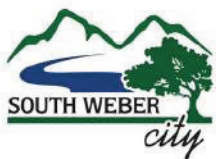




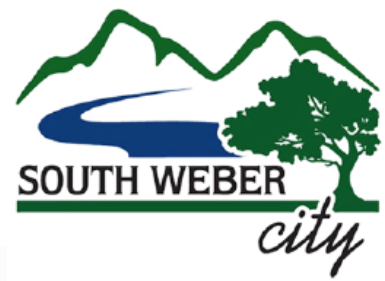
# 2019 TRANSPORTATION

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IMPACT FEE FACILITIES PLAN  
PRESENTED TO SOUTH WEBER CITY  
MARCH 15, 2019



**HORROCKS**  
ENGINEERS



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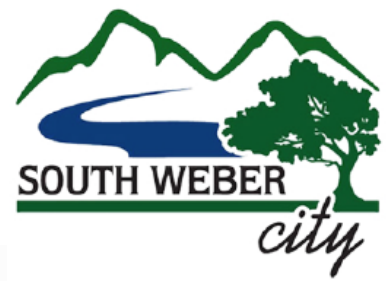


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# Impact Fee Facilities Plan

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## Introduction

The purpose of the Roadway Impact Fee Facilities Plan (IFFP) is to identify public roadways that are needed to accommodate anticipated development and to determine which projects may be funded with impact fees. Utah law requires communities to prepare an IFFP prior to preparing an impact fee analysis (IFA) and establishing an impact fee. According to Title 11, Chapter 35a-302 of the Utah Code, the IFFP is required to identify the following:

- **The existing level of service (LOS)**
- **A proposed LOS**
- **Any excess capacity to accommodate future growth beyond the IFFP horizon year at the proposed LOS**
- **The demands placed on existing public facilities by new development**
- **A proposed means by which the local political subdivision will meet those demands**
- **A general consideration of all potential revenue sources to finance the impacts on system improvements**

This analysis incorporates the information provided in the 2018 South Weber Capital Facilities Plan (CFP) regarding the upcoming demands on the existing infrastructure that will require improvements to accommodate future growth and provide an acceptable LOS. The TMP provides additional detail regarding the methodology used to determine future travel demand.

This document focuses on the improvements that are projected to be needed over the next ten years. Utah law requires that any impact fees collected for those improvements be spent within six years of being collected. Only capital improvements are included in this plan; all other maintenance and operation costs are assumed to be covered through the City's General Fund as tax revenues increase as a result of additional development.

## Existing Level of Service (11-36a-302.1.a.i)

According to the Impact Fee Act, level of service is defined as "the defined performance standard or unit of demand for each capital component of a public facility within a service area." The LOS of a roadway segment or intersection is used to determine if capacity improvements are necessary. LOS is measured on a roadway segment using its daily traffic volume as an approximation of PM peak hour congestion and at an intersection based on the average delay per vehicle. The existing LOS for the roadway network is included in **Figure 3**.





## Level of Service for Roadway Segments

Roadway LOS is used as a planning tool to quantitatively represent the ability of a particular roadway to accommodate the travel demand. **Table 1** shows LOS traffic volume thresholds for each of the major roadways in the City. These values are based on HCM principles and regional experience. For South Weber roadways, LOS C will be used for analysis. Unacceptable roadway segments can be mitigated with geometry improvements, additional lanes, two-way-left turn lanes, and access management.

**Table 1: Roadway Segment Maximum Capacity (LOS C)**

Lanes	Arterial		Collector	
	LOS B	LOS C	LOS B	LOS C
2	7,500	<b>10,000</b>	7,000	<b>9,000</b>
3	9,000	<b>11,500</b>	7,500	<b>10,000</b>

## Level of Service for Intersections

Whereas roadway LOS considers an overall picture of a roadway to estimate operating conditions, intersection LOS looks at each individual movement at an intersection and provides a much more precise method for quantifying operations. Since intersections are typically a source of bottlenecks in the transportation network, a detailed look into vehicle delay at each intersection should be performed on a regular basis. The methodology for calculating delay at an intersection is outlined in the *Highway Capacity Manual* (HCM) and the resulting criteria for assigning LOS to signalized and un-signalized intersections are outlined in **Table 2**. LOS C at an intersection corresponds to an average control delay of 20-35 seconds per vehicle for a signalized intersection and 15-25 seconds per vehicle for an un-signalized intersection.

### Signalized Intersections

At a signalized intersection under LOS C conditions, the average vehicle will be stopped for less than 35 seconds. This is considered an acceptable amount of delay during the times of the day when roadways are most congested. As a general rule, traffic signal cycle lengths (the length of time it takes for a traffic signal to cycle through each movement in turn) should be below 90 seconds. An average delay of less than 35 seconds suggests that in most cases, no vehicles will have to wait more than one cycle before proceeding through an intersection.

### Unsignalized Intersections

Un-signalized intersections are generally stop-controlled. These intersections allow major streets to flow freely, and minor intersecting streets to stop prior to entering the intersection. In cases where traffic volumes are more evenly distributed or where sight distances may be limited, four-way stop-controlled intersections are common. LOS for an un-signalized intersection is assigned based on the average control of the worst approach (always a stop approach) at the intersection. An un-signalized intersection operating at LOS C means the average vehicle waiting at one of the stop-controlled approaches will wait no longer than 25 seconds before proceeding through the intersection. This delay may be caused by large volumes of traffic on the major street resulting in fewer gaps in traffic for a vehicle to turn, or for queued vehicles waiting at the stop sign. Roundabout LOS is also measured using the stopped controlled LOS parameters.

**Table 2: Intersection Maximum Delay**

LOS*	Signalized Intersection (sec)	Stop-Controlled/ Roundabout (sec)
A	≤10	≤10
B	>10-20	>10-15
C	>20-35	>15-25
D	>35-55	>25-35
E	>55-80	>35-50
F	≥80	≥50

\*LOS F when traffic volumes exceed capacity

Intersection improvements will be necessary in some cases to maintain the desired level of service. One method to reduce costs is to coordinate the placement of signal wiring, foundations, and other features with roadway construction before the placement of the actual traffic signals and other elements are needed. The costs of these intersection improvements have been included in the roadway network cost estimates in **Table 4**. The total costs for the full installation of these intersection improvements may be postponed, depending on the specific needs of the intersections in the future.

## Cross-Section Standards

Each functional street classification in South Weber has minimum cross-section criterion. New roadways in South Weber that are a part of or required by new development must typically be constructed by the developer in accordance with (at a minimum) the residential cross-section shown in **Table 3**. Improvements to existing roadways must also follow the minimum criteria for each functional classification found in **Table 3**.

**Table 3: Typical Cross-Sections**

Functional Classification	Number of Lanes	Right of Way Width (ft.)
Local Collector	2	70
Minor Collector	2 or 3	78
South Weber Drive	3	80

## Trips

The unit of demand for transportation impact is the vehicle trip. A vehicle trip is defined by the Institute of Transportation Engineers (ITE) as a single or one-directional vehicle movement to or from a site during a normal week day. The total traffic impact of a new development can be determined by the sum of the total number of vehicle trips generated by a development in a day. This trip generation number or impact can be estimated for an individual development using the ITE Trip Generation Manual (currently 9<sup>th</sup> edition). This publication uses national data studied over decades to assist traffic engineering professionals to determine the likely impact of new development on transportation infrastructure.

There is a minor discrepancy in the way ITE calculates trips and the way trips or roadway volumes are calculated in the travel demand model used in the South Weber TMP. This discrepancy is explained by the model roadway volumes and capacities being calculated using daily traffic volumes rather than trips on the roadway. Essentially, this means that a travel demand model “trip” or unit of volume is counted



once as a vehicle leaves home, travels on the road network, and then arrives at work. This vehicle will only be counted as it travels on the roadway network. The ITE Trip Generation method uses driveway counts as its measure of a trip. Therefore, a vehicle making the same journey will be counted once as it leaves home and once again as it arrives at work for a total of two trips. This can be rectified simply by adjusting the ITE Trip Generation rates by one half. This calculation will be evident in the IFA.

An additional consideration is that certain developments do not generate primary trips or trips that originated for the sole purpose of visiting that development. An example of a primary trip is a home based work trip where someone leaves their house with the express purpose of going to work. This primary trip has been generated by a combination of the home where the trip originated and the place of occupation where the trip is terminated. Thus, it is easily understood that the impact of this trip should be attributed to the housing development and workplace development since without either of these locations, the trip doesn't happen. Some trips are not primary trips, they are defined as pass-by trips. This means that the trip (crossing the driveway of a development) was generated by a driver deciding to make a stop on their way to their primary destination. Good examples of pass-by trips are someone that stops at the gas station on their way to work (a gas station is a pass-by trip) or a driver that is enticed to stop at a fast food restaurant as they drive by because the "HOT DONUTS" sign is illuminated (the fast food restaurant is a pass-by trip). Pass-by trips do not add traffic to the roadway and, therefore, do not create additional impact. Each land use type in the ITE Trip Generation Manual has a suggested reduction for pass-by trips where applicable. In each case, the trip reduction rate will be applied to the trip generation rate used in the IFA.

### *System Improvements and Project Improvements*

There are four primary classifications of roads, which include local streets, collectors, arterials, and freeways/expressways. The City of South Weber classifies street facilities based on the relative amounts of through and land-access service they provide. Local streets primarily serve land-access functions, while freeways and expressways are primarily meant for mobility.

Existing and future collectors and arterials are considered "system improvements" as defined in the Utah Impact Fee Law, as these streets serve users from multiple developments. All system improvements must comply with the minimum cross-section in **Table 3**. All intersection improvements on existing and future collectors and arterials are also considered as system improvements. System improvements may include anything within the roadway, such as curb and gutter, asphalt, road base, lighting, and signing for collectors and arterials. These projects are eligible to be funded with impact fees and are included in this IFFP.

