499	(\$0.027)
Total	\$6,190,874		\$0.101

The cost per sf is then applied to the land use data for each type of land uses, as shown below.

TABLE 6.2: FEE BY LAND USE TYPE

	TOTAL IMP. SURFACE (SF)	COST PER IMP. SF	IMPACT FEE PER UNIT	2006 IMPACT FEE	% CHANGE
Residential (per Dwelling)					
Residential Single Family	5,082	\$0.101	\$512	\$444	15%
Residential Multi-Family & Mobile Homes	3,267	\$0.101	\$329	\$286	15%
Non-Residential (per 1,000 SF)					
Commercial/Office	950	\$0.101	\$96	\$83	15%
Industrial	900	\$0.101	\$91	\$79	15%

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.¹³ This adjustment could result in a higher or lower impact fee if the City determines that a particular user may create a different impact than what is standard for its land use. To determine the impact fee for a non-standard use, the City should use the following formula:

$$\text{Total Impervious Surface} * \text{Cost per Impervious SF } (\$.101)$$

¹¹ This is the actual cost to update and IFA. The City can use this portion of the impact fee to reimburse itself for the expense of updating the IFA. The cost is divided over the total future impervious surface anticipated in the next six years.

¹² The FY 2013 Impact Fee Fund balance totaled \$1,659,259. The City anticipates that this amount will be spent on projects listed in the IFFP.

¹³ 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 only on those projects outlined in the IFFP as growth related costs to maintain the LOS.

PROPOSED CREDITS OWED TO DEVELOPMENT

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

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

GROWTH-DRIVEN EXTRAORDINARY COSTS

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

SUMMARY OF TIME PRICE DIFFERENTIAL

The Impact Fees Act allows for the inclusion of a time price differential to ensure that the future value of costs incurred at a later date are accurately calculated to include the costs of construction inflation. A one percent annual construction inflation adjustment is applied to projects completed after 2012 (the base year cost estimate).

STORM DRAIN IMPACT FEE FACILITIES PLAN

Consultant Job No. 001-12-01

January 2014

DRAFT

EXTEN 3-25-14

Prepared for:



Prepared by:



Bowen Collins
& Associates, Inc.
CONSULTING ENGINEERS

STORM DRAIN IMPACT FEE FACILITIES PLAN

Consultant Job No. 001-12-01

January 2014

Prepared for:

City of St. George
Public Works Department



Prepared by:

 **Bowen Collins
& Associates, Inc.**
CONSULTING ENGINEERS

1664 S Dixie Dr Ste E-102
St. George, Utah 84770

INTRODUCTION

In 2009, the City of St. George adopted a new storm drain master plan that provided recommendations and guidelines for existing and future storm drain facilities. The City recently decided to update their storm drain impact fees. Recent changes in the State Legislative Code require municipalities to prepare an impact fee facilities plan that defines the public facilities required to serve development resulting from new development activities.

Bowen Collins & Associates (BC&A) was retained to prepare the Storm Drain Impact Fee Facilities Plan (IFFP). This report is intended to document the public facilities required to serve development resulting from new development activity.

It should be noted that while the City of St. George charges a monthly storm water fee to existing property owners, this fund is used to provide maintenance and upkeep on existing facilities. It is not intended to be used for new facilities that are required as a result of new development. The City relies on impact fees to fund facilities that are required for new development.

DEMAND ANALYSIS

The City desires that their stormwater impact fee be based upon the amount of impervious surface associated with development. The percent of impervious surface that contributes to stormwater runoff varies based on development type and density.

In order to define the existing and future need for stormwater management facilities, various types of information were collected from the City and analyzed using GIS software. That information included zoning maps, contour maps, aerial photography (dated 2011), and a copy of the City's existing impact fee ordinance. Using that information, BC&A worked with City staff to estimate the amount of developed land by land use type. The results of this analysis are presented in Table 1. City personnel estimate that the 9,513 acres of existing developed land will increase by 30 percent over the next 10 years. For the purposes of this study, it was assumed that the existing developed acreage associated with each land use type will each developed by 30 percent over that period. The existing and projected impervious areas by land use type are also presented in Table 1.

**Table 1
Existing and Projected Impervious Areas by Land Use Type**

Land Use	Existing Developed Land (Acres)	Avg. Units Per Acre	Post Development Percent Impervious	Estimated Impervious Area Associated with Existing Developed Land (Square Feet)	Estimated Percentage of Total Impervious Area by Land Use Type	Estimated Impervious Area in 10 Years Assuming 30 Percent Growth (Square Feet)
Low Density Residential	6,650	3	35%	101,392,540	49%	30,417,762
Medium and High Density Residential	875	8	60%	22,855,941	11%	6,856,782
Commercial/Office	1,268	N/A	95%	52,475,849	26%	15,742,755
Industrial	720	N/A	90%	28,237,334	14%	8,471,200
Totals	9,513			204,961,664	30%	61,488,499

Source: Storm Drain Impact Fee Analysis

Figure 1 shows the service area with the zoning in the 2010 Land Use Master Plan that was used for this study. Total developable land was determined using information from the City's ordinances, including the hillside development ordinance, and the zoning map. It should be noted that the City did not define locations for new school district facilities or charter schools for this plan. It is anticipated that these will be considered on a case by case basis as the school facilities are planned and developed.

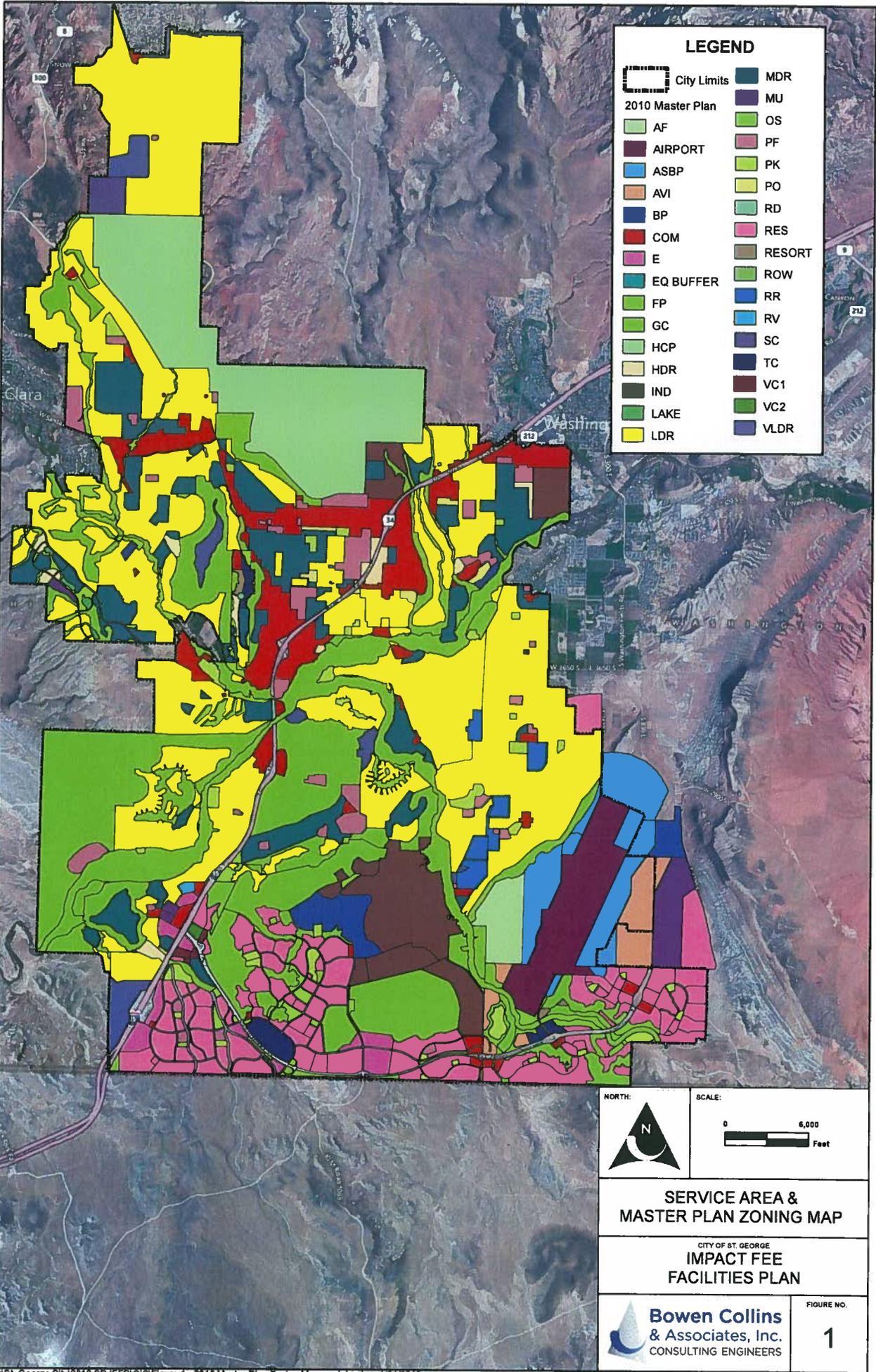
INVENTORY OF EXISTING FACILITIES

In order to determine what areas need improved facilities to handle development, existing storm drain facilities were inventoried. For the purposes of the storm drain impact fee analysis, a storm drain "system improvement" is any existing or future stormwater management facility that serves more than one development and is further defined as follows:

- A storm drain pipe that has an inside diameter equal to or greater than 24 inches.
- Any storm drain catch basin, manhole, or inlet that is directly connected to pipe that has an inside diameter of 24" larger.
- Any stormwater detention or retention facility that serves more than one development.
- Any street that is designed to convey stormwater runoff from a 10-year design storm.
- Any open channel that will convey runoff from a 10-year design storm.

A storm drain "project improvement" is a storm water management facility that is installed as part of a development and does not generally serve areas outside the development. A "project improvement" may include pipes, catch basins, detention or retention facilities, or other stormwater facilities.

Based on these definitions, the City's current GIS database was evaluated to estimate the lengths of existing storm drain pipe and open channel facilities within the City. The results of this analysis are presented in Table 2.



LEGEND	
	City Limits
	2010 Master Plan AF
	AIRPORT
	ASBP
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	BP
	COM
	E
	EQ BUFFER
	FP
	GC
	HCP
	HDR
	IND
	LAKE
	LDR
	MDR
	MU
	OS
	PF
	PK
	PO
	RD
	RES
	RESORT
	ROW
	RR
	RV
	SC
	TC
	VC1
	VC2
	VLDR



SERVICE AREA & MASTER PLAN ZONING MAP

CITY OF ST. GEORGE
IMPACT FEE FACILITIES PLAN

Bowen Collins & Associates, Inc.
 CONSULTING ENGINEERS

FIGURE NO.
1

Table 2
Summary of Existing Storm Drain Pipe and Open Channel Facilities

Size	Total Existing Pipe (ft)
24	59,920
30	41,695
36	45,041
42	16,721
48	32,654
54	4,904
60	17,097
66	-
72	21,439
84	-
96	980
108	-
Open Channel	29,505
Total	269,956

REVENUE SOURCES

Several revenue sources were considered to pay for the system improvements. Those revenue sources include grants, bonds, interfund loans, impact fees, the general fund, and anticipated or accepted dedication of system improvements. It is recommended that impact fees be used to equitably allocate the costs between future development and existing users.

To meet the requirements of the Utah State Impact Fee Act, an impact fee analysis must identify any excess (available) capacity in existing stormwater facilities that is available to serve future growth. However, the City staff has indicated that they are not interested in including a buy-in component as part of their storm drain impact fee. Therefore an excess capacity analysis was not performed as part of this study.

LEVEL OF SERVICE STANDARDS

Level of Service Standards are defined in the City of St. George Drainage Manual, dated July 2009. Section 3 from that manual has been included in Appendix A. That section defines the standards for all storm drain facilities, including streets, storm drain piping, culverts, bridges, open channels, storage facilities, and floodplains.

In general, the drainage manual addresses the following facilities:

- Streets – Where storm drains are not adequate to convey the 100-year, 3-hour design storm, streets may be used to convey the additional runoff to adequate downstream

conveyance facilities. The 100-year flood flows in streets should be contained within street right-of-way and adjacent drainage easements.

- Storm Drains - Conveyance capacity of storm drain pipes shall be sized for a minimum of the 10-year, 3-hour design flood.
- Culverts - All culvert crossings under a roadway shall be designed to convey the 100-year storm unless otherwise approved. The minimum culvert diameter shall be 24 inches.
- Bridges - Free-span bridges must pass the 100-year event with a minimum of 2.0 feet of freeboard. No significant increases are allowed in upstream water levels.
- Open Channels - All open channels must be designed as permanent in nature and have a minimum freeboard of 1 foot. They must be designed as generally low maintenance facilities and must have adequate maintenance access for the entire length.
- Storage Facilities - Detention facilities will generally be used to prevent local increases in the 10-year, 24-hour and the 100-year, 24-hour peak flows, or the 100-year 3-hour storm, whichever case requires the largest volume.
- Floodplains - Any alteration of the floodplain is not permitted unless the proposed use can be shown to have no significant negative influence on the flood conveyance, the floodplain, or the alteration itself. Hydrologic, hydraulic, erosion, and geomorphologic studies will be required of developments adjacent to floodplains.
- Erosion Control – All drainage that leaves a new development shall be adequately addressed to mitigate all erosion on adjacent properties.
- Irrigation Ditches – In general, irrigation ditches shall not be used as outfall points for drainage systems.

PROPOSED CAPITAL FACILITIES

Using the updated existing facilities plan and the hydrologic analysis from the 2009 Storm Drain Master Plan, existing pipelines were evaluated to estimate the amount of excess capacity available for new development. Several meetings with St. George City staff were also held to determine likely areas of growth during the next 5 to 10 years. Projects were grouped based on geographical location.

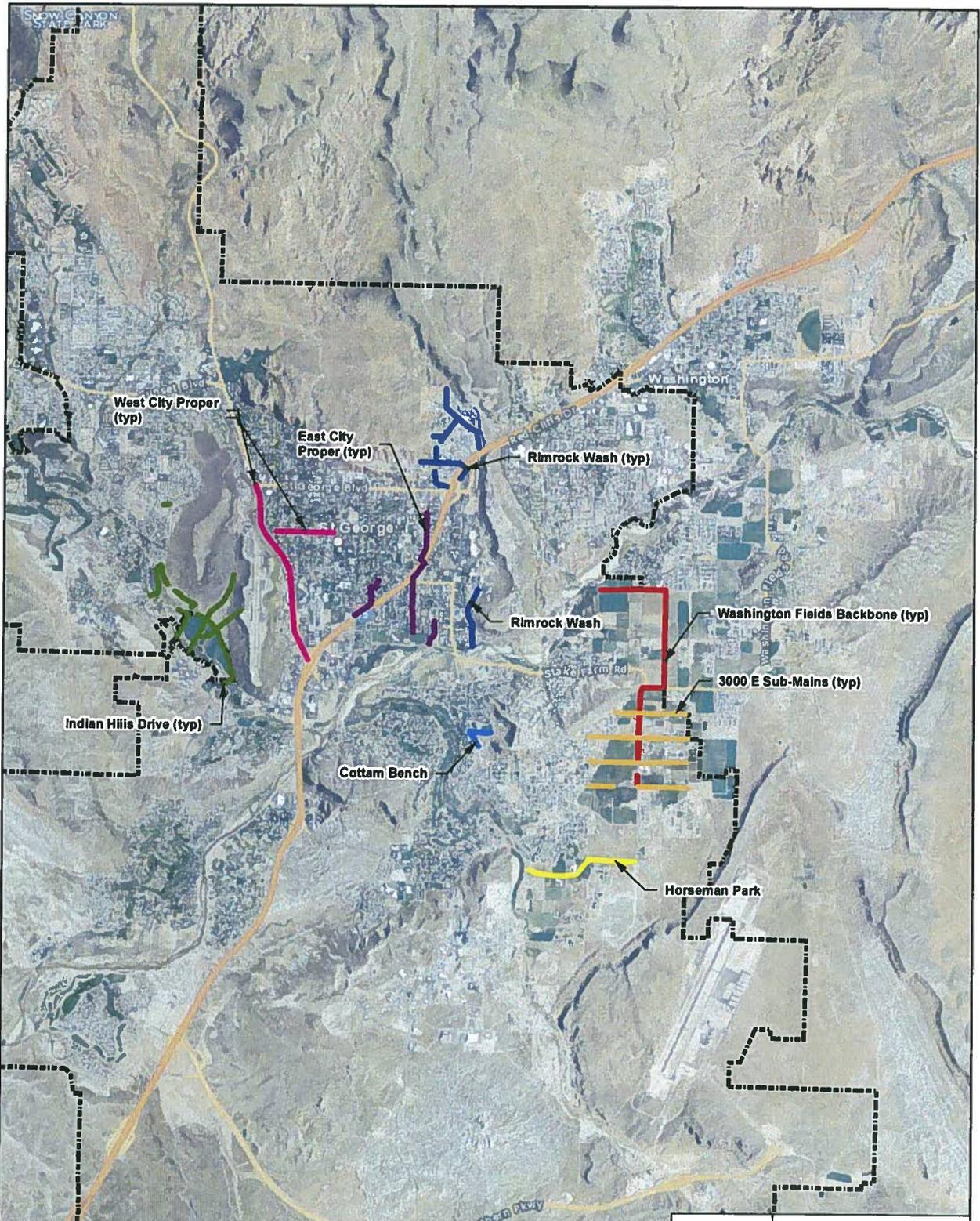
The recommended improvements identified in this IFFP include only major storm drain facilities (system improvements). Local storm drain facilities (project improvements), typically associated with development projects, are not included in the IFFP nor are they eligible for impact fees. This report defines only system improvements for the City's storm drain system. The definition of system improvements and project improvements is presented below.

- **Major Conveyance Facilities** – Major storm drain conveyance facilities (system improvements) include pipelines and improvements to major channels that typically service multiple developments. Local facilities (project improvements) include smaller storm drain conveyance facilities that typically only serve one development and are used to convey storm water runoff from the 100-year design storm to the major conveyance facilities.

- **Regional Detention Facilities** – Based on discussions with City personnel, it was decided to require each development to provide local detention facilities (project improvements) to attenuate peak storm water discharges to the limits stated in the SDMP report. A major regional detention facility (system improvement) will attenuate peak runoff from the 100-year design storm to levels that can be safely conveyed through existing downstream facilities.
- **Developer Related Projects as Needed** – This item covers “system improvements” for any projects that are required due to development, but are not specifically identified in the master plan. An example would be the road expansion project of Riverside Drive near River Road. That project is required due to an increase in traffic on that road, and will require a larger storm drain system to convey runoff from the expanded roadway surface.

Using this information, needed system stormwater management facilities have been identified to serve new development that is projected to occur within the next 10 years. The locations of recommended projects are shown on Figure 2, and are listed in Table 3.

An analysis was performed to identify demands placed upon existing stormwater system facilities by new development activities at the desired level of service. This analysis included estimating the following: existing facility capacity, design storm discharges for existing development, magnitude of existing deficiencies (if any), design storm discharges for projected full build out conditions, and increased discharges to existing rivers and washes. In addition, costs associated with needed stormwater system improvements that will serve areas of projected redevelopment in areas that are currently developed were estimated based on increased impervious area. Recommended projects and costs that can be attributed to development projected to occur in the next 10 years are presented in Table 3.



LEGEND	
PROJECTS	
	3000 E Sub-Mains
	Cottam Bench
	Indian Hills Drive
	Washington Fields Backbone
	East City Proper
	Horseman Park
	West City Proper
	CITY LIMITS

NORTH: 

SCALE:  5,000 Feet

**10 YEAR
PROPOSED PROJECTS**

CITY OF ST. GEORGE
**IMPACT FEE
FACILITIES PLAN**

 Bowen Collins & Associates, Inc. CONSULTING ENGINEERS	FIGURE NO. 2
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Table 3
Proposed Capital Facilities Project (10 Year Plan)

Project	Estimated Total Cost ¹	Percentage of Projects completed within 1-5 Years	Percentage of Projects completed within 6-10 Years	Percent City Cost	Percent Associated with Project	Percent Associated with New Development	Impact Fee Eligible Cost In 1-5 Years	Impact Fee Eligible Cost In 6-10 Years
3000 E Sub-Mains	\$3,140,000	38%	40%	30%	50%	20%	\$238,640	\$251,200
Cottam Bench	\$220,000	90%	10%	25%	30%	45%	\$89,100	\$9,900
Indian Hills Drive	\$3,745,000	30%	15%	28%	11%	61%	\$685,335	\$342,668
Washington Fields Backbone	\$8,210,000	30%	15%	12%	8%	80%	\$1,970,400	\$985,200
East City Proper	\$2,130,000	0%	20%	92%	0%	8%	\$0	\$34,080
Horseman Park	\$1,730,000	25%	65%	25%	0%	75%	\$324,375	\$843,375
Rimrock Wash	\$4,014,900	30%	40%	10%	76%	14%	\$168,626	\$224,834
West City Proper	\$2,370,000	0%	20%	90%	0%	10%	\$0	\$47,400
Developer Matching	\$1,000,000	50%	50%	0%	0%	100%	\$500,000	\$500,000
River & Wash Upgrades	\$1,000,000	50%	50%	35%	50%	15%	\$75,000	\$75,000
Total Impact Fee Eligible Costs							\$ 4,051,476	\$ 3,313,657

1. Costs are in 2012 dollars.
2. Percentages shown in table are average percentages.

IMPACT FEE CERTIFICATION

The analysis contained in this report has been prepared based on growth and system information provided by the City of St. George. Based on the data and growth assumptions provided and assuming the City follows the improvement plan outlined in this report, BC&A certifies that, to the best of our knowledge and in accordance with Section 11-36a-306, this impact fee facilities plan:

1. Includes only the costs for qualifying 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 for operation or 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 other relevant respect with the Impact Fees Act.

APPENDIX A

**LEVEL OF SERVICE STANDARDS
(Section 3 of 2009 Drainage Design Manual)**

SECTION 3 DESIGN CRITERIA

STREETS

Streets are a significant and important component in urban drainage and may be made use of in storm runoff within reasonable limits. The primary purpose of streets is for traffic. Reasonable limits for the use of streets for runoff shall be set by the City Engineer. Design criteria for gutter capacity and associated lane encroachment will depend on the roadway type as shown in Table 3-1. Street designs must include surface drainage relief points (inlets). This is especially important for flat gradient areas, local sumps or depressions and cul-de-sacs. Catch basins should be located on both sides of the street, in general, and the spacing between catch basin locations should not exceed 400 feet.

For pedestrian safety, street flows must be limited such that the product of the depth (feet) and velocity (feet/second) does not exceed six for the 10-year flow and eight for the 100-year flow. Curb overtopping is not permitted in the 10-year event. When street encroachment limits are met, an underground storm sewer system shall be required. Where this underground conveyance is required to limit street flows, it will be designed for the 10-year design storm or greater.

**Table 3-1
Street Gutter Capacity for 100-Year Event**

Street Classification	Maximum Encroachment
Local (Residential)	No curb overtopping.* Flow may spread to crown of street.
Minor Collector (Residential)	No curb overtopping.* Flow spread must leave one lane free of water.
Major Collector	No curb overtopping.* Flow spread must leave at least two lanes of travel free. (One lane in each direction)
Arterial	No Curb overtopping.* All travel lanes to remain open.
Major Arterial	No Curb overtopping.* No encroachment is allowed on any traffic lane.

*Where no curb exists, encroachment shall not extend over property lines.

Streets must also provide for routing of the 100-year design storm to adequate downstream conveyance facilities. The 100-year flood flows in streets should be contained within street right-of-way and adjacent drainage easements. Provision should be made to allow flows within the street to enter any downstream detention basins or other such facilities.

While the 100-year flow is the largest storm required in this manual, consideration should be given to requiring a flood easement to convey the 500-year storm through the natural lowpoint of

a basin. While this area could be used for roads and recreation type facilities, buildings would not be allowed within this corridor.

STORM DRAINS

Storm drain design conveyance capacity will be sized for a minimum of the 10-year, 3-hour design flood. The storm drain system should be of sufficient capacity to prevent significant damage to property during the 100-year, 3-hour design flood as the streets will most likely not be able to convey the difference between the 10-year and 100-year storms. Inlets must have sufficient capacity to prevent local ponding during the 10-year event, with 50 percent blockage of inlets by debris. Analysis of combined street and storm drain capacity for the 100-year flood must determine maximum ponding depths and water levels and show that these depths are non-damaging. In instances where sufficient combined capacity does not exist, the storm drain size may have to be increased beyond that of the 10-year design.

In areas where underground water is anticipated to be added to the drainage system, the pipe size should be increased accordingly. In general, ground water will not be allowed to flow in streets and gutters and in other overland flow situations.

Design considerations will be given for differences in interception capacity of inlets on a gradient as compared to interception capacity of inlets in sag locations. Inlet spacing and locations will be for continuous grade or sag situations as appropriate. Inlets will be spaced so as to keep the street encroachment of flood waters to the minimum. Sag points may be required to have additional inlets spaced to control the maximum level of ponding. Curb inlets are typically only capable of catching two cfs and should be of sufficient number to allow the pipe to flow full.

All storm drains will be designed by application of the Manning's equation. Minimum design velocity shall be 2.0 feet/second flowing one-half full. The Manning's n value shall represent that value that will be seen during the useful life of pipe which may differ from that of a new pipe. The hydraulic grade line will be shown for all pipe systems. The minimum storm drain diameter shall be 15-inch.

Storm drains shall not be designed for surcharged (pressure) pipe conditions unless otherwise approved by the City Engineer. When storm drains are designed for full pipe flow, or surcharged pipe conditions, the designer shall establish the hydraulic grade line considering head losses caused by flow resistance in the pipe, and changes of momentum and interferences at junctions, bends and structures. The water surface elevation profile and hydraulic grade line will be shown for the 10-year and the 100-year design flood as required in the Drainage Control Plan and Report.

CULVERTS

In general, culverts are used to carry runoff from an open channel or ditch under a roadway to a receiving open channel or ditch. The minimum culvert diameter shall be 24 inches. All culvert crossings under a roadway shall be designed to convey the 100-year storm unless otherwise

approved by the City. No road overtopping will be permitted for culvert crossings under arterial roads. Any overtopping on less critical roads shall be limited by the velocity/depth ratio.

A culvert entrance blockage factor of 50 percent shall be used for culverts with a diameter less than 36" culverts, as well as for culverts placed in drainages with upstream debris as determined by the City. The 100-year design storm water backwater surface upstream will be determined (using HEC-2 or HEC-RAS) unless otherwise not required by the City. The back water must be shown to be non-damaging and be approved by the affected property owner. Potential paths of embankment overtopping flows will be determined and redirected, if necessary, so that no significant flood damage occurs. Entrance and exit structures must be installed to minimize erosion and maintenance. The minimum culvert slope shall be 1 percent unless otherwise approved.

BRIDGES

Bridges consist of major structures crossing major washes or drainages. The roadway facility handled can be any classification of roadway. Low water crossings are generally not permitted. Bridges can consist of free span structures, box culverts, multiple box culverts, multiple precast bridges and others.

Free-span bridges must pass the 100-year event with a minimum of 2.0 feet of freeboard. No significant increases are allowed in upstream water levels. A HEC-2 or HEC-RAS analysis of potential upstream water surface may be required by the City. Local and regional scour analyses are required on the structure, upstream and downstream, and embankments. All potential scour will be mitigated. Appropriate references for this include the UDOT Manual of Instruction for Roadway Drainage; Stream Stability at Highway Structures, Hydraulic Engineering Circular No. 20, Federal Highway Administration; Evaluating Scour at Bridges, Hydraulic Engineering Circular No. 18, Federal Highway Administration; and Bridge Scour and Stream Instability Countermeasures, Hydraulic Engineering Circular No. 23, Federal Highway Administration.

For structures crossing FEMA designated flood plains and drainages, other requirements will be used, as directed by the City.

OPEN CHANNELS

Generally, there are two types of channels: man-made and natural. Natural channels can be further subdivided into several sub-categories such as un-encroached, encroached, partially encroached, bank-lined and others. The 100-year recurrence flood will be used for design for all channels unless otherwise approved by the City. All open channels must be designed as permanent in nature and have a minimum freeboard of 1 foot. They must be designed as generally low maintenance facilities and must have adequate maintenance access for the entire length.

Man-made Channels

Man-made channel side slopes will generally be limited to a maximum slope of 2H:1V. Flatter slopes are generally recommended for maintenance and safety reasons. Safety is a primary concern. A channel should be designed such that a person falling into it could climb out within a reasonable distance. A channel that is shallow in depth or in remote areas, or in areas of restricted right-of-way may, upon approval, have a steeper slope. Maximum velocities will depend on the type of material used for the channel lining. Supercritical velocities are not permitted for any material used. Drop structures and other energy dissipating design may be required to limit velocities to control erosion and head cutting.

Maximum velocities for grass lined channels depend on the type of grass mixture. The designers should consult appropriate design literature for details. It is assumed that grass lined channels will be mowed at least annually and will need to be irrigated. The minimum bottom width of a grass lined channel will be 6 feet unless otherwise approved by the maintenance agency. The minimum bottom width of all man-made channels shall be designed to facilitate access and maintenance.

Natural Channels

The use and preservation of natural drainage ways shall be encouraged. Natural channels for drainage conveyance can reduce long term maintenance costs, can reduce initial costs associated with drainage, and can enhance passive recreation and open space uses. When natural channels are incorporated into the drainage control plan, consideration shall be given to the impact of increased flows due to improvements to upstream drainage basins and areas, adequate access for maintenance and debris removal, long-term degradation and erosion potential, and the need for additional set-backs for structures.

STORAGE FACILITIES

Generally, there are two types of storm water storage facilities: retention and detention. Retention ponds which are normally intended for infiltration of stored water may require extensive subsoil and groundwater studies as well as extensive maintenance requirements and safety concerns and are generally not allowed.

Detention facilities (basins) are used to temporarily store runoff and reduce the peak discharge by allowing flow to be discharged at a controlled rate. The controlled discharge rate is based on either limited down stream capacity, as in regional basins, or on a limit on the increase in flows over pre-development conditions, as in local facilities, and in some instances both.

Regional detention facilities are those identified by the City and will be identified in the Storm Drain Master Plan and other regional studies. Generally, these facilities control flow on major washes or drainage basins, are of major proportion, and are built as part of major development or mitigation plans.

Local detention facilities are usually designed by and financed by developers or local property owners desiring to improve their property. These facilities are intended to allow development of property by protecting a site from existing flooding and/or to protect downstream property from increased runoff caused by development. In small facilities, detention storage volume may be provided in small landscaped basins, parking lots, underground vaults, excess open space, or a suitable combination. In larger facilities, dual functions may be served. These larger facilities are required to reduce existing flooding to allow a development and/or control increased runoff caused by the development itself. These larger facilities may store significant flood volumes and may handle both off-site and on-site flows.

Detention facilities will generally be used to prevent local increases in the 10-year, 24-hour and the 100-year, 24-hour peak flows, or the 100-year 3-hour storm, whichever case requires the largest volume. Post-development discharges must not exceed pre-development discharges or .2 cfs per acre, whichever is less. If downstream facilities lack adequate capacity to handle the flow, lower release rates must be used.

Standard engineering practice shall be used in determining the volume of the required facilities. A minimum of 1 foot of freeboard is required above the maximum water surface elevation. Emergency spillways or overflows will be incorporated into all designs. Structures and facilities shall be design so as not to be damaged is case of emergency overflow. Detention basins must empty within 24 hours of a storm event. The maximum impounded water depth of a basin should be 3 feet unless otherwise approved. Below grade basins are preferred. Partially wet basins may be allowed for recreational or aesthetic purposes, but storage below permanent spillways or low-level outlets cannot be included in control calculations. Groundwater should not be introduced into detention basins without approval of the City. Multi-use (e.g. recreation) should be considered for all detention basins.

Energy dissipation and erosion protection is required at all outlet structures where storm drainage is released into a natural or erodible channel, unless otherwise approved by the City. All basins are required to function properly under debris and sedimentation conditions. Adequate access must be provided to allow for cleaning and maintenance. All basins shall be designed as permanent facilities unless otherwise approved in writing by the City.

FLOODPLAINS

Flood plains are generally classified as FEMA and non-FEMA. Any work in and around FEMA designated and mapped floodplains should refer to the local ordinance governing their use. All work in the FEMA floodplain requires an appropriate permit.

Non-FEMA Floodplains

In general, all building floor levels should be constructed two feet above the 100-year flood level. Encroachments into the 100-year floodplain for natural water courses will not be allowed unless otherwise permitted by the City. All natural drainages, washes, and waterways that convey a developed 100-year flow of greater than 150 cfs will be left open unless otherwise approved. Developments located adjacent to or in floodplains may be required to stabilize the

continual degradation and erosion of the channel by installing grade control structures and/or by other effective means. Any alteration of the floodplain is not permitted unless the proposed use can be shown to have no significant negative influence on the flood conveyance, the floodplain, or the alteration itself.

In the layout and design of new developments, adequate access to floodplains and erosion protection shall be provided. It is preferred that streets be positioned between floodplains and structures. Where not possible or feasible, additional structural setbacks will be required.

Hydrologic, hydraulic, erosion, and geomorphologic studies will be required of developments adjacent to floodplains.

EROSION CONTROL

Necessary measures shall be taken to prevent erosion due to drainage at all points in new developments. During grading and construction, the developer shall control all potential storm runoff so that eroded soil and debris cannot enter any downstream water course or adjoining property. All drainage that leaves a new development shall be adequately addressed to mitigate all erosion on adjacent properties. Erosion mitigation shall be permanent unless otherwise approved. A comprehensive reference on erosion control is Sedimentation Engineering by the ASCE.

IRRIGATION DITCHES

In general, irrigation ditches shall not be used as outfall points for drainage systems, unless such use is shown to be without unreasonable hazard substantiated by adequate hydraulic engineering analysis.

In general, irrigation ditches are constructed on very flat slopes and with limited carrying capacity. It is obvious, based on experience and hydraulic calculations, that irrigation ditches cannot, as a general rule, be used as an outfall point for storm drainage because of physical limitations. Exceptions to the rule are when the capacity of the irrigation ditch is adequate to carry the normal ditch flow plus the maximum storm runoff with adequate freeboard to obviate creating a hazard to property and persons below and around the ditch. Ditches are seldom for use as a storm drain.

Irrigation ditches are sometimes abandoned in areas where agricultural use has subsided. Provisions must be made for ditch perpetuation prior to its being chosen and used as an outfall for drainage. Use of irrigation ditches for collection and transportation of storm runoff shall be made only when in accordance with the Storm Drain Master Plan.

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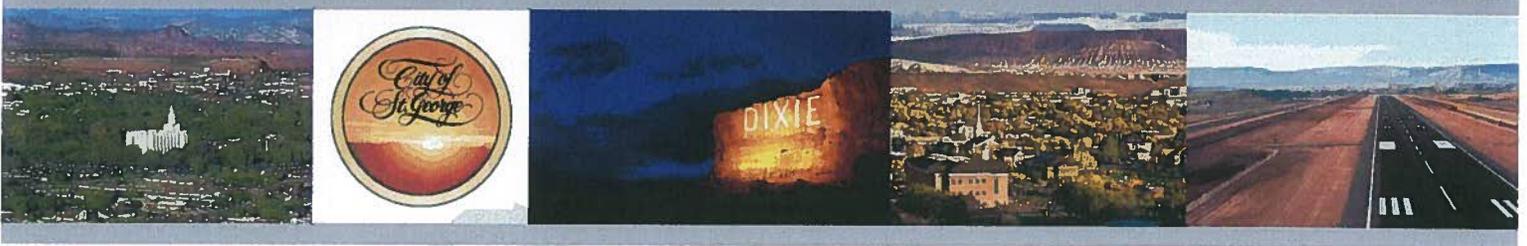
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TRANSPORTATION IMPACT FEE FACILITIES PLAN (IFFP) & IMPACT FEE ANALYSIS (IFA)

CITY OF ST. GEORGE, UTAH



NOVEMBER 2013

DRAFT

DATED 3-25-14


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SECTION 1: EXECUTIVE SUMMARY

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

- **Impact Fee Service Area:** The service area for transportation impact fees includes all areas within the City.
- **Demand Analysis:** The demand units utilized in this analysis are based on undeveloped residential and commercial land and the new trips generated from these land-use types. As residential and commercial growth occurs within the City, additional trips will be generated on the City's roadways. The transportation capital improvements identified in this study are based on maintaining the current level of service as defined by the City.
- **Level of Service:** LOS is a term used to describe the traffic operations of an intersection and/or roadway, based on congestion and delay. Level of Service is generally defined in ranges from LOS A (almost no congestion or delay) to LOS F (traffic demand is above capacity and the intersections experience long queues and delays). The LOS C or D is generally considered acceptable for rural or urbanized areas. Most of the City's roadways currently maintain this standard.
- **Excess Capacity:** A buy-in component has not been calculated in this analysis. Capital projects required to maintain existing service levels, as a result of new growth, are considered impact fee eligible projects.
- **Capital Facilities Analysis:** Based upon the projected increase in trips through 2023, a total of \$16,846,944 is identified as necessary, growth-related future transportation capital projects. The percentage of the total costs that is attributable to growth is based upon the proportionate share analysis provided by the City.
- **Funding of Future Facilities:** This analysis assumes future growth related facilities will be funded on a pay-as-you-go basis.

PROPOSED TRANSPORTATION IMPACT FEE

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

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, CFP ("Capital Facilities Plan") or CIP ("Capital Improvement Plan") 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 level of service and determine any excess capacity in existing facilities that could serve new growth.

TRANSPORTATION IMPACT FEE CALCULATION

The total cost identified as growth related and funded is then applied to the total future trips served over the planning horizon. This results in a cost per trip of approximately \$94.61.



TABLE 1.1: ILLUSTRATION OF IMPACT FEE PER TRIP

TRANSPORTATION CAPITAL PROJECTS	GROWTH RELATED COSTS	FUTURE TRIPS	COST PER TRIP
Future Roadway Projects	\$16,846,944	151,830	\$110.96
Professional Expenses ¹	\$9,675	86,692	\$0.11
Impact Fee Fund Balance ²	(\$2,498,912)	151,830	(\$16.46)
Net Impact Fee Cost per Trip	\$14,357,707		\$94.61

The cost per trip is then applied to the trip statistics for each type of land use, as shown below.

TABLE 1.2: FEE BY LAND USE TYPE

ITE CLASSIFICATION	WEEKDAY TRIPS	PASS-BY ADJUST.	ADJUSTED TRIPS	ESTIMATED FEE	EXISTING FEE	% CHANGE
Residential (per Unit)						
Single Family Homes (210)	9.57		9.57	\$905	\$754	20%
Multi-Family (220)	6.65		6.65	\$629	\$529	19%
Mobile Home Park (240)	4.99		4.99	\$472	\$393	20%
Lodging (per Room)						
Hotel (310)	8.17		8.17	\$773	\$562	38%
Motel (320)	5.63		5.63	\$533	\$574	-7%
Non Residential (Per 1,000 SF)						
Church (560)	9.11		9.11	\$862	\$574	50%
Supermarket (850)	102.24	36%	65.43	\$6,191	\$1,622	282%
Fast Food With Drive Thru (934)	496.12	50%	248.06	\$23,470	\$6,025	290%
Quality Restaurant (931)	89.95	44%	50.37	\$4,766	\$4,959	-4%
Drive-In Bank (912)	148.15	47%	78.52	\$7,429	\$3,882	91%
Convenience. Mkt W/ Gas Pumps (853)	845.60	66%	287.50	\$27,201	\$4,556	497%
General Commercial/Shopping Center (820)	42.94	34%	28.34	\$2,681	\$2,705	-1%
Specialty Retail Center (814)	44.32		44.32	\$4,193	\$1,745	140%
General Office (710)	11.01		11.01	\$1,042	\$867	20%
General Light Industrial (110)	6.97		6.97	\$659	\$549	20%
Auto Parts (843)	61.91	43%	35.29	\$3,339	\$3,901	-14%
Medical/Dental Office (720)	36.13		36.13	\$3,418	\$2,845	20%
Business Park (770)	12.76		12.76	\$1,207	\$1,005	20%
New Car Sales (841)	33.34		33.34	\$3,154	\$2,101	50%
Free Standing Discount Super (813)	53.13	28%	38.25	\$3,619	\$1,654	119%
Hardware/Paint Store (816)	51.29	26%	37.95	\$3,591	\$2,424	48%
Home Improvement Store (862)	29.80	48%	15.50	\$1,466	\$1,408	4%
Electronic Superstore (863)	45.04	40%	27.02	\$2,557	\$2,483	3%
Apparel Store (876)	66.40		66.40	\$6,282	\$2,615	140%
Manufacturing (140)	3.82		3.82	\$361	\$301	20%

Note: Adjustment factor is considered to be 1.00 for all land uses.

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 total future trips generated in the next six years.

² The FY 2013 Impact Fee Fund balance totaled \$2,524,912. The City anticipates that most of this will be spent on projects listed in the IFFP. Approximately \$26,000 has already been spent or will be spent on projects listed in the previous impact fee study thus the impact fee calculation only includes \$2,498,912 as the impact fee fund balance.



NON-STANDARD IMPACT FEES

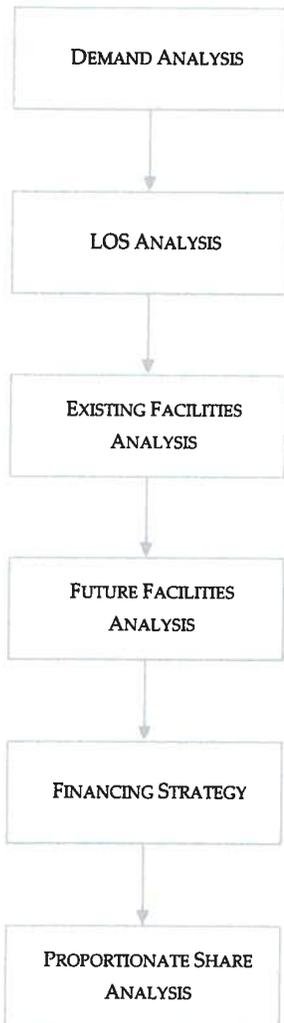
The City reserves the right under the Impact Fees Act to assess an adjusted fee that more closely matches the true impact that the land use will have upon public facilities.³ This adjustment could result in a higher or lower impact fee if the City determines that a particular user may create a different impact than what is standard for its land use. To determine the impact fee for a non-standard use, the City should use the following formula:

$$\text{Total Trips (per Specified Land Use)} * \text{Applicable Adjustment Factors} * \text{Cost per Trip (\$94.61)}$$

³ 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 IFFP and IFA. The IFFP is designed to identify the demands placed upon the City's existing facilities by future development and evaluate how these demands will be met by the City. The IFFP is also intended to outline the improvements which are intended to be funded by impact fees. The IFA is designed to proportionately allocate the cost of the new facilities and any excess capacity to new development, while ensuring that all methods of financing are considered. Each component must consider the historic level of service provided to existing development and ensure that impact fees are not used to raise that level of service. The following elements are important considerations when completing an IFFP and IFA.

DEMAND ANALYSIS

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

LEVEL OF SERVICE ANALYSIS

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

EXISTING FACILITY INVENTORY

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

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

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

FUTURE CAPITAL FACILITIES ANALYSIS

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

**FINANCING STRATEGY – CONSIDERATION OF ALL REVENUE SOURCES**

This analysis must also include a consideration of all revenue sources, including impact fees, future debt costs, alternative funding sources and the dedication of system improvements, which may be used to finance system improvements.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 to the costs borne in the past and to be borne in the future (UCA 11-36a-302).

⁴ 11-36a-302(2)

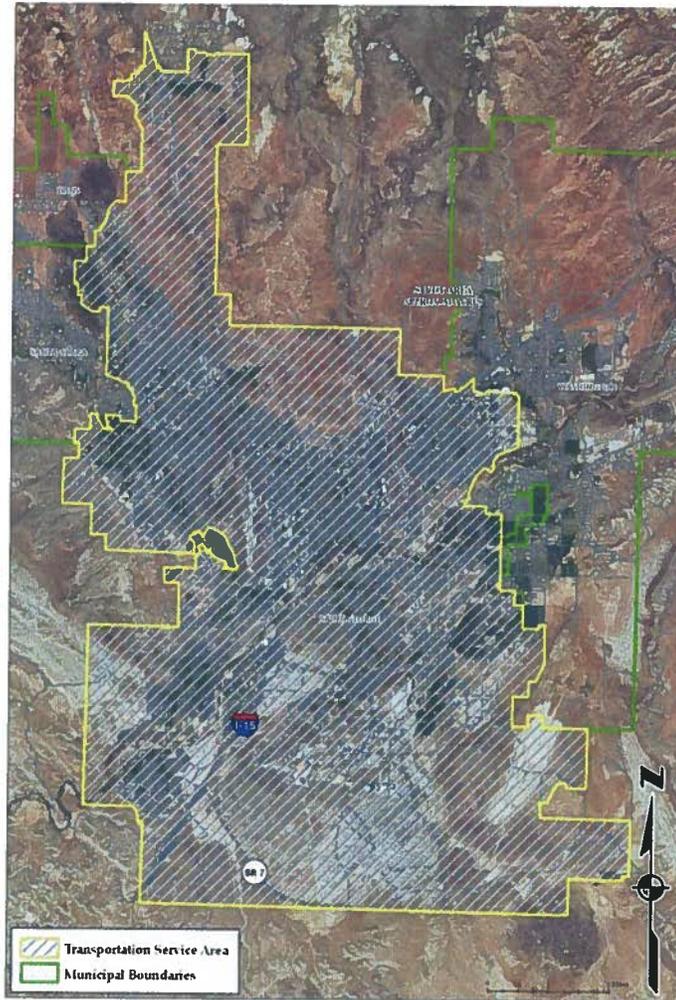
⁵ 11-36a-302(3)

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.⁶ The service area for transportation impact fees includes all areas within the City. This document identifies capital projects that will help to maintain the same level of service enjoyed by existing residents into the future.

FIGURE 3.1: ST. GEORGE TRANSPORTATION SERVICE AREA



It is anticipated the growth projected over the next six to ten years will impact the City's existing services. Public facilities will need to be expanded in order to maintain the existing level of service. The IFFP, in conjunction with the IFA, are designed to accurately assess the true impact of a particular user upon the City's infrastructure.

DEMAND UNITS

The demand units utilized in this analysis are based on undeveloped residential and commercial land and the new trips generated from these land-use types. As residential and commercial growth occurs within the City, additional trips will be generated on the City's roadways. The transportation capital improvements identified in

⁶ 11-36a-402(a)

this study are based on maintaining the current level of service as defined by the City. The proposed impact fees are based upon the projected growth in demand units which are used as a means to quantify the impact that future users will have upon the City's system. The demand unit used in the calculation of the transportation impact fee is based upon each land use category's impact and road usage characteristics expressed in the number of trips generated. The existing and future trip statistics used in this analysis were prepared by the City and their engineers based on existing modeling software.

To determine the proportionate impact from each land use type, the existing trips are allocated to the different land use types based on trip statistics as presented in the Institute of Traffic Engineers (ITE) Trip Generation Manual, 8th Edition. The most common method of determining growth is measuring the number of trips within a community based on existing and future land uses. Appropriate adjustment factors are applied to remove pass-by traffic. Based on the growth in trips, the City will need to expand its current facilities to accommodate new growth.

TABLE 3.1: ILLUSTRATION OF TRIPS

TRIPS BY TYPE	2013	2018	2023
Pass-By ¹	21,665	26,734	33,973
IX - XI ²	114,550	140,695	170,058
Internal ³	222,381	246,801	270,542
Total Trips	580,977	661,031	745,115
Growth in Trips (Difference between 2023 and 2013 Total Trips)			164,138
Trip Productions and Attractions in St. George⁴	559,312	634,297	711,142
Growth in New Trips within St. George (Difference between 2023 and 2013 Trip Productions and Attractions in St. George)			151,830

1 - Pass-By: Trip passes through St. George City but begins and ends outside City limits.

2 - IX-XI: Trip either begins or ends in St. George City limits but not both.

3 - Internal: Trip begins and ends inside St. George limits.

4 - Trip Productions and Attractions in St. George: "IX-XI" plus two times the "Internal" trips. This is done to determine the number of trips relative to the trip statistics found in the Institute of Traffic Engineers (ITE) Manual. Trip statistics in the ITE Manual account for entering and exiting traffic by development type.⁷

Source: St. George City, Horrocks Engineers

LEVEL OF SERVICE STANDARDS

The purpose of this document is to establish a level of service ("LOS") based on the facilities and amenities provided to residents within the service area. Roadway operations are typically rated in terms of "Level of Service" (LOS). LOS is a term used to describe the traffic operations of an intersection and/or roadway, based on congestion and delay. Level of Service is generally defined in ranges from LOS A (almost no congestion or delay) to LOS F (traffic demand is above capacity and the intersections experience long queues and delays). LOS C or D is generally considered acceptable for rural or urbanized areas, whereas LOS E and F are considered above capacity.

TABLE 3.2: LEVEL OF SERVICE CRITERIA FOR ROADWAYS

LOS	ARTERIAL (ADTs) ⁸	COLLECTOR (ADTs)
LOS A	5,500	5,000
LOS B	7,500	7,000
LOS C	10,000	9,000
LOS D	11,500	10,500
LOS E	15,000	13,500

⁷ For example, the 2013 Trip Productions and Attractions figure was calculated by multiplying the Internal Trips of 222,381 by two to account for beginning and ending trips and then adding the IX-XI Trips of 114,550. This totals 559,312 trips.

⁸ "Arterial" roads serve major traffic movements or major traffic corridors. "ADTs" stands for Average Daily Trips.



The Impact Fees Act allows cities to charge impact fees for roadway facilities as long as a reasonable relationship exists between the fees imposed on development and the needs generated by new development. Thus, the consultants used the level of service analysis to determine the road segments that would be impacted by new growth through a reduction in the level of service. For those road segments that experience a reduced level of service as a result of new growth, impact fees are an applicable method of financing additional capital improvements. In addition, in areas where new roadways need to be constructed (due to new development), the capital costs of these projects can also be applied to impact fees. For the road segments that do not experience a reduced level of service as a result of future growth, the capital costs are not included in the impact fee analysis. Under this methodology the consultants isolated those projects that could be funded through impact fees.

It is important to note that existing roadways that maintain the level of service despite growth and the road improvements required to be funded by developers or other agencies are not included.

In accordance with current City policy, development that will increase traffic volumes on collector and arterial road intersections will be required to make improvements to maintain at least a level of service ("LOS") D during peak hours. Most of the City's roadways currently maintain this standard. However, in the event that existing roadways must be repaired in order to meet the LOS standard, the City has created a transportation maintenance program which is designed to finance reparations to existing roadways on an as-needed-basis.



SECTION 4: EXISTING FACILITIES INVENTORY

EXCESS CAPACITY

Transportation impact fees are justified when trips are added to system-wide roadways that are at or nearing capacity or when new system-wide roadways are needed to meet the demands of growth. A buy-in component is contemplated for the roadways that have sufficient capacity to handle new growth while maintaining safe and acceptable levels of service. No buy-in component is calculated in this analysis. Capital projects required to maintain existing service levels, as a result of new growth, are considered impact fee eligible projects.

VALUE OF EXISTING TRANSPORTATION INFRASTRUCTURE

Since a buy-in component is not included in this analysis, the value of existing infrastructure has not been calculated.

MANNER OF FINANCING EXISTING FACILITIES

The City has funded existing facilities using several revenue sources including general fund revenues (property taxes, Class C road funds, etc.), grants, donations, impact fee revenues and debt. 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. In addition, the City has identified the alternative funding mechanism related to future facilities, as discussed in the next section.

SECTION 5: CAPITAL FACILITY ANALYSIS

Impact fees cannot be used to finance an increase in the level of service to current or future users of capital improvements. Therefore, it is important to maintain the levels of service within the City that have historically been maintained for the existing development in the City. The future capital projects have been designed to maintain the existing level of service for future development, and repair and replacement projects have been excluded from the calculation of impact fees.

This section identifies system improvements as well as projects related to curing existing deficiencies. Existing deficiencies are also identified based on the LOS standards and existing demand. Impact fee eligible costs were calculated based on the percent attributed to new growth for **system improvements** necessary to maintain the existing LOS, and excluded those improvements that were necessary to cure deficiencies.

Based upon the projected increase in trip ends through 2023, the City's Public Works Department has determined the transportation capital improvements needed to serve future development. **Table 5.1** summarizes the costs of future transportation capital projects (**Appendix A** provides a detailed description of the capital projects as well as the allocation of cost to growth). The percentage of the total costs that is attributable to growth is based upon the proportionate share analysis provided by the City. Also, an adjustment is made to remove the costs applicable to pass-by traffic. As shown in table 3.1, St. George trips are approximately 151,830 or 92.5 percent of the total trips (164,138). Thus, 92.5 percent of the total costs to growth for future improvements will be included in the impact fee.

TABLE 5.1: SUMMARY OF TRANSPORTATION CAPITAL IMPROVEMENT PLAN

	2013 ESTIMATED COST	CONSTRUCTION YEAR COST	% GROWTH RELATED	COST TO GROWTH
Short-Term Projects (1-5 Years)				
Subtotal: Short Term	\$73,277,000	\$75,828,524	11.8%	\$8,966,852
Mid-Term Projects (6-10 Years)				
Subtotal: Mid Term	\$31,460,000	\$33,549,392	27.6%	\$9,245,779
Total	\$104,737,000	\$109,377,916		\$18,212,631
			Pass-By Adjustment	92.5%
			Total Growth Related Costs Applied to Impact Fees⁹	\$16,846,944

The City has determined the projects included in this Impact Fee Facilities Plan using capital project and engineering data, planning analysis and other information. The City has provided all future capital project data including project descriptions and estimated project costs (See Appendix A). 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 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.¹⁰ 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.¹¹ The Impact Fee Analysis may only include the costs of impacts on system improvements related to new growth within the proportionate share analysis.

⁹ \$16.8 million is approximately 15 percent of the total construction year costs, thus the overall percent to growth is approximately 15 percent.

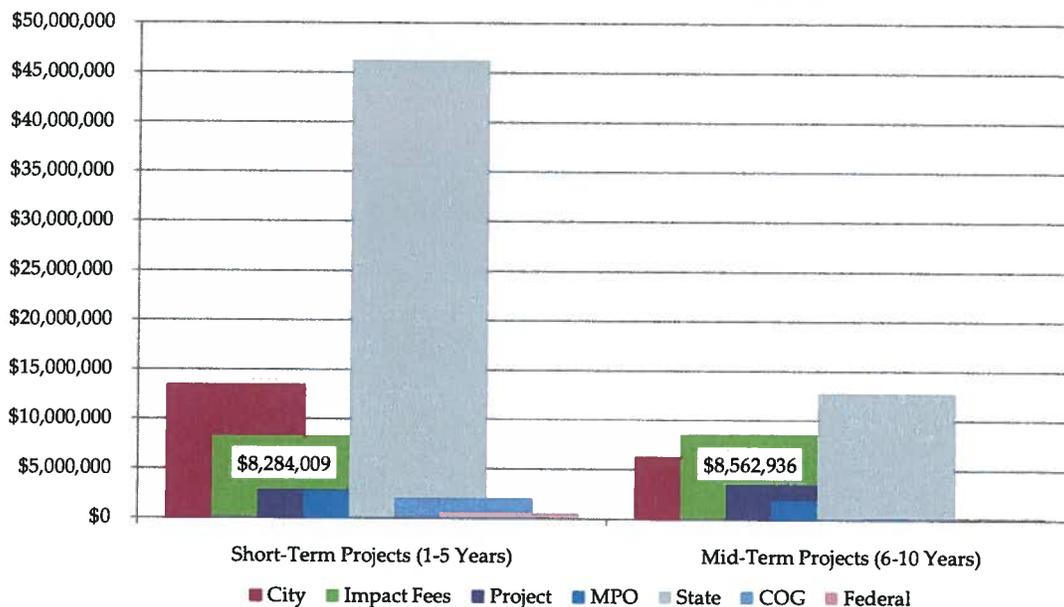
¹⁰ 11-36a-102(20)

¹¹ 11-36a102(13)

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.¹² 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.¹³ 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. In addition, the City has identified the alternative funding mechanism related to future facilities, as shown below.

FIGURE 5.1: ILLUSTRATION OF FUTURE CAPITAL FACILITIES BY FUNDING SOURCE



As shown in the figure above, a total of \$16,846,944 is identified as necessary, growth-related future transportation capital projects, based on projects within the next ten years. See Appendix A for more details.

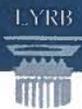
CONSIDERATION OF ALTERNATIVE FUNDING MECHANISMS

Property tax revenues are considered in this analysis as a funding source for capital projects. The City has identified the projects that will be paid through general fund revenues. Specific grants are not identified in this analysis. However, it is likely that some or all of the funds shown under the "Federal" category will be obtained through grants. If unanticipated grants become available, the impact analysis should be updated to reflect the grant monies received. A donor will 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 developer credits for donations.

In the event the City has not amassed 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

¹² 11-36a-302(2)

¹³ 11-36a-302(3)



development and reimburse itself later from impact fee revenues for the costs of principal and interest.

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

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: TRANSPORTATION 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 level of service.

PROPOSED TRANSPORTATION 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, CFP ("Capital Facilities Plan") or CIP ("Capital Improvement Plan") 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 level of service and determine any excess capacity in existing facilities that could serve new growth.

TRANSPORTATION IMPACT FEE CALCULATION

The total cost identified as growth related and funded is then applied to the total future trips served over the planning horizon. This results in a cost per trip of \$94.61.

TABLE 6.1: ILLUSTRATION OF IMPACT FEE PER TRIP

TRANSPORTATION CAPITAL PROJECTS	GROWTH RELATED COSTS	FUTURE TRIPS	COST PER TRIP
Future Roadway Projects	\$16,846,944	151,830	\$110.96
Professional Expenses ¹⁴	\$9,675	86,692	\$0.11
Impact Fee Fund Balance ¹⁵	(\$2,498,912)	151,830	(\$16.46)
Net Impact Fee Cost per Trip	\$14,357,707		\$94.61

The cost per trip is then applied to the trip statistics for each type of land use, as shown below.

TABLE 6.2: FEE BY LAND USE TYPE

ITE CLASSIFICATION	WEEKDAY TRIPS	PASS-BY ADJUST.	ADJUSTED TRIPS	ESTIMATED FEE	EXISTING FEE	% CHANGE
Residential (per Unit)						
Single Family Homes (210)	9.57		9.57	\$905	\$754	20%
Multi-Family (220)	6.65		6.65	\$629	\$529	19%
Mobile Home Park (240)	4.99		4.99	\$472	\$393	20%
Lodging (per Room)						
Hotel (310)	8.17		8.17	\$773	\$562	38%
Motel (320)	5.63		5.63	\$533	\$574	-7%
Non Residential (Per 1,000 SF)						
Church (560)	9.11		9.11	\$862	\$574	50%
Supermarket (850)	102.24	36%	65.43	\$6,191	\$1,622	282%
Fast Food With Drive Thru (934)	496.12	50%	248.06	\$23,470	\$6,025	290%
Quality Restaurant (931)	89.95	44%	50.37	\$4,766	\$4,959	-4%
Drive-In Bank (912)	148.15	47%	78.52	\$7,429	\$3,882	91%
Convenience. Mkt W/ Gas Pumps (853)	845.60	66%	287.50	\$27,201	\$4,556	497%
General Commercial/Shopping Center (820)	42.94	34%	28.34	\$2,681	\$2,705	-1%
Specialty Retail Center (814)	44.32		44.32	\$4,193	\$1,745	140%

¹⁴ 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 total future trips generated in the next six years.

¹⁵ The FY 2013 Impact Fee Fund balance totaled \$2,524,912. The City anticipates that most of this will be spent on projects listed in the IFFP. Approximately \$26,000 has already been spent or will be spent on projects listed in the previous impact fee study thus the impact fee calculation only includes \$2,498,912 as the impact fee fund balance.

ITE CLASSIFICATION	WEEKDAY TRIPS	PASS-BY ADJUST.	ADJUSTED TRIPS	ESTIMATED FEE	EXISTING FEE	% CHANGE
General Office (710)	11.01		11.01	\$1,042	\$867	20%
General Light Industrial (110)	6.97		6.97	\$659	\$549	20%
Auto Parts (843)	61.91	43%	35.29	\$3,339	\$3,901	-14%
Medical/Dental Office (720)	36.13		36.13	\$3,418	\$2,845	20%
Business Park (770)	12.76		12.76	\$1,207	\$1,005	20%
New Car Sales (841)	33.34		33.34	\$3,154	\$2,101	50%
Free Standing Discount Super (813)	53.13	28%	38.25	\$3,619	\$1,654	119%
Hardware/Paint Store (816)	51.29	26%	37.95	\$3,591	\$2,424	48%
Home Improvement Store (862)	29.80	48%	15.50	\$1,466	\$1,408	4%
Electronic Superstore (863)	45.04	40%	27.02	\$2,557	\$2,483	3%
Apparel Store (876)	66.40		66.40	\$6,282	\$2,615	140%
Manufacturing (140)	3.82		3.82	\$361	\$301	20%

Note: Adjustment factor is considered to be 1.00 for all land uses.

NON-STANDARD IMPACT FEES

The proposed fees are based upon population growth. 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.¹⁶ This adjustment could result in a higher or lower impact fee if the City determines that a particular user may create a different impact than what is standard for its land use. To determine the impact fee for a non-standard use, the City should use the following formula:

$$\text{Total Trips (per Specified Land Use)} * \text{Applicable Adjustment Factors} * \text{Cost per Trip (\$94.61)}$$

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 to maintain the LOS.

