SARATOGA SPRINGS

Life's just better here

1. 2020-6-2 Cc Agenda

   Documents:

   2020-6-2 CC AGENDA.PDF

2. 2020-6-2 Cc Packet

   Documents:

   2020-6-2 CC PACKET.PDF

3. 2020-6-2 Approved Minutes

   Documents:

   2020-6-2 CITY COUNCIL MINUTES APPROVED.PDF

AGENDA – City Council Meeting
Mayor Jim Miller
Mayor Pro Tem Ryan Poduska
Council Member Christopher Carn
Council Member Michael McOmber
Council Member Chris Porter
Council Member Stephen Willden

CITY OF SARATOGA SPRINGS
Tuesday, June 2, 2020, 6:00 pm
Pursuant to State and Federal Guidelines concerning COVID19, this Meeting will be conducted electronically.
Meetings are streamlined live electronically at
https://www.youtube.com/c/CityofSaratogaSprings
Questions and comments to staff and/or Council may be submitted to comments@saratogaspringscity.com

POLICY MEETING

1. Call to Order.
2. Roll Call.
3. Invocation / Reverence.
4. Pledge of Allegiance.

REPORTS:

1. Mayor.
2. City Council.
3. Administration: Ongoing Item Review.

PUBLIC HEARINGS:

1. Saratoga Springs Transportation Impact Fee Facilities Plan (IFFP) and Impact Fee Analysis (IFA) Update; Ordinance 20-20 (6-2-20).

BUSINESS ITEMS:

1. Fireworks Restrictions Update; Ordinance 20-21 (6-2-20).

MINUTES:

1. May 19, 2020.

CLOSED SESSION:

Motion to enter into closed session for any of the following: purchase, exchange, or lease of real property; discussion regarding deployment of security personnel, devices, or systems; pending or reasonably imminent litigation; the character, professional competence, or the physical or mental health of an individual.

ADJOURNMENT

In compliance with the Americans with Disabilities Act, individuals needing special accommodations (including auxiliary communicative aids and services) during this meeting should notify the City Recorder at 801.766.9793 at least one day prior to the meeting.

AGENDA – City Council Meeting
Mayor Jim Miller
Mayor Pro Tem Ryan Poduska
Council Member Christopher Carn
Council Member Michael McOmber
Council Member Chris Porter
Council Member Stephen Willden

CITY OF SARATOGA SPRINGS
Tuesday, June 2, 2020, 6:00 pm
Pursuant to State and Federal Guidelines concerning COVID19, this Meeting will be conducted electronically.
Meetings are streamlined live electronically at
https://www.youtube.com/c/CityofSaratogaSprings
Questions and comments to staff and/or Council may be submitted to comments@saratogaspringscity.com

POLICY MEETING

1. Call to Order.
2. Roll Call.
3. Invocation / Reverence.
4. Pledge of Allegiance.

REPORTS:

1. Mayor.
2. City Council.
3. Administration: Ongoing Item Review.

PUBLIC HEARINGS:

1. Saratoga Springs Transportation Impact Fee Facilities Plan (IFFP) and Impact Fee Analysis (IFA) Update; Ordinance 20-20 (6-2-20).

BUSINESS ITEMS:

1. Fireworks Restrictions Update; Ordinance 20-21 (6-2-20).

MINUTES:

1. May 19, 2020.

CLOSED SESSION:

Motion to enter into closed session for any of the following: purchase, exchange, or lease of real property; discussion regarding deployment of security personnel, devices, or systems; pending or reasonably imminent litigation; the character, professional competence, or the physical or mental health of an individual.

ADJOURNMENT

In compliance with the Americans with Disabilities Act, individuals needing special accommodations (including auxiliary communicative aids and services) during this meeting should notify the City Recorder at 801.766.9793 at least one day prior to the meeting.

City Council Staff Report

Author: Gordon Miner, City Engineer
Subject: Transportation Impact Fee Facilities Plan and Impact Fee Analysis
Date: June 2, 2020
Type of Item: Transportation Capital Facilities Planning and Funding

CITY OF SARATOGA SPRINGS

A. Executive Summary: An Impact Fee Facilities Plan and an Impact Fee Analysis have been prepared in order to modify the City's impact fee schedule relative to required transportation system improvements attributable to new growth within the city.

Recommendation: City staff recommends that the City Council adopt these documents.

B. Background: Four documents are involved in the process of planning and funding transportation system improvements: Transportation Master Plan (TMP), Capital Facilities Plan (CFP), Impact Fee Facilities Plan (IFFP), and Impact Fee Analysis (IFA). Beginning with the TMP, each one is derived from the former. For most facilities, the TMP used a planning horizon of the year 2050, while the build-out scenario was used for some facilities. The CFP addresses the capital facilities projects that are anticipated to be built within the next 10 years. The IFFP addresses those capital projects that will qualify to be funded with impact fees. The IFA provides the calculation of the impact fee amount.

Because the CFP and the IFFP are so closely-related, we chose to just include the CFP in the IFFP and call it the IFFP.

The Council adopted a TMP a year ago. The City staff has been working on the CFP, IFFP, and IFA concurrently. The City is now ready to adopt the IFFP and IFA.

C. Funding Source: Impact Fees.

D. Review: The IFFP was prepared by Horrocks Engineers with significant input from City staff. The IFA was prepared by Zions Bank. Both documents use the same methodologies as before. Representatives from Horrocks Engineers and Zions Bank will be at the meeting to answer questions.

Drafts of these documents have been made generally-available to the public as required by State law. They were also placed on the City's website, the links to which were made available to the Utah Valley Homebuilders Association, and other stakeholders.

E. Recommendation and Alternatives: City staff recommends that the City Council adopt these documents. The following alternative motions are offered to the Council for consideration:

Alternative 1 - Adopt

"I move to **adopt** the subject Transportation System Impact Fee Facilities Plan and Impact Fee Analysis".

Alternative 2 – Adopt with Modifications

"I move to **adopt** the subject Transportation System Impact Fee Facilities Plan and Impact Fee Analysis with direction to City staff to modify the subject document(s) as follows:"

1. _____
2. _____
3. _____

Alternative 3 – Table

"I move to **table** the adoption of the Transportation System Impact Fee Facilities Plan and Impact Fee Analysis with the following direction to City staff for changes needed to render a future consideration:

1. _____
2. _____
3. _____

F. Attachments:

1. Transportation Impact Fee Facilities Plan
2. Transportation Impact Fee Analysis

Impact Fee Facilities Plan Certification (11-36a-306)

I certify that the attached impact fee facilities plan:

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

This certification is made with the following limitations:

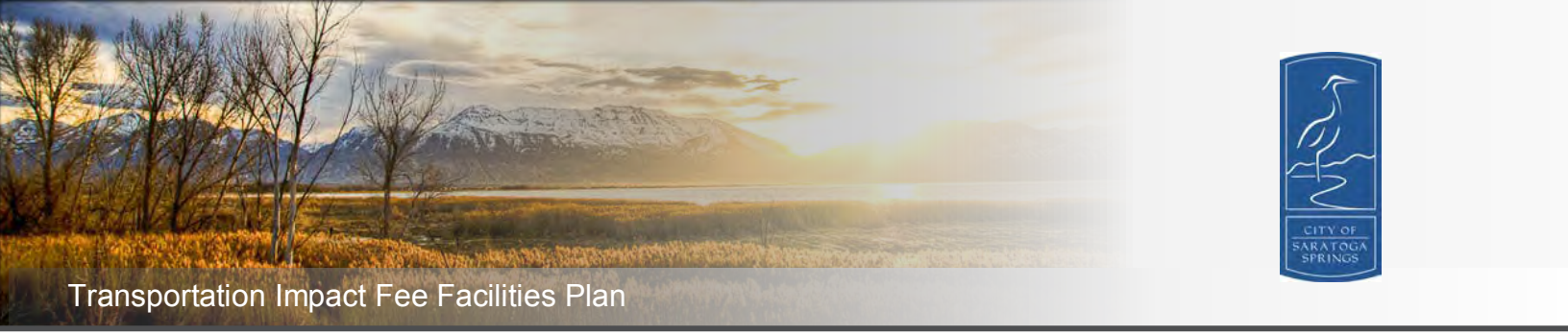
1. All of the recommendations for implementing this IFFP are followed in their entirety by the City.
2. If any portion of the IFFP is modified or amended in any way, this certification is no longer valid.
3. All information presented and used in the creation of this IFFP is assumed to be complete and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

DRAFT

PROFESSIONAL ENGINEER
No. 10484815
KEVIN J. CROSHAW
4/3/2020
STATE OF UTAH

Kevin J. Croshaw, P.E.

HORROCKS ENGINEERS



Transportation Impact Fee Facilities Plan Summary

Introduction

The Impact Fee Facilities Plan (IFFP) was prepared to meet the requirements of Section 11-36a of the Utah State Impact Fee Code. The purpose of the IFFP is to identify master planned roadway infrastructure projects that are eligible for impact fees, estimate the implementation costs associated with those projects that are eligible for impact fees, and estimate the available capacities in the existing roadway network that are eligible for reimbursement through impact fees.

Existing Level of Service

According to the Impact Fee Act, level of service (LOS) 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 was chosen as the acceptable LOS for Saratoga Springs City. Based on existing traffic volumes, the following shows existing deficiencies within the City:

- **Redwood Road (SR-68):** Northern Border to Crossroads Blvd.
- **Redwood Road (SR-68):** 400 North to Pony Express
- **Crossroads Blvd:** Riverside Dr to Eastern Border

Future Demand

The basis of the future travel demand was projected using the Mountainland Association of Governments (MAG) Travel Demand Model (TDM). The MAG TDM models the entire Wasatch Front from north of Ogden to south of Spanish Fork. The entire region is split into Traffic Analysis Zones (TAZ). Each TAZ includes socio-economic and land use data provided by MAG and the City. The TDM generates traffic projects and, future traffic demands/impacts based on the socioeconomic data within each TAZ. Since the MAG TDM is a regional model, the TAZ's were updated to better simulate driving conditions within the City boundaries. The TDM was used to project existing traffic volumes to determine the roadway projects necessary to maintain adequate LOS.

DRAFT

Project Cost Attributable to Future Demand

Utilizing the TDM projections, a 10 year Capital Facilities Plan was created outlining the projects necessary to maintain adequate LOS throughout the City. This includes existing improvements as well as new roadways based on projected new development. All projects included in the 10 year Capital Facilities Plan were assigned a project year based on expected development. Only the projects from 2020-2030 are impact fee eligible. For all impact fee eligible projects, reductions were calculated based on existing deficiencies, excess capacity and pass-through traffic. Of the **$65,838,000** required from Saratoga Springs to build the expected roadway projects from 2020-2030, **$26,208,000** is eligible to be paid using impact fees. All project costs included in the IFFP include inflation based on the expected project year.

DRAFT

Table of Contents

Impact Fee Facilities Plan Certification (11-36a-306) i

Transportation Impact Fee Facilities Plan Summary ii

Introduction ii

Existing Level of Service ii

Future Demand ii

Project Cost Attributable to Future Demand iii

Table of Contents iv

List of Figures v

List of Tables v

Impact Fee Facilities Plan 1

Introduction 1

Existing Level of Service (11-36a-302.1.a.i) 1

Intersection Standards 2

Trips 2

System Improvements and Project Improvements 3

Proposed Level of Service (11-36a-302.1.a.ii) 4

Existing Capacity to Accommodate Future Growth (11-36a-302.1.a.iii) 4

Demands Placed on Facilities by New Development (11-36a-302.1.a.iv) 6

Existing Roadway Network Conditions 6

Future Roadway Network Conditions 13

10-Year Capital Facilities Plan 15

Infrastructure Required to Meet Demands of New Development (11-36a-302.1.a.v) 17

Project Cost Attributable to 10-year Growth 17

Project Cost Attributable to 6-Year Growth 20

Proposed Means to Meet Demands of New Development (11-36a-302.2) 26

Federal Funding 27

State/County Funding 27

City Funding 28

DRAFT

Interfund Loans *29*
Developer Dedications and Exactions *29*
Developer Impact Fees *29*
Necessity of Improvements to Maintain Level of Service 29
ITE Trip Generation 30
TAZ Socioeconomic Data 33
10 Year Capital Facilities Plan Cost Summary 38
IFFP Cost Estimates 40

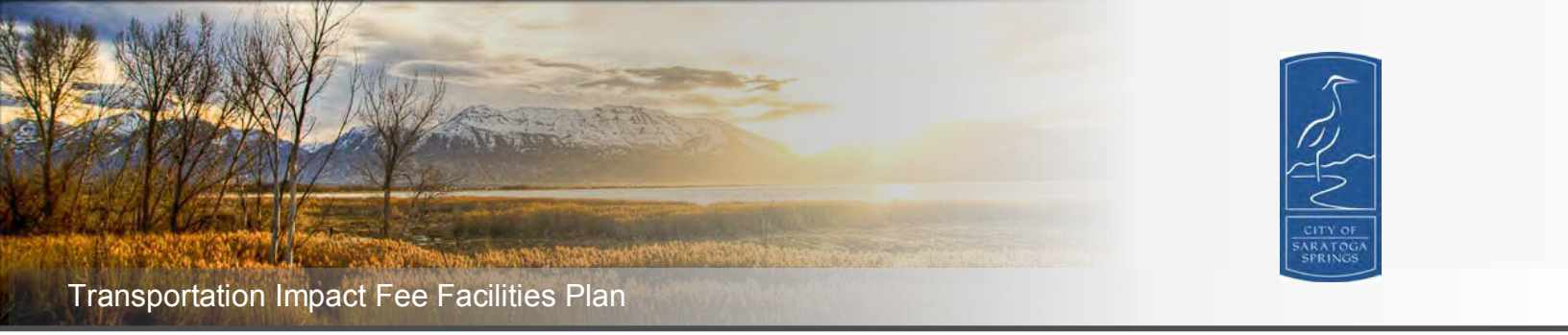
List of Figures

Figure 1: Traffic Count Locations 9
Figure 2: TAZ's Used in Saratoga Springs 10
Figure 3: Existing Functional Classification 11
Figure 4: Existing Level of Service 12
Figure 5: 2030 No Build Level of Service 14
Figure 6: 10 Year Capital Facilities Plan Projects 16
Figure 7: Impact Fee Facilities Plan Projects 19

List of Tables

Table 1: Capacity Criteria in Vehicles per Day at LOS D 2
Table 2: Existing and 2030 Excess Capacity/Deficiency Calculations on Existing Roadways 5
Table 3: Total Households and Total Employment for Each TAZ in Saratoga Springs 8
Table 4: Capital Facilities Plan Projects 15
Table 5: Impact Fee Facilities Plan Project Funding Sources 17
Table 6: Existing Deficiency Cost Reduction Calculation 20
Table 7: Pass-Through Traffic Cost Reduction Calculation 21
Table 8: Excess Capacity Cost Reduction Calculations 22
Table 9: Existing User Share Cost Reduction Calculation 23
Table 10: Proportion of Projects Attributed to New Development 24
Table 11: Cost Attributable to Growth 25

DRAFT



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 prior to preparing an impact fee analysis and establishing an impact fee. According to Title 11, Chapter 36a-302 of the Utah Code, the IFFP is required to identify the following:

- **The existing level of service**
- **A proposed level of service**
- **Any excess capacity to accommodate future growth at the proposed level of service**
- **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 Saratoga Springs 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. Reference should be made to the previous chapters for additional information on the evaluation methodology and how the projections were made.

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

DRAFT

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 was chosen as the acceptable LOS for Saratoga Springs City. This allows for speeds at or near free-flow speeds, but with less freedom to maneuver. At intersections, LOS D means that vehicles should not have to wait more than one cycle to proceed through the intersection and

experience delays less than 35 seconds, according to the Highway Capacity Manual 2010. **Table 1** below summarizes the capacities for roadway segments used by Saratoga Springs City at LOS D.

The 2-Lane Minor Collector cross-section is no longer built in Saratoga Springs. The existing Minor Collector roadways are included in **Figure 3** for inventory purposes. The capacity used for the roadways are 10,500 vehicles per day. The local roadway cross-section capacity, as shown in **Table 1**, was determined based on local knowledge in the Wasatch Front area as well as with assistance from City Staff.

Because roadways throughout the network were built at different times, all roadways do not exactly fit the classifications and capacities shown in **Figure 1** and **Table 1**. For analysis purposes, the existing roadway width and number of lanes are used to best determine the existing capacity of a roadway.

Table 1: Capacity Criteria in Vehicles per Day at LOS D

Functional Classification	Lanes	Capacity
Principal Arterial	7	46,000
Major Arterial	5	30,500
Minor Arterial	3	13,000
Collector	3	11,500
Local Road	2	7,500

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 controlled, signal, roundabout, or are controlled in another way. The level of service for each type of intersection is calculated in a different way. Intersection improvements will be necessary in order to maintain LOS D. 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. The costs of these intersection improvements have been included in the roadway network cost estimates included in **Table 5**.

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 4pm and 6pm. 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 10th edition) (Examples of ITE Trip Generation values are found in **ITE Trip Generation**). This publication uses national data studied over decades to assist traffic engineering professionals to determine the likely impact of new development on transportation infrastructure.

DRAFT

There is a minor discrepancy in the way ITE calculates trips, and the way trips or roadway volumes are calculated in the travel demand modelling used in the Saratoga Springs TMP. This discrepancy is explained by the model roadway volumes and capacities being calculated using daily traffic volumes rather than trips on the roadway. Essentially, this means that a travel demand model "trip" or unit of volume is counted once as a vehicle leaves home, travels on the road network, and then arrives at work. This vehicle will only be counted as it travels on the roadway network. The ITE Trip Generation method uses Driveway counts as its measure of a trip. Therefore, a vehicle making the same journey will be counted once as it leaves home and once again as it arrives at work for a total of 2 trips. This can be rectified simply by adjusting the ITE Trip Generation rates by one half.

An additional consideration is that certain types of developments do not generate primary trips or trips that originated for the sole purpose of visiting that development. An example of a primary trip is a home based work trip where someone leaves their house with the express purpose of going to work. This primary trip has been generated by a combination of the home 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 the housing development and workplace development, without either of these locations, the trip doesn't happen. Some trips are not primary trips, they are defined as pass-by trips. This essentially means that the trip (crossing the Driveway of a development) was generated by a Driver deciding to make a stop on their way to their primary destination. Good examples of pass-by trips are someone that stops at the gas station on their way to work (a gas station is a pass-by trip) or a Driver that is enticed to stop at a fast food restaurant as they Dr 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 has been applied to the trip generation rate used in this IFFP.

System Improvements and Project Improvements

As described in the TMP, there are four primary classifications of roads, including local streets, collectors, arterials, and freeways/expressways. Saratoga Springs City 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 amount 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.

DRAFT

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

The proposed level of service provides a standard for future roadway conditions to be evaluated against. This standard will determine whether or not a roadway will need improvements or not. 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 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 Saratoga Springs jurisdiction. A positive excess capacity represents available capacity for new development in the city before additional infrastructure will be needed. This represents a buy-in component from the City as the existing residents/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). For the existing roadway segments with a negative existing excess capacity in **Table 2** (existing deficiencies under the Impact Fee Act) will undergo capacity improvements that will not be funded with Impact Fee revenues and the analysis is included in the IFFP.

DRAFT

Table 2: Existing and 2030 Excess Capacity/Deficiency Calculations on Existing Roadways

Road Name	Existing Capacity	Existing Volume	Excess Capacity/ Deficiency	Excess Capacity/ Deficiency %	2030 Capacity (Projects Included)	2030 Volume	2030 Excess Capacity/ Deficiency	2030 Excess Capacity/ Deficiency %
Pony Express Pkwy	30,500	25,700	4,800	16%	30,500	43,600	-13,100	-43%
Crossroads Blvd (East of Redwood Road)	13,000	13,900	-900	-7%	30,500	22,000	8,500	28%
W Harvest Hills Blvd	11,500	4,700	6,800	59%	11,500	7,000	4,500	39%
Aspen Hills Blvd	11,500	1,900	9,600	83%	11,500	7,000	4,500	39%
Commerce Dr.	11,500	5,100	6,400	57%	11,500	7,100	4,400	38%
400 East	7,500	3,100	4,400	59%	30,500	8,700	21,800	71%
1400 North	11,500	1,500	10,000	87%	11,500	2,000	9,500	83%
Foothill Blvd	11,500	12,200	-700	-6%	11,500	24,700	-13,200	-115%
1200 North	11,500	1,000	10,500	91%	11,500	5,800	5,700	50%
Thunder Blvd.	11,500	2,400	9,100	79%	11,500	10,000	1,500	13%
400 South	7,500	4,200	3,300	44%	11,500	13,200	-1,700	-15%
1400 East: Pioneer to 145 North	11,500	1,000	10,500	91%	11,500	3,400	8,100	70%
Saratoga Road: 145 North to 400 South	11,500	6,100	5,400	47%	11,500	15,600	-4,100	-36%
Saratoga Road: 400 South to the South	11,500	6,100	5,400	47%	11,500	15,600	-4,100	-36%
Ring Road	11,500	4,600	6,900	60%	11,500	8,100	3,400	30%
Lariat Blvd	11,500	2,700	8,800	77%	11,500	5,900	5,600	49%
Stillwater Dr.	11,500	1,000	10,500	91%	11,500	2,000	9,500	83%
Village Pkwy	11,500	1,300	10,200	89%	11,500	3,700	7,800	68%
Wildlife Blvd	11,500	2,800	8,700	76%	11,500	4,600	6,900	60%
Harbor Park Way	11,500	2,600	8,900	77%	11,500	2,900	8,600	75%
145 North	11,500	1,000	10,500	91%	11,500	3,900	7,600	66%
Riverside Dr (South of Pioneer Crossing)	11,500	5,400	6,100	53%	11,500	6,000	5,500	48%
Market St	13,000	1,900	11,100	85%	13,000	3,900	9,100	70%
Riverside Dr (North Side)	11,500	6,500	5,000	43%	11,500	12,600	-1,100	-10%
Pioneer Crossing (SR-165) West of Redwood	30,500	5,600	24,900	82%	30,500	16,600	13,900	46%
400 North	11,500	1,600	9,900	86%	11,500	9,300	2,200	19%
Talus Ridge Dr	11,500	2,200	9,300	81%	11,500	10,000	1,500	13%
Grandview Blvd	11,500	5,600	5,900	51%	11,500	10,500	1,000	9%

DRAFT

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

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

1. **Existing Demand –** The traffic demand at the present time was 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 (TDM). The MAG TDM models the entire Wasatch Front from north of Ogden to south of Spanish Fork. The entire region is split into Traffic Analysis Zones (TAZ). Each TAZ includes socio-economic and land use data provided by MAG and the City. Variables included in the model come directly from the Utah Governor's Office of Management and budget such as total population, total households, household size, total employment as well as average income.

The MAG TDM was calibrated to fit existing traffic conditions in Saratoga Springs City. Existing traffic counts were collected throughout the city. Traffic counts were collected from UDOT and include annual average daily traffic (AADT) volumes as defined in *Traffic on Utah Highways.* On City owned roadways, traffic counts were either provided by Saratoga Springs City or were manually counted as part of the analysis. **Figure 1** shows the count locations throughout the City used for model calibration. Once collected, the TDM is updated so the model produces similar traffic patterns within the City.

The TDM generates traffic projects and future traffic demands/impacts based on the socioeconomic data within each TAZ. There are numerous variables within each TAZ, but the two main variables that determine traffic generation are total households and total employment. Since the MAG TDM provides a regional model with large TAZ's, citywide traffic volumes generated in the model are not accurate. In order to align the MAG TDM with the existing local conditions, each TAZ is split into smaller units based

DRAFT

on the roadway network in Saratoga Springs. The socioeconomic data within the original TAZ's are then redistributed within the split TAZ's. No data in the model is changed, but redistributed to ensure that the model is calibrated with the existing roadway conditions and better reflects future growth impacts (The TAZ socioeconomic data is included in **TAZ Socioeconomic Data**). The TAZ structure used for this analysis is shown in **Figure 2**. The original TAZ's are shown as dark lines and the split TAZ's are shown as lighter lines. For each TAZ, **Table 3** shows the total households and total employment for each TAZ in 2020, and 2030 for all TAZ's in Saratoga Springs.

Existing Functional Classification and Level of Service

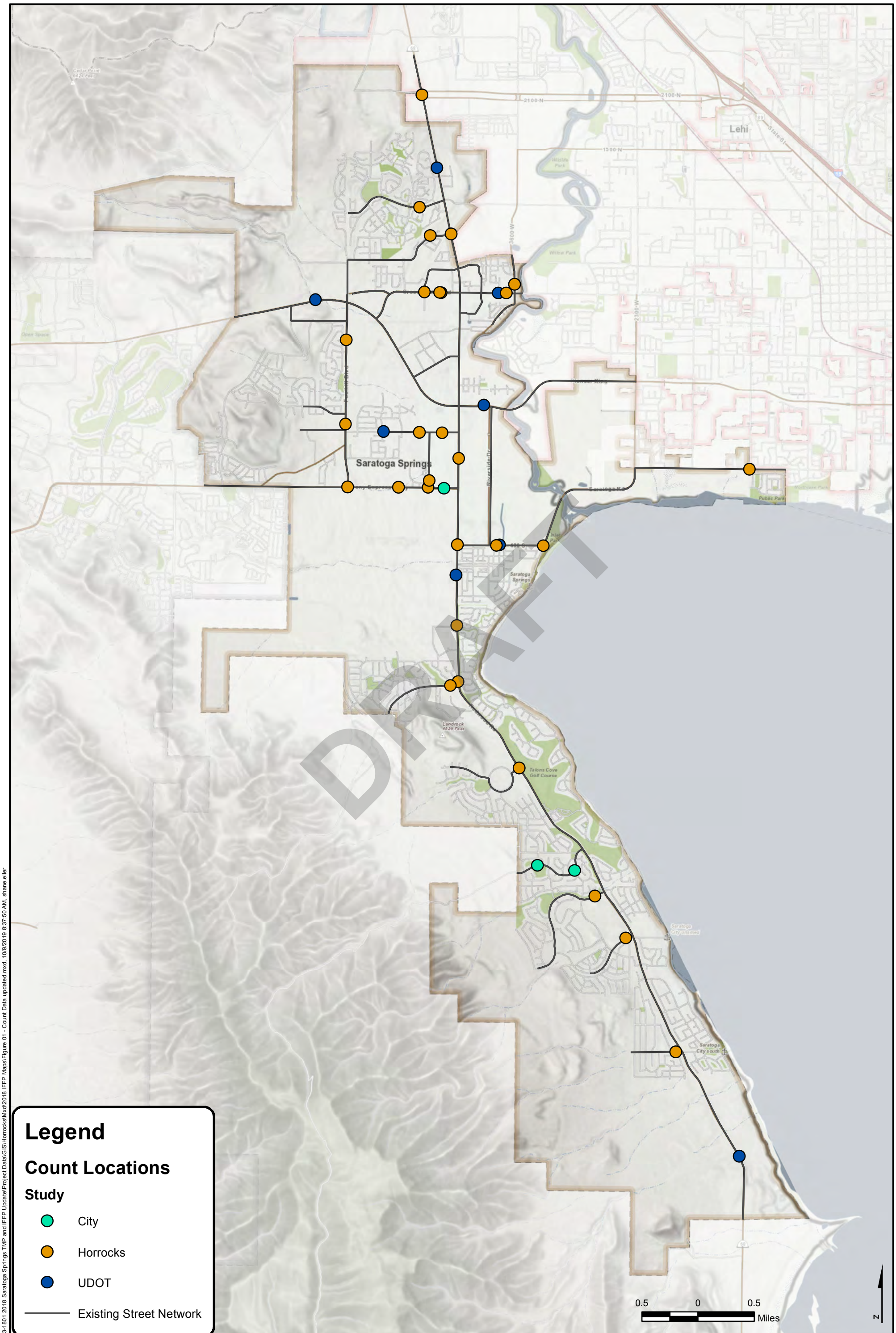
The existing functional classification used in the MAG Travel Demand Model is shown in **Figure 3**. The LOS was calculated for each roadway and intersection according to the guidelines explained in the Level of Service section and a LOS map is included in **Figure 4**.