## Proposed Level of Service (11-36a-302.1.a.ii)

The proposed level of service provides a standard of evaluation for future roadway conditions. This standard will determine whether or not a roadway will need improvements. According to the Utah Impact Fee Law, the proposed level of service may:

1. Diminish or equal the existing level of service



2. Exceed the existing level of service if, independent of the use of impact fees, the political subdivision or private entity provides, implements, and maintains the means to increase the existing level of service for existing demand within six years of the date on which new growth is charged for the proposed level of service; or
3. Establish a new public facility if, independent of the use of impact fees, the political subdivision or private entity provides, implements, and maintains the means to increase the existing level of service for existing demand within six years of the date on which new growth is charged for the proposed level of service.

This IFFP will not make any changes to the existing level of service included in **Figure 3**. LOS C will be the standard by which the impacts of future growth will be evaluated.

## Existing Capacity to Accommodate Future Growth (11-36a-302.1.a.iii)

An important element of the IFFP is the determination of excess capacity on the roadway network. Excess capacity is defined as the amount of available capacity on any given street in the roadway network under existing conditions. This capacity is available for new development in the city before additional infrastructure will be needed. This represents a buy-in component from the City if the existing residents/property owners have already paid for these improvements. New roads do not have any excess capacity and roads which are not under City jurisdiction have their capacity information removed from the calculations. This analysis does not include analysis for any existing roadway segments to determine existing excess capacity.

## Demands Placed on Facilities by New Development (11-36a-302.1.a.iv)

To meet the requirements of the Utah Impact Fee law, to “identify demands placed upon existing public facilities by new development activity at the proposed level of service” and to “identify the means by which the political subdivision or private entity will meet those growth demands”, the following steps were completed and are explained in further detail in the following sections:

1. **Existing Demand-** The traffic demand at the present time was identified using traffic counts.
2. **Existing Capacity-** The capacity of the current roadway network was estimated using the calculated LOS.
3. **Existing Deficiencies-** The deficiencies in the current network were identified by comparing the LOS of the roadways to the LOS standard.
4. **Future Demand-** The future demand on the network was estimated using development projections.
5. **Future Deficiencies-** The deficiencies in the future network were identified by comparing the calculated future LOS with the LOS standard.





6. **Recommended Improvements-** Recommendations were made that will help meet future demands.

### *Existing Roadway Network Conditions*

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#### *Conversions of Growth and Development Projections to Trip Generations*

As with the TAZ structure, the WFRC Travel Demand Model was calibrated to fit existing traffic conditions in South Weber City. The method used to calibrate the model was to use traffic counts throughout the City. Traffic counts were collected from UDOT and include annual average daily traffic (AADT) volumes as defined in *Traffic on Utah Highways*. On City owned roadways, traffic counts were either provided by South Weber City or were manually counted as part of this CFP. **Figure 1** shows the count locations throughout the City used for model calibration.

#### *Existing Functional Classification and Level of Service*

The existing functional classification used in the WFRC Travel Demand Model are shown in **Figure 2**. The LOS was calculated according to the guidelines explained in the Level of Service section for the existing roadway network and is included in **Figure 3**.









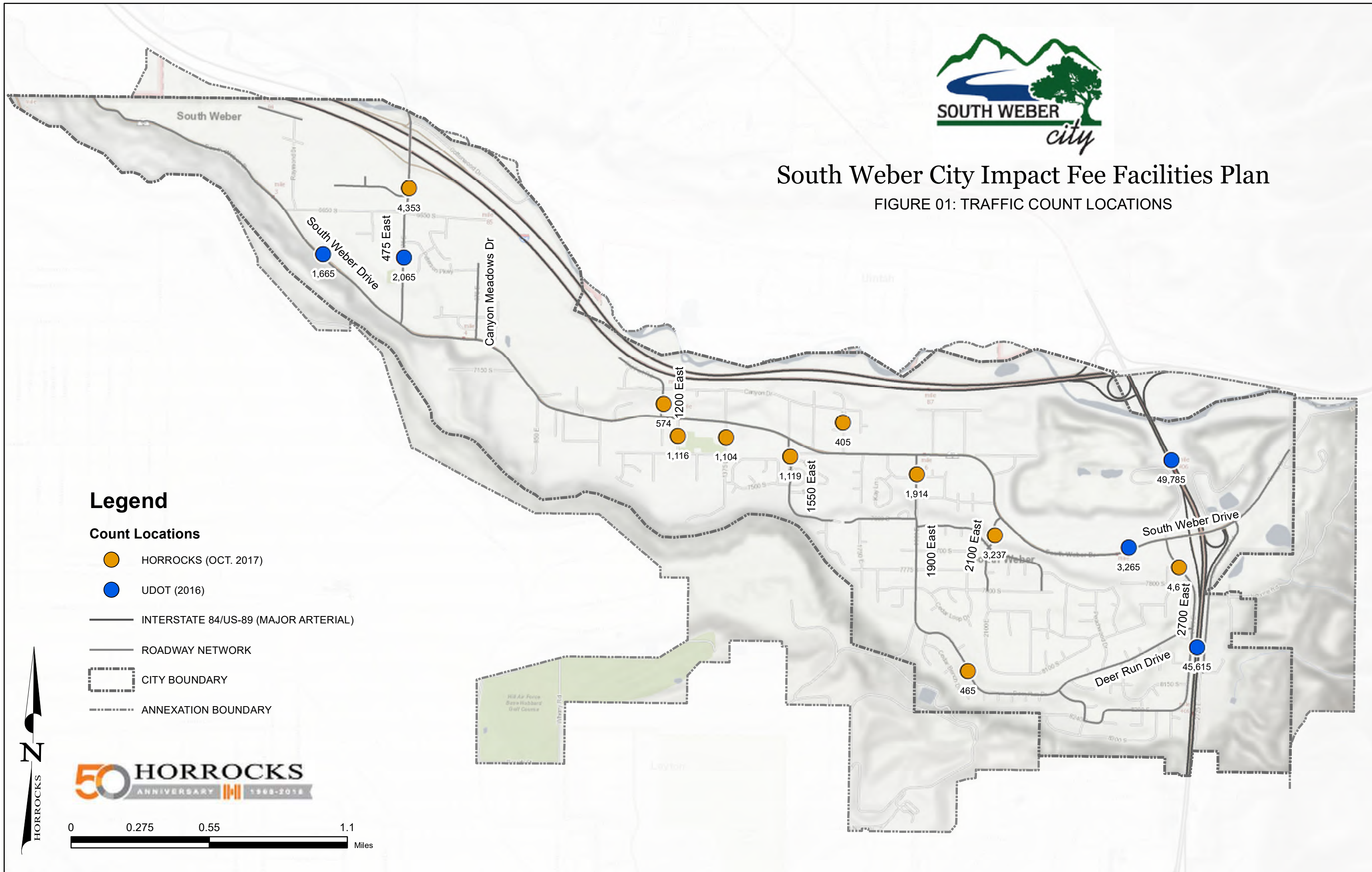
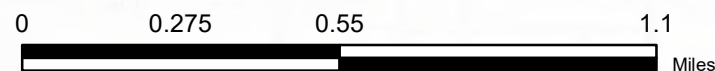
# South Weber City Impact Fee Facilities Plan

FIGURE 01: TRAFFIC COUNT LOCATIONS

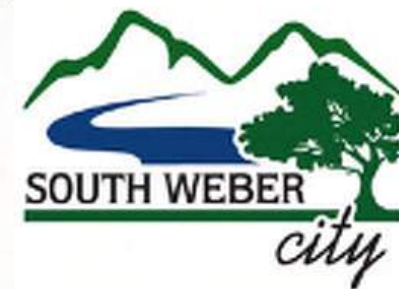
## Legend

### Count Locations

-  HORROCKS (OCT. 2017)
-  UDOT (2016)
-  INTERSTATE 84/US-89 (MAJOR ARTERIAL)
-  ROADWAY NETWORK
-  CITY BOUNDARY
-  ANNEXATION BOUNDARY







