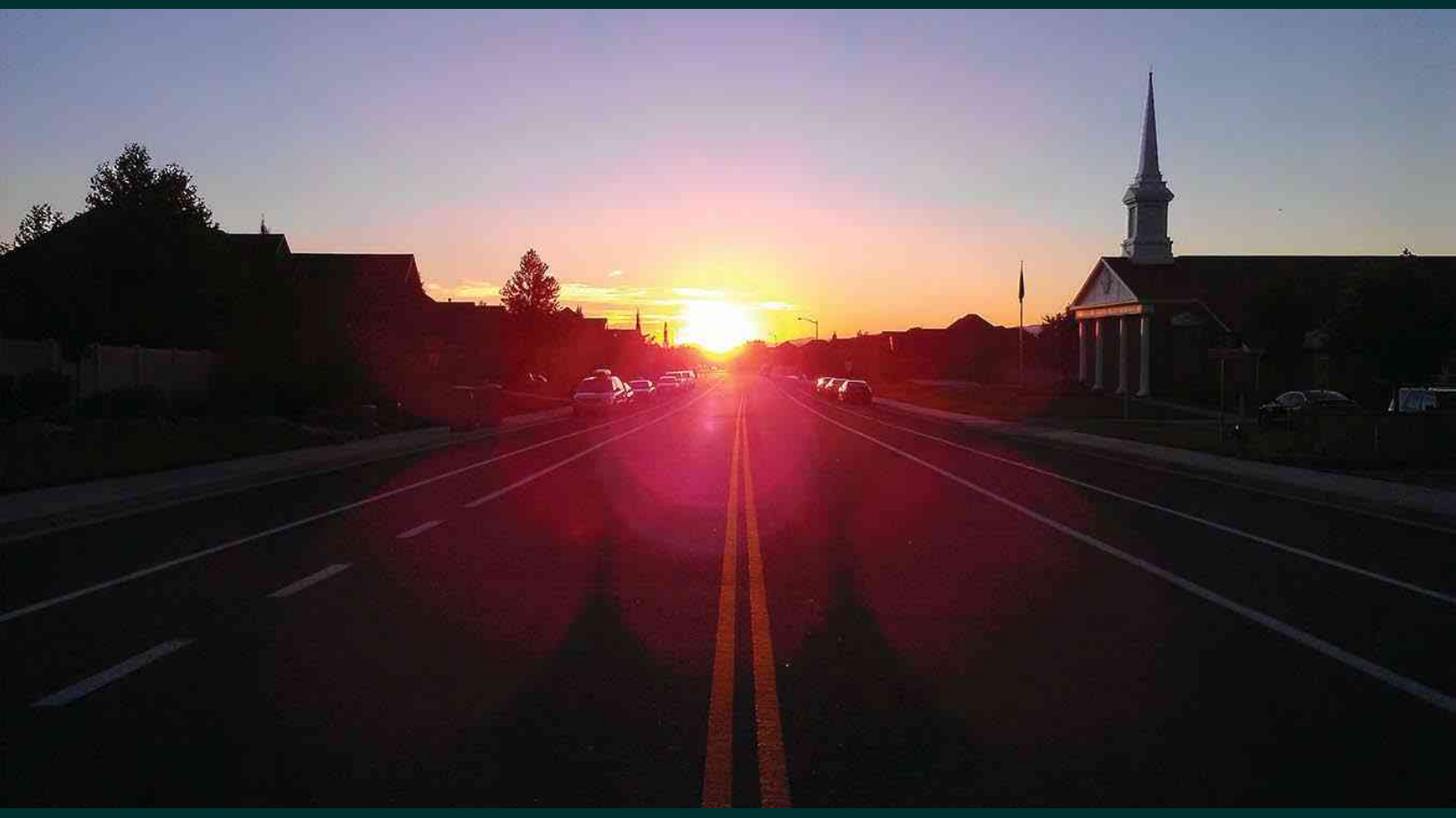
SPRINGVILLE CITY

IMPACT FEE FACILITIES PLAN



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IMPACT FEE FACILITIES PLAN

Introduction

The purpose of an Impact Fee Facilities Plan (IFFP) is to identify public facilities that are needed to accommodate development and to determine which projects may be funded with impact fees. Utah law requires communities to prepare an IFFP before preparing an impact fee analysis 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 2020 Springville Transportation Master Plan (TMP) regarding the upcoming demands on the existing infrastructure facilities that will require improvements to accommodate future growth and provide an acceptable LOS. The TMP provides additional detail regarding the methodology used to determine the 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 because 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 and at an intersection based on the average delay per vehicle. A standard of LOS D is a generally accepted LOS standard for urban areas and is used as the standard for Springville City. This allows for speeds at or near free-flow speeds but with some congestion during the peak times of the day. At intersections, LOS D means that vehicles should not have to wait for more than one cycle to proceed through the intersection and experience delays of less than 35 seconds, according to the Highway Capacity Manual 2010. **Table 1** below summarizes the maximum capacities for roadway segments used by the City of Springville.

Table 1: LOS D Capacity Criteria in Vehicles per Day

Lanes	Arterial	Collector
2	13,400	12,100
3	15,100	13,400
5	32,800	26,900
7	50,500	NA

Source: Utah/Wasatch Front Specific Daily Capacity Estimates; MAG & WFRC

Intersection Standards

The performance of intersections has a large effect on the level of service of the roadway network. Intersections have different stop controls such as no control, stop control, signal, roundabout, or yield. The level of service for each type of intersection is calculated depending on its control type. Intersection improvements will be necessary 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 3**. 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.

Trips

The unit of demand for transportation impact is the PM peak hour trip. A PM peak hour trip is defined by the Institute of Transportation Engineers (ITE) as a single or one-directional vehicle movement to or from a site between the hours of 4 PM and 6 PM. The total traffic impact of a new development can be determined by the sum of the total number of trips generated by a development during the PM peak hour. This trip generation number or impact can be estimated for an individual development using the ITE Trip Generation Manual (currently 9th edition). This publication uses national data studied over decades to assist traffic engineering professionals in determining 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 Springville 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. These vehicles will only be counted as they travel 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 main 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 the trip originated in 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 housing development and workplace development since without either of these

locations, the trip wouldn't happen. Some trips are not primary, 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 who stops at the gas station on their way to work (a gas station is a pass-by trip) or a driver who 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 this IFA.

System Improvements and Project Improvements

As described in the TMP, there are four primary classifications of roads, which include local streets, collectors, arterials, and freeways/expressways. The City of Springville 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. Each classification may have a variable number of lanes, which is a function of the expected traffic volume and serves as the greatest measure of roadway capacity.

Improvements to collectors and arterials are considered "system improvements" according to the Utah Impact Fee Law, as these streets serve users from multiple developments. 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 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, and LOS D 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)

Included is the determination of excess capacity on the existing roadway network. Excess capacity is defined as the amount of available capacity on any given street in the roadway network under existing conditions. **Table 2** represents the excess capacity for each existing roadway under Springville's jurisdiction. A positive excess capacity represents the available capacity for new development in the city before additional infrastructure is needed. This represents a buy-in component from the City as the existing residential/property owners/developers are to proportionately reimburse the City for its actual cost of excess capacity in these improvements. The portion of these roadways which are calculated as the buy-in component of the impact fee is included in the Impact Fee Analysis (IFA). Existing roadway segments with a negative excess capacity in **Table 2** (existing deficiencies under the Impact Fee Act) would undergo capacity improvements not funded with Impact Fee revenues. The roadways are shown in **Table 2** are part of a recently constructed roadway project with a total upsize cost to Springville of $1,215,384.

Table 2: Existing and 2033 Excess Capacity/Deficiency Calculations in Existing Roadways

Road Name	Project Cost	Existing Capacity	Existing Volume	Excess Capacity/ Deficiency	Excess Capacity/ Deficiency %	2033 Capacity (Projects Included)	2033 Volume	2033 Excess Capacity/ Deficiency	2033 Excess Capacity/ Deficiency %
1200 West	$477,454.19	32,800	5,000	27,800	85%	32,800	26,348	6,452	20%
900 South	$119,858.79	12,100	200	11,900	98%	12,100	513	11,587	96%
Matte Ln/750 W	$101,896.12	12,100	1,500	10,600	88%	12,100	4,500	7,600	63%
100 West & 600 S	$40,260.08	12,100	100	12,000	99%	13,400	500	12,900	96%
1400 North	$0.00	13,400	6,400	7,000	52%	13,400	10,400	3,000	22%
2600 West	$405,750.20	13,400	4,400	9,000	67%	13,400	9,500	3,900	29%
400 S: 1850 E to 1950 E	$70,164.70	13,400	1,800	11,600	87%	13,400	7,750	5,650	42%

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 how 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 present was estimated using traffic counts and population data.
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

Conversions of Growth and Development Projections to Trip Generations

The basis of the future travel demand was projected using the Mountainland Association of Governments (MAG) Travel Demand Model. The inputs to the model consist of socio-economic and land use data provided by MAG and the City. The outputs from the model include peak hour trips and daily traffic volumes on each of the roadways in the network. The MAG Travel Demand Model was calibrated to existing traffic conditions in the City of Springville. Traffic counts for state roads 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 the City of Springville or were manually counted as part of the TMP. **Figure 1** shows the count locations throughout the City used for model calibration.

Existing Functional Classification and Level of Service

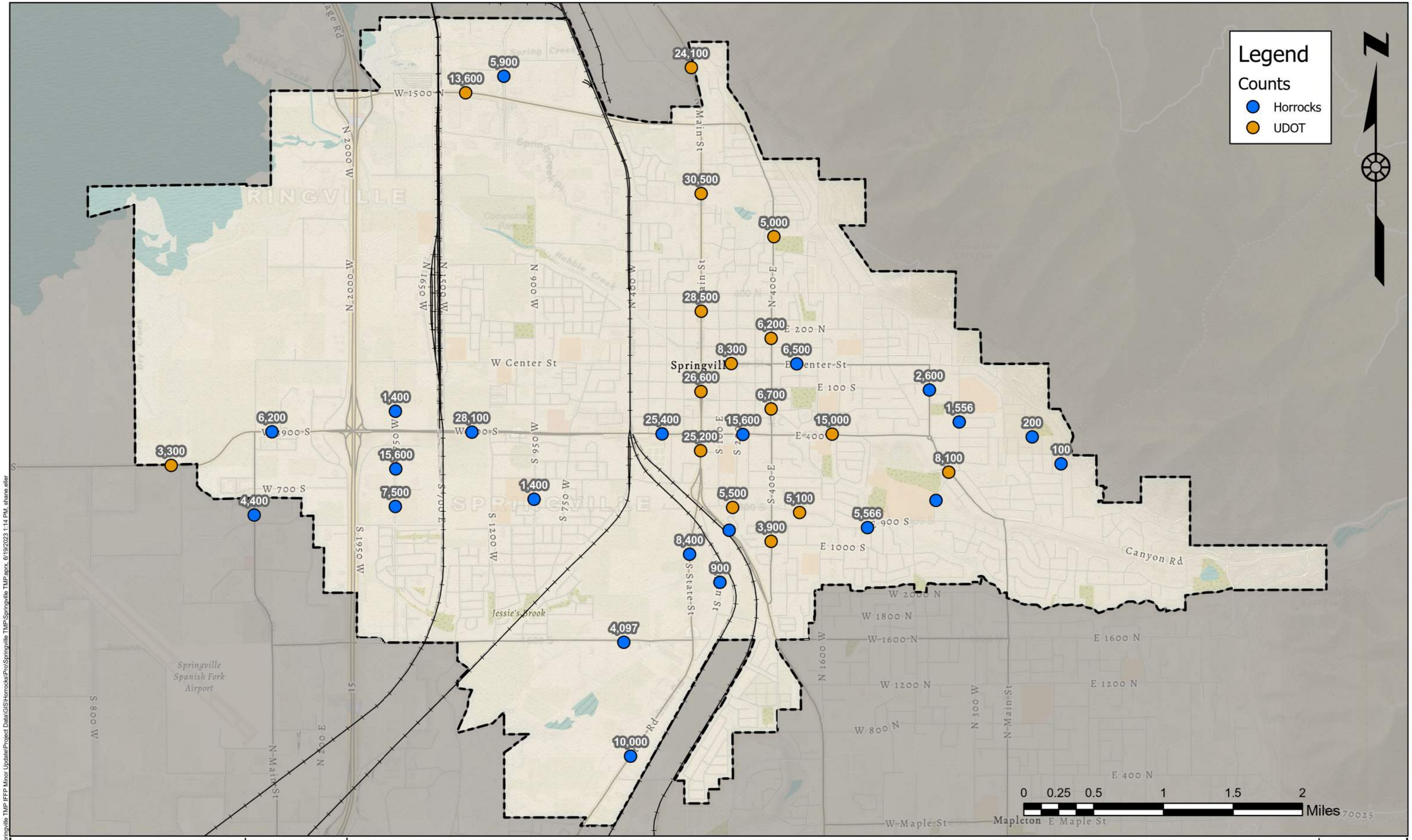
The existing functional classification used in the MAG Travel Demand Model is shown in **Figure 2**. The LOS was calculated for each roadway according to the guidelines explained in the Level of Service section and a LOS map is included in **Figure 3**

Using LOS D as the threshold for roadway improvements in **Figure 3** (Indicated by red lines), the following shows the roadways that have existing capacity deficiencies:

Roadway Elements at or below LOS E:

- **None**

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. It is recommended to investigate other mitigation methods before widening the roadway for all roadway capacity improvements.



