

AMERICAN FORK CITY COUNCIL
DECEMBER 4, 2014
NOTICE OF WORK SESSION & AGENDA

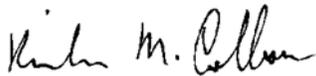
WORK SESSION

The purpose of City Work Sessions is to prepare the City Council for upcoming agenda items on future City Council Meetings. The Work Session is not an action item meeting. No one attending the meeting should rely on any discussion or any perceived consensus as action or authorization. These come only from the City Council Meeting.

Notice is hereby given that the American Fork City Council will meet in a work session on **Thursday, December 4, 2014**, in the **American Fork City Offices, 51 East Main Street**, commencing at **3:30 p.m.** The agenda shall be as follows:

1. Presentation regarding the implementation of Bicycle and Pedestrian Master Plans in the Mountainland Association of Governments' service area. – *Jim Price*
2. Discussion of the Refunding of RDA bonds. – *Preston Kirk*
3. Report on the American Fork Public Works Streets Division Snow Removal Program. – *TJ Warnick*
4. Discussion regarding modifications to the Transportation Impact Fee and the addition of a Storm Water Impact Fee. – *Andy Spencer*
5. Adjournment.

Dated this 2 day of December, 2014



Richard M. Colborn
City Recorder

CITY COUNCIL STUDY ITEM

City of American Fork
COUNCIL WORK SESSION
November 13, 2014

Department Planning Director Approval 

STUDY ITEM Presentation regarding implementation of bicycle and pedestrian master plans in Mountainland Association of Governments' service area

BACKGROUND Jim Price, Mountainland Association of Governments' Trails Coordinator, will present a status update of the bicycle and pedestrian master plan implementation efforts in our region. He will discuss the creation of a region wide non-motorized transportation network and American Fork's role in the endeavor.

SUPPORTING DOCUMENTS NA

CITY COUNCIL STUDY ITEM

City of American Fork
COUNCIL WORK SESSION
December 4, 2014

STUDY ITEM Refunding RDA bonds

SUMMARY RECOMMENDATION Finance officer recommends approval of the Refunding RDA bonds.

BACKGROUND The 2005 RDA bonds were issued for \$5,810,000 at 4.38%. The callable date of the bonds is currently set at March 1, 2015; the retirement date is set at March 1, 2019.

Preston Kirk with George K. Baum has indicated that the City has an option of refunding these bonds at an estimate interest rate of 1.5%. The retirement date would remain the same, March 1, 2019. The new debt service amount in the proposed refunding will be \$1,684,000.

BUDGET IMPACT It is estimated the new refunding will save the City between approximately \$16,000 and \$17,200 annually in debt service payments.

SUPPORTING DOCUMENTS Bond Analysis from George K. Baum

AMERICAN FORK CITY, UTAH
\$1,684,000 SALES TAX REVENUE REFUNDING BONDS
SERIES JANUARY 29, 2015

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AMERICAN FORK CITY, UTAH
\$5,810,000 SALES TAX REVENUE BONDS
SERIES APRIL 1, 2005

Prior Original Debt Service

Date	Principal	Coupon	Interest	Total P+I	Fiscal Total
03/01/2015	420,000.00	5.000%	45,706.25	465,706.25	465,706.25
09/01/2015	-	-	35,206.25	35,206.25	-
03/01/2016	430,000.00	4.125%	35,206.25	465,206.25	500,412.50
09/01/2016	-	-	26,337.50	26,337.50	-
03/01/2017	400,000.00	4.250%	26,337.50	426,337.50	452,675.00
09/01/2017	-	-	17,837.50	17,837.50	-
03/01/2018	415,000.00	4.250%	17,837.50	432,837.50	450,675.00
09/01/2018	-	-	9,018.75	9,018.75	-
03/01/2019	390,000.00	4.625%	9,018.75	399,018.75	408,037.50
Total	\$2,055,000.00	-	\$222,506.25	\$2,277,506.25	-

Yield Statistics

Callable Bonds (Refunded).....	1,635,000.00
Average Life.....	2.052 Years
Average Coupon.....	4.3845465%
Weighted Average Maturity (Par Basis).....	2.052 Years

Refunding Bond Information

Refunding Dated Date.....	1/29/2015
Refunding Delivery Date.....	1/29/2015

AMERICAN FORK CITY, UTAH
\$1,684,000 SALES TAX REVENUE REFUNDING BONDS
SERIES JANUARY 29, 2015

Debt Service Schedule

Date	Principal	Coupon	Interest	Total P+I	Fiscal Total
01/29/2015	-	-	-	-	-
03/01/2015	-	-	2,245.33	2,245.33	2,245.33
09/01/2015	-	-	12,630.00	12,630.00	-
03/01/2016	458,000.00	1.500%	12,630.00	470,630.00	483,260.00
09/01/2016	-	-	9,195.00	9,195.00	-
03/01/2017	418,000.00	1.500%	9,195.00	427,195.00	436,390.00
09/01/2017	-	-	6,060.00	6,060.00	-
03/01/2018	422,000.00	1.500%	6,060.00	428,060.00	434,120.00
09/01/2018	-	-	2,895.00	2,895.00	-
03/01/2019	386,000.00	1.500%	2,895.00	388,895.00	391,790.00
Total	\$1,684,000.00	-	\$63,805.33	\$1,747,805.33	-

Yield Statistics

Bond Year Dollars.....	\$4,253.69
Average Life.....	2.526 Years
Average Coupon.....	1.4999999%
Net Interest Cost (NIC).....	1.4999999%
True Interest Cost (TIC).....	1.5001660%
Bond Yield for Arbitrage Purposes.....	1.5001660%
All Inclusive Cost (AIC).....	2.2435233%

IRS Form 8038

Net Interest Cost.....	1.4999999%
Weighted Average Maturity.....	2.526 Years



AMERICAN FORK CITY, UTAH
\$1,684,000 SALES TAX REVENUE REFUNDING BONDS
SERIES JANUARY 29, 2015

Sources & Uses

Dated 01/29/2015 | Delivered 01/29/2015

SOURCES OF FUNDS

Par Amount of Bonds.....	\$1,684,000.00
City Funds for March 1, 2015 Payment.....	16,500.00
TOTAL SOURCES.....	\$1,700,500.00

USES OF FUNDS

Repayment of Prior Bonds.....	1,670,092.78
Estimated Costs of Issuance.....	30,407.22
TOTAL USES.....	\$1,700,500.00



AMERICAN FORK CITY, UTAH
\$1,684,000 SALES TAX REVENUE REFUNDING BONDS
SERIES JANUARY 29, 2015

Net Debt Service Schedule

Date	Principal	Coupon	Interest	Total P+I	Unrefunded	Net New D/S	Fiscal Total
01/29/2015	-	-	-	-	-	-	-
03/01/2015	-	-	2,245.33	2,245.33	430,500.00	432,745.33	432,745.33
09/01/2015	-	-	12,630.00	12,630.00	-	12,630.00	-
03/01/2016	458,000.00	1.500%	12,630.00	470,630.00	-	470,630.00	483,260.00
09/01/2016	-	-	9,195.00	9,195.00	-	9,195.00	-
03/01/2017	418,000.00	1.500%	9,195.00	427,195.00	-	427,195.00	436,390.00
09/01/2017	-	-	6,060.00	6,060.00	-	6,060.00	-
03/01/2018	422,000.00	1.500%	6,060.00	428,060.00	-	428,060.00	434,120.00
09/01/2018	-	-	2,895.00	2,895.00	-	2,895.00	-
03/01/2019	386,000.00	1.500%	2,895.00	388,895.00	-	388,895.00	391,790.00
Total	\$1,684,000.00	-	\$63,805.33	\$1,747,805.33	\$430,500.00	\$2,178,305.33	-



AMERICAN FORK CITY, UTAH
\$1,684,000 SALES TAX REVENUE REFUNDING BONDS
SERIES JANUARY 29, 2015

Gross Debt Service Comparison

Date	Principal	Coupon	Interest	New D/S	OLD D/S	Savings	Fiscal Total
01/29/2015	-	-	-	-	(16,500.00)	(16,500.00)	-
03/01/2015	-	-	2,245.33	2,245.33	35,206.25	32,960.92	16,460.92
09/01/2015	-	-	12,630.00	12,630.00	35,206.25	22,576.25	-
03/01/2016	458,000.00	1.500%	12,630.00	470,630.00	465,206.25	(5,423.75)	17,152.50
09/01/2016	-	-	9,195.00	9,195.00	26,337.50	17,142.50	-
03/01/2017	418,000.00	1.500%	9,195.00	427,195.00	426,337.50	(857.50)	16,285.00
09/01/2017	-	-	6,060.00	6,060.00	17,837.50	11,777.50	-
03/01/2018	422,000.00	1.500%	6,060.00	428,060.00	432,837.50	4,777.50	16,555.00
09/01/2018	-	-	2,895.00	2,895.00	9,018.75	6,123.75	-
03/01/2019	386,000.00	1.500%	2,895.00	388,895.00	399,018.75	10,123.75	16,247.50
Total	\$1,684,000.00	-	\$63,805.33	\$1,747,805.33	\$1,830,506.25	\$82,700.92	-

PV Analysis Summary (Gross to Gross)

Gross PV Debt Service Savings.....	97,088.45
City Funds for March 1, 2015 Payment.....	<u>(16,500.00)</u>

Net Present Value Benefit..... \$80,588.45

Net PV Benefit / \$1,635,000 Refunded Principal.....	4.929%
Net PV Benefit / \$1,684,000 Refunding Principal.....	4.786%

Refunding Bond Information

Refunding Dated Date.....	1/29/2015
Refunding Delivery Date.....	1/29/2015

AMERICAN FORK CITY, UTAH
\$5,810,000 SALES TAX REVENUE BONDS
SERIES APRIL 1, 2005

Debt Service To Maturity And To Call

Date	Refunded Bonds	Refunded Interest	D/S To Call	Principal	Coupon	Interest	Refunded D/S	Fiscal Total
03/01/2015	1,635,000.00	35,206.25	1,670,206.25	-	5.000%	35,206.25	35,206.25	35,206.25
09/01/2015	-	-	-	-	-	35,206.25	35,206.25	-
03/01/2016	-	-	-	430,000.00	4.125%	35,206.25	465,206.25	500,412.50
09/01/2016	-	-	-	-	-	26,337.50	26,337.50	-
03/01/2017	-	-	-	400,000.00	4.250%	26,337.50	426,337.50	452,675.00
09/01/2017	-	-	-	-	-	17,837.50	17,837.50	-
03/01/2018	-	-	-	415,000.00	4.250%	17,837.50	432,837.50	450,675.00
09/01/2018	-	-	-	-	-	9,018.75	9,018.75	-
03/01/2019	-	-	-	390,000.00	4.625%	9,018.75	399,018.75	408,037.50
Total	\$1,635,000.00	\$35,206.25	\$1,670,206.25	\$1,635,000.00	-	\$212,006.25	\$1,847,006.25	-

Yield Statistics

Callable Bonds (Refunded).....	1,635,000.00
Average Life.....	2.557 Years
Average Coupon.....	4.3790500%
Weighted Average Maturity (Par Basis).....	2.557 Years

Refunding Bond Information

Refunding Dated Date.....	1/29/2015
Refunding Delivery Date.....	1/29/2015

CITY COUNCIL STUDY ITEM

**City of American Fork
COUNCIL WORK SESSION
December 4, 2014**

Department Public Works Director Approval 

STUDY ITEM Report on AFPW Streets Division Snow Removal Program

SUMMARY RECOMMENDATION N/A – informational only

BACKGROUND Generally, snow removal from City streets is accomplished in the following order:

1. Hills – 700 N, 900 E
2. Collectors – 300 N, 900 W
3. Minor Collectors – 300 E, Center St.
4. Residential thru streets
5. Cul-de-sacs
6. Parking Lots

BUDGET IMPACT

Average Annual Snow Removal Costs:

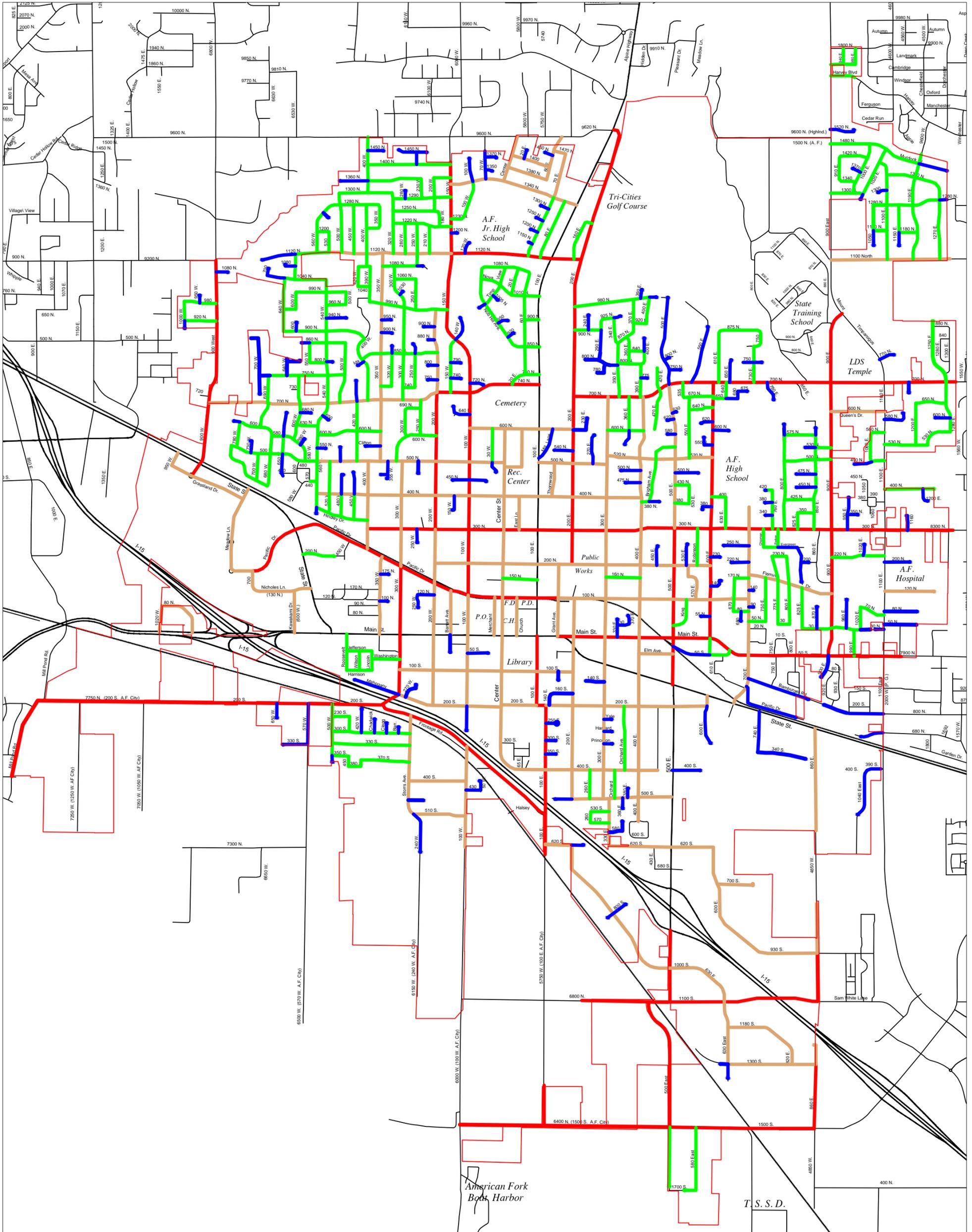
Manpower	\$ 17,000.00
Vehicles	\$ 40,000.00
Salt	\$ 45,000.00
Total	\$102,000.00

Funding Source: B & C road funds

ALTERNATIVES N/A

SUPPORTING DOCUMENTS Snow Removal Map

American Fork City Snow Removal Priority



Legend

- Priority 1 
- Priority 2 
- Priority 3 
- Priority 4 

** All other roads are either private or are the responsibility of another entity



CITY COUNCIL STUDY ITEM

City of American Fork
COUNCIL WORK SESSION
December 4, 2014

Department Public Works

Director Approval



STUDY ITEM Discussion regarding modifications to the Transportation Impact Fee and the addition of a Storm Water Impact Fee.

SUMMARY RECOMMENDATION Staff recommends approval of the proposed fee structure.

BACKGROUND In 2013 the City updated the impact fee assessment studies for all existing impact fees except for the transportation impact fee. It was also noted at the time that the only City utility system without an impact fee is the storm drain system. The updates to the transportation capital facility plan and storm drainage capital facility plans were not completed at the time of the 2013 impact fee analysis. These fees, therefore, could not be reviewed concurrently with the other fees.

The capital facility plans for both the transportation and storm drain systems are now updated and have been adopted. This completion has allowed the impact fees for these systems to be completed for City Council review and consideration for adoption.

A meeting was held on August 5, 2014 to discuss the proposed changes to the impact fees with the development community. Following that meeting, the City Council discussed the study results on August 21, 2014, and requested that the Transportation Impact Fee be revised to reduce the categories for commercial entities thereby smoothing some of the extremes in the fee structure. The Council also requested that the Storm Drain Impact Fee include consideration for existing facilities that will be used by development. Both modifications have been completed in the updated documents.

The completed studies and findings will be discussed with the City Council during the Work Session presentation.

BUDGET IMPACT The updated impact fees will ensure that the City has sufficient funds to address the capital improvements affected by additional development.

ALTERNATIVES Adopt fee structures as presented or request additional study

SUPPORTING DOCUMENTS

1. Notice of Impact Fee Public Hearing
2. Proposed Impact Fee Ordinance
3. Transportation Impact Fee Facilities Plan
4. Storm Drain Impact Fee Facilities Plan
5. Transportation Impact Fee Analysis
6. Storm Drain Impact Fee Analysis
7. City Council Minutes 8-21-2014

Notice of Impact Fee Public Hearing

Notice is hereby given that American Fork City (“City”) intends to enact an Impact Fee Ordinance to amend Storm Water and Transportation Impact Fees and adopt Storm Water and Transportation Impact Fee Facilities Plans. Furthermore, the City intends to adopt Storm Water and Transportation Impact Fee Analyses. A public hearing will be held by the City Council (“Council”) on Tuesday, December 9, 2014 at 7:00 p.m. at the American Fork City Hall located at 31 North Church Street American Fork, UT to receive public comment on the (1) Proposed Storm Water and Transportation Impact Fee Facilities Plans and associated Impact Fee Analyses for the City and (2) an Enactment adopting impact fees for the City.

The Impact Fee Facilities Plans and summary of the Plans, the Impact Fee Analyses and a summary of the Analyses, and the Impact Fee Enactment will be available for public inspection at the City office located at 51 East Main Street and at the public library located at 64 South 100 East at least 10 days before the public hearing. This Notice is being given in satisfaction of requirements of UCA §§ 11-36a-504 and 10-9a-205. If you cannot attend the hearing and would like to submit written comments, they will be received until 5:00 p.m. on December 9, 2014, via email at dick@afcity.net.

If you are planning to attend this public meeting and, due to disability, need assistance in understanding or participating in the meeting, please notify the City ten or more hours in advance and the City will, within reason, provide what assistance may be required.

Dated this 20 day of November 2014

Richard M. Colborn, City Recorder

Impact Fee Ordinance

American Fork City, Utah

Ordinance No.

ORDINANCE ADOPTING AN IMPACT FEE FACILITIES PLAN AND IMPACT FEE ANALYSES AND IMPOSING IMPACT FEES FOR TRANSPORTATION AND STORM WATER; PROVIDING FOR THE CALCULATION AND COLLECTION OF SUCH FEES; PROVIDING FOR APPEAL, ACCOUNTING AND SEVERABILITY OF THE SAME, AND OTHER RELATED MATTERS

WHEREAS, In April 2012, American Fork City, Utah (the “City”) posted notice and as to its intention to prepare impact fee facilities plans (“Impact Fee Facilities Plans”) and impact fee analyses (“Impact Fee Analyses”) for Transportation and Storm Water and invited all interested parties to participate in the impact fee preparation process, consistent with UCA Section 11-36a-501;

WHEREAS, American Fork City is a municipality in the State of Utah, authorized and organized under the provisions of Utah law and is authorized pursuant to the Impact Fees Act, Utah Code Ann. 11-36a-101 et seq. to adopt impact fees; and

WHEREAS, on November 26, 2014, the City posted notice of a public hearing in the local paper, the Herald Extra, Utah’s Public Notice Website and at the City’s administrative building and libraries to consider the assumptions and conclusions of the Impact Fee Facilities Plans and the Impact Fee Analyses;

WHEREAS, the American Fork City Council (the “Council”) met in regular session on December 9, 2014, to convene a public hearing and to consider adopting the Impact Fee Facilities Plans and Impact Fee Analyses, imposing updated Transportation and Storm Water impact fees, providing for the calculation and collection of such fees, and providing for an appeal process, accounting and reporting method and other related matters; and

WHEREAS, in August 2013 for Transportation and September 2013 for Storm Water, the Impact Fee Facilities Plan Consultant certified its work under UCA section 11-36a-306(1);

WHEREAS, on August 27, 2013 and considering the input of the public and stakeholders and relying on the professional advice and certification of the Impact Fee Facilities Plan Consultant, American Fork City adopted the findings, conclusions, and recommendations of the impact fee facilities plans prepared by Horrocks Engineers for Transportation and Bowen and Collins and Associates, Inc. for Storm Drain (“Consultant”), a copy of which is attached hereto; and

WHEREAS, on October 16, 2014 for Transportation and on September 24, 2014 for Storm Water, the Impact Fee Analysis Consultant certifies its work under UCA Section 11-36a-306(2);

WHEREAS, based on the input of the public and stakeholders and relying on the professional advice and certification of Consultant, a copy of which is attached; and

WHEREAS, on November 25, 2014, a copy of the Impact Fee Analyses and Impact Fee Facilities Plans and the proposed Impact Fee Ordinance, along with a summary of the analyses that was designated to be understood by a lay person, were made available to the public and deposited at the City public library, administrative office and on the public notice website; and

WHEREAS, on November 26, 2014, the Herald Extra published notice on the date, time and place of the first public hearing to consider the Impact Fee Ordinance; and

WHEREAS, on November 26, 2014, American Fork City posted notice of the date, time and place of the first public hearing to consider the Impact Fee Analysis in three public places and on the public notices website; and

WHEREAS, on December 9, 2014, the Council held a public hearing regarding the Impact Fee Analyses and the Impact Fee Ordinance; and

WHEREAS, after careful consideration and review of the comments at the public hearing, the Council has determined that it is in the best interest of the health, safety and welfare of the inhabitants of American Fork City to adopt the findings and recommendations of the Impact Fee Facilities Plans and Impact Fee Analyses to address the impacts of development upon the transportation and storm water utilities, to adopt the Impact Fee Facilities Plans as proposed, to approve the Impact Fee Analyses as proposed, to adopt Transportation and Storm Water impact fees, to provide for the calculation and collection of such fees, and to provide for an appeal process, and an accounting and reporting method of the same.

NOW, THEREFORE, BE IT ORDAINED by the American Fork City Council as follows:

Section 1. Findings. The Council finds and determines as follows:

1.1. All required notices have been given and made and public hearings conducted as requested by the Impact Fees Act with respect to the Impact Fee Facilities Plans, the Impact Fee Analyses, and this Impact Fee Ordinance (this “Ordinance”).

1.2. Growth and development activities in American Fork City will create additional demands on its infrastructure. The facility improvement requirements that are analyzed in the Impact Fee Facilities Plans and the Impact Fee Analyses are the direct result of the additional facility needs caused by future development activities. The persons responsible for growth and development activities should pay a proportionate share of the costs of the facilities needed to serve the growth and development activity.

1.3. Impact fees are necessary to achieve an equitable allocation to the costs borne in the past and to be borne in the future, in comparison with the benefits already received and yet to be received.

1.4. In enacting and approving the Impact Fee Analyses and this Ordinance, the Council has taken into consideration, and in certain situations will consider on a case-by-case basis in the future, the future capital facilities and needs of American Fork City, the capital financial needs of American Fork City that are the result of American Fork City's future facilities' needs, the distribution of the burden of costs to different properties within American Fork City based on the use of transportation and storm water of American Fork City by such properties, the financial contribution of those properties and other properties similarly situated in American Fork City at the time of computation of the required fee and prior to the enactment of this Ordinance, all revenue sources available to American Fork City, and the impact on future facilities that will be required by growth and new development activities in American Fork City.

1.5. The provisions of this Ordinance shall be liberally construed in order to carry out the purpose and intent of the Council in establishing the impact fee program.

Section 2. Definitions.

2.1. Except as provided below, words and phrases that are defined in the Impact Fees Act shall have the same meaning in this Ordinance.

2.2. "Service Area" shall mean that geographic area designated within the City's boundaries as exhibited in the appendix of the Impact Fee Analyses.

2.3. "Project Improvement" does not mean system improvement and includes, but is not limited to, those projects identified in the plans for the benefit of growth.

2.4. "Utah State Impact Fees Act" shall mean Title 11, Chapter 36a, Utah Code Annotated or its successor state statute if that title and chapter is renumbered, recodified, or amended.

Section 3. Adoption.

The Council hereby approves and adopts the Impact Fee Analyses attached and the analyses reflected therein. The Impact Fee Facilities Plans and the Impact Fee Analyses are incorporated herein by reference and adopted as though fully set forth herein.

Section 4. Impact Fee Calculations.

4.1. *Impact Fees.* The impact fees imposed by this Ordinance shall have two components; a future facilities impact fee as well as a buy in fee for excess capacity in existing facilities. The Impact Fee shall be calculated as set forth below.

4.2. *Developer Credits/Developer Reimbursements.* A developer, including a school district or charter school, may be allowed a credit against or proportionate reimbursement of impact fees if the developer dedicates land for a system improvement, builds and dedicates some or all of a system improvement, or dedicates a public facility that American Fork City and the developer agree will reduce the need for a system

improvement. A credit against impact fees shall be granted for any dedication of land for, improvement to, or new construction of, any system improvements provided by the developer if the facilities are system improvements to the respective utilities, or are dedicated to the public and offset the need for an identified future improvement.

4.3. Adjustment of Fees. The Council may adjust either up (but not above the maximum allowable fee) or down the standard impact fees at the time the fee is charged in order to respond to an unusual circumstance in specific cases and to ensure that the fees are imposed fairly. The Council may adjust the amount of the fees to be imposed if the fee payer submits studies and data clearly showing that the payment of an adjusted impact fee is more consistent with the true impact being placed on the system.

4.4. Impact Fee Accounting. American Fork City shall establish a separate interest-bearing ledger account for the cash impact fees collected pursuant to this Ordinance. Interest earned on such account shall be allocated to that account.

(a) Reporting. At the end of each fiscal year, American Fork City shall prepare a report generally showing the source and amount of all monies collected, earned and received by the fund or account and of each expenditure from the fund or account. The report shall also identify impact fee fund by the year in which they were received, the project from which the funds were collected, the capital projects from which the funds were budgeted, and the projected schedule for expenditure and be provided to the State Auditor on the appropriate form found on the State Auditor's Website.

(b) Impact Fee Expenditures. Funds collected pursuant to the impact fees shall be deposited in such account and only be used by the City to construct and upgrade the respective facilities to adequately service development activity or used as otherwise approved by law.

4.5. Refunds. The City shall refund any impact fee paid when:

(a) the fee payer has not proceeded with the development activity and has filed a written request with the Council for a refund within one (1) year after the impact fee was paid;

(b) the fees have not been spent or encumbered within six (6) years of the payment date; and

(c) no impact has resulted.

Section 5. Appeal.