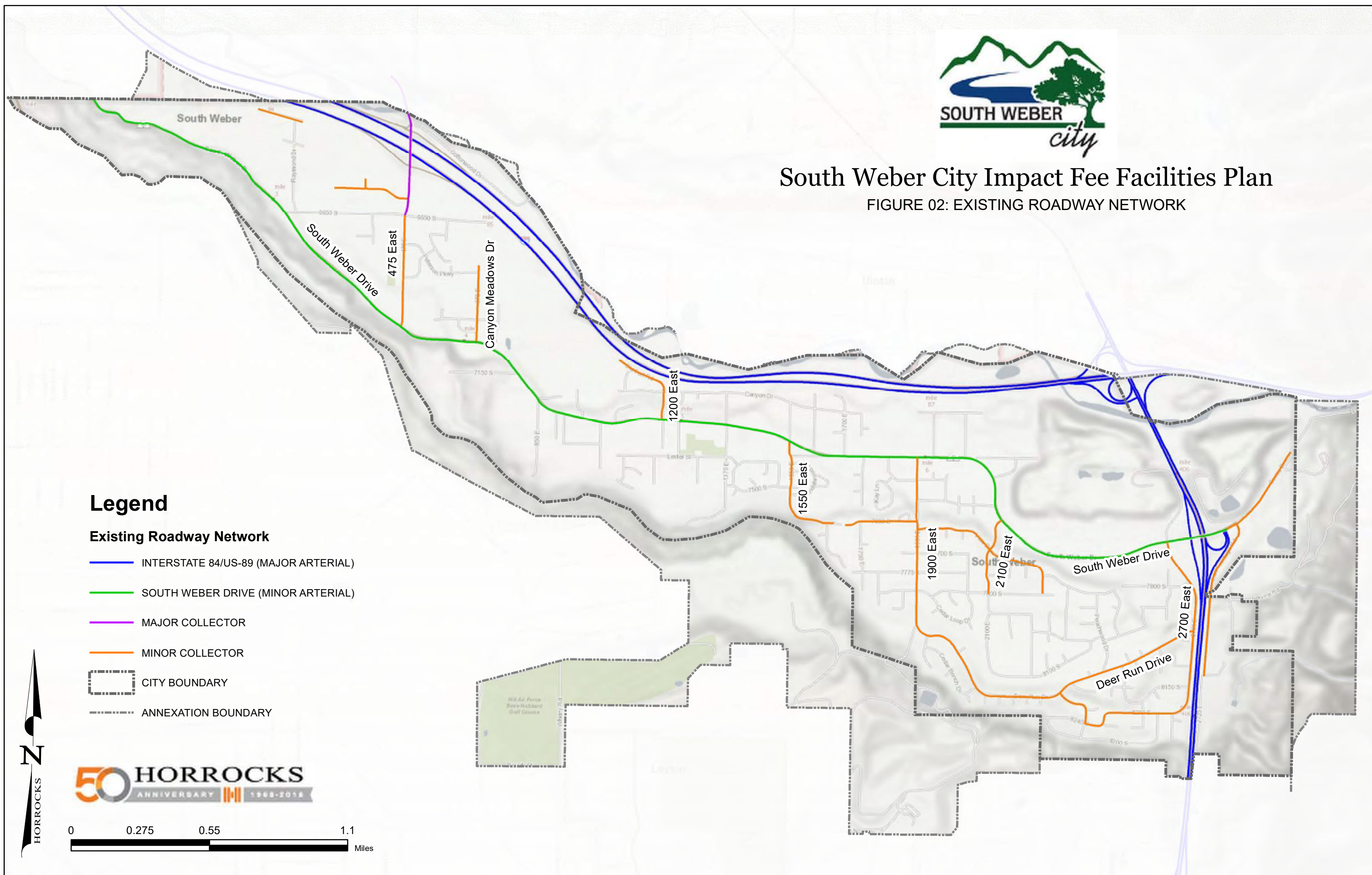
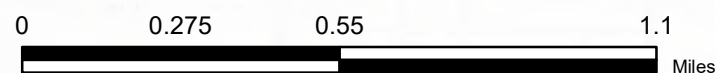
# South Weber City Impact Fee Facilities Plan

FIGURE 02: EXISTING ROADWAY NETWORK

## Legend

### Existing Roadway Network

- INTERSTATE 84/US-89 (MAJOR ARTERIAL)
- SOUTH WEBER DRIVE (MINOR ARTERIAL)
- MAJOR COLLECTOR
- MINOR COLLECTOR
- CITY BOUNDARY
- ANNEXATION BOUNDARY







# South Weber City Impact Fee Facilities Plan

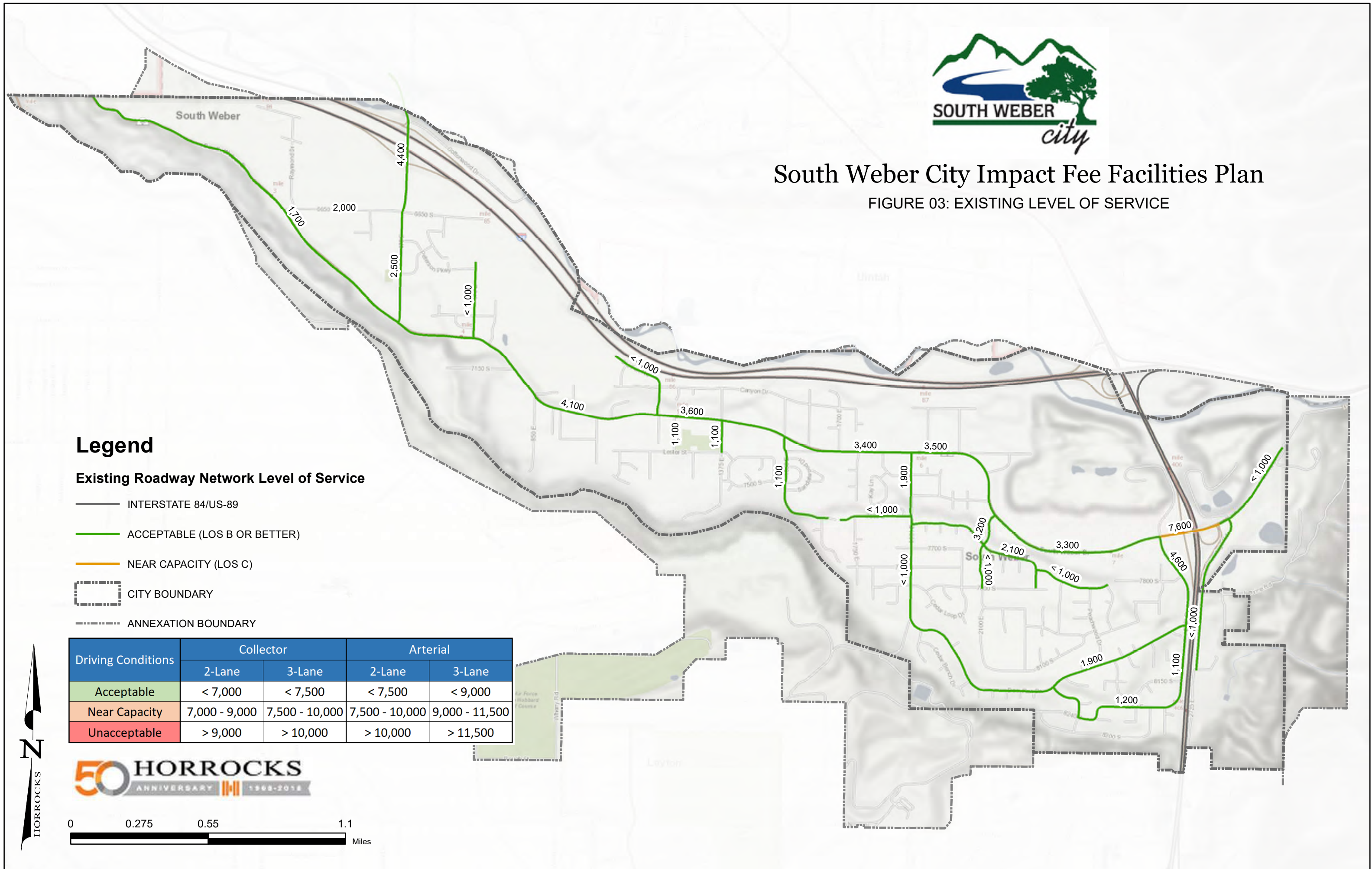
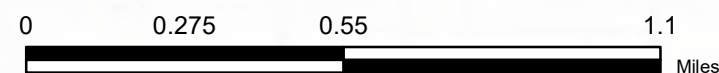
FIGURE 03: EXISTING LEVEL OF SERVICE

## Legend

### Existing Roadway Network Level of Service

- INTERSTATE 84/US-89
- ACCEPTABLE (LOS B OR BETTER)
- NEAR CAPACITY (LOS C)
- CITY BOUNDARY
- ANNEXATION BOUNDARY

Driving Conditions	Collector		Arterial	
	2-Lane	3-Lane	2-Lane	3-Lane
Acceptable	< 7,000	< 7,500	< 7,500	< 9,000
Near Capacity	7,000 - 9,000	7,500 - 10,000	7,500 - 10,000	9,000 - 11,500
Unacceptable	> 9,000	> 10,000	> 10,000	> 11,500





## South Weber City Transportation Impact Fee Facilities Plan

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### *Mitigations to Existing Capacity Deficiencies*

Using LOS C as the threshold for roadway improvements in **Figure 3** (Indicated by red lines), the following shows the roadways and intersections that are nearing existing capacity deficiencies:

#### **Roadway Segments Nearing Capacity (LOS C):**

- **South Weber Dr.:** Junction with US-89

In most cases, roadway capacity improvements are achieved by adding travel lanes. In some cases, additional capacity can be gained by striping additional lanes where the existing pavement width will accommodate it. This can be accomplished by eliminating on street parking, creating narrower travel lanes, and adding two-way left turn lanes where they don't currently exist. For all roadway capacity improvements, it is recommended to investigate other mitigation methods before widening the roadway. The only roadway segment nearing capacity (LOS C) is on South Weber Dr. No mitigations are needed for the existing roadway network.

### *Future Roadway Network Conditions*

By calibrating the WFRC Travel Demand Model to fit the existing traffic conditions in South Weber City, the model is prepared to project traffic volumes into the future. There are two future models used for this CFP, a no build scenario and a solution scenario. The model used was to identify potential capacity deficiencies, called the capital facilities plan No Build Model. The other model used was the capital facilities plan Master Plan Solution Model, which includes all future projects to improve the deficiencies in the capital facilities plan No Build Model.