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Springville Transportation Master Plan

Traffic Count Locations

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Figure 1

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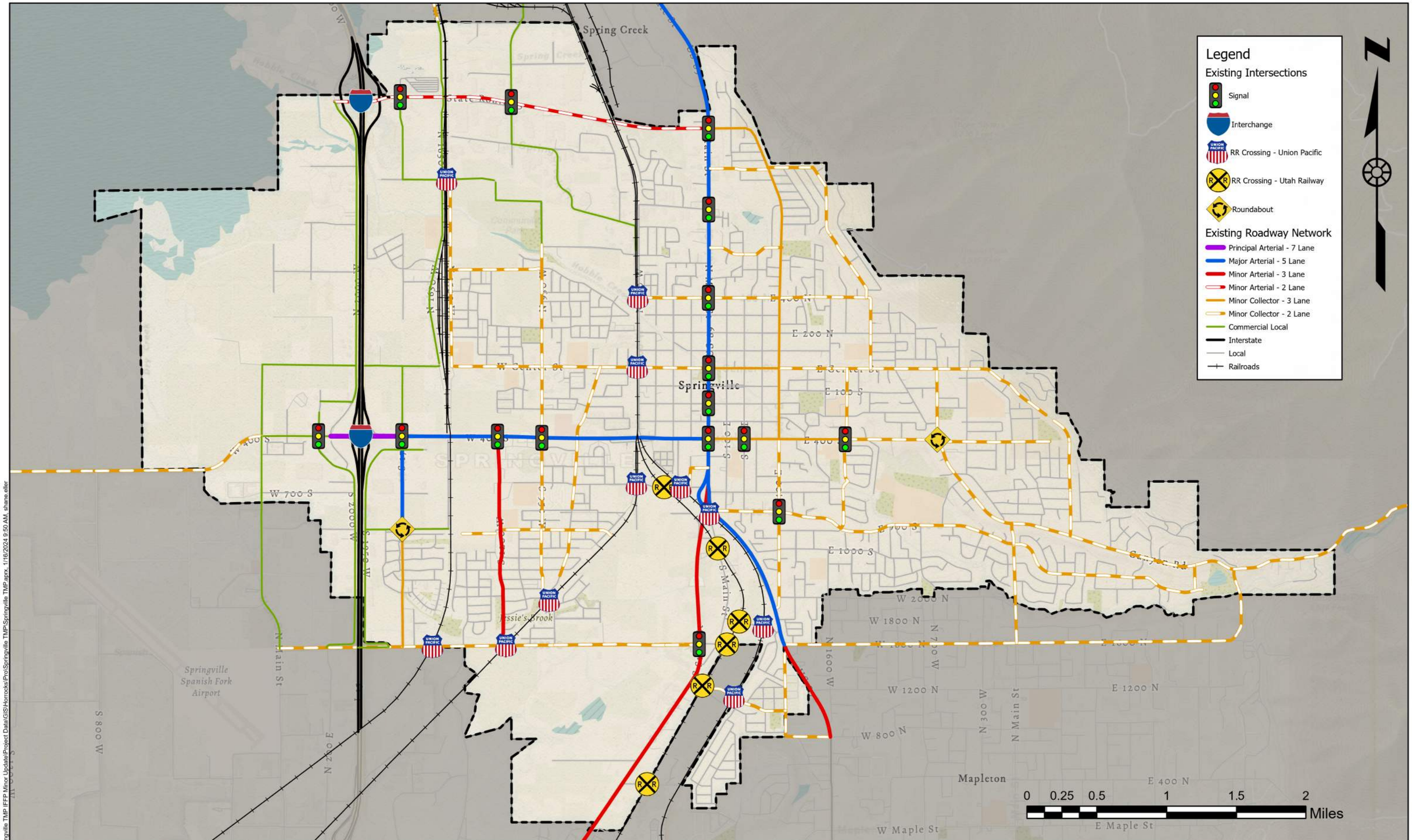

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Existing Functional Classification Map

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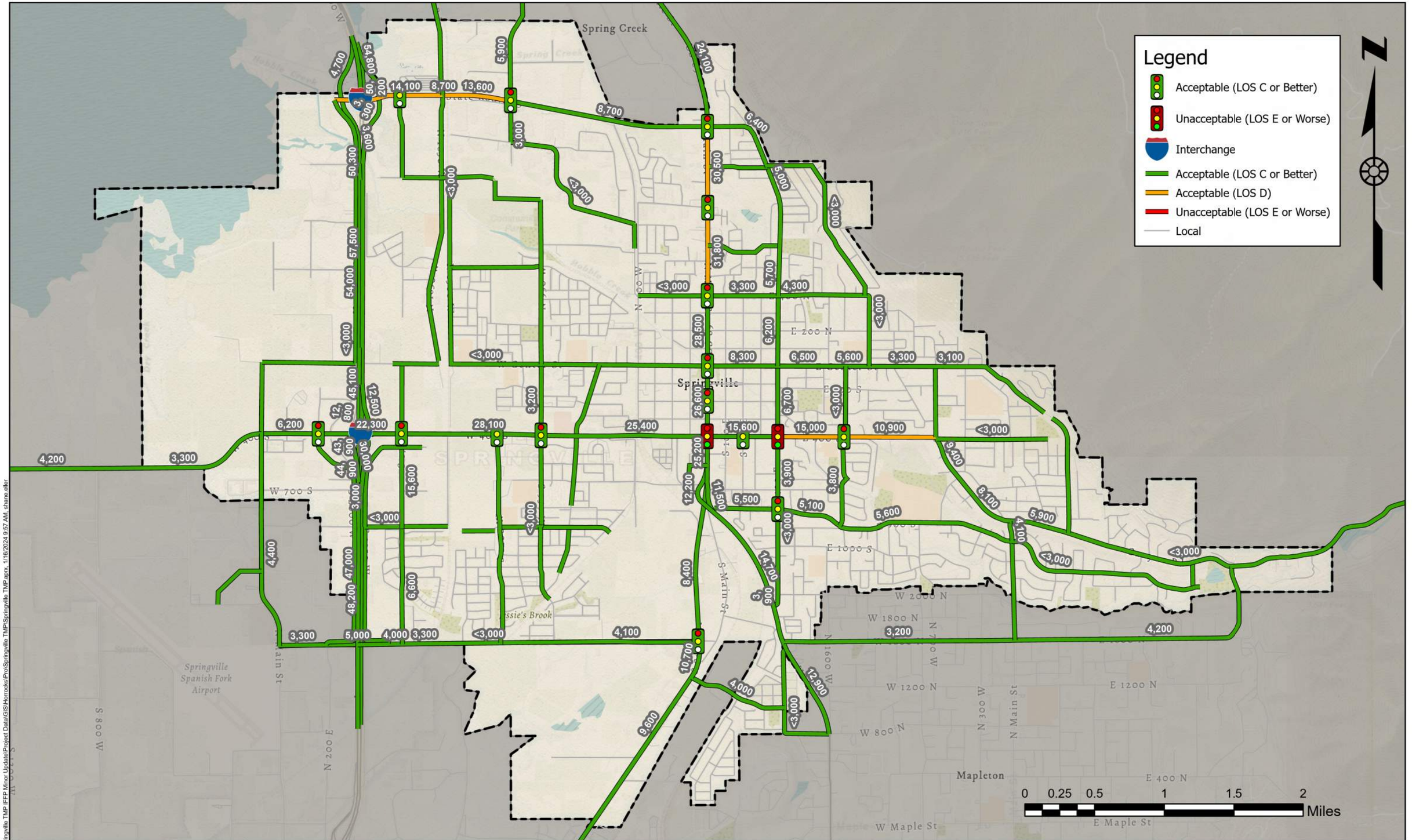
Figure 2



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Existing Level of Service Map

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Figure 3

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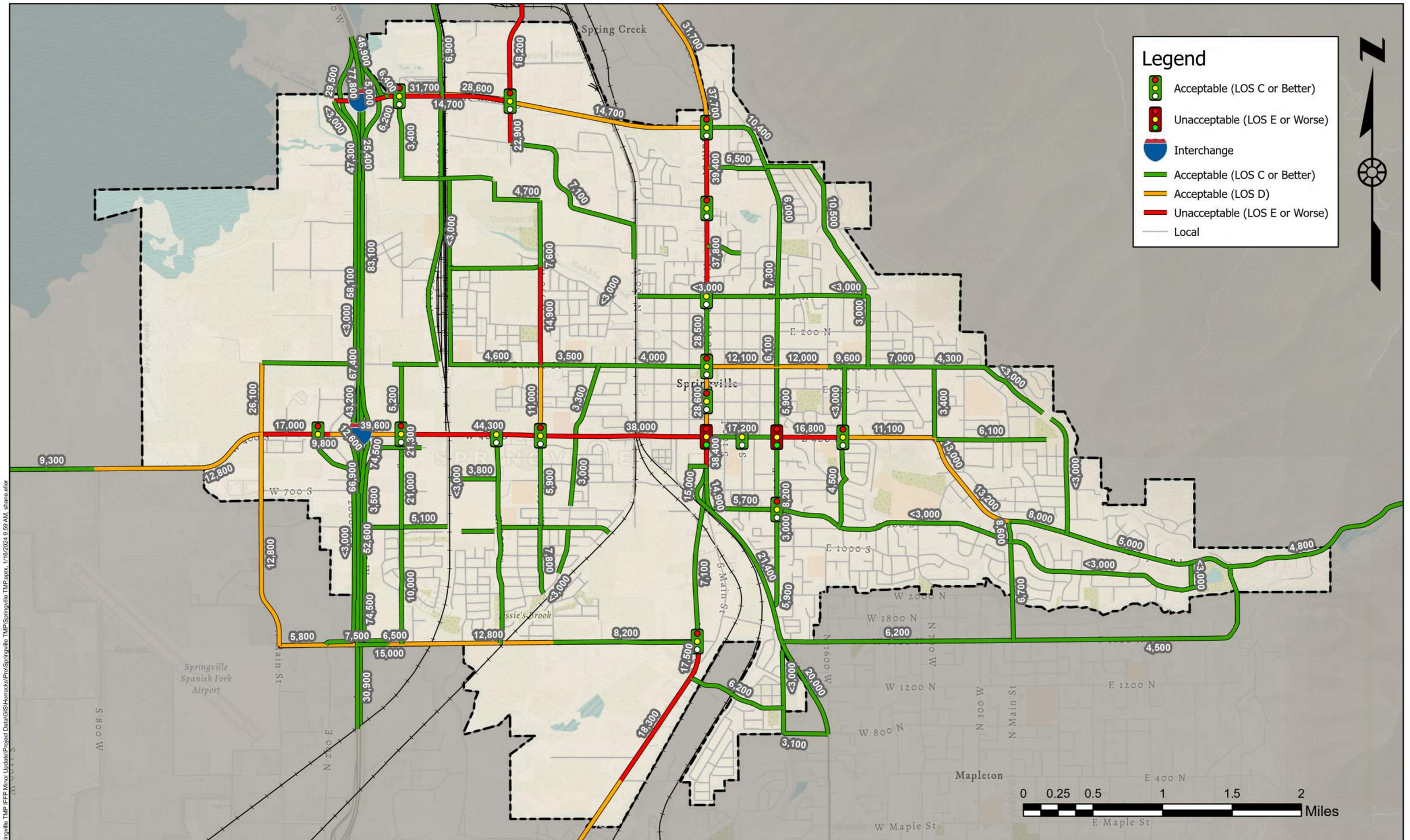
Future Roadway Network Conditions

By calibrating the MAG Travel Demand Model to the existing traffic conditions in the City of Springville, the model is prepared to project traffic volumes into the future. Two modeling scenarios were analyzed. The first identified potential capacity deficiencies by projecting traffic conditions assuming no roadway improvements are made (no-build condition). The second scenario includes proposed projects that will mitigate the deficiencies identified in scenario one.

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 roadway elements will perform at LOS E or worse if no action is taken to improve the roadway network:

- **1400 North** (I-15 to 1100 West)
- **1200 West** (Northern Border to Spring Creek Road)
- **Main Street** (1400 North to 700 South)
- **950 West** (550 North to Center Street)
- **1600 South** (1750 West to Wallace Drive)
- **State Street (SR-51)** (1600 South to 5400 South)
- **1400 North (SR-75) & 1750 West** (Traffic Signal)
- **1400 North (SR-75) & 1100 West** (Traffic Signal)
- **Center Street & 400 East** (Stop Controlled Intersection)
- **400 South & 2600 West** (Stop Controlled Intersection)
- **400 South & 950 West** (Traffic Signal)
- **400 South & 400 East** (Traffic Signal)
- **1600 South & State Street** (Stop Controlled Intersection)
- **State Street & Evergreen Drive** (Stop Controlled Intersection)
- **Canyon Road & 620 South** (Stop Controlled Intersection)
- **900 South & 1300 East** (Stop Controlled Intersection)
- **900 South & 800 East** (Stop Controlled Intersection)



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2040 No Build Level of Service Map

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Figure 4

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10-Year Improvement Plan

Although projects will be completed as growth and development occur throughout the City, the existing and no-build scenarios are used to predict the necessary projects to include in the IFFP. For this IFFP, only projects that will be completed within the next ten years will be considered. **Table 3** shows the projects forecasted to be needed in the next ten years. **Table 3** includes all the projects regardless of their eligibility for impact fee expenditure. The portion of the project that is impact fee eligible is indicated in the **Impact Fee Eligible** and **Springville Total** columns. **Figure 5** shows the projects needed between now and 2033 to meet the demands placed on the roadway network by new development.

