Impact Fee Facilities Plan

for Transportation

September 2015

Prepared by:

Bowen Collins & Associates, Inc.
CONSULTING ENGINEERS

Prepared for:

EST 1852
LEHI CITY

IMPACT FEE FACILITIES PLAN FOR TRANSPORTATION

September 2015

Project No. 331-12-01

Prepared for:

EST 1852
LEHI CITY
PIONEERING UTAH'S FUTURE

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EXECUTIVE SUMMARY

INTRODUCTION

Lehi City has retained Bowen Collins & Associates (BC&A) and Zions Bank Public Finance (ZBPF) to prepare impact fee facility plans (IFFPs) for eight different services provided by the City. The subject of this IFFP document is transportation. The purpose of an IFFP is to identify demands placed upon City facilities by future development and evaluate how these demands will be met by the City. The IFFP is also intended to outline the improvements, which may be funded through impact fees.

WHY IS AN IFFP NEEDED?

The IFFP provides a technical basis for assessing updated impact fees throughout the City. This document will address the future infrastructure needed to serve the City with regard to current land use planning. The existing and future capital projects documented in this IFFP will ensure that level of service standards are maintained for all existing and future residents who reside within the service area. Local governments must pay strict attention to the required elements of the Impact Fee Facilities Plan, which are enumerated in the Impact Fees Act.

PROJECTED FUTURE GROWTH

To evaluate future infrastructure needs, it is first necessary to project how demand for transportation services will increase in the future. This was completed in Lehi's most recent transportation master plan by using the travel demand-forecasting model maintained by the Mountainland Association of Governments (MAG) and the Wasatch Front Regional Council (WFRC). The model predicts future demand for transportation services based on land use and socioeconomic projections. For the purposes of the Lehi Transportation Master Plan, this forecasting model was updated and refined to reflect additional information on development and growth in the City. This updated model forms the basis for projections in this report.

Projected 10-year growth in daily trips generated or ending in Lehi City were developed based on projected 2023 development conditions.

Table ES-1
Projected 10 Year Growth in Transportation Demand

Year	Residential Daily Trip Ends	Non-Residential Daily Trip Ends	Total Daily Trip Ends
2013	140,958	99,518	240,476
2023	179,702	126,881	306,583
Full Development			547,058

EXISTING CAPACITY AVAILABLE TO SERVE FUTURE GROWTH

Projected future growth will be met through a combination of available excess capacity in existing facilities and construction of additional capacity in new facilities. Existing capacity available to serve new growth in transportation facilities was determined by analyzing the updated Lehi travel demand-forecasting model. According to the traffic model results, the existing City transportation network is roughly 47 percent utilized. This leaves roughly 53 percent available to serve future growth. Within the next 10 years, growth within Lehi City is expected to add demand that will use an additional 1.5 percent of the capacity in existing infrastructure.

REQUIRED SYSTEM IMPROVEMENTS

Beyond available existing capacity, additional improvements to Lehi City facilities that will be required to serve new growth were identified by Lehi City personnel and are summarized in Table ES-2. All costs are given in 2015 dollars.

Table ES-2
Summary of Lehi City Transportation Project Costs Allocated to Projected Development, 10-year Planning

Project No.	Project Name	Percent to Existing	Percent to 10-year Growth	Percent to 10-year Growth in Pass Thru	Percent to Growth Beyond 10 Years	Cost to Existing	Cost to 10-year Growth	Cost to 10-year Growth in Pass Thru	Cost to Growth Beyond 10 Years	Total Project Costs
4	Triumph Blvd	0.0%	32.2%	0.6%	67.1%	$0	$727,017	$14,458	$1,515,125	$2,256,600
5	Triumph Blvd	0.0%	31.0%	0.6%	68.3%	$0	$416,073	$8,588	$915,554	$1,340,214
6	700 South	0.0%	74.7%	0.3%	25.0%	$0	$129,127	$462	$43,196	$172,786
7	700 South	0.0%	74.7%	0.3%	25.0%	$0	$93,980	$336	$31,439	$125,755
8	3600 West	7.9%	45.4%	3.4%	43.3%	$254,556	$1,472,070	$110,964	$1,403,638	$3,241,228
9	2600 North	9.3%	90.7%	0.0%	0.0%	$140,504	$1,364,018	$21	$0	$1,504,543
10	1500 North	6.5%	58.9%	9.5%	25.1%	$65,689	$595,544	$96,243	$254,455	$1,011,931
11	1200 West	22.7%	30.9%	1.2%	45.2%	$46,648	$63,457	$2,485	$92,989	$205,579
12	1200 West	17.2%	29.0%	1.1%	52.7%	$20,427	$34,325	$1,313	$62,366	$118,431
13	1200 West	17.2%	29.0%	1.1%	52.7%	$21,840	$36,700	$1,403	$66,681	$126,625
14	3200 North	0.0%	58.3%	0.0%	41.7%	$0	$560,827	$38	$400,618	$961,483
15	Traverse Mtn Blvd	0.0%	17.8%	0.0%	82.2%	$0	$119,844	$0	$552,141	$671,985
16	Center St	0.0%	29.7%	0.0%	70.3%	$0	$326,698	$2	$773,300	$1,100,000
17	Center St	0.0%	29.7%	0.0%	70.3%	$0	$29,937	$0	$70,862	$100,800
18	Traffic Signals	10.5%	34.7%	1.4%	53.4%	$105,379	$346,750	$14,140	$533,730	$1,000,000
19	Road Widening	0.0%	16.5%	0.7%	82.8%	$0	$206,171	$8,880	$1,034,949	$1,250,000
20	2300 West	11.6%	23.0%	1.8%	68.3%	$34,970	$69,480	$5,388	$192,215	$302,052
21	2300 West	11.0%	23.7%	1.6%	63.6%	$32,617	$70,076	$4,783	$188,081	$295,557
22	700 South	0.0%	47.2%	27.8%	25.0%	$0	$70,974	$41,778	$37,584	$150,336
23	4600 West	0.0%	39.8%	0.0%	60.2%	$0	$66,869	$1	$101,144	$168,014
24	4800 West	0.0%	39.8%	0.0%	60.2%	$0	$74,595	$0	$112,830	$187,426
25	N Frontage Rd	5.3%	49.0%	0.0%	45.7%	$64,591	$599,699	$35	$559,179	$1,223,504
26	Flight Park Rd	0.0%	17.8%	0.0%	82.2%	$0	$240,799	$0	$1,109,397	$1,350,196
27	N Frontage Rd	7.4%	33.2%	0.4%	58.9%	$66,268	$296,370	$3,777	$525,258	$891,674
TOTAL COSTS						**$853,489**	**$8,011,401**	**$315,096**	**$10,576,732**	**$19,756,719**

