

# TRANSPORTATION IMPACT FEE ANALYSIS (IFA)

DECEMBER 2015

SUBMITTED BY:  
LEWIS YOUNG ROBERTSON & BURNINGHAM, INC.



  
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# TABLE OF CONTENTS

<b>IMPACT FEE CERTIFICATION .....</b>	<b>3</b>
<b>SECTION I: EXECUTIVE SUMMARY.....</b>	<b>4</b>
<b>SECTION II: GENERAL IMPACT FEE METHODOLOGY.....</b>	<b>5</b>
<b>SECTION III: OVERVIEW OF SERVICE AREA, DEMAND AND LEVEL OF SERVICE .....</b>	<b>6</b>
SERVICE AREA .....	6
DEMAND UNITS.....	7
LEVEL OF SERVICE.....	7
<b>SECTION IV: EXISTING FACILITIES INVENTORY .....</b>	<b>8</b>
EXCESS CAPACITY & BUY-IN.....	8
<b>SECTION V: CAPITAL FACILITY ANALYSIS .....</b>	<b>9</b>
FUTURE CAPITAL PROJECTS.....	9
SYSTEM VS. PROJECT IMPROVEMENTS .....	10
FUNDING OF FUTURE FACILITIES .....	10
PROPOSED CREDITS OWED TO DEVELOPMENT .....	10
EQUITY OF IMPACT FEES .....	10
NECESSITY OF IMPACT FEES.....	10
<b>SECTION VI: TRANSPORTATION IMPACT FEE CALCULATION .....</b>	<b>11</b>
PROPOSED TRANSPORTATION IMPACT FEE.....	11
CONSIDERATION OF ALL REVENUE SOURCES .....	11
EXPENDITURE OF IMPACT FEES.....	11
GROWTH-DRIVEN EXTRAORDINARY COSTS.....	11
SUMMARY OF TIME PRICE DIFFERENTIAL .....	11

NOTICE  
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## IMPACT FEE CERTIFICATION

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Lewis Young Robertson & Burningham, Inc. certifies that the Impact Fee Analysis ("IFA") prepared for transportation services:

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

**Lewis Young Robertson & Burningham, Inc. makes this certification with the following caveats:**

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

LEWIS YOUNG ROBERTSON & BURNINGHAM, INC.

## SECTION I: EXECUTIVE SUMMARY

The purpose of the Transportation Impact Fee Analysis (“IFA”) is to fulfill the requirements established in Utah Code Title 11 Chapter 36a, the “Impact Fee Act,” and help West Point City (the “City”) plan necessary capital improvements for future growth. This document will determine the appropriate impact fee the City may charge to new growth to maintain the level of service (“LOS”) for the transportation system. The **West Point Transportation Master Plan 2015** fulfills the requirements in the Impact Fee Act related to the completion of an impact fee facilities plan (the “IFFP”) and is referred to in this document as the IFFP. This document, along with information from the City, provides the information utilized in the analysis for the purposes of calculating impact fees.

- ☞ **Impact Fee Service Areas:** The impact fees related to transportation will be assessed within the proposed service area, which incorporates the entire municipal boundaries.
- ☞ **Demand Analysis:** The demand unit utilized in this analysis are trips on existing and proposed roadways. As residential and commercial growth occurs within the City, it generates new trips on existing and proposed roadways. The capital improvements identified in this study are designed to maintain the current level of service for new growth.
- ☞ **Level of Service:** Level of Service (LOS) assesses the level of congestion on a roadway segment or intersection. LOS is measured using a letter grade A through F, where A represents free flowing traffic with absolutely no congestion and F represents grid lock. West Point City has adopted an acceptable standard of LOS C for its street network and intersections.
- ☞ **Excess Capacity:** It is anticipated that new development will benefit from the existing roadways that have been constructed within the service area. Approximately 25 percent of the total demand on the system will occur within the IFFP planning horizon. As a result, **\$706,847** of the total original system cost is included in this analysis, based on the original cost of system improvements as identified in the City’s financial records.
- ☞ **Capital Facilities Analysis:** The IFFP has identified the growth related projects needed within the next ten years. The total cost related to growth is **\$2,950,509**, based on construction timing and inflation of three percent annually.
- ☞ **Financing of Future Facilities:** The future capital projects which are intended to serve new growth will be financed using inter-fund loans or the issuance of bonds. Thus, costs associated with future debt are included in the Impact Fee Analysis.