DRAFT

Table 3: Total Households and Total Employment for Each TAZ in Saratoga Springs

TAZ ID	Total Households		Total Employment		TAZ ID	Total Households		Total Employment	
	2020	2030	2020	2030		2020	2030	2020	2030
1918	1	90	0	44	**1966**	6	174	67	1265
1919	0	235	0	363	**1967**	0	0	0	716
1920	0	162	1	1	**1968**	13	25	0	0
1921	2	155	0	0	**1969**	8	8	227	510
1922	8	196	0	0	**1970**	124	227	351	365
1923	35	367	0	0	**1971**	78	143	281	661
1924	109	197	6	24	**1972**	126	173	140	283
1925	45	196	0	0	**1973**	31	88	108	315
1926	38	191	1	6	**1974**	38	431	0	0
1927	25	489	0	0	**1975**	158	463	0	0
1928	362	468	0	36	**1978**	267	312	0	0
1929	114	198	1	1	**1979**	73	263	27	30
1930	366	727	14	43	**1980**	1	1	0	296
1931	88	510	0	0	**1981**	61	296	46	277
1932	198	496	141	284	**1983**	106	328	1	43
1933	99	204	104	1148	**1984**	580	839	1262	1579
1934	366	483	0	11	**1985**	0	0	0	235
1935	73	339	0	0	**1986**	12	144	168	572
1936	15	88	0	0	**1987**	0	73	97	453
1937	204	318	0	0	**1988**	0	0	608	1426
1938	371	447	1	19	**1991**	10	509	40	627
1939	158	216	107	110	**1992**	53	151	332	1381
1940	131	253	95	103	**1993**	7	21	17	567
1941	106	310	0	0	**1994**	0	0	431	438
1942	64	466	4	4	**1995**	94	197	201	259
1943	80	573	0	0	**1996**	678	935	61	72
1944	9	296	0	145	**1997**	804	1108	118	262
1945	45	256	0	0	**1998**	27	143	0	0
1946	88	469	4	164	**1999**	17	101	6	28
1947	33	306	0	0	**2000**	1	22	1	39
1950	199	499	0	180	**2001**	16	113	0	466
1954	152	180	0	0	**2002**	312	452	810	873
1955	312	373	0	0	**2005**	28	420	133	935
1956	128	304	0	0	**2013**	124	704	0	0
1957	28	217	0	0	**2021**	5	6	105	706
1958	105	600	0	0	**2022**	0	0	19	162
1959	10	293	0	0	**2882**	25	70	86	250
1960	29	438	0	408	**2883**	15	42	52	152
1961	153	686	0	27	**2884**	16	47	57	167
1962	362	429	0	0	**2885**	4	54	63	215
1963	349	873	3	373	**2886**	0	55	72	339
1964	0	0	36	628	**2887**	0	31	41	193
1965	27	349	21	1664	**2888**	1	1	467	475

DRAFT



HORROCKS ENGINEERS
2162 West Grove Parkway
Suite 400
Pleasant Grove, UT 84062
(801) 763-5100

Traffic Count Locations

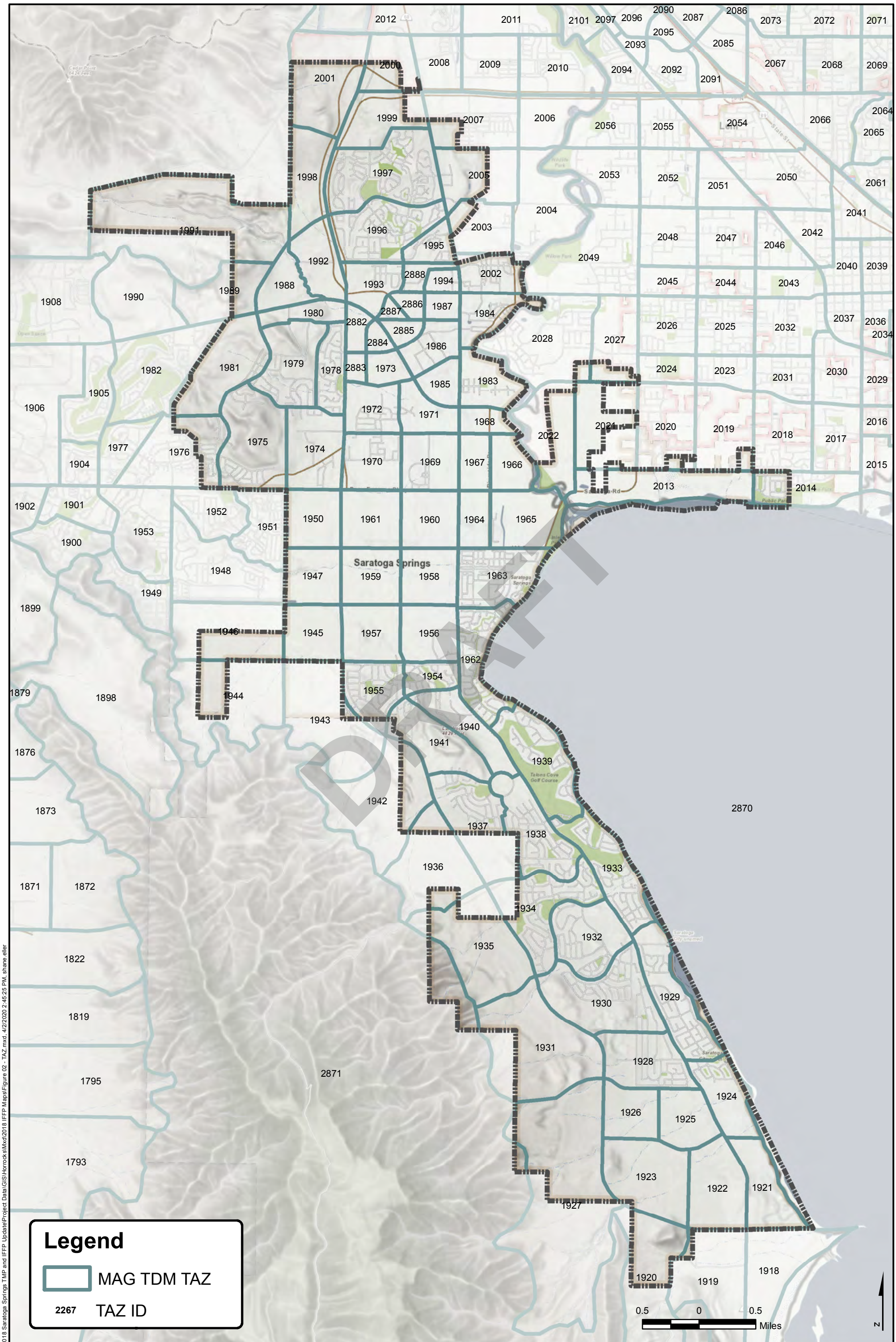
Saratoga Springs Impact Fee Facilities Plan

DATE 10/9/2019

DRAWN KJC

Figure 1

\\lobos\data\2018\UT-1003-1801 2018 Saratoga Springs TMP and IFFP Update\Project Data\GIS\Horrocks\Mxd\2018 IFFP Maps\Figure 01 - Count Data updated.mxd, 10/9/2019 8:37:50 AM, shane.eller



2162 West Grove Parkway
Suite 400
Pleasant Grove, UT 84062
(801) 763-5100

TAZ Structure

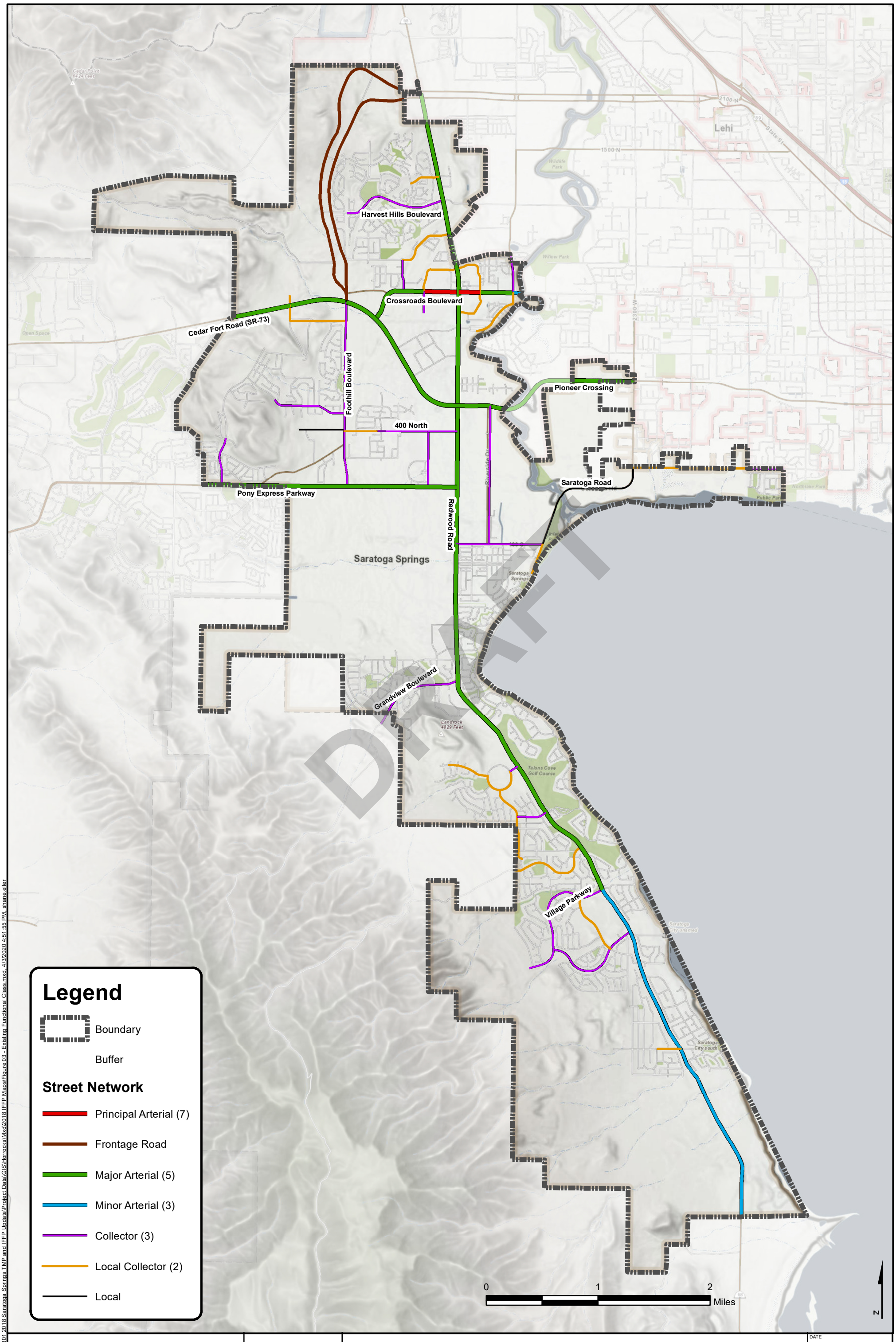
Saratoga Springs Impact Fee Facilities Plan

DATE 4/2/2020

DRAWN

Figure 2

O:\2018\UT-1003-1801 2018 Saratoga Springs TMP and IFFP Update\Project Data\GIS\Horrocks\Mxd\2018 IFFP Maps\Figure 02 - TAZ.mxd, 4/2/2020 2:45:25 PM, shane.eller



HORROCKS ENGINEERS

2162 West Grove Parkway
Suite 400
Pleasant Grove, UT 84062
(801) 763-5100

Existing Roadway Network

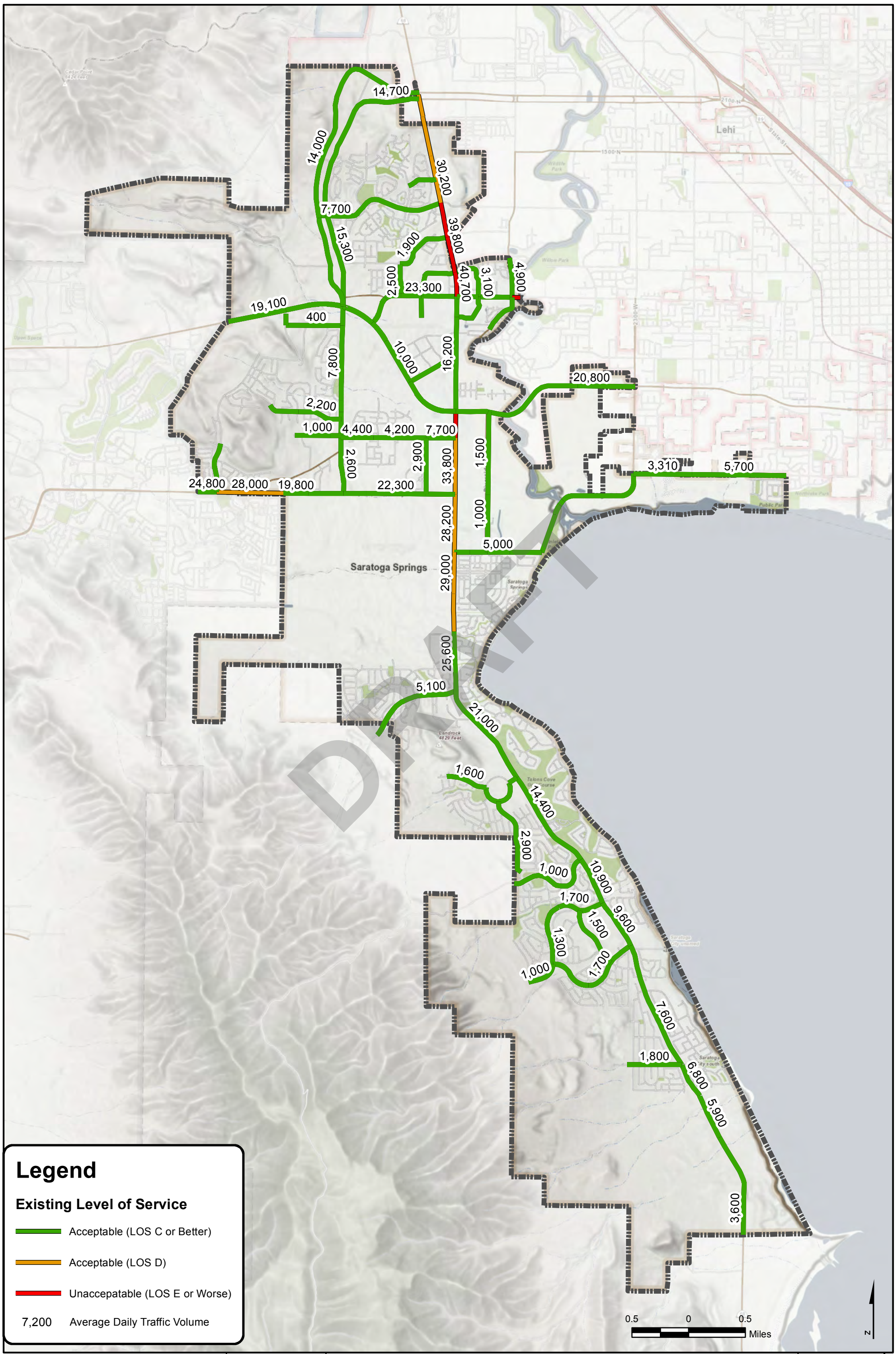
Saratoga Springs Impact Fee Facilities Plan

DATE 4/3/2020

DRAWN KJC

Figure 3

O:\2018\UT-1003-1801_2018 Saratoga Springs TMP and IFFP Update\Project Data\GIS\Horrocks\Mxd\2018 IFFP Maps\Figure 03 - Existing Functional Class.mxd, 4/3/2020 4:51:55 PM, shane.eller



HORROCKS ENGINEERS

2162 West Grove Parkway
Suite 400
Pleasant Grove, UT 84062
(801) 763-5100

Existing Level of Service

Saratoga Springs Impact Fee Facilities Plan

DATE 4/3/2020

DRAWN KJC

Figure 4

O:\12018\UT-1003-1801 2018 Saratoga Springs TMP and IFFP Update\Project Data\GIS\Horrocks\Mxd\2018 IFFP Maps\Figure 04 - Existing Level of Service updated3.26.2020.mxd, 4/3/2020 2:37:51 PM, shane.eller

Mitigations to Existing Capacity Deficiencies

Using LOS D as the threshold for roadway improvements in **Figure 4** (Indicated by red lines), the following shows the roadways that have existing capacity deficiencies:

Roadway Segments at or below LOS E:

- **Redwood Road (SR-68):** Aspen Hills Boulevard to Crossroads Blvd.
- **Redwood Road (SR-68):** 400 North to Pioneer Crossing
- **Crossroads Blvd:** Riverside Dr to Eastern Border

In most cases, roadway capacity improvements are achieved by adding travel lanes. In some cases, additional capacity can be gained by striping additional lanes where the existing pavement width will accommodate it. This can be accomplished by eliminating on street parking, creating narrower travel lanes, and adding two-way left turn lanes where they don't currently exist. For all roadway capacity improvements, it is recommended to investigate other mitigation methods before widening the roadway.

Future Roadway Network Conditions

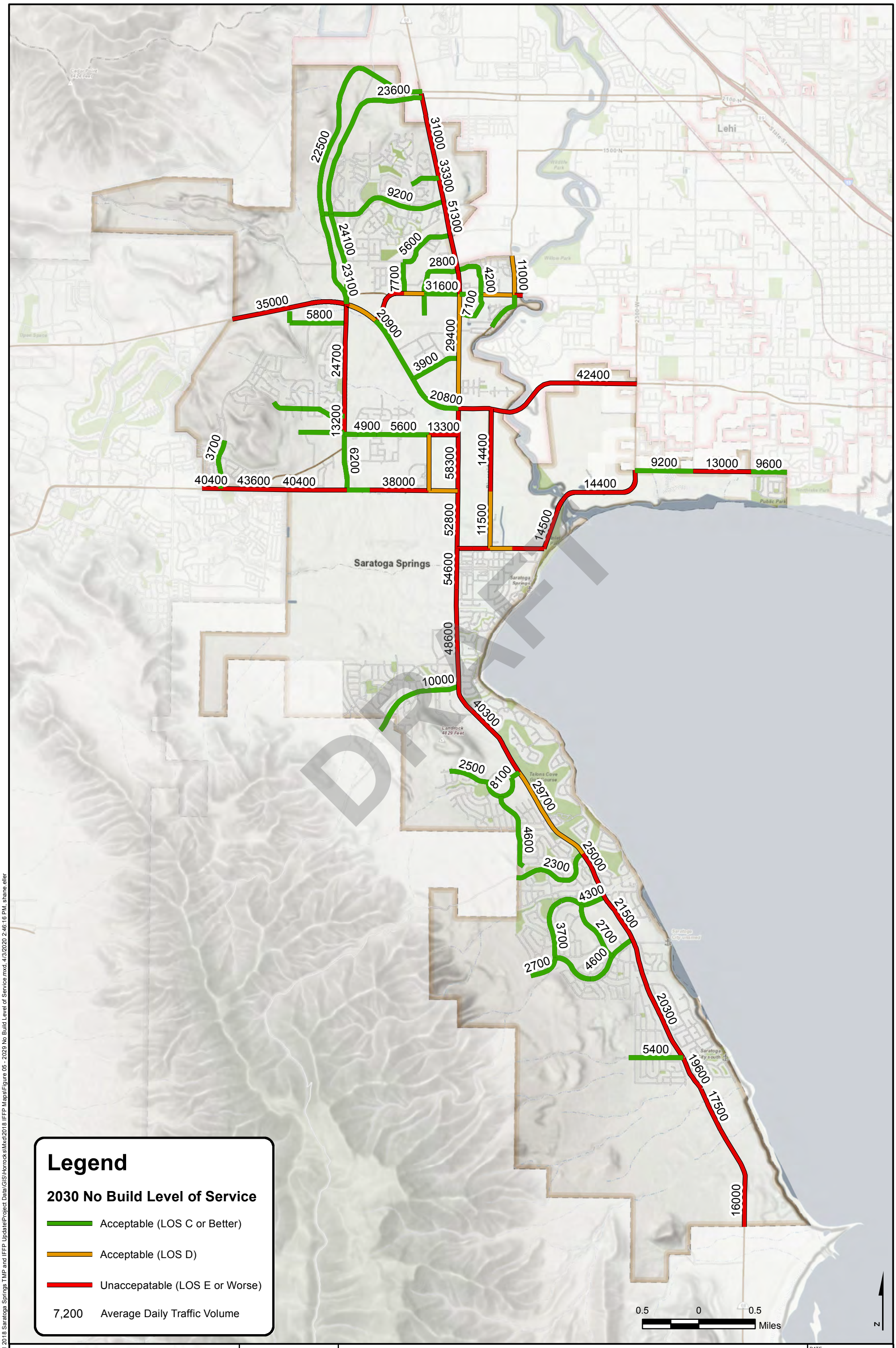
By calibrating the MAG Travel Demand Model to fit the existing traffic conditions in Saratoga Springs City, the model is prepared to project traffic volumes into the future. There are two future models used for this TMP. The first model used was to identify potential capacity deficiencies, called the 2030 No Build Model. The other model used was the 2030 Master Plan Solution Model, which includes all future projects to improve the deficiencies in the 2030 No Build Model.

No Build Level of Service

A no-build scenario is intended to show what the roadway network would be like in the future if no action is taken to improve the City roadway network. The travel demand model was again used to predict this condition by applying the future growth and travel demand to the existing roadway network. As shown in **Figure 5**, the following roadways would perform at LOS E or worse if no action were taken by 2030 to improve the roadway network:

- **Redwood Road (SR-68):** Northern Border to Crossroads Blvd.
- **Redwood Road (SR-68):** Pioneer Crossing (SR-145) to Ring Rd.
- **Crossroads Blvd.:** Commerce Dr. to Pioneer Crossing (SR-145) & Riverside Dr. to Eastern Border
- **Pioneer Crossing (SR-145):** Eastern Border to Redwood Road (SR-68)
- **Cedar Fort Road (SR-73):** Foothill Blvd. to Western Border
- **Foothill Boulevard:** Pioneer Crossing to 400 North
- **400 North:** Redwood Road (SR-68) to 200 West
- **Pony Express Parkway:** 200 west to 500 West & 800 West to Western Border
- **400 South:** Redwood Road (SR-68) to Riverside Drive & 300 East to Saratoga Road
- **Saratoga Road:** 400 South to 145 North
- **145 North:** Saratoga Road to 1100 West
- **Redwood Road (SR-68):** Stillwater Drive to Southern Border

DRAFT



O:\12018\UT-1003-1801 2018 Saratoga Springs TMP and IFFP Update\Project Data\GIS\Horrocks\Mxd\2018 IFFP Maps\Figure 05 - 2029 No Build Level of Service.mxd, 4/3/2020 2:46:16 PM, shane.eller

HORROCKS ENGINEERS

2162 West Grove Parkway
Suite 400
Pleasant Grove, UT 84062
(801) 763-5100

2030 No Build Level of Service

Saratoga Springs Impact Fee Facilities Plan

DATE 4/3/2020

DRAWN KJC

Figure 5

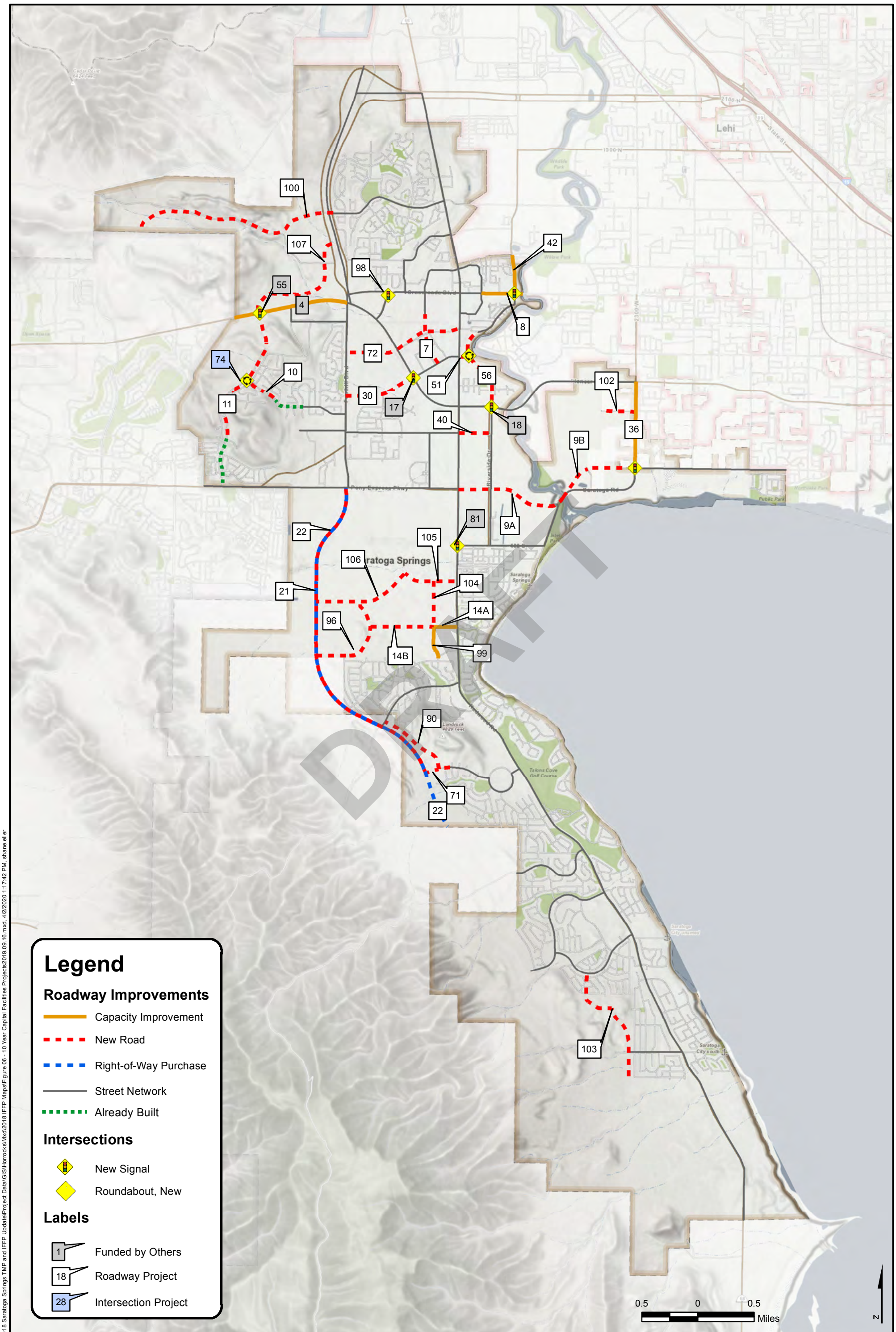
10-Year Capital Facilities Plan

Although projects will be completed as growth and development occurs throughout the city, the existing and no build scenarios are used as a basis to predict the necessary projects to include in the IFFP. **Figure 6** and **Table 4** show the Capital Facilities Plan, which forecast all necessary improvements for the next ten years. This includes all of the projects regardless of their eligibility for impact fee expenditure. Project costs are included in **10 Year Capital Facilities Plan Cost Summary**.

Table 4: Capital Facilities Plan Projects

Project	Location	Funding Source
4	SR-73: Mountain View Corridor Frontage to Western Border	UDOT
7	Exchange Place: Crossroads Blvd to Market Street (Upsize Only)	Saratoga Springs
8	Crossroads Blvd: Commerce Dr to Eastern Border, Signal: Crossroads and 400 E/Riverside Dr	MAG/Saratoga Springs
9A	Pony Express Extension: Redwood Road to Jordan River	MAG/Saratoga Springs
9B	Pony Express Extension: Jordan River to Saratoga Road	Saratoga Springs
10	Talus Ridge Dr: End of Existing to Mt. Saratoga Blvd (Upsize Only)	Saratoga Springs
11	Mt. Saratoga Blvd: End of Existing to SR-73 (Upsize Only)	Saratoga Springs
14A	Founder's Blvd: Redwood Road to Old Farm Road (Upsize Only)	Saratoga Springs
14B	Founder's Blvd: End of Old Farm Road to Ensign Dr	Saratoga Springs
17	Signal: Market Street & Pioneer Crossing (SR-145)	UDOT
18	Signal: Riverside Dr & Pioneer Crossing (SR-145)	UDOT
21	Foothill Blvd Extension (East Frontage Road): Pony Express Pkwy to Lariat Blvd	Saratoga Springs
22	Corridor Preservation	Saratoga Springs
30	Market Street: Pioneer Crossing (SR-145) to Foothill Blvd (Upsize Only)	Saratoga Springs
36	Saratoga Rd: Pony Express To Pioneer Crossing (SR-175) (Upsize Only, excludes Lehi's side)	Saratoga Springs
40	400 North: Redwood Road (SR-68) to Riverside Dr (Upsize Only)	Saratoga Springs
42	400 East: Crossroads Blvd to Northern Border	Saratoga Springs
51	Market Street: Redwood Road (SR-68) to Riverside Dr	Saratoga Springs
55	Traffic Signal: SR-73& Mt. Saratoga Blvd.	UDOT
56	Riverside Dr: End of Existing to Pioneer Roundabout: Market St and Riverside Dr	Saratoga Springs
71	Lariat Blvd: End of Existing to Foothill Blvd. Extension (Upsize Only)	Saratoga Springs
72	Medical Dr: Foothill Blvd to Redwood Road (Upsize Only)	Saratoga Springs
74	Roundabout: Talus Ridge Dr and Mt. Saratoga Blvd.	Saratoga Springs
81	Traffic Signal: Redwood Rd. (SR-68) & 400 South	UDOT
90	Frontage Road: Lariat Blvd to Grandview Blvd	Saratoga Springs
96	Ensign Dr: Foothill Blvd Extension to 800 South (Project 106)	Saratoga Springs
98	Traffic Signal: Crossroads Blvd & 1400 North	Saratoga Springs
99	Old Farm Road: Founders Blvd to School House (Upsize Only)	Saratoga Springs
100	Harvest Hills: End of Existing to Chianti Street (Upsize Only)	Saratoga Springs
102	560 North: Saratoga Road to 900 East (Approx. 1,600')	Saratoga Springs
103	New Collector: Wildlife Blvd to 4180 South (Approx. 6000')	Saratoga Springs
104	Old Farm Road: End of Existing to School House Road (Upsize Only)	Saratoga Springs
105	School House Road: Redwood Road to (Project 106) (Upsize Only)	Saratoga Springs
106	800 South (Approx.): School House Road to Foothill Blvd Extension (Upsize Only)	Saratoga Springs
107	Mount Saratoga Road: Mountain View Corridor to Approximately SR-73 (Upsize Only)	Saratoga Springs

DRAFT



HORROCKS ENGINEERS

2162 West Grove Parkway
Suite 400
Pleasant Grove, UT 84062
(801) 763-5100

10 Year Capital Facilities Plan Projects

Saratoga Springs Impact Fee Facilities Plan

DATE 4/2/2020

DRAWN KJC

Figure 6

O:\2018\UT-1003-1801 2018 Saratoga Springs TMP and IFFP Update\Project Data\GIS\Horrocks\Mxd\2018 IFFP Maps\Figure 06 - 10 Year Capital Facilities Projects2019.09.16.mxd, 4/2/2020 1:17:42 PM, shane.eller

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

Project Cost Attributable to 10-year Growth

Table 5 and **Figure 7** shows the funding sources for IFFP projects costs attributable to new growth as a percentage of the total project. A portion of each project in **Table 5** is impact fee eligible, depending on how it is funded. Only that portion of a project cost funded by Saratoga Springs is impact fee eligible. For each project, that amount is indicated in the **Saratoga Springs City %** and **Saratoga Springs City Total** columns. Where the project is likely to be completed using MAG funding, the Saratoga Springs City impact fee eligible portion of the project is its "matching funds" obligation, in this case, 6.77% of the total project cost. UDOT projects will be funded entirely with state funds and are not eligible for impact fee expenditure.

There are additional costs included in each cost estimate based on a percentage of the construction costs. The four additional costs include contingency, mobilization, preconstruction engineering, and construction engineering. The percentages used for the additional costs may vary as these values are estimated for each individual 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 roadway striping, utility placement, and survey. Contingency costs can range up to 25% based on the number of items not estimated. Mobilization is the preparation before construction begins on a project. It is recommended that a value of 10% be used for project mobilization. Preconstruction engineering is based on the complexity of the project as well as the construction costs. It is recommended that for local projects the preconstruction costs can range up to 16% of the construction costs. For the cost estimates included in this IFFP, a value of 10% was used. Construction engineering includes the construction management and additional design necessary during construction. Recommended costs for local projects range up to 16% and a value of 10% was used for the cost estimates included in the IFFP. All cost estimates along with all unit costs and assumptions are included in **IFFP Cost Estimates**.

