

ZIONS

HIGHLAND, UTAH

NOTICING DRAFT

**TRANSPORTATION IMPACT FEE
ANALYSIS**

PREPARED BY

ZIONS BANK PUBLIC FINANCE

APRIL 9, 2015



TABLE OF CONTENTS

| | |
|--|----|
| Table of Contents | 2 |
| Executive Summary | 3 |
| Recommended Transportation Impact Fees..... | 3 |
| Canal Boulevard Project | 5 |
| Chapter 1: Overview of the Transportation Impact Fees..... | 6 |
| Why Assess an Impact Fee? | 6 |
| Costs Included in the Impact Fee | 6 |
| Costs Not Included in the Impact Fee | 6 |
| How Are the Impact Fees Calculated? | 7 |
| Description of the Service Area..... | 7 |
| Cost per Trip End..... | 7 |
| Project Costs and Financing | 7 |
| Chapter 2: Impact From Growth Upon the City’s Facilities and Level of Service..... | 8 |
| Future Demand within the Service Area..... | 8 |
| Level of Service Analysis..... | 8 |
| Pass Through Traffic | 9 |
| Pass By Traffic | 9 |
| Chapter 3: Future and Historic Capital Projects Costs | 10 |
| Existing Capacities Available for Growth | 10 |
| Future Project Capacities Available for Growth..... | 11 |
| Impact Fee Analysis Updates | 11 |
| Bond Debt Service..... | 11 |
| Grant Funds..... | 12 |
| Chapter 4: Proportionate Share Analysis | 13 |
| Maximum Legal Transportation Impact Fees per Trip..... | 14 |
| Determination of Transportation Impact Fee | 14 |
| Non-Standard Demand Adjustments..... | 15 |
| Appendices: Certification, Service Area Map, Impact Fee Calculations | 17 |



EXECUTIVE SUMMARY

Highland City, Utah (the City) recently commissioned InterPlan to prepare the *Highland City Transportation Impact Fee Facilities Plan* (IFFP) dated April 2015. The City has also retained Zions Public Finance, Inc. (Zions) to calculate the City’s transportation impact fees in accordance with the IFFP and Utah State Law. An impact fee is a one-time charge to new development to reimburse the City for the cost of developing roadway infrastructure that will serve future development. The impact fee will be assessed to a single, city-wide service area (Service Area). Traffic from areas outside of the City, referred to as pass through traffic, is considered non-impact fee qualifying demand.

Much of Highland City’s roadways have been built by Utah County, However, the City did contribute engineering and planning to the projects expending approximately \$8,278,410 overall to construct City roadway facilities however only \$234,903 of the total investment is impact fee qualifying. The majority of existing roadways have significant capacity to serve new growth for the next ten years or beyond but the City will need to build another \$11,814,235 (FV) of new or expansionary roadway projects in the next ten years. The City has no debt outstanding related to the construction of roadways but anticipates issuing debt in approximately 2020 to help fund future improvements. The total impact fee qualifying cost of ten year improvements is estimated to be \$7,687,236, or about 65% of the anticipated cost of qualifying improvements.

FIGURE ES.1: COST PER TRIP CALCULATION

| Component | Total Cost | % That will Serve Ten Year Demand | Dollar Amount that will Serve Ten Year Demand | Ten Year Demand (Trips) | Cost per Trip End |
|---|----------------------|-----------------------------------|---|-------------------------|-------------------|
| Roadway Impact Fee | | | | | |
| Future 10 Year Capital Projects | \$ 11,814,235 | 65.07% | \$ 7,687,236 | 17,008 | \$ 452 |
| Future Growth Related Debt to be Issued - Interest Only | 3,172,689 | 65.07% | 2,064,392 | 17,008 | 121 |
| Existing Infrastructure | 8,278,410 | 2.84% | 234,903 | 17,008 | 14 |
| Existing Roads Related Debt - INTEREST ONLY | - | 0.00% | - | 17,008 | - |
| Roadway Impact Fee Subtotal | \$ 23,265,334 | | \$ 9,986,531 | | \$ 587.16 |
| Professional Services / Credits | | | | | |
| Unspent Impact Fee Funds | - | 0.00% | \$ - | 17,008 | \$ - |
| Professional Services / Credits | 40,000 | 100% | 40,000 | 17,008 | 2 |
| Professional Services / Credits Subtotal | 40,000 | | 40,000 | | \$ 2 |
| Total Impact Fee Per Trip | \$ 23,305,334 | | \$ 10,026,531 | | \$ 589.51 |

Recommended Transportation Impact Fees

As shown in Figure ES.1, the cost per trip has been calculated as \$589.51. Demand equivalencies have been determined for residential and non-residential demand based on the International Transportation Engineers (ITE) Trip Generation manuals. Figure ES.2 shows the maximum transportation impact fee for various types of residential and non-residential development.



FIGURE ES.2: MAXIMUM TRANSPORTATION IMPACT FEE SCHEDULE

| Land Use | Code | Unit | ITE Trip Generation Rate | Daily Trip Rate (1/2 ITE Rate) | Primary Trips | Daily REU | Total Transportation Impact Fee (Per Unit) |
|---------------------------------------|------|---------------|--------------------------|--------------------------------|---------------|-----------|--|
| Residential | | | | | | | |
| Single-Family | 210 | Dwelling Unit | 9.55 | 4.78 | 100% | 1.0 | \$ 2,815 |
| Attached 6-8 Units per Acre | 230 | Dwelling Unit | 5.81 | 2.91 | 100% | 0.6 | 1,713 |
| Multi-Family >8 Units | 220 | Dwelling Unit | 6.65 | 3.33 | 100% | 0.7 | 1,960 |
| Retail / Commercial | | | | | | | |
| General Retail Small (<90,000 sq ft) | 820 | 1000 sq | 111.14 | 55.57 | 43% | 5.0 | \$ 14,086 |
| General Retail Large (>90,000 sq ft) | 820 | 1000 sq | 46.7 | 23.35 | 43% | 2.1 | 5,919 |
| Convenience Store w/ Gas Pumps | 853 | 1000 sq | 845.6 | 422.80 | 16% | 14.2 | 39,879 |
| Drive-In Bank | 912 | 1000 sq | 148.15 | 74.08 | 27% | 4.2 | 11,790 |
| Fast Food Restaurant w/ Drive-Thru | 934 | 1000 sq | 496.12 | 248.06 | 30% | 15.6 | 43,870 |
| Sit-Down Restaurant | 932 | 1000 sq | 127.15 | 63.58 | 37% | 4.9 | 13,867 |
| Multiplex Movie Theater | 445 | 1000 sq | 63.0935 | 31.55 | 75% | 5.0 | 13,948 |
| Hotel / Motel | 603 | Rooms | 8.17 | 4.09 | 100% | 0.9 | 2,408 |
| Office / Institutional | | | | | | | |
| General Office | 710 | 1000 sq | 11.03 | 5.52 | 100% | 1.2 | \$ 3,251 |
| Medical Office | 720 | 1000 sq | 36.13 | 18.07 | 100% | 3.8 | 10,649 |
| Hospital | 610 | 1000 sq | 13.22 | 6.61 | 100% | 1.4 | 3,897 |
| Nursing Home | 620 | 1000 sq | 7.6 | 3.80 | 100% | 0.8 | 2,240 |
| Assisted Living | 254 | Occupied Bed | 2.74 | 1.37 | 100% | 0.3 | 808 |
| Church / Synagogue | 560 | 1000 sq | 9.11 | 4.56 | 100% | 1.0 | 2,685 |
| Day Care Center | 565 | 1000 sq | 74.06 | 37.03 | 10% | 0.8 | 2,183 |
| Elementary School | 520 | 1000 sq | 15.43 | 7.72 | 50% | 0.8 | 2,274 |
| High School | 530 | 1000 sq | 12.89 | 6.45 | 50% | 0.7 | 1,900 |
| Industrial | | | | | | | |
| General Light Industrial | 110 | 1000 sq | 6.97 | 3.49 | 100% | 0.7 | \$ 2,054 |
| Business Park | 770 | Employees | 4.04 | 2.02 | 100% | 0.4 | 1,191 |
| Warehouse | 150 | 1000 sq | 3.56 | 1.78 | 100% | 0.4 | 1,049 |
| Mini-Warehouse | 151 | 1000 sq | 2.5 | 1.25 | 100% | 0.3 | 737 |

Source: ITE Trip Generation 9th Edition; Note: Pass by trip adjustments are based on ITE sample data where available

Figure ES.3 provides a calculation of the impact fee for a non-standard user that may not fit the schedule found in ES.2. It is at the Council’s discretion if the non-standard calculation will be used. Otherwise the fees shown in ES.3 will be charged.

FIGURE ES.3: CALCULATION OF NON-STANDARD TRANSPORTATION IMPACT FEE

| Steps in Calculating a Non-Standard Fee |
|---|
| Step 1: Determine the expected Average Daily Trips (ADT) for the development |
| Step 2: Determine the percentage of ADT that are primary trips (1- % pass-by traffic) |
| Step 3: Multiple ADT by the Percent Primary Trips by \$589.51 |

The recommended impact fee structure presented in this analysis has been prepared to satisfy the Impact Fees Act, Utah Code Ann. § 11-36-101 et. Seq. (the “Act”), and represents the maximum transportation



impact fees that the City may assess within the Service Area. The City will be required to use other revenue sources to fund projects identified in the IFFP that constitute repair and replacement, cure any existing deficiencies, or maintain the existing level of service of “D” for current users.

Canal Boulevard Project

The funding source of the future projects located on Canal Boulevard is currently undetermined. It is possible, though unlikely, that the City will receive funding from Utah County/UDOT to construct the Canal Blvd improvements. If a project is funded by another entity at no cost to the City then the project is not impact fee eligible but because this project is very expensive, the City cannot afford to reduce the impact fee until the final method of funding is determined.

Until funding is finalized, the portion of the impact fee relating to the Canal Blvd project will be set aside and pro rata shares would be reimbursed to developers if a source other than the City ultimately funds this project. The full recommended impact fee per single family dwelling is \$2,815 including the Canal Blvd project. Without the Canal Blvd project, the impact fee is \$523 per single family dwelling. The difference between the two fees will be deposited into an escrow and refunded to developers if the County funds the Canal Blvd project.



CHAPTER 1: OVERVIEW OF THE TRANSPORTATION IMPACT FEES

Why Assess 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 roadways with capacity that new growth will utilize. 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. An impact fee cannot include any cost related to existing user demand, such as repair and replacement costs.

This analysis provides documentation that there is a fair comparison, or rational nexus, between the impact fee charged to new development and the impact on the capacity of the system. Impact fees are charged to different types of development and the impact fee is scaled according to different levels of demand.

Costs Included in the Impact Fee

The primary roadway facilities considered in this analysis are the acquisition of right of way, construction of roadways, intersection improvements, signaling and other associated costs such as engineering, planning and legal fees. Other roadway improvements not listed may be qualifying if they are required to expand roadway capacity for new growth and are funded by the City.

The impact fees proposed in the Transportation Impact Fee Analysis are calculated based upon the costs of constructing:

- New facilities required to maintain (but not exceed) the proposed level of service of "D" identified in the IFFP; projects to be built within ten years are considered in the final calculations of the impact fee
- Interest costs related to existing and future debt associated with facilities that will serve new development
- Historic costs of existing facilities directly funded by the City or built through reimbursement agreements that will serve new development
- Cost of professional services for engineering, planning, and preparation of the impact fee facilities plan and impact fee analysis

Costs Not Included in the Impact Fee

- Operational and maintenance costs including sealing, overlays, etc.
- Cost of facilities constructed beyond 10 years
- Costs of UDOT or county roads that have not been funded by the City
- Cost of facilities funded by grants or other sources which the City is not required to repay
- Cost of renovating or reconstructing facilities which do not provide new capacity or needed enhancement of services to serve future development
- Project level roadway improvements constructed by developers



How Are the Impact Fees Calculated?

A fair roadway impact fee is calculated by dividing the cost of unused capacity in the existing and future roadway facilities by the number of new trip ends that will benefit from the unused capacity. Only the City's cost of capacity that is needed to serve the projected growth that will occur in the next ten years is included in the fee. The proposed impact fees are comprised of the costs of future and existing capital projects that benefit additional development within the Service Area, interest expense of bonds that have been issued to fund growth-related projects, and professional expenses pertaining to the regular update of the IFFP and Impact Fee Analysis.

Description of the Service Area

The impact fee has been calculated for one service area which is comprised of the incorporated boundaries of Highland City. The impact fees exclude the costs of capacity related to pass-through traffic that originates and ends outside of the City boundaries.