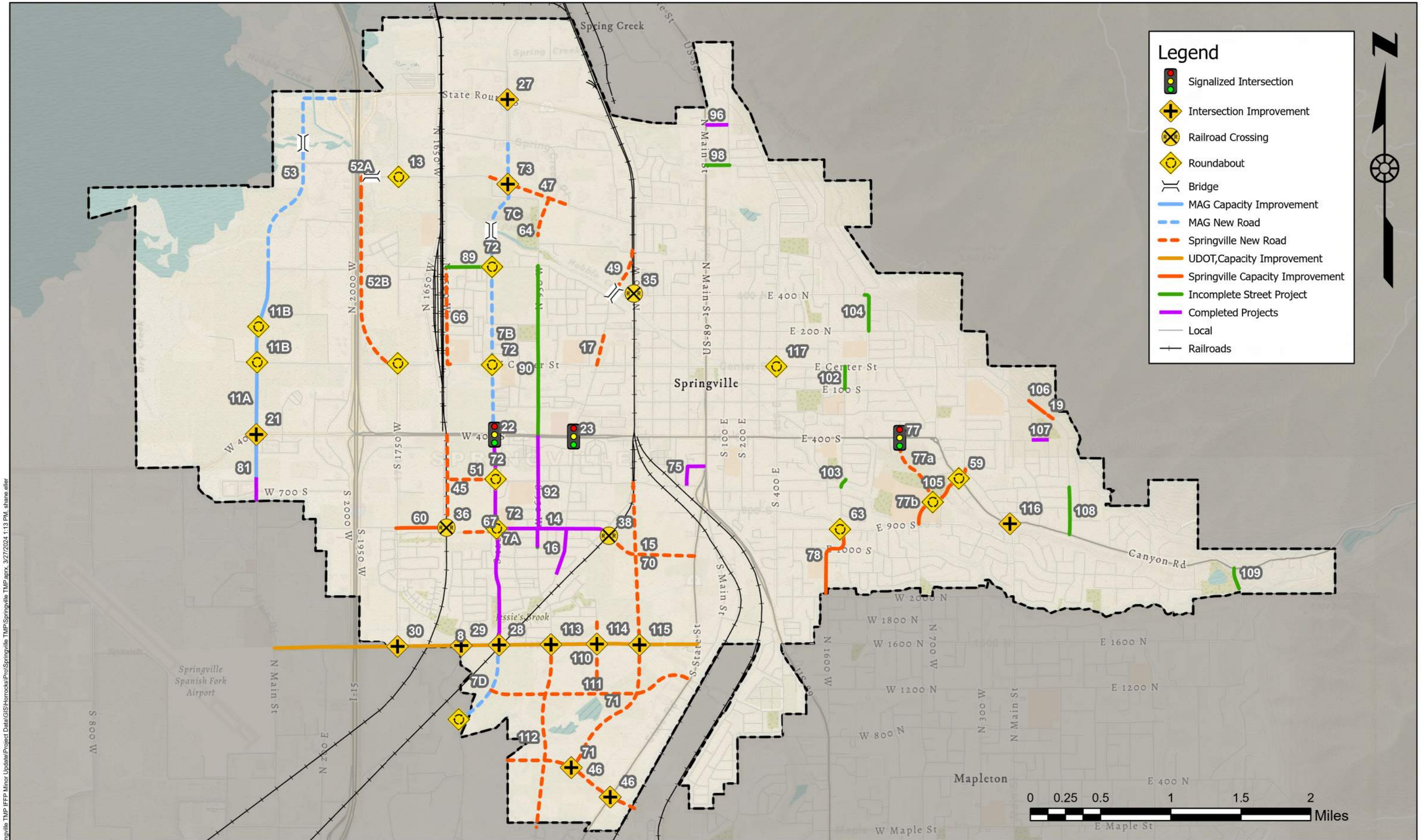
Infrastructure Required to Meet Demands of New Development (11-36a-302.1.a.v)

Project Cost Attributable to Future Growth

Table 3 shows the project costs attributable to new growth as a percentage of the total project costs, as defined in the previous section. Each project in **Table 3** would be needed due to future growth but the cost that should be shared by new development through the assessment of impact fees varies depending on the road jurisdiction, the funding available, and the roadway classification. There are roadways in Springville included in MAG's Transportation Improvement Program (TIP). For those projects, a 6.77% match is required to receive funding assistance. If Springville receives funding assistance, only the 6.77% match is impact fee eligible. UDOT projects will be funded entirely with state funds and are therefore not eligible for impact fee expenditure. Road widening projects are considered 100% impact fee eligible, as any work on these roads will only be needed as traffic increases because of new development. New city-owned roads are variable depending on the road classification. The cost attributable to new growth and potentially impact fee eligible is defined as the portion of the roadway cross-section more than the minimum standards for both a local and commercial street (the determination of local versus commercial local is based on the Land Use Plan). This is based on the premise that a local or commercial cross-section serves the needs of the localized development which directly accesses 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 is determined as the percentage of the total project cost beyond a local street classification. For example, a Minor Collector Street is 15% and 6% more costly than a local street and commercial local street respectively so the City responsible (impact fee eligible) portion of a new Minor Collector is 15% or 6% based on the Land Use plan. Detailed cost estimates can be found in **Appendix A – Cost Estimates**.

There are additional costs included in each cost estimate based on a percentage of the construction costs. The four additional costs are **contingency**, **mobilization**, **preconstruction engineering**, and **construction engineering**. The percentages used for the additional costs may vary as these values are estimated for each project. These estimates are based on the concept cost estimate values used by UDOT. **Contingency** accounts for the items not estimated during the concept cost estimate. Examples include utility placement and surveying. **Contingency** costs can range up to 15% based on the number of items not estimated. **Mobilization** is the preparation made by the contractor before construction begins on a project. Springville will use the UDOT recommended mobilization value for local projects at 10% of the

construction cost. **Preconstruction** engineering is based on the complexity of the project as well as the construction costs. For local projects, the preconstruction costs can range up to 16% of the construction costs based on UDOT cost estimating. For the cost estimates included in this IFFP, a value of 8% was used. **Construction engineering** includes the construction management and additional design necessary during construction. Recommended costs for local projects are up to 16% and a value of 8% was used for the cost estimates included in the IFFP.



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Springville Transportation Master Plan

10-Year Project Map

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Figure 5

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Table 3: Impact Fee Facilities Plan 2024-2033

Project	Location	Total Price	Funding Source	Springville City %	Springville City Total
7B	1200 West: 400 S to 550 North	$2,348,000	Springville/ MAG	6.77%	$159,000
7C	1200 West: 550 North to SR-75	$5,168,000	Springville/ MAG	6.77%	$350,000
7D	1200 West: 1600 South to Canyon Creek Pkwy	$2,373,000	Springville/ MAG	6.77%	$161,000
8	1600 South Widening: I-15 to State Street	$46,629,000	UDOT	0%	$0
11A	2600 West Widening: 400 South to 500 North	$5,168,000	Springville	50%	$2,584,000
11B	Roundabout: 2600 West & Center Street and 2600 West & 300 North	$2,189,000	Springville	50%	$1,095,000
13	Roundabout: 1750 West & 1000 North	$1,095,000	Springville	100%	$1,095,000
15	900 South Extension to SR-51	$6,642,000	Springville	17%	$1,110,000
17	Connection of Wood Springs Dr. & 550 West	$1,174,000	Springville	16%	$197,000
19	Connection of 2080 East near 250 South	$538,000	Springville	100%	$538,000
21	Intersection Improvement: 400 South & 2600 West	$254,000	UDOT	0%	$0
22	Intersection Improvement: 400 South & 1200 West	$254,000	Springville/ MAG	6.77%	$18,000
23	Intersection Improvement: 400 South & Wood Springs Dr.	$254,000	UDOT	0%	$0
27	Intersection Improvement: 1400 North & 1200 West	$254,000	UDOT	0%	$0
28	Intersection Improvement: 1600 South & 1200 West	$254,000	UDOT	0%	$0
29	Intersection Improvement: 1600 South & Wallace Dr.	$254,000	UDOT	0%	$0
30	Intersection Improvement: 1600 South & 1750 West	$254,000	UDOT	0%	$0
35	Railroad Crossing: 400 North & 450 West	$705,000	Springville	100%	$705,000
36	Railroad Crossing: 900 South & 1500 West	$705,000	Springville	100%	$705,000
38	Railroad Crossing: 900 South & 600 West	$705,000	Springville	100%	$705,000
45	1500 West: Center Street to 900 South	$6,506,000	Springville	17%	$1,087,000
46	1600 South & SR-51 Connection	$7,761,000	UDOT	0%	$0
47	1000 North Extension to 1650 West	$3,054,000	Springville	6%	$184,000
49	550 West Extension: 550 North to 450 West	$2,206,000	Springville	6%	$142,000
51	700 South New Road: 1500 West (Project 45) to 1250 West (Project 7A)	$1,927,000	Springville	16%	$309,000
52	Frontage Road: 1000 North to Center Street with Culvert	$8,984,000	Springville	39%	$2,009,000
53	2600 West Extension: Center Street to SR-57	$11,153,700	Springville/ MAG	6.77%	$756,000
59	Roundabout: Canyon Road and 620 South	$1,095,000	Springville	100%	$1,095,000
60	900 South: 1750 West to 1500 West	$2,099,000	Springville	6%	$126,000

Project	Location	Total Price	Funding Source	Springville City %	Springville City Total
63	Roundabout: 900 South and 800 East	$795,000	Springville/ MAG	6.77%	$54,000
64	950 West Realignment: 700 North to 850 North	$949,000	Springville	17%	$159,000
66	1500 West: 1000 North to 550 North	$4,664,000	Springville	16%	$747,000
67	900 South: 1500 West to 1200 West	$2,440,000	Springville	16%	$391,000
70	450 West New Road: 700 South to 1600 South	$8,404,000	Springville	16%	$1,345,000
71	1700 South: 1600 South to Project 46	$7,062,000	Springville	100%	$7,062,000
72	1200 West Roundabouts	$4,377,000	Springville	100%	$4,377,000
73	Intersection Improvement: 1000 North & 1200 West	$1,095,000	Springville	100%	$1,095,000
77a	1200 E Extension: Canyon Rd to 900 S with Signal	$4,185,000	Springville	50%	$2,093,000
77b	620 South Realignment: Canyon Road to 900 South	$4,035,000	Springville	50%	$2,018,000
81	Spanish Fork Main Street: 400 South to South Border	$3,155,000	Springville/ MAG	6.77%	$214,000
89	550 North: 1500 West to 950 West	$1,544,000	Springville	17%	$258,000
90	950 West: 550 North to 400 South	$1,690,000	Springville	17%	$283,000
92	950 West: 400 South to 1000 South	$804,000	Springville	17%	$135,000
98	1150 North: Main Street to 200 East	$132,000	Springville	50%	$66,000
102	800 East: Center Street to 100 South	$23,000	Springville	100%	$23,000
103	800 East: Brookside Drive to 650 South	$133,000	Springville	100%	$133,000
104	900 East: 400 North to 200 North	$213,000	Springville	100%	$213,000
105	Roundabout: Red Devil Drive & 620 South	$1,095,000	Springville	50%	$548,000
106	Center St/2080 E: Spring Oaks Dr to New Road	$465,000	Springville	0%	$0
108	2080 East: 700 South to Canyon Road	$480,000	Springville	17%	$81,000
109	Canyon Road: 2900 East to Southeast Border	$1,198,000	Springville	100%	$1,198,000
110	600 West: Extend to Evergreen Road	$1,095,000	Springville	17%	$187,000
111	Evergreen Road: State Road to 1200 West	$1,095,000	Springville	17%	$187,000
112	950 West: 1600 South to Southern Border	$1,095,000	Springville	17%	$187,000
113	Intersection Improvement: 1600 South & 950 West	$1,095,000	UDOT	0%	$0
114	Intersection Improvement: 1600 South & 600 West	$1,095,000	UDOT	0%	$0
115	Intersection Improvement: 1600 South & 400 West	$1,095,000	UDOT	0%	$0
116	Intersection Improvement: 1700 East & Canyon Road	$1,095,000	Springville	100%	$1,095,000
117	Roundabout: 400 East & Center Street	$1,095,000	Springville	100%	$1,095,000
Total		**$179,700,700**			**$41,869,000**

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 Springville for the existing and future conditions. The difference

between the future PM trips and the existing PM trips (the number of new trips in the City) becomes the denominator in the equation used to calculate the impact fee cost per PM peak hour trip for new development. The City of Springville currently generates approximately **19,378** one-way PM peak hour trips. In 2040, this number is expected to increase to **34,652**, an increase of **79%**. The projected 2033 PM peak hour trip number for the City of Springville is **27,255**, a **41%** increase on today's value.

Included in **Table 4** is the percent Pass-Through traffic for all project roadways. A vehicle trip is considered a pass-through when the origin and the destination for a specific trip occur outside the city limits. For all growth within Springville, there is a certain percentage of new trips that are considered pass-through. This percentage is determined using the MAG 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 Springville and the origin and destination of that trip is located outside of Springville, that trip is considered a pass-through trip. Since a pass-through trip does not originate or terminate within the city, 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 4: Pass-Through Traffic Calculation

Project	Location	Added Capacity	Pass-Through Volume	Impact Fee Reduction%
7B	1200 West: 400 South to 550 North (New Road)	32,800	817	**2%**
7C	1200 West: 550 North to SR-75 (New Road)	32,800	817	**2%**
7D	1200 West: 1600 South to Canyon Creek Pkwy (New Road)	32,800	817	**2%**
14	900 South: 1200 West to RR Crossing (Project 38)	5,000	279	**6%**
16	Connection of Mattea Lane & 750 West (New Road)	12,100	242	**2%**
45	1500 West: Center Street to 900 South	5,000	17	**1%**
67	900 South: 1500 West to 1200 West	12,100	484	**4%**
69	700 South New Road: 950 West to 450 West (New Road)	5,000	15	**1%**
70	450 West New Road: 700 South to 1600 South	5,000	195	**4%**
81	Spanish Fork Main Street: 400 South to South Border	6,500	1,173	**19%**

Table 5 includes the calculated excess capacity remaining in 2033. The excess capacity is the proportion of the added capacity that is not used in 2033. Since this capacity is not used by 2033, it cannot be paid using impact fees.