SECTION 1
INTRODUCTION

Lehi City has retained Bowen Collins & Associates (BC&A) and Zions Bank Public Finance (ZBPF) to prepare impact fee facility plans (IFFPs) for eight different services provided by the City. The subject of this IFFP document is transportation. The purpose of an IFFP is to identify demands placed upon City facilities by future development and evaluate how these demands will be met by the City. The IFFP is also intended to outline the improvements, which may be funded through impact fees.

Requirements for the preparation of an IFFP are outlined in Title 11, Chapter 36 of the Utah code (the Impact Fees Act). Under these requirements, an IFFP shall accomplish the following for each facility:

1. Identify the existing level of service
2. Establish a proposed level of service
3. Identify excess capacity to accommodate future growth
4. Identify demands of new development
5. Identify the means by which demands from new development will be met
6. Consider the following additional issues
    a. revenue sources to finance required system improvements
    b. necessity of improvements to maintain the proposed level of service
    c. need for facilities relative to planned locations of schools

The following sections of this report have been organized to address each of these requirements.

SECTION 2
EXISTING LEVEL OF SERVICE (11-36A-302.1.A.I)

Level of service is defined in the Impact Fees Act as "the defined performance standard or unit of demand for each capital component of a public facility within a service area". This section discusses the level of service being currently provided to existing users.

PERFORMANCE STANDARD

The performance standard defines the level of service the City has established to satisfy City and/or State performance requirements. For transportation systems, this can be complex, but is dependent on demand and capacity of roadways. This is explained in detail in the City's Transportation Master Plan. Level of service (LOS) typically ranges from LOS A (free-flow traffic operations) to LOS F (where conditions are such that demand exceeds capacity). In the City's master plan, LOS is further defined by utilizing a ratio of volume to capacity (*v/c*). Low *v/c* ratios describe favorable traffic conditions, and therefore higher levels of service, while higher *v/c* ratios describe the poorest of traffic conditions and lowest levels of service. Detailed descriptions and *v/*c limits for each level of service can be found in the City's master plan document.

Level of service varies based on roadway size, use, and overall classification. According to Lehi City municipal code, all local and collector roads are required to maintain an LOS C or better ($0.50 > v/c$ ratio ≥ 0.75). Per the City's Transportation Master Plan, the acceptable threshold for arterial roads in Lehi City was determined to be LOS D ($0.75 > v/c$ ratio ≥ 0.85), which is based on UDOT's Roadway Design Manual of Instruction. It should be noted that this is a slight change from Lehi City's historic practice of requiring LOS C on all City streets. Allowing LOS D for arterial roads will apply to both existing and future development.

Planning-level capacity thresholds were also estimated in the City's master plan for each type of cross section. By estimating roadway capacities and using recent traffic counts, the *v/c* ratios can be calculated and LOS for each roadway segment determined.