Cost per Trip End

The unit of measurement used for transportation is the cost per trip end. A trip end is a single or one-directional vehicle movement to or from a particular site or development or the end point or destination of a trip. This analysis uses average daily 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 general impact fee methodology divides the available capacity of existing and future capital projects between the number of existing and future trips the projects can serve. The impact fee is then calculated based on a cost per trip end. According to ITE trip generation rates, a single family residential unit generates 9.55 trip ends per day.

Project Costs and Financing

The City plans a number of transportation projects to meet future demand. A portion of the improvements have been allocated to ten year growth and included in the impact fee. It is anticipated that the City will issue debt in 2020 for approximately \$6.7M to fund projects. The funding source of the future projects located on Canal Boulevard is currently undetermined. Until funding is finalized, the portion of the impact fee relating to the Canal Blvd project will be set aside and pro rata shares would be reimbursed to developers if a source other than the City funds this project.



CHAPTER 2: IMPACT FROM GROWTH UPON THE CITY’S FACILITIES AND LEVEL OF SERVICE

Future Demand within the Service Area

Transportation demand within the City will increase as development activity rebounds and homes and businesses are built. Currently the City has 85,264 daily trip ends which are expected to grow by 17,008 to a total of 102,272 daily trip ends by 2024. The trip end calculation is net of the pass by trips that are not generated by Highland City residents. Only the increased demand from new Highland City growth will be included in impact fee calculations.

FIGURE 2.1: PROJECTED GROWTH IN TRIP ENDS

| Year | Population | Annualized Growth | Total Daily Trip Ends | Annualized Growth |
|-----------------|------------|-------------------|-----------------------|-------------------|
| 2015 | 17,355 | | 85,264 | |
| 2016 | 17,617 | 0.15% | 87,153 | 0.22% |
| 2017 | 17,879 | 0.15% | 89,043 | 0.21% |
| 2018 | 18,141 | 0.15% | 90,933 | 0.21% |
| 2019 | 18,403 | 0.14% | 92,823 | 0.21% |
| 2020 | 18,665 | 0.14% | 94,713 | 0.20% |
| 2021 | 18,927 | 0.14% | 96,603 | 0.20% |
| 2022 | 19,189 | 0.14% | 98,492 | 0.19% |
| 2023 | 19,451 | 0.14% | 100,382 | 0.19% |
| 2024 | 19,713 | 0.13% | 102,272 | 0.19% |
| Ten Year Growth | 2,358 | 0.14% | 17,008 | 0.20% |

Source: 2015 Transportation Impact Fee Analysis Prepared by InterPlan

Assumes Total Daily Trip Ends

Level of Service Analysis

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.

Transportation level of service is identified in the IFFP as ranging from LOS “A” (free-flow traffic operations) to LOS “F” (where conditions are such that demand exceeds capacity). According to Highland City policy, all City roads are required to maintain at least a LOS “D”. Impact fees are calculated according to LOS “D”.



Pass Through Traffic

It is important to note that some of the roadway infrastructure usage in the City is due to pass through traffic, or traffic that has a destination beyond the impact fee service area. Demand associated with pass through is not associated with existing or current Highland City residents and was excluded from the impact fee calculation.

Pass By Traffic

Pass by traffic are the stops along the way to a primary destination. An example would be a stop at a convenience store on the way to another 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.



CHAPTER 3: FUTURE AND HISTORIC CAPITAL PROJECTS COSTS

The Impact Fees Act allows for the inclusion of various cost components in the calculation of the impact fees. These cost components are the construction costs of growth-driven improvements and appropriate professional services inflated from current dollars to construction year costs. Impact fees can only fund system improvements which are defined as facilities or lines that contribute to the entire system’s capacity rather than just to a small, localized area. The City does not have any debt outstanding related to the Transportation system but does anticipate issuing a bond in 2020 and a portion of the interest related to that bond will be included in the impact fee calculation.

Existing Capacities Available for Growth

Existing roadway capacity and 10 year capacity estimates were provided by InterPlan. The City has expended approximately \$8,278,410 to construct existing roadway infrastructure. Based on data provided by InterPlan, 2.84% of existing infrastructure cost is attributable to ten year growth; therefore, \$234,903 was included in the impact fee calculation.

Figure 3.1: Existing Capacity

| Description | Cost | 2015 Volume | 2015 Capacity | 2025 Volume | Beyond 10 Year | Utilized | 2025 | Beyond 10 Year | Cost to 10 Year Growth |
|--|---------------------|-------------|---------------|-------------|----------------|----------|------|----------------|------------------------|
| 11800 North (Highland Blvd to 6000 West) | \$ - | 4,485 | 11,200 | 9,420 | 1,780 | 40% | 44% | 16% | \$ - |
| 11800 North (6000 West to East City Boundary) | - | 4,485 | 11,200 | 9,520 | 1,680 | 40% | 45% | 15% | - |
| 11200 North (6000 West to 5710 West) | - | 750 | 11,200 | 890 | 10,310 | 7% | 1% | 92% | - |
| 11200 North (5850 West to SR-74) | - | 2,610 | 11,200 | 920 | 10,280 | 23% | -15% | 92% | - |
| 11200 North (SR-74 to 4800 West) | - | 2,900 | 11,200 | 3,000 | 8,200 | 26% | 1% | 73% | - |
| 10400 North (1200 East to 6000 West) | - | 1,840 | 11,200 | 3,380 | 7,820 | 16% | 14% | 70% | - |
| 10400 North (6000 West to SR-74) | - | 1,840 | 11,200 | 4,820 | 6,380 | 16% | 27% | 57% | - |
| 9860 North (6800 West to 6630 West) | - | 1,000 | 11,200 | 1,870 | 9,330 | 9% | 8% | 83% | - |
| 9860 North (Mountain View Drive to 6000 West) | - | 1,000 | 11,200 | 990 | 10,210 | 9% | 0% | 91% | - |
| 9860 North (6000 West to SR-74) | 768,135 | 1,910 | 11,200 | 3,240 | 7,960 | 17% | 12% | 71% | 91,216 |
| 9600 North (West City Boundary to 6000 West) | - | 2,255 | 11,200 | 3,680 | 7,520 | 20% | 13% | 67% | - |
| 9600 North (6000 West to SR-74) | - | 2,255 | 11,200 | 2,280 | 8,920 | 20% | 0% | 80% | - |
| Highland Blvd (North City Boundary to SR-92) | - | 3,810 | 17,500 | 9,830 | 7,670 | 22% | 34% | 44% | - |
| 6800 West (10400 North to 9600 North) | - | 4,260 | 11,200 | 4,620 | 6,580 | 38% | 3% | 59% | - |
| 6800 West (9600 North to South City Boundary) | - | 4,780 | 11,200 | 4,500 | 6,700 | 43% | -2% | 60% | - |
| 6400 West (SR-92 to 10400 North) | - | 1,420 | 11,200 | 2,050 | 9,150 | 13% | 6% | 82% | - |
| 6000 West (11800 North to SR-92) | - | 4,485 | 11,200 | 4,560 | 6,640 | 40% | 1% | 59% | - |
| 6000 West (SR-92 to 10400 North) | - | 3,545 | 11,200 | 7,370 | 3,830 | 32% | 34% | 34% | - |
| 6000 West (10400 North to 9600 North) | - | 3,545 | 11,200 | 4,290 | 6,910 | 32% | 7% | 62% | - |
| 6000 West (9600 North to South City Boundary) | - | 3,865 | 11,200 | 6,080 | 5,120 | 35% | 20% | 46% | - |
| 5600 West (11200 North to SR-92) | - | 2,840 | 11,200 | 5,260 | 5,940 | 25% | 22% | 53% | - |
| 5600 West (SR-92 to 10400 North) | 396,995 | 3,110 | 11,200 | 4,020 | 7,180 | 28% | 8% | 64% | 32,256 |
| 4800 West (North City Boundary to SR-92) | - | 12,725 | 17,500 | 15,870 | 1,630 | 73% | 18% | 9% | - |
| 4800 West (SR-92 to Cedar Hills Drive) | 573,232 | 12,400 | 41,000 | 20,370 | 20,630 | 30% | 19% | 50% | 111,431 |
| 4800 West (Cedar Hills Drive to South City Boundary) | - | 9,025 | 41,000 | 26,620 | 14,380 | 22% | 43% | 35% | - |
| Total | \$ 1,738,362 | | | | | | | | \$ 234,903 |



Future Project Capacities Available for Growth

The costs of future capital projects are defined in the corresponding Impact Fees Facilities Plan prepared by InterPlan and are summarized in Figure 3.2. Some of the projects the City has planned will not be built to full planned width and number of lanes within the impact fee planning horizon. Only the improvements that will be constructed within the planning window are included in the impact fee calculation. Planned projects include: road widening, construction of traffic signals and other growth-related system improvements.

FIGURE 3.2: CAPITAL PROJECT COSTS TO BE FUNDED THROUGH IMPACT FEES

| Project Name | Project ID | Year to be Constructed | 2015 Cost | Construction Costs | Cost to Existing/ Non-Qualifying | Cost to 10 Year Growth | Cost to Growth Beyond 10 Years |
|--|------------|------------------------|----------------------|----------------------|----------------------------------|------------------------|--------------------------------|
| 11200 N 2 Lane Collector | A1 | 2020 | \$ 324,850 | \$ 381,698 | \$ 5,837 | \$ 354,492 | \$ 21,369 |
| Madison Ave/9860 N 2 Lane Collector | B1 | 2020 | 1,129,819 | 1,327,537 | 20,299 | 1,232,916 | 74,321 |
| Canal Boulevard 2 Lane Collector | C1 | 2020 | 8,000,000 | 9,400,000 | 3,461,217 | 5,601,140 | 337,643 |
| Canal Boulevard and SR 74 Intersection | 1 | 2020 | 300,000 | 352,500 | 176,250 | 166,230 | 10,020 |
| Canal Boulevard and 4800 West Intersection | 2 | 2020 | 300,000 | 352,500 | - | 332,459 | 20,041 |
| Ten Year Total | | | \$ 10,054,668 | \$ 11,814,235 | \$ 3,663,604 | \$ 7,687,236 | \$ 463,395 |

Impact Fee Analysis Updates

As development occurs and capital project planning is periodically revised, the future lists of capital projects and their costs may be different than the information utilized in this analysis. For this reason, it is assumed that the City will perform updates to the analysis every three years. The cost of preparing this analysis, the impact fee facilities plan and the future costs of updating both documents has been included in the impact fee calculations. The 2014 cost of updating the impact fee facilities plan and impact fee analysis was approximately \$40,000 and included in the impact fee calculation.

Bond Debt Service

The City does not currently have any outstanding transportation related debt. In the future, the City intends to issue a bond in 2020 and an impact fee qualifying portion of the interest of the new bonds will be included in the impact fee calculation. Only the interest of the bond will be calculated into the impact fee and apportioned to 10-year growth or non-qualifying categories in the same manner that capital projects were allocated.



FIGURE 3.3: FUTURE TRANSPORTATION DEBT ISSUE SERIES 2020

| PmtNo. | Principal | Interest | Total Principal and Interest |
|--------|--------------|--------------|------------------------------|
| 1 | \$226,000.00 | \$ 269,080 | \$ 495,080 |
| 2 | 235,000 | 260,044 | 495,044 |
| 3 | 244,000 | 250,646 | 494,646 |
| 4 | 254,000 | 240,873 | 494,873 |
| 5 | 264,000 | 230,708 | 494,708 |
| 6 | 275,000 | 220,137 | 495,137 |
| 7 | 286,000 | 209,143 | 495,143 |
| 8 | 297,000 | 197,710 | 494,710 |
| 9 | 309,000 | 185,819 | 494,819 |
| 10 | 322,000 | 173,452 | 495,452 |
| 11 | 334,000 | 160,591 | 494,591 |
| 12 | 348,000 | 147,215 | 495,215 |
| 13 | 362,000 | 133,304 | 495,304 |
| 14 | 376,000 | 118,837 | 494,837 |
| 15 | 391,000 | 103,791 | 494,791 |
| 16 | 407,000 | 88,143 | 495,143 |
| 17 | 423,000 | 71,870 | 494,870 |
| 18 | 440,000 | 54,945 | 494,945 |
| 19 | 458,000 | 37,344 | 495,344 |
| 20 | 476,000 | 19,038 | 495,038 |
| | \$ 6,727,000 | \$ 3,172,689 | \$ 9,899,689 |

Source: Zions Public Finance, Inc.