### PROPORTIONATE SHARE ANALYSIS

The proportionate share analysis determines the proportionate cost assignable to new development based on the proposed capital projects and the new growth served by the proposed projects. The impact fee per trip is calculated below.

TABLE 1.1: PROPORTIONATE SHARE ANALYSIS

TRANSPORTATION CAPITAL PROJECTS	GROWTH RELATED COSTS	FUTURE TRIPS	COST PER TRIP
Future Roadway Projects	\$2,950,509	25,460	\$115.89
Interest Expense	\$1,075,398	25,460	\$42.24
Excess Capacity of Existing Roads	\$706,847	25,460	\$27.76
Professional Expenses	\$7,500	25,460	\$0.29
Impact Fee Fund Balance	(\$671,638)	25,460	(\$26.38)
<b>Net Impact Fee Cost per Trip</b>	<b>\$4,068,617</b>		<b>\$159.80</b>

### IMPACT FEE SUMMARY BY LAND USE TYPE

The impact fee by land use type is illustrated in Table 1.2.

TABLE 1.2: IMPACT FEE SUMMARY BY LAND USE TYPE

	ASSESSMENT	ADJUSTED TRIPS	ESTIMATED FEE
Residential Single-Family	per Unit	9.57	\$1,529
Residential Multi-Family	per Unit	6.65	\$1,063
Professional Office	per 1,000 sf	11.01	\$1,759
Commercial	per 1,000 sf	28.34	\$4,529
Manufacturing/Industrial	per 1,000 sf	6.97	\$1,114

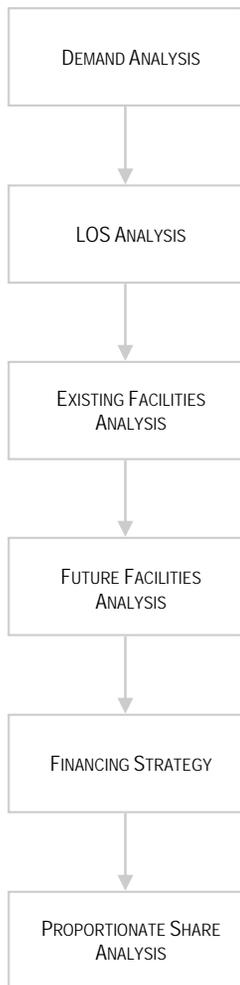
### NON-STANDARD IMPACT FEES

The City reserves the right under the Impact Fees Act<sup>1</sup> to assess an adjusted fee that more closely matches the true impact that a specific land use will have upon the City’s transportation system. This adjustment could result in a different impact fee by land use if evidence suggests a particular user will create a different impact than what is standard for its category.

<sup>1</sup> 11-36a-402(1)(c)

## SECTION II: GENERAL IMPACT FEE METHODOLOGY

FIGURE 2.1: IMPACT FEE METHODOLOGY



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

### DEMAND ANALYSIS

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

### LEVEL OF SERVICE ANALYSIS

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

### EXISTING FACILITY INVENTORY

In order to quantify the demands placed upon existing public facilities by new development activity, to the extent possible, the Impact Fee Facilities Plan provides an inventory of the existing **system** facilities. The inventory valuation should include the original construction cost and estimated useful life of each facility. The inventory of existing facilities is important to properly determine the excess capacity of existing facilities and the utilization of excess capacity by new development.

### FUTURE CAPITAL FACILITIES ANALYSIS

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

### FINANCING STRATEGY

This analysis must also include a consideration of all revenue sources, including impact fees, future debt costs, alternative funding sources, and the dedication of system improvements, which may be used to finance system improvements.<sup>2</sup> In conjunction with this revenue analysis, there must be a determination that impact fees are necessary to achieve an equitable allocation of the costs of the new facilities between the new and existing users.<sup>3</sup>