### *No Build Level of Service*

A no-build scenario is intended to show what the roadway network would be like in the future if no action is taken to improve the City roadway network. The travel demand model was again used to predict this condition by applying the future growth and travel demand to the existing roadway network. As shown in **Figure 4**, the following roadways would perform at LOS C or worse if no action were taken to improve the roadway network:

- **South Weber Drive:** Junction with US-89
- **475 East:** (South Weber Dr. to Junction with I-84)

The following roadways would perform at LOS C if no action were taken to improve the roadway network:

- **South Weber Drive:** (1900 East to 2700 East)
- **South Weber Drive:** (475 East to 1200 East)





# South Weber City Impact Fee Facilities Plan

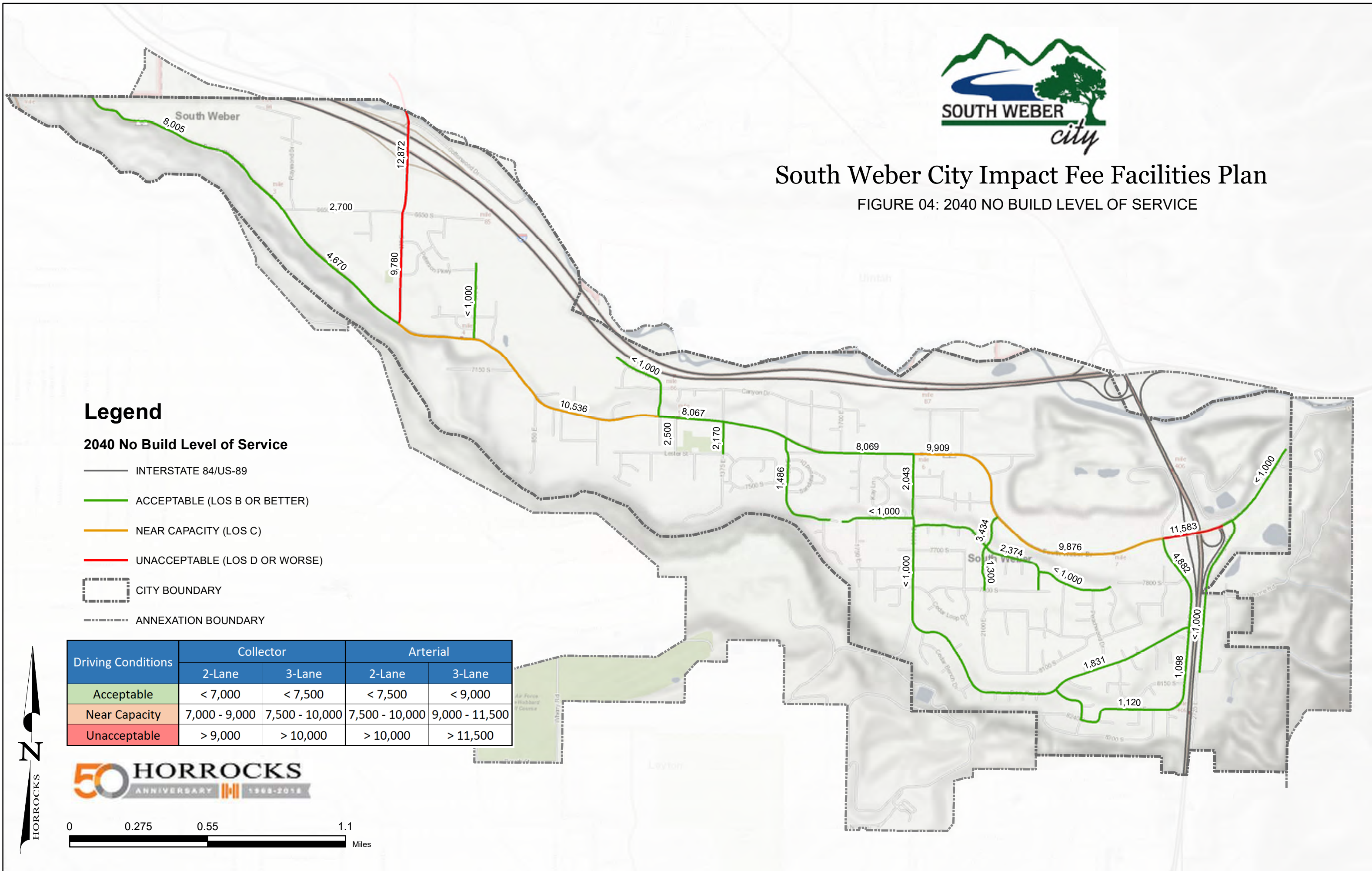
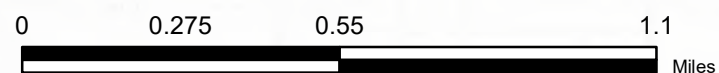
FIGURE 04: 2040 NO BUILD LEVEL OF SERVICE

## Legend

### 2040 No Build Level of Service

- INTERSTATE 84/US-89
- ACCEPTABLE (LOS B OR BETTER)
- NEAR CAPACITY (LOS C)
- UNACCEPTABLE (LOS D OR WORSE)
- CITY BOUNDARY
- ANNEXATION BOUNDARY

Driving Conditions	Collector		Arterial	
	2-Lane	3-Lane	2-Lane	3-Lane
Acceptable	< 7,000	< 7,500	< 7,500	< 9,000
Near Capacity	7,000 - 9,000	7,500 - 10,000	7,500 - 10,000	9,000 - 11,500
Unacceptable	> 9,000	> 10,000	> 10,000	> 11,500





## 10-Year Improvement Plan

Although projects will be completed as growth and development occurs throughout the City, the existing and no build scenarios are used as a basis to predict the necessary projects to include in the IFFP. For the purposes of this IFFP, only projects that will be completed within the next ten years will be considered. **Table 4** shows the projects that are forecasted to be constructed in the next ten years. This table includes all of the projects regardless of their eligibility for impact fee expenditure. The portion of the project that is impact fee eligible is indicated in the **City of South Weber Cost** column. **Figure 5** shows all projects expected to be constructed in the next ten years to meet the demands placed on the roadway network by new development.

## Infrastructure Required to Meet Demands of New Development (11-36a-302.1.a.v)

### Project Cost Attributable to Future Growth

**Table 4** represents all projects expected to be constructed based on the expected 10 year growth regardless of impact fee eligibility. Each project in **Table 4** includes a “Project Year”, “Total Project Cost”, “Funding Source” and “City of South Weber Cost”. All projects will cost **\$26,470,000**. Of the total cost, the City of South Weber will need to find funding for only **\$9,600,000**. The City is not required to pay this amount, but this represents the amount for which the City will need to find funding. Out of the City of South Weber Cost, only the cost due to future growth will be shared by new development through the assessment of impact fees.

The amount of each project to be funded by impact fees varies depending on the road jurisdiction, the funding available, the roadway classification and whether the need for the project is created by new growth in South Weber. Where an impact fee eligible project is likely to be completed using WFRC funding, the City of South Weber impact fee eligible portion of the project is only the amount of money the City will need to find as their required “matching funds”, in this case, 8% of the total project cost. UDOT projects will be funded entirely with state funds and are therefore not eligible for impact fee expenditure. Road widening projects for City streets are considered 100% impact fee eligible to the extent that such work on these roads is needed as traffic increases as a result of new development and is not needed to cure an existing deficiency. New city-owned roads are variable depending on the road classification. The cost of projects attributable to new growth and potentially impact fee eligible is defined as the portion of the roadway cross section in excess of the standards for a local street. This is based on the premise that a local cross section serves the needs of the localized development which directly access the new road. This portion will be paid for by the individual development, which accesses the new road. Any improvement due to growth that requires a cross section beyond a local street would be considered a system improvement and is therefore impact fee eligible. The City responsibility cost for each new road improvement is determined as the percentage of the total project cost beyond a local street classification.



## South Weber City Transportation Impact Fee Facilities Plan

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**Table 4: City of South Weber Total Project Costs 2019-2028**

Project	Location	Total Project Cost*	Funding Source	City of South Weber Cost
3	South Bench Drive: Toe of Bench to South Weber Drive (Project 20)	\$5,050,000	South Weber	\$490,000
4	South Bench Drive: South Weber Drive (Project 20) to Cook Property	\$5,250,000	South Weber	\$500,000
5	South Bench Drive: Cook Property to 475 East (includes realignment of 475 East)	\$1,940,000	South Weber	\$1,940,000
6	Harper Way: End of Existing to South Weber Drive	\$2,250,000	South Weber	\$0
7	New Roads: Kingston Drive & Harper Way	\$1,830,000	South Weber	\$0
9	Canyon Meadow Drive: End of Existing to South Bench Drive	\$1,320,000	South Weber	\$0
10	Old Fort Rd: End of Existing to South Bench Drive	\$800,000	South Weber	\$0
11	Lester Drive/7375 South: End of Existing to South Bench Drive	\$2,310,000	South Weber	\$1,760,000
14	1900 East Extension: Deer Run Drive to South Bench Drive	\$1,220,000	South Weber	\$1,220,000
16	Old Maple Road: End of Existing to South Weber Drive	\$1,860,000	South Weber	\$1,310,000
17	New Traffic Signal: South Bench Drive & South Weber Drive	\$260,000	UDOT	\$0
20	South Bench Drive: Roadway Improvements at South Weber Drive	\$2,380,000	South Weber	\$2,380,000
<b>Total</b>		<b>\$26,470,000</b>		<b>\$9,600,000</b>

\*Costs provided by City of South Weber Staff

### *Project Cost Attributable to 10-Year Growth*

Using the travel demand model mentioned in previous chapters, it is possible to estimate the number of PM trips originating or terminating in South Weber for the existing and future conditions. The City of South Weber generates approximately 1,632 and 2,510 one-way PM peak hour trips currently and in 2028 respectively, which indicates a growth of 878 trips. The growth in PM peak hour trips over the next 10 years becomes the denominator in the equation used to calculate the impact fee cost per PM peak hour trip for new development.