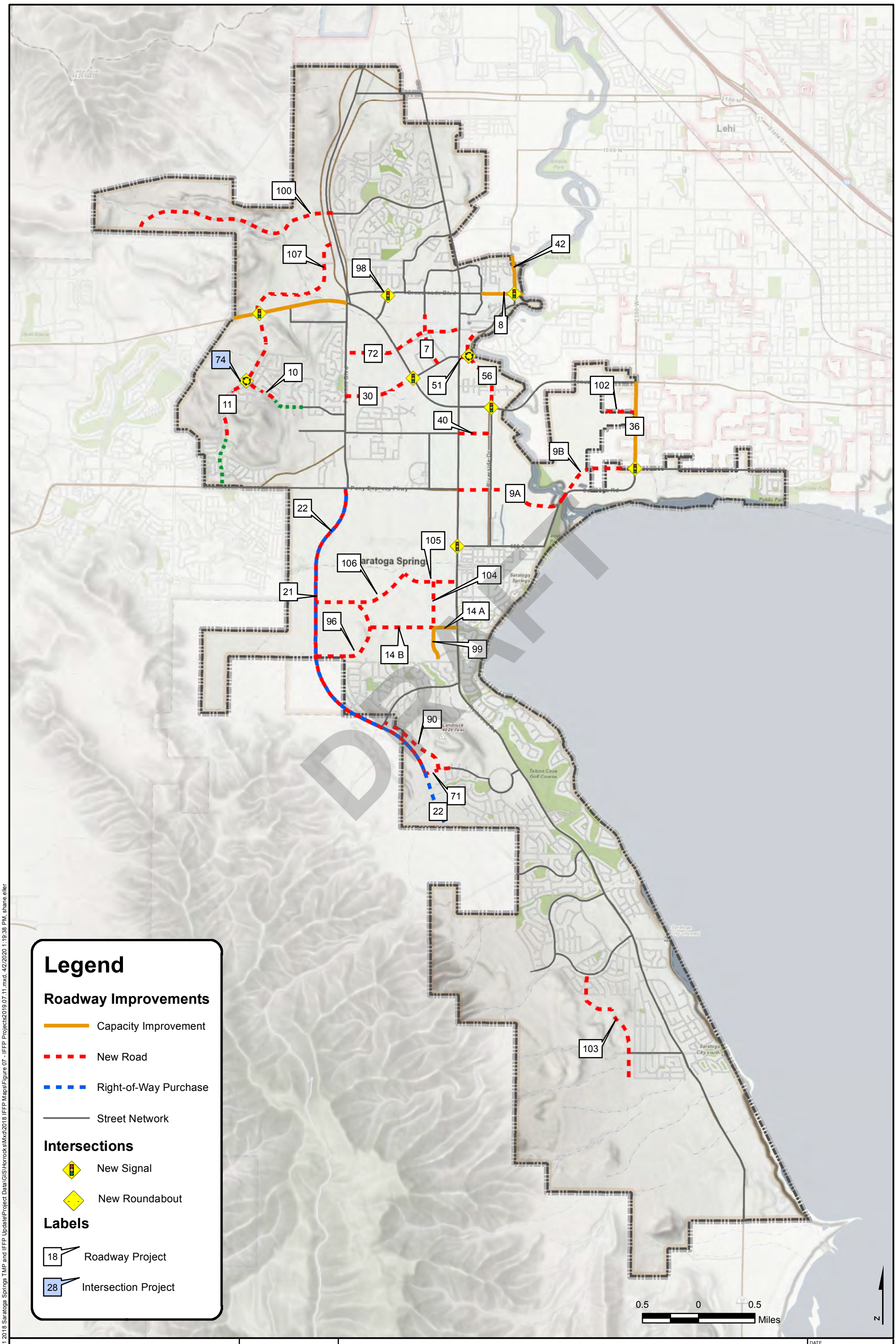
DRAFT

Table 5: Impact Fee Facilities Plan Project Funding Sources

Project	Location	Total Price	Funding Source	Saratoga Springs City %	Saratoga Springs City Total
7	Exchange Place: Crossroads Blvd to Market Street (Upsize Only)	$2,337,000	Saratoga Springs	21%	$491,000
8	Crossroads Blvd: Commerce Drive to Eastern Border, Signal: Crossroads and 400 East/Riverside Drive	$2,005,000	MAG/Saratoga Springs	30%	$602,000
9A	Pony Express Extension: Redwood Road to Jordan River	$6,563,000	MAG/Saratoga Springs	12%	$817,000
9B	Pony Express Extension: Jordan River to Saratoga Road	$10,151,000	Saratoga Springs	100%	$10,151,000
10	Talus Ridge Drive: End of Existing to Mt. Saratoga Blvd (Upsize Only)	$2,689,000	Saratoga Springs	21%	$565,000
11	Mt. Saratoga Blvd: End of Existing to SR-73 (Upsize Only)	$8,981,000	Saratoga Springs	21%	$1,886,000

Project	Location	Total Price	Funding Source	Saratoga Springs City %	Saratoga Springs City Total
14A	Founder's Boulevard: Redwood Road to Old Farm Road (Upsize Only)	$1,088,000	Saratoga Springs	21%	$228,000
14B	Founder's Boulevard: End of Old Farm Road to Ensign Drive	$3,117,000	Saratoga Springs	100%	$3,117,000
21	Mountain View Corridor Extension (East Frontage Road): Pony Express Parkway to Lariat Boulevard	$16,349,000	MAG/Saratoga Springs	7%	$1,107,000
22	Corridor Preservation	$5,752,000	Saratoga Springs	100%	$5,752,000
30	Market Street: Pioneer Crossing (SR-145) to Foothill Boulevard	$4,790,000	Saratoga Springs	100%	$4,790,000
36	1400 East: Pony Express to Pioneer Crossing (SR-175) (Upsize Only)	$1,615,000	Saratoga Springs	100%	$1,615,000
40	400 North: Redwood Road (SR-68) to Riverside Drive (Upsize Only)	$1,806,000	Saratoga Springs	21%	$379,000
42	400 East: Crossroads Boulevard to Northern Border	$2,004,000	Saratoga Springs	100%	$2,004,000
51	Market Street: Redwood Road (SR-68) to Riverside Drive	$520,000	Saratoga Springs	100%	$520,000
56	Riverside Drive: End of Existing to Pioneer Crossing (Includes Roundabout at Market Street and Riverside Drive)	$4,598,000	Saratoga Springs	100%	$4,598,000
71	Lariat Boulevard: End of Existing to Foothill Blvd. Extension (Upsize Only)	$1,213,000	Saratoga Springs	21%	$255,000
72	Medical Drive: Foothill Boulevard to Redwood Road (Upsize Only)	$6,912,000	Saratoga Springs	21%	$1,452,000
74	Roundabout: Talus Ridge Drive and Mt. Saratoga Blvd.	$802,000	Saratoga Springs	100%	$802,000
90	Frontage Road: Lariat Boulevard to Grandview Boulevard	$3,228,000	Saratoga Springs	100%	$3,228,000
96	Ensign Drive: Mountain View Corridor Extension to 800 South (Project 106)	$4,321,000	Saratoga Springs	21%	$907,000
98	Traffic Signal: Crossroads Boulevard & 1400 North	$566,000	Saratoga Springs	100%	$566,000
99	Old Farm Road: Founders Blvd to School House (Upsize Only)	$1,913,000	Saratoga Springs	21%	$402,000
100	Harvest Hills: End of Existing to Chianti Street (Upsize Only)	$14,102,000	Saratoga Springs	43%	$6,064,000
102	560 North: Saratoga Road to 900 East (Approx. 1,600')	$2,004,000	Saratoga Springs	100%	$2,004,000
103	New Collector: Wildlife Blvd to 4180 South (Approx. 6000')	$7,515,000	Saratoga Springs	100%	$7,515,000
104	Old Farm Road: End of Existing to School House Road (Upsize Only)	$3,302,000	Saratoga Springs	21%	$693,000
105	School House Road: Redwood Road to (Project 106) (Upsize Only)	$3,132,000	Saratoga Springs	21%	$658,000
106	800 South (Approx.): School House Road to Mountain View Corridor Extension (Upsize Only)	$5,807,000	Saratoga Springs	21%	$1,219,000
107	Mount Saratoga Road: Mountain View Corridor to Approximately SR-73 (Upsize Only)	$6,908,000	Saratoga Springs	21%	$1,451,000
99	**Total**	**$136,090,000**			**$65,838,000**

DRAFT



HORROCKS ENGINEERS

2162 West Grove Parkway
Suite 400
Pleasant Grove, UT 84062
(801) 763-5100

Impact Fee Facilities Plan Projects

Saratoga Springs Impact Fee Facilities Plan

DATE 4/2/2020

DRAWN KJC

Figure 7

O:\2018\UT-1003-1801 2018 Saratoga Springs TMP and IFFP Update\Project Data\GIS\Horrocks\Mxd\2018 IFFP Maps\Figure 07 - IFFP Projects2019.07.11.mxd, 4/2/2020 1:19:38 PM, shane.eller

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 Saratoga Springs 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 Saratoga Springs currently generates approximately **9,010** one-way PM peak hour trips. The projected 2030 PM peak hour trip number for Saratoga Springs City is **24,111** a **168%** increase on today's value. This gives a total increase of **15,101** trips.

Included in the IFFP are reductions to the City's total cost that are not attributed to growth. The reductions included in the following sections are for existing deficiencies, pass-through, and excess capacity that will not be consumed through 2030. These are calculated based on the projected 2030 traffic volumes as well as output data from the TDM.

Also included are the reductions 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 of 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. To estimate the reductions for existing deficiencies, pass-through, and excess capacity, the weighted average of the two intersecting streets was used.

Existing Deficiency Reduction

Table 6 includes the calculations to determine the cost to cure deficiencies in existing roadways that are unrelated to new development activity due to existing deficiencies. This proportionate cost of added lane capacity will remedy an existing capacity deficiency that cannot be funded using Impact Fees.

Table 6: Existing Deficiency Cost Reduction Calculation

Project	Location	Added Capacity	Existing Deficiency	**Deficiency %**
8	Crossroads Blvd: 400 East to Eastern Border	17,500	700	**4%**

Pass-Through Reduction

Included in **Table 7** is the percent Pass-Through traffic for all project roadways. A vehicle trip is considered pass-through when the origin and the destination for a specific trip occurs outside the city limits. For all growth within Saratoga Springs, there is a certain percentage of new trips which 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 Saratoga Springs and the origin and destination of that trip is located outside of Saratoga Springs, that trip is considered a pass-through trip. Since a pass-through trip does not arise from new development activity in Saratoga Springs, 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.

DRAFT

Table 7: Pass-Through Traffic Cost Reduction Calculation

Project	Location	Added Capacity	Pass-Through Volume	Pass Through %
7	Exchange Place: Crossroads Blvd to Market Street (Upsize Only)	11,500	20	**1%**
8	Crossroads Blvd: Commerce Drive to Eastern Border, Signal: Crossroads and 400 East/Riverside Drive	17,500	2,120	**13%**
9A	Pony Express Extension: Redwood Road to Jordan River	30,500	6,310	**21%**
9B	Pony Express Extension: Jordan River to Saratoga Road	30,500	6,760	**23%**
10	Talus Ridge Drive: End of Existing to Mt. Saratoga Blvd (Upsize Only)	6,500	60	**1%**
11	Mt. Saratoga Blvd: End of Existing to SR-73 (Upsize Only)	6,500	410	**7%**
14A	Founder's Boulevard: Redwood Road to Old Farm Road (Upsize Only)	11,500	70	**1%**
14B	Founder's Boulevard: End of Old Farm Road to Ensign Drive	11,500	40	**1%**
21	Mountain View Corridor Extension (East Frontage Road): Pony Express Parkway to Lariat Boulevard	11,500	2,120	**19%**
22	Corridor Preservation	NA	0	**0%**
30	Market Street: Pioneer Crossing (SR-145) to Foothill Boulevard	8,000	60	**1%**
36	1400 East: Pony Express to Pioneer Crossing (SR-175) (Upsize Only)	4,000	20	**1%**
40	400 North: Redwood Road (SR-68) to Riverside Drive (Upsize Only)	11,500	140	**2%**
42	400 East: Crossroads Boulevard to Northern Border	5,500	310	**6%**
51	Market Street: Redwood Road (SR-68) to Riverside Drive	11,500	60	**1%**
56	Riverside Drive: End of Existing to Pioneer Crossing (Includes Roundabout at Market Street and Riverside Drive)	11,500	30	**1%**
71	Lariat Boulevard: End of Existing to Foothill Blvd. Extension (Upsize Only)	11,500	390	**4%**
72	Medical Drive: Foothill Boulevard to Redwood Road (Upsize Only)	11,500	30	**1%**
74	Roundabout: Talus Ridge Drive and Mt. Saratoga Blvd.	23,000	120	**1%**
90	Frontage Road: Lariat Boulevard to Grandview Boulevard	5,000	0	**0%**
96	Ensign Drive: Mountain View Corridor Extension to 800 South (Project 106)	11,500	30	**1%**
98	Traffic Signal: Crossroads Boulevard & 1400 North	42,000	0	**0%**
99	Old Farm Road: Founders Blvd to School House (Upsize Only)	11,500	0	**0%**
100	Harvest Hills: End of Existing to Chianti Street (Upsize Only)	13,000	70	**1%**
102	560 North: Saratoga Road to 900 East (Approx. 1,600')	11,500	10	**1%**
103	New Collector: Wildlife Blvd to 4180 South (Approx. 6000')	11,500	60	**1%**
104	Old Farm Road: End of Existing to School House Road (Upsize Only)	11,500	20	**1%**
105	School House Road: Redwood Road to (Project 106) (Upsize Only)	11,500	10	**1%**
106	800 South (Approx.): School House Road to Mountain View Corridor Extension (Upsize Only)	11,500	640	**6%**
107	Mount Saratoga Road: Mountain View Corridor to Approximately SR-73 (Upsize Only)	11,500	230	**2%**

DRAFT

Excess Capacity Reduction

Included in **Table 8** is the calculated excess capacity remaining in 2030. The excess capacity is the proportion of the added capacity that is not used in 2030. Since this capacity is not used by 2030, it is not a cost of growth in this IFFP period, but can be recouped in a later IFFP period.

Table 8: Excess Capacity Cost Reduction Calculations

Project	Location	Future Capacity	Added Capacity	2030 Traffic Volume	2030 Excess Capacity	Cost Reduction %
7	Exchange Place: Crossroads Blvd to Market Street (Upsize Only)	11,500	11,500	2,122	9,378	**82%**
8	Crossroads Blvd: Commerce Drive to Eastern Border, Signal: Crossroads and 400 East/Riverside Drive	30,500	17,500	24,800	5,700	**33%**
9A	Pony Express Extension: Redwood Road to Jordan River	30,500	30,500	15,387	15,113	**50%**
9B	Pony Express Extension: Jordan River to Saratoga Road	30,500	30,500	28,149	2,351	**8%**
10	Talus Ridge Drive: End of Existing to Mt. Saratoga Blvd (Upsize Only)	11,500	6,500	6,000	5,500	**85%**
11	Mt. Saratoga Blvd: End of Existing to SR-73 (Upsize Only)	11,500	6,500	6,886	4,614	**71%**
14A	Founder's Boulevard: Redwood Road to Old Farm Road (Upsize Only)	11,500	11,500	6,500	5,000	**43%**
14B	Founder's Boulevard: End of Old Farm Road to Ensign Drive	11,500	11,500	3,574	7,926	**69%**
21	Mountain View Corridor Extension (East Frontage Road): Pony Express Parkway to Lariat Boulevard	11,500	11,500	10,554	946	**8%**
22	Corridor Preservation	NA	NA	NA	NA	**0%**
30	Market Street: Pioneer Crossing (SR-145) to Foothill Boulevard	13,000	8,000	5,800	7,200	**90%**
36	1400 East: Pony Express to Pioneer Crossing (SR-175) (Upsize Only)	11,500	4,000	9,267	2,233	**56%**
40	400 North: Redwood Road (SR-68) to Riverside Drive (Upsize Only)	11,500	11,500	1,800	9,700	**84%**
42	400 East: Crossroads Boulevard to Northern Border	13,000	5,500	10,347	2,653	**48%**
51	Market Street: Redwood Road (SR-68) to Riverside Drive	11,500	11,500	5,500	6,000	**52%**
56	Riverside Drive: End of Existing to Pioneer Crossing (Includes Roundabout at Market Street and Riverside Drive)	11,500	11,500	2,600	8,900	**77%**
71	Lariat Boulevard: End of Existing to Foothill Blvd. Extension (Upsize Only)	11,500	11,500	7,784	3,716	**32%**
72	Medical Drive: Foothill Boulevard to Redwood Road (Upsize Only)	11,500	11,500	5,500	6,000	**52%**
74	Roundabout: Talus Ridge Drive and Mt. Saratoga Blvd.	23,000	23,000	12,300	10,700	**47%**
90	Frontage Road: Lariat Boulevard to Grandview Boulevard	5,000	5,000	1,173	3,827	**77%**
96	Ensign Drive: Mountain View Corridor Extension to 800 South (Project 106)	11,500	11,500	2,816	8,684	**76%**
98	Traffic Signal: Crossroads Boulevard & 1400 North	42,000	42,000	16,000	26,000	**62%**
99	Old Farm Road: Founders Blvd to School House (Upsize Only)	11,500	11,500	600	10,900	**95%**
100	Harvest Hills: End of Existing to Chianti Street (Upsize Only)	13,000	13,000	7,240	5,760	**44%**
102	560 North: Saratoga Road to 900 East (Approx. 1,600')	11,500	11,500	1,300	10,200	**89%**
103	New Collector: Wildlife Blvd to 4180 South (Approx. 6000')	11,500	11,500	6,463	5,037	**44%**
104	Old Farm Road: End of Existing to School House Road (Upsize Only)	11,500	11,500	1,704	9,796	**85%**
105	School House Road: Redwood Road to (Project 106) (Upsize Only)	11,500	11,500	1,142	10,358	**90%**
106	800 South (Approx.): School House Road to Mountain View Corridor Extension (Upsize Only)	11,500	11,500	5,851	5,649	**49%**
107	Mount Saratoga Road: Mountain View Corridor to Approximately SR-73 (Upsize Only)	11,500	11,500	11,400	100	**1%**

DRAFT

Existing User Share for New Construction Projects

For all roadways in the roadway system, a portion of the traffic volume would be used by the existing roadway users regardless of future development. For existing roadways, the existing user share is the existing roadway volume. For new construction, a proportion of the new traffic volume is attributed to those users who would use the road regardless of the development. To calculate a reduction for Corridor Preservation (Project #22), it is anticipated new development trips will consume 15,600 of the 65,000

future trips. Therefore, a reduction of 76% will be issued for this project. **Table 9** shows the cost reduction based on the existing user share for all new roadway construction.

Table 9: Existing User Share Cost Reduction Calculation

Project	Location	Added Capacity	Existing User Volume	Existing User %
7	Exchange Place: Crossroads Blvd to Market Street (Upsize Only)	6,500	21	**1%**
8	Crossroads Blvd: Commerce Dr to Eastern Border, Signal: Crossroads and 400 East/Riverside Dr	11,500	115	**1%**
9A	Pony Express Extension: Redwood Road to Jordan River	11,500	57	**1%**
9B	Pony Express Extension: Jordan River to Saratoga Road	11,500	57	**2%**
10	Talus Ridge Dr: End of Existing to Mt. Saratoga Blvd (Upsize Only)	11,500	230	**1%**
11	Mt. Saratoga Blvd: End of Existing to SR-73 (Upsize Only)	11,500	115	**1%**
14A	Founder's Blvd: Redwood Road to Old Farm Road (Upsize Only)	11,500	230	**2%**
14B	Founder's Blvd: End of Old Farm Road to Ensign Dr	11,500	230	**2%**
21	Mountain View Corridor Extension (East Frontage Road): Pony Express Pkwy to Lariat Blvd	13,000	230	**2%**
22	Corridor Preservation	NA	NA	**76%**
30	Market Street: Pioneer Crossing (SR-145) to Foothill Blvd	13,000	260	**2%**
36	1400 East: Pony Express To Pioneer Crossing (SR-175) (Upsize Only)	11,500	114	**2%**
40	400 North: Redwood Road (SR-68) to Riverside Dr (Upsize Only)	11,500	18	**1%**
42	400 East: Crossroads Blvd to Northern Border	8,000	56	**1%**
51	Market Street: Redwood Road (SR-68) to Riverside Dr	5,000	55	**1%**
56	Riverside Dr: End of Existing to Pioneer Crossing (Includes Roundabout at Market Street and Riverside Dr)	11,500	57	**1%**
71	Lariat Blvd: End of Existing to Foothill Blvd. Extension (Upsize Only)	11,500	52	**2%**
72	Medical Dr: Foothill Blvd to Redwood Road (Upsize Only)	6,500	164	**2%**
90	Frontage Road: Lariat Blvd to Grandview Blvd	5,000	10	**1%**
96	Ensign Dr: Mountain View Corridor Extension to 800 South (Project 106)	11,500	56	**2%**
98	Traffic Signal: Crossroads Blvd & 1400 North	42,000	320	**2%**
99	Old Farm Road: Founders Blvd to School House (Upsize Only)	6,500	6	**1%**
100	Harvest Hills: End of Existing to Chianti Street (Upsize Only)	11,500	11	**1%**
102	560 North: Saratoga Road to 900 East (Approx. 1,600')	11,500	13	**1%**
103	New Collector: Wildlife Blvd to 4180 South (Approx. 6,000')	11,500	24	**1%**
104	Old Farm Road: End of Existing to School House Road (Upsize Only)	11,500	3	**1%**
105	School House Road: Redwood Road to (Project 106) (Upsize Only)	11,500	7	**1%**
106	800 South (Approx.): School House Road to Mountain View Corridor Extension (Upsize Only)	11,500	14	**1%**
107	Mount Saratoga Road: Mountain View Corridor to Approximately SR-73 (Upsize Only)	11,500	14	**1%**

Proportion Attributable to Growth Summary and Costs

Impact fees can only be collected for the proportion of the added capacity which is used by new development that is projected to occur through 2030. **Table 10** is a summary table that accounts for all cost reductions attributed to existing deficiencies, existing user share, pass-through, and excess capacity.

DRAFT

Table 10: Proportion of Projects Attributed to New Development

Project	Location	Cost Reduction For			Proportion Attributable to Growth
		Existing Deficiencies/ User Share	Reduction for Pass-Through	Reduction for Excess Capacity	
7	Exchange Place: Crossroads Blvd to Market Street (Upsize Only)	1%	1%	82%	16%
8	Crossroads Blvd: Commerce Drive to Eastern Border, Signal: Crossroads and 400 East/Riverside Drive	0%	13%	33%	50%
9A	Pony Express Extension: Redwood Road to Jordan River	1%	21%	50%	28%
9B	Pony Express Extension: Jordan River to Saratoga Road	1%	23%	8%	68%
10	Talus Ridge Drive: End of Existing to Mt. Saratoga Blvd (Upsize Only)	2%	1%	85%	12%
11	Mt. Saratoga Blvd: End of Existing to SR-73 (Upsize Only)	1%	7%	71%	21%
14A	Founder's Boulevard: Redwood Road to Old Farm Road (Upsize Only)	2%	1%	43%	54%
14B	Founder's Boulevard: End of Old Farm Road to Ensign Drive	2%	1%	69%	28%
21	Mountain View Corridor Extension (East Frontage Road): Pony Express Parkway to Lariat Boulevard	2%	19%	8%	71%
22	Corridor Preservation	76%	0%	0%	24%
30	Market Street: Pioneer Crossing (SR-145) to Foothill Boulevard	2%	1%	90%	7%
36	1400 East: Pony Express to Pioneer Crossing (SR-175) (Upsize Only)	0%	1%	56%	43%
40	400 North: Redwood Road (SR-68) to Riverside Drive (Upsize Only)	1%	2%	84%	13%
42	400 East: Crossroads Boulevard to Northern Border	1%	6%	48%	45%
51	Market Street: Redwood Road (SR-68) to Riverside Drive	1%	1%	52%	46%
56	Riverside Drive: End of Existing to Pioneer Crossing (Includes Roundabout at Market Street and Riverside Drive)	1%	1%	77%	21%
71	Lariat Boulevard: End of Existing to Foothill Blvd. Extension (Upsize Only)	2%	4%	32%	62%
72	Medical Drive: Foothill Boulevard to Redwood Road (Upsize Only)	2%	1%	52%	45%
74	Roundabout: Talus Ridge Drive and Mt. Saratoga Blvd.	0%	1%	47%	52%
90	Frontage Road: Lariat Boulevard to Grandview Boulevard	1%	0%	77%	22%
96	Ensign Drive: Mountain View Corridor Extension to 800 South (Project 106)	2%	1%	76%	21%
98	Traffic Signal: Crossroads Boulevard & 1400 North	0%	0%	62%	38%
99	Old Farm Road: Founders Blvd to School House (Upsize Only)	2%	0%	95%	3%
100	Harvest Hills: End of Existing to Chianti Street (Upsize Only)	2%	1%	44%	53%
102	560 North: Saratoga Road to 900 East (Approx. 1,600')	0%	1%	89%	10%
103	New Collector: Wildlife Blvd to 4180 South (Approx. 6000')	1%	1%	44%	54%

DRAFT

Project	Location	Cost Reduction For			Proportion Attributable to Growth
		Existing Deficiencies/ User Share	Reduction for Pass-Through	Reduction for Excess Capacity	
104	Old Farm Road: End of Existing to School House Road (Upsize Only)	**2%**	**1%**	**85%**	**12%**
105	School House Road: Redwood Road to (Project 106) (Upsize Only)	**2%**	**1%**	**90%**	**7%**
106	800 South (Approx.): School House Road to Mountain View Corridor Extension (Upsize Only)	**1%**	**6%**	**49%**	**44%**
107	Mount Saratoga Road: Mountain View Corridor to Approximately SR-73 (Upsize Only)	**1%**	**2%**	**1%**	**96%**

Using the proportion attributed to future growth in **Table 10**, the cost attributable to future growth is calculated in **Table 11**. Of the **$65,838,000** required by Saratoga Springs for roadway improvements, **$26,208,000** is eligible to be paid using impact fees. All project costs in **Table 11** include inflation based on the project year. All assumptions, rates and specific project costs are found in **IFFP Cost Estimates**.

Table 11: Cost Attributable to Growth

Project	Location	Total Cost	Saratoga Springs City Total	Proportion Attributable to Growth	Cost Attributable to Growth
7	Exchange Place: Crossroads Blvd to Market Street (Upsize Only)	$2,337,000	$491,000	**16%**	**$79,000**
8	Crossroads Blvd: Commerce Drive to Eastern Border, Signal: Crossroads and 400 East/Riverside Drive	$2,005,000	$602,000	**50%**	**$301,000**
9A	Pony Express Extension: Redwood Road to Jordan River	$6,563,000	$817,000	**28%**	**$229,000**
9B	Pony Express Extension: Jordan River to Saratoga Road	$10,151,000	$10,151,000	**68%**	**$6,903,000**
10	Talus Ridge Drive: End of Existing to Mt. Saratoga Blvd (Upsize Only)	$2,689,000	$565,000	**12%**	**$68,000**
11	Mt. Saratoga Blvd: End of Existing to SR-73 (Upsize Only)	$8,981,000	$1,886,000	**21%**	**$396,000**
14A	Founder's Boulevard: Redwood Road to Old Farm Road (Upsize Only)	$1,088,000	$228,000	**54%**	**$123,000**
14B	Founder's Boulevard: End of Old Farm Road to Ensign Drive	$3,117,000	$3,117,000	**28%**	**$873,000**
21	Mountain View Corridor Extension (East Frontage Road): Pony Express Parkway to Lariat Boulevard	$16,349,000	$1,107,000	**71%**	**$786,000**
22	Corridor Preservation	$5,752,000	$5,752,000	**24%**	**$1,380,000**
30	Market Street: Pioneer Crossing (SR-145) to Foothill Boulevard	$4,790,000	$4,790,000	**7%**	**$335,000**
36	1400 East: Pony Express to Pioneer Crossing (SR-175) (Upsize Only)	$1,615,000	$1,615,000	**43%**	**$694,000**
40	400 North: Redwood Road (SR-68) to Riverside Drive (Upsize Only)	$1,806,000	$379,000	**13%**	**$49,000**
42	400 East: Crossroads Boulevard to Northern Border	$2,004,000	$2,004,000	**45%**	**$902,000**
51	Market Street: Redwood Road (SR-68) to Riverside Drive	$520,000	$520,000	**46%**	**$239,000**
56	Riverside Drive: End of Existing to Pioneer Crossing (Includes Roundabout at Market Street and Riverside Drive)	$4,598,000	$4,598,000	**21%**	**$966,000**

DRAFT

Project	Location	Total Cost	Saratoga Springs City Total	Proportion Attributable to Growth	Cost Attributable to Growth
71	Lariat Boulevard: End of Existing to Foothill Blvd. Extension (Upsize Only)	$1,213,000	$255,000	**62%**	**$158,000**
72	Medical Drive: Foothill Boulevard to Redwood Road (Upsize Only)	$6,912,000	$1,452,000	**45%**	**$653,000**
74	Roundabout: Talus Ridge Drive and Mt. Saratoga Blvd.	$802,000	$802,000	**52%**	**$417,000**
90	Frontage Road: Lariat Boulevard to Grandview Boulevard	$3,228,000	$3,228,000	**22%**	**$710,000**
96	Ensign Drive: Mountain View Corridor Extension to 800 South (Project 106)	$4,321,000	$907,000	**21%**	**$190,000**
98	Traffic Signal: Crossroads Boulevard & 1400 North	$566,000	$566,000	**38%**	**$215,000**
99	Old Farm Road: Founders Blvd to School House (Upsize Only)	$1,913,000	$402,000	**3%**	**$12,000**
100	Harvest Hills: End of Existing to Chianti Street (Upsize Only)	$14,102,000	$6,064,000	**53%**	**$3,214,000**
102	560 North: Saratoga Road to 900 East (Approx. 1,600')	$2,004,000	$2,004,000	**10%**	**$200,000**
103	New Collector: Wildlife Blvd to 4180 South (Approx. 6000')	$7,515,000	$7,515,000	**54%**	**$4,058,000**
104	Old Farm Road: End of Existing to School House Road (Upsize Only)	$3,302,000	$693,000	**12%**	**$83,000**
105	School House Road: Redwood Road to (Project 106) (Upsize Only)	$3,132,000	$658,000	**7%**	**$46,000**
106	800 South (Approx.): School House Road to Mountain View Corridor Extension (Upsize Only)	$5,807,000	$1,219,000	**44%**	**$536,000**
107	Mount Saratoga Road: Mountain View Corridor to Approximately SR-73 (Upsize Only)	$6,908,000	$1,451,000	**96%**	**$1,393,000**
Total		**$136,090,000**	**$65,838,000**		**$26,208,000**

DRAFT

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

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

Transportation routes often span multiple jurisdictions and provide regional significance to the transportation network. As a result, other government jurisdictions or agencies often help pay for such regional benefits. Those jurisdictions and agencies could include the Federal Government, the State Government or UDOT, or MAG. The City will need to continue to partner and work with these other jurisdictions to ensure the 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 Saratoga Springs City recommended improvements are to be built. The following paragraphs further describe the various transportation funding sources available to the City.

Federal Funding

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

The Surface Transportation Program (STP) funds projects for any roadway with a functional classification of a collector street or higher as established on the 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 12 categories ranging from historic preservation, bicycle and pedestrian facilities, and water runoff mitigation. Other federal and state trail funds are available from the Utah State Parks and Recreation Program.

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

- **Congestion Relief** – spot improvement 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 license fees, inspection fees, and transportation permits. Seventy-five percent 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 Saratoga Springs fall under UDOT jurisdiction, it is in the interests of the City that staff is 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

DRAFT

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 in the county to better plan for future transportation needs by acquiring property to be used as future right-of-way before it is fully developed and becomes extremely difficult to acquire. UDOT holds on account the revenue generated by the local corridor preservation fund, but the county is responsible to program and control monies. In order to qualify for preservation funds, the City must comply with the Corridor Preservation Process found online at www.udot.utah.gov/public/ucon. Currently, Saratoga Springs City uses Class C funding for their 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 for the purpose of funding a single specific project that benefits an identifiable group of properties. Another source of funding used by cities includes 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-way and participate in the construction of collector/arterial streets adjacent to their developments. Developers can also be considered a possible source of funds for projects through the use of impact fees. These fees are assessed as a result of the impacts a particular development will have on the surrounding roadway system, such as the need for traffic signals or street widening.