PROPOSED CREDITS OWED TO DEVELOPMENT

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

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

¹⁶ 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 one percent annual construction inflation adjustment is applied to projects completed after 2013 (the base year cost estimate).

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APPENDIX A:

TABLE A-1: ILLUSTRATION OF CAPITAL FACILITIES AND ESTIMATED COST

	PROJECT NAME	LOCATION	PROJECT DESCRIPTION	ESTIMATED COST (2013)	CONSTRUCTION YEAR COST
Short-Term Projects (1-5 Years)					
1	2014 Mall Drive Bridge	3000 East to Riverside Drive	Construct new bridge and connecting roads over the Virgin River.	\$10,000,000	\$10,100,000
2	2014 3000 East, 700 South to 1400 South	700 South to 1400 South	Improve to arterial standards.	\$3,000,000	\$3,030,000
3	2014 Little Valley Road	2450 South to Commerce Dr.	Extend, widen and improve roadway.	\$1,100,000	\$1,111,000
4	2014 Indian Hills Drive	Valley View to Hilton Drive	Widen and improve to major collector standard.	\$3,000,000	\$3,030,000
5	2016 Bluff Street/Sunset Blvd Intersection Upgrade	Bluff Street and Sunset Blvd.	Upgrade to a Jug-Handle Intersection	\$21,100,000	\$21,739,351
6	2016 Transit Facilities and Planning	Various areas of the City	Provide building improvements and bus stop improvements and planning.	\$715,000	\$736,665
7	2017 Development Matching	Various areas of the City	Special developer-related projects that occur on a year-to-year basis and cannot be specifically identified in a 10-year forecast.	\$500,000	\$520,302
8	2017 Traffic and Transportation Studies	N/A	Studies required to meet traffic and transportation needs.	\$200,000	\$208,121
9	2017 R/W Acquisition/Corridor Preservation	Various areas of the City	Acquire right-of-way for future transportation corridors throughout the City.	\$1,000,000	\$1,040,604
10	2017 Intersection Improvements	Various areas of the City	Traffic signals, roundabouts and other intersection improvements.	\$1,000,000	\$1,040,604
11	2017 Master plan Update	N/A	Forecast of transportation needs, update of city-wide road planning and improvement program.	\$150,000	\$156,091
12	2017 Traffic Control Center & Communication Systems	City-wide System	Upgrade and expansion of the Traffic Control Center, fiber network, and associated infrastructure.	\$200,000	\$208,121
13	2017 Access Management	Various areas of the City	Plan and improve access on major roads.	\$100,000	\$104,060
14	2017 Bike Lanes	Various areas of the City	Plan and install bike lanes along City streets.	\$50,000	\$52,030
15	2018 Bluff Street Widening, Phase I	300 North to 500 North	Widen Bluff Street to seven lanes.	\$25,000,000	\$26,275,251
16	2018 East St. George Blvd.	St. George Blvd. - 900 E. to 1000 E.	Widen & upgrade St. George Blvd.	\$650,000	\$683,157
17	2018 Old Airport Redevelopment Access Road	From Blackridge Drive to top of Black Hill	Extend and improve road.	\$1,500,000	\$1,576,515
18	2018 River Road Widening	Ft. Pearce Drive to Brigham Road	Roadway widening to five lanes and bridge reconstruction	\$3,350,000	\$3,520,884
19	2018 700 South Upgrade	Bluff Street to River Road	Refurbish and restripe as a five-lane facility. Improve access conditions as required to facilitate traffic flow.	\$162,000	\$170,264
20	2018 200 North Extension	250 East to 300 East	Extend and improve road.	\$500,000	\$525,505
Total				\$73,277,000	\$75,828,524

PROJECT NAME		LOCATION	PROJECT DESCRIPTION	ESTIMATED COST (2013)	CONSTRUCTION YEAR COST
Mid-Term Projects (6-10 Years)					
21	2019 Commerce Drive	1630 East to 2350 East	Construct bridge and extend and improve road to arterial standards.	\$6,000,000	\$6,369,121
22	2019 3000 East, 1580 South to 4000 South	1580 South to 4000 South	Improve to arterial standards	\$2,500,000	\$2,653,800
23	2019 Red Hills Parkway/Red Cliffs Drive Connection	Area near Red Cliffs Mall	Construct a new connection across I-15.	\$16,000,000	\$16,984,322
24	2020 Plantations Drive	Sunbrook Drive to Dixie Drive	Improve new arterial road.	\$1,750,000	\$1,876,237
25	2020 Intersection Improvements	Various areas of the City	Traffic signals, roundabouts, and other intersection improvements	\$1,000,000	\$1,072,135
26	2020 Master plan Update	N/A	Forecast of transportation needs, update of city-wide road planning and improvement program.	\$150,000	\$160,820
27	2021 Development Matching	Various areas of the City	Special development-related projects that occur on a year-to-year basis and cannot be specifically identified in a 10-year forecast.	\$500,000	\$541,428
28	2021 Traffic and Transportation Studies	N/A	Studies required to meet traffic and transportation needs.	\$200,000	\$216,571
29	2021 R/W Acquisition/Corridor Preservation	Various areas of the City	Acquire right-of-way for future transportation corridors throughout the City.	\$1,000,000	\$1,082,857
30	2021 Traffic Control Center & Communication Systems	City-wide System	Upgrade and expansion of the Traffic Control Center. Fiber network and associated infrastructure.	\$200,000	\$216,571
31	2021 Transit Facilities and Planning	Various areas of the City	Provide building improvements and bus stop improvements and planning.	\$300,000	\$324,857
32	2021 Access Management	Various areas of the City	Plan and improve access on major roads.	\$100,000	\$108,286
33	2022 Bike Lanes	Various areas of the City	Plan and install bike lanes along City streets.	\$50,000	\$54,684
34	2022 Sunset Blvd. Upgrade	Entire Length	Refurbish and restripe as a seven-lane facility. Improve access conditions as required to facilitate traffic flow.	\$110,000	\$120,305
35	2023 2450 South	Little Valley Road to east city boundary	Extend and improve to arterial standards.	\$1,600,000	\$1,767,395
Total				\$31,460,000	\$33,549,392

TABLE A-2: ILLUSTRATION OF CAPITAL FACILITIES BY FUNDING SOURCE

	PROJECT NAME	CONSTRUCTION YEAR COST	% NON-GROWTH (CITY)	% IMPACT FEE (GROWTH)	% PROJECT	% METROPOLITAN PLANNING ORGANIZATION (MPO)	% STATE GOVERNMENTS (COG)	% FEDERAL
Short-Term Projects (1-5 Years)								
1	Mall Drive Bridge	\$10,100,000	90%	10%				
2	3000 East, 700 South to 1400 South	\$3,030,000	20%	50%	30%	15%		
3	Little Valley Road	\$1,111,000	30%	50%	20%			
4	Indian Hills Drive	\$3,030,000	5%	35%	20%	40%	100%	
5	Bluff Street/Sunset Blvd Intersection Upgrade	\$21,739,351	0%	0%				80%
6	Transit Facilities and Planning	\$736,665	0%	20%				
7	Development Matching	\$520,302	0%	100%				
8	Traffic and Transportation Studies	\$208,121	25%	50%	25%			
9	R/W Acquisition/Corridor Preservation	\$1,040,604	10%	70%			20%	
10	Intersection Improvements	\$1,040,604	50%	50%				
11	Master plan Update	\$156,091	50%	50%				
12	Traffic Control Center & Communication Systems	\$208,121	0%	30%		70%		
13	Access Management	\$104,060	40%	60%				
14	Bike Lanes	\$52,030	40%	60%				
15	Bluff Street Widening, Phase I	\$26,275,251	0%	1%		0%	92%	7%
16	East St. George Blvd.	\$683,157	0%	50%		0%	50%	
17	Old Airport Redevelopment Access Road	\$1,576,515	25%	5%	70%			
18	River Road Widening	\$3,520,884	25%	50%	25%			
19	700 South Upgrade	\$170,264	25%	75%				
20	200 North Extension	\$525,505	100%	0%				
	Total	\$75,828,524						
Mid-Term Projects (6-10 Years)								
21	Commerce Drive	\$6,369,121	40%	50%	10%			
22	3000 East, 1580 South to 4000 South	\$2,653,800	20%	50%	30%			
23	Red Hills Parkway/Red Cliffs Drive Connection	\$16,984,322	10%	5%		10%	75%	
24	Plantations Drive	\$1,876,237	0%	65%	35%			
25	Intersection Improvements	\$1,072,135	50%	50%				
26	Master plan Update	\$160,820	50%	50%				
27	Development Matching	\$541,428	0%	100%				
28	Traffic and Transportation Studies	\$216,571	25%	50%		25%		
29	R/W Acquisition/Corridor Preservation	\$1,082,857	10%	70%			20%	
30	Traffic Control Center & Communication Systems	\$216,571		30%	70%			
31	Transit Facilities and Planning	\$324,857	20%	20%				80%
32	Access Management	\$108,286	40%	60%				



	PROJECT NAME	CONSTRUCTION YEAR COST	% NON-GROWTH (CITY)	% IMPACT FEE (GROWTH)	% PROJECT	% METROPOLITAN PLANNING ORGANIZATION (MPO)	% STATE	% COUNCIL OF GOVERNMENTS (COG)	% FEDERAL
33	Bike Lanes	\$54,684	40%	60%					
34	Sunset Blvd. Upgrade	\$120,305		50%			50%		
35	2450 South	\$1,767,395		20%	80%				
	Total	\$33,549,392							

DRAFT

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

CITY OF ST. GEORGE, UTAH



DECEMBER 2013

DRAFT

DATED 3.25.14

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SECTION 1: EXECUTIVE SUMMARY - FIRE IMPACT FEES

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

- **Service Area:** The service area for fire impact fees includes all areas within the City.
- **Demand Analysis:** The demand unit used for this analysis is calls for fire service. It is anticipated that the growth projected over the next five- to ten-year planning horizon, and through buildout, will impact the City's existing services through the increase in calls for service. Section 3 of this report outlines the growth in calls for service.
- **Level of Service:** The level of service for purposes of this analysis is the current building square feet per call. While the impact fee has been calculated based on the number of building square feet per call, level of service can also be measured in response times and road miles. The target response time for the Fire Department is four to six minutes or to be within 1.5 road miles from a fire station. However, the existing response time is slightly higher at approximately 6.27 minutes. Additional detail regarding level of service is found in Section 3.
- **Excess Capacity:** Fire facilities are not governed by traditional excess capacity analyses such as water and sewer systems. Instead, fire relies more on response time coverage and the geographic location of fire stations. Currently the average response time is approximately 6.27 minutes, thus the SGFD does not have any excess capacity to serve growth that continues to spread toward the outer-limits of the City's boundaries.
- **Future Capital Facilities:** Based on the calls for service outlined in this report, demand shows that the City needs to construct one new station of approximately 12,000 sq. ft. within the next ten years. The City is also planning on constructing a training facility and buying a new engine and aerial ladder within the next ten years. It is likely that additional stations will also be required to meet demand through buildout; however, the demand analysis shows that these additional stations will not be necessary within the IFFP planning horizon and thus are not included in this analysis. If the City determines that these future stations are needed within the next ten years due to growth in calls for service or level of service requirements, the impact fee will need to be revised to include these facilities.

PROPOSED FIRE IMPACT FEE

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

GROWTH-DRIVEN (PERPETUATION OF EXISTING LEVEL OF SERVICE)

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



FIRE IMPACT FEE CALCULATION

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

TABLE 1.1: PROPOSED FIRE/EMS IMPACT FEE SCHEDULES

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

NON-STANDARD IMPACT FEES

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

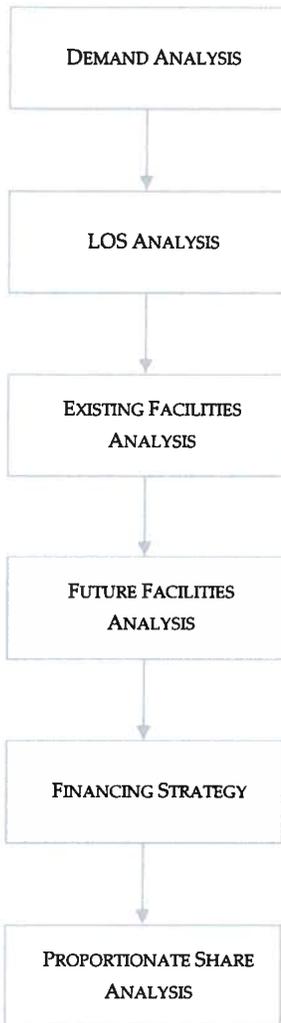
$$\text{Total Calls (per Specified Land Use) * Cost per Call}$$

¹ Since the number of calls per unit as shown in Table 3.3 is the same for mobile homes as multi-family units, the mobile homes category has been combined with the multi-family category.

² 11-36a-402(1)(c)

SECTION 2: GENERAL IMPACT FEE METHODOLOGY

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

DEMAND ANALYSIS

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

LEVEL OF SERVICE ANALYSIS

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

EXISTING FACILITY INVENTORY

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

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

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

FUTURE CAPITAL FACILITIES ANALYSIS

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

**FINANCING STRATEGY – CONSIDERATION OF ALL REVENUE SOURCES**

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

PROPORTIONATE SHARE ANALYSIS

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

³ 11-36a-302(2)

⁴ 11-36a-302(3)

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

SERVICE AREA

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

DEVELOPMENT BY ZONING CLASS

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

TABLE 3.1: DEVELOPMENT BY ZONING CLASS

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

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

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

DEMAND UNITS

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

TABLE 3.2: HISTORIC FIRE CALL DATA BY LAND USE CATEGORY

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

⁵ UC 11-36a-402(a)

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

TABLE 3.3: RATIO OF CALLS PER DEVELOPED UNIT

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

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

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

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

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

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

TABLE 3.4: FIRE CALL PROJECTIONS

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

As shown in Table 3.4, the City anticipates an additional annual 4,052 calls through buildout.⁷ Thus, the total annual calls at buildout are expected to be approximately 8,405.⁸ Table 3.5 shows a forecast of calls from 2011 through buildout. Approximately 966 of these calls will occur within the planning horizon (2013-2023).

TABLE 3.5: FORECASTED CALLS

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

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

LEVEL OF SERVICE STANDARDS

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

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

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

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



TABLE 3.6: FIRE FACILITIES LEVEL OF SERVICE AND NEEDS ASSESSMENT

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

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

TARGET LEVEL OF SERVICE (RESPONSE TIME AND ROAD MILES)

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

EXISTING LEVEL OF SERVICE (RESPONSE TIME AND ROAD MILES)

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

TABLE 3.7: EXISTING LEVEL OF SERVICE (RESPONSE TIME)

NATURE	RESPONSE TIME
Fire-Alarm	0:06:29
Fire-Brush	0:06:53
Fire-Other	0:06:54
Fire-Structure	0:05:56
Fire-Trash	0:04:43
Fire-Vehicle	0:07:17

Source: City of St. George Dispatch, 2011

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

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

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

⁹ City of St. George, GIS



SECTION 4: EXISTING FACILITIES ANALYSIS

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

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

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

VALUE OF EXISTING FIRE INFRASTRUCTURE

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

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

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

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

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

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

EXCESS CAPACITY

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

MANNER OF FINANCING EXISTING PUBLIC FACILITIES

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

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

CAPACITY FOR GROWTH IN FIRE STATIONS

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

SECTION 5: CAPITAL FACILITY ANALYSIS

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

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

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

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

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

SYSTEM VS. PROJECT IMPROVEMENTS

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

¹⁰ The historic average calls shown in Table 3.3 (4,353) plus additional calls for buildout shown in Table 3.4 (4,052).

¹¹ UC 11-36a-102(20)

¹² UC 11-36a102(13)



FUNDING OF FUTURE FACILITIES

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

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

PROPERTY TAX REVENUES

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

GRANTS AND DONATIONS

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

IMPACT FEE REVENUES

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

DEBT FINANCING

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

EQUITY OF IMPACT FEES

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

¹³ UC 11-36a-302(2)

¹⁴ UC 11-36a-302(3)



NECESSITY OF IMPACT FEES

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

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SECTION 6: FIRE IMPACT FEE CALCULATION

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

PROPOSED FIRE IMPACT FEES

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

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

TABLE 5.1: ESTIMATE OF IMPACT FEE COSTS PER CALL

	ESTIMATED COST TO FIRE	IF ELIGIBLE	COST TO IMPACT FEES	CALLS SERVED	COST PER CALL
Future Stations and Facilities					
Southeast Station (Little Valley/Fort Pierce)	\$2,153,329	100%	\$2,153,329	1,018	\$2,116
Training Center	\$1,061,520	100%	\$1,061,520	8,405	\$126
Total Stations and Facilities					\$2,242
Future Engines					
Engine/Pumper	\$710,908	100%	\$710,908	1,197	\$594
Total Engines					\$594
Future Ladders					
Aerial ladder	\$1,261,212	100%	\$1,261,212	1,197	\$1,054
Total Ladders					\$1,054
Other Expenses					
Professional Expense ¹⁵			\$9,675	557	\$17
Total Other Expenses¹⁶					\$17

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

TABLE 5.2: RECOMMENDED FIRE/EMS IMPACT FEE SCHEDULE

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

¹⁵ This is the actual cost to update the IFFP and IFA. The City can use this portion of the impact fee to reimburse itself for the expense of updating the IFFP and IFA. The cost is divided over the additional calls generated in the next six years.

¹⁶ Since the impact fee fund balance is negligible, it has not been included in the calculation of the impact fees.

¹⁷ Since the number of calls per unit as shown in Table 3.3 is the same for mobile homes as multi-family units, the mobile homes category has been combined with the multi-family category.



NON-STANDARD FIRE IMPACT FEES

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

FORMULA FOR NON-STANDARD FIRE/EMS IMPACT FEES:

<p>Residential Fire Impact Fee Calls per Residence x \$2,259 = Recommended Impact Fee</p> <p>Non-Residential Fire Impact Fee Calls per Unit / (Bldg. Sq. Ft./1,000) x \$3,907 = Recommended Impact Fee</p>
--

CONSIDERATION OF ALL REVENUE SOURCES

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

EXPENDITURE OF IMPACT FEES

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

PROPOSED CREDITS OWED TO DEVELOPMENT

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

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

GROWTH-DRIVEN EXTRAORDINARY COSTS

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

SUMMARY OF TIME PRICE DIFFERENTIAL

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

¹⁸ UC 11-36a-402(1)(c)

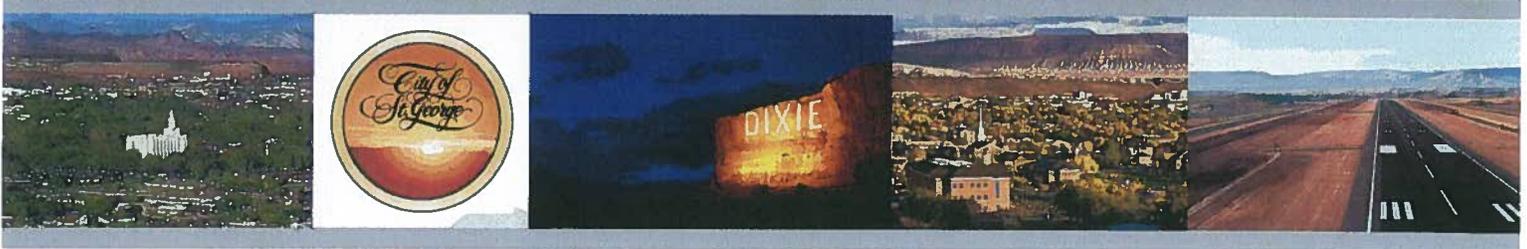


APPENDIX A: MAP OF EXISTING FIRE STATIONS

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

CITY OF ST. GEORGE, UTAH



NOVEMBER 2013

DRAFT

DATED 3.25.14


**LEWIS YOUNG
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SECTION 1: EXECUTIVE SUMMARY

The purpose of the Parks and Recreation Impact Fee Facilities Plan ("IFFP"), with supporting Impact Fee Analysis ("IFA"), is to fulfill the requirements established in Utah Code Title 11 Chapter 36a, the "Impact Fees Act", and help the City of St. George (the "City") plan necessary capital improvements for future growth. The following summarizes the inputs utilized in this analysis.

- **Service Area:** The service area for the parks and recreation impact fees includes all areas within the City.
- **Demand Analysis:** The demand unit used in this analysis is population. The City's current population is approximately 79,657. Based on reasonable growth estimates provided by the City, the service area should reach a population of approximately 107,052 residents by 2023. As a result of new growth, the City will need to construct additional parks, recreation, and trail facilities to maintain the existing level of service (LOS).
- **Level of Service:** The level of service (LOS) consists of two components – the land value per capita and the improvement value per capita (or the cost to purchase land and make improvements in today's dollars), resulting in a total value per capita for parks and trails of approximately \$690. The level of service is shown in more detail in Sections 4 and 6.
- **Excess Capacity:** The City owns several parks, recreation, and trail facilities that are utilized by existing residents. The facilities will serve the service area beyond 2023 and will be treated as a buy-in component.
- **Capital Facilities Analysis:** Based on the expected changes in population over the planning horizon (six to ten years), the City will need to invest approximately \$18.9 million in parks and trails.
- **Funding of Future Facilities:** Impact fees have been and will continue to be a main source of funding for parks and recreation infrastructure as they are an ideal mechanism for funding growth-related infrastructure.

PROPOSED PARKS AND RECREATION IMPACT FEE

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

GROWTH-DRIVEN (PERPETUATION OF EXISTING LOS)

The methodology utilized in this analysis is based on the increase, or **growth**, in residential demand. The growth-driven method utilizes the existing level of service and perpetuates that level of service into the future. Impact fees are then calculated to provide sufficient funds for the entity to expand or provide additional facilities, as growth occurs within the community. Under this methodology, impact fees are calculated to ensure new development provides sufficient investment to maintain the current LOS standards in the community. This approach is often used for public facilities that are not governed by specific capacity limitations and do not need to be built before development occurs (i.e. park facilities).

Utilizing the estimated land value per capita by park type and the value per capita to provide the same level of improvements, the fee per capita is \$690. With the addition of the buy-in component and professional expense the total fee per capita is \$706.

TABLE 1.1: ESTIMATE OF IMPACT FEE VALUE PER CAPITA

	LAND VALUE PER CAPITA	VALUE OF IMPROVEMENTS PER CAPITA	TOTAL VALUE PER CAPITA
Parks			
Neighborhood Parks	\$36	\$145	\$181
Community Parks	\$56	\$338	\$394
Undeveloped Park Land	\$59	\$0	\$59
Trailheads	\$3	\$15	\$17
Trails			
Regional Trails - Paved	\$0	\$38	\$38
Other			
Buy-In Component			\$16
Professional Services Expense ¹		\$9,675	\$1
Estimate of Impact Fee Per Capita			\$706

Based on the per capita fee, the proposed impact fee per household is summarized in Table 1.2.

TABLE 1.2: PARK IMPACT FEE SCHEDULE

IMPACT FEE PER HH	PERSONS PER HH*	FEE PER HH**	EXISTING FEE PER HH	% CHANGE
Single Family	3.09	\$2,182	\$2,730	-20%
Multi Family	2.02	\$1,427	\$2,828	-50%

*Source: Census 2010.

**The calculations shown in Tables 1.1 and 1.2 may vary slightly due to rounding.

NON-STANDARD PARK IMPACT FEES

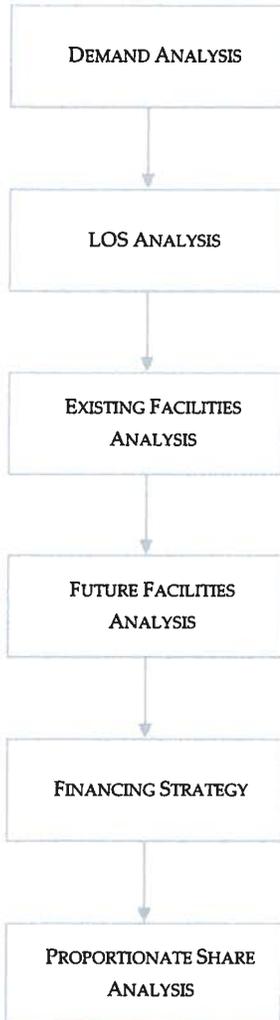
The City reserves the right under the Impact Fees Act to assess an adjusted fee that more closely matches the true impact that the land use will have upon public facilities.² This adjustment could result in a lower impact fee if the City determines that a particular user may create a different impact than what is standard for its land use.

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 population added in the next six years.

² 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 IFFP and IFA. The IFFP is designed to identify the demands placed upon the City's existing facilities by future development and evaluate how these demands will be met by the City. The IFFP is also intended to outline the improvements which are intended to be funded by impact fees. The IFA is designed to proportionately allocate the cost of the new facilities and any excess capacity to new development, while ensuring that all methods of financing are considered. Each component must consider the historic level of service provided to existing development and ensure that impact fees are not used to raise that level of service. The following elements are important considerations when completing an IFFP and IFA:

DEMAND ANALYSIS

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

LEVEL OF SERVICE ANALYSIS

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

EXISTING FACILITY INVENTORY

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

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

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

FUTURE CAPITAL FACILITIES ANALYSIS

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

**FINANCING STRATEGY – CONSIDERATION OF ALL REVENUE SOURCES**

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

PROPORTIONATE SHARE ANALYSIS

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

³ 11-36a-302(2)

⁴ 11-36a-302(3)



SECTION 3: OVERVIEW OF SERVICE AREA AND DEMOGRAPHICS

The City of St. George is a hub of residential and commercial development, with the potential to attract substantial growth and development into the future. As a result of continued growth, the City will need to expand its existing services to continue to provide the current level of service enjoyed within the community.

SERVICE AREA

Utah Code requires the impact fee enactment to establish one or more service areas within which impact fees will be imposed.⁵ This service area includes all areas within the City. This document identifies capital projects that will help to maintain the same level of service enjoyed by existing residents over the planning horizon.

It is anticipated that the growth projected over the next six to ten years will impact the City's existing services. The parks and recreation system will need to be expanded in order to maintain the existing level of service. The IFFP, in conjunction with the impact fee analysis, is designed to accurately assess the true impact of a particular user upon the City's infrastructure.

DEMOGRAPHICS

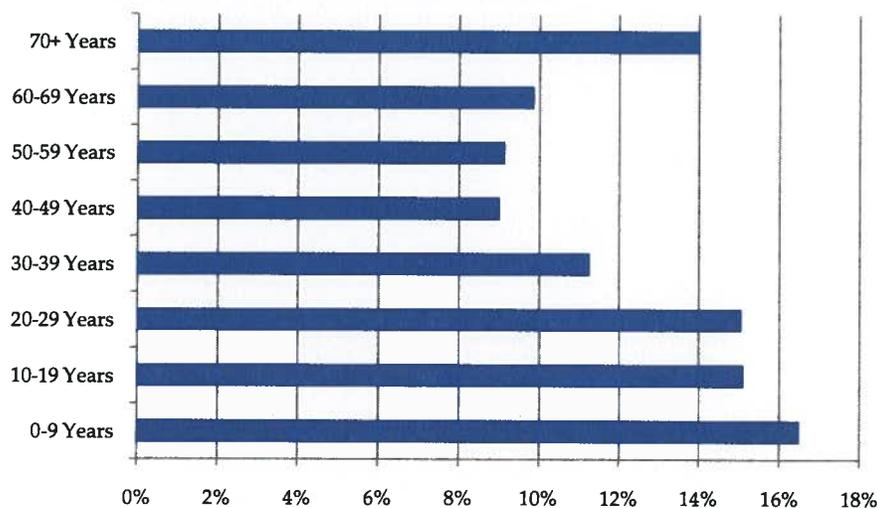
POPULATION

According to 2010 Census data, the total population for St. George in 2010 was approximately 72,897. The City estimates annual population growth of approximately three percent, this was based on historic growth and the Governor's Office of Planning and Budget (GOPB) projections. LYRB verified this growth rate using Census and building permit data. Using Census data for 2000 and 2010, average annual growth was estimated at 3.55 percent. An analysis of building permit data obtained from the University of Utah's Bureau of Economic and Business Research (BEBR) resulted in a growth rate of approximately 4.12 percent. Thus, it was determined that the City's estimated growth rate of three percent annually is a reasonable measure of growth.

AGE

Figure 3.1 shows the population by age for St. George. As is shown below, St. George has a fairly large percentage of residents younger than 30 years of age and greater than 70. The median age of 32.5 is slightly higher than the State's median age of 29.2 years.

FIGURE 3.1: PERCENT OF POPULATION BY AGE

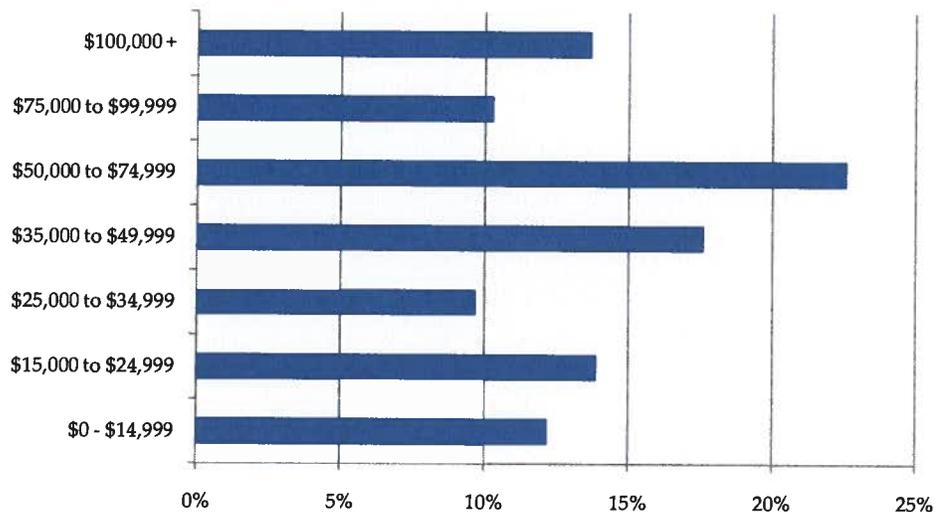


⁵ 11-36a-402(a)

INCOME

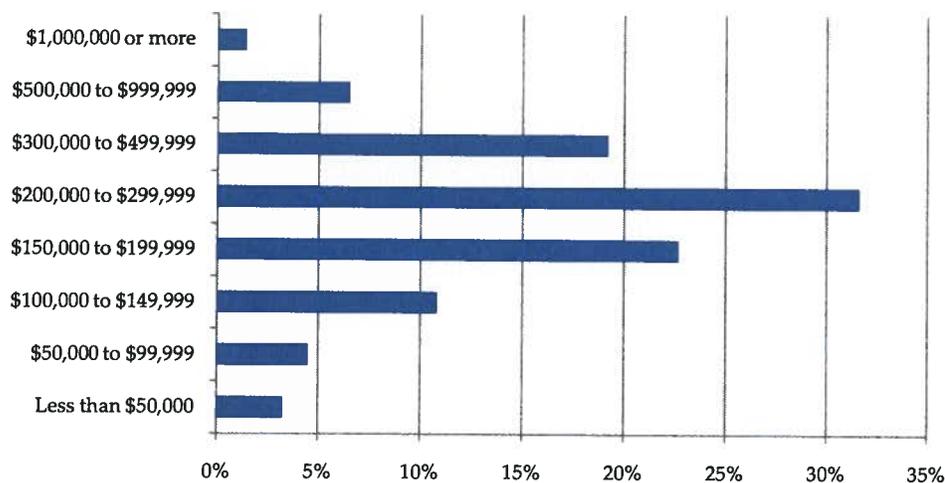
The median household income for St. George residents is approximately \$46,959.⁶ This is slightly lower than the State's median of \$54,744.⁷ Figure 3.2 shows a breakdown of the percent of households that fall within various income ranges.

FIGURE 3.2: HOUSEHOLD INCOME

**HOME VALUE**

According to the American Community Survey (ACS) 2010, the median value for an owner-occupied unit in St. George is approximately \$225,300. As shown in Figure 3.3, approximately 32 percent of all owner-occupied units are valued between \$200,000 and \$299,999.

FIGURE 3.3: HOME VALUE



⁶ American Community Survey (ACS) 2010 1-year estimate for St. George.

⁷ 2010 Census, State of Utah.



SECTION 4: DEMAND ANALYSIS

The purpose of this document is to establish a LOS based on the facilities and amenities funded by the City within the service area. The current LOS for parks and recreation is based on the City's residential population. The LOS consists of two components – the land value per capita and the improvement value per capita (or the cost to purchase the land and make improvements in today's dollars), resulting in a total value per capita for parks and trails. The City has some storm water detention land on City park land. Typically storm water detention land is excluded from the calculation of the level of service so as to avoid any double counting of value (recovering the value of this land through both the storm water and parks impact fees). However, public works has not accounted for the value of this land in the storm water impact fee, thus it has been included in the calculation of the park impact fee.

DEMAND UNITS

The demand units used in this analysis is population. The population projections are based on several sources including Census data, GOPB estimates, and planning projections provided by the City. According to these projections, the City's current population, and the existing service area demand, is approximately 79,657.

TABLE 4.1: ILLUSTRATION OF EXISTING DEMAND ASSUMPTIONS

	2010	2011	2012	2013
Existing Population	72,897	75,084	77,336	79,657
Buildout Population	200,000	200,000	200,000	200,000
Average household size	2.82			
Average family size	3.26			
Average HH Size: Single Family	3.09			
Average HH Size: Multi-Family	2.02			

Source: 2010 Census and ACS 2010 (1-Year Estimate) adjusted for Avg. HH Size, City of St. George

FUTURE DEMAND

The future population in St. George is used to determine the additional parks and recreation needs. The level of service standards for each of these types of improvements has been calculated, and a blended level of service determined for the future population, giving the City flexibility to provide future residents the types of improvements that are desired. If growth projections and land use planning changes significantly in the future, the City will need to update the parks and recreation projections, the IFFP, and the impact fees.

TABLE 4.2: FUTURE DEMAND PROJECTIONS

Year	City Population	% Added Annually
2013	79,657	
2014	82,046	3.00%
2015	84,508	3.00%
2016	87,043	3.00%
2017	89,654	3.00%
2018	92,344	3.00%
2019	95,114	3.00%
2020	97,967	3.00%
2021	100,906	3.00%
2022	103,934	3.00%
2023	107,052	3.00%

The City anticipates future population growth to average a conservative three percent annually. This was determined based on historic Census data of 3.84 percent average annual growth for the last 10 years and the Governor's Office of Planning and Budget (GOPB) 3.82 percent average population growth through 2020. Thus, assuming an estimate of three percent annual growth, the service area should reach a population of approximately 107,052 residents by 2023. As a result of this growth, the City will need to construct additional parks and recreation facilities to maintain the existing level of service.

SECTION 5: EXISTING FACILITIES INVENTORY**PARK INVENTORY**

The City's existing park inventory for park acres by type is shown in Table 5.1 and 5.2. See **Appendix A** for the park classification system and **Appendix B** for a detailed list of park facilities and amenities. The improvement value for parks and recreation are based on the existing improvements to each type of facility and are calculated on a per acre basis for parks.

The city-owned acreage and estimated improvement value illustrated below will be the basis for the LOS analysis discussed in Section 6.

TABLE 5.1: ACREAGE OF EXISTING PARKS, TRAILS, AND OPEN SPACES

PARKS	TOTAL ACREAGE	LESS GIFTED	FINAL ACRES	CITY OWNED ACRES	ESTIMATED LAND VALUE FOR CITY OWNED ACRES	2013 EST. IMPROV. VALUE ⁸
Neighborhood Parks	130.15	53.35	76.80	56.81 ⁹	\$2,840,250	\$11,586,806
Community Parks	276.31	186.80	89.51	89.51	\$4,475,500	\$26,928,200
Undeveloped Park Land	244.96	150.67	94.29	94.29	\$4,714,500	\$0
Trailheads	5.80	1.80	4.00	4.00	\$200,000	\$1,159,930
Total Parks	657.22	392.62	264.60	244.61	\$12,230,250	\$39,674,936
TRAILS	TOTAL MILES			CITY FUNDED MILES	ESTIMATED LAND VALUE ¹⁰	2013 EST. IMPROV. VALUE
Regional Trails (paved)	36.38			18.10	\$0.00	\$3,062,816
Total Trail Ways	36.38			18.10	\$0.00	\$3,062,816

Existing parks include a variety of services including: basketball courts, volleyball courts, playgrounds, restrooms and other amenities as listed below.

TABLE 5.2: EXISTING PARK FACILITY IMPROVEMENTS

	MEASUREMENT	TOTAL AMENITIES
Covered Pavilions	Each	48.6
Fishing	Each	4.0
Parking Spaces	Each	2,078.0
Drinking Fountain	Each	49.0
Playground	Each	32.0
Dog Park	Each	2.0
Restroom	Each	27.0
Volleyball	Each	14.0
Basketball	Each	14.0
Tennis	Each	14.0
Horseshoe Pits	Each	22.0
Softball Fields	Each	17.0
Splash Pad	Each	3.0
Walking Path-Miles	Miles	7.5

⁸ The City had a park impact fee fund balance of \$2,928,220 as of June 30, 2013. The City anticipates that this amount will be used to fund neighborhood parks, community parks, trailheads, and regional trails. Thus the impact fee fund balance has been spread evenly over these categories and included in the estimated improvement value.

⁹ The difference in final acres vs. city owned acres for Neighborhood Parks is due to the full or partial ownership by the School District of Centennial Park, Dixie Downs, and Sunset Park.

¹⁰ The estimated land value is considered to be \$0 for regional trails as most trails are constructed on rights-of-way that have not been purchased by the City.

	MEASUREMENT	TOTAL AMENITIES
Climbing Wall	Each	3.0
Amphitheatre	Each	4.0
Skate Park	Each	1.0
Ponds	Each	8.0
Information Kiosk	Each	6.0
Swing Bay	Each	40.0
Concession Stands	Each	5.0
Back Stops	Each	7.0
Bench Swings	Each	6.0
Pickle ball Courts	Each	18.0
Futsal Courts	Each	1.0
Open Grass Area-Acres	Acre	154.0
Trailhead Parking	Stall	182.0
Trailhead Drinking Water	Each	1.0
Trailhead Info Kiosk	Each	5.0
Trailhead Benches	Each	3.0

FACILITY INVENTORY

In addition to the park acreage and amenities mentioned above, the City also supports several recreation and maintenance facilities that are utilized by existing residents (recreation center, outdoor pool, etc.). The majority of these facilities will serve the service area for longer than the six to ten year time frame considered in this analysis and will be treated as a buy-in component. Most of these facilities are unique and are designed to service both existing and new development.

It is not anticipated that any other recreation facilities will be built in the next six to ten years. Thus, for the purpose of this analysis, new development will pay a proportionate share of the existing recreation facilities rather than purchasing new facilities. The inclusion of a buy-in component will not reduce the LOS, but provide a repayment source for costs already incurred.

TABLE 5.3: EXISTING RECREATION AND MAINTENANCE FACILITIES (BUY-IN COMPONENT)

BUY-IN DETERMINATION	FUNDING MECHANISM	FINAL COST	% INCLUDED IN IFA	BUY-IN COMPONENT	BUILT DATE	USEFUL LIFE	POPULATION SERVED	PER PERSON
Recreation Center*	53% City funded from Capital Projects Fund and Impact Fees (47% funded from GO Bonds)	\$2,247,907	53%	\$1,188,498	1996	30	116,978	\$10
Hydro Tube for Public Swimming Pool	100% City funded	\$100,000	100%	\$100,000	1985	37	103,934	\$1
Maintenance Building	100% City funded	\$260,600	100%	\$260,600	2013	5	95,114	\$3
Public Swimming Pool	Received 50/50 grant	\$373,885	50%	\$186,943	1974	50	110,263	\$2
Total Buy-In		\$4,499,709						\$16

Notes:

*Approximately \$1,059,409 of the Recreation Center was funded by GO Bonds and thus is not included in the calculated impact fee.

**Sand Hollow Aquatic Center is not included in the excess capacity analysis as 100% of the facility was funded by participation money and GO Bonds (Series 1999, Series 2004 Refunding, and Series 2010 Refunding).

***The Millcreek Industrial Park Building is not included in the excess capacity analysis as the building may not be considered a parks and recreation "public facility" as defined in impact fee legislation.

TABLE 5.4: LAND VALUE ASSUMPTIONS

ASSUMPTIONS	
2013 Population	79,657
Land Value per Acre	\$50,000

LAND VALUE

It is noted that current costs are used strictly to determine the actual cost, in today's dollars, of duplicating the current level of service for future

development in the City, and does not reflect the value of the existing improvements within the City. The assumptions utilized for estimation of land values are shown below. The City estimates that the value for residential land is approximately \$50,000 per acre, thus they have recommended that a conservative estimate of \$50,000 per acre be used in the analysis. LYRB verified this estimate through the Wasatch Front Multiple List Service (MLS), which showed a median price of \$65,000 per acre for recently sold land in the St. George area. Thus, the land value of \$50,000 used to calculate impact fees in this analysis is conservative and reasonable.

TABLE 5.5: COMPARABLE OF RECENT LAND SALES

SOURCE	PROPERTY COUNT:	LOW:	HIGH:	MEDIAN PRICE (PER ACRE)	AVERAGE PRICE (PER ACRE)
Wasatch Front MLS	2	\$50,000	\$80,000	\$65,000	\$65,000

Source: Report generated automatically by the Wasatch Front Regional MLS on 4/10/2012 at 12:11 pm

Search Criteria: Sold Land Listings, State is Utah, Area is St. George; Bloomington or St. George; Santa Clara; Ivins, Price per Unit is Acre.

MANNER OF FINANCING EXISTING PUBLIC FACILITIES

The City's existing parks and recreation infrastructure has been funded through a combination of general fund revenues, grants and donations, impact fees, and long-term debt. General fund revenues include a mix of property taxes, sales taxes, federal and state grants, and any other available general fund revenues. While the City has received some grant monies and donations to fund parks and recreation facilities, all park land and improvements funded through grant monies and donations have been excluded in the impact fee calculations. In addition, the proportion of all facilities funded through General Obligation Bonds has been removed.

SECTION 6: LEVEL OF SERVICE ANALYSIS

LEVEL OF SERVICE STANDARDS

The level of service (LOS) consists of two components – the land value per capita and the improvement value per capita funded by the City (or the cost to purchase the land and make improvements in today’s dollars), resulting in a total value per capita for parks and trails. Using the estimated land and park improvement value per type of park shown in table 5.1 and the existing population for 2013, the value per capita (or level of service) is calculated. This approach uses current construction and land costs to determine the current value. It is assumed that the City will maintain, at a minimum, the current set level of service standard.

Table 6.1 below shows the LOS for park land and trails in the defined service area, broken down by type of park.

TABLE 6.1: EXISTING PARK ACREAGE LEVEL OF SERVICE

	LAND VALUE PER CAPITA	IMPROVEMENT VALUE PER CAPITA	TOTAL VALUE PER CAPITA
Neighborhood Parks	\$36	\$145	\$181
Community Parks	\$56	\$338	\$394
Undeveloped Park Land	\$59	\$0	\$59
Trailheads	\$3	\$15	\$17
Regional Trails - Paved	\$0	\$38	\$38
Total	\$154	\$537	\$690

Land values are estimated conservatively using recent comparable land sales in the area.

The calculation of impact fees relies upon the information contained in this analysis. The timing of construction for development-related park facilities will depend on the rate of development and the availability of funding. For purposes of this analysis, a specific construction schedule is not required. The construction of park facilities can lag behind development without impeding continued development activity. This analysis assumes that construction of needed park facilities will proceed on a pay-as-you-go basis, and assumes a standard annual dollar amount the City should anticipate collecting and plan to expend on park improvements.

SECTION 7: CAPITAL FACILITY ANALYSIS

Future planning for park land is an ongoing process based on the changes in population and community preference. The City will purchase and improve parks and recreational facilities to maintain the level of service defined in this document. A summary of the City's desired improvements is found below, which includes projects that will enhance the existing parks and add to the existing inventory, while maintaining the current level of service. Actual future improvements will be determined as development occurs, and the opportunity to acquire and improve park land arises.

Based on the expected changes in population over the planning horizon, the City will need to invest approximately \$18.9 million in parks and trails. This assumes the City will grow by 27,395 persons through 2023.

TABLE 7.1: ILLUSTRATION OF PARKS AND TRAIL INVESTMENT NEEDED TO MAINTAIN LOS

TYPE OF IMPROVEMENT	TOTAL VALUE PER CAPITA	POPULATION INCREASE IFFP HORIZON	COST TO PARKS OVER IFFP HORIZON
Neighborhood Parks	\$181	27,395	\$4,961,701
Community Parks	\$394	27,395	\$10,800,247
Undeveloped Park Land	\$59	27,395	\$1,621,394
Trailheads	\$17	27,395	\$467,702
Regional Trails - Paved	\$38	27,395	\$1,053,352
Total			\$18,904,396

TABLE 7.2: ILLUSTRATION OF ST. GEORGE PARKS AND RECREATION CAPITAL IMPROVEMENT COSTS

YEAR	ESTIMATED IMPACT FEE ELIGIBLE COST
2014	\$1,704,800
2015	\$1,755,000
2016	\$1,808,300
2017	\$1,861,500
2018	\$1,918,800
2019	\$1,976,000
Total	\$11,024,400

The table to the left illustrates the cost of the City's impact fee eligible capital improvements through 2019 which will be used to maintain the existing level of service through land acquisition, park development, and improvements. A more detailed list of capital improvements is shown in Appendix C. Actual future improvements will be determined as development occurs, and the opportunity to acquire and improve park land arises. Impact fees will only be assessed the proportionate fee to maintain the existing level of service.

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.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.

Only park facilities that serve the entire community are included in the level of service. The following park facility types are considered system improvements, as defined in Appendix A:

- ☒ Neighborhood Parks;
- ☒ Community Parks;

¹¹ 11-36a-102(20)

¹² 11-36a102(13)



- ☒ Undeveloped Park Land;
- ☒ Trailheads; and
- ☒ Regional Multi-Use Paved Trails.

FUNDING OF FUTURE FACILITIES

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

PROPERTY TAX REVENUES

Property tax revenues are not specifically identified in this analysis as a funding source for capital projects, but inter-fund loans can be made from the general fund which will ultimately include some property tax revenues. Inter-fund loans may be repaid once sufficient impact fee revenues have been collected.

GRANTS AND DONATIONS

The City does not anticipate any donations from new development for future system-wide capital improvements related to park facilities. A donor will be entitled to a reimbursement for the negotiated value of system improvements funded through impact fees if donations are made by new development.

The City may receive grant monies to assist with park construction and improvements. 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 level of service. Therefore, the City's existing "level of service" standards have been funded by the City's existing residents. Funding the future improvements through impact fees places a similar burden upon future users as that which has been placed upon existing users through impact fees, property taxes, user fees, and other revenue sources.

IMPACT FEE REVENUES

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

DEBT FINANCING

In the event the City has not amassed sufficient impact fees in the future 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 (i.e. interest costs). Debt financing has not been considered in the calculation of the parks and recreation impact fees.

EQUITY OF IMPACT FEES

Impact fees are intended to recover the costs of capital infrastructure that relate to future growth. The impact fee calculations are structured for impact fees to fund 100% of the growth-related facilities identified in the proportionate share analysis as presented in the impact fee analysis. Even so, there may be years that impact fee

¹³ 11-36a-302(2)

¹⁴ 11-36a-302(3)



revenues cannot cover the annual growth-related expenses. In those years, other revenues, such as general fund revenues, will be used to make up any annual deficits. Any borrowed funds are to be repaid in their entirety through impact fees.

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.

DRAFT

SECTION 8: PARKS & RECREATION 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 level of service. The following paragraphs briefly discuss the methodology for calculating impact fees.

PROPOSED PARKS AND RECREATION IMPACT FEE

GROWTH-DRIVEN (PERPETUATION OF EXISTING LOS)

The methodology utilized in this analysis is based on the increase, or **growth**, in residential demand. The growth-driven method utilizes the existing level of service and perpetuates that level of service into the future. Impact fees are then calculated to provide sufficient funds for the entity to expand or provide additional facilities, as growth occurs within the community. Under this methodology, impact fees are calculated to ensure new development provides sufficient investment to maintain the current LOS standards in the community. This approach is often used for public facilities that are not governed by specific capacity limitations and do not need to be built before development occurs (i.e. park facilities).

PARKS AND RECREATION IMPACT FEE CALCULATION

The park impact fees proposed in this analysis will be assessed within all areas of the City. Utilizing the estimated land value per capita by park type and the value per capita to provide the same level of improvements, the fee per capita is \$690. With the addition of the buy-in component and professional expense the total fee per capita is \$706.

TABLE 8.1: ESTIMATE OF IMPACT FEE VALUE PER CAPITA

	LAND VALUE PER CAPITA	VALUE OF IMPROVEMENTS PER CAPITA	TOTAL VALUE PER CAPITA
Parks			
Neighborhood Parks	\$36	\$145	\$181
Community Parks	\$56	\$338	\$394
Undeveloped Park Land	\$59	\$0	\$59
Trailheads	\$3	\$15	\$17
Trails			
Regional Trails - Paved	\$0	\$38	\$38
Other			
Buy-In Component			\$16
Professional Services Expense ¹⁵		\$9,675	\$1
Estimate of Impact Fee Per Capita			\$706

Based on the per capita fee, the proposed impact fee per household is summarized in Table 8.2.

TABLE 8.2: PARK IMPACT FEE SCHEDULE

IMPACT FEE PER HH	PERSONS PER HH*	FEE PER HH**	EXISTING FEE PER HH	% CHANGE
Single Family	3.09	\$2,182	\$2,730	-20%
Multi Family	2.02	\$1,427	\$2,828	-50%

*Source: Census 2010.

**The calculations shown in Tables 1.1 and 1.2 may vary slightly due to rounding.

NON-STANDARD PARK IMPACT FEES

The proposed fees are based upon population growth. 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 park facilities.¹⁶

¹⁵ This is the actual cost to update the IFFP and IFA. The City can use this portion of the impact fee to reimburse itself for the expense of updating the IFFP and IFA. The cost is divided over the population added in the next six years.

¹⁶ 11-36a-402(1)(c)



This adjustment could result in a lower impact fee if the City determines that a particular user may create a different impact than what is standard for its land use.

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 7 for further discussion regarding the consideration of revenue sources.

EXPENDITURE OF IMPACT FEES

Legislation requires that impact fees should be spent or encumbered with six years after each impact fee is paid. Impact fees collected in the next five to six years should be spent only on impact fee eligible projects to maintain the LOS.

PROPOSED CREDITS OWED TO DEVELOPMENT

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

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

GROWTH-DRIVEN EXTRAORDINARY COSTS

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

SUMMARY OF TIME PRICE DIFFERENTIAL

Although 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, an inflation component was not considered in the cost estimates in this study. All costs are represented in today's dollars.



APPENDIX A: PARK CLASSIFICATION SYSTEM

The City's park classification system is summarized in the following paragraphs.¹⁷

NEIGHBORHOOD PARKS

According to the *City of St. George Parks, Recreation, Arts & Trails Mater Plan Update 2006* (generally referred to as the 2006 Master Plan) neighborhood parks are defined as follows:

"Public parks that are owned by the City and typically designed to serve an area that may encompass several residential blocks. A neighborhood park may be smaller in size than a community park, but this may not always be the case. Neighborhood parks gain their designation in two ways: (1) these were properties that were identified through comprehensive future planning, or (2) as a result of land becoming available for public park acquisition. Park size in this classification may also define the type of park amenities placed in a neighborhood park. However, it is possible for a neighborhood park to also possess natural resource areas, unique landscapes, environmental features, man-made structures like stormwater detention basins, and or athletic field space. Typical amenities for a neighborhood park may include depending on size, a restroom, playground, drinking fountain, sitting benches, picnic shelters, and walking paths. Neighborhood parks are intended to have active as well as passive uses."

Since the formal adoption of the 2006 Master Plan, the City standards for a neighborhood park have evolved to better meet the needs and expectations of the public and elected officials. Elements that have become additions to the standard include:

- More guidance detailing play structure requirements for neighborhood parks has been provided. Each park should include a play structure for young children (2-5 years old) separate from play structures for older children (5-12 years old). The City is looking for innovation, creativity, and unique layout and design for play structures. Structure configuration can play off existing and unique site features or contrast with the surroundings creating a unique focal point. The play components should provide a balance of activities encouraging both upper and lower body strength, coordination and movement. All play structures must meet ADA, IPEMA and CPSC certifications. Some exceptions to the play structure requirement may be approved by the City depending on the park's unique circumstances.
- Each playground will contain at least one swing bay for both age groups (2-5 years old) and (5-12 years old).
- A shade structure is mandatory over a minimum of 50% of each playground.
- Play structure fall zone surfacing shall be engineered wood fiber, poured-in-place playground safety surfacing, or well anchored, interlocking, playground safety surfacing tiles. The product must be approved by the City.
- Where the park does not contain street frontage for at least ten parallel parking stalls, the neighborhood park shall contain a minimum of ten off-street parking stalls. In either circumstance accessible parking must be provided as required by the latest version of the Americans with Disabilities Act (ADA).
- Restroom facilities will contain a minimum of two family units for each four acres of developed park.

COMMUNITY PARKS

The 2006 Master Plan defines community parks as follows:

¹⁷ As defined by the City of St. George.



"A park owned and maintained by the City that generally ranges in size from 20 – 50 acres. Community parks may be much larger especially if they contain large undeveloped open lands that are accessed by trails, or they may be smaller depending on land availability. They serve several neighborhood parks with a service area of one to two miles, or more. Community parks accommodate special events and gatherings, and can provide for a broad variety of activities and recreation opportunities. Community parks may include large open spaces with sensitive environments such as wildlife habitat, river corridors and floodplains, greenways, and other protected open space and sensitive lands. These lands also provide for recreational use including trails for biking and hiking, picnic facilities, interpretive information, and wildlife viewing. Community parks may also be highly developed. Community parks should provide for a variety of amenities and elements as required for neighborhood parks such as additional special facilities, which may include sport fields for competitive play, group shelters, swimming pools and recreation centers, skate parks, tennis complexes, or other opportunities for recreation activity that involve larger groups, competitions and community gathering areas."

Since the formal adoption of the 2006 Master Plan Update, further clarification and definition to community parks includes the following:

- The 2006 Master Plan included a much larger calculation of community park land than what is included in the impact fee inventory because it included floodway and floodplain land. The flood of 2005 and 2010, recent projects to repair trails within the floodplains, and recent communication with federal agencies such as the Army Corp of Engineers (USACE) and United States Fish and Wildlife Service (USFW) has forced the City to reconsider the 2006 definition of community park land. The Natural Resources Conservation Service (NRCS) built riprap erosion protection along much of the Virgin and Santa Clara Rivers after the 2005 flood. The riprap erosion protection altered the natural terrain of river banks going from a smooth, gradual, accessible transition to 10 foot high steep, rock wall effectively cutting off easy access by park users to the river bottom. The size of the community parks for this 2012 Impact Fee Analysis does not include land in the river bottom beyond the top of the NRCS riprap protection. Prior to the NRCS riprap placement, some of this land may have been considered developable for some types of park amenities. Based on recent communications with USACE and USFW, these areas are not to be considered for development of any kind. USFW is discouraging construction of trails in the floodplain making environmental approval for trail projects in the floodplain difficult and may become impossible. Therefore, these lands are being removed from the community park land calculation and definition. It would be more appropriate to classify river bottom land as open space.
- If a park contains an amenity that is generally used by the community as a whole, then regardless of the size, it may be considered a community park. For example, there are several urban fishing ponds such as Tawa Ponds and Skyline Pond that are considered community park amenities.
- If an amenity is considered to be a popular community attraction, it will be discouraged from neighborhood parks. For example splash pads tend to draw a large crowd in the summer and require a lot of parking. This type of amenity will most likely not be approved for a neighborhood park.
- There is a small "pocket park" downtown called Zion Plaza. It is considered a community park amenity although it is small in size. It serves the community by adding a pedestrian rest area, interpretive signage and beautification to the downtown area.

OPEN SPACE

The 2006 Master Plan did not address open space in a significant way. Data was not gathered in 2006 for the purposes of establishing impact fees. While the City endeavors to acquire floodway, floodplain and hillside property whenever possible to prevent development on this sensitive land type; much of the City's property has been donated or purchased for a nominal fee. The Leisure Services Department has decided that there is not a

cost benefit to gathering the data needed to propose a first-time Open Space Impact Fee as part of this 2012 Impact Fee Analysis.

TRAILS

The 2006 Master Plan addressed several types of trails; off-street multi-use, hiking (natural), park trails, equestrian trails and on-street bicycle routes. The 2006 Master Plan did not publish specific definitions of each trail type. Working definitions for each trail type have evolved since 2006 to become more specific.

- **REGIONAL MULTI-USE TRAIL (2006 DEFINITION IS "OFF-STREET MULTI-USE TRAIL):** These trails are shown on the recently adopted Trail Master Plan 2011 and serve the community as a whole. These trails are not only recreational but also provide multimodal transportation opportunities. They provide a 10 foot wide asphalt or concrete paved trail generally meeting American Association of State Highway and Transportation Officials (AASHTO) guidance standards as much as possible. AASHTO guidance includes a 2 ft wide clear zone on each side of the 10 foot wide paved trail. Including this clear zone the regional trail requires a minimum width of 14 feet for construction. Many existing trail easements are 15 feet wide. In order to adequately accommodate grading and drainage a 20 foot wide easement is being recommended as the minimum. A revised standard may include potable drinking sources and benches for rest in the shade every ½ mile wherever possible and as many shade trees along the south side of the trails as possible.

Regional multi-use trails are included in the impact fee analysis.

- **NATURAL TRAILS (2006 DEFINITION IS "HIKING TRAILS):** These trails are natural surface dirt or gravel trails intended for hiking and trail biking (depending on the location). These trails are often through sensitive areas where conservation or preservation is in effect. They are recreational and are not considered for alternate transportation routes.

Natural trails are not included in the impact fee analysis as most historic trails were improved by donations from the community, particularly Boy Scouts of America.

- **COMMUNITY TRAILS (2006 DEFINITION IS "PARK TRAILS):** The neighborhood park standard includes a paved loop trail around the outside edge of each park to provide a pleasant recreational route. These interior park trails can be less than 10 feet wide. A minimum width of eight feet is acceptable for these interior park trails where they are not part of the regional trail system. In the past five years some developments have been proposed to include public trails connecting neighborhoods, parks and open space. Where these trails are not shown on the Trail Master Plan 2011, then they are considered to be community trails and may be a minimum of eight feet wide. While compliance to AASHTO guidelines are recommended, the construction standards for these narrower trails may be more flexible to better fit natural contours and site conditions.

Community trails are accounted for in the impact fee analysis as amenities within the corresponding park.

- **EQUESTRIAN TRAILS:** Equestrian trails provide routes for horse riding. The 2006 Master Plan intended future equestrian trails would have a natural surface and sometimes included within public road right of ways. The intent was to provide routes between the residential areas where horses have traditionally been kept, river corridors and public lands where horse riding is most desirable. The natural surface equestrian trails accommodate single file horse riding. The natural surface trail itself is six feet wide but within a minimum ten foot wide equestrian trail right-of-way or easement. The 10 feet width may include landscaping along the edges, accommodates a meandering single file trail and safe clearance for horses and their riders.



Since the 2006 Master Plan, planned equestrian routes have been affected by higher density development pressure and increased vehicular traffic in areas where horses have traditionally been kept. Recently a planning update effort was conducted with residents of the Little Valley area of St. George. The sub-area committee recommended a reduction in the 2006 Master Plan equestrian trail routes by removing equestrian trails from alongside 90 foot public road right-of-ways. With this recent direction the definition for equestrian trails must be modified to discourage mixing of horses and vehicles. Where equestrian trails must be placed adjacent to major collector roads (66 feet wide) or larger the trail should be located a safe distance from the edge of the vehicle traffic or possibly include some type of safety barrier.

The 2006 Master Plan did not include a discussion about equestrian trailheads. However, during the recent planning effort for the Little Valley area, it became clear that horse owners would rather trailer their horses to a trailhead rather than ride them along busy public streets. At this time, there has been discussion about adding some equestrian trailheads to the City's Trail Master Plan to get the equestrians closer to the most desirable routes away from traffic. This will be a new definition in future planning documents.

Equestrian trails are not included in the impact fee analysis as most historic trails were improved by donations from the community, particularly Boy Scouts of America.

- **ON-STREET BICYCLE ROUTES:** Since the 2006 Master Plan, Park Planning and Public Works have coordinated on multi-modal transportation planning. Citizen input from bicycle commuters indicate that they often prefer to use the public street system rather than the multi-use regional trail system because it is often a more direct route. Park Planning does not currently address on-street bicycle routes. On-street bicycle use is considered a form of transportation rather than recreation. As such Public Works has assumed responsibility for accommodating this transportation mode. Park Planning continues to coordinate with Public Works to improve connections between the regional multi-use trails and on-street bicycle routes when the need arises.

On-street bicycle routes are not included in the impact fee analysis.

TRAILHEADS

The 2006 Master Plan described that trailheads "typically include parking and may be located within a park or along a trail route in an adjacent development. Several include kiosks that provide trails information. Most do not include restrooms."