### PROPORTIONATE SHARE ANALYSIS

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

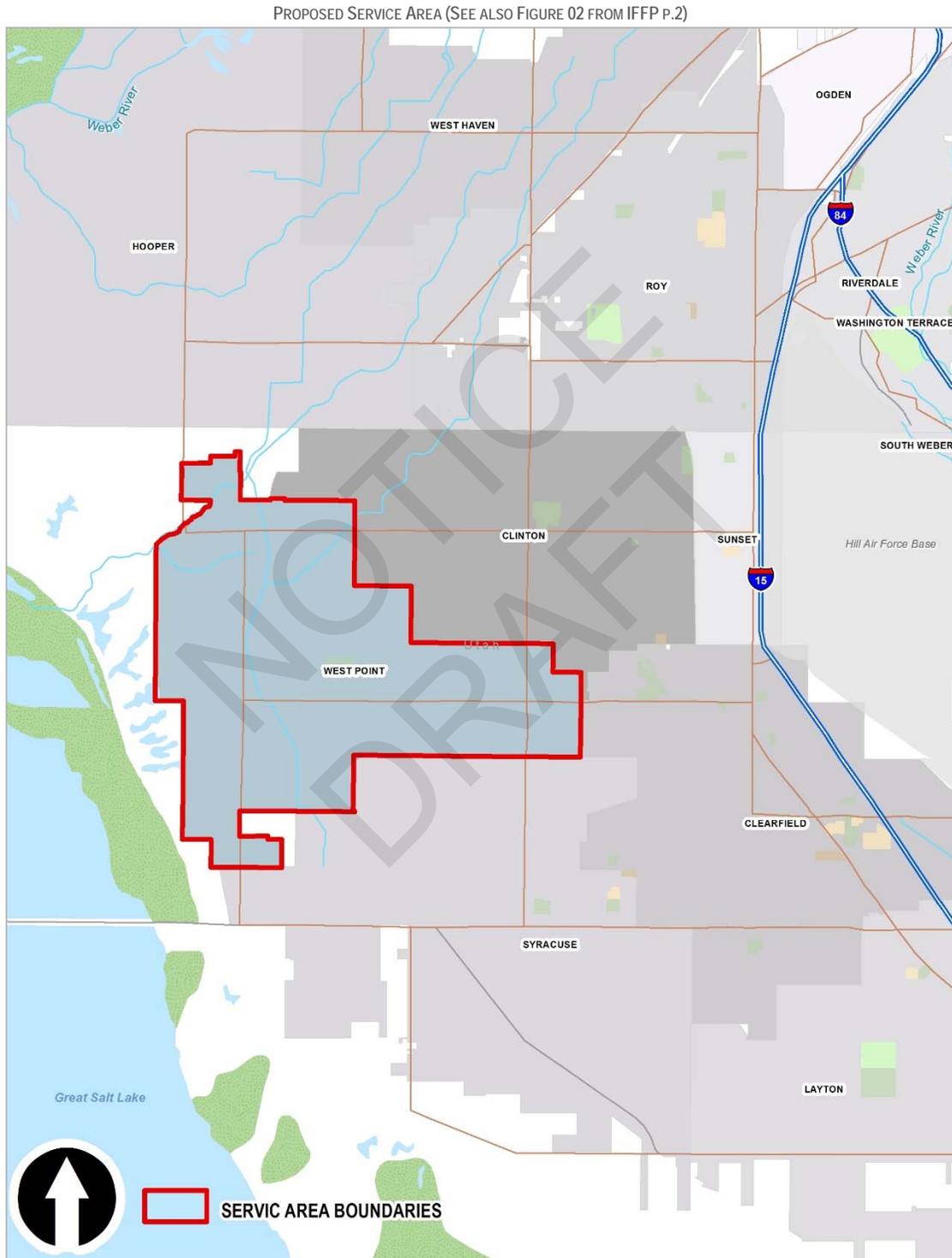
<sup>2</sup> 11-36a-302(2)

<sup>3</sup> 11-36a-302(3)

## SECTION III: OVERVIEW OF SERVICE AREA, DEMAND AND LEVEL OF SERVICE

### SERVICE AREA

Figure 02 of the IFFP illustrates the proposed impact fee service area, which incorporates the entire municipal boundaries. A detailed service area map has also been provided below. The impact fees related to transportation will be assessed within the proposed service area.



