

## ***APPENDIX B***

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*TRAFFIC STUDY*

# Park City Mountain Resort

## Traffic Impact Study



## Park City, Utah

August 29, 2019

UT19-1481

## EXECUTIVE SUMMARY

This study addresses the traffic impacts associated with the proposed Park City Mountain Resort (PCMR) development located in Park City, Utah. The proposed project is located on the west side of Empire Avenue, adjacent to the existing PCMR parcel.

Included within the analyses for this study are the traffic operations and recommended mitigation measures for existing conditions and plus project conditions (conditions after development of the proposed project) at key intersections and roadways near the site. Future 2024 and 2040 conditions were also analyzed. The evening peak hour level of service (LOS) was computed for each study intersection. The results of this analysis are shown in Table ES-1. Recommended storage lengths are shown in Table ES-2.

**TABLE ES-1**  
**LOS Analysis - Evening Peak Hour**  
**Park City Mountain Resort TIS**

Intersection	Level of Service (Sec/Veh) <sup>1</sup>				
	Existing (2019) Background	Future (2024)		Future (2040)	
		Background	Plus Project	Background	Plus Project
Empire Ave / Park Ave	D (42.7)	D (54.0)	E (63.5)	F (>80)	F (>80)
Silver King Dr / Empire Ave	F (>50) / EB	A (9.1)	A (3.7)	B (11.0)	A (3.9)
Lowell Ave / Silver King Dr	F (>50) / NB	A (5.8) / NB	A (3.5)	C (16.4) / NB	A (5.3)
Three Kings Dr & NW E Access / Silver King Dr	A (4.0) / SB	A (3.8) / SB	A (4.3) / SB	A (3.8) / SB	A (4.9) / SB
Shadow Ridge Rd / Empire Ave	A (7.2) / NEB	A (8.8) / NEB	A (8.3) / NEB	C (18.0) / NEB	B (13.5) / NEB
Shadow Ridge Rd / Lowell Ave	A (6.9) / EB	A (7.5) / EB	A (7.1) / EB	A (8.4) / EB	B (12.5) / EB
14th Street / Empire Ave	B (10.1) / SWB	B (12.3) / SWB	A (4.4) / SWB	C (19.1) / SWB	A (5.9) / SWB
Manor Way / Empire Ave	A (8.3) / EB	A (9.2) / EB	A (8.7) / NB	B (12.9) / EB	B (11.5) / NB
Manor Way / Lowell Ave	A (6.8)	A (7.5)	A (6.9) / NB	B (11.9)	A (8.6) / NB
NE E Access / Silver King Dr	-	-	A (4.1) / NB	-	A (9.3) / NB
North B Access / Shadow Ridge Rd	-	-	A (2.8) / NB	-	A (8.7) / NB
South B Access / Manor Way	-	-	A (10.0) / SB	-	B (11.9) / SB
East B Access / Empire Ave	-	-	B (10.3) / EB	-	B (13.2) / EB
West D Access / Lowell Avenue	-	-	-	-	B (12.7) / SWB
C Access / Lowell Avenue	-	-	-	-	A (7.9) / EB
East D Access / Empire Avenue	-	-	-	-	D (33.6) / EB

1. Intersection LOS and delay (seconds/vehicle) values represent the overall intersection average for roundabout, signalized, all-way stop controlled intersections and the worst approach for all other unsignalized intersections.

Source: Hales Engineering, August 2019

TABLE ES-2 Recommended Storage Lengths Park City Mountain Resort TIS								
Intersection	Storage Length (feet)							
	Northbound		Southbound		Eastbound		Westbound	
	LT	RT	LT	RT	LT	RT	LT	RT
Empire Ave / Park Ave	<b>300</b>	-	<b>350</b>	<b>250</b>	<b>550</b>	-	<b>250</b>	-

Source: Hales Engineering, August 2019

## SUMMARY OF KEY FINDINGS/RECOMMENDATIONS

The following is a summary of key findings and recommendations:

### Existing (2019) Background

- Hales Engineering adjusted turning movement counts collected on Saturday, February 18, 2017 to a peak winter condition by increasing volumes by 14 percent consistent with a Utah Department of Transportation (UDOT) Automatic Traffic data Recorder (ATR) located on SR-224. Traffic from the proposed King’s Crown and Woodside Park projects were also added.
- The Silver King Drive / Empire Avenue (LOS F) and Lowell Avenue / Silver King Drive (LOS F) intersections operate poorly during the evening peak hour. The Empire Avenue / Park Avenue intersection operates at LOS D during the morning peak hour, but very close to LOS E. Excessive southbound queues exist at the Empire Avenue / Park Avenue intersection during the morning peak hour.
  - Recommendation: UDOT should plan to widen Park Avenue in the future to provide space for two left-turn lanes, a through lane, and a channelized right-turn pocket on the southbound approach of Empire Avenue / Park Avenue.
    - It is anticipated that a left-turn lane and a shared through-left lane would be inefficient and result in a worse LOS than a single left-turn lane, as would a dual left-turn lanes, and a shared through-right lane, in the southbound direction.
  - Recommendation: That the southbound right-turn movement of the Empire Avenue / Park Avenue intersection be channelized with striping or a small raised island to reduce southbound queueing.
  - Recommendation: That the westbound left-turn phasing at the Empire Avenue / Park Avenue intersection be permissive-protected instead of protected.
  - Recommendation: That a roundabout be installed at the Silver King Drive / Empire Avenue intersection to reduce delays during the evening peak hour.

### Project Conditions

- The development will consist of condominiums, hotel rooms, meeting space, and retail space. It was assumed that Parcels B and E would be completed by 2024 and that Parcels C and D would be completed by 2040.
- Hales Engineering did preliminary traffic analyses of several internal roadway configuration alternatives. It was determined that the best system would be a one-way loop on Lowell Avenue, Manor Way, Shadow Ridge Road, and Empire Avenue, two-way travel on Silver King Drive, and roundabouts at the Silver King Drive / Empire Avenue and Lowell Avenue / Silver King Drive intersections.
- It should be recognized that there are currently multiple ways to access the resort including Park City Transit, Uber, Lyft, Black Car service, drop-offs, etc. On the north end of the site, along Lowell Avenue in the southbound direction, a large pull out area is planned for the Uber, Lyft, Black Car service and skier drop-offs. On the south end of the site in front of The Lodge (current bus stop), there is enough space to have 2 buses stop for boarding and alighting, and frequently buses accidentally block one another. The development team has been working to provide a more efficient bus drop off area utilizing a sawtooth arrangement similar to the intermodal hub at Kimball Junction, and will be providing two additional bus pull-outs, creating four total pull outs and enhancing the existing and increasing the future transit opportunities.
- Bike lanes have been added within the project.
- Pedestrian enhancements have been added to the site with multiple strategically placed crosswalks with one raised crossing from the plaza lawn to the ski beach. The one-way circulation patterns for traffic will enhance the pedestrian experience and safety to cross the roadway.

### Future (2024) Background

- It was assumed traffic volumes on internal PCMR roadways would increase by 1% per year. It was assumed that other turning movements at the Empire Avenue / Park Avenue intersection would increase by 2% per year between 2019 and 2024 based on UDOT traffic volume historical data.
- All study intersections are anticipated to operate at an acceptable LOS during the evening peak hour. However, the Empire Avenue / Park Avenue intersection is very close to operating at LOS E.

### Future (2024) Plus Project

- Based on the traffic volumes it is anticipated that approximately 730 trips during the evening peak hour were from day skiers. These trips were routed to the day skier parking lots at Parcel B and Parcel E.

- The Empire Avenue / Park Avenue intersection (LOS E) is anticipated to operate poorly during the evening peak hour.
  - *Recommendation:* That Empire Avenue be re-stripped with a five-lane cross-section between Silver King Drive and Park Avenue to accommodate 2 full left-turn storage lanes.

#### Future (2040) Background

- It was assumed that all traffic volumes would increase by 1% per year between 2024 and 2040 to obtain future (2040) background volumes.
- It was assumed that dual left-turn lanes, a through lane, and a right-turn pocket were installed at the southbound approach of Empire Avenue / Park Avenue.
- The Empire Avenue / Park Avenue intersection (LOS F) is anticipated to operate poorly during the evening peak hour.
  - *Recommendation:* That UDOT consider channelizing the westbound right-turn movement or an innovative intersection. Continuing to promote transit and active transportation will also be key in reducing the anticipated delays.

#### Future (2040) Plus Project

- The Empire Avenue / Park Avenue intersection (LOS F) is anticipated to operate poorly during the evening peak hour.

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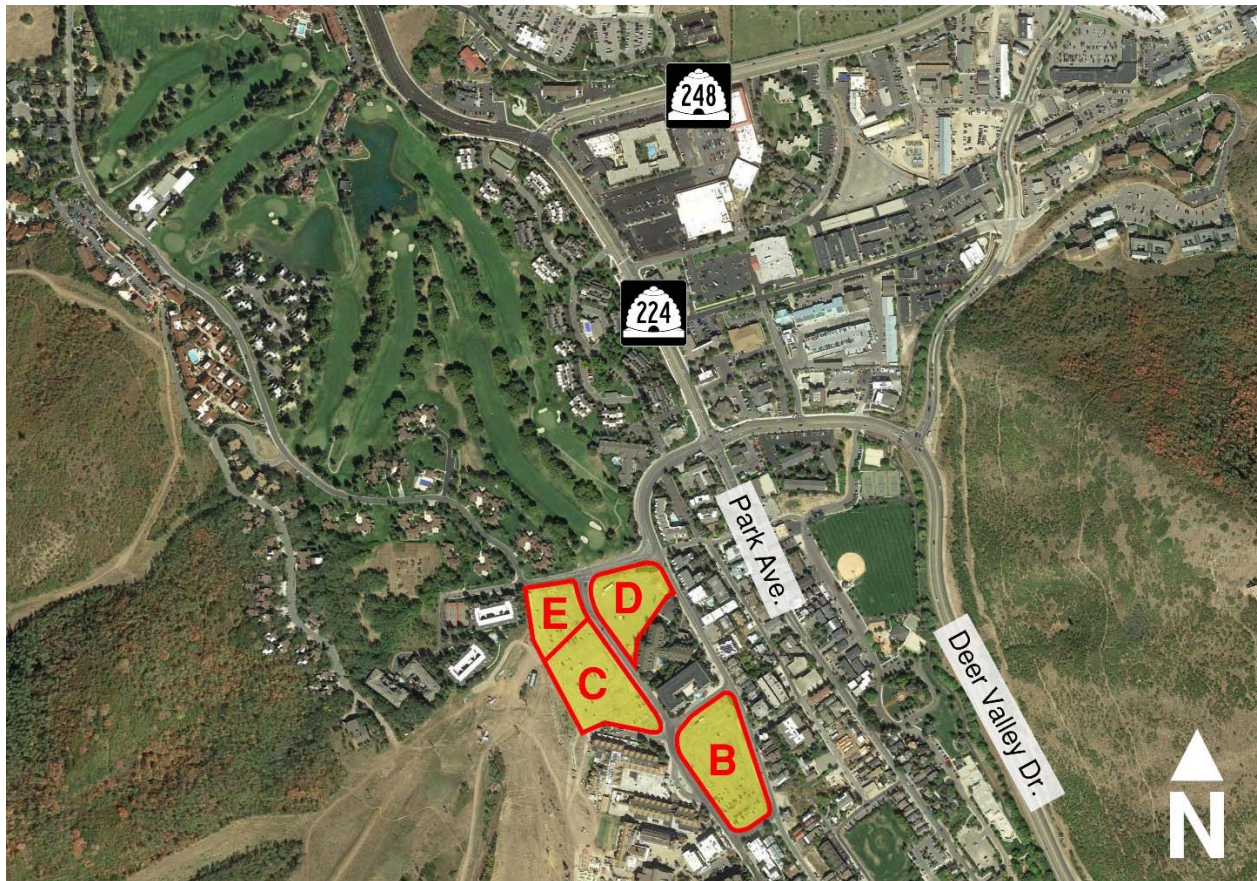
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## I. INTRODUCTION

### A. Purpose

This study addresses the traffic impacts associated with the proposed Park City Mountain Resort (PCMR) development located in Park City, Utah. The proposed project is located on the west side of Empire Avenue, adjacent to the existing PCMR parcel. Figure 1 shows a vicinity map of the proposed development.

Included within the analyses for this study are the traffic operations and recommended mitigation measures for existing conditions and plus project conditions (conditions after development of the proposed project) at key intersections and roadways near the site. Future 2024 and 2040 conditions were also analyzed.



**Figure 1: Vicinity map showing the project location in Park City, Utah**

## **B. Scope**

This study was scoped to evaluate the traffic operational performance impacts of the project on the following intersections:

- Empire Ave & Deer Valley Dr / Park Ave
- Silver King Dr / Empire Ave
- Lowell Ave / Silver King Dr
- Three Kings Dr / Silver King Dr
- Shadow Ridge Rd / Empire Ave
- Shadow Ridge Rd / Lowell Ave
- 14th Street / Empire Ave
- Manor Way / Empire Ave
- Manor Way / Lowell Ave
- Project Accesses (8)

## **C. Analysis Methodology**

Level of service (LOS) is a term that describes the operating performance of an intersection or roadway. LOS is measured quantitatively and reported on a scale from A to F, with A representing the best performance and F the worst. Table 1 provides a brief description of each LOS letter designation and an accompanying average delay per vehicle for both signalized and unsignalized intersections. Figure 2 provides a visual representation of each LOS letter designation.

The *Highway Capacity Manual* (HCM), 6<sup>th</sup> Edition, 2016 methodology was used in this study to remain consistent with “state-of-the-practice” professional standards, which has quantitative evaluations for signalized and unsignalized intersections. For signalized and all-way stop intersections, the LOS is provided for the overall intersection (weighted average of all approach delays). For all other unsignalized intersections, LOS is reported based on the worst approach.

Using Synchro/SimTraffic software, which follow the HCM methodology, the peak hour LOS was computed for each study intersection. Multiple runs of SimTraffic were used to provide a statistical evaluation of the interaction between the intersections. The detailed LOS reports are provided in Appendix A. Hales Engineering also calculated the 95<sup>th</sup> percentile queue lengths for the study intersections using SimTraffic. The detailed queue length reports are provided in Appendix C.

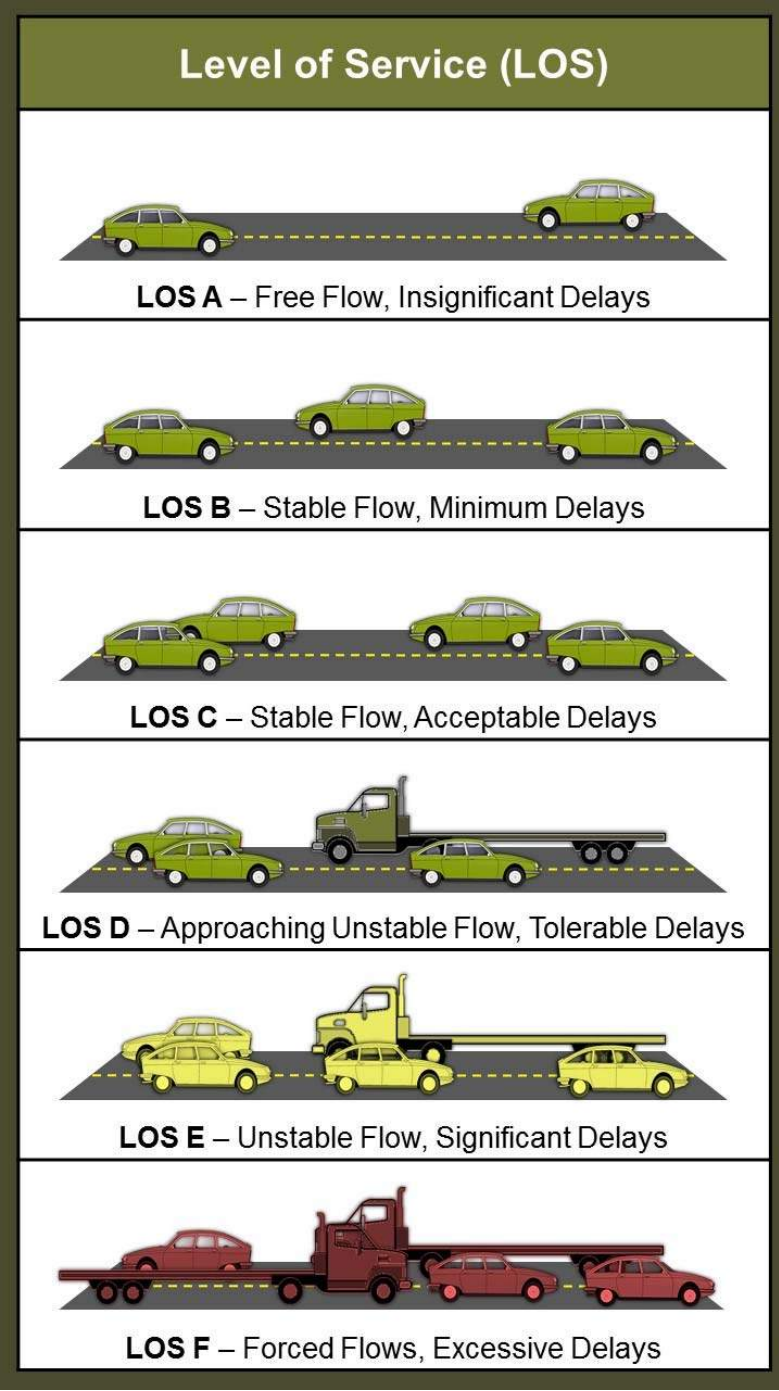
## **D. Level of Service Standards**

For the purposes of this study, a minimum acceptable intersection performance for each of the study intersections was set at LOS D. If levels of service E or F conditions exist, an explanation and/or mitigation measures will be presented. An LOS D threshold is consistent with “state-of-the-practice” traffic engineering principles for urbanized areas.

**Table 1: Level of Service Description**

Level of Service	Description of Traffic Conditions	Average Delay (seconds/vehicle)
<b>Signalized Intersections</b>		<b>Overall Intersection</b>
A	Extremely favorable progression and a very low level of control delay. Individual users are virtually unaffected by others in the traffic stream.	$0 \leq 10.0$
B	Good progression and a low level of control delay. The presence of other users in the traffic stream becomes noticeable.	$> 10.0$ and $\leq 20.0$
C	Fair progression and a moderate level of control delay. The operation of individual users becomes somewhat affected by interactions with others in the traffic stream.	$>20.0$ and $\leq 35.0$
D	Marginal progression with relatively elevated levels of control delay. Operating conditions are noticeably more constrained.	$> 35.0$ and $\leq 55.0$
E	Poor progression with unacceptably elevated levels of control delay. Operating conditions are at or near capacity.	$> 55.0$ and $\leq 80.0$
F	Unacceptable progression with forced or breakdown operating conditions.	$> 80.0$
<b>Unsignalized Intersections</b>		<b>Worst Approach</b>
A	Free Flow / Insignificant Delay	$0 \leq 10.0$
B	Stable Operations / Minimum Delays	$>10.0$ and $\leq 15.0$
C	Stable Operations / Acceptable Delays	$>15.0$ and $\leq 25.0$
D	Approaching Unstable Flows / Tolerable Delays	$>25.0$ and $\leq 35.0$
E	Unstable Operations / Significant Delays Can Occur	$>35.0$ and $\leq 50.0$
F	Forced Flows / Unpredictable Flows / Excessive Delays Occur	$> 50.0$

Source: Hales Engineering Descriptions, based on the *Highway Capacity Manual (HCM)*, 6<sup>th</sup> Edition, 2016 Methodology (Transportation Research Board)



**Figure 2: Visual representation of the LOS letter designations**

## II. EXISTING (2019) BACKGROUND CONDITIONS

### A. Purpose

The purpose of the background analysis is to study the intersections and roadways during the peak travel periods of the day with background traffic and geometric conditions. Through this analysis, background traffic operational deficiencies can be identified, and potential mitigation measures recommended. This analysis provides a baseline condition that may be compared to the build conditions to identify the impacts of the development.

### B. Roadway System

The primary roadways that will provide access to the project site are described below:

Empire Avenue – is a city-maintained roadway which is classified by the Park City Transportation Master Plan (2011) as a commercial collector roadway. The roadway has one travel lane in each direction. The posted speed limit is 25 mph in the study area.

Silver King Drive – is a city-maintained roadway which is classified by the Park City Transportation Master Plan (2011) as a minor residential collector roadway. The roadway has one travel lane in each direction. The posted speed limit was assumed to be 25 mph in the study area.

### C. Traffic Volumes

#### *Data Collection*

Hales Engineering obtained turning movement count data for the study intersections from a previous traffic study completed for the King's Crown and Treasure Hill developments in 2017 by Triton Engineering. Saturday morning (8:00 to 10:00 a.m.) and evening (4:00 to 6:00 p.m.) peak period traffic counts were performed at the following intersections:

- Empire Ave & Deer Valley Dr / Park Ave
- Silver King Dr / Empire Ave
- Lowell Ave / Silver King Dr
- Three Kings Dr / Silver King Dr
- Shadow Ridge Rd / Empire Ave
- Shadow Ridge Rd / Lowell Ave
- 14th Street / Empire Ave
- Manor Way / Empire Ave
- Manor Way / Lowell Ave

The counts were performed on Saturday, February 18, 2017 (President's Day Weekend). The morning peak hour was determined to be between 8:15 and 9:15 a.m., and the evening peak hour was determined to be between 4:00 and 5:00 p.m. The evening peak hour volumes were approximately 25% higher than the morning peak hour volumes. Therefore, Hales Engineering focused on the evening peak hour as a worst-case scenario. However, the morning peak hour was also analyzed in existing (2019) background conditions as well.

Hales Engineering collected additional turning movement count data during the same periods on Saturday, June 8, 2019 at the Three Kings Drive / Silver King Drive intersection. Because this count was done during summer, the peak winter volumes from adjacent intersections were carried through to the Three Kings Drive / Silver King Drive intersection.

### ***Volume Adjustments***

Though the counts were collected on what is considered a peak ski day during President's Weekend, it is known that 2017 had less skiers than other years. Therefore, Hales Engineering adjusted the volumes to a peak year condition. According to a nearby UDOT automatic traffic recorder (ATR) on SR-224 (ATR #605), the highest traffic volumes experienced on the Saturday of President's Day Weekend in recent years was on Saturday, February 13, 2016. These volumes in 2016 were 13.3% higher than those observed on Saturday, February 18, 2017. To be conservative, Hales Engineering increased the 2017 volumes by 14% to estimate a peak winter day in the study area.

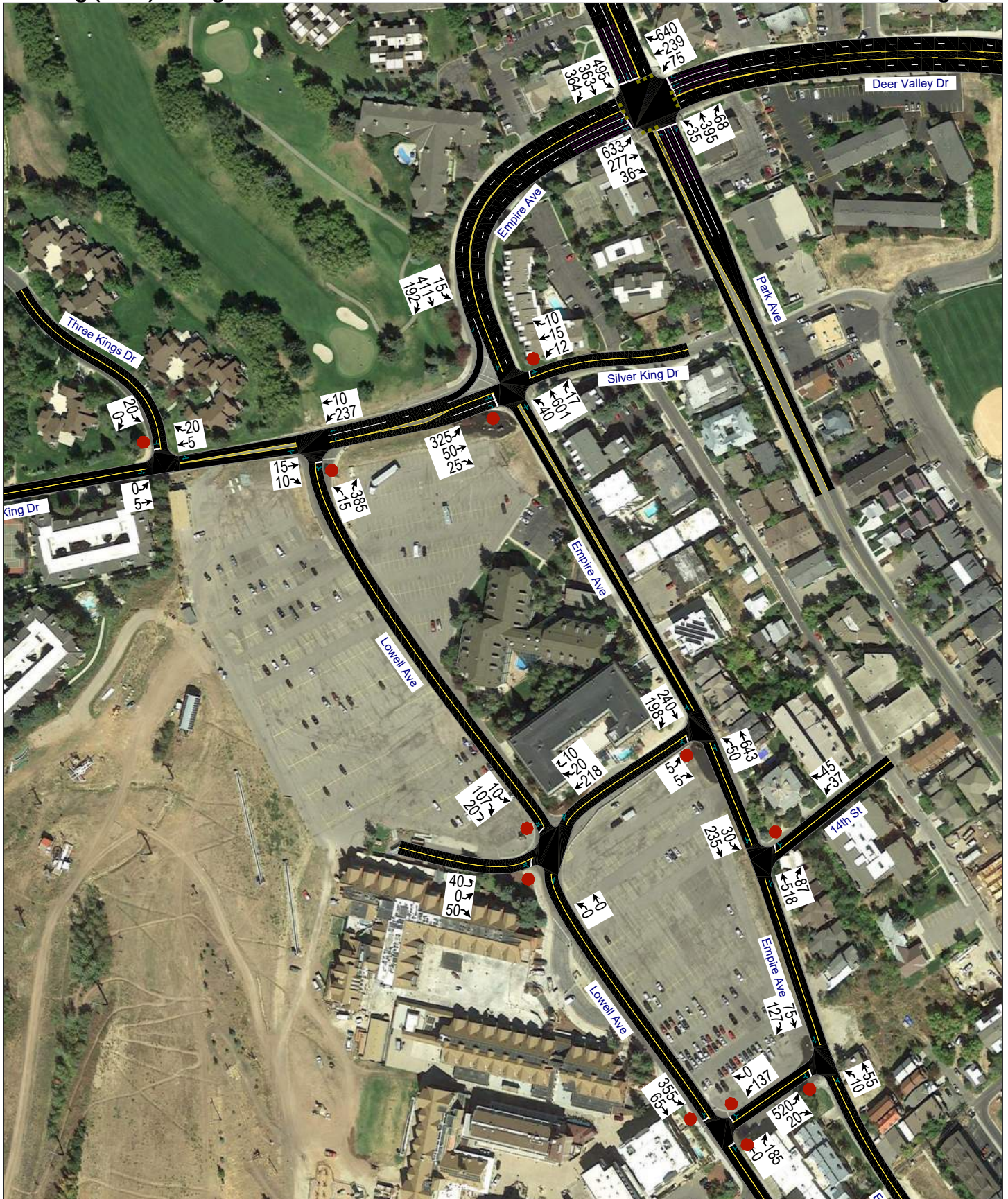
As a comparison, the traffic studies completed by Triton Engineering in 2017 were increased by 12.8% to adjust the volumes to an 85<sup>th</sup> percentile ski day of the 2016-2017 ski season. Therefore, the traffic volumes in this study are higher than those in the previous studies.

### ***Additional Projects***

Hales Engineering also added traffic volumes of other developments in the study area that are either under construction or recently built. The traffic from the following developments were added to the background volumes based on the Institute of Transportation Engineers (ITE), *Trip Generation*, 10<sup>th</sup> Edition, 2017:

- King's Crown (Lowell Avenue, southeast of Manor Way)
- Woodside Park Phase 1 (Park Avenue, southeast of 14<sup>th</sup> Street)
- Woodside Park Phase 2 (Woodside Avenue, southeast of 14<sup>th</sup> Street)

Figure 3 shows the existing (2019) background Saturday evening peak hour volumes at the study intersections with the mentioned adjustments, assumptions, and additions.





## D. Level of Service Analysis

Hales Engineering determined that all study intersections are currently operating at acceptable levels of service during the evening peak hour except for the Silver King Drive / Empire Avenue (LOS F) and Lowell Avenue / Silver King Drive (LOS F) intersections, as shown in Table 2. These results serve as a baseline condition for the impact analysis of the proposed development during existing (2019) conditions.

**Table 2: Existing (2019) Background Evening Peak Hour Level of Service**

Intersection		Worst Approach			Overall Intersection	
Description	Control	Approach <sup>1,3</sup>	Aver. Delay (Sec/Veh) <sup>1</sup>	LOS <sup>1</sup>	Aver. Delay (Sec/Veh) <sup>2</sup>	LOS <sup>2</sup>
Empire Ave / Park Ave	Signal	-	-	-	42.7	D
Silver King Dr / Empire Ave	EB Stop	EB	>50	F	-	-
Lowell Ave / Silver King Dr	NB Stop	NB	>50	F	-	-
Three Kings Dr / Silver King Dr	SB Stop	SB	4.0	A	-	-
Shadow Ridge Rd / Empire Ave	NEB Stop	NEB	7.2	A	-	-
Shadow Ridge Rd / Lowell Ave	SB/EB Stop	EB	6.9	A	-	-
14th Street / Empire Ave	SWB Stop	SWB	10.1	B	-	-
Manor Way / Empire Ave	EB Stop	EB	8.3	A	-	-
Manor Way / Lowell Ave	AWSC	-	-	-	6.8	A

1. This represents the worst approach LOS and delay (seconds / vehicle) and is only reported for non-all-way stop unsignalized intersections.

2. This represents the overall intersection LOS and delay (seconds / vehicle) and is reported for all-way stop and signal-controlled intersections.

3. SB = Southbound approach, etc.

Source: Hales Engineering, August 2019

Hales Engineering also determined that most study intersections are currently operating at acceptable levels of service during the morning peak hour. The Empire Avenue / Park Avenue intersection is operating at LOS D, but very close to LOS E.

## E. Queuing Analysis

Hales Engineering calculated the 95<sup>th</sup> percentile queue lengths for each of the study intersections. The significant 95<sup>th</sup> percentile queue lengths for existing (2019) background conditions during the evening peak hour are shown below:

Empire Ave & Deer Valley Dr / Park Ave

Northbound – 300 feet  
Southbound – 525 feet  
Eastbound – 300 feet  
Westbound – 375 feet

Silver King Dr / Empire Ave

Eastbound – 350 feet

Lowell Ave / Silver King Dr

Northbound – 525 feet

The significant 95<sup>th</sup> percentile queue lengths for existing (2019) background conditions during the morning peak hour are shown below:

Empire Ave & Deer Valley Dr / Park Ave

Northbound – 175 feet  
Southbound – 1,250 feet  
Eastbound – 150 feet  
Westbound – 250 feet

Though the Empire Ave & Deer Valley Dr / Park Ave intersection is operating at an acceptable LOS during both the morning and evening peak hour, there is significant queueing in the southbound direction.

## F. Mitigation Measures

*According to UDOT left-turn guidelines, the southbound left-turn of the Empire Avenue / Park Avenue intersection warrants dual left-turn lanes based on evening peak hour volumes. To avoid having to widen Park Avenue, Hales Engineering considered converting the southbound through lane to a shared through-left lane. This would result in split phasing on the north- and southbound approaches (meaning that same-side left-turn and through vehicles will have a protected green light simultaneously). However, based on preliminary analyses, it is anticipated that split phasing at the intersection would be inefficient and result in a worse LOS. It is recommended that UDOT plan to widen Park Avenue in the future to provide space for two left-turn lanes, a through lane, and a channelized right-turn pocket on the southbound approach.*

It is recommended that the southbound right-turn movement of the Empire Avenue / Park Avenue intersection be channelized with striping or a small raised island to reduce southbound queueing. This movement currently has an overlap green arrow phase. However, it is not anticipated that the overlap phase will be sufficient for the high morning peak hour volumes.



It is recommended that the westbound left-turn phasing at the Empire Avenue / Park Avenue intersection be permissive-protected (yield to opposing through vehicles) instead of protected.

It is recommended that a roundabout be installed at the Silver King Drive / Empire Avenue intersection to reduce delays during the evening peak hour.

### III. PROJECT CONDITIONS

#### A. Purpose

The project conditions discussion explains the type and intensity of development. This provides the basis for trip generation, distribution, and assignment of project trips to the surrounding study intersections defined in Chapter I.

#### B. Project Description

The proposed Park City Mountain Resort development project is located on the west side of Empire Avenue, adjacent to the existing PCMR parcel. The development will consist of condominiums, hotel rooms, meeting space, and retail space. The project is divided into four parcels: B, C, D, and E. It is anticipated that Parcel B will be the first parcel completed, and a parcel will be completed every two years afterward. Therefore, it was assumed that Parcels B and E would be completed by 2024 and that Parcels C and D would be completed by 2040. A concept plan for the proposed development is provided in Appendix B.

The proposed land use by parcel for the development has been identified as follows:

- Parcel B (2024)
  - Multi-family residential units 75 dwelling units
  - Employee units 42 dwelling units
  - Day skier parking 760 parking stalls
- Parcel C (2040)
  - Hotel 249 keys
  - Meeting space 20,000 square feet
  - Retail / services 31,500 square feet
- Parcel D (2040)
  - Multi-family residential units 35 dwelling units
  - Retail 9,600 square feet
- Parcel E (2024)
  - Multi-family residential units 39 dwelling units
  - Retail / services 25,500 square feet
  - Day skier parking 440 day-skier parking

As shown, Parcels B and E will also contain a total of 1,200 day-skier parking stalls, which will be accounted for in the background traffic.

### C. Trip Generation

Trip generation for the development was calculated using a combination of trip generation rates published in the Institute of Transportation Engineers (ITE), *Trip Generation*, 10<sup>th</sup> Edition, 2017, hotel / condo trip generation data collected in the Canyons Resort area, and other data collected by Hales Engineering at meeting space developments.

The data at the Canyons was collected on Saturday, February 17, 2018 (President's Day weekend) at several hotel / condo resorts. The transit reduction at the Canyons was observed to be 3.4%. Based on transit boarding and alighting data provided by Park City staff, the trip reduction due to transit in the PCMR area on Saturday, February 18, 2017 was approximately 3%. Transit ridership has steadily increased by approximately 25% each year. Therefore, the Canyons rates were used directly for this project without adjustment as the transit reductions at both sites are comparable.

Trip generation for the proposed project is included in Table 3. The total trip generation for the development by parcel is as follows:

- Parcel B (2024)
  - Daily Trips: 402
  - Morning Peak Hour Trips: 27
  - Evening Peak Hour Trips: 46
- Parcel C (2040)
  - Daily Trips: 3,450
  - Morning Peak Hour Trips: 295
  - Evening Peak Hour Trips: 355
- Parcel D (2040)
  - Daily Trips: 522
  - Morning Peak Hour Trips: 46
  - Evening Peak Hour Trips: 56
- Parcel E (2024)
  - Daily Trips: 1,094
  - Morning Peak Hour Trips: 100
  - Evening Peak Hour Trips: 111

**Table 3**  
**Park City - Mountain Resort TIS**  
**Trip Generation**

Parcel	Land Use	# of Units	Unit Type	Trip Gen. Rate	Trip Generation		% Entering		Trips		Internal Capture	% Occupied	Net Trips		Total Daily Trips
					Generation	Rate	Entering	Exiting	Entering	Exiting			Entering	Exiting	
<b>Saturday Daily</b>															
B	Condominiums <sup>2</sup>	75	Dwelling Units	6.27	472	50%	50%	236	236	0%	0%	85%	201	201	402
	Hotel <sup>2</sup>	249	Keys	6.27	1,562	50%	50%	781	781	0%	0%	85%	664	664	1,328
C	Meeting Space <sup>3</sup>	20	1,000 sq. ft.	68.80	1,376	50%	50%	688	688	25%	25%	-	516	516	1,032
	Retail (ITE 820) <sup>1</sup>	31.5	1,000 sq. ft.	46.12	1,454	50%	50%	727	727	25%	25%	-	545	545	1,090
D	Condominiums <sup>2</sup>	35	Dwelling Units	6.27	220	50%	50%	110	110	0%	0%	85%	94	94	188
	Retail (ITE 820) <sup>1</sup>	9.6	1,000 sq. ft.	46.12	444	50%	50%	222	222	25%	25%	-	167	167	334
E	Condominiums <sup>2</sup>	39	Dwelling Units	6.27	246	50%	50%	123	123	0%	0%	85%	105	105	210
	Retail (ITE 820) <sup>1</sup>	25.5	1,000 sq. ft.	46.12	1,178	50%	50%	589	589	25%	25%	-	442	442	884
	<b>TOTAL</b>				<b>6,952</b>			<b>3,476</b>	<b>3,476</b>				<b>2,734</b>	<b>2,734</b>	<b>5,468</b>
<b>Saturday AM Peak Hour</b>															
B	Condominiums <sup>2</sup>	75	Dwelling Units	0.41	32	23%	77%	7	25	0%	0%	85%	6	21	27
	Hotel <sup>2</sup>	249	Keys	0.41	104	59%	41%	61	43	0%	0%	85%	52	37	89
C	Meeting Space <sup>3</sup>	20	1,000 sq. ft.	6.50	130	65%	35%	85	46	25%	25%	-	64	35	99
	Retail (ITE 820) <sup>1</sup>	31.5	1,000 sq. ft.	4.50	142	62%	38%	88	54	25%	25%	-	66	41	107
D	Condominiums <sup>2</sup>	35	Dwelling Units	0.41	16	23%	77%	4	12	0%	0%	85%	3	10	13
	Retail (ITE 820) <sup>1</sup>	9.6	1,000 sq. ft.	4.50	44	62%	38%	27	17	25%	25%	-	20	13	33
E	Condominiums <sup>2</sup>	39	Dwelling Units	0.41	16	23%	77%	4	12	0%	0%	85%	3	10	13
	Retail (ITE 820) <sup>1</sup>	25.5	1,000 sq. ft.	4.50	116	62%	38%	72	44	25%	25%	-	54	33	87
	<b>TOTAL</b>				<b>600</b>			<b>348</b>	<b>253</b>				<b>268</b>	<b>200</b>	<b>468</b>
<b>Saturday PM Peak Hour</b>															
B	Condominiums <sup>2</sup>	75	Dwelling Units	0.70	54	63%	37%	34	20	0%	0%	85%	29	17	46
	Hotel <sup>2</sup>	249	Keys	0.70	176	56%	44%	99	77	0%	0%	85%	84	65	149
C	Meeting Space <sup>3</sup>	20	1,000 sq. ft.	6.50	130	35%	65%	46	85	25%	25%	-	35	64	99
	Retail (ITE 820) <sup>1</sup>	31.5	1,000 sq. ft.	4.50	142	52%	48%	74	68	25%	25%	-	56	51	107
D	Condominiums <sup>2</sup>	35	Dwelling Units	0.70	26	63%	37%	16	10	0%	0%	85%	14	9	23
	Retail (ITE 820) <sup>1</sup>	9.6	1,000 sq. ft.	4.50	44	52%	48%	23	21	25%	25%	-	17	16	33
E	Condominiums <sup>2</sup>	39	Dwelling Units	0.70	28	63%	37%	18	10	0%	0%	85%	15	9	24
	Retail (ITE 820) <sup>1</sup>	25.5	1,000 sq. ft.	4.50	116	52%	48%	60	56	25%	25%	-	45	42	87
	<b>TOTAL</b>				<b>716</b>			<b>370</b>	<b>347</b>				<b>295</b>	<b>273</b>	<b>568</b>

1. Based on Institute of Transportation Engineers (ITE) Trip Generation, 10th Edition, 2017  
 2. Based on data collected by Hales Engineering at ski resorts in the Park City area  
 3. Based on data collected by Hales Engineering at other meeting space land uses  
 SOURCE: Hales Engineering, August, 2019

## D. Roadway Concept Development

Hales Engineering worked with the developer through many iterations of roadway concepts in the PCMR area to identify the best configuration for traffic flow and safety. The following is a summary of each alternative that was discussed, and the general results based on an analysis of full-build conditions (without other developments and future background growth):

- Alternative 0: Roundabout at Silver King Drive / Empire Avenue
  - Poor LOS at several project accesses
- Alternative 1: One-way loop except for Silver King Drive and Shadow Ridge Road
  - Poor LOS at Silver King Drive / Empire Avenue and on Shadow Ridge Road
- Alternative 2: One-way loop except for Silver King Drive, Shadow Ridge Road, and Empire Avenue between Silver King Drive and Shadow Ridge Road
  - Poor LOS on Shadow Ridge Road and at several project accesses
- Alternative 3: One-way travel on Lowell Avenue only
  - Poor LOS at several project accesses and Silver King Drive / Empire Avenue
- Alternative 4: One-way loop except for Silver King & roundabout at Silver King Drive / Empire Avenue
  - Heavy eastbound queuing at Empire Avenue / Park Avenue
- Alternative 5: Same as Alternative 4 plus a channelized southbound right-turn at Empire Avenue / Park Avenue and eastbound stop control at Lowell Avenue / Silver King Drive
  - Poor LOS along Silver King Drive
- Alternative 6: Same as Alternative 5 except a roundabout at Lowell Avenue / Silver King Drive

It was assumed that Alternative 6 would be implemented for this project. A concept of Alternative 6 is shown in Figure 4.