Each trailhead is unique and the elements included are determined by needs, desires, site constraints and available funding. A standard list of required amenities and their quantities is not appropriate. However, there are several trailhead type distinctions that can be made:

- **TRAILHEAD FOR A PAVED MULTI-USE TRAIL:** Parking and trail access should be fully accessible. Restrooms, drinking fountains and trash receptacles should be made available if possible.
- **TRAILHEAD FOR A NATURAL TRAIL:** Endeavor to make the trailhead accessible. The parking may be gravel and informal. Trash receptacles are desirable.
- **TRAILHEADS FOR EQUESTRIAN TRAILS:** Must be large enough to accommodate pull-through horse trailer parking. May be gravel. Trash receptacles are desirable. Potable water source is desirable. Tie up stations for the horses may be desirable.

Trailheads have been included in the impact fee analysis.



APPENDIX B: EXISTING FACILITIES INVENTORY

DRAFT



APPENDIX C: FUTURE CAPITAL PROJECTS

DRAFT



City of St. George
Capital Projects

Dept. #4400
Dept. Name: Park Impact Funds

Item No.	Project Title	Estimated Revenue / Year							Total
		Estimated Costs	Fiscal Year 2014	Fiscal Year 2015	Fiscal Year 2016	Fiscal Year 2017	Fiscal Year 2018	Fiscal Year 2019	
1	Neighborhood Park (4 Acres) Available Park Sites: Little Valley 1 Desert Canyons 1 Tonaquint Heights Little Valley 2 Hidden Valley 2 Escalera	\$ 800,000.00	\$ 411,000.00	\$ 423,000.00	\$ 436,000.00	\$ 449,000.00	\$ 463,000.00	\$ 476,000.00	\$ 2,658,000.00
2	Community Park (6 Acres) Available Sites: Slick Rock St. James Little Valley Phase 4 Sand Hollow Wash Sunset Las Colinas Fossil Falls Temple Springs Virgin River Parkway Desert Canyons	\$ 2,000,000.00	\$ 873,000.00	\$ 899,000.00	\$ 926,000.00	\$ 953,000.00	\$ 982,000.00	\$ 1,012,000.00	\$ 5,645,000.00
3	Trail (1 Mile) Unfinished Trails: 3000 East Trail Underpass Santa Clara River (Mathis to CC) Virgin River Trail (River Rd. to Springs) Virgin River Trail (Springs to Mall Drive) Fort Pearce Wash (DC to River Rd.) Mathis Park to Halfway Wash Sand Hollow Wash (SHAC to Sunbrook) Virgin River (I-15 to Bloomington Park) Lava Flow Drive Middleton Wash Trail to I-15 Rimrock Trail Fort Pearce Wash (St. James to River Rd.) Bluff Street Crossing	\$ 200,000.00	\$ 70,000.00	\$ 72,000.00	\$ 74,000.00	\$ 76,000.00	\$ 79,000.00	\$ 81,000.00	\$ 452,000.00

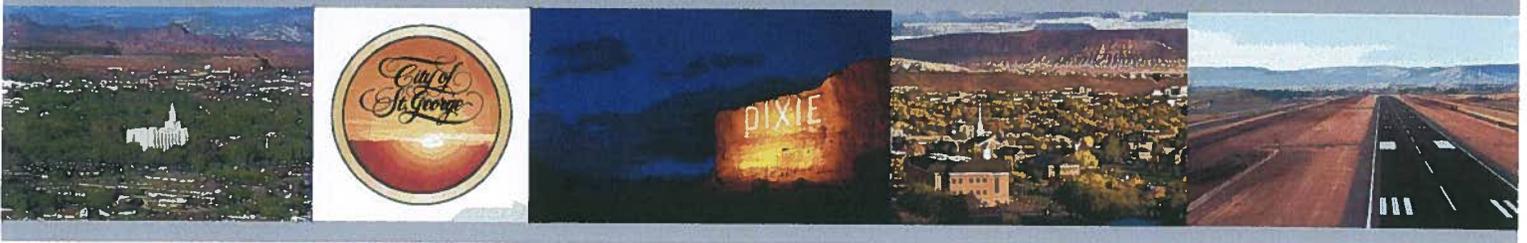


Dept. #4400
Dept. Name: Park Impact Funds

Item No.	Project Title	Estimated Costs	Estimated Revenue / Year						Total	
			Fiscal Year 2014	Fiscal Year 2015	Fiscal Year 2016	Fiscal Year 2017	Fiscal Year 2018	Fiscal Year 2019		
4	Trailhead Proposed Sites: Temple Quarry Little Valley Entryway	\$ 150,000.00	\$ 18,000.00	\$ 18,000.00	\$ 19,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 21,000.00	\$ 116,000.00
5	Land Purchase (1 Acre)	\$ 50,000.00	\$ 146,000.00	\$ 151,000.00	\$ 155,000.00	\$ 160,000.00	\$ 165,000.00	\$ 165,000.00	\$ 170,000.00	\$ 947,000.00
6	Other Maintenance Building Buy-In Component Professional Services Expense Reimbursements (Hidden Valley)	\$ 200,000.00 \$ \$ \$371,018.56 pd to date	\$ 7,200.00 \$ 31,000.00 \$ 600.00 \$ 148,000.00	\$ 7,400.00 \$ 32,000.00 \$ 600.00 \$ 152,000.00	\$ 7,600.00 \$ 33,000.00 \$ 700.00 \$ 157,000.00	\$ 7,800.00 \$ 34,000.00 \$ 700.00 \$ 161,000.00	\$ 8,100.00 \$ 35,000.00 \$ 700.00 \$ 166,000.00	\$ 8,300.00 \$ 36,000.00 \$ 700.00 \$ 171,000.00	\$ 8,300.00 \$ 36,000.00 \$ 700.00 \$ 171,000.00	\$ 46,400.00 \$ 201,000.00 \$ 4,000.00 \$ 955,000.00
Totals			\$ 1,704,800.00	\$ 1,755,000.00	\$ 1,808,300.00	\$ 1,861,500.00	\$ 1,918,800.00	\$ 1,918,800.00	\$ 1,976,000.00	
			\$ 148,000.00	\$ 152,000.00	\$ 157,000.00	\$ 161,000.00	\$ 166,000.00	\$ 166,000.00	\$ 171,000.00	
			\$ 1,556,800.00	\$ 1,603,000.00	\$ 1,651,300.00	\$ 1,700,500.00	\$ 1,752,800.00	\$ 1,752,800.00	\$ 1,805,000.00	

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

CITY OF ST. GEORGE, UTAH



DECEMBER 2013

DRAFT

DATED 3.25.14

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SECTION 1: EXECUTIVE SUMMARY - POLICE IMPACT FEES

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

- **Service Area:** The service area for police impact fees includes all areas within the City.
- **Demand Analysis:** The demand unit used for this analysis is calls for service. It is anticipated that the growth projected over the next six to ten years, and through buildout, will impact the City's existing services through the increase in calls for service. Section 3 of this report outlines the growth in calls for service.
- **Level of Service:** The target level of service for the police department is one officer per 1,000 residents. Currently the number of officers per 1,000 residents is approximately 1.39. Another way to measure level of service is the square feet of floor space per officer. Currently the police department has approximately 389 sq. ft. of floor space per officer. The level of service is shown in more detail in Section 3 of this report.
- **Excess Capacity:** Unlike fire protection and emergency medical service, police protection does not rely on the distance of responding units to a fixed location. Officers generally patrol throughout a city, and the units closest to a call are generally the first to respond. Therefore, a police station's location is directly determined by growth patterns rather than target response times, and most cities will try to position police stations in central locations.
- **Future Capital Facilities:** The Police Department doesn't anticipate building any additional facilities in the next six- to ten-year planning horizon. However, City Administration, the Police Department and the Fire Department estimate that approximately five percent of each fire station built in the future will serve the Police Department. The Fire Department anticipates building an additional station in the next six to ten years, which will include needed space for satellite police offices.

PROPOSED POLICE IMPACT FEE

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

GROWTH-DRIVEN (PERPETUATION OF EXISTING LEVEL OF SERVICE)

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

POLICE IMPACT FEE CALCULATION

Police impact fees were calculated using a "fair share" approach which assumes new development pays a portion of all existing and new facilities. The total cost of all facilities is divided over the total calls estimated to

be served by all facilities. A cost for professional services is also applied. *The fair share approach is recommended in establishing impact fees since all police facilities serve the entire service area.* Section 6 further details the calculation of this impact fee.

TABLE 1.1: PROPOSED POLICE IMPACT FEE SCHEDULES

	Annual Calls per Unit	COST PER CALL	IMPACT FEE PER UNIT	2006 FEE	% CHANGE
Residential					
Residential Single-Family (per dwelling unit)	0.316	\$271	\$86	\$109	-22%
Residential Multi-Family (per dwelling unit)	0.444	\$271	\$120	\$49	145%
Mobile Homes (per dwelling unit)	0.483	\$271	\$131	\$57	129%
Non-Residential					
Professional Office (per 1,000 square feet)	0.224	\$271	\$61	\$68	-11%
Commercial (per 1,000 square feet)	0.565	\$271	\$153	\$95	61%
Manufacturing (per 1,000 square feet)	0.057	\$271	\$15	\$6	157%

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 lower impact fee if the City determines that a particular user may create a different impact than what is standard for its land use. To determine the impact fee for a non-standard use, the City should use the following formula:

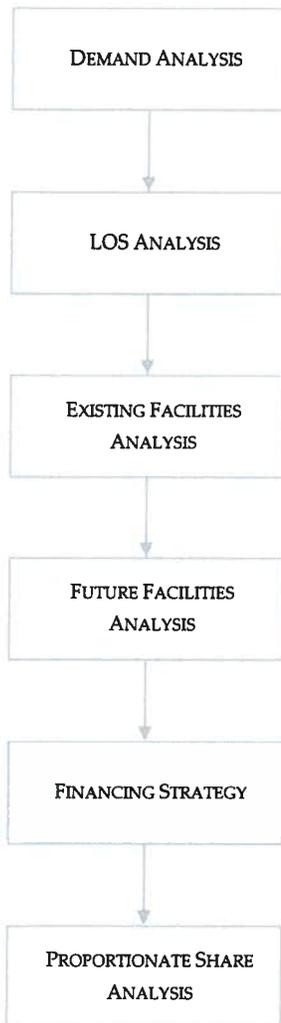
$$\text{Residential Police Impact Fee} \\ \text{Calls per Residence} \times \$271 = \text{Recommended Impact Fee}$$

$$\text{Non-Residential Police Impact Fee} \\ \text{Calls per Unit} / (\text{Bldg. Sq. Ft./1,000}) \times \$271 = \text{Recommended Impact Fee}$$

¹ 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 IFFP and IFA. The IFFP is designed to identify the demands placed upon the City's existing facilities by future development and evaluate how these demands will be met by the City. The IFFP is also intended to outline the improvements which are intended to be funded by impact fees. The IFA is designed to proportionately allocate the cost of the new facilities and any excess capacity to new development, while ensuring that all methods of financing are considered. Each component must consider the historic level of service provided to existing development and ensure that impact fees are not used to raise that level of service. The following elements are important considerations when completing an IFFP and IFA.

DEMAND ANALYSIS

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

LEVEL OF SERVICE ANALYSIS

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

EXISTING FACILITY INVENTORY

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

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

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

FUTURE CAPITAL FACILITIES ANALYSIS

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

**FINANCING STRATEGY – CONSIDERATION OF ALL REVENUE SOURCES**

This analysis must also include a consideration of all revenue sources, including impact fees, future debt costs, alternative funding sources and the dedication of system improvements, which may be used to finance system improvements.² 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.³

PROPORTIONATE SHARE ANALYSIS

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

² 11-36a-302(2)

³ 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.⁴ The impact fee identified in this document will be assessed to a single city-wide service area.

DEVELOPMENT BY ZONING CLASS

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

TABLE 3.1: DEVELOPMENT BY ZONING CLASS

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

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

The IFFP, in conjunction with the IFA, is designed to accurately assess the true impact of a particular user upon the City's infrastructure and prevent existing users from subsidizing new growth. 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 is to equitably allocate the costs of growth-related infrastructure in accordance with the true impact that a user will place on the system.

DEMAND UNITS

This element focuses on the specific demand unit related to police services, which will be calls for service. The demand analysis identifies the existing demand on public facilities and the future demand as a result of new development that will impact public facilities. The demand analysis also provides projected annual growth in demand units over the planning horizon of the IFFP.

Existing call data was analyzed in relation to the current land-use within the City to determine the current level of service by land-use type. Call data was collected from 2009 through 2011 to determine the average calls for residential and non-residential development.

TABLE 3.2: HISTORIC POLICE CALL DATA BY LAND USE CATEGORY

LAND USE	POLICE CALLS 2009-2011	3 YEAR AVERAGE # OF CALLS
Residential Single-Family	23,624	7,875
Residential Multi-Family	9,768	3,256
Mobile Homes	1,897	632
Professional Office	384	128
Commercial	18,019	6,006
Manufacturing	1,331	444
Total Calls:	55,022	18,341

⁴ UC 11-36a-402(a)

TABLE 3.3: RATIO OF CALLS PER DEVELOPED UNIT

	DEVELOPED UNITS	HISTORIC AVG. ANNUAL CALLS	CALLS PER DEVELOPED UNIT
Residential Single-Family (per dwelling unit)	24,892	7,875	0.316
Residential Multi-Family (per dwelling unit)	7,331	3,256	0.444
Mobile Homes(per dwelling unit)	1,310	632	0.483
Professional Office (per 1,000 square feet)	572	128	0.224
Commercial (per 1,000 square feet)	10,639	6,006	0.565
Manufacturing (per 1,000 square feet)	7,844	444	0.057
Total	52,588	18,341	

In all, an average of 18,341 calls for service were attributed to residential and non-residential development (not including calls placed from public land-uses – i.e. government buildings, parks, etc. – and calls that cannot be traced to identifiable land-uses).

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

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

TABLE 3.4: POLICE CALL PROJECTIONS TO BUILDOUT

	CALLS PER UNIT	UNDEVELOPED UNITS	ADDITIONAL ANNUAL CALLS TO BUILDOUT
Residential Single-Family (per dwelling unit)	0.316	27,371	8,649
Residential Multi-Family (per dwelling unit)	0.444	2,335	1,037
Mobile Homes(per dwelling unit)	0.483	47	23
Professional Office (per 1,000 square feet)	0.224	456	102
Commercial (per 1,000 square feet)	0.565	13,568	7,666
Manufacturing (per 1,000 square feet)	0.057	6,510	371
Total		50,288	17,848

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

LEVEL OF SERVICE STANDARDS

The target level of service for the police department is one officer per 1,000 residents. Currently the number of officers per 1,000 residents is approximately 1.39. Another way to measure level of service is the square feet of floor space per officer. Currently the police department has approximately 389 sq. ft. of floor space per officer.

POLICE FACILITIES NEEDS ASSESSMENT

To determine the impacts new development will place on the existing system this analysis also considers the current building square feet per call. Impact fees cannot be used to finance an increase in the level of service to



current or future users of the infrastructure. Based on the historic call data shown above there is approximately 18,341 calls annually. This equates to 2.21 sq. ft. of existing facilities per call.

TABLE 3.5: POLICE FACILITIES NEEDS ASSESSMENT

	POLICE FACILITIES
Total Current Sq. Ft.	40,449
Average Annual Calls	18,341
Sq. Ft./Call	2.21
Future Annual Calls to Buildout	17,848
Additional Square Feet Needed	39,363

Based on the historic level of service, a total of 39,363 new square feet will be necessary to serve new development and maintain the same proportionality of square footage at buildout. This is based on 2.21 sq. ft. per call as identified in the needs assessment.

SECTION 4: EXISTING FACILITIES ANALYSIS

VALUE OF EXISTING POLICE INFRASTRUCTURE

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

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

The following table outlines the existing facilities inventory. The Police Department currently shares two facilities with the Fire Department, thus only the percent of Stations 7 and 8 used by the Police Department are included in the square footage and cost estimates that make up the impact fee.

TABLE 4.1: ORIGINAL COST OF EXISTING FACILITIES

DESCRIPTION	DATE IN SERVICE	SQ. FT.	% OF FACILITY (POLICE)	% TO ST. GEORGE	TOTAL POLICE SQ. FT. (ST. GEORGE)	ORIGINAL COST	COST TO POLICE & ST. GEORGE
Police Station	1997	18,900	100%	100%	18,900	\$2,440,483	\$2,440,483
Target Shed	2000	126	100%	100%	126	\$500	\$500
Evidence Bldg	1992	1,200	100%	100%	1,200	\$28,000	\$28,000
Reactive Steel Shelter	2000	414	100%	100%	414	\$1,000	\$1,000
Reactive Steel Range	2000	450	100%	100%	450	\$1,500	\$1,500
Cinder Block Bunker	1978	100	100%	100%	100	\$500	\$500
Training Structure	1998	720	100%	100%	720	\$2,000	\$2,000
West Bunker	1996	216	100%	100%	216	\$5,000	\$5,000
Tire House	1996	2,904	100%	100%	2,904	\$9,000	\$9,000
East Bunker	1996	432	100%	100%	432	\$20,000	\$20,000
Bomb Bunker	1989	200	100%	100%	200	\$1,000	\$1,000
Animal Shelter	1994	2,600	100%	100%	2,600	\$50,000	\$50,000
Webb Hill Tower Bldg	2005	360	100%	100%	360	\$60,000	\$60,000
Webb Hill Tower	2005	-	100%	100%	-	\$55,000	\$55,000
Downtown Station (100 East)	2009	4,012	100%	100%	4,012	\$500,000	\$500,000
Fire Station 7	2003	10,355	20%	100%	2,071	\$1,201,061	\$240,212
Fire Station 8	2011	12,000	5%	100%	600	\$2,381,083	\$119,054
East Annex for Storage ¹	2013	69,344	4%	100%	2,848	\$1,099,950	\$45,176
East Annex for Drug Task Force ²	2013	-	7%	47%	2,296	see above	\$36,427
East Annex Remodel for Task Force ³	2013	-	100%	47%	-	\$316,670	\$148,835
East Annex Remodel for Storage	2013	-	100%	100%	-	\$176,470	\$176,470
East Annex Remodel for Architect Fees ⁴	2013	-	60%	100%	-	\$46,000	\$27,600
Total Existing Improvements		124,333			40,449	\$8,395,217	\$3,967,757

1 - The police recently relocated 2,848 sq. ft. of storage area to the Courthouse (now known as the East Annex). This makes up approximately four percent of the total Courthouse square footage. After an exchange between the City and the State, the net purchase price of the Courthouse was approximately \$1,320,950. However, the City recently received \$221,000 from the State to repair water damage that occurred prior to the transfer of property to the City. Thus, the total cost of the East Annex was \$1,099,950.

2 - The Drug Task Force has recently relocated to the East Annex and will occupy approximately 4,880 sq. ft. which makes up approximately seven percent of the total Courthouse sq. ft. The Task Force is made up of employees from St. George,

Hurricane, Ivins, Washington City, and Washington County. St. George employees make up approximately 47% of the employees in the Task Force. Thus, these percentages will be applied to the total square footage and cost of the Courthouse.

3 - St. George invested approximately \$316,670 into remodeling the area of the Courthouse dedicated to the Task Force. Since St. George employees only make up 47% of the Task Force, only 47% of the remodel costs will be applied to the impact fee.

4 - The total architect fees for assisting in the Courthouse remodel were approximately \$46,000. However, only 30% of these costs were related to the police portion.

EXCESS CAPACITY

Unlike fire protection and emergency medical service, police protection does not rely on the distance of responding units to a fixed location. Officers generally patrol throughout a city, and the units closest to a call are generally the first to respond. For this reason, calculating a defined amount of excess capacity in any one police facility can prove to be difficult. This impact fee has been calculated using a fair share approach, which assumes that new development will pay a portion of all of the existing and new fire stations. The total value of all impact fee eligible improvements (existing and future) will be spread over the total number of calls that can be served by those facilities. Thus, new growth will only pay a portion of the costs for the existing facilities as well as the future facilities.

MANNER OF FINANCING EXISTING PUBLIC FACILITIES

The City's existing facilities have been funded by existing development through impact fees, general fund revenues, and the issuance of debt. The City has received no State and/or Federal grants to fund existing police infrastructure.

In 1996, the Municipal Building Authority of the City of St. George issued Lease Revenue Bonds, Series 1996B to finance the acquisition and construction of a public safety facility to house the City's police department. In 1998, the Series 1998A Bonds were issued and used to retire and refund the Authority's outstanding Lease Revenue Bonds, Series 1996B. The public safety portion of the total refunded amount was approximately 34 percent. Therefore, approximately 34 percent of the total interest cost for the Series 1998A Bonds will be applied in the calculation of the police impact fee. Table 4.2 illustrates the debt service for the Series 1998A Bonds and the interest component included in the calculation of the impact fee.

TABLE 4.2: OUTSTANDING DEBT, SERIES 1998A BONDS

1998 A BONDS (REFUNDING) DEBT SERVICE SCHEDULE				
Payment Date	Principal	Interest	Period Total	Annual Debt Service
3/1/1999		\$54,215	\$54,215	\$54,215
9/1/1999	\$340,000	128,405	468,405	
3/1/2000		123,135	123,135	591,540
9/1/2000	355,000	123,135	478,135	
3/1/2001		117,100	117,100	595,235
9/1/2001	375,000	117,100	492,100	
3/1/2002		110,350	110,350	602,450
9/1/2002	375,000	110,350	485,350	
3/1/2003		103,413	103,413	588,763
9/1/2003	395,000	103,413	498,413	
3/1/2004		95,908	95,908	594,320
9/1/2004	505,000	95,908	600,908	
3/1/2005		86,186	86,186	687,094
9/1/2005	250,000	86,186	336,186	
3/1/2006		81,186	81,186	417,373
9/1/2006	255,000	81,186	336,186	
3/1/2007		76,086	76,086	412,273
9/1/2007	270,000	76,086	346,086	



1998 A BONDS (REFUNDING) DEBT SERVICE SCHEDULE				
Payment Date	Principal	Interest	Period Total	Annual Debt Service
3/1/2008		70,551	70,551	416,638
9/1/2008	280,000	70,551	350,551	
3/1/2009		64,776	64,776	415,328
9/1/2009	290,000	64,776	354,776	
3/1/2010		58,614	58,614	413,390
9/1/2010	305,000	58,614	363,614	
3/1/2011		52,056	52,056	415,670
9/1/2011	315,000	52,056	367,056	
3/1/2012		45,205	45,205	412,261
9/1/2012	330,000	45,205	375,205	
3/1/2013		37,780	37,780	412,985
9/1/2013	345,000	37,780	382,780	
3/1/2014		30,018	30,018	412,798
9/1/2014	360,000	30,018	390,018	
3/1/2015		21,738	21,738	411,755
9/1/2015	375,000	21,738	396,738	
3/1/2016		12,925	12,925	409,663
9/1/2016	395,000	12,925	407,925	
3/1/2017		3,643	3,643	411,568
9/1/2017	155,000	3,643	158,643	158,643
Total	\$6,270,000	\$2,563,958	\$8,833,958	\$8,833,958
% to Public Safety		34%		
Interest Cost (Outstanding Debt)		\$881,860		

Funding the future improvements through impact fees places a similar burden upon future users compared to existing users. The City's objective is to fairly and equitably recover the costs of new growth-related infrastructure from new development. This implies that new growth will be expected to pay its fair share of the costs that will be incurred for improvements that serve new growth. Additionally, general fund monies spent on existing facilities that serve new development can also be reimbursed through impact fees.

CAPACITY FOR GROWTH IN POLICE STATIONS

As development continues to occur within the City, the need for police officers and police facilities will increase which will force the City to construct additional facilities.

SECTION 5: CAPITAL FACILITY ANALYSIS

Unlike fire protection and emergency medical service, police protection does not rely on the distance of responding units to a fixed location. Officers generally patrol throughout a city, and the units closest to a call are generally the first to respond. Therefore, a police station's location is directly determined by growth patterns rather than target response times, and most cities will try to position police stations in central locations.

The Police Department doesn't anticipate building any additional facilities in the next six to ten years. However, the Fire Department has estimated that approximately five percent of each fire station built in the future will serve the Police Department as shown below.

TABLE 5.1: ESTIMATED COST OF FUTURE FACILITIES

FACILITIES	YEAR	TOTAL SQ. FT.	2013 CONSTRUCTION TOTAL	CONSTRUCTION YEAR COST	% TO POLICE	% TO ST. GEORGE/CITY FUNDED	TOTAL POLICE SQ. FT.	TOTAL IMPACT FEE ELIGIBLE COST
Southeast Station (Little Valley/Fort Pierce)	2016	12,000	\$2,200,000	\$2,266,662	5%	100%	600	\$113,333
Total		12,000	\$2,200,000	\$2,266,662			600	\$113,333

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.⁵ 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.⁶ The Impact Fee Analysis may only include the costs of impacts on system improvements related to new growth within the proportionate share analysis. Since police services serve the entire community, the construction of police buildings are considered system improvements.

FUNDING OF FUTURE FACILITIES

The IFFP must also include a consideration of all revenue sources, including impact fees and the donations (dedication) of system improvements, which may be used to finance system improvements.⁷ 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.⁸

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

PROPERTY TAX REVENUES

Property tax revenues are not specifically identified in this analysis as a funding source for capital projects, but inter-fund loans can be made from the general fund which will ultimately include some property tax revenues. Inter-fund loans will be repaid once sufficient impact fee revenues have been collected.

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 the improvements funded through impact fees if donations are made by new development. Section 6

⁵ UC 11-36a-102(20)

⁶ UC 11-36a-102(13)

⁷ UC 11-36a-302(2)

⁸ UC 11-36a-302(3)



further addresses developer donations.

IMPACT FEE REVENUES

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

DEBT FINANCING

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

EQUITY OF IMPACT FEES

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

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: POLICE IMPACT FEE CALCULATION

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

PROPOSED POLICE IMPACT FEES

The police impact fees proposed in this analysis will be assessed within all areas of the City. As stated above, the impact fee analysis allocates the existing and future police facilities within the ten year planning horizon to current and future development.

Police impact fees are calculated using a "fair share" approach which assumes new development pays a portion of all existing and new stations. The fair share approach, is recommended in establishing impact fees since all police facilities serve the entire service area. This approach provides an equitable distribution of the existing and proposed facilities that will serve development. The cost per call for police facilities is found in Table 5.1 and is the basis for the maximum impact fees per land use category shown in Table 5.2.

TABLE 6.1: ESTIMATE OF IMPACT FEE COSTS PER CALL

	ESTIMATED COST	IF ELIGIBLE	COST TO IMPACT FEES	CALLS SERVED ¹	COST PER CALL
Existing Facilities	\$3,967,757	100%	\$3,967,757	18,613	\$213
Outstanding Debt ²	\$881,860	100%	\$881,860	18,613	\$47
Future Facilities ³	\$113,333	100%	\$113,333	18,613	\$6
Total			\$4,962,950		\$267
Professional Expense ⁴			\$9,675	2,432	\$4
Total Impact Fee Cost per Call⁵					\$271

Table Notes:

1 - **Calls Served:** The cost for existing facilities, outstanding debt, and future facilities is applied to the demand estimated for the total existing and future facilities. Demand served is calculated by dividing the respective square footage of the existing (40,449 Sq. Ft.) and future facilities (600 Sq. Ft.) as shown in Tables 4.1 and 5.1. by the 2.21 Sq. Ft. per call as shown in Table 3.5.

2 - **Outstanding Debt:** 34 percent of the interest on the Series 1998A Refunding Bonds has been included in the impact fee calculations.

3 - **Future Facilities:** This includes only the portion of the future fire station that will be utilized by the police force as explained in Section 5.

4 - **Professional Expense:** This is the actual cost to update the IFFP and IFA. The City can use this portion of the impact fee to reimburse itself for the expense of updating the IFFP and IFA. The cost is divided over the additional calls generated in the next six years.

5 - **Total Impact Fee Cost per Call:** Since the impact fee fund balance is negligible, it has not been included in the calculation of the impact fee.

TABLE 6.2: RECOMMENDED POLICE IMPACT FEE SCHEDULE

	Annual Calls per Unit	COST PER CALL	IMPACT FEE PER UNIT	2006 FEE	% CHANGE
Residential					
Residential Single-Family (per dwelling unit)	0.316	\$271	\$86	\$109	-22%
Residential Multi-Family (per dwelling unit)	0.444	\$271	\$120	\$49	145%
Mobile Homes (per dwelling unit)	0.483	\$271	\$131	\$57	129%
Non-Residential					
Professional Office (per 1,000 square feet)	0.224	\$271	\$61	\$68	-11%
Commercial (per 1,000 square feet)	0.565	\$271	\$153	\$95	61%
Manufacturing (per 1,000 square feet)	0.057	\$271	\$15	\$6	157%

NON-STANDARD POLICE 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 higher impact fee if the City determines that a particular user may create a greater impact than what is standard for its land use. The City may also decrease the impact fee if the developer can provide documentation evidence, or alternative-credible analysis that the proposed impact will be lower than normal. The formula for determining a non-standard impact fee, assuming the fair share approach, is found below.

FORMULA FOR NON-STANDARD POLICE IMPACT FEES:

Residential Police Impact Fee
Calls per Residence x \$271 = Recommended Impact Fee

Non-Residential Police Impact Fee
Calls per Unit / (Bldg. Sq. Ft./1,000) x \$271 = Recommended Impact Fee

CONSIDERATION OF ALL REVENUE SOURCES

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

EXPENDITURE OF IMPACT FEES

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

PROPOSED CREDITS OWED TO DEVELOPMENT

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

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

GROWTH-DRIVEN EXTRAORDINARY COSTS

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

SUMMARY OF TIME PRICE DIFFERENTIAL

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

⁹ UC 11-36a-402(1)(c)

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

CITY OF ST. GEORGE, UTAH



NOVEMBER 2013

DRAFT

DATED 3.25.14


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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 help the City of St. George (the "City") plan necessary capital improvements for future growth. This document will address the future infrastructure needed to serve the City through the next nine years, as well as the appropriate impact fees the City may charge to new growth to maintain the level of service ("LOS").

- **Impact Fee Service Area:** The Municipal Power Service Area ("Service Area") currently serves approximately 27,000 accounts or nearly 59,000 residents, which is approximately 74 percent of the City's total population. The remaining portion of the City is served by the Dixie Power Cooperative. The City's electric system also serves the majority of the commercial businesses.
- **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 104,472 additional kilowatts (kW) demand will be generated based on the build out in undeveloped land within the current Service Area. A total 41,068 kW are projected to occur within the IFFP planning horizon, (9-10 years; 2-3% per year growth). See Section 3 for details regarding growth in kW and equivalent units (EUs).
- **Level of Service:** The power level of service, as defined by the St. George City Energy Services Department, is based on an average load per ERU of **6.69 kilowatts ("kW")**. The average load per ERU was calculated by taking the peak load of 169,000 kW ending 2010 (see Table 3.1) and dividing by the total number of ERUs (beginning 2011 at 25,261). New facilities are designed to maintain this level of service.
- **Excess Capacity:** The City does not have excess energy capacity during peak periods. Short term market purchases are required to supply energy during peak periods. There is however, approximately 67 percent of the Green Valley substation that has capacity available for growth, the actual cost of which is included in the impact fee calculation.¹
- **Capital Facilities Analysis:** There is a total of \$36.9 million in capital costs for power facilities needed through the next nine years. The costs of future projects related to growth are estimated at \$29.5 million which represents 80 percent of the total projects identified.²
- **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 level of service and determine any excess capacity in existing facilities that could serve new growth.

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. Growth is expected over the next 10 years to use up this capacity.

² All power generation projects have been removed due to the uncertainty of the type of projects needed to serve growth. Once these projects are more specifically defined, the impact fee will need to be revised to include the cost of these projects that is applicable to 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 \$875. The fee per kW is then applied to the general usage statistics for residential and commercial users, as shown in Table 1.1 through 1.3.

TABLE 1.1: ILLUSTRATION OF RESIDENTIAL IMPACT FEE

SERVICE DESCRIPTION	EST. KW	COST PER KW	IMPACT FEE	2006 FEE ³	% CHANGE
100 Amp - 240/120 V	4.25	\$875	\$3,720	\$2,790	33%
200 Amp - 240/120 V	5.25	\$875	\$4,595	\$3,446	33%
400 Amp - 240/120 V	9.00	\$875	\$7,878	\$5,908	33%

TABLE 1.2: ILLUSTRATION OF COMMERCIAL IMPACT FEE

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

TABLE 1.3: ILLUSTRATION OF COMMERCIAL IMPACT FEE (CONT.)

SERVICE DESCRIPTION	EST. AVERAGE DIVERSIFIED KVA	ESTIMATED DIVERSIFIED KW	COST PER KW	IMPACT FEE	2006 FEE	% CHANGE
Single Phase Service						
240/120 V	7.92	7.13	\$875	\$6,239	\$4,679	33%
	15.84	14.26	\$875	\$12,478	\$9,358	33%
Three Phase Service						
208Y/120 V	15.85	14.27	\$875	\$12,487	\$9,365	33%
	31.70	28.53	\$875	\$24,974	\$18,731	33%
	63.41	57.07	\$875	\$49,949	\$37,462	33%
	95.11	85.60	\$875	\$74,923	\$56,192	33%
	158.52	142.67	\$875	\$124,872	\$93,654	33%
480Y/277 V	36.58	32.92	\$875	\$28,817	\$21,612	33%
	73.16	65.85	\$875	\$57,633	\$43,225	33%
	146.32	131.69	\$875	\$115,266	\$86,450	33%
	219.49	197.54	\$875	\$172,900	\$129,675	33%
	365.81	329.23	\$875	\$288,166	\$216,125	33%

³ When the existing fee was adopted in 2006, it was adopted at 75 percent of what was recommended.

**NON-STANDARD IMPACT FEES**

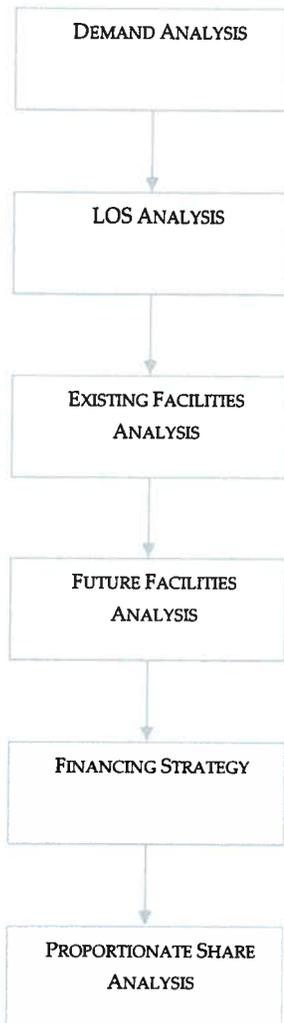
The proposed fees are based upon growth in kW. The City reserves the right under the Impact Fees Act to assess an adjusted fee that more closely matches the true impact that the land use will have upon public facilities.⁴ This adjustment could result in a higher or lower impact fee if the City determines that a particular user may create a different impact than what is standard for its land use.

Estimated Usage / 6.69 kWh * \$875

⁴ 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 IFFP and IFA. The IFFP is designed to identify the demands placed upon the City's existing facilities by future development and evaluate how these demands will be met by the City. The IFFP is also intended to outline the improvements which are intended to be funded by impact fees. The IFA is designed to proportionately allocate the cost of the new facilities and any excess capacity to new development, while ensuring that all methods of financing are considered. Each component must consider the historic level of service provided to existing development and ensure that impact fees are not used to raise that level of service. The following elements are important considerations when completing an IFFP and IFA.

DEMAND ANALYSIS

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

LEVEL OF SERVICE ANALYSIS

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

EXISTING FACILITY INVENTORY

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

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

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

FUTURE CAPITAL FACILITIES ANALYSIS

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

**FINANCING STRATEGY – CONSIDERATION OF ALL REVENUE SOURCES**

This analysis must also include a consideration of all revenue sources, including service rates, impact fees, future debt costs, alternative funding sources and the dedication of system improvements, which may be used to finance system improvements.⁵ 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.⁶

PROPORTIONATE SHARE ANALYSIS

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

⁵ 11-36a-302(2)

⁶ 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.⁷ The City's electrical system currently serves approximately 27,000 accounts or nearly 59,000 residents which is approximately 74 percent of the City's total population. The remaining portion of the City is served by the Dixie Power Cooperative. The City's electric system also serves the majority of the commercial businesses. See **Appendix A** for a map of the Service Area.

DEMAND UNITS

The City of St. George Municipal Power system is in need of expansion to perpetuate the level of service 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. The City of St. George Energy Service Department has outlined the recommended capital projects that will maintain the established level of service through 2022.

All information regarding the existing power level of service, 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. The City of St. George Municipal Power Service Area ("Power Impact Fee Service Area") is defined in **Appendix A** of this study plan.

DEMAND UNITS

The proposed impact fees are based upon the costs of capital infrastructure that will serve future growth. The following table illustrates the new demand generated from all the undeveloped areas within the City. This is a build out demand analysis based on current zoning plans within the City limits and service territory.

TABLE 3.1: ILLUSTRATION OF NEW DEMAND WITH SERVICE AREA

UNDEVELOPED AREAS – NON-HILLSIDE: LAND USE CODE	TOTAL EST. UNITS	EST. % IN SERVICE AREA	EST. UNITS IN SERVICE AREA	EST. KW PER UNIT	EST. TOTAL KW LOAD
High Density Residential (HDR)	1,083	20%	217	4.0	868
Low Density Residential (LDR)	13,049	75%	9,787	5.5	53,829
Medium Density Residential (MDR)	3,406	20%	681	5.0	3,405
Multi-Residential (MR)	12,839	20%	2,568	4.5	11,556
Rural Residential (RR)	1,547	0%	0	5.0	0
Very Low Density Residential (VLDR)	152	50%	76	5.5	418
Subtotal:	32,076		13,329		70,076
UNDEVELOPED AREAS: HILLSIDE					
25 % Slope	1,240	50%	620	4.5	2,790
40 % Slope	0	0%	0		0
Subtotal:			620		2,790
Developed Areas - Vacant Lots	2,917		1,666	4.5	7,497
			Est. Future Residential Load Additions:		80,363
			Est. Commercial Load Additions:		24,109
			Total Estimated New Demand:		104,472

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 demand units (kW/ERU). The demand unit used in the calculation of the power impact fees is the estimated summer peak load, or power capacity, measured in kilowatts (kW). The summer peak values are used because the City's power system is required by the Federal

⁷ UC 11-36a-402(a)

Energy Regulatory Commission (FERC) and the North American Electric Reliability Corporation (NERC) to meet national reliability standards, which dictate the required design load levels. These demand values are consistent with the values used in the area Joint Systems Transmission Planning Study, which has been included in this document as **Appendix D**. The St. George City Energy Services Department has projected the existing and future kW's within the Power Service Area through 2025, but this IFFP focuses primarily on the next nine years. Figure 3.2 summarizes the projected annual increase in kW's within the Power Service Area.

TABLE 3.2: PROJECTED GROWTH IN ERUS AND KILOWATTS IN SERVICE AREA

YEAR	LOAD	GROWTH RATE	NEW KW	NEW ERUS
2012	176,000			
2013	180,000	2.3%	4,000	598
2014	183,000	1.7%	3,000	448
2015	187,000	2.2%	4,000	598
2016	191,000	2.1%	4,000	598
2017	195,011	2.1%	4,011	600
2018	199,964	2.5%	4,953	740
2019	205,043	2.5%	5,079	759
2020	210,251	2.5%	5,208	778
2021	215,592	2.5%	5,340	798
2022	221,068	2.5%	5,476	819
2023	226,683	2.5%	5,615	839
2024	232,441	2.5%	5,758	861
2025	238,345	2.5%	5,904	883
Total kW (2013-2022)			41,068	

It is anticipated that the growth projected over the next nine years will impact the City's existing services. Power facilities will need to be expanded in order to maintain the existing level of service. 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 level of service to current or future users of capital improvements. Therefore, it is important to identify the power level of service within the Power Service Area to ensure that the new capacities of projects financed through impact fees do not exceed the established standard. The power level of service, as defined by the St. George City Energy Services Department, is shown below.

TABLE 3.3: LEVEL OF SERVICE

	LOS
Existing Peak Load (kw)	169,000
Existing ERUs (2011)	25,261
kW/ERU	6.69

The level of service or average load per ERU (6.69) was calculated by taking the peak load in 2010 of 169,000 kW and dividing by the total number of ERUs beginning in 2011 (25,261).

SECTION 4: EXISTING FACILITIES 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; and, (2) City Transmission and Distribution System Improvements.

VALUE OF EXISTING POWER INFRASTRUCTURE

Based upon the City's 2011 electric utility depreciation schedule, the existing power system is valued at approximately \$144 million, based on original cost, as shown in Table 4.1.

FIGURE 4.1: VALUE OF EXISTING POWER SYSTEM

ITEM	ORIGINAL COST
Building	\$82,725,934
Improvements	\$7,320,600
Land	\$350,166
Other	\$54,120,200
Total	\$144,516,900

"Other" includes some distribution related improvements.

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 as well as the cost of power to the City's customers. The figure below, as well as Table 4.2, illustrates the existing resources available to the City.

FIGURE 4.1: ILLUSTRATION OF EXISTING POWER RESOURCES

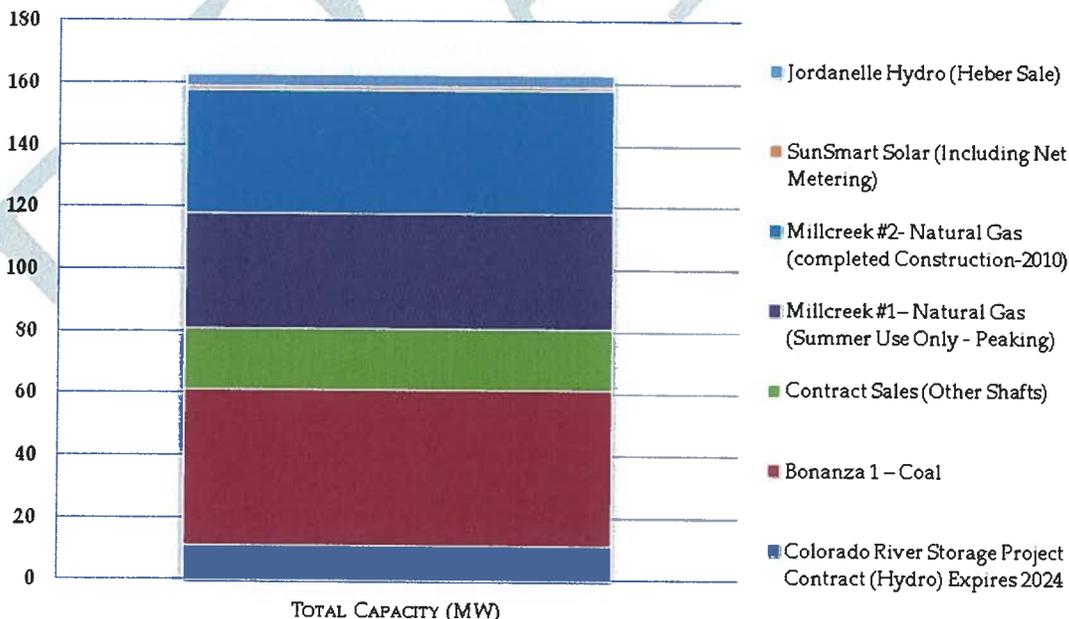


TABLE 4.2: EXISTING POWER RESOURCES

CURRENT SOURCES	CAPACITY MW (PEAK)
Colorado River Storage Project Contract (Hydro) Expires 2024	
Western Replacement Power	19
Western System Power Pool	10
Actual Contracted Amount before Market Purchase	11
Deseret Generation and Transmission	
Bonanza 1 – Coal	50
Contract Sales (Other Shafts)	20
City Owned Generation	
Red Rock – Diesel (Emergency Only)	14
Bloomington – Diesel (Emergency Only)	11
Millcreek #1– Natural Gas (Summer Use Only - Peaking)	37
Millcreek #2- Natural Gas (Completed Construction-2010)	40
Renewable Resources	
SunSmart Solar (Including Net Metering)	1
Long Term Purchase Contacts	
Jordanelle Hydro (Heber sale)	4
Total Resources Available to the City	163
Other Available Sources	
Short Term Market Purchases/Sales (1-3 year contracts)	
Utah Associated Municipal Power (UAMPS)	
Natural Gas (BP Long Term Gas Hedge) (35%-50% of Requirements into 2021)	

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. A typical load profile for the City's electrical system for the month of July is shown in Figure C.1 of **Appendix C**. Figure C.2 is a typical load profile for the month of October. Also included is Figure C.3 which shows the number of hours that the City's electrical load is at or above a given load level. These graphs show that the peak load level during the off peak months is significantly lower than the summer. 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 MG of capacity with Millcreek #1 and Millcreek #2. The City has historically followed a policy to purchase power from the market until reaching -25 MW, at which point an additional generation resource is constructed.

It is anticipated that an additional peaking resource would be required in the 2017-2018 timeframe. The peaking resource could be in the form of a power contract or additional generation facility. However, since the type of source has not yet been identified, the City has chosen not to include a cost for additional generation resources in the impact fee study. Future generation will be evaluated on a case by case basis. The City may elect to enter into long term peaking agreements with outside entities rather than constructing new generation facilities inside the City. Once the City has defined the type of generation resource needed to meet growing demand, the impact fees will be revised to include these costs if necessary.

Thus, the only generation cost shown in the impact fee is approximately \$200,000 of improvements included annually in order to keep the City's existing generation facilities in top operating condition and maintain the level of service due to added growth.

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 by having one area 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. The City estimates only 25 MW of capacity have been used to date, leaving an excess capacity of 50 MW or 67 percent of the total capacity. In constructing substations and transmission lines, it is not practical to build just 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 "level of service" 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 projected resource needs for the next several years are indicated in this section. 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, (2) City Transmission and Distribution System Improvements, and (3) Main Jointly Owned Transmission System Improvements. **Appendix B** details the anticipated resource and capital improvement needs that will be required for the next nine years.

POWER RESOURCE IMPROVEMENTS

The only generation costs included in the impact fee is approximately \$200,000 of improvements annually to keep the City's existing generation facilities in top operating condition and to accommodate any impact on the generation related to projected growth. Only 50% is allocated to growth.

It is anticipated that an additional peaking resource would be required in the 2017-2018 timeframe. The peaking resource could be in the form of a power contract or additional generation facility. However, since the type of source has not yet been identified, the City has chosen not to include a cost for additional generation resources in the impact fee study. Once the City has defined the type of generation resource needed to meet growing demand, the impact fees will be revised to include these costs if necessary.

CITY TRANSMISSION & DISTRIBUTION IMPROVEMENTS

Due to the increasing system loads, improvements to the system will be required in order to maintain the level of service and deliver the increased load demand to the City's electrical customers. Improvements to various components of the system will be required to meet all of the FERC/NERC reliability standards. The needed capital improvement projects are described below:

- Distribution capacitors help provide voltage support to both the distribution and transmission systems. Capacitors also improve overall system efficiency by reducing losses from the conductors and transformers on the system caused by additional load. The budget total is \$411,000 for the installation of capacitors on the distribution system.
- Due to growth, new distribution substations and improvements to the existing distribution substations will be required to maintain reliable electric service to the City's customers. The cost will be \$6,106,000.
- Improvements to subtransmission lines are ongoing as load grows so that single line failure does not cut off service to a large number of customers for more than a short time. Budgeted cost is \$1,389,000.
- For new customer meters on the system, \$1,001,000 has been budgeted.
- The City is in the process of adding equipment to increase the number of meters that can be automatically read by the City's automatic meter reading system. \$1,500,000 has been allocated for the automatic meter reading system to account for future new meters.
- In order to increase capacity and to improve system efficiency, \$1,391,000 has been included in the budget for reconductor portions of existing distribution lines rather than building new lines.
- Yard additions will be necessary to house the equipment in the future. Budgeted costs are \$572,000. However, these costs are not attributed to growth, thus they are not included in the impact fee.
- Several improvements to the City's internal 69 kV transmission system will be needed to accommodate growth. These improvements include work such as 69 kV switch installations and line/pole relocations. The needed improvements are budgeted to cost \$6,350,000.
- The SCADA system, which monitors and controls the various system components, requires ongoing improvements in order to keep the SCADA operating as required and to accommodate growth. The various SCADA upgrades are estimated to cost \$631,000 for the next nine budgeted years.
- Budgeted cost for underground distribution projects and additions for growth is \$2,785,000.
- A budget amount of \$1,531,000 has been allocated for miscellaneous smaller projects and improvements on the City's electrical system. However, these costs are not attributed to growth, thus they are not included in the impact fee.



- ☐ An amount of \$351,000 has been budgeted to connect the City's substations to the new fiber loop system to accommodate growth of data being transferred.
- ☐ Equipment improvements are needed for the substations to keep the flow of electricity to customers. Over the next nine years the cost will be \$5,781,000. However, only \$2,711,317 of the total cost will be related to growth and is included in the impact fee analysis.
- ☐ Construct Ledges Transmission 69kV to accommodate growth in area. Cost in the year 2022 is \$9,540,000. However, the City anticipates that this project will be fully funded by the developer and thus is not included in the impact fee because the line will be radial and will only benefit this area. The line will not be a benefit to the entire system.
- ☐ Construct Dixie 138 kV Tie – West Side transmission line. \$2,470,000 is budgeted for 2019 to cover these costs. This line will provide backup to the entire system.

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 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. The most recent Joint Plan Study has been attached as **Appendix D** and needed improvements are outlined in this plan.

SOUTHWEST UTAH JOINT TRANSMISSION PROJECTS

- ☐ Expand the area with additional looped 138 kV transmission throughout the study period
- ☐ Establish a new 138 kV delivery point and 138/69 kV substation in west Hurricane around 2014 with future 345 kV capability
- ☐ Expand St. George substation to 345 kV operation and install a 345/138 kV transformer by 2015
- ☐ Energize a 4th circuit between Red Butte and St. George at 345 kV by 2015
- ☐ Re-conductor St. George-fields 138 kV line with high temperature conductor by 2017
- ☐ Energize 2nd 345 kV circuit between Red Butte and St. George and add second 345/138 kV transformer at St. George by 2021
- ☐ Re-conductor St. George-Skyline #1 and #2 lines with high temperature conductor by 2022
- ☐ Construct new St. George-Hurricane 345 kV Line (initially operated 138kV) by 2023
- ☐ Construct Three Peaks-Hurricane 345 kV line to coincide with PacifiCorp Transmission requirements, energize St. George-Hurricane line at 345 kV, and install 345/138 kV transformation at proposed Hurricane West substation

Most of these 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.

SUMMARY OF FUTURE CAPITAL PROJECTS

Based upon the projected increase in kilowatts and demand on the system, the City has identified the future power capital projects that must be constructed over the next nine years to serve future development. The costs of these projects are summarized in Figure 5.1. A more detailed cost analysis is provided in **Appendix B**. The percentage of the total costs that is attributable to growth is based upon information provided by the City's Energy Services Department.

TABLE 5.1: FUTURE POWER CAPITAL PROJECT COSTS

SERVICE	COST OF FUTURE CAPITAL PROJECTS *	% OF TOTAL COSTS TO GROWTH **	TOTAL COSTS TO GROWTH
Generation Additions	\$2,452,897	50%	\$1,226,448
Distribution and Transmission	\$34,509,165	82%	\$28,307,799

Notes:

* The Cost of Future Capital Projects includes 1% annual construction inflation.

**Generation additions are being allocated 50% to growth and the other 50% to replace depreciated equipment. The distribution and transmission is being allocated 82%, which is the aggregate percentage of all the projects listed in Appendix B. Some of the projects are only being partially allocated to growth because some of the funds will be spent on replacement of existing equipment (i.e. meters and AMR).

The City Energy Services has prepared this capital plan using capital project and engineering data, planning analysis and other information provided by the Energy Services staff. The City has provided all future capital project data including project descriptions and estimated project costs. 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.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 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

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 non-growth related capital project needs.

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 will 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 owed to development.

IMPACT FEE REVENUES

Impact fees have become 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. Analysis is required to accurately assess the true impact of a particular user upon the City infrastructure and to prevent existing users from subsidizing new growth. The following

⁸ 11-36a-102(20)

⁹ 11-36a102(13)



paragraphs discuss other issues pertaining to impact fees. 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, at the request of the City, 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% 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 utility rate revenues will 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: 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 level of service. 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 level of service 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 \$875.

TABLE 6.1: ILLUSTRATION OF COST PER NEW KW

POWER PROJECTS	TOTAL COSTS WITHIN IFFP HORIZON	% RELATED TO GROWTH	GROWTH RELATED COSTS	GROWTH RELATED KW	COST PER NEW KW
CAPITAL PROJECTS					
Generation Additions	\$2,452,897	50%	\$1,226,448	41,068	\$29.86
Distribution and Transmission	\$34,509,165	82%	\$28,307,799	41,068	\$689.29
Sub-Total Capital Projects Cost	\$36,962,061		\$29,534,247		\$719.16
BUY-IN					
Green Valley	\$11,680,125	67%	\$7,786,750	50,000	\$155.73
Sub-Total Buy-In Cost	\$11,680,125		\$7,786,750		\$155.73
OTHER					
Professional Expense ¹⁰	\$9,675	100%	\$9,675	25,043	\$0.39
Sub-Total Other Cost	\$9,675		\$9,675		\$0.39
Total¹¹	\$48,651,861		\$37,330,672		\$875.28

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

TABLE 6.3: ILLUSTRATION OF RESIDENTIAL IMPACT FEE

SERVICE DESCRIPTION	EST. KW	COST PER KW	IMPACT FEE	2006 FEE ¹²	% CHANGE
100 Amp - 240/120 V	4.25	\$875	\$3,720	\$2,790	33%
200 Amp - 240/120 V	5.25	\$875	\$4,595	\$3,446	33%
400 Amp - 240/120 V	9.00	\$875	\$7,878	\$5,908	33%

¹⁰ 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 new kW's generated in the next six years.

¹¹ As of June 30, 2013 the electric utility impact fee fund balance was negative and thus not shown in the calculation of the impact fee above.

¹² When the existing fee was adopted in 2006, it was adopted at 75 percent of what was recommended.

TABLE 6.4: ILLUSTRATION OF COMMERCIAL IMPACT FEE

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

TABLE 6.5: ILLUSTRATION OF COMMERCIAL IMPACT FEE (CONT.)

SERVICE DESCRIPTION	EST. AVERAGE DIVERSIFIED KVA	ESTIMATED DIVERSIFIED KW	COST PER KW	IMPACT FEE	2006 FEE	% CHANGE
Single Phase Service						
240/120 V	7.92	7.13	\$875	\$6,239	\$4,679	33%
	15.84	14.26	\$875	\$12,478	\$9,358	33%
Three Phase Service						
208Y/120 V	15.85	14.27	\$875	\$12,487	\$9,365	33%
	31.70	28.53	\$875	\$24,974	\$18,731	33%
	63.41	57.07	\$875	\$49,949	\$37,462	33%
	95.11	85.60	\$875	\$74,923	\$56,192	33%
	158.52	142.67	\$875	\$124,872	\$93,654	33%
480Y/277 V	36.58	32.92	\$875	\$28,817	\$21,612	33%
	73.16	65.85	\$875	\$57,633	\$43,225	33%
	146.32	131.69	\$875	\$115,266	\$86,450	33%
	219.49	197.54	\$875	\$172,900	\$129,675	33%
	365.81	329.23	\$875	\$288,166	\$216,125	33%

NON-STANDARD IMPACT FEES

The proposed fees are based upon growth in kW. 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.¹³ 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.

$$\text{Estimated Usage} / 6.69 \text{ kWh} * \$875$$

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.

¹³ UC 11-36a-402(1)(c)



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

The Impact Fees Act requires that credits be paid back to development for future fees that will pay for growth-driven system projects included in the Impact Fee Facilities Plan that would otherwise be paid for through user fees. Credits may also be paid to developers who have constructed and donated system facilities to that City that are included in the IFFP in-lieu of impact fees. 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

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

SUMMARY OF TIME PRICE DIFFERENTIAL

The Impact Fees Act allows for the inclusion of a time price differential to ensure that the future value of costs incurred at a later date are accurately calculated to include the costs of construction inflation. A one percent annual construction inflation adjustment is applied to projects completed after 2011 (the base year cost estimate).