5.1. Any person required to pay an impact fee who believes the fee does not meet the requirements of the law may file a written request for information with the City Council.

5.2. Within two (2) weeks of the receipt of the request for information the City shall provide the person or entity with a copy of the reports and with any other relevant information relating to the impact fee.

5.3. Any person or entity required to pay an impact fee imposed under this article, who believes the fee does not meet the requirements of law may request and be granted a full administrative appeal of that grievance. An appeal shall be made to the Council within thirty (30) calendar days of the date of the action complained of, or the date when the complaining person reasonably should have become aware of the action.

5.4. The notice of the administrative appeal to the Council shall be filed and shall contain the following information:

(a) the person's name, mailing address, and daytime telephone number;

(b) a copy of the written request for information and a brief summary of the grounds for appeal; and

(c) the relief sought.

5.5. The City shall schedule the appeal before the Council no sooner than five (5) days and no later than fifteen (15) days from the date of the filing of the appeal. The written decision of the Council shall be made no later than thirty (30) days after the date the challenge to the fee is filed with the City and shall, when necessary, be forwarded to the appropriate officials for action.

This Ordinance shall be effective **March 15, 2015**

James H. Hadfield, Mayor

Attested By:

Richard Colborn, City Recorder

5.0 IMPACT FEE FACILITIES PLAN

5.1 UTAH CODE LEGAL REQUIREMENTS

Utah law requires communities to prepare an Impact Fee Facilities Plan (IFFP) prior to preparing an impact fee analysis and establishing an impact fee. The code also outlines the requirements of an IFFP. An IFFP is required to identify the following:

- The demands placed on existing public facilities by new development;
- A proposed means by which the local political subdivision will meet those demands; and
- A general consideration of all potential revenue sources to finance the impacts on system improvements.

This analysis incorporates the information provided in previous chapters regarding the upcoming demands on the existing infrastructure facilities that will be needed to accommodate future growth and provide an acceptable LOS. This section focuses on the improvements that are projected to be needed over the next ten years; however, Utah law requires that any impact fees collected for those improvements be spent within six years of being collected. Only capital improvement are included in this plan; all other maintenance and operation cost are assumed to be covered through the City's General Fund as tax revenues increase as a result of additional development.

5.1.1 NOTICE OF INTENT TO PREPARE AN IMPACT FEE FACILITIES PLAN

In accordance with Utah Code, a local political subdivision must provide written notice of its intent to prepare an IFFP before preparing the Plan. This notice must be posted on the Utah Public Notice website. The City of American Fork has complied with this noticing requirement of the IFFP by posting notice in 2012.

5.2 DEMANDS PLACED ON EXISTING FACILITIES BY NEW DEVELOPMENT

5.2.1 TRANSPORTATION IMPROVEMENT PROGRAM

As American Fork grows, new developments will require an increased roadway capacity throughout the City's street network in order to provide an acceptable level of service. The City has developed a TIP that identifies specific projects needed to provide an acceptable LOS to the residents of American Fork. The total transportation capital improvements needed to maintain an acceptable LOS over the next 10 years (through 2023) would cost approximately **\$84,000,000** as shown in **Table 5-1**. Only roads classified as collectors and above are included in the ten year impact fee facilities plan. It is assumed that local roads will be paid for by developers, as these roads do not meet the regional demands of the entire City. **Figure 5-1** shows the recommended 2023 roadway network.

Figure 5-1 2023 Transportation Improvement Program

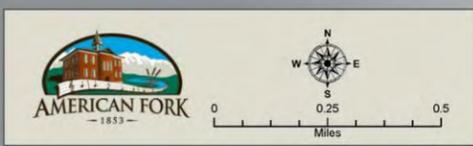
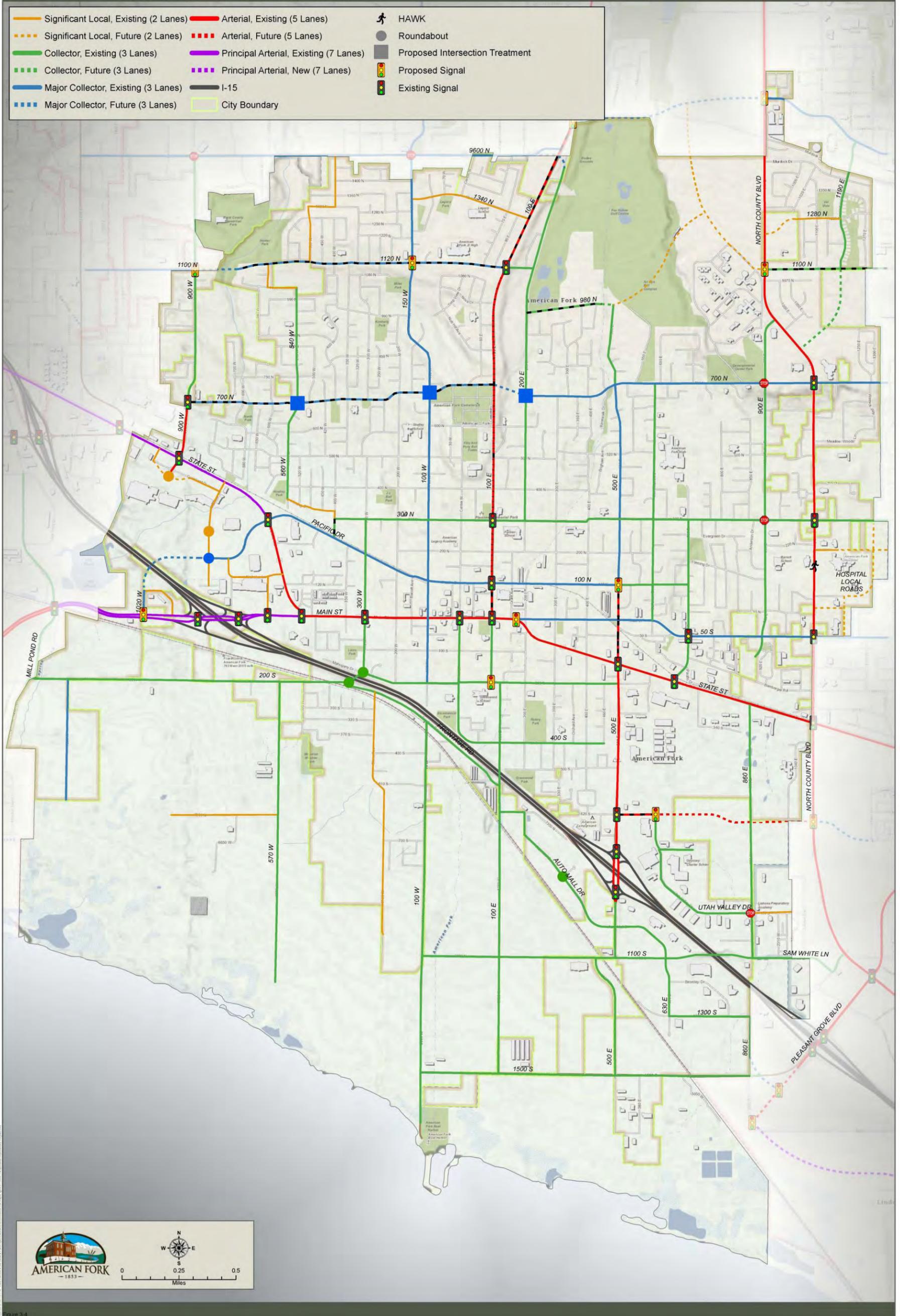


Figure 3-4



Table 5-1 2023 Transportation Improvement Program

American Fork City Transportation Improvement Program (TIP)						
Type of Improvement	Roadway or Location	From	To	Jurisdiction(s)	Total Project Costs ¹	Potential Funding Source ²
Upgrades to Major Collector (2 to 3-Lanes)	1120 North	900 West	100 East	City	\$12,253,000	C, O
Intersection Improvement	900 West & Grassland Dr.	-	-	City	\$2,245,000	C, O
New Major Collector (3-Lanes)	700 North	100 East	200 East	City	\$2,172,000	C, O
Widen to Arterial (5-Lanes)	900 West	800 North	1120 North	City	\$3,359,000	C, O
Widen to Arterial (5-Lanes)	500 East	State St	Pacific Dr. (100 N)	City	\$3,092,000	F, S, C, O
Extension of Minor Collector (2 Lanes) with new Railroad Crossing	560 West	Pacific Dr.	Hindley Dr.	City	\$2,032,000	C, O
Intersection Improvement	700 North & 500 East	-	-	City	\$705,000	C, O
Upgrades to Major Collector (2 to 3-Lanes)	700 North	900 West	100 East	City	\$7,498,000	C, O
Widen to Minor Collector (2-Lanes)	1100 North	North County Blvd	East City-Limits	City	\$2,559,000	C, O
New Significant Local Road	1100 North (Extension)	North City-Limits (Murdock Connector)	North County Blvd	City	\$3,434,000	C, O



American Fork City Transportation Improvement Program (TIP)						
Type of Improvement	Roadway or Location	From	To	Jurisdiction(s)	Total Project Costs¹	Potential Funding Source²
New Minor Collector (2-Lanes)	1190 East	North County Blvd	1100 North	City	\$3,758,000	C, O
New Significant Local Road	1280 North	North County Blvd	1030 East	City	\$1,828,000	C, O
Intersection Improvement	200 East & Main St/ State St	-	-	City/UDOT	\$705,000	F, S, C, O
New Arterial (5-Lanes)	620 South	600 East	East City-Limits	City	\$9,342,000	C, O
Widen to Arterial (5-Lanes)	620 South	500 East	600 East	City	\$1,249,000	C, O
New Significant Local Road	Art Dye Connector	500 East	1100 North (Extension)	City	\$4,815,000	C, O
New Significant Local Road	Hospital Significant Local Roads	Various	Various	City	\$7,802,000	C, O
New Major Collector (3-Lanes)	Pacific Dr.	Pioneer Crossing	Meadow Lane	City/UDOT	\$15,686,000	F, S, C, O
Total for Improvements needed by 2023					\$84,534,000	

¹Cost represents existing (2012) construction, right of way, and engineering costs.

²Potential Funding Source: F-Federal, S-State, C-City, and O-Other

5.2.2 TRAVEL DEMAND FROM NEW DEVELOPMENT

In order to determine the portion of future traffic that can be attributed to new development, travel demand modeling methodology using the MAG travel demand model was utilized. This is considered industry best practice and uses the best available data.

Travel Demand is a dynamic function of many different inputs, including socioeconomic characteristics, land use planning and roadway functional type. The travel demand model generates trips in TAZ, based on these and other inputs and then distributes these trips to attraction TAZ via the roadway network. Average Daily Traffic volumes can then be extracted from the individual roadway links in the network to assess the operating conditions of the network.

The best measure of traffic growth in an area is daily vehicle miles travelled (VMT). The difference between existing VMT and future VMT is the traffic growth due to new development. Not all traffic on a

roadway either originates or terminates in American Fork; some traffic is simply passing through. This pass-by traffic must be removed from the future growth when impact fees are being calculated. Similarly, traffic on roadways not under American Fork jurisdiction, such as UDOT roads, should also be removed from the calculation, as American Fork is not responsible for the construction of these roads. The total VMT of on American Fork’s roads and with origins or destinations in the City in 2013 is 152,593. The projected VMT in 2023 and 2030 is 246,593 and 341,959 respectively. This corresponds to an increase of 62% in 2023 and 124% in 2040.

5.3 PROPOSED MEANS TO MEET DEMANDS OF NEW DEVELOPMENT

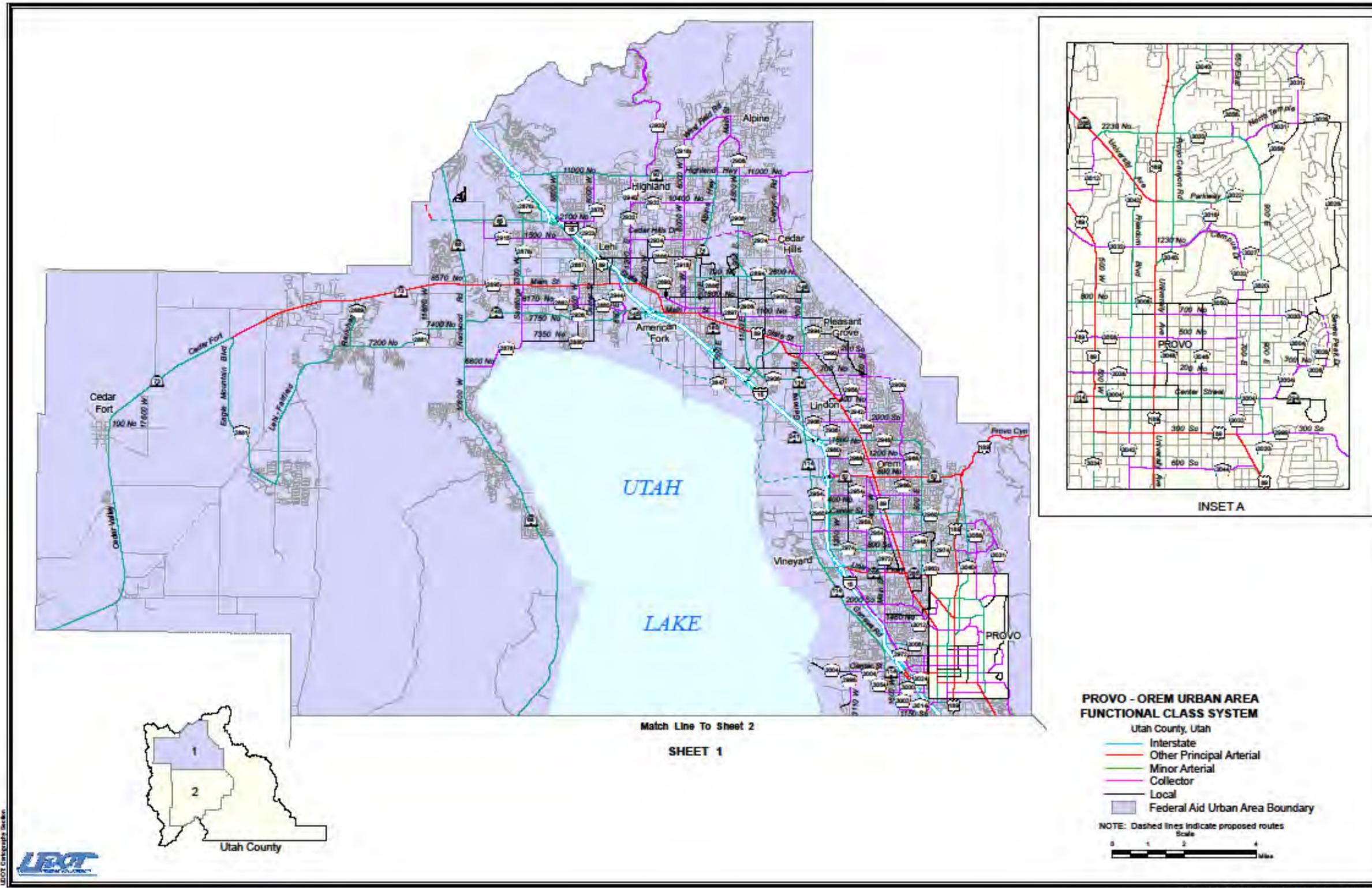
All possible revenue sources have been considered as a means of financing transportation capital improvements needed as a result of new growth. This section discusses the potential revenue sources that could be used to fund transportation needs as a result of new development. Funding sources for transportation are essential if American Fork City recommended improvements are to be built. The following paragraphs further describe the various transportation funding sources available to the City.

5.3.1 FEDERAL FUNDING

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

The Surface Transportation Program (STP) funds projects for any roadway with a functional classification of a collector street or higher as established on the Utah State Functional Classification Map (**Figure 5-2**). STP funds can be used for both rehabilitation and new construction. The Joint Highway Committee programs a portion of the STP funds for projects around the state in urban areas. Another portion of the STP funds can be used for projects in any area of the state at the discretion of the State Transportation Commission. Transportation Enhancement funds are allocated based on a competitive application process. The Transportation Enhancement Committee reviews the applications and then a portion of those are passed to the State Transportation Commission. Transportation enhancements include 12 categories ranging from historic preservation, bicycle and pedestrian facilities and water runoff mitigation. Other federal and state trails funds are available from the Utah State Parks and Recreation Program.

Figure 5-2 Utah State Functional Classification Map



Approved: 2005 Technical Revision: 10/3/2012

MAG accepts applications for federal funds through local and regional government jurisdictions. The MAG Technical Advisory and Regional Planning committees select projects for funding every two years. The selected projects form the Transportation Improvement Program (TIP). In order to receive funding, projects should include one or more of the following aspects:

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

5.3.2 STATE FUNDING

The distribution of State Class B and C Program monies is established by State Legislation and is administered by the State Department of Transportation. Revenues for the program are derived from State fuel taxes, registration fees, driver license fees, inspection fees, and transportation permits. Seventy-five percent of these funds are kept by UDOT for their construction and maintenance programs. The rest is made available to counties and cities. As many of the roads in American Fork fall under UDOT jurisdiction, it is in the interests of the City that staff is aware of the procedures used by UDOT to allocate those funds and to be active in requesting the funds be made available for UDOT owned roadways in the City.

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

5.3.3 PARTNERING JURISDICTIONS

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

5.3.4 LOCAL FUNDING

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

Private interests often provide resources for transportation improvements. Developers construct the local streets within subdivisions and often dedicate right-of-way and participate in the construction of collector/arterial streets adjacent to their developments. Developers can also be considered a possible source of funds for projects through the use of impact fees. These fees are assessed as a result of the impacts a particular development will have on the surrounding roadway system, such as the need for traffic signals or street widening.

5.3.4.1 GENERAL FUND REVENUES

General fund revenues are typically reserved for operation and maintenance purposes as they relate to transportation. However, general funds could be used if available to fund the expansion or introduction of specific services. American Fork City does not currently have a general fund budgeted line item for transportation improvements. It is recommended that a plan be put in place to address this and to develop an annual budget amount to fund transportation projects should other funding options fall short or the needed amount.

5.3.4.2 GENERAL OBLIGATION BONDS

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

5.3.4.3 SPECIAL ASSESSMENT AREAS (SAA)

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

5.3.5 GRANTS

Grant monies are ideal for funding projects within the City since they do not need to be paid back and the City can greatly benefit from these funds. Grants are not easy to come by and therefore obtaining such funding is not likely for the City and should not be considered a viable revenue source.

5.3.6 IMPACT FEES

Impact fees are a way for a community to obtain funds to assist in the construction of infrastructure improvements resulting from and needed to serve new growth. The premise behind impact fees is that if no new development occurred, the existing infrastructure would be adequate. Therefore, new developments should pay for the portion of required improvements that result from new growth. Impact fees are assessed for many types of infrastructure and facilities that are provided by a

community, such as roadway facilities. According to state law, impact fees can only be used to fund growth related system improvements.

To help fund roadway improvements, impact fees should be established. These fees are collected from new developments in the City to help pay for improvements that are needed to the roadway system due to growth. At the culmination of the Transportation Master Planning process, a citywide IFFP will be developed according to state law to determine the appropriate impact fee values for the City.

5.4 IFFP CERTIFICATION

Horrocks Engineers certifies that this IFFP:

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



IMPACT FEE

Analysis

STORM WATER

AMERICAN FORK CITY

DRAFT

ZIONS BANK PUBLIC FINANCE
SEPTEMBER 24, 2014



IMPACT FEE ANALYSIS

STORM WATER

AMERICAN FORK

DRAFT

CONSULTANTS:

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ACKNOWLEDGEMENTS:

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EXECUTIVE SUMMARY

Zions Bank Public Finance (Zions) is pleased to provide American Fork (the City) with a storm drain impact fee analysis. The following pages summarize the document and tables included. The intent is to provide a concise discussion of the calculation and identification of the maximum legal impact fee.

Growth and Developed Acres

Currently the City has a total of 5,841 equivalent residential connections¹. The following table identifies the current and future acres to be developed in a single City-Wide Service Area. The analysis considers growth over the next ten years. Between now and 2023, the developed acres will increase by 879 to reach 6,738. The full growth table can be found in Appendix 1 of the document.

Figure ES1: Developed Acres

Storm Water		
	Current	Buildout
Current Developed Area ¹	5,841	8,782

¹ Bowen Collins & Associates 2013 IFFP

Level of Service Definitions

Bowen Collins & Associates Engineers defined the City’s level of service in the Capital Facilities Plan and the Storm Drain Technical Memo. The plans state the following:

The requirements for the storm drain system are as follows:

- **Storm Drain Pipelines** – Storm drain pipelines are not allowed to surcharge to within two feet from the ground surface during the 4 percent annual chance (25-year) design Storm drain pipes (other than laterals) are also not to be smaller than 18 inches in diameter. Storm drain laterals may be 15-inches. To qualify as a lateral, a storm drain pipe must be connected to inlet box, be generally perpendicular to the overall direction of storm drain flow, and be less than 100 feet.
- **Open Channels** – In general, large open channels (such as Mitchell’s Hollow, the Meadow’s Wetland, Spring Creek, or the American Fork River) should have at least two feet of freeboard during the 100-year storm event. Open channels should also have protective lining. If velocities are less than 4 ft per second (ft/s), the channel may be grass lined.
- **Detention/Retention Basins** – Detention/retention facilities need to have capacity for the 100-year storm, with at least one foot of freeboard, and have an emergency overflow that directs water away from private property. Retention is only allowed in areas outside the City’s designated sensitive lands area.
- **ESU:** The City reports that a typical ESU (equivalent surface unit) of land is 3,400 square feet of impervious surface area².

² Resolution No. 97-03-07 R

PROPORTIONATE SHARE ANALYSIS

The Impact Fees Act requires that the impact fee analysis estimate the proportionate share of the costs for existing capacity that will be recouped and the costs of impacts on system improvements that are reasonably related to the new development activity.

Part of the proportionate share analysis is a consideration of the manner of funding existing public facilities. A City typically funds existing infrastructure through several different funding sources including:

- General Fund Revenues
- User Fees
- Grants
- Bond Proceeds
- Developer Exactions
- Impact Fees

Historically the City has funded its existing storm drain infrastructure through User Fees (rate revenues) and developer exactions and donations. All of these funding sources (with exception of developer contributions/donations) are impact fee qualifying expenses to be considered for buy-in purposes.

In consideration of future capital improvements, the City will continue using similar funding sources, plus impact fee funding as well; no grants are being considered or are available at this time. Using impact fees places a burden on future users that is equal to the burden that was borne in the past by existing users.³

Existing Infrastructure and Capacity to Serve New Growth (Buy-In Component)

The City Engineer provided documentation and capacity to serve growth for several recent projects in American Fork. The historic cost paid by the City is all that has been considered in the buy in component of the analysis.

Future Capital Improvements

Bowen Collins & Associates provided a list of capital projects to be constructed in the next six to ten years. The engineers defined the percent of the project that will benefit growth through the next six to ten years. The 2013 fiscal year total of capital improvements is \$31,568,998. Zions Bank Public Finance has added a 2.43%⁴ inflation factor to the projects to be constructed North of I-15. These projects are more predictable as development has occurred more in this area. The City did not wish to add an inflationary component to the projects to be constructed South of I-15 due to questions on where exactly development will occur. In order to remain consistent and fair with the other studies the City has completed, it is anticipated that an inflationary component will be considered in an update to this analysis as the City gains addition information. Therefore the amount calculated to equals \$ \$31,568,998. 19% of the future value will be included into the impact fee, or \$ \$6,238,890.

Outstanding and Future Debt

There is no outstanding storm drain related debt in American Fork. It is currently not anticipated that the City will bond for this utility in the next six to ten years.

CALCULATED FEE

The impact fees have been calculated with all the above considerations for the City-Wide Service Area. The fee is calculated per square foot. The fee will be multiplied by impervious square feet of the lot at time of building permit.

³ Utah Impact Fees Act, 11-36a-304(2) (c) (d)

⁴ Based on 10 years average cost of inflation using the Bureau of Labor Statistics.

American Fork: Storm Drain Impact Fee Analysis

Figure ES2: Maximum Legal Fee per Square Foot

	Cost	% Impact Fee Qualifying	Impact Fee Qualifying Cost	ERUs to be Served	Cost per Acre
Storm Drain Impact Fee					
IFFP Projects	33,129,606	19%	6,238,890	897	6,955
Buy In - Existing Assets	1,121,003	51%	573,700	897	640
Subtotal	34,250,609	20%	6,812,590		7,595
Total Impact Fee Per Acre (43,560 Sq Feet)					\$ 7,595
Fee per Impervious Square Foot					\$ 0.17

CHAPTER 1: IMPACT FEE OVERVIEW

PROJECT OVERVIEW

Zions Bank Public Finance (Zions) is pleased to provide American Fork (the City) with a storm drain impact fee analysis. American Fork realizes that its facility planning is needed as well as a new impact fee assessment for the utility to create a fair means of funding a much needed system. The City is still growing rapidly and has many capital needs. The analysis is an intensive collaborative effort that meets the needs of City Stakeholders and the City. The information used to create this fee analysis was provided by City staff, Zions Bank Public Finance and Bowen Collins & Associates.

The goal of the impact fee analysis is to calculate the maximum impact fee that may be assessed to new development and ensure the fee meets the requirements of the Impact Fees Act, Utah Code 11-36a-101 *et seq.* The sections and subsections of the impact fee analysis will directly address the following items, required by the code:

- Impact Fee Analysis Requirements (Utah Code 11-36a-304)
 - Identify Existing Capacity to serve growth
 - Proportionate Share Analysis
 - Identify the level of service
 - Identify the impact of future development on existing and future improvements
- Calculated Fee (Utah Code 11-36a-305)
- Certification (Utah Code 11-36a-306)

WHAT IS AN IMPACT FEE?

An impact fee is a one-time fee, not a tax, charged to new development to recover the City's cost of constructing storm drain facilities with capacity to serve new growth. The fee is assessed at the time of building permit issuance as a condition of development approval. The calculation of the impact fee must strictly follow the Impact Fees Act to ensure that the fee is equitable and fair.

This analysis shows that there is a fair comparison between the impact fee charged to new development and the impact the new development will have upon the system in terms of taking available capacity. Impact fees are charged to development according to a number of fixture units, which is a realistic measure of the potential storm drain demands that each user will add to the system.

HOW WILL NEW GROWTH AFFECT THE CITY?

According to the current master plan, the City's developed acres total 5,841 and the plan estimates that over the next six to ten years the City will add approximately 879 acres of developed land. When the Service Area is built out, it is anticipated that there will be 8,782 developed acres. There is a large amount of vacant land left within the City's current boundaries as well as in areas around the south side of the City.

This new growth and increased flows will generally increase storm drain demands as the density and increased development occurs, and extending pipe networks and other facilities as development stretches farther away. In the case of the City the capacity needed for new growth is found in both existing facilities that the City has built ahead of the growth and in the future capital projects that will be constructed in the next six to ten years. The recommended impact fee will balance the cost of capacity the future projects will provide existing residents and the percent of the new projects that are needed to serve the additional anticipated growth.

Population growth is important in the Capital Facilities and Impact Fee Facilities Planning as population, in addition to non-residential demands, drive project needs and timing. However, this storm drain impact fee analysis is not population dependent as the system is sized for commercial, industrial, institutional, churches, schools, etc. The primary measurement of capacity and demand in a storm drain system is an acre of developed land according to the Impact Fee

American Fork: Storm Drain Impact Fee Analysis

Facilities Plan. The fee is based on future projects and is not directly dependent upon population, as non-residential demands have an impact upon the storm drain system, or upon the growth rate.