## E. Trip Distribution and Assignment

Evening peak hour project traffic was assigned to the roadway network based on existing travel patterns observed during data collection, as shown below:

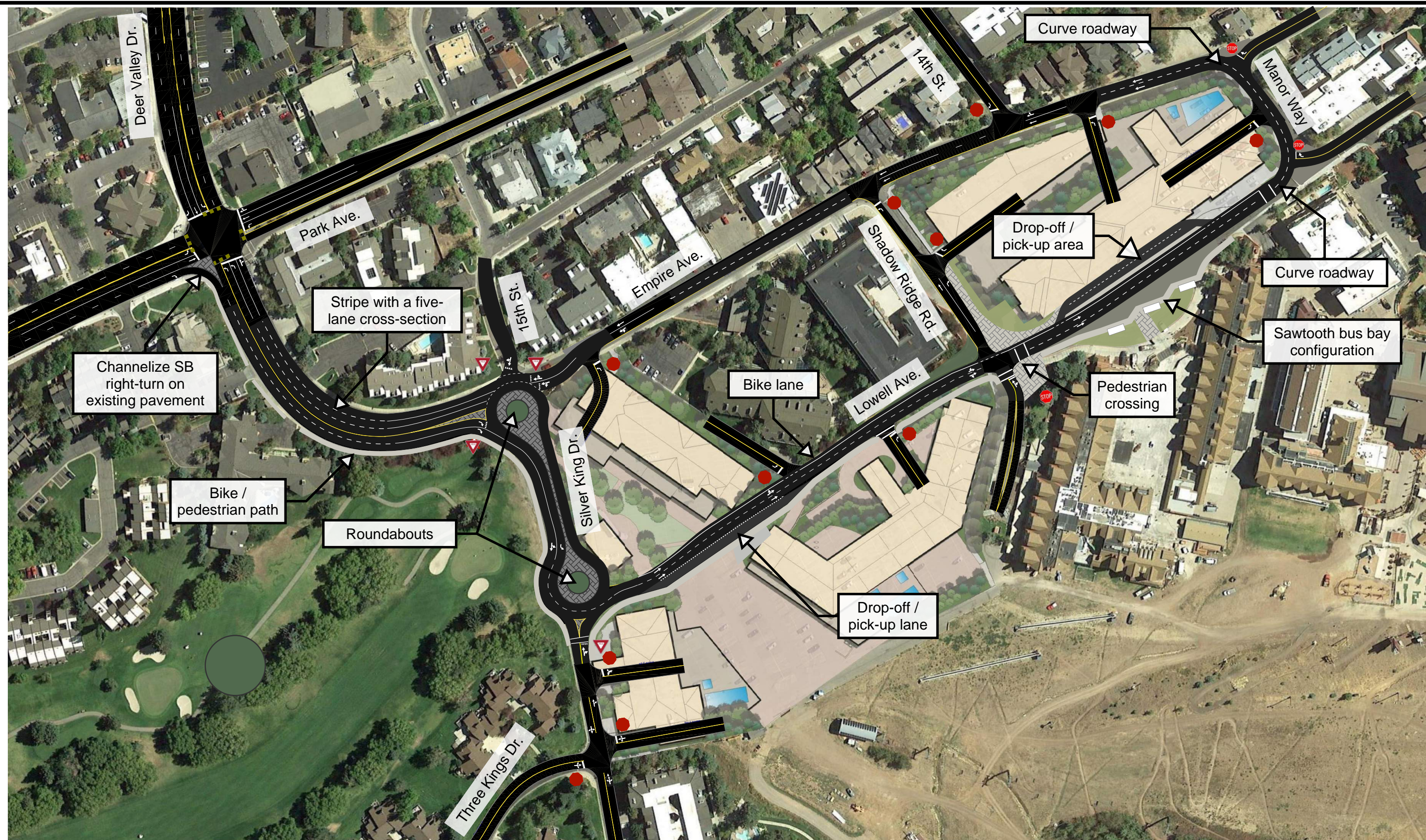
### To Project (Entering)

- 53% North
- 13% South
- 34% East

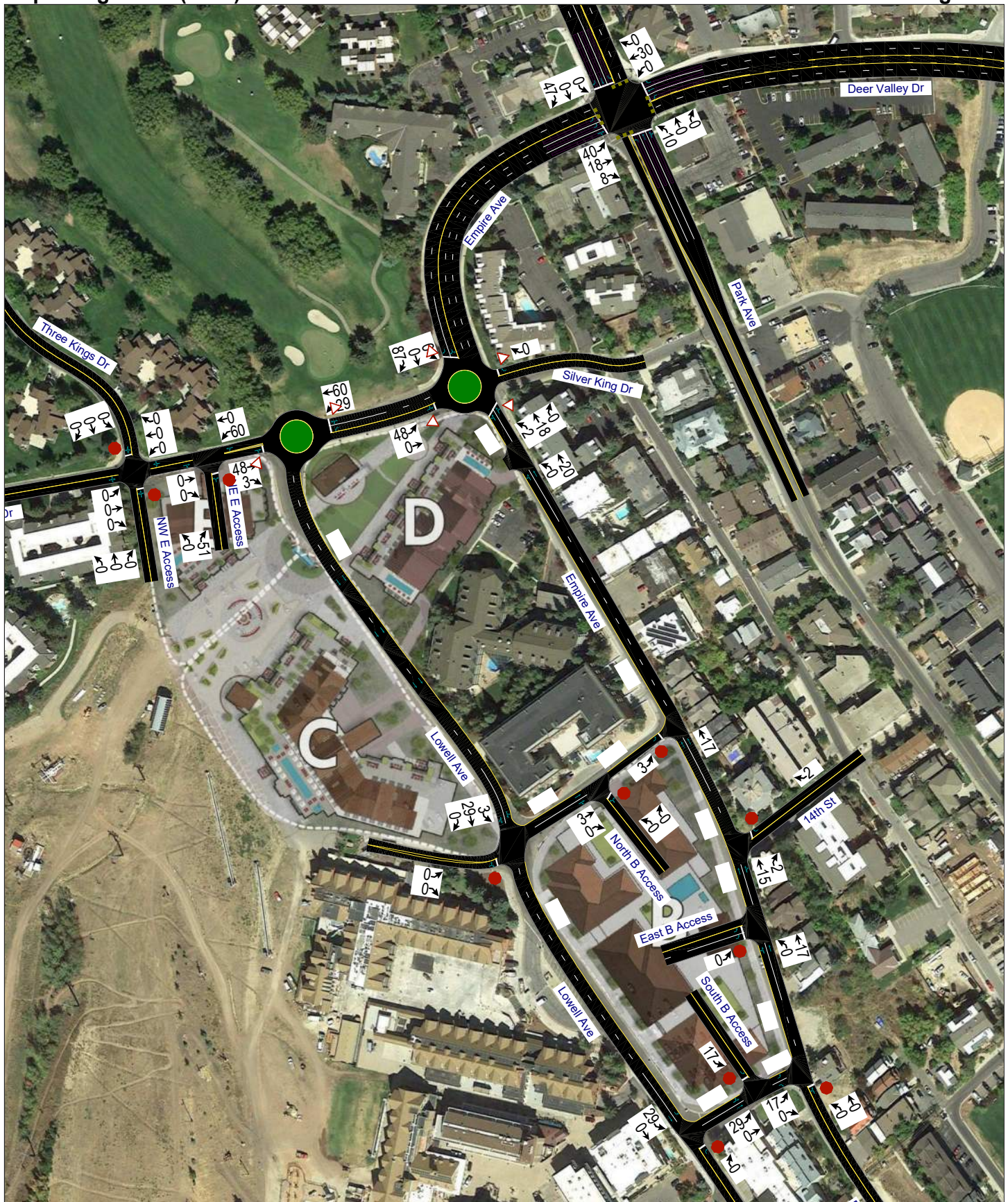
### From Project (Exiting)

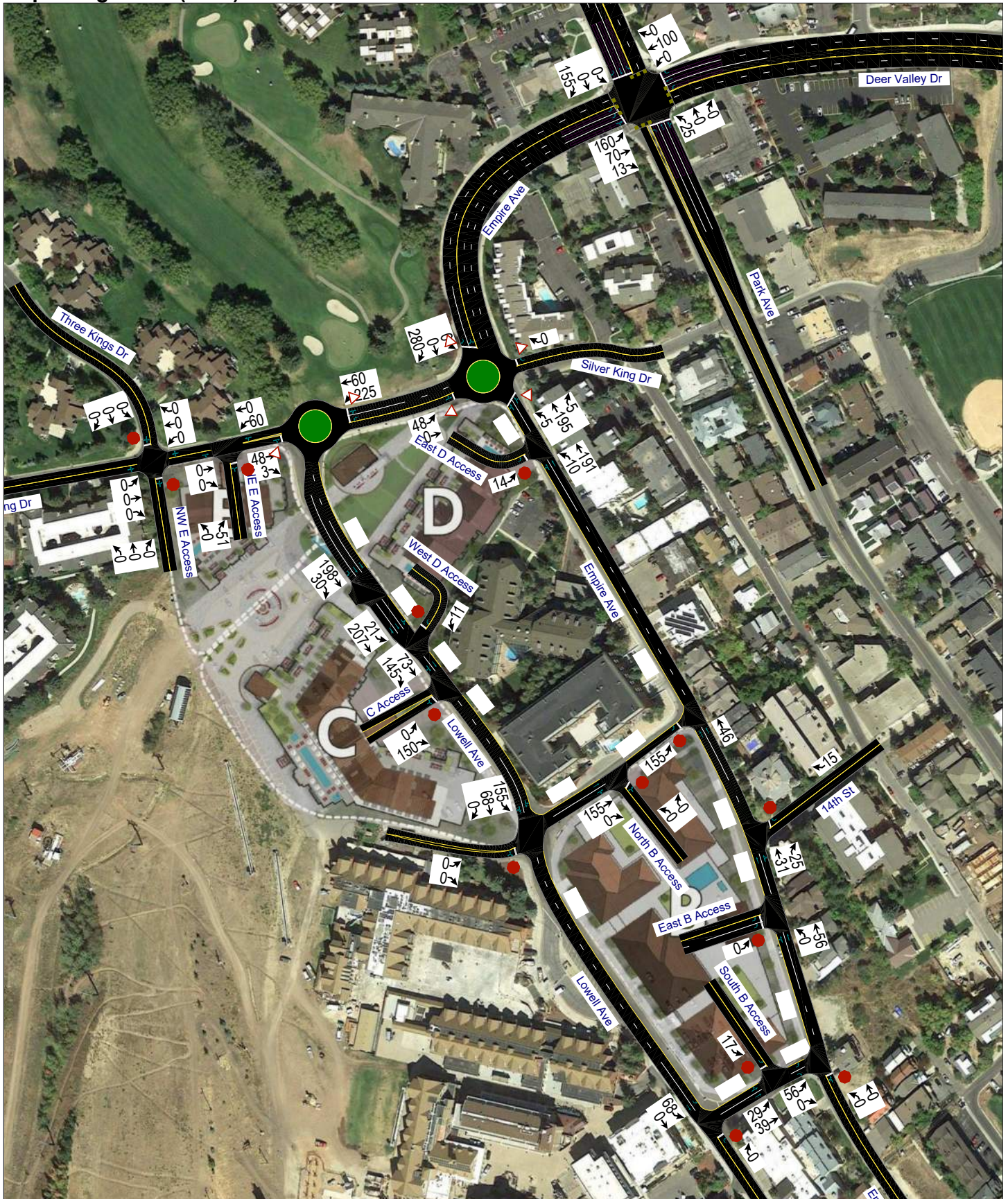
- 59% North
- 14% South
- 27% East

These trip distribution assumptions were used to assign the evening peak hour generated traffic at the study intersections in the one-way loop configuration described as Alternative 6. Trip assignment for the development in 2024 and 2040 is shown in Figure 5 and Figure 6, respectively.









## **F. Access**

The proposed access for the site will be gained at the following locations:

### Silver King Drive:

- The Northeast E Access will be located within 50 feet west of the Lowell Avenue / Silver King Drive intersection. It will access Parcel E on the south side of Silver King Drive. This access will be to the condo and ski club parking.
- The Northwest E Access will be located approximately 185 feet west of the Lowell Avenue / Silver King Drive intersection. It will access Parcel E on the south side of Silver King Drive near Three Kings Drive. This access will be to the day skier parking.
- It is anticipated that there will also be a drop-off loop to Parcel E that accesses Silver King Drive. This was not included in the analysis.

### Lowell Avenue:

- The West D Access will be located approximately 400 feet south of the Lowell Avenue / Silver King Drive intersection. It will access Parcel D on the east side of Lowell Avenue.
- The C Access will be located approximately 275 feet north of the Shadow Ridge Road / Lowell Avenue intersection. It will access Parcel C on the west side of Lowell Avenue.
- It is anticipated that there will also be a truck access to Parcel C and a drop-off area to Parcel B along Lowell Avenue. These were not included in the analysis.

### Shadow Ridge Road:

- The North B Access will be located approximately 200 feet east of the Shadow Ridge Road / Lowell Avenue intersection. It will access Parcel B on the south side of Shadow Ridge Road. This access will be to the lowest parking level on Parcel B.

### Manor Way:

- The South B Access will be located approximately 125 feet east of the Manor Way / Lowell Avenue intersection. It will access Parcel B on the north side of Manor Way. This access will be to the highest parking level on Parcel B near the condo parking.

### Empire Avenue:

- The East B Access will be located approximately 275 feet north of the Manor Way / Empire Avenue intersection. It will access Parcel B on the west side of Empire Avenue. This access will be to a middle parking level on Parcel B.
- The East D Access will be located approximately 200 feet south of the Silver King Drive / Empire Avenue intersection. It will access Parcel D on the west side of Empire Avenue.

## **IV. FUTURE (2024) BACKGROUND CONDITIONS**

### **A. Purpose**

The purpose of the future (2024) background analysis is to study the intersections and roadways during the peak travel periods of the day for future background traffic and geometric conditions. Through this analysis, future background traffic operational deficiencies can be identified, and potential mitigation measures recommended.

### **B. Roadway Network**

As recommended in existing (2019) background conditions, the following improvements were assumed for future (2024) conditions:

- Roundabout at the Silver King Drive / Empire Avenue intersection
- Channelized southbound right-turn at the Empire Avenue / Park Avenue intersection
- Westbound left-turn phasing at Empire Avenue / Park Avenue changed to permissive-protected phasing instead of protected phasing only

### **C. Traffic Volumes**

This area of Park City is mostly built-out, and future background growth in traffic will be minimal within the PCMR area besides that caused by the PCMR development. Based on discussions with Park City, it was agreed that Hales Engineering would use common growth rates to estimate future volumes. It was assumed that the volumes within the PCMR area would increase by approximately 1% per year. It was assumed that other volumes at the Empire Avenue / Park Avenue intersection would increase by the same growth rate observed in recent years on Park Avenue and Deer Valley Drive. Based on UDOT data, volumes have increased by between 1% and 2% per year on Park Avenue and Deer Valley Drive. A growth rate of 2% per year was assumed at the Empire Avenue / Park Avenue intersection between 2019 and 2024. Future (2024) evening peak hour turning movement volumes are shown in Figure 7.

### **D. Level of Service Analysis**

Hales Engineering determined that all study intersections are anticipated to operate at acceptable levels of service during the evening peak hour in future (2024) background conditions, as shown in Table 4. However, the Empire Avenue / Park Avenue intersection is very close to operating at LOS E. These results serve as a baseline condition for the impact analysis of the proposed development for future (2024) conditions.



**Table 4: Future (2024) Background Evening Peak Hour Level of Service**

Intersection		Worst Approach			Overall Intersection	
Description	Control	Approach <sup>1,3</sup>	Aver. Delay (Sec/Veh) <sup>1</sup>	LOS <sup>1</sup>	Aver. Delay (Sec/Veh) <sup>2</sup>	LOS <sup>2</sup>
Empire Ave / Park Ave	Signal	-	-	-	54.0	D
Silver King Dr / Empire Ave	Round-about	-	-	-	9.1	A
Lowell Ave / Silver King Dr	NB Stop	NB	5.8	A	-	-
Three Kings Dr / Silver King Dr	SB Stop	SB	3.8	A	-	-
Shadow Ridge Rd / Empire Ave	NEB Stop	NEB	8.8	A	-	-
Shadow Ridge Rd / Lowell Ave	SB/EB Stop	EB	7.5	A	-	-
14th Street / Empire Ave	SWB Stop	SWB	12.3	B	-	-
Manor Way / Empire Ave	EB Stop	EB	9.2	A	-	-
Manor Way / Lowell Ave	AWSC	-	-	-	7.5	A

1. This represents the worst approach LOS and delay (seconds / vehicle) and is only reported for non-all-way stop unsignalized intersections.  
 2. This represents the overall intersection LOS and delay (seconds / vehicle) and is reported for all-way stop and signal-controlled intersections.  
 3. SB = Southbound approach, etc.

Source: Hales Engineering, August 2019

## E. Queuing Analysis

Hales Engineering calculated the 95<sup>th</sup> percentile queue lengths for each of the study intersections. The significant 95<sup>th</sup> percentile queue lengths for future (2024) background conditions during the evening peak hour are shown below:

Empire Ave / Park Ave  
 Northbound – 425 feet  
 Southbound – 900 feet  
 Eastbound – 400 feet  
 Westbound – 525 feet

Silver King Dr / Empire Ave  
 Eastbound – 200 feet

Lowell Ave / Silver King Dr  
 Northbound – 150 feet

## **F. Mitigation Measures**

The Empire Avenue / Park Avenue is anticipated to continue experiencing heavy delays and queueing. As discussed previously, it is recommended that UDOT plan to widen Park Avenue at the intersection to provide two left-turn lanes, a through lane, and a channelized right-turn lane with a pocket on the southbound approach.

No additional mitigation measures are recommended at this time.

## V. FUTURE (2024) PLUS PROJECT CONDITIONS

### A. Purpose

The purpose of the future (2024) plus project analysis is to study the intersections and roadways during the peak travel periods of the day for future background traffic and geometric conditions plus the net trips generated by the proposed development. This scenario provides valuable insight into the potential impacts of the proposed project on future background traffic conditions.

### B. Traffic Volumes

Hales Engineering added the project trips discussed in Chapter III from Parcels B and E to the future (2024) background traffic volumes to predict turning movement volumes for future (2024) plus project conditions. Hales Engineering also redistributed the day skier parking on site to the new day skier parking in Parcel B and E. The trips to and from skier parking were estimated based on the difference in trips between intersections in the study area. For example, it was observed that northbound traffic on one segment of Lowell Avenue increased by 330 vehicles between intersections. Therefore, it was assumed that there were 330 day-skier vehicles exiting the parking along that segment. This methodology resulted in calculating 730 day-skier trips during the evening peak hour (180 entering, 550 exiting). These trips were divided up between Parcels B and E based on the amount of day skier parking in both. Because Parcel B has 760 day-skier stalls planned out of 1,200 total, approximately 63% of the day skier traffic was assigned to the Parcel B access points. Future (2024) plus project evening peak hour turning movement volumes are shown in Figure 8.

### C. Level of Service Analysis

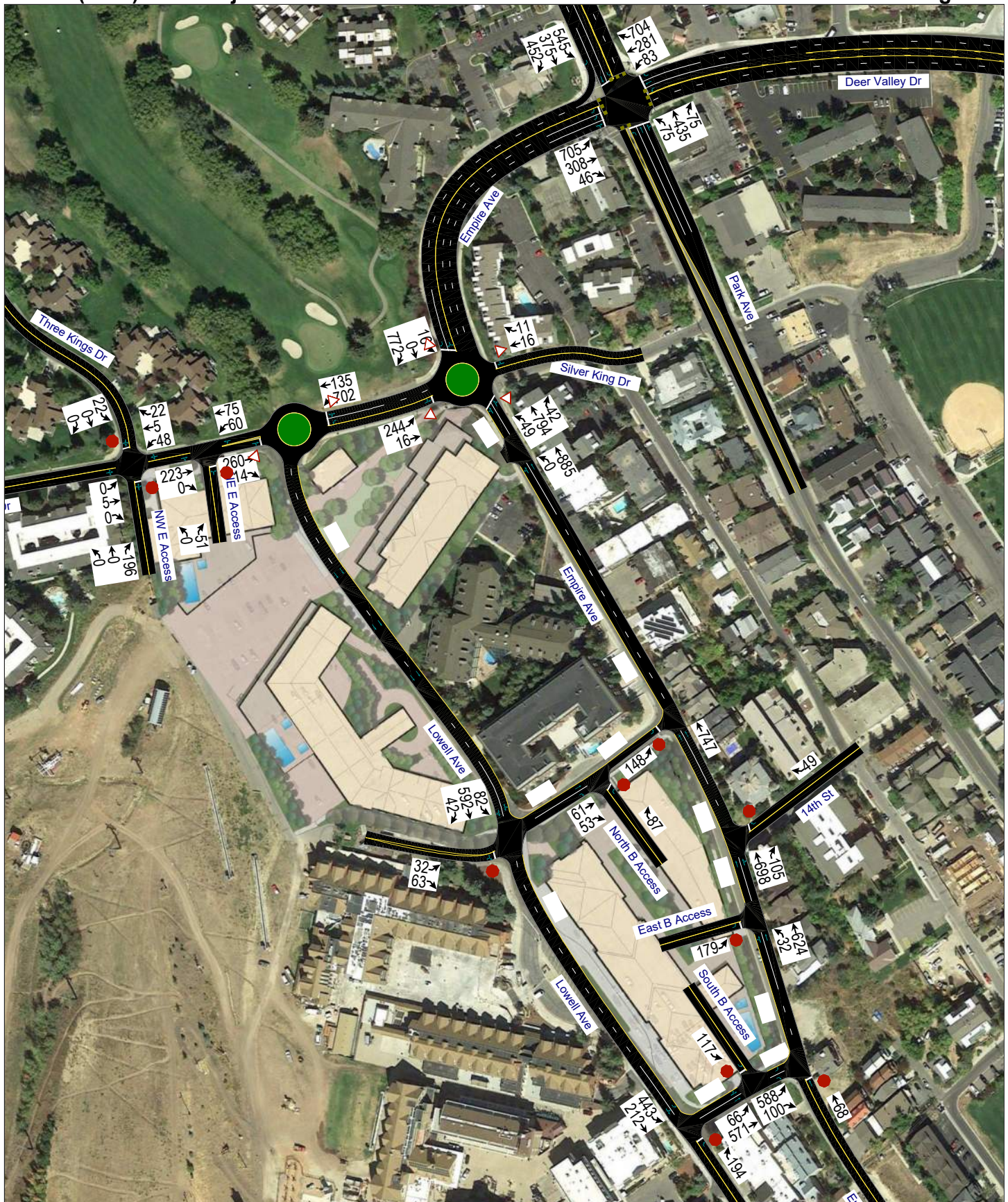
Hales Engineering determined that all intersections are anticipated to operate at acceptable levels of service during the evening peak hour in future (2024) plus project conditions except for the Empire Avenue / Park Avenue intersection (LOS E), as shown in Table 5.

### D. Queuing Analysis

Hales Engineering calculated the 95<sup>th</sup> percentile queue lengths for each of the study intersections. The significant 95<sup>th</sup> percentile queue lengths for future (2024) plus project conditions during the evening peak hour are shown below:

<u>Empire Ave / Park Ave</u>	
Northbound – 390 feet	Eastbound – 450 feet
Southbound – 1,150 feet	Westbound – 750 feet





**Table 5: Future (2024) Plus Project Evening Peak Hour Level of Service**

Intersection		Worst Approach			Overall Intersection	
Description	Control	Approach <sup>1,3</sup>	Aver. Delay (Sec/Veh) <sup>1</sup>	LOS <sup>1</sup>	Aver. Delay (Sec/Veh) <sup>2</sup>	LOS <sup>2</sup>
Empire Ave / Park Ave	Signal	-	-	-	63.5	E
Silver King Dr / Empire Ave	Round-about	-	-	-	3.7	A
Lowell Ave / Silver King Dr	Round-about	-	-	-	3.5	A
Three Kings Dr & NW E Access / Silver King Dr	NB/SB Stop	SB	4.3	A	-	-
Shadow Ridge Rd / Empire Ave	NEB Stop	NEB	8.3	A	-	-
Shadow Ridge Rd / Lowell Ave	SB/EB Stop	EB	7.1	A	-	-
14th Street / Empire Ave	SWB Stop	SWB	4.4	A	-	-
Manor Way / Empire Ave	NB Stop	NB	8.7	A	-	-
Manor Way / Lowell Ave	NB Stop	NB	6.9	A	-	-
NE E Access / Silver King Dr	NB Stop	NB	4.1	A	-	-
North B Access / Shadow Ridge Rd	NB Stop	NB	2.8	A	-	-
South B Access / Manor Way	SB Stop	SB	10.0	A	-	-
East B Access / Empire Ave	EB Stop	EB	10.3	B	-	-

1. This represents the worst approach LOS and delay (seconds / vehicle) and is only reported for non-all-way stop unsignalized intersections.
2. This represents the overall intersection LOS and delay (seconds / vehicle) and is reported for all-way stop and signal-controlled intersections.
3. SB = Southbound approach, etc.

Source: Hales Engineering, August 2019

## E. Mitigation Measures

As recommended in previous background scenarios, it is recommended that dual left-turns be added to the southbound approach of the Empire Avenue / Park Avenue intersection when possible. It is also recommended that Empire Avenue be re-stripped with a five-lane cross-section between Silver King Drive and Park Avenue to accommodate 2 full left-turn storage lanes. This improvement was assumed for this future (2024) plus project analysis.

## VI. FUTURE (2040) BACKGROUND CONDITIONS

### A. Purpose

The purpose of the future (2040) background analysis is to study the intersections and roadways during the peak travel periods of the day for future background traffic and geometric conditions. Through this analysis, future background traffic operational deficiencies can be identified, and potential mitigation measures recommended.

### B. Roadway Network

Based on recommendations in the existing (2019) and future (2024) background conditions, it was assumed that UDOT would install southbound dual left-turn lanes at the Empire Avenue / Park Avenue intersection by 2040.

### C. Traffic Volumes

As discussed for future (2024) background conditions, it was assumed that the PCMR internal roadways would experience 1% growth per year between 2024 and 2040. It was assumed that Park Avenue and Deer Valley Drive would also experience 1% growth per year as well. Future (2040) background evening peak hour turning movement volumes are shown in Figure 9.

### D. Level of Service Analysis

Hales Engineering determined that all study intersections are anticipated to operate at acceptable levels of service during the evening peak hour in future (2040) background conditions except for the Empire Avenue / Park Avenue intersection (LOS F), as shown in Table 6. These results serve as a baseline condition for the impact analysis of the proposed development for future (2040) conditions.

### E. Queuing Analysis

Hales Engineering calculated the 95<sup>th</sup> percentile queue lengths for each of the study intersections. The significant 95<sup>th</sup> percentile queue lengths for future (2040) background conditions during the evening peak hour are shown below:

Empire Ave / Park Ave  
 Northbound – 750 feet  
 Southbound – 550 feet  
 Eastbound – 450 feet  
 Westbound – >1,000 feet

Silver King Dr / Empire Ave  
 Eastbound – 275 feet

Lowell Ave / Silver King Dr  
 Northbound – 275 feet



**Table 6: Future (2040) Background Evening Peak Hour Level of Service**

Intersection		Worst Approach			Overall Intersection	
Description	Control	Approach <sup>1,3</sup>	Aver. Delay (Sec/Veh) <sup>1</sup>	LOS <sup>1</sup>	Aver. Delay (Sec/Veh) <sup>2</sup>	LOS <sup>2</sup>
Empire Ave / Park Ave	Signal	-	-	-	>80	F
Silver King Dr / Empire Ave	Round-about	-	-	-	11.0	B
Lowell Ave / Silver King Dr	NB Stop	NB	16.4	C	-	-
Three Kings Dr / Silver King Dr	SB Stop	SB	3.8	A	-	-
Shadow Ridge Rd / Empire Ave	NEB Stop	NEB	18.0	C	-	-
Shadow Ridge Rd / Lowell Ave	SB/EB Stop	EB	8.4	A	-	-
14th Street / Empire Ave	SWB Stop	SWB	19.1	C	-	-
Manor Way / Empire Ave	EB Stop	EB	12.9	B	-	-
Manor Way / Lowell Ave	AWSC	-	-	-	11.9	B

1. This represents the worst approach LOS and delay (seconds / vehicle) and is only reported for non-all-way stop unsignalized intersections.
2. This represents the overall intersection LOS and delay (seconds / vehicle) and is reported for all-way stop and signal-controlled intersections.
3. SB = Southbound approach, etc.

Source: Hales Engineering, August 2019

## F. Mitigation Measures

As shown, significant delays and queueing are anticipated at the Empire Avenue / Park Avenue intersection, even assuming southbound dual left-turns at the intersection. It is recommended that UDOT consider channelizing the westbound right-turn movement due to the high peak hour volume. It is anticipated that this will reduce the high delays and queueing.

The delays and queueing at the Empire Avenue / Park Avenue intersection are anticipated to be excessive in the future. UDOT and Park City may want to consider an innovative intersection at this location. Continuing to promote transit and active transportation will also be key in reducing the anticipated delays at this location.

## VII. FUTURE (2040) PLUS PROJECT CONDITIONS

### A. Purpose

The purpose of the future (2040) plus project analysis is to study the intersections and roadways during the peak travel periods of the day for future background traffic and geometric conditions plus the net trips generated by the proposed development. This scenario provides valuable insight into the potential impacts of the proposed project on future background traffic conditions.

### B. Traffic Volumes

Hales Engineering added the full-build project trips discussed in Chapter III to the future (2040) background traffic volumes to predict turning movement volumes for future (2040) plus project conditions. Future (2040) plus project evening peak hour turning movement volumes are shown in Figure 10.

### C. Level of Service Analysis

Hales Engineering determined that all intersections are anticipated to operate at acceptable levels of service during the evening peak hour in future (2040) plus project conditions except for the Empire Avenue / Park Avenue intersection (LOS F), as shown in Table 7.

### D. Queuing Analysis

Hales Engineering calculated the 95<sup>th</sup> percentile queue lengths for each of the study intersections. The significant 95<sup>th</sup> percentile queue lengths for future (2040) plus project conditions during the evening peak hour are shown below:

<u>Empire Ave / Park Ave</u>	
Northbound – 900 feet	Eastbound – 550 feet
Southbound – 530 feet	Westbound – >1,000 feet

### E. Mitigation Measures

No additional mitigation measures are recommended.



**Table 7: Future (2040) Plus Project Evening Peak Hour Level of Service**

Intersection		Worst Approach			Overall Intersection	
Description	Control	Approach <sup>1,3</sup>	Aver. Delay (Sec/Veh) <sup>1</sup>	LOS <sup>1</sup>	Aver. Delay (Sec/Veh) <sup>2</sup>	LOS <sup>2</sup>
Empire Ave / Park Ave	Signal	-	-	-	>80	F
Silver King Dr / Empire Ave	Round-about	-	-	-	3.9	A
Lowell Ave / Silver King Dr	Round-about	-	-	-	5.3	A
Three Kings Dr & NW E Access / Silver King Dr	NB/SB Stop	SB	4.9	A	-	-
Shadow Ridge Rd / Empire Ave	NEB Stop	NEB	13.5	B	-	-
Shadow Ridge Rd / Lowell Ave	SB/EB Stop	EB	12.5	B	-	-
14th Street / Empire Ave	SWB Stop	SWB	5.9	A	-	-
Manor Way / Empire Ave	NB Stop	NB	11.5	B	-	-
Manor Way / Lowell Ave	NB Stop	NB	8.6	A	-	-
NE E Access / Silver King Dr	NB Stop	NB	9.3	A	-	-
North B Access / Shadow Ridge Rd	NB Stop	NB	8.7	A	-	-
South B Access / Manor Way	SB Stop	SB	11.9	B	-	-
East B Access / Empire Ave	EB Stop	EB	13.2	B	-	-
West D Access / Lowell Avenue	SWB Stop	SWB	12.7	B	-	-
C Access / Lowell Avenue	EB Stop	EB	7.9	A	-	-
East D Access / Empire Avenue	EB Stop	EB	33.6	D	-	-

1. This represents the worst approach LOS and delay (seconds / vehicle) and is only reported for non-all-way stop unsignalized intersections.  
 2. This represents the overall intersection LOS and delay (seconds / vehicle) and is reported for all-way stop and signal-controlled intersections.  
 3. SB = Southbound approach, etc.

Source: Hales Engineering, August 2019



**F. Recommended Storage Lengths**

Hales Engineering determined recommended storage lengths based on the 95<sup>th</sup> percentile queue lengths given in the future (2040) plus project scenario. These storage lengths do not include the taper length. Recommended storage lengths for the study intersections are shown in Table 8. Intersections shown in Table 8 include new intersections and existing intersections that have recommended storage length changes.