General fund revenues are typically reserved for operation and maintenance purposes as they relate to transportation. However, general funds could be used if available to fund the expansion or introduction of specific services. The City of Saratoga Springs currently uses Class C funding for their transportation improvements. 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 as a result of new growth because existing residents would be paying for the impacts of new growth. As a result, general obligation bonds are not considered a fair means of financing future facilities needed as a result of new growth.

Certain areas might require different needs or methods of funding other 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 the public health, convenience, and necessity requiring the creation of a SAA. The boundaries and services

DRAFT

provided by the district must be specified and a public hearing held prior to creation of the SAA. Once the SAA is created, funding can be obtained from tax levies, bonds, and fees when approved by the majority of the qualified electors of the SAA. These funding mechanisms allow the costs to be spread out over time. Through the SAA, tax levies and bonding can apply to specific areas in the City needing to benefit from the improvements.

Interfund Loans

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

Developer Impact Fees

Impact fees are a way for a community to obtain funds to assist in the construction of infrastructure improvements resulting from and needed to serve new growth. The premise behind impact fees is that if no new development occurred, the existing infrastructure would be adequate. Therefore, new 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 statue, 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 costs that address future needs are included in this IFFP. This ensures a fair fee since developers will not be expected to address present deficiencies.

DRAFT

ITE Trip Generation

DRAFT

Category	Units; Per	ITE Trips
130 - Industrial Park	1000 Sq. Feet Gross Floor Area	0.84
140 - General Manufacturing	1000 Sq. Feet Gross Floor Area	0.75
151 - Storage Units	1000 Sq. Feet Rentable Storage Area	0.22
152 - Warehouse / Distribution Center	1000 Sq. Feet Gross Floor Area	0.16
210 - Single-Family Detached Housing	Dwelling Unit	1.02
220 - Multi-Family / Apartment (Greater than 4 Units)	Dwelling Unit	0.67
230 - Multi-Family / Condo, Townhouse, Duplex, Triplex, Quadplex	Dwelling Unit	0.52
240 - Mobile Home / RV Park	Dwelling Lot	0.60
254 - Assisted Living Center	Bed	0.35
310 - Hotel	Room	0.61
444 - Movie Theatre < 10 Screens	1000 Sq. Feet Gross Floor Area	3.80
445 - Movie Theatre > 10 Screens	1000 Sq. Feet Gross Floor Area	4.91
492 - Health/Fitness Club	1000 Sq. Feet Gross Floor Area	4.06
520 - Elementary School	1000 Sq. Feet Gross Floor Area	3.11
522 - Middle School / Junior High School	1000 Sq. Feet Gross Floor Area	2.52
530 - High School	1000 Sq. Feet Gross Floor Area	2.12
534 - Private School (K-8)	1000 Sq. Feet Gross Floor Area	6.53
560 - Church	1000 Sq. Feet Gross Floor Area	0.94
565 - Day Care Center	1000 Sq. Feet Gross Floor Area	13.75
590 - Library	1000 Sq. Feet Gross Floor Area	7.20
610 - Hospital	1000 Sq. Feet Gross Floor Area	1.16
710 - General Office Building	1000 Sq. Feet Gross Floor Area	1.49
720 - Medical-Dental Office Building	1000 Sq. Feet Gross Floor Area	4.27
770 - Business Park	1000 Sq. Feet Gross Floor Area	1.26
812 - Building Materials and Lumber Store	1000 Sq. Feet Gross Floor Area	5.56
817 - Nursery (Garden Center)	1000 Sq. Feet Gross Floor Area	9.04
820 - Shopping Center / Strip Mall	1000 Sq. Feet Gross Leasable Area	3.71
826 - Specialty Retail Center	1000 Sq. Feet Gross Leasable Area	5.02
841 - Automobile Car Sales	1000 Sq. Feet Gross Floor Area	2.80
848 - Tire Store	1000 Sq. Feet Gross Floor Area	4.15
850 - Supermarket	1000 Sq. Feet Gross Floor Area	8.37
851 - Convenience Store	1000 Sq. Feet Gross Floor Area	53.42
912 - Bank / Financial Institution	1000 Sq. Feet Gross Floor Area	26.69
918 - Hair / Nails / Massage / Beauty Salon / Day Spa	1000 Sq. Feet Gross Floor Area	1.93

DRAFT

Category	Units; Per	ITE Trips
932 - Restaurant, Sit-Down (Low Turnover)	1000 Sq. Feet Gross Floor Area	9.02
932 - Restaurant, Sit-Down (High Turnover)	1000 Sq. Feet Gross Floor Area	18.49
934 - Restaurant with Drive-Trough Window	1000 Sq. Feet Gross Floor Area	47.30
942 - Auto Care Center	1000 Sq. Feet Occupied Gross Leasable Area	3.51
944 - Gasoline/Service Station	Fueling Position	15.65
945 - Gasoline/Service Station with Convenience Store	1000 Sq. Feet Gross Floor Area	97.14
947 - Self Service Car Wash	Wash Stall	5.54
948 - Automated Car Wash	1000 Sq. Feet Gross Floor Area	14.12

DRAFT

TAZ Socioeconomic Data

DRAFT

TAZ Socioeconomic Data - 2019

Z	COUNTY	TOTHH	TOTPOP	HHSIZE	TOTEMP	RETEMP	INDEMP	OTHEMP	AVGINCOME	ALLEMP	RETL	FOOD	MANU	WSLE	OFFI	GVED	HLTH	OTHR	FM_AGRI	FM_MING	FM_CONS	ENROL_K_6	ENROL_7_12
1751	4	330	1214	3.68	12	0	5	7	54415	12	0	0	0	5	0	0	2	5	0	0	0	0	0
1754	4	245	1086	4.43	79	0	7	72	54415	93	0	0	6	1	3	71	1	2	0	0	9	1000	0
1755	4	9	30	3.33	0	0	0	0	54415	7	0	0	0	0	0	0	0	0	0	0	7	0	0
1781	4	0	0	0.00	0	0	0	0	60510	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1782	4	0	0	0.00	0	0	0	0	54415	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1784	4	7	23	3.28	8	0	8	0	54415	67	0	0	8	0	0	0	0	0	47	4	8	0	0
1786	4	818	3108	3.80	92	3	17	72	54415	152	3	0	9	8	11	64	1	2	0	0	54	1200	0
1787	4	334	1413	4.23	340	229	1	110	54415	409	226	8	0	1	17	6	6	89	0	0	56	0	0
1788	4	0	0	0.00	0	0	0	0	60510	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1789	4	183	593	3.24	604	272	1	331	54415	655	172	107	0	1	8	138	76	130	0	0	23	0	0
1790	4	0	0	3.00	0	0	0	0	54415	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1791	4	2	6	2.82	0	0	0	0	54415	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1792	4	25	100	3.99	90	0	0	90	54415	95	0	0	0	0	1	90	1	3	0	0	0	211	609
1793	4	7	15	2.14	0	0	0	0	54415	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1794	4	0	0	0.00	6	0	0	6	54415	6	0	0	0	0	0	6	0	0	0	0	0	0	0
1795	4	1	3	3.00	0	0	0	0	54415	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1796	4	2	2	1.00	0	0	0	0	54415	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1797	4	556	2099	3.78	25	1	7	17	56467	37	1	0	4	4	5	0	0	13	0	0	10	0	0
1798	4	364	1653	4.54	18	0	0	18	56467	46	0	0	0	0	7	0	0	12	0	0	27	0	0
1799	4	0	0	0.00	0	0	0	0	56467	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800	4	24	93	3.88	34	0	0	34	56467	38	0	0	0	0	0	35	0	1	0	0	2	514	0
1801	4	94	417	4.44	127	0	0	127	56467	135	0	0	0	0	7	3	1	124	0	0	0	0	0
1802	4	211	912	4.32	35	10	1	24	56467	44	0	10	0	1	4	4	8	8	0	0	9	0	0
1803	4	73	312	4.28	23	0	0	23	56467	27	0	0	0	0	1	19	0	4	0	0	3	327	0
1804	4	16	57	3.56	0	0	0	0	56467	3	0	0	0	0	0	0	0	0	0	0	3	0	0
1805	4	116	523	4.51	5	0	0	5	56467	16	0	0	0	0	0	0	0	5	0	0	11	0	0
1806	4	236	942	3.99	13	2	0	11	56467	17	2	0	0	0	6	0	0	5	0	0	4	0	0
1807	4	96	364	3.79	7	0	0	7	56467	7	0	0	0	0	5	0	0	2	0	0	0	0	0
1808	4	2	5	2.50	0	0	0	0	56467	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1809	4	0	0	0.00	0	0	0	0	55078	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1811	4	0	0	0.00	5	0	0	5	60510	8	0	0	0	0	0	0	0	5	0	0	3	0	0
1818	4	0	0	0.00	0	0	0	0	60510	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1819	4	191	854	4.47	20	2	2	16	60510	22	2	0	2	0	2	14	0	1	0	0	1	0	0
2245	4	0	0	0.00	0	0	0	0	54415	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2264	4	0	0	0.00	0	0	0	0	55078	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2265	4	32	121	3.79	2	0	0	2	56467	3	0	0	0	0	2	0	0	1	0	0	0	0	0
2266	4	50	190	3.79	4	0	0	4	56467	4	0	0	0	0	3	0	0	1	0	0	0	0	0
2267	4	38	144	3.79	3	0	0	3	56467	3	0	0	0	0	2	0	0	1	0	0	0	0	0
2268	4	145	579	3.99	7	1	0	6	56467	10	1	0	0	0	4	0	0	3	0	0	2	0	0
2269	4	66	282	4.28	21	0	0	21	56467	26	0	0	0	0	1	18	0	4	0	0	3	297	0
2270	4	45	193	4.28	14	0	0	14	56467	18	0	0	0	0	1	12	0	3	0	0	2	203	0
2271	4	121	523	4.32	19	6	0	13	56467	26	0	6	0	0	3	2	5	5	0	0	5	0	0
2272	4	2	8	3.88	4	0	0	4	56467	4	0	0	0	0	0	4	0	0	0	0	0	53	0
2273	4	23	89	3.88	32	0	0	32	56467	36	0	0	0	0	0	33	0	1	0	0	2	485	0
2274	4	7	27	3.88	10	0	0	10	56467	10	0	0	0	0	0	10	0	0	0	0	0	148	0
2275	4	0	0	4.54	0	0	0	0	56467	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2276	4	0	0	0.00	0	0	0	0	56467	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2277	4	0	0	0.00	0	0	0	0	56467	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2278	4	1	1	1.00	0	0	0	0	54415	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2279	4	0	0	3.00	0	0	0	0	54415	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2280	4	0	0	3.00	0	0	0	0	54415	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2281	4	0	0	3.00	0	0	0	0	54415	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2282	4	0	0	3.00	0	0	0	0	54415	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2283	4	0	0	3.00	0	0	0	0	54415	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2284	4	0	0	0.00	2	0	0	2	54415	2	0	0	0	0	0	2	0	0	0	0	0	0	0
2285	4	43	172	3.99	153	0	0	153	54415	164	0	0	0	0	3	153	2	6	0	0	0	361	1040
2286	4	16	64	3.99	57	0	0	57	54415	61	0	0	0	0	1	57	1	2	0	0	0	135	388
2287	4	3	8	2.82	0	0	0	0	54415	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2288	4	128	541	4.23	129	87	0	42	54415	154	86	3	0	0	6	2	2	34	0	0	21	0	0
2289	4	128	541	4.23	130	88	0	42	54415	155	87	3	0	0	6	2	2	34	0	0	21	0	0
2290	4	53	224	4.23	53	36	0	17	54415	65	36	1	0	0	3	1	1	14	0	0	9	0	0
2291	4	4	13	3.28	4	0	4	0	54415	35	0	0	4	0	0	0	0	0	25	2	4	0	0

DRAFT

2292	4	8	26	3.28	9	0	9	0	54415	76	0	0	9	0	0	0	0	0	53	5	9	0	0
2293	4	159	509	3.20	333	231	1	101	54415	359	52	185	0	1	13	3	44	48	0	0	13	0	0
2294	4	1	3	2.82	0	0	0	0	54415	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2295	4	1	3	2.82	0	0	0	0	54415	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2296	4	1	3	2.82	0	0	0	0	54415	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2297	4	2	6	2.82	0	0	0	0	54415	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2298	4	2	6	2.82	0	0	0	0	54415	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2299	4	1	3	3.00	0	0	0	0	54415	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300	4	1	3	3.00	0	0	0	0	54415	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2301	4	102	456	4.47	10	1	1	8	60510	11	1	0	1	0	1	8	0	0	0	0	0	0	0
2302	4	0	0	0.00	0	0	0	0	60510	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DRAFT

TAZ Socioeconomic Data - 2029

Z	COUNTY	TOTHH	TOTPOP	HHSIZE	TOTEMP	RETEMP	INDEMP	OTHEMP	AVGINCOME	ALLEMP	RETL	FOOD	MANU	WSLE	OFFI	GVED	HLTH	OTHR	FM_AGRI	FM_MING	FM_CONS	ENROL_K_6	ENROL_7_12
1751	4	613	2184	3.56	24	0	5	19	54415	25	0	0	0	5	4	3	4	9	0	0	0	0	0
1754	4	504	2144	4.25	131	0	7	124	54415	154	0	0	6	1	19	83	10	20	0	0	15	1140	0
1755	4	64	202	3.16	225	35	19	171	54415	252	25	11	9	10	54	38	30	62	0	0	13	505	0
1781	4	0	0	0.00	0	0	0	0	60510	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1782	4	108	364	3.37	101	16	0	85	54415	107	11	5	0	0	29	17	15	30	0	0	0	0	0
1784	4	98	389	3.97	44	4	9	31	54415	110	3	1	9	0	10	6	6	11	46	4	14	0	0
1786	4	1158	4268	3.69	409	74	17	318	54415	528	53	22	9	8	90	117	44	89	0	0	96	1368	0
1787	4	453	1830	4.04	718	312	4	402	54415	855	286	35	2	2	107	72	58	194	0	0	99	0	0
1788	4	128	431	3.37	49	8	0	41	60510	51	5	2	0	0	14	8	7	15	0	0	0	0	0
1789	4	507	1592	3.14	750	275	5	470	54415	829	174	108	2	3	51	170	101	180	0	0	40	0	0
1790	4	39	131	3.37	110	23	0	87	54415	116	16	7	0	0	27	20	15	31	0	0	0	0	0
1791	4	69	273	3.96	158	34	0	124	54415	167	24	11	0	0	38	28	22	44	0	0	0	0	0
1792	4	113	433	3.83	436	0	0	436	54415	466	0	0	0	0	109	167	62	128	0	0	0	241	703
1793	4	66	136	2.06	305	35	0	270	54415	325	25	11	0	0	80	64	47	98	0	0	0	0	0
1794	4	175	592	3.38	14	0	0	14	54415	15	0	0	0	0	3	8	1	3	0	0	0	0	0
1795	4	74	249	3.37	5	1	0	4	54415	6	1	0	0	0	1	1	1	2	0	0	0	0	0
1796	4	252	849	3.37	5	0	0	5	54415	6	0	0	0	0	2	1	1	2	0	0	0	0	0
1797	4	828	3033	3.66	38	1	7	30	56467	59	1	0	4	4	9	3	3	17	0	0	18	0	0
1798	4	364	1587	4.36	18	0	0	18	56467	44	0	0	0	0	5	1	1	9	0	0	28	0	0
1799	4	199	671	3.37	6	1	0	5	56467	6	1	0	0	0	1	1	1	2	0	0	0	457	0
1800	4	167	625	3.74	44	0	2	42	56467	49	0	0	1	1	3	36	2	3	0	0	3	586	0
1801	4	182	773	4.25	148	0	0	148	56467	158	0	0	0	0	13	8	5	132	0	0	0	0	0
1802	4	462	1913	4.14	85	20	3	62	56467	105	8	13	1	1	16	13	15	22	0	0	16	273	0
1803	4	255	1046	4.10	57	7	2	48	56467	66	5	2	1	1	9	25	5	13	0	0	5	373	0
1804	4	82	324	3.95	112	19	0	93	56467	123	13	6	0	0	32	19	16	32	0	0	5	0	0
1805	4	302	1297	4.29	8	0	0	8	56467	29	0	0	0	0	1	1	1	6	0	0	20	0	0
1806	4	558	2132	3.82	22	2	0	20	56467	29	2	0	0	0	9	2	2	8	0	0	6	309	0
1807	4	312	1148	3.68	19	0	0	19	56467	20	0	0	0	0	9	3	2	6	0	0	0	183	0
1808	4	247	834	3.38	6	1	0	5	56467	6	1	0	0	0	1	1	1	2	0	0	0	0	0
1809	4	130	438	3.37	4	1	0	3	55078	5	1	0	0	0	1	1	1	1	0	0	0	0	0
1811	4	87	293	3.37	787	127	169	491	60510	832	90	40	83	88	155	106	86	179	0	0	5	0	0
1818	4	876	2953	3.37	166	27	8	131	60510	176	19	9	3	5	45	26	23	46	0	0	0	0	216
1819	4	520	2241	4.31	292	64	5	223	60510	309	46	20	3	1	68	59	36	74	0	0	2	336	0
2245	4	110	371	3.37	6	0	0	6	54415	6	0	0	0	0	2	1	1	2	0	0	0	0	0
2264	4	59	199	3.37	2	0	0	2	55078	1	0	0	0	0	0	0	0	1	0	0	0	0	0
2265	4	104	383	3.68	6	0	0	6	56467	7	0	0	0	0	3	1	1	2	0	0	0	61	0
2266	4	163	600	3.68	10	0	0	10	56467	10	0	0	0	0	5	1	1	3	0	0	0	95	0
2267	4	124	456	3.68	7	0	0	7	56467	8	0	0	0	0	4	1	1	2	0	0	0	73	0
2268	4	344	1314	3.82	13	1	0	12	56467	18	1	0	0	0	5	2	1	5	0	0	4	191	0
2269	4	232	951	4.10	51	6	1	44	56467	60	4	2	1	1	8	23	4	12	0	0	5	339	0
2270	4	158	648	4.10	35	4	1	30	56467	38	3	1	0	0	5	15	3	8	0	0	3	231	0
2271	4	265	1097	4.14	48	12	1	35	56467	60	4	8	1	1	9	7	9	12	0	0	9	156	0
2272	4	17	64	3.74	4	0	0	4	56467	4	0	0	0	0	0	4	0	0	0	0	0	60	0
2273	4	158	591	3.74	41	0	2	39	56467	47	0	0	1	1	3	34	2	3	0	0	3	553	0
2274	4	48	180	3.74	13	0	1	12	56467	14	0	0	0	0	1	11	0	1	0	0	1	169	0
2275	4	255	1112	4.36	10	0	0	10	56467	32	0	0	0	0	4	1	1	6	0	0	20	0	0
2276	4	0	0	3.37	0	0	0	0	56467	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2277	4	0	0	3.37	0	0	0	0	56467	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2278	4	64	216	3.37	1	0	0	1	54415	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2279	4	41	138	3.37	2	0	0	2	54415	2	0	0	0	0	1	0	0	1	0	0	0	0	0
2280	4	27	91	3.37	1	0	0	1	54415	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2281	4	33	111	3.37	1	0	0	1	54415	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2282	4	17	57	3.37	1	0	0	1	54415	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2283	4	9	30	3.37	0	0	0	0	54415	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2284	4	78	264	3.38	7	0	0	7	54415	7	0	0	0	0	1	3	1	2	0	0	0	0	0
2285	4	193	739	3.83	745	0	0	745	54415	797	0	0	0	0	186	286	107	218	0	0	0	411	1201
2286	4	72	276	3.83	278	0	0	278	54415	297	0	0	0	0	69	107	40	81	0	0	0	153	448
2287	4	94	372	3.96	215	46	0	169	54415	229	33	15	0	0	52	38	30	61	0	0	0	0	0
2288	4	173	699	4.04	275	119	2	154	54415	326	109	13	1	1	41	27	22	74	0	0	38	0	0
2289	4	173	699	4.04	275	119	2	154	54415	326	109	13	1	1	41	27	22	74	0	0	38	0	0
2290	4	71	287	4.04	113	49	1	63	54415	134	45	5	0	0	17	11	9	31	0	0	16	0	0
2291	4	52	206	3.97	24	2	5	17	54415	61	2	1	5	0	6	3	3	6	25	2	8	0	0

DRAFT

2292	4	111	441	3.97	51	5	10	36	54415	127	3	2	10	0	12	7	6	13	53	5	16	0	0
2293	4	135	419	3.10	333	148	4	181	54415	165	18	51	1	1	20	13	22	33	0	0	6	0	0
2294	4	33	131	3.96	76	16	0	60	54415	82	12	5	0	0	19	13	11	22	0	0	0	0	0
2295	4	29	115	3.96	66	14	0	52	54415	71	10	5	0	0	16	12	9	19	0	0	0	0	0
2296	4	31	123	3.96	70	15	0	55	54415	75	11	5	0	0	17	12	10	20	0	0	0	0	0
2297	4	78	309	3.96	178	38	0	140	54415	189	27	12	0	0	43	32	25	50	0	0	0	0	0
2298	4	53	210	3.96	122	26	0	96	54415	129	19	8	0	0	29	22	17	34	0	0	0	0	0
2299	4	51	172	3.37	140	29	0	111	54415	149	21	9	0	0	34	25	20	40	0	0	0	0	0
2300	4	74	249	3.37	205	42	0	163	54415	219	30	14	0	0	50	37	29	59	0	0	0	0	0
2301	4	278	1198	4.31	156	35	2	119	60510	167	25	10	2	1	36	32	20	40	0	0	1	179	0
2302	4	152	512	3.37	57	9	0	48	60510	61	7	3	0	0	16	10	8	17	0	0	0	0	0

DRAFT

10 Year Capital Facilities Plan Cost Summary

DRAFT

Saratoga Springs 10 Year Capital Facilities Plan (2020-2030)									
Project	Location	Total Price	Completion Year	Inflation Rate	Total Price (Project Year)	Funding Source	Saratoga Springs %	Saratoga Springs Total	Saratoga Springs Total (Project Year)
7	Exchange Place: Crossroads Blvd to Market Street (Upsize Only)	$2,120,000	2021	1.10	$2,337,000	Saratoga Springs	21%	$445,000	$491,000
8	Crossroads Blvd: Commerce Drive to Eastern Border, Signal: Crossroads and 400 East/Riverside Drive	$1,900,000	2020	1.06	$2,005,000	MAG/Saratoga Springs	30%	$570,000	$602,000
9A	Pony Express Extension: Redwood Road to Jordan River	$5,554,000	2023	1.19	$6,563,000	MAG/Saratoga Springs	12%	$692,000	$817,000
9B	Pony Express Extension: Jordan River to Saratoga Road	$8,554,000	2023	1.19	$10,151,000	Saratoga Springs	100%	$8,554,000	$10,151,000
10	Talus Ridge Drive: End of Existing to Mt. Saratoga Blvd (Upsize Only)	$2,266,000	2023	1.19	$2,689,000	Saratoga Springs	21%	$476,000	$565,000
11	Mt. Saratoga Blvd: End of Existing to SR-73 (Upsize Only)	$7,568,000	2023	1.19	$8,981,000	Saratoga Springs	21%	$1,589,000	$1,886,000
14A	Founder's Boulevard: Redwood Road to Old Farm Road (Upsize Only)	$949,000	2022	1.15	$1,088,000	Saratoga Springs	21%	$199,000	$228,000
14B	Founder's Boulevard: End of Old Farm Road to Ensign Drive	$2,718,000	2022	1.15	$3,117,000	Saratoga Springs	100%	$2,718,000	$3,117,000
21	Mountain View Corridor Extension (East Frontage Road): Pony Express Parkway to Lariat Boulevard	$13,777,000	2023	1.19	$16,349,000	MAG/Saratoga Springs	7%	$933,000	$1,107,000
22	Corridor Preservation	$4,525,000	2025	1.27	$5,752,000	Saratoga Springs	100%	$4,525,000	$5,752,000
30	Market Street: Pioneer Crossing (SR-145) to Foothill Boulevard	$3,640,000	2026	1.32	$4,790,000	Saratoga Springs	100%	$3,640,000	$4,790,000
36	1400 East: Pony Express to Pioneer Crossing (SR-175) (Upsize Only)	$1,107,000	2029	1.46	$1,615,000	Saratoga Springs	100%	$1,107,000	$1,615,000
40	400 North: Redwood Road (SR-68) to Riverside Drive (Upsize Only)	$1,326,000	2027	1.36	$1,806,000	Saratoga Springs	21%	$278,000	$379,000
42	400 East: Crossroads Boulevard to Northern Border	$1,689,000	2023	1.19	$2,004,000	Saratoga Springs	100%	$1,689,000	$2,004,000
51	Market Street: Redwood Road (SR-68) to Riverside Drive	$424,000	2024	1.23	$520,000	Saratoga Springs	100%	$424,000	$520,000
56	Riverside Drive: End of Existing to Pioneer Crossing (Includes Roundabout at Market Street and Riverside Drive)	$4,011,000	2022	1.15	$4,598,000	Saratoga Springs	100%	$4,011,000	$4,598,000
71	Lariat Boulevard: End of Existing to Foothill Blvd. Extension (Upsize Only)	$1,022,000	2023	1.19	$1,213,000	Saratoga Springs	21%	$215,000	$255,000
72	Medical Drive: Foothill Boulevard to Redwood Road (Upsize Only)	$4,904,000	2028	1.41	$6,912,000	Saratoga Springs	21%	$1,030,000	$1,452,000
74	Roundabout: Talus Ridge Drive and Mt. Saratoga Blvd.	$675,000	2023	1.19	$802,000	Saratoga Springs	100%	$675,000	$802,000
90	Frontage Road: Lariat Boulevard to Grandview Boulevard	$2,213,000	2029	1.46	$3,228,000	Saratoga Springs	100%	$2,213,000	$3,228,000
96	Ensign Drive: Mountain View Corridor Extension to 800 South (Project 106)	$3,919,000	2021	1.10	$4,321,000	Saratoga Springs	21%	$823,000	$907,000
98	Traffic Signal: Crossroads Boulevard & 1400 North	$388,000	2029	1.46	$566,000	Saratoga Springs	100%	$388,000	$566,000
99	Old Farm Road: Founders Blvd to School House (Upsize Only)	$1,312,000	2029	1.46	$1,913,000	Saratoga Springs	21%	$276,000	$402,000
100	Harvest Hills: End of Existing to Chianti Street (Upsize Only)	$11,482,000	2024	1.23	$14,102,000	Saratoga Springs	43%	$4,937,000	$6,064,000
102	560 North: Saratoga Road to 900 East (Approx. 1,600')	$1,374,000	2029	1.46	$2,004,000	Saratoga Springs	100%	$1,374,000	$2,004,000
103	New Collector: Wildlife Blvd to 4180 South (Approx. 6000')	$5,152,000	2029	1.46	$7,515,000	Saratoga Springs	100%	$5,152,000	$7,515,000
104	Old Farm Road: End of Existing to School House Road (Upsize Only)	$2,264,000	2029	1.46	$3,302,000	Saratoga Springs	21%	$475,000	$693,000
105	School House Road: Redwood Road to (Project 106) (Upsize Only)	$2,147,000	2029	1.46	$3,132,000	Saratoga Springs	21%	$451,000	$658,000
106	800 South (Approx.): School House Road to Mountain View Corridor Extension (Upsize Only)	$3,981,000	2029	1.46	$5,807,000	Saratoga Springs	21%	$836,000	$1,219,000
107	Mount Saratoga Road: Mountain View Corridor to Approximately SR-73 (Upsize Only)	$5,624,000	2024	1.23	$6,908,000	Saratoga Springs	21%	$1,181,000	$1,451,000
	Total	**$114,660,000**			**$143,810,000**			**$51,880,000**	**$65,840,000**

DRAFT

IFFP Cost Estimates

DRAFT

Saratoga Springs Impact Fee Calculation (2020-2030)

Project	Location	Total Cost (Project Year)	Funding Source	Saratoga Springs %	Saratoga Springs City Total (Project Year)	Reduction for Existing Deficiencies	Reduction for Pass-Through	Reduction for Excess Capacity	Existing Proportionate Share	Impact Fee Eligible Proportion	Cost Atributable to Growth (Project Year)
7	Exchange Place: Crossroads Blvd to Market Street (Upsize Only)	$2,337,000	Saratoga Springs	21%	$491,000	0%	1%	82%	1%	16%	$79,000
8	Crossroads Blvd: Commerce Drive to Eastern Border, Signal: Crossroads and 400 East/Riverside Drive	$2,005,000	MAG/Saratoga Springs	30%	$602,000	4%	13%	33%	0%	50%	$301,000
9A	Pony Express Extension: Redwood Road to Jordan River	$6,563,000	MAG/Saratoga Springs	12%	$817,000	0%	21%	50%	1%	28%	$229,000
9B	Pony Express Extension: Jordan River to Saratoga Road	$10,151,000	Saratoga Springs	100%	$10,151,000	0%	23%	8%	1%	68%	$6,903,000
10	Talus Ridge Drive: End of Existing to Mt. Saratoga Blvd (Upsize Only)	$2,689,000	Saratoga Springs	21%	$565,000	0%	1%	85%	2%	12%	$68,000
11	Mt. Saratoga Blvd: End of Existing to SR-73 (Upsize Only)	$8,981,000	Saratoga Springs	21%	$1,886,000	0%	7%	71%	1%	21%	$396,000
14A	Founder's Boulevard: Redwood Road to Old Farm Road (Upsize Only)	$1,088,000	Saratoga Springs	21%	$228,000	0%	1%	43%	2%	54%	$123,000
14B	Founder's Boulevard: End of Old Farm Road to Ensign Drive	$3,117,000	Saratoga Springs	100%	$3,117,000	0%	1%	69%	2%	28%	$873,000
21	Mountain View Corridor Extension (East Frontage Road): Pony Express Parkway to Lariat Boulevard	$16,349,000	MAG/Saratoga Springs	7%	$1,107,000	0%	19%	8%	2%	71%	$786,000
22	Corridor Preservation	$5,752,000	Saratoga Springs	100%	$5,752,000	0%	0%	0%	0%	24%	$1,380,000
30	Market Street: Pioneer Crossing (SR-145) to Foothill Boulevard	$4,790,000	Saratoga Springs	100%	$4,790,000	0%	1%	90%	2%	7%	$335,000
36	1400 East: Pony Express to Pioneer Crossing (SR-175) (Upsize Only)	$1,615,000	Saratoga Springs	100%	$1,615,000	0%	1%	56%	0%	43%	$694,000
40	400 North: Redwood Road (SR-68) to Riverside Drive (Upsize Only)	$1,806,000	Saratoga Springs	21%	$379,000	0%	2%	84%	1%	13%	$49,000
42	400 East: Crossroads Boulevard to Northern Border	$2,004,000	Saratoga Springs	100%	$2,004,000	0%	6%	48%	1%	45%	$902,000
51	Market Street: Redwood Road (SR-68) to Riverside Drive	$520,000	Saratoga Springs	100%	$520,000	0%	1%	52%	1%	46%	$239,000
56	verside Drive: End of Existing to Pioneer Crossing (Includes Roundabout at Market Street and Riverside Dri	$4,598,000	Saratoga Springs	100%	$4,598,000	0%	1%	77%	1%	21%	$966,000
71	Lariat Boulevard: End of Existing to Foothill Blvd. Extension (Upsize Only)	$1,213,000	Saratoga Springs	21%	$255,000	0%	4%	32%	2%	62%	$158,000
72	Medical Drive: Foothill Boulevard to Redwood Road (Upsize Only)	$6,912,000	Saratoga Springs	21%	$1,452,000	0%	1%	52%	2%	45%	$653,000
74	Roundabout: Talus Ridge Drive and Mt. Saratoga Blvd.	$802,000	Saratoga Springs	100%	$802,000	0%	1%	47%	0%	52%	$417,000
90	Frontage Road: Lariat Boulevard to Grandview Boulevard	$3,228,000	Saratoga Springs	100%	$3,228,000	0%	0%	77%	1%	22%	$710,000
96	Ensign Drive: Mountain View Corridor Extension to 800 South (Project 106)	$4,321,000	Saratoga Springs	21%	$907,000	0%	1%	76%	2%	21%	$190,000
98	Traffic Signal: Crossroads Boulevard & 1400 North	$566,000	Saratoga Springs	100%	$566,000	0%	0%	62%	0%	38%	$215,000
99	Old Farm Road: Founders Blvd to School House (Upsize Only)	$1,913,000	Saratoga Springs	21%	$402,000	0%	0%	95%	2%	3%	$12,000
100	Harvest Hills: End of Existing to Chianti Street (Upsize Only)	$14,102,000	Saratoga Springs	43%	$6,064,000	0%	1%	44%	2%	53%	$3,214,000
102	560 North: Saratoga Road to 900 East (Approx. 1,600')	$2,004,000	Saratoga Springs	100%	$2,004,000	0%	1%	89%	0%	10%	$200,000
103	New Collector: Wildlife Blvd to 4180 South (Approx. 6000')	$7,515,000	Saratoga Springs	100%	$7,515,000	0%	1%	44%	1%	54%	$4,058,000
104	Old Farm Road: End of Existing to School House Road (Upsize Only)	$3,302,000	Saratoga Springs	21%	$693,000	0%	1%	85%	2%	12%	$83,000
105	School House Road: Redwood Road to (Project 106) (Upsize Only)	$3,132,000	Saratoga Springs	21%	$658,000	0%	1%	90%	2%	7%	$46,000
106	800 South (Approx.): School House Road to Mountain View Corridor Extension (Upsize Only)	$5,807,000	Saratoga Springs	21%	$1,219,000	0%	6%	49%	1%	44%	$536,000
107	Mount Saratoga Road: Mountain View Corridor to Approximately SR-73 (Upsize Only)	$6,908,000	Saratoga Springs	21%	$1,451,000	0%	2%	1%	1%	96%	$1,393,000
	Total	**$136,090,000**			**$65,838,000**						**$26,208,000**