UNIT OF DEMAND

It is necessary to define a unit of demand to describe projected transportation capacity used by both existing and future development. The unit of demand for transportation is being defined as an equivalent residential unit (ERU) and is based on trip generation. Based on the ITE trip generation rates, a single-family residential unit generates 9.55 trips per day (for both existing and future ERUs). Consequently, 9.55 trips per day becomes the definition of an ERU. ERUs for other development types may be calculated using the trip generation rates for the development type and the following formula:

$$\frac{Daily\ trip\ generation\ estimate^{1}}{9.55\ trips/day} \times Impact\ Fee\ per\ ERU = Impact\ Fee$$

[1] Unless other data is available, daily trips to be estimated based on land use type and ITE 9th edition trip generation rates. Note that ITE trip generation rates are for trips ends and include both trip starts and stops.

SECTION 3
PROPOSED LEVEL OF SERVICE (11-36A-302.1.A.II)

The proposed level of service is the performance standard used to evaluate system needs in the future. The Impact Fee Act indicates that the proposed level of service may:

1. diminish or equal the existing level of service; or
2. exceed the existing level of service if, independent of the use of impact fees, the City implements and maintains the means to increase the level of service for existing demand within six years of the date on which new growth is charged for the proposed level of service.

No changes in the level of service are proposed for Lehi City. Future facilities will be constructed as needed to meet performance standards at the existing level of service. As will be discussed in detail in later sections of this document, the current transportation network in Lehi City does have a small number of existing deficiencies. However, these deficiencies are currently planned to be resolved within the timeframe mentioned above using funds outside impact fees.

The city does have some bike lanes on roadways that are not considered as separate trails (and correspondingly have not been included in the City's Parks and Trails impact fees) The City's long-term plan is to increase the quantity of these bike lanes throughout the City. Where transportation projects include additional cost associated with bike lanes to be added to roadways where they do not currently exist, that portion of the project cost will be considered an increase in level of service and will be split proportionally between existing and future users.

SECTION 4
EXCESS CAPACITY TO ACCOMMODATE FUTURE GROWTH (11-36A-302.1.A.III)

Projected future growth will be met through a combination of available excess capacity in existing facilities and construction of additional capacity in new facilities.

EXISTING TRANSPORTATION INFRASTRUCTURE

A summary of the existing transportation facilities are contained in the following tables. Existing roadway classifications from the City's master plan are summarized in Table 4-1. Most city roads are composed of two- and three-lane cross sections with some five-lane cross sections.

Table 4-1
Summary of Existing Roadway System

Cross Section	Lane Configuration[1]	Capacity at LOS
Major Arterial	5	33,000
Minor Arterial	3	16,000
Major Collector	3	12,000
Minor Collector	3	11,000
Minor Collector	2	7,000

[1] – Odd numbered lanes include a center two-way left-turn lane.

EXISTING DEMAND AND DETERMINATION OF EXCESS CAPACITY

The current demand on the existing transportation infrastructure was estimated by comparing roadway capacities to traffic counts where available, and the updated Lehi travel demand-forecasting model developed for the Transportation Master Plan. The results of this assessment are as follows:

To calculate the percentage of existing capacity to be used by future growth in existing facilities, existing and future demands were examined in the travel demand forecasting model for each roadway. The method used to calculate excess capacity available for use by future development is as follows:

- **Calculate Demand –** The peak demand in each facility was calculated in the model for both existing and future development scenarios. The maximum capacity of each facility was also identified.
- **Identify Available Capacity –** Where a facility has capacity in excess of projected demands at buildout, the available capacity in the facility was defined as the difference between existing demand and buildout demand. Where the facility has capacity less than projected demand at buildout, the available capacity in the facility was defined as the difference between existing demands and the facility's maximum capacity.

- **Calculate Percent of Excess Capacity Used in Remaining Facilities –** Where the future demand was less than the capacity of the facility, the percent of excess capacity being used in each facility was calculated by dividing the growth in use in the facility (future needs less existing needs) by the maximum use of capacity at buildout. Where the future demand was more than the capacity of the facility, the percent of excess capacity being used in each facility was calculated by dividing the available remaining capacity in the facility by total capacity.
- **Calculate Cost Weighted Average for System –** Each facility in the system has a different quantity of excess capacity to be used by future growth. To develop an estimate of excess capacity for portions of the system containing multiple components, the capacities of each of these road segments and their contribution to the system as a whole must be considered. To do this, each component has been weighted based on its length and capacity. The capacity of the system as a whole is then calculated as the sum of the weighted capacity used by future growth divided by the sum of total weighted capacity in the system.

Based on the method described above, the calculated percentage of existing capacity used by growth during the 10-year planning window is 1.5 percent of the qualifying actual system cost. This total does not include any growth associated with pass through traffic (trips that neither begin nor end in Lehi City but that utilize City facilities), as will be discussed in Section 5.

SECTION 5
DEMANDS PLACED ON FACILITIES BY NEW DEVELOPMENT (11-36A-302.1.A.IV)

Growth and new development in Lehi City is discussed in detail in a technical memorandum prepared by BC&A dated April 18, 2014. A summary of the projections for future residential and private non residential growth is contained in the table below. Private non residential growth includes all non public and non residential uses; such as business, churches, offices, retail, medical facilities, etc.

