

Saratoga Springs

IMPACT FEE ANALYSIS

Version #2

2021



avenue
CONSULTANTS

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 2021 and prepared by Avenue Consultants.

Projected Growth. The IFFP projects that new development in the City of Saratoga Springs ("City") is projected to grow by an estimated 10,802 PM peak trips between 2020 and 2030 – from 10,628 PM peak hour trips in 2020 to 21,430 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. 3). 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 42 streets. The actual cost of completed improvements on these streets are eligible to be included in the calculation of impact fees. The City has identified \$7,991,000 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, one street 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 31 projects necessitated by new development at a total cost of **\$198,461,000**. However, three of the projects will be partially funded by Mountain Association of Governments (MAG). The City is only responsible for costs of **\$72,159,000**.

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 **\$17,454,000** of the total new construction costs.

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

Table 1: Proportionate Share Analysis

Summary of Cost per Trip	Amount
Excess Capacity	\$739.77
New Construction	\$1,313.53
Total	\$2,053.30

The maximum fee per PM peak hour trip is \$2,053.30.

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	0	\$411
140	General Manufacturing	1000 Sq. Feet Gross Floor Area	0.67	0	\$688
151	Mini-Warehouse	1000 Sq. Feet Gross Floor Area	0.17	0	\$175
210	Single-Family Detached Housing	Dwelling Unit	0.99	0	\$1,016
220	Multi-Family / (Low-Rise 1-2 Levels)	Dwelling Unit	0.56	0	\$575
221	Multi-Family (Mid-Rise 3-10 Levels)	Dwelling Unit	0.44	0	\$452
222	Multi-Family (High-Rise >10 Levels)	Dwelling Unit	0.36	0	\$370
240	Mobile Home / RV Park	Occupied Dwelling Unit	0.59	0	\$606
254	Assisted Living Center	Bed	0.26	0	\$267
310	Hotel	Room	0.6	0	\$616
444	Movie Theater < 10 Screens	1000 Sq. Feet Gross Floor Area	6.17	0	\$6,334
445	Movie Theater > 10 Screens	1000 Sq. Feet Gross Floor Area	4.91	0	\$5,041
492	Health/Fitness Club	1000 Sq. Feet Gross Floor Area	3.45	0	\$3,542
520	Elementary School	1000 Sq. Feet Gross Floor Area	1.37	0	\$1,407

Table 2 Continued

Code	Category	Units; Per	ITE Trips	Additional Factor - Pass-By Factors	Maximum Fee
522	Middle School / Junior High School	1000 Sq. Feet Gross Floor Area	1.19	0	\$1,222
530	High School	1000 Sq. Feet Gross Floor Area	0.97	0	\$996
534	Private School (K-8)	Students	0.26	0	\$267
560	Church	1000 Sq. Feet Gross Floor Area	0.49	0	\$503
565	Day Care Center	1000 Sq. Feet Gross Floor Area	11.12	0	\$11,416
590	Library	1000 Sq. Feet Gross Floor Area	8.16	0	\$8,377
610	Hospital	1000 Sq. Feet Gross Floor Area	0.97	0	\$996
710	General Office Building	1000 Sq. Feet Gross Floor Area	1.15	0	\$1,181
720	Medical-Dental Office Building	1000 Sq. Feet Gross Floor Area	3.46	0	\$3,552
730	Government Office Building	1000 Sq. Ft. Gross Floor Area	1.71	0	\$1,756
770	Business Park	1000 Sq. Feet Gross Floor Area	0.42	0	\$431
812	Building Material and Lumber Store	1000 Sq. Feet Gross Floor Area	2.06	0	\$2,115
816	Hardware/Paint Store	1000 Sq. Ft. Gross Floor Area	2.68	0.26	\$2,036
817	Nursery (Garden Center)	1000 Sq. Feet Gross Floor Area	6.94	0	\$7,125
820	Shopping Center / Strip Mall	1000 Sq. Feet Gross Leasable Area	3.81	0.34	\$2,582
841	Automobile Sales	1000 Sq. Feet Gross Floor Area	3.75	0	\$3,850
848	Tire Store	1000 Sq. Feet Gross Floor Area	3.98	0.28	\$2,942
850	Supermarket	1000 Sq. Feet Gross Floor Area	9.24	0.36	\$6,071
851	Convenience Market	1000 Sq. Feet Gross Floor Area	49.11	0.51	\$24,705
880	Pharmacy/Drugstore without Drive-Thru Window	1000 Sq. Ft. Gross Floor Area	8.51	0.53	\$4,106
881	Pharmacy/Drugstore with Drive-Thru Window	1000 Sq. Ft. Gross Floor Area	10.29	0.49	\$5,388
890	Furniture Store	1000 Sq. Ft. Gross Floor Area	0.52	0.53	\$251
911	Walk-In Bank	1000 Sq. Ft. Gross Floor Area	12.13	0	\$12,453
912	Drive-in Bank	1000 Sq. Feet Gross Floor Area	20.45	0.35	\$13,647
918	Hair Salon	1000 Sq. Feet Gross Floor Area	1.45	0	\$1,489
932	Restaurant, Sit-Down	1000 Sq. Feet Gross Floor Area	9.77	0.44	\$5,617
933	Fast Food without Drive-Through Window	1000 Sq. Feet Gross Floor Area	28.34	0.43	\$16,584
934	Fast Food with Drive Through Window	1000 Sq. Feet Gross Floor Area	32.67	0.05	\$31,864
942	Auto Care Center	1000 Sq. Feet Gross Leasable Area	3.11	0	\$3,193
944	Gasoline/Service Station	Fueling Position	14.03	0.42	\$8,354
945	Gasoline/Service Station with Convenience Store	1000 Sq. Feet Gross Floor Area	88.35	0.56	\$39,910
947	Self Service Car Wash	Wash Stall	5.54	0	\$5,688
948	Automated Car Wash	1000 Sq. Feet Gross Floor Area	14.2	0	\$14,578