DRAFT

Inflation Rate Table			
Year	Rate	Recommended Rate	Cumulative Inflation Factor
2019	6.5%	0.0%	1.00
2020	5.5%	5.5%	1.06
2021	4.5%	5.5%	1.10
2022	4.0%	4.5%	1.15
2023	3.5%	4.0%	1.19
2024	3.5%	4.0%	1.23
2025	3.5%	4.0%	1.27
2026	3.5%	4.0%	1.32
2027	3.5%	4.0%	1.36
2028	3.5%	4.0%	1.41
2029	3.5%	4.0%	1.46
2030	3.5%	4.0%	1.51
2031	3.5%	4.0%	1.56
2032	3.5%	4.0%	1.62
2033	3.5%	4.0%	1.67
2034	3.5%	4.0%	1.73
2035	3.5%	4.0%	1.79
2036	3.5%	4.0%	1.86
2037	3.5%	4.0%	1.92
2038	3.5%	4.0%	1.99
2039	3.5%	4.0%	2.06
2040	3.5%	4.0%	2.13
2041	3.5%	4.0%	2.20
2042	3.5%	4.0%	2.28
2043	3.5%	4.0%	2.36
2044	3.5%	4.0%	2.44
2045	3.5%	4.0%	2.53

DRAFT

Saratoga Springs City
Transportation Improvement Program (TIP)

Unit Costs

Item	Unit	Unit Cost
Parkstrip	S.F.	$10
Removal of Existing Asphalt	S.Y.	$4.00
Clearing and Grubbing	Acre	$2,000
Roadway Excavation	C.Y.	$10.50
HMA Concrete	Ton	$85.00
Untreated Base Course	C.Y.	$15.00
Granular Borrow	C.Y.	$40.00
Curb and Gutter	L.F.	$22.50
Sidewalk (5' width)	L.F.	$25.00
Drainage	L.F.	$45.00
Right of Way	S.F.	$2.30
*		
Hydraulic	Each	$376,000
Geotech/Drilling	Each	$7,500
Bridge/Culvert	S.F.	$225
Traffic Signal	Each	$250,000
Roundabout	Each	$500,000

Contingency	25%

Mobilization	10%

Preconstruction Engineering	10%
Construction Engineering	10%

* Right-of-Way calculated based on open space land cost

DRAFT

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 7

Exchange Place: Crossroads Blvd to Market Street (Upsize Only)

Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2021)
Removal of Existing Asphalt	S.Y.	$4	0	$0	$0
Clearing and Grubbing	Acre	$2,000	4	$8,726	$9,621
Roadway Excavation	C.Y.	$11	10,056	$105,589	$116,410
HMA Concrete	Ton	$85	2,806	$238,481	$262,919
Untreated Base Course	C.Y.	$15	2,682	$40,224	$44,346
Granular Borrow	C.Y.	$40	2,011	$80,449	$88,693
Curb and Gutter	L.F.	$23	4,937	$111,074	$122,457
Sidewalk (5' width)	L.F.	$25	4,937	$123,416	$136,063
Drainage	L.F.	$45	4,937	$222,149	$244,913
Right of Way	S.F.	$2.30	190,061	$437,139	$481,935
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$250,000	0	$0	$0
Roundabout	Each	$500,000	0	$0	$0
			Construction Cost	**$1,367,249**	**$1,507,357**
Mobilization (10% of Construction)	Lump	10%	136,725	$136,725	$150,736
Contingency (25% of Construction)	Lump	25%	341,812	$341,812	$376,839
			Subtotal	**$1,845,786**	**$2,034,932**

Preconstruction Engineering	10%	$136,725	$150,736
Construction Engineering	10%	$136,725	$150,736

Total Project Costs	**$2,120,000**	**$2,337,000**

Saratoga Springs City's Responsibility via Impact Fee's	**21%**	
	$445,000	**$491,000**

DRAFT

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**4**
Untreated Base Course Thickness (in) =	**8**
Granual Borrow Thickness (in) =	**6**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**Capacity Improvement**
Funding:	**Saratoga Springs**
Comp Year:	**2021**
Inflation Rate:	**1.10**

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 8

Crossroads Blvd: Commerce Drive to Eastern Border, Signal: Crossroads and 400 East/Riverside Drive

Major Arterial

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2020)
Removal of Existing Asphalt	S.Y.	$4	12,608	$50,432	$53,206
Clearing and Grubbing	Acre	$2,000	2	$4,671	$4,928
Roadway Excavation	C.Y.	$11	4,348	$45,650	$48,161
HMA Concrete	Ton	$85	1,516	$128,879	$135,968
Untreated Base Course	C.Y.	$15	870	$13,043	$13,760
Granular Borrow	C.Y.	$40	2,174	$86,952	$91,734
Curb and Gutter	L.F.	$23	3,913	$88,039	$92,881
Sidewalk (5' width)	L.F.	$25	3,913	$97,821	$103,201
Drainage	L.F.	$45	3,913	$176,078	$185,762
Right of Way	S.F.	$2.30	101,734	$233,988	$246,857
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$300,000	1	$300,000	$316,500
Roundabout	Each	$500,000	0	$0	$0
			Construction Cost	**$1,225,552**	**$1,292,958**
Mobilization (10% of Construction)	Lump	10%	122,555	$122,555	$129,296
Contingency (25% of Construction)	Lump	25%	306,388	$306,388	$323,239
			Subtotal	**$1,654,496**	**$1,745,493**

Preconstruction Engineering	10%	$122,555	$129,296
Construction Engineering	10%	$122,555	$129,296

Total Project Costs	**$1,900,000**	**$2,005,000**

Saratoga Springs City's Responsibility via Impact Fee's	**30%**	
	$570,000	**$602,000**

DRAFT

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**5**
Untreated Base Course Thickness (in) =	**6**
Granual Borrow Thickness (in) =	**15**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**Capacity Improvement**
Funding:	**MAG/Saratoga Springs**
Comp Year:	**2020**
Inflation Rate:	**1.06**
Notes	Signal 100% Saratoga Springs
	Roadway MAG 6.77% match

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 9A

Pony Express Extension: Redwood Road to Jordan River

Major Arterial

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2023)
Removal of Existing Asphalt	S.Y.	$4	0	$0	$0
Clearing and Grubbing	Acre	$2,000	13	$26,396	$31,193
Roadway Excavation	C.Y.	$11	24,250	$254,625	$300,903
HMA Concrete	Ton	$85	8,457	$718,860	$849,515
Untreated Base Course	C.Y.	$15	4,850	$72,750	$85,972
Granular Borrow	C.Y.	$40	12,125	$484,999	$573,149
Curb and Gutter	L.F.	$23	6,388	$143,725	$169,848
Sidewalk (5' width)	L.F.	$25	6,388	$159,695	$188,720
Drainage	L.F.	$45	6,388	$287,451	$339,696
Right of Way	S.F.	$2.30	574,902	$1,322,274	$1,562,601
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$250,000	0	$0	$0
Roundabout	Each	$500,000	0	$0	$0
			Construction Cost	**$3,470,774**	**$4,101,597**
Mobilization (10% of Construction)	Lump	15%	520,616	$520,616	$615,240
Contingency (25% of Construction)	Lump	25%	867,694	$867,694	$1,025,399
			Subtotal	**$4,859,084**	**$5,742,236**

Preconstruction Engineering	10%	$347,077	$410,160
Construction Engineering	10%	$347,077	$410,160

Total Project Costs	**$5,554,000**	**$6,563,000**

Saratoga Springs City's Responsibility via Impact Fee's	**12%**	
	$692,000	**$817,000**

DRAFT

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**5**
Untreated Base Course Thickness (in) =	**6**
Granual Borrow Thickness (in) =	**15**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**New Road**
Funding:	**MAG/Saratoga Springs**
Comp Year:	**2023**
Inflation Rate:	**1.18**

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 9B

Pony Express Extension: Jordan River to Saratoga Road

Major Arterial

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2023)
Removal of Existing Asphalt	S.Y.	$4	10,267	$41,067	$48,734
Clearing and Grubbing	Acre	$2,000	11	$21,389	$25,382
Roadway Excavation	C.Y.	$11	20,676	$217,097	$257,630
HMA Concrete	Ton	$85	7,211	$612,912	$727,345
Untreated Base Course	C.Y.	$15	4,135	$62,028	$73,609
Granular Borrow	C.Y.	$40	10,338	$413,519	$490,724
Curb and Gutter	L.F.	$23	7,700	$173,250	$205,596
Sidewalk (5' width)	L.F.	$25	7,700	$192,500	$228,441
Drainage	L.F.	$45	7,700	$346,500	$411,193
Right of Way	S.F.	$2.30	465,850	$1,071,455	$1,271,500
Bridge/Culvert	S.F.	$225	8,640	$1,944,000	$2,306,953
Traffic Signal	Each	$250,000	1	$250,000	$296,676
Roundabout	Each	$500,000	0	$0	$0
			Construction Cost	**$5,345,716**	**$6,343,783**
Mobilization (10% of Construction)	Lump	15%	801,857	$801,857	$951,567
Contingency (25% of Construction)	Lump	25%	1,336,429	$1,336,429	$1,585,946
			Subtotal	**$7,484,002**	**$8,881,296**

Preconstruction Engineering	10%	$534,572	$634,378
Construction Engineering	10%	$534,572	$634,378

Total Project Costs	**$8,554,000**	**$10,151,000**

Saratoga Springs City's Responsibility via Impact Fee's	**100%**	
	$8,554,000	**$10,151,000**

DRAFT

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**5**
Untreated Base Course Thickness (in) =	**6**
Granual Borrow Thickness (in) =	**15**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**Capacity Improvement**
Funding:	**Saratoga Springs**
Comp Year:	**2023**
Inflation Rate:	**1.19**

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 10

Talus Ridge Drive: End of Existing to Mt. Saratoga Blvd (Upsize Only)

Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2023)
Removal of Existing Asphalt	S.Y.	$4	0	$0	$0
Clearing and Grubbing	Acre	$2,000	5	$9,330	$11,072
Roadway Excavation	C.Y.	$11	10,752	$112,892	$133,969
HMA Concrete	Ton	$85	3,000	$254,974	$302,579
Untreated Base Course	C.Y.	$15	2,867	$43,006	$51,036
Granular Borrow	C.Y.	$40	2,150	$86,013	$102,072
Curb and Gutter	L.F.	$23	5,278	$118,756	$140,929
Sidewalk (5' width)	L.F.	$25	5,278	$131,952	$156,587
Drainage	L.F.	$45	5,278	$237,513	$281,857
Right of Way	S.F.	$2.30	203,205	$467,372	$554,633
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$250,000	0	$0	$0
Roundabout	Each	$500,000	0	$0	$0
			Construction Cost	**$1,461,808**	**$1,734,734**
Mobilization (10% of Construction)	Lump	10%	146,181	$146,181	$173,473
Contingency (25% of Construction)	Lump	25%	365,452	$365,452	$433,683
			Subtotal	**$1,973,441**	**$2,341,890**

Preconstruction Engineering	10%	$146,181	$173,473
Construction Engineering	10%	$146,181	$173,473

Total Project Costs	**$2,266,000**	**$2,689,000**

Saratoga Springs City's Responsibility via Impact Fee's	**21%**	
	$476,000	**$565,000**

DRAFT

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**4**
Untreated Base Course Thickness (in) =	**8**
Granual Borrow Thickness (in) =	**6**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**New Road**
Funding:	**Saratoga Springs**
Comp Year:	**2023**
Inflation Rate:	**1.19**

Note: **Includes 1,100 LF of Already Built Roadway**

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 11

Mt. Saratoga Blvd: End of Existing to SR-73 (Upsize Only)

Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2023)
Removal of Existing Asphalt	S.Y.	$4	0	$0	$0
Clearing and Grubbing	Acre	$2,000	16	$31,162	$36,981
Roadway Excavation	C.Y.	$11	35,911	$377,065	$447,464
HMA Concrete	Ton	$85	10,019	$851,628	$1,010,630
Untreated Base Course	C.Y.	$15	9,576	$143,644	$170,463
Granular Borrow	C.Y.	$40	7,182	$287,287	$340,925
Curb and Gutter	L.F.	$23	17,629	$396,653	$470,709
Sidewalk (5' width)	L.F.	$25	17,629	$440,725	$523,010
Drainage	L.F.	$45	17,629	$793,305	$941,418
Right of Way	S.F.	$2.30	678,717	$1,561,048	$1,852,502
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$250,000	0	$0	$0
Roundabout	Each	$500,000	0	$0	$0
			Construction Cost	**$4,882,516**	**$5,794,102**
Mobilization (10% of Construction)	Lump	10%	488,252	$488,252	$579,410
Contingency (25% of Construction)	Lump	25%	1,220,629	$1,220,629	$1,448,526
			Subtotal	**$6,591,397**	**$7,822,038**

Preconstruction Engineering	10%	$488,252	$579,410
Construction Engineering	10%	$488,252	$579,410

Total Project Costs	**$7,568,000**	**$8,981,000**

Saratoga Springs City's Responsibility via Impact Fee's	**21%**	
	$1,589,000	**$1,886,000**

DRAFT

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**4**
Untreated Base Course Thickness (in) =	**8**
Granual Borrow Thickness (in) =	**6**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**New Road**
Funding:	**Saratoga Springs**
Comp Year:	**2023**
Inflation Rate:	**1.19**

Note: **Includes 1,650 LF of Already Built Roadway**

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 14A

Founder's Boulevard: Redwood Road to Old Farm Road (Upsize Only)

Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2022)
Removal of Existing Asphalt	S.Y.	$4	0	$0	$0
Clearing and Grubbing	Acre	$2,000	2	$3,905	$4,477
Roadway Excavation	C.Y.	$11	4,500	$47,248	$54,173
HMA Concrete	Ton	$85	1,255	$106,713	$122,354
Untreated Base Course	C.Y.	$15	1,200	$17,999	$20,637
Granular Borrow	C.Y.	$40	900	$35,999	$41,275
Curb and Gutter	L.F.	$23	2,209	$49,703	$56,988
Sidewalk (5' width)	L.F.	$25	2,209	$55,225	$63,320
Drainage	L.F.	$45	2,209	$99,405	$113,975
Right of Way	S.F.	$2.30	85,047	$195,607	$224,278
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$250,000	0	$0	$0
Roundabout	Each	$500,000	0	$0	$0
			Construction Cost	**$611,803**	**$701,478**
Mobilization (10% of Construction)	Lump	10%	61,180	$61,180	$70,148
Contingency (25% of Construction)	Lump	25%	152,951	$152,951	$175,369
			Subtotal	**$825,934**	**$946,995**

Preconstruction Engineering	10%	$61,180	$70,148
Construction Engineering	10%	$61,180	$70,148

Total Project Costs	**$949,000**	**$1,088,000**

Saratoga Springs City's Responsibility via Impact Fee's	**21%**	
	$199,000	**$228,000**

DRAFT

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**4**
Untreated Base Course Thickness (in) =	**8**
Granual Borrow Thickness (in) =	**6**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**Capacity Improvement**
Funding:	**Saratoga Springs**
Comp Year:	**2022**
Inflation Rate:	**1.15**

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 14B

Founder's Boulevard: End of Old Farm Road to Ensign Drive

Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2022)
Removal of Existing Asphalt	S.Y.	$4	0	$0	$0
Clearing and Grubbing	Acre	$2,000	6	$11,192	$12,832
Roadway Excavation	C.Y.	$11	12,897	$135,420	$155,269
HMA Concrete	Ton	$85	3,598	$305,856	$350,686
Untreated Base Course	C.Y.	$15	3,439	$51,589	$59,150
Granular Borrow	C.Y.	$40	2,579	$103,177	$118,300
Curb and Gutter	L.F.	$23	6,331	$142,455	$163,335
Sidewalk (5' width)	L.F.	$25	6,331	$158,283	$181,483
Drainage	L.F.	$45	6,331	$284,909	$326,670
Right of Way	S.F.	$2.30	243,756	$560,638	$642,813
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$250,000	0	$0	$0
Roundabout	Each	$500,000	0	$0	$0
			Construction Cost	**$1,753,518**	**$2,010,538**
Mobilization (10% of Construction)	Lump	10%	175,352	$175,352	$201,054
Contingency (25% of Construction)	Lump	25%	438,380	$438,380	$502,635
			Subtotal	**$2,367,250**	**$2,714,227**

Preconstruction Engineering	10%	$175,352	$201,054
Construction Engineering	10%	$175,352	$201,054

Total Project Costs	**$2,718,000**	**$3,117,000**

Saratoga Springs City's Responsibility via Impact Fee's	**100%**	
	$2,718,000	**$3,117,000**

DRAFT

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**4**
Untreated Base Course Thickness (in) =	**8**
Granual Borrow Thickness (in) =	**6**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**New Road**
Funding:	**Saratoga Springs**
Comp Year:	**2022**
Inflation Rate:	**1.15**

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 21

Mountain View Corridor Extension (East Frontage Road): Pony Express Parkway to Lariat Boulevard

Frontage Road

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2023)
Removal of Existing Asphalt	S.Y.	$4	0	$0	$0
Clearing and Grubbing	Acre	$2,000	0	$0	$0
Roadway Excavation	C.Y.	$11	97,566	$1,024,448	$1,215,716
HMA Concrete	Ton	$85	27,221	$2,313,788	$2,745,782
Untreated Base Course	C.Y.	$23	19,513	$448,806	$532,599
Granular Borrow	C.Y.	$26	78,053	$2,040,521	$2,421,495
Curb and Gutter	L.F.	$23	23,948	$538,833	$639,435
Concrete Trail (10' Width)	L.F.	$25	23,948	$598,703	$710,483
Drainage	L.F.	$45	23,948	$1,077,666	$1,278,870
Right of Way	S.F.	$2.30	0	$0	$0
Hydraulic	Each	$376,000	1	$376,000	$446,201
Geotech/Drilling	Each	$7,500	4	$30,000	$35,601
Bridge/Culvert	S.F.	$225	3	$675	$801
Traffic Signal	Each	$200,000	6	$1,200,000	$1,424,045
Lighting	L.F.	$20	23,948	$478,962	$568,387
			Construction Cost	**$10,128,401**	**$12,019,415**
Mobilization (10% of Construction)	Lump	7%	724,607	$724,607	$859,895
Contingency (25% of Construction)	Lump	12%	1,245,251	$1,245,251	$1,477,745
			Subtotal	**$12,098,260**	**$14,357,054**

Preconstruction Engineering	8%	$745,779	$885,019
Construction Engineering	10%	$932,224	$1,106,274

Total Project Costs	**$13,777,000**	**$16,349,000**

Saratoga Springs City's Responsibility via Impact Fee's	**7%**	
	$933,000	**$1,107,000**

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**4**
Untreated Base Course Thickness (in) =	**6**
Granual Borrow Thickness (in) =	**24**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**1**

Project Parameters:

Improvement Type:	**New Road**
Funding:	**MAG/Saratoga Springs**
Comp Year:	**2023**
Inflation Rate:	**1.19**
Notes:	**East Frontage Road**

DRAFT

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 22

Corridor Preservation

Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2025)
Removal of Existing Asphalt	S.Y.	$4	0	$0	$0
Clearing and Grubbing	Acre	$2,000	0	$0	$0
Roadway Excavation	C.Y.	$11	0	$0	$0
HMA Concrete	Ton	$85	0	$0	$0
Untreated Base Course	C.Y.	$15	0	$0	$0
Granular Borrow	C.Y.	$40	0	$0	$0
Curb and Gutter	L.F.	$23	0	$0	$0
Sidewalk (5' width)	L.F.	$25	0	$0	$0
Drainage	L.F.	$45	0	$0	$0
Right of Way	S.F.	$2.30	1,457,012	$3,351,129	$4,260,046
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$250,000	0	$0	$0
Roundabout	Each	$500,000	0	$0	$0
			Construction Cost	**$3,351,129**	**$4,260,046**
Mobilization (10% of Construction)	Lump	10%	335,113	$335,113	$426,005
Contingency (25% of Construction)	Lump	25%	837,782	$837,782	$1,065,011
			Subtotal	**$4,524,024**	**$5,751,062**

Preconstruction Engineering	0%	$0	$0
Construction Engineering	0%	$0	$0

Total Project Costs	**$4,525,000**	**$5,752,000**

Saratoga Springs City's Responsibility via Impact Fee's	**100%**	
	$4,525,000	**$5,752,000**

DRAFT

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**4**
Untreated Base Course Thickness (in) =	**8**
Granual Borrow Thickness (in) =	**6**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**Right-of-Way**
Funding:	**Saratoga Springs**
Completion Year:	**2025**
Inflation Rate:	**1.27**

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 30

Market Street: Pioneer Crossing (SR-145) to Foothill Boulevard

Minor Arterial

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2026)
Removal of Existing Asphalt	S.Y.	$4	0	$0	$0
Clearing and Grubbing	Acre	$2,000	7	$14,883	$19,582
Roadway Excavation	C.Y.	$11	17,692	$185,770	$244,422
HMA Concrete	Ton	$85	6,170	$524,470	$690,055
Untreated Base Course	C.Y.	$15	4,718	$70,770	$93,113
Granular Borrow	C.Y.	$40	3,538	$141,539	$186,226
Curb and Gutter	L.F.	$23	6,824	$153,545	$202,022
Sidewalk (5' width)	L.F.	$30	6,824	$204,727	$269,363
Drainage	L.F.	$45	6,824	$307,090	$404,044
Right of Way	S.F.	$2.30	324,150	$745,546	$980,930
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$250,000	0	$0	$0
Roundabout	Each	$500,000	0	$0	$0
			Construction Cost	**$2,348,340**	**$3,089,758**
Mobilization (10% of Construction)	Lump	10%	234,834	$234,834	$308,976
Contingency (25% of Construction)	Lump	25%	587,085	$587,085	$772,439
			Subtotal	**$3,170,259**	**$4,171,173**

Preconstruction Engineering	10%	$234,834	$308,976
Construction Engineering	10%	$234,834	$308,976

Total Project Costs	**$3,640,000**	**$4,790,000**

Saratoga Springs City's Responsibility via Impact Fee's	**100%**	
	$3,640,000	**$4,790,000**

DRAFT

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**5**
Untreated Base Course Thickness (in) =	**8**
Granual Borrow Thickness (in) =	**6**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**New Road**
Funding:	**Saratoga Springs**
Completion Year:	**2026**
Inflation Rate:	**1.32**

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 36

1400 East: Pony Express to Pioneer Crossing (SR-175) (Upsize Only)

Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2029)
Removal of Existing Asphalt	S.Y.	$4	5,836	$23,342	$34,051
Clearing and Grubbing	Acre	$2,000	1	$1,298	$1,894
Roadway Excavation	C.Y.	$11	3,367	$35,350	$51,567
HMA Concrete	Ton	$85	939	$79,841	$116,468
Untreated Base Course	C.Y.	$15	898	$13,467	$19,645
Granular Borrow	C.Y.	$40	673	$26,933	$39,289
Curb and Gutter	L.F.	$23	6,040	$135,900	$198,246
Sidewalk (5' width)	L.F.	$25	6,040	$151,000	$220,273
Drainage	L.F.	$45	4,040	$181,800	$265,203
Right of Way	S.F.	$2.30	28,280	$65,044	$94,884
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$250,000	0	$0	$0
Roundabout	Each	$500,000	0	$0	$0
			Construction Cost	**$713,975**	**$1,041,520**
Mobilization (10% of Construction)	Lump	10%	71,398	$71,398	$104,152
Contingency (25% of Construction)	Lump	25%	178,494	$178,494	$260,380
			Subtotal	**$963,866**	**$1,406,052**

Preconstruction Engineering	10%	$71,398	$104,152
Construction Engineering	10%	$71,398	$104,152

Total Project Costs	**$1,107,000**	**$1,615,000**

Saratoga Springs City's Responsibility via Impact Fee's	**100%**	
	$1,107,000	**$1,615,000**

DRAFT

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**4**
Untreated Base Course Thickness (in) =	**8**
Granual Borrow Thickness (in) =	**6**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**Capacity Improvement**
Funding:	**Saratoga Springs**
Completion Year:	**2029**
Inflation Rate:	**1.46**
Notes:	**Northside build only C&G and sidewalk. Southside widen to match northside cross-section**

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 40

400 North: Redwood Road (SR-68) to Riverside Drive (Upsize Only)

Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2027)
Removal of Existing Asphalt	S.Y.	$4	0	$0	$0
Clearing and Grubbing	Acre	$2,000	3	$5,458	$7,433
Roadway Excavation	C.Y.	$11	6,290	$66,045	$89,938
HMA Concrete	Ton	$85	1,755	$149,166	$203,130
Untreated Base Course	C.Y.	$15	1,677	$25,160	$34,262
Granular Borrow	C.Y.	$40	1,258	$50,320	$68,524
Curb and Gutter	L.F.	$23	3,088	$69,476	$94,610
Sidewalk (5' width)	L.F.	$25	3,088	$77,195	$105,122
Drainage	L.F.	$45	3,088	$138,951	$189,219
Right of Way	S.F.	$2.30	118,880	$273,425	$372,342
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$250,000	0	$0	$0
Roundabout	Each	$500,000	0	$0	$0
			Construction Cost	**$855,195**	**$1,164,579**
Mobilization (10% of Construction)	Lump	10%	85,520	$85,520	$116,458
Contingency (25% of Construction)	Lump	25%	213,799	$213,799	$291,145
			Subtotal	**$1,154,513**	**$1,572,182**

Preconstruction Engineering	10%	$85,520	$116,458
Construction Engineering	10%	$85,520	$116,458

Total Project Costs	**$1,326,000**	**$1,806,000**

Saratoga Springs City's Responsibility via Impact Fee's	**21%**	
	$278,000	**$379,000**

DRAFT

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**4**
Untreated Base Course Thickness (in) =	**8**
Granual Borrow Thickness (in) =	**6**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**New Road**
Funding:	**Saratoga Springs**
Completion Year:	**2027**
Inflation Rate:	**1.36**

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 42

400 East: Crossroads Boulevard to Northern Border

Major Arterial

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2023)
Removal of Existing Asphalt	S.Y.	$4	4,912	$19,648	$23,316
Clearing and Grubbing	Acre	$2,000	2	$4,144	$4,918
Roadway Excavation	C.Y.	$11	8,187	$85,960	$102,009
HMA Concrete	Ton	$85	2,855	$242,684	$287,994
Untreated Base Course	C.Y.	$15	1,637	$24,560	$29,145
Granular Borrow	C.Y.	$40	4,093	$163,733	$194,303
Curb and Gutter	L.F.	$23	3,684	$82,890	$98,366
Sidewalk (5' width)	L.F.	$25	3,684	$92,100	$109,295
Drainage	L.F.	$45	3,684	$165,780	$196,732
Right of Way	S.F.	$2.30	90,258	$207,593	$246,352
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$250,000	0	$0	$0
Roundabout	Each	$500,000	0	$0	$0
			Construction Cost	**$1,089,092**	**$1,292,430**
Mobilization (10% of Construction)	Lump	10%	108,909	$108,909	$129,243
Contingency (25% of Construction)	Lump	25%	272,273	$272,273	$323,108
			Subtotal	**$1,470,275**	**$1,744,781**

Preconstruction Engineering	10%	$108,909	$129,243
Construction Engineering	10%	$108,909	$129,243

Total Project Costs	**$1,689,000**	**$2,004,000**

Saratoga Springs City's Responsibility via Impact Fee's	**100%**	
	$1,689,000	**$2,004,000**

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**5**
Untreated Base Course Thickness (in) =	**6**
Granual Borrow Thickness (in) =	**15**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**Capacity Improvement**
Funding:	**Saratoga Springs**
Completion Year:	**2023**
Inflation Rate:	**1.19**
Note:	**400 E. 105' ROW from TMP**