**Table 8: Recommended Storage Lengths**

Recommended Storage Lengths Park City Mountain Resort TIS								
Intersection	Storage Length (feet)							
	Northbound		Southbound		Eastbound		Westbound	
	LT	RT	LT	RT	LT	RT	LT	RT
Empire Ave / Park Ave	300	-	350	250	550	-	250	-

Source: Hales Engineering, August 2019

# APPENDIX A

## LOS Results

## SimTraffic LOS Report

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Existing (2019) Background  
**Time Period:** Morning Peak Hour **Project #: UT19-1481**

**Intersection:** Park Ave & Empire Ave/Deer Valley Dr  
**Type:** Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	36	36	99	22.8	C
	T	191	193	101	38.8	D
	R	67	65	97	7.0	A
	<b>Subtotal</b>	<b>294</b>	<b>294</b>	<b>100</b>	<b>29.8</b>	<b>C</b>
SB	L	477	456	96	147.1	F
	T	169	158	94	101.6	F
	R	901	862	96	31.4	C
	<b>Subtotal</b>	<b>1,547</b>	<b>1,476</b>	<b>95</b>	<b>74.7</b>	<b>E</b>
EB	L	320	315	99	29.0	C
	T	172	167	97	19.6	B
	R	16	18	114	12.6	B
	<b>Subtotal</b>	<b>508</b>	<b>500</b>	<b>98</b>	<b>25.3</b>	<b>C</b>
WB	L	50	47	94	44.5	D
	T	253	262	103	45.7	D
	R	215	216	100	6.7	A
	<b>Subtotal</b>	<b>518</b>	<b>525</b>	<b>101</b>	<b>29.5</b>	<b>C</b>
<b>Total</b>		<b>2,866</b>	<b>2,795</b>	<b>98</b>	<b>53.4</b>	<b>D</b>

**Intersection:** Empire Ave & Silver King Dr  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	52	53	102	5.2	A
	T	350	346	99	1.6	A
	R	19	18	96	1.1	A
	<b>Subtotal</b>	<b>421</b>	<b>417</b>	<b>99</b>	<b>2.0</b>	<b>A</b>
SB	L	6	7	112	3.8	A
	T	621	606	98	1.2	A
	R	563	545	97	3.4	A
	<b>Subtotal</b>	<b>1,190</b>	<b>1,158</b>	<b>97</b>	<b>2.3</b>	<b>A</b>
<b>EB</b>	L	142	140	99	28.2	D
	T	17	16	96	28.9	D
	R	17	17	101	7.7	A
	<b>Subtotal</b>	<b>176</b>	<b>173</b>	<b>98</b>	<b>26.3</b>	<b>D</b>
WB	L	22	21	97	20.6	C
	T	13	14	106	20.9	C
	R	5	6	120	7.9	A
	<b>Subtotal</b>	<b>40</b>	<b>41</b>	<b>103</b>	<b>18.8</b>	<b>C</b>
<b>Total</b>		<b>1,826</b>	<b>1,789</b>	<b>98</b>	<b>4.9</b>	<b>A</b>

## SimTraffic LOS Report

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Existing (2019) Background  
**Time Period:** Morning Peak Hour **Project #:** UT19-1481

**Intersection:** Lowell Ave & Silver King Dr  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	5	4	80	24.2	C
	R	169	168	100	4.3	A
	<b>Subtotal</b>	174	172	99	4.8	A
EB	T	6	5	80	1.5	A
	R	14	18	126	1.0	A
	<b>Subtotal</b>	20	23	115	1.1	A
WB	L	608	589	97	4.9	A
	T	20	22	111	4.0	A
	<b>Subtotal</b>	<b>628</b>	<b>611</b>	<b>97</b>	<b>4.9</b>	<b>A</b>
<b>Total</b>		822	806	98	4.7	A

**Intersection:** Silver King Dr & Three Kings Dr  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
SB	L	15	17	111	3.9	A
	<b>Subtotal</b>	<b>15</b>	<b>17</b>	<b>113</b>	<b>3.9</b>	<b>A</b>
EB	T	5	6	120	0.0	A
	<b>Subtotal</b>	5	6	120	0.0	A
WB	T	5	5	100	0.4	A
	R	20	21	106	0.1	A
	<b>Subtotal</b>	25	26	104	0.2	A
<b>Total</b>		45	49	109	1.5	A

**SimTraffic LOS Report**

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Existing (2019) Background  
**Time Period:** Morning Peak Hour **Project #:** UT19-1481

**Intersection:** Shadow Ridge Rd & Empire Ave  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	36	35	97	7.7	A
	T	430	428	99	1.1	A
	<b>Subtotal</b>	<b>466</b>	<b>463</b>	<b>99</b>	<b>1.6</b>	<b>A</b>
SB	T	271	262	97	2.9	A
	R	399	390	98	1.8	A
	<b>Subtotal</b>	<b>670</b>	<b>652</b>	<b>97</b>	<b>2.2</b>	<b>A</b>
NE	L	1	0	0	3.2	A
	R	1	2	200	3.2	A
	<b>Subtotal</b>	<b>2</b>	<b>2</b>	<b>100</b>	<b>3.2</b>	<b>A</b>
<b>Total</b>		<b>1,139</b>	<b>1,117</b>	<b>98</b>	<b>2.0</b>	<b>A</b>

**Intersection:** Lowell Ave & Shadow Ridge Rd  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
SB	T	314	303	96	1.0	A
	R	100	100	100	0.5	A
	R2	22	22	101	0.5	A
	<b>Subtotal</b>	<b>436</b>	<b>425</b>	<b>97</b>	<b>0.9</b>	<b>A</b>
EB	L2	22	22	101	12.5	B
	L	1	1	100	12.7	B
	R	18	19	107	6.8	A
<b>Subtotal</b>	<b>41</b>	<b>42</b>	<b>102</b>	<b>9.9</b>	<b>A</b>	
SE	L	1	0	0	0.4	A
	T	483	473	98	10.5	B
	R	104	102	98	6.0	A
	R2	34	32	94	6.0	A
<b>Total</b>		<b>1,099</b>	<b>1,074</b>	<b>98</b>	<b>2.1</b>	<b>A</b>

**SimTraffic LOS Report**

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Existing (2019) Background  
**Time Period:** Morning Peak Hour **Project #:** UT19-1481

**Intersection:** Empire Ave & Manor Way  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	5	5	100	3.0	A
	T	44	46	104	0.2	A
	Subtotal	49	51	104	0.5	A
SB	T	103	101	98	0.4	A
	R	89	87	98	0.4	A
	Subtotal	192	188	98	0.4	A
<b>EB</b>	L	406	397	98	6.0	A
	R	10	10	98	4.5	A
	<b>Subtotal</b>	<b>416</b>	<b>407</b>	<b>98</b>	<b>6.0</b>	<b>A</b>
<b>Total</b>		658	646	98	3.9	A

**Intersection:** Lowell Ave & Manor Way  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	R	142	137	97	4.1	A
	Subtotal	142	137	96	4.1	A
SB	L	274	270	99	5.8	A
	T	161	154	96	1.3	A
	Subtotal	435	424	97	4.2	A
<b>WB</b>	L	94	92	98	4.2	A
	<b>Subtotal</b>	<b>94</b>	<b>92</b>	<b>98</b>	<b>4.2</b>	<b>A</b>
<b>Total</b>		671	653	97	4.2	A

## SimTraffic LOS Report

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Existing (2019) Background  
**Time Period:** Morning Peak Hour **Project #:** UT19-1481

**Intersection:** Empire Ave & 14th St  
**Type:** All-way Stop Controlled

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	410	403	98	1.0	A
	R	40	41	102	0.7	A
	Subtotal	450	444	99	1.0	A
SB	L	8	7	85	4.5	A
	T	264	257	97	0.7	A
	Subtotal	272	264	97	0.8	A
SW	L	36	34	94	9.5	A
	R	57	60	105	5.5	A
	Subtotal	93	94	101	6.9	A
<b>Total</b>		816	802	98	1.6	A

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #1 4:30

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.3
Denied Del/Veh (s)	0.0	0.0	0.0	3.4	0.3	0.2	3.8	0.5	3.5	5.5	4.5	4.3
Total Delay (hr)	0.6	0.2	0.0	0.2	0.8	0.1	0.1	0.5	0.0	3.3	0.8	1.4
Total Del/Veh (s)	27.5	20.2	15.4	44.9	40.1	6.0	23.8	35.1	7.1	95.2	64.1	21.7
Vehicles Entered	77	41	5	12	63	51	11	48	15	110	43	221
Vehicles Exited	78	40	5	12	62	49	11	48	15	112	42	214
Hourly Exit Rate	312	160	20	48	248	196	44	192	60	448	168	856
Input Volume	309	166	15	48	245	208	35	185	65	461	163	871
% of Volume	101	96	133	100	101	94	126	104	92	97	103	98

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #1 4:30

Movement	All
Denied Delay (hr)	0.5
Denied Del/Veh (s)	2.8
Total Delay (hr)	8.0
Total Del/Veh (s)	39.0
Vehicles Entered	697
Vehicles Exited	688
Hourly Exit Rate	2752
Input Volume	2771
% of Volume	99

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #2 4:45

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.4
Denied Del/Veh (s)	0.0	0.0	0.0	3.2	0.3	0.2	3.6	0.5	3.7	6.8	6.1	6.0
Total Delay (hr)	0.6	0.2	0.0	0.1	0.8	0.1	0.0	0.5	0.0	3.9	0.8	1.7
Total Del/Veh (s)	28.5	18.6	10.3	44.2	40.5	6.0	20.8	38.4	6.1	101.5	65.7	25.9
Vehicles Entered	78	42	5	11	64	52	7	44	17	124	38	218
Vehicles Exited	76	42	5	11	65	53	8	45	16	115	37	219
Hourly Exit Rate	304	168	20	44	260	212	32	180	64	460	148	876
Input Volume	309	166	15	48	245	208	35	185	65	461	163	871
% of Volume	98	101	133	92	106	102	91	97	98	100	91	101

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #2 4:45

Movement	All
Denied Delay (hr)	0.7
Denied Del/Veh (s)	3.7
Total Delay (hr)	8.8
Total Del/Veh (s)	42.2
Vehicles Entered	700
Vehicles Exited	692
Hourly Exit Rate	2768
Input Volume	2771
% of Volume	100



1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #3 5:00

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.3	2.0
Denied Del/Veh (s)	0.0	0.0	0.0	3.0	0.4	0.3	3.8	0.6	3.8	30.7	27.9	29.3
Total Delay (hr)	0.7	0.2	0.0	0.2	1.0	0.1	0.1	0.6	0.0	6.1	1.5	2.6
Total Del/Veh (s)	27.8	18.8	13.9	39.0	46.3	7.6	23.5	37.7	8.0	154.1	114.3	39.2
Vehicles Entered	86	41	5	13	70	62	9	52	17	121	42	225
Vehicles Exited	87	41	5	13	68	62	9	51	18	114	39	224
Hourly Exit Rate	348	164	20	52	272	248	36	204	72	456	156	896
Input Volume	352	188	18	55	278	236	40	210	74	524	186	990
% of Volume	99	87	111	95	98	105	90	97	97	87	84	91

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #3 5:00

Movement	All
Denied Delay (hr)	3.6
Denied Del/Veh (s)	16.4
Total Delay (hr)	13.1
Total Del/Veh (s)	58.7
Vehicles Entered	743
Vehicles Exited	731
Hourly Exit Rate	2924
Input Volume	3151
% of Volume	93

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #4 5:15

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	1.2	6.3
Denied Del/Veh (s)	0.0	0.0	0.0	3.2	0.3	0.2	3.8	0.5	3.7	96.4	96.6	95.5
Total Delay (hr)	0.6	0.2	0.0	0.1	0.9	0.1	0.1	0.6	0.0	6.5	1.6	2.1
Total Del/Veh (s)	27.9	17.7	10.5	43.1	44.6	6.5	20.6	37.2	6.8	163.3	123.5	33.0
Vehicles Entered	74	43	4	10	65	51	9	50	16	114	38	211
Vehicles Exited	74	44	4	10	66	52	9	50	16	115	39	204
Hourly Exit Rate	296	176	16	40	264	208	36	200	64	460	156	816
Input Volume	309	166	15	48	245	208	35	185	65	461	163	871
% of Volume	96	106	107	83	108	100	103	108	98	100	96	94

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #4 5:15

Movement	All
Denied Delay (hr)	10.9
Denied Del/Veh (s)	53.9
Total Delay (hr)	12.7
Total Del/Veh (s)	60.5
Vehicles Entered	685
Vehicles Exited	683
Hourly Exit Rate	2732
Input Volume	2771
% of Volume	99

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Entire Run

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	5.0	1.6	9.0
Denied Del/Veh (s)	0.0	0.0	0.0	3.1	0.3	0.2	3.6	0.5	3.7	37.0	34.9	35.8
Total Delay (hr)	2.6	0.9	0.1	0.6	3.4	0.4	0.2	2.1	0.1	19.8	4.7	7.7
Total Del/Veh (s)	29.0	19.6	12.6	44.5	45.7	6.7	22.8	38.8	7.0	147.1	101.6	31.4
Vehicles Entered	315	167	18	47	262	216	37	194	65	470	162	875
Vehicles Exited	315	167	18	47	262	216	36	193	65	456	158	862
Hourly Exit Rate	315	167	18	47	262	216	36	193	65	456	158	862
Input Volume	320	172	16	50	253	215	36	191	67	477	169	901
% of Volume	99	97	114	94	103	100	99	101	97	96	94	96

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Entire Run

Movement	All
Denied Delay (hr)	15.8
Denied Del/Veh (s)	19.7
Total Delay (hr)	42.5
Total Del/Veh (s)	53.4
Vehicles Entered	2828
Vehicles Exited	2795
Hourly Exit Rate	2795
Input Volume	2866
% of Volume	98

2: Empire Ave & Silver King Dr Performance by movement Interval #1 4:30

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	22.7	29.6	7.4	21.3	19.2	6.1	4.8	1.3	1.1	2.5	1.1	3.3
Vehicles Entered	33	4	4	5	3	2	12	87	5	2	146	139
Vehicles Exited	32	4	4	5	3	2	12	86	4	2	146	138
Hourly Exit Rate	128	16	16	20	12	8	48	344	16	8	584	552
Input Volume	137	16	16	21	13	5	50	338	18	6	601	544
% of Volume	93	100	100	95	92	160	96	102	89	133	97	101

2: Empire Ave & Silver King Dr Performance by movement Interval #1 4:30

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.0
Total Delay (hr)	0.5
Total Del/Veh (s)	4.3
Vehicles Entered	442
Vehicles Exited	438
Hourly Exit Rate	1752
Input Volume	1765
% of Volume	99

2: Empire Ave & Silver King Dr Performance by movement Interval #2 4:45

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.2	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0
Total Delay (hr)	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Total Del/Veh (s)	28.9	22.8	7.1	22.4	22.1	7.9	5.8	1.5	1.0	4.4	1.2	3.3
Vehicles Entered	36	3	4	5	4	2	12	87	4	2	154	135
Vehicles Exited	35	4	5	5	3	2	13	86	4	2	154	135
Hourly Exit Rate	140	16	20	20	12	8	52	344	16	8	616	540
Input Volume	137	16	16	21	13	5	50	338	18	6	601	544
% of Volume	102	100	125	95	92	160	104	102	89	133	102	99

2: Empire Ave & Silver King Dr Performance by movement Interval #2 4:45

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.0
Total Delay (hr)	0.6
Total Del/Veh (s)	5.0
Vehicles Entered	448
Vehicles Exited	448
Hourly Exit Rate	1792
Input Volume	1765
% of Volume	102

2: Empire Ave & Silver King Dr Performance by movement Interval #3 5:00

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.5	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1
Total Del/Veh (s)	32.7	31.5	8.0	22.5	20.5	6.2	5.7	2.0	1.1	4.5	1.2	3.4
Vehicles Entered	37	4	5	6	4	2	16	91	5	2	158	141
Vehicles Exited	37	4	4	6	4	1	16	91	5	2	158	142
Hourly Exit Rate	148	16	16	24	16	4	64	364	20	8	632	568
Input Volume	156	19	19	24	14	5	57	385	21	7	682	619
% of Volume	95	84	84	100	114	80	112	95	95	114	93	92

2: Empire Ave & Silver King Dr Performance by movement Interval #3 5:00

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.1
Total Delay (hr)	0.7
Total Del/Veh (s)	5.6
Vehicles Entered	471
Vehicles Exited	470
Hourly Exit Rate	1880
Input Volume	2008
% of Volume	94

2: Empire Ave & Silver King Dr Performance by movement Interval #4 5:15

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	23.3	23.9	6.5	16.5	21.8	6.8	4.4	1.3	0.8	3.6	1.2	3.3
Vehicles Entered	34	4	4	5	3	1	12	82	5	1	149	129
Vehicles Exited	36	4	4	5	3	1	12	82	5	1	148	130
Hourly Exit Rate	144	16	16	20	12	4	48	328	20	4	592	520
Input Volume	137	16	16	21	13	5	50	338	18	6	601	544
% of Volume	105	100	100	95	92	80	96	97	111	67	99	96

2: Empire Ave & Silver King Dr Performance by movement Interval #4 5:15

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.0
Total Delay (hr)	0.5
Total Del/Veh (s)	4.4
Vehicles Entered	429
Vehicles Exited	431
Hourly Exit Rate	1724
Input Volume	1765
% of Volume	98

2: Empire Ave & Silver King Dr Performance by movement Entire Run

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	1.1	0.1	0.0	0.1	0.1	0.0	0.1	0.2	0.0	0.0	0.2	0.5
Total Del/Veh (s)	28.2	28.9	7.7	20.6	20.9	7.9	5.2	1.6	1.1	3.8	1.2	3.4
Vehicles Entered	140	16	17	22	14	6	54	346	18	7	608	545
Vehicles Exited	140	16	17	21	14	6	53	346	18	7	606	545
Hourly Exit Rate	140	16	17	21	14	6	53	346	18	7	606	545
Input Volume	142	17	17	22	13	5	52	350	19	6	621	563
% of Volume	99	96	101	97	106	120	102	99	96	112	98	97

2: Empire Ave & Silver King Dr Performance by movement Entire Run

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.0
Total Delay (hr)	2.5
Total Del/Veh (s)	4.9
Vehicles Entered	1793
Vehicles Exited	1789
Hourly Exit Rate	1789
Input Volume	1826
% of Volume	98

3: Lowell Ave & Silver King Dr Performance by movement Interval #1 4:30

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Total Delay (hr)	0.0	0.0	0.2	0.0	0.0	0.0	0.3
Total Del/Veh (s)	1.3	1.0	4.9	3.8	27.3	4.1	4.7
Vehicles Entered	1	5	148	6	1	40	201
Vehicles Exited	1	5	147	6	1	40	200
Hourly Exit Rate	4	20	588	24	4	160	800
Input Volume	6	14	588	19	5	163	795
% of Volume	67	143	100	126	80	98	101

3: Lowell Ave & Silver King Dr Performance by movement Interval #2 4:45

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.2	0.0
Total Delay (hr)	0.0	0.0	0.2	0.0	0.0	0.1	0.3
Total Del/Veh (s)	0.9	1.5	4.8	3.7	27.6	4.4	4.7
Vehicles Entered	2	4	146	5	1	42	200
Vehicles Exited	2	4	145	6	1	42	200
Hourly Exit Rate	8	16	580	24	4	168	800
Input Volume	6	14	588	19	5	163	795
% of Volume	133	114	99	126	80	103	101

3: Lowell Ave & Silver King Dr Performance by movement Interval #3 5:00

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Total Delay (hr)	0.0	0.0	0.2	0.0	0.0	0.1	0.3
Total Del/Veh (s)	3.0	0.8	4.9	3.7	18.1	4.3	4.7
Vehicles Entered	1	4	156	6	1	45	213
Vehicles Exited	1	4	157	6	1	45	214
Hourly Exit Rate	4	16	628	24	4	180	856
Input Volume	7	15	668	22	5	186	903
% of Volume	57	107	94	109	80	97	95

3: Lowell Ave & Silver King Dr Performance by movement Interval #4 5:15

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Delay (hr)	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Total Del/Veh (s)	0.7	1.0	4.8	3.5	24.0	3.9	4.5
Vehicles Entered	1	5	140	6	1	40	193
Vehicles Exited	2	5	140	6	1	40	194
Hourly Exit Rate	8	20	560	24	4	160	776
Input Volume	6	14	588	19	5	163	795
% of Volume	133	143	95	126	80	98	98

3: Lowell Ave & Silver King Dr Performance by movement Entire Run

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.2	0.0
Total Delay (hr)	0.0	0.0	0.8	0.0	0.0	0.2	1.1
Total Del/Veh (s)	1.5	1.0	4.9	4.0	24.2	4.3	4.7
Vehicles Entered	5	18	589	22	4	167	805
Vehicles Exited	5	18	589	22	4	168	806
Hourly Exit Rate	5	18	589	22	4	168	806
Input Volume	6	14	608	20	5	169	822
% of Volume	80	126	97	111	80	100	98

4: Silver King Dr & Three Kings Dr Performance by movement Interval #1 4:30

Movement	EBT	WBT	WBR	SBL	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	0.0	0.2	0.1	4.2	1.4
Vehicles Entered	2	2	5	4	13
Vehicles Exited	2	2	5	4	13
Hourly Exit Rate	8	8	20	16	52
Input Volume	5	5	19	15	44
% of Volume	160	160	105	107	118

4: Silver King Dr & Three Kings Dr Performance by movement Interval #2 4:45

Movement	EBT	WBT	WBR	SBL	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	0.0	0.3	0.1	3.6	1.5
Vehicles Entered	1	2	5	5	13
Vehicles Exited	1	2	5	5	13
Hourly Exit Rate	4	8	20	20	52
Input Volume	5	5	19	15	44
% of Volume	80	160	105	133	118

4: Silver King Dr & Three Kings Dr Performance by movement Interval #3 5:00

Movement	EBT	WBT	WBR	SBL	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	0.0	0.1	0.2	4.4	1.2
Vehicles Entered	2	1	5	3	11
Vehicles Exited	2	1	6	3	12
Hourly Exit Rate	8	4	24	12	48
Input Volume	5	5	22	16	48
% of Volume	160	80	109	75	100

4: Silver King Dr & Three Kings Dr Performance by movement Interval #4 5:15

Movement	EBT	WBT	WBR	SBL	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	0.0	0.8	0.2	3.6	1.4
Vehicles Entered	2	1	6	5	14
Vehicles Exited	2	1	6	5	14
Hourly Exit Rate	8	4	24	20	56
Input Volume	5	5	19	15	44
% of Volume	160	80	126	133	127

4: Silver King Dr & Three Kings Dr Performance by movement Entire Run

Movement	EBT	WBT	WBR	SBL	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	0.0	0.4	0.1	3.9	1.5
Vehicles Entered	6	5	21	17	49
Vehicles Exited	6	5	21	17	49
Hourly Exit Rate	6	5	21	17	49
Input Volume	5	5	20	15	45
% of Volume	120	100	106	111	109

5: Shadow Ridge Rd & Empire Ave Performance by movement Interval #1 4:30

Movement	NBL	NBT	SBT	SBR	NEL	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	6.9	0.9	2.7	1.7		3.4	1.8
Vehicles Entered	7	107	62	96	0	1	273
Vehicles Exited	8	107	62	96	0	1	274
Hourly Exit Rate	32	428	248	384	0	4	1096
Input Volume	35	416	262	386	1	1	1101
% of Volume	91	103	95	99	0	400	100

5: Shadow Ridge Rd & Empire Ave Performance by movement Interval #2 4:45

Movement	NBL	NBT	SBT	SBR	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0		0.0
Total Delay (hr)	0.0	0.0	0.1	0.1	0.0	0.2
Total Del/Veh (s)	7.5	1.0	2.9	1.8		2.0
Vehicles Entered	9	105	65	101	0	280
Vehicles Exited	8	105	65	102	0	280
Hourly Exit Rate	32	420	260	408	0	1120
Input Volume	35	416	262	386	1	1101
% of Volume	91	101	99	106	0	102



5: Shadow Ridge Rd & Empire Ave Performance by movement Interval #3 5:00

Movement	NBL	NBT	SBT	SBR	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0		0.0
Total Delay (hr)	0.0	0.0	0.1	0.1	0.0	0.2
Total Del/Veh (s)	7.0	1.3	2.8	1.9		2.1
Vehicles Entered	11	115	70	100	0	296
Vehicles Exited	11	115	68	99	0	293
Hourly Exit Rate	44	460	272	396	0	1172
Input Volume	40	474	298	438	1	1252
% of Volume	110	97	91	90	0	94

5: Shadow Ridge Rd & Empire Ave Performance by movement Interval #4 5:15

Movement	NBL	NBT	SBT	SBR	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0		0.0
Total Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.2
Total Del/Veh (s)	8.6	1.1	2.9	1.8		2.0
Vehicles Entered	8	101	65	93	0	267
Vehicles Exited	8	101	66	93	0	268
Hourly Exit Rate	32	404	264	372	0	1072
Input Volume	35	416	262	386	1	1101
% of Volume	91	97	101	96	0	97

5: Shadow Ridge Rd & Empire Ave Performance by movement Entire Run

Movement	NBL	NBT	SBT	SBR	NEL	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay (hr)	0.1	0.1	0.2	0.2	0.0	0.0	0.6
Total Del/Veh (s)	7.7	1.1	2.9	1.8		3.2	2.0
Vehicles Entered	35	428	262	390	0	2	1117
Vehicles Exited	35	428	262	390	0	2	1117
Hourly Exit Rate	35	428	262	390	0	2	1117
Input Volume	36	430	271	399	1	1	1139
% of Volume	97	99	97	98	0	200	98

6: Lowell Ave & Shadow Ridge Rd Performance by movement Interval #1 4:30

Movement	EBL2	EBL	EBR	SBT	SBR	SBR2	SEL	SET	SER	SER2	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.1	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Total Del/Veh (s)	10.4	6.5	6.5	0.9	0.4	0.4		0.4	9.2	6.1	2.0
Vehicles Entered	6	1	5	77	21	6	0	119	25	8	268
Vehicles Exited	6	1	5	77	20	6	0	120	25	8	268
Hourly Exit Rate	24	4	20	308	80	24	0	480	100	32	1072
Input Volume	21	1	17	304	97	21	1	467	101	33	1063
% of Volume	114	400	118	101	82	114	0	103	99	97	101

6: Lowell Ave & Shadow Ridge Rd Performance by movement Interval #2 4:45

Movement	EBL2	EBL	EBR	SBT	SBR	SBR2	SEL	SET	SER	SER2	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1		0.1	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Total Del/Veh (s)	10.2		5.9	1.0	0.5	0.6		0.4	11.0	5.0	2.0
Vehicles Entered	5	0	4	74	30	6	0	117	26	7	269
Vehicles Exited	5	0	4	75	30	6	0	117	25	7	269
Hourly Exit Rate	20	0	16	300	120	24	0	468	100	28	1076
Input Volume	21	1	17	304	97	21	1	467	101	33	1063
% of Volume	95	0	94	99	124	114	0	100	99	85	101

6: Lowell Ave & Shadow Ridge Rd Performance by movement Interval #3 5:00

Movement	EBL2	EBL	EBR	SBT	SBR	SBR2	SEL	SET	SER	SER2	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1		0.1	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2
Total Del/Veh (s)	13.2		7.5	1.0	0.5	0.6		0.4	10.7	7.5	2.4
Vehicles Entered	5	0	5	80	25	6	0	122	31	9	283
Vehicles Exited	5	0	5	80	25	6	0	121	31	9	282
Hourly Exit Rate	20	0	20	320	100	24	0	484	124	36	1128
Input Volume	24	1	20	345	110	24	1	531	114	37	1207
% of Volume	83	0	100	93	91	100	0	91	109	97	93

6: Lowell Ave & Shadow Ridge Rd Performance by movement Interval #4 5:15

Movement	EBL2	EBL	EBR	SBT	SBR	SBR2	SET	SER	SER2	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Total Del/Veh (s)	13.9		7.1	1.0	0.5	0.4	0.4	9.9	5.0	2.0
Vehicles Entered	6	0	5	71	25	4	114	21	9	255
Vehicles Exited	6	0	5	72	26	4	115	22	9	259
Hourly Exit Rate	24	0	20	288	104	16	460	88	36	1036
Input Volume	21	1	17	304	97	21	467	101	33	1063
% of Volume	114	0	118	95	107	76	99	87	109	97

6: Lowell Ave & Shadow Ridge Rd Performance by movement Entire Run

Movement	EBL2	EBL	EBR	SBT	SBR	SBR2	SEL	SET	SER	SER2	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.1	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.3	0.1	0.6
Total Del/Veh (s)	12.5	12.7	6.8	1.0	0.5	0.5		0.4	10.5	6.0	2.1
Vehicles Entered	22	1	19	303	100	22	0	472	102	32	1073
Vehicles Exited	22	1	19	303	100	22	0	473	102	32	1074
Hourly Exit Rate	22	1	19	303	100	22	0	473	102	32	1074
Input Volume	22	1	18	314	100	22	1	483	104	34	1099
% of Volume	101	100	107	96	100	101	0	98	98	94	98

7: Empire Ave & Manor Way Performance by movement Interval #1 4:30

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.1	0.2	0.1	0.0	0.0	0.0
Total Delay (hr)	0.2	0.0	0.0	0.0	0.0	0.0	0.2
Total Del/Veh (s)	5.8	4.4	1.9	0.3	0.3	0.4	3.8
Vehicles Entered	96	2	2	11	23	21	155
Vehicles Exited	96	2	2	11	23	22	156
Hourly Exit Rate	384	8	8	44	92	88	624
Input Volume	393	10	5	43	100	86	637
% of Volume	98	80	160	102	92	102	98

7: Empire Ave & Manor Way Performance by movement Interval #2 4:45

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.4	0.1	0.0	0.0	0.0
Total Delay (hr)	0.2	0.0	0.0	0.0	0.0	0.0	0.2
Total Del/Veh (s)	5.7	3.8	2.7	0.2	0.4	0.4	3.7
Vehicles Entered	97	3	1	11	26	21	159
Vehicles Exited	96	3	1	12	26	21	159
Hourly Exit Rate	384	12	4	48	104	84	636
Input Volume	393	10	5	43	100	86	637
% of Volume	98	120	80	112	104	98	100

7: Empire Ave & Manor Way Performance by movement Interval #3 5:00

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.2	0.0	0.0	0.0	0.0	0.0	0.2
Total Del/Veh (s)	6.4	4.8	3.9	0.2	0.4	0.3	4.3
Vehicles Entered	108	3	1	13	26	21	172
Vehicles Exited	108	3	1	13	26	21	172
Hourly Exit Rate	432	12	4	52	104	84	688
Input Volume	446	11	5	48	113	98	721
% of Volume	97	109	80	108	92	86	95

7: Empire Ave & Manor Way Performance by movement Interval #4 5:15

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.2	0.0	0.0	0.0	0.0	0.0	0.2
Total Del/Veh (s)	6.0	5.0	2.2	0.2	0.3	0.4	3.8
Vehicles Entered	97	2	2	10	26	23	160
Vehicles Exited	97	2	1	11	26	23	160
Hourly Exit Rate	388	8	4	44	104	92	640
Input Volume	393	10	5	43	100	86	637
% of Volume	99	80	80	102	104	107	100

7: Empire Ave & Manor Way Performance by movement Entire Run

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.2	0.1	0.0	0.0	0.0
Total Delay (hr)	0.7	0.0	0.0	0.0	0.0	0.0	0.7
Total Del/Veh (s)	6.0	4.5	3.0	0.2	0.4	0.4	3.9
Vehicles Entered	397	10	5	46	101	86	645
Vehicles Exited	397	10	5	46	101	87	646
Hourly Exit Rate	397	10	5	46	101	87	646
Input Volume	406	10	5	44	103	89	658
% of Volume	98	98	100	104	98	98	98

8: Lowell Ave & Manor Way Performance by movement Interval #1 4:30

Movement	WBL	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.2	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.1	0.0	0.2
Total Del/Veh (s)	4.1	4.1	5.7	1.3	4.1
Vehicles Entered	23	32	66	40	161
Vehicles Exited	23	33	65	40	161
Hourly Exit Rate	92	132	260	160	644
Input Volume	91	137	265	156	649
% of Volume	101	96	98	103	99

8: Lowell Ave & Manor Way Performance by movement Interval #2 4:45

Movement	WBL	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.2	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.1	0.0	0.2
Total Del/Veh (s)	4.1	4.0	5.6	1.2	4.1
Vehicles Entered	22	31	68	36	157
Vehicles Exited	22	30	69	36	157
Hourly Exit Rate	88	120	276	144	628
Input Volume	91	137	265	156	649
% of Volume	97	88	104	92	97

8: Lowell Ave & Manor Way Performance by movement Interval #3 5:00

Movement	WBL	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.2	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.1	0.0	0.2
Total Del/Veh (s)	4.3	4.1	5.8	1.4	4.2
Vehicles Entered	22	38	73	42	175
Vehicles Exited	22	38	72	42	174
Hourly Exit Rate	88	152	288	168	696
Input Volume	103	156	301	177	737
% of Volume	85	97	96	95	94

8: Lowell Ave & Manor Way Performance by movement Interval #4 5:15

Movement	WBL	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.2	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.1	0.0	0.2
Total Del/Veh (s)	4.1	4.2	5.5	1.2	4.0
Vehicles Entered	24	36	62	35	157
Vehicles Exited	24	35	64	36	159
Hourly Exit Rate	96	140	256	144	636
Input Volume	91	137	265	156	649
% of Volume	105	102	97	92	98

8: Lowell Ave & Manor Way Performance by movement Entire Run

Movement	WBL	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.2	0.0	0.0	0.0
Total Delay (hr)	0.1	0.2	0.4	0.1	0.8
Total Del/Veh (s)	4.2	4.1	5.8	1.3	4.2
Vehicles Entered	92	137	269	154	652
Vehicles Exited	92	137	270	154	653
Hourly Exit Rate	92	137	270	154	653
Input Volume	94	142	274	161	671
% of Volume	98	97	99	96	97

18: Empire Ave & 14th St Performance by movement Interval #1 4:30

Movement	NBT	NBR	SBL	SBT	SWL	SWR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	0.9	0.8	4.1	0.7	9.4	5.8	1.7
Vehicles Entered	98	9	2	61	9	16	195
Vehicles Exited	99	9	2	61	9	16	196
Hourly Exit Rate	396	36	8	244	36	64	784
Input Volume	397	39	8	255	35	55	789
% of Volume	100	92	100	96	103	116	99

18: Empire Ave & 14th St Performance by movement Interval #2 4:45

Movement	NBT	NBR	SBL	SBT	SWL	SWR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	0.9	0.6	5.2	0.8	9.5	4.8	1.6
Vehicles Entered	98	9	2	64	9	16	198
Vehicles Exited	98	10	2	64	9	15	198
Hourly Exit Rate	392	40	8	256	36	60	792
Input Volume	397	39	8	255	35	55	789
% of Volume	99	103	100	100	103	109	100

18: Empire Ave & 14th St Performance by movement Interval #3 5:00

Movement	NBT	NBR	SBL	SBT	SWL	SWR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.3	0.2	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	1.0	0.7	3.3	0.7	11.5	6.1	1.7
Vehicles Entered	110	12	2	67	8	16	215
Vehicles Exited	109	12	2	66	8	16	213
Hourly Exit Rate	436	48	8	264	32	64	852
Input Volume	451	44	9	290	40	63	897
% of Volume	97	109	89	91	80	102	95

18: Empire Ave & 14th St Performance by movement Interval #4 5:15

Movement	NBT	NBR	SBL	SBT	SWL	SWR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	1.0	0.8	6.3	0.7	7.8	4.8	1.5
Vehicles Entered	97	11	1	65	8	13	195
Vehicles Exited	97	11	1	65	8	12	194
Hourly Exit Rate	388	44	4	260	32	48	776
Input Volume	397	39	8	255	35	55	789
% of Volume	98	113	50	102	91	87	98

18: Empire Ave & 14th St Performance by movement Entire Run

Movement	NBT	NBR	SBL	SBT	SWL	SWR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.1	0.0
Total Delay (hr)	0.1	0.0	0.0	0.1	0.1	0.1	0.4
Total Del/Veh (s)	1.0	0.7	4.5	0.7	9.5	5.5	1.6
Vehicles Entered	403	41	7	256	34	60	801
Vehicles Exited	403	41	7	257	34	60	802
Hourly Exit Rate	403	41	7	257	34	60	802
Input Volume	410	40	8	264	36	57	816
% of Volume	98	102	85	97	94	105	98

Total Network Performance By Interval

Interval Start	4:30	4:45	5:00	5:15	All
Denied Delay (hr)	0.6	0.7	3.6	11.0	15.8
Denied Del/Veh (s)	2.8	3.6	16.1	52.6	19.3
Total Delay (hr)	9.7	10.6	15.2	14.4	49.9
Total Del/Veh (s)	44.2	47.8	63.3	63.5	60.3
Vehicles Entered	712	715	762	704	2897
Vehicles Exited	702	704	750	708	2868
Hourly Exit Rate	2808	2816	3000	2832	2868
Input Volume	11632	11632	13220	11632	12029
% of Volume	24	24	23	24	24



Intersection: 1: Park Ave & Empire Ave/Deer Valley Dr, Interval #1

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	TR	L	T	R	L	T	TR	L	T	R
Maximum Queue (ft)	106	128	149	83	216	81	55	139	103	250	704	558
Average Queue (ft)	73	92	78	42	143	50	29	93	44	228	485	334
95th Queue (ft)	116	137	151	86	236	89	63	144	102	292	1036	819
Link Distance (ft)		558	558		810	810		674			1000	1000
Upstream Blk Time (%)											7	6
Queuing Penalty (veh)											0	0
Storage Bay Dist (ft)	200			175			200		200	150		
Storage Blk Time (%)					6					59	1	
Queuing Penalty (veh)					3					96	5	

Intersection: 1: Park Ave & Empire Ave/Deer Valley Dr, Interval #2

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	TR	L	T	R	L	T	TR	L	T	R
Maximum Queue (ft)	124	138	130	76	227	92	42	163	119	250	722	553
Average Queue (ft)	73	90	71	37	154	52	18	96	47	247	556	390
95th Queue (ft)	123	134	132	83	229	94	47	165	115	264	1009	925
Link Distance (ft)		558	558		810	810		674			1000	1000
Upstream Blk Time (%)											9	5
Queuing Penalty (veh)											0	0
Storage Bay Dist (ft)	200			175			200		200	150		
Storage Blk Time (%)					6			0		74	1	
Queuing Penalty (veh)					3			0		120	4	

Intersection: 1: Park Ave & Empire Ave/Deer Valley Dr, Interval #3

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	TR	L	T	R	L	T	TR	L	T	R
Maximum Queue (ft)	107	141	134	113	254	95	48	163	123	250	975	964
Average Queue (ft)	74	100	71	45	171	63	24	111	61	249	855	729
95th Queue (ft)	123	148	130	122	285	103	56	171	129	258	1216	1293
Link Distance (ft)		558	558		810	810		674			1000	1000
Upstream Blk Time (%)											31	17
Queuing Penalty (veh)											0	0
Storage Bay Dist (ft)	200			175			200		200	150		
Storage Blk Time (%)					13			0	0	80	1	
Queuing Penalty (veh)					7			0	0	149	4	