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 10,802 trips by 2030.

Table 3: PM Peak Hour Trips

Time Period	PM Peak Hour Trips
2020 PM Peak Hour Trips	10,628
2030 PM Peak Trips	21,430
Growth in PM Peak Hour Trips, 2020-2030	10,802

Source: City of Saratoga Springs Transportation IFFP 2021, 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 Master Plan. Existing excess capacity, as well as current deficiencies, are shown in Table 2 of the IFFP, p. 4 and are included below.

Table 4: Available Capacity

Excess Capacity	Existing Capacity	Existing Volume	Excess Capacity	Excess Capacity %
Pony Express Pkwy	32,800	20,400	12,400	38%
Crossroads Blvd (East of Redwood Rd)	15,100	19,800	(4700)	-31%
W Harvest Hills Blvd	13,400	6,800	6,600	49%
Aspen Hills Blvd	12,100	1,700	10,400	86%
Commerce Dr.	12,100	2,000	10,100	83%
400 East	7,500	4,400	3,100	41%
Foothill Blvd (800 West)	13,400	6,800	6,600	49%
1200 North	12,100	200	11900	98%
Thunder Blvd.	13,400	2,600	10,800	81%
400 South	13,400	3,400	10,000	75%
1400 East: Pioneer to 145 North	7,500	1,600	5,900	79%
Saratoga Rd: 145 North to 400 South	7,500	1,600	5,900	79%
Saratoga Rd: 400 South to the South	13,400	2,500	10,900	81%
Ring Rd	13,400	2,300	11,100	83%
Lariat Blvd	12,100	2,100	10,000	83%
Stillwater Dr.	12,100	500	11,600	96%
Village Pkwy	13,400	1,100	12,300	92%
Wildlife Blvd	13,400	800	12,600	94%
Harbor Park Way	12,100	1,600	10,500	87%
145 North	7,500	600	6,900	92%
Riverside Dr (South of Pioneer Crossing)	13,400	600	12,800	96%
Market St	15,100	200	14,900	99%
Riverside Dr (North Side)	13,400	600	12,800	96%
400 North	13,400	6,200	7,200	54%
Talus Ridge Dr	13,400	1,000	12,400	93%
Grandview Blvd	13,400	4,600	8,800	66%
Mt. Saratoga Blvd	13,400	2,500	10,900	81%
Fall Harvest Dr	12,100	5,600	6,500	54%
400 West	13,400	600	12,800	96%
Highpoint Dr	12,100	100	12,000	99%
School House Rd	12,100	2,100	10,000	83%
Old Farm Rd	32,800	400	32,400	99%
Founders Blvd	13,400	400	13,000	97%
Saratoga Dr	12,100	2,700	9,400	78%
Parkway Blvd	13,400	800	12,600	94%
Centennial Blvd	12,100	300	11,800	98%
Fairway Blvd	12,100	1,200	10,900	90%
Shorewood Dr	12,100	900	11,200	93%
Colt Dr	12,100	3,800	8,300	69%
Swainson Ave	12,100	1,000	11,100	92%
Medical Dr	13,400	100	13,300	99%
Exchange Dr	13,400	100	13,300	99%
Crossroads Blvd (West of Redwood Rd)	32,800	20,700	12,100	37%