Figure 1: Projected Growth in Developed Acres

Developed Area Projections					
Year	Developed Area	Year	Developed Area	Year	Developed Area
2012	-	2022	6,631	2032	7,682
2013	5,841	2023	6,738	2033	7,726
2014	5,915	2024	6,845	2034	7,770
2015	5,989	2025	6,952	2035	8,342
2016	6,075	2026	7,187	2036	8,386
2017	6,161	2027	7,423	2037	8,430
2018	6,246	2028	7,658	2038	8,474
2019	6,332	2029	7,894	2039	8,518
2020	6,417	2030	7,594	2040	8,782
2021	6,524	2031	7,638		

WHY ARE IMPACT FEES NECESSARY?

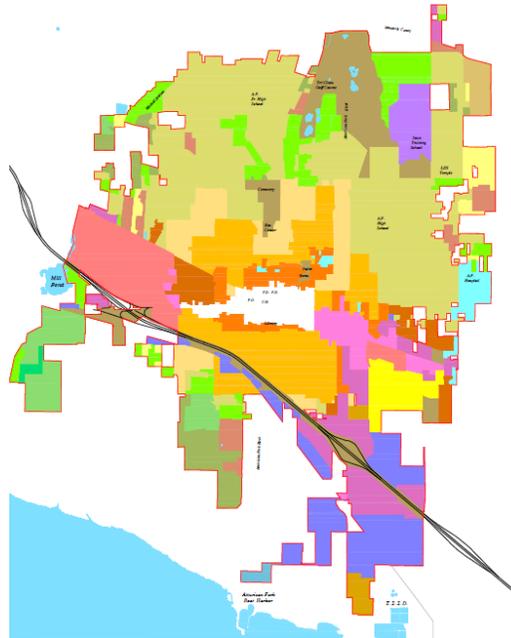
Impact fees are necessary to allocate the costs of unused storm drain system capacity (when applicable) that is reserved for new growth to the developments that will benefit from it. Impact fees help to shield existing users from shouldering the burden of paying not only for the capacity that they use but also from funding the cost of capacity needed for new development to occur.

WHERE WILL THE IMPACT FEES BE ASSESSED?

The impact fees will be assessed within the City's Storm drain Service Area, which includes the current City boundaries and future annexation areas to which the City will provide storm drain service. A detailed map of the Service Area included in the attached appendix shows the Service Area served by the City. In short, if a developer is requesting a building permit and will be served by the City's storm drain system then that property is included in the Service Area.

American Fork: Storm Drain Impact Fee Analysis

Figure 2: Service Area Map



WHAT COSTS ARE INCLUDED IN THE IMPACT FEE?

Impact fee revenues may not be spent on capital projects or associated costs, such as financing interest expense that constitute repair and replacement, cure any existing deficiencies, or maintain the existing level of service for current users. Impact fees cannot fund operational expenses. The proposed impact fees will be assessed throughout the entire Impact Fee Service Area.

The impact fees proposed in this analysis are calculated based upon:

- Costs of replacement facilities that are needed to perpetuate unused capacity in the system that growth will require;
- New capital infrastructure that provides new capacity for growth; and
- Buy in cost to existing infrastructure, at historic cost, with capacity to serve new development; and
- Cost of professional services for engineering, planning services and preparation of the impact fee facilities plan and impact fee analysis.

WHAT COSTS ARE NOT INCLUDED IN THE IMPACT FEE?

The costs, both direct capital and financing, that cannot be included in the impact fee are as follows:

- Projects that cure deficiencies for existing users;
- Projects that increase the level of service above that which is currently provided;
- Operations and maintenance costs;
- Costs of facilities funded by grants or other funds that the City does not have to repay; and
- Costs of reconstruction of facilities that do not have capacity to serve new growth.

HOW ARE IMPACT FEES CALCULATED?

To calculate a fair impact fee we determine a growth related cost of existing and future facilities and divide that by the number of new units that will benefit from the unused capacity. A cost per unit is calculated by dividing impact fee qualifying cost by the amount of capacity to derive the cost per capacity unit. This cost per unit of capacity is then multiplied by the amount of demand that a typical residential home or non-residential user would utilize. In this case the fee is calculated per square foot.

American Fork: Storm Drain Impact Fee Analysis

The general impact fee methodology splits the capacity in existing facilities (there are none considered in this analysis) and future capital projects between that which already benefits existing users and capacity that is available to benefit new growth. A cost is assigned to the capacity that is available for new growth based upon the historic cost of storm drain facilities and the future costs of storm drain infrastructure. A final fee per residential or non-residential land use is calculated by multiplying the cost per impervious square foot of lot size that each new unit of development.

WHAT IS THE CURRENT LEVEL OF SERVICE?

Bowen Collins & Associates defined the City's level of service in the Capital Facilities Plan. The plan states the following:

The requirements for the storm drain system are as follows:

- **Storm Drain Pipelines** – Storm drain pipelines are not allowed to surcharge to within two feet from the ground surface during the 4 percent annual chance (25-year) design. Storm drain pipes (other than laterals) are also not to be smaller than 18 inches in diameter. Storm drain laterals may be 15-inches. To qualify as a lateral, a storm drain pipe must be connected to inlet box, be generally perpendicular to the overall direction of storm drain flow, and be less than 100 feet.
- **Open Channels** – In general, large open channels (such as Mitchell's Hollow, the Meadow's Wetland, Spring Creek, or the American Fork River) should have at least two feet of freeboard during the 100-year storm event. Open channels should also have protective lining. If velocities are less than 4 ft per second (ft/s), the channel may be grass lined.
- **Detention/Retention Basins** – Detention/retention facilities need to have capacity for the 100-year storm, with at least one foot of freeboard, and have an emergency overflow that directs water away from private property. Retention is only allowed in areas outside the City's designated sensitive lands area.
- The City reports that a typical ESU (equivalent surface unit) of land is 3,400 square feet of impervious surface area⁵.

HOW ARE SCHOOLS CONSIDERED IN THIS ANALYSIS?

The Impact Fees Act exempts schools from paying a parks and recreation impact fee but with proper documentation of the impact that a school could place on the storm drain system, the City can assess an impact fee for schools. The storm drain impact fee analysis quantifies the cost per acre (converted to square feet) and also defines the number of acres that can be served by each size of storm drain pipe that a school could install. The impact that a school will have upon the system is clearly defined by the size and number of storm drainpipes that will be installed.

⁵ Resolution No. 97-03-07 R

WHAT ARE THE RECOMMENDED CITY STORM DRAIN IMPACT FEES?

Figure 3: Maximum Legal Storm Drain Impact Fee

	Cost	% Impact Fee Qualifying	Impact Fee Qualifying Cost	ERUs to be Served	Cost per Acre
Storm Drain Impact Fee					
IFFP Projects	33,129,606	19%	6,238,890	897	6,955
Buy In - Existing Assets	1,121,003	51%	573,700	897	640
Subtotal	34,250,609	20%	6,812,590		7,595
Total Impact Fee Per Acre (43,560 Sq Feet)					\$ 7,595
Fee per Impervious Square Foot					\$ 0.17

The American Fork City Council has the discretion to set the actual impact fees to be assessed, but they may not exceed the maximum allowable fee calculated. The City may, on a case by case basis, work directly with a developer to adjust the standard impact fee to respond to unusual circumstances and ensure that impact fees are imposed fairly. This adjusted impact fee calculation will be based on the cost per impervious square foot defined above.

CHAPTER 2: FUTURE CAPITAL PROJECTS AND LEVEL OF SERVICE

IMPACT FEE ANALYSIS REQUIREMENTS

Growth and Land Development Projections

According to the Impact Fee Facilities Plan and the growth projections completed by ZBPF, the 2010 population was 26,263⁶. Population is important in the Capital Facilities and Impact Fee Facilities planning as population, and other factors, drive project need and timing. However, this impact fee analysis is not population dependent. The driving force is the land use and developed acres. The Impact Fee Facilities Plan defines currently the City has 5,841 developed acres⁷. In the next six to ten years it is anticipated that the City will grow to 6,738 developed acres (an increase of 879 acres). The increase in acres is displayed below.

Figure 4: Developed Acres

Developed Area Projections					
Year	Developed Area	Year	Developed Area	Year	Developed Area
2012	-	2022	6,631	2032	7,682
2013	5,841	2023	6,738	2033	7,726
2014	5,915	2024	6,845	2034	7,770
2015	5,989	2025	6,952	2035	8,342
2016	6,075	2026	7,187	2036	8,386
2017	6,161	2027	7,423	2037	8,430
2018	6,246	2028	7,658	2038	8,474
2019	6,332	2029	7,894	2039	8,518
2020	6,417	2030	7,594	2040	8,782
2021	6,524	2031	7,638		

There will be significant growth expected within the City's boundaries and increased demand on the City's collection facilities which will require new projects to meet further demand. The area is growing at a very rapid pace. The growth projections in developed acres are found in the appendix of this document.

⁶ 2010 Census Data

⁷ Bowen Collins & Associates American Fork Impact Fee Facilities Plan

Existing Infrastructure and Capacity to Serve New Growth (Buy-In Component)

The systems funding sources and historic costs are not extensively documented and the consulting engineers report there is limited capacity in the existing facilities. However the City Engineer was able to provide the historic cost for several recent projects that have capacity to serve new growth. The historic cost has been apportioned between existing and future users and included into the impact fee calculation. This is detailed in Appendix 3 of this document.

Impact Fee Facilities Plan – Future Capital Projects

The Impact Fee Facilities Plan developed the following capital projects, helped determine the timing and identified what was growth related, and of that amount, how much of the total capacity will be realized in the next ten years (percentage Impact Fee Qualifying & Impact Fee Qualifying Cost).

Figure 5: Capital Projects

Project Name	Year to be Constructed	FY 2013 Cost	Construction Cost	% to Growth	Impact Fee Qualifying Cost	Non Growth Related	Acres
North of I-15							
1. 568 Feet of 27 Inch Pipe (Average)	2014	129,624	129,624	3%	4,148	125,476	
2. 2,222 Feet of 32 Inch Pipe (Average)	2015	1,981,666	2,029,880	6%	111,643	1,918,237	
3. 4,406 Feet of 42 Inch Pipe (Average)	2015	1,475,873	1,511,781	6%	83,148	1,428,633	
4. 1,135 Feet of 18 Inch Pipe (Average)	2016	221,206	232,101	6%	12,766	219,335	
5A. 5,634 Feet of 35 Inch Pipe (Average)	2017	2,777,291	2,984,978	6%	164,174	2,820,804	
6. 1,615 Feet of 30 Inch Pipe (Average)	2018	390,328	429,724	6%	23,635	406,089	
7. 7,596 Feet of 22 Inch Pipe (Average)	2018	1,630,236	1,794,775	6%	98,713	1,696,063	
8. 1,600 Feet of 18 Inch Pipe (Average)	2019	311,790	351,610	6%	19,339	332,272	
9. 3,054 Feet of 18 Inch Pipe (Average)	2020	595,067	687,393	6%	37,807	649,587	
10. 2,303 Feet of 24 Inch Pipe (Average)	2021	487,084	576,346	6%	31,699	544,647	
11. 2,819 Feet of 40 Inch Pipe (Average)	2021	912,162	1,079,322	6%	59,363	1,019,960	
12. 3,976 Feet of 18 Inch Pipe (Average)	2022	774,794	939,086	6%	51,650	887,436	
13. 2,897 Feet of 46 Inch Pipe (Average)	2022	1,050,205	1,272,897	6%	70,009	1,202,888	
14. 3,118 Feet of 24 Inch Pipe (Average)	2023	659,383	818,647	6%	45,026	773,622	
15. 2,435 Feet of 20 Inch Pipe (Average)	2023	493,317	612,470	6%	33,686	578,785	
South of I-15							
101. 2,440 Feet of 30 Inch Pipe (Average)		589,671	589,671	31%	179,850	409,821	
102. 4,187 Feet of 42 Inch Pipe (Average)		1,366,526	1,366,526	31%	416,790	949,736	
103. 4,583 Feet of 36 Inch Pipe (Average)		1,276,479	1,276,479	31%	389,326	887,153	
104. 2,236 Feet of 30 Inch Pipe (Average)		540,408	540,408	31%	164,824	375,584	
105. 2,014 Feet of 46 Inch Pipe (Average)		735,488	735,488	31%	224,324	511,164	
106. 8,719 Feet of 35 Inch Pipe (Average)		2,504,926	2,504,926	31%	764,002	1,740,924	
108. 5,720 Feet of 27 Inch Pipe (Average)		1,305,992	1,305,992	31%	398,328	907,664	
109. 1,370 Feet of 30 Inch Pipe (Average)		331,059	331,059	31%	100,973	230,086	
110. 1,473 Feet of 38 Inch Pipe (Average)		437,344	437,344	31%	133,390	303,954	
113. 4,168 Feet of 40 Inch Pipe (Average)		1,332,238	1,332,238	31%	406,333	925,905	
115. 3,490 Feet of 30 Inch Pipe (Average)		843,251	843,251	31%	257,192	586,059	
116. 4,032 Feet of 54 Inch Pipe (Average)		1,732,862	1,732,862	31%	528,523	1,204,339	
117. 1,867 Feet of 42 Inch Pipe (Average)		614,232	614,232	31%	187,341	426,891	
118. 4,863 Feet of 36 Inch Pipe (Average)		1,354,464	1,354,464	31%	413,112	941,352	
119. 6,947 Feet of 29 Inch Pipe (Average)		1,665,730	1,665,730	31%	508,048	1,157,682	
120. 1,614 Feet of 24 Inch Pipe (Average)		341,403	341,403	31%	104,128	237,275	
121. 971 Feet of 42 Inch Pipe (Average)		270,335	270,335	31%	82,452	187,883	
122. 1,327 Feet of 42 Inch Pipe (Average)		436,564	436,564	31%	133,152	303,412	
Six to Ten Year Total		\$ 31,568,998	\$ 33,129,606	19%	\$ 6,238,890	\$ 26,890,716	897

CHAPTER 3: PROPORTIONATE SHARE ANALYSIS

The Impact Fees Act requires that the impact fee analysis estimate the proportionate share of the costs for existing capacity that will be recouped; and the costs of impacts on system improvements that are reasonably related to the new development activity.

American Fork continues to grow and there is still expansion in the area. The capital improvement plan clearly defines what projects are growth related, repair and replacement, or pipe upsizing (the upsizing may include some element of growth). The projects are detailed later in the Future Capital Projects section.

Part of the proportionate share analysis is a consideration of the manner of funding existing public facilities. Historically the City has funded existing infrastructure through several different funding sources including:

- General Fund Revenues
- User Rates
- Grants
- Bond Proceeds
- Developer Exactions
- Impact Fees

In calculating the buy-in (for existing infrastructure capacity) component of this analysis no grant funded infrastructure has been included. Once the grant funded projects have been removed, all remaining infrastructure has been funded by existing residents. In order to ensure fairness to existing users, impact fees are an appropriate means of funding future capital infrastructure. Using impact fees places a burden on future users that is equal to the burden that was borne in the past by existing users. (Utah Impact Fees Act, 11-36a-304(2)(c)(d))

Just as existing infrastructure has been funded through different means; it is required by the Impact Fees Act to evaluate all means of funding future capital. There are positives and negative aspects to the various forms of funding. It is important to evaluate each.

General Fund/User Rates

The general fund and user rates have both been funded in one form or another by existing users. It would be an additional burden to existing users to use this revenue source to fund future capital to meet the needs of future users. This is not an equitable policy and can place too much stress on the tight budgets of the general fund and other user rate funds. The storm drain rates in American Fork are dedicated to payments on the public works building, operation and maintenance, repair and replacement and ensuring a stable reserve for maintaining a good credit rating. If rate revenues are required to supplement the capital required by growth, the City will reimburse the user rate fund with impact fees as they are collected and act as a loan to the impact fee fund to be repaid.

Property Taxes

It is true that property taxes may be a stable source of income. However, property taxes are not based on impact placed upon a system. Property taxes are based upon property valuation. Using property taxes to fund future capital again places too much burden on existing users and subsidizes growth. The financial audits for the City do not show a line item for property taxes as a revenue stream for storm drain, thus any property taxes collected on the property being developed is not being used to fund infrastructure or operation and maintenance of the storm drain system.

Impact Fees

Impact fees are a fair and equitable means of providing infrastructure for future development. They provide a rational nexus between the costs borne in the past and the costs required in the future. The Impact Fees Act ensures that future

American Fork: Storm Drain Impact Fee Analysis

development is not paying any more than what future growth will demand. Existing users and future users receive equal treatment; therefore, impact fees are the optimal funding mechanism for future growth related capital needs.

Developer Credits

If a project included in the Impact Fee Facilities Plan (or a project that will offset the demand for a system improvement that is listed in the IFFP) is constructed by a developer that developer is entitled to a credit against impact fees owed. (Utah Impact Fees Act, 11-36a-304(2)(f))

Time-Price Differential

Utah Code 11-36a-301(2)(h) allows for the inclusion of a time-price differential in order to create fairness for amounts paid at different times. To address the time-price differential, this analysis includes an inflationary component to account for construction inflation for future projects. Projects constructed after the year 2013 will be calculated at a future value with a 2.43% inflation rate. All users who pay an impact fee today or within the next six to ten years will benefit from projects to be constructed and included in the fee.

Other

In this particular analysis, there is also a credit for unspent impact fee revenues collected in the past. The current impact fee fund balance for storm drain was credited against the fee.

CALCULATED FEE

The impact fees have been calculated with all the above considerations for the City-wide Service Area. The fee is calculated per square foot. The fees per square foot can be found in Figure 6. These tables can also be found in Appendix 4.

Figure 6: Fee per Impervious Square Foot

	Cost	% Impact Fee Qualifying	Impact Fee Qualifying Cost	ERUs to be Served	Cost per Acre
Storm Drain Impact Fee					
IFFP Projects	33,129,606	19%	6,238,890	897	6,955
Buy In - Existing Assets	1,121,003	51%	573,700	897	640
Subtotal	34,250,609	20%	6,812,590		7,595
Total Impact Fee Per Acre (43,560 Sq Feet)					\$ 7,595
Fee per Impervious Square Foot					\$ 0.17

The City will assess the impact fee on a per Impervious Square Foot basis for all land uses.

CHAPTER 4: CERTIFICATION AND APPENDICES

In accordance with Utah Code Annotated, 11-36a-306(2), Zions Bank Public Finance, makes the following certification:

Zions Bank Public Finance certifies that the attached impact fee analysis:

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

Zions Bank Public Finance makes this certification with the following caveats:

1. All of the recommendations for implementations of the Impact Fee Facilities Plans (“IFFPs”) made in the IFFP documents or in the impact fee analysis documents are followed in their entirety by American Fork staff and elected officials.
2. If all or a portion of the IFFPs or impact fee analyses are modified or amended, this certification is no longer valid.
3. All information provided to Zions Bank Public Finance, its contractors or suppliers is assumed to be correct, complete and accurate. This includes information provided by American Fork and outside sources. Copies of letters requesting data are included as appendices to the IFFPs and the impact fee analysis.

Dated: September 24, 2014

ZIONS BANK PUBLIC FINANCE

APPENDICES

NOTICE OF INTENT TO PREPARE OR AMEND A WRITTEN ANALYSIS OF PROPOSED IMPACT FEES AMERICAN FORK CITY

Notice is hereby given that American Fork City intends to prepare and/or amend a written analysis of proposed impact fees or to contract for the preparation or amendment of a written analysis of proposed impact fees related to the implementation or amendment of impact fees. The impact fees to be considered will be charged to new development and used to offset the cost of capital facilities to serve new development. These new capital facilities may include water, sewer, parks, storm drainage improvements, roadways, fire, police and other infrastructure.

Those receiving this notice are invited to provide information to be considered in amending or adopting a written analysis of proposed impact fees or contracting for the preparation of a written analysis of proposed impact fees and to participate in the preparation or amendment to a written analysis of proposed impact fees.

For more information about the written analysis of proposed impact fees and the process of its preparation, or to provide information to be considered, please contact the project coordinator:

Cathy Jensen
Finance Officer
51 East Main Street
American Fork, UT 84003
cathy@afcity.net

Any information provided for consideration as the written analysis of proposed impact fees is prepared and considered should be provided in writing or via email using the contact information above.

Dated this 25 day of April 2012.

Cathy Jensen, Finance Officer

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Appendix 1:
CURRENT AND FUTURE ACRES

	A	B	C
1	Storm Water		
2		Current	Buildout
3	Current Developed Area1	5,841	8,782
4			

¹ Bowen Collins & Associates 2013 IFFP

	Area Added Per Year	
8	2013	-
9	2014	74
10	2015	74
11	2016	86
12	2017	86
13	2018	85
14	2019	86
15	2020	85
16	2021	107
17	2022	107
18	2023	107
19	Total	897

Developed Area Projections					
Year	Developed Area	Year	Developed Area	Year	Developed Area
2012	-	2022	6,631	2032	7,682
2013	5,841	2023	6,738	2033	7,726
2014	5,915	2024	6,845	2034	7,770
2015	5,989	2025	6,952	2035	8,342
2016	6,075	2026	7,187	2036	8,386
2017	6,161	2027	7,423	2037	8,430
2018	6,246	2028	7,658	2038	8,474
2019	6,332	2029	7,894	2039	8,518
2020	6,417	2030	7,594	2040	8,782
2021	6,524	2031	7,638		

A B C D E F G H I J



Appendix 2:
CAPITAL PROJECTS - IMPACT FEE FACILITIES PLAN
Inflation Rate*

	A	B	C	D	E	F	G	H	
1	Project Name	Year to be Constructed	FY 2013 Cost	Construction Cost	% to Growth	Impact Fee Qualifying Cost	Non Growth Related	Acres	1
2	North of I-15								
3	1. 568 Feet of 27 Inch Pipe (Average)	2014	129,624	129,624	3%	4,148	125,476		3
4	2. 2,222 Feet of 32 Inch Pipe (Average)	2015	1,981,666	2,029,880	6%	111,643	1,918,237		4
5	3. 4,406 Feet of 42 Inch Pipe (Average)	2015	1,475,873	1,511,781	6%	83,148	1,428,633		5
6	4. 1,135 Feet of 18 Inch Pipe (Average)	2016	221,206	232,101	6%	12,766	219,335		6
7	5A. 5,634 Feet of 35 Inch Pipe (Average)	2017	2,777,291	2,984,978	6%	164,174	2,820,804		7
8	6. 1,615 Feet of 30 Inch Pipe (Average)	2018	390,328	429,724	6%	23,635	406,089		8
9	7. 7,596 Feet of 22 Inch Pipe (Average)	2018	1,630,236	1,794,775	6%	98,713	1,696,063		9
10	8. 1,600 Feet of 18 Inch Pipe (Average)	2019	311,790	351,610	6%	19,339	332,272		10
11	9. 3,054 Feet of 18 Inch Pipe (Average)	2020	595,067	687,393	6%	37,807	649,587		11
12	10. 2,303 Feet of 24 Inch Pipe (Average)	2021	487,084	576,346	6%	31,699	544,647		12
13	11. 2,819 Feet of 40 Inch Pipe (Average)	2021	912,162	1,079,322	6%	59,363	1,019,960		13
14	12. 3,976 Feet of 18 Inch Pipe (Average)	2022	774,794	939,086	6%	51,650	887,436		14
15	13. 2,897 Feet of 46 Inch Pipe (Average)	2022	1,050,205	1,272,897	6%	70,009	1,202,888		15
16	14. 3,118 Feet of 24 Inch Pipe (Average)	2023	659,383	818,647	6%	45,026	773,622		16
17	15. 2,435 Feet of 20 Inch Pipe (Average)	2023	493,317	612,470	6%	33,686	578,785		17
18	South of I-15								
19	101. 2,440 Feet of 30 Inch Pipe (Average)		589,671	589,671	31%	179,850	409,821		19
20	102. 4,187 Feet of 42 Inch Pipe (Average)		1,366,526	1,366,526	31%	416,790	949,736		20
21	103. 4,583 Feet of 36 Inch Pipe (Average)		1,276,479	1,276,479	31%	389,326	887,153		21
22	104. 2,236 Feet of 30 Inch Pipe (Average)		540,408	540,408	31%	164,824	375,584		22
23	105. 2,014 Feet of 46 Inch Pipe (Average)		735,488	735,488	31%	224,324	511,164		23
24	106. 8,719 Feet of 35 Inch Pipe (Average)		2,504,926	2,504,926	31%	764,002	1,740,924		24
25	108. 5,720 Feet of 27 Inch Pipe (Average)		1,305,992	1,305,992	31%	398,328	907,664		25
26	109. 1,370 Feet of 30 Inch Pipe (Average)		331,059	331,059	31%	100,973	230,086		26
27	110. 1,473 Feet of 38 Inch Pipe (Average)		437,344	437,344	31%	133,390	303,954		27
28	113. 4,168 Feet of 40 Inch Pipe (Average)		1,332,238	1,332,238	31%	406,333	925,905		28
29	115. 3,490 Feet of 30 Inch Pipe (Average)		843,251	843,251	31%	257,192	586,059		29
30	116. 4,032 Feet of 54 Inch Pipe (Average)		1,732,862	1,732,862	31%	528,523	1,204,339		30
31	117. 1,867 Feet of 42 Inch Pipe (Average)		614,232	614,232	31%	187,341	426,891		31
32	118. 4,863 Feet of 36 Inch Pipe (Average)		1,354,464	1,354,464	31%	413,112	941,352		32
33	119. 6,947 Feet of 29 Inch Pipe (Average)		1,665,730	1,665,730	31%	508,048	1,157,682		33
34	120. 1,614 Feet of 24 Inch Pipe (Average)		341,403	341,403	31%	104,128	237,275		34
35	121. 971 Feet of 42 Inch Pipe (Average)		270,335	270,335	31%	82,452	187,883		35
36	122. 1,327 Feet of 42 Inch Pipe (Average)		436,564	436,564	31%	133,152	303,412		36
37	Six to Ten Year Total		\$ 31,568,998	\$ 33,129,606	19%	\$ 6,238,890	\$ 26,890,716	897	37
38	<i>*Based on 10 years average cost of inflation using the Bureau of Labor Statistics and net of interest earnings</i>								



Appendix 3:
ASSETS

	A	B	C	D	
	Date Acquired	Description	Historic Cost	Avg % Current Capacity Available	
1					1
2	2013	36" Storm Drain to 200 East	65,000	50%	2
3	1995	700 North Storm Drain	-	20%	3
4	2014	South - North Park	12,000	50%	4
5		300 West 24" Pipe @ I-15 Crossing	94,000	80%	5
6		Salt Storage Facility	900,000	50%	6
7	2014	Star Mill Area Storm Drain	50,000	20%	7
11	Impact Fee Qualifying		\$ 1,121,003	\$ 573,700	11

**Source: American Fork City*

12
13
14

A B C D



Appendix 4:
 BASE FEE PER ACRE
 American Fork Impact Fee

	A	B	C	D	E	F	
1		Cost	% Impact Fee Qualifying	Impact Fee Qualifying Cost	ERUs to be Served	Cost per Acre	1
2	Storm Drain Impact Fee						2
3	IFFP Projects	33,129,606	19%	6,238,890	897	6,955	3
4	Buy In - Existing Assets	1,121,003	51%	573,700	897	640	4
5	Subtotal	34,250,609	20%	6,812,590		7,595	5
6	Total Impact Fee Per Acre (43,560 Sq Feet)					\$ 7,595	6
7	Fee per Impervious Square Foot					\$ 0.17	7