Intersection: 1: Park Ave & Empire Ave/Deer Valley Dr, Interval #4

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	TR	L	T	R	L	T	TR	L	T	R
Maximum Queue (ft)	112	129	129	88	247	87	61	157	111	250	975	940
Average Queue (ft)	67	88	71	41	169	55	26	106	50	249	910	837
95th Queue (ft)	122	137	136	117	272	94	61	168	116	253	1268	1382
Link Distance (ft)		558	558		810	810		674			1000	1000
Upstream Blk Time (%)											47	30
Queuing Penalty (veh)											0	0
Storage Bay Dist (ft)	200			175			200		200	150		
Storage Blk Time (%)					12			0		80	1	
Queuing Penalty (veh)					6			0		130	6	

Intersection: 1: Park Ave & Empire Ave/Deer Valley Dr, All Intervals

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	TR	L	T	R	L	T	TR	L	T	R
Maximum Queue (ft)	137	155	178	152	305	112	69	194	154	250	1007	972
Average Queue (ft)	72	92	73	41	159	55	24	102	50	243	701	572
95th Queue (ft)	121	140	138	105	258	96	57	163	116	280	1234	1212
Link Distance (ft)		558	558		810	810		674			1000	1000
Upstream Blk Time (%)											23	14
Queuing Penalty (veh)											0	0
Storage Bay Dist (ft)	200			175			200		200	150		
Storage Blk Time (%)					9			0	0	73	1	
Queuing Penalty (veh)					5			0	0	124	5	

Intersection: 2: Empire Ave & Silver King Dr, Interval #1

Movement	EB	EB	WB	NB	SB
Directions Served	LT	R	LTR	LTR	LT
Maximum Queue (ft)	103	48	50	68	16
Average Queue (ft)	63	18	28	25	2
95th Queue (ft)	110	60	56	67	16
Link Distance (ft)		288	271	591	558
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	75				
Storage Blk Time (%)	15				
Queuing Penalty (veh)	2				

Intersection: 2: Empire Ave & Silver King Dr, Interval #2

Movement	EB	EB	WB	NB	SB
Directions Served	LT	R	LTR	LTR	LT
Maximum Queue (ft)	101	98	57	85	25
Average Queue (ft)	68	25	28	31	5
95th Queue (ft)	113	112	62	85	28
Link Distance (ft)		288	271	591	558
Upstream Blk Time (%)		0			
Queuing Penalty (veh)		0			
Storage Bay Dist (ft)	75				
Storage Blk Time (%)	17	0			
Queuing Penalty (veh)	3	0			

Intersection: 2: Empire Ave & Silver King Dr, Interval #3

Movement	EB	EB	WB	NB	SB
Directions Served	LT	R	LTR	LTR	LT
Maximum Queue (ft)	110	105	50	84	32
Average Queue (ft)	76	29	28	40	6
95th Queue (ft)	123	121	55	90	30
Link Distance (ft)		288	271	591	558
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	75				
Storage Blk Time (%)	25	0			
Queuing Penalty (veh)	5	0			

Intersection: 2: Empire Ave & Silver King Dr, Interval #4

Movement	EB	EB	WB	NB	SB
Directions Served	LT	R	LTR	LTR	LT
Maximum Queue (ft)	108	94	50	64	16
Average Queue (ft)	67	25	26	27	2
95th Queue (ft)	117	102	56	70	18
Link Distance (ft)		288	271	591	558
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	75				
Storage Blk Time (%)	15				
Queuing Penalty (veh)	2				

Intersection: 2: Empire Ave & Silver King Dr, All Intervals

Movement	EB	EB	WB	NB	SB
Directions Served	LT	R	LTR	LTR	LT
Maximum Queue (ft)	121	196	67	108	40
Average Queue (ft)	69	24	27	31	4
95th Queue (ft)	116	101	58	79	24
Link Distance (ft)		288	271	591	558
Upstream Blk Time (%)		0			
Queuing Penalty (veh)		0			
Storage Bay Dist (ft)	75				
Storage Blk Time (%)	18	0			
Queuing Penalty (veh)	3	0			

Intersection: 3: Lowell Ave & Silver King Dr, Interval #1

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	18	73	70
Average Queue (ft)	2	17	43
95th Queue (ft)	15	66	73
Link Distance (ft)	198	288	715
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Lowell Ave & Silver King Dr, Interval #2

Movement	EB	WB	WB	NB
Directions Served	TR	L	T	LR
Maximum Queue (ft)	18	50	5	72
Average Queue (ft)	4	15	1	45
95th Queue (ft)	20	51	11	82
Link Distance (ft)	198	288	288	715
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Lowell Ave & Silver King Dr, Interval #3

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	12	53	74
Average Queue (ft)	2	16	43
95th Queue (ft)	15	53	86
Link Distance (ft)	198	288	715
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Lowell Ave & Silver King Dr, Interval #4

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	9	49	69
Average Queue (ft)	2	11	41
95th Queue (ft)	13	45	71
Link Distance (ft)	198	288	715
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Lowell Ave & Silver King Dr, All Intervals

Movement	EB	WB	WB	NB
Directions Served	TR	L	T	LR
Maximum Queue (ft)	25	84	5	108
Average Queue (ft)	2	15	0	43
95th Queue (ft)	16	54	5	78
Link Distance (ft)	198	288	288	715
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Silver King Dr & Three Kings Dr, Interval #1

Movement	SB
Directions Served	LR
Maximum Queue (ft)	26
Average Queue (ft)	12
95th Queue (ft)	35
Link Distance (ft)	365
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Silver King Dr & Three Kings Dr, Interval #2

Movement	SB
Directions Served	LR
Maximum Queue (ft)	29
Average Queue (ft)	14
95th Queue (ft)	38
Link Distance (ft)	365
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Silver King Dr & Three Kings Dr, Interval #3

Movement	SB
Directions Served	LR
Maximum Queue (ft)	26
Average Queue (ft)	10
95th Queue (ft)	33
Link Distance (ft)	365
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Silver King Dr & Three Kings Dr, Interval #4

Movement	SB
Directions Served	LR
Maximum Queue (ft)	26
Average Queue (ft)	13
95th Queue (ft)	37
Link Distance (ft)	365
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Silver King Dr & Three Kings Dr, All Intervals

Movement	SB
Directions Served	LR
Maximum Queue (ft)	29
Average Queue (ft)	12
95th Queue (ft)	36
Link Distance (ft)	365
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Shadow Ridge Rd & Empire Ave, Interval #1

Movement	NB	SB	NE
Directions Served	LT	TR	LR
Maximum Queue (ft)	87	8	20
Average Queue (ft)	29	2	3
95th Queue (ft)	87	12	17
Link Distance (ft)	186	591	244
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Shadow Ridge Rd & Empire Ave, Interval #2

Movement	NB	SB	NE
Directions Served	LT	TR	LR
Maximum Queue (ft)	96	16	6
Average Queue (ft)	35	3	1
95th Queue (ft)	102	18	11
Link Distance (ft)	186	591	244
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Shadow Ridge Rd & Empire Ave, Interval #3

Movement	NB	SB	NE
Directions Served	LT	TR	LR
Maximum Queue (ft)	109	13	3
Average Queue (ft)	44	2	1
95th Queue (ft)	108	12	8
Link Distance (ft)	186	591	244
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Shadow Ridge Rd & Empire Ave, Interval #4

Movement	NB	SB	NE
Directions Served	LT	TR	LR
Maximum Queue (ft)	94	15	6
Average Queue (ft)	30	3	1
95th Queue (ft)	93	14	9
Link Distance (ft)	186	591	244
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			



Intersection: 5: Shadow Ridge Rd & Empire Ave, All Intervals

Movement	NB	SB	NE
Directions Served	LT	TR	LR
Maximum Queue (ft)	134	27	20
Average Queue (ft)	35	2	1
95th Queue (ft)	99	14	12
Link Distance (ft)	186	591	244
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Lowell Ave & Shadow Ridge Rd, Interval #1

Movement	EB	SB	SE
Directions Served	<LR	TR>	LR>
Maximum Queue (ft)	41	6	79
Average Queue (ft)	26	1	39
95th Queue (ft)	48	9	78
Link Distance (ft)	226	244	715
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Lowell Ave & Shadow Ridge Rd, Interval #2

Movement	EB	SB	SE
Directions Served	<LR	TR>	LR>
Maximum Queue (ft)	34	6	61
Average Queue (ft)	21	1	38
95th Queue (ft)	41	8	64
Link Distance (ft)	226	244	715
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Lowell Ave & Shadow Ridge Rd, Interval #3

Movement	EB	SB	SE
Directions Served	<LR	TR>	LR>
Maximum Queue (ft)	40	8	74
Average Queue (ft)	22	1	44
95th Queue (ft)	43	11	78
Link Distance (ft)	226	244	715
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Lowell Ave & Shadow Ridge Rd, Interval #4

Movement	EB	SB	SE
Directions Served	<LR	TR>	LR>
Maximum Queue (ft)	48	13	68
Average Queue (ft)	26	1	36
95th Queue (ft)	52	8	65
Link Distance (ft)	226	244	715
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Lowell Ave & Shadow Ridge Rd, All Intervals

Movement	EB	SB	SE
Directions Served	<LR	TR>	LR>
Maximum Queue (ft)	57	18	93
Average Queue (ft)	24	1	40
95th Queue (ft)	46	9	72
Link Distance (ft)	226	244	715
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Empire Ave & Manor Way, Interval #1

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	91	6
Average Queue (ft)	57	1
95th Queue (ft)	92	9
Link Distance (ft)	154	523
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Empire Ave & Manor Way, Interval #2

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	93	6
Average Queue (ft)	56	0
95th Queue (ft)	92	6
Link Distance (ft)	154	523
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Empire Ave & Manor Way, Interval #3

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	101	8
Average Queue (ft)	66	1
95th Queue (ft)	111	13
Link Distance (ft)	154	523
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Empire Ave & Manor Way, Interval #4

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	86	15	2
Average Queue (ft)	59	3	0
95th Queue (ft)	91	19	4
Link Distance (ft)	154	523	295
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Empire Ave & Manor Way, All Intervals

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	124	32	2
Average Queue (ft)	60	1	0
95th Queue (ft)	97	13	2
Link Distance (ft)	154	523	295
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Lowell Ave & Manor Way, Interval #1

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	47	65	69
Average Queue (ft)	34	41	51
95th Queue (ft)	52	65	77
Link Distance (ft)	154	550	487
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Lowell Ave & Manor Way, Interval #2

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	49	63	70
Average Queue (ft)	33	40	50
95th Queue (ft)	55	63	71
Link Distance (ft)	154	550	487
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Lowell Ave & Manor Way, Interval #3

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	46	62	72
Average Queue (ft)	33	42	54
95th Queue (ft)	49	64	85
Link Distance (ft)	154	550	487
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Lowell Ave & Manor Way, Interval #4

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	46	65	66
Average Queue (ft)	33	42	48
95th Queue (ft)	50	67	71
Link Distance (ft)	154	550	487
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Lowell Ave & Manor Way, All Intervals

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	58	75	85
Average Queue (ft)	33	41	51
95th Queue (ft)	52	65	76
Link Distance (ft)	154	550	487
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 18: Empire Ave & 14th St, Interval #1

Movement	SB	SW
Directions Served	LT	LR
Maximum Queue (ft)	21	62
Average Queue (ft)	4	38
95th Queue (ft)	23	67
Link Distance (ft)	186	243
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 18: Empire Ave & 14th St, Interval #2

Movement	SB	SW
Directions Served	LT	LR
Maximum Queue (ft)	33	54
Average Queue (ft)	6	33
95th Queue (ft)	31	59
Link Distance (ft)	186	243
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 18: Empire Ave & 14th St, Interval #3

Movement	NB	SB	SW
Directions Served	TR	LT	LR
Maximum Queue (ft)	4	15	73
Average Queue (ft)	1	3	39
95th Queue (ft)	9	18	72
Link Distance (ft)	295	186	243
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 18: Empire Ave & 14th St, Interval #4

Movement	SB	SW
Directions Served	LT	LR
Maximum Queue (ft)	25	50
Average Queue (ft)	4	32
95th Queue (ft)	25	53
Link Distance (ft)	186	243
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 18: Empire Ave & 14th St, All Intervals

Movement	NB	SB	SW
Directions Served	TR	LT	LR
Maximum Queue (ft)	4	46	86
Average Queue (ft)	0	4	36
95th Queue (ft)	4	25	63
Link Distance (ft)	295	186	243
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty, Interval #1: 106
Network wide Queuing Penalty, Interval #2: 131
Network wide Queuing Penalty, Interval #3: 165
Network wide Queuing Penalty, Interval #4: 144
Network wide Queuing Penalty, All Intervals: 136

## SimTraffic LOS Report

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Existing (2019) Background  
**Time Period:** Saturday PM Peak Hour **Project #: UT19-1481**

**Intersection:** Park Ave & Empire Ave/Deer Valley Dr  
**Type:** Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	35	36	104	53.5	D
	T	395	385	97	59.6	E
	R	68	67	98	24.7	C
	<b>Subtotal</b>	<b>498</b>	<b>488</b>	<b>98</b>	<b>54.4</b>	<b>D</b>
SB	L	495	492	99	51.4	D
	T	363	364	100	44.2	D
	R	364	382	105	5.2	A
	<b>Subtotal</b>	<b>1,222</b>	<b>1,238</b>	<b>101</b>	<b>35.0</b>	<b>C</b>
EB	L	633	593	94	54.4	D
	T	277	245	88	40.4	D
	R	36	33	92	32.0	C
	<b>Subtotal</b>	<b>946</b>	<b>871</b>	<b>92</b>	<b>49.6</b>	<b>D</b>
WB	L	75	78	104	74.3	E
	T	239	232	97	76.6	E
	R	640	638	100	22.8	C
	<b>Subtotal</b>	<b>954</b>	<b>948</b>	<b>99</b>	<b>40.2</b>	<b>D</b>
<b>Total</b>		<b>3,621</b>	<b>3,545</b>	<b>98</b>	<b>42.7</b>	<b>D</b>

**Intersection:** Empire Ave & Silver King Dr  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	40	41	103	4.6	A
	T	601	593	99	1.7	A
	R	17	18	104	1.2	A
	<b>Subtotal</b>	<b>658</b>	<b>652</b>	<b>99</b>	<b>1.9</b>	<b>A</b>
SB	L	15	15	98	5.7	A
	T	431	434	101	1.8	A
	R	192	199	104	2.8	A
	<b>Subtotal</b>	<b>638</b>	<b>648</b>	<b>102</b>	<b>2.2</b>	<b>A</b>
<b>EB</b>	L	325	256	79	120.0	F
	T	50	41	82	122.5	F
	R	25	20	79	56.1	F
	<b>Subtotal</b>	<b>400</b>	<b>317</b>	<b>79</b>	<b>116.3</b>	<b>F</b>
WB	L	12	10	82	22.9	C
	T	15	14	92	26.2	D
	R	10	10	98	10.1	B
	<b>Subtotal</b>	<b>37</b>	<b>34</b>	<b>92</b>	<b>20.5</b>	<b>C</b>
<b>Total</b>		<b>1,734</b>	<b>1,651</b>	<b>95</b>	<b>25.0</b>	<b>C</b>



## SimTraffic LOS Report

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Existing (2019) Background  
**Time Period:** Saturday PM Peak Hour **Project #:** UT19-1481

**Intersection:** Lowell Ave & Silver King Dr  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
<b>NB</b>	L	15	12	79	134.4	F
	R	385	304	79	140.6	F
	<b>Subtotal</b>	<b>400</b>	<b>316</b>	<b>79</b>	<b>140.4</b>	<b>F</b>
EB	T	15	15	98	10.6	B
	R	10	12	117	2.1	A
	Subtotal	25	27	108	6.8	A
WB	L	237	244	103	4.2	A
	T	10	11	107	3.5	A
	Subtotal	247	255	103	4.2	A
<b>Total</b>		<b>673</b>	<b>598</b>	<b>89</b>	<b>77.9</b>	<b>F</b>

**Intersection:** Silver King Dr & Three Kings Dr  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
<b>SB</b>	L	20	21	104	4.0	A
	<b>Subtotal</b>	<b>20</b>	<b>21</b>	<b>105</b>	<b>4.0</b>	<b>A</b>
EB	T	5	5	100	0.0	A
	Subtotal	5	5	100	0.0	A
WB	T	5	5	95	0.4	A
	R	20	18	89	0.6	A
	Subtotal	25	23	92	0.6	A
<b>Total</b>		<b>51</b>	<b>49</b>	<b>97</b>	<b>1.9</b>	<b>A</b>

**SimTraffic LOS Report**

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Existing (2019) Background  
**Time Period:** Saturday PM Peak Hour **Project #:** UT19-1481

**Intersection:** Shadow Ridge Rd & Empire Ave  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	50	48	96	5.3	A
	T	643	637	99	1.3	A
	<b>Subtotal</b>	693	685	99	1.6	A
SB	T	250	253	101	2.1	A
	R	198	193	97	1.5	A
	<b>Subtotal</b>	448	446	100	1.8	A
NE	L	5	4	80	12.1	B
	T	0	0	0		
	R	5	6	120	4.0	A
	<b>Subtotal</b>	<b>10</b>	<b>10</b>	<b>100</b>	<b>7.2</b>	<b>A</b>
<b>Total</b>		1,152	1,141	99	1.7	A

**Intersection:** Lowell Ave & Shadow Ridge Rd  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
SB	T	218	215	98	0.6	A
	R	20	18	89	0.3	A
	R2	10	8	78	0.3	A
	<b>Subtotal</b>	248	241	97	0.6	A
EB	L2	40	38	96	7.9	A
	R	50	52	104	6.1	A
	<b>Subtotal</b>	<b>90</b>	<b>90</b>	<b>100</b>	<b>6.9</b>	<b>A</b>
SE	L	10	10	98	8.8	A
	T	110	116	106	0.3	A
	R	107	110	103	6.8	A
	R2	20	20	99	4.8	A
<b>Total</b>		586	587	100	2.9	A

## HALES ENGINEERING SimTraffic LOS Report

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Existing (2019) Background  
**Time Period:** Saturday PM Peak Hour **Project #:** UT19-1481

**Intersection:** Empire Ave & 14th St  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	518	511	99	1.3	A
	R	87	90	104	1.0	A
	<b>Subtotal</b>	<b>605</b>	<b>601</b>	<b>99</b>	<b>1.3</b>	<b>A</b>
SB	L	30	30	101	7.4	A
	T	235	237	101	1.4	A
	<b>Subtotal</b>	<b>265</b>	<b>267</b>	<b>101</b>	<b>2.1</b>	<b>A</b>
SW	L	37	38	103	14.0	B
	R	45	49	109	7.1	A
	<b>Subtotal</b>	<b>82</b>	<b>87</b>	<b>106</b>	<b>10.1</b>	<b>B</b>
<b>Total</b>		<b>951</b>	<b>955</b>	<b>100</b>	<b>2.3</b>	<b>A</b>

**Intersection:** Empire Ave & Manor Way  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	10	9	88	2.3	A
	T	55	54	98	0.3	A
	<b>Subtotal</b>	<b>65</b>	<b>63</b>	<b>97</b>	<b>0.6</b>	<b>A</b>
SB	T	144	150	104	0.8	A
	R	127	125	98	0.6	A
	<b>Subtotal</b>	<b>271</b>	<b>275</b>	<b>101</b>	<b>0.7</b>	<b>A</b>
EB	L	520	514	99	8.4	A
	T	1	1	100	2.7	A
	R	20	21	104	6.7	A
<b>Subtotal</b>	<b>541</b>	<b>536</b>	<b>99</b>	<b>8.3</b>	<b>A</b>	
<b>Total</b>		<b>878</b>	<b>874</b>	<b>100</b>	<b>5.4</b>	<b>A</b>

## SimTraffic LOS Report

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Existing (2019) Background  
**Time Period:** Saturday PM Peak Hour **Project #:** UT19-1481

**Intersection:** Lowell Ave & Manor Way  
**Type:** All-way Stop Controlled

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	R	185	176	95	4.8	A
	Subtotal	185	176	95	4.8	A
SB	L	355	360	101	8.0	A
	T	65	63	97	8.7	A
	Subtotal	420	423	101	8.1	A
WB	L	137	133	97	4.8	A
	T	0	1	400	0.3	A
	Subtotal	137	134	98	4.8	A
<b>Total</b>		743	733	99	6.8	A

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #1 4:30

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	2.8	0.5	0.5	3.7	0.7	3.4	2.7	1.0	0.6
Total Delay (hr)	2.3	0.7	0.1	0.4	1.1	1.0	0.1	1.5	0.1	1.5	1.0	0.1
Total Del/Veh (s)	50.7	38.2	32.0	70.4	66.1	21.0	48.7	53.3	22.5	43.6	37.7	5.1
Vehicles Entered	148	66	8	20	54	158	8	96	17	114	89	90
Vehicles Exited	146	63	7	19	53	162	8	96	18	117	88	90
Hourly Exit Rate	584	252	28	76	212	648	32	384	72	468	352	360
Input Volume	622	272	35	74	235	629	34	388	67	486	357	358
% of Volume	94	93	80	103	90	103	94	99	107	96	99	101

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #1 4:30

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.9
Total Delay (hr)	9.9
Total Del/Veh (s)	38.5
Vehicles Entered	868
Vehicles Exited	867
Hourly Exit Rate	3468
Input Volume	3557
% of Volume	97

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #2 4:45

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	2.8	0.5	0.5	3.3	0.8	3.3	2.7	1.1	0.7
Total Delay (hr)	2.4	0.7	0.1	0.4	1.4	1.1	0.1	1.6	0.1	1.7	1.1	0.1
Total Del/Veh (s)	52.3	38.3	28.5	67.0	76.4	23.8	48.1	56.8	24.0	46.3	41.4	5.0
Vehicles Entered	149	58	9	20	59	160	9	95	19	126	87	98
Vehicles Exited	149	58	9	20	59	159	9	98	19	126	85	97
Hourly Exit Rate	596	232	36	80	236	636	36	392	76	504	340	388
Input Volume	622	272	35	74	235	629	34	388	67	486	357	358
% of Volume	96	85	103	108	100	101	106	101	113	104	95	108

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #2 4:45

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.9
Total Delay (hr)	10.8
Total Del/Veh (s)	41.1
Vehicles Entered	889
Vehicles Exited	888
Hourly Exit Rate	3552
Input Volume	3557
% of Volume	100

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #3 5:00

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	2.7	0.6	0.5	3.1	0.7	3.5	2.7	1.2	0.7
Total Delay (hr)	2.2	0.7	0.1	0.5	1.5	1.0	0.1	1.7	0.1	2.1	1.3	0.2
Total Del/Veh (s)	50.7	38.8	26.3	71.2	75.7	21.6	47.8	58.0	25.2	53.1	43.7	5.6
Vehicles Entered	144	62	9	21	63	166	10	101	16	132	97	104
Vehicles Exited	150	63	9	20	61	164	9	96	16	126	99	105
Hourly Exit Rate	600	252	36	80	244	656	36	384	64	504	396	420
Input Volume	666	292	38	79	252	674	37	416	72	521	382	383
% of Volume	90	86	95	101	97	97	97	92	89	97	104	110

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #3 5:00

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.9
Total Delay (hr)	11.5
Total Del/Veh (s)	41.9
Vehicles Entered	925
Vehicles Exited	918
Hourly Exit Rate	3672
Input Volume	3812
% of Volume	96

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #4 5:15

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	2.8	0.5	0.5	3.5	0.6	3.4	2.7	1.0	0.7
Total Delay (hr)	2.2	0.7	0.1	0.4	1.2	1.0	0.1	1.7	0.1	1.9	1.2	0.1
Total Del/Veh (s)	50.7	37.7	31.6	64.6	64.7	22.0	52.9	57.0	24.4	50.5	44.0	4.8
Vehicles Entered	146	60	8	18	57	153	9	95	15	119	92	90
Vehicles Exited	148	61	8	20	59	153	9	94	14	122	92	89
Hourly Exit Rate	592	244	32	80	236	612	36	376	56	488	368	356
Input Volume	622	272	35	74	235	629	34	388	67	486	357	358
% of Volume	95	90	91	108	100	97	106	97	84	100	103	99

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #4 5:15

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.9
Total Delay (hr)	10.6
Total Del/Veh (s)	41.1
Vehicles Entered	862
Vehicles Exited	869
Hourly Exit Rate	3476
Input Volume	3557
% of Volume	98

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Entire Run

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.4	0.1	0.1
Denied Del/Veh (s)	0.0	0.0	0.0	2.8	0.5	0.5	3.4	0.7	3.4	2.7	1.1	0.7
Total Delay (hr)	9.1	2.8	0.3	1.7	5.0	4.1	0.5	6.6	0.5	7.2	4.5	0.6
Total Del/Veh (s)	54.4	40.4	32.0	74.3	76.6	22.8	53.5	59.6	24.7	51.4	44.2	5.2
Vehicles Entered	588	246	34	78	232	636	36	387	67	491	365	382
Vehicles Exited	593	245	33	78	232	638	36	385	67	492	364	382
Hourly Exit Rate	593	245	33	78	232	638	36	385	67	492	364	382
Input Volume	633	277	36	75	239	640	35	395	68	495	363	364
% of Volume	94	88	92	104	97	100	104	97	98	99	100	105

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Entire Run

Movement	All
Denied Delay (hr)	0.9
Denied Del/Veh (s)	0.9
Total Delay (hr)	42.7
Total Del/Veh (s)	42.7
Vehicles Entered	3542
Vehicles Exited	3545
Hourly Exit Rate	3545
Input Volume	3621
% of Volume	98

2: Empire Ave & Silver King Dr Performance by movement Interval #1 4:30

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	2.0	0.3	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	92.3	91.9	45.6	17.0	20.9	13.9	4.3	1.6	1.3	7.4	1.4	2.6
Vehicles Entered	69	9	7	3	4	2	9	146	4	2	100	48
Vehicles Exited	69	10	7	3	4	2	9	147	4	2	102	48
Hourly Exit Rate	276	40	28	12	16	8	36	588	16	8	408	192
Input Volume	319	49	25	12	15	10	39	590	17	15	423	189
% of Volume	87	82	112	100	107	80	92	100	94	53	96	102

2: Empire Ave & Silver King Dr Performance by movement Interval #1 4:30

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.0
Total Delay (hr)	2.6
Total Del/Veh (s)	21.9
Vehicles Entered	403
Vehicles Exited	407
Hourly Exit Rate	1628
Input Volume	1703
% of Volume	96

2: Empire Ave & Silver King Dr Performance by movement Interval #2 4:45

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	2.3	0.3	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Total Del/Veh (s)	113.9	107.3	51.6	15.0	24.5	6.4	4.8	1.8	1.9	5.6	2.1	2.8
Vehicles Entered	66	9	4	2	3	2	10	149	4	5	115	46
Vehicles Exited	64	9	4	2	3	2	10	149	4	5	114	46
Hourly Exit Rate	256	36	16	8	12	8	40	596	16	20	456	184
Input Volume	319	49	25	12	15	10	39	590	17	15	423	189
% of Volume	80	73	64	67	80	80	103	101	94	133	108	97

2: Empire Ave & Silver King Dr Performance by movement Interval #2 4:45

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.0
Total Delay (hr)	3.0
Total Del/Veh (s)	24.9
Vehicles Entered	415
Vehicles Exited	412
Hourly Exit Rate	1648
Input Volume	1703
% of Volume	97

2: Empire Ave & Silver King Dr Performance by movement Interval #3 5:00

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	21.5	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	2.3	0.4	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Total Del/Veh (s)	123.9	131.3	77.9	19.3	26.0	10.3	4.0	1.6	1.1	5.6	1.7	2.8
Vehicles Entered	56	10	4	3	4	3	12	153	5	4	114	57
Vehicles Exited	57	10	4	3	4	3	12	153	5	4	114	57
Hourly Exit Rate	228	40	16	12	16	12	48	612	20	16	456	228
Input Volume	342	54	26	13	16	11	42	633	18	16	454	202
% of Volume	67	74	62	92	100	109	114	97	111	100	100	113

2: Empire Ave & Silver King Dr Performance by movement Interval #3 5:00

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.2
Total Delay (hr)	3.1
Total Del/Veh (s)	25.0
Vehicles Entered	425
Vehicles Exited	426
Hourly Exit Rate	1704
Input Volume	1827
% of Volume	93



2: Empire Ave & Silver King Dr Performance by movement Interval #4 5:15

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	18.0	0.4	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	2.2	0.4	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Total Del/Veh (s)	105.1	107.1	48.0	23.6	26.2	14.7	5.1	1.7	0.8	5.1	1.8	2.7
Vehicles Entered	67	12	5	2	4	2	10	144	4	4	105	49
Vehicles Exited	67	12	5	3	4	2	10	143	4	3	105	48
Hourly Exit Rate	268	48	20	12	16	8	40	572	16	12	420	192
Input Volume	319	49	25	12	15	10	39	590	17	15	423	189
% of Volume	84	98	80	100	107	80	103	97	94	80	99	102

2: Empire Ave & Silver King Dr Performance by movement Interval #4 5:15

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.2
Total Delay (hr)	3.0
Total Del/Veh (s)	25.2
Vehicles Entered	408
Vehicles Exited	406
Hourly Exit Rate	1624
Input Volume	1703
% of Volume	95

2: Empire Ave & Silver King Dr Performance by movement Entire Run

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	8.8	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	8.9	1.5	0.3	0.1	0.1	0.0	0.1	0.3	0.0	0.0	0.2	0.2
Total Del/Veh (s)	120.0	122.5	56.1	22.9	26.2	10.1	4.6	1.7	1.2	5.7	1.8	2.8
Vehicles Entered	258	41	20	10	14	10	41	592	18	15	434	200
Vehicles Exited	256	41	20	10	14	10	41	593	18	15	434	199
Hourly Exit Rate	256	41	20	10	14	10	41	593	18	15	434	199
Input Volume	325	50	25	12	15	10	40	601	17	15	431	192
% of Volume	79	82	79	82	92	98	103	99	104	98	101	104

2: Empire Ave & Silver King Dr Performance by movement Entire Run

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.1
Total Delay (hr)	11.6
Total Del/Veh (s)	25.0
Vehicles Entered	1653
Vehicles Exited	1651
Hourly Exit Rate	1651
Input Volume	1734
% of Volume	95

3: Lowell Ave & Silver King Dr Performance by movement Interval #1 4:30

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.9	1.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	24.6	35.7	20.8
Total Delay (hr)	0.0	0.0	0.1	0.0	0.1	2.2	2.4
Total Del/Veh (s)	10.8	3.1	4.1	3.0	103.1	86.9	52.6
Vehicles Entered	3	3	59	3	4	85	157
Vehicles Exited	3	3	59	3	4	82	154
Hourly Exit Rate	12	12	236	12	16	328	616
Input Volume	15	10	233	10	15	378	661
% of Volume	80	120	101	120	107	87	93

3: Lowell Ave & Silver King Dr Performance by movement Interval #2 4:45

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.2	3.5	3.6
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	152.3	122.7	76.7
Total Delay (hr)	0.0	0.0	0.1	0.0	0.1	3.1	3.3
Total Del/Veh (s)	6.3	2.2	4.0	4.7	103.9	125.7	74.5
Vehicles Entered	4	3	56	2	3	79	147
Vehicles Exited	4	3	56	2	3	76	144
Hourly Exit Rate	16	12	224	8	12	304	576
Input Volume	15	10	233	10	15	378	661
% of Volume	107	120	96	80	80	80	87

3: Lowell Ave & Silver King Dr Performance by movement Interval #3 5:00

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.3	9.2	9.5
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	208.1	269.2	164.2
Total Delay (hr)	0.0	0.0	0.1	0.0	0.1	3.5	3.8
Total Del/Veh (s)	14.5	1.7	4.2	3.1	178.8	153.7	80.9
Vehicles Entered	4	3	70	3	3	67	150
Vehicles Exited	4	4	69	3	3	66	149
Hourly Exit Rate	16	16	276	12	12	264	596
Input Volume	16	11	249	11	16	405	708
% of Volume	100	145	111	109	75	65	84

3: Lowell Ave & Silver King Dr Performance by movement Interval #4 5:15

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.6	16.5	17.1
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	362.5	390.5	271.1
Total Delay (hr)	0.0	0.0	0.1	0.0	0.1	3.6	3.8
Total Del/Veh (s)	10.8	0.7	4.2	3.6	127.4	135.5	80.1
Vehicles Entered	4	3	59	3	3	80	152
Vehicles Exited	4	3	60	3	2	81	153
Hourly Exit Rate	16	12	240	12	8	324	612
Input Volume	15	10	233	10	15	378	661
% of Volume	107	120	103	120	53	86	93

3: Lowell Ave & Silver King Dr Performance by movement Entire Run

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	1.1	30.1	31.2
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	245.2	282.2	164.9
Total Delay (hr)	0.0	0.0	0.3	0.0	0.5	12.5	13.3
Total Del/Veh (s)	10.6	2.1	4.2	3.5	134.4	140.6	77.9
Vehicles Entered	15	12	243	11	13	312	606
Vehicles Exited	15	12	244	11	12	304	598
Hourly Exit Rate	15	12	244	11	12	304	598
Input Volume	15	10	237	10	15	385	673
% of Volume	98	117	103	107	79	79	89

4: Silver King Dr & Three Kings Dr Performance by movement Interval #1 4:30

Movement	EBT	WBT	WBR	SBL	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	0.0	0.6	0.5	3.8	1.9
Vehicles Entered	1	1	6	5	13
Vehicles Exited	1	1	5	5	12
Hourly Exit Rate	4	4	20	20	48
Input Volume	5	5	20	20	50
% of Volume	80	80	100	100	96

4: Silver King Dr & Three Kings Dr Performance by movement Interval #2 4:45

Movement	EBT	WBT	WBR	SBL	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.1	0.1
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	0.0	0.7	0.5	3.7	2.1
Vehicles Entered	1	1	4	5	11
Vehicles Exited	1	1	4	6	12
Hourly Exit Rate	4	4	16	24	48
Input Volume	5	5	20	20	50
% of Volume	80	80	80	120	96

4: Silver King Dr & Three Kings Dr Performance by movement Interval #3 5:00

Movement	EBT	WBT	WBR	SBL	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.1	0.1
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	0.0	0.3	0.5	3.5	1.8
Vehicles Entered	2	2	4	6	14
Vehicles Exited	2	2	4	5	13
Hourly Exit Rate	8	8	16	20	52
Input Volume	5	6	21	21	53
% of Volume	160	133	76	95	98

4: Silver King Dr & Three Kings Dr Performance by movement Interval #4 5:15

Movement	EBT	WBT	WBR	SBL	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.2	0.1
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	0.0	0.3	0.6	4.2	2.0
Vehicles Entered	1	1	4	5	11
Vehicles Exited	1	1	5	5	12
Hourly Exit Rate	4	4	20	20	48
Input Volume	5	5	20	20	50
% of Volume	80	80	100	100	96

4: Silver King Dr & Three Kings Dr Performance by movement Entire Run

Movement	EBT	WBT	WBR	SBL	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.1	0.1
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	0.0	0.4	0.6	4.0	1.9
Vehicles Entered	5	5	18	21	49
Vehicles Exited	5	5	18	21	49
Hourly Exit Rate	5	5	18	21	49
Input Volume	5	5	20	20	51
% of Volume	100	95	89	104	97

5: Shadow Ridge Rd & Empire Ave Performance by movement Interval #1 4:30

Movement	NBL	NBT	SBT	SBR	NEL	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.2	0.0	0.0	0.0	0.0	0.1
Total Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	5.8	1.2	2.0	1.3	19.6	5.5	1.7
Vehicles Entered	12	156	61	44	1	1	275
Vehicles Exited	12	156	61	44	1	1	275
Hourly Exit Rate	48	624	244	176	4	4	1100
Input Volume	49	632	246	195	5	5	1132
% of Volume	98	99	99	90	80	80	97

5: Shadow Ridge Rd & Empire Ave Performance by movement Interval #2 4:45

Movement	NBL	NBT	SBT	SBR	NEL	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.2	0.0	0.0	0.0	0.0	0.1
Total Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	5.9	1.3	2.2	1.6	8.1	5.4	1.8
Vehicles Entered	11	160	65	50	1	1	288
Vehicles Exited	11	160	66	50	0	1	288
Hourly Exit Rate	44	640	264	200	0	4	1152
Input Volume	49	632	246	195	5	5	1132
% of Volume	90	101	107	103	0	80	102

5: Shadow Ridge Rd & Empire Ave Performance by movement Interval #3 5:00

Movement	NBL	NBT	SBT	SBR	NEL	NET	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.2	0.0	0.0	0.0		0.0	0.1
Total Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	5.2	1.2	2.1	1.7	15.3		4.6	1.7
Vehicles Entered	12	167	67	50	1	0	1	298
Vehicles Exited	12	166	68	50	1	0	1	298
Hourly Exit Rate	48	664	272	200	4	0	4	1192
Input Volume	53	677	264	208	5	1	5	1213
% of Volume	91	98	103	96	80	0	80	98

5: Shadow Ridge Rd & Empire Ave Performance by movement Interval #4 5:15

Movement	NBL	NBT	SBT	SBR	NEL	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.2	0.0	0.0	0.0	0.0	0.1
Total Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	4.6	1.2	2.1	1.3	5.3	4.2	1.6
Vehicles Entered	12	155	60	48	1	2	278
Vehicles Exited	12	155	59	48	1	2	277
Hourly Exit Rate	48	620	236	192	4	8	1108
Input Volume	49	632	246	195	5	5	1132
% of Volume	98	98	96	98	80	160	98

5: Shadow Ridge Rd & Empire Ave Performance by movement Entire Run

Movement	NBL	NBT	SBT	SBR	NEL	NET	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.2	0.0	0.0	0.0		0.0	0.1
Total Delay (hr)	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.5
Total Del/Veh (s)	5.3	1.3	2.1	1.5	12.1		4.0	1.7
Vehicles Entered	48	637	253	192	4	0	6	1140
Vehicles Exited	48	637	253	193	4	0	6	1141
Hourly Exit Rate	48	637	253	193	4	0	6	1141
Input Volume	50	643	250	198	5	0	5	1152
% of Volume	96	99	101	97	80	0	120	99