Grant Funds

Mountainland Association of Governments (MAG) funds many transportation projects in the Utah County region. MAG funding is possible for projects identified in later phases of the City’s transportation plan but the City does not anticipate receiving grant funding for any of the projects identified in Phase I. As mentioned earlier, the funding source of the future projects located on Canal Boulevard is currently undetermined. It is possible, though unlikely, that the City will receive funding from Utah County/UDOT to construct the Canal Blvd improvements. Until funding is finalized, the portion of the impact fee relating to the Canal Blvd project will be set aside and pro rata shares would be reimbursed to developers if a source other than the City funds this project.



CHAPTER 4: PROPORTIONATE SHARE ANALYSIS

The Impact Fees Act requires the impact fee analysis to estimate the proportionate share of the cost for existing capacity that will be recouped as shown in Figure 3.1. The impact fee must be based on the historic costs and reasonable future costs of the system. This chapter will show in Figure 4.1 that the proposed impact fee for system improvements is reasonably related to the impact on the transportation system from new development activity.

The proportionate share analysis considers the manner of funding utilized for existing public facilities. Historically the City has funded existing infrastructure with sources including the following:

- Property Tax Revenues
- Impact Fees
- Bond Proceeds

In the future, the City will primarily rely upon property tax revenues to fund the operations and maintenance of the system. Some General Fund revenues may be used to pay the debt service of the bonds in years when impact fee revenues are insufficient to cover the annual payment to principal and interest. However, if rate revenues are used to pay what should be funded through impact fees (due to a shortfall in impact fee revenues) then the general fund will be repaid with impact fees for what the impact fee fund needed to borrow.

Grant funding for impact fee qualifying transportation projects is not anticipated. However, if they are received, future impact fees will be discounted according to the size of grant and what it will be intended to fund.

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 then that developer is entitled to a credit against impact fees owed. (Utah Impact Fees Act, 11-36a-304(2)(f)). There are currently no situations anticipated in this analysis that would entitle a developer to a credit.

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 2014 will be calculated at a future value as shown in Appendix E. 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.



FIGURE 4.1: TRANSPORTATION IMPACT FEE CALCULATION

| Component | Total Cost | % That will Serve Ten Year Demand | Dollar Amount that will Serve Ten Year Demand | Ten Year Demand (Trips) | Cost per Trip End |
|---|----------------------|-----------------------------------|---|-------------------------|-------------------|
| Roadway Impact Fee | | | | | |
| Future 10 Year Capital Projects | \$ 11,814,235 | 65.07% | \$ 7,687,236 | 17,008 | \$ 452 |
| Future Growth Related Debt to be Issued - Interest Only | 3,172,689 | 65.07% | 2,064,392 | 17,008 | 121 |
| Existing Infrastructure | 8,278,410 | 2.84% | 234,903 | 17,008 | 14 |
| Existing Roads Related Debt - INTEREST ONLY | - | 0.00% | - | 17,008 | - |
| Roadway Impact Fee Subtotal | \$ 23,265,334 | | \$ 9,986,531 | | \$ 587.16 |
| Professional Services / Credits | | | | | |
| Unspent Impact Fee Funds | - | 0.00% | \$ - | 17,008 | \$ - |
| Professional Services / Credits | 40,000 | 100% | 40,000 | 17,008 | 2 |
| Professional Services / Credits Subtotal | 40,000 | | 40,000 | | \$ 2 |
| Total Impact Fee Per Trip | \$ 23,305,334 | | \$ 10,026,531 | | \$ 589.51 |

Maximum Legal Transportation Impact Fees per Trip

As shown in Figure 4.1, the maximum legal impact fee per trip is calculated to be \$589.51. An impact fee is then calculated based on development type and the net adjusted trips that the development type generates. This fee is the combination of individual fees for the buy in to existing facilities, future facilities, future bond interest and professional fees. Each fee for individual components is based upon the historic and future costs divided by the total available capacities. This results in a very precise impact fee per trip and complies with the Impact Fees Act.

Determination of Transportation Impact Fee

The impact fees to be paid by different residential and non-residential users are assessed according to trips. The impact fee calculated per trip is multiplied by the number of trips a development type generates. A single family home generates 9.55 trips. The impact fee is assessed by land use according to the table below.



FIGURE 4.2: MAXIMUM IMPACT FEE SCHEDULE

| Land Use | Code | Unit | ITE Trip Generation Rate | Daily Trip Rate (1/2 ITE Rate) | Primary Trips | Daily REU | Total Transportation Impact Fee (Per Unit) |
|---------------------------------------|------|---------------|--------------------------|--------------------------------|---------------|-----------|--|
| Residential | | | | | | | |
| Single-Family | 210 | Dwelling Unit | 9.55 | 4.78 | 100% | 1.0 | \$ 2,815 |
| Attached 6-8 Units per Acre | 230 | Dwelling Unit | 5.81 | 2.91 | 100% | 0.6 | 1,713 |
| Multi-Family >8 Units | 220 | Dwelling Unit | 6.65 | 3.33 | 100% | 0.7 | 1,960 |
| Retail / Commercial | | | | | | | |
| General Retail Small (<90,000 sq ft) | 820 | 1000 sq | 111.14 | 55.57 | 43% | 5.0 | \$ 14,086 |
| General Retail Large (>90,000 sq ft) | 820 | 1000 sq | 46.7 | 23.35 | 43% | 2.1 | 5,919 |
| Convenience Store w/ Gas Pumps | 853 | 1000 sq | 845.6 | 422.80 | 16% | 14.2 | 39,879 |
| Drive-In Bank | 912 | 1000 sq | 148.15 | 74.08 | 27% | 4.2 | 11,790 |
| Fast Food Restaurant w/ Drive-Thru | 934 | 1000 sq | 496.12 | 248.06 | 30% | 15.6 | 43,870 |
| Sit-Down Restaurant | 932 | 1000 sq | 127.15 | 63.58 | 37% | 4.9 | 13,867 |
| Multiplex Movie Theater | 445 | 1000 sq | 63.0935 | 31.55 | 75% | 5.0 | 13,948 |
| Hotel / Motel | 603 | Rooms | 8.17 | 4.09 | 100% | 0.9 | 2,408 |
| Office / Institutional | | | | | | | |
| General Office | 710 | 1000 sq | 11.03 | 5.52 | 100% | 1.2 | \$ 3,251 |
| Medical Office | 720 | 1000 sq | 36.13 | 18.07 | 100% | 3.8 | 10,649 |
| Hospital | 610 | 1000 sq | 13.22 | 6.61 | 100% | 1.4 | 3,897 |
| Nursing Home | 620 | 1000 sq | 7.6 | 3.80 | 100% | 0.8 | 2,240 |
| Assisted Living | 254 | Occupied Bed | 2.74 | 1.37 | 100% | 0.3 | 808 |
| Church / Synagogue | 560 | 1000 sq | 9.11 | 4.56 | 100% | 1.0 | 2,685 |
| Day Care Center | 565 | 1000 sq | 74.06 | 37.03 | 10% | 0.8 | 2,183 |
| Elementary School | 520 | 1000 sq | 15.43 | 7.72 | 50% | 0.8 | 2,274 |
| High School | 530 | 1000 sq | 12.89 | 6.45 | 50% | 0.7 | 1,900 |
| Industrial | | | | | | | |
| General Light Industrial | 110 | 1000 sq | 6.97 | 3.49 | 100% | 0.7 | \$ 2,054 |
| Business Park | 770 | Employees | 4.04 | 2.02 | 100% | 0.4 | 1,191 |
| Warehouse | 150 | 1000 sq | 3.56 | 1.78 | 100% | 0.4 | 1,049 |
| Mini-Warehouse | 151 | 1000 sq | 2.5 | 1.25 | 100% | 0.3 | 737 |

Source: ITE Trip Generation 9th Edition; Note: Pass by trip adjustments are based on ITE sample data where available

Non-Standard Demand Adjustments

The City reserves the right under the Impact Fees Act (Utah Code 11-36-402(1)(c,d)) to assess an adjusted fee to respond to unusual circumstances and to ensure that the impact fees are assessed fairly. The impact fee ordinance must include a provision that permits adjustment of the fee for a particular development based upon studies and data submitted by the developer that indicate a more realistic and accurate impact upon the City’s infrastructure.



The impact fee formula shown below in Figure 4.3 for a non-standard user is shown below.

FIGURE 4.3: CALCULATION OF NON-STANDARD IMPACT FEE

| Steps in Calculating a Non-Standard Fee |
|---|
| Step 1: Determine the expected Average Daily Trips (ADT) for the development |
| Step 2: Determine the percentage of ADT that are primary trips (1- % pass-by traffic) |
| Step 3: Multiple ADT by the Percent Primary Trips by \$589.51 |
| |

DRAFT



**APPENDICES: CERTIFICATION, SERVICE AREA
MAP, IMPACT FEE CALCULATIONS**

DRAFT



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

Zions 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 Public Finance, Inc. makes this certification with the following caveats:

1. All of the recommendations for implementations of the Impact Fee Facilities Plan (IFFP) made in the IFFP or in the impact fee analysis are followed in their entirety by City staff and Council in accordance to the specific policies established for the Service Area.
2. If all or a portion of the IFFP or impact fee analysis are modified or amended, this certification is no longer valid.
3. All information provided to Zions Public Finance, Inc., its contractors or suppliers is assumed to be correct, complete and accurate. This includes information provided by Highland City and outside sources. Copies of letters requesting data are included as appendices to the IFFP and the impact fee analysis.

Dated: 4/1/2015

ZIONS PUBLIC FINANCE, INC.



Notice Date & Time: September 11, 2014 | 7:00 AM - 11:59 PM

Description/Agenda: Notice Title: Notice of Intent to Create Impact Fee Facilities Plans and Amended Impact Fee Written Analyses

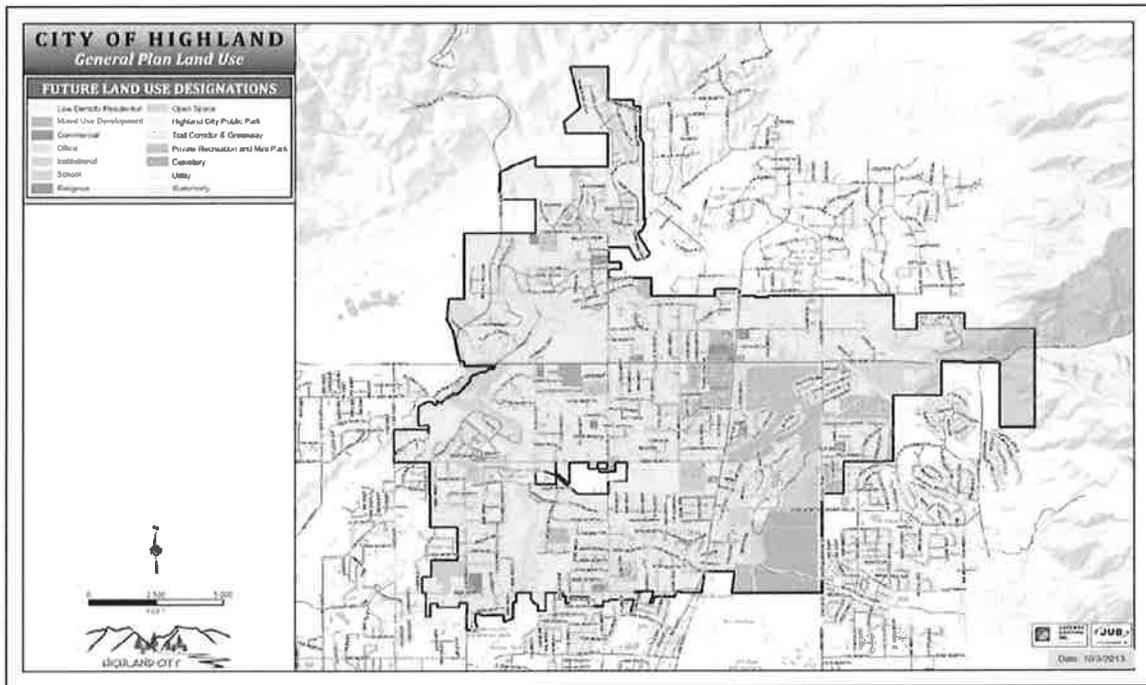
NOTICE OF INTENT TO CREATE IMPACT FEE FACILITIES PLANS AND AMENDED IMPACT FEE WRITTEN ANALYSES

Highland City, a municipality of the State of Utah, located in Utah County, Utah intends to commence the preparation of independent and comprehensive Impact Fee Facilities Plans and Written Impact Fee Analyses for the services of secondary water, sanitary sewer, parks, recreation and trails, roads and public safety. Therefore, pursuant to the provisions of 11-36a-501 and 503 of the Utah Code, as amended 2011, notice is hereby provided to you of the intent of Highland City to create an Impact Fee Facilities Plans and amend Highland City's Impact Fee Written Analyses. The location(s) that will be included in the Impact Fee Facilities Plans and Impact Fee Analyses are all areas within the legal Highland City limits and the declared annexation areas of Highland City.