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. These costs from existing capacity improvements are from Table 13 of the IFFP and are summarized below. Additionally, 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 5: Actual Cost of Excess Capacity Consumed 2020-2030

Project	Excess Capacity	Actual Cost	Avg. Proportion Attributable to New Growth	Cost Attributable to Growth (2020-2030)
E-1	Talus Ridge Dr: Foothill Blvd to west of Grand Tour Dr.	\$521,516	27%	\$142,000
E-2	Saratoga Rd: 145 N to Lazaret Ave Pony Express Pkwy: Saratoga Rd to Northshore Dr	\$258,712	18%	\$47,000
E-3	Medical Dr: Regent St to Redwood Rd exchange Dr: Market St to Medical Drive	\$659,790	27%	\$180,000
E-4	Exchange Dr: South boundary of Tractor Supply Co. to north boundary of IHC parcel	\$44,783	27%	\$12,000
E-5	Redwood Rd: Medical Dr north to northerly parcel boundary line (~340 ft)	\$17,293	18%	\$3,000
E-6	Redwood Rd : 400 S to Pony Express	\$163,537	18%	\$30,000
E-7	400 South: Patriot Park to Redwood Rd	\$109,718	27%	\$30,000
E-8	Riverside Dr : Pioneer Crossing to Dalmore Meadows	\$66,722	27%	\$18,000
E-9	Dandelion Dr: Mountain View to Providence Dr	\$30,000	18%	\$5,000
E-10	Aster Dr: Chianti St to Mountain View	\$214,800	27%	\$59,000
E-11	Wild Blossom Blvd: west of Mountain View	\$3,727,680	24%	\$897,000
E-12	Chianti St: Aster Dr to Wild Blossom Blvd	\$519,100	27%	\$141,000
E-13	Founders Blvd: Old Farm Rd to Redwood Rd	\$516,949	18%	\$94,000
E-14	Grandview: Redwood Rd to Hillside Dr	\$358,970	27%	\$98,000
E-15	80 East: Commerce Dr to Jordan Ridge	\$32,560	18%	\$6,000
E-16	400 East : Jordan View Landing extents	\$112,655	18%	\$20,000
E-17	400 South: Redwood Rd to Legacy Farms	\$12,106	27%	\$3,000
E-18	400 North : Mason Ct to 800 W	\$59,885	27%	\$16,000
E-19	W Commerce Dr: Redwood Rd to Crossroads Blvd	\$191,131	18%	\$35,000
E-20	Talus Ridge Dr: Approximately Grand Tour Dr to Mt. Saratoga Blvd	\$384,750	27%	\$105,000
E-21	Mt. Saratoga Blvd: Pony Express to Woodland Rd	\$479,700	27%	\$131,000
E-22	Commerce Dr: City Hall Access Road	\$34,950	18%	\$6,000
E-23	Saratoga Road Widening: 6800 North	\$841,217	27%	\$229,000
E-24	6800 N Widening: Bridge to 7350 N	\$545,812	27%	\$149,000
E-25	400 North Canal Bridge	\$286,225	27%	\$78,000
E-26	Pony Express Pkwy: Redwood Rd to 200 W	\$1,723,323	18%	\$312,000