Appendix 5:
INFLATION RATE

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	
1	30 Year Historical Inflation Rate Data														1
2	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	2
3	2012	2.93%	2.87%	2.65%	2.30%	1.70%	1.66%	1.41%	1.69%	1.99%	2.16%				3
4	2011	1.63%	2.11%	2.68%	3.16%	3.57%	3.56%	3.63%	3.77%	3.87%	3.53%	3.39%	2.96%	3.16%	4
5	2010	2.63%	2.14%	2.31%	2.24%	2.02%	1.05%	1.24%	1.15%	1.14%	1.17%	1.14%	1.50%	1.64%	5
6	2009	0.03%	0.24%	-0.38%	-0.74%	-1.28%	-1.43%	-2.10%	-1.48%	-1.29%	-0.18%	1.84%	2.72%	-0.34%	6
7	2008	4.28%	4.03%	3.98%	3.94%	4.18%	5.02%	5.60%	5.37%	4.94%	3.66%	1.07%	0.09%	3.85%	7
8	2007	2.08%	2.42%	2.78%	2.57%	2.69%	2.69%	2.36%	1.97%	2.76%	3.54%	4.31%	4.08%	2.85%	8
9	2006	3.99%	3.60%	3.36%	3.55%	4.17%	4.32%	4.15%	3.82%	2.06%	1.31%	1.97%	2.54%	3.24%	9
10	2005	2.97%	3.01%	3.15%	3.51%	2.80%	2.53%	3.17%	3.64%	4.69%	4.35%	3.46%	3.42%	3.39%	10
11	2004	1.93%	1.69%	1.74%	2.29%	3.05%	3.27%	2.99%	2.65%	2.54%	3.19%	3.52%	3.26%	2.68%	11
12	2003	2.60%	2.98%	3.02%	2.22%	2.06%	2.11%	2.11%	2.16%	2.32%	2.04%	1.77%	1.88%	2.27%	12
13	2002	1.14%	1.14%	1.48%	1.64%	1.18%	1.07%	1.46%	1.80%	1.51%	2.03%	2.20%	2.38%	1.59%	13
14	2001	3.73%	3.53%	2.92%	3.27%	3.62%	3.25%	2.72%	2.72%	2.65%	2.13%	1.90%	1.55%	2.83%	14
15	2000	2.74%	3.22%	3.76%	3.07%	3.19%	3.73%	3.66%	3.41%	3.45%	3.45%	3.45%	3.39%	3.38%	15
16	1999	1.67%	1.61%	1.73%	2.28%	2.09%	1.96%	2.14%	2.26%	2.63%	2.56%	2.62%	2.68%	2.19%	16
17	1998	1.57%	1.44%	1.37%	1.44%	1.69%	1.68%	1.68%	1.62%	1.49%	1.49%	1.55%	1.61%	1.55%	17
18	1997	3.04%	3.03%	2.76%	2.50%	2.23%	2.30%	2.23%	2.23%	2.15%	2.08%	1.83%	1.70%	2.34%	18
19	1996	2.73%	2.65%	2.84%	2.90%	2.89%	2.75%	2.95%	2.88%	3.00%	2.99%	3.26%	3.32%	2.93%	19
20	1995	2.80%	2.86%	2.85%	3.05%	3.19%	3.04%	2.76%	2.62%	2.54%	2.81%	2.61%	2.54%	2.81%	20
21	1994	2.52%	2.52%	2.51%	2.36%	2.29%	2.49%	2.77%	2.90%	2.96%	2.61%	2.67%	2.67%	2.61%	21
22	1993	3.26%	3.25%	3.09%	3.23%	3.22%	3.00%	2.78%	2.77%	2.69%	2.75%	2.68%	2.75%	2.96%	22
23	1992	2.60%	2.82%	3.19%	3.18%	3.02%	3.09%	3.16%	3.15%	2.99%	3.20%	3.05%	2.90%	3.03%	23
24	1991	5.65%	5.31%	4.90%	4.89%	4.95%	4.70%	4.45%	3.80%	3.39%	2.92%	2.99%	3.06%	4.25%	24
25	1990	5.20%	5.26%	5.23%	4.71%	4.36%	4.67%	4.82%	5.62%	6.16%	6.29%	6.27%	6.11%	5.39%	25
26	1989	4.67%	4.83%	4.98%	5.12%	5.36%	5.17%	4.98%	4.71%	4.34%	4.49%	4.66%	4.65%	4.83%	26
27	1988	4.05%	3.94%	3.93%	3.90%	3.89%	3.96%	4.13%	4.02%	4.17%	4.25%	4.25%	4.42%	4.08%	27
28	1987	1.46%	2.10%	3.03%	3.78%	3.86%	3.65%	3.93%	4.28%	4.36%	4.53%	4.53%	4.43%	3.66%	28
29	1986	3.89%	3.11%	2.26%	1.59%	1.49%	1.77%	1.58%	1.57%	1.75%	1.47%	1.28%	1.10%	1.91%	29
30	1985	3.53%	3.52%	3.70%	3.69%	3.77%	3.76%	3.55%	3.35%	3.14%	3.23%	3.51%	3.80%	3.55%	30
31	1984	4.19%	4.60%	4.80%	4.56%	4.23%	4.22%	4.20%	4.29%	4.27%	4.26%	4.05%	3.95%	4.30%	31
32	1983	3.71%	3.49%	3.60%	3.90%	3.55%	2.58%	2.46%	2.56%	2.86%	2.85%	3.27%	3.79%	3.22%	32
33	1982	8.39%	7.62%	6.78%	6.51%	6.68%	7.06%	6.44%	5.85%	5.04%	5.14%	4.59%	3.83%	6.16%	33
34	1981	11.83%	11.41%	10.49%	10.00%	9.78%	9.55%	10.76%	10.80%	10.95%	10.14%	9.59%	8.92%	10.35%	34
35	1980	13.91%	14.18%	14.76%	14.73%	14.41%	14.38%	13.13%	12.87%	12.60%	12.77%	12.65%	12.52%	13.58%	35
36	1979	9.28%	9.86%	10.09%	10.49%	10.85%	10.89%	11.26%	11.82%	12.18%	12.07%	12.61%	13.29%	11.22%	36
37	1978	6.84%	6.43%	6.55%	6.50%	6.97%	7.41%	7.70%	7.84%	8.31%	8.93%	8.89%	9.02%	7.62%	37
38	1977	5.22%	5.91%	6.44%	6.95%	6.73%	6.87%	6.83%	6.62%	6.60%	6.39%	6.72%	6.70%	6.50%	38
39	1976	6.72%	6.29%	6.07%	6.05%	6.20%	5.97%	5.35%	5.71%	5.49%	5.46%	4.88%	4.86%	5.75%	39
40	1975	11.80%	11.23%	10.25%	10.21%	9.47%	9.39%	9.72%	8.60%	7.91%	7.44%	7.38%	6.94%	9.20%	40
41	1974	9.39%	10.02%	10.39%	10.09%	10.71%	10.86%	11.51%	10.86%	11.95%	12.06%	12.20%	12.34%	11.03%	41
42	1973	3.65%	3.87%	4.59%	5.06%	5.53%	6.00%	5.73%	7.38%	7.36%	7.80%	8.25%	8.71%	6.16%	42
43	1972	3.27%	3.51%	3.50%	3.49%	3.23%	2.71%	2.95%	2.94%	3.19%	3.42%	3.67%	3.41%	3.27%	43
44	*Source: Bureau of Labor Statistics											30 Year Average		4.42%	44
45												10 Year Average		2.43%	45



IMPACT FEE

Analysis

TRANSPORTATION

AMERICAN FOR CITY

NOTICING DRAFT

ZIONS BANK PUBLIC FINANCE MUNICIPAL CONSULTING GROUP
NOVEMBER 20, 2014



IMPACT FEE ANALYSIS

TRANSPORTATION
AMERICAN FORK CITY

NOTICING DRAFT

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EXECUTIVE SUMMARY

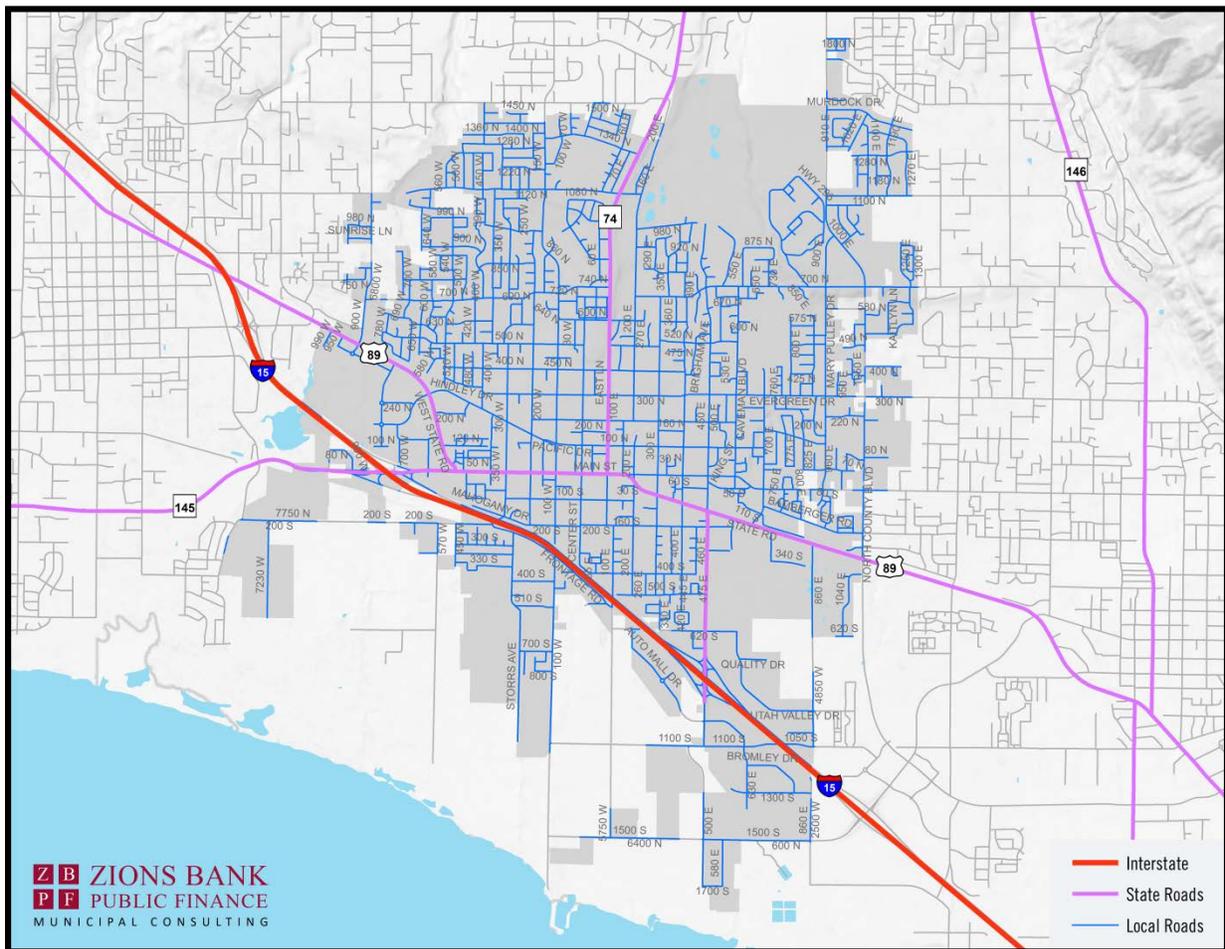
INTRODUCTION

Zions Bank Public Finance (Zions) is pleased to provide American Fork City (the City) with an update to the Transportation Impact Fee Analysis. The previous analysis was completed in 2007. This update brings the City into compliance with the most recent changes in the Utah State Impact Fee Act as well as updates the analysis with current demographics, projections, and data regarding the City's road system.

AMERICAN FORK CITY TRANSPORTATION IMPACT FEE SERVICE AREA

The entire City is considered to be one single impact fee service area for the purposes of this impact fee analysis. All areas within the City are subject to the same engineering design standards, are provided the same level of service, and all infrastructure included herein has been funded in essentially the same manner which has been through impact fees and user fees.

Figure ES.1: American Fork City Transportation / Roadway Impact Fee Service Area



CHAPTER 1: IMPACT FEE OVERVIEW

Chapter 1 provides an overview of this analysis and also includes important excerpts to help give a brief introduction to the reasons why and how American Fork City is assessing a transportation impact fee.

American Fork City Transportation Impact Fee Analysis

CHAPTER 2: LEVEL OF SERVICE

Utah State Impact Fees Act makes it clear that impact fees cannot be used to increase the quality of public services and infrastructure for existing property owners at the expense of incoming property owners. Impact fees can only be used to perpetuate the same quality of infrastructure and services that are currently offered referred to as the level of service (LOS). This chapter provides details regarding the City's historic level of service and the future level of service to be maintained.

CHAPTER 3: HISTORIC INFRASTRUCTURE COSTS

One part of the impact fee calculation is to determine what share of the existing City roadway infrastructure should be paid for by new growth. According to the Impact Fees Act, in addition to paying for a portion of new infrastructure, impact fees can also be used to reimburse local governments for infrastructure which has unused capacity that can serve new development. This chapter explains the method used to arrive at the historic costs used in calculating this fee.

CHAPTER 4: FUTURE TEN YEAR INFRASTRUCTURE COSTS

Chapter 4 lays out the ten year roadway infrastructure projects as detailed in the Impact Fee Facilities Plan completed by Horrocks Engineers. This chapter also explains how rather than simply divide ten year projects by ten year growth to arrive at an impact fee the City has currently decided to use a conservative method for estimating a lower fee. It should be clear that the City may return to the simpler method of ten year projects by ten year growth if this new method should fail to address the demands and needs of future development.

CHAPTER 5: PROPORTIONATE SHARE ANALYSIS

The Impact Fees Act requires that the impact fee analysis estimate the proportionate share of the costs for existing capacity that will be recouped; and the costs of impacts on system improvements that are reasonably related to the new development activity. This analysis will be completed throughout this study. This chapter also details the sources of funding available to the City and explains why impact fees are necessary in order to fund the ten year projects recommended by the Impact Fee Facilities Plan.

CHAPTER 6: IMPACT FEE CALCULATIONS

This chapter provides the details necessary to understand the final fee, including the trip generation data and the important considerations used to calculate what share of existing and future costs should be paid for by new development.

CERTIFICATION

In accordance with Utah Code Annotated, 11-36a-306(2), this final section provides a certification that this analysis complies with the Utah State Impact Fees Act.

PROPOSED IMPACT FEE

Figure ES.2: Cost Per Trip

Component	Ten Year Growth in PM Peak Hour Trips	Cost	Cost Per Trip
Existing Roadway System Improvements (Buy in Com	20,273	\$ 7,753,090	\$ 382.43
Ten Year Roadway System Improvements	20,273	45,770,457	2,258
Ten Year Growth's Share of the Cost of Anticipated De	20,273	14,363,086	708
Total		\$ 67,886,632	\$ 3,348.62

*This is the cost of issuance plus interest payments multiplied by the "% to Ten Year Growth"

American Fork City Transportation Impact Fee Analysis

Figure ES.3: Proposed Impact Fee by Land Use

Category	Cost per Trip	ITE PM Peak Hr Average Trips	Unit of Measurement:	Impact Fee per Unit:
Residential Category				
Single-Family Detached Housing	\$3,348.62	0.62	Dwelling Unit	\$ 2,076.68
Multi-Family (Average ITE Categories 220, 230, 240)	\$3,348.62	0.35	Dwelling Unit	1,174.39
General Non-Residential Category				
Hotel	\$3,348.62	0.32	Room	\$ 1,066.27
School (Average of ITE Categories 520, 522, 530)	\$3,348.62	0.53	1000 Sq. Feet Gross Floor Area	1,763.38
Non-Residential Category 1: Less than 1 Trip per 1,000 Square Feet	\$3,348.62	0.50	1000 Sq. Feet Gross Floor Area	1,674.31
Non-Residential Category 2: 1 to 2 Trips per 1,000 Square Feet ²	\$3,348.62	1.50	1000 Sq. Feet Gross Floor Area	5,022.93
Non-Residential Category 3: More than 2 Trips per 1,000 Square Feet	\$3,348.62	3.50	1000 Sq. Feet Gross Floor Area	11,720.18

¹ Category 1 may include occupancies such as:

- Warehouse / Distribution Center
- Storage Units
- Industrial Park
- General Office Building
- Church
- Business Park
- General Manufacturing *
- Hospital
- Hair / Nails / Massage / Beauty Salon / Day Spa
- Shopping Center / Strip Mall
- Automobile Car Sales
- Auto Care Center
- Tire Store

² Category 2 may include

- occupancies such as:
- Day Care Center
 - Medical-Dental Office Building
 - Supermarket
 - Specialty Retail Center
 - Self Service Car Wash

³ Category 3 may include occupancies such as:

- Health/Fitness Club
- Building Materials and Lumber Store
- Automated Car Wash
- Discount Supermarket/ Supercenter
- Movie Theatre < 10 Screens
- Library
- Movie Theatre 10 or More Screens
- Nursery (Garden Center)
- Restaurant, Sit-Down (Low Turnover, >1 hour stay)
- Bank / Financial Institution
- Restaurant, Sit-Down (High-Turnover)
- Gasoline/Service Station
- Restaurant with Drive-Through Window
- Convenience Store

Source: ITE Trip Generation 9th Edition, American Fork Public Works Department

Note: Pass by trip adjustments are based on American Fork Public Works estimates and ITE sample data where available

CHAPTER 1: IMPACT FEE OVERVIEW

PROJECT OVERVIEW

Zions Bank Public Finance (Zions) is pleased to provide American Fork City (the City) with an update to the Transportation Impact Fee Analysis. American Fork City realizes that due to changes in the City's Transportation General Plan, as well as changes to the Utah State Impact Fees Act, an updated analysis is needed. The update to the analysis is a data driven and collaborative effort between the City, its engineers, Zions, and the community stakeholders. The information used to create this fee analysis was provided by City staff, Zions Bank Public Finance, the City's contracted engineers (Horrocks Engineers, Inc.) and other data sources from County and State agencies.

The goal of the impact fee analysis is to calculate a fair and equitable impact fee that will be paid by new development. This analysis also ensures the fee meets the requirements of the Impact Fees Act, Utah Code 11-36a-101 *et seq.* This analysis will address the following sections and subsections of the code:

- Impact fee analysis requirements (Utah Code 11-36a-304)
 - Identify existing capacity to serve growth
 - Proportionate share analysis
 - Identify the level of service
 - Identify the impact of future development on existing and future improvements
- Calculated Fee (Utah Code 11-36a-305)
- Certification (Utah Code 11-36a-306)

WHAT IS AN IMPACT FEE?

An impact fee is a development fee, not a tax, charged by a local government to new development to recover all or a portion of the costs of providing services to new development. Impact fees collected for the roadway system provide funding for essential road construction and right of way purchases needed by American Fork City to handle the increase in vehicle trips that new growth will generate.

Impact fees are a common and equitable way to share the costs of infrastructure between existing and future residents. According to a survey completed in 2012, 28 states actively employ impact fees as a method of funding.¹ Utah adopted its first impact fee legislation into the Utah Code in 1995, with its most recent update in 2011 and added amendments in 2013.

WHY ARE IMPACT FEES NECESSARY?

Without impact fees, new development may not pay its fair share of the infrastructure built to support its existence. This would arguably require existing residents to pay for facilities and services that may only be needed by new development. Utilizing impact fees to pay a portion of the costs associated with future infrastructure puts future users on an equal footing with existing users—who have been paying property taxes, sales taxes, user fees and/or other revenue sources in order to generate the revenue required to provide needed services.

WHY IS THE CITY UPDATING THE 2007 TRANSPORTATION IMPACT FEE ANALYSIS?

The City has commissioned this Impact fee analysis to accomplish the following:

- Determine a fair and equitable impact fee that may be assessed to new development;
- Update capital need projections and account for historic costs of facilities;

¹"National Impact Fee Survey: 2012" completed by Duncan Associates: http://impactfees.com/publications%20pdf/2012_survey.pdf

American Fork City Transportation Impact Fee Analysis

- Put the analysis in compliance with the latest changes to the Utah State Impact Fees Act;
- Incorporate the data from the 2013 American Fork Transportation Element of the General Plan and 2013 Impact Fee Facilities Plan (IFFP) with a ten year capital planning horizon; and
- More clearly define the current level of service and the future level of service that the City will provide.

WHAT COSTS ARE INCLUDED IN THE IMPACT FEE?

The impact fees proposed in this analysis are calculated based upon:

- Cost of roadway infrastructure that is needed to perpetuate unused capacity in the system that growth will require;
- New roadway infrastructure that provides new capacity for growth;
- Historic costs of existing roadway infrastructure that provide existing capacity that will serve new development;
- City contributions toward UDOT and County projects if applicable;
- Developer contributions toward system improvements that were made in lieu of fees²; and
- Cost of professional services for engineering, planning services and preparation of the impact fee analysis.

WHAT COSTS ARE NOT INCLUDED IN THE IMPACT FEE?

The costs, both direct capital and financing, that cannot be included in the impact fee are as follows:

- Developers contributions toward project improvements that did not benefit the entire City transportation system;
- Projects that cure deficiencies for existing users;
- Projects that increase the level of service above that which is currently provided;
- Operations and maintenance costs;
- Any costs beyond the ten year planning horizon;
- Costs of facilities funded by grants or other funds that the City does not have to repay; and
- Costs of reconstruction of facilities that do not have capacity to serve new growth.

WHAT IS ROADWAY INFRASTRUCTURE

Roadway infrastructure includes more than just roads. For the purposes of this impact fee analysis, roadway infrastructure will signify all the necessary improvements required to construct a City road as defined in the City code.

DO DEVELOPERS RECEIVE CREDIT FOR THE ROADS THEY BUILD? SYSTEM IMPROVEMENTS VS. PROJECT IMPROVEMENTS

When a developer builds in the City of American Fork they are required to construct and install a certain amount of roadway infrastructure as determined by the City Code. These roadway infrastructure improvements are often referred to as “project” improvements because they primarily benefit the development project in which they are built not the system as a whole. Developers do not receive any impact fee credit for these projects and they are not included in the impact fee calculations. Only “system” improvements, or improvements which are deemed to primarily benefit the system or City as a whole, are included the calculations.

Because system improvements are included in the Transportation Impact Fee Analysis, if the City allows a developer to construct and install a system improvement, that developer may be due a credit redeemable in lieu of future impact fees owed (Utah Impact Fees Act, 11-36a-304(2)(f)). However, it is important to understand that—in the case of road width expansion—the developer would not receive credit for the minimum widths considered as project improvements and required by the City code.

²The City will require future developers to contribute a certain amount to the project frontage as a part of their project improvements. Also, if possible, the City will require the right of way to be donated. This will only apply in the areas that are yet to annex. Typically, the City will only reimburse or credit the developer when the improvements are not “project” related.

American Fork City Transportation Impact Fee Analysis

As a practice, all system improvement credits should be arranged and agreed upon by both the developer and the City's Public Works Department and ratified by the City Council before the development project is undertaken.

MEASURING DEMAND ON THE SYSTEM

The metric utilized in this analysis to measure the demand on the system is PM peak hour trips (as in the number of vehicle trip ends generated during the peak hour of afternoon traffic between the hours of 4pm and 6pm). PM peak hour trips is an effective way of measuring the average daily peak capacity of American Fork's roadway infrastructure because PM peak hour trips measure the highest impact each land use will have on a roadway. Peak hour trips must be considered in order to effectively plan for the highest congestion on the roadways to effectively plan for growth and perpetuate the LOS desired by the City. A trip end is the primary destination of a trip. Although a trip will have a beginning and an end the impact fee calculation sorts trips based on the attraction of the trip and nets out the return trip end so that the same roundtrip is not double counted in the analysis.

Trip End

A trip end is a single or one-directional vehicle movement to or from a particular site or development. This analysis uses peak hour trips that are attracted to a particular land use. They consider only trips that are entering and that are primary trips. Primary trips are the trip ends to a place that is considered to be the intended destination of the trip. Stops along the way to the primary destination are called pass-by trips. An example of a primary trip might be a car that leaves home to head to a grocery store. If the car stops at a gas station along the way on the primary route then the visit to the gas station is a pass-by trip. If the car leaves the primary route to the grocery store and drives along an adjacent route then this is a diverted trip and is equivalent to a pass-by trip and not a primary trip.

Pass by trips, including diverted trips (trips that are diverted from nearby roadways onto adjacent streets), are not included as they are an intermediate stop on the way to a primary destination. Trip end analysis in this impact fee analysis focuses on primary trips.

The following table depicts the growth in population expected for American Fork as well as the corresponding growth in PM peak hour trips on the total collection of American Fork transportation system improvements. The data for this table was provided by the Horrocks Engineers who have created a complex transportation model which takes into account data from several sources.

Figure 1.1: Projected Population and PM Peak Hour Trips

Year	American Fork Population	Cumulative % Growth	PM Peak Hour Trips	Cumulative % Growth
2013	27,305	-	58,094	-
2023	34,686	27%	78,367	35%
2040	47,678	59%	101,587	55%

Source: 2013 American Fork Revised General Plan population projections, Horrocks Engineers

It is assumed that the difference between existing and future traffic growth is primarily due to new development, both residential and nonresidential. Nonresidential growth is an especially important factor as vehicle trips in American Fork are increased substantially when necessary or desirable destinations are added within the City. This not only induces City residents to drive more but also induces additional driving from neighboring communities. Therefore, it should be no surprise that the growth in PM peak hour trips is proportionally greater than the growth in population over the next ten years.

It is important to note that some of the roadway infrastructure usage in American Fork is due to pass through traffic, or traffic that has a destination beyond the City. Pass through trips are stops along the way to a primary destination. For the purpose of this analysis only trips to primary destinations are measured in order to classify trips according to which type of land use generated the trip. The data provided by the Horrocks Engineers takes into consideration pass through traffic as well as traffic on roadways not under American Fork jurisdiction, such as UDOT roads (because American Fork is not responsible for the construction of these roads).

HOW ARE TRANSPORTATION IMPACT FEES CALCULATED?

In general, impact fees are determined by completing a thorough analysis of a local government's existing level of public services, future needs due to growth, and the anticipated cost to maintain the existing level of service.

To calculate a fair impact fee for roadway infrastructure, it is important to add up **Ten Year Growth's share** of the following:

1. The cost of the available capacity of **existing** roadway infrastructure;
2. The cost of **future** roadway projects planned for the next **ten years** for which the City has full or partial jurisdiction;
3. The cost of estimated **debt financing**; which amounts to the total **interest** accrued plus the **cost of issuance**.

Once this amount is totaled it is then divided by the number of new PM peak hour trips estimated to occur in the next ten years. This results in a cost per vehicle trip. This cost per trip is then multiplied by the number of PM peak hour trips each type of land use will generate—according to the data provided by the Institute of Transportation Engineers (ITE) Trip Generation Manual (9th Edition) and the American Fork Public Works Department (which also includes a pass by adjustment and an adjustment for entering versus exiting vehicles. For instance, the average single family detached housing land use is expected to generate 0.62 vehicle trips during the PM peak hour.

This updated impact fee analysis includes categories based on high, medium and low trip generations. The impact fee ordinance allows City officials calculate non-standard roadway impact fees for unique land uses utilizing data from the most recent edition of the ITE Manual. At the City's discretion, additional categories can be referenced by utilizing the latest edition of the ITE manual.

CHAPTER 2: LEVEL OF SERVICE

LEVEL OF SERVICE DEFINITIONS

The Utah State Impact Fees Act makes it clear that impact fees cannot be used to increase the quality of public services and infrastructure for existing property owners at the expense of incoming property owners. Impact fees can only be used to perpetuate the same quality of infrastructure and services that are currently offered. In order to demonstrate that this is the case, it has become a common practice for entities assessing an impact fee to identify a “Level of Service” (LOS) which cannot be exceeded. The LOS is, simply stated, the demand placed upon existing public services and infrastructure by existing property owners. The level of service is defined in Figure 2.1 below.