Table 5-1
Projected 10 Year Residential and Non-Residential Growth

	2010	2013	2020	2023
Census & BEBR Derived Population	47,715	53,561		
GOPB Population Projections			62,154	68,285
Single Family Housing Units	10,543	11,912	13,823	15,187
Multifamily Housing Units	2,521	2,848	3,305	3,631
Total Lehi Housing Units	13,064	14,760	17,128	18,817
Lehi Persons per Housing Unit	3.63	3.63	3.63	3.63
Lehi Private Non Residential Space (kSF)		5,957	6,913	7,595
Lehi Private Non Residential Space SF per Capita		8.99	8.99	8.99

*Source: US Census, BEBR, Utah Governor's Office of Planning and Budget, Lehi City Planning Department

Using this information, the ten-year growth in transportation demand was estimated and is contained in Table 5-2. Total trip generation is based on the regional travel demand-forecasting model. The division between residential and non-residential trips is based on ITE trip generation rates.

Table 5-2
Projected 10 Year Growth in Transportation Demand

Year	Residential Daily Trip Ends	Non-Residential Daily Trip Ends	Total Daily Trip Ends
2013	140,958	99,518	240,476
2023	179,702	126,881	306,583
Full Development			547,058

PASS THROUGH TRAFFIC

Pass through traffic refers to the demand on City transportation facilities created by trips that do not start or end in Lehi City. As a result, demand associated with pass through traffic is not associated with existing or future Lehi City residents and must be accounted for separately in the impact fee analysis. In Lehi City, most of the pass through traffic is on facilities owned by the Utah Department of Transportation (UDOT) such as Interstate-15 and Pioneer Crossing. Since

these facilities are not part of the Lehi transportation impact fee, pass through traffic on these roadways can be ignored. However, some pass through traffic on City streets must be included in the analysis. This traffic is largely associated with access to the communities of Saratoga Springs and Eagle Mountain located to the west of Lehi.

Since Table 5-2 includes only trips either starting or ending in Lehi City, pass through traffic does not show up in these numbers. Instead, pass through traffic must be evaluated on a street-by-street basis as will be detailed in subsequent sections. Existing and future pass through traffic by street has been based on traffic model results from the City's Transportation Master Plan.

PASS BY TRAFFIC

Pass by traffic refers to stops associated with traffic that is already on the road heading to other destinations. This traffic is largely associated with "side" trips (i.e. to a convenience store on the way to another principal destination) that would not occur otherwise. As a result, pass by traffic will show up as projected trip starts and stops, but does not create additional demand on City transportation facilities since the trip is being motivated by another destination. Because these trips do not result in additional demand on transportation facilities, they need to be removed from the calculation and administration of impact fees.

To account for this issue, pass by traffic has been removed from the non-residential transportation demand shown in Table 5-2. This has been based on the weighted average pass-by percentage of 19 percent for all commercial uses (using estimated growth in Lehi City of the various non-residential land use types). This percentage of trips has been removed from the total non-residential transportation demand shown in Table 5-2.

SECTION 6
INFRASTRUCTURE REQUIRED TO MEET DEMANDS OF NEW DEVELOPMENT (11-36A-302.1.A.V)

To satisfy the requirements of state law, demand placed upon existing system facilities by future development was projected using the process outlined below. These steps were completed as part of the City's master plan's development.

1. **Existing Demand** – The demand of existing development was determined by measuring the current transportation demand on facilities.
2. **Existing Capacity** – The capacities of the existing roadways were identified based on the street cross-sections.
3. **Existing Deficiencies** – Existing deficiencies in the system were looked for by comparing defined levels of service against calculated capacities.
4. **Future Demand** - The demand that future development will place on the system was estimated based on development projections as discussed in Section 5.
5. **Future Deficiencies** - Future deficiencies in the transportation infrastructure were identified in a model of the City's transportation system based on the defined level of service and assessing future growth as projected in Section 5.
6. **Recommended Improvements** – As a part of the City's transportation master plan development, the existing transportation system and future traffic projections were analyzed in detail to determine what facilities will be needed to serve new growth.

The steps listed above describe the "demands placed upon existing public facilities by new development activity at the proposed level of service; and… the means by which the political subdivision or private entity will meet those growth demands" (Section 11-36a-302-1.a of the Utah Code).

INFRASTRUCTURE NEEDS FOR TRANSPORTATION

Additional transportation projects will be required to meet transportation infrastructure needs in Lehi City at future conditions. These projects will ensure that the existing LOS is maintained. Many improvements in the City will be completed by Lehi City, and some projects will be completed by other entities.

Table 6-1 summarizes the projects in the Metropolitan Transportation Plan for the Utah County area that was completed by MAG. This region-level plan is developed in coordination with UDOT, UTA and the Utah Division of Air Quality (DAQ) and is detailed in the City's transportation master plan document. Lehi City will not be funding any of these public transportation projects within the planning window of this IFFP (unless noted otherwise); therefore, no impact fees will be collected for the projects in Table 6-1.

