



City of Saratoga Springs

Transportation Impact Fees Analysis

January 24, 2017

ZIONS  PUBLIC FINANCE, INC.

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 January 2017 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 6,340 PM peak trips between 2016 and 2022 – from 7,809 PM peak hour trips in 2016 to 14,149 trips in 2022. 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 27 streets. The actual cost of these improvements is eligible to be included in the calculation of impact fees. The City has identified \$4,260,744 in actual costs of existing, excess capacity that will be consumed by new development between 2016 and 2022.

System Deficiencies. The City has identified five roadways 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 16 projects necessitated by new development at a total cost of \$42,573,000. However, one of the projects will be partially funded by Mountain Association of Governments (MAG). The City will be responsible for only 6.77 percent of this project and only that portion of project costs has been included in the calculation of impact fees. For the remaining 15 projects, 100 percent of project costs have been included in the calculation of impact fees.

After removing the MAG costs, as well as adjustments for excess capacity remaining in 2022 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 \$12,192,000 of the total new construction costs. Therefore, the initial cost of \$42,573,000 has been reduced by roughly 71 percent to account for these various factors. The City will offset \$2,494,572 of the cost which leaves \$9,697,428 for the construction of new projects needed due to the growth in development over the next six years.

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	\$672.04
New Construction	\$1,529.45
Consultant Cost	\$4.85
Cost per PM Peak Trip	\$2,206.45

The maximum fee per PM peak hour trip is \$2,206.45.

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

Stand-Alone*	Code	Category	Units; Per	ITE Trips	Trip Utilization Factor	Additional Factor - Pass-By Factors	Maximum Fee
	130	Industrial Park	1000 Sq. Feet Gross Floor Area	0.84	0.50		\$927
	140	General Manufacturing	1000 Sq. Feet Gross Floor Area	0.75	0.50		\$827
	151	Storage Units	1000 Sq. Feet Gross Floor Area	0.22	0.50		\$243
	152	Warehouse/Distribution Center	1000 Sq. Feet Gross Floor Area	0.16	0.50		\$177
	210	Single-Family Detached Housing	Dwelling Unit	1.02	0.50		\$1,125
	220	Multi-Family/Apartment (Greater than 4 Units)	Dwelling Unit	0.67	0.50		\$739
	230	Multi-Family / Condo, Townhouse, Duplex, Triplex, Quadplex	Dwelling Unit	0.52	0.50		\$574
	240	Mobile Home / RV Park	Dwelling Unit	0.60	0.50		\$662
	254	Assisted Living Center	Bed	0.35	0.50		\$386
	310	Hotel	Room	0.61	0.50		\$673
Yes	444	Movie theater < 10 Screens	1000 Sq. Feet Gross Floor Area	3.80	0.50		\$4,192
	445	Movie theater > 10 Screens	1000 Sq. Feet Gross Floor Area	4.91	0.50		\$5,417
	492	Health/Fitness Club	1000 Sq. Feet Gross Floor Area	4.06	0.50		\$4,479
	520	Elementary School	1000 Sq. Feet Gross Floor Area	3.11	0.50		\$3,431