LOS classification is also a common tool in roadway infrastructure planning. As defined in the Highway Capacity Manual (HCM), a document published by the Transportation Research Board (TRB), LOS serves as the traditional form of measurement of a roadway’s functionality. The TRB identifies LOS by reviewing elements, such as the number of lanes assigned to a roadway, the amount of traffic using the roadway and the time of delay per vehicle traveling on the roadway and at the intersections. Levels of service range from A (free flow where users are virtually unimpeded by other traffic on the roadway) to F (traffic exceeds the operating capacity of the roadway).

CURRENT LEVEL OF SERVICE NOT TO BE EXCEEDED

After discussions with City staff, it was determined that adopting the industry standard of LOS D for system streets was acceptable for future planning. This is a common goal for urban streets during peak hours. LOS D suggests that for most times of the day, the roadways will be operating at well below capacity. The peak times of day will likely experience moderate congestion characterized by a higher vehicle density and slower than free flow speeds.

While American Fork City has historically maintained a higher classification, it was decided that perpetuating the same LOS would be potentially cost prohibitive and may present societal impacts, as the need for additional lanes and wider streets may harm the livability of existing neighborhoods where these improvements would be needed.

It should be noted that local streets are designed at lower speeds than system streets in order to be less intrusive and are not as strictly access-controlled. This ultimately results in a loss of capacity. On local streets LOS C is the minimum expectation for design. This ensures that local streets are more “livable” for homes that may front these streets. This has been the past standard and will continue to be the standard for local streets designed and built into the future. For more details on the LOS see the IFFP and Transportation Element of the American Fork City General Plan.

LEVEL OF SERVICE USED IN DETERMINING CAPACITY

In order to determine the excess capacity of existing roadway infrastructure as well as the future capacity of future projects, LOS D for system streets and LOS C for local streets was utilized.

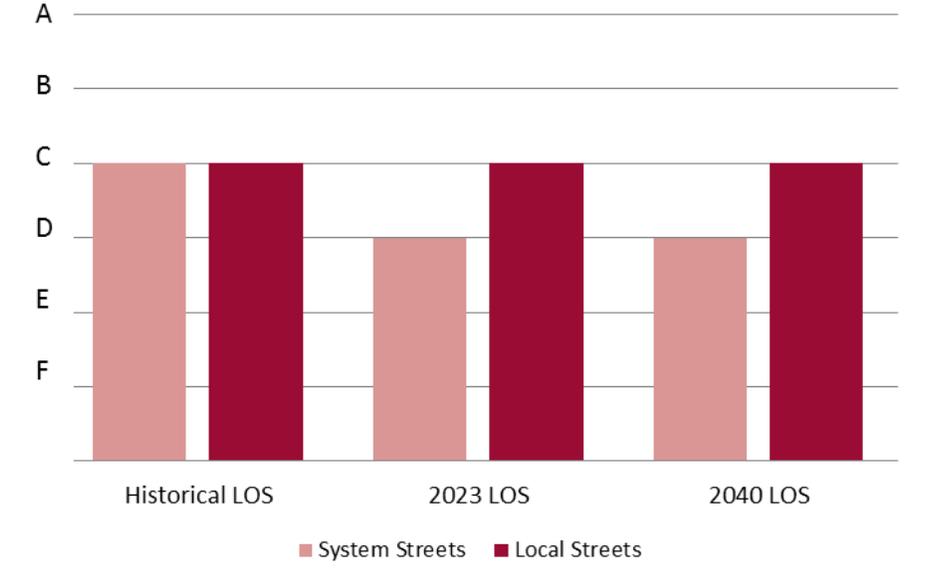
Figure 2.1: Level of Service Standards for Historical and Future Roadway Infrastructure

Roadway Infrastructure Category	Historical LOS	2023 LOS	2040 LOS
System Streets	C	D	D
Local Streets	C	C	C

Source: American Fork General Plan Transportation Element 2013, American Fork Public Works Department, Horrocks Engineers

American Fork City Transportation Impact Fee Analysis

Figure 2.2: Level of Service Standards for Historical and Future Roadway Infrastructure



CHAPTER 3: HISTORIC INFRASTRUCTURE COSTS

American Fork City maintains an existing roadway infrastructure system representing a significant investment by current and previous residents over several decades. The Utah State Impact Fees Act allows local jurisdictions to collect a portion of impact fees for the reimbursement of existing infrastructure with available capacity. The City has approved a conservative method for estimating the historic value of this infrastructure, in the absence of specific records detailing the exact amount of historical costs.

COST OF EXISTING ROADWAY INFRASTRUCTURE WITH EXCESS CAPACITY

As was stated previously, impact fees can be calculated to recover the portion of costs associated with existing facilities with available capacity. The following tables provide an inventory of the City's existing infrastructure, the associated available capacity, and the estimated historic cost.

Figure 3.1: Summary of the Amount of SF in each Roadway Infrastructure Category

Existing Roadway Infrastructure Category	Existing Centerline Feet	Average Right of Way	Project Improvement SF	System Improvement SF
Arterials	2,142	96	0	205,632
Major Collectors	55,596	82	3,335,760	1,223,112
Minor Collectors	144,107	66	8,646,420	864,642
Project Improvement Portion (Excluded)	-	60	11,982,180	-

Source: American Fork Public Works Department, Horrocks Engineers

Note: 100% of Arterials are System Improvements; also the Project Improvement Portion has been discounted by 25%, the assumed contribution of the City to local roads (before regular developer contributions)

Figure 3.2: Summary of Roadway Infrastructure Costs Deflated to Reflect Historical Investment

Existing Roadway Infrastructure Category	Estimated Cost per SF in 2013	Estimated Cost per SF in 1993 *	Estimated City Investment (Deflated)
Arterials	\$17.50	\$10.86	\$2,233,164
Major Collectors	\$17.50	\$10.86	\$13,282,996
Minor Collectors	\$12.50	\$7.75	\$6,700,976

* The 2013 cost per square foot of roadway infrastructure was deflated to 1993 dollars in order to conservatively estimate the city's historic investment; the BLS CPI Inflation Calculator was utilized to make this calculation

Figure 3.3: Summary of Existing Capacity of Roadway Infrastructure for which Ten Year Growth is Responsible

Existing Roadway Infrastructure Category	% Excess Capacity in LOS	% of Excess Capacity Utilized by 10 Year Growth	Cost to Ten Year Growth
Arterials	50%	70%	\$779,305
Major Collectors	71%	49%	\$4,635,353
Minor Collectors	71%	49%	\$2,338,432
Total			\$7,753,090

Source: American Fork Public Works Department, Horrocks Engineers



American Fork City Transportation Impact Fee Analysis

This inventory of roadway infrastructure represents system streets—and has been subdivided into three categories: arterials, major collectors, and minor collectors. This subdivision was necessary due to the fact that the cost per SF and the excess capacity for each one of these categories varies.

It is important to note that capacity is calculated according to the historic level of service standards maintained by the City and not the maximum number of trips the system can handle.

CHAPTER 4: FUTURE TEN YEAR INFRASTRUCTURE COSTS

COST OF FUTURE ROADWAY INFRASTRUCTURE PLANNED FOR THE NEXT TEN YEARS

The IFFP contains a list of roadway infrastructure projects that are planned for completion within the next ten years. The following table displays the roadway projects for which the City has partial or full jurisdiction. The “Project Cost” indicated for each project represents the amount the City will be responsible for funding in present dollars.

Figure 4.1: Summary of Ten Year Roadway Infrastructure Projects for which Ten Year Growth is Responsible

Project	Roadway or Location	Total Project Costs	Average Construction Year Cost *	% to Ten Year Growth **	Amount to Ten Year Growth
Upgrades to Major Collector (2 to 3 Lanes)	1120 North	\$12,253,000	\$14,768,533	8%	\$1,200,693.76
Intersection Improvement	900 West & Grassland Dr	\$2,245,000	\$2,705,897	70%	\$1,888,547.94
New Major Collector (3-Lanes)	700 North	\$2,172,000	\$2,617,910	98%	\$2,559,300.32
Widen to Arterial (5-Lanes)*	900 West	\$759,000	\$914,822	58%	\$527,618.40
Widen to Arterial (5-Lanes)	500 East	\$3,092,000	\$3,726,786	36%	\$1,348,741.49
Extension of Minor Collector (2 Lanes) with new Railroad Crossing	560 West	\$2,032,000	\$2,449,168	96%	\$2,347,119.66
Intersection Improvement	700 North & 500 East	\$705,000	\$849,736	49%	\$417,649.96
Upgrades to Major Collector (2 to 3 Lanes)	700 North	\$7,498,000	\$9,037,335	52%	\$4,742,998.38
Widen to Minor Collector (2-Lanes)	1100 North	\$2,559,000	\$3,084,361	31%	\$963,862.85
New Minor Collector (2-Lanes)	1190 East	\$3,758,000	\$4,529,515	69%	\$3,145,496.58
Intersection Improvement*	200 East & Main St/ State St	\$0	\$0	49%	\$0.00
New Arterial (5-Lanes)	620 South	\$9,342,000	\$11,259,907	83%	\$9,352,987.11
Widen to Arterial (5-Lanes)	620 South	\$1,249,000	\$1,505,419	76%	\$1,142,041.94
New Major Arterial (3-Lanes)	Pacific Dr	\$15,686,000	\$18,906,326	85%	\$16,133,398.25
Total / Overall		\$63,350,000	\$76,355,716	60%	\$45,770,457

Source: American Fork Public Works Department, Horrocks Engineers

* Projects with asterisks are partially or fully grant funded and costs have been adjusted accordingly

** "% to Ten Year Growth" is based on calculations of 2023 volume vs. 2040 volume except for intersection improvements which are based on the capacity of their roadway infrastructure category

IS THERE A NEED FOR NEW ROADWAY INFRASTRUCTURE?

While considerable capacity does exist in the overall system—as evidenced by the previous chapter discussing the existing roadway infrastructure—it is important to note that the projects in the previous table address specific points within the system that need to be built or upgraded in order to handle the growth from new development.

TIME-PRICE DIFFERENTIAL

Utah Code 11-36a-301(2)(h) allows for the inclusion of a time-price differential in order to create fairness for amounts paid at different times. To address the time-price differential, this analysis includes an “Average Construction Year Cost” to account for construction inflation on future projects. Without a specific project timeline, inflation was added by averaging the un-inflated and 10th year inflated construction year cost for each project at 3.5%. This provides a conservative estimate for the construction year cost of each project.

AMOUNT TO TEN YEAR GROWTH

The Engineers provided the estimated existing volume, 2023 volume, and 2040 volume for each of the roadway infrastructure projects planned for the next ten years. This data can be found in detail in the appendix. Utilizing these estimates, the “% to Ten Year Growth” was determined by calculating what percentage of the 2040 volume that could be attributed to volume added from 2013 to 2023.



American Fork City Transportation Impact Fee Analysis

DIVIDING TEN YEAR PROJECTS BY TEN YEAR GROWTH

An alternative method considered was to simply divide projects planned for the next ten years by the growth in vehicle trips expected in the next ten years. This is a common method utilized in calculating transportation impact fees as ten year projects would not typically be needed if no more growth was expected to occur (as is the case with American Fork). This would have resulted in a higher fee—roughly 40% higher for each land use category. The City has decided to test this alternative method in order to provide a more conservative estimate for transportation impact fees. However, it should be understood that the City may return to the alternative method considered should this current method fail to address the demands and needs of future development.

COST OF ANTICIPATED DEBT FINANCING

While the City will be collecting impact fees and taxes, such as property and sales tax, to pay for roadway infrastructure costs each year, it is anticipated that project timing and implementation will require the City to come up with large sums of money in certain years. This will require the City to seek debt financing in order to appropriately fund these projects. As is consistent with the Impact Fees Act, this analysis incorporates the estimated costs associated with debt financing, particularly the interest payments and the associated cost of issuance. Details on these estimated costs can be found in the appendix. However, it should be noted that attempts at debt financing by the City have proved infeasible in the past. In 2008 a proposed bond to fund capacity related projects failed to pass and in 2010 a bond funding maintenance related projects also failed to pass. If this continues to be the case for the City reevaluation of this method of funding may be necessary in a future study.

CHAPTER 5: PROPORTIONATE SHARE ANALYSIS

The Impact Fees Act requires that the impact fee analysis estimate the proportionate share of the costs for existing capacity that will be recouped; and the costs of impacts on system improvements that are reasonably related to the new development activity. This has been demonstrated throughout the previous three chapters and will be concluded in the next chapter which details the impact fee calculations.

SOURCES OF FUNDING

Additionally, part of the proportionate share analysis is a consideration of the manner of funding existing public facilities. Historically the City has had the options to fund roadway infrastructure through the following sources:

- General Fund Revenues
- Fuel Tax
- Bond Proceeds
- Grant Funding
- Impact Fees

Just as existing infrastructure has been funded through different means; it is required by the Impact Fees Act to evaluate all means of funding future capital. There are positives and negative aspects to the various forms of funding. It is important to evaluate each.

General Fund Revenues

The sources of the American Fork City General Fund include primarily property taxes and sales taxes collected within the City limits, as well as a few other minor sources. The General Fund represents the contributions of existing and previous City residents and those who patronize the City.

It would be an unfair burden to existing residents to use only this revenue source in order to fund the roadway infrastructure projects required for new development. This would not be an equitable policy and would place too much stress on the tight budgets of the general fund. Additionally, while it is true that property and sales taxes may be a stable source of income over time, these taxes are not directly based on the impact placed upon a system.

Fuel Tax

For motor fuels such as gasoline and diesel, the State levies a 24.5 cent fuel tax on every gallon purchased. The revenue generated from this tax is split 70/30 between the state of Utah and local governments such as American Fork. The local government portion is divided up among local jurisdictions based on a formula that takes into account both population and lane miles.

Because this tax is based on consumption, revenues can be volatile. When motorists drive less or drive more fuel efficient vehicles this can affect how much revenue is generated—while not necessarily decreasing the overall demand on roadway infrastructure. Generally speaking, the motor fuel tax funds about 40% of an average city's transportation expense, but this percentage has been on the decline. Still, the fuel tax is an important revenue source for the operations and maintenance expenses of the City's roads. But it is critical to understand that this revenue source does not provide the needed funding in order to construct the new roadway infrastructure required for new development.

Grant Funding

The City received grant funding for the 200 East & Main Street / State Street Intersection Improvement project and also for the 900 West street widening project. The total project costs shown in this document are net of the grant funds to ensure future development is paying a fair cost for future improvements.

Impact Fees

Impact fees are a fair and equitable means of providing infrastructure for future development. They are based on a rational nexus or connection between the demand generated by new development and the costs of building new infrastructure required by that development. The Impact Fees Act ensures that future development is not paying any more than what future growth will demand. Existing users and future users receive equal treatment. Therefore, impact fees are the optimal funding mechanism for future growth related capital needs.

DEVELOPER CREDITS

When a developer builds in the City of American Fork they are required to construct and install a certain amount of roadway infrastructure as determined by the City Code. These roadway infrastructure improvements are often referred to as “project” improvements because they primarily benefit the development project in which they are built. Developers do not receive any impact fee credit for these projects and they are not included in the impact fee calculations. Only “system” improvements, or improvements which are deemed to primarily benefit the system or City as a whole, are included the calculations.

Because system improvements are included in the Transportation Impact Fee Analysis, if the City allows a developer to construct and install a system improvement, that developer may be due a credit redeemable in lieu of future impact fees owed, or a credit of similar value (Utah Impact Fees Act, 11-36a-304(2)(f)). However, it is important to understand that—in the case of road width expansion—the developer would not receive credit for the minimum widths considered as project improvements and required by the City code.

As a practice, all system improvement credits should be arranged and agreed upon by both the developer and the City’s Public Works Department before the development project is undertaken.

CHAPTER 6: IMPACT FEE CALCULATIONS

TRIP GENERATION DATA

The Impact Fee calculations are based on trip generation data which was provided by the American Fork Public Works Department and the 9th Edition of the ITE Trip Generation Manual. The following table represents the majority of land use categories expected in American Fork City. The ITE Trip Generation Manual contains more categories which can be referenced in coordination with the Public Works Department.

As can be seen in the following table, the “ITE Trips” has been adjusted based on the “% entering”, “% primary trip”, and the “% diverted link, pass by.” The % entering adjustment is because we are interested in the trips coming to the land use, not those leaving the land use. Those leaving are attributed to the land use they are going to during the PM peak hour. The % passing by adjustment is because some land uses do not generate all new trips but a portion of their trips are from cars passing by. These trips are not considered to add more demand to the system.

Figure 6.1: Institute of Transportation Engineers (ITE) Data Showing Trips Per Type of Land Use Per Unit

Category	Units; Per	Study	Page	ITE Trips	% Entering	% Primary Trip	% Diverted Link, Pass By	Final ITE PM Peak Hr Adjusted Trips
130 - Industrial Park	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	149	0.84	21%	90%	10%	0.16
140 - General Manufacturing *	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	177	0.75	52%	90%	10%	0.35
151 - Storage Units	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	234	0.22	54%	90%	10%	0.11
152 - Warehouse / Distribution Center	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	277	0.16	37%	90%	10%	0.05
210 - Single-Family Detached Housing	Dwelling Unit	Weekday - PM Peak Hour	300	1.02	64%	95%	5%	0.62
220 - Multi-Family / High Density (Greater than 4 Units)	Dwelling Unit	Weekday - PM Peak Hour	337	0.67	61%	95%	5%	0.39
230 - Multi-Family / Condo, Townhouse, Duplex, Triplex, Quadpl	Dwelling Unit	Weekday - PM Peak Hour	398	0.52	64%	95%	5%	0.32
240 - Mobile Home / RV Park	Dwelling Lot	Weekday - PM Peak Hour	446	0.60	61%	95%	5%	0.35
254 - Assisted Living Center	Bed	Weekday - PM Peak Hour	533	0.35	47%	90%	10%	0.15
310 - Hotel	Room	Weekday - PM Peak Hour	617	0.61	58%	90%	10%	0.32
444 - Movie Theatre < 10 Screens	1000 Sq. Feet Gross Floor Area	Friday - PM Peak Hour	838	3.80	64%	90%	10%	2.19
445 - Movie Theatre 10 or More Screens	1000 Sq. Feet Gross Floor Area	Friday - PM Peak Hour	853	4.91	62%	90%	10%	2.74
492 - Health/Fitness Club	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	944	4.06	51%	90%	10%	1.86
520 - Elementary School	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	990	3.11	44%	50%	50%	0.68
522 - Middle School / Junior High School	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	1003	2.52	45%	50%	50%	0.57
530 - High School	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	1024	2.12	31%	50%	50%	0.33
534 - Private School/ Charter School	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	1035	6.53	49%	50%	50%	1.60
560 - Church	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	1093	0.94	54%	50%	50%	0.25
565 - Day Care Center	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	1129	13.75	47%	20%	80%	1.29
590 - Library	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	1176	7.20	52%	60%	40%	2.25
610 - Hospital	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	1200	1.16	40%	90%	10%	0.42
710 - General Office Building	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	1261	1.49	17%	80%	20%	0.20
720 - Medical-Dental Office Building	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	1298	4.27	39%	80%	20%	1.33
770 - Business Park	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	1404	1.26	26%	80%	20%	0.26
812 - Building Materials and Lumber Store	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	1432	5.56	49%	70%	30%	1.91
817 - Nursery (Garden Center)	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	1517	9.04	49%	70%	30%	3.10
820 - Shopping Center / Strip Mall	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	1563	3.71	48%	50%	50%	0.89
826 - Specialty Retail Center	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	1573	5.02	51%	70%	30%	1.79
841 - Automobile Car Sales	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	1598	2.80	47%	70%	30%	0.92
848 - Tire Store	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	1619	4.15	43%	68%	32%	1.22
850 - Supermarket	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	1649	8.37	52%	39%	61%	1.70
851 - Convenience Store	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	1659	53.42	52%	33%	67%	9.14
854 - Discount Supermarket/ Supercenter	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	1694	8.13	49%	54%	46%	2.14
912 - Bank / Financial Institution	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	1846	26.69	51%	27%	73%	3.68
918 - Hair / Nails / Massage / Beauty Salon / Day Spa	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	1858	1.93	38%	70%	30%	0.51
931 - Restaurant, Sit-Down (Low Turnover, >1 hour stay)	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	1868	9.02	62%	60%	40%	3.36
932 - Restaurant, Sit-Down (High-Turnover)	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	1889	18.49	54%	40%	60%	4.01
934 - Restaurant with Drive-Through Window	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	1916	47.30	52%	41%	59%	10.03
942 - Auto Care Center	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	1978	3.51	49%	60%	40%	1.03
944 - Gasoline/Service Station	Fueling Position	Weekday - PM Peak Hour	1988	15.65	50%	35%	65%	2.74
945 - Gasoline/Service Station with Convenience Store	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	2000	97.14	50%	12%	88%	5.99
947 - Self Service Car Wash	Wash Stall	Weekday - PM Peak Hour	2012	5.54	51%	30%	70%	0.85
948 - Automated Car Wash	1000 Sq. Feet Gross Floor Area	Weekday - PM Peak Hour	2015	14.12	50%	30%	70%	2.12

Source: ITE Trip Generation 9th Edition, American Fork Public Works Department

Note: Pass by trip adjustments are based on American Fork Public Works estimates and ITE sample data where available

* Manufacturing = Location for conversion of raw materials to parts or finished products

American Fork City Transportation Impact Fee Analysis

COST PER TRIP AND RECOMMENDED IMPACT FEES

The cost per trip has been calculated and is contained in the first table below. This represents the average cost of each trip including existing roadway facility costs and costs from projects planned for the next ten years. The second table below provides a final fee due for each type of land use. Each final fee in the second table below is a product of the cost per trip multiplied by the number of trips each type of land use is expected to generate per unit.

Figure 6.2: Cost Per Trip

Component	Ten Year Growth in PM Peak Hour Trips	Cost	Cost Per Trip
Existing Roadway System Improvements (Buy in Component)	20,273	\$ 7,753,090	\$ 382.43
Ten Year Roadway System Improvements	20,273	45,770,457	2,258
Ten Year Growth's Share of the Cost of Anticipated Debt Financing *	20,273	14,363,086	708
Total		\$ 67,886,632	\$ 3,348.62

* This is the cost of issuance plus interest payments multiplied by the "% to Ten Year Growth"

Figure 6.3: Proposed Impact Fee by Land Use

Category	Cost per Trip	ITE PM Peak Hr Average Trips	Unit of Measurement:	Impact Fee per Unit:
Residential Category				
Single-Family Detached Housing	\$3,348.62	0.62	Dwelling Unit	\$ 2,076.68
Multi-Family (Average ITE Categories 220, 230, 240)	\$3,348.62	0.35	Dwelling Unit	1,174.39
General Non-Residential Category				
Hotel	\$3,348.62	0.32	Room	\$ 1,066.27
School (Average of ITE Categories 520, 522, 530)	\$3,348.62	0.53	1000 Sq. Feet Gross Floor Area	1,763.38
Non-Residential Category 1: Less than 1 Trip per 1,000 Square Feet	\$3,348.62	0.50	1000 Sq. Feet Gross Floor Area	1,674.31
Non-Residential Category 2: 1 to 2 Trips per 1,000 Square Feet ²	\$3,348.62	1.50	1000 Sq. Feet Gross Floor Area	5,022.93
Non-Residential Category 3: More than 2 Trips per 1,000 Square Feet	\$3,348.62	3.50	1000 Sq. Feet Gross Floor Area	11,720.18

¹ Category 1 may include occupancies such as:

- Warehouse / Distribution Center
- Storage Units
- Industrial Park
- General Office Building
- Church
- Business Park
- General Manufacturing *
- Hospital
- Hair / Nails / Massage / Beauty Salon / Day Spa
- Shopping Center / Strip Mall
- Automobile Car Sales
- Auto Care Center
- Tire Store

² Category 2 may include occupancies such as:

- Day Care Center
- Medical-Dental Office Building
- Supermarket
- Specialty Retail Center
- Self Service Car Wash

³ Category 3 may include occupancies such as:

- Health/Fitness Club
- Building Materials and Lumber Store
- Automated Car Wash
- Discount Supermarket/ Supercenter
- Movie Theatre < 10 Screens
- Library
- Movie Theatre 10 or More Screens
- Nursery (Garden Center)
- Restaurant, Sit-Down (Low Turnover, >1 hour stay)
- Bank / Financial Institution
- Restaurant, Sit-Down (High-Turnover)
- Gasoline/Service Station
- Restaurant with Drive-Through Window
- Convenience Store

Source: ITE Trip Generation 9th Edition, American Fork Public Works Department

Note: Pass by trip adjustments are based on American Fork Public Works estimates and ITE sample data where available

American Fork City Transportation Impact Fee Analysis

TYPES OF UNIT

The impact fee is assessed on a per unit basis. Special attention should be paid to the impact fee table in order to assess each land use using the correct type of unit. As can be seen, many units are a 1,000 square foot unit of some type of area whereas some units are based on other units such as wash stalls for self-service car washes. If any questions arise regarding unit types or associated trip generation data, the ITE Trip Generation Manual (9th Edition or latest edition) should be referred to.

NON STANDARD DEMAND ADJUSTMENT

The City may, on a case by case basis, adjust the impact fee to respond to a user that has an impact on the system that is more than the typical user. The City may use the calculation below to calculate the fee that is fair for such a user. If a developer feels their impact on the system will be significantly less than the typical user they must show a reasonable basis for this determination (such as a traffic study) and the City may work with them to determine a more personalized impact fee.

Adjustments may be made but only with sufficient and correct data. The developer must provide traffic analysis data including trip generation data including traffic entering and exiting a property in the peak PM hour or generation, and % of traffic generated by the development that are pass-by or primary trips. The traffic analysis must be completed by a qualified traffic professional and must provide the required trip generation and primary trip calculation for review by the City. The process will begin with a signed petition to the City requesting adjustments. The City will review and concur with the analysis or request more detail, if required. The City will not proactively complete studies for individual uses and will only complete this review upon application.

Figure 6.4: Non Standard Demand Adjustment Formula

Conduct an Appropriate Study to Determine:		Cost Per Trip		Impact Fee
The number of Expected Primary Trip Ends Generated during the Peak PM Hour excluding diverted link and pass-by trips	X	\$3,348.62	=	Non Standard Adjustment Fee Per Unit

CERTIFICATION

In accordance with Utah Code Annotated, 11-36a-306(2), Matthew Millis on behalf of Zions Bank Public Finance, makes the following certification:

I certify that the attached impact fee analysis:

1. INCLUDES ONLY THE COST OF PUBLIC FACILITIES THAT ARE:
 - a) ALLOWED UNDER THE IMPACT FEES ACT; AND
 - b) ACTUALLY INCURRED; OR
 - c) PROJECTED TO BE INCURRED OR ENCUMBERED WITHIN SIX YEARS AFTER THE DAY ON WHICH EACH IMPACT FEE IS PAID;

1. DOES NOT INCLUDE:
 - a) COSTS OF OPERATION AND MAINTENANCE OF PUBLIC FACILITIES;
 - b) COST OF QUALIFYING PUBLIC FACILITIES THAT WILL RAISE THE LEVEL OF SERVICE FOR THE FACILITIES, THROUGH IMPACT FEES, ABOVE THE LEVEL OF SERVICE THAT IS SUPPORTED BY EXISTING RESIDENTS;
 - c) ANY 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;

2. OFFSETS COSTS WITH GRANTS OR OTHER ALTERNATE SOURCES OF PAYMENT WHERE POSSIBLE; AND

3. COMPLIES IN EACH AND EVERY RELEVANT RESPECT WITH THE IMPACT FEES ACT.

Zions Bank makes this certification with the following caveats:

1. All of the recommendations for implementations of the Impact Fee Facilities Plans (“IFFPs”) made in the IFFP documents or in the impact fee analysis documents are followed in their entirety by American Fork City staff and elected officials.
2. If all or a portion of the IFFPs or impact fee analyses are modified or amended, this certification is no longer valid.
3. All information provided to Zions Bank Public Finance, its contractors or suppliers is assumed to be correct, complete and accurate. This includes information provided by American Fork City and outside sources. Copies of letters requesting data are included as appendices to the IFFPs and the impact fee analysis.