Table 5 Continued

Project	Excess Capacity	Actual Cost	Avg. Proportion Attributable to New Growth	Cost Attributable to Growth (2020-2030)
E-27	Pony Express Pkwy: 200 W to Eagle Mountain	\$4,479,663	18%	\$812,000
E-28	800 West Extension: Pony Express to 400 N	\$3,228,371	27%	\$879,000
E-29	Redwood Widening Betterments: Hillcrest, Sergeant, Checker, Dalmore	\$256,760	18%	\$47,000
E-30	400 North: 540 W to Redwood Rd	\$1,065,998	27%	\$290,000
E-31	Pioneer Crossing Betterments: SR-73 to Redwood Rd	\$1,297,000	18%	\$235,000
E-32	Pony Express & 800 West: Intersection Widening	\$188,549	18%	\$34,000
E-33	Pony Express & 800 West: New Signal	\$300,000	18%	\$54,000
E-34	Market Street: Pioneer to Redwood and Riverside Drive: 400 S to Pioneer Crossing	\$6,847,753	27%	\$1,865,000
E-35	400 West Connection: Crossroads Blvd to Aspen Hills	\$1,132,963	27%	\$309,000
E-36	Pony Express 5 Lane Widening: Redwood to Eagle Mountain	\$232,500	18%	\$42,000
E-37	Redwood Widening Betterments: 400 S to Village Pkwy	\$967,582	18%	\$175,000
E-38	Foothill Blvd Widening: Fairfield Rd to Talus Ridge	\$278,165	27%	\$76,000
E-39	Saratoga Road Widening	\$99,704	27%	\$27,000
E-40	Dalmore Meadows Sidewalk	\$53,000	18%	\$10,000
E-41	2015 Transportation Master Plan	\$32,924	100%	\$33,000
E-42	2015 Transportation CFP, IFFP, IFA	\$15,000	100%	\$15,000
E-43	Foothill Blvd Conceptual Design and Cost Est	\$64,901	27%	\$18,000
E-44	2018 Transportation Master Plan	\$16,450	100%	\$16,000
E-45	2018 Transportation IFFP Update	\$16,450	100%	\$16,000
E-46	Foothill Extension Design: Pony Express to Lariat	\$703,401	27%	\$192,000
	Total	\$33,191,017		\$7,991,000

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 31 projects necessitated by new development at a total cost of **\$198,461,000**. However, eight of the projects will be partially funded by Mountain Association of Governments (MAG). The City is only responsible for costs of **\$72,159,000**.

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 **\$17,454,000** 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, p.16 of the IFFP as shown below.

Table 6: City Proportion of New Construction Costs

Project	Location	Total Price (with Inflation)	Funding Source	Saratoga Springs Total (with Inflation)
1A	Foothill Blvd (East Frontage Rd): Pony Express to Lariat Blvd	\$16,349,000	Saratoga /MAG	\$6,349,000
1B	Foothill Blvd: Corridor Preservation	\$4,451,000	Saratoga	\$1,826,000
2	Pony Express Pkwy Extension: Redwood Rd (SR-68) to Jordan River	\$19,529,000	Saratoga /MAG	\$9,529,000
3	Pony Express Pkwy Extension: Jordan River Bridge	\$5,868,000	Saratoga /MAG	\$397,000
4A	Pony Express Pkwy Extension: Jordan River to Saratoga Rd, Phase 1	\$1,189,000	Saratoga /MAG	\$547,000
4B	Pony Express Pkwy Extension: Jordan River to Saratoga Rd, Phase 2	\$7,139,000	Saratoga /MAG	\$483,000
11	Crossroads Blvd: Commerce Dr to East City Border, Signal: Crossroads and 400 East/Riverside Dr	\$3,386,000	Saratoga /MAG	\$229,000
12	400 East: Crossroads Blvd to North City Border	\$1,864,000	Saratoga /MAG	\$126,000
14	Saratoga Rd: Pony Express Pkwy to Pioneer Crossing (SR-145) (Saratoga Springs Portion)	\$4,256,000	Saratoga	\$4,256,000
I12	Roundabout: Talus Ridge Dr ad Mt. Saratoga Blvd	\$990,000	Saratoga	\$990,000
21	Wild Blossom Blvd: West City Border to Mountain View Corridor	\$19,014,000	Saratoga	\$7,802,000
22	Aster Dr: Chianti St to Cory B Wride Memorial Hwy (SR-73)	\$12,940,000	Saratoga /MAG	\$876,000
23	Mt. Saratoga Blvd: Cory B Wride Memorial Hwy to Quail Hill Rd	\$13,537,000	Saratoga	\$3,267,000
25	Medical Dr: Foothill Blvd to Pioneer Crossing (SR-145)	\$6,417,000	Saratoga	\$1,549,000
26	Riverside Dr: End of Existing to Pioneer Crossing (SR-145)	\$7,725,000	Saratoga	\$1,865,000
27	Market St: Redwood Rd (SR-68) to Riverside Dr	\$1,137,000	Saratoga	\$274,000
28	Market St: Foothill Blvd to Pioneer Crossing (SR-145)	\$7,434,000	Saratoga	\$1,794,000
I21	Traffic Signal: Crossroads Blvd and 1400 North	\$663,000	Saratoga	\$663,000
30	550 North: 500 East to Saratoga Rd	\$7,352,000	Saratoga	\$1,775,000
32	400 North: Redwood Rd (SR-68) to Riverside Dr	\$1,110,000	Saratoga	\$268,000
I24	Traffic Signal: Wild Blossom Blvd and Chianti St	\$696,000	Saratoga	\$696,000
35A	Old Farm Rd: Founders Blvd to Project 39	\$6,677,000	Saratoga	\$1,612,000
38A	800 South (Approx.): Foothill Blvd to New Collector (Project 39)	\$16,287,000	Saratoga	\$6,683,000
39	New Collector: Redwood Rd (SR-68) to Hidden Valley Dr (Project 38A)	\$5,934,000	Saratoga	\$1,432,000
40A	Ensign Dr: Foothill Blvd to Light House Dr	\$4,827,000	Saratoga	\$1,165,000
40B	Ensign Dr: Herald Dr to 800 South (approx.)	\$1,693,000	Saratoga	\$409,000
45	Lariat Blvd: End of Existing to Foothill Blvd	\$1,068,000	Saratoga	\$160,000
50	New Collector: Bonneville Dr to Wildlife Blvd	\$4,999,000	Saratoga	\$1,207,000
53	Harvest Hills Blvd: Right-turn lane at Mountain View	\$596,000	Saratoga	\$596,000
13A	Foothill Blvd: Cory B Wride Memorial Hwy (SR-73) to Pony Express	\$12,839,000	Saratoga	\$12,839,000
I26	Traffic Signal: Foothill Blvd & 400 North	\$495,000	Saratoga	\$495,000
	Total	\$198,461,000		\$72,159,000