Stand-Alone*	Code	Category	Units; Per	ITE Trips	Trip Utilization Factor	Additional Factor - Pass-By Factors	Maximum Fee
	522	Middle School / Junior High School	1000 Sq. Feet Gross Floor Area	2.52	0.50		\$2,780
	530	High School	1000 Sq. Feet Gross Floor Area	2.12	0.50		\$2,339
	534	Private School (K-8)	1000 Sq. Feet Gross Floor Area	6.53	0.50		\$7,204
	560	Church	1000 Sq. Feet Gross Floor Area	0.94	0.50		\$1,037
	565	Day Care Center	1000 Sq. Feet Gross Floor Area	13.75	0.50		\$15,169
	590	Library	1000 Sq. Feet Gross Floor Area	7.20	0.50		\$7,943
	610	Hospital	1000 Sq. Feet Gross Floor Area	1.16	0.50		\$1,280
	710	General Office Building	1000 Sq. Feet Gross Floor Area	1.49	0.50		\$1,644
	720	Medical-Dental Office Building	1000 Sq. Feet Gross Floor Area	4.27	0.50		\$4,711
	770	Business Park	1000 Sq. Feet Gross Floor Area	1.26	0.50		\$1,390
	812	Building Materials and Lumber Store	1000 Sq. Feet Gross Floor Area	5.56	0.50	0.17	\$5,091
Yes	817	Nursery (Garden Center)	1000 Sq. Feet Gross Floor Area	9.04	0.50		\$9,973
	820	Shopping Center / Strip Mall	1000 Sq. Feet Gross Floor Area	3.71	0.50	0.34	\$2,701
Yes	826	Specialty Retail Center	1000 Sq. Feet Gross Floor Area	5.02	0.50	0.34	\$3,655
	841	Automobile Car Sales	1000 Sq. Feet Gross Floor Area	2.80	0.50		\$3,089
Yes	848	Tire Store	1000 Sq. Feet Gross Floor Area	4.15	0.50		\$4,578
	850	Supermarket	1000 Sq. Feet Gross Floor Area	8.37	0.50	0.34	\$6,094
Yes	851	Convenience Store	1000 Sq. Feet Gross Floor Area	53.42	0.50	0.61	\$22,984
Yes	912	Bank/Financial Institution	1000 Sq. Feet Gross Floor Area	26.69	0.50	0.47	\$15,606
Yes	918	Hair/Nails/Massage/Beauty Salon/Day Spa	1000 Sq. Feet Gross Floor Area	1.93	0.50		\$2,129
Yes	932	Restaurant, Sit-Down (Low Turnover)	1000 Sq. Feet Gross Floor Area	9.02	0.50	0.44	\$5,573
Yes	932	Restaurant, Sit-Down (High Turnover)	1000 Sq. Feet Gross Floor Area	18.49	0.50	0.44	\$11,423
Yes	934	Restaurant with Drive-Through Window	1000 Sq. Feet Gross Floor Area	47.30	0.50	0.50	\$26,091
Yes	942	Auto Care Center	1000 Sq. Feet Gross Floor Area	3.51	0.50		\$3,872
Yes	944	Gasoline/Service Station	Fueling Position	15.65	0.50	0.61	\$6,734
Yes	945	Gasoline/Service Station with Convenience Store	1000 Sq. Feet Gross Floor Area	97.14	0.50	0.61	\$41,795
Yes	947	Self Service Car Wash	Wash Stall	5.54	0.50		\$6,112
Yes	948	Automated Car Wash	1000 Sq. Feet Gross Floor Area	14.12	0.50		\$15,578

*Stand-alone is indicated by "yes."

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;
- (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 6,340 trips by 2022.

TABLE 3: PM PEAK HOUR TRIPS

Time Period	PM Peak Hour Trips
PM Peak Hour Trips 2016	7,809
PM Peak Hour Trips 2022	14,149
PM Peak Hour Trip Growth 2016-2022	6,340

Source: City of Saratoga Springs Transportation IFFP, p. 20

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 Master Plan. Existing excess capacity, as well as current deficiencies, are shown in Table 2 of the IFFP, pp. 4-5 and are included below.

TABLE 4: AVAILABLE CAPACITY

	Existing Capacity	Existing Volume	Excess Capacity	Excess Capacity %
Pony Express Parkway	13,000	15,900	(2,900)	-22%
Crossroads Blvd (East of Redwood Road)	13,000	13,700	(700)	-5%
W Harvest Hills Blvd	10,500	4,700	5,800	55%
Aspen Hills Blvd	10,500	1,100	9,400	90%
Commerce Dr.	10,500	5,000	5,500	52%
400 East	10,500	3,100	7,400	70%
800 West	10,500	1,000	9,500	90%
1400 North	10,500	1,500	9,000	86%
Foothill Blvd	11,500	2,000	9,500	83%
1200 North	10,500	1,000	9,500	90%
W Evans Lane	10,500	1,000	9,500	90%
200 West	11,500	1,500	10,000	87%
400 South	5,000	1,200	3,800	76%
Saratoga Road	11,500	1,000	10,500	91%
Ring Road	11,500	2,300	9,200	80%
Lariat Blvd.	11,500	2,300	9,200	80%
Stillwater Dr	11,500	1,000	10,500	91%
Village Pkwy	11,500	1,000	10,500	91%
Wildlife Blvd	11,500	1,000	10,500	91%
Harbor Park Way	11,500	2,600	8,900	77%
7200 North	11,500	900	10,600	92%
7350 North	11,500	600	10,900	95%
Riverside Drive (South of Pioneer Crossing)	11,500	1,000	10,500	91%
Market St	13,000	1,000	12,000	92%
Riverside Drive (North Side)	11,500	1,000	10,500	91%