## South Weber City Impact Fee Facilities Plan

FIGURE 05: TEN YEAR CAPITAL FACILITIES PROJECTS

### Legend

#### Capital Facilities Projects

##### Future Roadway Network

— INTERSTATE 84/US-89 (MAJOR ARTERIAL)

— NEW MINOR COLLECTOR (2-3 LANES)

- - - NEW LOCAL COLLECTOR

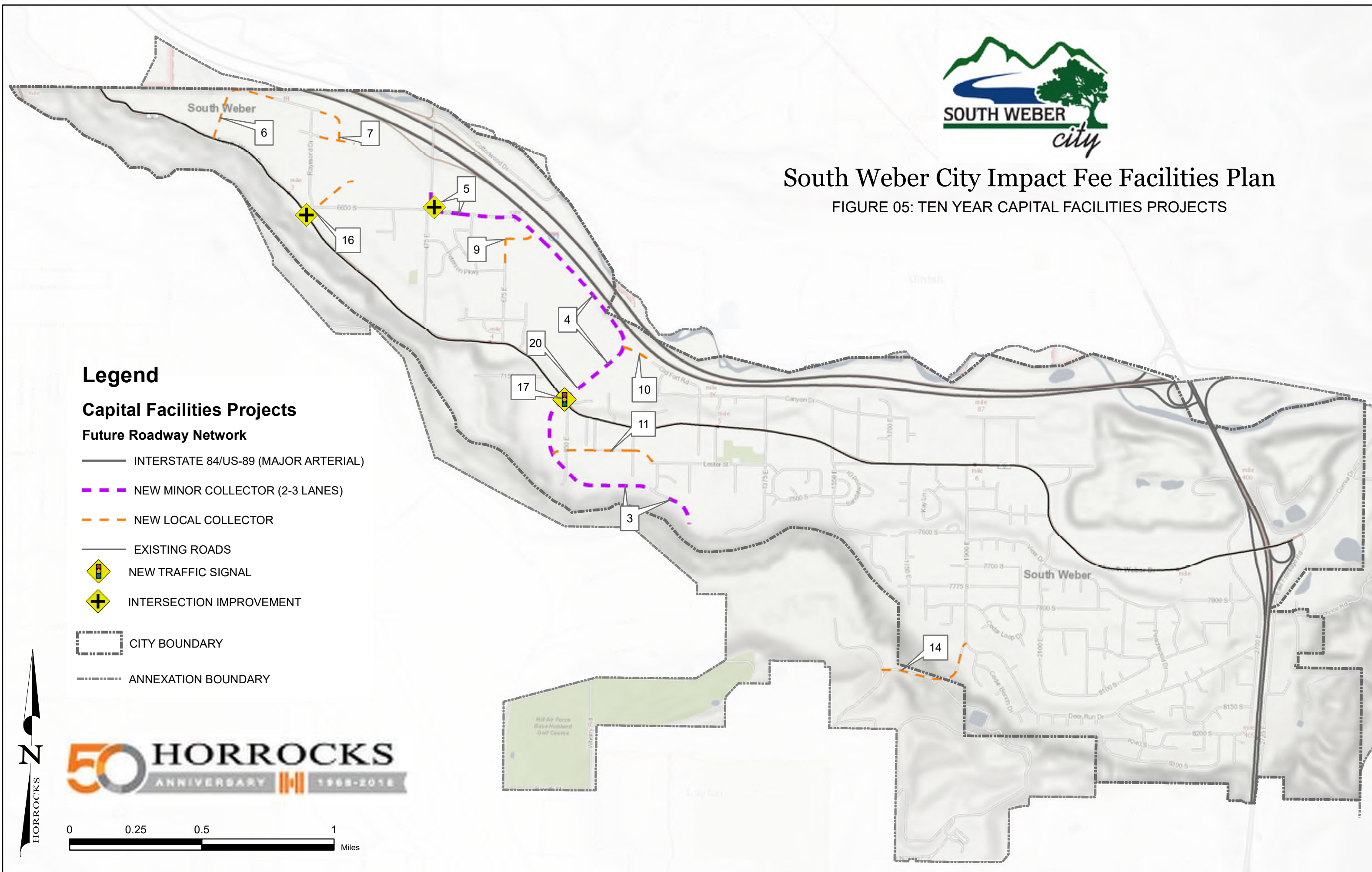
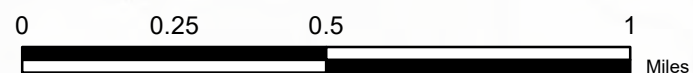
— EXISTING ROADS

🚦 NEW TRAFFIC SIGNAL

⛶ INTERSECTION IMPROVEMENT

▭ CITY BOUNDARY

- - - ANNEXATION BOUNDARY





## South Weber City Transportation Impact Fee Facilities Plan

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### *Pass-Through Reduction*

Included in **Table 5** is the percent Pass-Through traffic for all project roadways. A vehicle trip is considered pass-through when the origin and the destination for a specific trip occurs outside the city limits. For all growth within South Weber, there is a certain percentage of new trips which are considered pass-through. This percentage is determined using the WFRM Travel Demand Model. The Travel Demand Model determines pass-through traffic by keeping track of the origin, destination, and path for each vehicle trip generated. When the vehicle trip uses a roadway in South Weber and the origin and destination of that trip is located outside of South Weber, that trip is considered a pass-through trip. Since a pass-through trip does not arise from new development activity in South Weber, it cannot be paid for with impact fees. The proportion of pass-through traffic not attributable to impact fees is the proportion of pass-through traffic to the added capacity of the roadway.

**Table 5: Pass-Through Traffic Cost Reduction Calculation**

Project	Location	Added Capacity	Pass-Through Volume	Pass Through %
3	South Bench Drive: Toe of Bench to South Weber Drive (Project 20)	10,000	0	0%
4	South Bench Drive: South Weber Drive (Project 20) to Cook Property	10,000	60	1%
5	South Bench Drive: Cook Property to 475 East (includes realignment of 475 East)	10,000	80	1%
6	Harper Way: End of Existing to South Weber Drive	9,000	0	0%
7	New Roads: Kingston Drive & Harper Way	9,000	0	0%
9	Canyon Meadow Drive: End of Existing to South Bench Drive	9,000	40	4%
10	Old Fort Rd: End of Existing to South Bench Drive	9,000	20	1%
11	Lester Drive/7375 South: End of Existing to South Bench Drive	9,000	10	1%
14	1900 East Extension: Deer Run Drive to South Bench Drive	9,000	40	1%
16	Old Maple Road: End of Existing to South Weber Drive	9,000	40	4%
17	New Traffic Signal: South Bench Drive & South Weber Drive	NA	NA	NA
20	South Bench Drive: Roadway Improvements at South Weber Drive	10,000	60	1%





## South Weber City Transportation Impact Fee Facilities Plan

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### *Excess Capacity Reduction*

Included in **Table 6** is the calculated excess capacity remaining in 2028. The excess capacity is the proportion of the added capacity that is not used in 2028. Since this capacity is not used by 2028, it is not a cost of growth in this IFFP period, but can be recouped in a later IFFP period.



## South Weber City Transportation Impact Fee Facilities Plan

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**Table 6: Excess Capacity Cost Reduction Calculations**

Project	Location	Future Capacity	Added Capacity	Future Volume	2028 Excess Capacity	Cost Reduction %
3	South Bench Drive: Toe of Bench to South Weber Drive	10,000	10,000	1,500	8,500	85%
4	South Bench Drive: South Weber Drive to Cook Property	10,000	10,000	6,400	3,600	36%
5	South Bench Drive: Cook Property to 475 East (includes realignment of 475 East)	10,000	10,000	7,800	2,200	22%
6	Harper Way: End of Existing to South Weber Drive	9,000	9,000	1,000	8,000	89%
7	New Roads: Kingston Drive & Harper Way	9,000	9,000	1,000	8,000	89%
9	Canyon Meadow Drive: End of Existing to South Bench Drive	9,000	9,000	1,000	8,000	89%
10	Old Fort Rd: End of Existing to South Bench Drive	9,000	9,000	1,700	7,300	81%
11	Lester Drive/7375 South: End of Existing to South Bench Drive	9,000	9,000	1,000	8,000	89%
14	1900 East Extension: Deer Run Drive to South Bench Drive	9,000	9,000	3,900	5,100	57%
16	Old Maple Road: End of Existing to South Weber Drive	9,000	9,000	1,100	7,900	88%
17	New Traffic Signal: South Bench Drive & South Weber Drive	NA	NA	NA	NA	NA
20	South Bench Drive: Roadway Improvements at South Weber Drive	10,000	10,000	4,000	6,000	60%

### *Existing User Share for New Construction Projects*

For all roadways in the roadway system, a portion of the traffic volume would be used by the existing roadway users regardless of future development. For existing roadways, the existing user share is the existing roadway volume. For new construction, a proportion of the new traffic volume is attributed to those users who would use the road regardless of the development. **Table 7** shows the cost reduction based on the existing user share for all new roadway construction.

**Table 7: Existing User Share Cost Reduction Calculation**

Project	Location	Added Capacity	Existing User Volume	Existing User %
3	South Bench Drive: Toe of Bench to South Weber Drive	10,000	300	3%
4	South Bench Drive: South Weber Drive to Cook Property	10,000	300	3%



## South Weber City Transportation Impact Fee Facilities Plan

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Project	Location	Added Capacity	Existing User Volume	Existing User %
5	South Bench Drive: Cook Property to 475 East (includes realignment of 475 East)	10,000	300	3%
6	Harper Way: End of Existing to South Weber Drive	9,000	90	1%
7	New Roads: Kingston Drive & Harper Way	9,000	90	1%
9	Canyon Meadow Drive: End of Existing to South Bench Drive	9,000	90	1%
10	Old Fort Rd: End of Existing to South Bench Drive	9,000	180	2%
11	Lester Drive/7375 South: End of Existing to South Bench Drive	9,000	180	2%
14	1900 East Extension: Deer Run Drive to South Bench Drive	9,000	450	5%
16	Old Maple Road: End of Existing to South Weber Drive	9,000	90	1%
17	New Traffic Signal: South Bench Drive & South Weber Drive	NA	NA	NA
20	South Bench Drive: Roadway Improvements at South Weber Drive	10,000	300	3%

### *Proportion Attributable to Growth Summary and Costs*

Impact fees can only be collected for the proportion of the added capacity which is used by new development that is projected to occur through 2028. **Table 8** is a summary table that accounts for all cost reductions attributed to existing deficiencies, existing user share, pass-through, and excess capacity.