6: Lowell Ave & Shadow Ridge Rd Performance by movement Interval #1 4:30

Movement	EBL2	EBR	SBT	SBR	SBR2	SEL	SET	SER	SER2	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	7.5	5.2	0.6	0.4	0.5	7.8	0.3	6.1	4.5	2.8
Vehicles Entered	9	12	50	4	2	3	26	29	5	140
Vehicles Exited	9	12	50	5	2	3	26	28	5	140
Hourly Exit Rate	36	48	200	20	8	12	104	112	20	560
Input Volume	39	49	215	20	10	10	108	105	20	576
% of Volume	92	98	93	100	80	120	96	107	100	97

6: Lowell Ave & Shadow Ridge Rd Performance by movement Interval #2 4:45

Movement	EBL2	EBR	SBT	SBR	SBR2	SEL	SET	SER	SER2	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Total Del/Veh (s)	8.1	6.7	0.5	0.2	0.2	7.5	0.3	7.2	3.6	3.0
Vehicles Entered	10	14	55	5	2	2	27	26	4	145
Vehicles Exited	10	14	55	5	2	2	27	27	4	146
Hourly Exit Rate	40	56	220	20	8	8	108	108	16	584
Input Volume	39	49	215	20	10	10	108	105	20	576
% of Volume	103	114	102	100	80	80	100	103	80	101

6: Lowell Ave & Shadow Ridge Rd Performance by movement Interval #3 5:00

Movement	EBL2	EBR	SBT	SBR	SBR2	SEL	SET	SER	SER2	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Total Del/Veh (s)	8.3	6.4	0.5	0.3	0.2	9.7	0.2	7.0	5.9	3.0
Vehicles Entered	9	14	56	4	2	3	34	30	5	157
Vehicles Exited	9	14	56	4	2	3	33	30	5	156
Hourly Exit Rate	36	56	224	16	8	12	132	120	20	624
Input Volume	42	53	229	21	11	11	115	113	21	616
% of Volume	86	106	98	76	73	109	115	106	95	101

6: Lowell Ave & Shadow Ridge Rd Performance by movement Interval #4 5:15

Movement	EBL2	EBR	SBT	SBR	SBR2	SEL	SET	SER	SER2	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	7.0	5.5	0.5	0.3	0.3	10.3	0.3	6.4	4.4	2.7
Vehicles Entered	11	11	54	5	2	2	28	25	7	145
Vehicles Exited	11	12	54	5	2	2	29	25	7	147
Hourly Exit Rate	44	48	216	20	8	8	116	100	28	588
Input Volume	39	49	215	20	10	10	108	105	20	576
% of Volume	113	98	100	100	80	80	107	95	140	102

6: Lowell Ave & Shadow Ridge Rd Performance by movement Entire Run

Movement	EBL2	EBR	SBT	SBR	SBR2	SEL	SET	SER	SER2	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.5
Total Del/Veh (s)	7.9	6.1	0.6	0.3	0.3	8.8	0.3	6.8	4.8	2.9
Vehicles Entered	38	52	215	18	8	10	115	110	20	586
Vehicles Exited	38	52	215	18	8	10	116	110	20	587
Hourly Exit Rate	38	52	215	18	8	10	116	110	20	587
Input Volume	40	50	218	20	10	10	110	107	20	586
% of Volume	96	104	98	89	78	98	106	103	99	100

7: Empire Ave & 14th St Performance by movement Interval #1 4:30

Movement	NBT	NBR	SBL	SBT	SWL	SWR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.2	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	1.2	1.0	5.6	1.0	12.3	7.2	2.2
Vehicles Entered	126	21	8	56	10	12	233
Vehicles Exited	126	21	8	56	10	12	233
Hourly Exit Rate	504	84	32	224	40	48	932
Input Volume	509	85	29	231	36	44	934
% of Volume	99	99	110	97	111	109	100



7: Empire Ave & 14th St Performance by movement Interval #2 4:45

Movement	NBT	NBR	SBL	SBT	SWL	SWR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.0	0.1	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	1.3	0.9	7.8	1.3	12.5	6.1	2.1
Vehicles Entered	130	22	7	62	9	12	242
Vehicles Exited	129	22	7	62	9	12	241
Hourly Exit Rate	516	88	28	248	36	48	964
Input Volume	509	85	29	231	36	44	934
% of Volume	101	104	97	107	100	109	103

7: Empire Ave & 14th St Performance by movement Interval #3 5:00

Movement	NBT	NBR	SBL	SBT	SWL	SWR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.2	0.0
Total Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.0	0.2
Total Del/Veh (s)	1.4	1.0	6.5	1.3	13.8	7.7	2.3
Vehicles Entered	132	26	8	62	10	14	252
Vehicles Exited	132	26	8	62	10	14	252
Hourly Exit Rate	528	104	32	248	40	56	1008
Input Volume	545	92	32	247	39	47	1002
% of Volume	97	113	100	100	103	119	101

7: Empire Ave & 14th St Performance by movement Interval #4 5:15

Movement	NBT	NBR	SBL	SBT	SWL	SWR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.3	0.0	0.2	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total Del/Veh (s)	1.3	0.9	8.2	1.8	16.1	6.9	2.5
Vehicles Entered	123	21	7	56	10	11	228
Vehicles Exited	124	22	7	56	9	11	229
Hourly Exit Rate	496	88	28	224	36	44	916
Input Volume	509	85	29	231	36	44	934
% of Volume	97	104	97	97	100	100	98

7: Empire Ave & 14th St Performance by movement Entire Run

Movement	NBT	NBR	SBL	SBT	SWL	SWR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.0	0.1	0.2	0.0
Total Delay (hr)	0.2	0.0	0.1	0.1	0.2	0.1	0.6
Total Del/Veh (s)	1.3	1.0	7.4	1.4	14.0	7.1	2.3
Vehicles Entered	510	90	30	236	39	49	954
Vehicles Exited	511	90	30	237	38	49	955
Hourly Exit Rate	511	90	30	237	38	49	955
Input Volume	518	87	30	235	37	45	951
% of Volume	99	104	101	101	103	109	100

8: Empire Ave & Manor Way Performance by movement Interval #1 4:30

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Total Del/Veh (s)	8.2	1.7	6.7	4.0	0.2	0.8	0.5	5.3
Vehicles Entered	124	1	6	1	14	38	29	213
Vehicles Exited	125	1	6	1	14	38	29	214
Hourly Exit Rate	500	4	24	4	56	152	116	856
Input Volume	511	1	20	10	54	142	125	863
% of Volume	98	400	120	40	104	107	93	99

8: Empire Ave & Manor Way Performance by movement Interval #2 4:45

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0		0.0	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Total Del/Veh (s)	8.3		6.6	1.9	0.2	0.8	0.6	5.3
Vehicles Entered	132	0	6	2	13	39	32	224
Vehicles Exited	132	0	6	2	13	39	32	224
Hourly Exit Rate	528	0	24	8	52	156	128	896
Input Volume	511	1	20	10	54	142	125	863
% of Volume	103	0	120	80	96	110	102	104

8: Empire Ave & Manor Way Performance by movement Interval #3 5:00

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0		0.0	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Total Del/Veh (s)	8.5		7.3	1.6	0.3	0.8	0.7	5.4
Vehicles Entered	133	0	5	3	15	37	35	228
Vehicles Exited	134	0	5	2	14	37	35	227
Hourly Exit Rate	536	0	20	8	56	148	140	908
Input Volume	547	1	21	11	58	152	134	924
% of Volume	98	0	95	73	97	97	104	98

8: Empire Ave & Manor Way Performance by movement Interval #4 5:15

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0		0.0	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Total Del/Veh (s)	8.3		6.3	2.6	0.3	0.7	0.7	5.3
Vehicles Entered	125	0	4	3	13	36	30	211
Vehicles Exited	125	0	4	3	13	36	29	210
Hourly Exit Rate	500	0	16	12	52	144	116	840
Input Volume	511	1	20	10	54	142	125	863
% of Volume	98	0	80	120	96	101	93	97

8: Empire Ave & Manor Way Performance by movement Entire Run

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	1.2	0.0	0.0	0.0	0.0	0.0	0.0	1.3
Total Del/Veh (s)	8.4	2.7	6.7	2.3	0.3	0.8	0.6	5.4
Vehicles Entered	515	1	20	9	54	150	125	874
Vehicles Exited	514	1	21	9	54	150	125	874
Hourly Exit Rate	514	1	21	9	54	150	125	874
Input Volume	520	1	20	10	55	144	127	878
% of Volume	99	100	104	88	98	104	98	100

9: Lowell Ave & Manor Way Performance by movement Interval #1 4:30

Movement	WBL	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.2	0.0	0.0	0.1
Total Delay (hr)	0.0	0.1	0.2	0.0	0.3
Total Del/Veh (s)	4.6	4.8	7.8	8.0	6.6
Vehicles Entered	31	45	85	16	177
Vehicles Exited	31	45	85	15	176
Hourly Exit Rate	124	180	340	60	704
Input Volume	135	182	349	64	730
% of Volume	92	99	97	94	96

9: Lowell Ave & Manor Way Performance by movement Interval #2 4:45

Movement	WBL	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.2	0.1	0.1	0.1
Total Delay (hr)	0.0	0.1	0.2	0.0	0.4
Total Del/Veh (s)	4.6	4.7	8.1	8.9	6.8
Vehicles Entered	34	44	93	16	187
Vehicles Exited	33	44	94	16	187
Hourly Exit Rate	132	176	376	64	748
Input Volume	135	182	349	64	730
% of Volume	98	97	108	100	102

9: Lowell Ave & Manor Way Performance by movement Interval #3 5:00

Movement	WBL	WBT	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.2	0.1	0.1	0.1
Total Delay (hr)	0.1	0.0	0.1	0.2	0.0	0.4
Total Del/Veh (s)	4.9	0.3	4.5	8.7	9.9	7.1
Vehicles Entered	37	1	42	95	17	192
Vehicles Exited	37	1	42	96	16	192
Hourly Exit Rate	148	4	168	384	64	768
Input Volume	144	1	195	374	68	782
% of Volume	103	400	86	103	94	98

9: Lowell Ave & Manor Way Performance by movement Interval #4 5:15

Movement	WBL	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.2	0.1	0.0	0.1
Total Delay (hr)	0.0	0.1	0.2	0.0	0.3
Total Del/Veh (s)	4.9	4.9	6.9	7.6	6.1
Vehicles Entered	32	44	86	15	177
Vehicles Exited	32	44	85	16	177
Hourly Exit Rate	128	176	340	64	708
Input Volume	135	182	349	64	730
% of Volume	95	97	97	100	97

9: Lowell Ave & Manor Way Performance by movement Entire Run

Movement	WBL	WBT	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.2	0.1	0.0	0.1
Total Delay (hr)	0.2	0.0	0.2	0.8	0.2	1.4
Total Del/Veh (s)	4.8	0.3	4.8	8.0	8.7	6.8
Vehicles Entered	133	1	175	360	63	732
Vehicles Exited	133	1	176	360	63	733
Hourly Exit Rate	133	1	176	360	63	733
Input Volume	137	0	185	355	65	743
% of Volume	97	400	95	101	97	99

Total Network Performance By Interval

Interval Start	4:30	4:45	5:00	5:15	All	
Denied Delay (hr)		1.2	3.9	9.8	17.4	32.2
Denied Del/Veh (s)		4.7	14.9	34.6	64.5	31.0
Total Delay (hr)		16.4	18.7	19.9	18.8	73.8
Total Del/Veh (s)		57.5	64.6	66.3	65.7	70.0
Vehicles Entered		900	919	958	894	3669
Vehicles Exited		902	916	943	905	3670
Hourly Exit Rate		3608	3664	3772	3620	3670
Input Volume		13689	13689	14668	13689	13934
% of Volume		26	27	26	26	26

Intersection: 1: Park Ave & Empire Ave/Deer Valley Dr, Interval #1

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	TR	L	T	R	L	T	TR	L	T	R
Maximum Queue (ft)	263	291	267	160	299	319	55	291	256	414	391	104
Average Queue (ft)	211	233	174	81	198	213	29	220	176	299	236	61
95th Queue (ft)	290	307	283	174	368	339	59	297	264	433	406	110
Link Distance (ft)		558	558		810	810		674			1000	1000
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			175			200		200	300		
Storage Blk Time (%)	12	20		1	19			13	2	10	3	
Queuing Penalty (veh)	38	63		3	14			37	5	36	15	

Intersection: 1: Park Ave & Empire Ave/Deer Valley Dr, Interval #2

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	TR	L	T	R	L	T	TR	L	T	R
Maximum Queue (ft)	299	306	247	196	330	354	71	276	257	448	390	100
Average Queue (ft)	221	237	168	97	223	233	31	215	183	343	238	60
95th Queue (ft)	308	315	258	212	362	407	74	285	263	477	404	101
Link Distance (ft)		558	558		810	810		674			1000	1000
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			175			200		200	300		
Storage Blk Time (%)	15	23		0	28			16	3	16	5	
Queuing Penalty (veh)	46	71		0	20			47	7	58	25	

Intersection: 1: Park Ave & Empire Ave/Deer Valley Dr, Interval #3

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	TR	L	T	R	L	T	TR	L	T	R
Maximum Queue (ft)	278	290	290	194	354	342	65	294	260	489	576	172
Average Queue (ft)	212	230	183	105	250	218	33	216	180	377	332	78
95th Queue (ft)	287	305	317	235	403	355	72	306	281	547	618	192
Link Distance (ft)		558	558		810	810		674			1000	1000
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			175			200		200	300		
Storage Blk Time (%)	11	20		0	34			16	3	22	8	
Queuing Penalty (veh)	38	65		0	27			52	9	86	42	

Intersection: 1: Park Ave & Empire Ave/Deer Valley Dr, Interval #4

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	TR	L	T	R	L	T	TR	L	T	R
Maximum Queue (ft)	281	303	267	209	307	335	116	300	250	446	507	85
Average Queue (ft)	212	229	159	89	207	215	39	225	181	341	314	54
95th Queue (ft)	288	303	264	194	314	352	117	318	281	514	589	93
Link Distance (ft)		558	558		810	810		674			1000	1000
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			175			200		200	300		
Storage Blk Time (%)	12	20		0	20			17	3	18	5	
Queuing Penalty (veh)	36	62		0	15			51	6	64	26	

Intersection: 1: Park Ave & Empire Ave/Deer Valley Dr, All Intervals

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	TR	L	T	R	L	T	TR	L	T	R
Maximum Queue (ft)	318	334	324	274	431	439	135	333	297	496	629	183
Average Queue (ft)	214	232	171	93	220	220	33	219	180	340	280	63
95th Queue (ft)	294	308	283	205	368	365	84	302	273	500	522	133
Link Distance (ft)		558	558		810	810		674			1000	1000
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			175			200		200	300		
Storage Blk Time (%)	12	21		0	25			15	3	17	5	
Queuing Penalty (veh)	39	65		1	19			47	7	61	27	

Intersection: 2: Empire Ave & Silver King Dr, Interval #1

Movement	EB	EB	WB	NB	SB
Directions Served	LT	R	LTR	LTR	LT
Maximum Queue (ft)	125	295	47	67	43
Average Queue (ft)	124	265	24	19	10
95th Queue (ft)	130	378	53	70	40
Link Distance (ft)		288	271	591	558
Upstream Blk Time (%)		42			
Queuing Penalty (veh)		163			
Storage Bay Dist (ft)	75				
Storage Blk Time (%)	96	0			
Queuing Penalty (veh)	24	0			

Intersection: 2: Empire Ave & Silver King Dr, Interval #2

Movement	EB	EB	WB	NB	SB
Directions Served	LT	R	LTR	LTR	LT
Maximum Queue (ft)	125	298	36	97	120
Average Queue (ft)	124	289	18	27	26
95th Queue (ft)	129	321	44	92	110
Link Distance (ft)		288	271	591	558
Upstream Blk Time (%)		57			
Queuing Penalty (veh)		226			
Storage Bay Dist (ft)	75				
Storage Blk Time (%)	99	0			
Queuing Penalty (veh)	25	0			

Intersection: 2: Empire Ave & Silver King Dr, Interval #3

Movement	EB	EB	WB	NB	SB
Directions Served	LT	R	LTR	LTR	LT
Maximum Queue (ft)	125	299	51	81	66
Average Queue (ft)	125	291	26	22	15
95th Queue (ft)	127	298	54	81	58
Link Distance (ft)		288	271	591	558
Upstream Blk Time (%)		62			
Queuing Penalty (veh)		262			
Storage Bay Dist (ft)	75				
Storage Blk Time (%)	100	0			
Queuing Penalty (veh)	26	0			

Intersection: 2: Empire Ave & Silver King Dr, Interval #4

Movement	EB	EB	WB	NB	SB
Directions Served	LT	R	LTR	LTR	LT
Maximum Queue (ft)	125	300	60	86	88
Average Queue (ft)	125	294	27	26	15
95th Queue (ft)	126	302	62	84	80
Link Distance (ft)		288	271	591	558
Upstream Blk Time (%)		57			
Queuing Penalty (veh)		225			
Storage Bay Dist (ft)	75				
Storage Blk Time (%)	100	0			
Queuing Penalty (veh)	25	1			



Intersection: 2: Empire Ave & Silver King Dr, All Intervals

Movement	EB	EB	WB	NB	SB
Directions Served	LT	R	LTR	LTR	LT
Maximum Queue (ft)	125	302	66	126	164
Average Queue (ft)	124	285	24	24	16
95th Queue (ft)	129	347	54	82	77
Link Distance (ft)		288	271	591	558
Upstream Blk Time (%)		55			
Queuing Penalty (veh)		219			
Storage Bay Dist (ft)	75				
Storage Blk Time (%)	99	0			
Queuing Penalty (veh)	25	0			

Intersection: 3: Lowell Ave & Silver King Dr, Interval #1

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	23	22	350
Average Queue (ft)	6	5	284
95th Queue (ft)	27	27	526
Link Distance (ft)	198	288	715
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Lowell Ave & Silver King Dr, Interval #2

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	21	16	404
Average Queue (ft)	6	4	356
95th Queue (ft)	28	20	487
Link Distance (ft)	198	288	715
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Lowell Ave & Silver King Dr, Interval #3

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	36	23	416
Average Queue (ft)	11	4	379
95th Queue (ft)	38	22	466
Link Distance (ft)	198	288	715
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Lowell Ave & Silver King Dr, Interval #4

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	29	32	415
Average Queue (ft)	9	8	397
95th Queue (ft)	34	34	421
Link Distance (ft)	198	288	715
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Lowell Ave & Silver King Dr, All Intervals

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	48	45	430
Average Queue (ft)	8	5	354
95th Queue (ft)	33	26	515
Link Distance (ft)	198	288	715
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Silver King Dr & Three Kings Dr, Interval #1

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Movement	SB
Directions Served	LR
Maximum Queue (ft)	29
Average Queue (ft)	13
95th Queue (ft)	37
Link Distance (ft)	365
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Silver King Dr & Three Kings Dr, Interval #2

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Movement	SB
Directions Served	LR
Maximum Queue (ft)	29
Average Queue (ft)	15
95th Queue (ft)	39
Link Distance (ft)	365
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Silver King Dr & Three Kings Dr, Interval #3

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Movement	SB
Directions Served	LR
Maximum Queue (ft)	29
Average Queue (ft)	15
95th Queue (ft)	38
Link Distance (ft)	365
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Silver King Dr & Three Kings Dr, Interval #4

Movement	SB
Directions Served	LR
Maximum Queue (ft)	29
Average Queue (ft)	14
95th Queue (ft)	39
Link Distance (ft)	365
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Silver King Dr & Three Kings Dr, All Intervals

Movement	SB
Directions Served	LR
Maximum Queue (ft)	32
Average Queue (ft)	14
95th Queue (ft)	38
Link Distance (ft)	365
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Shadow Ridge Rd & Empire Ave, Interval #1

Movement	NB	SB	NE
Directions Served	LT	TR	LR
Maximum Queue (ft)	109	8	26
Average Queue (ft)	39	1	9
95th Queue (ft)	118	8	30
Link Distance (ft)	186	591	244
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Shadow Ridge Rd & Empire Ave, Interval #2

Movement	NB	SB	NE
Directions Served	LT	TR	LR
Maximum Queue (ft)	120	2	28
Average Queue (ft)	42	0	6
95th Queue (ft)	122	4	26
Link Distance (ft)	186	591	244
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	1		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Shadow Ridge Rd & Empire Ave, Interval #3

Movement	NB	NE
Directions Served	LT	LR
Maximum Queue (ft)	105	29
Average Queue (ft)	31	9
95th Queue (ft)	100	31
Link Distance (ft)	186	244
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: Shadow Ridge Rd & Empire Ave, Interval #4

Movement	NB	SB	NE
Directions Served	LT	TR	LR
Maximum Queue (ft)	127	12	29
Average Queue (ft)	35	1	8
95th Queue (ft)	116	10	30
Link Distance (ft)	186	591	244
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	1		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Shadow Ridge Rd & Empire Ave, All Intervals

Movement	NB	SB	NE
Directions Served	LT	TR	LR
Maximum Queue (ft)	161	20	30
Average Queue (ft)	37	1	8
95th Queue (ft)	114	7	29
Link Distance (ft)	186	591	244
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	1		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Lowell Ave & Shadow Ridge Rd, Interval #1

Movement	EB	SE
Directions Served	<LR	LR>
Maximum Queue (ft)	54	63
Average Queue (ft)	33	37
95th Queue (ft)	53	65
Link Distance (ft)	226	715
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Lowell Ave & Shadow Ridge Rd, Interval #2

Movement	EB	SE
Directions Served	<LR	LR>
Maximum Queue (ft)	61	70
Average Queue (ft)	35	40
95th Queue (ft)	63	75
Link Distance (ft)	226	715
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Lowell Ave & Shadow Ridge Rd, Interval #3

Movement	EB	SE
Directions Served	<LR	LR>
Maximum Queue (ft)	58	86
Average Queue (ft)	34	40
95th Queue (ft)	58	80
Link Distance (ft)	226	715
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Lowell Ave & Shadow Ridge Rd, Interval #4

Movement	EB	SE
Directions Served	<LR	LR>
Maximum Queue (ft)	58	56
Average Queue (ft)	34	34
95th Queue (ft)	57	59
Link Distance (ft)	226	715
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Lowell Ave & Shadow Ridge Rd, All Intervals

Movement	EB	SE
Directions Served	<LR	LR>
Maximum Queue (ft)	76	90
Average Queue (ft)	34	38
95th Queue (ft)	58	71
Link Distance (ft)	226	715
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Empire Ave & 14th St, Interval #1

Movement	NB	SB	SW
Directions Served	TR	LT	LR
Maximum Queue (ft)	2	64	62
Average Queue (ft)	0	24	39
95th Queue (ft)	5	70	65
Link Distance (ft)	295	186	243
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Empire Ave & 14th St, Interval #2

Movement	NB	SB	SW
Directions Served	TR	LT	LR
Maximum Queue (ft)	5	89	59
Average Queue (ft)	1	22	37
95th Queue (ft)	11	73	70
Link Distance (ft)	295	186	243
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Empire Ave & 14th St, Interval #3

Movement	NB	SB	SW
Directions Served	TR	LT	LR
Maximum Queue (ft)	4	73	66
Average Queue (ft)	1	23	40
95th Queue (ft)	9	72	72
Link Distance (ft)	295	186	243
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			



Intersection: 7: Empire Ave & 14th St, Interval #4

Movement	NB	SB	SW
Directions Served	TR	LT	LR
Maximum Queue (ft)	11	92	76
Average Queue (ft)	2	23	37
95th Queue (ft)	24	81	73
Link Distance (ft)	295	186	243
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Empire Ave & 14th St, All Intervals

Movement	NB	SB	SW
Directions Served	TR	LT	LR
Maximum Queue (ft)	19	119	89
Average Queue (ft)	1	23	38
95th Queue (ft)	14	74	70
Link Distance (ft)	295	186	243
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Empire Ave & Manor Way, Interval #1

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	128	3
Average Queue (ft)	87	0
95th Queue (ft)	140	6
Link Distance (ft)	154	523
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	2	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Empire Ave & Manor Way, Interval #2

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	135	9	2
Average Queue (ft)	86	1	0
95th Queue (ft)	137	11	4
Link Distance (ft)	154	523	295
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	2		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Empire Ave & Manor Way, Interval #3

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	134	9
Average Queue (ft)	90	1
95th Queue (ft)	143	11
Link Distance (ft)	154	523
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	3	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Empire Ave & Manor Way, Interval #4

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	138	16
Average Queue (ft)	83	3
95th Queue (ft)	142	18
Link Distance (ft)	154	523
Upstream Blk Time (%)	1	
Queuing Penalty (veh)	3	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Empire Ave & Manor Way, All Intervals

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	158	24	2
Average Queue (ft)	87	2	0
95th Queue (ft)	141	12	2
Link Distance (ft)	154	523	295
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	3		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Lowell Ave & Manor Way, Interval #1

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	60	71	125
Average Queue (ft)	39	47	75
95th Queue (ft)	60	75	130
Link Distance (ft)	154	550	487
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Lowell Ave & Manor Way, Interval #2

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	60	75	129
Average Queue (ft)	40	47	79
95th Queue (ft)	61	77	137
Link Distance (ft)	154	550	487
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Lowell Ave & Manor Way, Interval #3

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	73	70	133
Average Queue (ft)	42	47	82
95th Queue (ft)	72	74	146
Link Distance (ft)	154	550	487
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Lowell Ave & Manor Way, Interval #4

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	58	68	103
Average Queue (ft)	40	49	67
95th Queue (ft)	61	75	104
Link Distance (ft)	154	550	487
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Lowell Ave & Manor Way, All Intervals

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	83	90	173
Average Queue (ft)	40	47	76
95th Queue (ft)	64	75	131
Link Distance (ft)	154	550	487
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty, Interval #1: 401
Network wide Queuing Penalty, Interval #2: 527
Network wide Queuing Penalty, Interval #3: 608
Network wide Queuing Penalty, Interval #4: 513
Network wide Queuing Penalty, All Intervals: 512

## SimTraffic LOS Report

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Future (2024) Background  
**Time Period:** Saturday PM Peak Hour **Project #: UT19-1481**

**Intersection:** Park Ave & Empire Ave/Deer Valley Dr  
**Type:** Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	37	36	98	67.9	E
	T	435	444	102	71.8	E
	R	75	75	100	41.0	D
	Subtotal	547	555	101	67.4	E
SB	L	545	555	102	73.7	E
	T	399	392	98	40.9	D
	R	382	384	100	3.5	A
	Subtotal	1,326	1,331	100	43.8	D
EB	L	665	659	99	67.2	E
	T	291	305	105	41.8	D
	R	38	38	101	34.2	C
	Subtotal	994	1,002	101	58.2	E
WB	L	83	83	100	51.4	D
	T	251	254	101	115.7	F
	R	704	696	99	33.6	C
	Subtotal	1,038	1,033	100	55.2	E
<b>Total</b>		<b>3,904</b>	<b>3,921</b>	<b>100</b>	<b>54.0</b>	<b>D</b>

**Intersection:** Empire Ave & Silver King Dr  
**Type:** Roundabout

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	42	39	93	9.0	A
	T	631	630	100	6.9	A
	R	18	20	110	3.2	A
	Subtotal	691	689	100	6.9	A
SB	L	16	16	98	7.7	A
	T	452	451	100	9.8	A
	R	202	204	101	4.3	A
	Subtotal	670	671	100	8.1	A
EB	L	341	347	102	14.7	B
	T	54	51	94	14.1	B
	R	26	25	95	12.5	B
	Subtotal	421	423	100	14.5	B
WB	L	13	12	91	7.5	A
	T	16	16	98	7.2	A
	R	11	12	109	2.4	A
	Subtotal	40	40	100	5.9	A
<b>Total</b>		<b>1,822</b>	<b>1,823</b>	<b>100</b>	<b>9.1</b>	<b>A</b>

## SimTraffic LOS Report

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Future (2024) Background  
**Time Period:** Saturday PM Peak Hour **Project #:** UT19-1481

**Intersection:** Lowell Ave & Silver King Dr  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
<b>NB</b>	L	16	15	92	9.6	A
	R	404	406	101	5.7	A
	<b>Subtotal</b>	<b>420</b>	<b>421</b>	<b>100</b>	<b>5.8</b>	<b>A</b>
EB	T	16	14	86	0.9	A
	R	11	13	118	0.5	A
	Subtotal	27	27	100	0.7	A
WB	L	249	248	99	2.2	A
	T	11	11	98	0.5	A
	Subtotal	260	259	100	2.1	A
<b>Total</b>		708	707	100	4.3	A

**Intersection:** Silver King Dr & Three Kings Dr  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
<b>SB</b>	L	21	21	99	3.8	A
	<b>Subtotal</b>	<b>21</b>	<b>21</b>	<b>100</b>	<b>3.8</b>	<b>A</b>
EB	T	5	5	100	0.0	A
	Subtotal	5	5	100	0.0	A
WB	T	6	6	100	0.4	A
	R	21	20	94	0.4	A
	Subtotal	27	26	96	0.4	A
<b>Total</b>		54	52	97	1.8	A

**SimTraffic LOS Report**

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Future (2024) Background  
**Time Period:** Saturday PM Peak Hour **Project #:** UT19-1481

**Intersection:** Shadow Ridge Rd & Empire Ave  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	53	50	95	5.3	A
	T	675	677	100	1.2	A
	<b>Subtotal</b>	<b>728</b>	<b>727</b>	<b>100</b>	<b>1.5</b>	<b>A</b>
SB	T	264	259	98	2.7	A
	R	208	208	100	2.3	A
	<b>Subtotal</b>	<b>472</b>	<b>467</b>	<b>99</b>	<b>2.5</b>	<b>A</b>
NE	L	5	4	80	17.3	C
	T	1	2	200	0.6	A
	R	5	4	80	4.5	A
	<b>Subtotal</b>	<b>11</b>	<b>10</b>	<b>91</b>	<b>8.8</b>	<b>A</b>
<b>Total</b>		<b>1,210</b>	<b>1,204</b>	<b>99</b>	<b>1.9</b>	<b>A</b>

**Intersection:** Lowell Ave & Shadow Ridge Rd  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
SB	T	229	228	99	0.6	A
	R	21	20	94	0.3	A
	R2	11	12	109	0.3	A
	<b>Subtotal</b>	<b>261</b>	<b>260</b>	<b>100</b>	<b>0.6</b>	<b>A</b>
EB	L2	42	38	91	9.5	A
	R	53	53	100	6.1	A
	<b>Subtotal</b>	<b>95</b>	<b>91</b>	<b>96</b>	<b>7.5</b>	<b>A</b>
SE	L	11	10	91	9.6	A
	T	116	118	102	0.2	A
	R	112	109	98	7.6	A
	R2	21	24	113	4.9	A
<b>Total</b>		<b>616</b>	<b>612</b>	<b>99</b>	<b>3.1</b>	<b>A</b>

## HALES ENGINEERING SimTraffic LOS Report

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Future (2024) Background  
**Time Period:** Saturday PM Peak Hour **Project #:** UT19-1481

**Intersection:** Empire Ave & 14th St  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	544	537	99	1.3	A
	R	91	95	104	1.0	A
	<b>Subtotal</b>	<b>635</b>	<b>632</b>	<b>100</b>	<b>1.3</b>	<b>A</b>
SB	L	32	31	96	6.1	A
	T	247	240	97	1.0	A
	<b>Subtotal</b>	<b>279</b>	<b>271</b>	<b>97</b>	<b>1.6</b>	<b>A</b>
SW	L	39	38	98	17.1	C
	R	47	50	107	8.6	A
	<b>Subtotal</b>	<b>86</b>	<b>88</b>	<b>102</b>	<b>12.3</b>	<b>B</b>
<b>Total</b>		<b>1,000</b>	<b>991</b>	<b>99</b>	<b>2.4</b>	<b>A</b>

**Intersection:** Empire Ave & Manor Way  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	11	10	91	2.6	A
	T	58	56	97	0.4	A
	<b>Subtotal</b>	<b>69</b>	<b>66</b>	<b>96</b>	<b>0.7</b>	<b>A</b>
SB	T	153	147	96	0.7	A
	R	133	130	98	0.6	A
	<b>Subtotal</b>	<b>286</b>	<b>277</b>	<b>97</b>	<b>0.7</b>	<b>A</b>
EB	L	546	544	100	9.3	A
	T	0	0	0		
	R	21	23	108	7.0	A
<b>Subtotal</b>	<b>567</b>	<b>567</b>	<b>100</b>	<b>9.2</b>	<b>A</b>	
<b>Total</b>		<b>922</b>	<b>910</b>	<b>99</b>	<b>6.0</b>	<b>A</b>



## SimTraffic LOS Report

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Future (2024) Background  
**Time Period:** Saturday PM Peak Hour **Project #:** UT19-1481

**Intersection:** Lowell Ave & Manor Way  
**Type:** All-way Stop Controlled

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	R	194	194	100	5.7	A
	Subtotal	194	194	100	5.7	A
SB	L	373	372	100	9.1	A
	T	68	68	100	8.9	A
	Subtotal	441	440	100	9.1	A
WB	L	144	140	97	4.9	A
	Subtotal	144	140	97	4.9	A
<b>Total</b>		779	774	99	7.5	A

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #1 4:30

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	2.7	0.6	0.6	3.1	0.8	3.5	2.7	1.3	0.8
Total Delay (hr)	3.2	0.9	0.1	0.4	2.2	1.3	0.2	2.2	0.2	2.8	1.1	0.1
Total Del/Veh (s)	64.3	38.7	33.7	60.6	110.3	26.7	67.9	65.4	37.2	67.1	38.3	3.2
Vehicles Entered	162	79	8	22	64	169	10	109	18	140	97	96
Vehicles Exited	163	78	8	22	61	170	9	110	18	138	98	97
Hourly Exit Rate	652	312	32	88	244	680	36	440	72	552	392	388
Input Volume	656	287	37	82	248	694	36	429	74	537	393	377
% of Volume	99	109	86	107	98	98	100	103	97	103	100	103

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #1 4:30

Movement	All
Denied Delay (hr)	0.3
Denied Del/Veh (s)	1.0
Total Delay (hr)	14.7
Total Del/Veh (s)	50.4
Vehicles Entered	974
Vehicles Exited	972
Hourly Exit Rate	3888
Input Volume	3850
% of Volume	101

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #2 4:45

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	2.8	0.5	0.6	3.3	0.7	3.2	2.7	1.2	0.8
Total Delay (hr)	2.9	0.9	0.1	0.2	1.8	1.4	0.1	2.0	0.1	2.5	0.9	0.1
Total Del/Veh (s)	58.4	41.2	30.5	37.5	91.5	28.7	57.9	60.0	25.1	60.1	33.2	3.3
Vehicles Entered	162	75	9	20	62	174	8	108	19	140	97	96
Vehicles Exited	162	76	9	21	64	173	8	107	18	138	96	94
Hourly Exit Rate	648	304	36	84	256	692	32	428	72	552	384	376
Input Volume	656	287	37	82	248	694	36	429	74	537	393	377
% of Volume	99	106	97	102	103	100	89	100	97	103	98	100

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #2 4:45

Movement	All
Denied Delay (hr)	0.3
Denied Del/Veh (s)	1.0
Total Delay (hr)	13.2
Total Del/Veh (s)	45.5
Vehicles Entered	970
Vehicles Exited	966
Hourly Exit Rate	3864
Input Volume	3850
% of Volume	100

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #3 5:00

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	2.6	0.6	0.6	3.2	0.8	3.4	3.2	1.6	1.4
Total Delay (hr)	3.3	0.9	0.1	0.3	2.3	1.8	0.2	2.5	0.3	3.0	1.1	0.1
Total Del/Veh (s)	64.7	38.8	33.9	46.9	106.6	34.0	60.8	70.3	43.1	69.8	38.3	3.6
Vehicles Entered	167	78	10	21	68	183	10	116	19	142	100	94
Vehicles Exited	166	77	10	21	64	180	10	112	19	139	97	95
Hourly Exit Rate	664	308	40	84	256	720	40	448	76	556	388	380
Input Volume	693	303	40	86	261	733	39	453	78	568	416	398
% of Volume	96	102	100	98	98	98	103	99	97	98	93	95

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #3 5:00

Movement	All
Denied Delay (hr)	0.3
Denied Del/Veh (s)	1.2
Total Delay (hr)	15.8
Total Del/Veh (s)	52.4
Vehicles Entered	1008
Vehicles Exited	990
Hourly Exit Rate	3960
Input Volume	4068
% of Volume	97

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #4 5:15

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	2.7	0.6	0.6	3.1	0.8	3.4	3.4	2.0	1.4
Total Delay (hr)	3.2	0.9	0.1	0.3	2.2	2.0	0.2	2.5	0.3	3.3	1.4	0.1
Total Del/Veh (s)	62.0	39.5	29.4	48.2	107.1	39.7	64.8	71.5	47.6	78.6	46.0	3.7
Vehicles Entered	166	74	11	20	64	173	10	112	19	138	100	98
Vehicles Exited	167	74	11	19	64	174	9	115	19	140	101	97
Hourly Exit Rate	668	296	44	76	256	696	36	460	76	560	404	388
Input Volume	656	287	37	82	248	694	36	429	74	537	393	377
% of Volume	102	103	119	93	103	100	100	107	103	104	103	103