APPENDIX A: POWER SERVICE AREA

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APPENDIX B: CAPITAL IMPROVEMENT PLAN

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APPENDIX C: TYPICAL LOAD PROFILES

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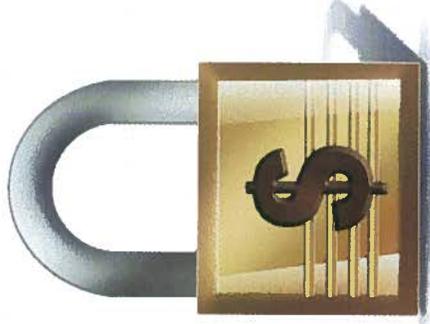
APPENDIX D: JOINT PLAN STUDY

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Power Projects	Construction Year	2011 Cost	Construction Year Costs	% to Growth	Inflated Cost To Growth	% Impact Fee Funded	Subtotals
Resources							
Additional Peaking Generation	2017		\$0	0%	\$0	0%	\$0
Additional Base Load Generation	2020		\$0	0%	\$0	100%	\$0
Total Major Resources			\$0	\$0	\$0	0%	\$0
Generation Additions							
Generation Additions	2013	\$200,000	\$204,020	50%	\$102,010	100%	\$102,010
Generation Additions	2014	\$206,000	\$212,242	50%	\$106,121	100%	\$106,121
Generation Additions	2015	\$212,180	\$220,795	50%	\$110,398	100%	\$110,398
Generation Additions	2016	\$218,545	\$229,693	50%	\$114,846	100%	\$114,846
Generation Additions	2017	\$225,102	\$238,950	50%	\$119,475	100%	\$119,475
Generation Additions	2018	\$231,855	\$248,580	50%	\$124,290	100%	\$124,290
Generation Additions	2019	\$238,810	\$258,997	50%	\$129,299	100%	\$129,299
Generation Additions	2020	\$245,975	\$269,019	50%	\$134,510	100%	\$134,510
Generation Additions	2021	\$253,354	\$279,860	50%	\$139,930	100%	\$139,930
Generation Additions	2022	\$260,955	\$291,139	50%	\$145,570	100%	\$145,570
Total Resources		\$2,292,776	\$2,452,897	50%	\$1,226,448	100%	\$1,226,448
Distribution and Transmission							
Distribution Capacitors	2013	\$74,000	\$75,487	100%	\$75,487	100%	\$75,487
Distribution Capacitors	2015	\$76,000	\$81,167	100%	\$81,167	100%	\$81,167
Distribution Capacitors	2017	\$83,000	\$88,106	100%	\$88,106	100%	\$88,106
Distribution Capacitors	2019	\$88,000	\$95,291	100%	\$95,291	100%	\$95,291
Distribution Capacitors	2021	\$88,000	\$97,207	100%	\$97,207	100%	\$97,207
Distribution Substations - New & Improvements	2014	\$1,353,000	\$1,393,997	100%	\$1,393,997	100%	\$1,393,997
Distribution Substations - New & Improvements	2016	\$1,523,000	\$1,600,688	100%	\$1,600,688	100%	\$1,600,688
Distribution Substations - New & Improvements	2018	\$1,615,000	\$1,731,499	100%	\$1,731,499	100%	\$1,731,499
Distribution Substations - New & Improvements	2021	\$1,615,000	\$1,783,965	100%	\$1,783,965	100%	\$1,783,965
Subtransmission Line Improvements	2013	\$246,000	\$250,945	100%	\$250,945	100%	\$250,945
Subtransmission Line Improvements	2014	\$127,000	\$130,848	100%	\$130,848	100%	\$130,848
Subtransmission Line Improvements	2017	\$130,000	\$137,998	100%	\$137,998	100%	\$137,998
Subtransmission Line Improvements	2018	\$178,000	\$190,840	100%	\$190,840	100%	\$190,840
Subtransmission Line Improvements	2020	\$189,000	\$206,707	100%	\$206,707	100%	\$206,707
Subtransmission Line Improvements	2021	\$330,000	\$364,525	100%	\$364,525	100%	\$364,525
Subtransmission Line Improvements	2022	\$189,000	\$210,861	100%	\$210,861	100%	\$210,861
Meters	2013	\$50,000	\$51,005	95%	\$48,455	100%	\$48,455
Meters	2014	\$95,000	\$97,879	95%	\$92,985	100%	\$92,985
Meters	2015	\$98,000	\$101,979	95%	\$96,880	100%	\$96,880
Meters	2016	\$101,000	\$106,152	95%	\$100,844	100%	\$100,844
Meters	2017	\$104,000	\$110,398	95%	\$104,878	100%	\$104,878
Meters	2018	\$107,000	\$114,718	95%	\$108,983	100%	\$108,983
Meters	2019	\$110,000	\$119,114	95%	\$113,159	100%	\$113,159
Meters	2020	\$113,000	\$123,586	95%	\$117,407	100%	\$117,407
Meters	2021	\$110,000	\$121,508	95%	\$115,433	100%	\$115,433
Meters	2022	\$113,000	\$126,071	95%	\$119,767	100%	\$119,767
AMR Remote Metering	2014	\$500,000	\$515,151	80%	\$412,120	100%	\$412,120
AMR Remote Metering	2015	\$500,000	\$520,302	80%	\$416,242	100%	\$416,242
AMR Remote Metering	2016	\$500,000	\$525,505	80%	\$420,404	100%	\$420,404
Reconductor Distribution Lines	2013	\$123,000	\$125,472	100%	\$125,472	100%	\$125,472
Reconductor Distribution Lines	2014	\$127,000	\$130,848	100%	\$130,848	100%	\$130,848
Reconductor Distribution Lines	2015	\$130,000	\$135,279	100%	\$135,279	100%	\$135,279
Reconductor Distribution Lines	2016	\$134,000	\$140,835	100%	\$140,835	100%	\$140,835
Reconductor Distribution Lines	2017	\$138,000	\$146,490	100%	\$146,490	100%	\$146,490
Reconductor Distribution Lines	2018	\$143,000	\$153,315	100%	\$153,315	100%	\$153,315
Reconductor Distribution Lines	2019	\$147,000	\$159,180	100%	\$159,180	100%	\$159,180
Reconductor Distribution Lines	2020	\$151,000	\$165,146	100%	\$165,146	100%	\$165,146
Reconductor Distribution Lines	2021	\$147,000	\$162,379	100%	\$162,379	100%	\$162,379
Reconductor Distribution Lines	2022	\$151,000	\$168,466	100%	\$168,466	100%	\$168,466
Yard Additions	2014	\$127,000	\$130,848	0%	\$0	0%	\$0
Yard Additions	2018	\$143,000	\$153,315	0%	\$0	0%	\$0
Yard Additions	2020	\$151,000	\$165,146	0%	\$0	0%	\$0
Yard Additions	2022	\$151,000	\$168,466	0%	\$0	0%	\$0
SCADA Improvements	2015	\$150,000	\$156,091	100%	\$156,091	100%	\$156,091
SCADA Improvements	2018	\$160,000	\$171,542	100%	\$171,542	100%	\$171,542
SCADA Improvements	2021	\$170,000	\$187,786	100%	\$187,786	100%	\$187,786
SCADA Improvements	2022	\$151,000	\$168,466	100%	\$168,466	100%	\$168,466
Underground Projects & Additions	2013	\$246,000	\$250,945	100%	\$250,945	100%	\$250,945
Underground Projects & Additions	2014	\$253,000	\$260,666	100%	\$260,666	100%	\$260,666
Underground Projects & Additions	2015	\$261,000	\$271,598	100%	\$271,598	100%	\$271,598
Underground Projects & Additions	2016	\$269,000	\$282,722	100%	\$282,722	100%	\$282,722
Underground Projects & Additions	2017	\$277,000	\$294,041	100%	\$294,041	100%	\$294,041
Underground Projects & Additions	2018	\$285,000	\$305,559	100%	\$305,559	100%	\$305,559
Underground Projects & Additions	2019	\$294,000	\$318,360	100%	\$318,360	100%	\$318,360
Underground Projects & Additions	2020	\$303,000	\$331,387	100%	\$331,387	100%	\$331,387
Underground Projects & Additions	2021	\$294,000	\$324,759	100%	\$324,759	100%	\$324,759
Underground Projects & Additions	2022	\$303,000	\$338,048	100%	\$338,048	100%	\$338,048
Miscellaneous Projects	2013	\$139,000	\$137,714	0%	\$0	0%	\$0
Miscellaneous Projects	2014	\$139,000	\$143,212	0%	\$0	0%	\$0
Miscellaneous Projects	2015	\$144,000	\$149,847	0%	\$0	0%	\$0
Miscellaneous Projects	2016	\$148,000	\$155,549	0%	\$0	0%	\$0
Miscellaneous Projects	2017	\$152,000	\$161,351	0%	\$0	0%	\$0
Miscellaneous Projects	2018	\$157,000	\$168,325	0%	\$0	0%	\$0
Miscellaneous Projects	2019	\$162,000	\$175,423	0%	\$0	0%	\$0
Miscellaneous Projects	2020	\$166,000	\$181,252	0%	\$0	0%	\$0
Miscellaneous Projects	2021	\$162,000	\$178,949	0%	\$0	0%	\$0
Miscellaneous Projects	2022	\$166,000	\$185,201	0%	\$0	0%	\$0
Fiber Optic Projects	2013	\$31,000	\$31,623	100%	\$31,623	100%	\$31,623
Fiber Optic Projects	2014	\$32,000	\$32,970	100%	\$32,970	100%	\$32,970
Fiber Optic Projects	2015	\$33,000	\$34,340	100%	\$34,340	100%	\$34,340
Fiber Optic Projects	2016	\$34,000	\$35,734	100%	\$35,734	100%	\$35,734
Fiber Optic Projects	2017	\$35,000	\$37,153	100%	\$37,153	100%	\$37,153
Fiber Optic Projects	2018	\$36,000	\$38,597	100%	\$38,597	100%	\$38,597
Fiber Optic Projects	2019	\$37,000	\$40,066	100%	\$40,066	100%	\$40,066
Fiber Optic Projects	2020	\$38,000	\$41,560	100%	\$41,560	100%	\$41,560
Fiber Optic Projects	2021	\$37,000	\$40,871	100%	\$40,871	100%	\$40,871
Fiber Optic Projects	2022	\$38,000	\$42,395	100%	\$42,395	100%	\$42,395
Miscellaneous Substation (Improve Equip)	2013	\$12,000	\$12,241	100%	\$12,241	100%	\$12,241
Miscellaneous Substation (Improve Equip)	2014	\$25,000	\$25,758	100%	\$25,758	100%	\$25,758
Miscellaneous Substation (Improve Equip)	2016	\$1,008,000	\$1,099,418	0%	\$0	0%	\$0
Miscellaneous Substation (Improve Equip)	2018	\$1,141,000	\$1,223,306	0%	\$0	0%	\$0
Miscellaneous Substation (Improve Equip)	2020	\$1,210,000	\$1,323,359	100%	\$1,323,359	100%	\$1,323,359
Miscellaneous Substation (Improve Equip)	2021	\$1,173,000	\$1,297,931	0%	\$0	0%	\$0
Miscellaneous Substation (Improve Equip)	2022	\$1,210,000	\$1,349,959	100%	\$1,349,959	100%	\$1,349,959
Total Distribution and Transmission		\$23,449,000	\$25,145,058		\$18,943,692	100%	\$18,943,692
Study Recommended Major Additions							

Ledges Transmission Line	2022		\$0	100%	\$0	0%	\$0
Substation Capacitor Banks 69 kV and 15 kV	2017	\$1,000,000	\$1,061,520	100%	\$1,061,520	100%	\$1,061,520
Dixie 138 kV Tie - West Side	2019	\$2,470,000	\$2,674,656	100%	\$2,674,656	100%	\$2,674,656
Install 2nd 138 kV Transformer in Green Valley Sub	2016	\$2,500,000	\$2,627,525	100%	\$2,627,525	100%	\$2,627,525
Reconductor Twin Lakes Tap to Flood Street 69 kV	2013	\$1,750,000	\$1,821,057	100%	\$1,821,057	100%	\$1,821,057
Green Valley to the Lakes North Transmission Line	2018	\$1,100,000	\$1,179,349	100%	\$1,179,349	100%	\$1,179,349
Total UAMPS/ICPE Study Additions		\$8,820,000	\$9,364,107		\$9,364,107	100%	\$9,364,107
PacifiCorp/UAMPS/DC&T "One System Plan" Study Additions - Cost Shared							
Hurricane West Substation							
Middleton-Gateway-Hurricane West							
Additional 345 kV - 138 kV Transformation							
Sigurd To Red Butte 345 kV Line							
Washington County Area 138 kV Line Projects							
St. George Substation - Hurricane West 345 kV Line							
Convert Red Butte - St. George Substation Double Circuit Lines to 345 kV Operation							
St. George Substation - Install 345 kV to 138 kV Transformation							
Hurricane West Substation - 345 kV to 138 kV Transformation							
Hurricane West to Three Peaks 345 kV Line							
Total PacifiCorp Study Additions		\$0	\$0		\$0		\$0
TOTAL COSTS:		\$34,561,776	\$36,962,061		\$29,534,247		\$29,534,247

**CITY OF ST GEORGE
FINANCE DEPARTMENT**



Finance Department
City of St. George UT



Finance Director
Philip R. Peterson, CPA



City Treasurer
Tiffany M. Labice, CPA



Business Licensing
Shiloh Kirkland

Licensing Tech
Debbi Grant

Customer Service

CSRs

- Linda Bagnell
- Shannon Bruse
- Patlie Clark
- Margie Gardner
- Joyce Greenwell
- Amy Kimball
- Donna Rasmussen

Collections

- Nikki Heaton
- Tonya Johnson

Accounting

Accounts Payable

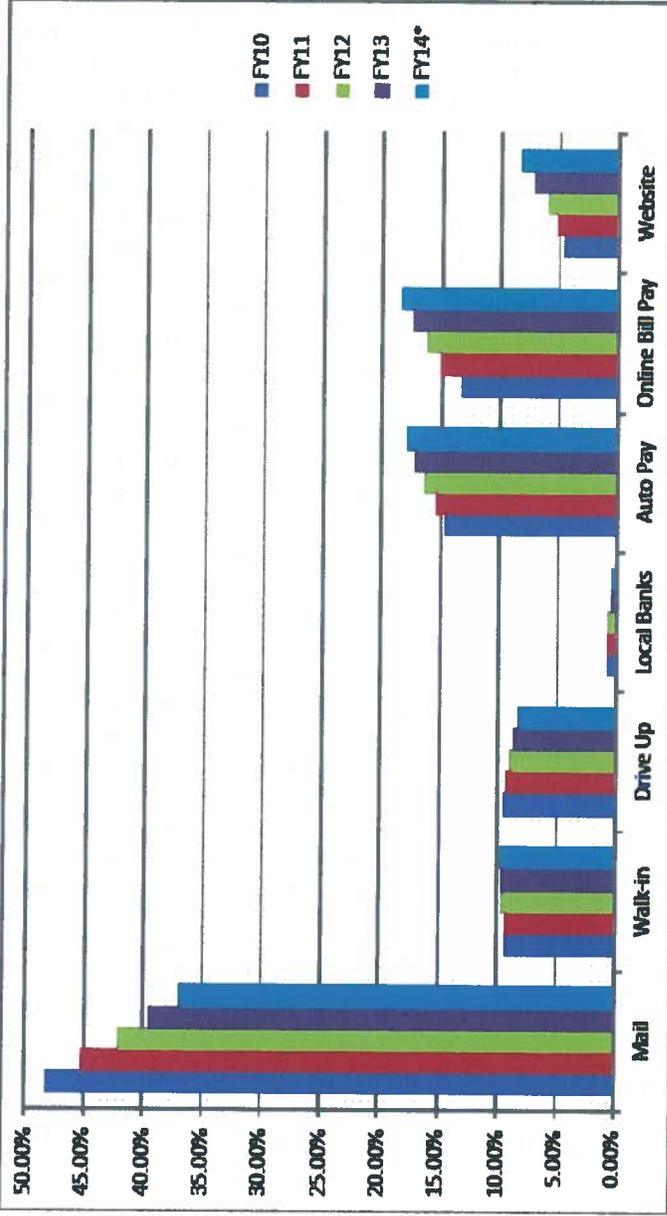
- Gloria Jensen

Utility Billing

- Annette Hansen
- Kim Lake
- Terri Mickelson
- Diana Naves
- Doris Winder

UTILITY PAYMENT OPTIONS

* Fiscal Year 2014 data is through 2/28/14



With changes in technology and customer habits, we have seen a steady decrease in the number of customers paying their bills by mail, while the walk in and drive up payments have remained fairly consistent. We have seen increases in the number of customers signing up for automatic payments (7% annual increase), using bank bill pay service (10% annual increase), and paying on our website (15% annual increase).

PAPERLESS BILLINGS

Paperless Signups

Jul-13	263
Aug-13	161
Sep-13	68
Oct-13	58
Nov-13	52
Dec-13	61
Jan-14	71
Feb-14	69
	<hr/>
	803

In July of 2013, we updated our billing software to allow customers to receive their utility bills via email. To jump start this program, we emailed any customer who had sent us an email about paperless billing in the past. We also posted the sign up form online, and made notes on our payment website. With this little advertising, we have had over 800 customers sign up in the past 8 months.

Although this is a fraction of our customer base, we are encouraged that others will sign up as they become aware of this option.

MISC. INFORMATION

FINANCE DEPARTMENT MISCELLANEOUS INFORMATION

AUTO PAY CUSTOMERS

Bank Drafts	4,644
Credit Cards	2,110

Budget plan accounts	917
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Active Electric customers	28,388
Active Water customers	23,339

Net bad debt writeoffs for fiscal year 6/30/2013	\$216,601.11 (.28% of total sales)
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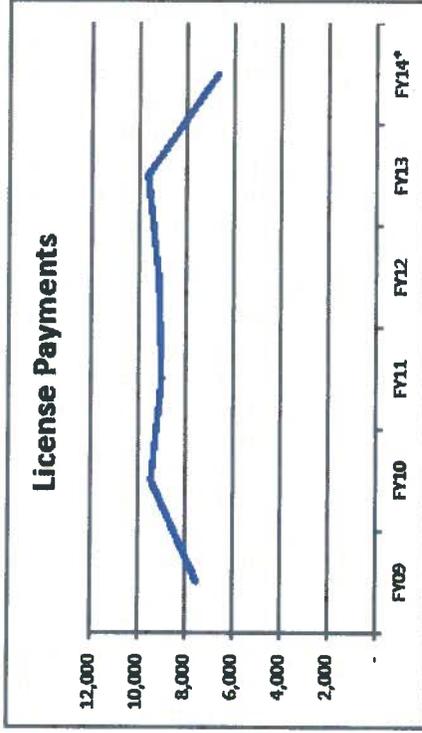
Account Aging (@ 3/24/2013)

Current	69.52%
Plus 1 month	19.13%
Plus 2 months	2.74%
Plus 3 months	0.30%
Plus 4 months	8.31%
	88.65%

BUSINESS LICENSES

Fiscal Year	License Payments
FY09	7,543
FY10	9,470
FY11	9,028
FY12	9,178
FY13	9,651
FY14*	6,673

* Through Feb 28, 2014

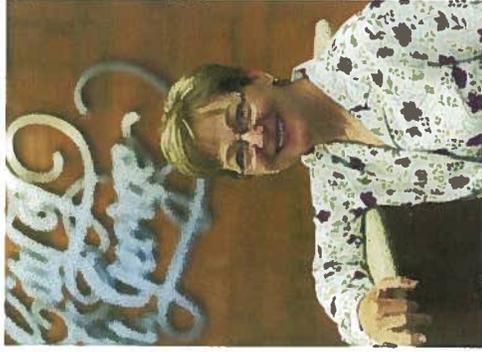


Business licenses are calendar year licenses that expire on December 31st of each year. In September of 2006, the Rental Dwelling License was changed to require a license for any residential rental properties in St George city limits, where the previous ordinance only required a license if an owner had 2 or more rental properties/units. We got the word out to local property managers and did advertising in the Spectrum, but some owners were still unaware of the licensing requirement, so in 2010, the city recorder assisted in sending letters to property owners to bring them into compliance with the licensing requirement.

Human Resources Department



Judith Mayfield, HR Director



Karen Rinehart,
HR Associate (part-time)

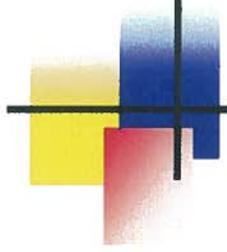


Vickie Weir,
HR Administrator



Heather Dutton,
HR Administrator



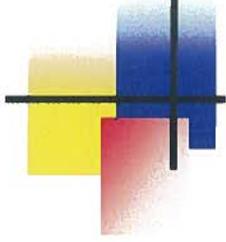


Human Resources Department Purpose Statement

The department has responsibility for administering many of the personnel functions for the City of St. George.

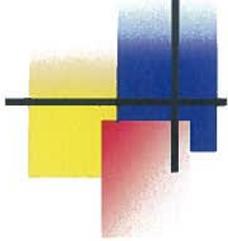
We provide a broad range of services to all employees and act in an advisory capacity when needed.

Our goal is to deal with each individual and each situation in an honest, respectful and objective manner with the ultimate outcome determined by what is in the best interest of the City of St. George and its' citizens.



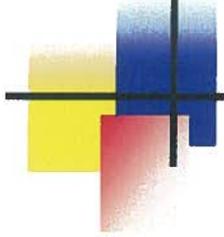
HR Department Responsibilities

- City Budget for Full-time Employees' Salary and Benefits
- Payroll, Time Entry Management
- Recruitment, Hiring and Retention
- Benefit Administrations
- Employee Relations
- Personnel Policies and Procedures
- Compensation Program
- Performance Evaluation Program
- Organization Development
- Public Supervisor Training
- Employee Professional Development



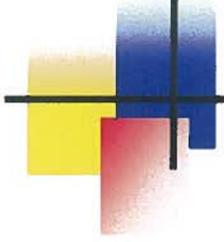
Recruitment, Hiring and Retention

- Recruitment
 - Approval to Recruit for Position
 - Advertising
 - Pre-screening Applications
 - Hiring
 - Preparation of Interview Grid
 - Participation in Interview
 - Selection based on Objective Criteria
 - Pre-employment Screening
- Orientation
 - Full-time and Part-time employees
 - Job Analysis
 - Job Descriptions
 - Salary Comparisons
 - Policy Compliance
 - Monthly Random Drug Screens
 - Annual Driver's License Verification
 - Bi-annual Harassment Prevention Training
 - EEOC Recording and Compliance
 - Terminations



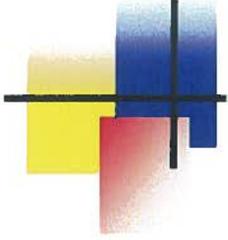
Payroll Administration

- Process Payroll for 900+ employees
 - Manually enter time for PD, Dispatch & Fire
 - Upload contributions to National Benefit Services (FSA) and Health Equity (HSA)
 - Associated bi-weekly, quarterly, annual reports
- Reconcile monthly bills for SelectHealth, ULGT Life Insurance, Utah State Withholding Taxes and Dept. of Workforce Services (unemployment)



Payroll Administration - continued

- Maintain accurate employee details in Tyler Database
 - New hires, promotions, career progressions, resignations and terminations
 - Changes to W-4's, Direct Deposits, HSA, 401k and 457 accounts, addresses, name changes, etc.
- Continuously work with supervisors and employees regarding time entry process with Employee Self Service (ESS) software system



Employee Benefits

- Healthcare – 3 Medical Plans, 2 Dental Plans, HSA, FSA, LTD
- Retirement
 - Beginning 7-1-11 USR 2 tiers each for Public Safety, Firefighters, Full-time Employees
 - USR Voluntary 401k, 457 and ROTH IRA
 - ICMA 401k and 457



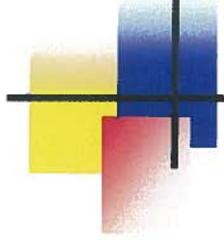
Employee Benefits - continued

- Employee Assistance Program
- Life Insurance
- Leaves of Absence
 - FMLA
 - Military
 - Personal
- COBRA



Compensation, Performance, Organization Development, Employee Relations

- Compensation
 - Annual Market Survey
 - Career Progression
 - Promotions and Transfers
- Performance Appraisal
 - Full-time Employees
 - December through November Annual Review
 - Informal mid-year review in June-July
- Organization Development
- Professional Development
 - Supervisor Training
 - Employee Development
- Employee Relations
- Policies and Procedures
- Employee Programs
 - Education Assistance
 - Longevity Bonus
 - Medical Leave Pool



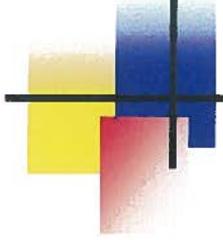
Administrative Duties

- Collect, screen and forward Employment Applications
- Schedule pre-employment drug screening
- Schedule interviews and pre-employment testing
- Prepare and send "Thanks but No Thanks" letters
- Track monthly, quarterly and annual EEOC Details
- Maintain Personnel Files
- Prepare New Employee Orientation notebooks/handouts
- Track supervisor and employee training attendance
- Provide employment verification



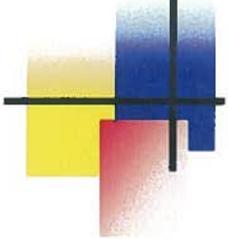
Administrative Duties - continued

- Prepare and distribute flyers and other materials for training and other employee events
- Assist with Payroll
- Assist with New Employee Orientation
- Provide assistance to the full-time HR staff members
- Provide general assistance to visitors and employees who call or come into the HR Department



Challenges

- **Budgetary Issues**
 - Healthcare and Retirement Costs
 - Competitive Pay for Hiring and Retention
 - Staffing
 - Maximize Technology
- **Employee Development**
 - Employment Laws, City Policies and Procedures
 - Professional Development
 - Employee Relations
 - Succession Planning
- **Part-time and Seasonal Employees**
 - Recruiting, Interviewing and Hiring
 - ACA and Policy Compliance
 - Performance Evaluations

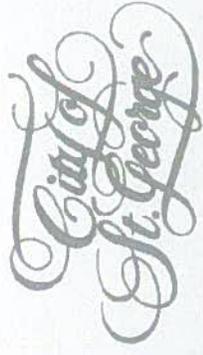


**That's All
Folks!!!**





ST. GEORGE CITY LEGAL SERVICES >



City Attorney
Shawn Guzman



Deputy City Attorney
Paula Houston



Claims Manager
Annette Johnson



Code Enforcement Officer
Malcolm Turner



Code Enforcement Officer
Jeff Cottam



Prosecutor
Robert Cosson



Assistant City Attorney
Victoria Hales



Office Manager
Brooke Smith



Paralegal
Diana Hamblin

LEGAL SERVICES-ORGANIZATION

CHART





» LEGAL COUNSEL

- > City Manager
- > Mayor
- > Council

» ADVISE DEPARTMENTS

» REVIEW/DRAFT CONTRACTS

» NEGOTIATE AND OVERSEE INSURANCE COVERAGES

» CLAIMS HANDLING

» CASE MANAGEMENT

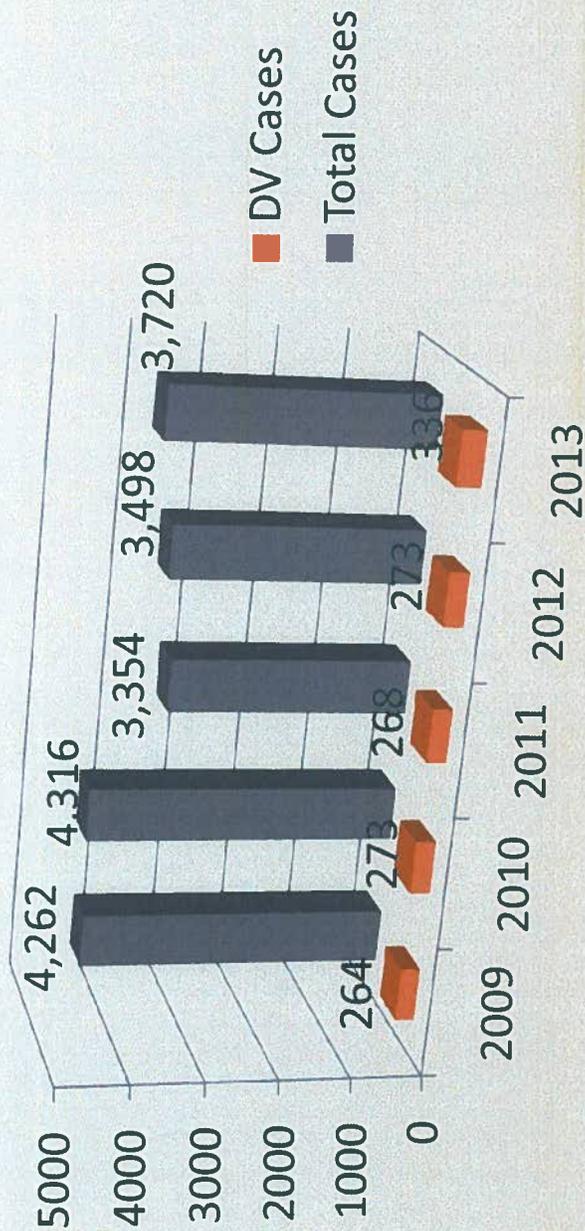
» CODE ENFORCEMENT

» PROSECUTIONS

- > VIOLATIONS OF STATE LAW AND CITY ORDINANCES
- > CLASS B&C MISDEMEANORS – INFRACTIONS
- > SGPD, WCSO, UHP, DIXIE STATE UNIVERSITY
- > JUSTICE COURT & DISTRICT COURT
- > DOMESTIC VIOLENCE CASES

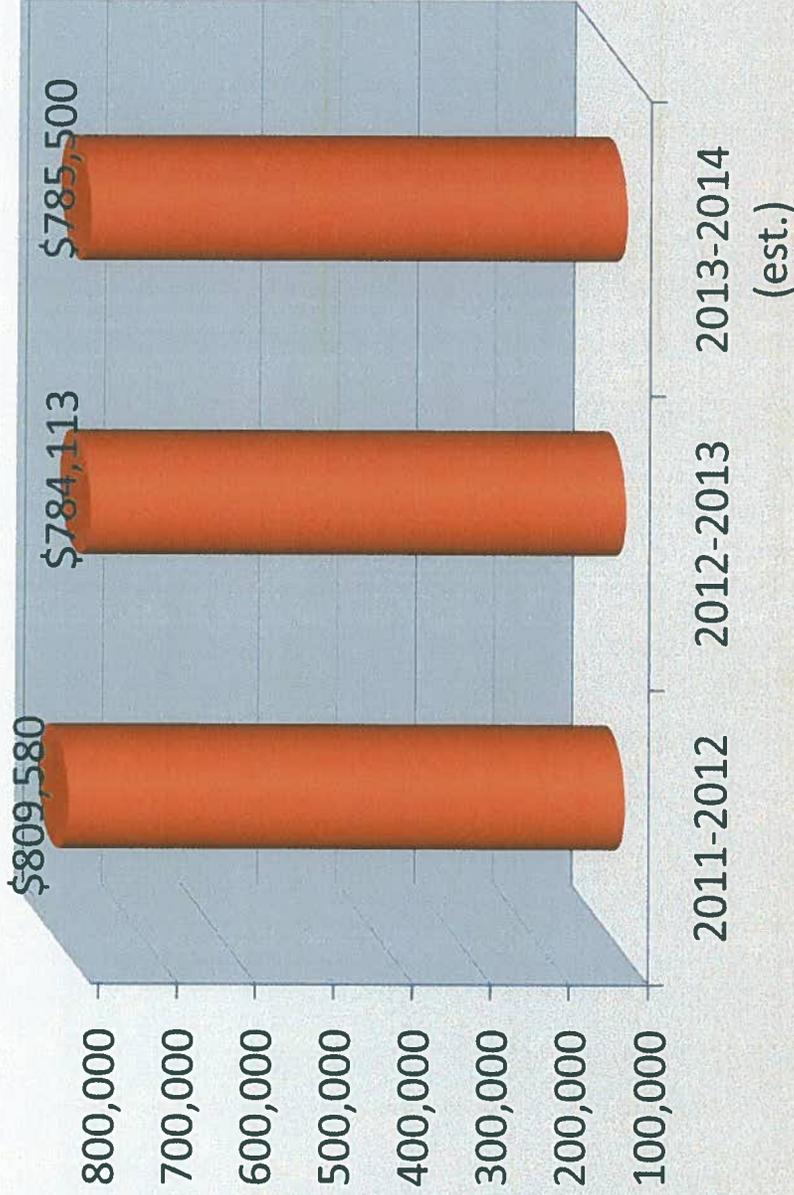
LEGAL SERVICES





LEGAL SERVICES-CRIMINAL CASES





JUSTICE COURT REIMBURSEMENTS

LEGAL SERVICES





»Court Reimbursements

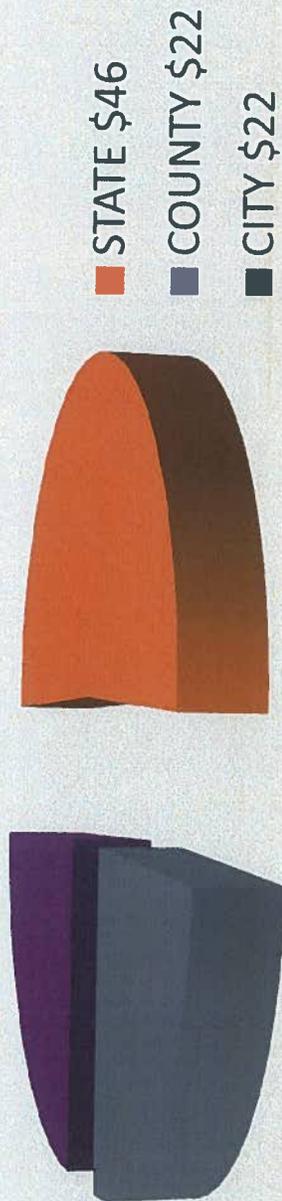
- > Do not cover the City's cost to:
 - + Provide and equip police officers
 - + Cover the cost of prosecution and settlement of cases
 - + Cover the cost of follow-up on plea agreements and pleas in abeyance
 - + Cover the cost of providing public defenders

LEGAL SERVICES





SPEEDING 10 MPH OVER \$50 (\$90 W/SURCHARGES)

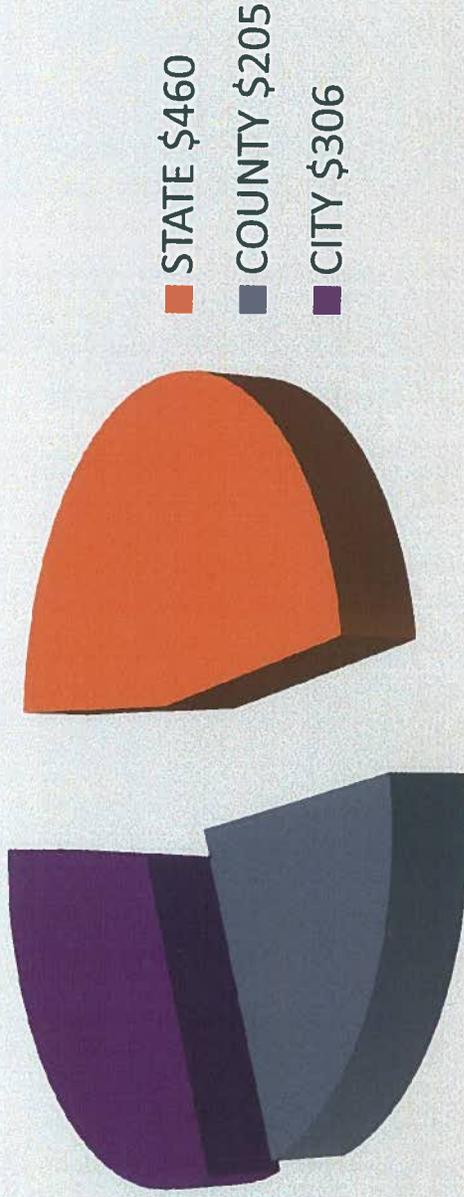


LEGAL SERVICES



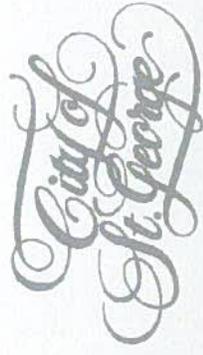


ASSAULT \$1,012 (WITH SURCHARGES)

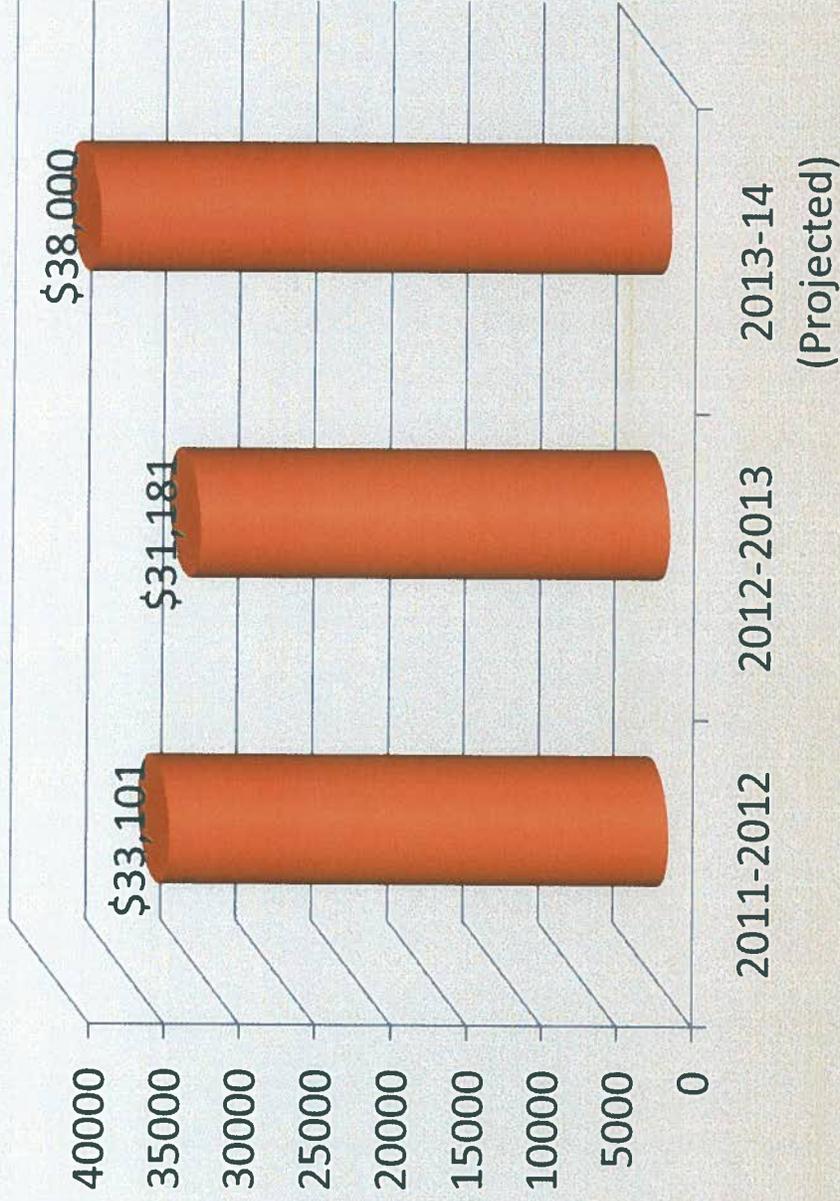


LEGAL SERVICES





Traffic School Reimbursements



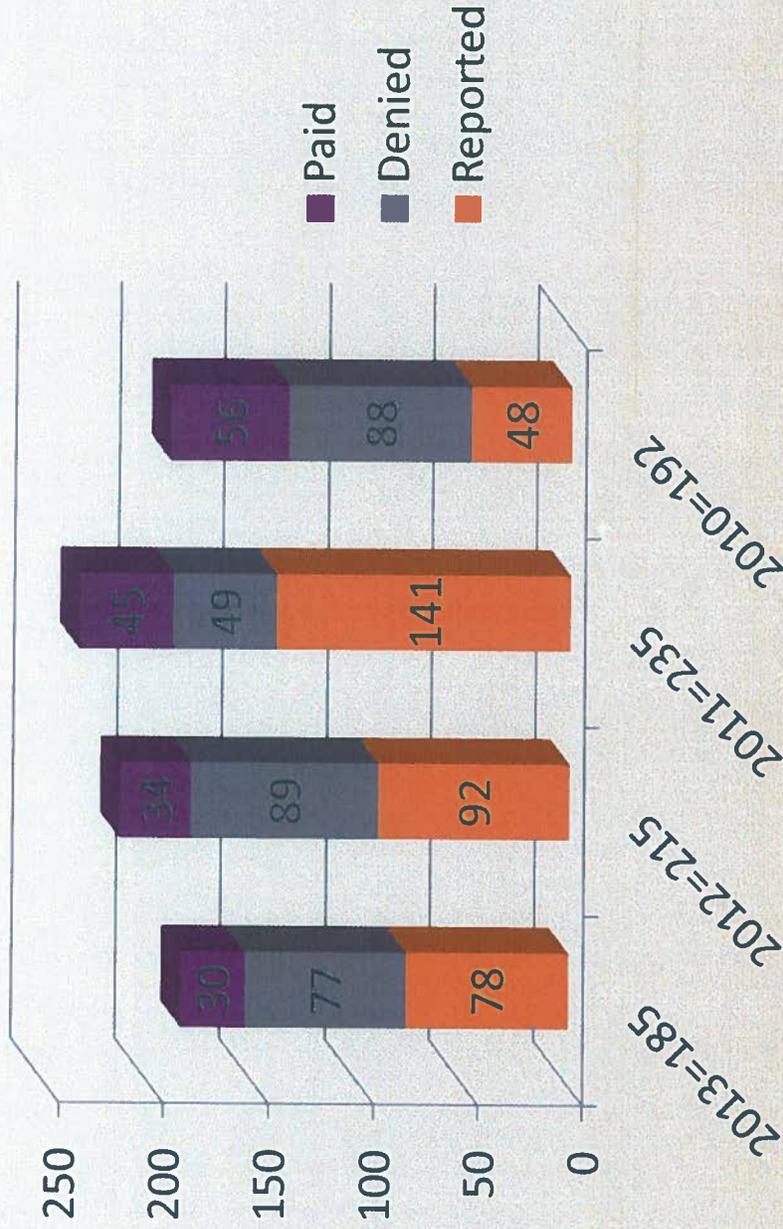
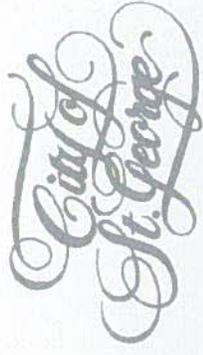
Legal Services





Property	Property-Gas Turbine	Liability-Auto	Liability-General	Crime	Worker's Comp.
\$25,000 SIR	\$500,000 SIR	\$250,000	\$250,000	\$5,000	\$0
\$320,354,156 TIV	\$100,000,000	\$3,000,000	\$20,000,000	Various \$500,000	Per Statute

LEGAL SERVICES-INSURANCE >



LEGAL SERVICES-CLAIMS





» CARINA MACE

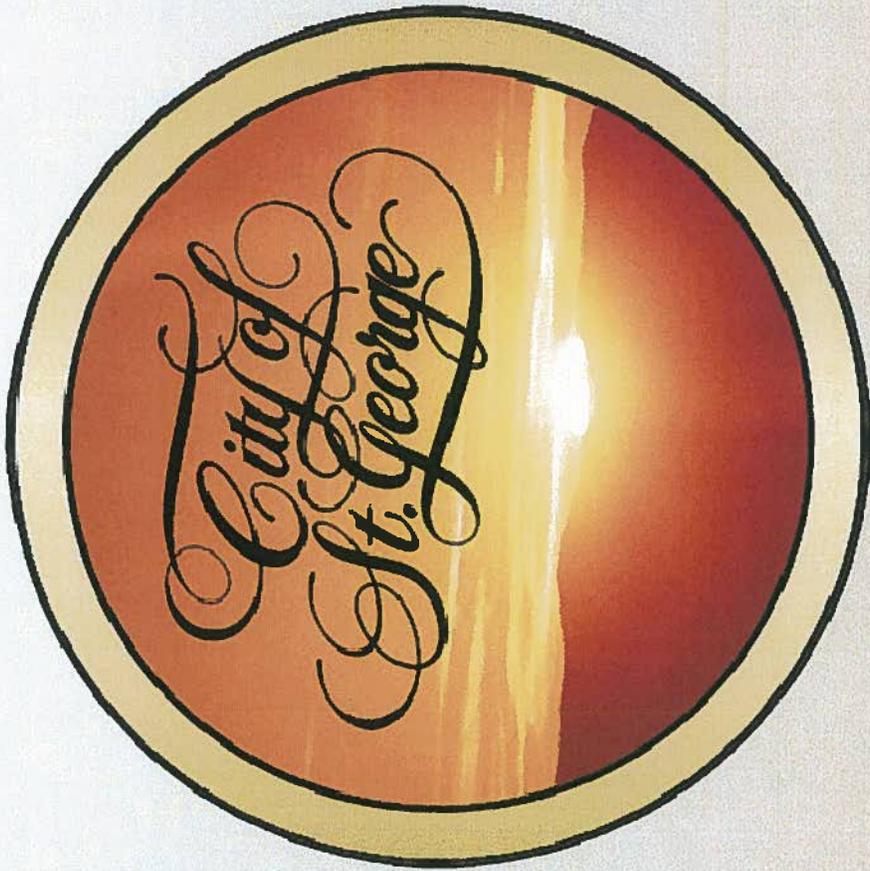
» NICHOLLE SMAELLIE

» CASSANDRA WARREN

» DONNA JOHNSON-Part Time

LEGAL SERVICES STAFF





Administrative Services



Deanna Brklacich
Budget & Financial Planning Mgr.



Connie Hood
Purchasing Manager



Christina Fernandez
City Recorder



Raquel Mortenson
Purchasing Technician II



Jean Wojtyla
Purchasing Tech I (Part - Time)



Lisa Reid
Secretary



City of St. George

BUDGET PROCESS OVERVIEW

1. *Budget* means a plan of financial operations for a fiscal period which embodies *estimates* of proposed expenditures for given purposes and the proposed means for financing them (it's the department's responsibility to review and update rate and fee schedules that affect their programs).
2. Process is governed by State Law and non-compliance can cause the State to withhold funds:
 - Budget must include in tabular form for Revenues and Expenditures:
 - ◊ Prior Year Actual
 - ◊ Current Year Estimate
 - ◊ Next Year's Budget (Dept. Request, City Manager Recommendation, Council Approved)
 - ◊ At least 6-months Current Year Actual (we do 7 months)
 - ◊ Current Year Budget
 - General Fund, Capital Project/Impact Funds, and Special Revenues Funds must be balanced (revenues = expenditures). Enterprise Funds (Water, Energy, Golf, etc.) are not required to be balanced.
 - Budget Message by the City's Budget Officer which is the City Manager.
 - Schedule of Transfers between funds.
 - Recommended Budget is due to Mayor and City Council the 1st regularly scheduled meeting in May.
 - Available for public inspection at least 10 days prior to the adoption of the Final budget (posted to the City's website and E-Net).
 - Hold one Public Hearing (St. George typically has held two Public Hearings in June).
 - Adopt Final Budget no later than June 22nd.
 - Remit to State Auditor's Office within 30 days of Adoption.
3. Statistics for the City:
 - Process takes approximately 29 weeks Jan. to July (busiest months are Feb. through April)
 - 45 Funds comprised of 98 departments and over 2,200 total expenditure accounts
 - 600 full-time employees
 - Current budget is 316 pages
 - Current combined budget is about \$197,500,000
4. Standardized Budget Forms available on the E-Net under **Budget & Finance > Forms & Resources**:
 - Budget Memo
 - Budget Timetable
 - Form Instructions
 - Department Information Form
 - Full-Time Personnel Request
 - General Fund Revenue Worksheets
 - Operating Expense Detail (required for operating accounts ≥ \$50,000)
 - Capital Outlay Detail (who, what, where, when, why/justification)
 - Capital Outlay Summary (prioritize and categorize, re-budget for un-started or partially complete projects *not automatically rolled over*)
 - Budget Openings

5. Recommended Budget and then Final Budget is made available on the City's website and E-net. Each division is "bookmarked" and has the following information presented:
 - Division description, purpose, goals, etc.
 - Summarized Budget Amounts by Full-Time, Part-Time, Employee Benefits, Materials & Supplies, and Capital Outlays
 - Authorized Full-Time Positions, New Positions Requested, and New Positions Approved
 - Capital Outlays Requested and Capital Outlays Approved
 - 5-Year Historical Comparisons
 - Tabular Budget (Prior Year, Current Year, Next Year)

6. Evaluate Performance and Make Adjustments:
 - Monthly Financial Statements prepared and distributed by Phil Peterson, Finance Director, compares actual to budgeted amounts and indicates the percentage available. The Department Heads, Division Supervisors, and Project Managers are responsible for monitoring their budgets.
 - State Law requires that a Budget Opening be approved prior to the encumbrance or expenditure. Budget Opening forms are on the E-net and are generally warranted under the following situations and will be submitted to the Mayor and City Council approximately every 2 months, as needed:
 - ◇ New unforeseen grant and related expenditures (include routine grants in original budget)
 - ◇ Unforeseen Emergency Repairs (exception to having to be pre-approved)
 - ◇ Actual bids exceeded estimates on projects already approved in the budget
 - ◇ Actual revenues exceed estimates (if significant)
 - ◇ Unexpected vendor price increases (if significant impact on budget)
 - ◇ New regulatory requirements (state, federal, etc. if significant impact on budget)
 - ◇ Significant economic changes

7. Common Budgeting Errors or Misconceptions:
 - Intentionally coding an expenditure to the wrong account because the correct account's budget is already over-budget (i.e. coding a weed trimmer purchase to Dues & Subscriptions).
 - Trying to spend the full amount budgeted in fear that the next year's budgeted funds will be reduced. Each year's budget should take a zero base approach.
 - Expecting that unexpended open Purchase Orders for Capital Outlays will automatically be rolled over into the next year's budget.

8. Contact Information: deanna.brklacich@sgcity.org or 627-4004

Responsible Party	Due Date (Week Start)	Jan 2014			Feb 2014			Mar 2014			Apr 2014			May 2014			Jun 2014			Jul 2014							
		1/6	1/13	1/20	1/27	2/3	2/10	2/17	2/24	3/3	3/10	3/17	3/24	3/31	4/7	4/14	4/21	4/28	5/5	5/12	5/19	5/26	6/2	6/9	6/16	6/23	6/30
Budget Manager	1/31/2014	Update forms, timelines, budget memo, instructions																									
HR Director	2/5/2014	Prepare salaries & benefits reports, market change projections, and merit projections																									
Finance Director	2/5/2014	Close Financial Statements for January (Current FY 7-month Actual)																									
Budget Manager	2/12/2014	Prepare dept. budgets for distribution (salaries & benefits, 7 month YTD actual, prior year actual, debt service)																									
Budget Manager	2/12/2014	General Fund Revenue Worksheets posted to the E-Net																									
Department Heads	2/28/2014	Revenue Worksheets reviewed and returned to Budget Manager																									
Department Heads	3/7/2014	General Fund Expenditure Budgets returned to Budget Manager																									
Budget Manager, Finance Director, City Manager	3/14/2014	General Fund Revenue Projections Finalized																									
Department Heads	3/14/2014	Enterprise Fund, Impact Fund, and Other Fund budgets returned to Budget Manager																									
Budget Manager	3/31/2014	Unbalanced General Fund budget delivered to City Manager																									
City Manager	4/7-18/14	City Manager meets with Departments to review budget requests																									
Health Care Committee	4/23/2014	Health Care Committee obtains benefits amounts (health, retirement, disability, etc.)																									
Budget Manager	4/23/2014	Balanced budget delivered to Budget Manager for assembly and printing																									
Budget Manager	5/1/2014	Recommended Budget presented to Mayor & City Council																									
Mayor & City Council	5/2014	Mayor & City Council discusses budgets with Dept. Heads during CC Work Meetings																									
Mayor & City Council	6/5/2014	1st Public Hearing on Recommended Budget																									
Mayor & City Council	6/19/2014	2nd Public Hearing, Adopt Budget (by 6/22)																									
Budget Manager, City Manager	6/22/2014	Certification of Property Tax Rate with County Auditor																									
Budget Manager	6/30/2014	Input Dept. Request, CM, & Approved budgets into Finance System																									
Budget Manager	7/18/2014	Budget transmitted to State Auditor																									

City of St. George

Water Services Department

March 2014

Mission Statement:

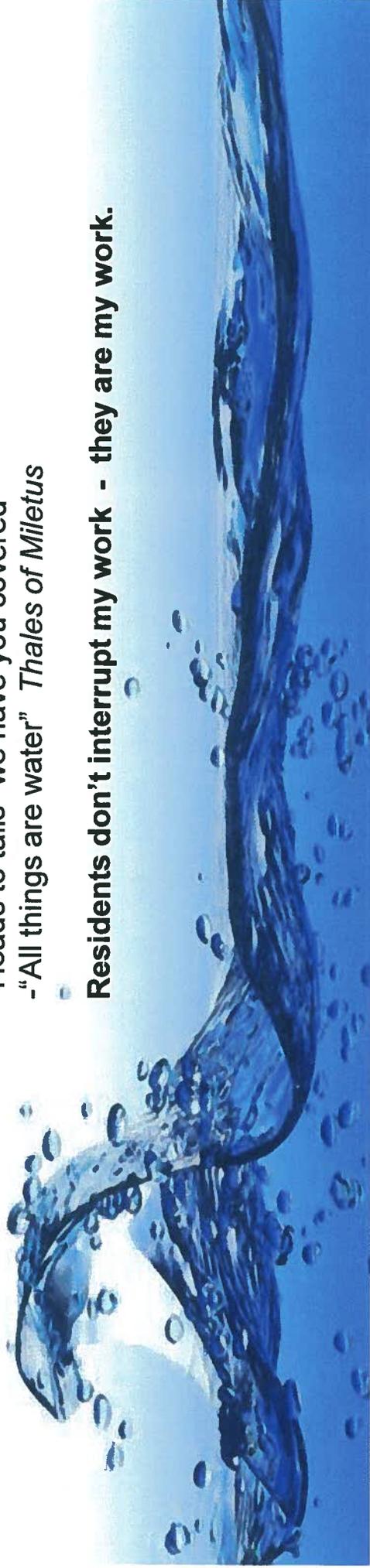
“Our mission is to **effectively** and **efficiently** manage and optimize the complete water cycle for the City of St. George. This cycle begins with the source of both drinking and irrigation water, treatment of water to meet regulations, distribution and conservation of the water, collection of the wastewater and treatment so the water can be reused and returned to the beginning of the cycle or to the environment.

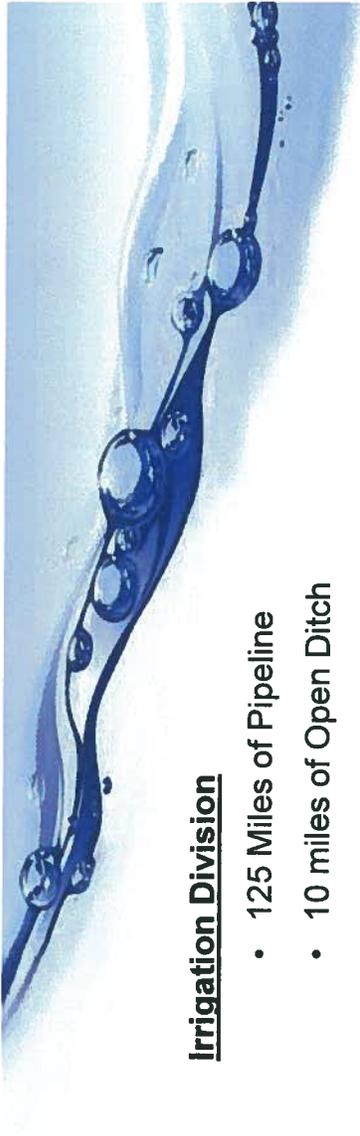
Our greatest concerns are providing water of high enough quality and quantity to enhance the health, environment, and enjoyment of the community.”

Mottos:

- We treat both ends
- Heads to tails- we have you covered
- “All things are water” *Thales of Miletus*

Residents don't interrupt my work - they are my work.





Water Services Department Info:

Water Distribution Division

- 700 Miles of Pipeline
- 5,300 Fire Hydrants
- 15,500 Valves
- 22 Tanks (58 MGal Storage)
- 16 Pump Stations
- 23 Wells
- Supply ~10B Gal annually (30,800 AF)
- Peak ~ 48 MGD

Wastewater Collections Division

- 415 miles of Pipeline
- 10,000 SHM's
- 10 Lift Stations
- Inverted Syphon
- Each Sewer line is visually inspected (video) and cleaned (high pressure jet) every 18 months

Irrigation Division

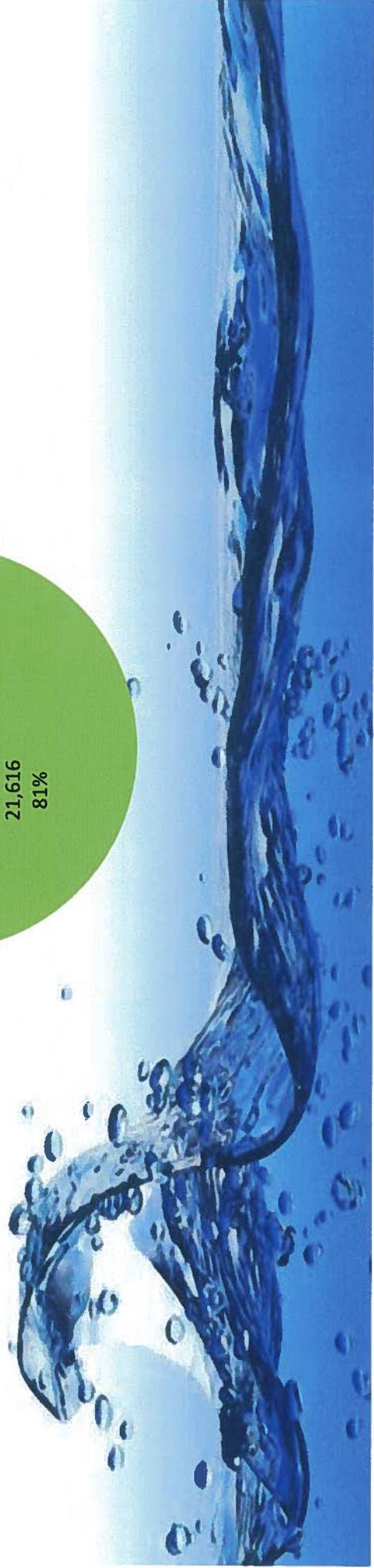
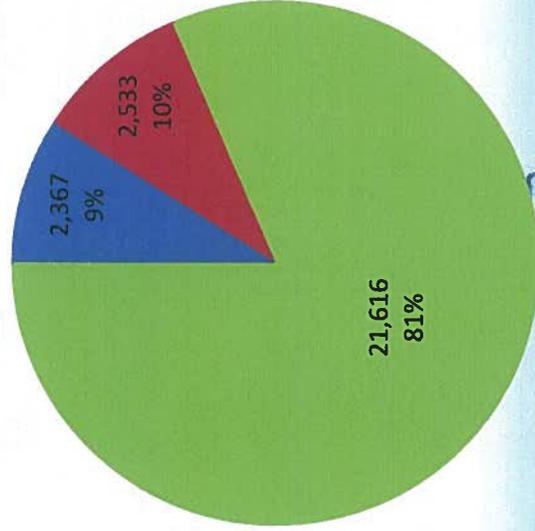
- 125 Miles of Pipeline
- 10 miles of Open Ditch
- 15 Ponds / Tanks
- 17 Wells
- 15 Pump Stations
- Share Holders in (8) Private Irrigation Companies

Wastewater Treatment Division

- Treats wastewater from St. George, Ivins, Santa Clara, and Washington
- Averages ~ 10 MGD
- Capable of producing 7 MGD reuse water
- 16,000 tons of sludge hauled to landfill annually

Culinary Water Source (Acre-Ft) 2013

■ Groundwater Wells ■ Springs ■ Regional WTP



Water Services Department Core Management Team



Scott Taylor
Water Services
Director



Cheryl Navas
Administrative
Professional



Rene Fleming
Conservation
Coordinator



Kirk Klotz
Water Distribution
Manager



Kade Bringhurst
Tech. Services Special
Project Manager



Ben Ford
Wastewater Manager



Nolan Gardner
Water Distribution
Superintendent



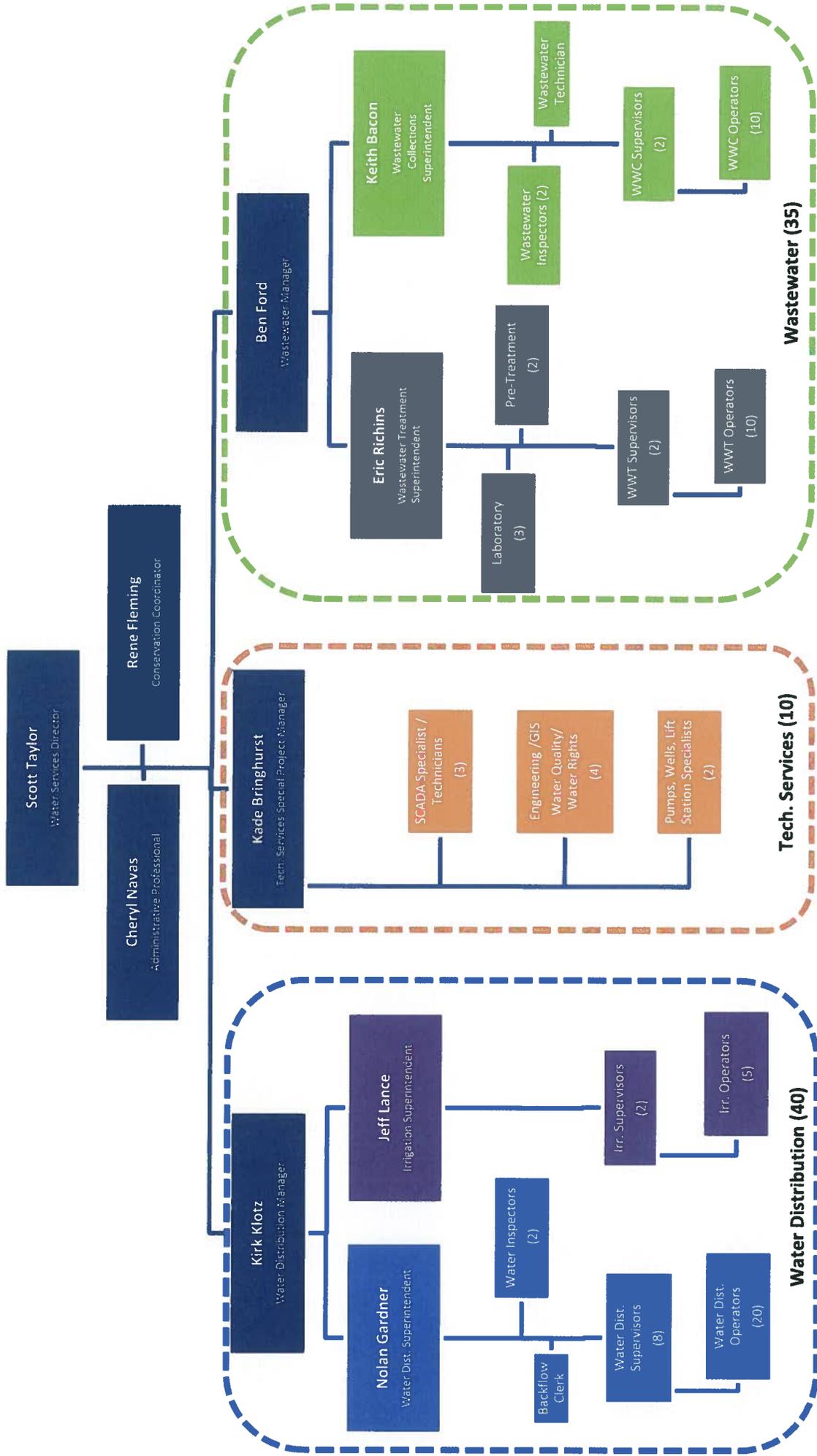
Jeff Lance
Irrigation
Superintendent



Keith Bacon
Wastewater
Collections
Superintendent



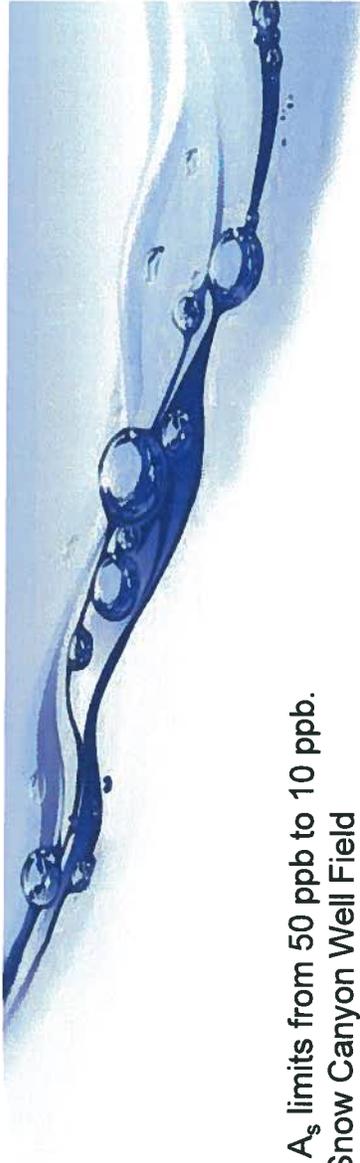
Eric Richins
Wastewater
Treatment
Superintendent



Wastewater (35)

Tech. Services (10)

Water Distribution (40)



Challenges:

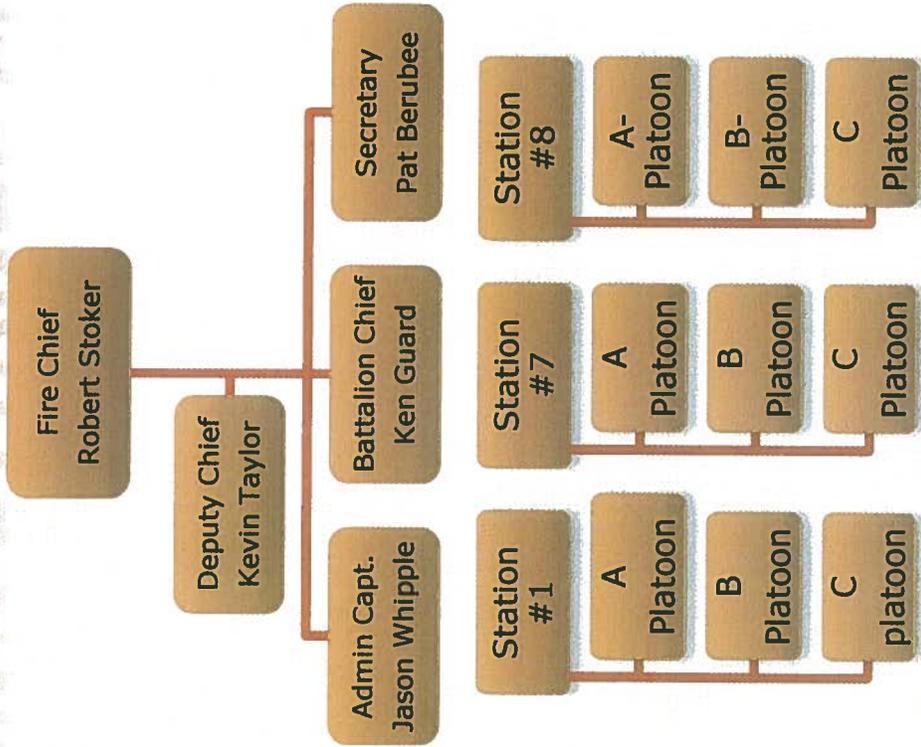
- EPA Regulations-
 - Increased testing requirements
 - Revised Arsenic Rule ~ 2005- Changed A_s limits from 50 ppb to 10 ppb.
 - Effected Gunlock Well Field and Snow Canyon Well Field
 - Gunlock water (\$0.30/1,000) replaced with Regional water (\$1.00/1,000)
 - Future A_s plant ~ \$18M
- Nutrient Removal Requirements for WWTP
 - Currently being considered. Most likely announce within the next few weeks.
 - “across the board” requirements, regardless of condition of receiving water body
 - Tier 2- retrofit existing ditches, modify process ~\$15M
 - Tier 1- Chemical Polishing treatment ~\$30M
- Aging Infrastructure-
 - Much of the “down town” water system is undersized and failing (Culinary, Irrigation, and Wastewater). While we are systematically replacing lines each year, main line replacement needs to be accelerated.
- Efficiency / Technology-
 - CityWorks- Computer Work Order Management System
 - SCADA- Supervisory Control and Data Acquisition system

ST. GEORGE FIRE



CUSTOMER SERVICE

ORGANIZATIONAL CHART



**FULL-TIME
STAFF**
32

**RESERVE
STAFF**
70





FIRE CHIEF
ROBERT STOKER



DEPUTY CHIEF
KEVIN TAYLOR



BATTALION CHIEF
KEN GUARD



ADMINISTRATIVE
CAPTAIN
JASON WHIPPLE



SECRETARY
PAT BERUBEE



SHIFT CAPTAIN
DAVE SLACK



SHIFT CAPTAIN
ROBERT HOOPER



SHIFT CAPTAIN
TYLER TALBOT



SHIFT CAPTAIN
DARREN JIMLAY



SHIFT CAPTAIN
DAN CAZIER



SHIFT CAPTAIN
JERRY TISCHNER



SHIFT CAPTAIN
RICK NELSON



SHIFT CAPTAIN
COTY CHADBURN

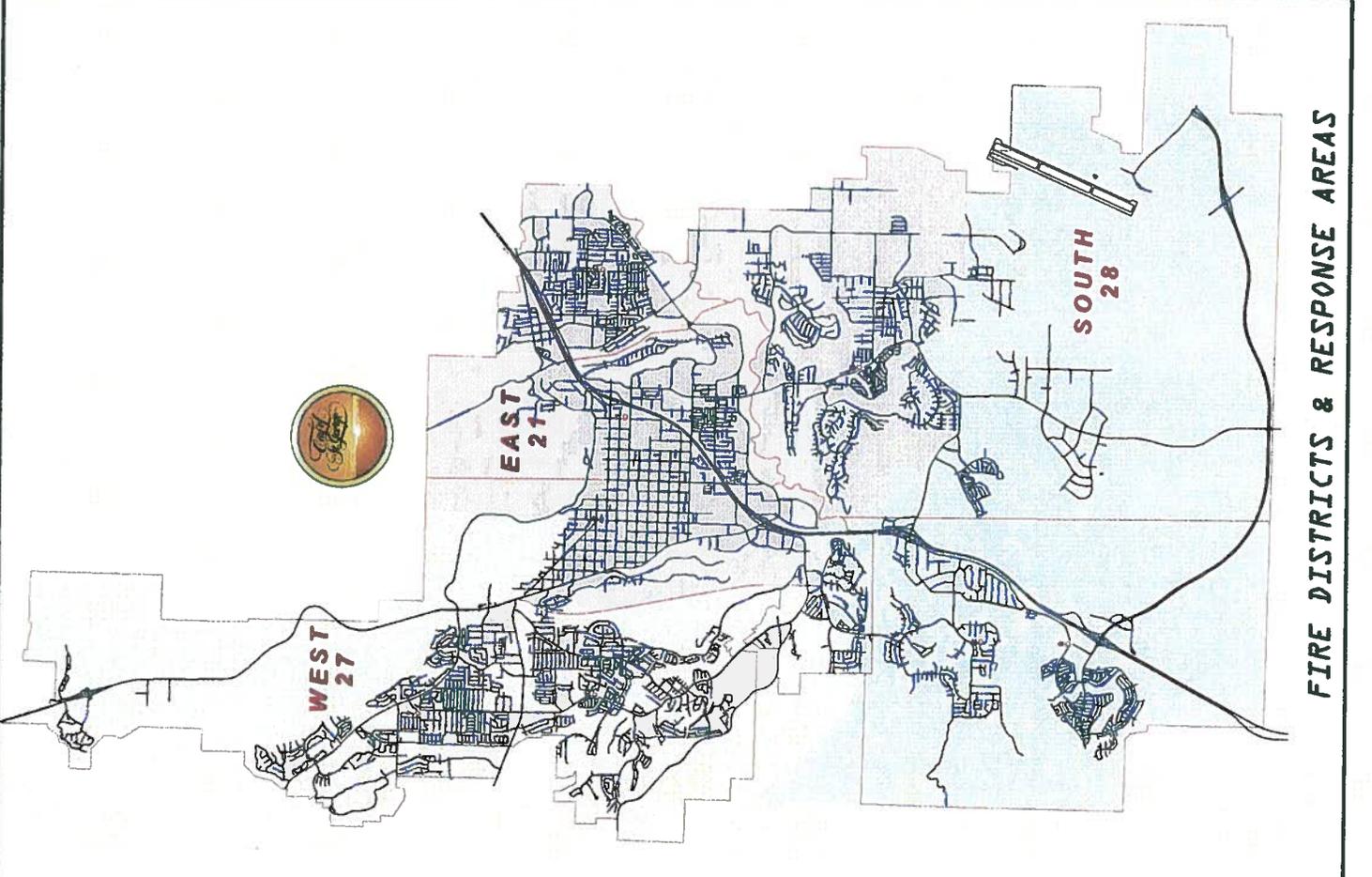
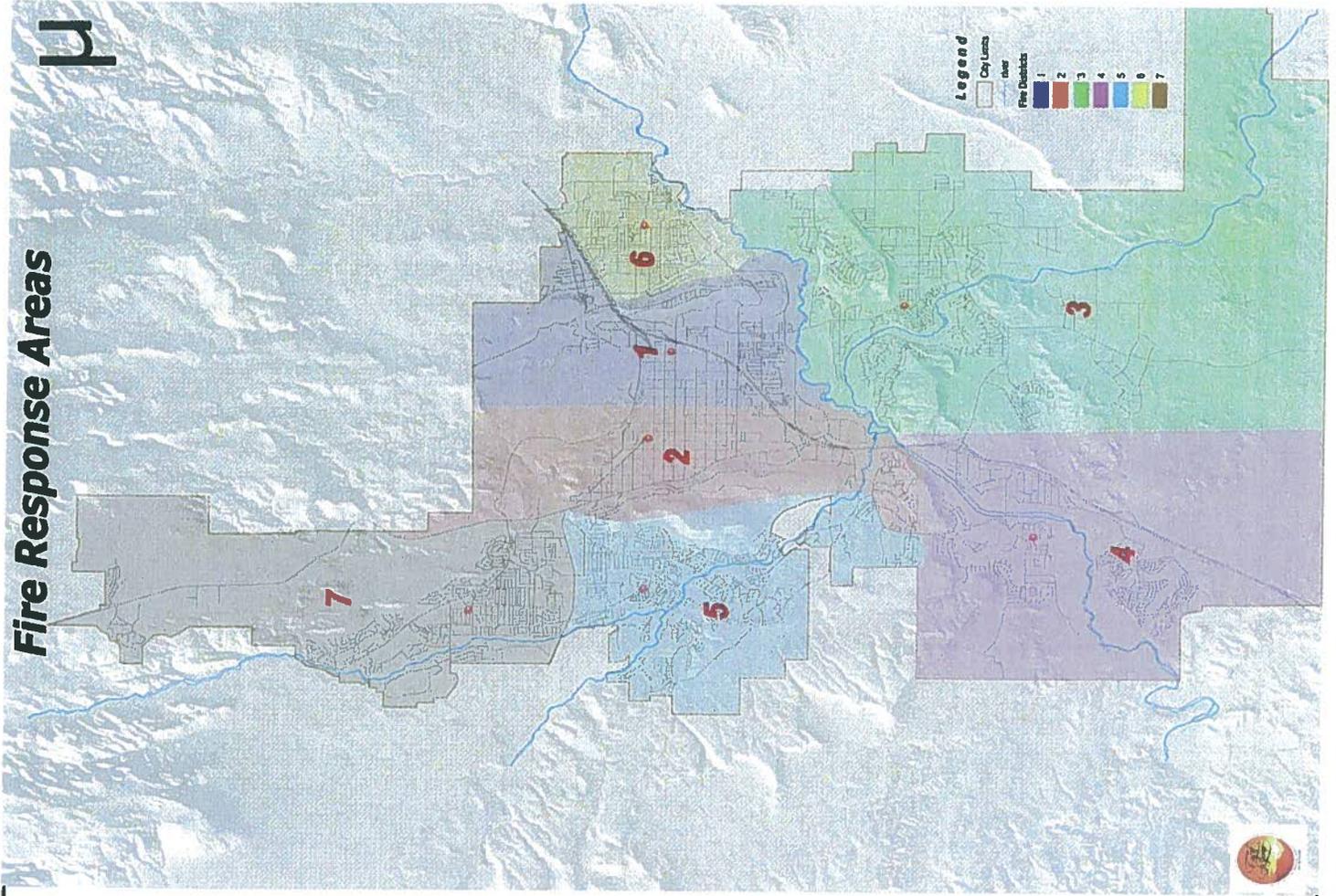


SHIFT CAPTAIN
SAM LARSON



Fire Response Areas

14



Incident Response & per day

Year	Total # Incidents	Average # Incidents Per Day
2011	4,423	12
2012	5,047	14
2013	5,382	15
2014 (3/24/14)	1,277	17



# of Incidents per Station per year.			
Station	2011	2012	2013
Station 1	2,471	2,710	2,911
Station 7	1,185	1,425	1,485
Station 8	767	912	986

STATION #1 51 S. 1000 E.



STATION #2 155 N. MAIN



STATION #3 2315 S. RIVER RD



STATION #4 3521 S. MANZANITA



STATION #5 100 N. DIXIE DR.



STATION #6 184 N. 2450 E.



STATION #7 1912 W. 1800 N.



STATION #8 1096 W. BLUEGRASS WAY



FIRE STATIONS

Fire Department Apparatus

Engines- 8

Reserve Engines- 3

Ladder Trucks- 2

Brush Trucks- 6

Squad- 3

Utility vehicles- 8

Trailers- 5



ENGINE 21



ENGINE 26



ENGINES

ENGINE 27



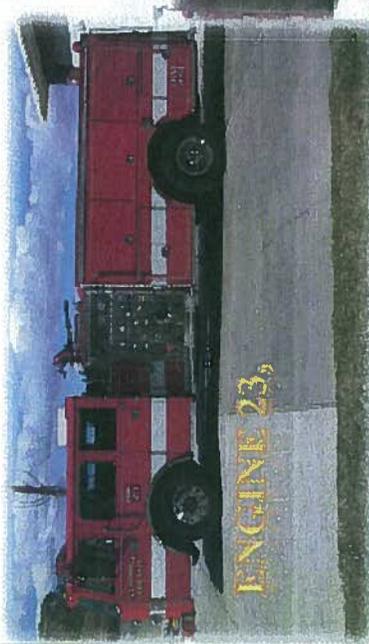
ENGINE 25



ENGINE 22



ENGINE 23



ENGINE 24



ENGINE 28



RESERVE FIRE ENGINES



1974 ENGINE 210



1948 AARON FOX,



1936 STUDEBAKER



1979 ENGINE 212



1960 ENGINE 211



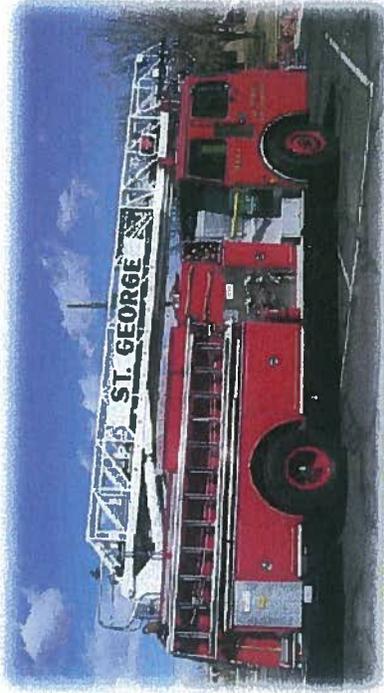


LADDER 27



LADDER TRUCKS & SQUADS

SQUAD 21



LADDER 21



SQUAD 25



SQUAD 26

BRUSH TRUCKS

BRUSH 21

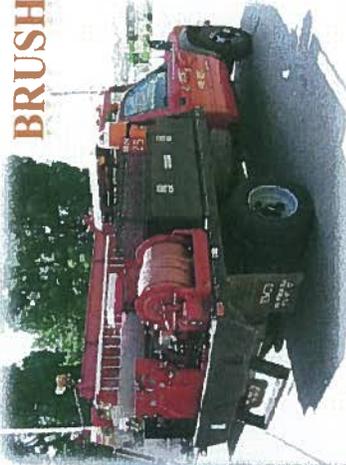


BRUSH 24

BRUSH 26



BRUSH 25



BRUSH 27



BRUSH 23

TRAINING PROGRAMS



- Firefighter I & II
- Emergency Medical Technician
- Hazardous Materials

Awareness-Operations - Technician

- Apparatus Driver Operator

Pumper - Aerial

- Wildland Firefighter I & II

- Fire Officer I

- Fire Inspector I
- Fire Instructor I
- Fire Investigator I
- Rescue Technician

Rope - Trench - confined space

- EMS instructor
- CPR & AED instructor
- Public Information Officer
- Bomb Technician



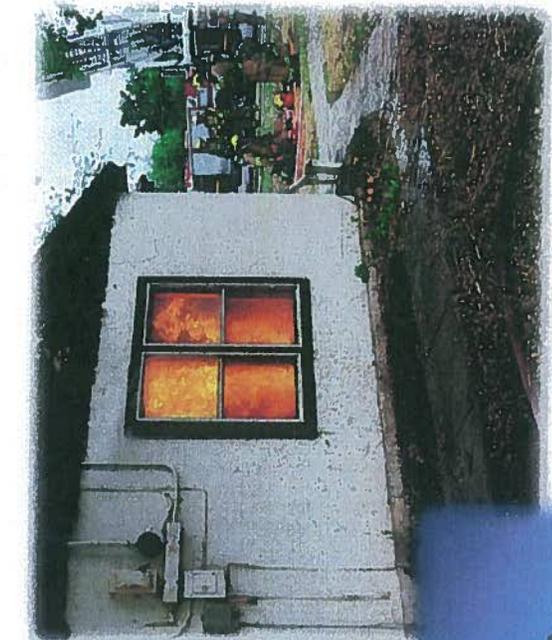
Total department

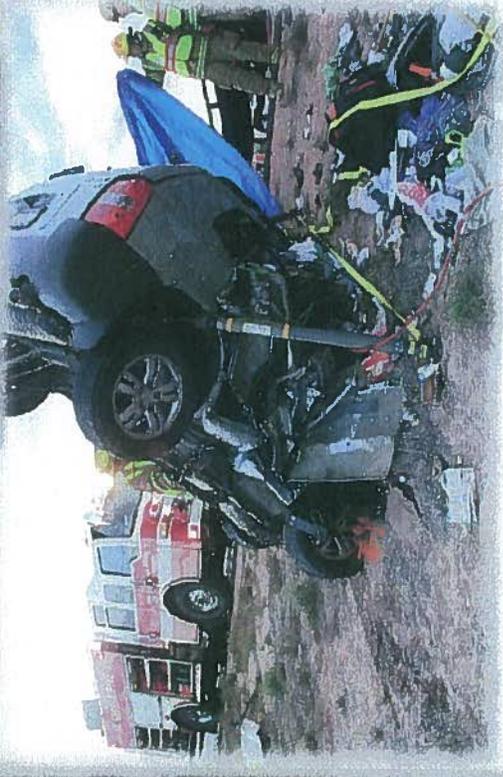
training hours
8734.15

2013

52 Utah State Fire Certification

FIRE CALLS





EMERGENCY MEDICAL TECHNICIANS

SOUTHWEST

REGIONAL RESPONSE TEAM

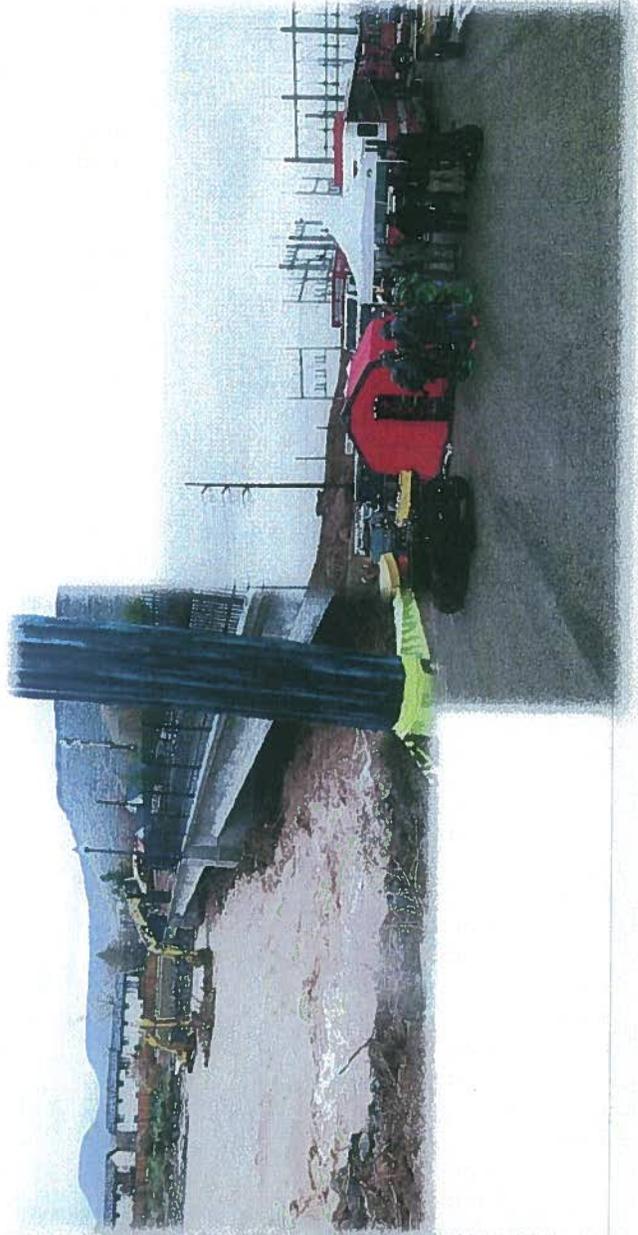
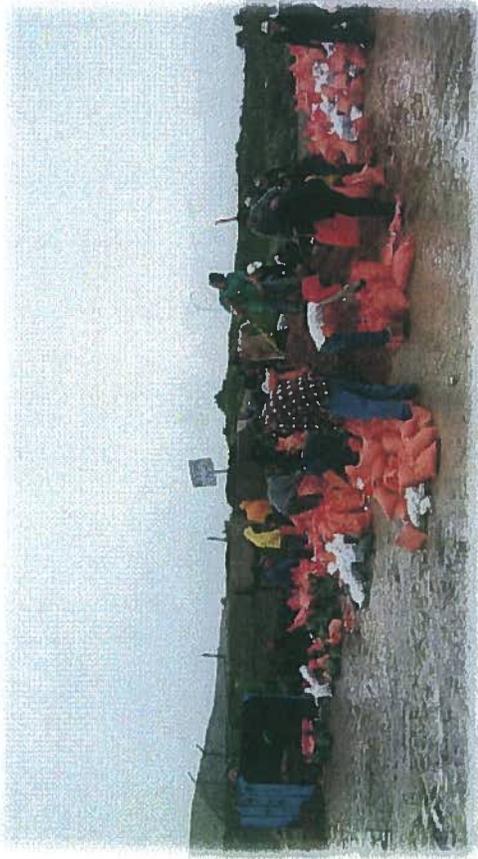


Hazardous Materials
Confined Space
Rope Rescue
Trench Rescue
Hazardous Device



2002 to 2014

Emergency Management



CITY WIDE AED PLACEMENT

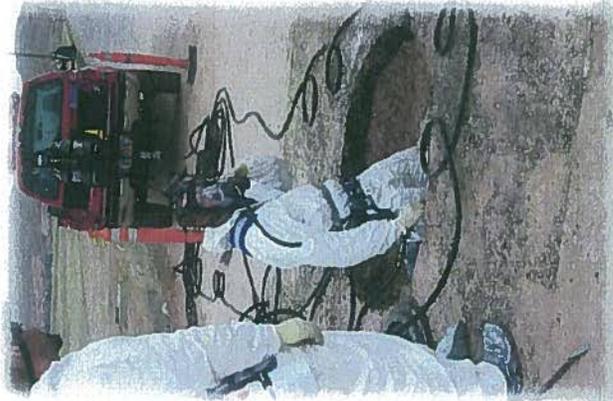
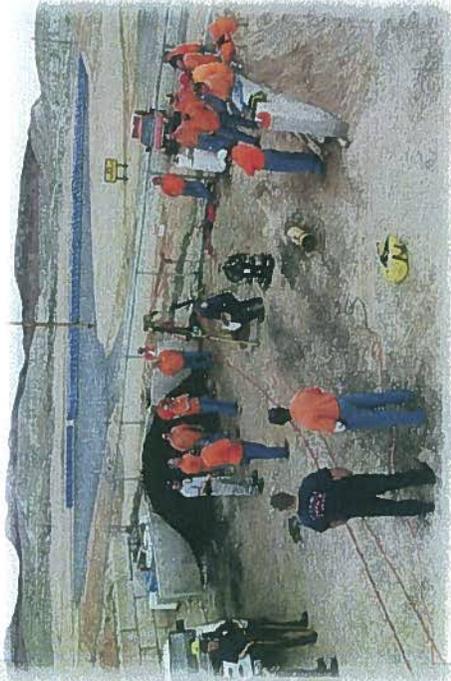
2004 to 2014

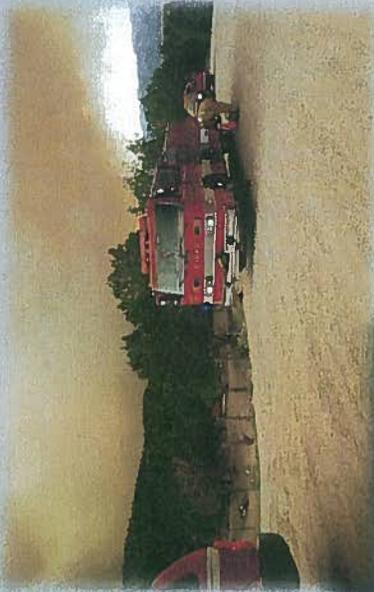


CITY WIDE CPR & AED TRAINING PROGRAM

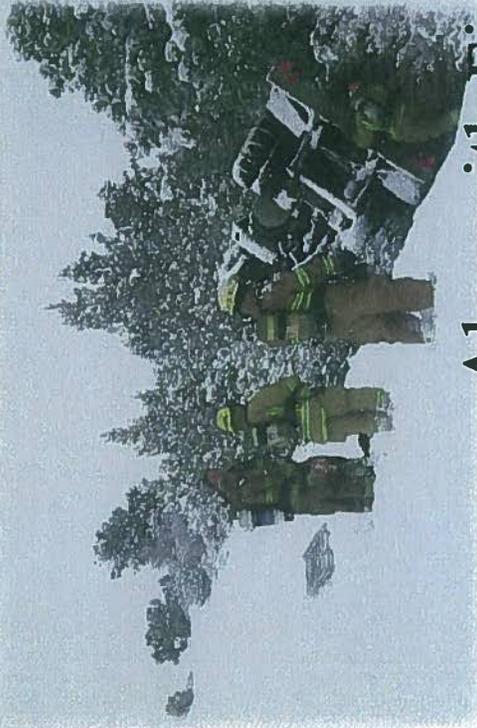


ASSISTING OTHER CITY DEPARTMENTS





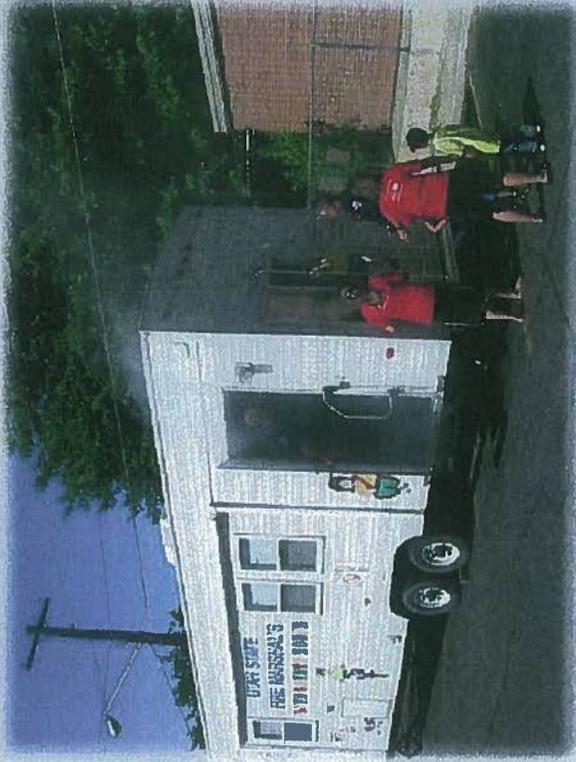
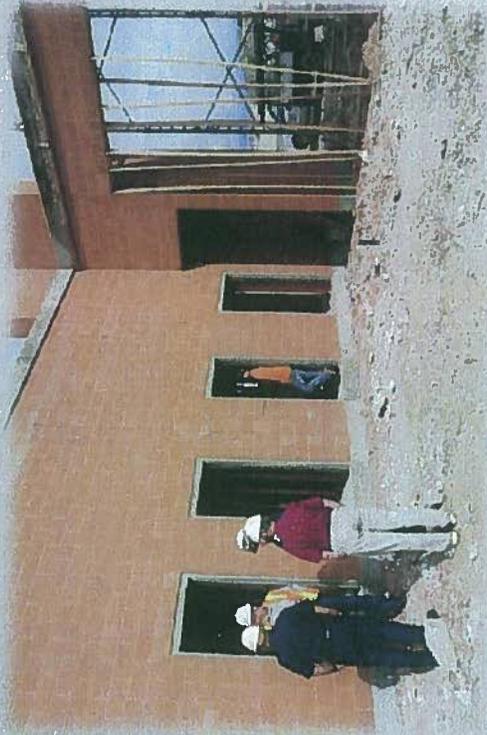
Mutual aid
 agreements with all
 agencies in
 Washington County



Also with Five
 County Region &
 State wide

MUTUAL AID TO OTHER FIRE DEPARTMENTS

Fire Prevention





St. George City Fire Department



MISSION STATEMENT



THE PROTECTION AND PRESERVATION OF LIFE, PROPERTY, AND THE ENVIRONMENT FROM FIRE, AND DISASTER, WHETHER IT BE NATURAL OR MAN MADE, AND OTHER EMERGENCY SITUATIONS THAT THE FIRE DEPARTMENT MAY RESPOND TO.

THROUGH AGGRESSIVE TRAINING, FIRE PREVENTION AND COMMUNITY PROGRAMS AND WITH A POSITIVE ATTITUDE TOWARDS SAFETY, CUSTOMER SERVICE AND COMMUNITY RELATIONS.

St. George Police Department

Chief Marlon Stratton

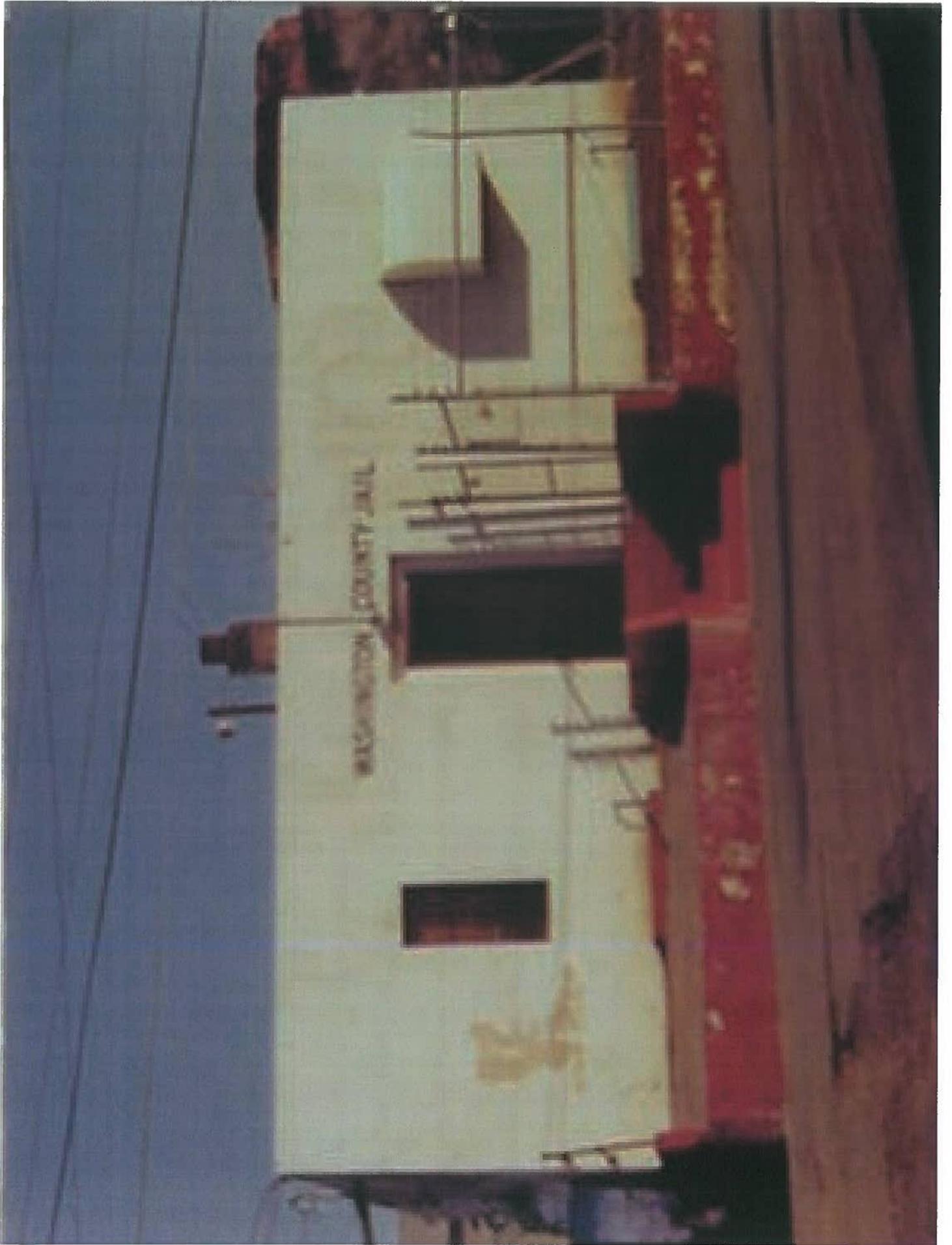


1974. The window on the lower left is where the Department was housed.



In 1974 the Police Department moved to this addition to the City Office Building on North Bluff Street. This was the **14** **9:45 AM** building that was ever build mainly for a police Department.





Our Mission

Our Mission is to work with the citizens of St. George to preserve life, Maintain Human Rights, Protect Property, and Promote Individual Responsibility and Community Commitment.

Department Leadership



Marlon
Stratton



Rich
Farnsworth



Chaplin
David
Nutter



Cindy
Flowers



Scott
Staley



Kyle
Whitehead



Mike Giles



Gordon
McCracken

Patrol Division

- The Patrol Division is commonly the first responder to incidents requiring police assistance.

Patrol Division



Captain
Scott
Staley



Sergeant
Tyler
Cowan



Lieutenant
Joe
Hartman



Lieutenant
Thad
Feltner



Lieutenant
Doug
Sargent

Patrol



Lieutenant
Joe
Hartman



Sergeant
Spencer
Holmes



Sergeant
David
Williams



Squad of 7
Police
Officers



Squad of 7
Police
Officers

Patrol



Lieutenant
Thad
Feltner



Sergeant
Al Gilman



Sergeant
Rich
Triplett Jr.



Squad of 7
Police
Officers



Squad of 7
Police
Officers

Patrol

Lieutenant
Doug
Sargent



Sergeant
Jeff
Bahlman



Sergeant
Wade
Johnson



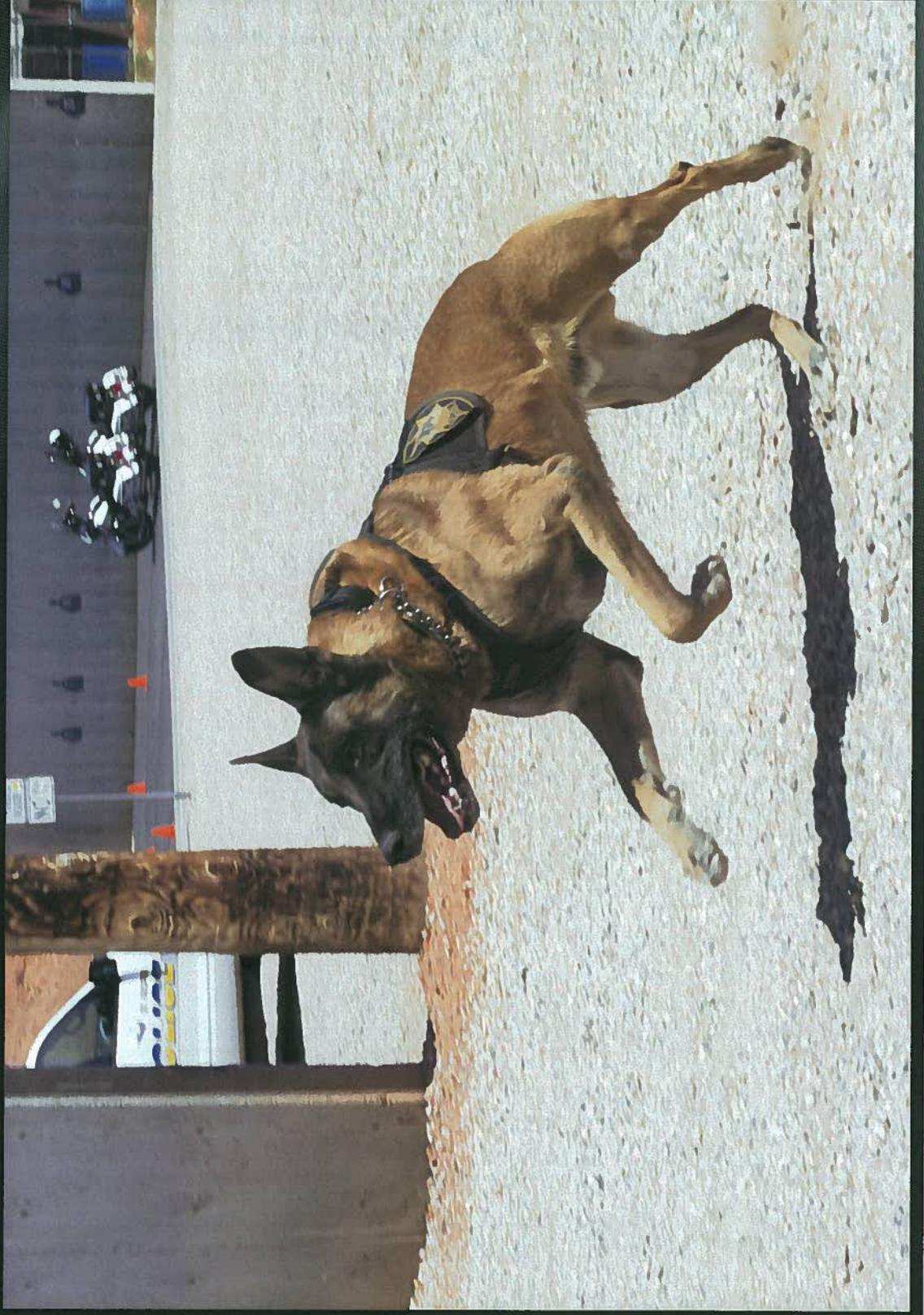
Squad of 7
Police
Officers



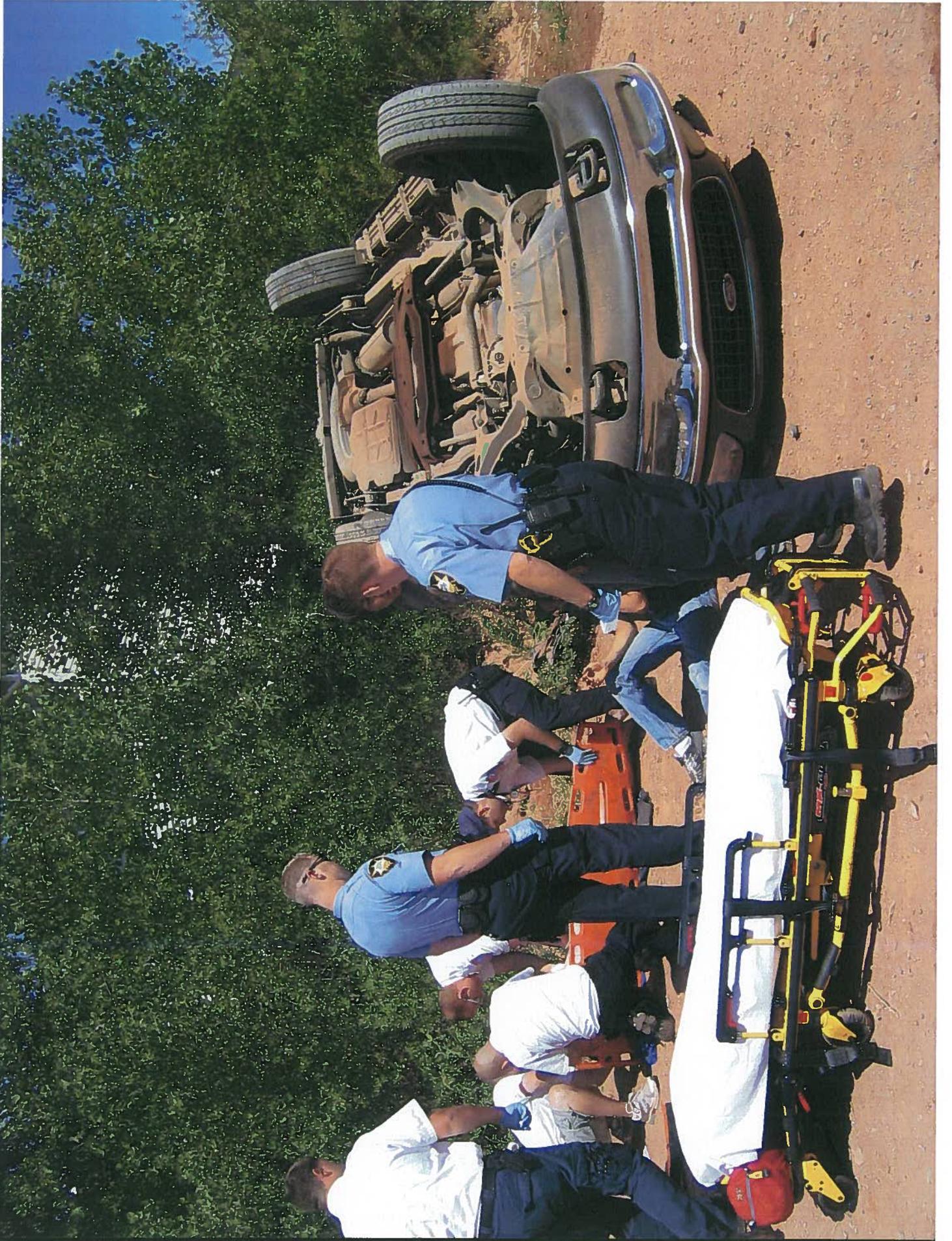
Squad of 7
Police
Officers

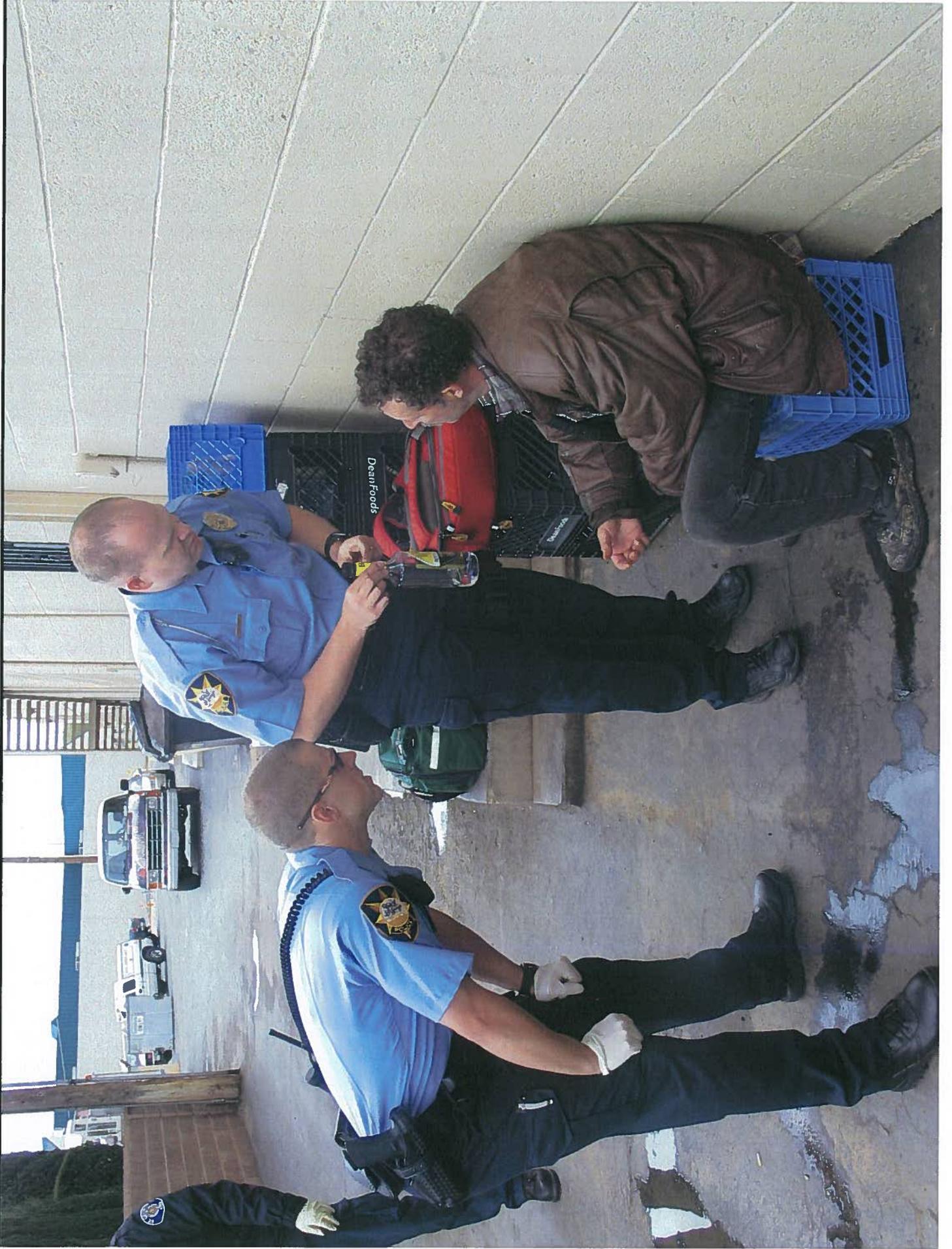


Patrol K 9



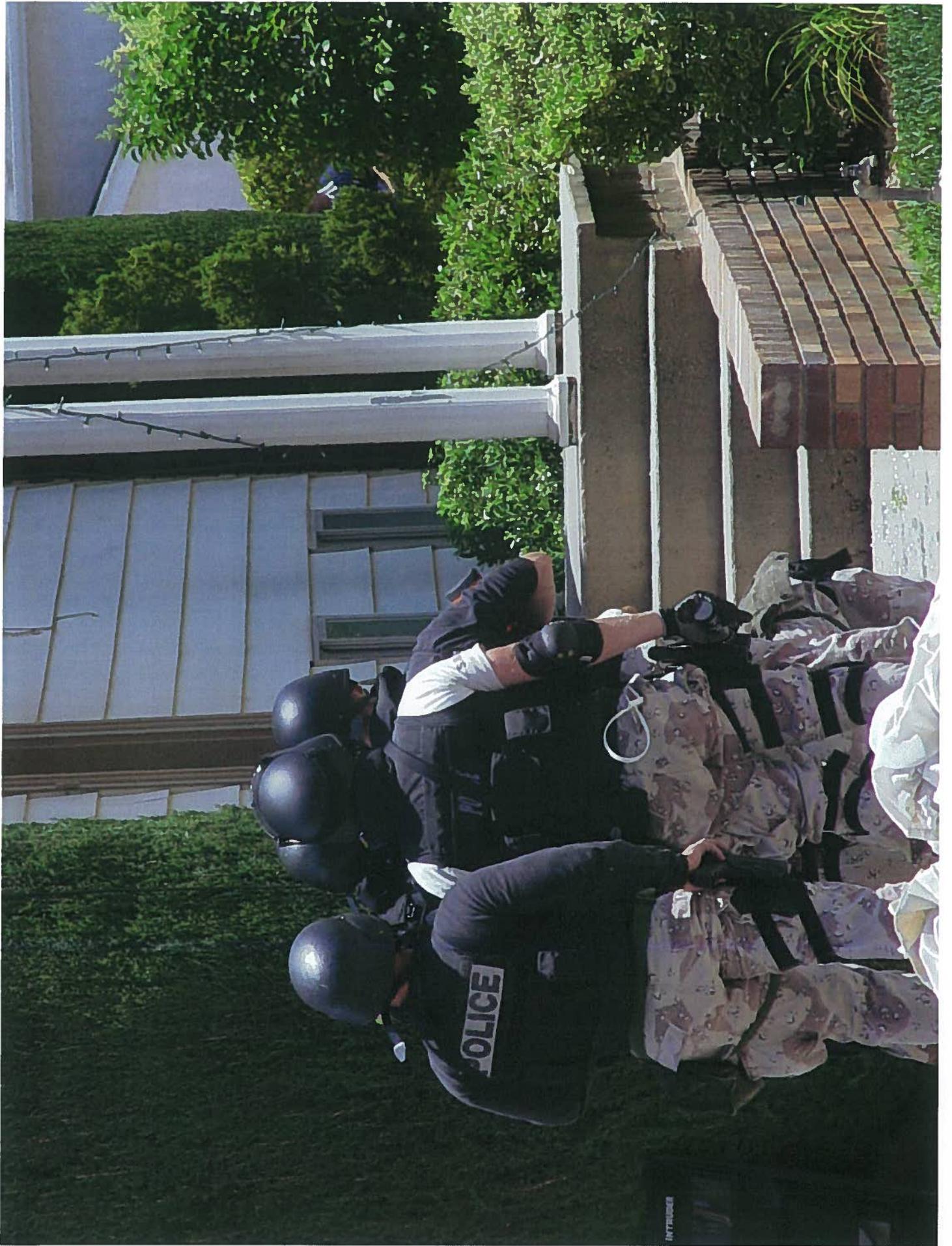






Dean Foods

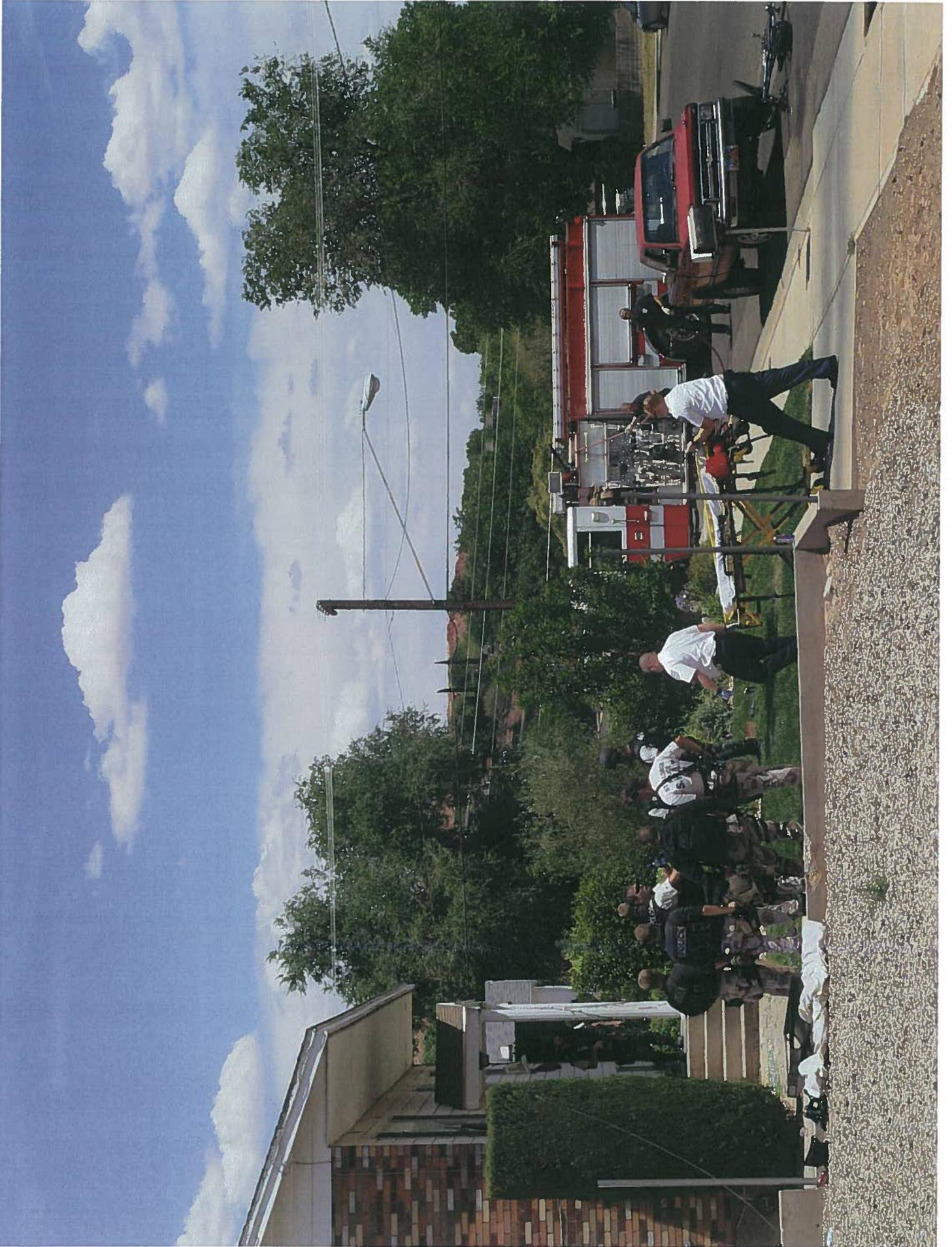






Negotiators





Community Action Teams (CAT)

CAT TEAM	CITIZEN REPRESENTATIVE	ADDRESS	PHONE	COUNCIL REPRESENTATIVE	POLICE OFFICER
HOLMES 1/3	Tad Derrick - 1				Det. Bergquist
	JoEllen Layne - 3				Det. Manzer Ofc. Matik
JOHNSON 2/4	Julie Blake - 2				Det. Minnick
	4 vacant				Det. Dunbar Ofc. Carson
GILMAN 5/7	Don Pendleton - 5				Det. Bergquist
					Det. Ence
	Brad Norman - 7				Ofc. Brown
					Ofc. J. Thompson
WILLIAMS 6/8	Dee Owens - 6				Det. Minnick
	8 vacant				Det. Wilson Oc. Schimbeck Ofc. Williams
TRIPLETT 9	Jay Rosenblum - 9				Det. Taylor
					Ofc. S. Linton Ofc. Bithell
BAHLMANN 10	Karen Jorgenson - 10			Gil Almquist	Det. Olmstead
					Ofc. Pitcher Ofc. Spencer

Honor Guard



Special Olympics Torch Run



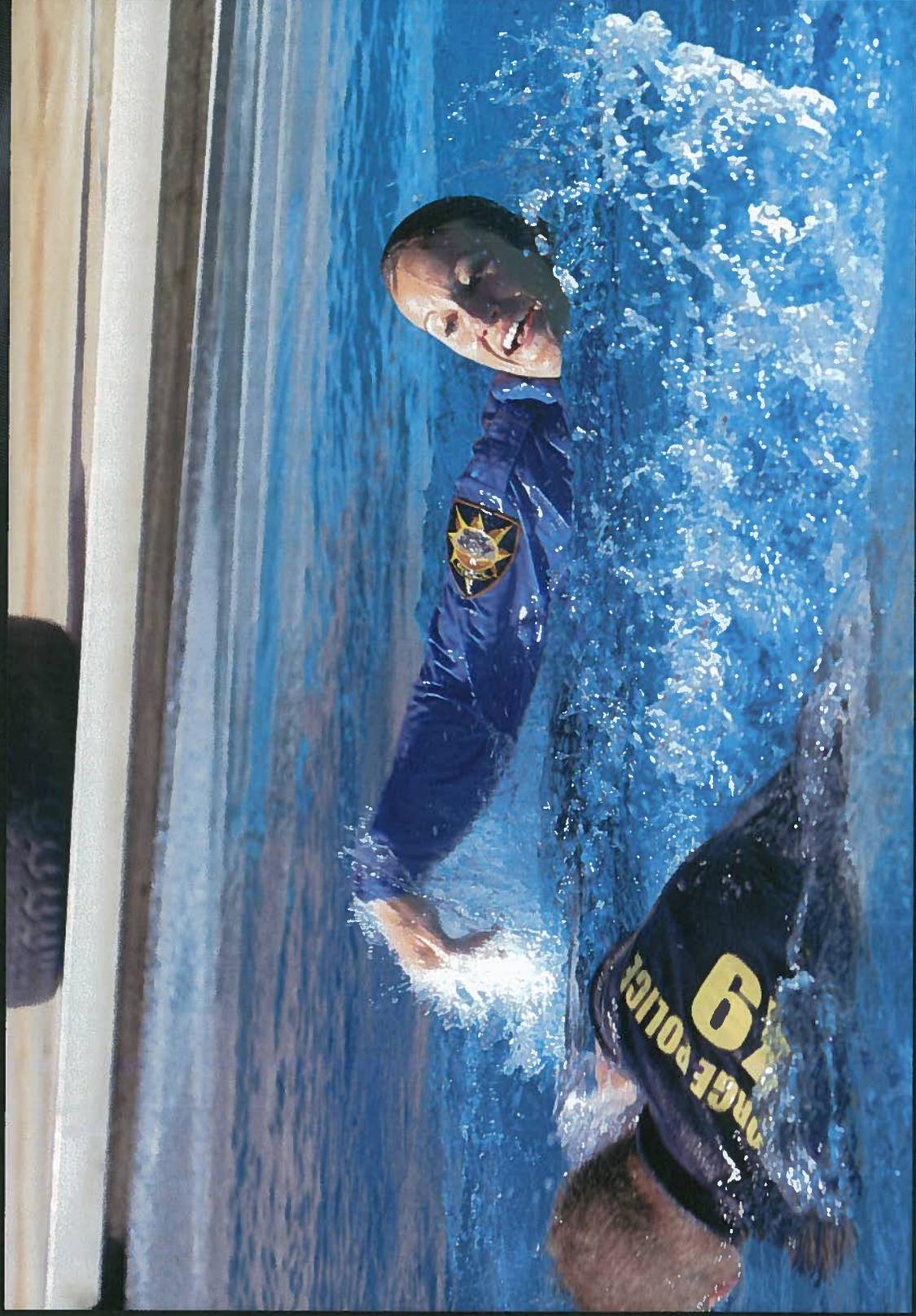
Special Olympics Polar Plunge



Special Olympics Polar Plunge



Special Olympics Polar Plunge





Investigations Division



Detectives



Adam
Olmstead

Sex
Crimes



Choli
Ence

Crimes
against
persons



Josh
Wilson

Property
Crimes



Brandon
Dunbar

Pill
Crimes



Terry
Taylor

Fraud
Crimes



John
Manzer

Sex
Crimes



Wyatt
Miles

Fraud
Crimes

Victim Services

When someone is a victim of a crime they are often left with a lot of questions.

What is next? Is my offender in jail? Will I have to testify? Do I have to go to court? What is the difference between a statement and a victim impact statement?

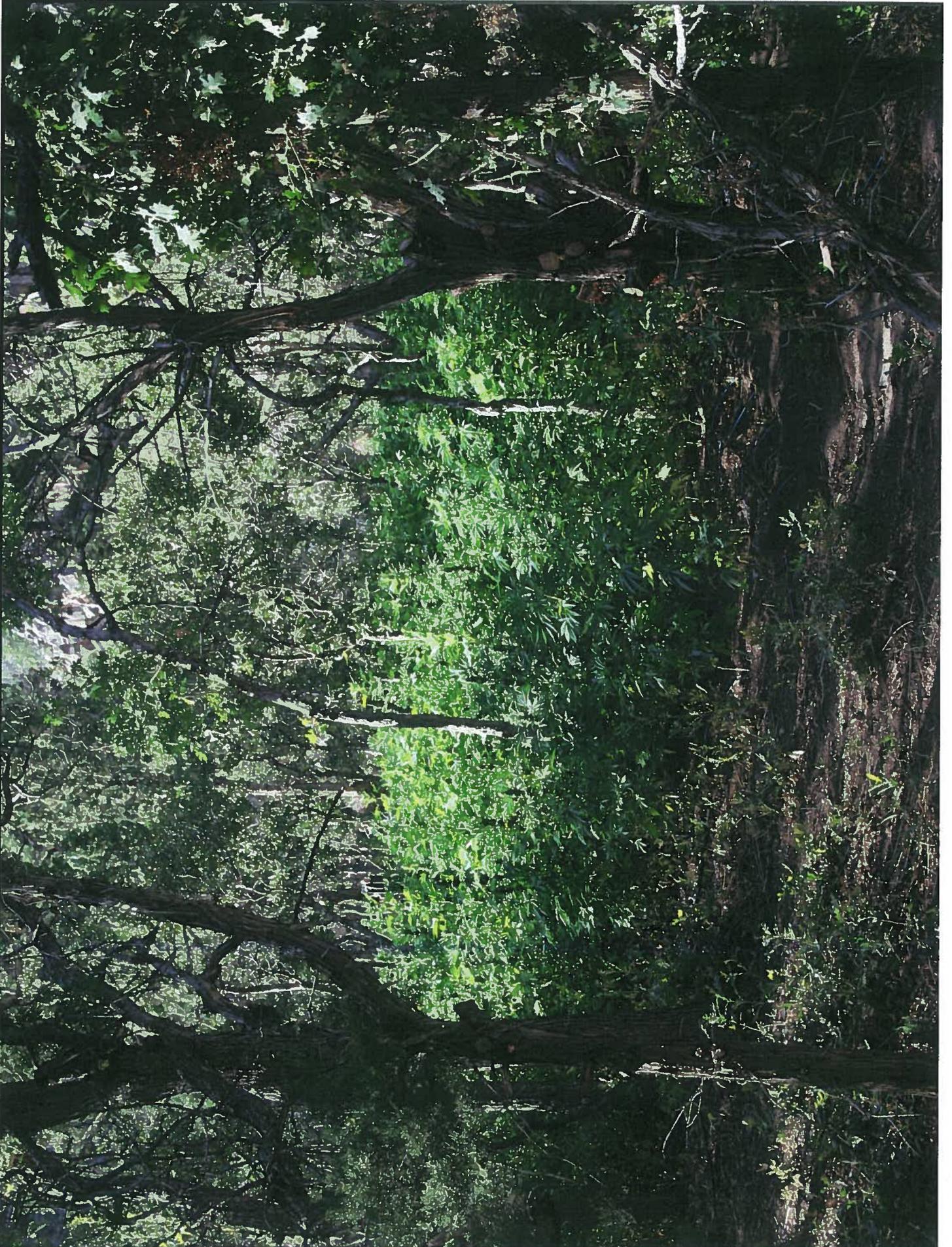
How many times will I be called to testify? How can I afford to stay in my home now that partner is in jail? Do I have to press charges? How can I get a protective order? Do I need a lawyer?