Dated: November 20, 2014

ZIONS BANK PUBLIC FINANCE

APPENDICES

APPENDIX A: GROWTH IN DEMAND PROJECTIONS

	A	B	C	D	E	
1	Projected Traffic Demands - Population, Daily VMT and PM Peak Hour Trips					1
2	Year	American Fork Population	Cumulative % Growth	PM Peak Hour Trips	Cumulative % Growth	2
3	2013	27,305	-	58,094	-	3
4	2023	34,686	27%	78,367	35%	4
5	2040	47,678	59%	101,587	55%	5
6	<i>Source: 2013 American Fork Revised General Plan population projections, Horrocks Engineers</i>					6

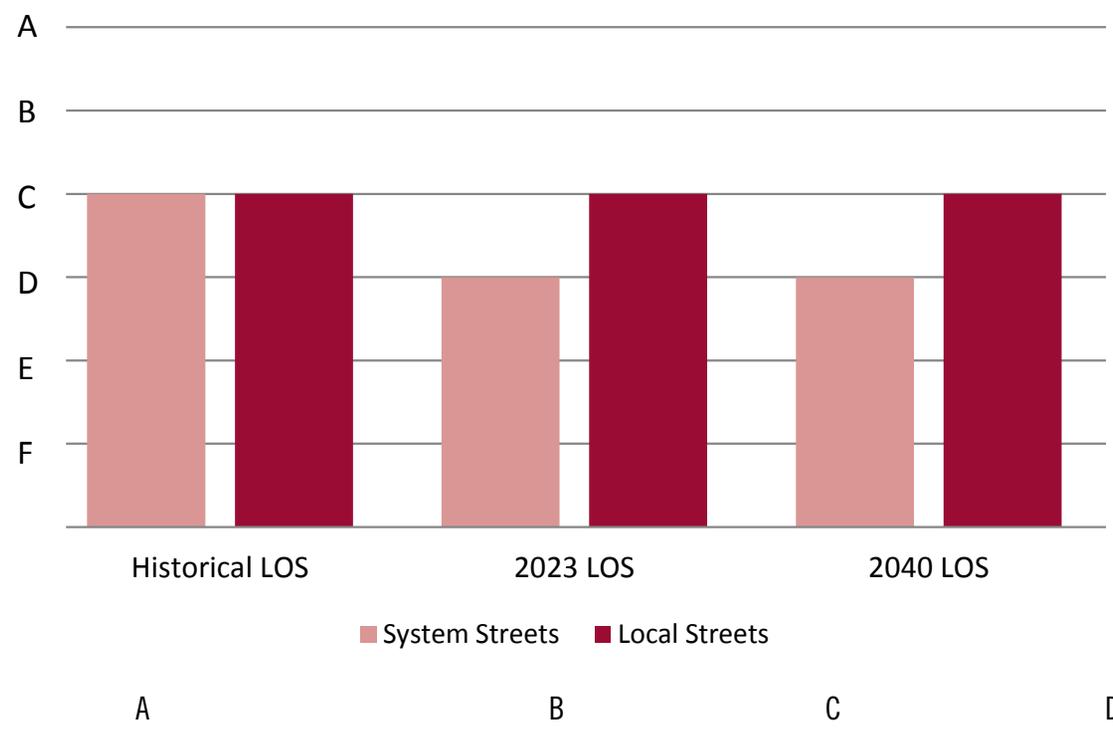
A B C D E

APPENDIX B: LEVEL OF SERVICE

	A	B	C	D
1 Level of Service Standards for Historical and Future Roadway Infrastructure				
2 Roadway Infrastructure Category	Historical LOS	2023 LOS	2040 LOS	
3 System Streets	C	D	D	
4 Local Streets	C	C	C	

5 *Source: American Fork General Plan Transportation Element 2013, American Fork Public Works Department, Horrocks Engineers*

7 **Level of Service Standards for Historical and Future Roadway Infrastructure**



APPENDIX C: TEN YEAR PROJECTS AND CAPACITY

A B C D E F

1 Summary of Ten Year Projects for which the City has Partial or Full Jurisdiction

2	Type of Improvement	Roadway or Location	From	To	Jurisdiction(s)	City's Costs
3	Upgrades to Major Collector (2 to 3 Lanes)	1120 North	900 West	100 East	City	\$12,253,000
4	Intersection Improvement	900 West & Grassland Dr	-	-	City	\$2,245,000
5	New Major Collector (3-Lanes)	700 North	100 East	200 East	City	\$2,172,000
6	Widen to Arterial (5-Lanes)*	900 West	State St	700 North	City	\$759,000
7	Widen to Arterial (5-Lanes)	500 East	State St	Pacific Dr (100 N)	City	\$3,092,000
8	Extension of Minor Collector (2 Lanes) with new Railroad Crossing	560 West	Pacific Dr	Hindley Dr	City	\$2,032,000
9	Intersection Improvement	700 North & 500 East	-	-	City	\$705,000
10	Upgrades to Major Collector (2 to 3 Lanes)	700 North	900 West	100 East	City	\$7,498,000
11	Widen to Minor Collector (2-Lanes)	1100 North	North County Blvd	East City-Limits	City	\$2,559,000
12	New Minor Collector (2-Lanes)	1190 East	North County Blvd	1100 North	City	\$3,758,000
13	Intersection Improvement*	200 East & Main St/ State St	-	-	City/UDOT	\$0
14	New Arterial (5-Lanes)	620 South	600 East	East City-Limits	City	\$9,342,000
15	Widen to Arterial (5-Lanes)	620 South	500 East	600 East	City	\$1,249,000
16	New Major Arterial (3-Lanes)	Pacific Dr	Pioneer Crossing	Meadow Lane	City/UDOT	\$15,686,000
17	Total for Improvements needed by 2023					\$63,350,000

18 * Projects with asterisks are partially or fully grant funded and costs have been adjusted accordingly

19 Source: American Fork Public Works Department, Horrocks Engineers

20 Summary of Capacity of Ten Year Projects

21	Type of Improvement	Existing Volume (Traffic Counts)	2023 Volume	2040 Volume	% to Ten Year Growth *
22	Upgrades to Major Collector (2 to 3 Lanes)	2,200	3,200	12,300	8%
23	Intersection Improvement	NA	NA	NA	70%
24	New Major Collector (3-Lanes)	0	13,100	13,400	98%
25	Widen to Arterial (5-Lanes)	11,100	23,500	21,500	58%
26	Widen to Arterial (5-Lanes)	6,600	10,400	10,500	36%
27	Extension of Minor Collector (2 Lanes) with new Railroad Crossing	0	6,900	7,200	96%
28	Intersection Improvement	NA	NA	NA	49%
29	Upgrades to Major Collector (2 to 3 Lanes)	6,600	14,000	14,100	52%
30	Widen to Minor Collector (2-Lanes)	2,200	3,200	3,200	31%
31	New Minor Collector (2-Lanes)	0	5,000	7,200	69%
32	Intersection Improvement	NA	NA	NA	49%
33	New Arterial (5-Lanes)	0	10,300	12,400	83%
34	Widen to Arterial (5-Lanes)	5,000	22,600	23,200	76%
35	New Major Arterial (3-Lanes)	0	6,400	7,500	85%

36 Source: American Fork Public Works Department, Horrocks Engineers

37 * % to Ten Year Growth* is a factor of 2023 volume vs. 2040, volume except for intersection improvements which are based on the capacity of their roadway infrastructure category

A B C D E F

APPENDIX D: FUTURE BONDS

Summary of Future Bond #1					
Inputs			Outputs		
Proceeds	\$20,000,000	Par Amount	\$20,800,000		
Annual Interest Rate	4.50%	Total Interest	\$11,180,476		
Cost of Issuance	4.00%	Total Payments	\$31,980,476		
Number of Years	20	Annual Payment	\$1,599,024		

Source: Zions Bank Public Finance

Future Bond #1					
PmtNo.	Beginning Balance	Scheduled Payment	Principal	Interest	Ending Balance
1	\$ 20,800,000	\$ 1,599,024	\$ 663,024	\$ 936,000	\$ 20,136,976
2	20,136,976	1,599,024	692,860	906,164	19,444,116
3	19,444,116	1,599,024	724,039	874,985	18,720,078
4	18,720,078	1,599,024	756,620	842,403	17,963,457
5	17,963,457	1,599,024	790,668	808,356	17,172,789
6	17,172,789	1,599,024	826,248	772,776	16,346,541
7	16,346,541	1,599,024	863,429	735,594	15,483,111
8	15,483,111	1,599,024	902,284	696,740	14,580,828
9	14,580,828	1,599,024	942,887	656,137	13,637,941
10	13,637,941	1,599,024	985,316	613,707	12,652,625
11	12,652,625	1,599,024	1,029,656	569,368	11,622,969
12	11,622,969	1,599,024	1,075,990	523,034	10,546,979
13	10,546,979	1,599,024	1,124,410	474,614	9,422,569
14	9,422,569	1,599,024	1,175,008	424,016	8,247,561
15	8,247,561	1,599,024	1,227,884	371,140	7,019,677
16	7,019,677	1,599,024	1,283,138	315,885	5,736,539
17	5,736,539	1,599,024	1,340,880	258,144	4,395,659
18	4,395,659	1,599,024	1,401,219	197,805	2,994,440
19	2,994,440	1,599,024	1,464,274	134,750	1,530,166
20	1,530,166	1,599,024	1,530,166	68,857	-

Summary of Future Bond #2					
Inputs			Outputs		
Proceeds	\$20,000,000	Par Amount	\$20,800,000		
Annual Interest Rate	4.50%	Total Interest	\$11,180,476		
Cost of Issuance	4.00%	Total Payments	\$31,980,476		
Number of Years	20	Annual Payment	\$1,599,024		

Source: Zions Bank Public Finance

Future Bond #2					
PmtNo.	Beginning Balance	Scheduled Payment	Principal	Interest	Ending Balance
1	\$ 20,800,000	\$ 1,599,024	\$ 663,024	\$ 936,000	\$ 20,136,976
2	20,136,976	1,599,024	692,860	906,164	19,444,116
3	19,444,116	1,599,024	724,039	874,985	18,720,078
4	18,720,078	1,599,024	756,620	842,403	17,963,457
5	17,963,457	1,599,024	790,668	808,356	17,172,789
6	17,172,789	1,599,024	826,248	772,776	16,346,541
7	16,346,541	1,599,024	863,429	735,594	15,483,111
8	15,483,111	1,599,024	902,284	696,740	14,580,828
9	14,580,828	1,599,024	942,887	656,137	13,637,941
10	13,637,941	1,599,024	985,316	613,707	12,652,625
11	12,652,625	1,599,024	1,029,656	569,368	11,622,969
12	11,622,969	1,599,024	1,075,990	523,034	10,546,979
13	10,546,979	1,599,024	1,124,410	474,614	9,422,569
14	9,422,569	1,599,024	1,175,008	424,016	8,247,561
15	8,247,561	1,599,024	1,227,884	371,140	7,019,677
16	7,019,677	1,599,024	1,283,138	315,885	5,736,539
17	5,736,539	1,599,024	1,340,880	258,144	4,395,659
18	4,395,659	1,599,024	1,401,219	197,805	2,994,440
19	2,994,440	1,599,024	1,464,274	134,750	1,530,166
20	1,530,166	1,599,024	1,530,166	68,857	-

APPENDIX E: COST PER TRIP CALCULATION

Summary of the Amount of SF in each Roadway Infrastructure Category

Existing Roadway Infrastructure Category	Existing Centerline Feet	Average Right of Way	Project Improvement SF	System Improvement SF
Arterials	2,142	96	0	205,632
Major Collectors	55,596	82	3,335,760	#####
Minor Collectors	144,107	66	8,646,420	864,642
Project Improvement Portion (Excluded)	-	60	11,982,180	-

Source: American Fork Public Works Department, Horrocks Engineers

Note: 100% of Arterials are System Improvements; also the Project Improvement Portion has been discounted by 25%, the assumed contribution of the City to local roads (before regular developer contributions)

Summary of Roadway Infrastructure Costs Deflated to Reflect Historical Investment

Existing Roadway Infrastructure Category	Estimated Cost per SF in 2013	Estimated Cost per SF in 1993 *	Estimated City Investment (Deflated)
Arterials	\$17.50	\$10.86	\$2,233,164
Major Collectors	\$17.50	\$10.86	\$13,282,996
Minor Collectors	\$12.50	\$7.75	\$6,700,976

* The 2013 cost per square foot of roadway infrastructure was deflated to 1993 dollars in order to conservatively estimate the city's historic investment; the BLS CPI Inflation Calculator was utilized to make this calculation

Summary of Existing Capacity of Roadway Infrastructure for which Ten Year Growth is Responsible

Existing Roadway Infrastructure Category	% Excess Capacity in LOS	% of Excess Capacity Utilized by 10 Year Growth	Cost to Ten Year Growth
Arterials	50%	70%	\$779,305
Major Collectors	71%	49%	\$4,635,353
Minor Collectors	71%	49%	\$2,338,432
Total			\$7,753,090

Source: American Fork Public Works Department, Horrocks Engineers

Summary of Ten Year Roadway Infrastructure Projects for which Ten Year Growth is Responsible

Inflation Rate: 3.5%

Project	Roadway or Location	Total Project Costs	Average Construction Year Cost *	% to Ten Year Growth **	Amount to Ten Year Growth
Upgrades to Major Collector (2 to 3 Lanes)	1120 North	\$12,253,000	\$14,768,533	8%	\$1,200,693.76
Intersection Improvement	900 West & Grassland Dr	\$2,245,000	\$2,705,897	70%	\$1,888,547.94
New Major Collector (3-Lanes)	700 North	\$2,172,000	\$2,617,910	98%	\$2,559,300.32
Widen to Arterial (5-Lanes)*	900 West	\$759,000	\$914,822	58%	\$527,618.40
Widen to Arterial (5-Lanes)	500 East	\$3,092,000	\$3,726,786	36%	\$1,348,741.49
Extension of Minor Collector (2 Lanes) with new Railroad Crossing	560 West	\$2,032,000	\$2,449,168	96%	\$2,347,119.66
Intersection Improvement	700 North & 500 East	\$705,000	\$849,736	49%	\$417,649.96
Upgrades to Major Collector (2 to 3 Lanes)	700 North	\$7,498,000	\$9,037,335	52%	\$4,742,998.38
Widen to Minor Collector (2-Lanes)	1100 North	\$2,559,000	\$3,084,361	31%	\$963,862.85
New Minor Collector (2-Lanes)	1190 East	\$3,758,000	\$4,529,515	69%	\$3,145,496.58
Intersection Improvement*	200 East & Main St/ State St	\$0	\$0	49%	\$0.00
New Arterial (5-Lanes)	620 South	\$9,342,000	\$11,259,907	83%	\$9,352,987.11
Widen to Arterial (5-Lanes)	620 South	\$1,249,000	\$1,505,419	76%	\$1,142,041.94
New Major Arterial (3-Lanes)	Pacific Dr	\$15,686,000	\$18,906,326	85%	\$16,133,398.25
Total / Overall		\$63,350,000	\$76,355,716	60%	\$45,770,457

Source: American Fork Public Works Department, Horrocks Engineers

* Projects with asterisks are partially or fully grant funded and costs have been adjusted accordingly

** % to Ten Year Growth* is based on calculations of 2023 volume vs. 2040 volume except for intersection improvements which are based on the capacity of their roadway infrastructure category

Cost Per Trip

Component	Ten Year Growth in PM Peak Hour Trips	Cost	Cost Per Trip
Existing Roadway System Improvements (Buy in Component)	20,273	\$ 7,753,090	\$ 382.43
Ten Year Roadway System Improvements	20,273	45,770,457	2,258
Ten Year Growth's Share of the Cost of Anticipated Debt Financing *	20,273	14,363,086	708
Total		\$ 67,886,632	\$ 3,348.62

* This is the cost of issuance plus interest payments multiplied by the % to Ten Year Growth*

APPENDIX F: RECOMMENDED IMPACT FEES

	A	B	C	D	E					
1	Proposed Impact Fee by Land Use									
2	<table border="1"> <thead> <tr> <th>Category</th> <th>Cost per Trip</th> <th>ITE PM Peak Hr Average Trips</th> <th>Unit of Measurement:</th> <th>Impact Fee per Unit:</th> </tr> </thead> </table>					Category	Cost per Trip	ITE PM Peak Hr Average Trips	Unit of Measurement:	Impact Fee per Unit:
Category	Cost per Trip	ITE PM Peak Hr Average Trips	Unit of Measurement:	Impact Fee per Unit:						
3										
4	Residential Category									
5	Single-Family Detached Housing	\$3,348.62	0.62	Dwelling Unit	\$ 2,076.68					
6	Multi-Family (Average ITE Categories 220, 230, 240)	\$3,348.62	0.35	Dwelling Unit	1,174.39					
7	General Non-Residential Category									
8	Hotel	\$3,348.62	0.32	Room	\$ 1,066.27					
9	School (Average of ITE Categories 520, 522, 530)	\$3,348.62	0.53	1000 Sq. Feet Gross Floor Area	1,763.38					
10	Non-Residential Category 1: Less than 1 Trip per 1,000 Square Feet ¹	\$3,348.62	0.50	1000 Sq. Feet Gross Floor Area	1,674.31					
11	Non-Residential Category 2: 1 to 2 Trips per 1,000 Square Feet ²	\$3,348.62	1.50	1000 Sq. Feet Gross Floor Area	5,022.93					
12	Non-Residential Category 3: More than 2 Trips per 1,000 Square Feet ³	\$3,348.62	3.50	1000 Sq. Feet Gross Floor Area	11,720.18					
13										
14	¹ Category 1 may include occupancies such as:	² Category 2 may include occupancies such as:	³ Category 3 may include occupancies such as:							
15	Warehouse / Distribution Center	Day Care Center	Health/Fitness Club							
16	Storage Units	Medical-Dental Office Building	Building Materials and Lumber Store							
17	Industrial Park	Supermarket	Automated Car Wash							
18	General Office Building	Specialty Retail Center	Discount Supermarket/ Supercenter							
19	Church	Self Service Car Wash	Movie Theatre < 10 Screens							
20	Business Park		Library							
21	General Manufacturing *		Movie Theatre 10 or More Screens							
22	Hospital		Nursery (Garden Center)							
23	Hair / Nails / Massage / Beauty Salon / Day Spa		Restaurant, Sit-Down (Low Turnover, >1 hour stay)							
24	Shopping Center / Strip Mall		Bank / Financial Institution							
25	Automobile Car Sales		Restaurant, Sit-Down (High-Turnover)							
26	Auto Care Center		Gasoline/Service Station							
27	Tire Store		Restaurant with Drive-Through Window							
28	Source: ITE Trip Generation 9th Edition, American Fork Public Works Department		Convenience Store							
29	Note: Pass by trip adjustments are based on American Fork Public Works estimates and ITE sample data where available									
30										
31	Non Standard Demand Adjustment									
32	<table border="1"> <thead> <tr> <th>Conduct an Appropriate Study to Determine:</th> <th>Cost Per Trip</th> <th>Impact Fee</th> </tr> </thead> </table>					Conduct an Appropriate Study to Determine:	Cost Per Trip	Impact Fee		
Conduct an Appropriate Study to Determine:	Cost Per Trip	Impact Fee								
33	<table border="1"> <tbody> <tr> <td>The number of Expected Primary Trip Ends Generated during the Peak PM Hour excluding diverted link and pass-by trips</td> <td>X</td> <td>\$3,348.62</td> <td>=</td> <td>Non Standard Adjustment Fee Per Unit</td> </tr> </tbody> </table>					The number of Expected Primary Trip Ends Generated during the Peak PM Hour excluding diverted link and pass-by trips	X	\$3,348.62	=	Non Standard Adjustment Fee Per Unit
The number of Expected Primary Trip Ends Generated during the Peak PM Hour excluding diverted link and pass-by trips	X	\$3,348.62	=	Non Standard Adjustment Fee Per Unit						
0	A	B	C	D	E					

CHAPTER 7 IMPACT FEE FACILITIES PLAN

IMPACT FEE FACILITIES PLAN

Recommended storm drain system improvements were identified in Chapter 6. Based on that information, it is now possible to identify the recommended improvements that qualify to be used in the calculation of impact fees as outlined in Section 11-36a of the Utah Code.

LEVEL OF SERVICE

Recommended improvements identified in previous sections of this report have been based on meeting level of service standards as established in the City's Storm Water Technical Manual. Level of service for the major components of the storm drain system are summarized here:

Storm Drain Pipelines – Storm drain pipelines are not allowed to surcharge to within two feet from the ground surface during the 4 percent annual chance (25-year) design Storm drain pipes (other than laterals) are also not to be smaller than 18 inches in diameter. Storm drain laterals may be 15-inches. To qualify as a lateral, a storm drain pipe must be connected to inlet box, be generally perpendicular to the overall direction of storm drain flow, and be less than 100 feet.

It is important to note that roadways become the major storm water conveyance facility during storms that are larger than the 25-year design event. At sags in roads or barriers such as the Union Pacific Railroad, storm drain inlets and pipelines must be sized to convey the 100-year storm event to detention basins or major conveyance channels such as the American Fork River or the Meadow's Wetland (See American Fork City Storm Drain Technical Manual).

Open Channels – In general, large open channels (such as Mitchell's Hollow, the Meadow's Wetland, Spring Creek, or the American Fork River) should have at least two feet of freeboard during the 100-year storm event. Open channels should also have protective lining. If velocities are less than 4 ft per second (ft/s), the channel may be grass lined. However, if the peak velocity in a channel is over 4 ft/s, then grass will not be sufficient to protect the channel from erosion damage and armoring will be required. For smaller open channels, at least one foot of freeboard is desirable, but less may be allowed at the discretion of the City Engineer.

Detention/Retention Basins – Detention/retention facilities need to have capacity for the 100-year storm, with at least one foot of freeboard, and have an emergency overflow that directs water away from private property. Retention basins are discouraged in the City because of clogging and other maintenance concerns. Retention basins are not permitted in the City's designated sensitive lands area. If a retention basin is permitted, it must be sized according to the City's Storm Drain Technical Manual.

It is important to note that the level of service standards summarized above are for both existing and future conditions. As discussed previously, there is one proposed increase in the level of service proposed for the City. Over time, the City desires to move from the conveyance of storm water in local ditches to a fully piped storm drain system. Costs for this transition will be

divided between existing and future users based on their proportional use of the facilities to be constructed for this purpose within the planning window.

FUTURE GROWTH

Unlike many other utilities (such as water, sewer, or pressure irrigation), system improvements for storm drain are not driven by population growth; but are primarily driven by the growth of developed area and associated impervious areas (such as roofs, driveways, roads, etc). To evaluate the need for storm drain system improvements, a projection of developed area over the next 10-years needed to be developed as part of this impact fee facilities plan.

Table 7-1 lists the historic population and population projections for American Fork City from several sources. Historic population (2010 through 2012) is based on numbers identified in the Mountainland Association of Government's 2012 Census. Shorter term projections (2013 through 2035) come from the City's most recent General Plan. Longer term projections (2040 through 2060) come from the Governor's Office of Planning and Budget. Table 7-1 also lists the developed area projection for American Fork City based on a proportional rate of development (assuming densities for future development are approximately equal to the average density of existing developed areas).

**Table 7-1
Population Projections**

Year	Population Projection	Cumulative Increase in Developed Area North of I-15 (acres) ^b	Cumulative Increase in Developed Area South of I-15 (acres) ^b	Cumulative Increase in Total Developed Area (acres)	Total Developed Area (acres)
2010	26,401	--	--	--	--
2011	26,814	--	--	--	--
2012	27,147	--	--	--	--
2013	27,305	--	--	--	5,841 ^a
2014	27,653	27	47	74	5,915
2015	28,000	54	95	149	5,989
2016	28,400	85	149	234	6,075
2017	28,800	116	204	320	6,161
2018	29,200	147	258	405	6,246
2019	29,600	178	313	491	6,332
2020	30,000	209	367	576	6,417
2021	30,500	248	436	683	6,524
2022	31,000	287	504	790	6,631
2023	31,500	325	572	897	6,738
2024	32,000	364	640	1,004	6,845
2025	32,500	403	708	1,111	6,952
2030	35,500	636	1,117	1,753	7,594
2035	39,000	907	1,594	2,502	8,342
2040	46,600	1,067 ^c	1,874 ^c	2,941 ^c	8,782 ^c
2050	54,000	1,067	1,874	2,941	8,782
2060	58,900	1,067	1,874	2,941	8,782

^a total developed area estimated based on 2012 aerial photography

^b based on uniform distribution of new growth in undeveloped areas.

^c full development with continued densification

As shown in the table, the expected growth in total developed acres over the next 10 years is 897 acres. This represents gross developed acres with no reduction for public right-of-way.

It will be noted that growth has been divided between the areas north and south of I-15 uniformly based on the ratio of currently undeveloped area. Table 7-2 summarizes the percentage of undeveloped and developed areas in American Fork City based on estimates from 2012 aerial photography and input from City personnel. It should be noted that areas south of I-15 are generally planned with lower densities than existing development. This would suggest that areas south of I-15 may develop more quickly than projected here. For the purpose of impact fee calculations, the growth in the south has been conservatively left at the lower numbers shown.

**Table 7-2
Developed Areas South and North of I-15**

	I-15 South	I-15 North	Total
Total Area (acres)	2,853	5,929	8,782
Developed (acres)	979	4,862	5,841
Percent Developed	34.3%	82.0%	66.5%
Undeveloped (acres)	1,874	1,067	2,941
Percent Undeveloped	65.7%	18.0%	33.5%

DEMAND ANALYSIS

To satisfy the requirements of state law, demands placed upon existing storm drain facilities by future development were determined using the process outlined below.

1. **Existing Capacity** – The capacities in existing storm drain pipelines were estimated using Manning’s equation, pipe size, and slope data as provided by the City or estimated using existing terrain information (See Chapters 3 and 4).
2. **Existing Flow** – The peak flow rates for existing development conditions were estimated using a hydrologic computer model (See Chapters 3 and 4).
3. **Existing Deficiencies** – Existing system capacity deficiencies in the storm drain system were identified using the defined level of service, peak flow estimates from the hydrologic computer model, and the estimated capacities for existing system facilities. City Staff reviewed identified deficiencies to determine if deficiencies corresponded to known storm water problems (see Chapter 5).
4. **Future Flow** - The peak flow rates for the design storm based on projected full build-out conditions were estimated using a hydrologic computer model (See Chapter 3 and 4).
5. **Future Flow Routing** – Because many of the existing trunk lines evaluated as part of the master plan were determined to be deficient, new storm drain trunk line routes were developed to better convey flow to acceptable discharge locations. Because new conveyance routes for existing storm water runoff have been planned, the effects of existing and future runoff were evaluated for all future storm water conveyance routes (see Chapter 5).
6. **Recommended Improvements** – Needed storm drain projects were identified to meet demands associated with future development (See Chapter 6).