Table 5 Excess Capacity Calculations

Project	Location	Existing Capacity	Built Capacity	Added Capacity	2033 Volume	Excess Capacity	Excess Capacity %
7B	1200 West: 400 South to 550 North (New Road)	0	32,800	32,800	26,348	6,452	**20%**
7C	1200 West: 550 North to SR-75 (New Road)	0	32,800	32,800	26,348	6,452	**20%**
7D	1200 West: 1600 South to Canyon Creek Pkwy (New Road)	0	32,800	32,800	26,348	6,452	**20%**
8	1600 South Widening: 300 West to Southwestern Border	5000	32,800	27,800	15,286	17,514	**63%**
11A	2600 West Widening: 400 South to Center Street	5,000	12,100	7,100	5,214	6,887	**97%**
14	900 South: 1200 West to RR Crossing (Project 38)	0	5,000	5,000	1,100	3,400	**78%**
15	900 South Extension to SR-51	0	12,100	12,100	1,100	11,000	**91%**
16	Connection of Mattea Lane & 750 West (New Road)	0	12,100	12,100	4,700	7,400	**61%**
17	Connection of Wood Springs Dr. & 550 West	0	5,000	5,000	2,300	2,700	**55%**
19	Connection of 2080 East near 250 South	0	5,000	5,000	150	4,850	**97%**
45	1500 West: Center Street to 900 South	0	5,000	5,000	1,700	3,300	**67%**
47	1000 North Extension to 1650 West	0	5,000	5,000	2,100	2,900	**59%**
49	550 West Extension: 550 North to 450 West	0	5,000	5,000	1,100	3,900	**78%**
51	700 South New Road: 1500 West (Project 45) to 1250 West (Project 7)	0	5,000	5,000	2,000	3,000	**60%**
52	Frontage Road: 1000 North to Center Street with Culvert	0	12,100	12,100	5,800	6,300	**52%**
53	2600 West Extension: 500 North to SR-57	0	32,800	32,800	7,500	25,300	**77%**
64	950 West Realignment: 700 North to 1000 North	5,000	5,000	0	2,100	2,900	**59%**
66	1500 West: 1000 North to 300 North	5000	5,000	0	1,000	4,000	**80%**
67	900 South: 1500 West to 1200 West	0	12,100	12,100	3,200	8,900	**74%**
68	1500 West Extension to 1000 S	0	12,100	12,100	1,600	10,500	**87%**
69	700 South New Road: 950 West to 450 West (New Road)	0	5,000	5,000	1,500	3,500	**70%**
70	450 West New Road: 700 South to 1600 South	0	5,000	5,000	1,500	3,500	**70%**
71	700 South: 1600 South to Project 46	0	5,000	5,000	1,700	3,300	**66%**
75	150 W, and 600 S New Road: 700 S to 600 S and 400 W to Main Street	0	12,100	12,100	500	11,600	**96%**
81	Spanish Fork Main Street: 400 South to South Border	5,000	12,100	7,100	9,900	2,200	**31%**
92	950 West: 400 South to 1000 South	5000	5,000	0	2,700	2,300	**46%**
108	2080 East: 700 South to Canyon Road	5,000	5,000	0	3,800	1,200	**24%**
109	Canyon Road: 2900 East to Southeast Border (Incomplete Street)	5000	5,000	0	3,678	1,322	**26%**
110	600 West: Extension to Evergreen Road	0	5,000	5,000	700	4,300	**86%**

Project	Location	Existing Capacity	Built Capacity	Added Capacity	2033 Volume	Excess Capacity	Excess Capacity %
111	Evergreen Road: State Road to 1200 West	0	5,000	5,000	3,700	1,300	**26%**
112	950 West: 1600 South to Southern Border	0	5,000	5,000	700	4,300	**86%**

Impact fees can only be collected for the proportion of the added capacity that is used by new development. This can be found by reducing the Springville total cost by each of the reduction percentages found in **Table 4** and **Table 5**. **Table 6** is a summary table for existing deficiencies, pass-through as well as excess capacity used to calculate the impact fee-eligible proportion that will be attributed to each project. According to the Impact Fee law, impact fees cannot be collected on improvements where the level of service is improved. For existing roadways where LOS is improved, the impact fee eligible percentage is reduced to 0 percent.

Table 6: Proportion of Projects Attributed to New Development

Project	Location	Reduction for Pass-Through	Reduction for Excess Capacity	Impact Fee Eligible Portion
7B	1200 West: 400 South to 550 North (New Road)	2%	20%	**78%**
7C	1200 West: 550 North to SR-75 (New Road)	2%	20%	**78%**
7D	1200 West: 1600 South to Canyon Creek Pkwy (New Road)	2%	20%	**78%**
8	1600 South Widening: 300 West to Southwestern Border	25%	63%	**12%**
11A	2600 West Widening: 400 South to Center Street	0%	97%	**3%**
14	900 South: 1200 West to RR Crossing (Project 38)	6%	78%	**16%**
15	900 South Extension to SR-51	0%	91%	**9%**
16	Connection of Mattea Lane & 750 West (New Road)	2%	61%	**37%**
17	Connection of Wood Springs Dr. & 550 West	0%	55%	**45%**
19	Connection of 2080 East near 250 South	0%	97%	**3%**
45	1500 West: Center Street to 900 South	1%	67%	**32%**
47	1000 North Extension to 1650 West	0%	59%	**41%**
49	550 West Extension: 550 North to 450 West	0%	78%	**22%**
51	700 South New Road: 1500 West (Project 45) to 1250 West (Project 7)	0%	60%	**40%**
52	Frontage Road: 1000 North to Center Street with Culvert	0%	52%	**48%**
53	2600 West Extension: 500 North to SR-57	0%	77%	**23%**
64	950 West Realignment: 700 North to 1000 North	0%	59%	**41%**
66	1500 West: 1000 North to 300 North	0%	80%	**20%**
67	900 South: 1500 West to 1200 West	4%	74%	**22%**
70	450 West New Road: 700 South to 1600 South	4%	70%	**26%**
71	700 South: 1600 South to Project 46	0%	66%	**34%**
75	150 West, and 600 South New Road: 700 South to 600 South and 400 West to Main Street	1%	96%	**3%**
81	Spanish Fork Main Street: 400 South to South Border	19%	31%	**50%**
92	950 West: 400 South to 1000 South	0%	46%	**54%**

Project	Location	Reduction for Pass-Through	Reduction for Excess Capacity	Impact Fee Eligible Portion
108	2080 East: 700 South to Canyon Road	0%	24%	**76%**
109	Canyon Road: 2900 East to Southeast Border (Incomplete Street)	0%	26%	**74%**
110	600 West: Extension to Evergreen Road	0%	86%	**14%**
111	Evergreen Road: State Road to 1200 West	0%	26%	**74%**
112	950 West: 1600 South to Southern Border	0%	86%	**14%**

Using the Impact Fee eligible proportions from **Table** 6, the impact fee eligible cost for each project is included in **Table 7**. The City can collect Impact Fees for the actual project costs incurred up to the impact fee-eligible portion of the total roadway cost based on functional classification. For MAG-funded projects, the impact fees collected to meet the 6.77 percent required by MAG is lower than the impact fee eligible costs for each functional classification and is therefore 100 percent impact fee eligible. Also included in **Table 7** is the impact fee eligible cost for traffic signals. Traffic signals are implemented based on the traffic signal warrants found in Chapter 4C of the Utah Manual on Uniform Traffic Control Devices (MUTCD). Included in the MUTCD are warrants based on traffic volumes, pedestrian volumes, safety, as well as the roadway network in proximity to the intersection. A traffic signal is not installed without meeting one of the signal warrants included in the Utah MUTCD. Therefore, a reduction in the impact fee due to excess capacity is not included.

Table 7: Impact Fee Facilities Plan 2024-2033 - Summary.

Project	Location	Total Price	Springville City Total	Impact Fee Eligible Portion	Impact Fees Eligible Cost
7B	1200 West: 400 S to 550 North	$2,348,000	$159,000	**78%**	$125,000
7C	1200 West: 550 North to SR-75	$5,168,000	$350,000	**78%**	$273,000
7D	1200 West: 1600 South to Canyon Creek Pkwy	$2,373,000	$161,000	**78%**	$127,000
8	1600 South Widening: I-15 to State Street	$46,629,000	$0	**12%**	$0
11A	2600 West Widening: 400 South to 500 North	$5,168,000	$2,584,000	**44%**	$1,144,000
11B	Roundabout: 2600 West & Center Street and 2600 West & 300 North	$2,189,000	$1,095,000	**100%**	$1,095,000
13	Roundabout: 1750 West & 1000 North	$1,095,000	$1,095,000	**100%**	$1,095,000
15	900 South Extension to SR-51	$6,642,000	$1,110,000	**9%**	$98,000
17	Connection of Wood Springs Dr. & 550 West	$1,174,000	$197,000	**45%**	$90,000
19	Connection of 2080 East near 250 South	$538,000	$538,000	**20%**	$180,000
21	Intersection Improvement: 400 South & 2600 West	$254,000	$0	**0%**	$0
22	Intersection Improvement: 400 South & 1200 West	$254,000	$18,000	**100%**	$18,000
23	Intersection Improvement: 400 South & Wood Springs Dr.	$254,000	$0	**0%**	$0
27	Intersection Improvement: 1400 North & 1200 West	$254,000	$0	**0%**	$0

Project	Location	Total Price	Springville City Total	Impact Fee Eligible Portion	Impact Fees Eligible Cost
28	Intersection Improvement: 1600 South & 1200 West	$254,000	$0	**0%**	$0
29	Intersection Improvement: 1600 South & Wallace Dr.	$254,000	$0	**0%**	$0
30	Intersection Improvement: 1600 South & 1750 West	$254,000	$0	**0%**	$0
35	Railroad Crossing: 400 North & 450 West	$705,000	$705,000	**0%**	$0
36	Railroad Crossing: 900 South & 1500 West	$705,000	$705,000	**100%**	$705,000
38	Railroad Crossing: 900 South & 600 West	$705,000	$705,000	**100%**	$705,000
45	1500 West: Center Street to 900 South	$6,506,000	$1,087,000	**32%**	$350,000
46	1600 South & SR-51 Connection	$7,761,000	$0	**0%**	$0
47	1000 North Extension to 1650 West	$3,054,000	$184,000	**41%**	$76,000
49	550 West Extension: 550 North to 450 West	$2,206,000	$142,000	**33%**	$48,000
51	700 South New Road: 1500 West (Project 45) to 1250 West (Project 7A)	$1,927,000	$309,000	**40%**	$124,000
52	Frontage Road: 1000 North to Center Street with Culvert	$8,984,000	$3,504,000	**57%**	$2,009,000
53	2600 West Extension: Center Street to SR-57	$11,153,700	$756,000	**53%**	$399,000
59	Roundabout: Canyon Road and 620 South	$1,095,000	$1,095,000	**100%**	$1,095,000
60	900 South: 1750 West to 1500 West	$2,099,000	$126,000	**0%**	$0
63	Roundabout: 900 South and 800 East	$795,000	$54,000	**100%**	$54,000
64	950 West Realignment: 700 North to 850 North	$949,000	$159,000	**41%**	$66,000
66	1500 West: 1000 North to 550 North	$4,664,000	$747,000	**20%**	$150,000
67	900 South: 1500 West to 1200 West	$2,440,000	$391,000	**22%**	$87,000
70	450 West New Road: 700 South to 1600 South	$8,404,000	$1,345,000	**26%**	$350,000
71	1700 South: 1600 South to Project 46	$7,062,000	$7,062,000	**34%**	$2,402,000
72	1200 West Roundabouts	$4,377,000	$4,377,000	**100%**	$4,377,000
73	Intersection Improvement: 1000 North & 1200 West	$1,095,000	$1,095,000	**100%**	$1,095,000
77a	1200 E Extension: Canyon Rd to 900 S with Signal	$4,185,000	$2,093,000	**100%**	$2,093,000
77b	620 South Realignment: Canyon Road to 900 South	$4,035,000	$2,018,000	**100%**	$2,018,000
81	Spanish Fork Main Street: 400 South to South Border	$3,155,000	$214,000	**50%**	$107,000
89	550 North: 1500 West to 950 West	$1,544,000	$258,000	**0%**	$0
90	950 West: 550 North to 400 South	$1,690,000	$283,000	**0%**	$0
92	950 West: 400 South to 1000 South	$804,000	$135,000	**54%**	$73,000
98	1150 North: Main Street to 200 East	$132,000	$66,000	**100%**	$66,000
102	800 East: Center Street to 100 South	$23,000	$23,000	**100%**	$23,000
103	800 East: Brookside Drive to 650 South	$133,000	$133,000	**100%**	$133,000
104	900 East: 400 North to 200 North	$213,000	$213,000	**100%**	$213,000

Project	Location	Total Price	Springville City Total	Impact Fee Eligible Portion	Impact Fees Eligible Cost
105	Roundabout: Red Devil Drive & 620 South	$1,095,000	$548,000	**100%**	$548,000
106	Center St/2080 E: Spring Oaks Dr to New Road	$465,000	$0	**100%**	$0
108	2080 East: 700 South to Canyon Road	$480,000	$81,000	**76%**	$62,000
109	Canyon Road: 2900 East to Southeast Border	$1,198,000	$1,198,000	**76%**	$911,000
110	600 West: Extend to Evergreen Road	$1,095,000	$187,000	**76%**	$143,000
111	Evergreen Road: State Road to 1200 West	$1,095,000	$187,000	**76%**	$143,000
112	950 West: 1600 South to Southern Border	$1,095,000	$187,000	**76%**	$143,000
113	Intersection Improvement: 1600 South & 950 West	$1,095,000	$0	**76%**	$0
114	Intersection Improvement: 1600 South & 600 West	$1,095,000	$0	**76%**	$0
115	Intersection Improvement: 1600 South & 400 West	$1,095,000	$0	**76%**	$0
116	Intersection Improvement: 1700 East & Canyon Road	$1,095,000	$1,095,000	**76%**	$833,000
117	Roundabout: 400 East & Center Street	$1,095,000	$1,095,000	**100%**	$1,095,000
	Total	**$179,700,700**	**$41,869,000**		**$26,869,000**

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 because of new growth. This section discusses the potential revenue sources that could be used to fund transportation needs because 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 or (UDOT), the county, and the local metropolitan planning organization (MAG). 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 Springville 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. 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.

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

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

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's 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 Springville 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. This bill 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. 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*** and also provided in the appendix of this report. Currently, Springville City uses Class C funding for its transportation projects.

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 to fund 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 using impact fees. These fees are assessed because 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 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 because 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 because of new growth.

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 an SAA. The boundaries and services provided by the district must be specified and a public hearing held before the creation of the SAA. Once the SAA is created, funding can be obtained from tax levies, bonds, and fees when approved by most 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.