Excess Capacity	Existing Capacity	Existing Volume	Excess Capacity	Excess Capacity %
Pioneer Crossing (SR-165) West of Redwood	30,500	10,000	20,500	67%
400 North	11,500	8,200	3,300	29%
Talus Ridge Drive	11,500	2,000	9,500	83%
Grandview Blvd.	11,500	5,000	6,500	56%

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 six years.

TABLE 5: ACTUAL COST OF EXCESS CAPACITY CONSUMED 2016-2022

Excess Capacity	Actual Cost	Excess Capacity Used by New Growth, 2016-2022	Excess Capacity Used by New Growth, 2016-2022
Pony Express Parkway	\$5,195,519	0.00%	\$0
Crossroads Blvd (East of Redwood Road)		0.00%	\$0
W Harvest Hills Blvd		21.90%	\$0
Aspen Hills Blvd		37.14%	\$0
Commerce Dr.		15.24%	\$0
400 East	\$112,655	4.76%	\$5,365
800 West	\$2,175,648	10.48%	\$227,925
1400 North		4.76%	\$0
Foothill Blvd		40.00%	\$0
1200 North		4.76%	\$0
W Evans Lane		9.52%	\$0
200 West		5.22%	\$0
400 South	\$900,000	23.83%	\$214,435
Saratoga Road	\$324,318	20.87%	\$67,684
Ring Road	\$354,595	30.43%	\$107,920
Lariat Blvd.		30.43%	\$0
Stillwater Dr		8.70%	\$0
Village Pkwy		17.39%	\$0
Wildlife Blvd		26.09%	\$0
Harbor Park Way		2.61%	\$0
7200 North		21.74%	\$0
7350 North		28.70%	\$0
Riverside Drive (South of Pioneer Crossing)	\$4,225,790	52.17%	\$2,204,760
Market St	\$2,029,022	37.69%	\$764,785

Excess Capacity	Actual Cost	Excess Capacity Used by New Growth, 2016-2022	Excess Capacity Used by New Growth, 2016-2022
Riverside Drive (North Side)		41.74%	\$0
Pioneer Crossing (SR-165) West of Redwood	\$929,389	21.64%	\$201,114
400 North	\$912,734	27.83%	\$253,978
Talus Ridge Drive	\$521,516	40.80%	\$212,779
Grandview Blvd.	\$358,970	0.00%	\$0
TOTAL	\$18,040,156		\$4,260,744

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 IFFP identifies a total of 16 projects necessitated by new development at a total cost of \$42,573,000. However, one of the projects will be primarily funded by Mountainland Association of Governments (MAG). The City will be responsible for only 6.77 percent of this project and only that portion of project costs has been included in the calculation of impact fees. For the remaining 15 projects, 100 percent of project costs have been included in the calculation of impact fees.

After removing the MAG portion of the costs, as well as calculations for excess capacity remaining in 2022 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 \$12,192,000 of the total new construction costs.

The projects identified in the IFFP as necessary to maintain a LOS D over the next six 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 %	Saratoga Springs Total (with Inflation)
32	400 West: Crossroads Blvd to Aspen Hills Blvd	\$900,000	Saratoga Springs	100%	\$900,000
47	Mt. Saratoga Blvd: Talus Ridge Drive to Pony Express Blvd.	\$5,431,000	Saratoga Springs	100%	\$5,431,000
14	Talus Ridge Dr: Talus Ridge Dr to Mt. Saratoga Blvd	\$3,390,000	Saratoga Springs	100%	\$3,390,000
34	Foothill Blvd: Landview Dr to Lariat Blvd (ROW only)	\$1,033,000	Saratoga Springs	100%	\$1,033,000