Table 6-1
Metropolitan Transportation Improvements (MAG)

Phase	Project	Approximate Year of Construction
I	Widen State Street (US-89) from Lehi Main Street to American Fork Main Street as a seven-lane cross section	2011-2020
I	Widen existing portions of 2300 West from two lanes to five lanes and create a new five-lane road between SR-92 and Pony Express Parkway[1]	2011-2020
II	Construct a new I-15 interchange at 4000 North	2021-2030
II	Construct an expressway on 2100 North from Lehi to Saratoga Springs	2021-2030
II	Add express lanes from 1200 East to the Alpine Highway on SR-92	2021-2030
II	Widen Main Street between Redwood Road and 500 West from a two-three-lane cross section to a five-lane cross section[2]	2021-2030
II	Widen 1900 South (Pony Express Parkway) [2]	2021-2030
III	Widen Pioneer Crossing from five lanes to seven lanes	2031-2040
Unfunded	Construct a new freeway connecting I-15 to the Mountain View Freeway north of Lehi	N/A

[1] Portions of this project will be paid for by Lehi City within the planning window and are accounted for later in this section (see Table 6-3).
[2] Portions of this project may be paid for by Lehi City but its timing is uncertain and the project costs have correspondingly been excluded from the impact fee calculation.

Table 6-2 summarizes the public transportation projects in the Metropolitan Transportation Plan for the Utah County area that was prepared by MAG. Like the road projects in Table 6-1, Lehi City will not be funding any of these public transportation projects within the planning window of this IFFP (unless noted otherwise); therefore, no impact fees will be collected for the projects in Table 6-2.

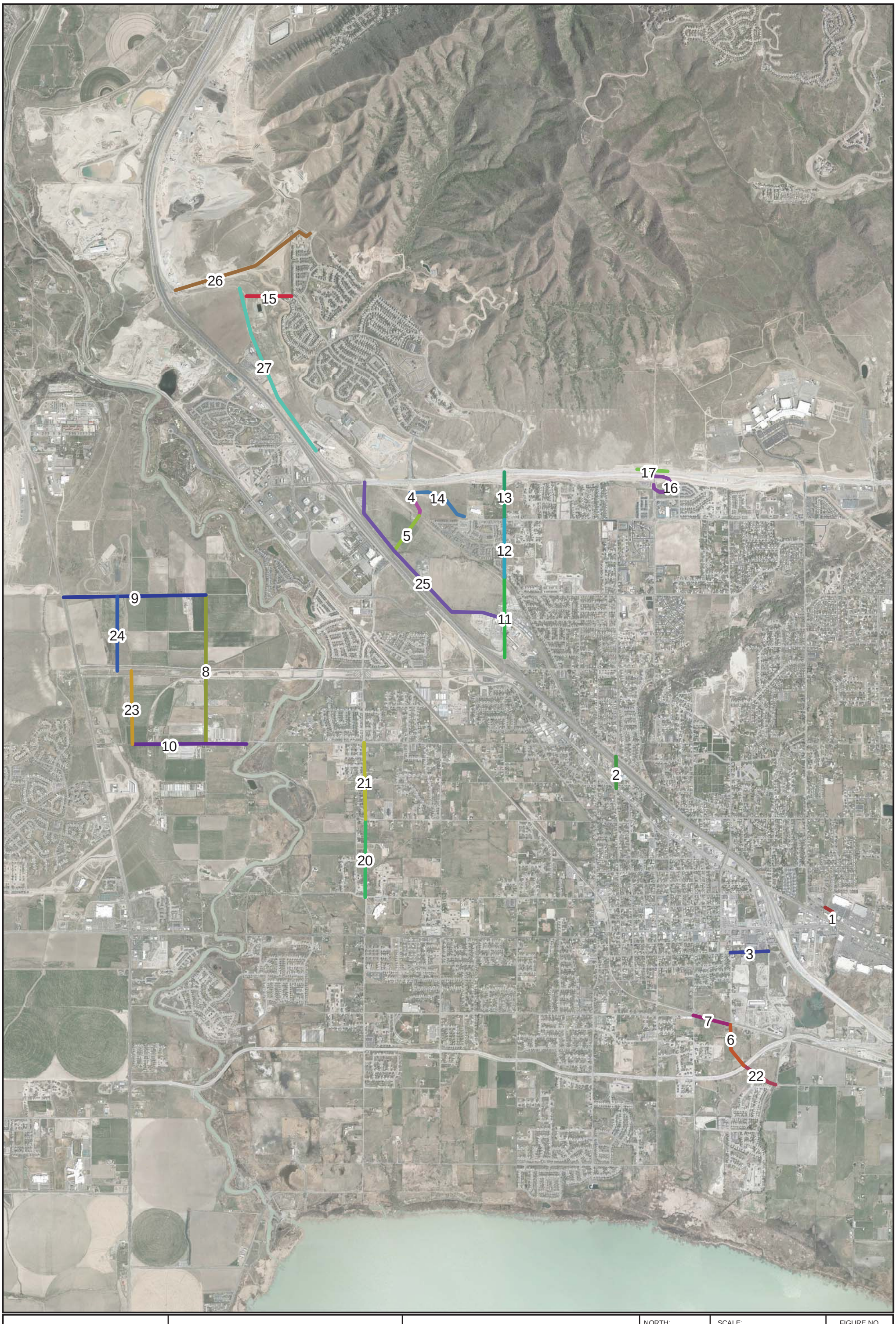
Table 6-2
Regional Public Transportation Improvements (MAG)