**Table 8: Proportion of Projects Attributed to New Development**

Project	Location	Cost Reduction For			Proportion Attributable to Growth
		Existing Deficiencies / User Share	Reduction for Pass-Through	Reduction for Excess Capacity	
3	South Bench Drive: Toe of Bench to South Weber Drive	3%	0%	85%	12%
4	South Bench Drive: South Weber Drive to Cook Property	3%	1%	36%	60%
5	South Bench Drive: Cook Property to 475 East (includes realignment of 475 East)	3%	1%	22%	74%
6	Harper Way: End of Existing to South Weber Drive	1%	0%	89%	10%
7	New Roads: Kingston Drive & Harper Way	1%	0%	89%	10%
9	Canyon Meadow Drive: End of Existing to South Bench Drive	1%	1%	89%	9%



## South Weber City Transportation Impact Fee Facilities Plan

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Project	Location	Cost Reduction For			Proportion Attributable to Growth
		Existing Deficiencies / User Share	Reduction for Pass-Through	Reduction for Excess Capacity	
10	Old Fort Rd: End of Existing to South Bench Drive	2%	1%	81%	16%
11	Lester Drive/7375 South: End of Existing to South Bench Drive	2%	1%	89%	8%
14	1900 East Extension: Deer Run Drive to South Bench Drive	5%	1%	57%	37%
16	Old Maple Road: End of Existing to South Weber Drive	1%	1%	88%	10%
17	New Traffic Signal: South Bench Drive & South Weber Drive	NA	NA	NA	100%
20	South Bench Drive: Roadway Improvements at South Weber Drive	3%	1%	60%	36%

Using the proportion attributed to future growth in **Table 8**, the cost attributable to future growth is calculated in **Table 9**. Of the **\$26,470,000** required by South Weber for roadway improvements, **\$3,376,000** is eligible to be paid using impact fees.

**Table 9: Cost Attributable to Growth**

Project	Location	Total Cost	South Weber Total	Proportion Attributable to Growth	Cost Attributable to Growth
3	South Bench Drive: Toe of Bench to South Weber Drive	\$5,050,000	\$490,000	12%	\$59,000
4	South Bench Drive: South Weber Drive to Cook Property	\$5,250,000	\$500,000	60%	\$300,000
5	South Bench Drive: Cook Property to 475 East (includes realignment of 475 East)	\$1,940,000	\$1,940,000	74%	\$1,436,000
6	Harper Way: End of Existing to South Weber Drive	\$2,250,000	\$0	10%	\$0
7	New Roads: Kingston Drive & Harper Way	\$1,830,000	\$0	10%	\$0
9	Canyon Meadow Drive: End of Existing to South Bench Drive	\$1,320,000	\$0	9%	\$0
10	Old Fort Rd: End of Existing to South Bench Drive	\$800,000	\$0	16%	\$0
11	Lester Drive/7375 South: End of Existing to South Bench Drive	\$2,310,000	\$1,760,000	8%	\$141,000
14	1900 East Extension: Deer Run Drive to South Bench Drive	\$1,220,000	\$1,220,000	37%	\$452,000
16	Old Maple Road: End of Existing to South Weber Drive	\$1,860,000	\$1,310,000	10%	\$131,000



## South Weber City Transportation Impact Fee Facilities Plan

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Project	Location	Total Cost	South Weber Total	Proportion Attributable to Growth	Cost Attributable to Growth
17	New Traffic Signal: South Bench Drive & South Weber Drive	\$260,000	\$0	100%	\$0
20	South Bench Drive: Roadway Improvements at South Weber Drive	\$2,380,000	\$2,380,000	36%	\$857,000
<b>Total</b>		<b>\$26,470,000</b>	<b>\$9,600,000</b>		<b>\$3,376,000</b>





## Proposed Means to Meet Demands of New Development (11-36a-302.2)

All possible revenue sources have been considered as a means of financing transportation capital improvements needed as a result of new growth. This section discusses the potential revenue sources that could be used to fund transportation needs as a result of new development.

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

Funding sources for transportation are essential if The City of South Weber recommended improvements are to be built. The following paragraphs further describe the various transportation funding sources available to the City.

### *Federal Funding*

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

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

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

- **Congestion Relief** – spot improvement and corridor improvement projects intended to improve Levels of Service and/or reduce average delay along those corridors identified in the Regional Transportation Plan as high congestion areas



## South Weber City Transportation Impact Fee Facilities Plan

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- **Mode Choice** – projects improving the diversity and/or usefulness of travel modes other than single occupant vehicles
- **Air Quality Improvements** – projects showing demonstrable air quality benefits
- **Safety** – improvements to vehicular, pedestrian, and bicyclist safety

### *State/County Funding*

The distribution of State Class B and C Program monies is established by State Legislation and is administered by the State Department of Transportation. Revenues for the program are derived from State fuel taxes, registration fees, driver license fees, inspection fees, and transportation permits. 75% of these funds are kept by UDOT for their construction and maintenance programs. The rest is made available to counties and cities. As many of the roads in South Weber fall under UDOT jurisdiction, it is in the interests of the City that staff are aware of the procedures used by UDOT to allocate those funds and to be active in requesting the funds be made available for UDOT owned roadways in the City.

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

In 2005, the State Senate passed a bill providing for the advance acquisition of right-of-way for highways of regional significance. These corridor preservation funds would enable cities and counties to better plan for future transportation needs by acquiring property to be used as future right-of-way before it is fully developed and becomes extremely difficult to acquire. UDOT holds on account the revenue generated by the local corridor preservation fund, but the county is responsible to program and control monies. In order to qualify for preservation funds, the City must comply with the Corridor Preservation Process, found at the following link [www.udot.utah.gov/public/ucon](http://www.udot.utah.gov/public/ucon)

### *City Funding*

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

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

General fund revenues are typically reserved for operation and maintenance purposes as they relate to transportation. However, general funds could be used if available to fund the expansion or introduction of specific services. Providing a line item in the City budgeted general funds to address roadway



## South Weber City Transportation Impact Fee Facilities Plan

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improvements, which are not impact fee eligible, is a recommended practice to fund transportation projects, should other funding options fall short of the needed amount.

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

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

### *Interfund Loans*

Developer dedications and exactions for impact fee eligible improvements shown in this IFFP can both be credited against the developer's impact fee analysis. If the value of the developer dedications and/or exactions are less than the developer's impact fee liability, the developer will owe the balance of the liability to the City. If the dedications and/or extractions of the developer are greater than the impact fee liability, the City must reimburse the developer the difference through impact fees collected from other developments.

### *Developer Dedications and Exactions*

Developer dedications and exactions can both be credited against the developer's impact fee analysis. If the value of the developer dedications and/or extractions are less than the developer's impact fee liability, the developer will owe the balance of the liability to the City. If the dedications and/or extractions of the developer are greater than the impact fee liability, the City must reimburse the developer the difference.

### *Developer Impact Fees*

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

## Necessity of Improvements to Maintain Level of Service

According to State statute, impact fees must only be used to fund projects that are necessitated by future development. They are not to be used to address present deficiencies. Only project costs that address future needs will be shown as impact fee eligible in this IFFP. This ensures a fair fee since developers will not be expected to address present deficiencies.

## Impact Fee Certification (11-36a-306)

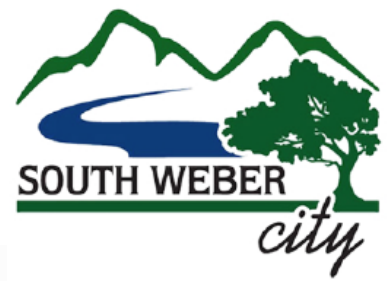
This report has been prepared in accordance with Utah Code Title 11 Chapter 36 titled “Impact Fees Act”. This report relies upon the planning, engineering, land use and other source data provided by the City and their designees and all results and projections are founded upon this information.

In accordance with Utah Code Annotate, 11-36a-306(1), Horrocks Engineers, certifies that this impact fee facilities plan:

1. Includes only the cost of public facilities that are:
  - a. Allowed under the Impact Fees Act; and
  - b. Actually incurred; or
  - c. Are projected to be incurred or encumbered within six years of 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 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 limitations:

1. All of the recommendations for implementing this IFFP of IFA are followed in their entirety by the City.
2. If any portion of the IFFP is modified or amended in any way, this certification is no longer valid.
3. All information presented and used in the creation of this IFFP is assumed to be complete and correct, including any information received from the City or other outside source.