What is an arraignment? Why did he/she plead not guilty? How long is this going to take? Is counseling available? What about my medical bills?

How do I get the door replaced that got kicked in? My glasses/phone broke during the crime. What now?

Washington County Area Drug Task Force

- St. George Police Department is the lead agency with Supervisory and grant management responsibilities.
- St. George Police Department has one Captain, one Lieutenant, one Sergeant and three detectives.
- Washington County Sheriff's Office has one Sergeant and three detectives.
- Hurricane Police Department has one detective.
- Washington Police Department has one detective.
- Santa Clara / Ivins Police Department has one detective.
- Washington County Attorney has one prosecutor.
- Utah National Guard has one person.





09.07.2007



Fraudulent Identity & Security Threats

- St. George Police Department is the lead agency with supervisory responsibilities.
- St. George Police Department has one Captain, one Lieutenant, one Sergeant, and two detectives.
- Washington County Sheriff's Office has one detective.
- Homeland Security / ICE has one Supervisor, one agent.
- Washington County Attorney's Office works closely with the unit.
- The unit shares information with other police agencies in Washington County.

Fraudulent Identity & Security Threats

- Fraudulent Identity and Identity Theft
- Gangs & Outlaw Motorcycle Gangs
- Graffiti
- Vice / Prostitution / web sites
- Homeland Security

Administrative Services Division



Captain Mike
Giles



Sergeant
Sam Despain



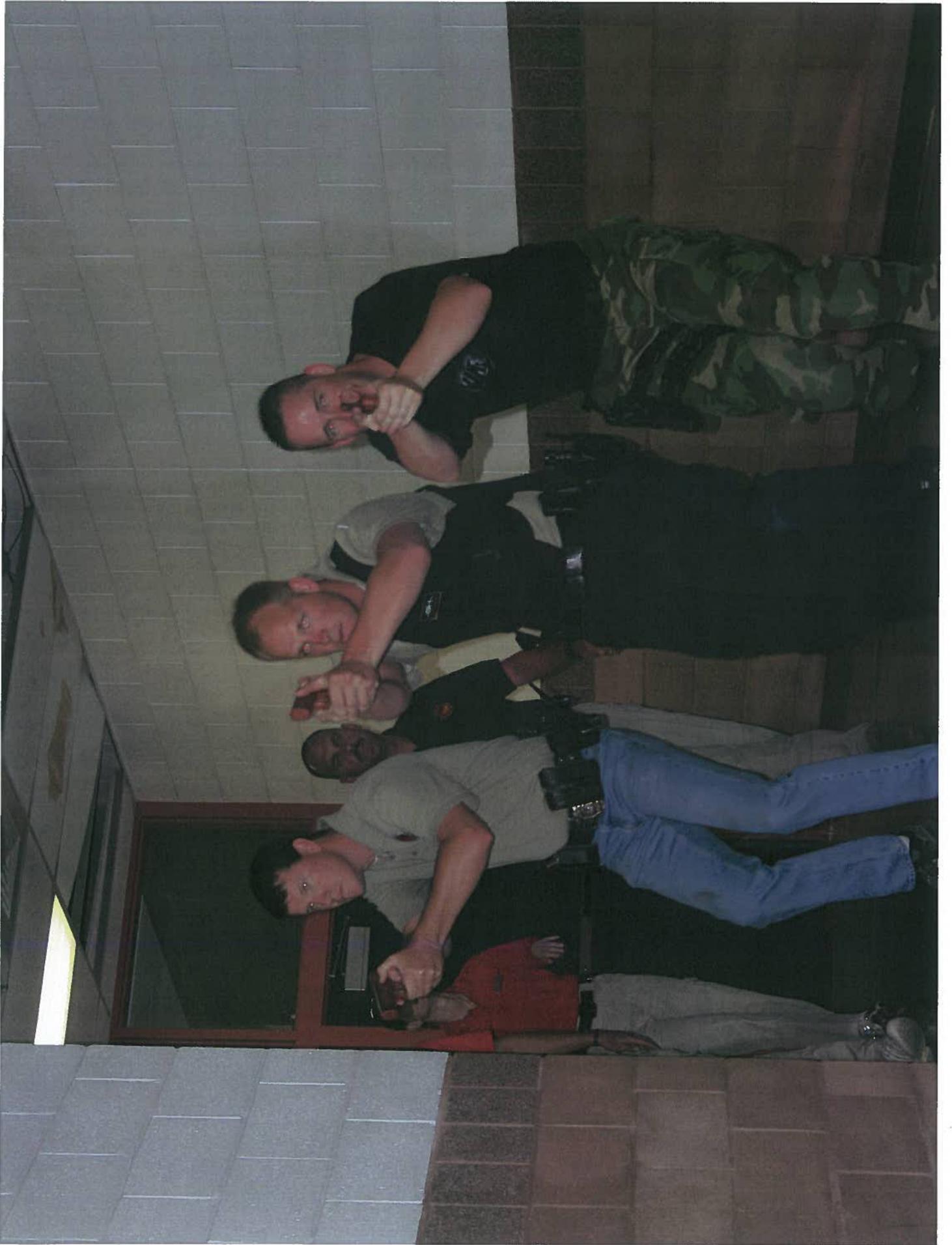
Office
Manager Val
Seely

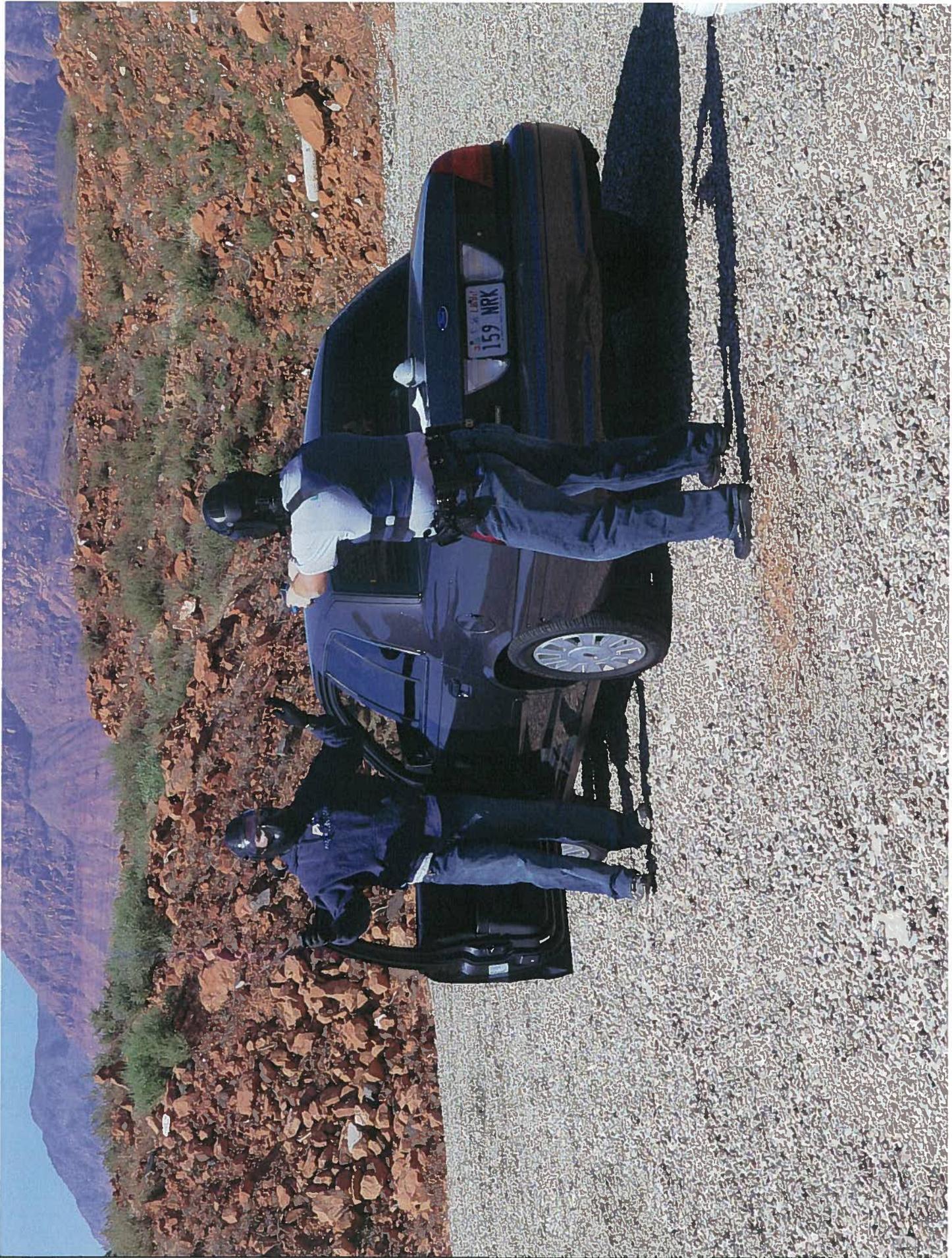


Evidence
Training
Q-master
I.A.
Hiring



4 Records
Clerks
Coplogic
online
reporting





Special Enforcement Division



Captain
Gordon
McCracken



Sergeant
Curtis
Spragg



Sergeant
Ivor
Fuller



Sergeant
Craig
Harding



Squad of 6
bike patrol
Officers



Squad of 12
School
Officers & 3
Animal
Officers



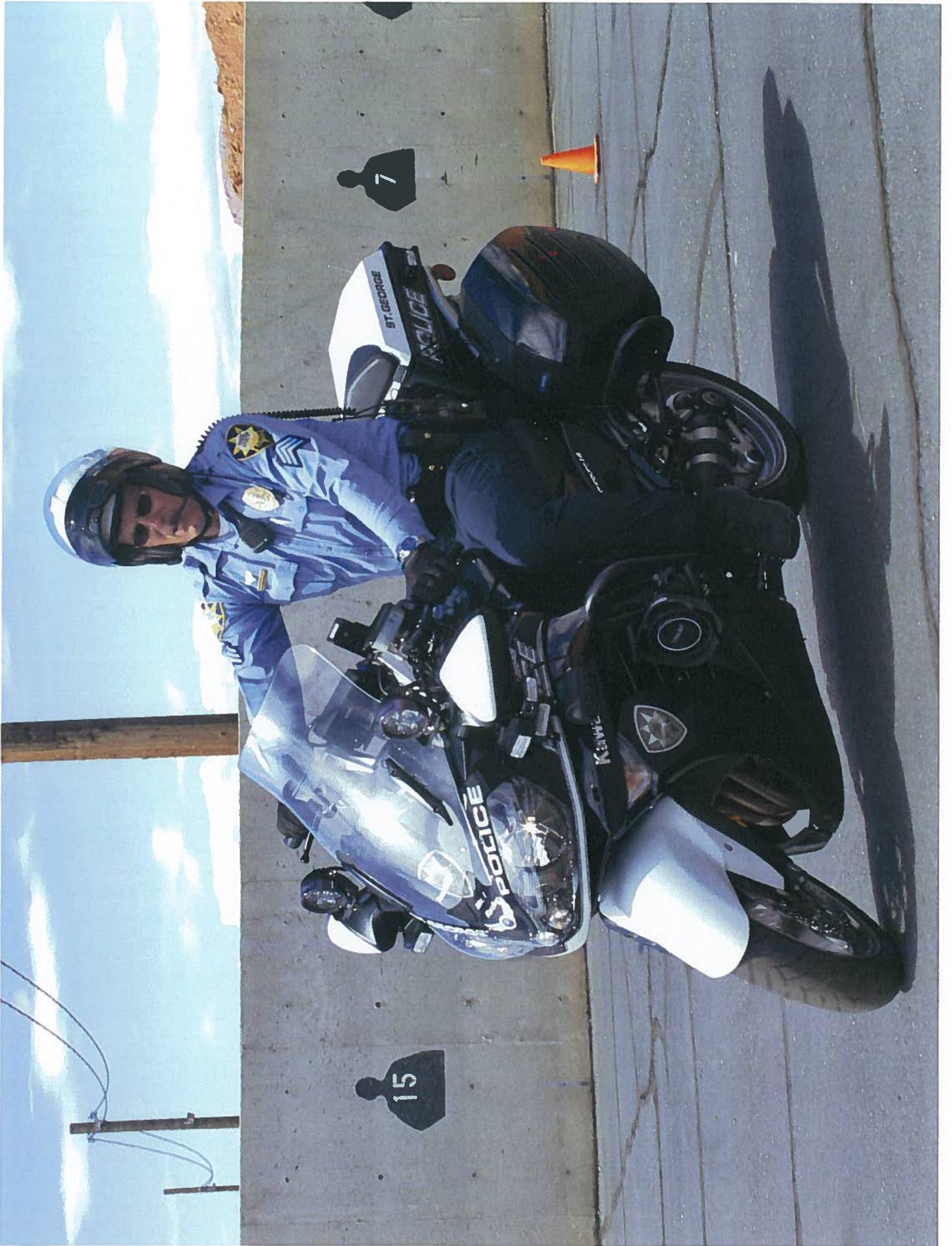
Squad of 3
traffic
officers &
20 Crossing
Guards

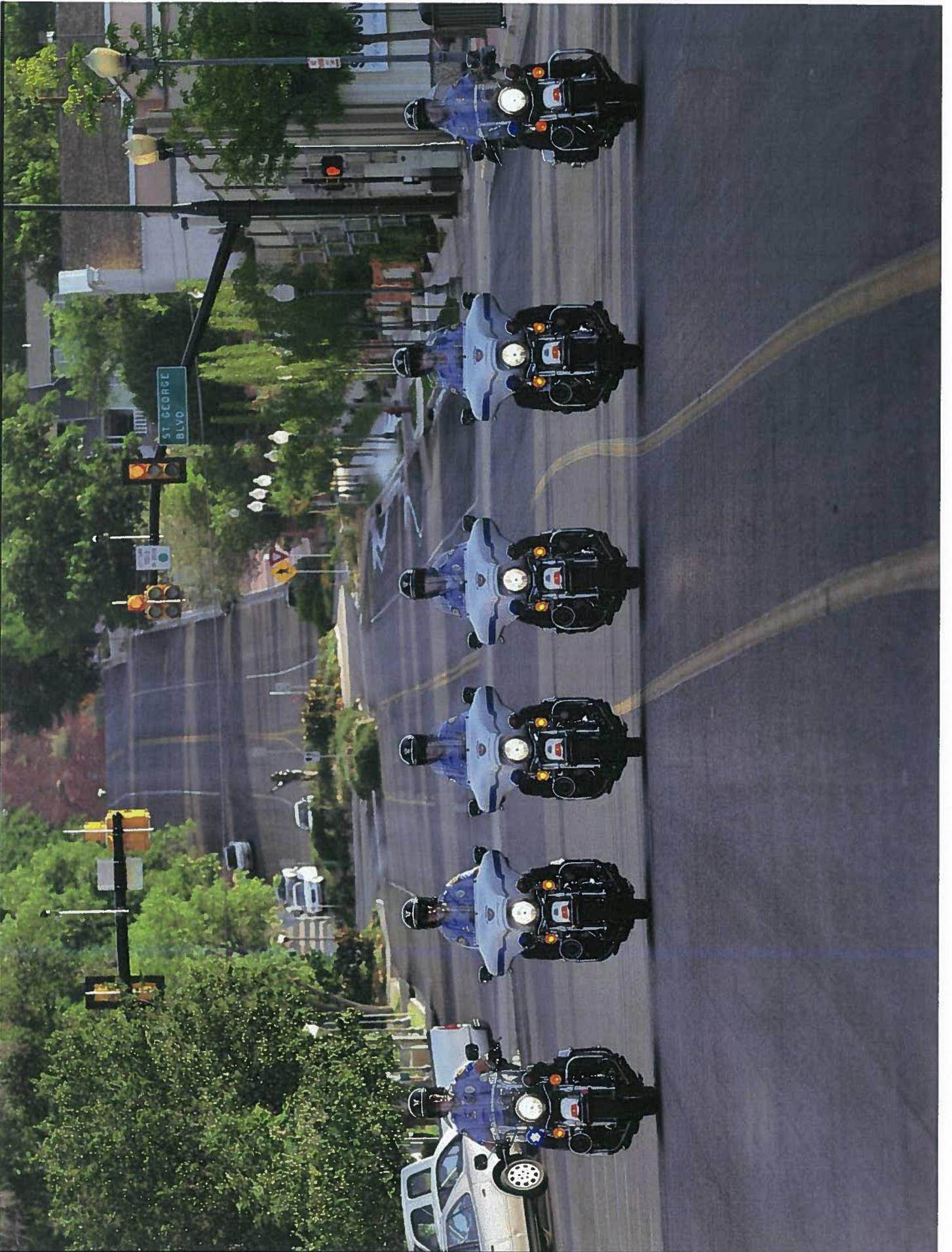


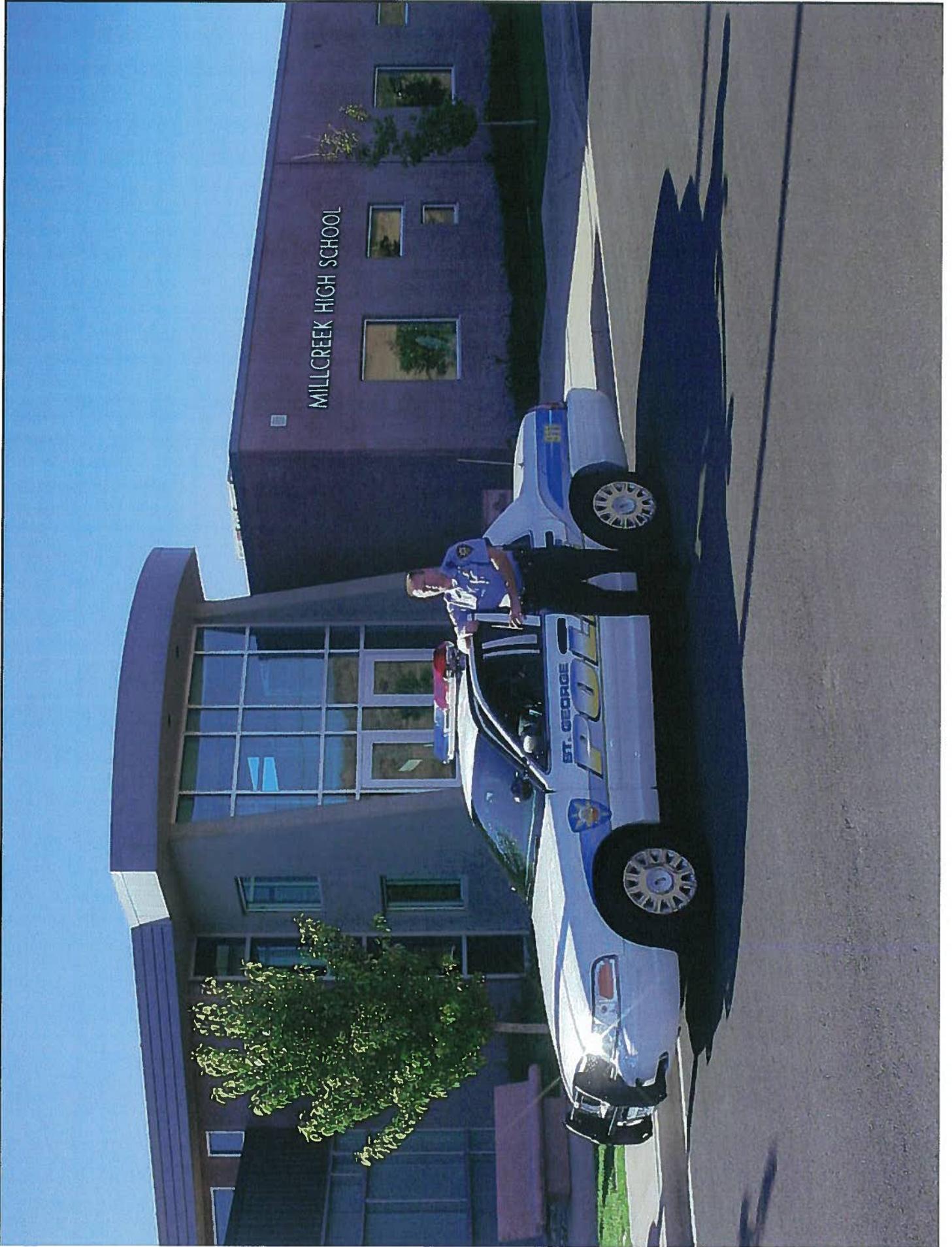


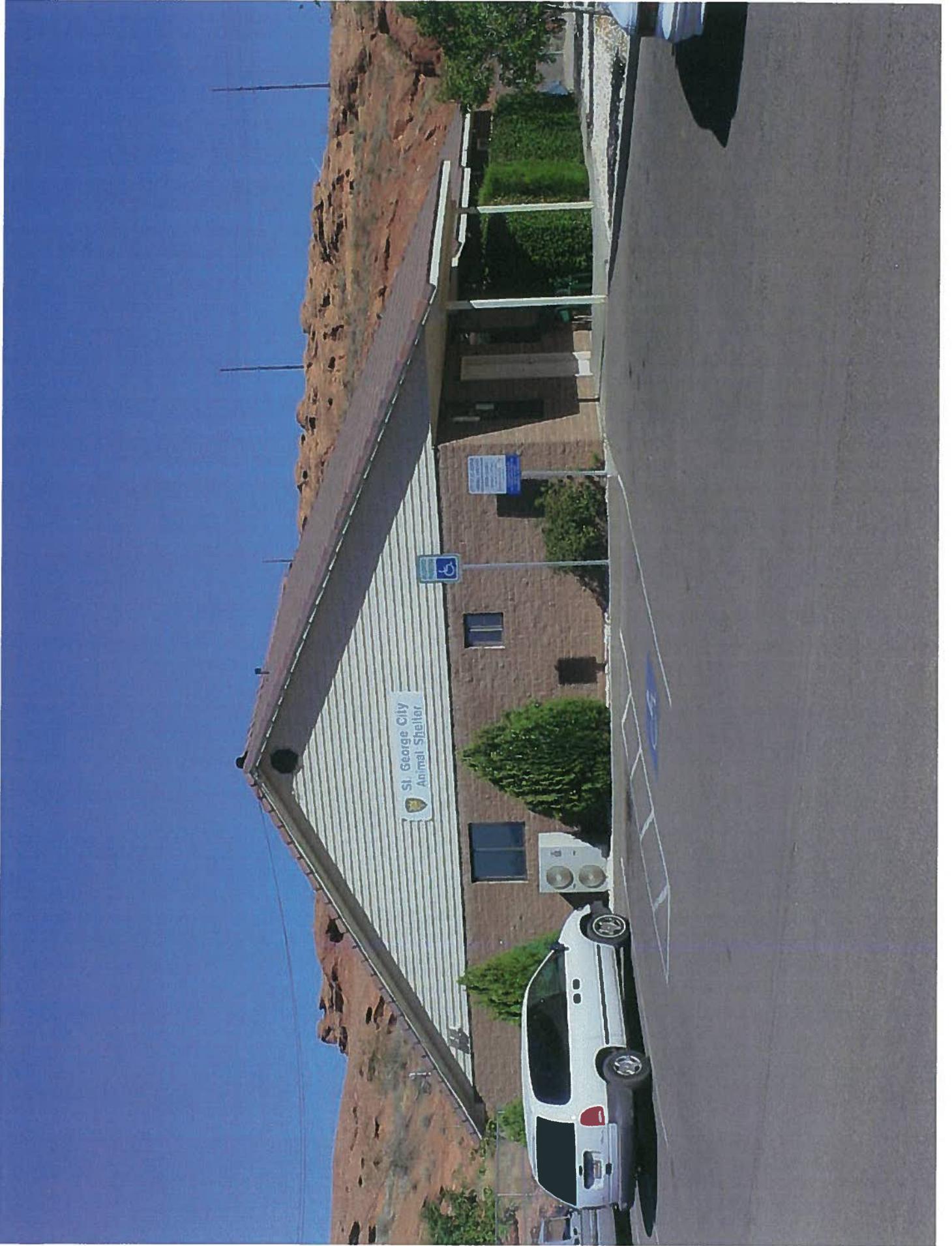


14 9:56 AM









St. George City
Animal Shelter



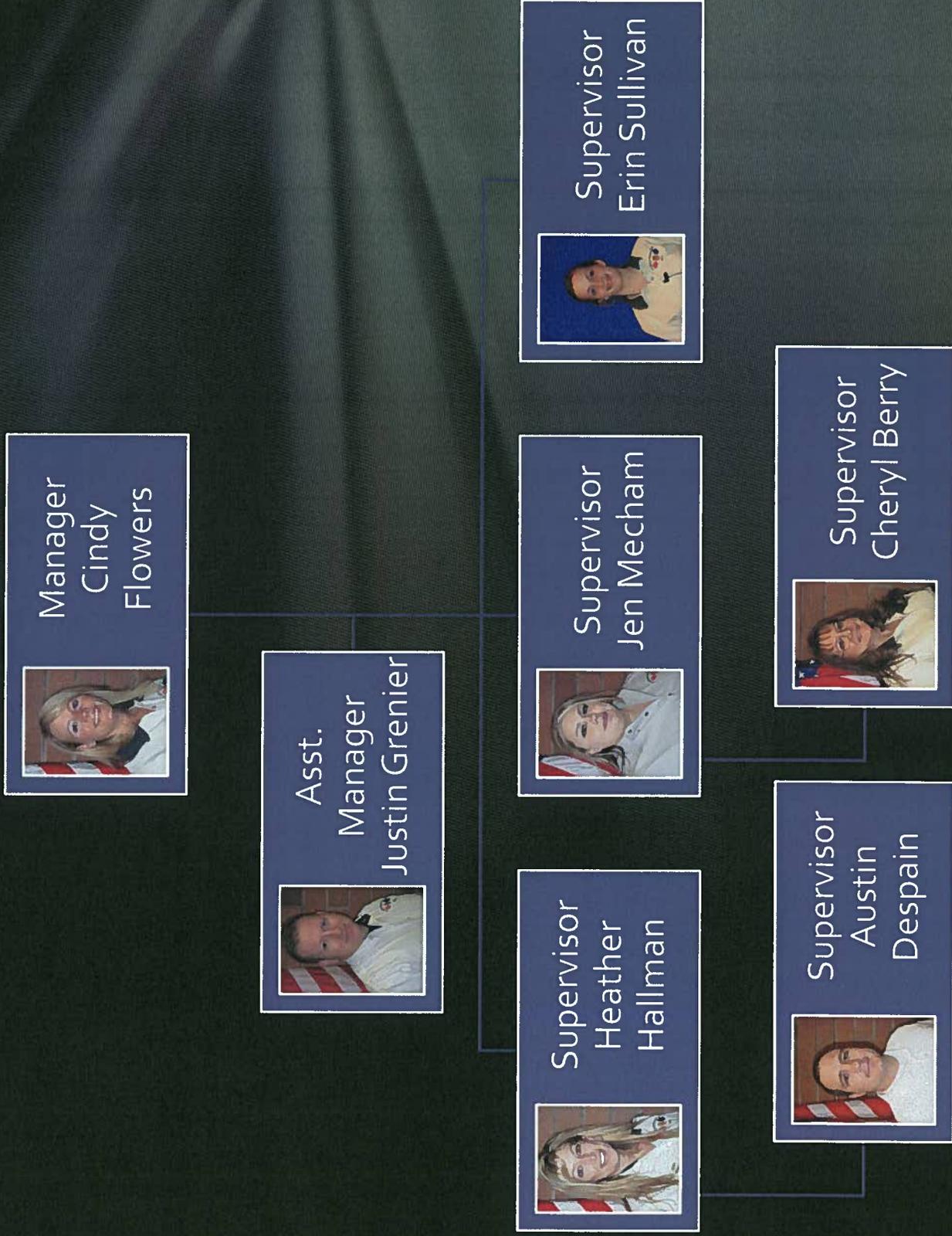
St. George City
Animal Shelter

ST. GEORGE COMMUNICATIONS



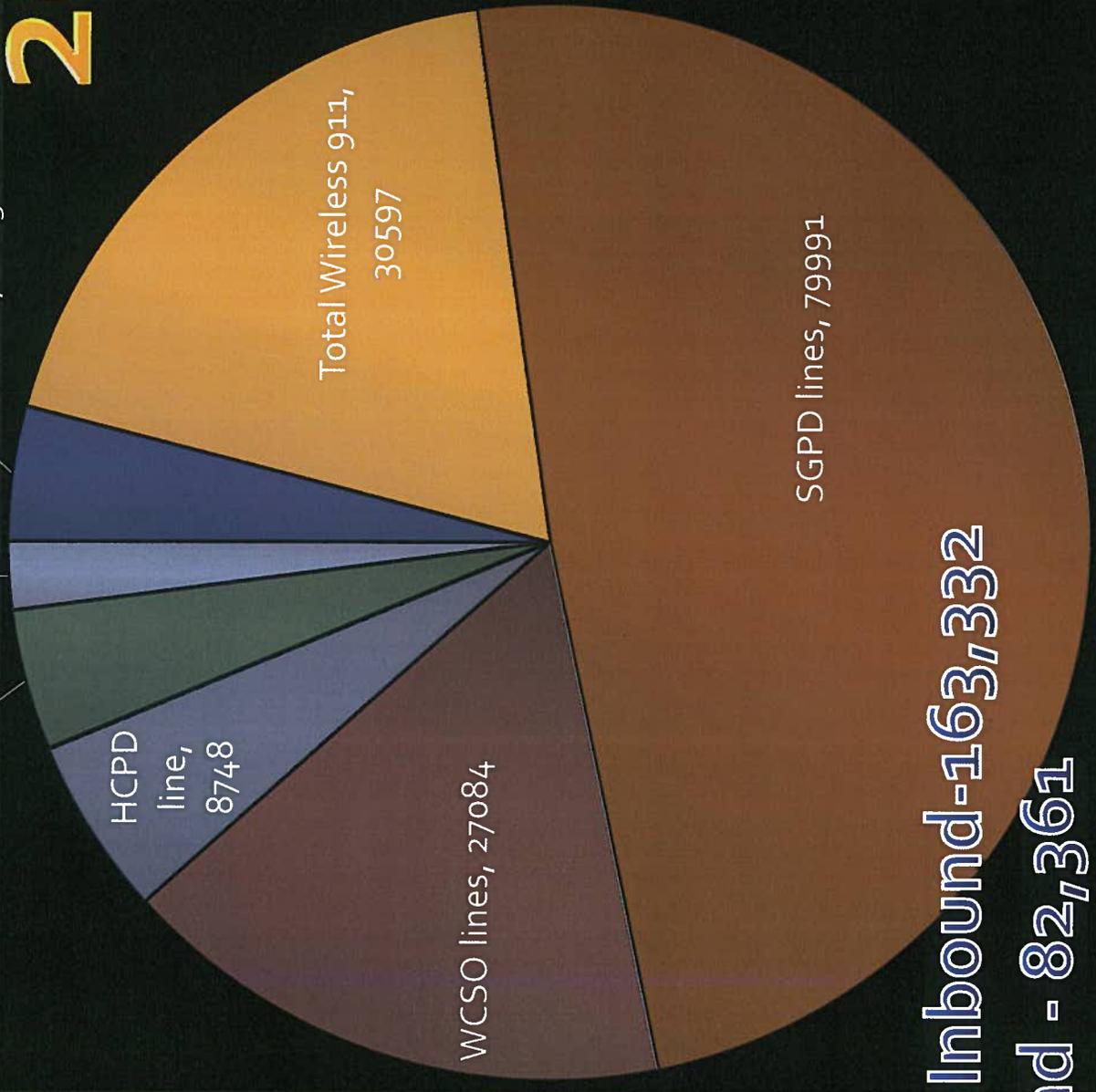
911

Communications Division



2013

Fire/EMS lines, 6912
Front Lobby, 3385
Total 911 land lines, 6615



Inbound Inbound-163,332
Outbound - 82,361



90% of the calls answered
Within the first 10 seconds

Second	1	2	3	4	5	6	7	8	9	10	> 10	All
Total	26,114	39,093	38,424	27,922	16,322	7,985	4,029	1,931	1,026	495	517	163,341
%	16.0%	23.9%	23.5%	17.1%	10.0%	4.9%	2.5%	1.2%	0.6%	0.3%	0.3%	
% Totals	16.0%	39.92%	63.4%	80.5%	90.5%	95.4%	97.9%	99.1%	99.7%	100.0%		



St George 911 answers 90.5%
in the first 5 seconds

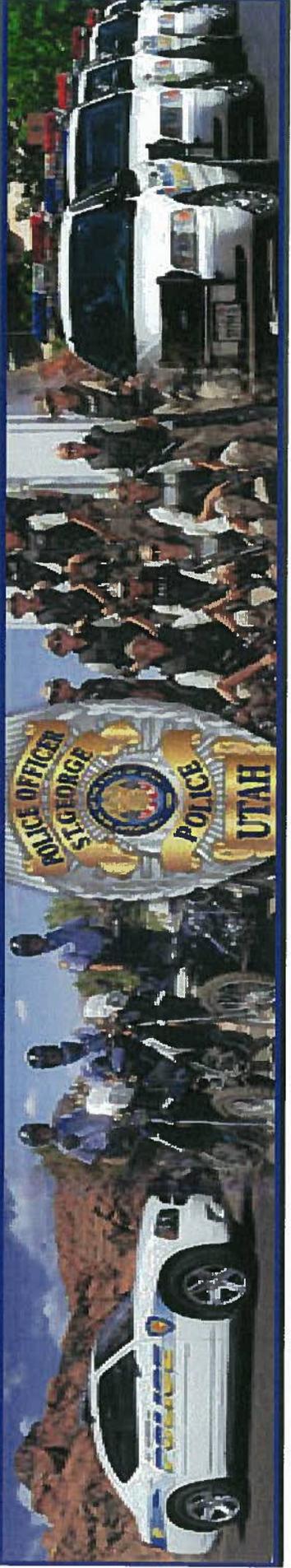


*We will work as a team and face our struggles,
treating others with respect, honesty, fairness, consistency,
courtesy, tolerance, and politeness. Always moving towards our goal.
Excellence in Emergency Communications.*





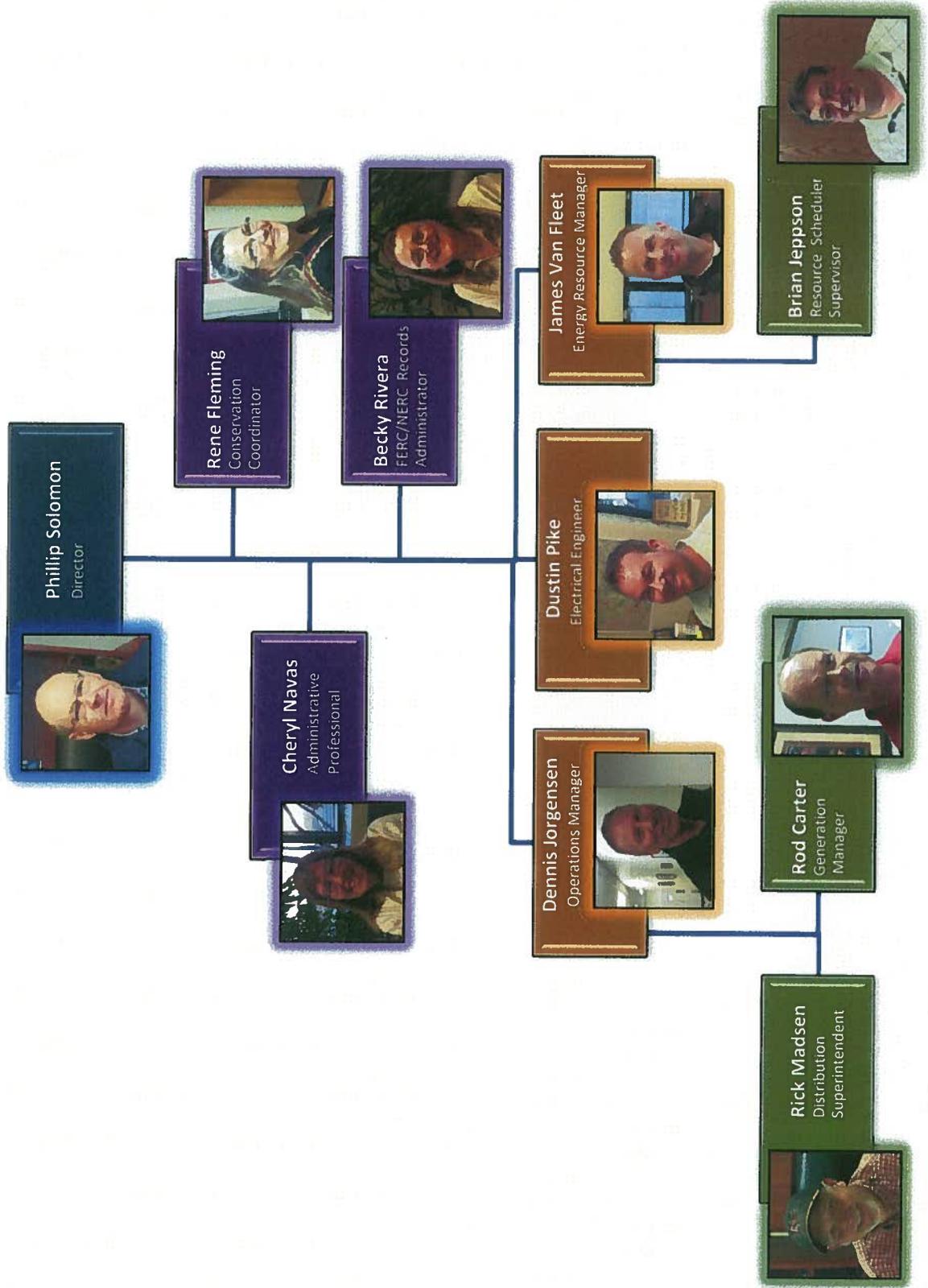
Thank you for
Your Support!



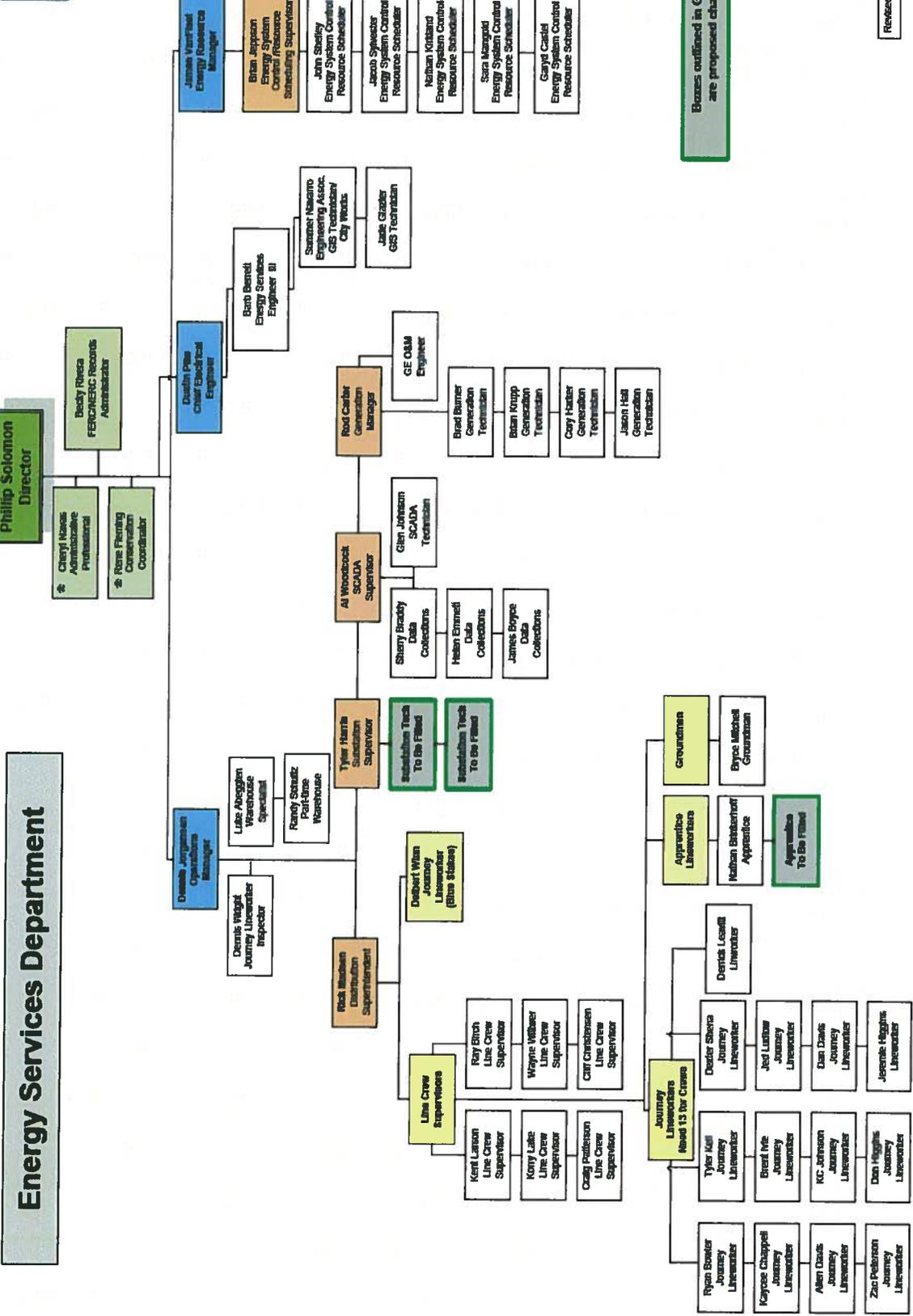
ENERGY SERVICES

- TRANSMISSION 345KV/69 KV
- GENERATION 100 MW DIESEL AND GAS
- POWER TRADING/SCHEDULING DESK
- DISTRIBUTION TO CUSTOMERS

City of St. George Energy Services Department



⚡ Note
These positions
are shared with
Water Services
Department



Boxes outlined in GREEN are proposed changes

Revised 03-10-14

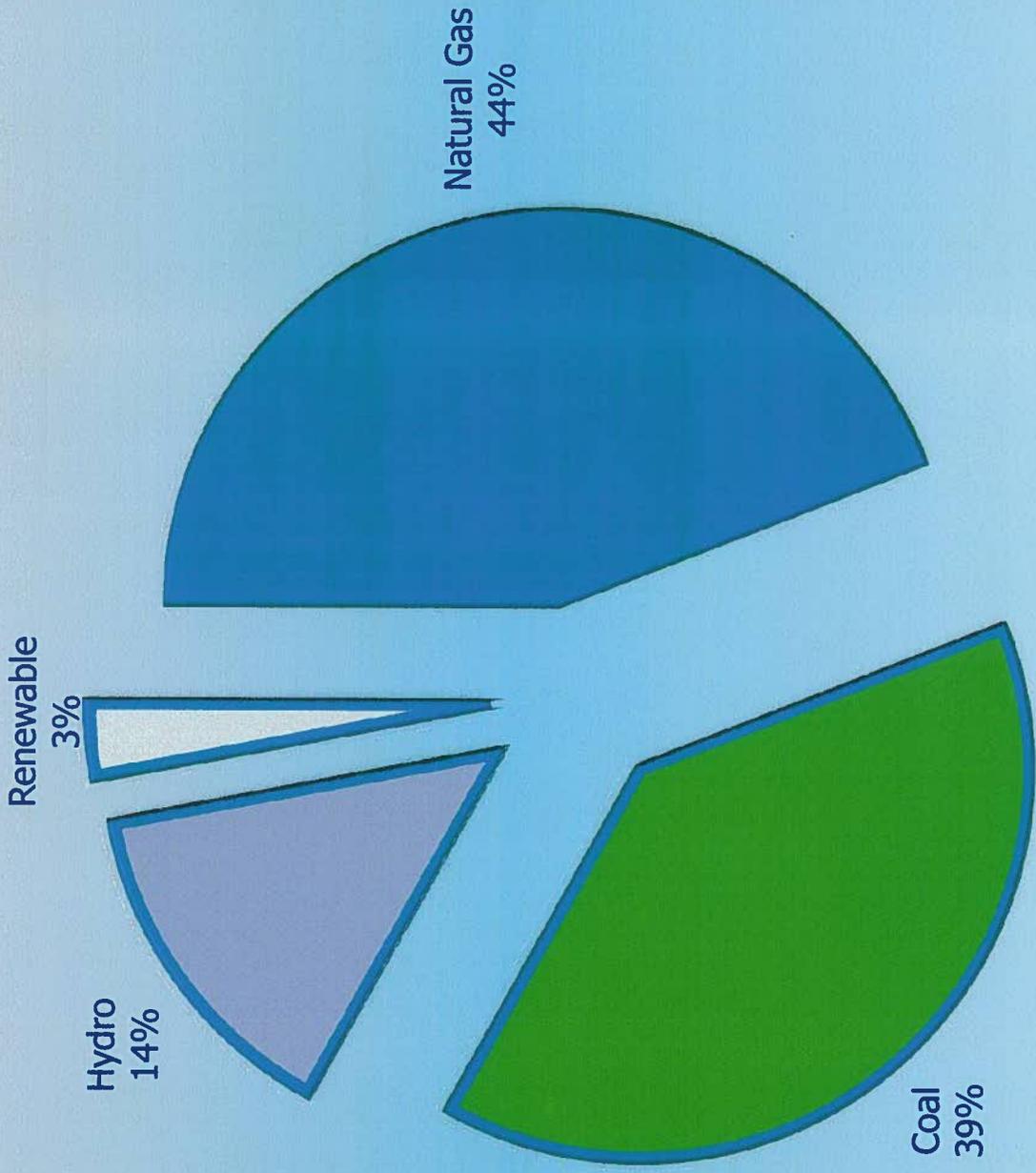
Energy Services Department

ST. GEORGE ENERGY SERVICES BACK GROUND

- ESTABLISHED IN 1941
- CUSTOMERS 28,000
- SUMMER 2007 EST. PEAK 180 MW
- FISCAL YEAR 2013 TOTAL ENERGY 642,163 MWH
- APPROX. \$55 MILLION IN REVENUES
- 17 DISTRIBUTION SUBSTATIONS
- 3 TRANSMISSION SUBSTATIONS
- 317 MILES O/H AND 576 MILES UG DIST. LINES
- TRANSMISSION VOLTAGES-345 KV, 138 KV AND 69 KV
- 100 MW OF INTERNAL GENERATION (GAS AND DIESEL)

Budget Recap FY 2014		Budget Recap FY 2015	
Power Purchases	\$ 38,951,945.00	Power Purchases	\$ 38,524,707.00
Natural Gas Purchases	\$ 4,364,195.00	Natural Gas Purchases	\$ 5,680,760.00
Sub total	\$ 43,316,040.00	Sub total	\$ 44,205,467.00
Operating		Operating	
5310	\$ 1,703,052.00	5310	\$ 1,786,623.00
5313	\$ 3,689,499.00	5313	\$ 3,903,439.00
5314	\$ 160,000.00	5314	\$ 150,000.00
5316	\$ 1,581,894.00	5316	\$ 1,613,057.00
5317	\$ 35,000.00	5317	\$ 40,000.00
Transfer to other funds	\$ 1,650,000.00	Transfer to other funds	\$ 1,650,000.00
Capital	\$ 8,819,445.00	Capital	\$ 9,143,119.00
5310	\$ 342,000.00	5310	\$ 317,800.00
5313	\$ 1,230,731.00	5313	\$ 1,598,500.00
5316	\$ 12,000.00	5316	\$ 24,200.00
New MGF Expansion Bonding	\$ 1,584,731.00		\$ 1,940,500.00
Misc - 5316			
P & I on bonds	\$ 4,674,666.00	P & I on bonds	\$ 4,628,603.00
Expenses	\$ 58,394,882.00	Expenses	\$ 59,917,689.00
Revenue Total	\$ 59,339,826.00	Revenue Total	\$ 62,716,151.00
Difference in Revenue/Cost	\$ 944,944.00	Difference in Revenue/Cost	\$ 2,798,462.00
Double Check		Double Check	
		5310	\$ 7,785,183.00
		5311	\$ 38,524,707.00
		5313	\$ 5,501,939.00
		5314	\$ 150,000.00
		5316	\$ 7,915,860.00
		5317	\$ 40,000.00
		Total	\$ 59,917,689.00
		Diff Check	
		DEBT COVERAGE RATIO	2.02

Resource Allocation 2013



2014

Substation

Harry Allen

Construction

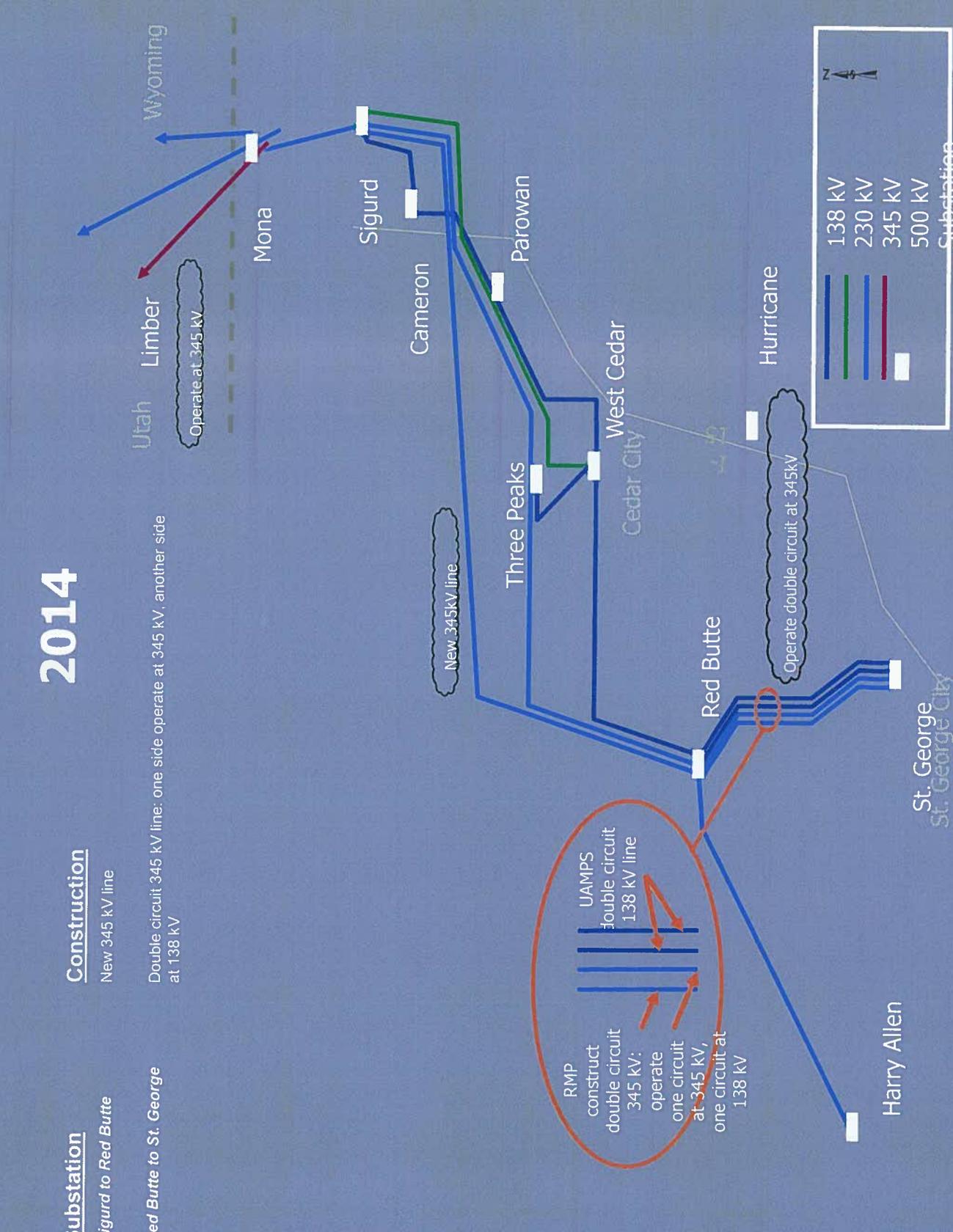
Red Butte to St. George

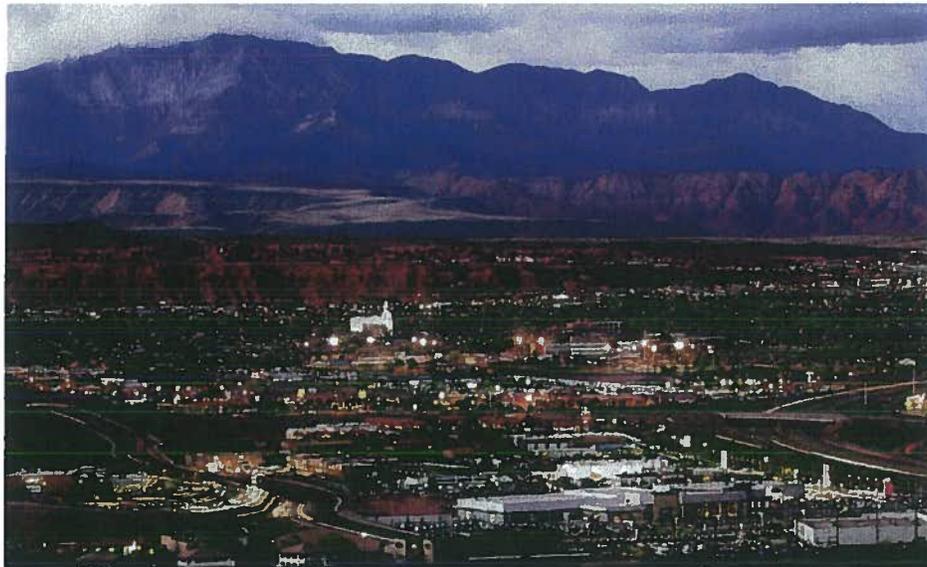
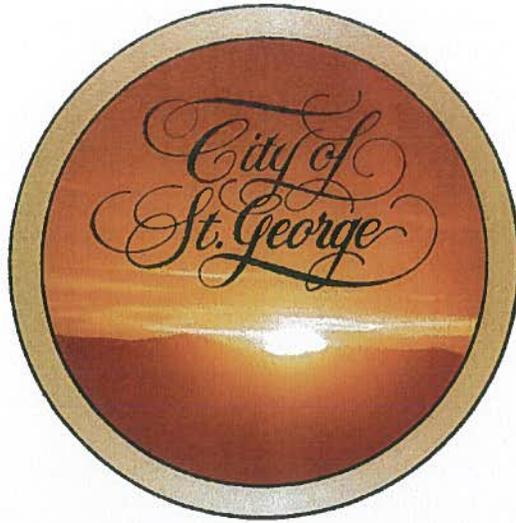
UAMS

Double circuit 345 kV line: one side operate at 345 kV, another side at 138 kV

UAMS

Operate at 345 kV





St. George Energy Services
Annual Executive Summary
2013

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Summary

This is the annual post peak St. George Energy Services Department (SGESD) report for 2013. It is intended to be reviewed and used to assess the areas that impact the City and Department. The findings are included in this report and will be updated each year. The focus of the report will center around the heaviest load period of the year (May 1st through September 30th), in turn providing information to assist in future system planning and preparation.

This year, the SGESD experienced its highest peak on record. The previous peak was set in 2007.

The peak load in 2013 occurred in July and was 179.85 MWs. This was a 2.5% increase over the peak in 2012. The peak occurred at 5:40 pm Monday afternoon July 1st, the temperature was 110.81 average degrees (F) in St. George. The humidity was 6.51% with 10 mph wind.

The SGESD had Millcreek I and II Natural Gas generators on line for a total of 75.26 MWs; Pine Valley Hydro was producing 260 kW and SunSmart Solar 137.15 kW during the peak.

The cost to generate that hour was \$38.75 per MWh, in the day ahead market STG purchased 9MWs at \$76 per MWh, real time STG purchased 1MW for \$75/MWh. The overall unit cost that day was \$37.56/MWh for 2,960 MWh's.

During fiscal year 2013, the SGESD purchased and produced a total of 809,847.39 MWhs for resale.

Area Information

The SGESD customer service area is located within Washington County Utah and is surrounded by several small municipal utilities, two electric cooperatives and an Investor Owned Utility company. These include:

Utah Associated Municipal Power Systems (UAMPS) Members:

Hurricane City

Washington City

Santa Clara City

Deseret Generation and Transmission (DGT) Members:

Dixie Escalante

Garkane Energy

Investor Owned Utility:

Rocky Mountain Power/Pacific Corp (PAC)

The load for most of these entities is fed from Red Butte Sub Station, which is located in Central Utah. Red Butte is fed from 345 Kv lines running North and South. Energy supplying these utilities usually comes from transactions made in the North – Bonanza Power Plant (eastern Utah), Intermountain Power Project (near Delta Utah), Hunter Power Plant (central Utah), and Nebo Natural Gas (Payson Utah) to name just a few. The transmission lines carrying the energy are owned by PacifiCorp in whole or as a partner, as in the case of the portions that run from Red Butte to St. George.

Natural gas for generation is transported by pipeline to St. George. The gas originates in Northern Eastern Utah and is currently supplied by two vendors (BP & CIMA). The gas travels from North to South via the Kern River Pipeline. It is intersected at Central Utah by Questar Gas and delivered to the Millcreek Generation Facility.

Like the SGECD, several of the entities listed above have invested in larger capital projects, such as generation units locally. These units lessen the exposure of the daily energy market emergencies system. They are:

Hurricane City – 9 units totaling 16.5 MWs

Washington City – 2 units totaling 4 MWs

Santa Clara City – 2 units totaling 4 MWs

St. George – 10 units totaling 97 MWs

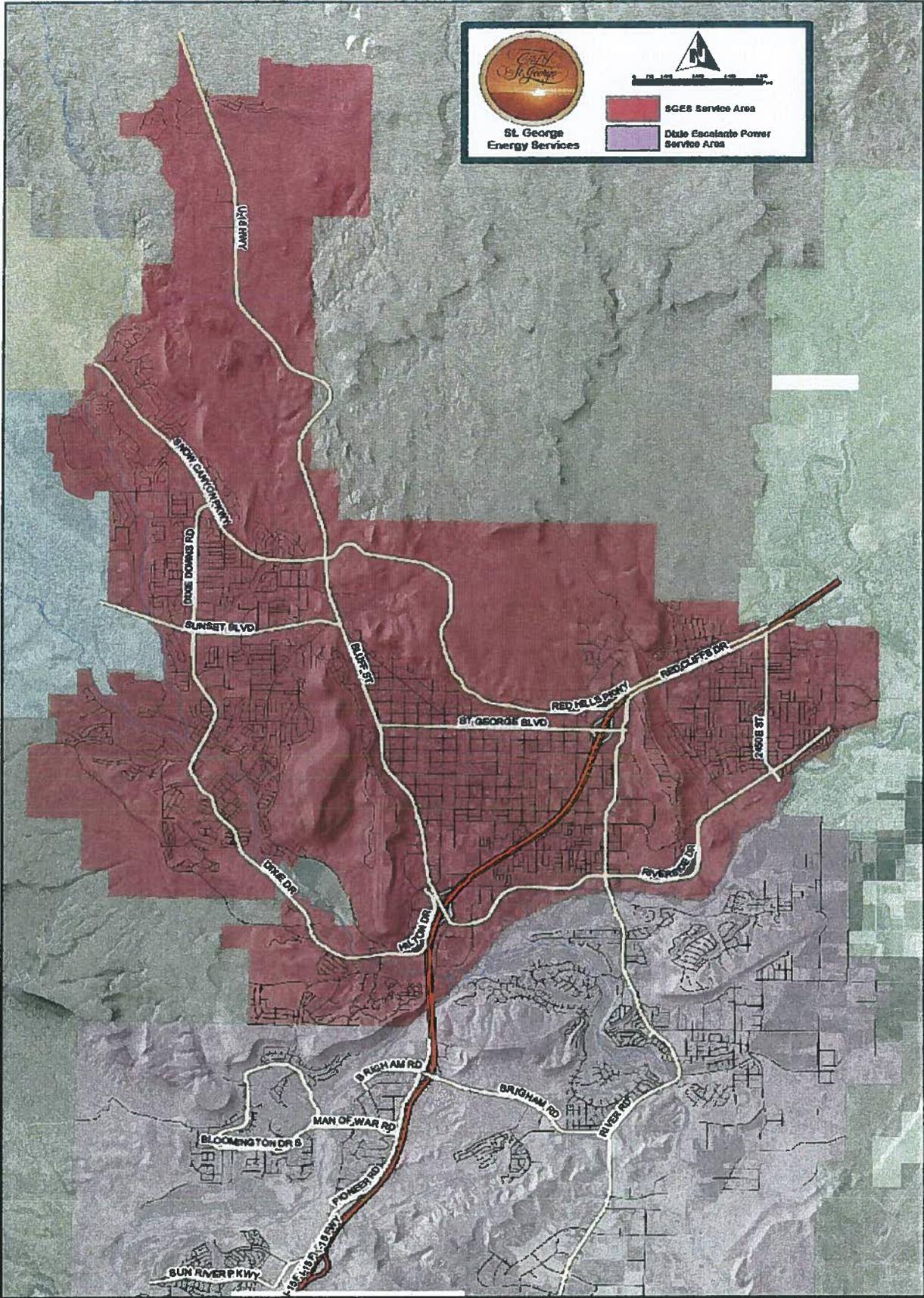
St. George Service Area:

According to U.S. Census Bureau information for Washington County, there were 90,345 residents in 2000 and the 2007 projected population was 133,447 resulting in a 47.7% from 2000 to 2007. Some regions of the county consistently maintained a growth rate of 1 to 20% annually for those years. Since 2007 the estimated growth has drastically reduced through 2012. The 2010 census reported a total population of 138,115 which confirms this reduction.