DRAFT

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 51

Market Street: Redwood Road (SR-68) to Riverside Drive

Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2024)
Removal of Existing Asphalt	S.Y.	$4	0	$0	$0
Clearing and Grubbing	Acre	$2,000	1	$1,742	$2,140
Roadway Excavation	C.Y.	$11	2,008	$21,080	$25,892
HMA Concrete	Ton	$85	560	$47,612	$58,479
Untreated Base Course	C.Y.	$15	535	$8,031	$9,864
Granular Borrow	C.Y.	$40	402	$16,061	$19,727
Curb and Gutter	L.F.	$23	986	$22,176	$27,237
Sidewalk (5' width)	L.F.	$25	986	$24,640	$30,263
Drainage	L.F.	$45	986	$44,351	$54,474
Right of Way	S.F.	$2.30	37,945	$87,273	$107,192
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$250,000	0	$0	$0
Roundabout	Each	$500,000	0	$0	$0
			Construction Cost	**$272,966**	**$335,267**
Mobilization (10% of Construction)	Lump	10%	27,297	$27,297	$33,527
Contingency (25% of Construction)	Lump	25%	68,241	$68,241	$83,817
			Subtotal	**$368,504**	**$452,610**

Preconstruction Engineering	10%	$27,297	$33,527
Construction Engineering	10%	$27,297	$33,527

Total Project Costs	**$424,000**	**$520,000**

Saratoga Springs City's Responsibility via Impact Fee's	**100%**	
	$424,000	**$520,000**

DRAFT

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**4**
Untreated Base Course Thickness (in) =	**8**
Granual Borrow Thickness (in) =	**6**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**New Road**
Funding:	**Saratoga Springs**
Completion Year:	**2024**
Inflation Rate:	**1.23**

Saratoga Springs City
Impact Fee Facilities Plan

Project No. 56

Riverside Drive: End of Existing to Pioneer Crossing (Includes Roundabout at Market Street and Riverside Drive)

Collector

Costs

Item	Unit	Unit Cost	Quantity	Quantity (Upsize)	Cost	Cost (Upsize)	Cost (2022)
Removal of Existing Asphalt	S.Y.	$4	0	0	$0	$0	$0
Clearing and Grubbing	Acre	$2,000	6	1	$12,951	$1,768	$16,876
Roadway Excavation	C.Y.	$11	14,924	2,037	$156,707	$21,389	$204,200
HMA Concrete	Ton	$85	4,164	568	$353,934	$48,308	$461,200
Untreated Base Course	C.Y.	$15	3,980	543	$59,698	$8,148	$77,791
Granular Borrow	C.Y.	$40	2,985	407	$119,396	$16,296	$155,581
Curb and Gutter	L.F.	$23	7,327	1,000	$164,848	$22,500	$214,808
Sidewalk (5' width)	L.F.	$25	7,327	1,000	$183,164	$25,000	$238,675
Drainage	L.F.	$45	7,327	1,000	$329,695	$45,000	$429,616
Right of Way	S.F.	$2.30	282,073	38,500	$648,767	$88,550	$845,388
Bridge/Culvert	S.F.	$225	0	0	$0	$0	$0
Traffic Signal	Each	$250,000	0	0	$0	$0	$0
Roundabout	Each	$500,000	1	0	$500,000	$0	$573,287
				Construction Cost	**$2,529,159**	**$276,959**	**$3,217,423**
Mobilization (10% of Construction)	Lump	10%	252,916	27,696	$252,916	$27,696	$321,742
Contingency (25% of Construction)	Lump	25%	632,290	69,240	$632,290	$69,240	$804,356
				Subtotal	**$3,414,365**	**$373,895**	**$4,343,521**

Preconstruction Engineering	$0		$252,916	$27,696	$321,742
Construction Engineering	$0		$252,916	$27,696	$321,742

Total Project Costs			**$3,921,000**	**$430,000**	**$4,988,000**
			100%	**21%**	**92%**
		Subtotal	**$3,921,000**	**$90,000**	
Saratoga Springs City's Responsibility via Impact Fee's		**Inflation Cost**	**$4,011,000**		**$4,598,000**

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**4**
Untreated Base Course Thickness (in) =	**8**
Granual Borrow Thickness (in) =	**6**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**New Road**
Funding:	**Saratoga Springs**
Completion Year:	**2022**
Inflation Rate:	**1.15**
Notes:	**500' Upsize only, rest is at full**

DRAFT

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 71

Lariat Boulevard: End of Existing to Foothill Blvd. Extension (Upsize Only)

Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2023)
Removal of Existing Asphalt	S.Y.	$4	0	$0	$0
Clearing and Grubbing	Acre	$2,000	2	$4,207	$4,993
Roadway Excavation	C.Y.	$11	4,848	$50,906	$60,410
HMA Concrete	Ton	$85	1,353	$114,974	$136,440
Untreated Base Course	C.Y.	$15	1,293	$19,393	$23,013
Granular Borrow	C.Y.	$40	970	$38,785	$46,027
Curb and Gutter	L.F.	$23	2,380	$53,550	$63,548
Sidewalk (5' width)	L.F.	$25	2,380	$59,500	$70,609
Drainage	L.F.	$45	2,380	$107,100	$127,096
Right of Way	S.F.	$2.30	91,630	$210,749	$250,097
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$250,000	0	$0	$0
Roundabout	Each	$500,000	0	$0	$0
			Construction Cost	**$659,163**	**$782,232**
Mobilization (10% of Construction)	Lump	10%	65,916	$65,916	$78,223
Contingency (25% of Construction)	Lump	25%	164,791	$164,791	$195,558
			Subtotal	**$889,870**	**$1,056,013**

Preconstruction Engineering	10%	$65,916	$78,223
Construction Engineering	10%	$65,916	$78,223

Total Project Costs	**$1,022,000**	**$1,213,000**

Saratoga Springs City's Responsibility via Impact Fee's	**21%**	
	$215,000	**$255,000**

DRAFT

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**4**
Untreated Base Course Thickness (in) =	**8**
Granual Borrow Thickness (in) =	**6**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**New Road**
Funding:	**Saratoga Springs**
Completion Year:	**2023**
Inflation Rate:	**1.19**

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 72

Medical Drive: Foothill Boulevard to Redwood Road (Upsize Only)

Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2028)
Removal of Existing Asphalt	S.Y.	$4	0	$0	$0
Clearing and Grubbing	Acre	$2,000	10	$20,191	$28,458
Roadway Excavation	C.Y.	$11	23,268	$244,310	$344,338
HMA Concrete	Ton	$85	6,492	$551,791	$777,712
Untreated Base Course	C.Y.	$15	6,205	$93,070	$131,176
Granular Borrow	C.Y.	$40	4,654	$186,141	$262,353
Curb and Gutter	L.F.	$23	11,422	$257,001	$362,226
Sidewalk (5' width)	L.F.	$25	11,422	$285,557	$402,473
Drainage	L.F.	$45	11,422	$514,003	$724,452
Right of Way	S.F.	$2.30	439,758	$1,011,443	$1,425,560
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$250,000	0	$0	$0
Roundabout	Each	$500,000	0	$0	$0
			Construction Cost	**$3,163,507**	**$4,458,749**
Mobilization (10% of Construction)	Lump	10%	316,351	$316,351	$445,875
Contingency (25% of Construction)	Lump	25%	790,877	$790,877	$1,114,687
			Subtotal	**$4,270,735**	**$6,019,311**

Preconstruction Engineering	10%	$316,351	$445,875
Construction Engineering	10%	$316,351	$445,875

Total Project Costs	**$4,904,000**	**$6,912,000**

Saratoga Springs City's Responsibility via Impact Fee's	**21%**	
	$1,030,000	**$1,452,000**

DRAFT

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**4**
Untreated Base Course Thickness (in) =	**8**
Granual Borrow Thickness (in) =	**6**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**New Road**
Funding:	**Saratoga Springs**
Completion Year:	**2028**
Inflation Rate:	**1.41**

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 74

Roundabout: Talus Ridge Drive and Mt. Saratoga Blvd.

Intersection Improvement

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2023)
Removal of Existing Asphalt	S.Y.	$4	0	$0	$0
Clearing and Grubbing	Acre	$2,000	0	$0	$0
Roadway Excavation	C.Y.	$11	0	$0	$0
HMA Concrete	Ton	$85	0	$0	$0
Untreated Base Course	C.Y.	$15	0	$0	$0
Granular Borrow	C.Y.	$40	0	$0	$0
Curb and Gutter	L.F.	$23	0	$0	$0
Sidewalk (5' width)	L.F.	$25	0	$0	$0
Drainage	L.F.	$45	0	$0	$0
Right of Way	S.F.	$2.30	0	$0	$0
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$250,000	0	$0	$0
Roundabout	Each	$500,000	1	$500,000	$593,352
			Construction Cost	**$500,000**	**$593,352**
Mobilization (10% of Construction)	Lump	10%	50,000	$50,000	$59,335
Contingency (25% of Construction)	Lump	25%	125,000	$125,000	$148,338
			Subtotal	**$675,000**	**$801,025**

Preconstruction Engineering	10%	$0	$0
Construction Engineering	10%	$0	$0

Total Project Costs	**$675,000**	**$802,000**

Saratoga Springs City's Responsibility via Impact Fee's	**100%**	
	$675,000	**$802,000**

DRAFT

Overall Assumptions:

HMA Pavement Density (pcf) =	**0**
HMA Thickness (in) =	**0**
Untreated Base Course Thickness (in) =	**0**
Granual Borrow Thickness (in) =	**0**
Roadway Excavation Depth (ft) =	**0**
Number of Sidewalks (No.) =	**0**

Project Parameters:

Improvement Type:	**Intersection Improvement**
Funding:	**Saratoga Springs**
Completion Year:	**2023**
Inflation Rate:	**1.19**

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 90

Frontage Road: Lariat Boulevard to Grandview Boulevard

Local Street

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2029)
Removal of Existing Asphalt	S.Y.	$4	0	$0	$0
Clearing and Grubbing	Acre	$2,000	5	$9,041	$13,188
Roadway Excavation	C.Y.	$11	7,814	$82,046	$119,685
HMA Concrete	Ton	$85	1,635	$138,979	$202,738
Untreated Base Course	C.Y.	$15	2,084	$31,255	$45,594
Granular Borrow	C.Y.	$40	1,563	$62,511	$91,189
Curb and Gutter	L.F.	$23	7,032	$158,231	$230,821
Sidewalk (5' width)	L.F.	$25	7,032	$175,812	$256,468
Drainage	L.F.	$45	7,032	$316,462	$461,642
Right of Way	S.F.	$2.30	196,909	$452,892	$660,661
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$250,000	0	$0	$0
Roundabout	Each	$500,000	0	$0	$0
			Construction Cost	**$1,427,228**	**$2,081,987**
Mobilization (10% of Construction)	Lump	10%	142,723	$142,723	$208,199
Contingency (25% of Construction)	Lump	25%	356,807	$356,807	$520,497
			Subtotal	**$1,926,758**	**$2,810,682**

Preconstruction Engineering	10%	$142,723	$208,199
Construction Engineering	10%	$142,723	$208,199

Total Project Costs	**$2,213,000**	**$3,228,000**

Saratoga Springs City's Responsibility via Impact Fee's	**100%**	
	$2,213,000	**$3,228,000**

DRAFT

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**3**
Untreated Base Course Thickness (in) =	**8**
Granual Borrow Thickness (in) =	**6**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**New Road**
Funding:	**Saratoga Springs**
Completion Year:	**2029**
Inflation Rate:	**1.46**

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 96

Ensign Drive: Mountain View Corridor Extension to 800 South (Project 106)

Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2021)
Removal of Existing Asphalt	S.Y.	$4	0	$0	$0
Clearing and Grubbing	Acre	$2,000	8	$16,137	$17,790
Roadway Excavation	C.Y.	$11	18,595	$195,252	$215,261
HMA Concrete	Ton	$85	5,188	$440,991	$486,182
Untreated Base Course	C.Y.	$15	4,959	$74,382	$82,004
Granular Borrow	C.Y.	$40	3,719	$148,764	$164,008
Curb and Gutter	L.F.	$23	9,129	$205,395	$226,443
Sidewalk (5' width)	L.F.	$25	9,129	$228,217	$251,604
Drainage	L.F.	$45	9,129	$410,791	$452,886
Right of Way	S.F.	$2.30	351,454	$808,345	$891,180
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$250,000	0	$0	$0
Roundabout	Each	$500,000	0	$0	$0
			Construction Cost	**$2,528,273**	**$2,787,358**
Mobilization (10% of Construction)	Lump	10%	252,827	$252,827	$278,736
Contingency (25% of Construction)	Lump	25%	632,068	$632,068	$696,840
			Subtotal	**$3,413,169**	**$3,762,933**

Preconstruction Engineering	10%	$252,827	$278,736
Construction Engineering	10%	$252,827	$278,736

Total Project Costs	**$3,919,000**	**$4,321,000**

Saratoga Springs City's Responsibility via Impact Fee's	**21%**	
	$823,000	**$907,000**

DRAFT

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**4**
Untreated Base Course Thickness (in) =	**8**
Granual Borrow Thickness (in) =	**6**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**New Road**
Funding:	**Saratoga Springs**
Completion Year:	**2021**
Inflation Rate:	**1.10**

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 98

Traffic Signal: Crossroads Boulevard & 1400 North

Traffic Signal

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2029)
Removal of Existing Asphalt	S.Y.	$4	0	$0	$0
Clearing and Grubbing	Acre	$2,000	0	$0	$0
Roadway Excavation	C.Y.	$11	0	$0	$0
HMA Concrete	Ton	$85	0	$0	$0
Untreated Base Course	C.Y.	$15	0	$0	$0
Granular Borrow	C.Y.	$40	0	$0	$0
Curb and Gutter	L.F.	$23	0	$0	$0
Sidewalk (5' width)	L.F.	$25	0	$0	$0
Drainage	L.F.	$45	0	$0	$0
Right of Way	S.F.	$2.30	0	$0	$0
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$250,000	1	$250,000	$364,691
Roundabout	Each	$500,000	0	$0	$0
			Construction Cost	**$250,000**	**$364,691**
Mobilization (10% of Construction)	Lump	10%	25,000	$25,000	$36,469
Contingency (25% of Construction)	Lump	25%	62,500	$62,500	$91,173
			Subtotal	**$337,500**	**$492,332**

Preconstruction Engineering	10%	$25,000	$36,469
Construction Engineering	10%	$25,000	$36,469

Total Project Costs	**$388,000**	**$566,000**

Saratoga Springs City's Responsibility via Impact Fee's	**100%**	
	$388,000	**$566,000**

DRAFT

Overall Assumptions:

HMA Pavement Density (pcf) =	**0**
HMA Thickness (in) =	**0**
Untreated Base Course Thickness (in) =	**0**
Granual Borrow Thickness (in) =	**0**
Roadway Excavation Depth (ft) =	**0**
Number of Sidewalks (No.) =	**0**

Project Parameters:

Improvement Type:	**Traffic Signal**
Funding:	**Saratoga Springs**
Completion Year:	**2029**
Inflation Rate:	**1.46**

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 99

Old Farm Road: Founders Blvd to School House (Upsize Only)

Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2029)
Removal of Existing Asphalt	S.Y.	$4	0	$0	$0
Clearing and Grubbing	Acre	$2,000	3	$5,398	$7,875
Roadway Excavation	C.Y.	$11	6,221	$65,322	$95,289
HMA Concrete	Ton	$85	1,736	$147,534	$215,217
Untreated Base Course	C.Y.	$15	1,659	$24,884	$36,300
Granular Borrow	C.Y.	$40	1,244	$49,769	$72,601
Curb and Gutter	L.F.	$23	3,054	$68,715	$100,239
Sidewalk (5' width)	L.F.	$25	3,054	$76,350	$111,377
Drainage	L.F.	$45	3,054	$137,430	$200,478
Right of Way	S.F.	$2.30	117,579	$270,432	$394,496
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$250,000	0	$0	$0
Roundabout	Each	$500,000	0	$0	$0
			Construction Cost	**$845,834**	**$1,233,871**
Mobilization (10% of Construction)	Lump	10%	84,583	$84,583	$123,387
Contingency (25% of Construction)	Lump	25%	211,458	$211,458	$308,468
			Subtotal	**$1,141,876**	**$1,665,725**

Preconstruction Engineering	10%	$84,583	$123,387
Construction Engineering	10%	$84,583	$123,387

Total Project Costs	**$1,312,000**	**$1,913,000**

Saratoga Springs City's Responsibility via Impact Fee's	**21%**	
	$276,000	**$402,000**

DRAFT

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**4**
Untreated Base Course Thickness (in) =	**8**
Granual Borrow Thickness (in) =	**6**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**Capacity Improvement**
Funding:	**Saratoga Springs**
Completion Year:	**2029**
Inflation Rate:	**1.46**

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 100

Harvest Hills: End of Existing to Chianti Street (Upsize Only)

Minor Arterial

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2024)
Removal of Existing Asphalt	S.Y.	$4	0	$0	$0
Clearing and Grubbing	Acre	$2,000	22	$44,185	$54,270
Roadway Excavation	C.Y.	$11	52,526	$551,522	$677,401
HMA Concrete	Ton	$85	18,318	$1,557,065	$1,912,448
Untreated Base Course	C.Y.	$15	14,007	$210,104	$258,058
Granular Borrow	C.Y.	$40	10,505	$420,207	$516,115
Curb and Gutter	L.F.	$23	20,260	$455,850	$559,893
Sidewalk (5' width)	L.F.	$30	20,260	$607,800	$746,524
Drainage	L.F.	$45	20,260	$911,700	$1,119,785
Right of Way	S.F.	$2.30	962,350	$2,213,405	$2,718,590
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$250,000	0	$0	$0
Roundabout	Each	$500,000	1	$500,000	$614,119
			Construction Cost	**$7,471,839**	**$9,177,202**
Mobilization (10% of Construction)	Lump	10%	747,184	$747,184	$917,720
Contingency (25% of Construction)	Lump	25%	1,867,960	$1,867,960	$2,294,300
			Subtotal	**$10,086,982**	**$12,389,222**

Preconstruction Engineering	10%	$697,184	$856,308
Construction Engineering	10%	$697,184	$856,308

Total Project Costs	**$11,482,000**	**$14,102,000**

Saratoga Springs City's Responsibility via Impact Fee's	**43%**	
	$4,937,000	**$6,064,000**

DRAFT

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**5**
Untreated Base Course Thickness (in) =	**8**
Granual Borrow Thickness (in) =	**6**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**Capacity Improvement**
Funding:	**Saratoga Springs**
Completion Year:	**2024**
Inflation Rate:	**1.23**

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 102

560 North: Saratoga Road to 900 East (Approx. 1,600')

Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2029)
Removal of Existing Asphalt	S.Y.	$4	0	$0	$0
Clearing and Grubbing	Acre	$2,000	3	$5,657	$8,252
Roadway Excavation	C.Y.	$11	6,519	$68,444	$99,844
HMA Concrete	Ton	$85	1,819	$154,587	$225,505
Untreated Base Course	C.Y.	$15	1,738	$26,074	$38,036
Granular Borrow	C.Y.	$40	1,304	$52,148	$76,072
Curb and Gutter	L.F.	$23	3,200	$72,000	$105,031
Sidewalk (5' width)	L.F.	$25	3,200	$80,000	$116,701
Drainage	L.F.	$45	3,200	$144,000	$210,062
Right of Way	S.F.	$2.30	123,200	$283,360	$413,355
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$250,000	0	$0	$0
Roundabout	Each	$500,000	0	$0	$0
			Construction Cost	**$886,270**	**$1,292,857**
Mobilization (10% of Construction)	Lump	10%	88,627	$88,627	$129,286
Contingency (25% of Construction)	Lump	25%	221,567	$221,567	$323,214
			Subtotal	**$1,196,464**	**$1,745,357**

Preconstruction Engineering	10%	$88,627	$129,286
Construction Engineering	10%	$88,627	$129,286

Total Project Costs	**$1,374,000**	**$2,004,000**

Saratoga Springs City's Responsibility via Impact Fee's	**100%**	
	$1,374,000	**$2,004,000**

DRAFT

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**4**
Untreated Base Course Thickness (in) =	**8**
Granual Borrow Thickness (in) =	**6**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**New Road**
Funding:	**Saratoga Springs**
Completion Year:	**2029**
Inflation Rate:	**1.46**

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 103

New Collector: Wildlife Blvd to 4180 South (Approx. 6000')

Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2029)
Removal of Existing Asphalt	S.Y.	$4	0	$0	$0
Clearing and Grubbing	Acre	$2,000	11	$21,212	$30,943
Roadway Excavation	C.Y.	$11	24,444	$256,667	$374,416
HMA Concrete	Ton	$85	6,820	$579,700	$845,645
Untreated Base Course	C.Y.	$15	6,519	$97,778	$142,635
Granular Borrow	C.Y.	$40	4,889	$195,556	$285,269
Curb and Gutter	L.F.	$23	12,000	$270,000	$393,866
Sidewalk (5' width)	L.F.	$25	12,000	$300,000	$437,629
Drainage	L.F.	$45	12,000	$540,000	$787,732
Right of Way	S.F.	$2.30	462,000	$1,062,600	$1,550,081
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$250,000	0	$0	$0
Roundabout	Each	$500,000	0	$0	$0
			Construction Cost	**$3,323,512**	**$4,848,214**
Mobilization (10% of Construction)	Lump	10%	332,351	$332,351	$484,821
Contingency (25% of Construction)	Lump	25%	830,878	$830,878	$1,212,054
			Subtotal	**$4,486,741**	**$6,545,089**

Preconstruction Engineering	10%	$332,351	$484,821
Construction Engineering	10%	$332,351	$484,821

Total Project Costs	**$5,152,000**	**$7,515,000**

Saratoga Springs City's Responsibility via Impact Fee's	**100%**	
	$5,152,000	**$7,515,000**

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**4**
Untreated Base Course Thickness (in) =	**8**
Granual Borrow Thickness (in) =	**6**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**New Road**
Funding:	**Saratoga Springs**
Completion Year:	**2029**
Inflation Rate:	**1.46**

DRAFT

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 104

Old Farm Road: End of Existing to School House Road (Upsize Only)

Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2029)
Removal of Existing Asphalt	S.Y.	$4	0	$0	$0
Clearing and Grubbing	Acre	$2,000	4	$7,725	$11,269
Roadway Excavation	C.Y.	$11	8,902	$93,469	$136,350
HMA Concrete	Ton	$85	2,484	$211,107	$307,956
Untreated Base Course	C.Y.	$15	2,374	$35,607	$51,943
Granular Borrow	C.Y.	$40	1,780	$71,215	$103,885
Curb and Gutter	L.F.	$23	4,370	$98,325	$143,433
Sidewalk (5' width)	L.F.	$25	4,370	$109,250	$159,370
Drainage	L.F.	$45	4,370	$196,650	$286,866
Right of Way	S.F.	$2.30	168,245	$386,964	$564,488
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$250,000	1	$250,000	$364,691
Roundabout	Each	$500,000	0	$0	$0
			Construction Cost	**$1,460,312**	**$2,130,249**
Mobilization (10% of Construction)	Lump	10%	146,031	$146,031	$213,025
Contingency (25% of Construction)	Lump	25%	365,078	$365,078	$532,562
			Subtotal	**$1,971,422**	**$2,875,836**

Preconstruction Engineering	10%	$146,031	$213,025
Construction Engineering	10%	$146,031	$213,025

Total Project Costs	**$2,264,000**	**$3,302,000**

Saratoga Springs City's Responsibility via Impact Fee's	**21%**	
	$475,000	**$693,000**

DRAFT

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**4**
Untreated Base Course Thickness (in) =	**8**
Granual Borrow Thickness (in) =	**6**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**Capacity Improvement**
Funding:	**Saratoga Springs**
Completion Year:	**2029**
Inflation Rate:	**1.46**

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 105

School House Road: Redwood Road to (Project 106) (Upsize Only)

Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2029)
Removal of Existing Asphalt	S.Y.	$4	0	$0	$0
Clearing and Grubbing	Acre	$2,000	4	$8,838	$12,893
Roadway Excavation	C.Y.	$11	10,185	$106,944	$156,007
HMA Concrete	Ton	$85	2,842	$241,542	$352,352
Untreated Base Course	C.Y.	$15	2,716	$40,741	$59,431
Granular Borrow	C.Y.	$40	2,037	$81,481	$118,862
Curb and Gutter	L.F.	$23	5,000	$112,500	$164,111
Sidewalk (5' width)	L.F.	$25	5,000	$125,000	$182,345
Drainage	L.F.	$45	5,000	$225,000	$328,222
Right of Way	S.F.	$2.30	192,500	$442,750	$645,867
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$250,000	0	$0	$0
Roundabout	Each	$500,000	0	$0	$0
			Construction Cost	**$1,384,797**	**$2,020,089**
Mobilization (10% of Construction)	Lump	10%	138,480	$138,480	$202,009
Contingency (25% of Construction)	Lump	25%	346,199	$346,199	$505,022
			Subtotal	**$1,869,476**	**$2,727,121**

Preconstruction Engineering	10%	$138,480	$202,009
Construction Engineering	10%	$138,480	$202,009

Total Project Costs	**$2,147,000**	**$3,132,000**

Saratoga Springs City's Responsibility via Impact Fee's	**21%**	
	$451,000	**$658,000**

DRAFT

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**4**
Untreated Base Course Thickness (in) =	**8**
Granual Borrow Thickness (in) =	**6**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**Capacity Improvement**
Funding:	**Saratoga Springs**
Completion Year:	**2029**
Inflation Rate:	**1.46**

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 106

800 South (Approx.): School House Road to Mountain View Corridor Extension (Upsize Only)

Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2029)
Removal of Existing Asphalt	S.Y.	$4	0	$0	$0
Clearing and Grubbing	Acre	$2,000	8	$16,390	$23,909
Roadway Excavation	C.Y.	$11	18,887	$198,318	$289,299
HMA Concrete	Ton	$85	5,270	$447,915	$653,401
Untreated Base Course	C.Y.	$15	5,037	$75,550	$110,209
Granular Borrow	C.Y.	$40	3,777	$151,099	$220,418
Curb and Gutter	L.F.	$23	9,272	$208,620	$304,327
Sidewalk (5' width)	L.F.	$25	9,272	$231,800	$338,141
Drainage	L.F.	$45	9,272	$417,240	$608,654
Right of Way	S.F.	$2.30	356,972	$821,036	$1,197,696
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$250,000	0	$0	$0
Roundabout	Each	$500,000	0	$0	$0
			Construction Cost	**$2,567,967**	**$3,746,054**
Mobilization (10% of Construction)	Lump	10%	256,797	$256,797	$374,605
Contingency (25% of Construction)	Lump	25%	641,992	$641,992	$936,513
			Subtotal	**$3,466,755**	**$5,057,172**

Preconstruction Engineering	10%	$256,797	$374,605
Construction Engineering	10%	$256,797	$374,605

Total Project Costs	**$3,981,000**	**$5,807,000**

Saratoga Springs City's Responsibility via Impact Fee's	**21%**	
	$836,000	**$1,219,000**

DRAFT

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**4**
Untreated Base Course Thickness (in) =	**8**
Granual Borrow Thickness (in) =	**6**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**Capacity Improvement**
Funding:	**Saratoga Springs**
Completion Year:	**2029**
Inflation Rate:	**1.46**

Saratoga Springs City
Impact Fee Facilities Plan
Project No. 107

Mount Saratoga Road: Mountain View Corridor to Approximately SR-73 (Upsize Only)

Collector

Costs

Item	Unit	Unit Cost	Quantity	Cost (2019)	Cost (2024)
Removal of Existing Asphalt	S.Y.	$4	0	$0	$0
Clearing and Grubbing	Acre	$2,000	12	$23,157	$28,442
Roadway Excavation	C.Y.	$11	26,685	$280,194	$344,146
HMA Concrete	Ton	$85	7,445	$632,839	$777,278
Untreated Base Course	C.Y.	$15	7,116	$106,741	$131,103
Granular Borrow	C.Y.	$40	5,337	$213,481	$262,206
Curb and Gutter	L.F.	$23	13,100	$294,750	$362,023
Sidewalk (5' width)	L.F.	$25	13,100	$327,500	$402,248
Drainage	L.F.	$45	13,100	$589,500	$724,047
Right of Way	S.F.	$2.30	504,350	$1,160,005	$1,424,763
Bridge/Culvert	S.F.	$225	0	$0	$0
Traffic Signal	Each	$250,000	0	$0	$0
Roundabout	Each	$500,000	0	$0	$0
			Construction Cost	**$3,628,167**	**$4,456,256**
Mobilization (10% of Construction)	Lump	10%	362,817	$362,817	$445,626
Contingency (25% of Construction)	Lump	25%	907,042	$907,042	$1,114,064
			Subtotal	**$4,898,026**	**$6,015,945**

Preconstruction Engineering	10%	$362,817	$445,626
Construction Engineering	10%	$362,817	$445,626

Total Project Costs	**$5,624,000**	**$6,908,000**

Saratoga Springs City's Responsibility via Impact Fee's	**21%**	
	$1,181,000	**$1,451,000**

DRAFT

Overall Assumptions:

HMA Pavement Density (pcf) =	**155**
HMA Thickness (in) =	**4**
Untreated Base Course Thickness (in) =	**8**
Granual Borrow Thickness (in) =	**6**
Roadway Excavation Depth (ft) =	**2.5**
Number of Sidewalks (No.) =	**2**

Project Parameters:

Improvement Type:	**New Road**
Funding:	**Saratoga Springs**
Completion Year:	**2024**
Inflation Rate:	**1.23**

City of Saratoga Springs

Impact Fee Analysis

SARATOGA SPRINGS
Life's just better here

Zions Public Finance, Inc.
April 8, 2020

DRAFT

Transportation Impact Fee Analysis

Summary

This Impact Fee Analysis (IFA) is based on the information provided in the City's Roadway Impact Fee Facilities Plan ("IFFP") dated April 2020 and prepared by Horrocks Engineers.

Projected Growth. The IFFP projects that new development in the City of Saratoga Springs ("City") is projected to grow by an estimated 15,101 PM peak trips between 2020 and 2030 – from 9,010 PM peak hour trips in 2020 to 24,111 trips in 2030. This growth will use up excess capacity on existing roads and will require the expansion of existing roads or development of new roads in order to maintain the existing levels of service.

Service Levels. The IFFP states that the existing level of service (LOS) is LOS D and that the "IFFP will not make any changes to the existing level of service, and LOS D will be the standard by which future growth will be evaluated" (p. 4). Therefore, the proposed LOS is also LOS D.

Service Areas. The City includes one roadway service area.

System Improvements. Only improvements to "collector" streets and "arterials" are considered "system improvements" and are eligible to be funded with impact fees.

Excess Capacity. The City's IFFP identifies current excess capacity on 26 streets. The actual cost of these improvements is eligible to be included in the calculation of impact fees. The City has identified $2,596,615 in actual costs of existing, excess capacity that will be consumed by new development between 2020 and 2030.

System Deficiencies. The City has identified, in the IFFP, three streets with existing deficiencies. Impact fees cannot be charged, and have not been charged, to make up for existing deficiencies.

New Construction. The City's Transportation IFFP identifies a total of 30 projects necessitated by new development at a total cost of $136,090,000. However, three of the projects will be partially funded by Mountain Association of Governments (MAG). The City is only responsible for costs of $65,838,000.

After removing the MAG costs, as well as adjustments for excess capacity remaining in 2030 on the newly-constructed projects, as well as pass-through traffic and costs of curing existing deficiencies, new development in the City is responsible for only $26,208,000 of the total new construction costs.