BY ORDER OF THE CITY COUNCIL OF HIGHLAND CITY

Public Notice Website <http://www.utah.gov/pmn/sitemap/notice/231435.html>

APPENDIX A: SERVICE AREA MAP



APPENDIX B: GROWTH IN DEMAND

| | A | B | C | D | E |
|----|--|-------------------|--------------------------|------------------------------|--------------------------|
| 1 | Projected Traffic Demands - Population, Average Daily Trips | | | | |
| 2 | Year | Population | Annualized Growth | Total Daily Trip Ends | Annualized Growth |
| 3 | 2015 | 17,355 | | 85,264 | |
| 4 | 2016 | 17,617 | 0.15% | 87,153 | 0.22% |
| 5 | 2017 | 17,879 | 0.15% | 89,043 | 0.21% |
| 6 | 2018 | 18,141 | 0.15% | 90,933 | 0.21% |
| 7 | 2019 | 18,403 | 0.14% | 92,823 | 0.21% |
| 8 | 2020 | 18,665 | 0.14% | 94,713 | 0.20% |
| 9 | 2021 | 18,927 | 0.14% | 96,603 | 0.20% |
| 10 | 2022 | 19,189 | 0.14% | 98,492 | 0.19% |
| 11 | 2023 | 19,451 | 0.14% | 100,382 | 0.19% |
| 12 | 2024 | 19,713 | 0.13% | 102,272 | 0.19% |
| 13 | Ten Year Growth | 2,358 | 0.14% | 17,008 | 0.20% |
| 14 | <i>Source: 2015 Transportation Impact Fee Analysis Prepared by InterPlan</i> | | | | |
| 15 | <i>Assumes Total Daily Trip Ends</i> | | | | |
| 16 | A | B | C | D | E |

APPENDIX C: LEVEL OF SERVICE

| | A | B | C | D | |
|---|--|---|---------------------------|----------|----------------------|
| 1 | Level of Service Standards for Historical and Future Roadway Infrastructure | | | | |
| 2 | Roadway Infrastructure Category | | Historical LOS/ City Code | 2025 LOS | Full Development LOS |
| 3 | Arterial Streets | D | D | D | D |
| 4 | Major Collector | D | D | D | D |
| 5 | Minor Collector | D | D | D | D |
| 6 | Local Streets | D | D | D | D |
| 7 | Source: 2015 Transportation Impact Fee Facilities Plan Prepared by InterPlan | | | | |
| | A | B | C | D | |

APPENDIX D: BUY IN COSTS

| | A | B | C | D | E | F | G | H | I | J | K | L |
|----|--|---------------------|------------|--------------------------------|-----------------|---------------|-------------|----------------|----------|------|----------------|------------------------|
| | Description | Cost | 2015 Lanes | 2015 Functional Classification | 2015 Volume | 2015 Capacity | 2025 Volume | Beyond 10 Year | Utilized | 2025 | Beyond 10 Year | Cost to 10 Year Growth |
| 1 | | | | | | | | | | | | |
| 2 | 11800 North (Highland Blvd to 6000 West) | \$ | - | 2 | Major Collector | 4,485 | 11,200 | 9,420 | 1,780 | 40% | 44% | 16% |
| 3 | 11800 North (6000 West to East City Boundary) | | - | 2 | Major Collector | 4,485 | 11,200 | 9,520 | 1,680 | 40% | 45% | 15% |
| 4 | 11200 North (6000 West to 5710 West) | | - | 2 | Minor Collector | 750 | 11,200 | 880 | 10,310 | 7% | 1% | 92% |
| 5 | 11200 North (5850 West to SR-74) | | - | 2 | Minor Collector | 2,610 | 11,200 | 920 | 10,280 | 23% | -15% | 92% |
| 6 | 11200 North (SR-74 to 4800 West) | | - | 2 | Minor Collector | 2,900 | 11,200 | 3,000 | 8,200 | 26% | 1% | 73% |
| 7 | 10400 North (1200 East to 6000 West) | | - | 2 | Major Collector | 1,840 | 11,200 | 3,380 | 7,820 | 16% | 14% | 70% |
| 8 | 10400 North (6000 West to SR-74) | | - | 2 | Major Collector | 1,840 | 11,200 | 4,820 | 6,380 | 16% | 27% | 57% |
| 9 | 9860 North (6800 West to 6630 West) | | - | 2 | Minor Collector | 1,000 | 11,200 | 1,870 | 9,330 | 9% | 8% | 83% |
| 10 | 9860 North (Mountain View Drive to 6000 West) | | - | 2 | Minor Collector | 1,000 | 11,200 | 990 | 10,210 | 9% | 0% | 91% |
| 11 | 9860 North (6000 West to SR-74) | 768,135 | - | 2 | Minor Collector | 1,910 | 11,200 | 3,240 | 7,960 | 17% | 12% | 71% |
| 12 | 9800 North (West City Boundary to 6000 West) | | - | 2 | Major Collector | 2,255 | 11,200 | 3,690 | 7,520 | 20% | 13% | 67% |
| 13 | 9600 North (6000 West to SR-74) | | - | 2 | Major Collector | 2,255 | 11,200 | 2,280 | 8,920 | 20% | 0% | 80% |
| 14 | Highland Blvd (North City Boundary to SR-92) | | - | 3 | Major Collector | 3,810 | 17,500 | 9,830 | 7,670 | 22% | 34% | 44% |
| 15 | 6800 West (10400 North to 9600 North) | | - | 2 | Minor Collector | 4,260 | 11,200 | 4,620 | 6,580 | 38% | 3% | 59% |
| 16 | 6800 West (9600 North to South City Boundary) | | - | 2 | Minor Collector | 4,760 | 11,200 | 4,500 | 6,700 | 43% | -2% | 60% |
| 17 | 6400 West (SR-92 to 10400 North) | | - | 2 | Minor Collector | 1,420 | 11,200 | 2,050 | 9,150 | 13% | 6% | 82% |
| 18 | 6000 West (11800 North to SR-92) | | - | 2 | Major Collector | 4,485 | 11,200 | 4,560 | 6,640 | 40% | 1% | 59% |
| 19 | 6000 West (SR-92 to 10400 North) | | - | 2 | Major Collector | 3,545 | 11,200 | 7,370 | 3,830 | 32% | 34% | 34% |
| 20 | 6000 West (10400 North to 9600 North) | | - | 2 | Major Collector | 3,545 | 11,200 | 4,290 | 6,910 | 32% | 7% | 62% |
| 21 | 6000 West (9600 North to South City Boundary) | | - | 2 | Major Collector | 3,865 | 11,200 | 6,080 | 5,120 | 35% | 20% | 46% |
| 22 | 5600 West (11200 North to SR-92) | | - | 2 | Minor Collector | 2,840 | 11,200 | 5,260 | 5,940 | 25% | 22% | 53% |
| 23 | 5600 West (SR-92 to 10400 North) | 396,995 | - | 2 | Minor Collector | 3,110 | 11,200 | 4,020 | 7,180 | 28% | 8% | 64% |
| 24 | 4800 West (North City Boundary to SR-92) | | - | 3 | Minor Arterial | 12,725 | 17,500 | 15,870 | 1,630 | 73% | 18% | 9% |
| 25 | 4800 West (SR-92 to Cedar Hills Drive) | 573,232 | - | 5 | Minor Arterial | 12,400 | 41,000 | 20,370 | 20,630 | 30% | 19% | 50% |
| 26 | 4800 West (Cedar Hills Drive to South City Boundary) | | - | 5 | Minor Arterial | 9,025 | 41,000 | 26,620 | 14,380 | 22% | 43% | 35% |
| 27 | Total | \$ 1,738,362 | | | | | | | | | | \$ 234,903 |

Table E.3: Existing / Project Level

| Project | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | Totals |
|--|------|------|------|------|------|------|------|------|------|------|------|--------|
| 11200 N 2 Lane Collector | - | - | - | - | - | - | - | - | - | - | - | \$ |
| Madison Ave/9860 N 2 Lane Collector | - | - | - | - | - | - | - | - | - | - | - | - |
| Canal Boulevard 2 Lane Collector | - | - | - | - | - | - | - | - | - | - | - | - |
| Canal Boulevard and SR 74 Intersection | - | - | - | - | - | - | - | - | - | - | - | - |
| Canal Boulevard and 4800 West Intersection | - | - | - | - | - | - | - | - | - | - | - | - |
| Totals | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |

Table E.4: 10 Year Growth

| Project | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | Totals |
|--|------|------|------|------|------|--------------|------|------|------|------|------|---------------|
| 11200 N 2 Lane Collector | - | - | - | - | - | 359,997 | - | - | - | - | - | \$ 359,997 |
| Madison Ave/9860 N 2 Lane Collector | - | - | - | - | - | 1,252,061 | - | - | - | - | - | 1,252,061 |
| Canal Boulevard 2 Lane Collector | - | - | - | - | - | 8,865,574 | - | - | - | - | - | 8,865,574 |
| Canal Boulevard and SR 74 Intersection | - | - | - | - | - | 332,459 | - | - | - | - | - | 332,459 |
| Canal Boulevard and 4800 West Intersection | - | - | - | - | - | 332,459 | - | - | - | - | - | 332,459 |
| Totals | \$ | \$ | \$ | \$ | \$ | \$11,142,551 | \$ | \$ | \$ | \$ | \$ | \$ 11,142,551 |

Table E.5: Beyond 10 Year Growth

| Project | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | Totals |
|--|------|------|------|------|------|------------|------|------|------|------|------|------------|
| 11200 N 2 Lane Collector | - | - | - | - | - | 21,701 | - | - | - | - | - | \$ 21,701 |
| Madison Ave/9860 N 2 Lane Collector | - | - | - | - | - | 75,476 | - | - | - | - | - | 75,476 |
| Canal Boulevard 2 Lane Collector | - | - | - | - | - | 534,426 | - | - | - | - | - | 534,426 |
| Canal Boulevard and SR 74 Intersection | - | - | - | - | - | 20,041 | - | - | - | - | - | 20,041 |
| Canal Boulevard and 4800 West Intersection | - | - | - | - | - | 20,041 | - | - | - | - | - | 20,041 |
| Totals | \$ | \$ | \$ | \$ | \$ | \$ 671,685 | \$ | \$ | \$ | \$ | \$ | \$ 671,685 |

APPENDIX F: EXISTING AND FUTURE BONDS

| | A | B | C | D | E |
|----|-------------------------------|------------------|--------------------|-------------------------------------|----|
| 1 | Summary of Future Bond | | | | 1 |
| 2 | Inputs | | | | 2 |
| 3 | Proceeds | | \$6,467,533 | | 3 |
| 4 | Annual Interest Rate | | 4.00% | | 4 |
| 5 | Cost of Issuance | | 4.00% | | 5 |
| 6 | Number of Years | | 20 | | 6 |
| 7 | Par Amount | | \$6,727,000 | | 7 |
| 8 | | | | | 8 |
| 9 | Future Bond #1 | | | | 9 |
| 10 | PmtNo. | Principal | Interest | Total Principal and Interest | 10 |
| 11 | 1 | \$226,000.00 | \$ 269,080 | \$ 495,080 | 11 |
| 12 | 2 | 235,000 | 260,044 | 495,044 | 12 |
| 13 | 3 | 244,000 | 250,646 | 494,646 | 13 |
| 14 | 4 | 254,000 | 240,873 | 494,873 | 14 |
| 15 | 5 | 264,000 | 230,708 | 494,708 | 15 |
| 16 | 6 | 275,000 | 220,137 | 495,137 | 16 |
| 17 | 7 | 286,000 | 209,143 | 495,143 | 17 |
| 18 | 8 | 297,000 | 197,710 | 494,710 | 18 |
| 19 | 9 | 309,000 | 185,819 | 494,819 | 19 |
| 20 | 10 | 322,000 | 173,452 | 495,452 | 20 |
| 21 | 11 | 334,000 | 160,591 | 494,591 | 21 |
| 22 | 12 | 348,000 | 147,215 | 495,215 | 22 |
| 23 | 13 | 362,000 | 133,304 | 495,304 | 23 |
| 24 | 14 | 376,000 | 118,837 | 494,837 | 24 |
| 25 | 15 | 391,000 | 103,791 | 494,791 | 25 |
| 26 | 16 | 407,000 | 88,143 | 495,143 | 26 |
| 27 | 17 | 423,000 | 71,870 | 494,870 | 27 |
| 28 | 18 | 440,000 | 54,945 | 494,945 | 28 |
| 29 | 19 | 458,000 | 37,344 | 495,344 | 29 |
| 30 | 20 | 476,000 | 19,038 | 495,038 | 30 |
| 31 | | \$ 6,727,000 | \$ 3,172,689 | \$ 9,899,689 | 31 |