Phase	Project	Construction Year
I	Front Runner South Line: Salt Lake City to Utah County	Completed
II	Enhanced bus or rapid transit line from Lehi to Lindon along the SR-92 corridor	2021-2030
II	Enhanced bus or rapid transit line from American Fork to Eagle Mountain along the Pioneer Crossing corridor	2021-2030
III	Light rail constructed from Draper to Orem	2031-2040
Unfunded	Light rail constructed from Lehi to Eagle Mountain	N/A
Unfunded	Commuter Rail from American Fork to Santaquin (west of Utah Lake)	N/A

10-YEAR IMPROVEMENT PLAN

Only infrastructure to be constructed by Lehi City within a ten-year horizon will be considered in the calculation of these impact fees. Use of a ten-year planning horizon will help avoid uncertainty surrounding improvements further into the future. Table 6-3 summarizes the projects that will need to be constructed within the next ten years as identified by Lehi City personnel. The location of projects summarized in Table 6-3 are shown in Figure 6-1. Several items should be noted regarding these projects:

- Project No. 1-3 as shown in Figure 6-1 are being constructed to remedy existing deficiencies and therefore are costs that are not eligible for impact fees. As a result, they have not been included in Table 6-3.
- The exact years for the construction of traffic signals are unknown (Project No. 18). The costs for an additional 10 traffic signals have been spread over the next six years for planning purposes.
- There is an additional $125,000 allocated to each year within the next 10 years for widening of streets within individual projects. This budget item is needed for growth-related system improvements (widening of developer constructed streets to serve as collectors) associated with unforeseen development-driven needs (Project No. 19). The amount budgeted for this purpose has been based on actual historic costs for this type of project over the last three years.
- Growth within the City will be the primary motivation for most of the projects, and therefore the timing of projects beyond the short-term planning window may be expedited or deferred depending on the rate of development.



Bowen Collins & Associates, Inc. CONSULTING ENGINEERS	LEHI CITY IMPACT FEE FACILITY PLAN	10-YEAR TRANSPORTATION PROJECTS	NORTH: NORTH	SCALE: 0 1,500 3,000 Feet	FIGURE NO. 6-1

P:\Lehi\2013 Impact Fee Study\4.0 GIS\4.1 Projects\Transportation.mxd dstoker 9/30/2014

- Included in the table is a division between the City costs and project level costs. In areas of new development, the developer will be responsible for construction of streets to accommodate local traffic (project level improvements). In these areas, the City will only be responsible for construction of additional improvements as required to accommodate system level transportation demands.

Table 6-3
Summary of Lehi City 10-Year Transportation Project Costs[1,2]

Project No.	Project Name	Year of Project	Project Level Costs[3]	Lehi City Costs	Total Project Costs
4	Triumph Blvd	2015	$0	$2,256,600	$2,256,600
5	Triumph Blvd	2015	$0	$1,340,214	$1,340,214
6	700 South	2019	$228,336	$172,786	$401,122
7	700 South	2019	$166,185	$125,755	$291,941
8	3600 West	2016	$714,732	$3,241,228	$3,955,960
9	2600 North	2016	$685,008	$1,504,543	$2,189,550
10	1500 North	2016	$460,725	$1,011,931	$1,472,656
11	1200 West	2017	$186,452	$205,579	$392,030
12	1200 West	2017	$107,412	$118,431	$225,844
13	1200 West	2017	$114,844	$126,625	$241,468
14	3200 North	2018	$437,756	$961,483	$1,399,239
15	Traverse Mtn Blvd	2017	$0	$671,985	$671,985
16	Center St	2019	$0	$1,100,000	$1,100,000
17	Center St	2019	$0	$100,800	$100,800
18	Traffic Signals	2015-2019	$0	$1,000,000	$1,000,000
19	Road Widening	2015-2024	$0	$1,250,000	$1,250,000
20	2300 West	2021	$94,239	$302,052	$396,292
21	2300 West	2021	$92,213	$295,557	$387,769
22	700 South	2021	$195,910	$150,336	$346,246
23	4600 West	2020	$339,126	$168,014	$507,140
24	4800 West	2020	$378,308	$187,426	$565,734
25	N Frontage Rd	2020	$521,525	$1,223,504	$1,745,029
26	Flight Park Rd	2024	$0	$1,350,196	$1,350,196
27	N Frontage Rd	2023	$349,034	$891,674	$1,240,708
	Total		**$5,071,804**	**$19,756,719**	**$24,828,523**

Notes: [1] Cost estimates are in 2014 dollars. Inflation is not included.
[2] Projects 1 through 3 are associated with existing deficiencies and have been correspondingly dropped from this IFFP.
[2] Does not include value of developer contributed ROW.