Transportation utility fees treat transportation networks as utility and bill properties based on usage rather than value. Springville may create transportation utilities and charge property owners a transportation utility fee.

Interfund Loans

Since infrastructure must generally built ahead of growth, it must sometimes be funded before expected impact fees are collected. Bonds are the solution to this problem in some cases. In other cases, funds from existing user rate revenue will be loaned to the impact fee fund to complete the initial construction of the

project. As impact fees are received, they will be reimbursed. Consideration of these loans will be included in the impact fee analysis and should be considered in subsequent accounting of impact fee expenditures.

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 is 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 developments should pay for the portion of required improvements that result from new growth. Impact fees are assessed for many types of infrastructures and facilities that are provided by a community, such as roadway facilities. According to state law, impact fees can only be used to fund growth-related system improvements.

Necessity of Improvements to Maintain Level of Service

According to State statute, impact fees must only be used to fund projects that will serve needs caused by future development. They are not to be used to address present deficiencies. Only projects that address future needs are included 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 by 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 its designees, and all results and projections are founded upon this information.

By 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. 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 under 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 relevant respect with the Impact Fees Act.

This certification is made with the following limitations:

1. All 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 sources.

APPENDIX A – COST ESTIMATES

Springville City
Transportation Master Plan

1200 West: 400 South to 550 North

Major Arterial with Trail

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	16,349	$65,396
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	3	$5,020
Roadway Excavation	C.Y.	$23.00	5,450	$125,342
HMA Concrete	Ton	$100.00	1,901	$190,056
Untreated Base Course	C.Y.	$45.00	1,817	$81,745
Granular Borrow	C.Y.	$40.00	4,087	$163,489
Curb and Gutter (2' width)	L.F.	$32.00	2,044	$65,396
Sidewalk (5' width)	L.F.	$50.00	2,044	$102,181
Drainage	L.F.	$45.00	2,044	$91,963
Right of Way	S.F.	$4.75	109,333	$519,334
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	1,022	$5,109
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
Culvert (Cast in Place)	Each	$250,000	1	$250,000
			Subtotal	**$1,665,030**

Contingency	15%	$249,754
Mobilization	10%	$166,503
Preconstruction Engineering	8%	$133,202
Construction Engineering	8%	$133,202
Total Project Costs		**$2,348,000**
Springville City's Responsibility		**6.77%**
		$159,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155
HMA Thickness (in) =	4
Untreated Base Course Thickness (in) =	8
Granual Borrow Thickness (in) =	18
Roadway Excavation Depth (ft) =	2
Number of Sidewalks (No.) =	2
Overlay HMA Thickness (in) =	3

7B

Project No.	**Springville/MAG**
Funding:	**New Road**
Type:	**New Road**

Costs apportioned from 2040 RTP

Springville City
Transportation Master Plan

1200 West: 550 North to SR-75

Major Arterial with Trail

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	39,458	$157,830
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	6	$12,115
Roadway Excavation	C.Y.	$23.00	13,153	$302,508
HMA Concrete	Ton	$100.00	4,587	$458,694
Untreated Base Course	C.Y.	$45.00	4,384	$197,288
Granular Borrow	C.Y.	$40.00	9,864	$394,575
Curb and Gutter (2' width)	L.F.	$32.00	4,932	$157,830
Sidewalk (5' width)	L.F.	$50.00	4,932	$246,610
Drainage	L.F.	$45.00	4,932	$221,949
Right of Way	S.F.	$4.75	263,872	$1,253,393
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	2,466	$12,330
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
Culvert (Cast in Place)	Each	$250,000	1	$250,000
			Subtotal	**$3,665,122**

Contingency	15%	$549,768
Mobilization	10%	$366,512
Preconstruction Engineering	8%	$293,210
Construction Engineering	8%	$293,210
Total Project Costs		**$5,168,000**
Springville City's Responsibility		**6.77%**
		$350,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155
HMA Thickness (in) =	4
Untreated Base Course Thickness (in) =	8
Granual Borrow Thickness (in) =	18
Roadway Excavation Depth (ft) =	2
Number of Sidewalks (No.) =	2
Overlay HMA Thickness (in) =	3

7C

Project No. **Springville/MAG**

Funding: **New Road**

Type: **New Road**

Costs apportioned from 2040 RTP

Springville City
Transportation Master Plan

1200 West: 1600 South to Canyon Creek Pkwy

Major Arterial with Trail

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	16,554	$66,215
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	3	$5,083
Roadway Excavation	C.Y.	$23.00	5,518	$126,912
HMA Concrete	Ton	$100.00	1,924	$192,438
Untreated Base Course	C.Y.	$45.00	1,839	$82,769
Granular Borrow	C.Y.	$40.00	4,138	$165,538
Curb and Gutter (2' width)	L.F.	$32.00	2,069	$66,215
Sidewalk (5' width)	L.F.	$50.00	2,069	$103,461
Drainage	L.F.	$45.00	2,069	$93,115
Right of Way	S.F.	$4.75	110,703	$525,842
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	1,035	$5,173
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
Culvert (Cast in Place)	Each	$250,000	1	$250,000
			Subtotal	**$1,682,761**

Contingency	15%	$252,414
Mobilization	10%	$168,276
Preconstruction Engineering	8%	$134,621
Construction Engineering	8%	$134,621
Total Project Costs		**$2,373,000**
Springville City's Responsibility		**6.77%**
		$161,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155
HMA Thickness (in) =	4
Untreated Base Course Thickness (in) =	8
Granual Borrow Thickness (in) =	18
Roadway Excavation Depth (ft) =	2
Number of Sidewalks (No.) =	2
Overlay HMA Thickness (in) =	3

7D

Project No.	**Springville/MAG**
Funding:	**New Road**
Type:	**New Road**

Costs apportioned from 2040 RTP

Springville City
Transportation Master Plan

1600 South Widening: I-15 to SR-51

Major Arterial

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	486,957	$1,947,830
Removal of Existing Asphalt	S.Y.	$4.50	98,068	$441,305
Clearing and Grubbing	Acre	$2,000.00	30	$60,087
Roadway Excavation	C.Y.	$23.00	96,941	$2,229,634
HMA Concrete	Ton	$100.00	50,909	$5,090,860
Untreated Base Course	C.Y.	$45.00	32,314	$1,454,109
Granular Borrow	C.Y.	$40.00	72,705	$2,908,218
Curb and Gutter (2' width)	L.F.	$32.00	60,870	$1,947,830
Sidewalk (5' width)	L.F.	$50.00	60,870	$3,043,484
Drainage	L.F.	$45.00	60,870	$2,739,135
Right of Way	S.F.	$4.75	1,308,698	$6,216,315
Removal of Existing Curb and Gutter	L.F.	$7.00	60,870	$426,088
Grind Existing Asphalt	S.F.	$5.00	882,610	$4,413,051
Restriping	L.F.	$5.00	30,435	$152,174
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$33,070,119**

Contingency	15%	$4,960,518
Mobilization	10%	$3,307,012
Preconstruction Engineering	8%	$2,645,610
Construction Engineering	8%	$2,645,610
Total Project Costs		**$46,629,000**

Springville City's Responsibility	**0.00%**
	$0

Overall Assumptions:

HMA Pavement Density (pcf) =	155
HMA Thickness (in) =	4
Untreated Base Course Thickness (in) =	8
Granual Borrow Thickness (in) =	18
Roadway Excavation Depth (ft) =	2
Number of Sidewalks (No.) =	2
Overlay HMA Thickness (in) =	3

Project No. **8**
Funding: **UDOT**
Type: **Capacity Improvement**
Cost apportioned from 2050 RTP

Springville City
Transportation Master Plan

2600 West Widening: 400 South to 500 North

Major Arterial with Trail

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	52,804	$211,218
Removal of Existing Asphalt	S.Y.	$4.50	10,634	$47,854
Clearing and Grubbing	Acre	$2,000.00	4	$7,273
Roadway Excavation	C.Y.	$23.00	10,512	$241,776
HMA Concrete	Ton	$100.00	5,520	$552,040
Untreated Base Course	C.Y.	$45.00	3,504	$157,680
Granular Borrow	C.Y.	$40.00	7,884	$315,360
Curb and Gutter (2' width)	L.F.	$32.00	6,601	$211,218
Sidewalk (5' width)	L.F.	$50.00	6,601	$330,027
Drainage	L.F.	$45.00	6,601	$297,025
Right of Way	S.F.	$4.75	158,413	$752,463
Removal of Existing Curb and Gutter	L.F.	$7.00	6,601	$46,204
Grind Existing Asphalt	S.F.	$5.00	95,708	$478,540
Restriping	L.F.	$5.00	3,300	$16,501
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$3,665,177**

Contingency	15%	$549,776
Mobilization	10%	$366,518
Preconstruction Engineering	8%	$293,214
Construction Engineering	8%	$293,214
Total Project Costs		**$5,168,000**

Springville City's Responsibility	**50%**
	$2,584,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**11a**
HMA Thickness (in) =	4	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**Capacity Improvement**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

Roundabouts: 2600 W & Center St and 2600 W & 200 N

Major Arterial with Trail

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	0	$0
Sidewalk (5' width)	L.F.	$50.00	0	$0
Drainage	L.F.	$45.00	0	$0
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$776,000	2	$1,552,000
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$1,552,000**

Contingency	15%	$232,800
Mobilization	10%	$155,200
Preconstruction Engineering	8%	$124,160
Construction Engineering	8%	$124,160
Total Project Costs		**$2,189,000**
Springville City's Responsibility		**50%**
		$1,095,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**11b**
HMA Thickness (in) =	4	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**Roundabout**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

Roundabout: 1750 West & 1000 North

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	0	$0
Sidewalk (5' width)	L.F.	$50.00	0	$0
Drainage	L.F.	$45.00	0	$0
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$776,000	1	$776,000
Traffic Signal	Each	$180,000	0	$0
Culvert (Cast in Place)	Each	$250,000	0	$0
			Subtotal	**$776,000**

Contingency	15%	$116,400
Mobilization	10%	$77,600
Preconstruction Engineering	8%	$62,080
Construction Engineering	8%	$62,080
Total Project Costs		**$1,095,000**

Springville City's Responsibility	**100%**
	$1,095,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155		13
HMA Thickness (in) =	3	Project No.	**Springville**
Untreated Base Course Thickness (in) =	8	Funding:	**Roundabout**
Granual Borrow Thickness (in) =	18	Type:	**Roundabout**
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

900 South Extension to SR-51

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	78,400	$313,600
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	8.10	$16,198
Roadway Excavation	C.Y.	$23.00	15,244	$350,622
HMA Concrete	Ton	$100.00	3,987	$398,738
Untreated Base Course	C.Y.	$45.00	5,081	$228,667
Granular Borrow	C.Y.	$40.00	11,433	$457,333
Curb and Gutter (2' width)	L.F.	$32.00	9,800	$313,600
Sidewalk (5' width)	L.F.	$50.00	9,800	$490,000
Drainage	L.F.	$45.00	9,800	$441,000
Right of Way	S.F.	$4.75	352,800	$1,675,800
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	4,900	$24,500
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$4,710,058**

Contingency	15%	$706,509
Mobilization	10%	$471,006
Preconstruction Engineering	8%	$376,805
Construction Engineering	8%	$376,805
Total Project Costs		**$6,642,000**
Springville City's Responsibility		**17%**
		$1,110,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**15**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**New Road**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

Connection of Wood Springs Dr. & 550 West

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	13,856	$55,424
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	1	$2,863
Roadway Excavation	C.Y.	$23.00	2,694	$61,967
HMA Concrete	Ton	$100.00	705	$70,471
Untreated Base Course	C.Y.	$45.00	898	$40,413
Granular Borrow	C.Y.	$40.00	2,021	$80,827
Curb and Gutter (2' width)	L.F.	$32.00	1,732	$55,424
Sidewalk (5' width)	L.F.	$50.00	1,732	$86,600
Drainage	L.F.	$45.00	1,732	$77,940
Right of Way	S.F.	$4.75	62,352	$296,172
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	866	$4,330
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$832,431**

Contingency	15%	$124,865
Mobilization	10%	$83,243
Preconstruction Engineering	8%	$66,594
Construction Engineering	8%	$66,594
Total Project Costs		**$1,174,000**

Springville City's Responsibility	**17%**
	$197,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**17**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**New Road**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

Connection of 2080 East Near 250 South

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	1	$1,120
Roadway Excavation	C.Y.	$23.00	1,379	$31,720
HMA Concrete	Ton	$100.00	361	$36,072
Untreated Base Course	C.Y.	$45.00	460	$20,687
Granular Borrow	C.Y.	$40.00	1,034	$41,373
Curb and Gutter (2' width)	L.F.	$32.00	1,284	$41,088
Sidewalk (5' width)	L.F.	$50.00	642	$32,100
Drainage	L.F.	$45.00	1,284	$57,780
Right of Way	S.F.	$4.75	24,396	$115,881
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	642	$3,210
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$381,031**

Contingency	15%	$57,155
Mobilization	10%	$38,103
Preconstruction Engineering	8%	$30,482
Construction Engineering	8%	$30,482
Total Project Costs		**$538,000**

Springville City's Responsibility	**100%**
	$538,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**19**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**New Road**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	1		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

Intersection Improvement: 400 South & 2600 West

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	0	$0
Sidewalk (5' width)	L.F.	$50.00	0	$0
Drainage	L.F.	$45.00	0	$0
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	1	$180,000
			Subtotal	**$180,000**

Contingency	15%	$27,000
Mobilization	10%	$18,000
Preconstruction Engineering	8%	$14,400
Construction Engineering	8%	$14,400
Total Project Costs		**$254,000**
Springville City's Responsibility		**0%**
		$0

Overall Assumptions:

HMA Pavement Density (pcf) =	155
HMA Thickness (in) =	3
Untreated Base Course Thickness (in) =	8
Granual Borrow Thickness (in) =	18
Roadway Excavation Depth (ft) =	2
Number of Sidewalks (No.) =	2
Overlay HMA Thickness (in) =	3

Project No.	**21**
Funding:	**UDOT**
Type:	**Traffic Signal**

Springville City
Transportation Master Plan

Intersection Improvement: 400 South & 1200 West

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	0	$0
Sidewalk (5' width)	L.F.	$50.00	0	$0
Drainage	L.F.	$45.00	0	$0
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	1	$180,000
			Subtotal	**$180,000**

Contingency	15%	$27,000
Mobilization	10%	$18,000
Preconstruction Engineering	8%	$14,400
Construction Engineering	8%	$14,400
Total Project Costs		**$254,000**
Springville City's Responsibility		**7%**
		$18,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155
HMA Thickness (in) =	3
Untreated Base Course Thickness (in) =	8
Granual Borrow Thickness (in) =	18
Roadway Excavation Depth (ft) =	2
Number of Sidewalks (No.) =	2
Overlay HMA Thickness (in) =	3

Project No. **22**
Funding: **Springville/MAG**
Type: **Traffic Signal**
Springville City Paying 10%
Currently two sidewalks

Springville City
Transportation Master Plan

Intersection Improvement: 400 South & Wood Springs Dr.