## DEMAND UNITS

The demand units utilized in this analysis are based on undeveloped residential and commercial land and the new trips generated from these land-use types. As residential and commercial growth occurs within the City, additional trips will be generated on the City's roadways. The transportation capital improvements identified in this study are based on maintaining the current level of service as defined by the City. The proposed impact fees are based upon the projected growth in demand units which are used as a means to quantify the impact that future users will have upon the City's system. The demand unit used in the calculation of the transportation impact fee is based upon each land use category's impact and road usage characteristics expressed in the number of trips generated. The existing and future trip statistics used in this analysis were prepared by the City and their engineers based on existing modeling software.

To determine the proportionate impact from each land use type, the existing trips are allocated to the different land use types based on trip statistics as presented in the Institute of Traffic Engineers (ITE) Trip Generation Manual, 8<sup>th</sup> Edition. The most common method of determining growth is measuring the number of trips within a community based on existing and future land uses. Appropriate adjustment factors are applied to remove pass-by traffic. Based on the growth in trips, the City will need to expand its current facilities to accommodate new growth. Growth of new development will create an additional 25,460 trips by 2025, as show in TABLE 3.1.

TABLE 3.1: TRIP PROJECTIONS

YEAR	PM PEAK	NEW PM PEAK TRIPS	TOTAL	NEW TRIPS
Existing	4,440	-	44,371	-
2025	6,979	2,540	69,831	25,460
Buildout	10,116	5,676	101,467	57,096

Source: Horrocks Engineers

TABLE 3.2: TRIP STATISTICS BY LAND USE TYPE

	ITE CLASSIFICATION	UNITS	WEEKDAY	PASS-BY ADJUSTMENT	DAILY TRIPS
<b>Residential</b>					
Single Family Homes	210	Dwelling Unit	9.57		9.57
Multi-Family	220	Dwelling Unit	6.65		6.65
<b>Non Residential</b>					
General Office	710	1,000 Square Feet	11.01		11.01
General Commercial/Shopping Center	820	1,000 Square Feet	42.94	34%	28.34
General Light Industrial	110	1,000 Square Feet	6.97		6.97

## LEVEL OF SERVICE

Level of Service (LOS) assesses the level of congestion on a roadway segment or intersection. LOS is measured using a letter grade A through F, where A represents free flowing traffic with absolutely no congestion and F represents grid lock. West Point City has adopted an acceptable standard of LOS C for its street network and intersections.<sup>4</sup>

<sup>4</sup> See West Point Transportation Master Plan 2015 p.8

## SECTION IV: EXISTING FACILITIES INVENTORY

### EXCESS CAPACITY & BUY-IN

Transportation impact fees are justified when trips are added to system-wide roadways that are at or nearing capacity or when new system-wide roadways are needed to meet the demands of growth. A buy-in component is contemplated for the roadways that have sufficient capacity to handle new growth while maintaining safe and acceptable levels of service.

#### EXISTING TRANSPORTATION SYSTEM BUY-IN

The determination of a buy-in component related to existing roadways is based on proportionate trips generated within the IFFP planning horizon. According to City records, the transportation system is valued at \$12.3 million. However, approximately \$9.5 million is related to project improvements and is therefore removed from the analysis. The remaining value of \$2.8 million is used to determine the appropriate buy-in fee. It is anticipated that new development will benefit from the existing roadways that have been constructed within the service area. Approximately 25 percent of the total demand on the system will occur within the IFFP planning horizon. As a result, \$706,847 of the total original system cost is included in this analysis, based on the original cost of system improvements as identified in the City's financial records.

TABLE: 4.1: ALLOCATION OF BUY-IN COMPONENT

	PROPORTIONAL TRIPS	PERCENT OF TOTAL	ALLOCATION OF ORIGINAL VALUE
Existing Trips	44,371	44%	\$1,231,874
IFFP Demand	25,460	25%	\$706,847
Buildout Trips	101,467	100%	\$2,817,033

Source: West Point City Financial Statements, LYRB

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## SECTION V: CAPITAL FACILITY ANALYSIS

The IFFP has identified the growth related projects needed within the next ten years. Capital projects related to curing existing deficiencies were not included in the calculation of the impact fees. Total future projects applicable to new development are shown below.

### FUTURE CAPITAL PROJECTS

Table 5.1 illustrates the estimated cost of future capital improvements within the Service Area, as identified in the IFFP. The total cost related to growth is **\$2,950,509**, based on construction timing and inflation of three percent annually.