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #4 5:15

Movement	All
Denied Delay (hr)	0.3
Denied Del/Veh (s)	1.2
Total Delay (hr)	16.5
Total Del/Veh (s)	55.2
Vehicles Entered	985
Vehicles Exited	990
Hourly Exit Rate	3960
Input Volume	3850
% of Volume	103

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Entire Run

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.5	0.2	0.1
Denied Del/Veh (s)	0.1	0.0	0.0	2.7	0.6	0.6	3.2	0.8	3.3	3.0	1.5	1.1
Total Delay (hr)	12.6	3.6	0.4	1.2	8.5	6.6	0.7	9.1	0.9	11.6	4.6	0.4
Total Del/Veh (s)	67.2	41.8	34.2	51.4	115.7	33.6	67.9	71.8	41.0	73.7	40.9	3.5
Vehicles Entered	658	305	38	82	257	698	37	445	76	559	395	384
Vehicles Exited	659	305	38	83	254	696	36	444	75	555	392	384
Hourly Exit Rate	659	305	38	83	254	696	36	444	75	555	392	384
Input Volume	665	291	38	83	251	704	37	435	75	545	399	382
% of Volume	99	105	101	100	101	99	98	102	100	102	98	100

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Entire Run

Movement	All
Denied Delay (hr)	1.2
Denied Del/Veh (s)	1.1
Total Delay (hr)	60.1
Total Del/Veh (s)	54.0
Vehicles Entered	3934
Vehicles Exited	3921
Hourly Exit Rate	3921
Input Volume	3904
% of Volume	100

2: Empire Ave & Silver King Dr Performance by movement Interval #1 4:30

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.3	0.1
Total Del/Veh (s)	12.3	10.4	10.8	5.8	6.4	2.3	7.7	6.6	3.2	6.8	7.9	4.2
Vehicles Entered	85	13	7	3	5	2	8	161	5	4	112	52
Vehicles Exited	86	13	7	3	5	2	8	160	5	4	111	52
Hourly Exit Rate	344	52	28	12	20	8	32	640	20	16	444	208
Input Volume	336	53	26	13	16	11	41	622	18	16	446	199
% of Volume	102	98	108	92	125	73	78	103	111	100	100	105

2: Empire Ave & Silver King Dr Performance by movement Interval #1 4:30

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.0
Total Delay (hr)	1.0
Total Del/Veh (s)	7.9
Vehicles Entered	457
Vehicles Exited	456
Hourly Exit Rate	1824
Input Volume	1797
% of Volume	102

2: Empire Ave & Silver King Dr Performance by movement Interval #2 4:45

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0
Total Delay (hr)	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.3	0.1
Total Del/Veh (s)	12.2	12.9	7.5	7.8	5.7	2.2	7.8	6.7	3.0	8.1	9.6	4.0
Vehicles Entered	85	12	6	3	4	4	11	154	6	4	110	51
Vehicles Exited	85	12	6	3	4	4	12	154	6	4	110	50
Hourly Exit Rate	340	48	24	12	16	16	48	616	24	16	440	200
Input Volume	336	53	26	13	16	11	41	622	18	16	446	199
% of Volume	101	91	92	92	100	145	117	99	133	100	99	101

2: Empire Ave & Silver King Dr Performance by movement Interval #2 4:45

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.0
Total Delay (hr)	1.1
Total Del/Veh (s)	8.3
Vehicles Entered	450
Vehicles Exited	450
Hourly Exit Rate	1800
Input Volume	1797
% of Volume	100

2: Empire Ave & Silver King Dr Performance by movement Interval #3 5:00

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.3	0.1
Total Del/Veh (s)	16.0	15.6	14.5	6.9	5.9	2.5	9.7	6.9	3.9	8.1	9.7	4.3
Vehicles Entered	89	13	6	3	4	3	10	161	4	4	115	51
Vehicles Exited	87	13	6	3	4	3	10	161	4	4	114	51
Hourly Exit Rate	348	52	24	12	16	12	40	644	16	16	456	204
Input Volume	355	57	27	14	17	11	44	657	19	17	471	210
% of Volume	98	91	89	86	94	109	91	98	84	94	97	97

2: Empire Ave & Silver King Dr Performance by movement Interval #3 5:00

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.0
Total Delay (hr)	1.2
Total Del/Veh (s)	9.4
Vehicles Entered	463
Vehicles Exited	460
Hourly Exit Rate	1840
Input Volume	1899
% of Volume	97

2: Empire Ave & Silver King Dr Performance by movement Interval #4 5:15

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.4	0.1
Total Del/Veh (s)	16.8	16.1	16.8	7.2	9.2	2.8	9.0	7.0	2.9	7.7	11.0	4.2
Vehicles Entered	87	13	5	3	4	3	10	155	5	4	117	51
Vehicles Exited	89	13	5	4	4	3	10	155	5	4	115	51
Hourly Exit Rate	356	52	20	16	16	12	40	620	20	16	460	204
Input Volume	336	53	26	13	16	11	41	622	18	16	446	199
% of Volume	106	98	77	123	100	109	98	100	111	100	103	103

2: Empire Ave & Silver King Dr Performance by movement Interval #4 5:15

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.0
Total Delay (hr)	1.3
Total Del/Veh (s)	10.0
Vehicles Entered	457
Vehicles Exited	458
Hourly Exit Rate	1832
Input Volume	1797
% of Volume	102

2: Empire Ave & Silver King Dr Performance by movement Entire Run

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	1.4	0.2	0.1	0.0	0.0	0.0	0.1	1.2	0.0	0.0	1.2	0.2
Total Del/Veh (s)	14.7	14.1	12.5	7.5	7.2	2.4	9.0	6.9	3.2	7.7	9.8	4.3
Vehicles Entered	346	51	25	12	16	12	40	631	20	15	454	204
Vehicles Exited	347	51	25	12	16	12	39	630	20	16	451	204
Hourly Exit Rate	347	51	25	12	16	12	39	630	20	16	451	204
Input Volume	341	54	26	13	16	11	42	631	18	16	452	202
% of Volume	102	94	95	91	98	109	93	100	110	98	100	101

2: Empire Ave & Silver King Dr Performance by movement Entire Run

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.0
Total Delay (hr)	4.6
Total Del/Veh (s)	9.1
Vehicles Entered	1826
Vehicles Exited	1823
Hourly Exit Rate	1823
Input Volume	1822
% of Volume	100

3: Lowell Ave & Silver King Dr Performance by movement Interval #1 4:30

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.4	0.3	0.2
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.1	0.2
Total Del/Veh (s)	0.8	0.6	2.2	0.4	7.9	5.0	3.9
Vehicles Entered	3	3	62	3	4	101	176
Vehicles Exited	3	3	61	3	4	102	176
Hourly Exit Rate	12	12	244	12	16	408	704
Input Volume	16	11	246	11	16	398	698
% of Volume	75	109	99	109	100	103	101

3: Lowell Ave & Silver King Dr Performance by movement Interval #2 4:45

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.8	0.4	0.2
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.1	0.2
Total Del/Veh (s)	0.7	0.5	2.2	0.5	9.7	5.2	3.9
Vehicles Entered	3	4	63	3	3	101	177
Vehicles Exited	3	4	63	3	3	101	177
Hourly Exit Rate	12	16	252	12	12	404	708
Input Volume	16	11	246	11	16	398	698
% of Volume	75	145	102	109	75	102	101

3: Lowell Ave & Silver King Dr Performance by movement Interval #3 5:00

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.4	0.3
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.2	0.2
Total Del/Veh (s)	1.2	0.6	2.3	0.3	12.9	6.4	4.8
Vehicles Entered	4	3	62	3	4	104	180
Vehicles Exited	4	3	62	3	4	104	180
Hourly Exit Rate	16	12	248	12	16	416	720
Input Volume	17	11	259	12	17	421	737
% of Volume	94	109	96	100	94	99	98

3: Lowell Ave & Silver King Dr Performance by movement Interval #4 5:15

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.4	0.2
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.2	0.2
Total Del/Veh (s)	0.8	0.5	2.2	0.7	7.8	6.0	4.4
Vehicles Entered	4	2	62	3	4	99	174
Vehicles Exited	4	2	62	3	4	100	175
Hourly Exit Rate	16	8	248	12	16	400	700
Input Volume	16	11	246	11	16	398	698
% of Volume	100	73	101	109	100	101	100

3: Lowell Ave & Silver King Dr Performance by movement Entire Run

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.4	0.4	0.2
Total Delay (hr)	0.0	0.0	0.2	0.0	0.0	0.7	0.9
Total Del/Veh (s)	0.9	0.5	2.2	0.5	9.6	5.7	4.3
Vehicles Entered	14	13	249	11	15	405	707
Vehicles Exited	14	13	248	11	15	406	707
Hourly Exit Rate	14	13	248	11	15	406	707
Input Volume	16	11	249	11	16	404	708
% of Volume	86	118	99	98	92	101	100

4: Silver King Dr & Three Kings Dr Performance by movement Interval #1 4:30

Movement	EBT	WBT	WBR	SBL	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.1	0.1
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	0.0	0.4	0.4	4.3	2.0
Vehicles Entered	1	1	5	5	12
Vehicles Exited	1	1	5	5	12
Hourly Exit Rate	4	4	20	20	48
Input Volume	5	6	21	21	53
% of Volume	80	67	95	95	91



4: Silver King Dr & Three Kings Dr Performance by movement Interval #2 4:45

Movement	EBT	WBT	WBR	SBL	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.1	0.1
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	0.0	0.3	0.5	3.4	1.9
Vehicles Entered	1	2	4	6	13
Vehicles Exited	1	2	4	5	12
Hourly Exit Rate	4	8	16	20	48
Input Volume	5	6	21	21	53
% of Volume	80	133	76	95	91

4: Silver King Dr & Three Kings Dr Performance by movement Interval #3 5:00

Movement	EBT	WBT	WBR	SBL	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	0.0	0.8	0.6	3.7	1.8
Vehicles Entered	2	1	5	6	14
Vehicles Exited	2	1	5	6	14
Hourly Exit Rate	8	4	20	24	56
Input Volume	5	6	22	22	55
% of Volume	160	67	91	109	102

4: Silver King Dr & Three Kings Dr Performance by movement Interval #4 5:15

Movement	EBT	WBT	WBR	SBL	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	0.0	0.9	0.4	4.2	1.6
Vehicles Entered	2	1	5	4	12
Vehicles Exited	2	1	5	4	12
Hourly Exit Rate	8	4	20	16	48
Input Volume	5	6	21	21	53
% of Volume	160	67	95	76	91

4: Silver King Dr & Three Kings Dr Performance by movement Entire Run

Movement	EBT	WBT	WBR	SBL	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.1	0.1
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	0.0	0.4	0.4	3.8	1.8
Vehicles Entered	5	6	20	21	52
Vehicles Exited	5	6	20	21	52
Hourly Exit Rate	5	6	20	21	52
Input Volume	5	6	21	21	54
% of Volume	100	100	94	99	97

5: Shadow Ridge Rd & Empire Ave Performance by movement Interval #1 4:30

Movement	NBL	NBT	SBT	SBR	NEL	NET	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.2	0.0	0.0	0.0		0.0	0.1
Total Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2
Total Del/Veh (s)	5.1	1.3	2.7	2.1	5.8		3.9	1.9
Vehicles Entered	13	171	63	53	1	0	1	302
Vehicles Exited	13	171	64	53	1	0	1	303
Hourly Exit Rate	52	684	256	212	4	0	4	1212
Input Volume	52	666	260	205	5	1	5	1194
% of Volume	100	103	98	103	80	0	80	102

5: Shadow Ridge Rd & Empire Ave Performance by movement Interval #2 4:45

Movement	NBL	NBT	SBT	SBR	NEL	NET	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	4.8	1.0	2.5	2.1	9.1	0.6	4.2	1.7
Vehicles Entered	12	167	65	50	2	1	1	298
Vehicles Exited	12	166	64	49	2	1	1	295
Hourly Exit Rate	48	664	256	196	8	4	4	1180
Input Volume	52	666	260	205	5	1	5	1194
% of Volume	92	100	98	96	160	400	80	99

5: Shadow Ridge Rd & Empire Ave Performance by movement Interval #3 5:00

Movement	NBL	NBT	SBT	SBR	NEL	NET	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.2	0.0	0.0	0.0		0.0	0.1
Total Delay (hr)	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.2
Total Del/Veh (s)	5.5	1.1	2.7	2.4	21.2		6.4	2.0
Vehicles Entered	12	172	66	53	1	0	1	305
Vehicles Exited	12	172	66	53	1	0	1	305
Hourly Exit Rate	48	688	264	212	4	0	4	1220
Input Volume	55	703	274	217	5	1	5	1260
% of Volume	87	98	96	98	80	0	80	97

5: Shadow Ridge Rd & Empire Ave Performance by movement Interval #4 5:15

Movement	NBL	NBT	SBT	SBR	NEL	NET	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.3	0.2	0.0	0.0	0.0		0.0	0.1
Total Delay (hr)	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.2
Total Del/Veh (s)	5.7	1.2	2.9	2.4	23.8		3.6	2.1
Vehicles Entered	14	166	66	53	1	0	1	301
Vehicles Exited	13	167	65	53	1	0	1	300
Hourly Exit Rate	52	668	260	212	4	0	4	1200
Input Volume	52	666	260	205	5	1	5	1194
% of Volume	100	100	100	103	80	0	80	101

5: Shadow Ridge Rd & Empire Ave Performance by movement Entire Run

Movement	NBL	NBT	SBT	SBR	NEL	NET	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay (hr)	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.7
Total Del/Veh (s)	5.3	1.2	2.7	2.3	17.3	0.6	4.5	1.9
Vehicles Entered	50	677	260	208	4	2	4	1205
Vehicles Exited	50	677	259	208	4	2	4	1204
Hourly Exit Rate	50	677	259	208	4	2	4	1204
Input Volume	53	675	264	208	5	1	5	1210
% of Volume	95	100	98	100	80	200	80	99

6: Lowell Ave & Shadow Ridge Rd Performance by movement Interval #1 4:30

Movement	EBL2	EBR	SBT	SBR	SBR2	SEL	SET	SER	SER2	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Total Del/Veh (s)	8.8	5.5	0.6	0.3	0.3	8.1	0.3	7.6	5.7	3.0
Vehicles Entered	9	14	58	6	3	2	30	27	5	154
Vehicles Exited	9	14	58	6	3	2	30	28	5	155
Hourly Exit Rate	36	56	232	24	12	8	120	112	20	620
Input Volume	41	52	226	21	11	11	115	110	21	608
% of Volume	88	108	103	114	109	73	104	102	95	102

6: Lowell Ave & Shadow Ridge Rd Performance by movement Interval #2 4:45

Movement	EBL2	EBR	SBT	SBR	SBR2	SEL	SET	SER	SER2	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Total Del/Veh (s)	8.1	6.2	0.6	0.4	0.4	11.6	0.2	7.5	4.9	3.1
Vehicles Entered	9	12	53	5	3	3	30	27	7	149
Vehicles Exited	9	12	53	5	3	3	30	27	7	149
Hourly Exit Rate	36	48	212	20	12	12	120	108	28	596
Input Volume	41	52	226	21	11	11	115	110	21	608
% of Volume	88	92	94	95	109	109	104	98	133	98

6: Lowell Ave & Shadow Ridge Rd Performance by movement Interval #3 5:00

Movement	EBL2	EBR	SBT	SBR	SBR2	SEL	SET	SER	SER2	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Total Del/Veh (s)	10.7	7.2	0.6	0.2	0.3	12.2	0.2	8.0	4.5	3.5
Vehicles Entered	10	15	59	3	3	2	29	28	5	154
Vehicles Exited	10	14	59	3	3	2	29	29	6	155
Hourly Exit Rate	40	56	236	12	12	8	116	116	24	620
Input Volume	44	55	239	22	11	11	120	117	22	641
% of Volume	91	102	99	55	109	73	97	99	109	97

6: Lowell Ave & Shadow Ridge Rd Performance by movement Interval #4 5:15

Movement	EBL2	EBR	SBT	SBR	SBR2	SEL	SET	SER	SER2	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Total Del/Veh (s)	9.3	4.9	0.5	0.4	0.3	10.5	0.2	7.1	3.9	2.8
Vehicles Entered	10	12	58	5	3	2	30	26	7	153
Vehicles Exited	11	12	58	5	3	2	30	26	6	153
Hourly Exit Rate	44	48	232	20	12	8	120	104	24	612
Input Volume	41	52	226	21	11	11	115	110	21	608
% of Volume	107	92	103	95	109	73	104	95	114	101

6: Lowell Ave & Shadow Ridge Rd Performance by movement Entire Run

Movement	EBL2	EBR	SBT	SBR	SBR2	SEL	SET	SER	SER2	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.5
Total Del/Veh (s)	9.5	6.1	0.6	0.3	0.3	9.6	0.2	7.6	4.9	3.1
Vehicles Entered	38	53	228	19	12	10	118	109	24	611
Vehicles Exited	38	53	228	20	12	10	118	109	24	612
Hourly Exit Rate	38	53	228	20	12	10	118	109	24	612
Input Volume	42	53	229	21	11	11	116	112	21	616
% of Volume	91	100	99	94	109	91	102	98	113	99

7: Empire Ave & 14th St Performance by movement Interval #1 4:30

Movement	NBT	NBR	SBL	SBT	SWL	SWR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	1.3	0.9	6.1	1.0	14.0	7.1	2.0
Vehicles Entered	136	23	7	59	7	12	244
Vehicles Exited	136	23	7	59	7	12	244
Hourly Exit Rate	544	92	28	236	28	48	976
Input Volume	536	90	32	244	38	46	986
% of Volume	101	102	88	97	74	104	99

7: Empire Ave & 14th St Performance by movement Interval #2 4:45

Movement	NBT	NBR	SBL	SBT	SWL	SWR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.0	0.1	0.2	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.0	0.2
Total Del/Veh (s)	1.3	1.0	6.0	0.9	18.8	9.9	2.5
Vehicles Entered	130	25	8	60	11	12	246
Vehicles Exited	130	25	8	60	11	12	246
Hourly Exit Rate	520	100	32	240	44	48	984
Input Volume	536	90	32	244	38	46	986
% of Volume	97	111	100	98	116	104	100

7: Empire Ave & 14th St Performance by movement Interval #3 5:00

Movement	NBT	NBR	SBL	SBT	SWL	SWR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.0	0.2	0.2	0.0
Total Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.0	0.2
Total Del/Veh (s)	1.4	1.0	6.9	1.1	15.7	8.8	2.4
Vehicles Entered	139	25	8	62	11	14	259
Vehicles Exited	138	26	8	62	11	13	258
Hourly Exit Rate	552	104	32	248	44	52	1032
Input Volume	567	95	33	257	41	49	1042
% of Volume	97	109	97	96	107	106	99

7: Empire Ave & 14th St Performance by movement Interval #4 5:15

Movement	NBT	NBR	SBL	SBT	SWL	SWR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.2	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total Del/Veh (s)	1.3	1.1	5.0	1.1	17.6	8.7	2.4
Vehicles Entered	131	22	8	59	9	13	242
Vehicles Exited	133	22	9	59	9	13	245
Hourly Exit Rate	532	88	36	236	36	52	980
Input Volume	536	90	32	244	38	46	986
% of Volume	99	98	112	97	95	113	99

7: Empire Ave & 14th St Performance by movement Entire Run

Movement	NBT	NBR	SBL	SBT	SWL	SWR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.2	0.0
Total Delay (hr)	0.2	0.0	0.1	0.1	0.2	0.1	0.7
Total Del/Veh (s)	1.3	1.0	6.1	1.0	17.1	8.6	2.4
Vehicles Entered	536	95	31	239	39	50	990
Vehicles Exited	537	95	31	240	38	50	991
Hourly Exit Rate	537	95	31	240	38	50	991
Input Volume	544	91	32	247	39	47	1000
% of Volume	99	104	96	97	98	107	99

8: Empire Ave & Manor Way Performance by movement Interval #1 4:30

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.4	0.0	0.0	0.0	0.0	0.0	0.4
Total Del/Veh (s)	9.0	7.1	3.3	0.3	0.7	0.5	6.1
Vehicles Entered	139	7	2	12	36	30	226
Vehicles Exited	139	6	2	12	36	30	225
Hourly Exit Rate	556	24	8	48	144	120	900
Input Volume	538	21	11	57	151	131	909
% of Volume	103	114	73	84	95	92	99

8: Empire Ave & Manor Way Performance by movement Interval #2 4:45

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.2	0.1	0.0	0.0	0.0
Total Delay (hr)	0.3	0.0	0.0	0.0	0.0	0.0	0.4
Total Del/Veh (s)	9.2	5.6	2.3	0.4	0.7	0.7	5.8
Vehicles Entered	131	4	3	17	37	34	226
Vehicles Exited	131	4	3	17	37	34	226
Hourly Exit Rate	524	16	12	68	148	136	904
Input Volume	538	21	11	57	151	131	909
% of Volume	97	76	109	119	98	104	99

8: Empire Ave & Manor Way Performance by movement Interval #3 5:00

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0		0.0	0.2	0.2	0.0	0.0	0.0
Total Delay (hr)	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Total Del/Veh (s)	9.2		6.4	2.5	0.5	0.6	0.6	5.9
Vehicles Entered	140	0	5	3	15	40	33	236
Vehicles Exited	140	0	6	3	15	40	33	237
Hourly Exit Rate	560	0	24	12	60	160	132	948
Input Volume	569	1	22	11	60	159	139	961
% of Volume	98	0	109	109	100	101	95	99

8: Empire Ave & Manor Way Performance by movement Interval #4 5:15

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.3	0.0	0.0	0.0	0.0	0.0	0.4
Total Del/Veh (s)	9.1	7.6	2.5	0.2	0.7	0.6	5.9
Vehicles Entered	133	6	2	13	35	33	222
Vehicles Exited	134	6	2	13	35	32	222
Hourly Exit Rate	536	24	8	52	140	128	888
Input Volume	538	21	11	57	151	131	909
% of Volume	100	114	73	91	93	98	98

8: Empire Ave & Manor Way Performance by movement Entire Run

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0		0.0	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	1.4	0.0	0.0	0.0	0.0	0.0	0.0	1.5
Total Del/Veh (s)	9.3		7.0	2.6	0.4	0.7	0.6	6.0
Vehicles Entered	544	0	23	10	56	148	130	911
Vehicles Exited	544	0	23	10	56	147	130	910
Hourly Exit Rate	544	0	23	10	56	147	130	910
Input Volume	546	0	21	11	58	153	133	922
% of Volume	100	0	108	91	97	96	98	99



9: Lowell Ave & Manor Way Performance by movement Interval #1 4:30

Movement	WBL	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.2	0.1	0.0	0.1
Total Delay (hr)	0.0	0.1	0.2	0.0	0.4
Total Del/Veh (s)	4.8	5.9	9.1	8.6	7.5
Vehicles Entered	32	52	95	18	197
Vehicles Exited	32	51	94	18	195
Hourly Exit Rate	128	204	376	72	780
Input Volume	142	191	368	67	768
% of Volume	90	107	102	107	102

9: Lowell Ave & Manor Way Performance by movement Interval #2 4:45

Movement	WBL	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.2	0.0	0.0	0.1
Total Delay (hr)	0.1	0.1	0.2	0.0	0.4
Total Del/Veh (s)	4.9	5.1	8.0	8.4	6.8
Vehicles Entered	37	46	88	16	187
Vehicles Exited	37	46	89	16	188
Hourly Exit Rate	148	184	356	64	752
Input Volume	142	191	368	67	768
% of Volume	104	96	97	96	98

9: Lowell Ave & Manor Way Performance by movement Interval #3 5:00

Movement	WBL	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.2	0.1	0.0	0.1
Total Delay (hr)	0.0	0.1	0.3	0.0	0.4
Total Del/Veh (s)	4.8	5.7	9.5	9.8	7.8
Vehicles Entered	36	50	98	17	201
Vehicles Exited	36	50	96	17	199
Hourly Exit Rate	144	200	384	68	796
Input Volume	150	202	389	71	812
% of Volume	96	99	99	96	98

9: Lowell Ave & Manor Way Performance by movement Interval #4 5:15

Movement	WBL	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.2	0.0	0.1	0.1
Total Delay (hr)	0.0	0.1	0.2	0.0	0.4
Total Del/Veh (s)	5.0	5.4	8.6	8.1	7.1
Vehicles Entered	35	47	92	17	191
Vehicles Exited	35	47	93	17	192
Hourly Exit Rate	140	188	372	68	768
Input Volume	142	191	368	67	768
% of Volume	99	98	101	101	100

9: Lowell Ave & Manor Way Performance by movement Entire Run

Movement	WBL	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.2	0.0	0.0	0.1
Total Delay (hr)	0.2	0.3	0.9	0.2	1.6
Total Del/Veh (s)	4.9	5.7	9.1	8.9	7.5
Vehicles Entered	140	194	373	68	775
Vehicles Exited	140	194	372	68	774
Hourly Exit Rate	140	194	372	68	774
Input Volume	144	194	373	68	779
% of Volume	97	100	100	100	99

Total Network Performance By Interval

Interval Start	4:30	4:45	5:00	5:15	All
Denied Delay (hr)	0.3	0.3	0.4	0.4	1.3
Denied Del/Veh (s)	1.1	1.0	1.2	1.3	1.2
Total Delay (hr)	17.6	16.1	19.1	19.8	72.6
Total Del/Veh (s)	55.8	51.1	58.4	61.3	62.2
Vehicles Entered	1006	1010	1051	1008	4074
Vehicles Exited	1006	1008	1024	1020	4061
Hourly Exit Rate	4024	4032	4096	4080	4061
Input Volume	14636	14636	15460	14636	14842
% of Volume	27	28	26	28	27

Intersection: 1: Park Ave & Empire Ave/Deer Valley Dr, Interval #1

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	TR	L	T	R	L	T	TR	L	T	R
Maximum Queue (ft)	350	391	371	254	467	379	138	346	297	487	692	167
Average Queue (ft)	278	302	226	121	324	262	48	263	222	413	440	38
95th Queue (ft)	396	433	364	337	606	427	147	370	326	562	900	341
Link Distance (ft)		502	502		812	812		673			1004	1004
Upstream Blk Time (%)		0	0		0						1	0
Queuing Penalty (veh)		2	0		0						0	0
Storage Bay Dist (ft)	200			300			200		200	300		
Storage Blk Time (%)	30	38			22			27	9	33	3	
Queuing Penalty (veh)	98	123			18			87	21	129	14	

Intersection: 1: Park Ave & Empire Ave/Deer Valley Dr, Interval #2

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	TR	L	T	R	L	T	TR	L	T	R
Maximum Queue (ft)	323	356	331	152	377	398	79	330	266	494	648	100
Average Queue (ft)	254	275	226	73	277	279	33	250	209	405	336	25
95th Queue (ft)	338	362	336	213	425	450	84	350	299	540	687	267
Link Distance (ft)		502	502		812	812		673			1004	1004
Upstream Blk Time (%)											1	0
Queuing Penalty (veh)											0	0
Storage Bay Dist (ft)	200			300			200		200	300		
Storage Blk Time (%)	24	33			13		0	22	4	29	1	
Queuing Penalty (veh)	79	108			11		0	71	10	116	5	

Intersection: 1: Park Ave & Empire Ave/Deer Valley Dr, Interval #3

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	TR	L	T	R	L	T	TR	L	T	R
Maximum Queue (ft)	357	394	359	255	441	443	161	400	313	495	670	283
Average Queue (ft)	279	305	233	109	322	312	49	289	235	426	427	80
95th Queue (ft)	382	428	374	310	515	513	159	451	348	561	876	515
Link Distance (ft)		502	502		812	812		673			1004	1004
Upstream Blk Time (%)		0	0					0			2	1
Queuing Penalty (veh)		2	0					0			0	0
Storage Bay Dist (ft)	200			300			200		200	300		
Storage Blk Time (%)	33	40			24			35	12	38	2	
Queuing Penalty (veh)	114	140			20			119	31	156	10	

Intersection: 1: Park Ave & Empire Ave/Deer Valley Dr, Interval #4

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	TR	L	T	R	L	T	TR	L	T	R
Maximum Queue (ft)	352	384	346	247	430	513	166	419	320	488	862	306
Average Queue (ft)	273	293	229	100	321	358	50	293	240	437	528	94
95th Queue (ft)	377	406	357	296	537	618	163	449	345	565	1034	566
Link Distance (ft)		502	502		812	812		673			1004	1004
Upstream Blk Time (%)		0									4	1
Queuing Penalty (veh)		1									0	0
Storage Bay Dist (ft)	200			300			200		200	300		
Storage Blk Time (%)	29	36			24			34	14	41	4	
Queuing Penalty (veh)	96	118			19			109	34	160	24	

Intersection: 1: Park Ave & Empire Ave/Deer Valley Dr, All Intervals

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	TR	L	T	R	L	T	TR	L	T	R
Maximum Queue (ft)	385	443	422	321	549	547	250	483	347	500	938	487
Average Queue (ft)	271	294	229	101	311	303	45	274	227	420	433	59
95th Queue (ft)	375	410	358	293	529	514	142	411	332	559	892	437
Link Distance (ft)		502	502		812	812		673			1004	1004
Upstream Blk Time (%)		0	0		0			0			2	0
Queuing Penalty (veh)		1	0		0			0			0	0
Storage Bay Dist (ft)	200			300			200		200	300		
Storage Blk Time (%)	29	37			20		0	29	10	35	2	
Queuing Penalty (veh)	97	122			17		0	96	24	140	13	

Intersection: 2: Empire Ave & Silver King Dr, Interval #1

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	LT	TR	LT	R
Maximum Queue (ft)	159	36	124	68	137	17
Average Queue (ft)	96	14	73	16	67	4
95th Queue (ft)	175	42	130	73	146	23
Link Distance (ft)	225	239	570		502	502
Upstream Blk Time (%)	0					
Queuing Penalty (veh)	2					
Storage Bay Dist (ft)				100		
Storage Blk Time (%)			4			
Queuing Penalty (veh)			15			

Intersection: 2: Empire Ave & Silver King Dr, Interval #2

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	LT	TR	LT	R
Maximum Queue (ft)	159	38	124	84	216	25
Average Queue (ft)	93	17	73	18	82	4
95th Queue (ft)	162	45	124	79	202	23
Link Distance (ft)	225	239	570		502	502
Upstream Blk Time (%)	0				0	
Queuing Penalty (veh)	1				0	
Storage Bay Dist (ft)				100		
Storage Blk Time (%)			4	0		
Queuing Penalty (veh)			12	0		

Intersection: 2: Empire Ave & Silver King Dr, Interval #3

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	LT	TR	LT	R
Maximum Queue (ft)	194	30	140	96	211	26
Average Queue (ft)	119	16	77	17	93	5
95th Queue (ft)	211	42	138	78	219	25
Link Distance (ft)	225	239	570		502	502
Upstream Blk Time (%)	1				0	
Queuing Penalty (veh)	4				0	
Storage Bay Dist (ft)				100		
Storage Blk Time (%)			5	0		
Queuing Penalty (veh)			18	1		

Intersection: 2: Empire Ave & Silver King Dr, Interval #4

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	LT	TR	LT	R
Maximum Queue (ft)	197	45	145	74	186	21
Average Queue (ft)	118	20	71	19	104	4
95th Queue (ft)	216	51	143	78	199	27
Link Distance (ft)	225	239	570		502	502
Upstream Blk Time (%)	2					
Queuing Penalty (veh)	7					
Storage Bay Dist (ft)				100		
Storage Blk Time (%)			5	0		
Queuing Penalty (veh)			17	0		

Intersection: 2: Empire Ave & Silver King Dr, All Intervals

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	LT	TR	LT	R
Maximum Queue (ft)	218	51	180	147	282	46
Average Queue (ft)	107	17	73	18	86	4
95th Queue (ft)	194	45	135	77	196	25
Link Distance (ft)	225	239	570		502	502
Upstream Blk Time (%)	1				0	
Queuing Penalty (veh)	3				0	
Storage Bay Dist (ft)				100		
Storage Blk Time (%)			5	0		
Queuing Penalty (veh)			15	0		

Intersection: 3: Lowell Ave & Silver King Dr, Interval #1

Movement	WB	NB
Directions Served	L	LR
Maximum Queue (ft)	38	103
Average Queue (ft)	11	63
95th Queue (ft)	43	100
Link Distance (ft)		715
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	100	
Storage Blk Time (%)	0	
Queuing Penalty (veh)	0	

Intersection: 3: Lowell Ave & Silver King Dr, Interval #2

Movement	WB	NB
Directions Served	L	LR
Maximum Queue (ft)	22	96
Average Queue (ft)	6	64
95th Queue (ft)	26	97
Link Distance (ft)		715
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	100	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: Lowell Ave & Silver King Dr, Interval #3

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	3	40	132
Average Queue (ft)	0	10	75
95th Queue (ft)	6	41	133
Link Distance (ft)	198		715
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		100	
Storage Blk Time (%)		0	
Queuing Penalty (veh)		0	

Intersection: 3: Lowell Ave & Silver King Dr, Interval #4

Movement	WB	NB
Directions Served	L	LR
Maximum Queue (ft)	32	111
Average Queue (ft)	7	71
95th Queue (ft)	31	119
Link Distance (ft)		715
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	100	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: Lowell Ave & Silver King Dr, All Intervals

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	3	55	154
Average Queue (ft)	0	8	68
95th Queue (ft)	3	36	114
Link Distance (ft)	198		715
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		100	
Storage Blk Time (%)		0	
Queuing Penalty (veh)		0	

Intersection: 4: Silver King Dr & Three Kings Dr, Interval #1

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Movement	SB
Directions Served	LR
Maximum Queue (ft)	32
Average Queue (ft)	16
95th Queue (ft)	40
Link Distance (ft)	365
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Silver King Dr & Three Kings Dr, Interval #2

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Movement	SB
Directions Served	LR
Maximum Queue (ft)	29
Average Queue (ft)	16
95th Queue (ft)	39
Link Distance (ft)	365
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Silver King Dr & Three Kings Dr, Interval #3

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Movement	SB
Directions Served	LR
Maximum Queue (ft)	29
Average Queue (ft)	16
95th Queue (ft)	40
Link Distance (ft)	365
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	



Intersection: 4: Silver King Dr & Three Kings Dr, Interval #4

Movement	SB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	11
95th Queue (ft)	36
Link Distance (ft)	365
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Silver King Dr & Three Kings Dr, All Intervals

Movement	SB
Directions Served	LR
Maximum Queue (ft)	32
Average Queue (ft)	15
95th Queue (ft)	39
Link Distance (ft)	365
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Shadow Ridge Rd & Empire Ave, Interval #1

Movement	NB	SB	NE
Directions Served	LT	TR	LR
Maximum Queue (ft)	120	14	26
Average Queue (ft)	39	3	6
95th Queue (ft)	116	17	26
Link Distance (ft)	186	570	244
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Shadow Ridge Rd & Empire Ave, Interval #2

Movement	NB	SB	NE
Directions Served	LT	TR	LR
Maximum Queue (ft)	88	6	28
Average Queue (ft)	31	1	8
95th Queue (ft)	92	8	29
Link Distance (ft)	186	570	244
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Shadow Ridge Rd & Empire Ave, Interval #3

Movement	NB	SB	NE
Directions Served	LT	TR	LR
Maximum Queue (ft)	123	6	28
Average Queue (ft)	40	1	8
95th Queue (ft)	120	8	30
Link Distance (ft)	186	570	244
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	2		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Shadow Ridge Rd & Empire Ave, Interval #4

Movement	NB	SB	NE
Directions Served	LT	TR	LR
Maximum Queue (ft)	106	16	23
Average Queue (ft)	40	2	7
95th Queue (ft)	111	15	27
Link Distance (ft)	186	570	244
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Shadow Ridge Rd & Empire Ave, All Intervals

Movement	NB	SB	NE
Directions Served	LT	TR	LR
Maximum Queue (ft)	152	27	34
Average Queue (ft)	38	2	7
95th Queue (ft)	110	13	28
Link Distance (ft)	186	570	244
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Lowell Ave & Shadow Ridge Rd, Interval #1

Movement	EB	SE
Directions Served	<LR	LR>
Maximum Queue (ft)	62	68
Average Queue (ft)	38	40
95th Queue (ft)	66	72
Link Distance (ft)	226	715
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Lowell Ave & Shadow Ridge Rd, Interval #2

Movement	EB	SB	SE
Directions Served	<LR	TR>	LR>
Maximum Queue (ft)	54	2	81
Average Queue (ft)	34	0	43
95th Queue (ft)	55	5	85
Link Distance (ft)	226	244	715
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Lowell Ave & Shadow Ridge Rd, Interval #3

Movement	EB	SE
Directions Served	<LR	LR>
Maximum Queue (ft)	68	81
Average Queue (ft)	37	39
95th Queue (ft)	68	76
Link Distance (ft)	226	715
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Lowell Ave & Shadow Ridge Rd, Interval #4

Movement	EB	SB	SE
Directions Served	<LR	TR>	LR>
Maximum Queue (ft)	57	4	69
Average Queue (ft)	34	1	39
95th Queue (ft)	59	6	71
Link Distance (ft)	226	244	715
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Lowell Ave & Shadow Ridge Rd, All Intervals

Movement	EB	SB	SE
Directions Served	<LR	TR>	LR>
Maximum Queue (ft)	79	6	101
Average Queue (ft)	36	0	41
95th Queue (ft)	62	4	76
Link Distance (ft)	226	244	715
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Empire Ave & 14th St, Interval #1

Movement	NB	SB	SW
Directions Served	TR	LT	LR
Maximum Queue (ft)	3	65	58
Average Queue (ft)	0	27	37
95th Queue (ft)	6	75	66
Link Distance (ft)	295	186	243
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Empire Ave & 14th St, Interval #2