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
1A	Foothill Blvd (East Frontage Rd): Pony Express to Lariat Blvd	15%	10%	37%	37%	\$2,380,000
1B	Foothill Blvd: Corridor Preservation	15%	10%	37%	37%	\$684,000
2	Pony Express Pkwy Extension: Redwood Rd (SR-68) to Jordan River	27%	28%	25%	20%	\$1,917,000
3	Pony Express Pkwy Extension: Jordan River Bridge	6%	38%	12%	44%	\$176,000
4A	Pony Express Pkwy Extension: Jordan River to Saratoga Rd, Phase 1	45%	29%	2%	23%	\$126,000
4B	Pony Express Pkwy Extension: Jordan River to Saratoga Rd, Phase 2	45%	29%	2%	23%	\$111,000
11	Crossroads Blvd: Commerce Dr to East Border, Signal: Crossroads and 400 East/Riverside Dr	27%	13%	45%	15%	\$34,000
12	400 East: Crossroads Blvd to North City Border	17%	6%	62%	15%	\$18,000
14	Saratoga Rd: Pony Express Pkwy to Pioneer Crossing (SR-145) (Saratoga Springs Portion)	44%	16%	27%	13%	\$564,000
I12	Roundabout: Talus Ridge Dr ad Mt. Saratoga Blvd	12%	20%	51%	16%	\$161,000
21	Wild Blossom Blvd: West City Border to Mountain View Corridor	2%	1%	70%	26%	\$2,061,000
22	Aster Dr: Chianti St to Cory B Wride Memorial Hwy (SR-73)	4%	3%	62%	31%	\$273,000
23	Mt. Saratoga Blvd: Cory B Wride Memorial Hwy (SR-73) to Quail Hill Rd	12%	35%	23%	30%	\$970,000
25	Medical Dr: Foothill Blvd to Pioneer Crossing (SR-145)	2%	1%	75%	22%	\$347,000
26	Riverside Dr: End of Existing to Pioneer Crossing (SR-145)	34%	5%	46%	15%	\$276,000
27	Market St: Redwood Rd (SR-68) to Riverside Dr	21%	5%	65%	10%	\$27,000
28	Market St: Foothill Blvd to Pioneer Crossing (SR-145)	23%	1%	59%	17%	\$309,000
I21	Traffic Signal: Crossroads Blvd and 1400 North	1%	1%	44%	53%	\$354,000
30	550 North: 500 East to Saratoga Rd	1%	1%	95%	3%	\$57,000
32	400 North: Redwood Rd (SR-68) to Riverside Dr	1%	1%	95%	3%	\$9,000
I24	Traffic Signal: Wild Blossom Blvd and Chianti St	1%	1%	44%	53%	\$372,000
35A	Old Farm Rd: Founders Blvd to Project 39	1%	1%	94%	4%	\$64,000
38A	800 South (Approx.): Foothill Blvd to New Collector (Project 39)	2%	1%	89%	8%	\$517,000
39	New Collector: Redwood Rd (SR-68) to Hidden Valley Dr (Project 38A)	2%	1%	82%	15%	\$208,000
40A	Ensign Dr: Foothill Blvd to Light House Dr	1%	1%	91%	7%	\$87,000
40B	Ensign Dr: Herald Dr to 800 South (approx.)	2%	1%	85%	12%	\$50,000
45	Lariat Blvd: End of Existing to Foothill Blvd	14%	3%	63%	20%	\$32,000
50	New Collector: Bonneville Dr to Wildlife Blvd	5%	1%	62%	32%	\$388,000
53	Harvest Hills Blvd: Right-turn lane at Mountain View	13%	23%	43%	22%	\$129,000
13A	Foothill Blvd: Cory B Wride Memorial Hwy (SR-73) to Pony Express	9%	39%	16%	36%	\$4,666,000
I26	Traffic Signal: Foothill Blvd & 400 North	24%	7%	51%	18%	\$87,000
Total						\$17,454,000