The SGECD serves St. George City customers north of the Virgin River within the City limits. Dixie Power serves customers south of the Virgin River.

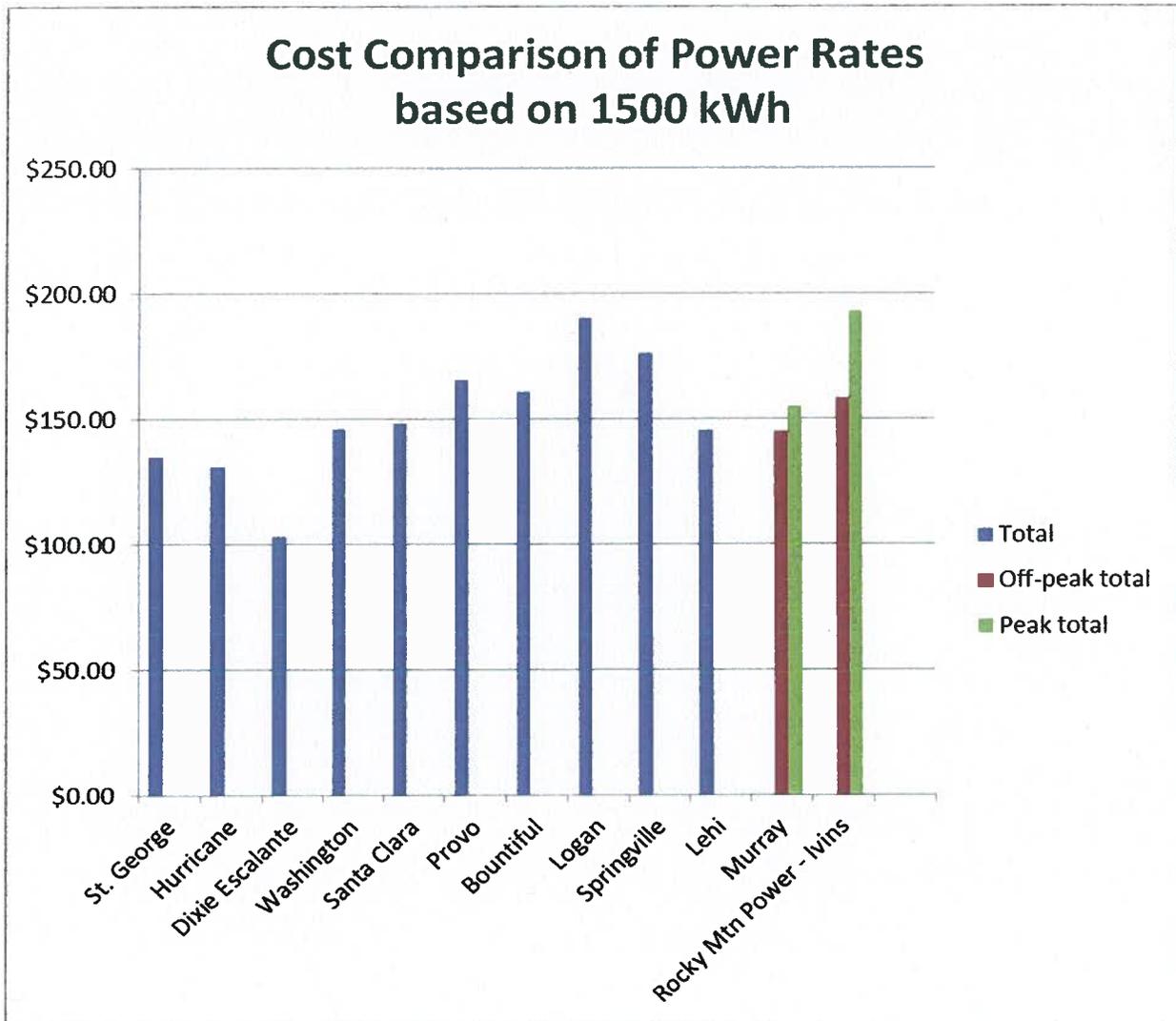
As of October 2013, SGECD serves 28,201 customers, has 18 substations and 1,064 miles of transmission and distribution lines.

See service territory map on next page.



Rate Comparison:

The below chart compares SGESD rates to other utilities (residential) locally and similar utilities around the State. The comparison is based on 1,500 kWh per month (average residential use.)



Finances

The City represents that the SGESD has operated with positive cash flows in fiscal years 2002 through 2009. For fiscal years 2010, 2011 and 2012 the SGESD realized net losses in operations. These losses primarily can be attributed to the economy, rising costs in power purchased/transmission, and low wholesale market values. The SGESD had projected more energy sales and higher market values for wholesale surplus sales than were realized. The SGESD has maintained a small surplus as a hedge to the market and potential growth. Cash reserves were used to accommodate the operating losses for these years. At the beginning of the fiscal year 2013, a rate of 8% was approved as cash reserves reached a level to trigger the increase. The City's decision to use cash reserves rather than raise rates resulted in the City's Energy Services' bond rating to be downgraded even though rates were increased for the fiscal year 2013.

Fiscal year 2013 resulted in having a small operating loss, even though the SGESD adjusted the forecast to include a slight increase in energy sales and the rate increase. The operating loss can be attributed to the loss of the aggregate of wholesale power purchased being higher than forecasted. The increases were mostly in the DGT IPP contract and in transmission costs as a result of the PacifiCorp transmission rate case. Cash reserves were increased due to a shift in policy on pooled cash within the City. The actual cash and accounts receivable for Energy rather than pooled are now reflected in the numbers.

Even with cash increases, the SGESD total net assets did decrease as capital assets net of accumulated depreciation declined by \$4,363,664. The rate of depreciation of current fixed assets has outpaced the need to add additional fixed assets to the system thus resulting in this decline in net fixed assets after depreciation. Total liabilities did increase by \$2,424,742 as current liabilities for purchased power and natural gas were paid after June 30, 2013, whereas in the prior year the invoices had been received and paid before June 30th. A change was made in the funds reflect the accounts receivable for utility sales. In prior years, all receivables were reflected in the SGESD balance sheet. This year the change was made to reflect each of the various utilities percentages of year-end receivables in their respective funds. In addition, the allowance for uncollectable and utility customer deposit liability is now reflected in these other utility funds in the same percentages. The respective percentages are as follows: Energy 65.7%, Water 23.83%, Wastewater Collection 5.28%, Refuse Collection 3.58%, and Drainage Utility 1.61%. This reallocation of the receivables has thus resulted in an increased cash position in the SGESD.

The City is working on financial policies to assure positive margins in the SGESD for the forecasted future years. Rate increases are being studied for the future budget years to assure positive cash flows. The City will continue to adhere to a strict risk policy in the management and procurement of energy resources to avoid market volatility.

CITY OF ST. GEORGE, UT
CONTINUING DISCLOSURE - 2005 ELECTRIC REVENUE BONDS
FISCAL YEAR ENDED JUNE 30, 2013

<u>TABLE I - SYSTEM RATES</u>	<u>Customer Charge</u> (per month)	<u>Energy Charge</u> (per kWh)	<u>Demand Charge</u> (per kW)	<u>Average Monthly Bill</u>
Residential Service				
0-800 kWh (per kWh)	\$ 14.63	\$ 0.070143		\$ 84.72
Over 800 kWh (per kWh)		\$ 0.0760		
Commercial Service				
Small General Service				
0-1,500 kWh (per kWh)	12.66	0.0785		151.68
Next 8,500 kWh (per kWh)		0.0856		
Over 10,000 kWh (per kWh)		0.0991		
0-10 kW (per kW)			\$ -	
Over 10 kW (per kW)			9.07	
Large General Service				
0-10,000 kWh (per kWh)	66.06	0.0573		3,210.03
Over 10,000 kWh (per kWh)		0.0432		
0-5 kW (per kW)			-	
Over 5 kW (per kW)			12.59	
Agricultural Service				
0-1,500 kWh (per kWh)	12.66	0.0785		
Next 8,500 kWh (per kWh)		0.0856		
Over 10,000 kWh (per kWh)		0.0991		

TABLE II - AVERAGE REVENUE FROM RATES

	<u>Average Revenue</u> \$ per kWh	<u>Average Monthly Bills</u>	
		<u>Summer</u> May-Oct	<u>Winter</u> Nov-Apr
Residential Service	\$ 0.0870	\$ 95.41	\$ 72.35
Small Commercial (includes demand)	0.1011	241.65	109.53
Large Commercial (includes demand)	0.0815	4,196.16	2,789.03

** RATE ADJUSTMENTS MADE IN FISCAL YEAR 2013 RESULTED IN A LARGE NUMBER OF RECLASSIFICATIONS BEING MADE BETWEEN SMALL AND LARGE COMMERCIAL CUSTOMERS

CITY OF ST. GEORGE, UT
CONTINUING DISCLOSURE - 2005 ELECTRIC REVENUE BONDS
FISCAL YEAR ENDED JUNE 30, 2013

TABLE III - Summary of Kilowatt Hours and Production Costs

Year	kWh	Cost per kWh
2002	503,732,000	0.08242
2003	550,745,668	0.06620
2004	557,424,755	0.06934
2005	559,564,333	0.06910
2006	611,224,083	0.07154
2007	654,854,223	0.07269
2008	663,553,033	0.07242
2009	795,155,258	0.06779
2010	850,437,074	0.06579
2011	767,286,024	0.06952
2012	833,069,170	0.06864
2013	809,847,387	0.07308

TABLE IV - Ten Largest Customers of the System

Name	Type of Business	kWh	% of City's Total kWh
Dixie State College	College	13,868,400	1.8360%
Tonaquint Data Center Inc.	Data center	12,266,100	1.6238%
IHC Dixie Regional Medical Center (300 E Campus)	Hospital	8,183,400	1.0834%
Dixie Medical Center (River Rd Campus)	Hospital	5,755,200	0.7619%
Quality Park Products	Manufacturing	6,022,000	0.7972%
Costco Wholesale	Large box store	5,347,200	0.7079%
Washington Co Water Conservancy District	Water agency	4,183,200	0.5538%
Harmon's City Inc	Grocery store	3,863,280	0.5114%
Dixie Medical Center (River Rd Campus)	Hospital	3,298,800	0.4367%
Dixie Medical Center (River Rd Campus)	Hospital	3,198,240	0.4234%
Dixie Medical Center (River Rd Campus)	Hospital	3,757,200	0.4974%
Lowes Home Improvement	Large box store	2,592,480	0.3432%
LDS St George Temple	Religious	2,115,420	0.2800%
Skywest Airlines	Airline Hdqtrs	2,019,000	0.2673%
		76,469,920	12.5222%

CITY OF ST. GEORGE, UT
CONTINUING DISCLOSURE - 2006 ELECTRIC REVENUE BONDS
FISCAL YEAR ENDED JUNE 30, 2013

TABLE V - Historical and Projected Operating Results

	2007	2008	2009	2010	2011	2012	2013	BUDGETED	2015	2016	2017
Sources of Funds:											
Service Charges/User Fees	\$48,831,532	\$51,029,054	\$51,811,239	\$52,140,945	\$51,683,285	\$54,450,390	\$57,489,897	\$57,854,595	\$59,096,975	\$59,807,866	\$61,272,725
Other operating revenues	1,115,323	819,806	1,017,219	874,678	1,129,740	50,308	45,634	1,100,000	1,000,000	1,000,000	1,000,000
Impact fees	2,741,642	2,241,959	1,273,488	843,653	1,315,694	1,161,102	1,262,873	1,100,000	1,000,000	1,000,000	1,000,000
Total sources of funds	52,688,487	54,090,919	54,101,946	53,859,276	54,108,719	55,681,770	59,819,104	59,954,595	60,096,975	60,807,866	62,272,725
Uses of Funds:											
Electricity purchased	36,099,643	35,496,629	37,868,364	39,785,534	38,833,578	37,491,445	40,599,715	39,651,845	39,723,011	39,619,400	42,100,000
Natural gas purchased	2,842,112	2,249,351	3,498,003	4,074,512	3,499,843	5,126,432	4,127,857	4,364,195	4,900,000	5,000,000	5,000,000
Operating costs	8,659,222	10,335,589	8,555,108	7,831,263	7,980,352	8,294,744	8,077,844	8,819,445	9,172,223	9,539,112	10,317,504
Total O & M Expenses	47,600,977	48,051,569	49,921,476	51,691,309	50,293,773	50,912,621	52,806,416	52,135,485	53,795,234	54,158,512	57,417,504
Net Operating Revenues	5,087,520	6,039,350	4,180,470	2,167,967	3,814,946	4,749,149	6,012,688	6,819,110	6,301,741	6,649,354	4,855,221
Non-operating Revenues (Expenses)											
Interest Income	688,072	565,987	906,871	143,515	22,604	17,933	17,616	25,000	250,000	250,000	250,000
Other Income	245,233	583,922	191,987	873,196	308,040	259,919	526,132	380,231	450,000	450,000	450,000
Total Non-operating	934,305	1,149,919	1,098,858	1,016,711	330,644	277,852	543,948	385,231	700,000	700,000	700,000
Net Revenues for DS payments	6,021,825	7,189,269	5,279,328	3,184,678	4,145,590	5,027,001	6,556,636	7,204,341	7,001,741	7,349,354	5,555,221
Outstanding Bonds:											
Series 2005 Bonds	1,303,301	1,302,244	1,337,629	1,335,054	1,334,454	1,334,466	1,333,496	1,337,041	1,338,791	1,338,031	1,334,900
Series 2008 Bonds (see below)	-	-	-	-	3,280,485	3,294,411	3,308,042	3,337,625	3,346,125	3,350,500	3,353,750
Total debt service payments	1,303,301	1,302,244	1,337,629	1,335,054	4,614,940	4,628,877	4,641,508	4,674,666	4,685,906	4,688,531	4,688,650
Projected Debt Service Coverage	4.62	5.52	3.95	2.39	0.90	1.09	1.41	1.54	1.49	1.57	1.18
In fiscal years 2009 and 2010 interest was capitalized											

CITY OF ST. GEORGE, UT CONTINUING DISCLOSURE - 2005 ELECTRIC REVENUE BONDS FISCAL YEAR ENDED JUNE 30, 2013					
TABLE VI Statement of Net Position					
	2013	2012	2011	2010	2009
ASSETS					
Current assets:					
Cash	\$ 8,037,550	\$ 1,356,079	\$ 6,220,551	\$ 7,984,450	\$ 7,439,768
Restricted cash	-	-	-	-	24,354,936
Accts. receivable (net of allowance for uncollectibles)	8,619,364	11,120,725	9,768,023	11,080,290	9,624,040
Inventory	1,726,901	1,784,537	1,840,282	1,982,398	1,877,049
Bond discounts & insurance	1,103,776	1,480,036	1,545,906	1,611,782	1,677,658
Prepaid expenses	-	1,023	1,160	1,115	2,144
Total current assets	19,487,591	15,742,400	19,375,922	22,660,035	44,975,595
Capital assets net of accumulated depreciation					
	89,082,356	93,446,020	98,743,093	100,208,668	84,261,261
TOTAL ASSETS	108,569,947	109,188,420	118,119,015	122,868,703	129,236,856
LIABILITIES					
Current liabilities:					
Accrued liabilities	8,984,007	4,387,896	7,410,426	5,407,943	9,548,663
Deposits payable	1,011,133	1,414,371	1,312,898	1,296,114	1,345,694
Total current liabilities	9,995,140	5,802,267	8,723,324	6,704,057	10,894,357
Long-term liabilities:					
Bonds payable - long term	59,235,000	60,965,000	62,610,000	64,180,000	64,845,000
Bond premiums	559,669	597,800	635,931	674,062	712,193
Total long-term liabilities	59,794,669	61,562,800	63,245,931	64,854,062	65,557,193
Total liabilities	69,789,809	67,365,067	71,969,255	71,558,119	76,451,550
NET POSITION					
Invested in capital assets, net of related debt	30,391,463	33,363,255	37,043,067	36,966,387	20,381,725
Restricted	-	-	-	-	24,354,936
Unrestricted	8,388,675	8,460,098	9,106,690	14,344,197	8,048,643
Total net position	\$ 38,780,138	\$ 41,823,353	\$ 46,149,757	\$ 51,310,584	\$ 52,785,304

CITY OF ST. GEORGE, UT
CONTINUING DISCLOSURE - 2005 ELECTRIC REVENUE BONDS
FISCAL YEAR ENDED JUNE 30, 2013

TABLE VII Statement of Revenues, Expenses, and Changes in Fund Net Position

	2013	2012	2011	2010	2009
OPERATING REVENUES:					**
Charges for services	\$ 57,489,697	\$ 54,450,360	\$ 51,663,285	\$ 52,140,945	\$ 51,584,369
Other operating revenues & impact fees	1,328,407	1,211,410	2,445,434	1,718,331	2,290,707
Total operating revenues	58,818,104	55,661,770	54,108,719	53,859,276	53,875,076
OPERATING EXPENSES:					
Electricity purchased	40,599,715	37,491,445	38,833,578	39,785,534	37,868,364
Natural gas purchased	4,127,857	5,126,432	3,499,843	4,074,512	3,498,003
Salary and wages	3,291,114	3,449,695	3,207,560	3,349,379	3,353,755
Supplies	762,296	776,745	888,178	515,160	799,088
Service vehicle expense	169,898	173,538	141,120	152,988	144,937
Equipment rental	-	-	-	-	-
Depreciation	6,377,950	6,369,528	6,261,468	4,030,025	3,979,778
Payroll tax & employee benefits	1,259,135	1,270,853	1,213,615	1,246,966	1,252,170
Office & dept. supplies	67,386	63,095	82,995	69,547	72,384
Professional services	267,432	312,825	350,185	264,740	558,004
R. & M. - equipment	372,948	526,818	393,528	586,685	525,412
R. & M. - buildings and grounds	25,382	18,542	18,089	24,112	20,255
Insurance & surety bonds	218,745	160,603	141,315	101,186	122,585
Travel	51,229	50,303	44,520	40,163	53,715
Miscellaneous	555	2,606	1,469	2,689	9,312
Interest expense	28,588	25,127	24,235	23,716	55,560
Subscriptions & memberships	63,136	63,995	53,544	53,933	61,061
Billing & administration	1,500,000	1,400,000	1,400,000	1,400,000	1,300,000
Total operating expenses	59,183,366	57,282,150	56,555,242	55,721,335	53,674,383
Operating income (loss)	(365,262)	(1,620,380)	(2,446,523)	(1,862,059)	200,693
NON-OPERATING REVENUES (EXPENSES)					
Interest income	17,816	17,933	22,604	143,515	906,871
Federal grants	295,887	-	144,464	557,036	-
Miscellaneous income	230,245	259,919	163,576	316,160	191,987
Loss on bond refinancing	-	-	-	-	-
Interest charges	(2,911,508)	(2,983,877)	(3,044,949)	(629,373)	(652,616)
Total non-operating revenue (expense)	(2,367,560)	(2,706,025)	(2,714,305)	387,338	446,242
Income before transfers	(2,732,822)	(4,326,405)	(5,160,828)	(1,474,721)	646,935
Contributions	-	-	-	-	-
Transfers to/from other funds	-	-	-	-	-
Change in Net Position	(2,732,822)	(4,326,405)	(5,160,828)	(1,474,721)	646,935
Restatement of Net position for GASB 62	(310,392)				
Total net position - beginning	41,823,353	46,149,756	51,310,584	52,785,304	52,138,369
Total net position - ending	\$ 38,780,139	\$ 41,823,351	\$ 46,149,756	\$ 51,310,583	\$ 52,785,304

** 2009 Charges for services restated for GAAP restatement of bad debt expense

Employee Productivity

Currently, the SGESD has 53 Full Time Employees. Department personnel are the reason for the success as a utility. Each employee works hard to accomplish current and long term goals and assignments.

- Work Orders
 - 1,807 total work orders
 - Overhead – 962
 - Underground – 274
 - Tree Trimming – 18
 - 1,127 tree trims
 - 148 trees removed
 - Other – 553

- Reliability
 - 87 unscheduled outages during fiscal year 2013
 - Average system availability index 99.99%
 - 77.6 minutes - Customer Average Interruption Duration Index (*CAIDI*): the number of customers that actually had one or more interruptions and how long (on average) the interruptions lasted. The figure represents the total number of customer interruption durations divided by the total number of customers interrupted. The national average is 81.6 minutes/year
 - 1.23 hours – System Average Interruption Duration Index (*SAIDI*): represents the sum of customer-sustained outage minutes per year divided by the total customers served. The national average is 1.50 hours/year

- Community Involvement
 - Participated in several energy fairs
 - Provided community group demos on energy conservation
 - Career Day – A Hot Line demonstration was provided to local students
 - Provided numerous demos on hot line dangers and safety to customer and citizens

DEED Internship Scholarship Award

The SGESD applied for and was awarded an internship scholarship through the Demonstration of Energy & Efficiency Developments (DEED) program. The goal of the internship was to conduct a pole testing program to determine several things:

- Determine the status of existing wood power poles on the SGESD system
- Evaluate the current power pole standard and support the modification of that standard if necessary
- Develop a pole testing/replacement schedule so that poles are replaced before they fail in the field resulting in possible outages

To conduct this study, a college intern was hired to do the pole testing and evaluate the results. The time frame was to complete the project during the university summer break. An IML PD500 Resistograph was purchased in order to drill into the poles to determine the structural integrity of the pole.

Results:

Currently there are 5,780 wood power poles in service on the system. The goal for the time frame allowed was to test 15-20 poles a day for a total of around 700 poles. The main challenge to achieving this goal was the Resistograph itself. Problems with the drill slowed progress considerably. On some days only five poles were tested and the rest of the day was spent working on the drill trying to extract broken bits from the chuck. One repair required the drill to be sent back to the manufacturer for repair. This resulted in a three week delay.

The intern was able to determine if the inside of the pole is in good, average, or poor condition. This is accomplished by drilling 2 minute holes into the pole 90 degrees apart, which is why this test is deemed "intrusive". Any pole that is less than 15 years old is considered good, and does not have to be tested. Poles that are "average" will be retested within the next 10 years. If the condition has not changed, then they will be tested again in another 10 years. Poles that are deemed "poor" will be replaced as soon as possible. The goal is to replace 25% of poles deemed "poor" annually. A budget line item of \$130,000 is included to cover the expenses associated with the pole replacement program.

The intern was able to test 769 poles. Of those tested, 553 were identified as Good, 167 Moderate, and 49 as Poor.

Strategic Plan Update

In 2012, the SGESD updated the five year strategic plan. The following are updates on each division's progress:

Transmission:

- Goal – Sell assets in UAMPS 138Kv project to lower overall debt
 - The sale of the 138Kv system is in the discussion phase between UAMPS and PacifiCorp. The sale has been presented to PacifiCorp and is now pending a reply and follow up discussions

Resources:

- Goal – Train Operators to perform Real Time trades and manage costs
 - All Apprentice Resource Schedulers are NERC certified and are trained to perform real time trading
 - Resource Scheduling Supervisor audits monthly sheet for correctness and reviews the Operator Journal for appropriate documentation of system notes
- Goal – Acquire new trading counterparties
 - The Resource Manager and Scheduling Supervisor attended the WSPP annual fall conference and interacted with many term traders. We renewed our association with Xcel Energy and NV Energy and began an association with Rainbow Energy
- Goal – Terminate IPP contract
 - A termination letter was sent to DGT opting out of IPP contract. An escalated termination date was requested. If no early release is obtained, the contract will end January 2015

Generation:

- Goal - Unit Reliability 99% or greater
 - At the end of the 2013 summer run season, MC1 reported a YTD reliability of 99.96% and MC2 reported 99.85%
 - We continue to follow GE OEM recommendations by consulting with our GE Facilities Manager Buck Oliver, as he provides maintenance and parts recommendations. We will be reviewing the O&M Agreement in regards to the contract with GE in 2014. The advantage of this position is to assure us that we receive and implement all service bulletins released from GE on a timely and active basis

- Goal – Unit Availability 98% or greater
 - At the end of the 2013 summer run season, MC1 reported a YTD availability of 98.17% and MC2 reported 98.42%
 - Cory is scheduled to attend the LM600 Package Familiarization course in the Spring 2014. Rod and Brad attended the GE business conference in 2013 and Jason is scheduled to attend a Level One engine repair class in March 2014

Conservation:

- Goal – Annually, evaluate at least one new energy efficiency technology to implement
 - LED lights were installed at the St. George Arts Museum. The lights were used to highlight artwork. The Art Museum has reported back that the lights are better and last longer

Operations/Distribution:

- Goal – Boost Moral
 - Completed employee survey regarding department morale
 - Created Employee Morale Committee
 - Created Employee Newsletter to provide information about events and employee spotlights
 - Hold annual in-house rodeo for Linemen in conjunction with annual hot line school
 - Plans to participate in APPA rodeo in April 2015 in Sacramento, CA. Dennis Jorgensen will be a judge at this event
- Goal – Separate from City Fiber System
 - In process of installing OPGW's around City. First phase to complete January 2014 (River Substation to Flood Street Substation)
- Goal – Safety
 - Striving for zero loss time accidents.
 - Monthly safety meetings are being held with Line Crews. Utah League of Governments Trust risk management training is being attended several times per year
- Goal – Improve Preventative Maintenance Program
 - PM Program developed and guidelines created August 2013
 - Pole Testing implemented through DEEDS grant (See DEEDS Scholarship Grant for more information)
 - Visited Logan City to study their pole testing procedures and documentation

- Goal – Improve/Review Emergency Plan
 - Completed update to Emergency Plan in June 2013. Plan has been distributed to personnel

Engineering:

- Goal – Optimize the Distribution System
 - The City purchased MilSoft software to produce work plans
 - Milsoft will allow for modeling and system optimization
- Goal – Develop Master (Five Year) Plan
 - Planning tools are in place and a draft plan is scheduled to be ready Spring 2014

Compliance:

- Goal – Internal Auditing and Monitoring Program
 - The City has purchased SharePoint software. The Compliance Manager has been working with IT on software setup. SharePoint will allow for documents to be uploaded to server and accessed by all Subject Matter Experts (SME). Reports for SME areas of responsibilities will be created or updated in the SharePoint system.
- Goal – Improve education/awareness of compliance requirements
 - Power Point presentations were made to City leaders and department personnel
 - Sabotage training was provide to department personnel

St. George City Customers

Customer uses:

- 28,201 customers (October 2013)
 - During fiscal year 2013, SGESD added six new residential solar installs (net metered)

41.19%	large commercial energy	39.20%	revenue collected
11.07%	small commercial energy	12.57%	revenue collected
44.81%	residential energy	45.44%	revenue collected
2.93%	no charge/energy losses		

Energy Resource Portfolio

St. George City is under contract for the following resources:

Coal:

- Bonanza Power Plant – 50 MW
- Intermountain Power Project (IPP) – 20 MW

Hydro:

- Glen Canyon Dam – 20 to 30 MW
- Jordanelle Reservoir – 1 to 4 MW
- Pine Valley Hydro – 260 kW

Natural Gas:

- British Petroleum (BP) – average 6,000 Dth daily
- CIM Energy Ltd – average 2,000 Dth daily
 - Hedged to 2021

Solar:

- 1.045 MW total
 - SunSmart – 250 kW
 - Net Metered – 795 kW

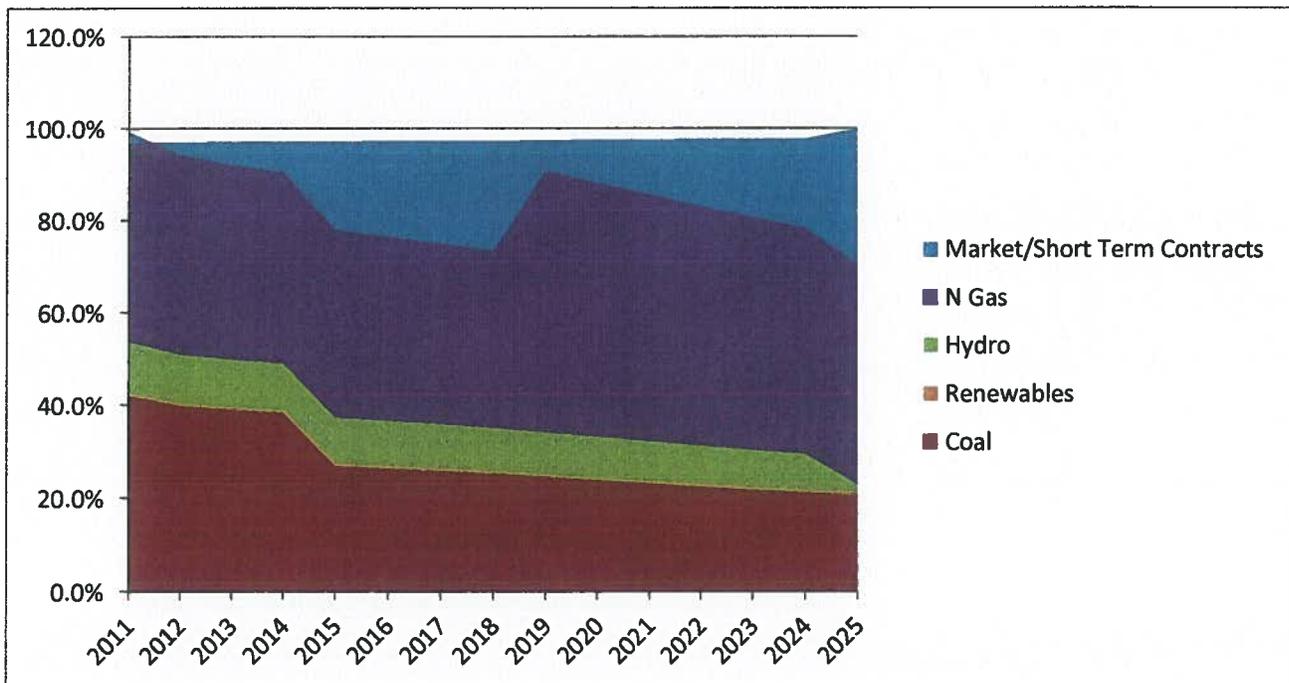
Day ahead and real time purchasing:

- Morgan Stanley
- NV energy
- Utah Associated Municipal Power Systems (UAMPS)
- Powerex
- Xcel Energy
- Cargill
- Rainbow Energy
- PacifiCorp (PAC)
- Western Area Power Administration (WAPA)
- Black Hills Power

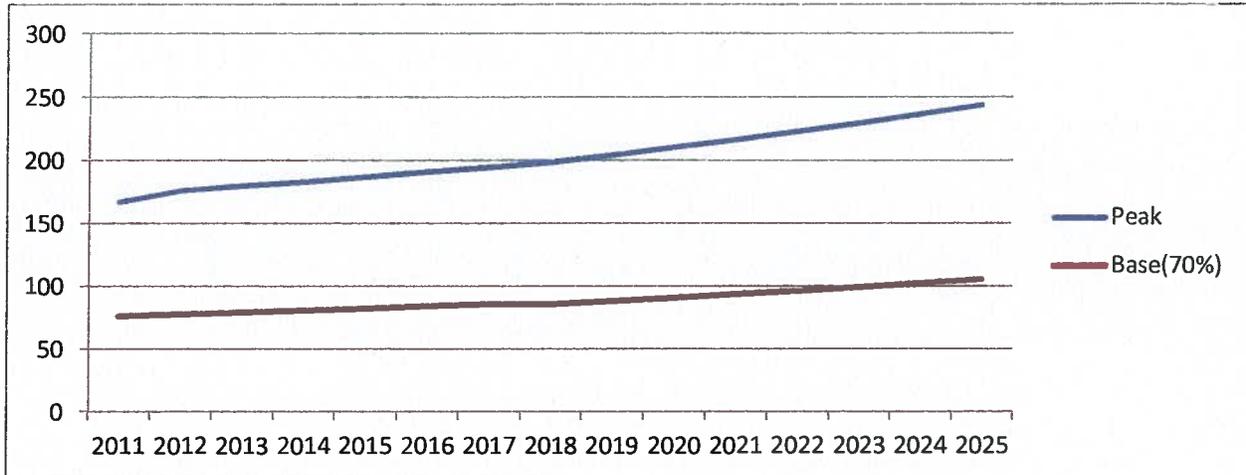
Energy resources are monitored in real time by Resource Schedulers from a 24-hour dispatch center located at the Red Rock Plant. Contracts with day ahead and real time traders are established through negotiation based upon the best cost scenario to the City. On all major contracts, attorneys are brought in for review.

RESOURCE CHARTS:

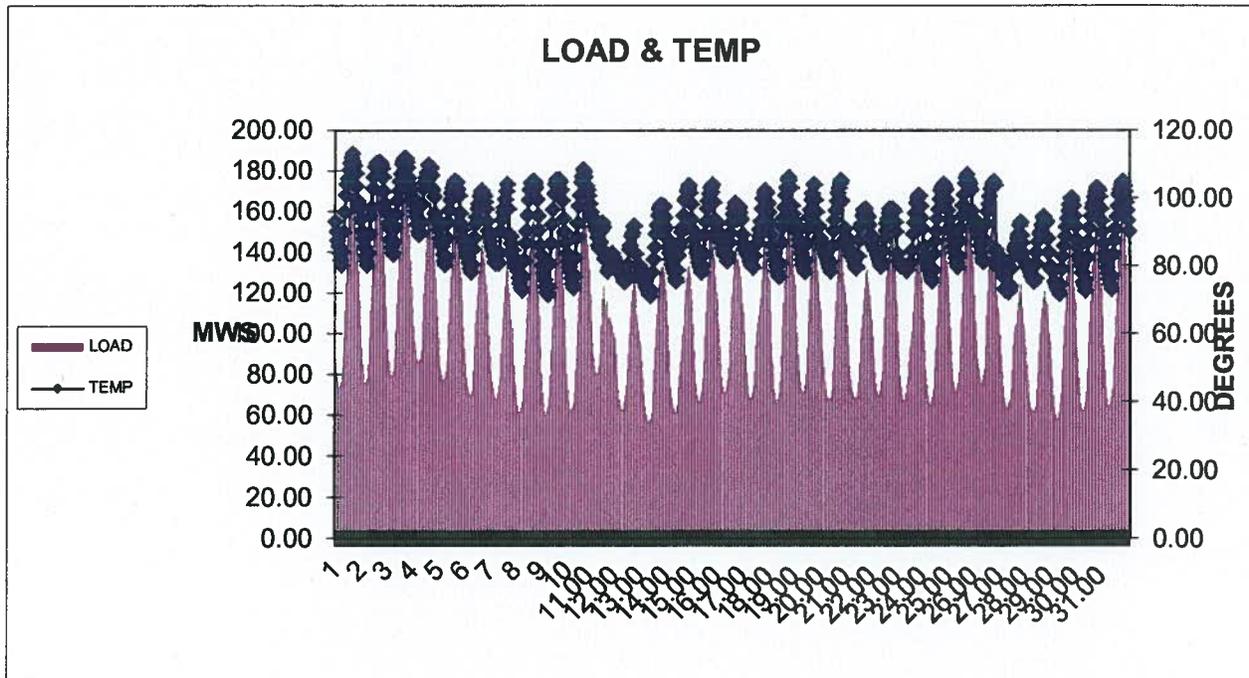
Resource Planning -



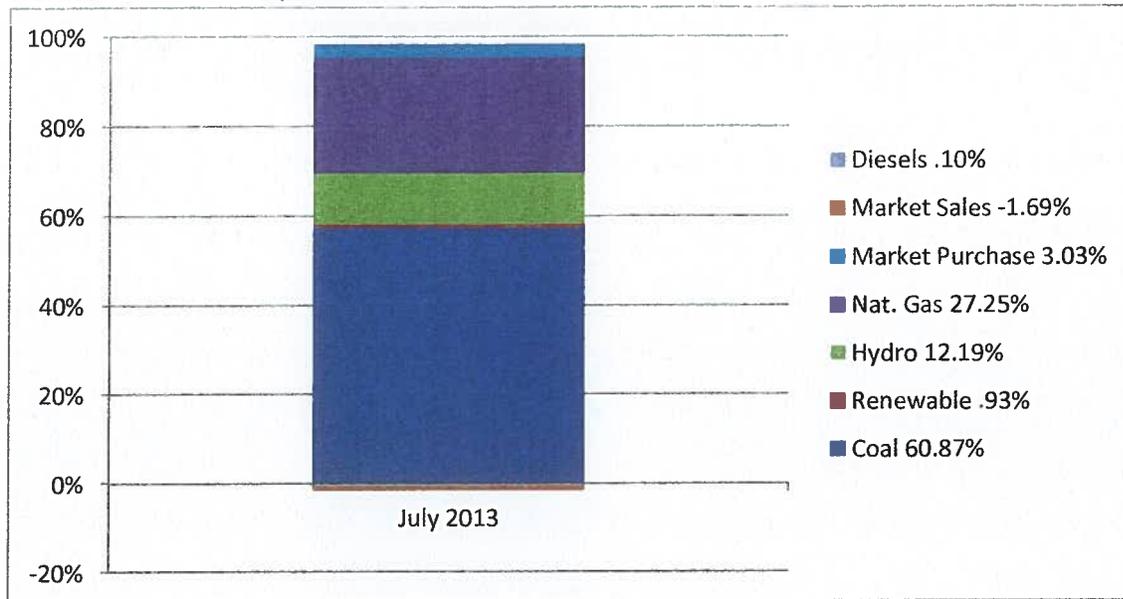
Load Planning (July – 15 Years) –



Actual Load and Temp July 2013:



Actual Resources July 2013:

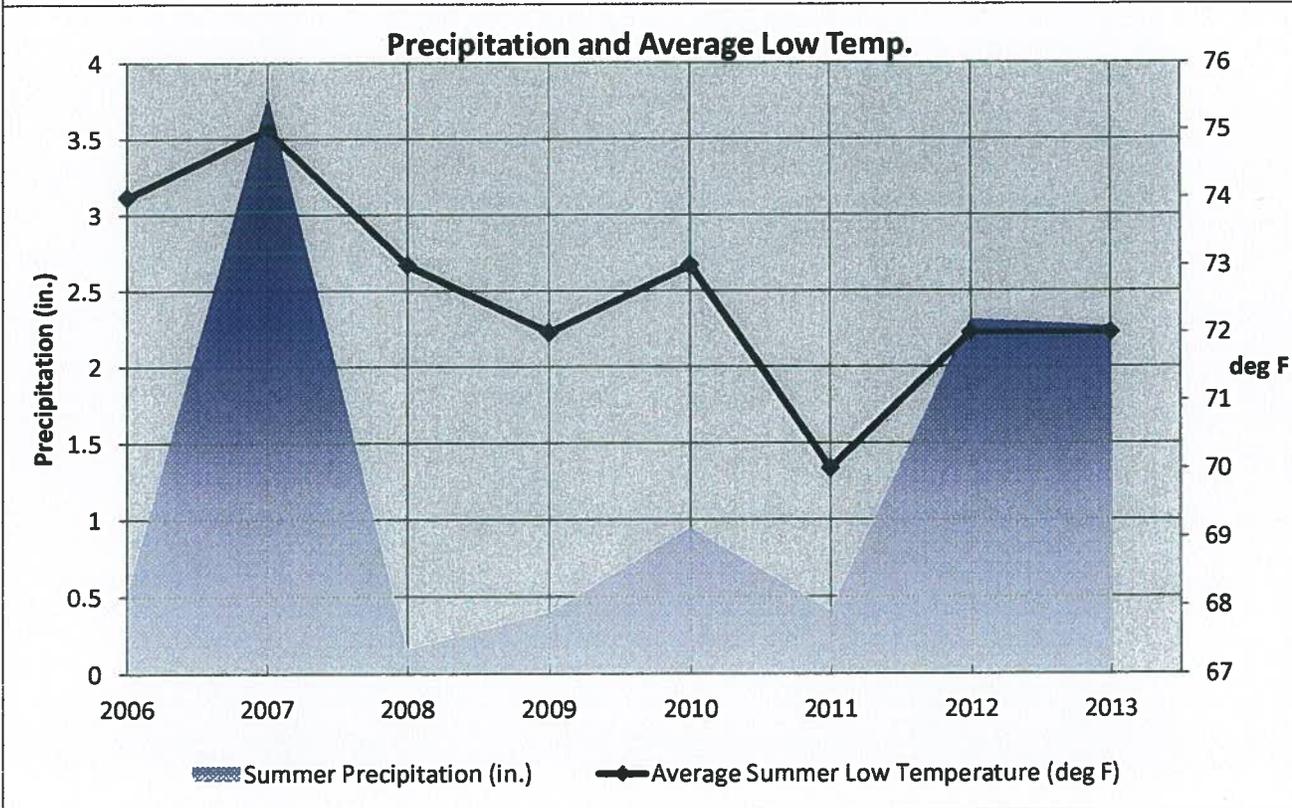
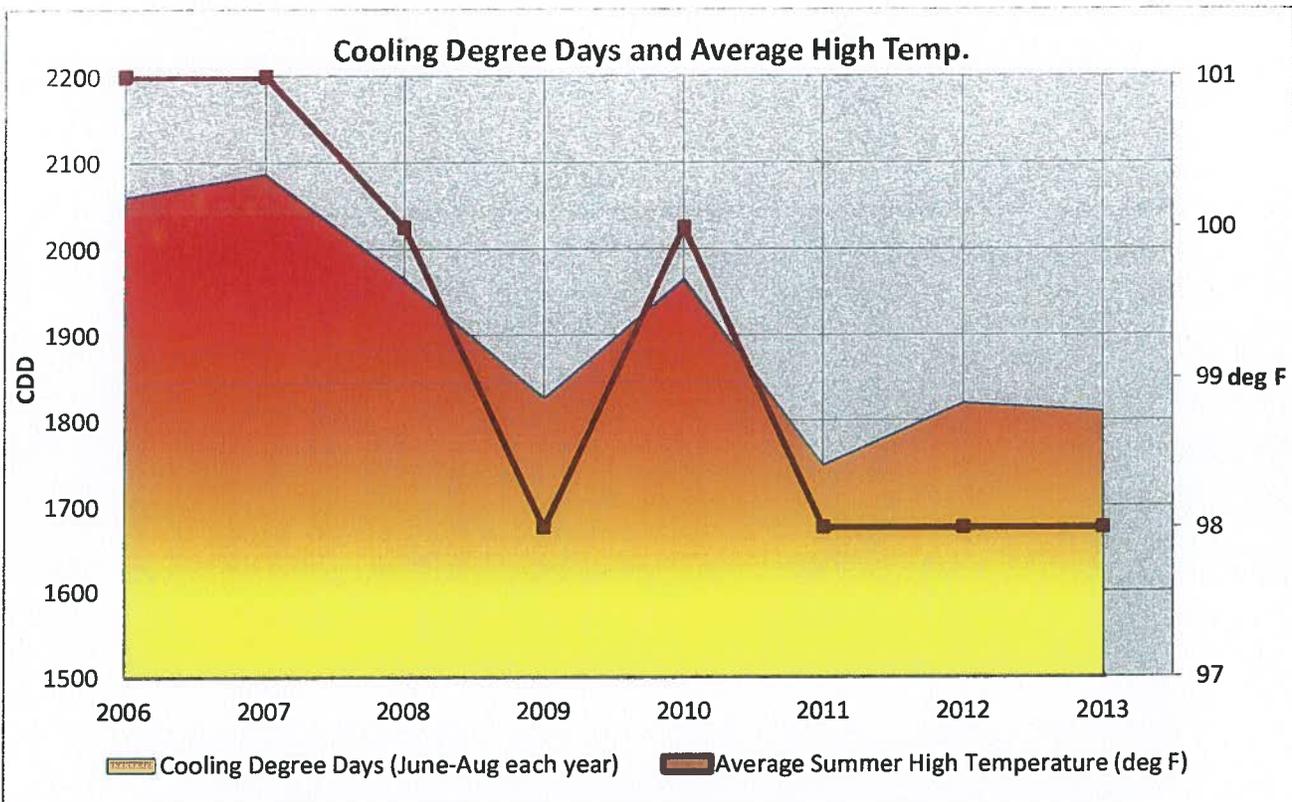


Weather Considerations

The climate during the 2013 summer, when compared to weather patterns that took place during the 2006 and 2007 summers, was somewhat different. An early summer heat wave caused extremely high temperatures for a period of time in June and early July, but dropped off to moderate levels throughout the remainder of the summer.

The chart on the following page compares the Washington County 2013 summer weather pattern to previous years. There were fewer cooling degree days in 2013 compared to 2006 and 2007 and the average high temperature for the area coincides with the number of cooling degree days which highlights that the overall summer weather pattern during 2013 was not particularly extreme.

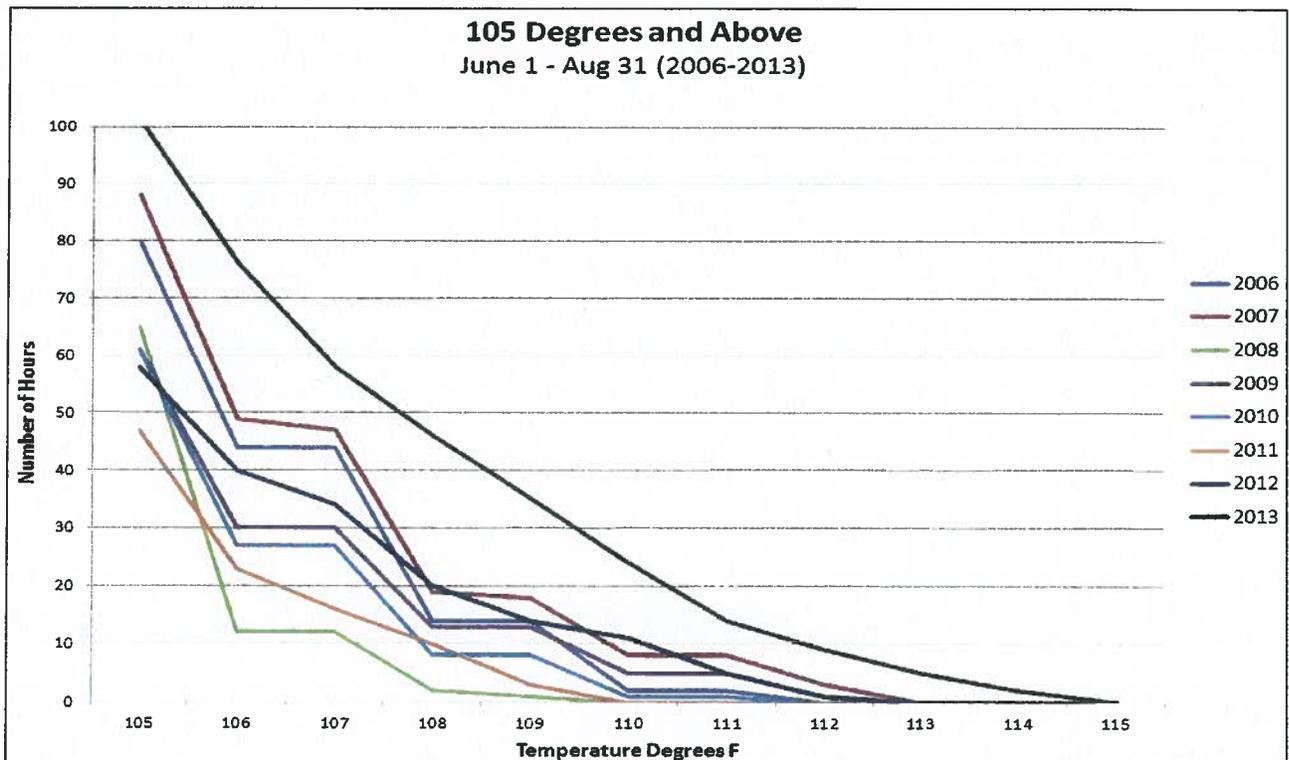
Also, the total precipitation accumulated through the summer months from June through August is shown along with the average low temperature experienced each year. The average low temperature correlates with the number of cooling degree days each year suggesting that the overnight temperatures in the area for the summer overall were comparatively moderate in 2013. The precipitation levels somewhat correlate with the cooling degree days and average high temperatures, but the correlation to peak load in the area is counter to what one would expect. However, precipitation or afternoon storms, particularly in July and August, may have contributed to a slightly lower 2013 system peak than would have been experienced otherwise and the high precipitation levels in 2007 appear to be an anomaly.

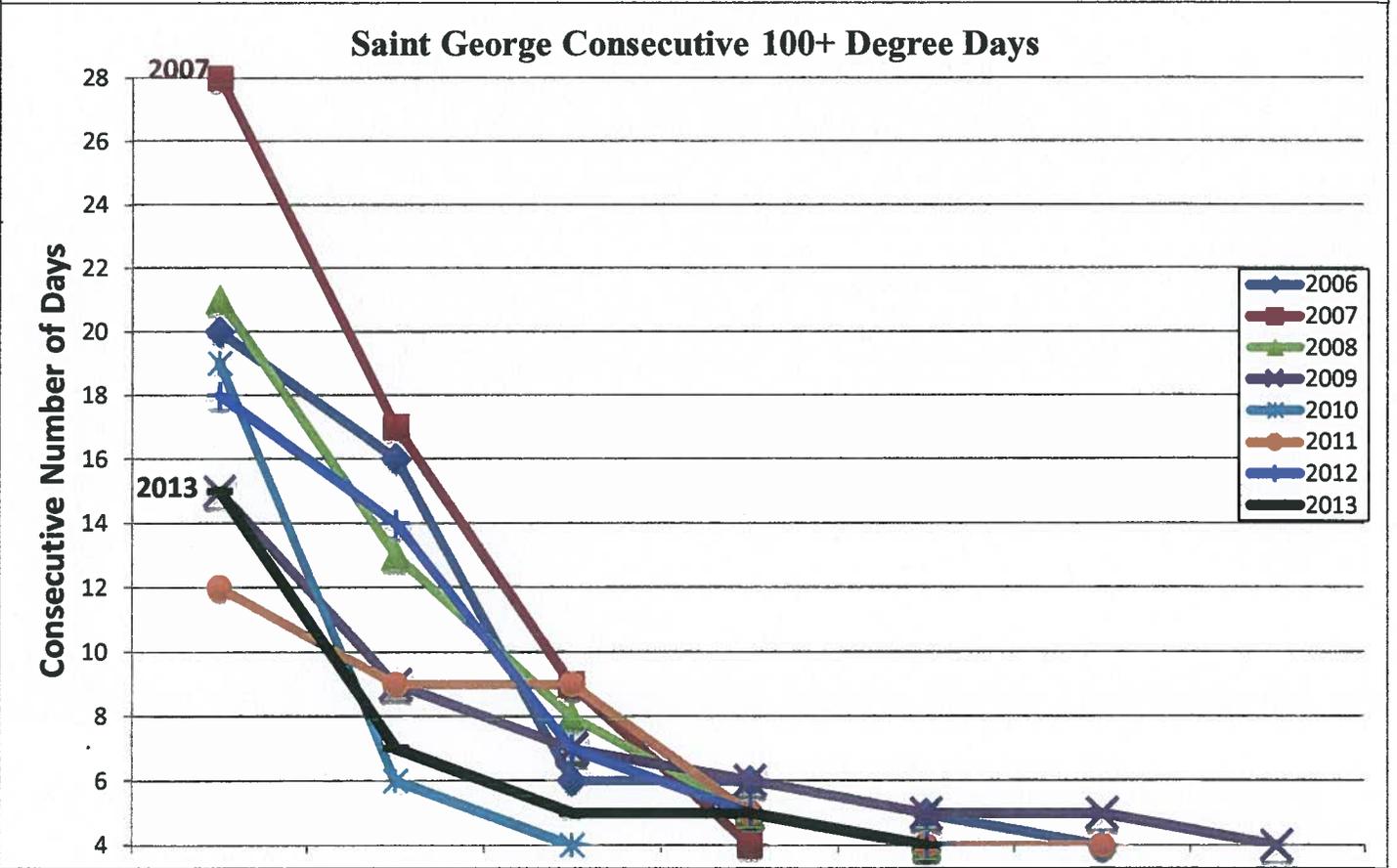
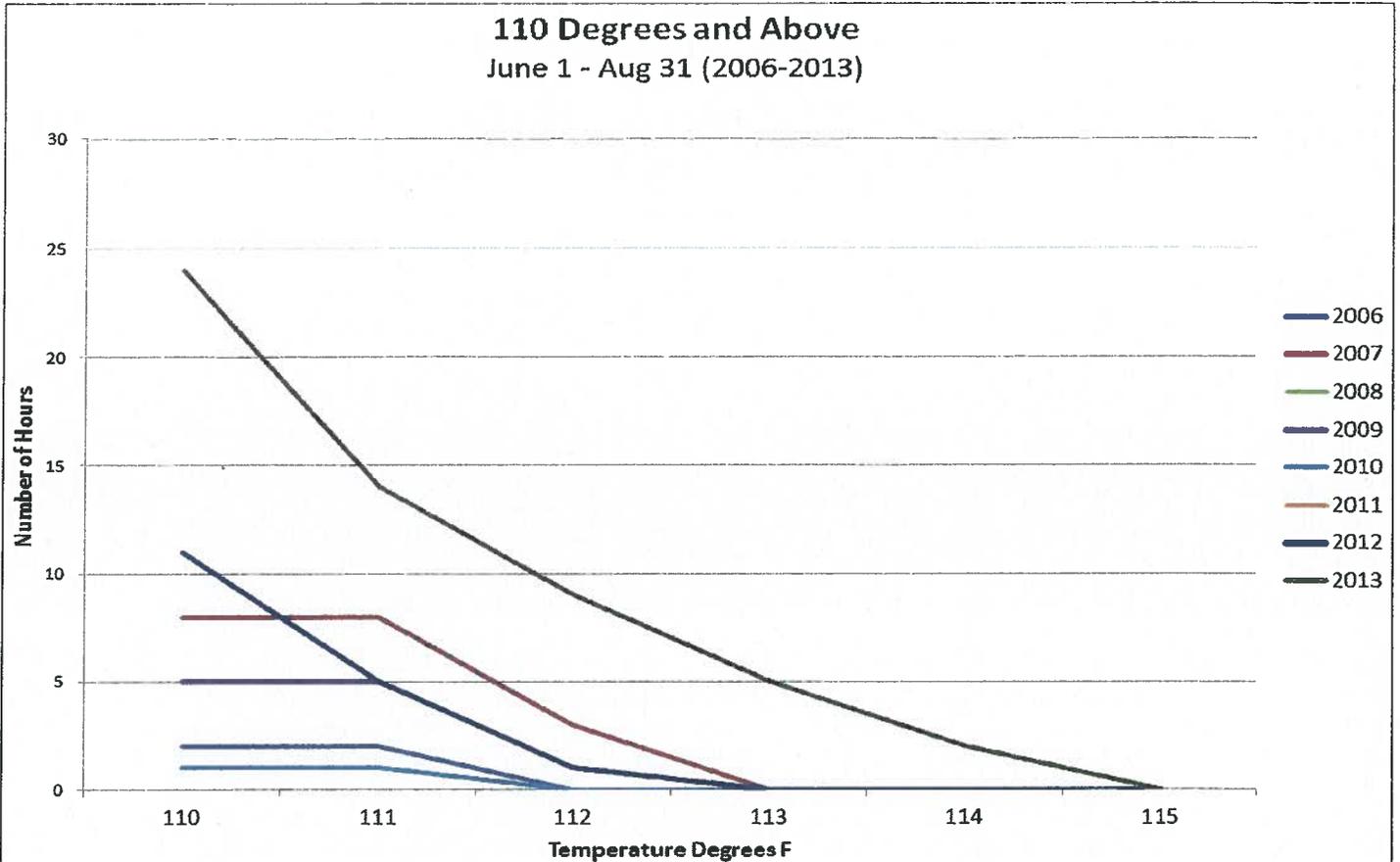


As shown in the chart on the previous page, the highest number of Cooling Degree Days for St. George in recent years continues to be 2007. During the 2013 summer there were approximately the same number of cooling degree days as in 2009 and 2012 which was higher than 2011 but much lower than 2007. Because of this, the 2013 summer weather conditions from a cooling degree days perspective was rather moderate. Since the highest ever electrical demand occurred in 2013, this also suggests that growth has likely occurred in the area since 2007 and a higher peak load may have occurred if the early heat wave had continued throughout the summer.

The temperature duration curves shown below indicate that during the 2013 summer, the number of hours where the temperature exceeded 105 degrees was approximately 100, which was higher than all the previously recorded years. The temperature exceeded 110 degrees for 24 hours in 2013 which was also the highest amount in recent years. The number of hours above 110 degrees and above 105 degrees indicates that there were comparatively more hours of extreme temperature spikes during 2013 which was particularly noticeable in June and early July.

Conversely, the number of consecutive 100 plus degree days shown Figure 10c was 15 compared to the high of 28 days that occurred in 2007. This figure is consistent with the number of cooling degree days for 2013 and emphasizes that the overall summer weather pattern, while especially hot for a shorter period of time, was not as consistently hot throughout the summer when compared to 2006 and 2007. As a result, it is likely that a somewhat higher system peak load would have been realized in 2013 if the higher temperatures that occurred early in the summer had continued more consistently throughout.