DRAFT

Proportionate Share Analysis. A summary of the proportionate share analysis is as follows:

TABLE 1: PROPORTIONATE SHARE ANALYSIS

Summary of Cost per Trip	Amount
Buy-In to Excess Capacity	$171.95
New Construction	$1,587.36
Consultant Cost	$2.05
Cost per PM Peak Trip	**$1,761.36**

The maximum fee per PM peak hour trip is $1,761.36.

The cost per trip is then applied to standards set by the Institute of Transportation Engineers (ITE) to evaluate the number of PM peak hour trips per development type.

The following table shows groupings as listed in the IFFP. Note that all ITE trip generation rates have been decreased by 50 percent to account for the differences between the model used for trip generation and ITE trip generation rates. Some categories have been further reduced to account for pass-by trips.

TABLE 2: RECOMMENDED MAXIMUM TRANSPORTATION IMPACT FEES INTO MAJOR GROUPINGS

Code	Category	Units; Per	ITE Trips	Additional Factor - Pass-By Factors	Maximum Fee
130	Industrial Park 130	1000 Sq. Feet Gross Floor Area	0.4		$352
140	General Manufacturing	1000 Sq. Feet Gross Floor Area	0.67		$590
151	Mini-Warehouse	1000 Sq. Feet Gross Floor Area	0.17		$150
152	Warehouse	1000 Sq. Feet Gross Floor Area	0.19		$167
210	Single-Family Detached Housing	Dwelling Unit	0.99		$872
220	Multi-Family / (Low-Rise 1-2 Levels)	Dwelling Unit	0.56		$493
221	Multi-Family (Mid-Rise 3-10 Levels)	Dwelling Unit	0.44		$387
222	Multi-Family (High-Rise >10 Levels)	Dwelling Unit	0.36		$317
240	Mobile Home / RV Park	Occupied Dwelling Unit	0.59		$520
254	Assisted Living Center	Bed	0.26		$229
310	Hotel	Room	0.6		$528
444	Movie Theater < 10 Screens	1000 Sq. Feet Gross Floor Area	6.17		$5,434
445	Movie Theater > 10 Screens	1000 Sq. Feet Gross Floor Area	4.91		$4,324
492	Health/Fitness Club	1000 Sq. Feet Gross Floor Area	3.45		$3,038
520	Elementary School	1000 Sq. Feet Gross Floor Area	1.37		$1,207
522	Middle School / Junior High School	1000 Sq. Feet Gross Floor Area	1.19		$1,048
530	High School	1000 Sq. Feet Gross Floor Area	0.97		$854
534	Private School (K-8)	Students	0.26		$229
560	Church	1000 Sq. Feet Gross Floor Area	0.49		$432

DRAFT

Code	Category	Units; Per	ITE Trips	Additional Factor - Pass-By Factors	Maximum Fee
565	Day Care Center	1000 Sq. Feet Gross Floor Area	11.12		$9,793
590	Library	1000 Sq. Feet Gross Floor Area	8.16		$7,186
610	Hospital	1000 Sq. Feet Gross Floor Area	0.97		$854
710	General Office Building	1000 Sq. Feet Gross Floor Area	1.15		$1,013
720	Medical-Dental Office Building	1000 Sq. Feet Gross Floor Area	3.46		$3,047
730	Government Office Building	1000 Sq. Ft. Gross Floor Area	1.71		$1,506
770	Business Park	1000 Sq. Feet Gross Floor Area	0.42		$370
812	Building Material and Lumber Store	1000 Sq. Feet Gross Floor Area	2.06		$1,814
816	Hardware/Paint Store	1000 Sq. Ft. Gross Floor Area	2.68	26%	$1,747
817	Nursery (Garden Center)	1000 Sq. Feet Gross Floor Area	6.94		$6,112
820	Shopping Center / Strip Mall	1000 Sq. Feet Gross Leasable Area	3.81	34%	$2,215
841	Automobile Sales	1000 Sq. Feet Gross Floor Area	3.75		$3,303
848	Tire Store	1000 Sq. Feet Gross Floor Area	3.98	28%	$2,524
850	Supermarket	1000 Sq. Feet Gross Floor Area	9.24	36%	$5,208
851	Convenience Market	1000 Sq. Feet Gross Floor Area	49.11	61%	$16,868
880	Pharmacy/Drugstore without Drive-Thru Window	1000 Sq. Ft. Gross Floor Area	8.51	53%	$3,522
881	Pharmacy/Drugstore with Drive-Thru Window	1000 Sq. Ft. Gross Floor Area	10.29	49%	$4,622
890	Furniture Store	1000 Sq. Ft. Gross Floor Area	0.52	53%	$215
911	Walk-In Bank	1000 Sq. Ft. Gross Floor Area	12.13		$10,683
912	Drive-in Bank	1000 Sq. Feet Gross Floor Area	20.45	47%	$9,545
918	Hair Salon	1000 Sq. Feet Gross Floor Area	1.45		$1,277
932	Restaurant, Sit-Down (High Turnover)	1000 Sq. Feet Gross Floor Area	9.77	44%	$4,818
933	Fast Food without Drive-Through Window	1000 Sq. Feet Gross Floor Area	28.34	43%	$14,226
934	Restaurant with Drive Through Window	1000 Sq. Feet Gross Floor Area	32.67	50%	$14,386
942	Auto Care Center	1000 Sq. Feet Gross Leasable Area	3.11		$2,739
944	Gasoline/Service Station	Fueling Position	14.03	42%	$7,166
945	Gasoline/Service Station with Convenience Store	1000 Sq. Feet Gross Floor Area	88.35	56%	$34,236
947	Self Service Car Wash	Wash Stall	5.54		$4,879
948	Automated Car Wash	1000 Sq. Feet Gross Floor Area	14.2		$12,506

DRAFT

Utah Code Legal Requirements

Utah law requires that communities prepare an Impact Fee Analysis (IFA) before enacting an impact fee. Utah law also requires that communities give notice of their intent to prepare and adopt an IFA. This IFA follows all legal requirements as outlined below.

Notice of Intent to Prepare Impact Fee Analysis

A local political subdivision must provide written notice of its intent to prepare an IFA before preparing the Plan (Utah Code §11-36a-503). This notice must be posted on the Utah Public Notice website. The City has complied with this noticing requirement for the IFA by posting notice.

Preparation of Impact Fee Analysis

Utah Code requires that each local political subdivision, before imposing an impact fee, prepare an impact fee analysis. (Utah Code 11-36a-304).

Section 11-36a-304 of the Utah Code outlines the requirements of an impact fee analysis as follows:

(1) An impact fee analysis shall:

- (a) identify the anticipated impact on or consumption of any existing capacity of a public facility by the anticipated development activity;
- (b) identify the anticipated impact on system improvements required by the anticipated development activity to maintain the established level of service for each public facility;
- (c) demonstrate how the anticipated impacts described in Subsections (1)(a) and (b) are reasonably related to the anticipated development activity;
- (d) estimate the proportionate share of:
  - (i) the costs for existing capacity that will be recouped; and
  - (ii) the costs of impacts on system improvements that are reasonably related to the new development activity; and
- (e) identify how the impact fee was calculated.

(2) In analyzing whether or not the proportionate share of the costs of public facilities are reasonably related to the new development activity, the local political subdivision or private entity, as the case may be, shall identify, if applicable:

- (a) the cost of each existing public facility that has excess capacity to serve the anticipated development resulting from the new development activity;
- (b) the cost of system improvements for each public facility;
- (c) other than impact fees, the manner of financing for each public facility, such as user charges, special assessments, bonded indebtedness, general taxes, or federal grants;

DRAFT

(d) the relative extent to which development activity will contribute to financing the excess capacity of and system improvements for each existing public facility, by such means as user charges, special assessments, or payment from the proceeds of general taxes;

(e) the relative extent to which development activity will contribute to the cost of existing public facilities and system improvements in the future;

(f) the extent to which the development activity is entitled to a credit against impact fees because the development activity will dedicate system improvements or public facilities that will offset the demand for system improvements, inside or outside the proposed development;

(g) extraordinary costs, if any, in servicing the newly-developed properties; and

(h) the time-price differential inherent in fair comparisons of amounts paid at different times.

Certification of Impact Fee Analysis

Utah Code states that an Impact Fee Analysis shall include a written certification from the person or entity that prepares the Impact Fee Analysis. This certification is included at the conclusion of this analysis.

Anticipated Impact on or Consumption of Any Existing Capacity of a Public Facility by the Anticipated Development Activity

Utah Code 11-36a-304(1)(a)

Projected Growth in PM Peak Hour Trips

PM peak hour trips are projected to grow by 15,101 trips by 2030.

TABLE 3: PM PEAK HOUR TRIPS

Time Period	PM Peak Hour Trips
2020 PM Peak Hour Trips	9,010
2030 PM Peak Trips	24,111
Growth in PM Peak Hour Trips, 2020-2030	15,101
Source: City of Saratoga Springs Transportation IFFP 2020, p. 21	

Existing Capacity

Development activity in the City is based on both residential and nonresidential growth. Growth projections are then used by the City's engineers as inputs in the Mountainland Association of Governments (MAG) travel demand model to forecast trip generation. The MAG Travel Demand Model was also calibrated to existing traffic conditions in the City of Saratoga Springs. Traffic counts for city-owned roadways were either provided by the City or were manually counted as part of the Transportation

DRAFT

Master Plan. Existing excess capacity, as well as current deficiencies, are shown in Table 2 of the IFFP, p. 5 and are included below.

TABLE 4: AVAILABLE CAPACITY

Excess Capacity	Existing Capacity	Existing Volume	Excess Capacity	Excess Capacity %
Pony Express Parkway	30,500	25,700	4,800	16%
Crossroads Blvd (East of Redwood Road)	13,000	13,900	(900)	-7%
W Harvest Hills Blvd	11,500	4,700	6,800	59%
Aspen Hills Blvd	11,500	1,900	9,600	83%
Commerce Dr.	11,500	5,100	6,400	56%
400 East	7,500	3,100	4,400	59%
1400 North	11,500	1,500	10,000	87%
Foothill Blvd	11,500	12,200	(700)	-6%
1200 North	11,500	1,000	10,500	91%
Thunder Blvd.	11,500	2,400	9,100	79%
400 South	7,500	4,200	3,300	44%
1400 East: Pioneer to 145 North	11,500	1,000	10,500	91%
Saratoga Road: 145 North to 400 South	11,500	6,100	5,400	47%
Saratoga Road: 400 South to the South	11,500	6,100	5,400	91%
Ring Road	11,500	4,600	6,900	60%
Lariat Blvd.	11,500	2,700	8,800	77%
Stillwater Dr	11,500	1,000	10,500	91%
Village Pkwy	11,500	1,300	10,200	89%
Wildlife Blvd	11,500	2,800	8,700	76%
Harbor Park Way	11,500	2,600	8,900	77%
145 North	11,500	1,000	10,500	91%
Riverside Drive (South of Pioneer Crossing)	11,500	5,400	6,100	53%
Market St	13,000	1,900	11,100	85%
Riverside Drive (North Side)	11,500	6,500	5,000	43%
Pioneer Crossing (SR-165) West of Redwood	30,500	5,600	24,900	82%
400 North	11,500	1,600	9,900	86%
Talus Ridge Drive	11,500	2,200	9,300	81%

DRAFT

Excess Capacity	Existing Capacity	Existing Volume	Excess Capacity	Excess Capacity %
Grandview Blvd.	11,500	5,600	5,900	57%

Where actual costs are available, these costs have been included in the calculation of existing excess capacity that will be consumed by new development over the next ten years.

TABLE 5: ACTUAL COST OF EXCESS CAPACITY CONSUMED 2020-2030

Excess Capacity	Actual Cost	Excess Capacity (%) Used by New Growth, 2020-2030	Excess Capacity (Cost) Used by New Growth, 2020-2030
Pony Express Parkway	$5,195,519	0.00%	$0
Crossroads Blvd (East of Redwood Road)		0.00%	$0
W Harvest Hills Blvd		20.00%	$0
Aspen Hills Blvd		44.35%	$0
Commerce Dr.		17.39%	$0
400 East	$112,655	0.00%	$0
1400 North		4.35%	$0
Foothill Blvd		108.70%	$0
1200 North		41.74%	$0
Thunder Blvd.		66.09%	$0
400 South	$900,000	58.78%	$529,043
1400 East: Pioneer to 145 North		20.87%	$0
Saratoga Road: 145 North to 400 South	$324,318	82.61%	$267,915
Saratoga Road: 400 South to the South		126.65%	$0
Ring Road	$354,595	30.43%	$107,920
Lariat Blvd.		27.83%	$0
Stillwater Dr		8.70%	$0
Village Pkwy		20.87%	$0
Wildlife Blvd		15.65%	$0
Harbor Park Way		2.61%	$0
145 North		25.22%	$0
Riverside Drive (South of Pioneer Crossing)	$4,225,790	5.22%	$220,476
Market St	$2,029,022	15.38%	$312,157
Riverside Drive (North Side)		53.04%	$0
Pioneer Crossing (SR-165) West of Redwood	$929,389	36.07%	$335,189
400 North	$912,734	66.96%	$611,135
Talus Ridge Drive	$521,516	40.80%	$212,779
Grandview Blvd.	$358,970	0.00%	$0
TOTAL	**$15,864,508**		**$2,596,615**

DRAFT

Identify the Anticipated Impact on System Improvements Required by the Anticipated Development Activity to Maintain the Established Level of Service for Each Public Facility and Demonstrate How the Anticipated Impacts are Reasonably Related to the New Development Activity

Utah Code 11-36a-304(1)(b)(c)

The City's Transportation IFFP identifies a total of 30 projects necessitated by new development at a total cost of $136,090,000. However, three of the projects will be partially funded by Mountain Association of Governments (MAG). The City is only responsible for costs of $65,838,000.

After removing the MAG portion of the costs, as well as calculations for excess capacity remaining in 2030 relative to new construction projects, as well as pass-through traffic and costs of curing existing deficiencies, new development in the City is responsible for only $26,208,000 of the total new construction costs.

The projects identified in the IFFP as necessary to maintain a LOS D over the next ten years, given the demands placed on the roadway network by new development, are found in Table 5, pp. 18 and 19 of the IFFP as shown below.

TABLE 6: CITY PORTION OF NEW CONSTRUCTION COSTS

Project	Location	Total Price (with Inflation)	Funding Source	Saratoga Springs Total (with Inflation)
7	Exchange Place: Crossroads Blvd to Market Street (Upsize Only)	$2,337,000	Saratoga Springs	$491,000
8	Crossroads Blvd: Commerce Drive to Eastern Border, Signal: Crossroads and 400 East/Riverside Drive	$2,005,000	MAG/Saratoga Springs	$602,000
9A	Pony Express Extension: Redwood Road to Jordan River	$6,563,000	MAG/Saratoga Springs	$817,000
9B	Pony Express Extension: Jordan River to Saratoga Road	$10,151,000	Saratoga Springs	$10,151,000
10	Talus Ridge Drive: Endo f Existing to Mt. Saratoga Blvd. (Upsize Only)	$2,689,000	Saratoga Springs	$565,000
11	Mt. Saratoga Blvd: End of Existing to SR-73 (Upsize Only)	$8,981,000	Saratoga Springs	$1,886,000
14A	Founder's Boulevard: Redwood Road to Old Farm Road (Upsize Only)	$1,088,000	Saratoga Springs	$228,000
14B	Founder's Boulevard: End of Old Farm Road to Ensign Drive	$3,117,000	Saratoga Springs	$3,117,000
21	Foothill Boulevard Extension (East Frontage Road): Pony Express Parkway to Lariat Boulevard	$16,349,000	MAG/Saratoga Springs	$1,107,000
22	Corridor Preservation	$5,752,000	Saratoga Springs	$5,752,000
30	Market Street: Pioneer Crossing (SR-145) to Foothill Boulevard (Upsize Only)	$4,790,000	Saratoga Springs	$4,790,000
36	Saratoga Road: Pony Express to Pioneer Crossing (SR-175) (Upsize Only, excludes Lehi's side)	$1,615,000	Saratoga Springs	$1,615,000

DRAFT

Project	Location	Total Price (with Inflation)	Funding Source	Saratoga Springs Total (with Inflation)
40	400 North: Redwood Road (SR-68) to Riverside Drive (Upsize Only)	$1,806,000	Saratoga Springs	$379,000
42	400 East: Crossroads Boulevard to Northern Border	$2,004,000	Saratoga Springs	$2,004,000
51	Market Street: Redwood Road (SR-68) to Riverside Drive	$520,000	Saratoga Springs	$520,000
56	Riverside Drive: End of Existing to Pioneer Roundabout: Market Street and Riverside Drive	$4,598,000	Saratoga Springs	$4,598,000
71	Lariat Boulevard: End of Existing to Foothill Blvd. Extension (Upsize Only)	$1,213,000	Saratoga Springs	$255,000
72	Medical Drive: Foothill Boulevard to Redwood Road (Upsize Only)	$6,912,000	Saratoga Springs	$1,452,000
74	Roundabout: Talus Ridge Drive and Mt. Saratoga Blvd.	$802,000	Saratoga Springs	$802,000
90	Frontage Road: Lariat Boulevard to Grandview Boulevard	$3,228,000	Saratoga Springs	$3,228,000
96	Ensign Drive: Foothill Boulevard Extension to 800 South (Project 106)	$4,321,000	Saratoga Springs	$907,000
98	Traffic Signal: Crossroads Boulevard & 1400 North	$566,000	Saratoga Springs	$566,000
99	Old Farm Road: Founders Blvd. to School House (Upsize Only)	$1,913,000	Saratoga Springs	$402,000
100	Harvest Hills: End of Existing to Chianti Street (Upsize Only)	$14,102,000	Saratoga Springs	$6,064,000
102	560 North: Saratoga Road to 900 East (Approx. 1,600')	$2,004,000	Saratoga Springs	$2,004,000
103	New Collector: Wildlife Blvd to 4180 South (Approx 6000')	$7,515,000	Saratoga Springs	$7,515,000
104	Old farm Road: End of Existing to School House road (Upsize Only)	$3,302,000	Saratoga Springs	$693,000
105	School House Road: Redwood road to (Project 106) (Upsize Only)	$3,132,000	Saratoga Springs	$658,000
106	800 South (Approx.): School House road to Mountain View Corridor Extension (Upsize Only)	$5,807,000	Saratoga Springs	$1,219,000
107	Mount Saratoga Road: Mountain View Corridor to Approx. SR-73 (Upsize Only)	$6,908,000	Saratoga Springs	$1,451,000
	TOTAL	**$136,090,000**		**$65,838,000**

The total cost for which new development is responsible must be reduced by those construction costs associated with curing existing deficiencies, for pass-through trips and for excess capacity remaining on the above roads in 2030.

TABLE 7: REDUCED COSTS FOR DEFICIENCIES, PASS-THROUGH AND REMAINING EXCESS CAPACITY IN 2030

Project	Location	Reduction for Existing Deficiencies	Reduction for Pass-Through	Reduction for Excess Capacity	Impact Fee Eligible Proportion	Impact Fee Eligible Total
7	Exchange Place: Crossroads Blvd to Market Street (Upsize Only)	1%	1%	82%	16%	$79,000

DRAFT

Project	Location	Reduction for Existing Deficiencies	Reduction for Pass-Through	Reduction for Excess Capacity	Impact Fee Eligible Proportion	Impact Fee Eligible Total
8	Crossroads Blvd: Commerce Drive to Eastern Border, Signal: Crossroads and 400 East/Riverside Drive	0%	13%	33%	50%	$301,000
9A	Pony Express Extension: Redwood Road to Jordan River	1%	21%	50%	28%	$229,000
9B	Pony Express Extension: Jordan River to Saratoga Road	1%	23%	8%	68%	$6,903,000
10	Talus Ridge Drive: Endo f Existing to Mt. Saratoga Blvd. (Upsize Only)	2%	1%	85%	12%	$68,000
11	Mt. Saratoga Blvd: End of Existing to SR-73 (Upsize Only)	1%	7%	71%	21%	$396,000
14A	Founder's Boulevard: Redwood Road to Old Farm Road (Upsize Only)	2%	1%	43%	54%	$123,000
14B	Founder's Boulevard: End of Old Farm Road to Ensign Drive	2%	1%	69%	28%	$873,000
21	Foothill Boulevard Extension (East Frontage Road): Pony Express Parkway to Lariat Boulevard	2%	19%	8%	71%	$786,000
22	Corridor Preservation	76%	0%	0%	24%	$1,380,000
30	Market Street: Pioneer Crossing (SR-145) to Foothill Boulevard (Upsize Only)	2%	1%	90%	7%	$335,000
36	Saratoga Road: Pony Express to Pioneer Crossing (SR-175) (Upsize Only, excludes Lehi's side)	0%	1%	56%	43%	$694,000
40	400 North: Redwood Road (SR-68) to Riverside Drive (Upsize Only)	1%	2%	84%	13%	$49,000
42	400 East: Crossroads Boulevard to Northern Border	1%	6%	48%	45%	$902,000
51	Market Street: Redwood Road (SR-68) to Riverside Drive	1%	1%	52%	46%	$239,000
56	Riverside Drive: End of Existing to Pioneer Roundabout: Market Street and Riverside Drive	1%	1%	77%	21%	$966,000
71	Lariat Boulevard: End of Existing to Foothill Blvd. Extension (Upsize Only)	2%	4%	32%	62%	$158,000
72	Medical Drive: Foothill Boulevard to Redwood Road (Upsize Only)	2%	1%	52%	45%	$653,000
74	Roundabout: Talus Ridge Drive and Mt. Saratoga Blvd.	0%	1%	47%	52%	$417,000
90	Frontage Road: Lariat Boulevard to Grandview Boulevard	1%	0%	77%	22%	$710,000
96	Ensign Drive: Foothill Boulevard Extension to 800 South (Project 106)	2%	1%	76%	21%	$190,000
98	Traffic Signal: Crossroads Boulevard & 1400 North	0%	0%	62%	38%	$215,000
99	Old Farm Road: Founders Blvd. to School House (Upsize Only)	2%	0%	95%	3%	$12,000
100	Harvest Hills: End of Existing to Chianti Street (Upsize Only)	2%	1%	44%	53%	$3,214,000

DRAFT

Project	Location	Reduction for Existing Deficiencies	Reduction for Pass-Through	Reduction for Excess Capacity	Impact Fee Eligible Proportion	Impact Fee Eligible Total
102	560 North: Saratoga Road to 900 East (Approx. 1,600')	0%	1%	89%	10%	$200,000
103	New Collector: Wildlife Blvd to 4180 South (Approx 6000')	1%	1%	44%	54%	$4,058,000
104	Old farm Road: End of Existing to School House road (Upsize Only)	2%	1%	85%	12%	$83,000
105	School House Road: Redwood road to (Project 106) (Upsize Only)	2%	1%	90%	7%	$46,000
106	800 South (Approx.): School House road to Mountain View Corridor Extension (Upsize Only)	1%	6%	49%	44%	$536,000
107	Mount Saratoga Road: Mountain View Corridor to Approx. SR-73 (Upsize Only)	1%	2%	1%	96%	$1,393,000
	TOTAL					**$26,208,000**

The cost of $26,208,000 can be partially offset by the fund balance of $2,237,272 which can be used for the cost of some of the capital improvements.

PM peak hour trip demand citywide is projected to grow from 9,010 trips in 2020 to 24,111 trips in 2030 – an increase of 15,101 trips over the 10-year period. While volume on some existing roads will actually decrease, volume will increase on new roads constructed. Therefore, the increased volume and capacity impacts need to be viewed as part of an overall increase on the road system.

Estimate the Proportionate Share of (i) the Costs for Existing Capacity That Will Be Recouped; and (ii) The Costs of Impacts on System Improvements That Are Reasonably Related to the New Development Activity; and Identify How the Impact Fee was Calculated

Utah Code 11-36a-304(1)(d)(e)

The proportionate share analysis calculates the proportionate share of any buy-in costs associated with the excess capacity in the existing system that will be consumed as a result of new development activity, as well as the proportionate share of new construction costs necessitated by new development.

Buy-In Calculation for Excess Capacity

The City currently has excess capacity on 26 roads as listed previously in Table 4 in this analysis. The proportionate share of the existing, excess capacity to be paid by new development is calculated as follows:

TABLE 8: PROPORTIONATE SHARE CALCULATION, CONSUMPTION OF EXCESS CAPACITY, 2020-2030

Description	Amount
Excess Capacity Actual Cost	$15,864,508

DRAFT

Description	Amount
Excess Capacity Consumed 2020-2030, Actual Cost	$2,596,615
Growth in PM Peak Hour Trips, 2020-2030	15,101
Excess Capacity Cost per PM Peak Hour Trip	**$171.95**

New Construction Cost Calculation

The City's Transportation IFFP identifies a total of 30 projects necessitated by new development at a total cost of $136,090,000. However, three of the projects will be partially funded by Mountain Association of Governments (MAG). The City will be responsible for $65,838,000 of total costs.

After removing the MAG costs, as well as adjustments for excess capacity remaining in 2030 on the newly-constructed projects, as well as pass-through traffic and costs of curing existing deficiencies, new development in the City is responsible for only $26,208,000 of the total new construction costs. The City will offset $2,237,272 of the cost which leaves $23,970,728 for the construction of new projects needed due to the growth in development over the next ten years.

New construction costs are calculated as follows:

TABLE 9: PROPORTIONATE SHARE CALCULATION – NEW CONSTRUCTED COSTS

New Construction Costs	
New Construction Costs - Impact Fee Eligible	$23,970,728
Growth in PM Peak Hour Trips, 2020-2030	15,101
New Construction Cost per PM Peak Hour Trip	**$1,587.36**

Other Cost Calculations

Utah law allows for the cost of developing the Impact Fee Facility Plan and Impact Fee Analysis to be included in the calculation of impact fees. These costs are then shared proportionately among the additional trips generated between 2020 and 2030.

TABLE 10: PROPORTIONATE SHARE CALCULATION – CONSULTING COSTS

Consulting Costs	Amount
Horrocks – IFFP	$25,000
ZPFI – IFA (est.)	$6,000
Growth in PM Peak Hour Trips, 2020-2030	15,101
Consultant Cost per PM Peak Hour Trip	**$2.05**

DRAFT

Summary of Impact Fees

TABLE 11: SUMMARY OF GROSS IMPACT FEE

Summary of Cost per PM Peak Hour Trip	Amount
Excess Capacity	$171.95
New Construction	$1,587.36
Consultant Cost	$2.05
TOTAL	**$1,761.36**

The total cost per trip is then applied to the PM peak hour trips generated by various land use types. The more trips that are associated with a particular land use or development, the greater its impact on the street system.

The IFFP explains that trips generated need to be adjusted: "There is a minor discrepancy in the way ITE calculates trips, and the way trips or roadway volumes are calculated in the travel demand modeling used in the Saratoga Springs TMP. This discrepancy is explained by the model roadway volumes and capacities being calculated using daily traffic volumes rather than trips on the roadway. Essentially, this means that a travel demand model "trip" or unit of volume is counted once as a vehicle leaves home, travels on the road network, and then arrives at work. This vehicle will only be counted as it travels on the roadway network. The ITE Trip Generation method uses driveway counts as its measure of a trip. Therefore, a vehicle making the same journey will be counted once as it leaves home and once again as it arrives at work for a total of 2 trips. This can be rectified simply by adjusting the ITE Trip Generation rates by one half."[1]

The IFFP further states that, "an additional consideration is that certain types of developments do not generate primary trips or trips that originated for the sole purpose of visiting that development."[2] Therefore, Horrocks has provided additional reductions for pass-by trips, as reflected in the table below.[3]

TABLE 12: SUMMARY OF ADDITIONAL REDUCTIONS FOR PASS-BY TRIPS

Land Use	Pass by Trip Percent
Hardware/Paint Store	26%
Shopping Center/Strip Mall	34%
Tire Store	28%
Supermarket	36%
Convenience Market	61%
Pharmacy/Drugstore without Drive-Thru Window	53%
Pharmacy/Drugstore with Drive-Thru Window	49%
Furniture Store	53%
Drive-In Bank	47%
Restaurant, Sit-Down (High Turnover)	44%
Fast Food without Drive-Through Window	43%
Restaurant with Drive Through Window	50%

[1] Transportation IFFP, p. 2.
[2] Transportation IFFP, p. 3.
[3] ITE Trip Generation Manual, 5th ed.

DRAFT

Land Use	Pass by Trip Percent
Gasoline/Service Station	42%
Gasoline/Service Station with Convenience Store	56%

A summary of the maximum impact fees by land use category is shown below. The City may choose to enact any fees up to the maximum amount (shown in the far right-hand column) below. These maximum fees were calculated by taking the cost per PM peak hour trip ($1,761.36) and multiplying by the ITE trips per land use type. This amount is then multiplied 50 percent to account for differences in the MAG model and ITE counts, and further reduced by pass-by-factors to arrive at the Maximum Fee.