Movement	SB	SW
Directions Served	LT	LR
Maximum Queue (ft)	57	85
Average Queue (ft)	25	45
95th Queue (ft)	64	87
Link Distance (ft)	186	243
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Empire Ave & 14th St, Interval #3

Movement	NB	SB	SW
Directions Served	TR	LT	LR
Maximum Queue (ft)	26	66	75
Average Queue (ft)	4	26	42
95th Queue (ft)	29	72	78
Link Distance (ft)	295	186	243
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Empire Ave & 14th St, Interval #4

Movement	NB	SB	SW
Directions Served	TR	LT	LR
Maximum Queue (ft)	2	74	74
Average Queue (ft)	0	24	39
95th Queue (ft)	4	65	65
Link Distance (ft)	295	186	243
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Empire Ave & 14th St, All Intervals

Movement	NB	SB	SW
Directions Served	TR	LT	LR
Maximum Queue (ft)	29	95	102
Average Queue (ft)	1	25	41
95th Queue (ft)	15	69	75
Link Distance (ft)	295	186	243
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Empire Ave & Manor Way, Interval #1

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	142	12
Average Queue (ft)	95	3
95th Queue (ft)	154	17
Link Distance (ft)	154	523
Upstream Blk Time (%)	1	
Queuing Penalty (veh)	5	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Empire Ave & Manor Way, Interval #2

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	145	17
Average Queue (ft)	97	3
95th Queue (ft)	154	19
Link Distance (ft)	154	523
Upstream Blk Time (%)	1	
Queuing Penalty (veh)	4	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Empire Ave & Manor Way, Interval #3

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	150	14
Average Queue (ft)	96	3
95th Queue (ft)	152	20
Link Distance (ft)	154	523
Upstream Blk Time (%)	1	
Queuing Penalty (veh)	7	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Empire Ave & Manor Way, Interval #4

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	137	12
Average Queue (ft)	93	2
95th Queue (ft)	148	13
Link Distance (ft)	154	523
Upstream Blk Time (%)	1	
Queuing Penalty (veh)	5	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Empire Ave & Manor Way, All Intervals

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	161	27
Average Queue (ft)	95	2
95th Queue (ft)	152	18
Link Distance (ft)	154	523
Upstream Blk Time (%)	1	
Queuing Penalty (veh)	5	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 9: Lowell Ave & Manor Way, Interval #1

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	61	89	140
Average Queue (ft)	41	53	86
95th Queue (ft)	62	93	150
Link Distance (ft)	154	550	487
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Lowell Ave & Manor Way, Interval #2

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	63	74	121
Average Queue (ft)	39	50	77
95th Queue (ft)	63	78	125
Link Distance (ft)	154	550	487
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			



Intersection: 9: Lowell Ave & Manor Way, Interval #3

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	59	89	147
Average Queue (ft)	40	54	84
95th Queue (ft)	64	89	166
Link Distance (ft)	154	550	487
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Lowell Ave & Manor Way, Interval #4

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	60	72	126
Average Queue (ft)	40	49	78
95th Queue (ft)	65	75	130
Link Distance (ft)	154	550	487
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Lowell Ave & Manor Way, All Intervals

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	72	108	194
Average Queue (ft)	40	51	81
95th Queue (ft)	64	84	145
Link Distance (ft)	154	550	487
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty, Interval #1: 514
Network wide Queuing Penalty, Interval #2: 417
Network wide Queuing Penalty, Interval #3: 624
Network wide Queuing Penalty, Interval #4: 589
Network wide Queuing Penalty, All Intervals: 536

## SimTraffic LOS Report

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Future (2024) Plus Project  
**Time Period:** Saturday PM Peak Hour **Project #: UT19-1481**

**Intersection:** Park Ave & Empire Ave/Deer Valley Dr  
**Type:** Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	75	74	99	55.9	E
	T	435	432	99	69.6	E
	R	75	74	99	37.4	D
	Subtotal	585	580	99	63.7	E
SB	L	545	536	98	94.1	F
	T	375	370	99	68.2	E
	R	452	459	101	8.3	A
	Subtotal	1,372	1,365	99	58.2	E
EB	L	705	698	99	72.4	E
	T	308	298	97	40.6	D
	R	46	49	107	37.5	D
	Subtotal	1,059	1,045	99	61.7	E
WB	L	83	79	95	84.7	F
	T	281	286	102	127.4	F
	R	704	708	101	46.6	D
	Subtotal	1,068	1,073	100	70.9	E
<b>Total</b>		4,084	4,063	99	63.5	E

**Intersection:** Empire Ave & Silver King Dr  
**Type:** Roundabout

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	49	50	103	3.3	A
	T	796	792	100	2.4	A
	R	42	42	101	1.7	A
	Subtotal	887	884	100	2.4	A
SB	L	16	16	98	5.5	A
	T	20	20	99	3.0	A
	R	772	782	101	5.3	A
	Subtotal	808	818	101	5.2	A
EB	L	244	238	97	3.2	A
	T	16	18	111	3.1	A
	Subtotal	260	256	98	3.2	A
WB	T	16	17	105	3.6	A
	R	11	10	91	2.5	A
	Subtotal	27	27	100	3.2	A
<b>Total</b>		1,982	1,985	100	3.7	A

## SimTraffic LOS Report

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Future (2024) Plus Project  
**Time Period:** Saturday PM Peak Hour **Project #:** UT19-1481

**Intersection:** Lowell Ave & Silver King Dr  
**Type:** Roundabout

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
EB	T	260	256	98	5.8	A
	R	14	14	98	3.7	A
	<b>Subtotal</b>	274	270	99	5.7	A
WB	L	702	705	100	2.8	A
	T	136	142	104	3.1	A
	<b>Subtotal</b>	838	847	101	2.9	A
<b>Total</b>		1,112	1,117	100	3.5	A

**Intersection:** NW E Access/Three Kings Dr & Silver King Dr  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	R	196	196	100	3.5	A
	<b>Subtotal</b>	196	196	100	3.5	A
<b>SB</b>	L	22	21	94	4.3	A
	<b>Subtotal</b>	<b>22</b>	<b>21</b>	<b>95</b>	<b>4.3</b>	<b>A</b>
EB	T	5	4	80	0.3	A
	<b>Subtotal</b>	5	4	80	0.3	A
WB	L	48	50	105	1.3	A
	T	5	6	114	0.3	A
	R	22	25	112	0.1	A
	<b>Subtotal</b>	75	81	108	0.9	A
<b>Total</b>		298	302	101	2.8	A

**SimTraffic LOS Report**

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Future (2024) Plus Project  
**Time Period:** Saturday PM Peak Hour **Project #:** UT19-1481

**Intersection:** Shadow Ridge Rd & Empire Ave  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	747	750	100	0.2	A
	Subtotal	747	750	100	0.2	A
NE	L	148	143	97	8.3	A
	T	0	0	0		
	<b>Subtotal</b>	<b>148</b>	<b>143</b>	<b>97</b>	<b>8.3</b>	<b>A</b>
<b>Total</b>		896	893	100	1.5	A

**Intersection:** Lowell Ave & Lodge Access & Shadow Ridge Rd  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
SB	L	82	81	99	1.6	A
	T	593	598	101	0.5	A
	R	42	41	98	0.2	A
	Subtotal	717	720	100	0.6	A
EB	L	32	32	99	10.8	B
	R	63	68	108	5.3	A
	<b>Subtotal</b>	<b>95</b>	<b>100</b>	<b>105</b>	<b>7.1</b>	<b>A</b>
<b>Total</b>		812	820	101	1.4	A

## SimTraffic LOS Report

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Future (2024) Plus Project  
**Time Period:** Saturday PM Peak Hour **Project #:** UT19-1481

**Intersection:** Empire Ave & 14th St  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	698	704	101	0.4	A
	R	105	107	102	0.4	A
	<b>Subtotal</b>	<b>803</b>	<b>811</b>	<b>101</b>	<b>0.4</b>	<b>A</b>
SW	R	49	46	94	4.4	A
	<b>Subtotal</b>	<b>49</b>	<b>46</b>	<b>94</b>	<b>4.4</b>	<b>A</b>
<b>Total</b>		<b>852</b>	<b>857</b>	<b>101</b>	<b>0.6</b>	<b>A</b>

**Intersection:** Empire Ave & Manor Way  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	68	70	103	8.7	A
	<b>Subtotal</b>	<b>68</b>	<b>70</b>	<b>103</b>	<b>8.7</b>	<b>A</b>
EB	L	588	590	100	0.3	A
	R	100	102	102	0.2	A
	<b>Subtotal</b>	<b>688</b>	<b>692</b>	<b>101</b>	<b>0.3</b>	<b>A</b>
<b>Total</b>		<b>756</b>	<b>762</b>	<b>101</b>	<b>1.1</b>	<b>A</b>

## SimTraffic LOS Report

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Future (2024) Plus Project  
**Time Period:** Saturday PM Peak Hour **Project #:** UT19-1481

**Intersection:** Lowell Ave & Manor Way  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
<b>NB</b>	R	194	190	98	6.9	A
	<b>Subtotal</b>	<b>194</b>	<b>190</b>	<b>98</b>	<b>6.9</b>	<b>A</b>
SB	L	443	449	101	1.1	A
	T	212	216	102	0.6	A
	Subtotal	655	665	102	0.9	A
<b>Total</b>		849	855	101	2.3	A

**Intersection:** NE E Access & Silver King Dr  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
<b>NB</b>	R	51	50	99	4.1	A
	<b>Subtotal</b>	<b>51</b>	<b>50</b>	<b>98</b>	<b>4.1</b>	<b>A</b>
EB	T	223	221	99	0.8	A
	Subtotal	223	221	99	0.8	A
WB	L	60	60	100	1.6	A
	T	76	80	106	0.5	A
	Subtotal	136	140	103	1.0	A
<b>Total</b>		410	411	100	1.3	A

## SimTraffic LOS Report

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Future (2024) Plus Project  
**Time Period:** Saturday PM Peak Hour **Project #:** UT19-1481

**Intersection:** Empire Ave & East D Access  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
<b>NB</b>	T	895	893	100	1.0	A
	<b>Subtotal</b>	<b>895</b>	<b>893</b>	<b>100</b>	<b>1.0</b>	<b>A</b>
<b>Total</b>		895	893	100	1.0	A

**Intersection:** Shadow Ridge Rd & North B Access  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
<b>NW</b>	R	87	86	99	2.8	A
	<b>Subtotal</b>	<b>87</b>	<b>86</b>	<b>99</b>	<b>2.8</b>	<b>A</b>
NE	T	62	58	94	0.5	A
	R	53	55	104	0.3	A
	Subtotal	115	113	98	0.4	A
<b>Total</b>		202	199	99	1.4	A

## SimTraffic LOS Report

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Future (2024) Plus Project  
**Time Period:** Saturday PM Peak Hour **Project #:** UT19-1481

**Intersection:** Manor Way & South B Access  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
<b>SB</b>	L	117	120	103	10.0	A
	<b>Subtotal</b>	<b>117</b>	<b>120</b>	<b>103</b>	<b>10.0</b>	<b>A</b>
EB	L	66	68	103	0.9	A
	T	572	572	100	0.5	A
	Subtotal	638	640	100	0.5	A
<b>Total</b>		754	760	101	2.0	A

**Intersection:** Empire Ave & East B Access  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	32	33	102	1.6	A
	T	624	628	101	0.4	A
	Subtotal	656	661	101	0.5	A
<b>EB</b>	L	179	183	102	10.3	B
	<b>Subtotal</b>	<b>179</b>	<b>183</b>	<b>102</b>	<b>10.3</b>	<b>B</b>
<b>Total</b>		836	844	101	2.6	A



1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #1 4:30

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	3.1	0.9	1.0	3.5	0.8	3.3	3.3	2.0	1.4
Total Delay (hr)	3.1	0.8	0.1	0.4	2.3	2.4	0.3	2.2	0.2	2.7	1.5	0.2
Total Del/Veh (s)	60.9	36.6	37.6	67.7	103.5	45.2	52.1	68.0	40.0	67.6	51.8	6.0
Vehicles Entered	170	72	12	18	70	179	18	107	19	132	92	109
Vehicles Exited	169	71	12	18	70	173	19	104	19	130	93	108
Hourly Exit Rate	676	284	48	72	280	692	76	416	76	520	372	432
Input Volume	695	304	45	82	277	694	74	429	74	537	370	446
% of Volume	97	93	107	88	101	100	103	97	103	97	101	97

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #1 4:30

Movement	All
Denied Delay (hr)	0.4
Denied Del/Veh (s)	1.3
Total Delay (hr)	16.2
Total Del/Veh (s)	54.1
Vehicles Entered	998
Vehicles Exited	986
Hourly Exit Rate	3944
Input Volume	4027
% of Volume	98

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #2 4:45

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Denied Del/Veh (s)	0.0	0.0	0.0	2.9	0.8	0.8	3.4	0.8	3.1	3.5	1.9	1.9
Total Delay (hr)	3.6	0.9	0.1	0.4	2.1	2.4	0.3	2.1	0.2	3.7	1.7	0.3
Total Del/Veh (s)	68.3	39.3	38.1	63.3	95.7	45.7	50.2	62.7	35.5	86.4	63.9	7.8
Vehicles Entered	173	74	13	21	69	176	18	108	18	139	88	117
Vehicles Exited	169	72	12	21	70	178	18	110	18	136	87	116
Hourly Exit Rate	676	288	48	84	280	712	72	440	72	544	348	464
Input Volume	695	304	45	82	277	694	74	429	74	537	370	446
% of Volume	97	95	107	102	101	103	97	103	97	101	94	104

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #2 4:45

Movement	All
Denied Delay (hr)	0.4
Denied Del/Veh (s)	1.3
Total Delay (hr)	17.7
Total Del/Veh (s)	57.9
Vehicles Entered	1014
Vehicles Exited	1007
Hourly Exit Rate	4028
Input Volume	4027
% of Volume	100

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #3 5:00

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.2
Denied Del/Veh (s)	0.1	0.0	0.0	2.5	0.6	0.6	3.1	0.8	3.3	6.9	5.1	5.7
Total Delay (hr)	3.8	0.9	0.1	0.5	2.8	2.2	0.3	2.4	0.2	3.9	2.1	0.3
Total Del/Veh (s)	67.2	38.8	33.6	76.1	114.6	41.0	61.2	68.5	37.0	90.8	67.7	8.7
Vehicles Entered	185	78	14	20	77	181	19	116	19	134	100	117
Vehicles Exited	180	80	14	19	73	180	19	115	19	132	99	118
Hourly Exit Rate	720	320	56	76	292	720	76	460	76	528	396	472
Input Volume	734	321	48	86	293	733	78	453	78	568	391	471
% of Volume	98	100	117	88	100	98	97	102	97	93	101	100

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #3 5:00

Movement	All
Denied Delay (hr)	0.7
Denied Del/Veh (s)	2.4
Total Delay (hr)	19.4
Total Del/Veh (s)	60.4
Vehicles Entered	1060
Vehicles Exited	1048
Hourly Exit Rate	4192
Input Volume	4254
% of Volume	99

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #4 5:15

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.2
Denied Del/Veh (s)	0.1	0.1	0.0	2.8	0.9	0.9	3.5	0.9	3.2	8.9	7.9	7.3
Total Delay (hr)	3.8	0.9	0.1	0.7	3.4	2.3	0.3	1.9	0.2	4.2	2.0	0.3
Total Del/Veh (s)	70.5	40.0	35.4	101.8	140.4	44.2	51.1	60.5	29.6	96.1	70.8	9.4
Vehicles Entered	171	76	11	22	72	174	18	102	18	135	92	116
Vehicles Exited	180	76	11	21	72	177	18	103	18	138	92	117
Hourly Exit Rate	720	304	44	84	288	708	72	412	72	552	368	468
Input Volume	695	304	45	82	277	694	74	429	74	537	370	446
% of Volume	104	100	98	102	104	102	97	96	97	103	99	105

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Interval #4 5:15

Movement	All
Denied Delay (hr)	0.9
Denied Del/Veh (s)	3.3
Total Delay (hr)	20.0
Total Del/Veh (s)	64.3
Vehicles Entered	1007
Vehicles Exited	1023
Hourly Exit Rate	4092
Input Volume	4027
% of Volume	102

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Entire Run

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.9	0.4	0.5
Denied Del/Veh (s)	0.1	0.0	0.0	2.8	0.8	0.8	3.4	0.8	3.2	5.7	4.3	4.1
Total Delay (hr)	14.3	3.4	0.5	2.0	10.6	9.3	1.2	8.5	0.8	14.5	7.2	1.1
Total Del/Veh (s)	72.4	40.6	37.5	84.7	127.4	46.6	55.9	69.6	37.4	94.1	68.2	8.3
Vehicles Entered	698	300	49	81	288	710	73	432	74	540	372	459
Vehicles Exited	698	298	49	79	286	708	74	432	74	536	370	459
Hourly Exit Rate	698	298	49	79	286	708	74	432	74	536	370	459
Input Volume	705	308	46	83	281	704	75	435	75	545	375	452
% of Volume	99	97	107	95	102	101	99	99	99	98	99	101

1: Park Ave & Empire Ave/Deer Valley Dr Performance by movement Entire Run

Movement	All
Denied Delay (hr)	2.4
Denied Del/Veh (s)	2.1
Total Delay (hr)	73.4
Total Del/Veh (s)	63.5
Vehicles Entered	4076
Vehicles Exited	4063
Hourly Exit Rate	4063
Input Volume	4084
% of Volume	99

2: Empire Ave & Silver King Dr Performance by movement Interval #1 4:30

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.5
Total Del/Veh (s)	3.2	3.4	4.0	2.2	3.1	2.4	1.8	5.0	3.2	5.2	3.6
Vehicles Entered	58	4	4	3	12	192	10	5	5	188	481
Vehicles Exited	57	4	4	3	12	192	10	5	4	188	479
Hourly Exit Rate	228	16	16	12	48	768	40	20	16	752	1916
Input Volume	241	16	16	11	48	785	41	16	20	761	1955
% of Volume	95	100	100	109	100	98	98	125	80	99	98

2: Empire Ave & Silver King Dr Performance by movement Interval #2 4:45

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.5
Total Del/Veh (s)	3.3	2.5	3.6	3.2	3.5	2.4	1.7	5.9	2.8	5.3	3.7
Vehicles Entered	62	4	3	2	11	194	10	4	5	195	490
Vehicles Exited	62	4	3	2	11	194	10	4	5	194	489
Hourly Exit Rate	248	16	12	8	44	776	40	16	20	776	1956
Input Volume	241	16	16	11	48	785	41	16	20	761	1955
% of Volume	103	100	75	73	92	99	98	100	100	102	100

2: Empire Ave & Silver King Dr Performance by movement Interval #3 5:00

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.5
Total Del/Veh (s)	3.2	3.4	3.7	2.7	3.2	2.4	1.8	6.4	3.2	5.2	3.7
Vehicles Entered	64	4	5	2	12	209	12	3	4	203	518
Vehicles Exited	64	4	5	2	12	208	12	3	4	201	515
Hourly Exit Rate	256	16	20	8	48	832	48	12	16	804	2060
Input Volume	254	17	17	11	51	828	44	17	21	804	2064
% of Volume	101	94	118	73	94	100	109	71	76	100	100

2: Empire Ave & Silver King Dr Performance by movement Interval #4 5:15

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.5
Total Del/Veh (s)	3.2	3.1	4.0	2.1	3.3	2.4	1.6	4.2	2.8	5.3	3.7
Vehicles Entered	55	6	4	3	14	197	10	5	6	197	497
Vehicles Exited	55	6	4	3	14	198	10	5	5	199	499
Hourly Exit Rate	220	24	16	12	56	792	40	20	20	796	1996
Input Volume	241	16	16	11	48	785	41	16	20	761	1955
% of Volume	91	150	100	109	117	101	98	125	100	105	102

2: Empire Ave & Silver King Dr Performance by movement Entire Run

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.2	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	1.2	2.1
Total Del/Veh (s)	3.2	3.1	3.6	2.5	3.3	2.4	1.7	5.5	3.0	5.3	3.7
Vehicles Entered	238	18	17	10	50	791	42	16	20	782	1984
Vehicles Exited	238	18	17	10	50	792	42	16	20	782	1985
Hourly Exit Rate	238	18	17	10	50	792	42	16	20	782	1985
Input Volume	244	16	16	11	49	796	42	16	20	772	1982
% of Volume	97	111	105	91	103	100	101	98	99	101	100

3: Lowell Ave & Silver King Dr Performance by movement Interval #1 4:30

Movement	EBT	EBR	WBL	WBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.0	0.1	0.0	0.3
Total Del/Veh (s)	5.6	5.1	2.8	3.1	3.5
Vehicles Entered	62	3	168	36	269
Vehicles Exited	62	3	168	36	269
Hourly Exit Rate	248	12	672	144	1076
Input Volume	256	14	692	134	1096
% of Volume	97	86	97	107	98

3: Lowell Ave & Silver King Dr Performance by movement Interval #2 4:45

Movement	EBT	EBR	WBL	WBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.0	0.1	0.0	0.3
Total Del/Veh (s)	5.5	4.0	2.7	3.1	3.4
Vehicles Entered	65	3	174	35	277
Vehicles Exited	65	3	173	35	276
Hourly Exit Rate	260	12	692	140	1104
Input Volume	256	14	692	134	1096
% of Volume	102	86	100	104	101

3: Lowell Ave & Silver King Dr Performance by movement Interval #3 5:00

Movement	EBT	EBR	WBL	WBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.0	0.1	0.0	0.3
Total Del/Veh (s)	5.7	3.1	2.8	3.1	3.5
Vehicles Entered	68	4	184	35	291
Vehicles Exited	69	4	184	35	292
Hourly Exit Rate	276	16	736	140	1168
Input Volume	272	15	731	142	1160
% of Volume	101	107	101	99	101

3: Lowell Ave & Silver King Dr Performance by movement Interval #4 5:15

Movement	EBT	EBR	WBL	WBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.0	0.1	0.0	0.3
Total Del/Veh (s)	6.3	3.8	2.7	3.0	3.5
Vehicles Entered	61	4	181	36	282
Vehicles Exited	61	4	181	36	282
Hourly Exit Rate	244	16	724	144	1128
Input Volume	256	14	692	134	1096
% of Volume	95	114	105	107	103

3: Lowell Ave & Silver King Dr Performance by movement Entire Run

Movement	EBT	EBR	WBL	WBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.4	0.0	0.5	0.1	1.1
Total Del/Veh (s)	5.8	3.7	2.8	3.1	3.5
Vehicles Entered	257	15	707	142	1121
Vehicles Exited	256	14	705	142	1117
Hourly Exit Rate	256	14	705	142	1117
Input Volume	260	14	702	136	1112
% of Volume	98	98	100	104	100

4: NW E Access/Three Kings Dr & Silver King Dr Performance by movement Interval #1 4:30

Movement	EBT	WBL	WBT	WBR	NBR	SBL	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.2	0.1	0.2
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	0.0	1.3	0.3	0.0	3.4	4.0	2.7
Vehicles Entered	1	12	1	7	47	5	73
Vehicles Exited	1	12	1	7	46	6	73
Hourly Exit Rate	4	48	4	28	184	24	292
Input Volume	5	47	5	22	193	22	294
% of Volume	80	102	80	127	95	109	99

4: NW E Access/Three Kings Dr & Silver King Dr Performance by movement Interval #2 4:45

Movement	EBT	WBL	WBT	WBR	NBR	SBL	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.3	0.1	0.2
Total Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Total Del/Veh (s)	0.2	1.2	0.3	0.1	3.8	4.3	3.1
Vehicles Entered	1	11	1	6	50	6	75
Vehicles Exited	1	12	1	6	50	6	76
Hourly Exit Rate	4	48	4	24	200	24	304
Input Volume	5	47	5	22	193	22	294
% of Volume	80	102	80	109	104	109	103

4: NW E Access/Three Kings Dr & Silver King Dr Performance by movement Interval #3 5:00

Movement	EBT	WBL	WBT	WBR	NBR	SBL	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.2	0.1	0.1
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	0.4	1.2	0.4	0.1	3.3	4.3	2.7
Vehicles Entered	2	14	2	5	52	6	81
Vehicles Exited	2	14	2	5	52	6	81
Hourly Exit Rate	8	56	8	20	208	24	324
Input Volume	5	50	6	23	204	23	311
% of Volume	160	112	133	87	102	104	104

4: NW E Access/Three Kings Dr & Silver King Dr Performance by movement Interval #4 5:15

Movement	EBT	WBL	WBT	WBR	NBR	SBL	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.2	0.1	0.1
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	0.1	1.3	0.1	0.1	3.3	3.9	2.6
Vehicles Entered	1	13	2	7	48	4	75
Vehicles Exited	1	13	2	7	48	4	75
Hourly Exit Rate	4	52	8	28	192	16	300
Input Volume	5	47	5	22	193	22	294
% of Volume	80	111	160	127	99	73	102

4: NW E Access/Three Kings Dr & Silver King Dr Performance by movement Entire Run

Movement	EBT	WBL	WBT	WBR	NBR	SBL	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.2	0.1	0.2
Total Delay (hr)	0.0	0.0	0.0	0.0	0.2	0.0	0.2
Total Del/Veh (s)	0.3	1.3	0.3	0.1	3.5	4.3	2.8
Vehicles Entered	4	50	6	24	196	21	301
Vehicles Exited	4	50	6	25	196	21	302
Hourly Exit Rate	4	50	6	25	196	21	302
Input Volume	5	48	5	22	196	22	298
% of Volume	80	105	114	112	100	94	101

5: Shadow Ridge Rd & Empire Ave Performance by movement Interval #1 4:30

Movement	NBT	NEL	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	0.0	0.1	0.1
Total Del/Veh (s)	0.2	7.7	1.4
Vehicles Entered	182	35	217
Vehicles Exited	182	35	217
Hourly Exit Rate	728	140	868
Input Volume	737	146	883
% of Volume	99	96	98



5: Shadow Ridge Rd & Empire Ave Performance by movement Interval #2 4:45

Movement	NBT	NEL	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	0.0	0.1	0.1
Total Del/Veh (s)	0.2	7.9	1.3
Vehicles Entered	185	34	219
Vehicles Exited	184	34	218
Hourly Exit Rate	736	136	872
Input Volume	737	146	883
% of Volume	100	93	99

5: Shadow Ridge Rd & Empire Ave Performance by movement Interval #3 5:00

Movement	NBT	NEL	NET	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0		0.0
Total Delay (hr)	0.0	0.1	0.0	0.1
Total Del/Veh (s)	0.2	7.8		1.4
Vehicles Entered	197	37	0	234
Vehicles Exited	198	37	0	235
Hourly Exit Rate	792	148	0	940
Input Volume	778	154	1	933
% of Volume	102	96	0	101

5: Shadow Ridge Rd & Empire Ave Performance by movement Interval #4 5:15

Movement	NBT	NEL	NET	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0		0.0
Total Delay (hr)	0.0	0.1	0.0	0.1
Total Del/Veh (s)	0.2	9.5		1.7
Vehicles Entered	186	36	0	222
Vehicles Exited	186	37	0	223
Hourly Exit Rate	744	148	0	892
Input Volume	737	146	0	883
% of Volume	101	101		101

5: Shadow Ridge Rd & Empire Ave Performance by movement Entire Run

Movement	NBT	NEL	NET	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0		0.0
Total Delay (hr)	0.0	0.3	0.0	0.4
Total Del/Veh (s)	0.2	8.3		1.5
Vehicles Entered	750	143	0	893
Vehicles Exited	750	143	0	893
Hourly Exit Rate	750	143	0	893
Input Volume	747	148	0	896
% of Volume	100	97	0	100

6: Lowell Ave & Lodge Access & Shadow Ridge Rd Performance by movement Interval #1 4:30

Movement	EBL	EBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.2	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	9.9	5.4	1.6	0.4	0.2	1.3
Vehicles Entered	8	17	19	143	10	197
Vehicles Exited	8	17	19	143	10	197
Hourly Exit Rate	32	68	76	572	40	788
Input Volume	32	62	81	585	41	801
% of Volume	100	110	94	98	98	98

6: Lowell Ave & Lodge Access & Shadow Ridge Rd Performance by movement Interval #2 4:45

Movement	EBL	EBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	9.6	5.7	1.6	0.5	0.1	1.4
Vehicles Entered	8	16	20	147	9	200
Vehicles Exited	8	16	20	147	9	200
Hourly Exit Rate	32	64	80	588	36	800
Input Volume	32	62	81	585	41	801
% of Volume	100	103	99	101	88	100

**6: Lowell Ave & Lodge Access & Shadow Ridge Rd Performance by movement Interval #3 5:00**

Movement	EBL	EBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.2	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	10.0	4.9	1.6	0.5	0.2	1.3
Vehicles Entered	7	19	22	155	12	215
Vehicles Exited	7	18	22	155	11	213
Hourly Exit Rate	28	72	88	620	44	852
Input Volume	33	66	85	617	44	845
% of Volume	85	109	104	100	100	101

**6: Lowell Ave & Lodge Access & Shadow Ridge Rd Performance by movement Interval #4 5:15**

Movement	EBL	EBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	11.0	5.4	1.6	0.5	0.2	1.4
Vehicles Entered	8	16	20	154	11	209
Vehicles Exited	9	17	20	154	11	211
Hourly Exit Rate	36	68	80	616	44	844
Input Volume	32	62	81	585	41	801
% of Volume	112	110	99	105	107	105

**6: Lowell Ave & Lodge Access & Shadow Ridge Rd Performance by movement Entire Run**

Movement	EBL	EBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.2	0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.1	0.0	0.1	0.0	0.3
Total Del/Veh (s)	10.8	5.3	1.6	0.5	0.2	1.4
Vehicles Entered	32	69	81	598	41	821
Vehicles Exited	32	68	81	598	41	820
Hourly Exit Rate	32	68	81	598	41	820
Input Volume	32	63	82	593	42	812
% of Volume	99	108	99	101	98	101

7: Empire Ave & 14th St Performance by movement Interval #1 4:30

Movement	NBT	NBR	SWR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	0.4	0.3	3.7	0.6
Vehicles Entered	171	29	11	211
Vehicles Exited	171	29	11	211
Hourly Exit Rate	684	116	44	844
Input Volume	688	104	48	840
% of Volume	99	112	92	100

7: Empire Ave & 14th St Performance by movement Interval #2 4:45

Movement	NBT	NBR	SWR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	0.4	0.4	4.7	0.6
Vehicles Entered	176	26	9	211
Vehicles Exited	176	26	9	211
Hourly Exit Rate	704	104	36	844
Input Volume	688	104	48	840
% of Volume	102	100	75	100

7: Empire Ave & 14th St Performance by movement Interval #3 5:00

Movement	NBT	NBR	SWR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	0.4	0.4	4.5	0.7
Vehicles Entered	183	25	13	221
Vehicles Exited	183	25	14	222
Hourly Exit Rate	732	100	56	888
Input Volume	727	109	51	887
% of Volume	101	92	110	100

7: Empire Ave & 14th St Performance by movement Interval #4 5:15

Movement	NBT	NBR	SWR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	0.4	0.3	4.3	0.6
Vehicles Entered	173	28	13	214
Vehicles Exited	173	28	13	214
Hourly Exit Rate	692	112	52	856
Input Volume	688	104	48	840
% of Volume	101	108	108	102

7: Empire Ave & 14th St Performance by movement Entire Run

Movement	NBT	NBR	SWR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Delay (hr)	0.1	0.0	0.1	0.1
Total Del/Veh (s)	0.4	0.4	4.4	0.6
Vehicles Entered	704	107	46	857
Vehicles Exited	704	107	46	857
Hourly Exit Rate	704	107	46	857
Input Volume	698	105	49	852
% of Volume	101	102	94	101

8: Empire Ave & Manor Way Performance by movement Interval #1 4:30

Movement	EBL	EBR	NBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.1
Total Del/Veh (s)	0.4	0.2	8.4	1.1
Vehicles Entered	145	24	16	185
Vehicles Exited	145	24	16	185
Hourly Exit Rate	580	96	64	740
Input Volume	580	99	67	746
% of Volume	100	97	96	99

8: Empire Ave & Manor Way Performance by movement Interval #2 4:45

Movement	EBL	EBR	NBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Delay (hr)	0.0	0.0	0.0	0.1
Total Del/Veh (s)	0.3	0.2	8.9	1.1
Vehicles Entered	148	24	18	190
Vehicles Exited	148	24	18	190
Hourly Exit Rate	592	96	72	760
Input Volume	580	99	67	746
% of Volume	102	97	107	102

8: Empire Ave & Manor Way Performance by movement Interval #3 5:00

Movement	EBL	EBR	NBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.1
Total Del/Veh (s)	0.3	0.2	9.0	1.1
Vehicles Entered	154	26	18	198
Vehicles Exited	153	26	17	196
Hourly Exit Rate	612	104	68	784
Input Volume	613	104	71	788
% of Volume	100	100	96	99

8: Empire Ave & Manor Way Performance by movement Interval #4 5:15

Movement	EBL	EBR	NBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.1
Total Del/Veh (s)	0.3	0.2	7.4	1.1
Vehicles Entered	144	28	19	191
Vehicles Exited	144	28	19	191
Hourly Exit Rate	576	112	76	764
Input Volume	580	99	67	746
% of Volume	99	113	113	102

8: Empire Ave & Manor Way Performance by movement Entire Run

Movement	EBL	EBR	NBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Delay (hr)	0.1	0.0	0.2	0.2
Total Del/Veh (s)	0.3	0.2	8.7	1.1
Vehicles Entered	590	102	70	762
Vehicles Exited	590	102	70	762
Hourly Exit Rate	590	102	70	762
Input Volume	588	100	68	756
% of Volume	100	102	103	101

9: Lowell Ave & Manor Way Performance by movement Interval #1 4:30

Movement	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.0	0.0	0.0
Total Delay (hr)	0.1	0.0	0.0	0.1
Total Del/Veh (s)	6.5	1.0	0.6	2.1
Vehicles Entered	45	110	50	205
Vehicles Exited	45	110	49	204
Hourly Exit Rate	180	440	196	816
Input Volume	191	437	209	837
% of Volume	94	101	94	97

9: Lowell Ave & Manor Way Performance by movement Interval #2 4:45

Movement	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.0	0.0	0.1
Total Delay (hr)	0.1	0.0	0.0	0.1
Total Del/Veh (s)	6.8	1.1	0.6	2.3
Vehicles Entered	49	111	52	212
Vehicles Exited	49	111	53	213
Hourly Exit Rate	196	444	212	852
Input Volume	191	437	209	837
% of Volume	103	102	101	102

9: Lowell Ave & Manor Way Performance by movement Interval #3 5:00

Movement	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.0	0.0	0.0
Total Delay (hr)	0.1	0.0	0.0	0.2
Total Del/Veh (s)	7.2	1.1	0.6	2.4
Vehicles Entered	51	117	56	224
Vehicles Exited	51	116	56	223
Hourly Exit Rate	204	464	224	892
Input Volume	202	461	222	885
% of Volume	101	101	101	101

9: Lowell Ave & Manor Way Performance by movement Interval #4 5:15

Movement	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.0	0.0	0.0
Total Delay (hr)	0.1	0.0	0.0	0.1
Total Del/Veh (s)	6.6	1.0	0.7	2.1
Vehicles Entered	44	113	57	214
Vehicles Exited	44	112	58	214
Hourly Exit Rate	176	448	232	856
Input Volume	191	437	209	837
% of Volume	92	103	111	102

9: Lowell Ave & Manor Way Performance by movement Entire Run

Movement	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.0	0.0	0.0
Total Delay (hr)	0.4	0.1	0.0	0.5
Total Del/Veh (s)	6.9	1.1	0.6	2.3
Vehicles Entered	190	450	216	856
Vehicles Exited	190	449	216	855
Hourly Exit Rate	190	449	216	855
Input Volume	194	443	212	849
% of Volume	98	101	102	101



10: NE E Access & Silver King Dr Performance by movement Interval #1 4:30

Movement	EBT	WBL	WBT	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	1.0	1.6	0.4	3.8	1.3
Vehicles Entered	53	16	20	12	101
Vehicles Exited	53	16	20	12	101
Hourly Exit Rate	212	64	80	48	404
Input Volume	220	59	75	50	404
% of Volume	96	108	107	96	100

10: NE E Access & Silver King Dr Performance by movement Interval #2 4:45

Movement	EBT	WBL	WBT	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	1.0	1.6	0.5	5.2	1.5
Vehicles Entered	56	15	19	12	102
Vehicles Exited	56	15	19	12	102
Hourly Exit Rate	224	60	76	48	408
Input Volume	220	59	75	50	404
% of Volume	102	102	101	96	101

10: NE E Access & Silver King Dr Performance by movement Interval #3 5:00

Movement	EBT	WBL	WBT	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	0.6	1.6	0.6	3.8	1.2
Vehicles Entered	59	15	20	14	108
Vehicles Exited	58	15	20	14	107
Hourly Exit Rate	232	60	80	56	428
Input Volume	233	63	78	53	427
% of Volume	100	95	103	106	100

10: NE E Access & Silver King Dr Performance by movement Interval #4 5:15

Movement	EBT	WBL	WBT	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	0.8	1.3	0.4	3.6	1.1
Vehicles Entered	53	14	21	11	99
Vehicles Exited	53	14	21	12	100
Hourly Exit Rate	212	56	84	48	400
Input Volume	220	59	75	50	404
% of Volume	96	95	112	96	99

10: NE E Access & Silver King Dr Performance by movement Entire Run

Movement	EBT	WBL	WBT	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Delay (hr)	0.1	0.0	0.0	0.1	0.1
Total Del/Veh (s)	0.8	1.6	0.5	4.1	1.3
Vehicles Entered	222	60	81	50	413
Vehicles Exited	221	60	80	50	411
Hourly Exit Rate	221	60	80	50	411
Input Volume	223	60	76	51	410
% of Volume	99	100	106	99	100