The steps listed above describe the “demands placed upon [the] existing public facilities by new development activity; and the proposed means by which the local political subdivision will meet those demands” (Section 11-36a-302-1.a-b of the Utah Code).

Chapter 6 identifies the recommended capital facility projects needed to provide the desired level of storm drain service to various parts of the City at projected full build-out conditions. Many of the projects north of I-15 will need to be funded by existing users because of the limited

undeveloped area north of I-15. The timing of projects north of I-15 will therefore depend mostly on the available funding available for projects. The timing of projects south of I-15 will depend on the timing and location of development.

ALLOCATED PROJECT COSTS ASSOCIATED WITH NEW DEVELOPMENT

Results from the demand analysis were used to allocate project costs between future development and existing development. Three examples of the cost allocation methodology used in this IFFP are presented below:

- **Example 1: Existing Pipeline Undersized for Existing Development:** Consider an existing pipeline with an estimated peak flow for existing development conditions of 14 cfs, and a capacity of something less than 14 cfs, and an estimated future peak flow of 20 cfs. The existing pipeline will need to be replaced. If the existing pipeline is replaced with a new pipeline that has 20 cfs capacity, then 70 percent (14 cfs divided by 20 cfs) of the pipeline replacement cost will be allocated to existing users and 30 percent (6 cfs divided by 20 cfs) to future growth.
- **Example 2: No Existing Storm Drain Infrastructure:** Consider an area that currently has low impact development (streets without curb and gutter, catch basins, storm drain piping, etc.). As the area continues to develop, the streets will be expanded and storm drain infrastructure will be installed. The estimated peak flow for existing development conditions is 30 cfs, and the estimated future design flow is 40 cfs. In this scenario, 75 percent of the storm drain improvement costs will be allocated to existing users and 25 percent to future growth.
- **Example 3: Area Using Local Detention:** It is difficult to quantify the effect of areas of new development using local detention. This is because these areas contribute flow to the City's storm drain system by increasing runoff volume and concentrating the runoff discharge point, even if they do not add significantly to existing peak flows. In these cases, costs have been divided based on the proportion of flow being contributed by the future development at buildout, independent of flow previous to development. For example, consider a new pipe to be installed downstream of a development with a required existing capacity of 10 cfs (6 cfs from existing development and 4 cfs from the undeveloped area). In the future, the estimated required capacity may remain at 10 cfs if the peak runoff from the developed area is 4 cfs through the use of local detention. In this case, even though the future development does not increase flow in the pipeline, it is benefiting from the facilities and adding to the volume of storm water conveyed. For these reasons, 40 percent of the storm drain improvement cost will be allocated to future growth while 60 percent will be allocated to existing users.

For comparison purposes, the impact of this development can be evaluated assuming no local detention. For the scenario above, the developed area without detention would contribute significantly more to peak flows. If we assume 14 cfs of flow would be generated from the undetained development, the required capacity of the downstream pipe would be 20 cfs. In this case, future users would be responsible for 70 percent of storm drain improvement costs and 30 percent would be attributed to existing users. Both the cost of the improvement and the percent attributable to future users would be

significantly higher. For this reason, the use of local detention and the division of costs as outlined above appears to be the best solution for both existing and future users to minimize and equitably distribute costs.

North of I-15

Figure 7-1 and Table 7-3 list the capital facility projects identified north of I-15 that should be constructed within the next 6 to 10 years to resolve existing deficiencies and/or meet the needs of anticipated development in areas north of I-15.

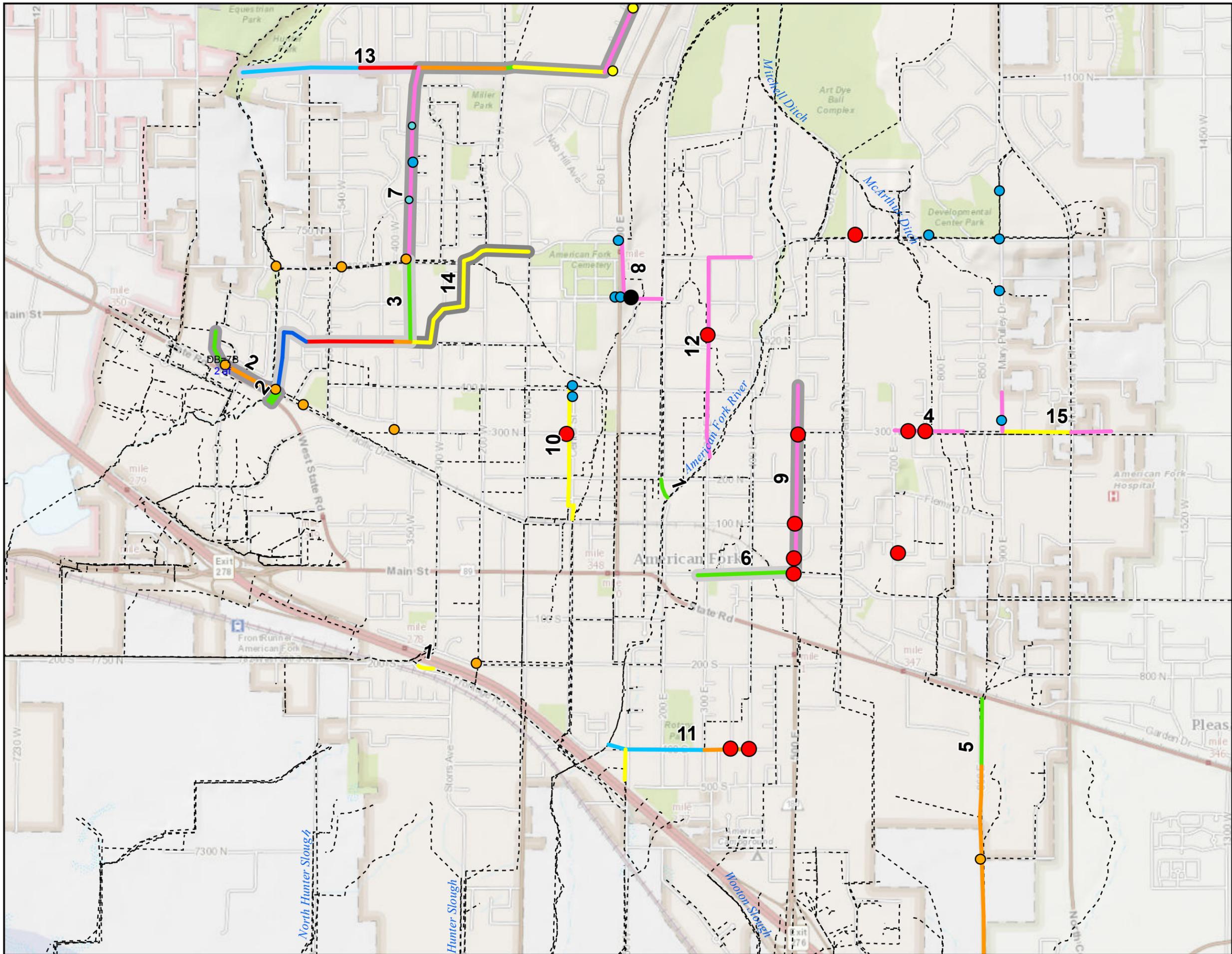
**Table 7-3
Storm Drain System Improvements North of I-15
(2013 Dollars)**

Project No.	Pipe Length (ft)	Ave Diameter (in)	Total Cost	Excess Capacity for 10-Year Growth	Excess Capacity for All Future Growth	Costs Attributable to 10-Year Growth
1	568	27.3	\$129,624	3.2% ^b	10.6%	\$4,190
2 ^a	2,222	32.6	\$1,981,666	5.5%	18.0%	\$108,992
3	4,406	42.2	\$1,475,873	5.5%	18.0%	\$81,173
4	1,135	18.0	\$221,206	5.5%	18.0%	\$12,166
5 ^a	5,634	34.8	\$2,777,291	5.5%	18.0%	\$152,751
6	1,615	30.0	\$390,328	5.5%	18.0%	\$21,468
7	7,596	22.8	\$1,630,236	5.5%	18.0%	\$89,663
8	1,600	18.0	\$311,790	5.5%	18.0%	\$17,148
9	3,054	18.0	\$595,067	5.5%	18.0%	\$32,729
10	2,303	24.0	\$487,084	5.5%	18.0%	\$26,790
11	2,819	40.7	\$912,162	5.5%	18.0%	\$50,169
12	3,976	18.0	\$774,794	5.5%	18.0%	\$42,614
13	2,897	46.0	\$1,050,205	5.5%	18.0%	\$57,761
14	3,118	24.0	\$659,383	5.5%	18.0%	\$36,266
15	2,435	20.8	\$493,317	5.5%	18.0%	\$27,132
Total	45,378		\$13,890,026			\$761,012

a Detention Basin 7B cost is included as part of Project No. 2 and Detention Basin 5 costs are included as part of Project No. 5

b 41 percent of the project cost is for project level improvements and are not eligible for impact fees.

Costs for future users have been calculated following the methodology described above. It will be noted that most of the projects included in the table have the same percentage of cost assigned to future users. This is because of the improvement approach being used by the City. Because of the wide distribution of both growth and storm drain deficiencies in the City, the improvement plan calls for series of small improvements in many areas that jointly contribute to the overall performance of the system and its ability to meet future growth. This includes a large number of diversions and parallel pipelines that makes it infeasible to evaluate the capacity of each



Legend

Observed Deficiency Category

- Flooding
- Infiltration
- Percolation Problem
- Pipe Capacity
- Inlet Capacity
- Ponding

Storm Drain Future Diameter*

- 18"
- 24"
- 30"
- 36"
- 42"
- 48"
- 60"

■ Detention Basin

--- Existing Conveyance Path

NORTH:

SCALE:

10-YEAR STORM DRAIN IMPROVEMENTS NORTH OF I-15

AMERICAN FORK CITY

STORM DRAIN MASTER PLAN UPDATE

Bowen Collins & Associates, Inc.
CONSULTING ENGINEERS

FIGURE NO. **7-1**

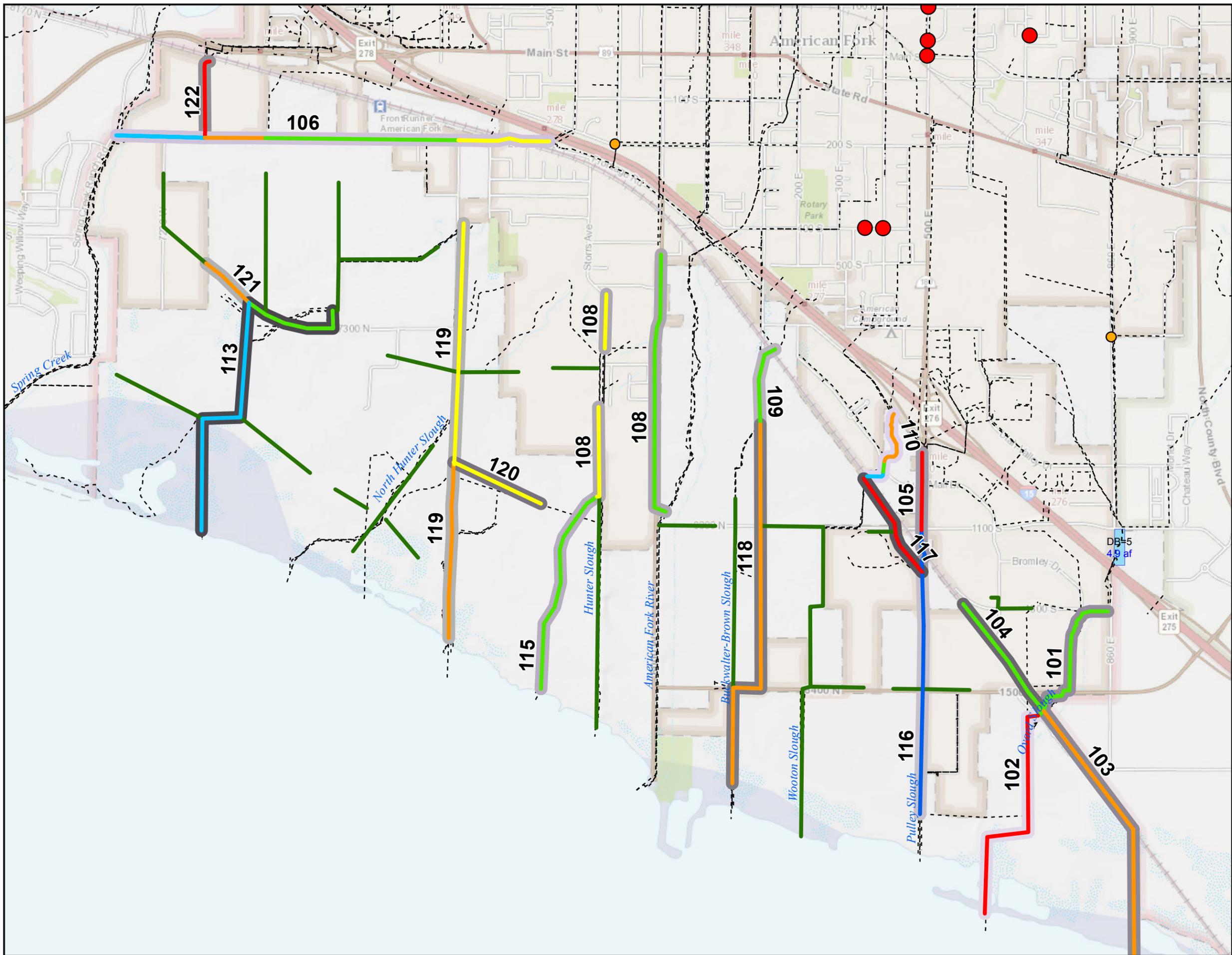
P:\American Fork\Storm Drain Master Plan\4.0 GIS\Figure 7-1 - 10-YearPlan.mxd amckinnon 7/19/2013

individual project. In this case, the most equitable approach appears to be to evaluate all the improvements jointly. For these jointly evaluated projects, the percent attributable to future growth was based on the ratio of 10-year developed area north of I-15 divided by remaining undeveloped area north of I-15.

It will be noted that the table includes a calculation of available capacity for 10-year growth and available capacity for all future growth. The projects included in the table are only those projected to be constructed in the next 10-years. However, nearly all of these projects will have capacity that will serve growth beyond the 10-year planning window. To properly calculate impact fees, growth projected for the next 10 years should only be required to pay for the capacity it will use in the future projects, with the remaining capacity being paid for by future users.

South of I-15

In general, there are very few storm drain facilities south of I-15. As development occurs, new facilities will need to be constructed to safely convey storm water to Utah Lake. However, American Fork City does not currently have any accurate method of projecting the exact location of growth south of I-15 over the next 6 to 10 years. Figure 7-2 shows all the impact fee eligible capital projects south of I-15 needed to meet future development needs. Table 7-4 lists all of the impact fee eligible projects south of I-15 and calculates the percent of capacity that would be used during the next 10 years based on the system as a whole.



Legend

Observed Deficiency Category

- Flooding
- Infiltration
- Percolation Problem
- Pipe Capacity
- Inlet Capacity
- Ponding

Storm Drain

- 18"
- 24"
- 30"
- 36"
- 42"
- 48"
- 60"
- Project Level Improvements
- Detention Basin
- - - Existing Conveyance Path

NORTH:

SCALE:

10-YEAR STORM DRAIN IMPROVEMENTS SOUTH OF I-15

AMERICAN FORK CITY

STORM DRAIN MASTER PLAN UPDATE

Bowen Collins & Associates, Inc.
CONSULTING ENGINEERS

FIGURE NO. **7-2**

P:\American Fork\Storm Drain Master Plan\4.0 GIS\Figure 7-2 - 10-Year Plan-south.mxd jdietch 7/30/2013

Table 7-4
Storm Drain System Improvements South of I-15
(2013 Dollars)

Project No.	Pipe Length (ft)	Ave Dia. (in)	Total Cost	Percent Attributable to 10-Year Growth^a	Percent Attributable to Future Growth^b	Costs Attributable to 10-Year Growth^a
101	2,440	30.0	\$589,671	30.5%	100.0%	\$179,850
102	4,187	41.6	\$1,366,526	30.5%	100.0%	\$416,790
103	4,583	36.0	\$1,276,479	30.5%	100.0%	\$389,326
104	2,236	30.0	\$540,408	30.5%	100.0%	\$164,825
105	2,014	46.3	\$735,488	30.5%	100.0%	\$224,324
106	8,719	35.7	\$2,504,926	30.5%	100.0%	\$764,002
108	5,720	27.3	\$1,305,992	30.5%	100.0%	\$398,328
109	1,370	30.0	\$331,059	30.5%	100.0%	\$100,973
110	1,473	38.0	\$437,344	30.5%	100.0%	\$133,390
113	4,168	40.2	\$1,332,238	30.5%	100.0%	\$406,332
115	3,490	30.0	\$843,251	30.5%	100.0%	\$257,191
116	4,032	54.0	\$1,732,862	30.5%	100.0%	\$528,523
117	1,867	42.0	\$614,232	30.5%	100.0%	\$187,341
118	4,863	36.0	\$1,354,464	30.5%	100.0%	\$413,112
119	6,947	29.1	\$1,665,730	30.5%	100.0%	\$508,048
120	1,614	24.0	\$341,403	30.5%	100.0%	\$104,128
121	971	36.0	\$270,335	30.5%	100.0%	\$82,452
122	1,327	42.0	\$436,564	30.5%	100.0%	\$133,152
	46,355		\$17,678,971			\$5,392,087

a 10-year percentages and costs have been estimated based on the system south I-15 as a whole. Actual ratio of capacity used in the 10-year window will vary depending on final location of actual development.

b These projects are 100 percent attributable to future growth because there are no existing facilities in the area and no existing deficiencies.

In reality, it is very unlikely that all of the projects listed in Table 7-4 will be constructed in the next 10 years. Based on projected growth and the City's current best understanding of development in the near term, the most likely projects to be completed include Projects 106, 108, 109, and 119. However, because of uncertainty with development location, this impact fee facility plan lists all potential projects that could be completed in the 10-year window depending on the location of development.

It should be emphasized that the 10-year percentages and costs contained in the table have been estimated based on the system south I-15 as a whole. This means the total cost of capacity to be used south of I-15 in the next 10 years will be the same, regardless of which specific projects are built within 10 years. This is because the capacity used in the projects actually built will be much higher than the values calculated when looking at the system as a whole. As an example, consider the projects identified above as most likely to be completed. If development does

indeed occur at currently projected locations and these are the actual projects constructed in the next 10 years, the capital cost of the improvements will be \$5.8 million. Of this, it is expected that the 10-year growth will use 93 percent of the total capacity. This equates to the same cost of capacity as when calculated for all improvements as a whole.

Based on the information listed in Tables 7-3 and 7-4, the total cost for new projects that can be allocated to impact fees (not including applicable bond costs) is \$6,153,099.

ACTUAL COST OF EXCESS CAPACITY

As discussed in Chapter 2, available information on the City's existing storm drain collection system is limited. As a result, the cost of existing capacity in the system that can be documented is expected to be minimal. For the development of the Impact Fee Analysis, the cost of the excess capacity of the existing storm drain system has therefore been assumed to be negligible and will not be included in the impact fee calculation.

IMPROVEMENT FUNDING PLAN

With the identification of required improvement projects, it is also important to consider how completion of these projects might be funded. While a comprehensive rate study is not part of the scope of this project, this section will briefly consider how projected future improvement cost compare to historic system funding and what changes might be needed to accomplish the improvement plan contained in this report.

Expected future costs associated with the improvements recommended in this report are summarized in Table 7-5.

**Table 7-5
Required Expenditures to Support Recommended Improvements
(2013 Dollars)**

	All Improvements (25-year Plan)	10-year Plan Improvements
<i>Total Costs</i>		
Pipe North of I-15	\$30,028,524	\$12,583,926
Pipe South of I-15	\$17,678,971	\$5,807,707
Detention Basins	\$2,419,600	\$1,306,100
Total	\$50,127,096	\$19,697,732
<i>Costs Associated with Future Growth^a</i>		
Pipe North of I-15	\$5,405,134	\$2,265,107 ^b
Pipe South of I-15	\$17,678,971	\$5,807,707 ^b
Detention Basins	\$435,528	\$235,098 ^b
Total	\$23,519,634	\$8,307,911^b
Net Project Costs to Recover From Rates	\$26,607,462	\$11,389,821
Years to Fund	25	10
Average Annual Capital Expenditures Required	\$1,064,298	\$1,138,982

^a This report contains a detailed analysis of costs associated with future growth for all projects in the 10-year plan. The same level of analysis was not completed for projects outside the 10-year plan. The values shown here for projects outside the 10-year plan are approximations for the purpose of estimating future funding only. Detailed calculation of costs associated with future growth for these projects will need to be completed in future impact fee facility plans.

^b These values represent costs associated with all future growth. They should not be confused with costs associated with projected 10-year growth. See Table 7-3 through 7-5.

Included in the table are two columns representing different planning periods. The first column includes all recommended improvements. Based on projected growth summarized in Table 7-1, it is expected that development of all currently undeveloped property will take a period of approximately 25 years. It has been correspondingly assumed that completion of all recommended improvements will occur over approximately the same time period. The second column in the table represents improvements identified to occur over the next 10 years as discussed previously.

For each planning period, the estimated costs of future improvements to be recovered through impact fees has been subtracted from the total project cost to calculate the net project costs that must be recovered through rates or other sources. This total has then been divided by the number of years in the planning period to calculate the average annual funding required to support the improvement plan. As calculated in the table, the level of funding required to support the improvement plan is approximately \$1.1 million annually. It is a little greater than this during the first 10 years, and slightly less than this in the long term.

It should be noted that this table is only a simple look at long term funding averages. Cash flow issues associated with the receipt of impact fees will likely push the required level of funding in specific years higher than the long term averages summarized here. This is a result of the practical requirement to build capacity before it will be used and paid for by future growth. As an example, consider the detailed impact fee facility plan discussed above. To service projected growth during the next 10 years, \$19.7 million in improvements will be completed. Of this \$8.3 million is associated with capacity to be used by future users, but only \$6.1 million is associated with capacity to be used by new users over the next 10-years. The remaining \$2.2 million is associated with excess capacity in the facilities that will be used and paid for by users beyond the 10-year planning window.

The result of this cash flow issue is that the City will need to come up with an additional \$2.2 million during the next 10 years to pay for capacity outside the 10-year planning window. While the City will ultimately be reimbursed for these expenditures through future impact fees, the need for cash over the next 10 years will be \$13.6 million instead of the \$11.4 million shown in the table. This pushes the average annual expenditure required to support the improvement plan to \$1.4 million over the next 10 years.

City personnel estimate current storm water fees only generate \$450,000 annually for capital improvements. It is recommended that the City prepare a comprehensive storm water rate study to identify how this difference between existing funding and needed funding will be addressed.

IMPACT FEE FACILITIES PLAN CERTIFICATION

The analysis contained in this report has been prepared based on growth and system information provided by American Fork City. Based on the data and growth assumptions provided and assuming American Fork City follows the improvement plan outlined in this report, BC&A certifies that, in accordance with Section 11-36a, 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 relevant respect with the Impact Fees Act.

AMERICAN FORK CITY
COUNCIL MEETING MINUTES
AUGUST 21, 2014

WORK SESSION

ATTACHMENTS (2)

The purpose of City Work Sessions is to prepare the City Council for upcoming agenda items on future City Council Meetings. The Work Session is not an action item meeting. No one attending the meeting should rely on any discussion or any perceived consensus as action or authorization. These come only from the City Council Meeting.

The American Fork City Council met in a work session on Thursday, August 21, 2014, in the American Fork City Offices, 51 East Main Street, commencing at 3:30 p.m. Those present included Mayor James H. Hadfield and Councilmembers Carlton Bowen, Brad Frost, Rob Shelton, Clark Taylor, and *Jeff Shorter.

Staff present: Associate Planner Wendelin Knobloch
Cemetery Sexton Ray Garrett
City Administrator Craig Whitehead
City Attorney Kasey Wright
City Engineer Andy Spencer
City Planner Adam Olsen
City Recorder Richard Colborn
Code Compliance Officer Nestor Gallo
Parks & Recreation Director Derric Rykert
Planning Commission Chairman John Woffinden
Police Chief Lance Call
Public Works Director Dale Goodman
Mark Coddington

Also present: Matt Millis, Tenille Tingey, and two additional persons.

Mayor Hadfield asked the Council and the Staff that if there was any interest in attending the Utah League of Cities and Towns Fall Conference in Salt Lake from September 10-12 to let Laurel Allman know so arrangements can be made.

DISCUSSION REGARDING THE EXPANSION OF THE AMERICAN FORK CITY CEMETERY TO THE FILLY FIELD AND RELATED IMPROVEMENTS – Staff

Nestor Gallo provided a Power Point Presentation regarding the expansion of the American Fork City Cemetery. It is included in these minutes as **ATTACHMENT 1**. Several properties were looked at. They settled on the use of the Filly Field. Option A included the closing of 600 North Street. Option B included leaving 600 North open. Option B was the preferred option.

*Councilman Jeff Shorter arrived.

Councilman Shelton asked if the “double deep” option was only available for the suggested Robinson and Filly properties.

Mr. Gallo responded that was correct. The others were not suitable for “double deep” due to higher ground water.

Mayor Hadfield commented that they were no longer flood irrigating on the Bromley, Beck, and Brown parcel. With a subsurface drain and fill, it might now be a useable piece of ground.

Mr. Gallo commented that the neighbors were concerned about losing open space.

Mayor Hadfield responded that the City was opening up other open space with the use of Bamberger Park.

Councilman Taylor thought the concern of the neighbors was losing “their” open space.

Councilman Frost noted that it was really Dan Adams that brought the matching theme up between the existing Cemetery and the use of the Filly Field. He had some rocks of the same look as the existing cemetery wall.

Mayor Hadfield questioned the location of the material storage yard in the new area.

Nestor Gallo stated that the plan was to locate it there now, and then move it in the future.

Mayor Hadfield did not think they wanted to do the dirty work on the front porch, so to speak.

Councilman Frost explained that the materials storage yard would have an eight-foot high fence enclosure.

Ray Garrett explained that there were two other storage yard options that they were looking at.

Mr. Gallo added that they were looking at some neighboring property.

Councilman Frost added that this location was Plan C.

Mr. Gallo stated that it has been designed so that it felt and looked like a park. He discussed the costs. With regard to the costs, they would be looking for donations for some of the elements.

Mayor Hadfield said that costs should not be a consideration at this point in time. The Cemetery Committee would be working on funding.

Mr. Gallo asked for comments.

Councilman Taylor asked if there was still a moratorium on the purchase of cemetery lots.

Ray Garrett answered that there was a moratorium. There had to be a need in order to purchase a lot. Once this was approved, they would open it up.

Councilman Bowen asked how many lots were currently available.

Mr. Garrett responded that there were 427 lots currently available for sale. These were in the new area and were not available to be “double deep.” Other areas in the cemetery were available for “double deep.”

Councilman Taylor asked if they could say that “double deep” was mandatory.

Mr. Garrett expressed that they could.

Councilman Taylor noted that right now it was an option.

Mayor Hadfield explained that cemetery expansion had been an issue for over twenty years and many options had been looked at. It had been a plea of the Sexton and the Cemetery Committee over that period of time. He liked the idea of keeping some of the architecture meaning the rock wall to carry over to the new area. Keeping 600 North Street open was very wise and prudent for a number of reasons and the traffic calming presented would serve the City well. He asked about the Planning Commission’s recommendation

Adam Olsen reported that the Planning Commission gave a positive recommendation.

Mayor Hadfield asked if there were any questions.