Source: Zions Public Finance, Inc.

| | | | | |
|---|---|---|---|---|
| A | B | C | D | E |
|---|---|---|---|---|

APPENDIX G: COST PER TRIP CALCULATION

| 1 | A | B | C | D | E | F |
|----|---|----------------------|-----------------------------------|---|-------------------------|-------------------|
| 2 | Summary of Existing Capacity of Roadway Infrastructure for which Ten Year Growth is Responsible | | | | | |
| 3 | Component | Total Cost | % That will Serve Ten Year Demand | Dollar Amount that will Serve Ten Year Demand | Ten Year Demand (Trips) | Cost per Trip End |
| 4 | Roadway Impact Fee | | | | | |
| 5 | Future 10 Year Capital Projects | \$ 11,814,235 | 65.07% | \$ 7,687,236 | 17,008 | \$ 452 |
| 6 | Future Growth Related Debt to be Issued - Interest Only | 3,172,689 | 65.07% | 2,064,392 | 17,008 | 121 |
| 7 | Existing Infrastructure | 8,278,410 | 2.84% | 234,903 | 17,008 | 14 |
| 8 | Existing Roads Related Debt - INTEREST ONLY | - | 0.00% | - | 17,008 | - |
| 9 | Roadway Impact Fee Subtotal | \$ 23,265,334 | | \$ 9,986,531 | | \$ 587.16 |
| 10 | | | | | | |
| 11 | Professional Services / Credits | | | | | |
| 12 | Unspent Impact Fee Funds | - | 0.00% | \$ - | 17,008 | \$ - |
| 13 | Professional Services / Credits | 40,000 | 100% | 40,000 | 17,008 | 2 |
| 14 | Professional Services / Credits Subtotal | 40,000 | | 40,000 | | \$ 2 |
| 15 | | | | | | |
| 16 | Total Impact Fee Per Trip | \$ 23,305,334 | | \$ 10,026,531 | | \$ 589.51 |

A B C D E F

APPENDIX I: ITE TRIP GENERATION DATA

| | A | B | C | D | E | F | G | H |
|----|---|------|---------------|--------------------------|--------------------------------|---------------|-----------|--|
| 1 | Institute of Transportation Engineers (ITE) Data Showing Trips Per Type of Land Use Per Unit | | | | | | | |
| 2 | Land Use | Code | Unit | ITE Trip Generation Rate | Daily Trip Rate (1/2 ITE Rate) | Primary Trips | Daily REU | Total Transportation Impact Fee (Per Unit) |
| 3 | Residential | | | | | | | |
| 4 | Single-Family | 210 | Dwelling Unit | 9.55 | 4.78 | 100% | 1.0 | \$ 2,815 |
| 5 | Attached 6-8 Units per Acre | 230 | Dwelling Unit | 5.81 | 2.91 | 100% | 0.6 | 1,713 |
| 6 | Multi-Family >8 Units | 220 | Dwelling Unit | 6.65 | 3.33 | 100% | 0.7 | 1,960 |
| 7 | Retail / Commercial | | | | | | | |
| 8 | General Retail Small (<90,000 sq ft) | 820 | 1000 sq | 111.14 | 55.57 | 43% | 5.0 | \$ 14,086 |
| 9 | General Retail Large (>90,000 sq ft) | 820 | 1000 sq | 46.7 | 23.35 | 43% | 2.1 | 5,919 |
| 10 | Convenience Store w/ Gas Pumps | 853 | 1000 sq | 845.6 | 422.80 | 16% | 14.2 | 39,879 |
| 11 | Drive-In Bank | 912 | 1000 sq | 148.15 | 74.08 | 27% | 4.2 | 11,790 |
| 12 | Fast Food Restaurant w/ Drive-Thru | 934 | 1000 sq | 496.12 | 248.06 | 30% | 15.6 | 43,870 |
| 13 | Sit-Down Restaurant | 932 | 1000 sq | 127.15 | 63.58 | 37% | 4.9 | 13,867 |
| 14 | Multiplex Movie Theater | 445 | 1000 sq | 63.0935 | 31.55 | 75% | 5.0 | 13,948 |
| 15 | Hotel / Motel | 603 | Rooms | 8.17 | 4.09 | 100% | 0.9 | 2,408 |
| 16 | Office / Institutional | | | | | | | |
| 17 | General Office | 710 | 1000 sq | 11.03 | 5.52 | 100% | 1.2 | \$ 3,251 |
| 18 | Medical Office | 720 | 1000 sq | 36.13 | 18.07 | 100% | 3.8 | 10,649 |
| 19 | Hospital | 610 | 1000 sq | 13.22 | 6.61 | 100% | 1.4 | 3,897 |
| 20 | Nursing Home | 620 | 1000 sq | 7.6 | 3.80 | 100% | 0.8 | 2,240 |
| 21 | Assisted Living | 254 | Occupied Bed | 2.74 | 1.37 | 100% | 0.3 | 808 |
| 22 | Church / Synagogue | 560 | 1000 sq | 9.11 | 4.56 | 100% | 1.0 | 2,685 |
| 23 | Day Care Center | 565 | 1000 sq | 74.06 | 37.03 | 10% | 0.8 | 2,183 |
| 24 | Elementary School | 520 | 1000 sq | 15.43 | 7.72 | 50% | 0.8 | 2,274 |
| 25 | High School | 530 | 1000 sq | 12.89 | 6.45 | 50% | 0.7 | 1,900 |
| 26 | Industrial | | | | | | | |
| 27 | General Light Industrial | 110 | 1000 sq | 6.97 | 3.49 | 100% | 0.7 | \$ 2,054 |
| 28 | Business Park | 770 | Employees | 4.04 | 2.02 | 100% | 0.4 | 1,191 |
| 29 | Warehouse | 150 | 1000 sq | 3.56 | 1.78 | 100% | 0.4 | 1,049 |
| 30 | Mini-Warehouse | 151 | 1000 sq | 2.5 | 1.25 | 100% | 0.3 | 737 |

31 Source: ITE Trip Generation 9th Edition; Note: Pass by trip adjustments are based on ITE sample data where available

33 Non Standard Demand Adjustment

| Steps in Calculating a Non-Standard Fee | | | |
|---|---|--|--|
| 34 | Step 1: Determine the expected Average Daily Trips (ADT) for the development | | |
| 35 | Step 2: Determine the percentage of ADT that are primary trips (1- % pass-by traffic) | | |
| 36 | Step 3: Multiple ADT by the Percent Primary Trips by \$589.51 | | |
| 37 | | | |
| 38 | | | |

A B C D E F G H

HIGHLAND CITY IMPACT FEE FACILITIES PLAN



Project Number 140378

March, 2015

InterPlan



Transportation Planning

7719 South Main Street
Midvale, Utah 84047
801-307-3400

TABLE OF CONTENTS

| | |
|--|----|
| Introduction | 1 |
| Section 1: Existing Level of Service (11-36A-302.1.A.I) | 2 |
| Intersection Standards | 3 |
| Unit of Demand..... | 3 |
| System Improvements and Project Improvements | 4 |
| Proposed Level of Service (11-36A-302.1.A.II) | 4 |
| Section 2: Excess Capacity to Accommodate Future Growth (11-36A-302.1.A.III) | 5 |
| Section 3: Demands Placed on Facilities by New Development (11-36A-302.1.A.IV) | 7 |
| Conversion of Growth and Development Projections to Trip Generations..... | 7 |
| Growth | 8 |
| Impact of Growth..... | 11 |
| Section 4: Infrastructure Required to Meet Demands of New Development (11-36A-302.1.A.V) | 13 |
| Ten-Year Improvement Plan | 13 |
| Project Cost Attributable to Future Growth | 14 |
| Project Cost Attributable to Ten-Year Growth | 14 |
| Section 5: Additional Considerations..... | 15 |
| Manner of Financing (11-36A-302.2)..... | 15 |
| Federal and State Grants and Donations..... | 15 |
| Bonds..... | 15 |
| Interfund Loans..... | 15 |
| Impact Fees..... | 15 |
| Developer Dedications and Exactions | 15 |
| Necessity of Improvements to Maintain Level of Service (11-36A-302.3) | 16 |
| Noticing and Adoption Requirements (11-36A-502) | 16 |
| Section 6: Impact Fee Certification (11-36A-306.1)..... | 17 |
| Appendix A: Cost Estimates | 18 |
| Appendix B: Land Use Trip Generation Categories..... | 19 |

Introduction

The purpose of an Impact Fee Facilities Plan (IFFP) is to use projected system demands to identify public facilities that are needed to serve growth associated with new development activity within the service area. The service area for this IFFP is the Highland City Boundary (see Figure 2). An IFFP should also identify capital facilities projects, which may be funded through impact fees. An IFFP generally serves as the basis of performing an Impact Fee Analysis (IFA) where impact fees are calculated. The Highland City Transportation Impact Fee Analysis will be performed by Zions Bank Public Finance and is presented in a separate document.

The IFFP and IFA documents should be updated on a regular basis, as needed, depending on how actual development and population growth occurs and to stay consistent with any updates to the city's Transportation Master Plan.

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

1. Identify the existing level of service
2. Establish a proposed level of service
3. Identify excess capacity to accommodate future growth at the proposed level of service
4. Identify demands placed upon existing public facilities by new development activity at the proposed level of service
5. Identify the means by which city or developer will meet those growth demands
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 1: Existing Level of Service (11-36A-302.1.A.I)

Level of service (LOS) 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.” Level of service standards for transportation are defined in the American Association of State Highway and Transportation Officials (AASHTO), A Policy on Geometric Design of Highways and Streets, 2011 (6th Edition). Highland City presently maintains a road system which is currently below capacity at a level of service (LOS) D threshold. According the AASHTO standards, LOS D is defined as "approaching unstable flow." A LOS D threshold is commonly used as a standard within urban areas. This level can be measured by methods included in the Transportation Research Board (TRB), Highway Capacity Manual (HCM), 2010.

LOS calculations can be complex and data intensive but simplified planning methods are reasonably accurate. LOS calculations according to the HCM2010 depend on the following factors:

1. Number of travel lanes
2. Number of turn lanes
3. Number of trucks in the travel flow
4. The level of "platooning" of vehicles approaching each intersection
5. The timing of traffic signals and the coordination of multiple traffic signals
6. The number of turning vehicles
7. The vertical grade of the roadway and other horizontal alignment factors
8. The familiarity of drivers to local conditions
9. The availability of shoulders and lateral clearances
10. Various natural environmental conditions

To simplify the analysis, the IFFP in Highland City relied on the use of the Mountainland Association of Governments (MAG) travel demand model 7.0. The MAG travel model is maintained at a regional level and was modified and calibrated for use in Highland City as part of the IFFP. The travel models use a link-based capacity (even though much of the actual delay is manifested at intersections). Algorithms exist in the travel model to estimate the delay associated with increased traffic volume, with the primary input being the travel link number of lanes, functional classification of the road, and area type (urban, suburban, rural, etc.). These simplifications are necessary since detailed data may not be available for forecasting future conditions and the travel model is developed at a regional (metropolitan area) scale.

Traffic capacities are defined in the regional travel models for the hourly level. For application in Highland City, capacities were adjusted to daily maximums based on various factors consistent with the Highway Capacity Manual. Table 1 summarizes the daily maximum

capacities used in Highland City at the acceptable LOS.