TABLE 5.1: SUMMARY OF FUTURE SYSTEM IMPROVEMENTS WITHIN IFFP PLANNING HORIZON

#	YEAR	LOCATION	TOTAL PRICE	CONST. YEAR PRICE	FUNDING SOURCE	WEST POINT CITY %	WEST POINT CITY TOTAL	% TO GROWTH	COST TO 10-YEAR GROWTH
12	2015	Cold Springs Rd (200 S to 300 N)	\$1,632,000	\$1,632,000	West Point	9%	\$146,880	35%	\$51,408
13	2015	Cold Springs Rd (700 S to 200 S)	\$1,637,000	\$1,637,000	West Point	9%	\$147,330	29%	\$42,726
14	2015	200 South (Cold Springs Rd to 4500 W)	\$1,965,000	\$1,965,000	West Point	100%	\$1,965,000	30%	\$589,500
19	2016	520 North: Between 3830 West & West View Park Drive	\$861,000	\$886,830	West Point	100%	\$886,830	0%	\$0
20	2016	Roundabout: 3000 West & 1300 North	\$340,000	\$350,200	West Point/WFRC	10%	\$35,020	100%	\$35,020
21	2016	3000 West: 1300 North to 1050 North	\$948,000	\$976,440	West Point/WFRC	10%	\$97,850	61%	\$59,689
22	2017	3000 West: 1050 North to 550 North	\$1,456,000	\$1,544,670	West Point/WFRC	10%	\$154,891	18%	\$27,880
23	2018	3000 West: 550 North to 300 North	\$896,000	\$979,083	West Point/WFRC	10%	\$98,345	58%	\$57,040
24	2019	3000 West Restriping: 300 North to 200 South	\$4,000	\$4,502	West Point	100%	\$4,502	58%	\$2,611
27	2020	300 North: 3000 West to 2000 West	\$5,590,000	\$6,480,342	West Point	100%	\$6,480,342	27%	\$1,749,692
28	2020	300 North: 2000 West to 1500 West	\$2,787,000	\$3,230,897	West Point/WFRC	8%	\$258,518	23%	\$59,459
29	2016	Roundabout: 3000 West & 800 North	\$340,000	\$350,200	West Point/WFRC	10%	\$35,020	100%	\$35,020
30	2017	Roundabout: 3000 West & 550 North	\$340,000	\$360,706	West Point/WFRC	10%	\$36,071	100%	\$36,071
31	2022	2550 West: 300 North to 200 South	\$1,598,000	\$1,965,338	West Point	9%	\$180,791	57%	\$103,051
32	2023	100 North: 2550 West to 2000 West	\$1,734,000	\$2,196,579	West Point	9%	\$202,683	50%	\$101,342
<b>Total</b>			<b>\$22,128,000</b>	<b>\$24,559,789</b>			<b>\$10,730,074</b>		<b>\$2,950,509</b>

Source: West Pt. Master Plan 2015, pg 42-43, Table 9-13, Horrocks Engineers; LYRB

## SYSTEM VS. PROJECT IMPROVEMENTS

System improvements are defined as existing and future public facilities designed to provide services to service areas within the community at large.<sup>5</sup> Project improvements are improvements and facilities that are planned and designed to provide service for a specific development (resulting from a development activity) and considered necessary for the use and convenience of the occupants or users of that development.<sup>6</sup> To the extent possible, this analysis only includes the costs of system improvements related to new growth within the proportionate share analysis.

## FUNDING OF FUTURE FACILITIES

The IFFP must also include a consideration of all revenue sources, including impact fees and the dedication of system improvements, which may be used to finance system improvements.<sup>7</sup> In conjunction with this revenue analysis, there must be a determination that impact fees are necessary to achieve an equitable allocation of the costs of the new facilities between the new and existing users.<sup>8</sup>

In considering the funding of future facilities, the IFFP has identified the portion of each project that is intended to be funded by the City, as well as funding sources from other government agencies. The cost applied to the City includes growth and non-growth related projects. The capital projects that will be constructed to cure the existing system deficiencies will be funded through general fund revenues. All other capital projects within the next six years which are intended to serve new growth will be funded through impact fees or on a pay-as-you-go approach. Where these revenues are not sufficient, the City may need to issue bonds or issue inter-fund loans to construct the proposed projects. As a result, **the costs associated with future debt are included in the Impact Fee Analysis.**

Other revenues such as grants can be used to fund these types of expenditures. The impact fees should be adjusted if grant monies are received. New development may be entitled to a reimbursement for any grants or donations received by the City for growth related projects or for developer funded IFFP projects. It is anticipated that future project improvements will be funded by the developer. These costs have been excluded from the calculation of the impact fee.