PROJECT COST ATTRIBUTABLE TO 10 YEAR GROWTH

To satisfy the requirements of state law, Table 6-4 provides a breakdown of the capital facility projects and the percentage of the project costs attributed to future users. As defined in Section 11-36-304, the impact fee facilities plan should only include "the proportionate share of the costs of public facilities [that] are reasonably related to the new development activity."

Included in the tables is a breakdown of capacity associated with growth through the next 10 years, growth in the next 10 years attributed to pass-through traffic, and for growth beyond 10 years. Some new roadways proposed in the impact fee facility plan will include capacity for growth beyond the 10-year planning window. To most accurately evaluate the cost of providing service for growth during the next ten years, added consideration has been given to evaluating how much of each roadway will be used in the next 10 years.

For some projects, the division of costs between existing and future users is easy because 100 percent of the project costs can be attributed to one category or the other (e.g. infrastructure needed solely to serve new development can be 100 percent attributed to new growth). However, some projects will benefit both future and existing users. This includes expansion of an existing road or locations where no road currently exists, but a new facility is being added that provides a more convenient route for existing traffic. In this type of situation, costs have been divided between the two categories based on the ratio of traffic associated with each type of user. For example, if the volume of traffic on a proposed road associated with existing traffic will be 4000 trips but the ultimate capacity of the roadway needs to accommodate 10,000 trips to meet future growth, 40 percent of the costs of the project have been assigned to existing users with 60 percent assigned to future growth.

BASIS OF CONSTRUCTION COST ESTIMATES

The estimated cost of construction for projects to be completed within ten years is based on recent cost estimates for similar transportation construction and roadway improvement projects. Each project has been evaluated based on total asphalt width, ROW purchase (where required), and construction of additional facilities. All costs are given in 2015 dollars.

Table 6-4
Summary of Lehi City Transportation Project Costs Allocated to Projected Development, 10-year Planning

Project No.	Project Name	Percent to Existing	Percent to 10-year Growth	Percent to 10-year Growth in Pass Thru	Percent to Growth Beyond 10 Years	Cost to Existing	Cost to 10-year Growth	Cost to 10-year Growth in Pass Thru	Cost to Growth Beyond 10 Years	Total Project Costs
4	Triumph Blvd	0.0%	32.2%	0.6%	67.1%	$0	$727,017	$14,458	$1,515,125	$2,256,600
5	Triumph Blvd	0.0%	31.0%	0.6%	68.3%	$0	$416,073	$8,588	$915,554	$1,340,214
6	700 South	0.0%	74.7%	0.3%	25.0%	$0	$129,127	$462	$43,196	$172,786
7	700 South	0.0%	74.7%	0.3%	25.0%	$0	$93,980	$336	$31,439	$125,755
8	3600 West	7.9%	45.4%	3.4%	43.3%	$254,556	$1,472,070	$110,964	$1,403,638	$3,241,228
9	2600 North	9.3%	90.7%	0.0%	0.0%	$140,504	$1,364,018	$21	$0	$1,504,543
10	1500 North	6.5%	58.9%	9.5%	25.1%	$65,689	$595,544	$96,243	$254,455	$1,011,931
11	1200 West	22.7%	30.9%	1.2%	45.2%	$46,648	$63,457	$2,485	$92,989	$205,579
12	1200 West	17.2%	29.0%	1.1%	52.7%	$20,427	$34,325	$1,313	$62,366	$118,431
13	1200 West	17.2%	29.0%	1.1%	52.7%	$21,840	$36,700	$1,403	$66,681	$126,625
14	3200 North	0.0%	58.3%	0.0%	41.7%	$0	$560,827	$38	$400,618	$961,483
15	Traverse Mtn Blvd	0.0%	17.8%	0.0%	82.2%	$0	$119,844	$0	$552,141	$671,985
16	Center St	0.0%	29.7%	0.0%	70.3%	$0	$326,698	$2	$773,300	$1,100,000
17	Center St	0.0%	29.7%	0.0%	70.3%	$0	$29,937	$0	$70,862	$100,800
18	Traffic Signals	10.5%	34.7%	1.4%	53.4%	$105,379	$346,750	$14,140	$533,730	$1,000,000
19	Road Widening	0.0%	16.5%	0.7%	82.8%	$0	$206,171	$8,880	$1,034,949	$1,250,000
20	2300 West	11.6%	23.0%	1.8%	68.3%	$34,970	$69,480	$5,388	$192,215	$302,052
21	2300 West	11.0%	23.7%	1.6%	63.6%	$32,617	$70,076	$4,783	$188,081	$295,557
22	700 South	0.0%	47.2%	27.8%	25.0%	$0	$70,974	$41,778	$37,584	$150,336
23	4600 West	0.0%	39.8%	0.0%	60.2%	$0	$66,869	$1	$101,144	$168,014
24	4800 West	0.0%	39.8%	0.0%	60.2%	$0	$74,595	$0	$112,830	$187,426
25	N Frontage Rd	5.3%	49.0%	0.0%	45.7%	$64,591	$599,699	$35	$559,179	$1,223,504
26	Flight Park Rd	0.0%	17.8%	0.0%	82.2%	$0	$240,799	$0	$1,109,397	$1,350,196
27	N Frontage Rd	7.4%	33.2%	0.4%	58.9%	$66,268	$296,370	$3,777	$525,258	$891,674
TOTAL COSTS						**$853,489**	**$8,011,401**	**$315,096**	**$10,576,732**	**$19,756,719**