Project	Location	Total Price (with Inflation)	Funding Source	Saratoga Springs %	Saratoga Springs Total (with Inflation)
2	Pony Express: Redwood Rd (SR-68) to Western Border (5-lane cross-section)	\$10,597,000	MAG/Saratoga Springs	6.77%	\$717,000
11	Riverside Drive Extension: Crossroads Blvd to Pioneer Crossing (SR-145)	\$4,959,000	Saratoga Springs	100%	\$4,959,000
19	Signal: Crossroads Blvd & Riverside Drive	\$325,000	Saratoga Springs	100%	\$325,000
26	Foothill Blvd: Pony Express Parkway to Lariat Blvd (26' Roadway Only)	\$3,137,000	Saratoga Springs	100%	\$3,137,000
36	Foothill Blvd: Honeywuckle Drive to Fox Hollow Drive (ROW Only)	\$1,745,000	Saratoga Springs	100%	\$1,745,000
33	Foothill Blvd: Meadow Side Dr to Landview Dr (ROW only)	\$1,955,000	Saratoga Springs	100%	\$1,955,000
46	Market Street: Redwood Road (SR-68) to Riverside Drive	\$628,000	Saratoga Springs	100%	\$628,000
31	400 South: Redwood Rd (SR-68) to Saratoga Rd	\$1,350,000	Saratoga Springs	100%	\$1,350,000
35	Foothill Blvd: Lariat Blvd to Honeysuckle Drive (ROW only)	\$1,377,000	Saratoga Springs	100%	\$1,377,000
42	400 East: Crossroads Blvd to Northern Border	\$2,283,000	Saratoga Springs	100%	\$2,283,000
43	145 North: 1100 West to 2300 West (ROW Only)	\$1,765,000	Saratoga Springs	100%	\$1,765,000
44	400 North: Redwood Road (SR-68) to Riverside Drive	\$1,698,000	Saratoga Springs	100%	\$1,698,000
	TOTAL	\$42,573,000			\$32,693,000

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 2022.

TABLE 7: REDUCED COSTS FOR DEFICIENCIES, PASS-THROUGH AND REMAINING EXCESS CAPACITY IN 2022

Project	Location	Reduction for Existing Deficiencies	Reduction for Pass-Through	Reduction for Excess Capacity	Impact Fee Eligible Proportion	Impact Fee Eligible Total
32	400 West: Crossroads Blvd to Aspen Hills Blvd	0%	1%	45%	52%	\$468,000
47	Mt. Saratoga Blvd: Talus Ridge Drive to Pony Express Blvd.		1%	45%	53%	\$2,878,000
14	Talus Ridge Dr: Talus Ridge Dr to Mt. Saratoga Blvd	0%	1%	48%	49%	\$1,661,000
34	Foothill Blvd: Landview Dr to Lariat Blvd (ROW only)	0%	1%	62%	35%	\$362,000
2	Pony Express: Redwood Rd (SR-68) to Western Border (5-lane cross-section)	17%	32%	40%	11%	\$79,000
11	Riverside Drive Extension: Crossroads Blvd to Pioneer Crossing (SR-145)		1%	50%	48%	\$2,380,000
19	Signal: Crossroads Blvd & Riverside Drive		13%	38%	47%	\$153,000
26	Foothill Blvd: Pony Express Parkway to Lariat Blvd (26' Roadway Only)	0%	1%	78%	16%	\$502,000
36	Foothill Blvd: Honeywuckle Drive to Fox Hollow Drive (ROW Only)	0%	1%	63%	35%	\$611,000
33	Foothill Blvd: Meadow Side Dr to Landview Dr (ROW only)	0%	1%	61%	35%	\$684,000

Project	Location	Reduction for Existing Deficiencies	Reduction for Pass-Through	Reduction for Excess Capacity	Impact Fee Eligible Proportion	Impact Fee Eligible Total
46	Market Street: Redwood Road (SR-68) to Riverside Drive		1%	52%	46%	\$289,000
31	400 South: Redwood Rd (SR-68) to Saratoga Rd	0%	1%	92%	7%	\$94,000
35	Foothill Blvd: Lariat Blvd to Honeysuckle Drive (ROW only)	0%	1%	63%	35%	\$482,000
42	400 East: Crossroads Blvd to Northern Border	0%	2%	66%	31%	\$708,000
43	145 North: 1100 West to 2300 West (ROW Only)	0%	5%	53%	39%	\$688,000
44	400 North: Redwood Road (SR-68) to Riverside Drive		6%	84%	9%	\$153,000
TOTAL						\$12,192,000

The cost of \$12,192,000 can be partially offset by the fund balance of \$2,494,572 which can be used for the cost of some of the capital improvements.