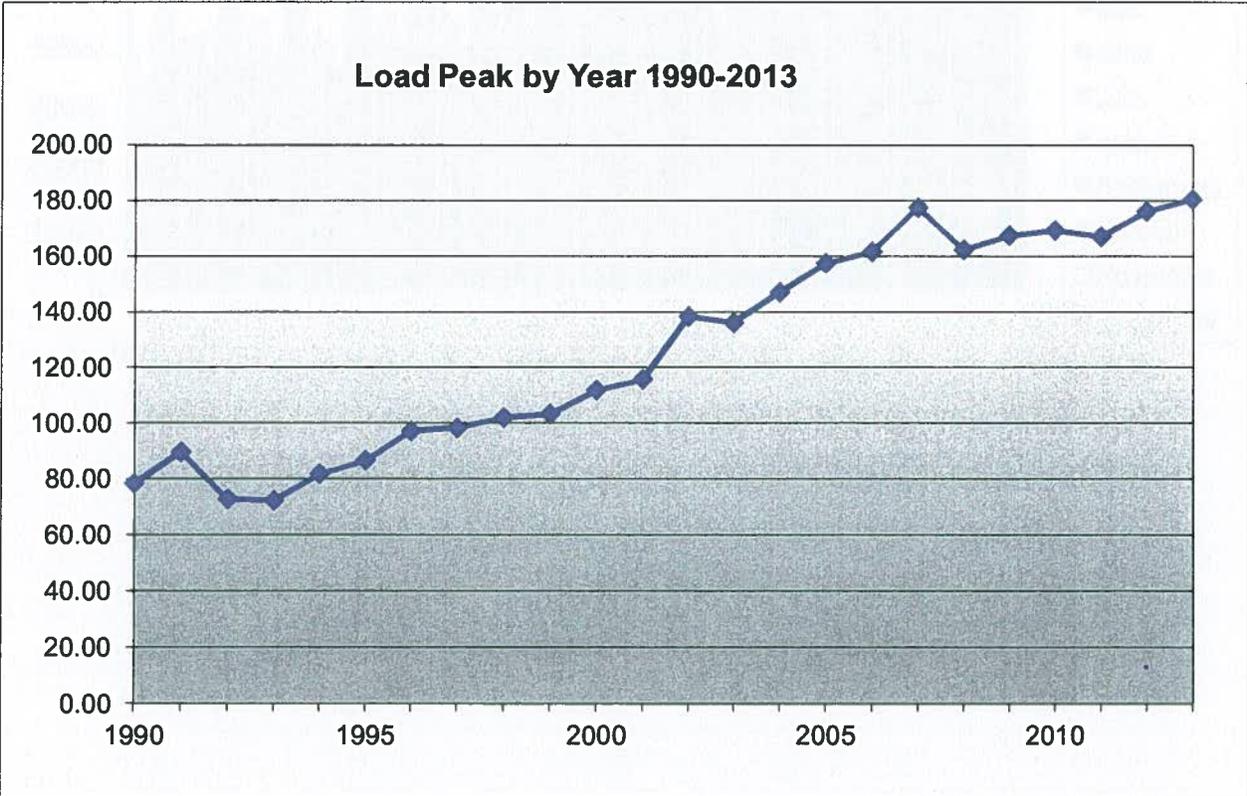
Energy Load

There are two types of load growth:

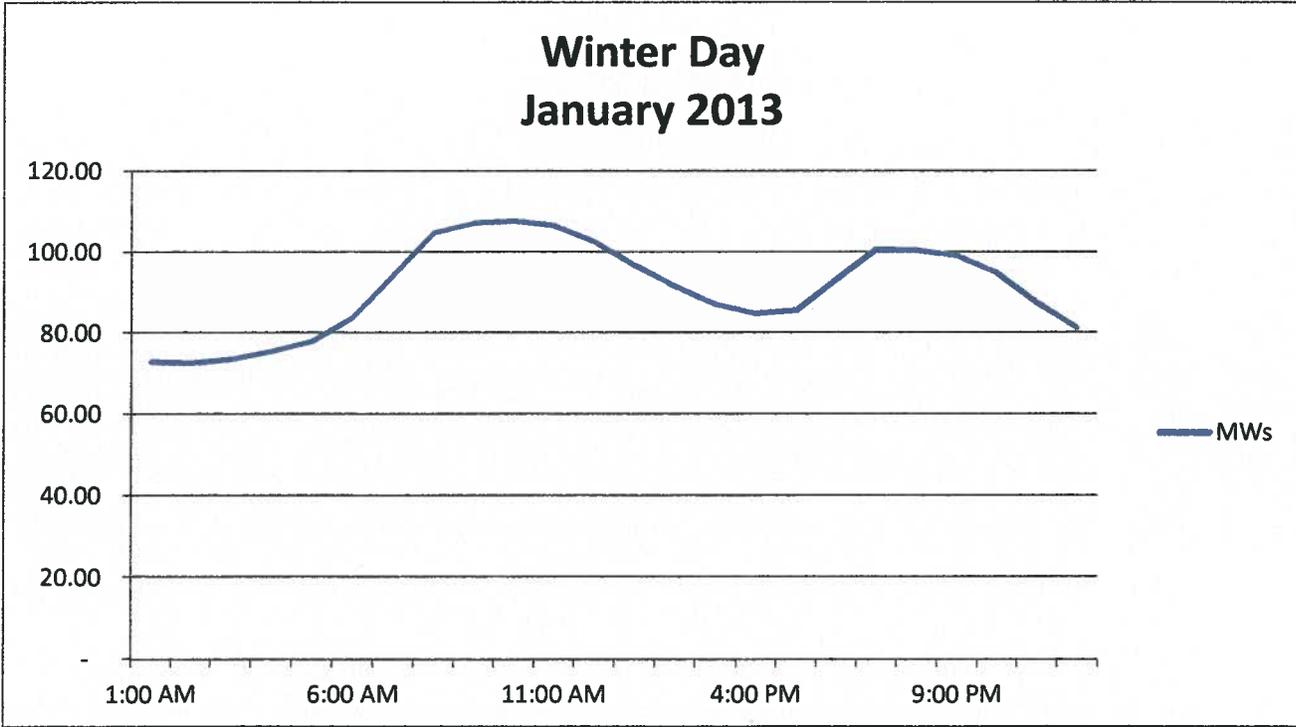
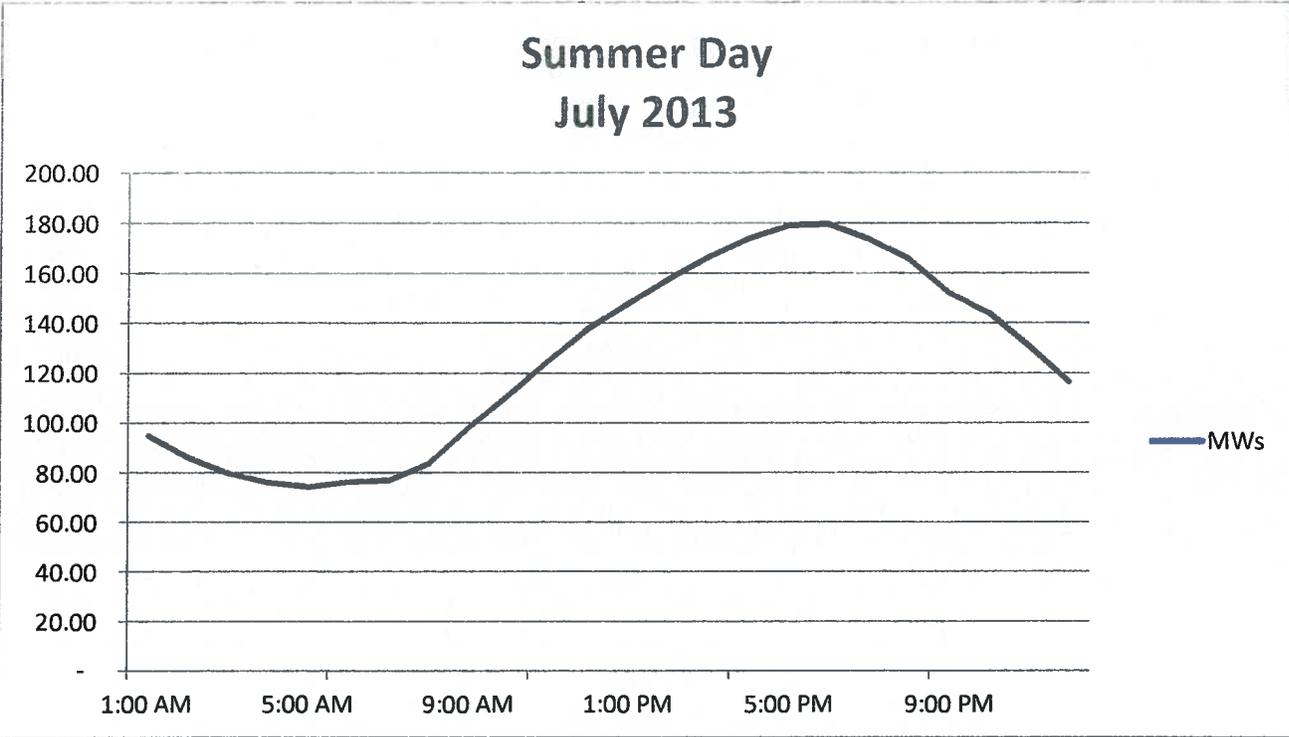
- Peak MWs in demand
- Energy Use

Both are important to energy load. Peak demand is studied and watched because of its effect on the infrastructure reliability. The SGESD must always be ready for the highest peak load to meet the customer demand.

When load and temperatures are high, the system becomes more fragile. The model studies are ongoing and consider contingencies so the SGESD is ready for any emergency/contingency. The following chart shows St. George Peaks from 1990 to 2013.



Below are charts that illustrate the 2013 summer and winter load and energy needs by season.



Summary: The Summer has one peak that lasts from approximately 11:00 am to 9:00 pm. The winter has two peaks, one during the morning hours and another during the evening hours, but the winter peak is not as sharp as the summer peak.

Current Position in Industry

The SGESD is very active in the Electric and Gas industry. The Resource Staff monitors the market for both commodities via internet subscriptions, regional committee memberships and project partnerships.

The Energy Services Director sits on an industrial advisory board for the University of Utah Civil/Environmental Engineering Department and the American Public Power Association (APPA) Reliable Public Power Provider (RP3) National Committee.

The SGESD is also a member of the Colorado River Electric Distributors Association (CREDA), which monitors our hydro allocations from the Glen Canyon Dam.

SGESD is an active member of American Public Power Association (APPA) including the customer connect program, which focuses on programs for public power customers. The APPA is an organization comprised of community-owned utilities throughout the country. SGESD also participates in the Department of Energy's summer conservation program.

The Department strives to provide reliable electric services to the community. This effort has earned the SGESD APPA's designation as a Reliable Public Power Provider (RP3) since 2007. The RP3 program is a peer-evaluation process, which highlights utilities that provide excellent services to its customers. Of the more than 2,000 municipal utilities in the country, 184 have earned the RP3 designation.

The APPA developed the RP3 program as a way to rate and acknowledge the reliability of municipal utilities throughout the country based on four areas of emphasis:

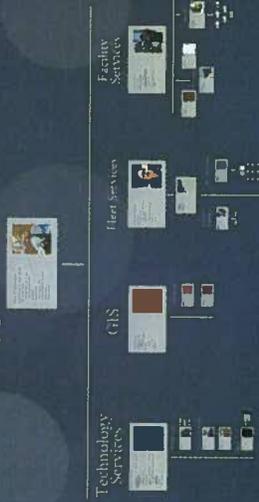
- Reliability
- System Improvement
- Safety
- Work Force Development

City of St. George

Administration



Support Services



Administration

Gary Esplin
City Manager
Employed Since 1975



Support Services



Mary M. Mervinakis
 Director of Support Services
 Employed since 1988

- Assistant to the City Manager
- Public Relations Officer
- Special Events
- Technology Services
- Geographic Information Systems
- Fleet Services

Technology Services



James C. Beckert
 Managing Systems Director

- Network
- Database
- Information Systems
- Microsoft Office
- Microsoft Exchange
- Microsoft Dynamics
- Microsoft Project
- Microsoft Access
- Microsoft Word
- Microsoft PowerPoint
- Microsoft Outlook
- Microsoft OneNote
- Microsoft Lync
- Microsoft Teams
- Microsoft SharePoint
- Microsoft Azure
- Microsoft Dynamics 365
- Microsoft Power BI
- Microsoft Forms
- Microsoft Flow
- Microsoft Power Automate
- Microsoft Office 365
- Microsoft Exchange Online
- Microsoft Teams Online
- Microsoft SharePoint Online
- Microsoft Dynamics 365 Online
- Microsoft Power BI Online
- Microsoft Forms Online
- Microsoft Flow Online
- Microsoft Power Automate Online
- Microsoft Office 365 Online
- Microsoft Exchange Online
- Microsoft Teams Online
- Microsoft SharePoint Online
- Microsoft Dynamics 365 Online
- Microsoft Power BI Online
- Microsoft Forms Online
- Microsoft Flow Online
- Microsoft Power Automate Online



GIS



David Elmer
 Director of GIS

- GIS
- GIS Data
- GIS Applications
- GIS Training
- GIS Support
- GIS Policy
- GIS Standards
- GIS Best Practices
- GIS Innovation
- GIS Leadership
- GIS Collaboration
- GIS Partnership
- GIS Advocacy
- GIS Communication
- GIS Outreach
- GIS Engagement
- GIS Inclusion
- GIS Equity
- GIS Justice
- GIS Sustainability
- GIS Resilience
- GIS Adaptability
- GIS Flexibility
- GIS Creativity
- GIS Innovation
- GIS Leadership
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- GIS Outreach
- GIS Engagement
- GIS Inclusion
- GIS Equity
- GIS Justice
- GIS Sustainability
- GIS Resilience
- GIS Adaptability
- GIS Flexibility
- GIS Creativity



Fleet Services



Kimberly Dugdale
 Director of Fleet Services

- Fleet Management
- Fleet Operations
- Fleet Maintenance
- Fleet Safety
- Fleet Compliance
- Fleet Training
- Fleet Support
- Fleet Policy
- Fleet Standards
- Fleet Best Practices
- Fleet Innovation
- Fleet Leadership
- Fleet Collaboration
- Fleet Partnership
- Fleet Advocacy
- Fleet Communication
- Fleet Outreach
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- Fleet Justice
- Fleet Sustainability
- Fleet Resilience
- Fleet Adaptability
- Fleet Flexibility
- Fleet Creativity

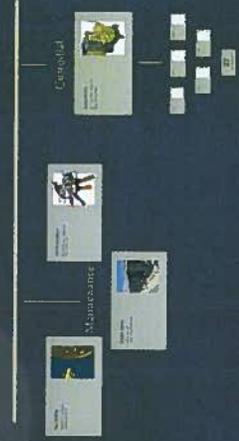


Facility Services



Carole Miller
 Director of Facility Services

- Facility Management
- Facility Operations
- Facility Maintenance
- Facility Safety
- Facility Compliance
- Facility Training
- Facility Support
- Facility Policy
- Facility Standards
- Facility Best Practices
- Facility Innovation
- Facility Leadership
- Facility Collaboration
- Facility Partnership
- Facility Advocacy
- Facility Communication
- Facility Outreach
- Facility Engagement
- Facility Inclusion
- Facility Equity
- Facility Justice
- Facility Sustainability
- Facility Resilience
- Facility Adaptability
- Facility Flexibility
- Facility Creativity



SUPPORT SERVICES

Marc M. Mortensen
 Support Services Operations Manager
 Employed since 1978

- Assistant to the City Manager
- Public Information Officer
- Special Events
- Technology Services
- Construction/Build/Install/Service
- Fleet Services
- Facility Services



Technology Services

James C. Duvall
 Information Systems Director, Bureau Chief, Office
 of Information Systems
 Employed since 2007

- Director
- Deputy Director
- Director of Information Management and Systems
- Director of Information Technology
- Director of Information Security
- Director of Information Services
- Director of Information Systems



Tech Support



GIS

David Evans
 GIS Business Manager
 Employed since 2007

- GIS Business Manager
- GIS Business Analyst
- GIS Business Developer
- GIS Business Support
- GIS Business Training
- GIS Business Consulting
- GIS Business Implementation
- GIS Business Maintenance
- GIS Business Upgrades
- GIS Business Integration
- GIS Business Interoperability
- GIS Business Security
- GIS Business Performance
- GIS Business Reliability
- GIS Business Availability
- GIS Business Scalability
- GIS Business Flexibility
- GIS Business Portability
- GIS Business Compatibility
- GIS Business Interoperability
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- GIS Business Portability
- GIS Business Compatibility



GIS Support



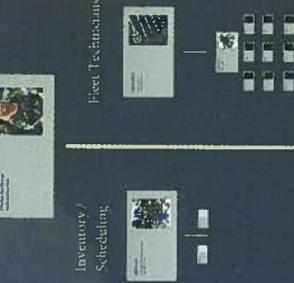
Fleet Services

Christine Stephens
 Fleet Manager
 Employed since 2007

- Fleet Manager
- Fleet Business Analyst
- Fleet Business Developer
- Fleet Business Support
- Fleet Business Training
- Fleet Business Consulting
- Fleet Business Implementation
- Fleet Business Maintenance
- Fleet Business Upgrades
- Fleet Business Integration
- Fleet Business Interoperability
- Fleet Business Security
- Fleet Business Performance
- Fleet Business Reliability
- Fleet Business Availability
- Fleet Business Scalability
- Fleet Business Flexibility
- Fleet Business Portability
- Fleet Business Compatibility



Inventory / Scheduling



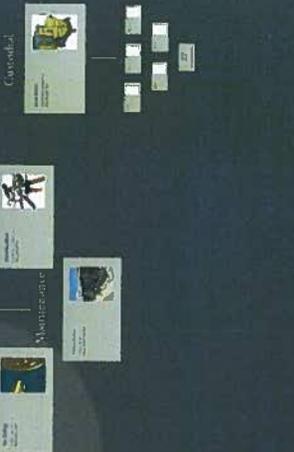
Facility Services

Carol Baker
 Facility Manager
 Employed since 2007

- Facility Manager
- Facility Business Analyst
- Facility Business Developer
- Facility Business Support
- Facility Business Training
- Facility Business Consulting
- Facility Business Implementation
- Facility Business Maintenance
- Facility Business Upgrades
- Facility Business Integration
- Facility Business Interoperability
- Facility Business Security
- Facility Business Performance
- Facility Business Reliability
- Facility Business Availability
- Facility Business Scalability
- Facility Business Flexibility
- Facility Business Portability
- Facility Business Compatibility



Warehouse



Values of Support Services

Communication

Trust

Teamwork

Safety

Leadership

Humor & Fun

Integrity

Professionalism

Guiding Principles

Every member of the Support Services Team contributes to the success of accomplishing the goals of the City of St. George. Excellence in day-to-day operations, financial stewardship and employee development are accomplished through: teamwork, continuous improvement, clear processes, relationships and communication.



Mottos

"When You Prohibit Self-Empowerment,
You Kill Innovation"

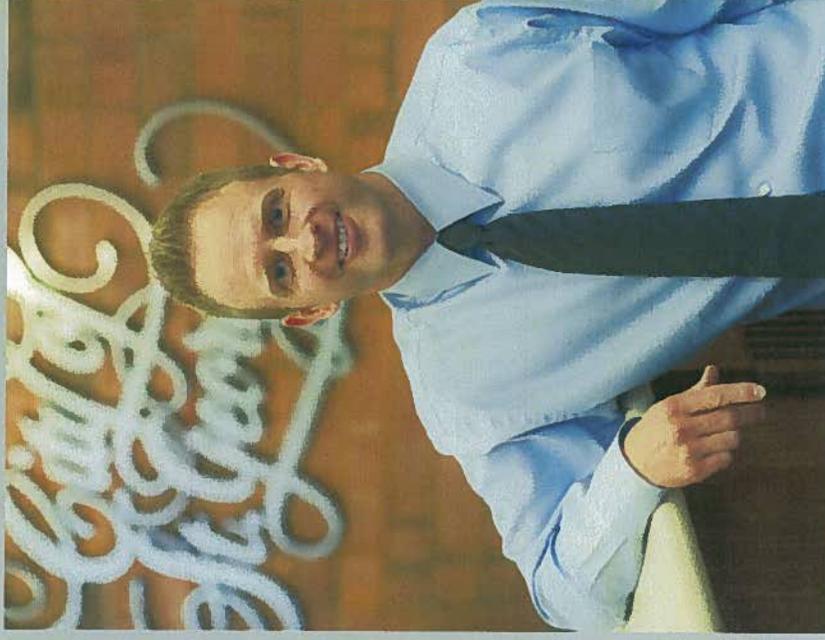
"Own It! Act on It! Answer for It!"

Marc M. Mortensen

Support Services Department Manager

Employed since 1998

- Assistant to the City Manager
- Public Information Office
- Marketing
- Special Events
- Technology Services
- Geographic Information Services
- Fleet Services
- Facility Services



Technology Services

James C. Duckett

Technology Services Division Manager (Head Geek)



Values of Technology Services

INTEGRITY
TEAMWORK

SAFETY
CUSTOMER SATISFACTION
PROFESSIONALISM
PROACTIVE LEADERSHIP
COMMUNICATION/TRUST

FUN & **H**UMOR
EFFICIENT

Mission Statement

*Technology Services supports City of
St. George employees through the
magic of technological wizardry.*

Projects Recently or Nearly Completed

Moved into East Annex Building

Added the airport to the City network

Increased network redundancies through wireless backup connections

Added Bradford NAC for wireless and switch port security

Updated City eNet

Released City App on iPhone, iPad, and Android

Upgraded and migrated all users from Exchange 2007 to Exchange 2013

Implemented SharePoint 2013

Upgrading Call Manager from v8.5 to v9.1

Adding new Nexus 5548 core to City network to better manage data routing

Upgrading surveillance camera servers

Updating City website

Technology Services

James C. Duckett

Technology Services Division Manager (Head Geek)

Employed since 2007

- Networks
- Security
- Systems and Servers
- Virtualization
- Electronic Communications (VoIP, Cell Phones, eMail, Instant Messaging)
- Hardware and software procurement deployment and support
- Web Services
- SharePoint
- Video Surveillance



Tech Support

Doug Belliston

Tech Manager

Employed Since 1994



Techs



Kelley Ewell
Inventory Specialist
Employed Since 2013



Jeremy Garfield
IS Technician
Employed Since 2012



Kim Edwards
Part-Time IS Technician
Employed Since 2013

Systems & Networks



Brandon Bundy

Systems Engineer
Employed Since 2008



Colt Stratton, CCNA

Network Engineer
Employed Since 2007

Web

Cory Frost

Webmaster
Employed Since 2004



Brian Healy

Part Time Recreation Webmaster
Employed Since 2008



CSHIS

Recent Projects

- Development of a platform for the analysis and visualization of data from the Hubble Space Telescope
- Design and implementation of a system for the analysis and visualization of data from the Hubble Space Telescope
- Design and implementation of a system for the analysis and visualization of data from the Hubble Space Telescope
- Design and implementation of a system for the analysis and visualization of data from the Hubble Space Telescope

Recent Projects

- Assumption of responsibility to calculate, assign, and track **addresses** and centerline ranges.
- **Major upgrades** to GIS server including a new operating system, SQL database server, and new versions of ESRI and Cityworks.
- Provided maps for **City mobile app**.
- In cooperation with the County and local agencies, we have acquired new high resolution **orthophotography**.

GIS

David Evans

GIS Division Manager

Employed since 1989

- GIS Administration
- ESRI
- City Works
- Addressing
- AutoCAD
- GIS Analysis



GIS Support



Janet Lang
GIS Technician
Employed since 1991



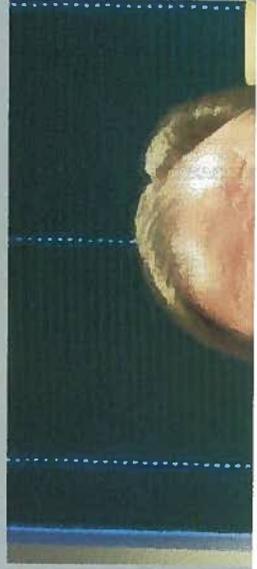
Steve Clarke
GIS Database Administrator
Employed since 2008

Fleet Services

Courtney Stephens

Fleet Manager

Employed since 2000



Fleet Facts

- Fleet averages 1,094 repairs on 304 assets per month
- Average of 3.4 units per day of backlog
- 1:1 bay to mechanic ratio
- We up-fit all police vehicles and most fire apparatus
- 23,398 fueling transactions
- 9.5 technicians working on 889 City assets
- Parts billing is \$1.6 million per year on assets worth \$14.1 million



City Vehicle Assets

Lawn Mowers, light trucks, heavy trucks, loaders, backhoes, motor graders, combo machines trailers, buses, and fire apparatus.

Fleet's Primary Values

Safety

Integrity

Respect

Quality work

Fleet Services

Courtney Stephens

Fleet Manager

Employed since 2000

- Vehicle/Equipment Purchasing
- Parts Inventory
- Fuel
- Vehicle Maintenance/Repairs
- Vehicle Up-fits
- Planning



Barbara Spear
Administrative Assistant
(The Real Fleet Manager)
Employed since 2006



Inventory / Scheduling

Jeff Hansen

Inventory and Scheduling Supervisor
Employed since 2003





Michael Burke

Part-Time Inventory and Scheduling
Employed since 2011



Casey Jacobs

Inventory and Scheduling
Employed since 2008

Fleet Technicians



Wayne Brush
Fleet Supervisor
Employed since 1975



Joseph Robinson
Fleet Technician Supervisor
Employed since 1978



Wayne Brush

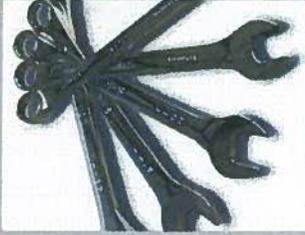
Fleet Supervisor

Employed since 1975



Joseph Robinson

Fleet Technician Operations
Employed since 1997



J.L. Lund
Fleet Technician



Vern Christensen
Fleet Technician



Ryan Monroe
Fleet Technician



Michael Henry
Fleet Technician



John Peterson
Fleet Technician



Josh Densley
Fleet Technician



Rodney Smith
Fleet Technician



Bruce Beatty
Fleet Technician



Bobby Dixon
Fleet Technician - Part Time



Facility Services

Facility Services Projects

Maintain 700,000 square feet in 66 facilities

Clean 240,000 square feet in 35 facilities

Re-roof and re-paint City Hall

Sliding doors at SGU and SHAC

Automating locks and security

Automating HVAC

New home for Facility Services at Ridgetop Complex

Facility Services

Carlos Robles

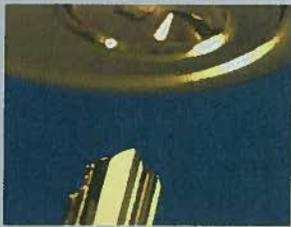
Project Manager

Employed since 2006

- Custodial Supervision
- Maintenance Supervision
- Special Projects
- Special Events
- Capital Projects/Specifications
- Planning



"It's Your Ship"



Ron Shelledy

Tech IV / Physical Security
Employed since 2011

Maintenance



Errick Donaldson

Tech III / General Maintenance
Employed since 2013



Tristan Dutton

Tech IV / HVAC
Employed since yesterday



PREZI

Custodial

Jenna Brown

Building Custodial Supervisor

Employed since 2006





Robert Nuzman
Building Custodian II



Thomas Victoria
Building Custodian II



Tigi Tapusoa
Building Custodian II



Connie Owen
Building Custodian II



Karen Snodgrass
Building Custodian II

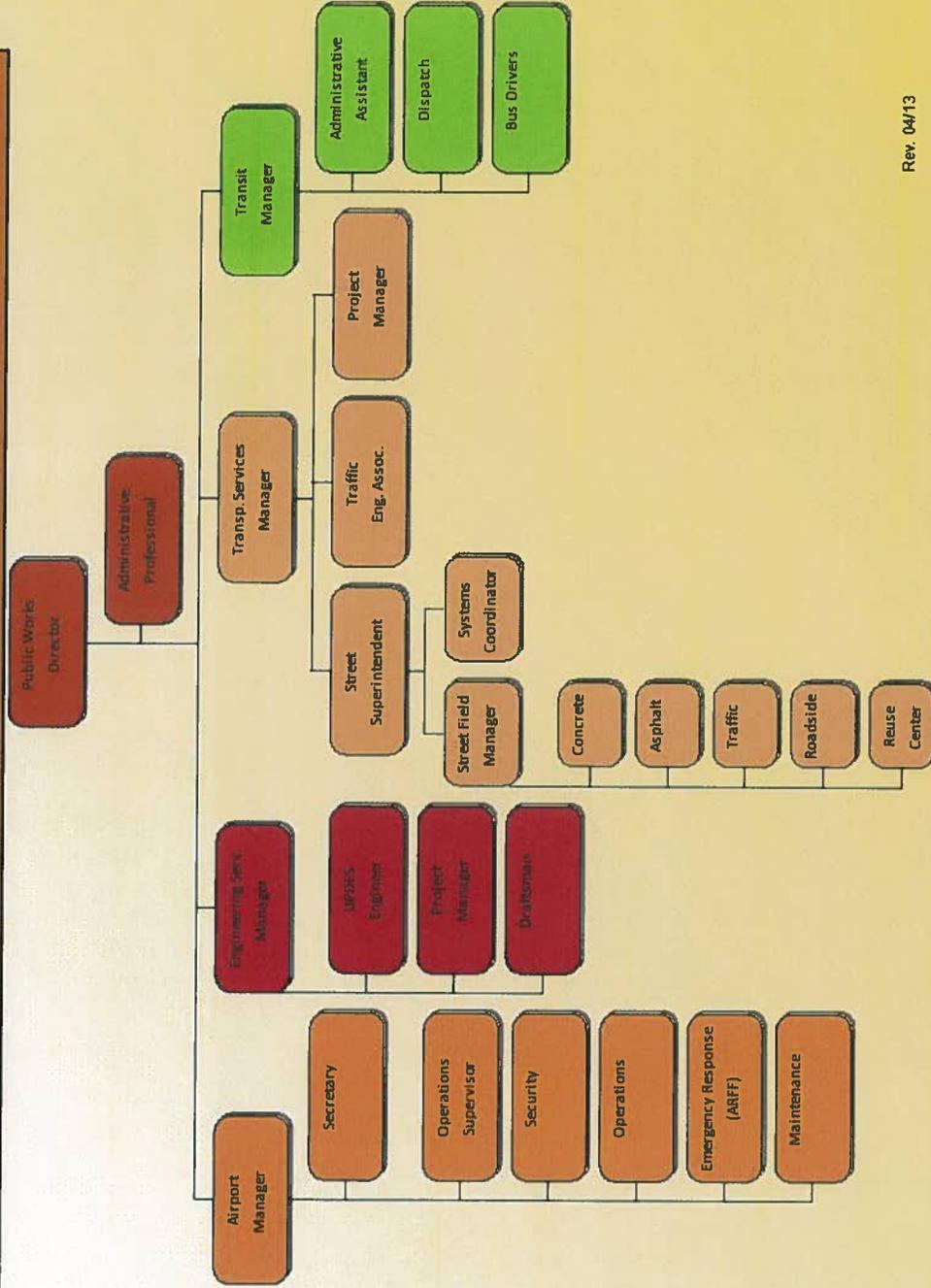
and

27

Part-Time Building Custodians



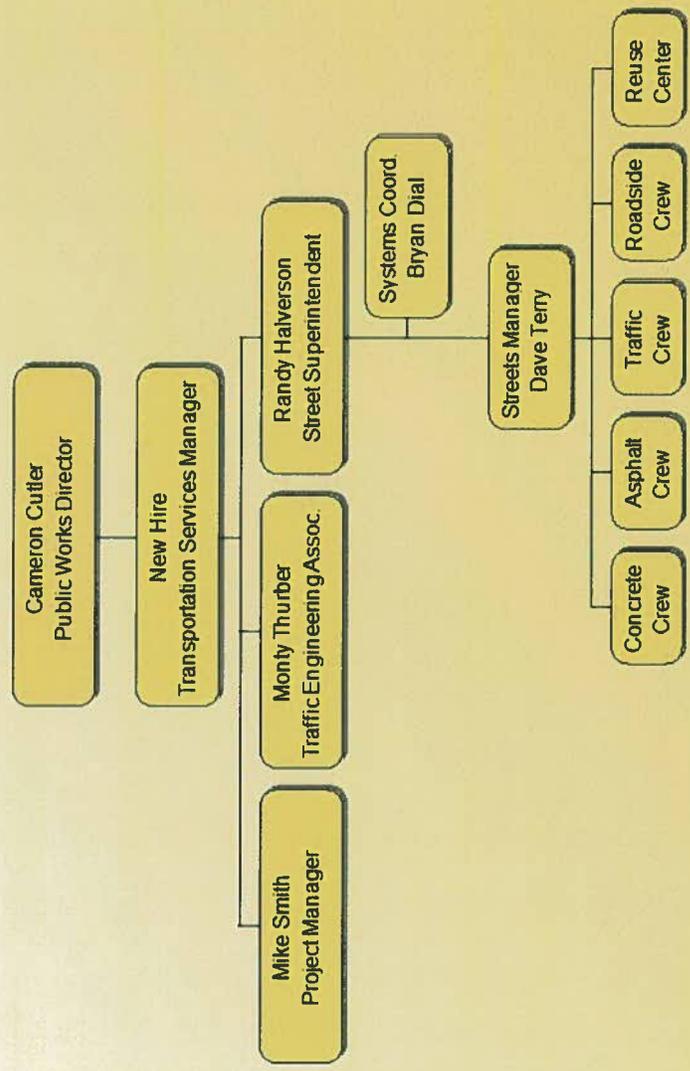
PUBLIC WORKS DEPARTMENT



Rev. 04/13

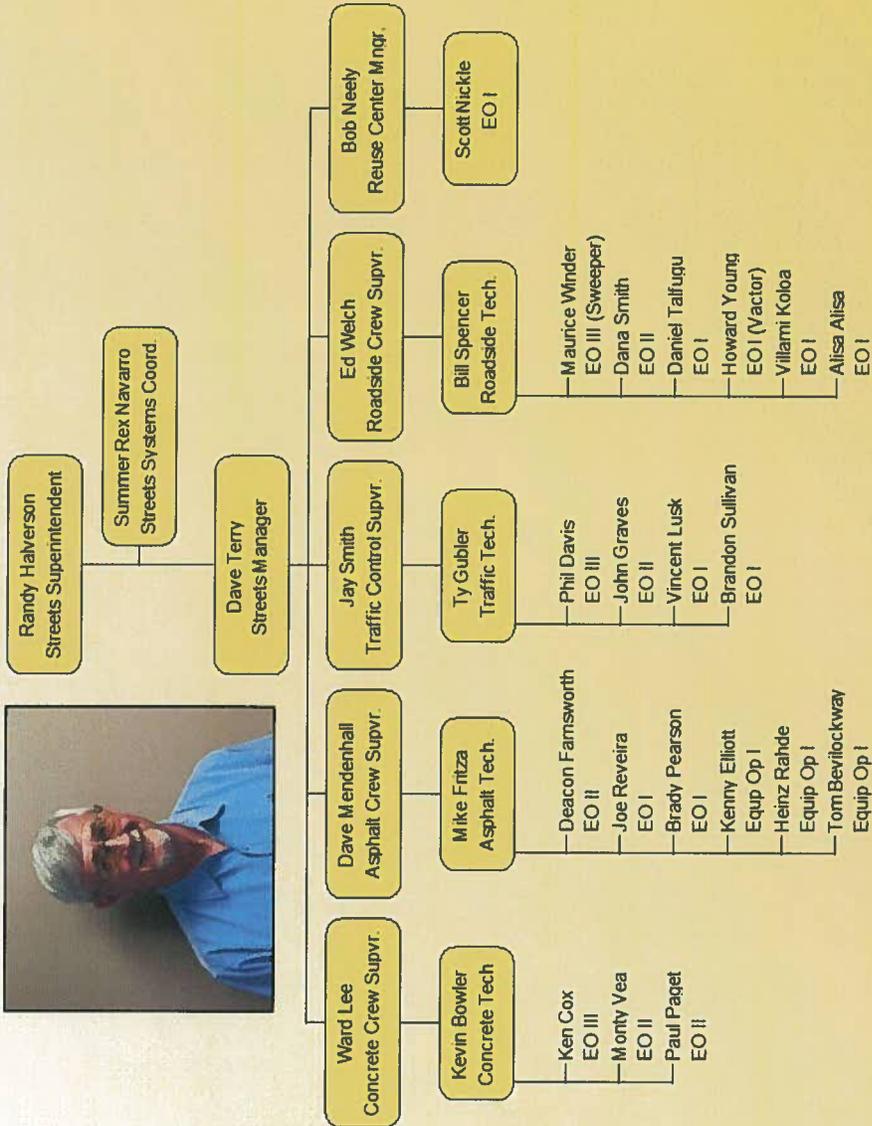
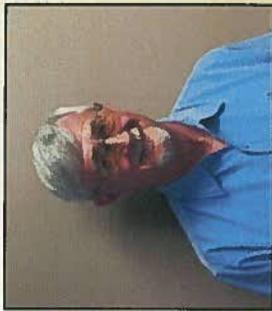


PUBLIC WORKS DEPARTMENT TRANSPORTATION SERVICES



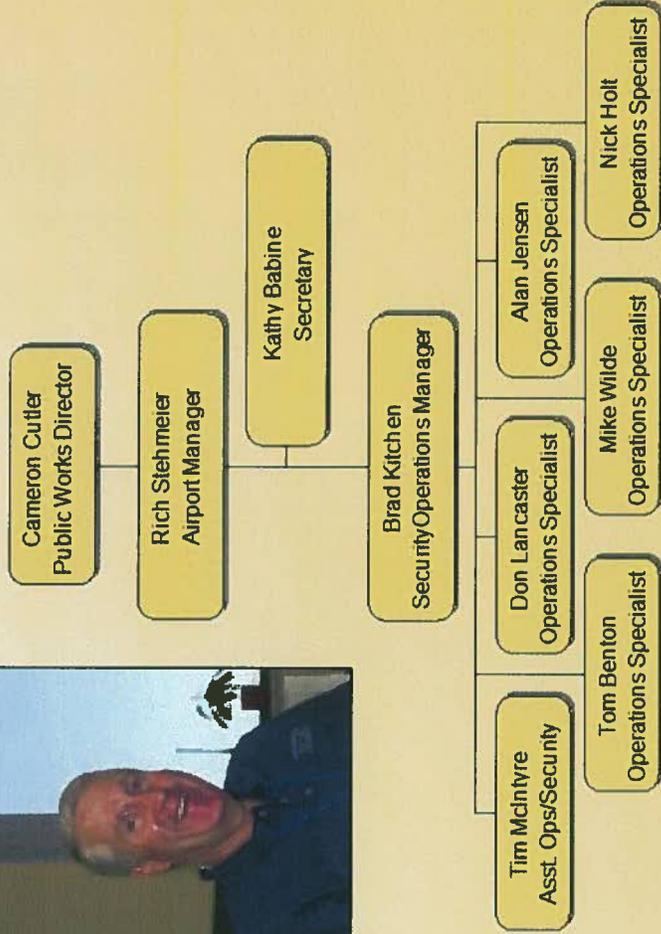


PUBLIC WORKS DEPARTMENT STREETS DIVISION



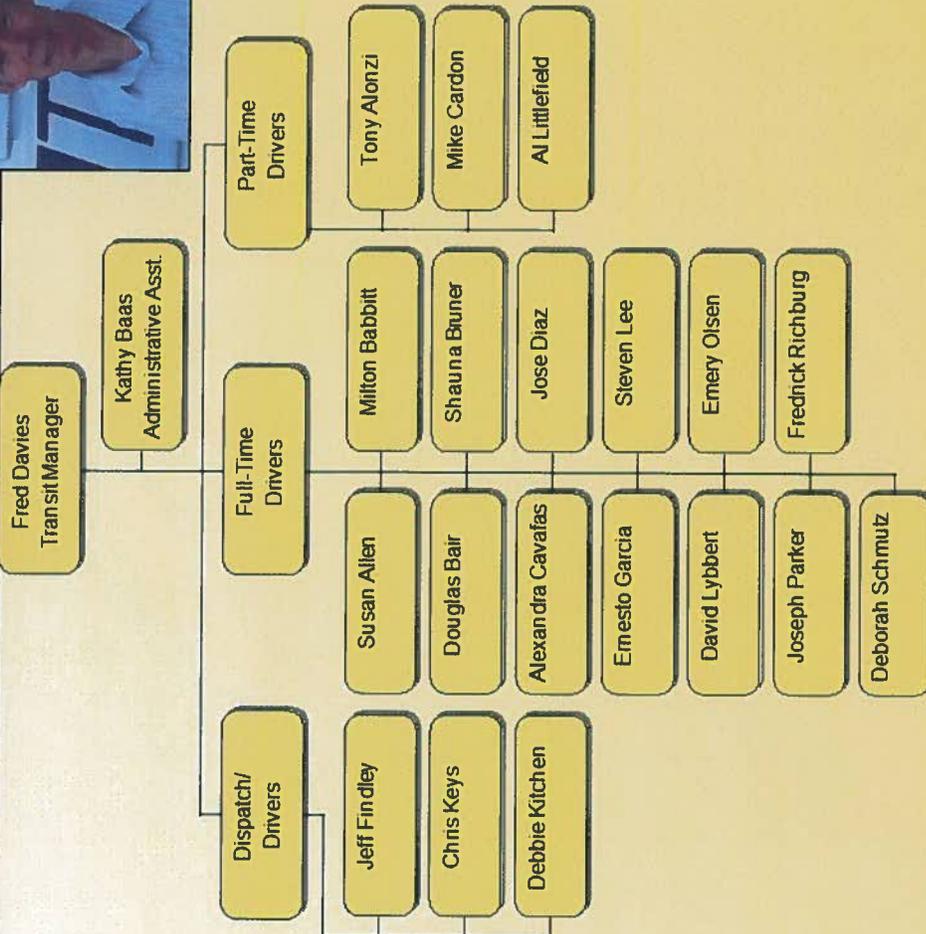


PUBLIC WORKS DEPARTMENT AIRPORT





PUBLIC WORKS DEPARTMENT SUNTRAN





PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES



Cameron Cutler
Public Works Director

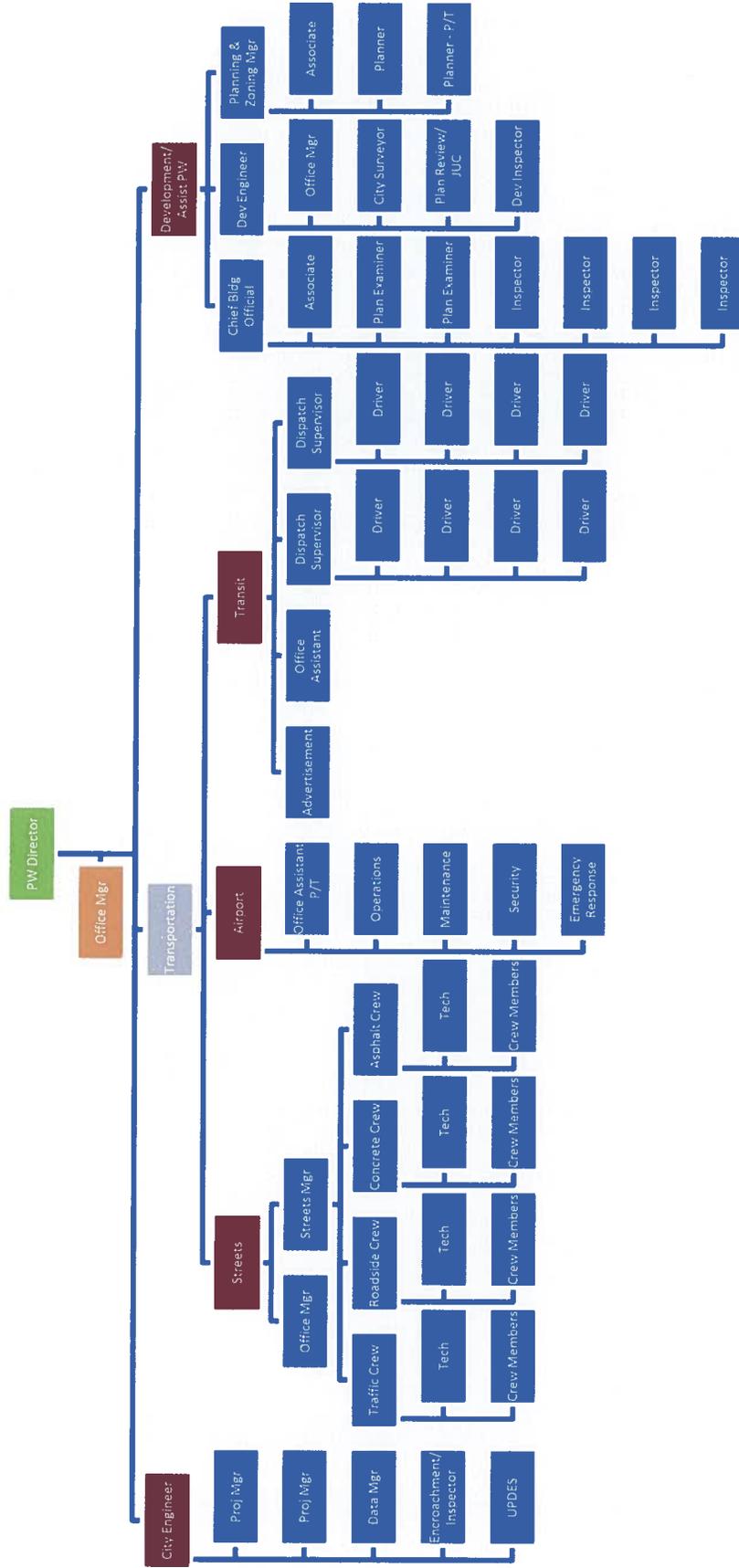
Jay Sandberg
Engineering Services Manager

Tom Scrocki
Project Manager

Ken Bricker
UPDES Engineer

Hank Schnaubelt
Draftsman

PUBLIC WORKS DEPARTMENT





ECONOMIC & HOUSING DEVELOPMENT DEPARTMENT ORGANIZATIONAL CHART

ORGANIZATIONAL CHART

Economic
Development
& Housing
Department

ORGANIZATIONAL CHART

Economic
Development
& Housing
Department

Economic
Development

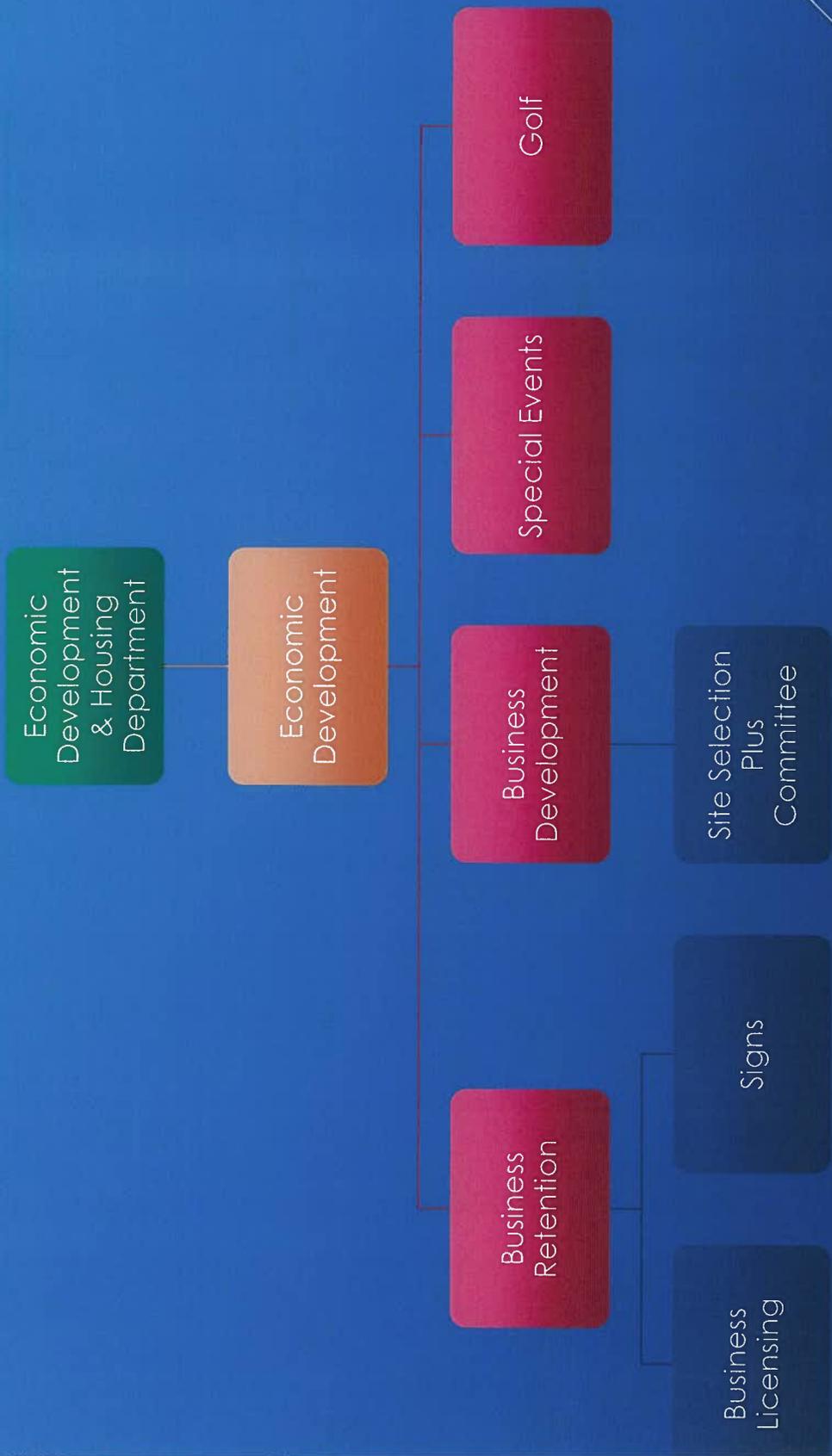
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graph TD; A[Economic Development & Housing Department] --- B[Economic Development]
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The organizational chart consists of two rounded rectangular boxes connected by a horizontal line. The left box is green and contains the text 'Economic Development & Housing Department'. The right box is orange and contains the text 'Economic Development'.

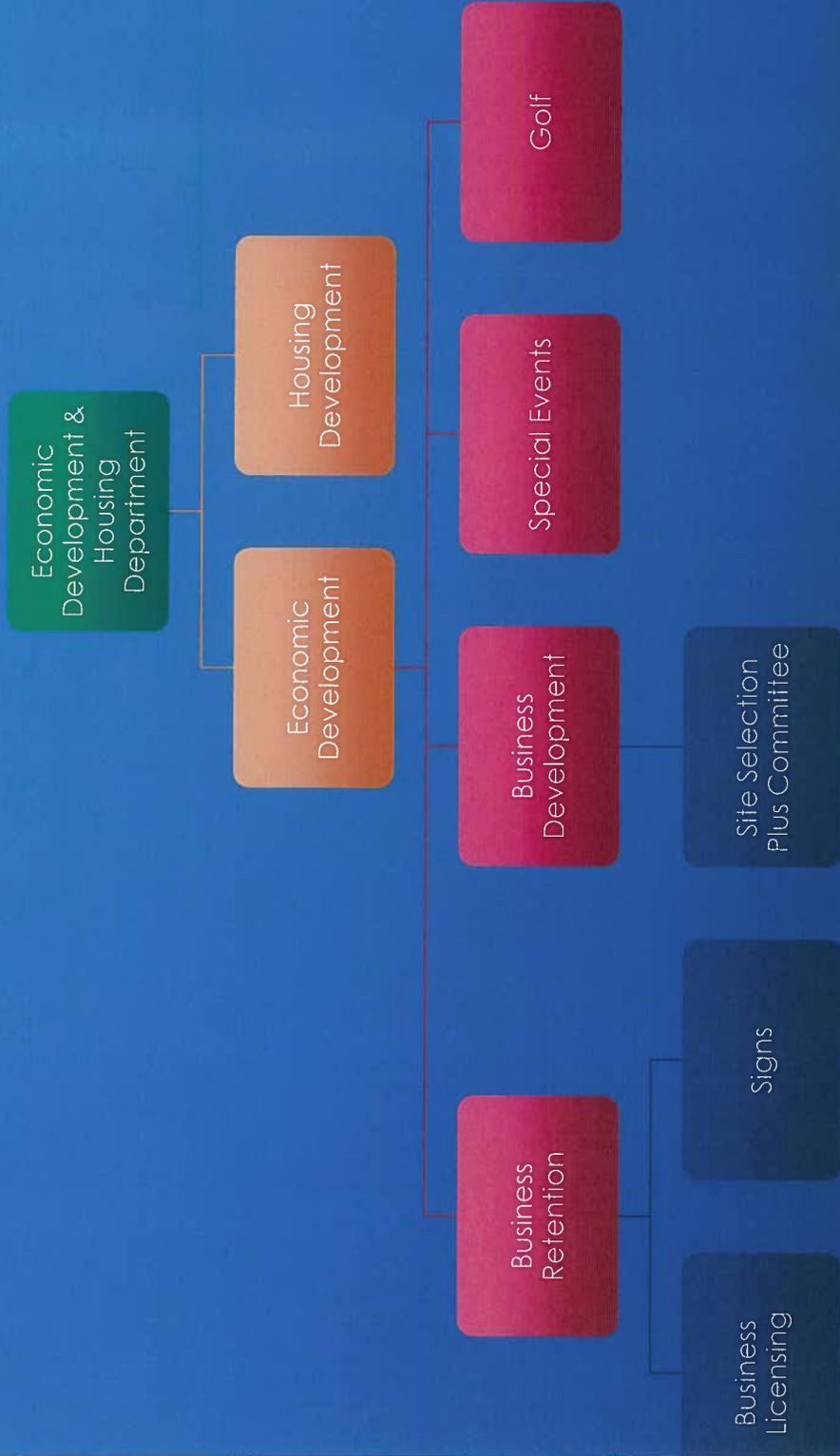
ORGANIZATIONAL CHART



ORGANIZATIONAL CHART



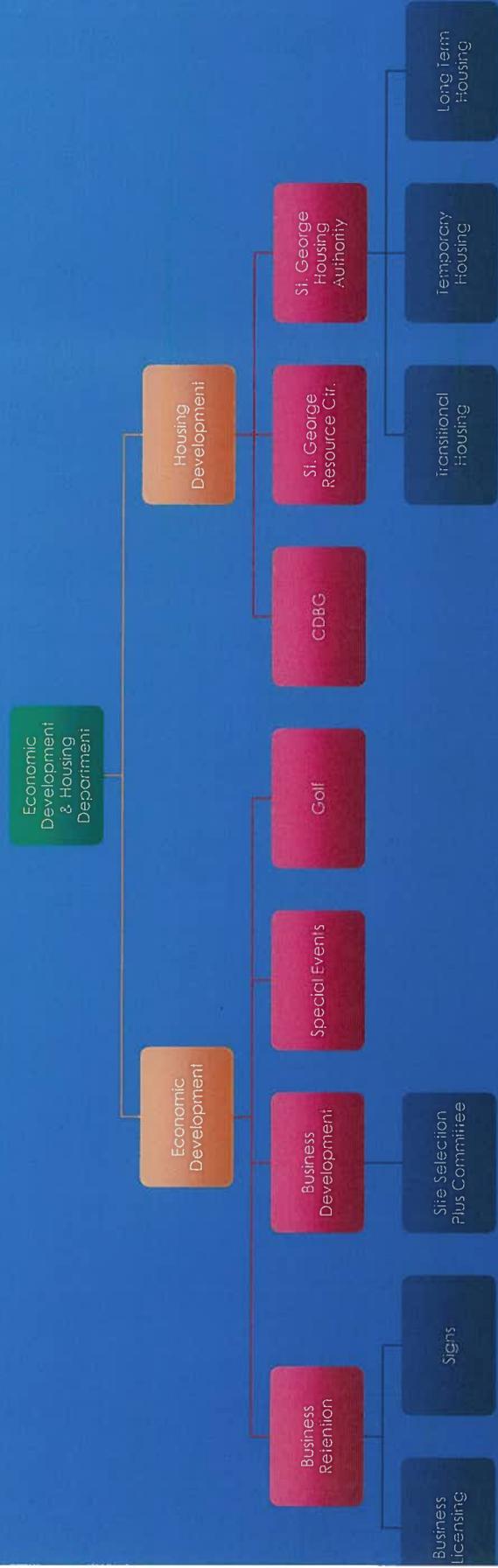
ORGANIZATIONAL CHART

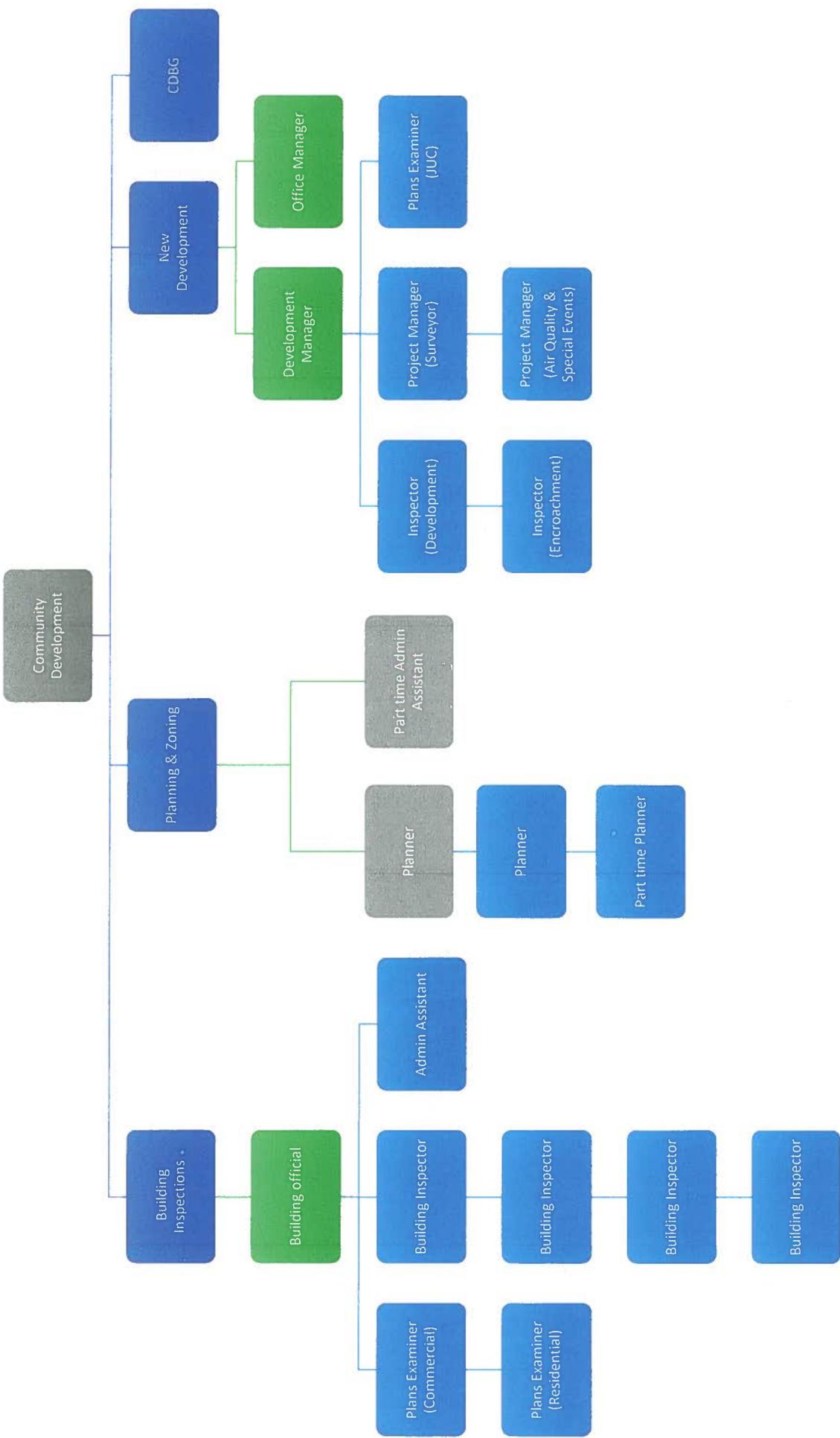


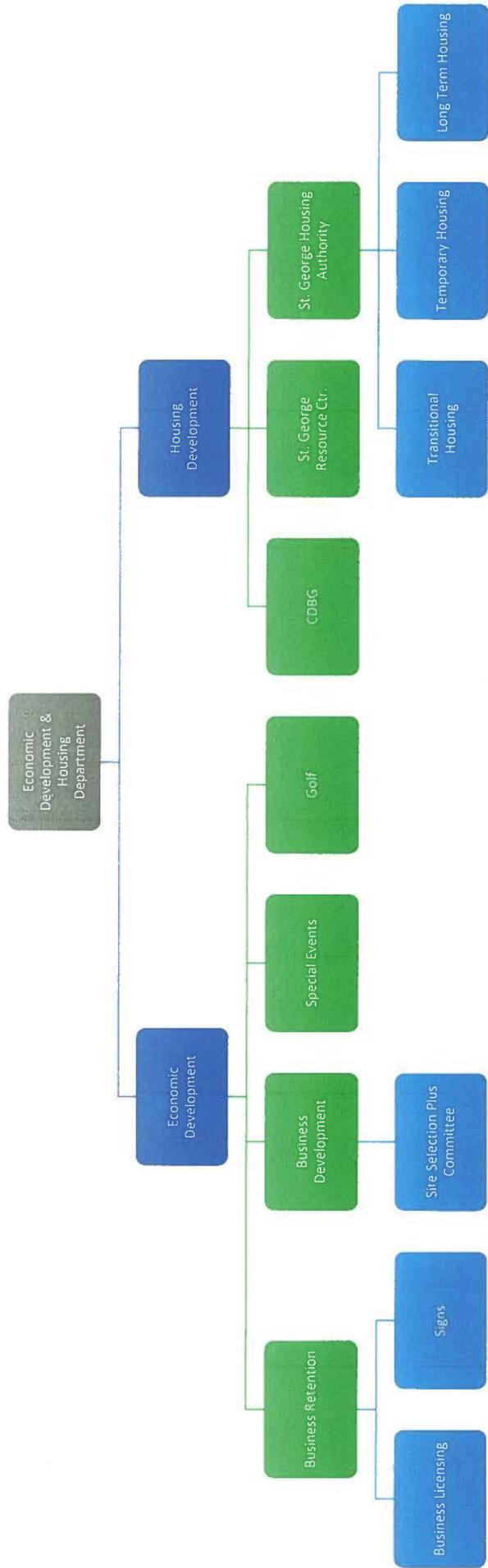
ORGANIZATIONAL CHART



ORGANIZATIONAL CHART









DIRECTOR OF GOLF
OPERATIONS
COLBY COWAN

**GOLF COURSE
MAINTENANCE**

**HEAD GOLF
PROFESSIONALS**

GOLF COURSE MAINTENANCE

MAINTENANCE MANAGER JEROME JONES



SUNBROOK
JEROME JONES



ASST. SUPER
KEN STEED

1 MECHANIC
2 TECHNICIANS
5 WORKERS



ST. GEORGE G.C.
DEAN COOPER



ASST. SUPER
TROY NELSON

1 MECHANIC
2 TECHNICIANS
3 WORKERS



SOUTHGATE
STEVE LARSEN



ASST. SUPER
MARK HAMELL

1 MECHANIC
2 TECHNICIANS
3 WORKERS



DIXIE RED HILLS
JEROME JONES

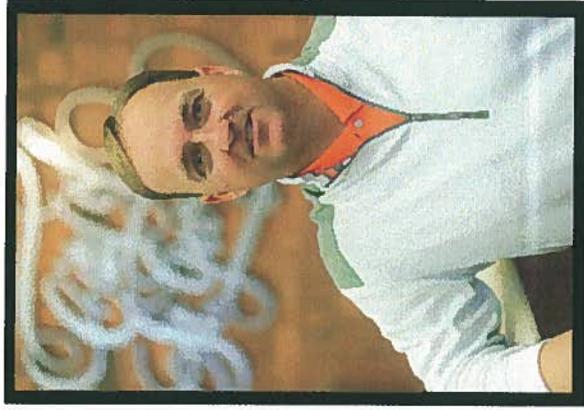


ASST. SUPER
GARY FLOWERS

1 TECHNICIAN
3 WORKERS

HEAD GOLF PROFESSIONALS

DIRECTOR OF GOLF
OPERATIONS
COLBY COWAN



SUNBROOK
EED McARTHUR



ST, GEORGE G.C.
JAMES HOOD



SOUTHGATE
SCOTT DRAPER



DIXIE RED HILLS
ALLEN ORCHARI

City of St. George Golf Division