Major Arterial

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	0	$0
Sidewalk (5' width)	L.F.	$50.00	0	$0
Drainage	L.F.	$45.00	0	$0
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	1	$180,000
			Subtotal	**$180,000**

Contingency	15%	$27,000
Mobilization	10%	$18,000
Preconstruction Engineering	8%	$14,400
Construction Engineering	8%	$14,400
Total Project Costs		**$254,000**

Springville City's Responsibility	**0%**
	$0

Overall Assumptions:

HMA Pavement Density (pcf) =	155
HMA Thickness (in) =	4
Untreated Base Course Thickness (in) =	8
Granual Borrow Thickness (in) =	18
Roadway Excavation Depth (ft) =	2
Number of Sidewalks (No.) =	2
Overlay HMA Thickness (in) =	3

Project No. **23**
Funding: **UDOT**
Type: **Traffic Signal**
Springville City Paying 10%

Springville City
Transportation Master Plan

Intersection Improvement: 1400 North & 1200 West

Major Arterial

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	0	$0
Sidewalk (5' width)	L.F.	$50.00	0	$0
Drainage	L.F.	$45.00	0	$0
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	1	$180,000
			Subtotal	**$180,000**

Contingency	15%	$27,000
Mobilization	10%	$18,000
Preconstruction Engineering	8%	$14,400
Construction Engineering	8%	$14,400
Total Project Costs		**$254,000**

Springville City's Responsibility	**0%**
	$0

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**27**
HMA Thickness (in) =	4	Funding:	**UDOT**
Untreated Base Course Thickness (in) =	8	Type:	**Traffic Signal**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

Intersection Improvement: 1600 South & 1200 West

Major Arterial

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	0	$0
Sidewalk (5' width)	L.F.	$50.00	0	$0
Drainage	L.F.	$45.00	0	$0
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	1	$180,000
			Subtotal	**$180,000**

Contingency	15%	$27,000
Mobilization	10%	$18,000
Preconstruction Engineering	8%	$14,400
Construction Engineering	8%	$14,400
Total Project Costs		**$254,000**

Springville City's Responsibility	**0%**
	$0

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**28**
HMA Thickness (in) =	4	Funding:	**UDOT**
Untreated Base Course Thickness (in) =	8	Type:	**Traffic Signal**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

Intersection Improvement: 1600 South & Wallace Dr.

Major Arterial

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	0	$0
Sidewalk (5' width)	L.F.	$50.00	0	$0
Drainage	L.F.	$45.00	0	$0
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	1	$180,000
			Subtotal	**$180,000**

Contingency	15%	$27,000
Mobilization	10%	$18,000
Preconstruction Engineering	8%	$14,400
Construction Engineering	8%	$14,400
Total Project Costs		**$254,000**

Springville City's Responsibility	**0%**
	$0

Overall Assumptions:

HMA Pavement Density (pcf) =	155
HMA Thickness (in) =	4
Untreated Base Course Thickness (in) =	8
Granual Borrow Thickness (in) =	18
Roadway Excavation Depth (ft) =	2
Number of Sidewalks (No.) =	2
Overlay HMA Thickness (in) =	3

Project No. **29**
Funding: **UDOT**
Type: **Traffic Signal**
Springville City Paying 10%

Springville City
Transportation Master Plan

Intersection Improvement: 1600 South & 1750 West

Major Arterial

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	0	$0
Sidewalk (5' width)	L.F.	$50.00	0	$0
Drainage	L.F.	$45.00	0	$0
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	1	$180,000
			Subtotal	**$180,000**

Contingency	15%	$27,000
Mobilization	10%	$18,000
Preconstruction Engineering	8%	$14,400
Construction Engineering	8%	$14,400
Total Project Costs		**$254,000**

Springville City's Responsibility	**0%**
	$0

Overall Assumptions:

HMA Pavement Density (pcf) =	155
HMA Thickness (in) =	4
Untreated Base Course Thickness (in) =	8
Granual Borrow Thickness (in) =	18
Roadway Excavation Depth (ft) =	2
Number of Sidewalks (No.) =	2
Overlay HMA Thickness (in) =	3

Project No. **30**
Funding: **UDOT**
Type: **Traffic Signal**
Springville City Paying 10%

Springville City
Transportation Master Plan

Railroad Crossing: 400 North & 450 West

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	0	$0
Sidewalk (5' width)	L.F.	$50.00	0	$0
Drainage	L.F.	$45.00	0	$0
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
Railroad Crossing	Each	$500,000	1	$500,000
			Subtotal	**$500,000**

Contingency	15%	$75,000
Mobilization	10%	$50,000
Preconstruction Engineering	8%	$40,000
Construction Engineering	8%	$40,000
Total Project Costs		**$705,000**
Springville City's Responsibility		**100%**
		$705,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155		**35**
HMA Thickness (in) =	3	Project No.	**Springville**
Untreated Base Course Thickness (in) =	8	Funding:	**Railroad**
Granual Borrow Thickness (in) =	18	Type:	**Railroad**
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

Railroad Crossing: 900 South & 1500 West

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	0	$0
Sidewalk (5' width)	L.F.	$50.00	0	$0
Drainage	L.F.	$45.00	0	$0
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
Railroad Crossing	Each	$500,000	1	$500,000
			Subtotal	**$500,000**

Contingency	15%	$75,000
Mobilization	10%	$50,000
Preconstruction Engineering	8%	$40,000
Construction Engineering	8%	$40,000
Total Project Costs		**$705,000**

Springville City's Responsibility	**100%**
	$705,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155		**36**
HMA Thickness (in) =	3	Project No.	**Springville**
Untreated Base Course Thickness (in) =	8	Funding:	**Railroad**
Granual Borrow Thickness (in) =	18	Type:	**Railroad**
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

Railroad Crossing: 900 South & 600 West

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	0	$0
Sidewalk (5' width)	L.F.	$50.00	0	$0
Drainage	L.F.	$45.00	0	$0
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
Railroad Crossing	Each	$500,000	1	$500,000
			Subtotal	**$500,000**

Contingency	15%	$75,000
Mobilization	10%	$50,000
Preconstruction Engineering	8%	$40,000
Construction Engineering	8%	$40,000
Total Project Costs		**$705,000**

Springville City's Responsibility	**100%**
	$705,000

Overall Assumptions:

			38
HMA Pavement Density (pcf) =	155	Project No.	**Springville**
HMA Thickness (in) =	3	Funding:	**Railroad**
Untreated Base Course Thickness (in) =	8	Type:	**Railroad**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

1500 West: Center Street to 900 South

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	76,800	$307,200
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	8	$15,868
Roadway Excavation	C.Y.	$23.00	14,933	$343,467
HMA Concrete	Ton	$100.00	3,906	$390,600
Untreated Base Course	C.Y.	$45.00	4,978	$224,000
Granular Borrow	C.Y.	$40.00	11,200	$448,000
Curb and Gutter (2' width)	L.F.	$32.00	9,600	$307,200
Sidewalk (5' width)	L.F.	$50.00	9,600	$480,000
Drainage	L.F.	$45.00	9,600	$432,000
Right of Way	S.F.	$4.75	345,600	$1,641,600
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	4,800	$24,000
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$4,613,934**

Contingency	15%	$692,090
Mobilization	10%	$461,393
Preconstruction Engineering	8%	$369,115
Construction Engineering	8%	$369,115
Total Project Costs		**$6,506,000**
Springville City's Responsibility		**17%**
		$1,087,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**45**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**New Road**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

1600 South & SR-51 Connection

Commercial Local

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	94,400	$377,600
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	9	$18,150
Roadway Excavation	C.Y.	$23.00	16,170	$371,919
HMA Concrete	Ton	$100.00	4,230	$422,956
Untreated Base Course	C.Y.	$45.00	5,390	$242,556
Granular Borrow	C.Y.	$40.00	12,128	$485,111
Curb and Gutter (2' width)	L.F.	$32.00	11,800	$377,600
Sidewalk (5' width)	L.F.	$50.00	11,800	$590,000
Drainage	L.F.	$45.00	11,800	$531,000
Right of Way	S.F.	$4.75	395,300	$1,877,675
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	5,900	$29,500
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	1	$180,000
			Subtotal	**$5,504,066**

Contingency	15%	$825,610
Mobilization	10%	$550,407
Preconstruction Engineering	8%	$440,325
Construction Engineering	8%	$440,325
Total Project Costs		**$7,761,000**

Springville City's Responsibility	**0%**
	$0

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**46**
HMA Thickness (in) =	3	Funding:	**UDOT**
Untreated Base Course Thickness (in) =	8	Type:	**New Road**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

1000 North Extension to 1650 West

Commercial Local

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	38,400	$153,600
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	4	$7,383
Roadway Excavation	C.Y.	$23.00	6,578	$151,289
HMA Concrete	Ton	$100.00	1,721	$172,050
Untreated Base Course	C.Y.	$45.00	2,193	$98,667
Granular Borrow	C.Y.	$40.00	4,933	$197,333
Curb and Gutter (2' width)	L.F.	$32.00	4,800	$153,600
Sidewalk (5' width)	L.F.	$50.00	4,800	$240,000
Drainage	L.F.	$45.00	4,800	$216,000
Right of Way	S.F.	$4.75	160,800	$763,800
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	2,400	$12,000
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$2,165,722**

Contingency	15%	$324,858
Mobilization	10%	$216,572
Preconstruction Engineering	8%	$173,258
Construction Engineering	8%	$173,258
Total Project Costs		**$3,054,000**
Springville City's Responsibility		**6%**
		$184,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**47**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**New Road**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

550 West Extension: 550 North to 450 West

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	21,872	$87,488
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	2	$4,519
Roadway Excavation	C.Y.	$23.00	4,253	$97,816
HMA Concrete	Ton	$100.00	1,112	$111,240
Untreated Base Course	C.Y.	$45.00	1,418	$63,793
Granular Borrow	C.Y.	$40.00	3,190	$127,587
Curb and Gutter (2' width)	L.F.	$32.00	2,734	$87,488
Sidewalk (5' width)	L.F.	$50.00	2,734	$136,700
Drainage	L.F.	$45.00	2,734	$123,030
Right of Way	S.F.	$4.75	98,424	$467,514
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	1,367	$6,835
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
Culvert (Cast in Place)	Each	$250,000	1	$250,000
			Subtotal	**$1,564,010**

Contingency	15%	$234,602
Mobilization	10%	$156,401
Preconstruction Engineering	8%	$125,121
Construction Engineering	8%	$125,121
Total Project Costs		**$2,206,000**
Springville City's Responsibility		**6%**
		$142,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	49
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**New Road**
Granual Borrow Thickness (in) =	18		**New Road**
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

700 South New Road: 1500 West (Project 45) to 1250 West (Project 7)

Minor Collector with Trail

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	22,192	$88,768
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	2	$4,904
Roadway Excavation	C.Y.	$23.00	4,315	$99,248
HMA Concrete	Ton	$100.00	1,129	$112,867
Untreated Base Course	C.Y.	$45.00	1,438	$64,727
Granular Borrow	C.Y.	$40.00	3,236	$129,453
Curb and Gutter (2' width)	L.F.	$32.00	2,774	$88,768
Sidewalk (5' width)	L.F.	$50.00	2,774	$138,700
Drainage	L.F.	$45.00	2,774	$124,830
Right of Way	S.F.	$4.75	106,799	$507,295
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	1,387	$6,935
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$1,366,494**

Contingency	15%	$204,974
Mobilization	10%	$136,649
Preconstruction Engineering	8%	$109,320
Construction Engineering	8%	$109,320
Total Project Costs		**$1,927,000**
Springville City's Responsibility		**16%**
		$309,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**51**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**New Road**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

Frontage Road: 1000 North to Center Street with Culvert

Commercial Local

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	92,800	$371,200
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	9	$17,842
Roadway Excavation	C.Y.	$23.00	15,896	$365,615
HMA Concrete	Ton	$100.00	4,158	$415,788
Untreated Base Course	C.Y.	$45.00	5,299	$238,444
Granular Borrow	C.Y.	$40.00	11,922	$476,889
Curb and Gutter (2' width)	L.F.	$32.00	11,600	$371,200
Sidewalk (5' width)	L.F.	$50.00	11,600	$580,000
Drainage	L.F.	$45.00	11,600	$522,000
Right of Way	S.F.	$4.75	388,600	$1,845,850
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	5,800	$29,000
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
Culvert/Bridge	S.F.	$325	3,500	$1,137,500
			Subtotal	**$6,371,328**

Contingency	15%	$955,699
Mobilization	10%	$637,133
Preconstruction Engineering	8%	$509,706
Construction Engineering	8%	$509,706
Total Project Costs		**$8,984,000**
Springville City's Responsibility		**39%**
		$3,504,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155		52
HMA Thickness (in) =	3	Project No.	**Springville**
Untreated Base Course Thickness (in) =	8	Funding:	**New Road**
Granual Borrow Thickness (in) =	18	Type:	**New Road**
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