Table 1: Daily Level of Service D Capacity in Highland City

| Maximum Daily Traffic Capacity Estimates | | |
|--|----------|-----------|
| Number of Lanes | Arterial | Collector |
| 2 | 12,500 | 11,200 |
| 3 | 19,100 | 17,500 |
| 4 | 38,300 | 30,900 |
| 5 | 41,000 | 37,200 |
| 6 | 52,800 | |
| 7 | 57,000 | |

Source: InterPlan

Intersection Standards

Delays at intersections are a major determinant in the LOS provided on the roadway system. Intersection LOS is determined by the type of intersection control including no control, stop signs, roundabouts, traffic signals, or other control (interchanges, etc.). Intersection improvements are difficult to predict even a few years into the future, since they depend on specific turn movements at each intersection. While the specific timing or phasing of traffic signals, for example, cannot be forecast, the need for capital improvements such as traffic signals can reasonably be estimated. The cost of intersection improvements can be mitigated with advanced planning such that signal foundations, signal wiring conduit, and other improvements can be implemented concurrent with roadway construction in advance of the actual placement of signal mast arms, signal controllers, and traffic signals. The cost of intersection improvements are included in the estimated cost of each roadway, although the full installation of all intersection improvements may be deferred as needed, based on on-going intersection specific traffic counts.

Unit of Demand

The impact of new development is driven by "trip generation" associated with various land use types. The more trips that are associated with a particular land use or development, the greater its impact on the street system. The number of trips can be estimated based on national guidelines developed by the Institute of Transportation Engineers (ITE) documented in their Trip Generation Manual. ITE trip rates are based on national research in the transportation industry.

The use of ITE trip rates allows for consistency of analysis across different areas and market segments, but has also been the source of confusion due to the definition of a "trip." Road capacity analyses in Highland City are based on a trip defined by a count on a road during a pre-defined period (daily). ITE trips are defined by extensive national studies of driveway counts. Therefore a typical trip from a home to a job should be counted as a single trip in the Highland

City IFFP and is counted once based on the travel model estimate of average daily traffic. However, ITE trip rates for the same home to work travel path count a "trip" crossing the residential driveway and a second "trip" crossing the workplace driveway. To correct for this semantic inconsistency, ITE trip rates have been divided by two in all cases.

In addition, many developments claim that their source of trips is drawn from traffic already on the road so that they do not generate new trips. To account for this issue, ITE trips have been reduced further in various non-residential cases by a "primary trip factor," which accounts for opportunistic driveway counts of drivers already on the road. The ITE Trip Generation Manual provides insight for estimating the primary trip factor. Trip generation by land use in Highland City is based on the Ninth Edition ITE Trip Generation Manual, 2012.

System Improvements and Project Improvements

For the purposes of this study, roadway functional classifications include arterials, collectors, and local streets. Local streets are considered "project improvements" as defined in Utah Impact Fee Law, and are not included in this IFFP nor are they eligible to be paid for using impact fees. Arterial and collector streets generally serve occupants or users from multiple developments and are considered "system improvements" as defined in Utah Impact Fee Law. The capital facility projects discussed in Section 4 of this report are system improvements and are eligible to be partially funded with transportation impact fees.

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.

In the case of this IFFP, no changes are proposed to the existing level of service standard. Future growth will be evaluated based on LOS D, the same level of service as identified above.

Section 2: Excess Capacity to Accommodate Future Growth (11-36A-302.1.A.III)

In an effort to assist in the development of the IFA, the percentage of the excess capacity of the existing transportation system that is eligible for reimbursement through impact fees was identified. In this report, the term “excess” capacity will be used interchangeably with “available” capacity. Available capacity, or excess capacity, is defined as the capacity in an existing transportation system that is available for additional trips from anticipated future development.

Figure 1: Existing Roads with Excess Capacity Available for Future Development

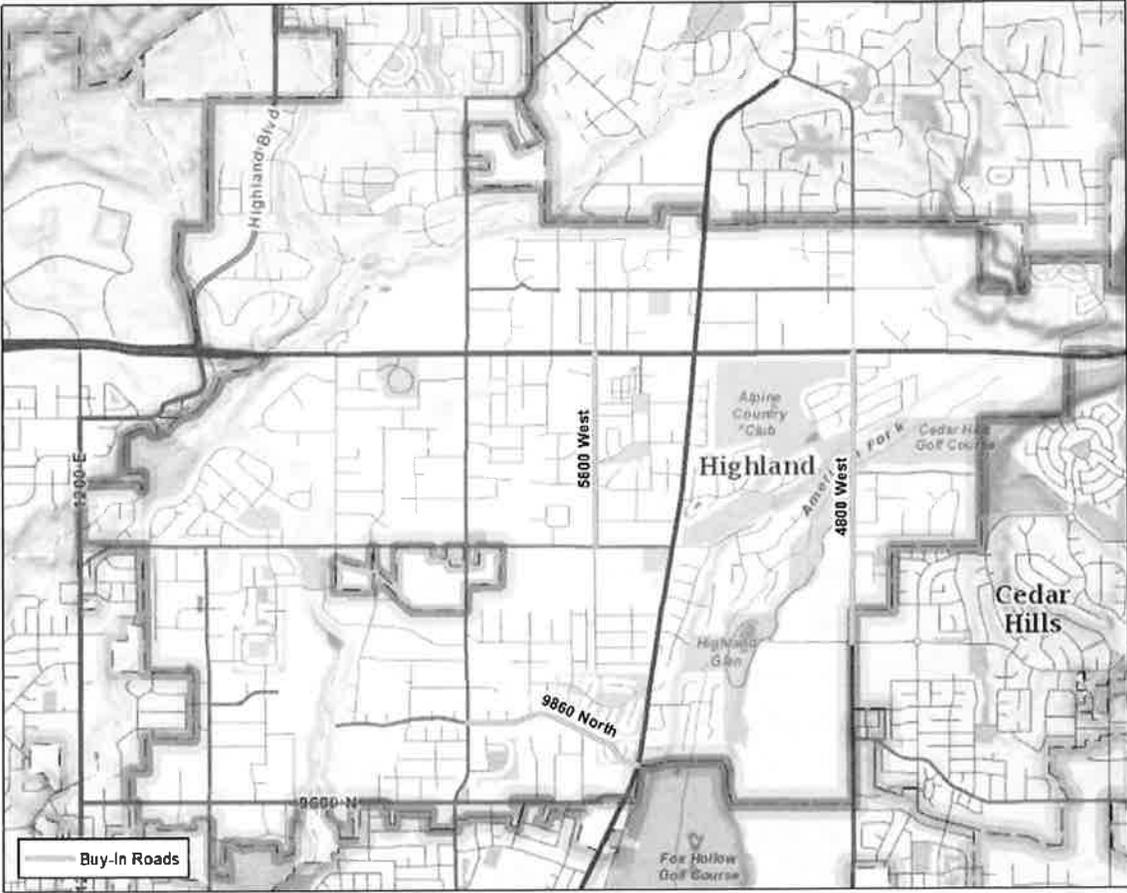


Figure 1 shows the roads in Highland City with existing available capacity that is eligible for new development to buy into through impact fees, referred to as “buy-in” roads. Roads with unknown construction costs or that were not constructed with any city funds cannot be included in the excess capacity inventory. The steps to estimate the excess capacity and the buy-in eligible cost are summarized below:

1. Estimate Capacities of Existing Roads – The capacities of the existing system roads shown in Figure 1 were estimated based on the LOS D.
2. Estimate Existing and 2025 Traffic Volumes – The traffic volumes for each road in Figure 1 were estimated using the travel demand model (See Sections 2 and 3) for existing and 2025 development conditions. Because the proposed impact fee will only address growth over the next ten years, the difference between the existing traffic volume and the estimated 2025 traffic volume was used in the calculation.
3. Calculate the percent of capacity consumed by the ten year growth – The percent of existing excess capacity that will be used by development over the next ten years was calculated by dividing the projected ten year trip growth, due to anticipated development, by the total capacity of the road, , then multiplying by one hundred to convert to a percentage.
4. Calculate the buy-in eligible cost – Multiply the percent of capacity consumed by the ten year growth by the portion of the total cost contributed by the city. This buy-in cost represents the amount of funds which are eligible to be recouped by the city from new development through impact fees.

Table 2 summarizes the calculations associated with the percent of excess capacity that can be used by future development over the next ten years.

Table 2: Existing Excess Capacity Buy-In

| Street | From | To | Capacity | Existing Volume | 2025 Volume | Growth in Utilization | Total Cost (City Contribution) | Buy-In Eligible Cost |
|-------------------------|-----------|-----------------|----------|-----------------|-------------|-----------------------|--------------------------------|----------------------|
| 9860 North | 6000 West | S.R. 74 | 11,200 | 1,910 | 3,240 | 12% | \$768,135 | \$91,216 |
| 5600 West | S.R. 92 | 10400 North | 11,200 | 3,110 | 4,020 | 8% | \$396,995 | \$32,256 |
| 4800 West | S.R. 92 | Cedar Hills Dr. | 41,00 | 9,025 | 26,620 | 19% | \$573,232 | \$111,431 |
| Total Road Costs | | | | | | | \$1,165,130 | \$234,903 |

Section 3: Demands Placed on Facilities by New Development (11-36A-302.1.A.IV)

To satisfy the requirements of state law, demand placed upon existing system facilities by future development was projected using the process outlined below.

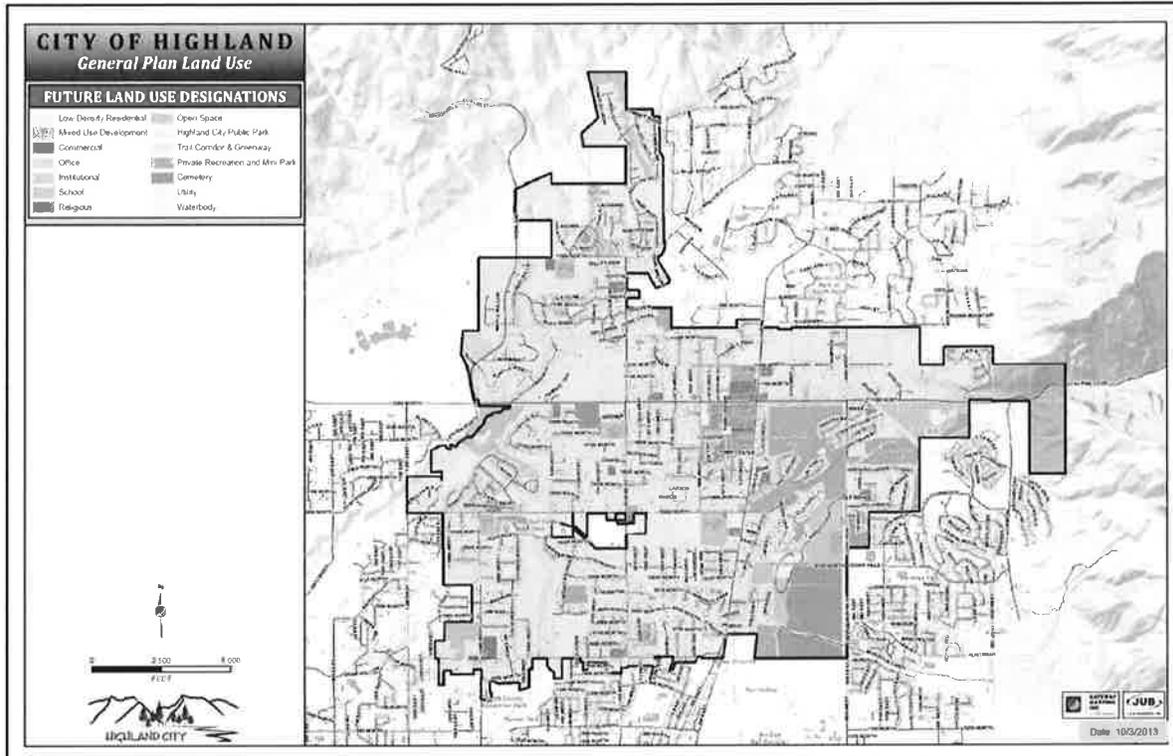
1. Existing Demand – The traffic demand associated with existing development on the city’s system roadways was estimated using traffic counts and population estimates.
2. Existing Capacity – The capacities of existing system facilities were estimated using LOS.
3. Existing Deficiencies – Existing deficiencies in the system were identified by comparing defined LOS against calculated capacities. No existing capacity deficiencies were identified in this study.
4. Future Demand – The demand future development will place on the system was estimated based on development projections for both 2025 and 2040.
5. Future Deficiencies – Future deficiencies in the transportation system were identified using defined level of service and results from the travel demand model for the years 2025 and 2040.
6. Recommended Improvements – Needed system improvements were identified to meet demands associated with future development.

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).

Conversion of Growth and Development Projections to Trip Generations

Future traffic conditions were forecasted using the MAG travel demand model version 7.0. The model forecasts trips to and from destinations along an established network, based on smaller regions known as traffic analysis zones (TAZs). The TAZs are geographically smaller than a municipality and are similar in size to census block groups. Socioeconomic estimates of future households, population, and employment by TAZ were created by MAG as inputs to the model to generate future trip forecasts for Highland City.