PM peak hour trip demand citywide is projected to grow from 7,809 trips in 2016 to 14,149 trips in 2022 – an increase of 6,340 trips over the 6-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 25 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, 2016-2022

Description	Amount
Excess Capacity Actual Cost	\$18,040,156
Excess Capacity Consumed 2016-2022, Actual Cost	\$4,260,744
Growth in PM Peak Hour Trips, 2016-2022	6,340

Description	Amount
Excess Capacity Cost per PM Peak Hour Trip	\$672.04

New Construction Cost Calculation

The City's Transportation IFFP identifies a total of 16 projects necessitated by new development at a total cost of \$42,573,000. However, one of the projects will be partially funded by Mountain Association of Governments (MAG). The City will be responsible for only 6.77 percent of this project and only that portion of project costs has been included in the calculation of impact fees. For the remaining 15 projects, 100 percent of project costs have been included in the calculation of impact fees.

After removing the MAG costs, as well as adjustments for excess capacity remaining in 2022 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 \$12,192,000 of the total new construction costs. Therefore, the initial cost of \$42,573,000 has been reduced by roughly 71 percent to account for these various factors. The City will offset \$2,494,572 of the cost which leaves \$9,697,428 for the construction of new projects needed due to the growth in development over the next six 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	\$9,697,428
Growth in PM Peak Hour Trips, 2016-2022	6,340
New Construction Cost per PM Peak Hour Trip	\$1,529.56

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 2016 and 2022.

TABLE 10: PROPORTIONATE SHARE CALCULATION – CONSULTING COSTS

Consulting Costs	Amount
Horrocks – IFFP	\$25,000
ZBPF – IFA (est.)	\$5,720
Growth in PM Peak Hour Trips, 2016-2022	6,340
Consultant Cost per PM Peak Hour Trip	\$4.85

Summary of Impact Fees

TABLE 11: SUMMARY OF GROSS IMPACT FEE

Summary of Cost per PM Peak Hour Trip	Amount
Excess Capacity	\$672.04
New Construction	\$1,529.56
Consultant Cost	\$4.85
TOTAL	\$2,206.45

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
Small Shopping Center (<90,000 sq ft)	34%
Large Shopping Center (>90,000 sq ft)	34%
Discount Superstore	17%
Home Improvement Superstore	17%
Convenience Store	61%
Convenience Store with Gas Pumps	61%
Discount Club	36%
Drive-In Bank	47%
Fast Food Restaurant with Drive-Thru	50%
Sit-Down Restaurant	44%

¹ Transportation IFFP, p. 2.

² Transportation IFFP, p. 3.

³ E-mail from Horrocks dated October 18, 2016.

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 (\$2,206.45) and multiplying by the ITE Trips (column 5 in table below). This amount is then multiplied by the Trip Utilization Factor (column 6) and any Additional Factor – Pass-By Factors (column 7) to arrive at the Maximum Fee (column 8)