The cost of **\$17,454,000** can be partially offset by the fund balance of **\$3,265,291** which can be used for the cost of some of the capital improvements.

PM peak hour trip demand citywide is projected to grow from 10,628 trips in 2020 to 21,430 trips in 2030 – an increase of 10,802 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 42 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	\$33,191,017
Excess Capacity Consumed 2020-2030, Actual Cost	\$7,991,000
Growth in PM Peak Hour Trips, 2020-2030	10,802
Excess Capacity Cost per PM Peak Hour Trip	\$739.77

New Construction Cost Calculation

The City's Transportation IFFP identifies a total of 31 projects necessitated by new development at a total cost of **\$198,461,000**. However, three of the projects will be partially funded by Mountain Association of Governments (MAG). The City will be responsible for **\$72,159,000** 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 **\$17,454,000** of the total new construction costs. The City will offset **\$3,265,291** of the cost which leaves **\$14,188,709** 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	Amount
New Construction Costs - Impact Fee Eligible	\$14,188,709
Growth in PM Peak Hour Trips, 2020-2030	10,802
New Construction Cost per PM Peak Hour Trip	\$1,313.53

Summary of Impact Fees

Table 10: Summary of Gross Impact Fee

Summary of Cost per PM Peak Hour Trip	Amount
Excess Capacity	\$739.77
New Construction	\$1,313.53
Total	\$2,053.30

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, additional reductions for pass-by trips are provided as reflected in the table below.³

Table 11: 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	51%
Pharmacy/Drugstore without Drive-Thru Window	53%
Pharmacy/Drugstore with Drive-Thru Window	49%
Furniture Store	53%
Drive-In Bank	35%
Restaurant, Sit-Down	44%
Fast Food without Drive-Through Window	43%
Fast Food with Drive Through Window	50%
Gasoline/Service Station	42%
Gasoline/Service Station with Convenience Store	56%

1 Transportation IFFP, p. 2.

2 Transportation IFFP, p. 3.

3 ITE Trip Generation Handbook, 3rd ed.

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 (**\$2,053.30**) 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 12: Summary of Maximum Impact