SECTION 7
ADDITIONAL CONSIDERATIONS

MANNER OF FINANCING (11-36A-302.2)

The City may fund the infrastructure identified in this IFFP through a combination of different revenue sources.

Federal and State Grants and Donations

Impact fees cannot reimburse costs funded or expected to be funded through federal grants and other funds that the City has received for capital improvements without an obligation to repay. Grants and donations are not currently contemplated in this analysis. If grants become available for constructing facilities, impact fees will need to be recalculated and an appropriate credit given. Any existing infrastructure funded through past grants will be removed from the system value during the impact fee analysis.

Bonds

None of the costs contained in this IFFP include the cost of bonding. The cost of bonding required to finance impact fee eligible improvements identified in the IFPP may be added to the calculation of the impact fee. This will be considered in the impact fee analysis.

Interfund Loans

Because infrastructure must generally be built ahead of growth, often projects must be funded ahead of expected impact fee revenues. In some cases, the solution to this issue will be bonding. In others, funds from existing user rate revenue will be loaned to the impact fee fund to complete initial construction of the project and will be reimbursed later as impact fees are received. Consideration of potential interfund loans will be included in the impact fee analysis and should be considered in subsequent accounting of impact fee expenditures.

Impact Fees

It is recommended that impact fees be used to fund growth-related capital projects as they help to maintain the proposed level of service and prevent existing users from subsidizing the capital needs for new growth. Based on this IFFP, an impact fee analysis will be able to calculate a fair and legal fee that new growth should pay to fund the portion of the existing and new facilities that will benefit new development.

Developer Dedications and Exactions

Developer exactions are not the same as grants. Developer exactions may be considered in the inventory of current and future transportation infrastructure. If a developer constructs a facility or dedicates land within the development that is identified as a system level improvement in this IFFP, the value of the dedication is credited against that particular developer's impact fee liability.

If the value of the dedication/exaction is less than the development's impact fee liability, the developer will owe the balance of the liability to the City. If the value of the improvements dedicated is worth more than the development's impact fee liability, the City must reimburse the difference to the developer from impact fee revenues collected from other developments.

It should be emphasized that the concept of impact fee credits pertains to system level improvements only. For project level improvement (i.e. projects not identified in the impact fee facility plan), developers will be responsible for the construction of the improvements without credit against the impact fee.

No developer dedications are expected for infrastructure associated with this plan.

NECESSITY OF IMPROVEMENTS TO MAINTAIN LEVEL OF SERVICE (11-36A-302.3)

According to State statute, impact fees cannot be used to correct deficiencies in the system and must be necessary to maintain the proposed level of service established for all users. Only those projects or portions of projects that are required to maintain the proposed level of service for future growth have been included in this IFFP. This will result in an equitable fee as future users will not be expected to fund any portion of the projects that will benefit existing residents.

SCHOOL RELATED INFRASTRUCTURE (11-36A-302.2)

As part of the noticing and data collection process for this plan, information was gathered regarding future school district and charter school development. Where the City is aware of the planned location of a school, required public facilities to serve the school have been included in the impact fee analysis.

NOTICING AND ADOPTION REQUIREMENTS (11-36A-502)

The Impact Fees Act requires that entities must publish a notice of intent to prepare or modify any IFFP. If an entity prepares an independent IFFP rather than include a capital facilities element in the general plan, the actual IFFP must be adopted by enactment. Before the IFFP can be adopted, a reasonable notice of the public hearing must be published in a local newspaper at least 10 days before the actual hearing. A copy of the proposed IFFP must be made available in each public library within the City during the 10-day noticing period for public review and inspection. Utah Code requires that the City must post a copy of the ordinance in at least three places. These places may include the City offices and the public libraries within the City's jurisdiction. Following the 10-day noticing period, a public hearing will be held, after which the City may adopt, amend and adopt, or reject the proposed IFFP.

SECTION 8
IMPACT FEE CERTIFICATION (11-36A-306.1)

This report has been prepared in accordance with Utah Code Title 11 Chapter 36a (the "Impact Fees Act"), which prescribes the laws pertaining to Utah municipal capital facilities plans and impact fee analyses. The accuracy of this report relies upon the planning, engineering, and other source data, which was provided by the City and their designees.

In accordance with Utah Code Annotated, 11-36a-306(1), Bowen Collins & Associates, makes the following certification:

I certify that this impact fee facility plan:

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

Dated: September 10, 2015

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