## Appendix A: Cost Estimates

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Project Summary (All Projects)					
Project	Location	Total Price	Cost of Others (UDOT, WFRM, etc.)	Cost to Developers	South Weber City Cost
3	South Bench Drive: Toe of Bench to South Weber Drive (Project 20)	\$5,050,000	\$0	\$4,570,000	\$490,000
4	South Bench Drive: South Weber Drive (Project 20) to Cook Property	\$5,250,000	\$0	\$4,760,000	\$500,000
5	South Bench Drive: Cook Property to 475 East (includes realignment of 475 East)	\$1,940,000	\$0	\$0	\$1,940,000
6	Harper Way: End of Existing to South Weber Drive	\$2,250,000	\$0	\$2,250,000	\$0
7	New Roads: Kingston Drive & Harper Way	\$1,830,000	\$0	\$1,830,000	\$0
9	Canyon Meadow Drive: End of Existing to South Bench Drive	\$1,320,000	\$0	\$1,320,000	\$0
10	Old Fort Rd: End of Existing to South Bench Drive	\$800,000	\$0	\$800,000	\$0
11	Lester Drive/7375 South: End of Existing to South Bench Drive	\$2,310,000	\$0	\$560,000	\$1,760,000
14	1900 East Extension: Deer Run Drive to South Bench Drive	\$1,220,000	\$0	\$0	\$1,220,000
16	Old Maple Road: End of Existing to South Weber Drive	\$1,860,000	\$0	\$560,000	\$1,310,000
17	New Traffic Signal: South Bench Drive & South Weber Drive	\$260,000	\$260,000	\$0	\$0
20	South Bench Drive: Roadway Improvements at South Weber Drive	\$2,380,000	\$0	\$0	\$2,380,000
Total		\$26,470,000	\$260,000	\$16,650,000	\$9,600,000

## South Weber City Capital Facilities Plan

### Unit Costs

Item	Unit	Unit Cost
Parkstrip	S.F.	\$3.00
Removal of Existing Asphalt	S.Y.	\$5.00
Clearing and Grubbing	Acre	\$2,000
Roadway Excavation	C.Y.	\$11.00
HMA Concrete	Ton	\$85.00
Untreated Base Course	C.Y.	\$40.00
Granular Borrow	C.Y.	\$30.00
Curb and Gutter (2.5' width)	L.F.	\$23.00
Sidewalk (6' width)	L.F.	\$40.00
Drainage	L.F.	\$60.00
Right of Way	S.F.	\$5.00
Bridge/Culvert	S.F.	\$225.00
Traffic Signal	Each	\$180,000

<b>Contingency</b>	15%
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<b>Mobilization</b>	10%
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<b>Preconstruction Engineering</b>	10%
<b>Construction Engineering</b>	10%

## South Weber City Capital Facilities Plan

Project No. 3  
Improvement Type: New Road

### South Bench Drive: Toe of Bench to South Weber Drive (Project 20)

Major Collector

#### Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	\$3	36,880	\$110,640
Removal of Existing Asphalt	S.Y.	\$5	0	\$0
Clearing and Grubbing	Acre	\$2,000	7	\$13,208
Roadway Excavation	C.Y.	\$11	17,074	\$187,815
HMA Concrete	Ton	\$85	4,764	\$404,912
Untreated Base Course	C.Y.	\$40	4,553	\$182,123
Granular Borrow	C.Y.	\$30	7,968	\$239,037
Curb and Gutter (2.5' width)	L.F.	\$23	7,376	\$169,648
Sidewalk (6' width)	L.F.	\$40	7,376	\$295,040
Drainage	L.F.	\$60	7,376	\$442,560
Right of Way	S.F.	\$5	287,664	\$1,438,320
Bridge/Culvert	S.F.	\$225	0	\$0
Traffic Signal	Each	\$180,000	0	\$0
Subtotal				\$3,480,000

Contingency	15%	\$522,000
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Mobilization	10%	\$348,000
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Preconstruction Engineering	10%	\$348,000
Construction Engineering	10%	\$348,000

Total Project Costs	\$5,050,000
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Responsibility of Others (UDOT, WFRC, ETC.)	0%
	\$0

Responsibility of Developer	90%
	\$4,570,000

South Weber City Responsibility	10%
	\$490,000

## South Weber City Capital Facilities Plan

Project No. 4  
Improvement Type: New Road

### South Bench Drive: South Weber Drive (Project 20) to Cook Property

Major Collector

#### Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	\$3	38,370	\$115,110
Removal of Existing Asphalt	S.Y.	\$5	0	\$0
Clearing and Grubbing	Acre	\$2,000	7	\$13,741
Roadway Excavation	C.Y.	\$11	17,764	\$195,403
HMA Concrete	Ton	\$85	4,956	\$421,271
Untreated Base Course	C.Y.	\$40	4,737	\$189,481
Granular Borrow	C.Y.	\$30	8,290	\$248,694
Curb and Gutter (2.5' width)	L.F.	\$23	7,674	\$176,502
Sidewalk (6' width)	L.F.	\$40	7,674	\$306,960
Drainage	L.F.	\$60	7,674	\$460,440
Right of Way	S.F.	\$5	299,286	\$1,496,430
Bridge/Culvert	S.F.	\$225	0	\$0
Traffic Signal	Each	\$180,000	0	\$0
Subtotal				\$3,620,000

Contingency	15%	\$543,000
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Mobilization	10%	\$362,000
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Preconstruction Engineering	10%	\$362,000
Construction Engineering	10%	\$362,000

Total Project Costs	\$5,250,000
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Responsibility of Others (UDOT, WFRC, ETC.)	0%
	\$0

Responsibility of Developer	90%
	\$4,760,000

South Weber City Responsibility	10%
	\$500,000

# South Weber City Capital Facilities Plan

Project No. 5  
Improvement Type: New Road

## South Bench Drive: Cook Property to 475 East (includes realignment of 475 East)

Major Collector

### Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	\$3	7,000	\$21,000
Removal of Existing Asphalt	S.Y.	\$5	7,794	\$38,969
Clearing and Grubbing	Acre	\$2,000	3	\$5,604
Roadway Excavation	C.Y.	\$11	4,984	\$54,822
HMA Concrete	Ton	\$85	3,965	\$337,025
Untreated Base Course	C.Y.	\$40	1,780	\$71,198
Granular Borrow	C.Y.	\$30	3,204	\$96,117
Curb and Gutter (2.5' width)	L.F.	\$23	4,670	\$107,410
Sidewalk (6' width)	L.F.	\$40	2,450	\$98,000
Drainage	L.F.	\$60	800	\$48,000
Right of Way	S.F.	\$5	91,612	\$458,060
Bridge/Culvert	S.F.	\$225	0	\$0
Traffic Signal	Each	\$180,000	0	\$0
Subtotal				\$1,340,000

Contingency	15%	\$201,000
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Mobilization	10%	\$134,000
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Preconstruction Engineering	10%	\$134,000
Construction Engineering	10%	\$134,000

Total Project Costs	\$1,940,000
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Responsibility of Others (UDOT, WFRC, ETC.)	0%
	\$0

Responsibility of Developer	0%
	\$0

South Weber City Responsibility	100%
	\$1,940,000

## South Weber City Capital Facilities Plan

Project No. 6  
Improvement Type: New Road

### Harper Way: End of Existing to South Weber Drive

Local Street

#### Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	\$3	28,230	\$84,690
Removal of Existing Asphalt	S.Y.	\$5	0	\$0
Clearing and Grubbing	Acre	\$2,000	3	\$6,049
Roadway Excavation	C.Y.	\$11	6,273	\$69,007
HMA Concrete	Ton	\$85	1,313	\$111,579
Untreated Base Course	C.Y.	\$40	1,673	\$66,916
Granular Borrow	C.Y.	\$30	2,928	\$87,827
Curb and Gutter (2.5' width)	L.F.	\$23	3,764	\$86,572
Sidewalk (6' width)	L.F.	\$40	3,764	\$150,560
Drainage	L.F.	\$60	3,764	\$225,840
Right of Way	S.F.	\$5	131,740	\$658,700
Bridge/Culvert	S.F.	\$225	0	\$0
Traffic Signal	Each	\$180,000	0	\$0
Subtotal				\$1,550,000

Contingency	15%	\$232,500
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Mobilization	10%	\$155,000
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Preconstruction Engineering	10%	\$155,000
Construction Engineering	10%	\$155,000

Total Project Costs	\$2,250,000
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Responsibility of Others (UDOT, WFRC, ETC.)	0%
	\$0

Responsibility of Developer	100%
	\$2,250,000

South Weber City Responsibility	0%
	\$0



# South Weber City Capital Facilities Plan

Project No. 7  
Improvement Type: New Road

## New Roads: Kingston Drive & Harper Way

Local Street

### Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	\$3	22,995	\$68,985
Removal of Existing Asphalt	S.Y.	\$5	0	\$0
Clearing and Grubbing	Acre	\$2,000	2	\$4,927
Roadway Excavation	C.Y.	\$11	5,110	\$56,210
HMA Concrete	Ton	\$85	1,069	\$90,888
Untreated Base Course	C.Y.	\$40	1,363	\$54,507
Granular Borrow	C.Y.	\$30	2,385	\$71,540
Curb and Gutter (2.5' width)	L.F.	\$23	3,066	\$70,518
Sidewalk (6' width)	L.F.	\$40	3,066	\$122,640
Drainage	L.F.	\$60	3,066	\$183,960
Right of Way	S.F.	\$5	107,310	\$536,550
Bridge/Culvert	S.F.	\$225	0	\$0
Traffic Signal	Each	\$180,000	0	\$0
Subtotal				\$1,260,000

Contingency	15%	\$189,000
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Mobilization	10%	\$126,000
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Preconstruction Engineering	10%	\$126,000
Construction Engineering	10%	\$126,000

Total Project Costs	\$1,830,000
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Responsibility of Others (UDOT, WFRC, ETC.)	0%
	\$0

Responsibility of Developer	100%
	\$1,830,000

South Weber City Responsibility	0%
	\$0

# South Weber City Capital Facilities Plan

Project No. 9  
Improvement Type: New Road

## Canyon Meadow Drive: End of Existing to South Bench Drive

Local Street

### Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	\$3	16,635	\$49,905
Removal of Existing Asphalt	S.Y.	\$5	0	\$0
Clearing and Grubbing	Acre	\$2,000	2	\$3,564
Roadway Excavation	C.Y.	\$11	3,697	\$40,663
HMA Concrete	Ton	\$85	774	\$65,750
Untreated Base Course	C.Y.	\$40	986	\$39,431
Granular Borrow	C.Y.	\$30	1,725	\$51,753
Curb and Gutter (2.5' width)	L.F.	\$23	2,218	\$51,014
Sidewalk (6' width)	L.F.	\$40	2,218	\$88,720
Drainage	L.F.	\$60	2,218	\$133,080
Right of Way	S.F.	\$5	77,630	\$388,150
Bridge/Culvert	S.F.	\$225	0	\$0
Traffic Signal	Each	\$180,000	0	\$0
Subtotal				\$910,000