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		\$411
140	General Manufacturing	1000 Sq. Feet Gross Floor Area	0.67		\$688
151	Mini-Warehouse	1000 Sq. Feet Gross Floor Area	0.17		\$175
210	Single-Family Detached Housing	Dwelling Unit	0.99		\$1,016
220	Multi-Family / (Low-Rise 1-2 Levels)	Dwelling Unit	0.56		\$575
221	Multi-Family (Mid-Rise 3-10 Levels)	Dwelling Unit	0.44		\$452
222	Multi-Family (High-Rise >10 Levels)	Dwelling Unit	0.36		\$370
240	Mobile Home / RV Park	Occupied Dwelling Unit	0.59		\$606
254	Assisted Living Center	Bed	0.26		\$267
310	Hotel	Room	0.6		\$616
444	Movie Theater < 10 Screens	1000 Sq. Feet Gross Floor Area	6.17		\$6,334
445	Movie Theater > 10 Screens	1000 Sq. Feet Gross Floor Area	4.91		\$5,041
492	Health/Fitness Club	1000 Sq. Feet Gross Floor Area	3.45		\$3,542
520	Elementary School	1000 Sq. Feet Gross Floor Area	1.37		\$1,407
522	Middle School / Junior High School	1000 Sq. Feet Gross Floor Area	1.19		\$1,222
530	High School	1000 Sq. Feet Gross Floor Area	0.97		\$996
534	Private School (K-8)	Students	0.26		\$267
560	Church	1000 Sq. Feet Gross Floor Area	0.49		\$503
565	Day Care Center	1000 Sq. Feet Gross Floor Area	11.12		\$11,416
590	Library	1000 Sq. Feet Gross Floor Area	8.16		\$8,377
610	Hospital	1000 Sq. Feet Gross Floor Area	0.97		\$996
710	General Office Building	1000 Sq. Feet Gross Floor Area	1.15		\$1,181
720	Medical-Dental Office Building	1000 Sq. Feet Gross Floor Area	3.46		\$3,552
730	Government Office Building	1000 Sq. Ft. Gross Floor Area	1.71		\$1,756
770	Business Park	1000 Sq. Feet Gross Floor Area	0.42		\$431
812	Building Material and Lumber Store	1000 Sq. Feet Gross Floor Area	2.06		\$2,115
816	Hardware/Paint Store	1000 Sq. Ft. Gross Floor Area	2.68	26%	\$2,036
817	Nursery (Garden Center)	1000 Sq. Feet Gross Floor Area	6.94		\$7,125
820	Shopping Center / Strip Mall	1000 Sq. Feet Gross Leasable Area	3.81	34%	\$2,582
841	Automobile Sales	1000 Sq. Feet Gross Floor Area	3.75		\$3,850
848	Tire Store	1000 Sq. Feet Gross Floor Area	3.98	28%	\$2,942
850	Supermarket	1000 Sq. Feet Gross Floor Area	9.24	36%	\$6,071
851	Convenience Market	1000 Sq. Feet Gross Floor Area	49.11	51%	\$24,705

Table 12 Continued

Code	Category	Units; Per	ITE Trips	Additional Factor - Pass-By Factors	Maximum Fee
880	Pharmacy/Drugstore without Drive-Thru Window	1000 Sq. Ft. Gross Floor Area	8.51	53%	\$4,106
881	Pharmacy/Drugstore with Drive-Thru Window	1000 Sq. Ft. Gross Floor Area	10.29	49%	\$5,388
890	Furniture Store	1000 Sq. Ft. Gross Floor Area	0.52	53%	\$251
911	Walk-In Bank	1000 Sq. Ft. Gross Floor Area	12.13		\$12,453
912	Drive-in Bank	1000 Sq. Feet Gross Floor Area	20.45	35%	\$13,647
918	Hair Salon	1000 Sq. Feet Gross Floor Area	1.45		\$1,489
932	Restaurant, Sit-Down	1000 Sq. Feet Gross Floor Area	9.77	44%	\$5,617
933	Fast Food without Drive-Through Window	1000 Sq. Feet Gross Floor Area	28.34	43%	\$16,584
934	Fast Food with Drive Through Window	1000 Sq. Feet Gross Floor Area	32.67	5%	\$31,864
942	Auto Care Center	1000 Sq. Feet Gross Leasable Area	3.11		\$3,193
944	Gasoline/Service Station	Fueling Position	14.03	42%	\$8,354
945	Gasoline/Service Station with Convenience Store	1000 Sq. Feet Gross Floor Area	88.35	56%	\$39,910
947	Self Service Car Wash	Wash Stall	5.54		\$5,688
948	Automated Car Wash	1000 Sq. Feet Gross Floor Area	14.2		\$14,578

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

Avenue Consultants 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.