15: Empire Ave & East D Access Performance by movement Interval #1 4:30

Movement	NBT	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	1.0	1.0
Vehicles Entered	217	217
Vehicles Exited	217	217
Hourly Exit Rate	868	868
Input Volume	883	883
% of Volume	98	98

15: Empire Ave & East D Access Performance by movement Interval #2 4:45

Movement	NBT	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	0.9	0.9
Vehicles Entered	218	218
Vehicles Exited	217	217
Hourly Exit Rate	868	868
Input Volume	883	883
% of Volume	98	98

15: Empire Ave & East D Access Performance by movement Interval #3 5:00

Movement	NBT	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	1.0	1.0
Vehicles Entered	235	235
Vehicles Exited	236	236
Hourly Exit Rate	944	944
Input Volume	932	932
% of Volume	101	101

15: Empire Ave & East D Access Performance by movement Interval #4 5:15

Movement	NBT	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	1.0	1.0
Vehicles Entered	223	223
Vehicles Exited	224	224
Hourly Exit Rate	896	896
Input Volume	883	883
% of Volume	101	101

15: Empire Ave & East D Access Performance by movement Entire Run

Movement	NBT	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.2	0.2
Total Del/Veh (s)	1.0	1.0
Vehicles Entered	893	893
Vehicles Exited	893	893
Hourly Exit Rate	893	893
Input Volume	895	895
% of Volume	100	100

16: Shadow Ridge Rd & North B Access Performance by movement Interval #1 4:30

Movement	NWR	NET	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.1
Total Delay (hr)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	2.6	0.4	0.3	1.4
Vehicles Entered	22	13	14	49
Vehicles Exited	22	13	14	49
Hourly Exit Rate	88	52	56	196
Input Volume	86	61	52	199
% of Volume	102	85	108	98

16: Shadow Ridge Rd & North B Access Performance by movement Interval #2 4:45

Movement	NWR	NET	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	2.6	0.4	0.3	1.3
Vehicles Entered	20	15	14	49
Vehicles Exited	20	15	14	49
Hourly Exit Rate	80	60	56	196
Input Volume	86	61	52	199
% of Volume	93	98	108	98

16: Shadow Ridge Rd & North B Access Performance by movement Interval #3 5:00

Movement	NWR	NET	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.1
Total Delay (hr)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	2.8	0.4	0.3	1.4
Vehicles Entered	23	15	14	52
Vehicles Exited	23	15	14	52
Hourly Exit Rate	92	60	56	208
Input Volume	91	65	55	211
% of Volume	101	92	102	99

16: Shadow Ridge Rd & North B Access Performance by movement Interval #4 5:15

Movement	NWR	NET	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.0	0.0	0.1
Total Delay (hr)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.0	0.5	0.3	1.5
Vehicles Entered	22	15	13	50
Vehicles Exited	22	15	13	50
Hourly Exit Rate	88	60	52	200
Input Volume	86	61	52	199
% of Volume	102	98	100	101

16: Shadow Ridge Rd & North B Access Performance by movement Entire Run

Movement	NWR	NET	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.1
Total Delay (hr)	0.1	0.0	0.0	0.1
Total Del/Veh (s)	2.8	0.5	0.3	1.4
Vehicles Entered	86	58	55	199
Vehicles Exited	86	58	55	199
Hourly Exit Rate	86	58	55	199
Input Volume	87	62	53	202
% of Volume	99	94	104	99

17: Manor Way & South B Access Performance by movement Interval #1 4:30

Movement	EBL	EBT	SBL	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Delay (hr)	0.0	0.0	0.1	0.1
Total Del/Veh (s)	0.9	0.5	9.8	2.0
Vehicles Entered	17	138	30	185
Vehicles Exited	16	139	30	185
Hourly Exit Rate	64	556	120	740
Input Volume	65	564	115	744
% of Volume	98	99	104	99

17: Manor Way & South B Access Performance by movement Interval #2 4:45

Movement	EBL	EBT	SBL	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Delay (hr)	0.0	0.0	0.1	0.1
Total Del/Veh (s)	0.8	0.4	9.7	1.9
Vehicles Entered	17	143	30	190
Vehicles Exited	17	143	29	189
Hourly Exit Rate	68	572	116	756
Input Volume	65	564	115	744
% of Volume	105	101	101	102

17: Manor Way & South B Access Performance by movement Interval #3 5:00

Movement	EBL	EBT	SBL	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Delay (hr)	0.0	0.0	0.1	0.1
Total Del/Veh (s)	0.9	0.5	11.0	2.1
Vehicles Entered	18	150	30	198
Vehicles Exited	18	150	30	198
Hourly Exit Rate	72	600	120	792
Input Volume	69	595	122	786
% of Volume	104	101	98	101

17: Manor Way & South B Access Performance by movement Interval #4 5:15

Movement	EBL	EBT	SBL	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Delay (hr)	0.0	0.0	0.1	0.1
Total Del/Veh (s)	0.8	0.4	9.5	2.0
Vehicles Entered	17	140	31	188
Vehicles Exited	17	141	30	188
Hourly Exit Rate	68	564	120	752
Input Volume	65	564	115	744
% of Volume	105	100	104	101

17: Manor Way & South B Access Performance by movement Entire Run

Movement	EBL	EBT	SBL	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Delay (hr)	0.0	0.1	0.3	0.4
Total Del/Veh (s)	0.9	0.5	10.0	2.0
Vehicles Entered	68	572	120	760
Vehicles Exited	68	572	120	760
Hourly Exit Rate	68	572	120	760
Input Volume	66	572	117	754
% of Volume	103	100	103	101

18: Empire Ave & East B Access Performance by movement Interval #1 4:30

Movement	EBL	NBL	NBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.0	0.0	0.0
Total Delay (hr)	0.1	0.0	0.0	0.1
Total Del/Veh (s)	9.4	1.5	0.4	2.4
Vehicles Entered	45	7	154	206
Vehicles Exited	46	8	154	208
Hourly Exit Rate	184	32	616	832
Input Volume	177	32	615	824
% of Volume	104	100	100	101

18: Empire Ave & East B Access Performance by movement Interval #2 4:45

Movement	EBL	NBL	NBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.0	0.0	0.0
Total Delay (hr)	0.1	0.0	0.0	0.1
Total Del/Veh (s)	9.1	1.5	0.4	2.3
Vehicles Entered	45	9	157	211
Vehicles Exited	45	8	157	210
Hourly Exit Rate	180	32	628	840
Input Volume	177	32	615	824
% of Volume	102	100	102	102

18: Empire Ave & East B Access Performance by movement Interval #3 5:00

Movement	EBL	NBL	NBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.0	0.0	0.0
Total Delay (hr)	0.1	0.0	0.0	0.2
Total Del/Veh (s)	10.9	1.5	0.4	2.7
Vehicles Entered	46	9	162	217
Vehicles Exited	46	9	161	216
Hourly Exit Rate	184	36	644	864
Input Volume	186	33	652	871
% of Volume	99	109	99	99

18: Empire Ave & East B Access Performance by movement Interval #4 5:15

Movement	EBL	NBL	NBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.0	0.0	0.0
Total Delay (hr)	0.1	0.0	0.0	0.2
Total Del/Veh (s)	11.2	1.6	0.4	2.9
Vehicles Entered	46	8	155	209
Vehicles Exited	46	8	155	209
Hourly Exit Rate	184	32	620	836
Input Volume	177	32	615	824
% of Volume	104	100	101	101



18: Empire Ave & East B Access Performance by movement Entire Run

Movement	EBL	NBL	NBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.0	0.0	0.0
Total Delay (hr)	0.5	0.0	0.1	0.6
Total Del/Veh (s)	10.3	1.6	0.4	2.6
Vehicles Entered	183	33	628	844
Vehicles Exited	183	33	628	844
Hourly Exit Rate	183	33	628	844
Input Volume	179	32	624	836
% of Volume	102	102	101	101

Total Network Performance By Interval

Interval Start	4:30	4:45	5:00	5:15	All
Denied Delay (hr)	0.4	0.4	0.7	0.9	2.4
Denied Del/Veh (s)	1.3	1.4	2.4	3.3	2.1
Total Delay (hr)	18.3	19.9	21.8	22.2	82.2
Total Del/Veh (s)	57.3	61.1	63.9	67.0	69.1
Vehicles Entered	1013	1024	1076	1022	4136
Vehicles Exited	1007	1017	1055	1039	4125
Hourly Exit Rate	4028	4068	4220	4156	4125
Input Volume	20689	20689	21858	20689	20981
% of Volume	19	20	19	20	20

Intersection: 1: Park Ave & Empire Ave/Deer Valley Dr, Interval #1

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	TR	L	T	R	L	T	TR	L	T	R
Maximum Queue (ft)	365	381	289	252	579	594	154	365	290	482	677	259
Average Queue (ft)	280	292	216	119	389	414	69	262	211	404	419	133
95th Queue (ft)	407	412	314	294	742	810	164	402	329	567	866	555
Link Distance (ft)	541	541	541		810	810		674			1136	1136
Upstream Blk Time (%)	0	0			2	2					3	1
Queuing Penalty (veh)	0	0			0	0					0	0
Storage Bay Dist (ft)				175			200		200	300		
Storage Blk Time (%)				1	50			27	11	31	7	
Queuing Penalty (veh)				2	41			99	32	115	36	

Intersection: 1: Park Ave & Empire Ave/Deer Valley Dr, Interval #2

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	TR	L	T	R	L	T	TR	L	T	R
Maximum Queue (ft)	387	393	336	259	565	590	180	359	292	491	837	551
Average Queue (ft)	300	308	225	128	390	410	71	253	208	446	578	224
95th Queue (ft)	433	429	358	297	684	752	175	368	317	565	1138	794
Link Distance (ft)	541	541	541		810	810		674			1136	1136
Upstream Blk Time (%)		0			1	4					4	1
Queuing Penalty (veh)		0			0	0					0	0
Storage Bay Dist (ft)				175			200		200	300		
Storage Blk Time (%)				1	51			25	9	46	10	
Queuing Penalty (veh)				2	42			91	25	170	53	

Intersection: 1: Park Ave & Empire Ave/Deer Valley Dr, Interval #3

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	TR	L	T	R	L	T	TR	L	T	R
Maximum Queue (ft)	405	402	355	274	536	542	194	415	328	487	902	492
Average Queue (ft)	321	330	250	143	402	374	77	286	238	440	632	208
95th Queue (ft)	463	460	399	324	623	587	182	434	339	581	1180	782
Link Distance (ft)	541	541	541		810	810		674			1136	1136
Upstream Blk Time (%)	0	0	0								6	4
Queuing Penalty (veh)	1	1	0								0	0
Storage Bay Dist (ft)				175			200		200	300		
Storage Blk Time (%)					65			32	11	47	13	
Queuing Penalty (veh)					56			121	32	182	75	

Intersection: 1: Park Ave & Empire Ave/Deer Valley Dr, Interval #4

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	TR	L	T	R	L	T	TR	L	T	R
Maximum Queue (ft)	415	410	337	275	638	580	116	320	290	498	916	565
Average Queue (ft)	331	337	231	168	492	421	61	233	196	452	689	358
95th Queue (ft)	476	466	368	347	816	802	134	328	295	569	1325	1115
Link Distance (ft)	541	541	541		810	810		674			1136	1136
Upstream Blk Time (%)	0	0			3	1					12	4
Queuing Penalty (veh)	1	0			0	0					0	0
Storage Bay Dist (ft)				175			200		200	300		
Storage Blk Time (%)				1	68		0	20	6	46	13	
Queuing Penalty (veh)				2	56		0	72	17	169	68	

Intersection: 1: Park Ave & Empire Ave/Deer Valley Dr, All Intervals

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	TR	L	T	R	L	T	TR	L	T	R
Maximum Queue (ft)	454	447	399	275	747	720	287	451	344	500	1102	878
Average Queue (ft)	308	317	231	139	418	405	69	259	213	435	579	231
95th Queue (ft)	449	445	363	318	728	747	165	389	323	575	1156	839
Link Distance (ft)	541	541	541		810	810		674			1136	1136
Upstream Blk Time (%)	0	0	0		1	2					6	3
Queuing Penalty (veh)	1	0	0		0	0					0	0
Storage Bay Dist (ft)				175			200		200	300		
Storage Blk Time (%)				1	59		0	26	9	42	11	
Queuing Penalty (veh)				1	49		0	96	26	159	58	

Intersection: 2: Empire Ave & Silver King Dr, Interval #1

Movement	EB	WB	NB	NB	SB
Directions Served	LT	TR	LT	TR	LR
Maximum Queue (ft)	56	29	52	40	40
Average Queue (ft)	29	7	31	8	10
95th Queue (ft)	58	29	58	33	37
Link Distance (ft)	182	253	58	58	541
Upstream Blk Time (%)			0	0	
Queuing Penalty (veh)			2	0	
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: Empire Ave & Silver King Dr, Interval #2

Movement	EB	WB	NB	NB	SB
Directions Served	LT	TR	LT	TR	LR
Maximum Queue (ft)	54	28	54	31	28
Average Queue (ft)	27	7	33	7	8
95th Queue (ft)	62	28	60	28	29
Link Distance (ft)	182	253	58	58	541
Upstream Blk Time (%)			1	0	
Queuing Penalty (veh)			4	0	
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: Empire Ave & Silver King Dr, Interval #3

Movement	EB	WB	NB	NB	SB
Directions Served	LT	TR	LT	TR	LR
Maximum Queue (ft)	48	30	57	35	28
Average Queue (ft)	26	9	37	8	8
95th Queue (ft)	52	32	63	34	28
Link Distance (ft)	182	253	58	58	541
Upstream Blk Time (%)			1	0	
Queuing Penalty (veh)			3	1	
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: Empire Ave & Silver King Dr, Interval #4

Movement	EB	WB	NB	NB	SB
Directions Served	LT	TR	LT	TR	LR
Maximum Queue (ft)	48	30	58	32	38
Average Queue (ft)	25	8	34	8	14
95th Queue (ft)	52	30	62	30	42
Link Distance (ft)	182	253	58	58	541
Upstream Blk Time (%)			1	0	
Queuing Penalty (veh)			3	0	
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: Empire Ave & Silver King Dr, All Intervals

Movement	EB	WB	NB	NB	SB
Directions Served	LT	TR	LT	TR	LR
Maximum Queue (ft)	68	33	63	49	49
Average Queue (ft)	27	8	34	8	10
95th Queue (ft)	56	30	61	31	35
Link Distance (ft)	182	253	58	58	541
Upstream Blk Time (%)			1	0	
Queuing Penalty (veh)			3	0	
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 3: Lowell Ave & Silver King Dr, Interval #1

Movement	EB	WB	WB
Directions Served	TR	L	LT
Maximum Queue (ft)	73	76	58
Average Queue (ft)	50	39	22
95th Queue (ft)	80	80	68
Link Distance (ft)	66	182	182
Upstream Blk Time (%)	3		
Queuing Penalty (veh)	8		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Lowell Ave & Silver King Dr, Interval #2

Movement	EB	WB	WB
Directions Served	TR	L	LT
Maximum Queue (ft)	73	70	54
Average Queue (ft)	53	33	19
95th Queue (ft)	82	80	57
Link Distance (ft)	66	182	182
Upstream Blk Time (%)	3		
Queuing Penalty (veh)	9		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Lowell Ave & Silver King Dr, Interval #3

Movement	EB	WB	WB
Directions Served	TR	L	LT
Maximum Queue (ft)	75	76	62
Average Queue (ft)	52	41	23
95th Queue (ft)	76	81	65
Link Distance (ft)	66	182	182
Upstream Blk Time (%)	2		
Queuing Penalty (veh)	7		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Lowell Ave & Silver King Dr, Interval #4

Movement	EB	WB	WB
Directions Served	TR	L	LT
Maximum Queue (ft)	73	86	70
Average Queue (ft)	53	37	20
95th Queue (ft)	81	88	67
Link Distance (ft)	66	182	182
Upstream Blk Time (%)	3		
Queuing Penalty (veh)	9		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Lowell Ave & Silver King Dr, All Intervals

Movement	EB	WB	WB
Directions Served	TR	L	LT
Maximum Queue (ft)	78	102	97
Average Queue (ft)	52	38	21
95th Queue (ft)	80	83	65
Link Distance (ft)	66	182	182
Upstream Blk Time (%)	3		
Queuing Penalty (veh)	8		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: NW E Access/Three Kings Dr & Silver King Dr, Interval #1

Movement	NB	SB
Directions Served	LTR	LTR
Maximum Queue (ft)	66	31
Average Queue (ft)	47	15
95th Queue (ft)	73	40
Link Distance (ft)	159	364
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: NW E Access/Three Kings Dr & Silver King Dr, Interval #2

Movement	NB	SB
Directions Served	LTR	LTR
Maximum Queue (ft)	75	31
Average Queue (ft)	50	16
95th Queue (ft)	85	40
Link Distance (ft)	159	364
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: NW E Access/Three Kings Dr & Silver King Dr, Interval #3

Movement	NB	SB
Directions Served	LTR	LTR
Maximum Queue (ft)	68	29
Average Queue (ft)	47	15
95th Queue (ft)	70	38
Link Distance (ft)	159	364
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: NW E Access/Three Kings Dr & Silver King Dr, Interval #4

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	6	64	29
Average Queue (ft)	1	44	14
95th Queue (ft)	9	66	37
Link Distance (ft)	70	159	364
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: NW E Access/Three Kings Dr & Silver King Dr, All Intervals

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	6	88	33
Average Queue (ft)	0	47	15
95th Queue (ft)	4	74	39
Link Distance (ft)	70	159	364
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Shadow Ridge Rd & Empire Ave, Interval #1

Movement	NE
Directions Served	L
Maximum Queue (ft)	75
Average Queue (ft)	46
95th Queue (ft)	77
Link Distance (ft)	104
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	



Intersection: 5: Shadow Ridge Rd & Empire Ave, Interval #2

Movement	NE
Directions Served	L
Maximum Queue (ft)	80
Average Queue (ft)	46
95th Queue (ft)	77
Link Distance (ft)	104
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Shadow Ridge Rd & Empire Ave, Interval #3

Movement	NE
Directions Served	L
Maximum Queue (ft)	83
Average Queue (ft)	49
95th Queue (ft)	85
Link Distance (ft)	104
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Shadow Ridge Rd & Empire Ave, Interval #4

Movement	NE
Directions Served	L
Maximum Queue (ft)	78
Average Queue (ft)	51
95th Queue (ft)	89
Link Distance (ft)	104
Upstream Blk Time (%)	1
Queuing Penalty (veh)	1
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Shadow Ridge Rd & Empire Ave, All Intervals

Movement	NE
Directions Served	L
Maximum Queue (ft)	99
Average Queue (ft)	48
95th Queue (ft)	82
Link Distance (ft)	104
Upstream Blk Time (%)	0
Queuing Penalty (veh)	1
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Lowell Ave & Lodge Access & Shadow Ridge Rd, Interval #1

Movement	EB	SB
Directions Served	LR	LT
Maximum Queue (ft)	66	3
Average Queue (ft)	39	0
95th Queue (ft)	71	6
Link Distance (ft)	218	216
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Lowell Ave & Lodge Access & Shadow Ridge Rd, Interval #2

Movement	EB	SB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	63	10	3
Average Queue (ft)	38	1	0
95th Queue (ft)	61	12	7
Link Distance (ft)	218	216	216
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Lowell Ave & Lodge Access & Shadow Ridge Rd, Interval #3

Movement	EB	SB
Directions Served	LR	LT
Maximum Queue (ft)	66	6
Average Queue (ft)	39	1
95th Queue (ft)	64	8
Link Distance (ft)	218	216
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Lowell Ave & Lodge Access & Shadow Ridge Rd, Interval #4

Movement	EB	SB
Directions Served	LR	LT
Maximum Queue (ft)	65	6
Average Queue (ft)	38	2
95th Queue (ft)	63	12
Link Distance (ft)	218	216
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Lowell Ave & Lodge Access & Shadow Ridge Rd, All Intervals

Movement	EB	SB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	81	19	3
Average Queue (ft)	38	1	0
95th Queue (ft)	65	10	3
Link Distance (ft)	218	216	216
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Empire Ave & 14th St, Interval #1

Movement	NB	SW
Directions Served	TR	R
Maximum Queue (ft)	2	44
Average Queue (ft)	0	23
95th Queue (ft)	5	49
Link Distance (ft)	77	230
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Empire Ave & 14th St, Interval #2

Movement	NB	SW
Directions Served	TR	R
Maximum Queue (ft)	2	38
Average Queue (ft)	0	20
95th Queue (ft)	5	45
Link Distance (ft)	77	230
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Empire Ave & 14th St, Interval #3

Movement	NB	SW
Directions Served	TR	R
Maximum Queue (ft)	2	42
Average Queue (ft)	0	26
95th Queue (ft)	0	49
Link Distance (ft)	77	230
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Empire Ave & 14th St, Interval #4

Movement	SW
Directions Served	R
Maximum Queue (ft)	44
Average Queue (ft)	27
95th Queue (ft)	50
Link Distance (ft)	230
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Empire Ave & 14th St, All Intervals

Movement	NB	SW
Directions Served	TR	R
Maximum Queue (ft)	7	56
Average Queue (ft)	0	24
95th Queue (ft)	4	49
Link Distance (ft)	77	230
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Empire Ave & Manor Way, Interval #1

Movement	EB	EB	NB
Directions Served	L	R	T
Maximum Queue (ft)	11	5	51
Average Queue (ft)	2	1	34
95th Queue (ft)	14	10	57
Link Distance (ft)	23	23	513
Upstream Blk Time (%)	0	0	
Queuing Penalty (veh)	0	0	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Empire Ave & Manor Way, Interval #2

Movement	EB	NB
Directions Served	L	T
Maximum Queue (ft)	7	66
Average Queue (ft)	1	36
95th Queue (ft)	11	67
Link Distance (ft)	23	513
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Empire Ave & Manor Way, Interval #3

Movement	NB
Directions Served	T
Maximum Queue (ft)	56
Average Queue (ft)	35
95th Queue (ft)	61
Link Distance (ft)	513
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Empire Ave & Manor Way, Interval #4

Movement	NB
Directions Served	T
Maximum Queue (ft)	53
Average Queue (ft)	35
95th Queue (ft)	54
Link Distance (ft)	513
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Empire Ave & Manor Way, All Intervals

Movement	EB	EB	NB
Directions Served	L	R	T
Maximum Queue (ft)	17	5	71
Average Queue (ft)	1	0	35
95th Queue (ft)	9	5	60
Link Distance (ft)	23	23	513
Upstream Blk Time (%)	0	0	
Queuing Penalty (veh)	0	0	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Lowell Ave & Manor Way, Interval #1

Movement	NB	SB
Directions Served	R	L
Maximum Queue (ft)	84	5
Average Queue (ft)	54	1
95th Queue (ft)	88	10
Link Distance (ft)	541	494
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 9: Lowell Ave & Manor Way, Interval #2

Movement	NB	SB
Directions Served	R	L
Maximum Queue (ft)	92	12
Average Queue (ft)	53	2
95th Queue (ft)	87	12
Link Distance (ft)	541	494
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 9: Lowell Ave & Manor Way, Interval #3

Movement	NB	SB
Directions Served	R	L
Maximum Queue (ft)	98	16
Average Queue (ft)	56	3
95th Queue (ft)	100	15
Link Distance (ft)	541	494
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 9: Lowell Ave & Manor Way, Interval #4

Movement	NB	SB
Directions Served	R	L
Maximum Queue (ft)	75	4
Average Queue (ft)	52	1
95th Queue (ft)	83	8
Link Distance (ft)	541	494
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 9: Lowell Ave & Manor Way, All Intervals

Movement	NB	SB
Directions Served	R	L
Maximum Queue (ft)	115	19
Average Queue (ft)	53	2
95th Queue (ft)	90	12
Link Distance (ft)	541	494
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		



Intersection: 10: NE E Access & Silver King Dr, Interval #1

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	35	31	46
Average Queue (ft)	9	9	28
95th Queue (ft)	40	32	53
Link Distance (ft)	70	66	129
Upstream Blk Time (%)	1		
Queuing Penalty (veh)	1		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 10: NE E Access & Silver King Dr, Interval #2

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	38	32	48
Average Queue (ft)	13	9	27
95th Queue (ft)	51	34	56
Link Distance (ft)	70	66	129
Upstream Blk Time (%)	1	0	
Queuing Penalty (veh)	2	0	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 10: NE E Access & Silver King Dr, Interval #3

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	33	33	46
Average Queue (ft)	5	9	27
95th Queue (ft)	28	32	46
Link Distance (ft)	70	66	129
Upstream Blk Time (%)	0	0	
Queuing Penalty (veh)	0	0	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 10: NE E Access & Silver King Dr, Interval #4

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	35	28	38
Average Queue (ft)	8	6	24
95th Queue (ft)	36	27	45
Link Distance (ft)	70	66	129
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 10: NE E Access & Silver King Dr, All Intervals

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	60	35	60
Average Queue (ft)	9	8	26
95th Queue (ft)	40	32	51
Link Distance (ft)	70	66	129
Upstream Blk Time (%)	0	0	
Queuing Penalty (veh)	1	0	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 15: Empire Ave & East D Access, Interval #1

Movement	NB	NB
Directions Served	LT	T
Maximum Queue (ft)	11	34
Average Queue (ft)	2	6
95th Queue (ft)	14	31
Link Distance (ft)	474	474
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 15: Empire Ave & East D Access, Interval #2

Movement	NB	NB
Directions Served	LT	T
Maximum Queue (ft)	14	15
Average Queue (ft)	2	4
95th Queue (ft)	15	25
Link Distance (ft)	474	474
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 15: Empire Ave & East D Access, Interval #3

Movement	NB	NB
Directions Served	LT	T
Maximum Queue (ft)	11	41
Average Queue (ft)	2	7
95th Queue (ft)	16	43
Link Distance (ft)	474	474
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 15: Empire Ave & East D Access, Interval #4

Movement	NB	NB
Directions Served	LT	T
Maximum Queue (ft)	22	21
Average Queue (ft)	3	3
95th Queue (ft)	24	21
Link Distance (ft)	474	474
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 15: Empire Ave & East D Access, All Intervals

Movement	NB	NB
Directions Served	LT	T
Maximum Queue (ft)	41	56
Average Queue (ft)	2	5
95th Queue (ft)	18	31
Link Distance (ft)	474	474
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 16: Shadow Ridge Rd & North B Access, Interval #1

Movement	NW
Directions Served	R
Maximum Queue (ft)	44
Average Queue (ft)	27
95th Queue (ft)	46
Link Distance (ft)	151
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 16: Shadow Ridge Rd & North B Access, Interval #2

Movement	NW
Directions Served	R
Maximum Queue (ft)	47
Average Queue (ft)	26
95th Queue (ft)	48
Link Distance (ft)	151
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 16: Shadow Ridge Rd & North B Access, Interval #3

Movement	NW	NE
Directions Served	R	T
Maximum Queue (ft)	47	3
Average Queue (ft)	27	0
95th Queue (ft)	46	6
Link Distance (ft)	151	112
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 16: Shadow Ridge Rd & North B Access, Interval #4

Movement	NW
Directions Served	R
Maximum Queue (ft)	50
Average Queue (ft)	27
95th Queue (ft)	49
Link Distance (ft)	151
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 16: Shadow Ridge Rd & North B Access, All Intervals

Movement	NW	NE
Directions Served	R	T
Maximum Queue (ft)	62	3
Average Queue (ft)	27	0
95th Queue (ft)	47	3
Link Distance (ft)	151	112
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 17: Manor Way & South B Access, Interval #1

Movement	SB
Directions Served	L
Maximum Queue (ft)	77
Average Queue (ft)	48
95th Queue (ft)	84
Link Distance (ft)	171
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 17: Manor Way & South B Access, Interval #2

Movement	EB	SB
Directions Served	LT	L
Maximum Queue (ft)	3	70
Average Queue (ft)	0	44
95th Queue (ft)	7	75
Link Distance (ft)	77	171
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 17: Manor Way & South B Access, Interval #3

Movement	EB	SB
Directions Served	LT	L
Maximum Queue (ft)	6	74
Average Queue (ft)	0	44
95th Queue (ft)	0	79
Link Distance (ft)	77	171
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 17: Manor Way & South B Access, Interval #4

Movement	EB	SB
Directions Served	LT	L
Maximum Queue (ft)	4	79
Average Queue (ft)	1	46
95th Queue (ft)	7	82
Link Distance (ft)	77	171
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 17: Manor Way & South B Access, All Intervals

Movement	EB	SB
Directions Served	LT	L
Maximum Queue (ft)	13	101
Average Queue (ft)	0	45
95th Queue (ft)	5	80
Link Distance (ft)	77	171
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 18: Empire Ave & East B Access, Interval #1

Movement	EB
Directions Served	L
Maximum Queue (ft)	104
Average Queue (ft)	61
95th Queue (ft)	103
Link Distance (ft)	141
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 18: Empire Ave & East B Access, Interval #2

Movement	EB
Directions Served	L
Maximum Queue (ft)	90
Average Queue (ft)	55
95th Queue (ft)	90
Link Distance (ft)	141
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 18: Empire Ave & East B Access, Interval #3

Movement	EB	NB	NB
Directions Served	L	LT	T
Maximum Queue (ft)	98	10	7
Average Queue (ft)	61	1	1
95th Queue (ft)	105	20	16
Link Distance (ft)	141	203	203
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 18: Empire Ave & East B Access, Interval #4

Movement	EB
Directions Served	L
Maximum Queue (ft)	109
Average Queue (ft)	65
95th Queue (ft)	114
Link Distance (ft)	141
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	



Intersection: 18: Empire Ave & East B Access, All Intervals

Movement	EB	NB	NB
Directions Served	L	LT	T
Maximum Queue (ft)	128	10	7
Average Queue (ft)	60	0	0
95th Queue (ft)	104	10	8
Link Distance (ft)	141	203	203
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty, Interval #1: 337
Network wide Queuing Penalty, Interval #2: 398
Network wide Queuing Penalty, Interval #3: 479
Network wide Queuing Penalty, Interval #4: 399
Network wide Queuing Penalty, All Intervals: 403

## SimTraffic LOS Report

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Future (2040) Background  
**Time Period:** Saturday PM Peak Hour **Project #: UT19-1481**

**Intersection:** Park Ave & Empire Ave/Deer Valley Dr  
**Type:** Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	43	40	92	98.2	F
	T	509	491	96	122.2	F
	R	88	93	106	100.3	F
	Subtotal	640	624	98	117.4	F
SB	L	638	623	98	53.4	D
	T	467	466	100	41.8	D
	R	447	464	104	9.5	A
	Subtotal	1,552	1,553	100	36.8	D
EB	L	778	782	100	62.6	E
	T	340	333	98	39.7	D
	R	44	43	97	35.3	D
	Subtotal	1,162	1,158	100	55.0	D
WB	L	97	88	91	93.3	F
	T	294	259	88	177.7	F
	R	824	700	85	153.6	F
	Subtotal	1,215	1,047	86	154.5	F
<b>Total</b>		<b>4,570</b>	<b>4,382</b>	<b>96</b>	<b>82.1</b>	<b>F</b>

**Intersection:** Empire Ave & Silver King Dr  
**Type:** Roundabout

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	49	52	106	5.7	A
	T	738	729	99	4.4	A
	R	21	23	110	3.8	A
	Subtotal	808	804	100	4.5	A
SB	L	19	16	84	11.8	B
	T	530	507	96	10.4	B
	R	236	240	102	4.5	A
	Subtotal	785	763	97	8.6	A
EB	L	399	394	99	25.8	D
	T	64	65	102	25.0	C
	R	30	30	99	24.6	C
	Subtotal	493	489	99	25.6	D
WB	L	15	12	80	8.1	A
	T	19	20	105	9.5	A
	R	13	14	108	3.3	A
	Subtotal	47	46	98	7.2	A
<b>Total</b>		<b>2,132</b>	<b>2,102</b>	<b>99</b>	<b>11.0</b>	<b>B</b>

## SimTraffic LOS Report

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Future (2040) Background  
**Time Period:** Saturday PM Peak Hour **Project #:** UT19-1481

**Intersection:** Lowell Ave & Silver King Dr  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
<b>NB</b>	L	19	18	95	17.1	C
	R	473	471	100	16.4	C
	<b>Subtotal</b>	<b>492</b>	<b>489</b>	<b>99</b>	<b>16.4</b>	<b>C</b>
EB	T	20	20	100	1.6	A
	R	13	15	115	0.5	A
	Subtotal	33	35	106	1.1	A
WB	L	291	297	102	2.4	A
	T	13	14	108	0.6	A
	Subtotal	304	311	102	2.3	A
<b>Total</b>		829	835	101	10.5	<b>B</b>

**Intersection:** Silver King Dr & Three Kings Dr  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
<b>SB</b>	L	25	27	107	3.8	A
	<b>Subtotal</b>	<b>25</b>	<b>27</b>	<b>108</b>	<b>3.8</b>	<b>A</b>
EB	T	6	5	83	0.0	A
	Subtotal	6	5	83	0.0	A
WB	T	8	8	103	0.5	A
	R	25	24	95	0.5	A
	Subtotal	33	32	97	0.5	A
<b>Total</b>		64	64	100	1.9	<b>A</b>

**SimTraffic LOS Report**

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Future (2040) Background  
**Time Period:** Saturday PM Peak Hour **Project #:** UT19-1481

**Intersection:** Shadow Ridge Rd & Empire Ave  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	62	58	93	6.3	A
	T	790	785	99	2.0	A
	<b>Subtotal</b>	<b>852</b>	<b>843</b>	<b>99</b>	<b>2.3</b>	<b>A</b>
SB	T	308	292	95	3.1	A
	R	243	234	96	2.5	A
	<b>Subtotal</b>	<b>551</b>	<b>526</b>	<b>95</b>	<b>2.8</b>	<b>A</b>
NE	L	6	6	100	34.0	D
	T	1	1	100	0.9	A
	R	6	6	100	4.8	A
	<b>Subtotal</b>	<b>13</b>	<b>13</b>	<b>100</b>	<b>18.0</b>	<b>C</b>
<b>Total</b>		<b>1,416</b>	<b>1,382</b>	<b>98</b>	<b>2.6</b>	<b>A</b>

**Intersection:** Lowell Ave & Shadow Ridge Rd  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
SB	T	268	251	94	0.7	A
	R	25	29	115	0.4	A
	R2	13	13	100	0.3	A
	<b>Subtotal</b>	<b>306</b>	<b>293</b>	<b>96</b>	<b>0.7</b>	<b>A</b>
EB	L2	49	46	93	10.5	B
	R	62	61	98	6.9	A
	<b>Subtotal</b>	<b>111</b>	<b>107</b>	<b>96</b>	<b>8.4</b>	<b>A</b>
SE	L	13	13	100	9.9	A
	T	135	134	99	0.2	A
	R	131	135	103	9.3	A
	R2	25	31	123	7.5	A
<b>Total</b>		<b>722</b>	<b>713</b>	<b>99</b>	<b>3.8</b>	<b>A</b>

HALES ENGINEERING  
**SimTraffic LOS Report**

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Future (2040) Background  
**Time Period:** Saturday PM Peak Hour **Project #:** UT19-1481

**Intersection:** Empire Ave & 14th St  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	636	631	99	1.6	A
	R	106	113	107	1.2	A
	<b>Subtotal</b>	<b>742</b>	<b>744</b>	<b>100</b>	<b>1.5</b>	<b>A</b>
SB	L	37	36	97	8.7	A
	T	289	272	94	1.9	A
	<b>Subtotal</b>	<b>326</b>	<b>308</b>	<b>94</b>	<b>2.7</b>	<b>A</b>
SW	L	46	46	99	25.5	D
	R	55	55	100	13.8	B
	<b>Subtotal</b>	<b>101</b>	<b>101</b>	<b>100</b>	<b>19.1</b>	<b>C</b>
<b>Total</b>		<b>1,170</b>	<b>1,153</b>	<b>99</b>	<b>3.4</b>	<b>A</b>

**Intersection:** Empire Ave & Manor Way  
**Type:** Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	13	13	100	2.8	A
	T	68	71	104	0.5	A
	<b>Subtotal</b>	<b>81</b>	<b>84</b>	<b>104</b>	<b>0.9</b>	<b>A</b>
SB	T	179	169	94	0.8	A
	R	156	149	96	0.7	A
	<b>Subtotal</b>	<b>335</b>	<b>318</b>	<b>95</b>	<b>0.8</b>	<b>A</b>
EB	L	639	635	99	13.0	B
	R	25	26	103	11.1	B
	<b>Subtotal</b>	<b>664</b>	<b>661</b>	<b>100</b>	<b>12.9</b>	<b>B</b>
<b>Total</b>		<b>1,081</b>	<b>1,063</b>	<b>98</b>	<b>8.4</b>	<b>A</b>

## SimTraffic LOS Report

**Project:** Park City Mountain Resort TIS  
**Analysis Period:** Future (2040) Background  
**Time Period:** Saturday PM Peak Hour **Project #:** UT19-1481

**Intersection:** Lowell Ave & Manor Way  
**Type:** All-way Stop Controlled

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	R	227	234	103	8.8	A
	Subtotal	227	234	103	8.8	A
SB	L	436	425	97	15.5	C
	T	80	77	97	15.2	C
	Subtotal	516	502	97	15.5	C
WB	L	168	160	95	5.5	A
	T	1	2	200	0.2	A
	Subtotal	169	162	96	5.4	A
<b>Total</b>		912	898	99	11.9	B