TABLE 13: SUMMARY OF MAXIMUM IMPACT FEES

Stand-Alone* (1)	Code (2)	Category (3)	Units; Per (4)	ITE Trips (5)	Trip Utilization Factor (6)	Additional Factor - Pass-By Factors (7)	Maximum Fee (8)
	130	Industrial Park	1000 Sq. Feet Gross Floor Area	0.84	0.50		\$927
	140	General Manufacturing	1000 Sq. Feet Gross Floor Area	0.75	0.50		\$827
	151	Storage Units	1000 Sq. Feet Gross Floor Area	0.22	0.50		\$243
	152	Warehouse/Distribution Center	1000 Sq. Feet Gross Floor Area	0.16	0.50		\$177
	210	Single-Family Detached Housing	Dwelling Unit	1.02	0.50		\$1,125
	220	Multi-Family/Apartment (Greater than 4 Units)	Dwelling Unit	0.67	0.50		\$739
	230	Multi-Family / Condo, Townhouse, Duplex, Triplex, Quadplex	Dwelling Unit	0.52	0.50		\$574
	240	Mobile Home / RV Park	Dwelling Unit	0.60	0.50		\$662
	254	Assisted Living Center	Bed	0.35	0.50		\$386
	310	Hotel	Room	0.61	0.50		\$673
Yes	444	Movie theater < 10 Screens	1000 Sq. Feet Gross Floor Area	3.80	0.50		\$4,192
	445	Movie theater > 10 Screens	1000 Sq. Feet Gross Floor Area	4.91	0.50		\$5,417
	492	Health/Fitness Club	1000 Sq. Feet Gross Floor Area	4.06	0.50		\$4,479
	520	Elementary School	1000 Sq. Feet Gross Floor Area	3.11	0.50		\$3,431
	522	Middle School / Junior High School	1000 Sq. Feet Gross Floor Area	2.52	0.50		\$2,780
	530	High School	1000 Sq. Feet Gross Floor Area	2.12	0.50		\$2,339
	534	Private School (K-8)	1000 Sq. Feet Gross Floor Area	6.53	0.50		\$7,204
	560	Church	1000 Sq. Feet Gross Floor Area	0.94	0.50		\$1,037
	565	Day Care Center	1000 Sq. Feet Gross Floor Area	13.75	0.50		\$15,169
	590	Library	1000 Sq. Feet Gross Floor Area	7.20	0.50		\$7,943
	610	Hospital	1000 Sq. Feet Gross Floor Area	1.16	0.50		\$1,280
	710	General Office Building	1000 Sq. Feet Gross Floor Area	1.49	0.50		\$1,644

Stand-Alone* (1)	Code (2)	Category (3)	Units; Per (4)	ITE Trips (5)	Trip Utilization Factor (6)	Additional Factor - Pass-By Factors (7)	Maximum Fee (8)
	720	Medical-Dental Office Building	1000 Sq. Feet Gross Floor Area	4.27	0.50		\$4,711
	770	Business Park	1000 Sq. Feet Gross Floor Area	1.26	0.50		\$1,390
	812	Building Materials and Lumber Store	1000 Sq. Feet Gross Floor Area	5.56	0.50	0.17	\$5,091
Yes	817	Nursery (Garden Center)	1000 Sq. Feet Gross Floor Area	9.04	0.50		\$9,973
	820	Shopping Center / Strip Mall	1000 Sq. Feet Gross Floor Area	3.71	0.50	0.34	\$2,701
Yes	826	Specialty Retail Center	1000 Sq. Feet Gross Floor Area	5.02	0.50	0.34	\$3,655
	841	Automobile Car Sales	1000 Sq. Feet Gross Floor Area	2.80	0.50		\$3,089
Yes	848	Tire Store	1000 Sq. Feet Gross Floor Area	4.15	0.50		\$4,578
	850	Supermarket	1000 Sq. Feet Gross Floor Area	8.37	0.50	0.34	\$6,094
Yes	851	Convenience Store	1000 Sq. Feet Gross Floor Area	53.42	0.50	0.61	\$22,984
Yes	912	Bank/Financial Institution	1000 Sq. Feet Gross Floor Area	26.69	0.50	0.47	\$15,606
Yes	918	Hair/Nails/Massage/Beauty Salon/Day Spa	1000 Sq. Feet Gross Floor Area	1.93	0.50		\$2,129
Yes	932	Restaurant, Sit-Down (Low Turnover)	1000 Sq. Feet Gross Floor Area	9.02	0.50	0.44	\$5,573
Yes	932	Restaurant, Sit-Down (High Turnover)	1000 Sq. Feet Gross Floor Area	18.49	0.50	0.44	\$11,423
Yes	934	Restaurant with Drive-Through Window	1000 Sq. Feet Gross Floor Area	47.30	0.50	0.50	\$26,091
Yes	942	Auto Care Center	1000 Sq. Feet Gross Floor Area	3.51	0.50		\$3,872
Yes	944	Gasoline/Service Station	Fueling Position	15.65	0.50	0.61	\$6,734
Yes	945	Gasoline/Service Station with Convenience Store	1000 Sq. Feet Gross Floor Area	97.14	0.50	0.61	\$41,795
Yes	947	Self Service Car Wash	Wash Stall	5.54	0.50		\$6,112
Yes	948	Automated Car Wash	1000 Sq. Feet Gross Floor Area	14.12	0.50		\$15,578

*Stand-alone is indicated by "yes."

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.