TABLE 13: SUMMARY OF MAXIMUM IMPACT FEES

Code	Category	Units; Per	ITE Trips	Additional Factor - Pass-By Factors	Maximum Fee
130	Industrial Park 130	1000 Sq. Feet Gross Floor Area	0.4		$352
140	General Manufacturing	1000 Sq. Feet Gross Floor Area	0.67		$590
151	Mini-Warehouse	1000 Sq. Feet Gross Floor Area	0.17		$150
152	Warehouse	1000 Sq. Feet Gross Floor Area	0.19		$167
210	Single-Family Detached Housing	Dwelling Unit	0.99		$872
220	Multi-Family / (Low-Rise 1-2 Levels)	Dwelling Unit	0.56		$493
221	Multi-Family (Mid-Rise 3-10 Levels)	Dwelling Unit	0.44		$387
222	Multi-Family (High-Rise >10 Levels)	Dwelling Unit	0.36		$317
240	Mobile Home / RV Park	Occupied Dwelling Unit	0.59		$520
254	Assisted Living Center	Bed	0.26		$229
310	Hotel	Room	0.6		$528
444	Movie Theater < 10 Screens	1000 Sq. Feet Gross Floor Area	6.17		$5,434
445	Movie Theater > 10 Screens	1000 Sq. Feet Gross Floor Area	4.91		$4,324
492	Health/Fitness Club	1000 Sq. Feet Gross Floor Area	3.45		$3,038
520	Elementary School	1000 Sq. Feet Gross Floor Area	1.37		$1,207
522	Middle School / Junior High School	1000 Sq. Feet Gross Floor Area	1.19		$1,048
530	High School	1000 Sq. Feet Gross Floor Area	0.97		$854
534	Private School (K-8)	Students	0.26		$229
560	Church	1000 Sq. Feet Gross Floor Area	0.49		$432
565	Day Care Center	1000 Sq. Feet Gross Floor Area	11.12		$9,793
590	Library	1000 Sq. Feet Gross Floor Area	8.16		$7,186

DRAFT

Code	Category	Units; Per	ITE Trips	Additional Factor - Pass-By Factors	Maximum Fee
610	Hospital	1000 Sq. Feet Gross Floor Area	0.97		$854
710	General Office Building	1000 Sq. Feet Gross Floor Area	1.15		$1,013
720	Medical-Dental Office Building	1000 Sq. Feet Gross Floor Area	3.46		$3,047
730	Government Office Building	1000 Sq. Ft. Gross Floor Area	1.71		$1,506
770	Business Park	1000 Sq. Feet Gross Floor Area	0.42		$370
812	Building Material and Lumber Store	1000 Sq. Feet Gross Floor Area	2.06		$1,814
816	Hardware/Paint Store	1000 Sq. Ft. Gross Floor Area	2.68	26%	$1,747
817	Nursery (Garden Center)	1000 Sq. Feet Gross Floor Area	6.94		$6,112
820	Shopping Center / Strip Mall	1000 Sq. Feet Gross Leasable Area	3.81	34%	$2,215
841	Automobile Sales	1000 Sq. Feet Gross Floor Area	3.75		$3,303
848	Tire Store	1000 Sq. Feet Gross Floor Area	3.98	28%	$2,524
850	Supermarket	1000 Sq. Feet Gross Floor Area	9.24	36%	$5,208
851	Convenience Market	1000 Sq. Feet Gross Floor Area	49.11	61%	$16,868
880	Pharmacy/Drugstore without Drive-Thru Window	1000 Sq. Ft. Gross Floor Area	8.51	53%	$3,522
881	Pharmacy/Drugstore with Drive-Thru Window	1000 Sq. Ft. Gross Floor Area	10.29	49%	$4,622
890	Furniture Store	1000 Sq. Ft. Gross Floor Area	0.52	53%	$215
911	Walk-In Bank	1000 Sq. Ft. Gross Floor Area	12.13		$10,683
912	Drive-in Bank	1000 Sq. Feet Gross Floor Area	20.45	47%	$9,545
918	Hair Salon	1000 Sq. Feet Gross Floor Area	1.45		$1,277
932	Restaurant, Sit-Down (High Turnover)	1000 Sq. Feet Gross Floor Area	9.77	44%	$4,818
933	Fast Food without Drive-Through Window	1000 Sq. Feet Gross Floor Area	28.34	43%	$14,226
934	Restaurant with Drive Through Window	1000 Sq. Feet Gross Floor Area	32.67	50%	$14,386
942	Auto Care Center	1000 Sq. Feet Gross Leasable Area	3.11		$2,739
944	Gasoline/Service Station	Fueling Position	14.03	42%	$7,166
945	Gasoline/Service Station with Convenience Store	1000 Sq. Feet Gross Floor Area	88.35	56%	$34,236
947	Self Service Car Wash	Wash Stall	5.54		$4,879
948	Automated Car Wash	1000 Sq. Feet Gross Floor Area	14.2		$12,506

DRAFT

Calculation of Credits

There is no general obligation or revenue bond outstanding debt on the roadway system and therefore no credits have been applied.

The City may choose to credit certain development types, including affordable housing, but these credits are at the discretion of the City. Further, a City may choose to allow a developer to put in a transportation facility listed in the IFFP and reduce impact fees accordingly. Again, this is at the discretion of the City.

Certification

Zions Public Finance, Inc. certifies that the attached impact fee analysis:

1. Includes only the costs of public facilities that are:
    a. allowed under the Impact Fees Act; and
    b. actually incurred; or
    c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;

2. Does not include:
    a. costs of operation and maintenance of public facilities;
    b. costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents; or
    c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement;

3. Offsets costs with grants or other alternate sources of payment; and

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

ORDINANCE NO. 20-20 (6-2-20)

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SARATOGA SPRINGS, UTAH ADOPTING AN AMENDED TRANSPORTATION IMPACT FEE FACILITIES PLAN, AMENDED IMPACT FEE ANALYSIS, AND AMENDED TRANSPORTATION IMPACT FEE; AND OTHER RELATED MATTERS

WHEREAS, on November 8, 2018, before the City or its consultants commenced work on amending the City's Transportation Impact Fee Facilities Plan and Impact Fee Analysis, the City published notice of the City's intent to update and amend its Transportation Impact Fee Facilities Plan and Impact Fee Analysis on the Utah Public Notice Website and the City's website in accordance with Utah Code Ann. §§ 11-36a-501 and 11-36a-503; and

WHEREAS, Horrocks Engineers has assessed the level of Transportation facility service that is currently provided to existing residents, the excess capacity in the existing Transportation facilities infrastructure that is available to accommodate new growth without diminishing the current level of service provided to existing residents, and the elements and the cost of additional Transportation facilities that will be required to maintain the current level of service as projected growth occurs in the impact fee expenditure period; a copy of the Transportation Impact Fee Facilities Plan prepared by Horrocks Engineers is attached hereto as Exhibit "A"

WHEREAS, Horrocks Engineers certified its work as compliant with Utah Code § 11-36a-306 in April, 2020; and

WHEREAS, the City has caused a Transportation Impact Fee Analysis to be prepared by Zions Public Finance; and

WHEREAS, Zions Public Finance has identified a maximum Transportation facilities impact fee based on the Transportation Impact Fee Facilities Plan; a copy of the Transportation Impact Fee Facilities Analysis prepared by Zions Public Finance dated April 8, 2020 is attached hereto as Exhibit "B"; and

WHEREAS, on May 15, 2020, the City properly published notice with the Provo Daily Herald, a newspaper of general circulation in the City of Saratoga Springs, Utah, of the City's intent to adopt the amended Transportation Impact Fee Facilities Plan, amended Impact Fee Analysis, and amended Ordinance/Enactment and of the scheduled public hearing by the City Council on June 2, 2020 to consider the same; and

WHEREAS, on May 14, 2020, the City properly published notice on the Utah Public Notice Website and the City's website of the City's intent to adopt the amended Transportation Impact Fee Facilities Plan, amended Impact Fee Analysis, and amended Ordinance/Enactment and of the scheduled public hearing by the City Council on June 2, 2020 to consider the same; and

WHEREAS, on May 14, 2020, the City properly mailed notice to affected entities of the City's intent to adopt the amended Transportation Impact Fee Facilities Plan, amended Impact Fee Analysis, and amended Ordinance/Enactment and of the scheduled public hearing by the City Council on June 16, 2020 to consider the same; and

WHEREAS, on May 7, 2020, a full copy of the proposed Transportation Impact Fee Facilities Plan and Transportation Impact Fee Analysis, along with an executive summary of the Transportation Impact Fee Facilities Plan and Analysis that was prepared in a manner to be understood by a lay person, were made available to the public at the Saratoga Springs public library, posted on the City's website, and the Utah Public Notice Website; and

WHEREAS, on June 2, 2020, the City Council held a public hearing regarding the proposed and certified Transportation Impact Fee Facilities Plan, Transportation Impact Fee Analysis, and this Transportation Facilities Impact Fee Ordinance; and

WHEREAS, after careful consideration and review of the comments at the public hearing and the comments of the participants, the Council has determined that it is in the best interest of the health, safety, and welfare of the inhabitants of Saratoga Springs to:

1. adopt the 2020 Transportation Impact Fee Facilities Plan for Transportation Facilities as proposed;
2. adopt the 2020 Transportation Impact Fee Analysis as proposed; and
3. in a manner that is consistent with the Impact Fees Act, enact this Ordinance to:
    a. amend its current Transportation impact fees;
    b. provide for the calculation and collection of such fees;
    c. authorize a means to consider and accept an independent fee calculation for atypical development requests;
    d. provide for an appeal process consistent with the Impact Fees Act; and
    e. update its accounting and reporting method.

NOW, THEREFORE, BE IT ORDAINED by the Saratoga Springs City Council as follows:

SECTION I – ENACTMENT OF TRANSPORTATION IMPACT FEE FACILITIES PLAN AND IMPACT FEE ANALYSIS

The Transportation Impact Fee Facilities Plan and Transportation Impact Fee Analysis attached hereto as Exhibits A and B are hereby adopted and incorporated herein.

SECTION II – ENACTMENT OF AMENDED TRANSPORTATION IMPACT FEES

The following amendments to Chapter 7.09 of the City Code are hereby made effective 90 days from the date of this enactment:

Chapter 7.09. Transportation Impact Fee.

Sections:

7.09.01. Definitions.
7.09.02. Findings and Purpose.
7.09.04. Adoption and Imposition of Transportation Impact Fees
7.09.05. Use of Transportation Impact Fees.

7.09.01. Definitions.

3. **"Transportation Facilities Impact Fee"** means the maximum allowable Impact Fee for each type of use of property imposed on Development Activity within the City per the ~~2017~~2020 Transportation Impact Fee Analysis and as allowed by Utah Code Chapter 11-36a.

4. **"Transportation Facilities Impact Fee Facilities Plan"** means the ~~2017~~2020 Transportation Facilities Impact Fee Facilities Plan prepared and certified by Horrocks Engineers adopted by the City Council in this Chapter and incorporated herein by this reference.

5. **"Transportation Facilities Impact Fee Analysis"** means the ~~2017~~2020 Transportation Facilities Impact Fee Analysis adopted by the City Council.

(Ord. 20-__; Ord. 11-9; 05-19)

7.09.02. Findings and Purpose.

The City Council hereby finds and determines:

1. There is a need to establish a transportation facilities impact fee for the City to maintain the level of service proposed in the ~~2017~~2020 Transportation Impact Fee Facilities Plan and Analysis.

2. The ~~2017~~2020 Transportation Impact Fee Facilities Plan and Analysis identifies the:
    a. projected future development activity in the City;
    b. level of service for transportation facilities that serve existing residents;
    c. excess transportation facilities capacity that is available to serve new growth in the existing infrastructure;
    d. proposed level of service for the City, which does not raise the existing level of service for current residents;
    e. additional capital facilities that are required to maintain the proposed transportation level of service without burdening existing residents with costs of new development activity; and
    f. maximum fee that is legally justified by the study

(Ord 20-__; Ord. 11-9; 05-19)

7.09.04. Adoption and Imposition of Transportation Facilities Impact Fees.

The City Council hereby approves, imposes, and levies on all Development Activity the maximum allowable Impact Fee for each type of proposed use of property within the City per the ~~2017~~2020 Transportation Impact Fee Analysis prepared and certified by Zions Public Finance incorporated herein by this reference.

(Ord. 20-__; Ord. 11-9; 05-19)

7.09.05. Use of Transportation Facilities Impact Fees.

The Transportation Facilities Impact Fees collected by the City shall be used as provided in the ~~2017~~2020 Impact Fee Facilities Plan and Analysis.
(Ord. 20-__; Ord. 11-9; 05-19)

SECTION III – AMENDMENT OF CONFLICTING ORDINANCES

If any ordinance, resolution, policy or map of the City heretofore adopted is inconsistent herewith it is hereby amended to comply with the provisions hereof. If it cannot be amended to comply with the provisions hereof, the inconsistent provision is hereby repealed.

SECTION IV – EFFECTIVE DATE

This ordinance shall take effect upon publication and 90 days after its passage by a majority vote of the Saratoga Springs City Council.

SECTION V – SEVERABILITY

If any section, subsection, sentence, clause, phrase, or portion of this ordinance is, for any reason, held invalid or unconstitutional by any court of competent jurisdiction, such provision shall be deemed a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions of this ordinance.

SECTION VI – PUBLIC NOTICE

The Saratoga Springs City Recorder is hereby ordered, in accordance with the requirements of Utah Code §§ 10-3-710—711, to:

a. deposit a copy of this ordinance in the office of the City Recorder; and
b. publish a short summary of this ordinance for at least one publication in a newspaper of general circulation in the City.

ADOPTED AND PASSED by the City Council of the City of Saratoga Springs, Utah, this 2nd day of June, 2020.

Signed: _____
Jim Miller, Mayor

Attest: _____
Cindy LoPiccolo, City Recorder

VOTE	**AYE**	**NAY**
Christopher Carn	_____	_____
Michael McOmber	_____	_____
Ryan Poduska	_____	_____
Chris Porter	_____	_____
Stephen Willden	_____	_____

EXHIBIT A
Transportation Impact Fee Facilities Plan prepared by Horrocks Engineers

EXHIBIT B
Impact Fee Facilities Analysis prepared by Zions Public Finance

ORDINANCE NO. 20-21 (6-2-20)

AN ORDINANCE OF THE SARATOGA SPRINGS CITY COUNCIL REGULATING, PREVENTING, AND BANNING THE DISCHARGE OF FIREWORKS OR THE USE OF ANY IGNITION SOURCE INCLUDING LIGHTERS, MATCHES, SKY LANTERNS, AND SMOKING MATERIALS WITHIN CERTAIN AREAS OF THE CITY OF SARATOGA SPRINGS, UTAH

WHEREAS, the Saratoga Springs City Council (the "Council") met in regular session on June 2, 2020, to consider among other things, regulating, preventing, and banning the discharge of fireworks or use any ignition source including lighters, matches, sky lanterns, and smoking materials within certain areas of the city; and

WHEREAS, the Saratoga Springs Fire Chief ("Fire Chief") has advised the Council that existing hazardous environmental conditions necessitate controlled use of any ignition source including fireworks, lighters, matches, sky lanterns, and smoking materials in bush-covered, dry grass-covered, and mountainous areas, within 200 feet of waterways, trails, canyons, washes, ravines, or similar area, in Wildland-Urban Interface areas in the City, or in a limited area outside the hazardous areas described above to facilitate a readily identifiable closed area ("Restricted Areas"); and

WHEREAS, the Fire Chief has produced a map ("Map") that identifies the Restricted Areas in the City; and

WHEREAS, the Council finds that the Restricted Areas on the Map designated for closure are closed areas along readily identifiable features like major roadways, waterways, or geographic features; and

WHEREAS, the Council finds that based on the Map the boundary of the Restricted Areas is as close as is practical to the defined hazardous area, provided that the closed area may include areas outside of the hazardous area to facilitate a readily identifiable line; and

WHEREAS, after careful consideration, the Council has determined that it is in the best interest of the health, safety and welfare of the inhabitants of Saratoga Springs to ban the use of fireworks and other ignition sources within the Restricted Areas shown on the Map in the City of Saratoga Springs, Utah.

NOW, THEREFORE, BE IT ORDAINED by the City Council as follows:

SECTION I – ENACTMENT

1. Except for display operators properly licensed as required by Utah law it is unlawful for any person to discharge a class C common state approved explosive in the areas identified as Restricted on the Map in the City of Saratoga Springs Utah.

2. The definition of "a class C common state approved explosive" shall be as defined in Utah Code Ann. § 53-7-202(5). All other terms shall have the same meaning as set forth in the Utah Fireworks Act, Utah Code Ann § 53-7-220 et seq.

3. It is hereby declared to be unlawful to use any ignition source including fireworks, lighters, matches, sky lanterns, and smoking materials in the areas identified as Restricted on the Map.

4. Any person convicted of violating the provisions of this ordinance shall be guilty of an Infraction pursuant to Utah Code Ann. § 53-7-225(4).

SECTION II – AMENDMENT OF CONFLICTING ORDINANCES

If any ordinances, resolutions, policies, or zoning maps of the City of Saratoga Springs heretofore adopted are inconsistent herewith they are hereby amended to comply with the provisions hereof. If they cannot be amended to comply with the provisions hereof, they are hereby repealed.

SECTION III – EFFECTIVE DATE

This ordinance shall take effect upon its passage by a majority vote of the Saratoga Springs City Council and following notice and publication as required by the Utah Code.

SECTION IV – SEVERABILITY

If any section, subsection, sentence, clause, phrase, or portion of this ordinance is, for any reason, held invalid or unconstitutional by any court of competent jurisdiction, such provision shall be deemed a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions of this ordinance.

SECTION V – PUBLIC NOTICE

The Saratoga Springs Recorder is hereby ordered, in accordance with the requirements of Utah Code §§ 10-3-710—711, to do as follows:

a. deposit a copy of this ordinance in the office of the City Recorder; and
b. publish notice as follows:
    i. publish a short summary of this ordinance for at least one publication in a newspaper of general circulation in the City; or
    ii. post a complete copy of this ordinance in three public places within the City.

ADOPTED AND PASSED by the City Council of the City of Saratoga Springs, Utah, this ___ day of _____, 2020.

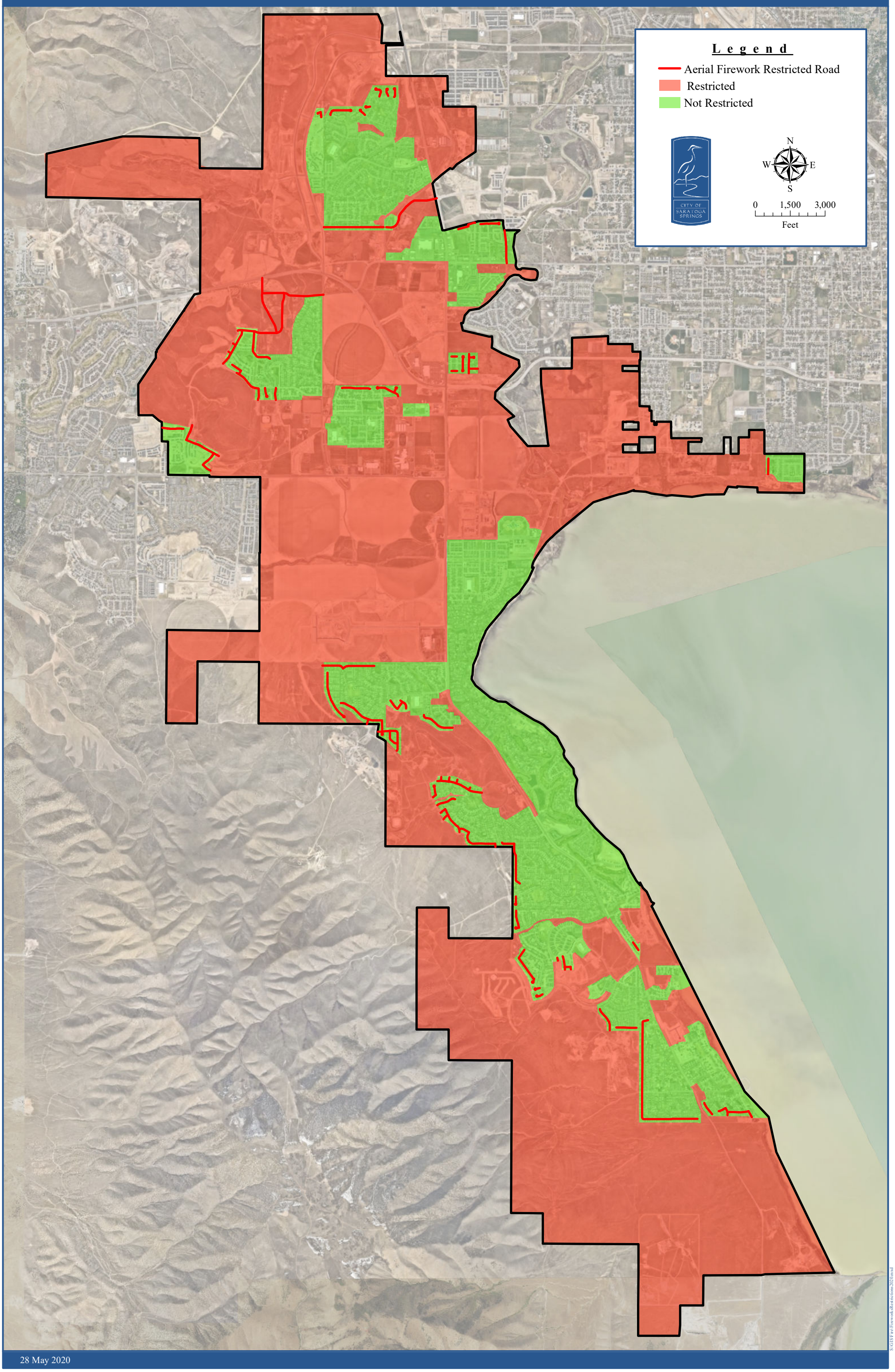
Signed: _____
Jim Miller, Mayor

Attest: _____
Cindy LoPiccolo, City Recorder

	VOTE
Chris Carn	_____
Michael McOmber	_____
Ryan Poduska	_____
Chris Porter	_____
Stephen Willden	_____

EXHIBIT A
Ignition Source and Fireworks Restricted Areas

Firework Restriction 2020



28 May 2020

S:\GIS\Fire\FireworksRestrictions2020.mxd

MINUTES – CITY COUNCIL

Tuesday, May 19, 2020
City of Saratoga Springs City Offices
1307 North Commerce Drive, Suite 200, Saratoga Springs, Utah 84045

City Council Policy Meeting

Call to Order: Mayor Jim Miller called the Meeting to order at 6:00 p.m.

Roll Call:

Pursuant to the COVID-19 Federal Guidelines, this Meeting will be conducted electronically.

Present Mayor Jim Miller, Council Members Chris Porter, Michael McOmber, Christopher Carn, and Stephen Willden. Council Member Ryan Poduska was excused.

Staff Present City Manager Mark Christensen, City Attorney Kevin Thurman, Assistant City Manager Owen Jackson, Economic Development and Public Relations Director David Johnson, City Engineer Gordon Miner, Senior Planner Tippe Morlan, and Deputy City Recorder Kayla Moss.

Invocation by Council Member Porter
Pledge of Allegiance by Council Member Willden

PUBLIC INPUT: None Submitted

REPORTS: Council Member Porter advised that there has been a lot of good information shared from the Lieutenant Governor's office over the last couple days about phasing from the current phase to the next.

City Manager Christensen advised the City parks opened up as of yesterday because of the change from the orange phase to the yellow phase.

The department reports for building, police, and fire were provided electronically to the Council Members.

Council Member McOmber thanked the first responders for all of the efforts they have made during the COVID-19 pandemic.

BUSINESS ITEMS:

1) **Wildflower Commercial Rezone / General Plan Amendment, DAI Utah Nate Shipp and Dan Herzog Applicant, Northwest Corner of Mountain View Corridor and SR-73; Ordinance 20-18 (5-19-20).**
Senior Planner Tippe Morlan gave the briefing on this item to the Council.

City Council Member Porter asked if they were actually changing the zones for the community plan or just establishing which zones they would be comfortable with.

Council Member Willden asked if they have specified how much of the area needs to be commercial.

Senior Planner Morlan advised they have outlined where the commercial zones need to be in the project, but the amount of commercial will be addressed with the village plans.

Motion by Council Member Willden made a motion to approve the Wildflower Commercial Rezone/General Plan Amendment, DAI Utah Nate Shipp and Dan Herzog Applicant, Northwest Corner of Mountain View Corridor and SR-73; Ordinance 20-18 (5-19-20) including all staff findings and conditions and adding condition that uses need to be consistent with the exhibit shown in the council meeting was seconded by Council Member Carn.
Vote: Council Members McOmber, Porter, Carn, and Willden– Aye.
Motion carried unanimously.

2) **Saratoga Springs Commercial Plat E Preliminary Plat, Daniel Schmidt Applicant, South of 1303 North Exchange Drive. (*Continued from May 5, 2020)***

Planner Gina Grandpre presented this to the Council. This is the DABC property just south of Tractor Supply. It is 2.01 acres zoned as regional commercial.

Council Member Porter asked if Exchange Drive will go all the way to the SLR property.

Planner Grandpre advised that it will, and will eventually connect with Medical Drive.

Motion by Council Member Porter made a motion to approve the Saratoga Springs Commercial Plat E Preliminary Plat, Daniel Schmidt Applicant, South of 1303 North Exchange Drive was seconded by Council Member Willden.
Vote: Council Members McOmber, Porter, Carn, and Willden– Aye.
Motion carried unanimously.

3) **Revisions to the City's Standard Technical Specifications and Drawings; Ordinance 20-19 (5-19-20).**

City Engineer Gordon Miner advised that there were two major updates to the standards and specifications that need to be made and that opened them up to change more things in the technical specifications and drawings. The most notable change being the change to minor arterials. It previously only had three lanes so it didn't improve the capacity much. The new minor arterial road will now have five lanes. Another big change is the requirement for low impact development. The state wants to keep rain where it fell so the new standards reflect that. The permit requires that each development retain .41 inches or precipitation, with the caveat that it is feasible.

Council Member Porter wondered if there were any restrictions on where 5G cell towers can be placed, or if they can be in front yards or anywhere else.

City Manager Christensen advised that the cell towers are restricted to road widths that are a certain size.

Council Member McOmber is also concerned about these possibly being in front of homes.

City Attorney Kevin Thurman advised that these would not be allowed on a residential local road. They would have to be placed on a collector or arterial road. They have to be placed at a 60 foot cross foot section or larger.

Motion by Council Member Carn made a motion to approve the Revision's to the City's Standard Technical Specifications and Drawings; Ordinance 20-19 (5-19-20) was seconded by Council Member Willden.
Vote: Council Members McOmber, Porter, Carn, and Willden– Aye.
Motion carried unanimously.

4) **Reimbursement Agreements for Northshore Phases 1, 2, D.R. Horton, Inc.; Resolution R20-24 (5-19-20).**

City Manager Christensen advised that they have long negotiated these agreements. This is to enhance the development of the neighborhoods.

Motion by Council Member McOmber to approve the Reimbursement Agreements for Northshore Phases 1, 2, D.R. Horton, Inc; Resolution R20-24 (5-19-20) was seconded by Council Member Porter.
Vote: Council Members McOmber, Porter, Carn, and Willden– Aye.
Motion carried unanimously.

5) Reimbursement Agreement for Perelle-Meadows Phases 1, 2, 3, AMH Development, LLC; Resolution R20-25 (5-19-20).

Motion by Council Member Porter to approve the Reimbursement Agreement for Perelle-Meadows Phases 1, 2, 3, AMH Development, LLC; Resolution R20-25 (5-19-20) was seconded by Council Member McOmber.
Vote: Council Members McOmber, Porter, Carn, and Willden– Aye.
Motion carried unanimously.

MINUTES:

1. May 5, 2020.

Motion by Council Member Porter to approve the Minutes of May 5, 2020, with the submitted and posted changes, was seconded by Council Member Carn.
Vote: Council Members Porter, McOmber, Willden, and Carn – Aye
Motion carried unanimously.

ADJOURNMENT:

There being no further business, Mayor Miller adjourned the meeting at 6:48 p.m.

_____
Jim Miller, Mayor

Attest:
_____
Cindy LoPiccolo, City Recorder
Approved:

MINUTES – CITY COUNCIL

Tuesday, June 2, 2020
City of Saratoga Springs City Offices
1307 North Commerce Drive, Suite 200, Saratoga Springs, Utah 84045

City Council Policy Meeting

Call to Order: Mayor Jim Miller called the Meeting to order at 6:03 p.m.

Roll Call:

Pursuant to the COVID-19 Federal Guidelines, this Meeting will be conducted electronically.

Present Mayor Jim Miller, Council Members Chris Porter, Ryan Poduska, Christopher Carn, and Stephen Willden. Council Member Michael McOmber was excused.

Staff Present City Manager Mark Christensen, City Attorney Kevin Thurman, Assistant City Manager Owen Jackson, Economic Development and Public Relations Director David Johnson, City Engineer Gordon Miner, Senior Planner Tippe Morlan, and Deputy City Recorder Kayla Moss.

Invocation by Council Member Willden
Pledge of Allegiance by Assistant City Manager Owen Jackson

PUBLIC INPUT: None Submitted

REPORTS: Council Member Chris Carn advised that it has come to his attention that a change in code in regards to food truck use in residential zones. He doesn't want to make residential zones a free for all but he would like to open up the possibility to have a food truck be able to cater to a private party at a house. He doesn't think there is much difference between hiring a caterer for a private event and hiring a food truck for the event.

Mayor Miller advised there is a meeting with communities who care tomorrow. Council Member Porter will be attending that.

City Manager Christensen advised late payments and fees were suspended due to the COVID pandemic for utilities and there is a moratorium on shut offs. He asked how long the Council would like the City to do that for the residents. He recommends to stick with the policy that has been in place and start the clock now. The earliest shut offs would happen at the end of July. They would get notice and given the chance to get current before then.

Council Member Porter thinks the City should try to look at getting books turned over again, if that has to be with late fees or otherwise. However since people are still out of work he thinks the moratorium on shut offs should continue for a while.

Council Member Willden mentioned that there are less than 1,500 households experiencing job loss in the City currently when you consider the state unemployment rate so there are some that are taking advantage of not having to make payments right now. He doesn't want to punish those that it is intended for but he thinks something should be looked at.

The consensus was that when the state goes green they will implement the regular process again. If the state doesn't go green in the next couple of weeks they will revisit it at the next meeting.

City Manager Christensen also mentioned that they had a coordinating meeting with Lehi City. It went very well. Jason Walker with Lehi suggested they get together on July 7th to do a walk through at the North Marina site and do a dinner together with Lehi Council.

PUBLIC HEARINGS:

1) Saratoga Springs Transportation Impact Fee Facilities Plan (IFFP) and Impact Fee Analysis (IFA) Update; Ordinance 20-20 (6-2-20).

City Engineer Gordon Miner advised they have calculated fees for projects to update these plans.

Kevin Croshaw with Horrocks Engineering and Susie Becker from Zions Bank presented the process of figuring out the impact fees to the Council.

Public Hearing was opened at 6:36 p.m.

Diane Huish from the Utah Homebuilders Association sent an email thanking the City for being proactive in updating the impact fees.

> Motion by Council Member Carn to approve the Saratoga Springs Transportation Impact Fee Facilities Plan (IFFP) and Impact Fee Analysis (IFA) Update; Ordinance 20-20 (6-2-20) including all staff findings and conditions was seconded by Council Member Porter.
> Vote: Council Members Poduska, Porter, Carn, and Willden– Aye.
> Motion carried unanimously.

BUSINESS ITEMS:

1) Fireworks Restrictions Update: Ordinance 20-21 (6-2-20).

Fire Chief Jess Campbell advised this is the opportunity to update the ordinance on restrictions. This will update the map for the county and state on fireworks restrictions. It is in attempt to address interface issues.

> Motion by Council Member Willden to approve the Fireworks Restrictions Update; Ordinance 20-21 (6-2-20) including all staff findings and conditions was seconded by Council Member Poduska.
> Vote: Council Members Poduska, Porter, Carn, and Willden– Aye.
> Motion carried unanimously.

MINUTES:

1. May 19, 2020.

Motion by Council Member Porter to approve the Minutes of May 19, 2020, with the submitted and posted changes, was seconded by Council Member Carn.
Vote: Council Members Poduska, Porter, McOmber, Willden, and Carn – Aye
Motion carried unanimously.

CLOSED SESSION:

Motion by Council Member Carn to enter into closed session for the purchase, exchange, or lease of property, discussion regarding deployment of security personnel, devices, or systems; pending or reasonably imminent

litigation, the character, professional competence, or physical or mental health of an individual, was seconded by Council Member Poduska.
Motion Carried Council Members Unanimously in Favor

The meeting moved to closed session at 6:45 p.m.

Present: Mayor Miller, Council Members Willden, Carn, Porter, Poduska, City Manager Mark Christensen, Assistant City Manager Owen Jackson, City Attorney Kevin Thurman, Deputy City Recorder Nicolette Fike, and Deputy City Recorder Kayla Moss.

Closed Session adjourned at 7:41 p.m.

ADJOURNMENT:

There being no further business, Mayor Miller adjourned the meeting at 7:41 p.m.

Jim Miller, Mayor

Attest:

Cindy LoPiccolo, City Recorder
Approved: 6-16-20