Figure 2: Highland City Future Land Use



Source: Highland City

Growth

If Highland City “builds out” by 2040, based on the land use plan in Figure 2, the city will have a population of approximately 24,769 people living in 6,943 households. New resident population is expected to occur primarily on currently vacant or agricultural land. This 18 percent increase in population and 26 percent increase in households will require some additional road infrastructure to serve the new development. This anticipated growth in households and resident population would be accompanied by an increase in commercial and industrial development.

For purposes of calculating an impact fee in the state of Utah a ten year growth horizon is used to ensure that the projects identified and the fee imposed will be encumbered within the statutorily required six year period. Table 3 provides actual change in population and households between the 2000 and 2010 census, current estimates and projections for the IFFP ten year window (2025) and 2040 based on the general plan land use map.

Table 3: Growth 2000 to 2040

| | U.S. Census | | Projections | | |
|------------------------------|-------------|--------|-------------|--------|--------|
| | 2000 | 2010 | 2015 | 2025 | 2040 |
| Population | 8,175 | 15,523 | 19,223 | 22,618 | 24,769 |
| Households | 1,804 | 3,547 | 4,429 | 5,597 | 6,943 |
| Persons per Household | 4.53 | 4.38 | 4.34 | 4.04 | 3.57 |
| Employment | NA | | | 4,420 | 5,065 |

Source; U.S. Bureau of the Census, Governor’s Office of Management and Budget, and MAG

Within this ten-year horizon, Highland City is projected to grow by 3,395 people and 1,168 households between 2015 and 2025. This residential growth represents an 18 percent increase in population and a 26 percent increase in households. At the same time, employment is projected to grow by nine percent. The majority of population and household growth is anticipated in two areas of Highland City; along the western boundary, and in the area bordered by S.R. 92, S.R. 74 and 4800 West (see Figures 3 and 4). The highest growth in employment occurs in the center of the city, south of S.R. 92 (see Figure 5).

Figure 3: Projected Population Growth through 2025

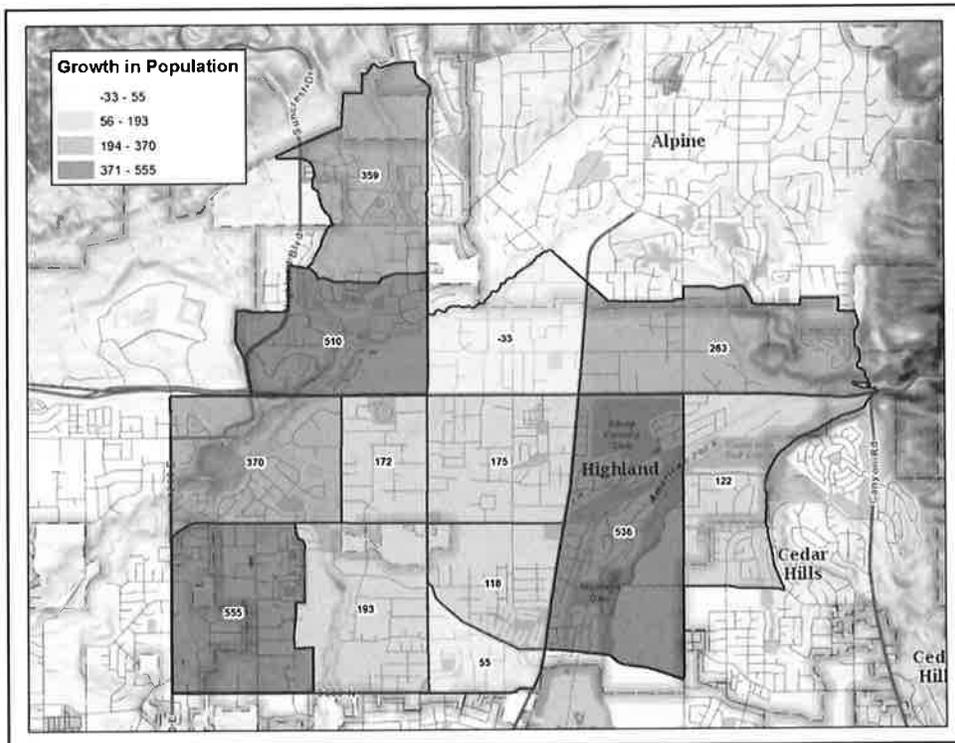


Figure 4: Projected Household Growth through 2025

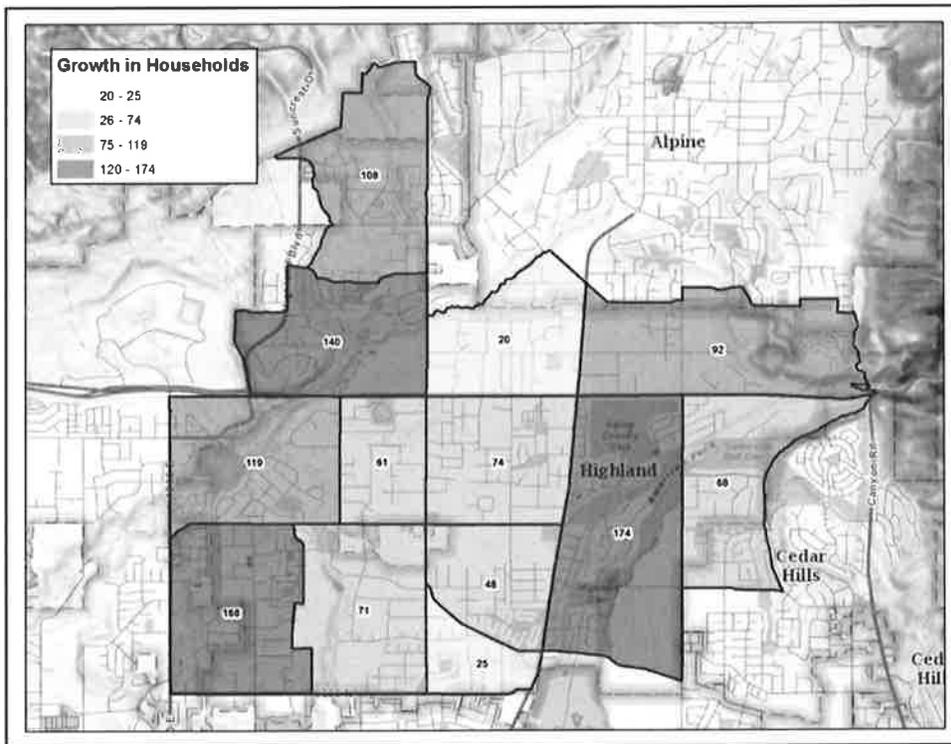
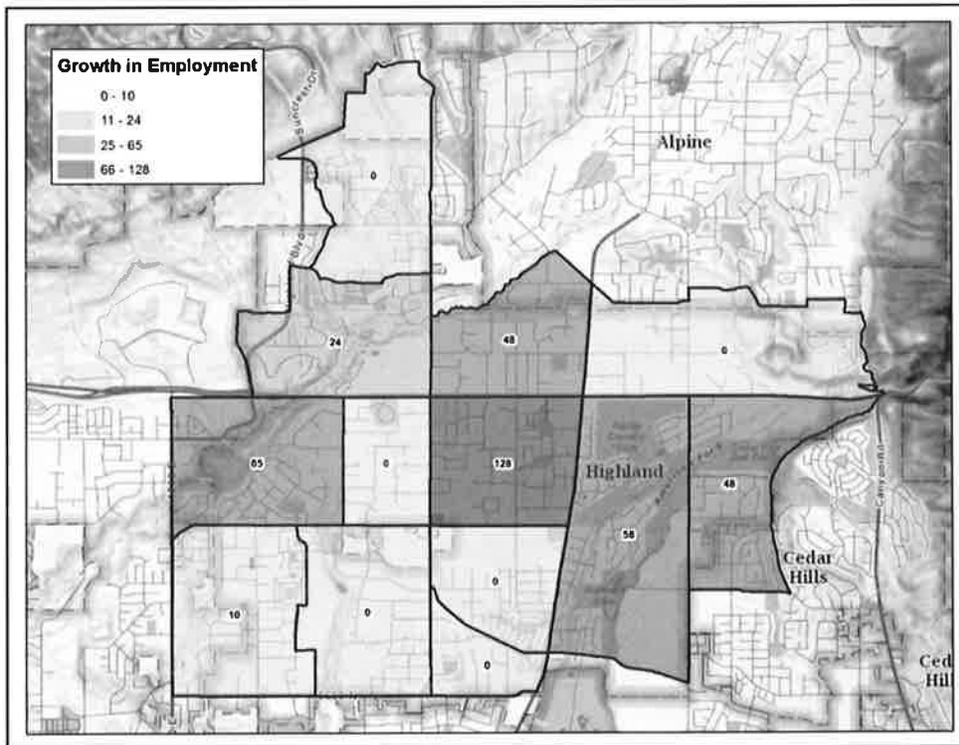


Figure 5: Projected Employment Growth through 2025



Impact of Growth

The travel demand model was also used to estimate the impact of the anticipated 3,395 new residents and 381 new jobs in 2025. InterPlan worked with Highland City staff to develop a capital improvement program represented by a first phase that would encompass the period from 2015 to 2025 and subsequent phases beyond the year 2025, as needed. Traffic volume estimates were developed by road segment. Traffic volumes were estimated based on the existing conditions, modeled conditions in the year 2025 based on planned improvements to be completed by 2025, and modeled conditions in the year 2040 based on planned improvements. The results show a growth of 18,839 total trips between 2015 and 2025 within the TAZs which comprise Highland City. Because the TAZ boundaries do not exactly match the city boundary and covers a slightly larger geographic extent, the 18,839 was reduced to 17,008 for the purposes of calculating the impact fee. This reduction was based on the difference between the TAZ population and the projected GOMB population for Highland City, as well as looking to the development intensity of the areas that were within the TAZ boundaries but outside the city.

Although improvements to the State Highway System are not eligible for impact fees, improvements included in the Mountainland Association of Government's Regional Transportation Plan (2011-2040) were assumed in the modeling, allowing the most accurate representation of future conditions possible with the available information.

- InterPlan and Highland City staff worked to develop capital improvement projects on the road segments that reflect the priorities of the city,
- Will directly benefit expected new development, and
- Relieve capacity deficiencies in the year 2025.

Since it is difficult to balance the IFFP to the precise capacity needed to serve new development in Highland City, a "capacity utilization factor" was estimated based on the net new capacity planned in the IFFP. This capacity utilization factor reflects the equivalent lane miles of needed capacity of the IFFP to balance the capacity needed by new development. This factor is based on forecasted system-wide vehicle miles traveled (VMT), and planned vehicle miles of capacity (VMC).

Table 4: Capacity Utilization Factor Formula

$$\frac{2025 \text{ Total system VMT} / 2025 \text{ Total System VMC}}{2040 \text{ Total system VMT} / 2040 \text{ Total System VMC}} = \text{Capacity Utilization Factor (0.943)}$$

The capacity utilization factor of the IFFP is 0.943, indicating that only 94 percent of the capacity shown in the IFFP may actually be constructed. Since it is cost effective to build complete road segments, as opposed to partial road construction, it is impossible to determine which six percent of road capacity of the IFFP may be deferred until beyond the year 2025, depending on the exact location and magnitude of new growth.

The capacity utilization factor has been proposed by InterPlan in response to the 2011 (and 2013) General Legislative session modifications of the Utah Impact Fees Act. Specifically, the act calls for impact fees to be expended within six years after collection and requires that each IFFP does not raise the level of service of existing residents through impact fees. Since the Act implies that IFFPs and IFAs will be updated every three to six years, the capacity utilization factor allows for an approximate balance of capacity added against the development need. The capacity utilization factor of 0.943 in Highland City indicates that 94 percent of the capacity identified in the IFFP is needed by new development in Highland City and will be fully funded based on anticipated development. The remaining six percent of the capacity proposed in the IFFP will either be built and included in future Impact Fees as Existing Excess Capacity (discussed later in this report) or deferred until future IFFPs. The use of this capacity utilization factor results in a lower impact fee since new development is paying for a fraction, in this case 94 percent, of the development attributable cost of the IFFP.

Section 4: Infrastructure Required to Meet Demands of New Development (11-36A-302.1.A.V)

Ten-Year Improvement Plan

Only infrastructure to be constructed within ten years will be considered in the calculation of impact fees to avoid uncertainty surrounding improvements further into the future. Figure 6 shows the projects that the city plans to construct over the next ten years and are included in the IFFP. Table 5 provides a brief description and the estimated construction cost for the projects shown in Figure 6.