## PROPOSED CREDITS OWED TO DEVELOPMENT

The Impact Fees Act requires a local political subdivision or private entity to ensure that the impact fee enactment allows a developer, including a school district or a charter school, to receive a credit against or proportionate reimbursement of an impact fee if the developer: (a) dedicates land for a system improvement; (b) builds and dedicates some or all of a system improvement; or (c) dedicates a public facility that the local political subdivision or private entity and the developer agree will reduce the need for a system improvement.<sup>9</sup>

The facilities must be considered system improvements or be dedicated to the public, and offset the need for an improvement identified in the IFFP.

## EQUITY OF IMPACT FEES

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

## NECESSITY OF IMPACT FEES

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

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<sup>5</sup> 11-36a-102(21)

<sup>6</sup> 11-36a-102(14)

<sup>7</sup> 11-36a-302(2)

<sup>8</sup> 11-36a-302(3)

<sup>9</sup> 11-36a-402(2)

## SECTION VI: TRANSPORTATION IMPACT FEE CALCULATION

The transportation impact fees proposed in this analysis will be assessed to the Service Area as defined in **Section III**. The impact fee calculations include the costs of constructing future transportation improvements (including an annual inflation rate for projects constructed after 2015).

### PROPOSED TRANSPORTATION IMPACT FEE

The proportionate share analysis determines the proportionate cost assignable to new development based on the proposed capital projects and the new growth served by the proposed projects. The impact fee per trip is calculated below.

TABLE 6.1: PROPORTIONATE SHARE ANALYSIS

TRANSPORTATION CAPITAL PROJECTS	GROWTH RELATED COSTS	FUTURE TRIPS	COST PER TRIP
Future Roadway Projects	\$2,950,509	25,460	\$115.89
Interest Expense	\$1,075,398	25,460	\$42.24
Excess Capacity of Existing Roads	\$706,847	25,460	\$27.76
Professional Expenses	\$7,500	25,460	\$0.29
Impact Fee Fund Balance	(\$671,638)	25,460	(\$26.38)
<b>Net Impact Fee Cost per Trip</b>	<b>\$4,068,617</b>		<b>\$159.80</b>

### IMPACT FEE SUMMARY BY LAND USE TYPE

The impact fee by land use type is, is illustrated in **Table 6.2**.

TABLE 6.2: IMPACT FEE SUMMARY BY LAND USE TYPE

		ADJUSTED TRIPS	ESTIMATED FEE
Residential Single-Family	per Unit	9.57	\$1,529
Residential Multi-Family	per Unit	6.65	\$1,063
Professional Office	per 1,000 sf	11.01	\$1,759
Commercial	per 1,000 sf	28.34	\$4,529
Manufacturing/Industrial	per 1,000 sf	6.97	\$1,114

### NON-STANDARD IMPACT FEES

The City reserves the right under the Impact Fees Act<sup>10</sup> to assess an adjusted fee that more closely matches the true impact that a specific land use will have upon the City's transportation system. This adjustment could result in a different impact fee if evidence suggests a particular user will create a different impact than what is standard for its category.

### CONSIDERATION OF ALL REVENUE SOURCES

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

### EXPENDITURE OF IMPACT FEES

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

### GROWTH-DRIVEN EXTRAORDINARY COSTS

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

### SUMMARY OF TIME PRICE DIFFERENTIAL

The Impact Fees Act allows for the inclusion of a time price differential to ensure that the future value of costs incurred at a later date are accurately calculated to include the costs of construction inflation. A three percent annual construction inflation adjustment is applied to the proposed capital improvements identified in this analysis. The impact fee analysis should be updated regularly to account for changes in costs estimates over time.

<sup>10</sup> 11-36a-402(1)(c)