Contingency	15%	\$136,500
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Mobilization	10%	\$91,000
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Preconstruction Engineering	10%	\$91,000
Construction Engineering	10%	\$91,000

Total Project Costs	\$1,320,000
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Responsibility of Others (UDOT, WFRC, ETC.)	0%
	\$0

Responsibility of Developer	100%
	\$1,320,000

South Weber City Responsibility	0%
	\$0

## South Weber City Capital Facilities Plan

Project No. 10  
Improvement Type: New Road

### Old Fort Rd: End of Existing to South Bench Drive

Local Street

#### Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	\$3	10,110	\$30,330
Removal of Existing Asphalt	S.Y.	\$5	0	\$0
Clearing and Grubbing	Acre	\$2,000	1	\$2,166
Roadway Excavation	C.Y.	\$11	2,247	\$24,713
HMA Concrete	Ton	\$85	470	\$39,960
Untreated Base Course	C.Y.	\$40	599	\$23,964
Granular Borrow	C.Y.	\$30	1,048	\$31,453
Curb and Gutter (2.5' width)	L.F.	\$23	1,348	\$31,004
Sidewalk (6' width)	L.F.	\$40	1,348	\$53,920
Drainage	L.F.	\$60	1,348	\$80,880
Right of Way	S.F.	\$5	47,180	\$235,900
Bridge/Culvert	S.F.	\$225	0	\$0
Traffic Signal	Each	\$180,000	0	\$0
Subtotal				\$550,000

Contingency	15%	\$82,500
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Mobilization	10%	\$55,000
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Preconstruction Engineering	10%	\$55,000
Construction Engineering	10%	\$55,000

Total Project Costs	\$800,000
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Responsibility of Others (UDOT, WFRC, ETC.)	0%
	\$0

Responsibility of Developer	100%
	\$800,000

South Weber City Responsibility	0%
	\$0

## South Weber City Capital Facilities Plan

Project No. 11  
Improvement Type: New Road

### Lester Drive/7375 South: End of Existing to South Bench Drive

Minor Collector

#### Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	\$3	25,163	\$75,489
Removal of Existing Asphalt	S.Y.	\$5	4,652	\$23,259
Clearing and Grubbing	Acre	\$2,000	3	\$6,356
Roadway Excavation	C.Y.	\$11	3,885	\$42,738
HMA Concrete	Ton	\$85	2,885	\$245,225
Untreated Base Course	C.Y.	\$40	3,885	\$155,410
Granular Borrow	C.Y.	\$30	0	\$0
Curb and Gutter (2.5' width)	L.F.	\$23	5,683	\$130,709
Sidewalk (6' width)	L.F.	\$40	5,624	\$224,960
Drainage	L.F.	\$60	2,950	\$177,000
Right of Way	S.F.	\$5	101,766	\$508,830
Bridge/Culvert	S.F.	\$225	0	\$0
Traffic Signal	Each	\$180,000	0	\$0
Subtotal				\$1,590,000

Contingency	15%	\$238,500
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Mobilization	10%	\$159,000
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Preconstruction Engineering	10%	\$159,000
Construction Engineering	10%	\$159,000

Total Project Costs	\$2,310,000
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Responsibility of Others (UDOT, WFRC, ETC.)	0%
	\$0

Responsibility of Developer	24%
	\$560,000

South Weber City Responsibility	76%
	\$1,760,000

# South Weber City Capital Facilities Plan

Project No. 14  
Improvement Type: New Road

## 1900 East Extension: Deer Run Drive to South Bench Drive

Minor Collector

### Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	\$3	750	\$2,250
Removal of Existing Asphalt	S.Y.	\$5	1,036	\$5,182
Clearing and Grubbing	Acre	\$2,000	1.35	\$2,693
Roadway Excavation	C.Y.	\$11	3,129	\$34,416
HMA Concrete	Ton	\$85	2,904	\$246,840
Untreated Base Course	C.Y.	\$40	3,129	\$125,148
Granular Borrow	C.Y.	\$30	0	\$0
Curb and Gutter (2.5' width)	L.F.	\$23	4,573	\$105,179
Sidewalk (6' width)	L.F.	\$40	4,526	\$181,040
Drainage	L.F.	\$60	2,338	\$140,280
Right of Way	S.F.	\$5	0	\$0
Bridge/Culvert	S.F.	\$225	0	\$0
Traffic Signal	Each	\$180,000	0	\$0
Subtotal				\$840,000

Contingency	15%	\$126,000
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Mobilization	10%	\$84,000
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Preconstruction Engineering	10%	\$84,000
Construction Engineering	10%	\$84,000

Total Project Costs	\$1,220,000
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Responsibility of Others (UDOT, WFRC, ETC.)	0%
	\$0

Responsibility of Developer	0%
	\$0

South Weber City Responsibility	100%
	\$1,220,000

## South Weber City Capital Facilities Plan

Project No. 16  
Improvement Type: New Road

### Old Maple Road: End of Existing to South Weber Drive

Minor Collector

#### Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	\$3	30,801	\$92,403
Removal of Existing Asphalt	S.Y.	\$5	3,475	\$17,377
Clearing and Grubbing	Acre	\$2,000	3	\$5,649
Roadway Excavation	C.Y.	\$11	2,864	\$31,504
HMA Concrete	Ton	\$85	2,126	\$180,710
Untreated Base Course	C.Y.	\$40	2,864	\$114,559
Granular Borrow	C.Y.	\$30	0	\$0
Curb and Gutter (2.5' width)	L.F.	\$23	4,192	\$96,416
Sidewalk (6' width)	L.F.	\$40	4,121	\$164,840
Drainage	L.F.	\$60	2,210	\$132,600
Right of Way	S.F.	\$5	53,149	\$265,745
Bridge/Culvert	S.F.	\$225	0	\$0
Intersection Improvement	Each	\$180,000	1	\$180,000
Subtotal				\$1,280,000

Contingency	15%	\$192,000
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Mobilization	10%	\$128,000
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Preconstruction Engineering	10%	\$128,000
Construction Engineering	10%	\$128,000

Total Project Costs	\$1,860,000
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Responsibility of Others (UDOT, WFRC, ETC.)	0%
	\$0

Responsibility of Developer	30%
	\$560,000

South Weber City Responsibility	70%
	\$1,310,000



## South Weber City Capital Facilities Plan

Project No. 17  
Improvement Type: Traffic Signal

### New Traffic Signal: South Bench Drive & South Weber Drive

South Weber Drive

#### Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	\$3	0	\$0
Removal of Existing Asphalt	S.Y.	\$5	0	\$0
Clearing and Grubbing	Acre	\$2,000	0	\$0
Roadway Excavation	C.Y.	\$11	0	\$0
HMA Concrete	Ton	\$85	0	\$0
Untreated Base Course	C.Y.	\$40	0	\$0
Granular Borrow	C.Y.	\$30	0	\$0
Curb and Gutter (2.5' width)	L.F.	\$23	0	\$0
Sidewalk (6' width)	L.F.	\$40	0	\$0
Drainage	L.F.	\$60	0	\$0
Right of Way	S.F.	\$5	0	\$0
Bridge/Culvert	S.F.	\$225	0	\$0
Traffic Signal	Each	\$180,000	1	\$180,000
<b>Subtotal</b>				<b>\$180,000</b>

<b>Contingency</b>	15%	\$27,000
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<b>Mobilization</b>	10%	\$18,000
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<b>Preconstruction Engineering</b>	10%	\$18,000
<b>Construction Engineering</b>	10%	\$18,000

<b>Total Project Costs</b>	<b>\$260,000</b>
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<b>Responsibility of Others (UDOT, WFRC, ETC.)</b>	<b>100%</b>
	<b>\$260,000</b>

<b>Responsibility of Developer</b>	<b>0%</b>
	<b>\$0</b>

<b>South Weber City Responsibility</b>	<b>0%</b>
	<b>\$0</b>

# South Weber City Capital Facilities Plan

Project No. 20  
Improvement Type: New Road

## South Bench Drive: Roadway Improvements at South Weber Drive

Major Collector

### Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	\$3	19,400	\$58,200
Removal of Existing Asphalt	S.Y.	\$5	5,600	\$28,000
Clearing and Grubbing	Acre	\$2,000	2	\$4,000
Roadway Excavation	C.Y.	\$11	4,745	\$52,195
HMA Concrete	Ton	\$85	3,500	\$297,500
Untreated Base Course	C.Y.	\$40	3,200	\$128,000
Granular Borrow	C.Y.	\$30	11,500	\$345,000
Curb and Gutter (2.5' width)	L.F.	\$23	2,200	\$50,600
Sidewalk (6' width)	L.F.	\$40	2,200	\$88,000
Drainage	L.F.	\$60	2,000	\$120,000
Right of Way	S.F.	\$5	92,000	\$460,000
Bridge/Culvert	S.F.	\$225	0	\$0
Traffic Signal	Each	\$180,000	0	\$0
Subtotal				\$1,640,000

Contingency	15%	\$246,000
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Mobilization	10%	\$164,000
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Preconstruction Engineering	10%	\$164,000
Construction Engineering	10%	\$164,000

Total Project Costs	\$2,380,000
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Responsibility of Others (UDOT, WFRC, ETC.)	0%
	\$0

Responsibility of Developer	0%
	\$0

South Weber City Responsibility	100%
	\$2,380,000