2600 West Extension: 500 North to SR -57

Major Arterial with Trail

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	91,395	$365,581
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	14	$28,063
Roadway Excavation	C.Y.	$23.00	30,465	$700,697
HMA Concrete	Ton	$100.00	10,625	$1,062,470
Untreated Base Course	C.Y.	$45.00	10,155	$456,976
Granular Borrow	C.Y.	$40.00	22,849	$913,952
Curb and Gutter (2' width)	L.F.	$32.00	11,424	$365,581
Sidewalk (5' width)	L.F.	$50.00	11,424	$571,220
Drainage	L.F.	$45.00	11,424	$514,098
Right of Way	S.F.	$4.75	611,206	$2,903,227
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	5,712	$28,561
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$7,910,426**

Contingency	15%	$1,186,564
Mobilization	10%	$791,043
Preconstruction Engineering	8%	$632,834
Construction Engineering	8%	$632,834
Total Project Costs		**$11,153,700**
Springville City's Responsibility		**6.77%**
		$756,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**53**
HMA Thickness (in) =	4	Funding:	**Springville/MAG**
Untreated Base Course Thickness (in) =	8	Type:	**New Road**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

Roundabout: Canyon Road and 620 South

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	0	$0
Sidewalk (5' width)	L.F.	$50.00	0	$0
Drainage	L.F.	$45.00	0	$0
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$776,000	1	$776,000
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$776,000**

Contingency	15%	$116,400
Mobilization	10%	$77,600
Preconstruction Engineering	8%	$62,080
Construction Engineering	8%	$62,080
Total Project Costs		**$1,095,000**

Springville City's Responsibility	**100%**
	$1,095,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**59**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**Roundabout**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

900 South: 1750 West to 1500 West

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	30,400	$121,600
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	1	$2,792
Roadway Excavation	C.Y.	$23.00	5,911	$135,956
HMA Concrete	Ton	$100.00	1,546	$154,613
Untreated Base Course	C.Y.	$45.00	1,970	$88,667
Granular Borrow	C.Y.	$40.00	4,433	$177,333
Curb and Gutter (2' width)	L.F.	$32.00	3,800	$121,600
Sidewalk (5' width)	L.F.	$50.00	3,800	$190,000
Drainage	L.F.	$45.00	3,800	$171,000
Right of Way	S.F.	$4.75	60,800	$288,800
Removal of Existing Curb and Gutter	L.F.	$7.00	3,800	$26,600
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	1,900	$9,500
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$1,488,460**

Contingency	15%	$223,269
Mobilization	10%	$148,846
Preconstruction Engineering	8%	$119,077
Construction Engineering	8%	$119,077
Total Project Costs		**$2,099,000**
Springville City's Responsibility		**6%**
		$126,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**60**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**Capacity Improvement**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

Roundabout: 900 South and 800 East

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	0	$0
Sidewalk (5' width)	L.F.	$50.00	0	$0
Drainage	L.F.	$45.00	0	$0
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$563,456	1	$563,456
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$563,456**

Contingency	15%	$84,518
Mobilization	10%	$56,346
Preconstruction Engineering	8%	$45,076
Construction Engineering	8%	$45,076
Total Project Costs		**$795,000**

Springville City's Responsibility	**7%**
	$54,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**63**
HMA Thickness (in) =	3	Funding:	**Springville/MAG**
Untreated Base Course Thickness (in) =	8	Type:	**Roundabout**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

950 West Realignment: 700 North to 850 North

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	11,200	$44,800
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	1	$2,314
Roadway Excavation	C.Y.	$23.00	2,178	$50,089
HMA Concrete	Ton	$100.00	570	$56,963
Untreated Base Course	C.Y.	$45.00	726	$32,667
Granular Borrow	C.Y.	$40.00	1,633	$65,333
Curb and Gutter (2' width)	L.F.	$32.00	1,400	$44,800
Sidewalk (5' width)	L.F.	$50.00	1,400	$70,000
Drainage	L.F.	$45.00	1,400	$63,000
Right of Way	S.F.	$4.75	50,400	$239,400
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	700	$3,500
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$672,865**

Contingency	15%	$100,930
Mobilization	10%	$67,287
Preconstruction Engineering	8%	$53,829
Construction Engineering	8%	$53,829
Total Project Costs		**$949,000**
Springville City's Responsibility		**17%**
		$159,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**64**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**New Road**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

1500 West: Center Street to 550 North

Commercial Local

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	58,640	$234,560
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	6	$11,274
Roadway Excavation	C.Y.	$23.00	10,045	$231,031
HMA Concrete	Ton	$100.00	2,627	$262,735
Untreated Base Course	C.Y.	$45.00	3,348	$150,672
Granular Borrow	C.Y.	$40.00	7,534	$301,344
Curb and Gutter (2' width)	L.F.	$32.00	7,330	$234,560
Sidewalk (5' width)	L.F.	$50.00	7,330	$366,500
Drainage	L.F.	$45.00	7,330	$329,850
Right of Way	S.F.	$4.75	245,555	$1,166,386
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	3,665	$18,325
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$3,307,238**

Contingency	15%	$496,086
Mobilization	10%	$330,724
Preconstruction Engineering	8%	$264,579
Construction Engineering	8%	$264,579
Total Project Costs		**$4,664,000**
Springville City's Responsibility		**16%**
		$747,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**66**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**New Road**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

900 South: 1500 West to 1200 West

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	28,800	$115,200
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	3	$5,950
Roadway Excavation	C.Y.	$23.00	5,600	$128,800
HMA Concrete	Ton	$100.00	1,465	$146,475
Untreated Base Course	C.Y.	$45.00	1,867	$84,000
Granular Borrow	C.Y.	$40.00	4,200	$168,000
Curb and Gutter (2' width)	L.F.	$32.00	3,600	$115,200
Sidewalk (5' width)	L.F.	$50.00	3,600	$180,000
Drainage	L.F.	$45.00	3,600	$162,000
Right of Way	S.F.	$4.75	129,600	$615,600
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	1,800	$9,000
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$1,730,225**

Contingency	15%	$259,534
Mobilization	10%	$173,023
Preconstruction Engineering	8%	$138,418
Construction Engineering	8%	$138,418
Total Project Costs		**$2,440,000**
Springville City's Responsibility		**16%**
		$391,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**67**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**New Road**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

450 West New Road: 700 South to 1600 South

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	99,200	$396,800
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	10	$20,496
Roadway Excavation	C.Y.	$23.00	19,289	$443,644
HMA Concrete	Ton	$100.00	5,045	$504,525
Untreated Base Course	C.Y.	$45.00	6,430	$289,333
Granular Borrow	C.Y.	$40.00	14,467	$578,667
Curb and Gutter (2' width)	L.F.	$32.00	12,400	$396,800
Sidewalk (5' width)	L.F.	$50.00	12,400	$620,000
Drainage	L.F.	$45.00	12,400	$558,000
Right of Way	S.F.	$4.75	446,400	$2,120,400
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	6,200	$31,000
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$5,959,665**

Contingency	15%	$893,950
Mobilization	10%	$595,967
Preconstruction Engineering	8%	$476,773
Construction Engineering	8%	$476,773
Total Project Costs		**$8,404,000**
Springville City's Responsibility		**16%**
		$1,345,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**70**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**New Road**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

700 South: 1600 South to Project 46

Commercial Local

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	88,800	$355,200
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	9	$17,073
Roadway Excavation	C.Y.	$23.00	15,211	$349,856
HMA Concrete	Ton	$100.00	3,979	$397,866
Untreated Base Course	C.Y.	$45.00	5,070	$228,167
Granular Borrow	C.Y.	$40.00	11,408	$456,333
Curb and Gutter (2' width)	L.F.	$32.00	11,100	$355,200
Sidewalk (5' width)	L.F.	$50.00	11,100	$555,000
Drainage	L.F.	$45.00	11,100	$499,500
Right of Way	S.F.	$4.75	371,850	$1,766,288
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	5,550	$27,750
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$5,008,232**

Contingency	15%	$751,235
Mobilization	10%	$500,823
Preconstruction Engineering	8%	$400,659
Construction Engineering	8%	$400,659
Total Project Costs		**$7,062,000**
Springville City's Responsibility		**100%**
		$7,062,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**71**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**New Road**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

1200 West Intersection Improvements

Major Arterial with Trail

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	0	$0
Sidewalk (5' width)	L.F.	$50.00	0	$0
Drainage	L.F.	$45.00	0	$0
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$776,000	4	$3,104,000
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$3,104,000**

Contingency	15%	$465,600
Mobilization	10%	$310,400
Preconstruction Engineering	8%	$248,320
Construction Engineering	8%	$248,320
Total Project Costs		**$4,377,000**

Springville City's Responsibility	**100%**
	$4,377,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**72**
HMA Thickness (in) =	4	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**Traffic Signal**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

Intersection Improvement: 1000 N & 1200 W

Major Arterial with Trail

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	0	$0
Sidewalk (5' width)	L.F.	$50.00	0	$0
Drainage	L.F.	$45.00	0	$0
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$776,000	1	$776,000
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$776,000**

Contingency	15%	$116,400
Mobilization	10%	$77,600
Preconstruction Engineering	8%	$62,080
Construction Engineering	8%	$62,080
Total Project Costs		**$1,095,000**

Springville City's Responsibility	**100%**
	$1,095,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**73**
HMA Thickness (in) =	4	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**Traffic Signal**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

1200 East Extension: Canyon Road to 900 South with Traffic Signal

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	46,400	$185,600
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	5	$9,587
Roadway Excavation	C.Y.	$23.00	9,022	$207,511
HMA Concrete	Ton	$100.00	2,360	$235,988
Untreated Base Course	C.Y.	$45.00	3,007	$135,333
Granular Borrow	C.Y.	$40.00	6,767	$270,667
Curb and Gutter (2' width)	L.F.	$32.00	5,800	$185,600
Sidewalk (5' width)	L.F.	$50.00	5,800	$290,000
Drainage	L.F.	$45.00	5,800	$261,000
Right of Way	S.F.	$4.75	208,800	$991,800
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	2,900	$14,500
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	1	$180,000
			Subtotal	**$2,967,585**

Contingency	15%	$445,138
Mobilization	10%	$296,759
Preconstruction Engineering	8%	$237,407
Construction Engineering	8%	$237,407
Total Project Costs		**$4,185,000**
Springville City's Responsibility		**50%**
		$2,093,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**77a**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**New Road**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

620 South Realignment: Canyon Rd to 900 South

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	46,944	$187,776
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	5	$9,699
Roadway Excavation	C.Y.	$23.00	9,128	$209,944
HMA Concrete	Ton	$100.00	2,388	$238,754
Untreated Base Course	C.Y.	$45.00	3,043	$136,920
Granular Borrow	C.Y.	$40.00	6,846	$273,840
Curb and Gutter (2' width)	L.F.	$32.00	5,868	$187,776
Sidewalk (5' width)	L.F.	$50.00	5,868	$293,400
Drainage	L.F.	$45.00	5,868	$264,060
Right of Way	S.F.	$4.75	211,248	$1,003,428
Removal of Existing Curb and Gutter	L.F.	$7.00	5,868	$41,076
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	2,934	$14,670
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$2,861,343**

Contingency	15%	$429,202
Mobilization	10%	$286,134
Preconstruction Engineering	8%	$228,907
Construction Engineering	8%	$228,907
Total Project Costs		**$4,035,000**
Springville City's Responsibility		**50%**
		$2,018,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155
HMA Thickness (in) =	3
Untreated Base Course Thickness (in) =	8
Granual Borrow Thickness (in) =	18
Roadway Excavation Depth (ft) =	2
Number of Sidewalks (No.) =	2
Overlay HMA Thickness (in) =	3

Project No.	**77b**
Funding:	**Springville**
Type:	**Capacity Improvement**

Springville City
Transportation Master Plan

Spanish Fork Main Street: 400 South to South Border

Major Arterial with Trail

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	76,053	$304,213
Removal of Existing Asphalt	S.Y.	$4.50	717	$3,227
Clearing and Grubbing	Acre	$2,000.00	3	$5,020
Roadway Excavation	C.Y.	$23.00	7,746	$178,162
HMA Concrete	Ton	$100.00	2,701	$270,147
Untreated Base Course	C.Y.	$45.00	2,582	$116,192
Granular Borrow	C.Y.	$40.00	5,810	$232,385
Curb and Gutter (2' width)	L.F.	$32.00	1,918	$61,376
Sidewalk (5' width)	L.F.	$50.00	1,918	$95,900
Drainage	L.F.	$45.00	9,507	$427,799
Right of Way	S.F.	$4.75	109,326	$519,301
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	4,753	$23,767
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$2,237,488**

Contingency	15%	$335,623
Mobilization	10%	$223,749
Preconstruction Engineering	8%	$178,999
Construction Engineering	8%	$178,999
Total Project Costs		**$3,155,000**
Springville City's Responsibility		**6.77%**
		$214,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155
HMA Thickness (in) =	4
Untreated Base Course Thickness (in) =	8
Granual Borrow Thickness (in) =	18
Roadway Excavation Depth (ft) =	2
Number of Sidewalks (No.) =	2
Overlay HMA Thickness (in) =	3

Project No.	**81**
Funding:	**Springville/MAG**
Type:	**Incomplete Street**

Springville City
Transportation Master Plan

550 North: 1500 West to 950 West

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	41,755	$167,020
Removal of Existing Asphalt	S.Y.	$4.50	1,093	$4,919
Clearing and Grubbing	Acre	$2,000.00	1	$2,709
Roadway Excavation	C.Y.	$23.00	1,020	$23,458
HMA Concrete	Ton	$100.00	267	$26,677
Untreated Base Course	C.Y.	$45.00	340	$15,299
Granular Borrow	C.Y.	$40.00	765	$30,598
Curb and Gutter (2' width)	L.F.	$32.00	3,940	$126,080
Sidewalk (5' width)	L.F.	$50.00	4,615	$230,750
Drainage	L.F.	$45.00	3,934	$177,030
Right of Way	S.F.	$4.75	59,010	$280,298
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	1,967	$9,835
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$1,094,673**