Figure 6: Ten-Year Improvement Plan Map

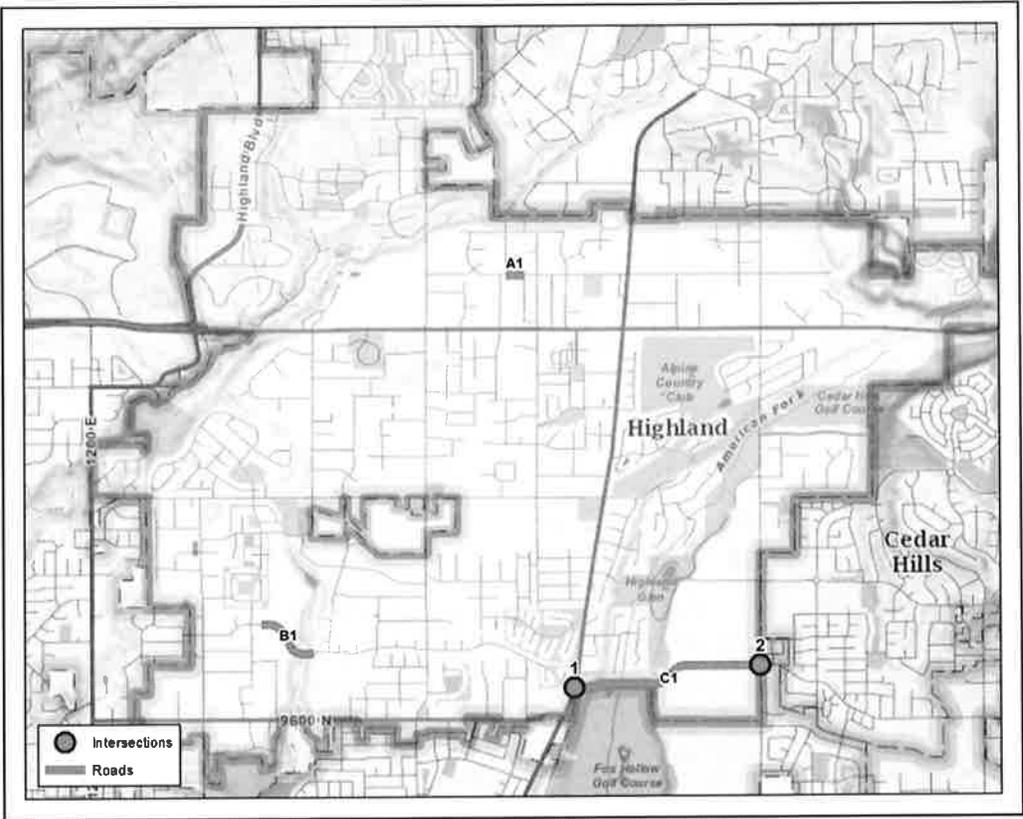


Table 5: Transportation Impact Fee Facilities Plan

| Roads | | | | | |
|---------------------------------|---------------------------------|-----------|---------------------|--------------------|--------------------|
| ID | Street | From | To | Cost Estimate | IFFP Cost |
| A1 | 11200 North | 5710 West | 5650 West | \$324,850 | \$319,882 |
| B1 | Madison Avenue/9860 North | 6600 West | Mountain View Drive | \$1,129,819 | \$1,112,543 |
| C1 | Murdock Connector | S.R. 74 | 4800 West | \$8,000,000 | \$5,054,283 |
| Total Road Costs | | | | \$9,507,816 | \$6,486,708 |
| Intersections | | | | | |
| 1 | Murdock Connector and S.R. 74 | | | \$300,000 | \$150,000 |
| 2 | Murdock Connector and 4800 West | | | \$300,000 | \$300,000 |
| Total Intersection Costs | | | | \$600,000 | \$450,000 |

Source: InterPlan. See Appendix A for cost estimates

Project Cost Attributable to Future Growth

For all capacity related transportation system improvements, the costs were apportioned based on the relative share of traffic growth amongst the cost to serve through traffic and the cost to serve traffic generated by new development in Highland City directly. In Highland City, there are no existing, major transportation deficiencies. The future 2025 rate of through traffic was estimated for each project based upon traffic model outputs, functional type, and geographic location. The project cost attributable to future growth has been reflected in the total cost available to be recovered through impact fees.

Project Cost Attributable to Ten-Year Growth

The projects that will be constructed within the next ten years will serve development through the year 2040. To estimate the percent of the capital facility projects that future development will use over the next ten years, the "capacity utilization factor" was developed. The capacity utilization factor is based on a comparison of the system-wide use of capacity including the capital improvement projects for road capacity, against the use of capacity in the IFFP. In other words, the capacity utilization factor has the effect of lowering the transportation impact fee to ensure that growth in the next ten years is not disproportionately paying for capacity that future growth may use. At the same time, this factor allows the city to identify a slightly larger subset of capital improvement projects in the IFFP than what would be represented by their full cost estimates.

Section 5: 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.

Bonds

Construction cost estimates contained in this IFFP do not include the cost of bonding. The cost of bonding required to finance impact fee eligible improvements identified in the IFFP may be added to the calculation of the impact fee. This should be considered in the impact fee analysis.

Interfund Loans

Because infrastructure must generally be built ahead of growth, there often arise situations in which projects must be funded ahead of expected impact fee revenues. In some cases, the solution to this issue will be borrowing. 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 IFA 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 LOS and prevent existing users from subsidizing the capital needs for new growth. Based on this IFFP, an IFA will be able to calculate a fair and reasonable 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 (which should be credited from the impact fee). Developer exactions may be considered in the inventory of current and future public safety infrastructure. If a developer constructs facility improvements or dedicates land within the development, 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 IFFP), developers will be responsible for the construction of the improvements without credit against the impact fee.

Necessity of Improvements to Maintain Level of Service (11-36A-302.3)

According to Utah Code, 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 LOS 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.

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 ten days before the actual hearing. A copy of the proposed IFFP must be made available in each public library within the city during the ten-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 public places. These places may include the city offices and the public libraries within the city's jurisdiction. Following the ten-day noticing period, a public hearing will be held, after which the city may adopt, amend and adopt, or reject the proposed IFFP.

Section 6: 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), InterPlan, certifies that this Impact Fee Facilities Plan (IFFP):

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.

This certification is made with the following caveats:

1. All of the recommendations for implementations of the IFFP made in the IFFP or in the impact fee analysis are followed in their entirety by the city.
2. If all or a portion of the IFFP or impact fee analysis is modified or amended, this certification is no longer valid.
3. All information provided in the preparation of this IFFP is assumed correct, complete, and accurate. This includes information provided by the city and outside sources.

(Vern Keeslar, InterPlan)



Appendix A: Cost Estimates

| 66' Minor Collector | | | | |
|---|------------------------------|-----------------|--|-----------------|
| ITEM | COST | UNIT | Quantity | COST |
| Roadway Excavation (18" depth) | \$0.34 | ft ³ | 42 x 1 x 1.5 = 63 ft ³ | \$21.42 |
| Clearing and Grubbing | \$1,036.00 | Acres | (66 x 1)/43,560 = 0.0015 ft ² | \$1.55 |
| Subgrade Finishing | \$0.18 | ft ² | 42 x 1 = 42 ft ² | \$7.56 |
| Untreated Base Course (10" thick) | \$0.79 | ft ³ | 42 x 1 x 0.83 = 34.86 ft ³ | \$27.67 |
| Bituminous Surface Course (8" thick)* | \$4.72 | ft ³ | 42 x 1 x 0.67 = 28.14 ft ³ | \$132.77 |
| Concrete Curb and Gutter Type B1 | \$6.23 | ft | 2.5 ft | \$15.58 |
| Pavement Marking Paint | \$1.83 | ft | 2 ft | \$3.66 |
| Parkstrip | \$6.00 | ft ² | 10 ft | \$60.00 |
| Clearing and Grubbing for Sidewalk | \$0.22 | ft ² | 10 ft | \$2.20 |
| Excavation | \$0.29 | ft ³ | 10 x 1 x 0.67 = 6.7 ft ³ | \$1.92 |
| Concrete Base Course, 4" inch thick. | \$2.06 | ft ² | 10 ft | \$20.57 |
| 8' Concrete Sidewalk, 4" Thick | \$4.47 | ft ² | 10 ft | \$44.70 |
| | | | Subtotal | \$339.59 |
| Signage | calculated @ 5% of subtotal | | | \$16.98 |
| Drainage (Inc. Structures) | calculated @ 15% of subtotal | | | \$50.94 |
| Environmental & Design | calculated @ 20% of subtotal | | | \$67.92 |
| | | | Subtotal | \$475.43 |
| Mobilization and Traffic Control | calculated @ 10% of subtotal | | | \$47.54 |
| Contingency | calculated @ 20% of subtotal | | | \$95.09 |
| | | | Subtotal | \$618.06 |
| Contingency for Price Increases | calculated @ 20% of subtotal | | | \$123.61 |
| TOTAL COST / FOOT | | | | \$741.67 |
| * Assumes UDOT Bid of \$69.90 per ton and in place density of 135 lbs per ft ³ | | | | |

Appendix B: Land Use Trip Generation Categories

| Land Use | Code | Unit | ITE Trip Generation Rate | Daily Trip Rate (1/2 ITE Rate) | Primary Trips | Daily REU |
|---------------------------------------|------|---------------|--------------------------|--------------------------------|---------------|-----------|
| Residential | | | | | | |
| Single-Family | 210 | Dwelling Unit | 9.52 | 4.76 | 100% | 1.0 |
| Multi-Family | 220 | Dwelling Unit | 6.65 | 3.33 | 100% | 0.7 |
| Mobile Home | 240 | Dwelling Unit | 4.99 | 2.50 | 100% | 0.5 |
| Retail / Commercial | | | | | | |
| Small Shopping Center (<90,00 sq ft) | 820 | 1000 sq | 111.14 | 55.57 | 43% | 0.3 |
| Large Shopping Center (>90,000 sq ft) | 820 | 1001 sq | 46.7 | 23.35 | 43% | 2.1 |
| Discount Superstore | 813 | 1000 sq | 50.75 | 25.38 | 48% | 2.6 |
| Home Improvement Superstore | 862 | 1000 sq | 30.74 | 15.37 | 52% | 1.7 |
| Convenience Store | 851 | 1000 sq | 737.99 | 369.00 | 24% | 18.6 |
| Convenience Store w/ Gas Pumps | 853 | 1000 sq | 845.6 | 422.80 | 16% | 14.2 |
| Discount Club | 857 | 1000 sq | 41.8 | 20.90 | 75% | 3.3 |
| Drive-In Bank | 912 | 1000 sq | 148.15 | 74.08 | 27% | 4.2 |
| Fast Food Restaurant w/ Drive-Thru | 934 | 1000 sq | 496.12 | 248.06 | 30% | 15.6 |
| Sit-Down Restaurant | 932 | 1000 sq | 127.15 | 63.58 | 37% | 4.9 |
| Multiplex Movie Theater | 445 | 1000 sq | 63.0935 | 31.55 | 75% | 5.0 |
| New Car Sales | 841 | 1000 sq | 32.3 | 16.15 | 75% | 2.5 |
| Hotel / Motel | 603 | Rooms | 8.17 | 4.09 | 100% | 0.9 |
| Office / Institutional | | | | | | |
| General Office | 710 | 1000 sq | 11.03 | 5.52 | 100% | 1.2 |
| Medical Office | 720 | 1000 sq | 36.13 | 18.07 | 100% | 3.8 |
| Hospital | 610 | 1000 sq | 13.22 | 6.61 | 100% | 1.4 |
| Nursing Home | 620 | 1000 sq | 7.6 | 3.80 | 100% | 0.8 |
| Church / Synagogue | 560 | 1000 sq | 9.11 | 4.56 | 100% | 1.0 |
| Day Care Center | 565 | 1000 sq | 74.06 | 37.03 | 10% | 0.8 |
| Elementary School | 520 | 1000 sq | 15.43 | 7.72 | 50% | 0.8 |
| High School | 530 | 1000 sq | 12.89 | 6.45 | 50% | 0.7 |
| Industrial | | | | | | |
| General Light Industrial | 110 | 1000 sq | 6.97 | 3.49 | 100% | 0.7 |
| Warehouse | 150 | 1000 sq | 3.56 | 1.78 | 100% | 0.4 |
| Mini-Warehouse | 151 | 1000 sq | 2.5 | 1.25 | 100% | 0.3 |