Councilman Frost added that something that always had stuck with him when he was in fifth grade was when his class went to Anderson and Son Mortuary. Part of the things he has read recently said that the “City needed to get out of the dead people business,” and, “why are we doing something for the dead, the living use this ground.” When with that class Alan Anderson said that everything they did there was for the living. Nothing they did there was for the dead. If they could not find a respectful place for our dead in this City, it was a really sad day.

Councilman Frost continued that they had gone through a methodical process of trying to find alternatives that did not break the bank. This was half- million dollars to make this a useable cemetery for a final resting place for the future. The neat architecture and other things would come as people made donations.

Mayor Hadfield saw this as the first step out of many steps that need to be made and for the first time in 20 years the City had an opportunity to take a positive step.

Councilman Shelton asked if the site plan included the materials storage facility and if they purchased land elsewhere for it, would they have to redo that site plan.

Nestor Gallo said that there were a lot of good reasons to find another place for that. First is the eye sore that the Mayor referred to as it would be located near where the current shack was south of the Filly Field. Second is area that they lose for grave spaces. It was very possible that it could go somewhere else.

Ray Garrett added that if this was approved on Tuesday, with the help of Engineering, they would be able to stake out lots and prepare for sales within a week and they would be able to see an immediate dollar return.

Mayor Hadfield stated that he had some contacts that could help with the stonework.

Councilman Frost felt it was important to move forward noting that with Nestor Gallo and others that the City has saved at least \$60,000 in engineering work. They have detailed construction drawings. They needed to ask Public Works what portions of this that they could do in house. That would mainly be the demolition and hauling and building the road system.

Dale Goodman expressed Public Works' willingness to help.

Adam Olsen clarified that if the Council decided to approve the site plan without the materials storage area, it would not need to go back to the Planning Commission as that was the way the Planning Commission approved it.

Councilman Bowen wanted to know if there was any member of the public that was present to speak on this issue.

Mayor Hadfield would allow them to speak at Tuesday's City Council meeting but added that the time for public comment regarding site plans was at the Planning Commission.

DISCUSSION REGARDING MODIFICATIONS TO THE TRANSPORTATION IMPACT FEE AND THE ADDITION OF A STORM DRAIN IMPACT FEE – Staff

Representatives of Zion's Bank Public Finance Department Matthew Millis and Tenille Tingey were in attendance for this discussion on impact fees and provided information in a power point, Impact Fees Update 2014 – Storm and Roadways, which is included in these minutes as **ATTACHMENT 2.**

STORM WATER

Matt Millis turned time to Tenille Tingey for discussion on Storm Water Impact Fees.

Ms. Tingey explained that the City did not currently have an impact fee for storm water. It was proposed that the residential dwelling fee be based on 16¢ per impervious square foot with an average area of 3,400 square feet. The impact fee amount would be \$544.

Mayor Hadfield noted that each current resident paid a monthly storm water fee of \$6 and that he had been paying that fee for 18 years. He added that there were some developments like Marcy's Orchard that would be sending their storm water to some facility. A new resident would be receiving the benefit of what he had been paying on for 18 years. He was getting at what that new user impact was.

Ms. Tingey reported that they had looked at it City wide and the engineers determined that there was not a whole lot of City-wide capacity.

Mayor Hadfield asked if the \$544 would cover what the City would be doing over the next ten years.

Ms. Tingey answered that was correct.

Mayor Hadfield asked if that included and identified all of the shortcomings and all of the piping of ditches and installing of catch basins.

Andy Spencer responded that the only part that it would take care of was the part they could attribute to ten year growth. There was substantial deficiencies in the existing storm drain system that that would not touch. The \$544 was the portion of projects that they anticipated building in the ten-year window that they could attribute to growth. If it was desired that they go back and review the existing inventory, they could help with that.

Ms. Tingey commented that the projects did address deficiencies in the plan.

Craig Whitehead added that the existing monthly fee paid for the maintenance of the system.

Mr. Spencer made it clear that there was no buy in component in that calculation. They looked at it as a whole to the City.

Mayor Hadfield stated that the City did have infrastructure and there should be a buy in consideration.

Mr. Spencer responded that they would look at that.

Ms. Tingey reiterated that inefficiencies could not be a part of the impact fee. The projects were sized to meet a 100-year storm. Storm drain pipes, other than laterals, were to not be smaller than 18 inches in diameter. Laterals may be 15-inches. North of I-15 there were about 45,000 feet of pipe needed at a cost of \$15 million. About \$846,000 was growth related. South of I-15 about 62,000 feet of pipe were needed at a cost of about \$17 million. About \$5.4 million was growth related.

Mayor Hadfield expressed that one of the things impacting the storm drain fee was that there were many blocks where there was not curb and gutter on either side of the travel way. The water runs into a park space or someone's front yard.

Ms. Tingey stated that she brought some of the surrounding communities' fees in line with the 3400 square feet of impervious area and reported Storm Drain Fee Comps as referred to in **Slide 15 of Attachment 2**.

Councilman Bowen asked if the developer typically paid this fee or was it the new homeowner when the home was bought.

Ms. Tingey answered that it was paid at the time of building permit.

Mayor Hadfield commented that it was paid for by the developer but ultimately paid for by the homebuyer.

Councilman Bowen asked if there would be an impact to existing homeowners.

Mayor Hadfield responded that the existing homeowner paid the current six-dollar monthly fee on an average lot.

Ms. Tingey added that without an impact fee, the total cost would have to be included in the monthly fee and they would go way up.

Mayor Hadfield asked Andy Spencer to look and see if there was sufficient improvement to warrant an impact fee.

TRANSPORTATION

Matthew Millis first referred to **Slide 7**, Level of Service – Roads, noting that the City’s current level was at C. The City is planning for a level of Service D. The developer has an accusation that the City was trying to expand to a level beyond what the City had now.

Slides 8 & 9, Capital Projects – Roads, were discussed including upcoming projects.

Councilman Frost asked if the impact on existing roads were part of the equation.

Mr. Millis answered that they took the existing roadway network, the widths and the lengths, to come up with the total area of roadways. They then took the cost of asphalt in say 1993 dollars and came up with a total value. They were not double counting improvements by the developer. He referred to the top line in **Slide 10**, Capital Projects – Fee, that showed the Existing Roadway System Improvements (Buy in component). Proposed fees are also displayed on that slide. There were many ways to calculate impact fees.

Slide 11, Road Fee Comps, were discussed. There were many factors that went into calculating roadway impact fees.

Mayor Hadfield was comfortable with the proposed residential but not with the commercial.

Councilman Bowen asked if larger cities generally had higher or lower impact fees.

Mr. Millis did not know of a good answer. It could go either way. There were a lot of factors to be taken into consideration.

Nestor Gallo asked about the multifamily impact.

Mr. Millis responded that that one large development may require signalization of an intersection however; it would be very difficult to charge one development one fee with a traffic light and one fee without a traffic light. It needed to be added into the overall improvements.

Mr. Millis continued that they have calculated impact fees based on the true costs. Many times fees were softened or discounted based on a number of factors.

Councilman Frost commented that that seemed very random to him.

Mayor Hadfield explained that Provo City, for example, was very unique. They did a land mass study of their City and learned that 55 percent did not pay property taxes, those being the LDS Church, Brigham Young University, Missionary Training Center, IHC, county and state office buildings and facilities, and the school district. Some time ago they adopted a plan where there was a transportation utility fee that everybody paid.

Mayor Hadfield continued that in American Fork the number was 35 percent of the land mass that did not pay property taxes. Every City could be different. American Fork has not adopted a utility fee but were looking at impact fees.

Councilman Taylor expressed that this was a tough message for a community that was trying to be business friendly.

Mayor Hadfield agreed that was something to look at.

Mr. Millis, referring to Councilman Frost's comment, stated that some Cities' approach was that rather than to try and define very specific categories, they used general business categories. Pleasant Grove has adopted just a one broad commercial general use category.

Councilman Taylor expressed that was probably needed in their case because they were trying to attract business as their location was horrendous. It was off I-15 and not a quick access.

Mr. Millis commented that that very well could be the case.

Mayor Hadfield noted that American Fork had twelve categories and Pleasant Grove had six categories.

Councilman Shorter asked if a high impact fee was defensible.

Kasey Wright answered that theoretically if the numbers held up and the formulas were good then theoretically that was what the courts would look at and one could win. He thought the first thing they would do, however, would be to look at all of the neighboring fees to see if they were reasonable.

Councilman Taylor felt this was a big equation for the City to look at. He was already getting beat up all the time because American Fork's water rates were more expensive.

Councilman Shelton commented that the City always had the right to lower an impact fee.

Mr. Millis promoted that there were two ways to look at this. One, lower that cost per trip and that would lower it across the board for all uses proportionately. The other approach was to come up with a more averaged general commercial fee.

Mr. Wright commented that from his perspective the City was better off saying this was what it cost and now the City was discounting it. He felt that was easier to defend.

Mr. Millis did not know if discounting was the right word. You did not want to cut a lot of revenue for the sake of a couple of businesses. Average was better. Discounting he thought it said that it might be fair to one and unfair to another.

Andy Spencer interjected that what Pleasant Grove said was that they were going to have 10,000 new commercial trips on the road. Rather than putting those in 17 categories, they were just going to cut it even across the board. Here is your fee, evenly sliced.

Mr. Wright stated that as long as the City could justify that they were not overcharging. He understood that the City also did not want to lose revenue.

Mr. Millis suggested that they sit down with that direction and make sure there was agreement in that approach. He added that there was a provision in the City's impact fee ordinance that said that anyone was allowed to bring compelling documented evidence that their use was something lower and they would be pushed into a lower category. There was a remedy.

Councilman Bowen stated that they wanted to attract businesses and the City would want it lower.

Councilman Shelton commented that American Fork had a lot of momentum behind them and they should stay competitive while there was still growth in the City.

Councilman Frost suggested the need for balance.

Councilman Shelton asked that Mr. Millis come back and bring some proposed averages and how that would function.

Mr. Millis stated that he would also bring a synopsis of how other cities came up with their fees.

Mayor Hadfield asked Mr. Millis to do some further research on other communities along the Wasatch Front of equal size.

Councilman Bowen would like to see impact fees lower than our neighbors for both residential and businesses.

Mayor Hadfield thanked Mr. Millis for the information.

Councilman Bowen asked that the reason that Mr. Millis was providing these numbers was because if the City borrowed money in the future that bond would be secured by these impact fees.

Mr. Millis responded that this was his core area. He did not deal with the bonding side.

Mayor Hadfield explained that Zion's Bank Public Finance were specialists in determining impact fees. The City paid them a fee for their work.

Councilman Frost expressed that there was great balance here in American Fork and it was a valuable place to live. American Fork was the Hub.

ADJOURNMENT

The work session adjourned at 5:18 p.m.

A handwritten signature in cursive script, appearing to read "R. M. Colborn".

Richard M. Colborn
City Recorder

Cemetery Expansion and Memorial Garden Option B

Cemetery Division

August 21 2014

SHAW • DENNIS • DAVE
 QUENTIN W BINDER • CRISTOBAL
 GARY L GABEL • LEANDRO GARZA
 JAN R GILLHAM • KENNETH E
 WILD JR • PHILLIP O CUILLEN • PHILIP
 BUTTEL • RENE ZAROGZAHER
 Y • DOUGLAS F HORBACK • WIL
 KENDRICK K KELLEY III • NOCE
 ROBERT A REYES • PATRICK L
 R • FRANCISCO MACHADO J
 IV • CHARLES W PERVALOFF • JOHN
 B • WAYNE P NEWCOMB • WAYNE L SAU
 ER • KEN TH J PATTON • JAMES C PAVW
 CARY S F ASCOVER • WILMER POTTS • H
 • GLEN • YRAMEY • STEVEN L MANE
 JOSEPH • NORRIGUES • THOMAS A R
 L • SELLA • ALVISON • DANNY RAI MO
 ROBE • PAUL • PAUL • MICHAEL STOTLER



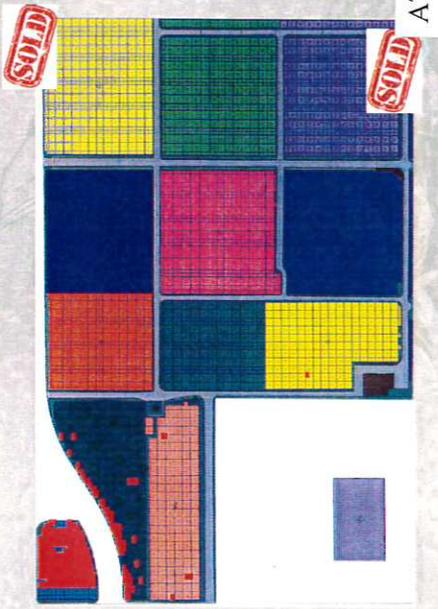
Topics

- Current conditions
- Cemetery expansion alternatives
- Public Comments
- Option B
- Opinion of Probable Cost
- Conclusions



Current Conditions

- Moratorium-less than 400 lots available
- At least 200 families on the waiting list



Beck/ Bromley/ Brown Parcel

- Property acquisition
- Road design and construction
- High groundwater table



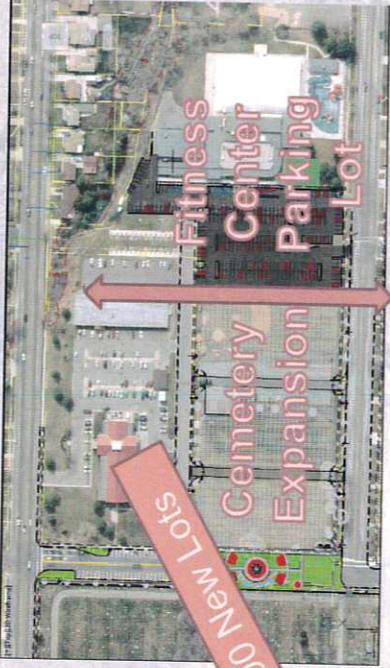
Robinson Parcel

- Property acquisition
- Road design and construction
- **New equipment storage building**



Pony and Filly Fields

- No Property acquisition
- No Road improvements
- No groundwater or drainage issues**



Proposed Improvements



Public Comments

- Concerns from residents
 - Short vs Long Term Solution
 - 600 North road closure
 - Losing open space
 - Fitness Center traffic circulation
 - Shelley Elementary School traffic circulation

Short vs Long Term Solution

- Number of burials per year
 - Low Range: 120 burials
 - High Range: 180 burials
- Total burials
 - Low Range: 29 years
 - High Range: 23 years
 - Average Number of Years: 26 years

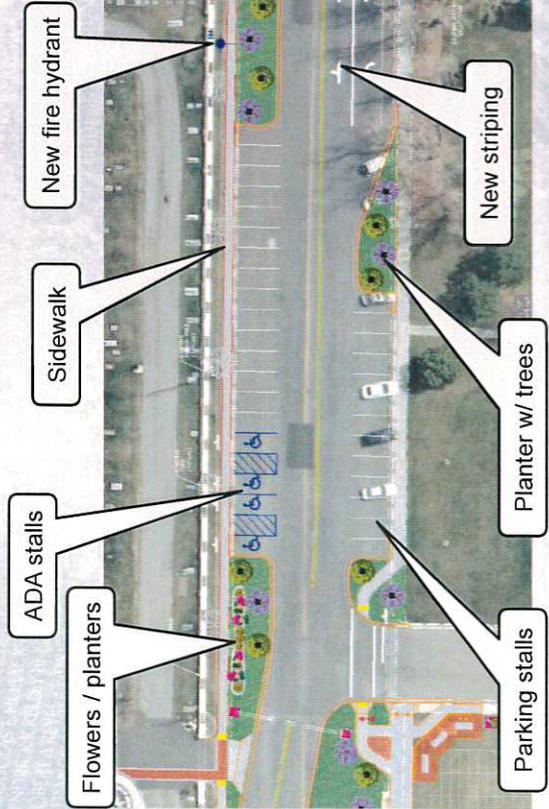
Double deep burials
7,000 parcels service
45 years service

Public Comments

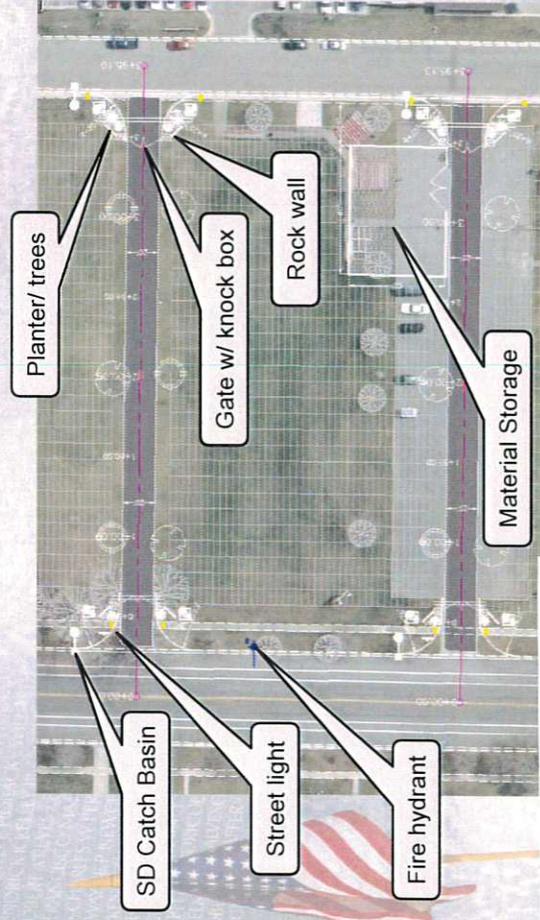
- Concerns from residents
 - Short vs Long Term Solution
 - 600 North road closure
 - Losing access to cemetery
 - Fire Department traffic circulation
 - Fire Department Elementary School traffic circulation

Option B

600 North and 100 East



Cemetery Access Roads



Memorial Center



Burial Directory



140 Ft Flag



Children Garden



Local Heroes



Memorial Center



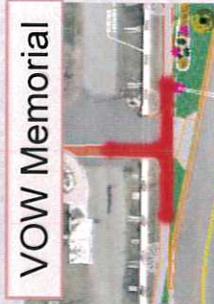
Pavers



Benches



Water Feature



VOW Memorial



Cremation Garden

Memorial Center



Arches

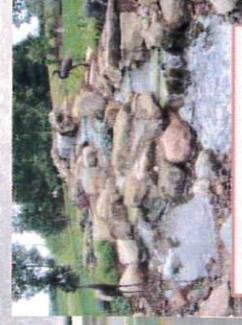


Gazebos



Lights

Children Memorial Garden



Water Feature



Water Fountain



Planters

Stone floor

Stamped concrete

Opinion of Probable Cost

Description	Construction Cost	Cost w/ in House Labor
Memorial Center (*)	\$ 193,000	\$ 157,000
600 North 100 East (*)	\$ 60,000	\$ 45,000
Northern Access Road (*)	\$ 109,000	\$ 62,000
Southern Access Road (*)	\$ 176,000	\$ 103,000
Flag Assembly Area	\$ 35,000	\$ 35,000
Children Garden Area	\$ 25,000	\$ 25,000
Cremation Niches	\$ 20,000	\$ 20,000
Water Feature	\$ 25,000	\$ 25,000
Entrance Arches	\$ 20,000	\$ 20,000
Subtotal	\$ 663,000	\$ 492,000

Note: (*) Includes a 15% contingency

Questions?

“Always on my mind;
Forever in my heart.”



For copies of this presentation, please, send an email to: ngallo@atcity.net or call Nestor Gallo, P.E. at (801) 404 7969

Conclusions

- There is an urgent need for future burial spaces for the citizens of American Fork City.
- The expansion of the cemetery to the South is the least expensive and more efficient option.
- Option B is a proposal that addresses most of the resident’s concerns.
- The Cemetery Expansion will provide services to local residents for the next 25 to 45 years.

IMPACT FEES UPDATE 2014

STORM AND ROADWAYS

AMERICAN FORK
SEPTEMBER 4, 2014

2

APPROACH

- STAKEHOLDER PARTICIPATION PROCESS
- CURRENT AF IMPACT FEE COMPARED WITH PROPOSED FEES
- IMPACT FEE ANALYSIS (IFA) – 10 YR
 - FINANCING ANALYSIS
- CHANGES TO IMPACT FEE METHODOLOGY
 - DEMAND
- LEVEL OF SERVICE
- INPUT AND DISCUSSION

STAKEHOLDER PARTICIPATION

- August 5th– Developer Informational Meeting
- August 15 – Commence Public Hearing Noticing Period
 - Drafts of the IFFP, IFA, and proposed ordinance placed in City offices and library
 - Electronic copies to be placed on the City's website
- August 26 – Public Hearing and possible adoption of the ordinance

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CURRENT/ PROPOSED IMPACT FEES

	Transportation	Storm Drain*
American Fork Current (Residential Dwellings)	\$ 1,348.39	N/A
American Fork Proposed (Residential Dwellings)	2,143.56	\$ 544

* Based on \$0.16 Per Impervious Square Foot for 3,400 Sf

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IMPACT FEE METHODOLOGY

- Impact fee calculation based on future capital projects – limited to a six to ten year horizon
 - As done in the past, no repair and replacement projects included – only growth related projects or portions of projects are included.
- Careful review of assets:
 - Historic costs included for buy-in capacity
 - As before, no project improvements considered
- Only City funded or exacted system improvements may be included
 - Example: park land acquired through density credits is not included

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IMPACT FEES ANALYSIS

- Review of Demand
- Review of Capital Facilities needed to Meet Demand within 10 Year Timeframe
- Proportionate Share Analysis
 - Buy-in Capacity and Cost
 - Uses Historic Cost Basis
 - New Construction
 - Uses Current Costs
- An inflationary component is included for future projects based on a 10 year Bureau of Labor Statistics average.

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LEVEL OF SERVICE - ROADS

- Levels of Service:
- Traffic levels of service are based upon the level of congestion and delay in the movement of traffic at peak PM periods
 - A standard of "C" or "D" is considered acceptable for an urban area such as American Fork
 - City currently maintains a level of service C
 - IFFP projects plan for a level of service D
 - Impact fees reflect a reduction in level of service rather than the continuation of the current standard

Roadway/Infrastructure Category	Historical LOS	2023 LOS	2040 LOS
System Streets	C	D	D
Local Streets	C	C	C

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CAPITAL PROJECTS - ROADS

- Using projects within the ten year construction horizon
- All existing assets prices discounted to 1993 dollars and separated by project and system improvements
- Cost of first 60' of roadway removed as it is assumed to be developer funded
- Cost of two future financings are considered (4.5% coupon)
- Excluding UDOT projects and grant funding

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CAPITAL PROJECTS - ROADS

Project	roadway / Location	Total Project Cost	Average Construction Year Cost *	% to Ten Year Growth **	Amount to Ten Year Growth
Upgrades to Major Collector (2 to 3 Lanes)	1120 North	\$12,250,000	\$4,788,833	6%	\$1,200,882.76
Intersection Improvement	900 West & Chestland Dr	\$2,345,000	\$2,706,897	70%	\$1,886,547.94
New Major Collector (3 Lanes)	700 North	\$1,175,000	\$2,617,910	89%	\$2,350,300.32
Widen to Arterial (5 Lanes)	500 West	\$3,360,000	\$4,048,801	59%	\$2,336,008.87
Widen to Arterial (5 Lanes)	500 East	\$3,062,000	\$3,726,786	36%	\$1,348,741.49
Extension of Minor Collector (2 Lanes) with New Railroad Crossing	500 West	\$2,022,000	\$2,448,168	90%	\$2,347,119.06
Intersection Improvement	700 North & 530 East	\$705,000	\$849,738	49%	\$417,648.96
Upgrades to Major Collector (2 to 3 Lanes)	700 North	\$7,498,000	\$8,607,350	52%	\$4,742,998.38
Widen to Minor Collector (2 Lanes)	1100 North	\$2,950,000	\$3,004,361	31%	\$603,862.06
New Minor Collector (2 Lanes)	1150 East	\$3,765,000	\$4,450,915	89%	\$3,145,485.98
Intersection Improvement	200 East & Main St / State St	\$705,000	\$849,738	49%	\$417,648.96
New Arterial (5 Lanes)	600 South	\$6,342,000	\$7,258,007	83%	\$6,303,967.11
Widen to Arterial (5 Lanes)	600 South	\$1,248,000	\$1,263,419	76%	\$1,142,004.94
New Major Collector (3 Lanes)	Park Dr	\$18,088,000	\$19,906,326	60%	\$11,133,936.25
Total Capital		\$88,885,000	\$80,338,200	60%	\$47,995,485

*Based on estimated construction cost of \$100 per square foot per year. Construction cost per year is not equal.
 **% to Ten Year Growth is calculated based on the total project cost divided by the average construction year cost multiplied by the % to Ten Year Growth.

- Approximately 60% of the total ten year capital projects are included in the impact fee (\$48M of \$80.3M)

CAPITAL PROJECTS - FEE

Component	Ten Year Growth in FMI Peak Hour Trips	Cost	Cost Per Trip
Existing Roadway System Improvements (Pay in Component)	20,273	\$7,755,090	\$382.43
Ten Year Roadway System Improvements	20,273	\$47,995,485	\$2,367.46
Ten Year Growth's Share of the Cost of Anticipated Debt Financing *	20,273	\$14,314,523	\$706.09
Total		\$70,065,108	\$3,455.98

* This is the cost of issuing public bonds, multiplied by the % to Ten Year Growth.

- Single Family Home: \$2,143 per Unit
- Multi-Family, 4 Units or less: \$1,092 per Unit
- Multi-Family, > 4 Units: \$1,341
- Non-Residential impact fees determined based upon occupancy and ITE trip generation data

ROAD FEE COMPS

Residential Impact Fees	Non Residential
Saraboga Springs \$ 2,500	Saraboga Springs 2,500
American Fork Current 1,348	American Fork Current* 12,541
American Fork Proposed 1,435	American Fork Proposed 34,855
Lehi 1,584	Lehi 988
Pleasant Grove 1,131	Pleasant Grove 4,632
Syracuse 986	Syracuse 2,328
Provo 3,577	Provo-Fast Food 2,622
West Jordan 764	West Jordan 4,163
Riverton 1,447	Riverton-Convenience Market 14,184
Draper 2,050	Riverton-Fast Food 11,741
Draper Traverse Mtn	Draper 4,848
Average \$ 1,722	Draper Traverse Mtn 6,870
	Average \$ 8,508
Spanish Fork no fee assessed	*Based on Restaurant with Drive Through Category
Mapleton no fee assessed	Spanish Fork no fee assessed
	Mapleton no fee assessed

LEVEL OF SERVICE - STORM

- Levels of Service:
 - Storm Drain: Fee assessed per impervious surface square feet
 - Projects based on the following criteria:
 - Storm Drain Pipelines – Storm drain pipelines are not allowed to surcharge to within two feet from the ground surface during the 4 percent annual chance (25-year) design Storm drain pipes (other than laterals) are also not to be smaller than 18 inches in diameter. Storm drain laterals may be 15-inches. To qualify as a lateral, a storm drain pipe must be connected to inlet box, be generally perpendicular to the overall direction of storm drain flow, and be less than 100 feet.
 - Open Channels – in general, large open channels (such as Mitchell's Hollow, the Meadow's Wetland, Spring Creek, or the American Fork River) should have at least two feet of freeboard during the 100-year storm event. Open channels should also have protective lining. If velocities are less than 4 ft per second (ft/s), the channel may be grass lined.
 - Detention/Retention Basins – Detention/retention facilities need to have capacity for the 100-year storm, with at least one foot of freeboard, and have an emergency overflow that directs water away from private property. Retention is only allowed in areas outside the City's designated sensitive lands area.