Contingency	15%	$164,201
Mobilization	10%	$109,467
Preconstruction Engineering	8%	$87,574
Construction Engineering	8%	$87,574
Total Project Costs		**$1,544,000**
Springville City's Responsibility		**17%**
		$258,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**89**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**Incomplete Street**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

950 West: 550 North to 400 South

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	24,250	$97,000
Removal of Existing Asphalt	S.Y.	$4.50	1,641	$7,385
Clearing and Grubbing	Acre	$2,000.00	1	$1,628
Roadway Excavation	C.Y.	$23.00	3,063	$70,458
HMA Concrete	Ton	$100.00	801	$80,127
Untreated Base Course	C.Y.	$45.00	1,021	$45,951
Granular Borrow	C.Y.	$40.00	2,298	$91,902
Curb and Gutter (2' width)	L.F.	$32.00	4,130	$132,160
Sidewalk (5' width)	L.F.	$50.00	4,850	$242,500
Drainage	L.F.	$45.00	5,470	$246,150
Right of Way	S.F.	$4.75	35,448	$168,378
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	2,954	$14,770
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$1,198,409**

Contingency	15%	$179,761
Mobilization	10%	$119,841
Preconstruction Engineering	8%	$95,873
Construction Engineering	8%	$95,873
Total Project Costs		**$1,690,000**
Springville City's Responsibility		**17%**
		$283,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**90**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**Incomplete Street**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

950 West: 400 South to 1000 South

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	9,935	$39,740
Removal of Existing Asphalt	S.Y.	$4.50	744	$3,348
Clearing and Grubbing	Acre	$2,000.00	1	$1,924
Roadway Excavation	C.Y.	$23.00	776	$17,848
HMA Concrete	Ton	$100.00	203	$20,297
Untreated Base Course	C.Y.	$45.00	259	$11,640
Granular Borrow	C.Y.	$40.00	582	$23,280
Curb and Gutter (2' width)	L.F.	$32.00	1,340	$42,880
Sidewalk (5' width)	L.F.	$50.00	1,987	$99,350
Drainage	L.F.	$45.00	2,328	$104,760
Right of Way	S.F.	$4.75	41,904	$199,044
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	1,164	$5,820
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$569,931**

Contingency	15%	$85,490
Mobilization	10%	$56,993
Preconstruction Engineering	8%	$45,594
Construction Engineering	8%	$45,594
Total Project Costs		**$804,000**
Springville City's Responsibility		**17%**
		$135,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**92**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**Incomplete Street**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

1150 North: Main Street to 200 East

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	732	$23,424
Sidewalk (5' width)	L.F.	$50.00	732	$36,600
Drainage	L.F.	$45.00	732	$32,940
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$92,964**

Contingency	15%	$13,945
Mobilization	10%	$9,296
Preconstruction Engineering	8%	$7,437
Construction Engineering	8%	$7,437
Total Project Costs		**$132,000**

Springville City's Responsibility	**50%**
	$66,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**98**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**Incomplete Street**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

800 East: Center Street to 100 South

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	491	$15,712
Sidewalk (5' width)	L.F.	$50.00	0	$0
Drainage	L.F.	$45.00	0	$0
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$15,712**

Contingency	15%	$2,357
Mobilization	10%	$1,571
Preconstruction Engineering	8%	$1,257
Construction Engineering	8%	$1,257
Total Project Costs		**$23,000**

Springville City's Responsibility	**100%**
	$23,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**102**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**Incomplete Street**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

800 East: Brookside Drive to 650 South

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	89	$401
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	201	$4,634
HMA Concrete	Ton	$100.00	53	$5,270
Untreated Base Course	C.Y.	$45.00	67	$3,022
Granular Borrow	C.Y.	$40.00	151	$6,044
Curb and Gutter (2' width)	L.F.	$32.00	580	$18,560
Sidewalk (5' width)	L.F.	$50.00	580	$29,000
Drainage	L.F.	$45.00	580	$26,100
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	160	$800
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$93,831**

Contingency	15%	$14,075
Mobilization	10%	$9,383
Preconstruction Engineering	8%	$7,506
Construction Engineering	8%	$7,506
Total Project Costs		**$133,000**
Springville City's Responsibility		**100%**
		$133,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**103**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**Incomplete Street**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

900 East: 400 North to 200 North

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	751	$3,004
Removal of Existing Asphalt	S.Y.	$4.50	4,503	$20,265
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	965	$30,880
Sidewalk (5' width)	L.F.	$50.00	965	$48,250
Drainage	L.F.	$45.00	965	$43,425
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	965	$4,825
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$150,649**

Contingency	15%	$22,597
Mobilization	10%	$15,065
Preconstruction Engineering	8%	$12,052
Construction Engineering	8%	$12,052
Total Project Costs		**$213,000**

Springville City's Responsibility	**100%**
	$213,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**104**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**Incomplete Street**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

Roundabout: Red Devil Drive & 620 South

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	0	$0
Sidewalk (5' width)	L.F.	$50.00	0	$0
Drainage	L.F.	$45.00	0	$0
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$776,000	1	$776,000
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$776,000**

Contingency	15%	$116,400
Mobilization	10%	$77,600
Preconstruction Engineering	8%	$62,080
Construction Engineering	8%	$62,080
Total Project Costs		**$1,095,000**
Springville City's Responsibility		**50%**
		$548,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**105**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**Roundabout**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

Center Street/2080 East: Spring Oaks Drive to New Road

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	1,974	$7,896
Removal of Existing Asphalt	S.Y.	$4.50	270	$1,215
Clearing and Grubbing	Acre	$2,000.00	0	$580
Roadway Excavation	C.Y.	$23.00	1,044	$24,012
HMA Concrete	Ton	$100.00	273	$27,307
Untreated Base Course	C.Y.	$45.00	348	$15,660
Granular Borrow	C.Y.	$40.00	783	$31,320
Curb and Gutter (2' width)	L.F.	$32.00	972	$31,104
Sidewalk (5' width)	L.F.	$50.00	1,688	$84,400
Drainage	L.F.	$45.00	972	$43,740
Right of Way	S.F.	$4.75	12,636	$60,021
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	486	$2,430
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$329,685**

Contingency	15%	$49,453
Mobilization	10%	$32,969
Preconstruction Engineering	8%	$26,375
Construction Engineering	8%	$26,375
Total Project Costs		**$465,000**

Springville City's Responsibility	**0%**
	$0

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**106**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**Incomplete Street**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

2080 East: 700 South to Canyon Road

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	8,470	$33,880
Removal of Existing Asphalt	S.Y.	$4.50	673	$3,029
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	1,524	$35,045
HMA Concrete	Ton	$100.00	399	$39,854
Untreated Base Course	C.Y.	$45.00	508	$22,856
Granular Borrow	C.Y.	$40.00	1,143	$45,711
Curb and Gutter (2' width)	L.F.	$32.00	1,210	$38,720
Sidewalk (5' width)	L.F.	$50.00	1,210	$60,500
Drainage	L.F.	$45.00	1,210	$54,450
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	1,210	$6,050
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$340,095**

Contingency	15%	$51,014
Mobilization	10%	$34,009
Preconstruction Engineering	8%	$27,208
Construction Engineering	8%	$27,208
Total Project Costs		**$480,000**
Springville City's Responsibility		**17%**
		$81,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**108**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**Incomplete Street**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

2900 East: Canyon Road to Southeast Border

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	1,562	$7,029
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	2,707	$62,258
HMA Concrete	Ton	$100.00	708	$70,802
Untreated Base Course	C.Y.	$45.00	902	$40,603
Granular Borrow	C.Y.	$40.00	2,030	$81,207
Curb and Gutter (2' width)	L.F.	$32.00	5,622	$179,904
Sidewalk (5' width)	L.F.	$50.00	2,811	$140,550
Drainage	L.F.	$45.00	5,622	$252,990
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	2,811	$14,055
Roundabout	Each	$776,000	0	$0
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$849,399**

Contingency	15%	$127,410
Mobilization	10%	$84,940
Preconstruction Engineering	8%	$67,952
Construction Engineering	8%	$67,952
Total Project Costs		**$1,198,000**

Springville City's Responsibility	**100%**
	$1,198,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**109**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**Incomplete Street**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

600 West: Extention to Evergreen Road

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	0	$0
Sidewalk (5' width)	L.F.	$50.00	0	$0
Drainage	L.F.	$45.00	0	$0
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$776,000	1.00000	$776,000
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$776,000**

Contingency	15%	$116,400
Mobilization	10%	$77,600
Preconstruction Engineering	8%	$62,080
Construction Engineering	8%	$62,080
Total Project Costs		**$1,095,000**
Springville City's Responsibility		**17%**
		$187,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**110**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**New Road**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

Evergreen Road: State Road to 1200 West

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	0	$0
Sidewalk (5' width)	L.F.	$50.00	0	$0
Drainage	L.F.	$45.00	0	$0
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$776,000	1.00000	$776,000
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$776,000**

Contingency	15%	$116,400
Mobilization	10%	$77,600
Preconstruction Engineering	8%	$62,080
Construction Engineering	8%	$62,080
Total Project Costs		**$1,095,000**
Springville City's Responsibility		**17%**
		$187,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**111**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**New Road**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

950 West: 1600 South to Southern Border

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	0	$0
Sidewalk (5' width)	L.F.	$50.00	0	$0
Drainage	L.F.	$45.00	0	$0
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$776,000	1.00000	$776,000
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$776,000**

Contingency	15%	$116,400
Mobilization	10%	$77,600
Preconstruction Engineering	8%	$62,080
Construction Engineering	8%	$62,080
Total Project Costs		**$1,095,000**
Springville City's Responsibility		**17%**
		$187,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**112**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**New Road**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

Intersection Improvement: 1600 South & 950 West

Major Arterial

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	0	$0
Sidewalk (5' width)	L.F.	$50.00	0	$0
Drainage	L.F.	$45.00	0	$0
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$776,000	1.00000	$776,000
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$776,000**

Contingency	15%	$116,400
Mobilization	10%	$77,600
Preconstruction Engineering	8%	$62,080
Construction Engineering	8%	$62,080
Total Project Costs		**$1,095,000**

Springville City's Responsibility	**0%**
	$0

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**113**
HMA Thickness (in) =	4	Funding:	**UDOT**
Untreated Base Course Thickness (in) =	8	Type:	**Traffic Signal**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

Intersection Improvement: 1600 South & 600 West

Major Arterial

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	0	$0
Sidewalk (5' width)	L.F.	$50.00	0	$0
Drainage	L.F.	$45.00	0	$0
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$776,000	1.00000	$776,000
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$776,000**

Contingency	15%	$116,400
Mobilization	10%	$77,600
Preconstruction Engineering	8%	$62,080
Construction Engineering	8%	$62,080
Total Project Costs		**$1,095,000**

Springville City's Responsibility	**0%**
	$0

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**114**
HMA Thickness (in) =	4	Funding:	**UDOT**
Untreated Base Course Thickness (in) =	8	Type:	**Traffic Signal**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

Intersection Improvement: 1600 South & 400 West

Major Arterial

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	0	$0
Sidewalk (5' width)	L.F.	$50.00	0	$0
Drainage	L.F.	$45.00	0	$0
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$776,000	1.00000	$776,000
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$776,000**

Contingency	15%	$116,400
Mobilization	10%	$77,600
Preconstruction Engineering	8%	$62,080
Construction Engineering	8%	$62,080
Total Project Costs		**$1,095,000**
Springville City's Responsibility		**0%**
		$0

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**115**
HMA Thickness (in) =	4	Funding:	**UDOT**
Untreated Base Course Thickness (in) =	8	Type:	**Traffic Signal**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

Intersection Improvement: 1700 East & Canyon Road

Major Arterial

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	0	$0
Sidewalk (5' width)	L.F.	$50.00	0	$0
Drainage	L.F.	$45.00	0	$0
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$776,000	1.00000	$776,000
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$776,000**

Contingency	15%	$116,400
Mobilization	10%	$77,600
Preconstruction Engineering	8%	$62,080
Construction Engineering	8%	$62,080
Total Project Costs		**$1,095,000**

Springville City's Responsibility	**100%**
	$1,095,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**116**
HMA Thickness (in) =	4	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**Traffic Signal**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		

Springville City
Transportation Master Plan

Roundabout: 400 East & Center Street

Minor Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	$4.00	0	$0
Removal of Existing Asphalt	S.Y.	$4.50	0	$0
Clearing and Grubbing	Acre	$2,000.00	0	$0
Roadway Excavation	C.Y.	$23.00	0	$0
HMA Concrete	Ton	$100.00	0	$0
Untreated Base Course	C.Y.	$45.00	0	$0
Granular Borrow	C.Y.	$40.00	0	$0
Curb and Gutter (2' width)	L.F.	$32.00	0	$0
Sidewalk (5' width)	L.F.	$50.00	0	$0
Drainage	L.F.	$45.00	0	$0
Right of Way	S.F.	$4.75	0	$0
Removal of Existing Curb and Gutter	L.F.	$7.00	0	$0
Grind Existing Asphalt	S.F.	$5.00	0	$0
Restriping	L.F.	$5.00	0	$0
Roundabout	Each	$776,000	1.00000	$776,000
Traffic Signal	Each	$180,000	0	$0
			Subtotal	**$776,000**

Contingency	15%	$116,400
Mobilization	10%	$77,600
Preconstruction Engineering	8%	$62,080
Construction Engineering	8%	$62,080
Total Project Costs		**$1,095,000**

Springville City's Responsibility	**100%**
	$1,095,000

Overall Assumptions:

HMA Pavement Density (pcf) =	155	Project No.	**117**
HMA Thickness (in) =	3	Funding:	**Springville**
Untreated Base Course Thickness (in) =	8	Type:	**Traffic Signal**
Granual Borrow Thickness (in) =	18		
Roadway Excavation Depth (ft) =	2		
Number of Sidewalks (No.) =	2		
Overlay HMA Thickness (in) =	3		