Fiscal Analysis: Services Budget

S125 per household per month Assumes 1.5 employees full time for 7 months @ \$30/hr Lump sum Assumes 2 employees working 25 full days @\$30/hr Lump sum, includes working 20 hours per week @\$30/hr Lump sum, includes utilities and repairs Notes \$125 per household per month Assumes 1 employee 14 hours a week for 7 months @ \$30/hr Lump sum	210,000.00 20,000.00 20,000.00 12,000.00 32,400.00 38,900.00 38,900.00 13,230.00 5,000.00	Per household 10 1,500.00 142.86 357.14 85.71 231.43 277.86 3,000.00 3,000.00	Annual Fee Open Space & Common Gardens Landscape Maintenance Materials Streets Maintenance Budget Snow Removal Clubhouse and Pool Management Utilities and Repairs Annual Fee Open Space & Common Gardens Landscape Maintenance Materials
			Parking and Sidewalks
			Parking and Sidewalks
			Darking and Sidewalks
Lump sum	5,000.00	35.71	Materials
Assumes a cimployee an moule a ween for a morning	13,630,00		רמוומזרמאב ואומווורביומוורב
Assumes 1 employee 14 hours a week for 7 months	13 230 00	94 50	Open space & common carvens
			Open Space & Common Gardens
\$125 per household per month	36,000.00	3,000.00	Annual Fee
Notes	otal		
		D#16	e Commercial OA Budget
Lump sum, includes utilities and repairs	38,900.00	277.86	Utilities and Repairs
Assumes 1 employees working 20 hours per week @\$30/hr	32,400.00	231.43	Management
			Clubhouse and Pool
Assumes 2 employees working 25 full days @\$30/hr	12,000.00	85.71	Snow Removal
Lump sum	50,000.00	357.14	Maintenance Budget
Lump sum	20,000.00	142.86	Materials
Assumes 1.5 employees full time for 7 months @ \$30/hr	26,700.00	405.00	Landscape Maintenance
			Open Space & Common Gardens
\$125 per household per month	210,000.00	1,500.00	Annual Fee
Notes	otai		



The Village

Traffic Impact Study



Midway, Utah

March 23, 2021

UT21-1835





EXECUTIVE SUMMARY

This study addresses the traffic impacts associated with the proposed The Village development located in Midway, Utah. The Village project is located on the north side of Main Street, east of River Road.

The purpose of this traffic impact study is to analyze traffic operations at key intersections for existing (2021) conditions with and without the proposed project and to recommend mitigation measures as needed. The evening peak hour level of service (LOS) results are shown in Table ES-1. Recommended storage lengths are shown in Table ES-2.

Table ES-1: Evening Peak Hour Level of Service Results

		Level of	Service
	Intersection	Existin	g (2021)
		BG	PP
1	River Road / Main Street (S.R. 113)	C	d
2	Fox Den Road / Main Street (S.R. 113)	а	b
3	580 East / Main Street (S.R. 113)	a	С
4	670 East / Main Street (S.R. 113)	b	b
5	Access 1 / Main Street (S.R. 113)	-	b
6	Access 3 / River Road	-	а

^{1.} Intersection LOS values represent the overall intersection average for roundabout, signalized, and all-way stop-controlled (AWSC) intersections (uppercase letter) and the worst movement for all other unsignalized intersections (lowercase letter)

Table ES-2: Recommended Storage Lengths

		Recommended Storage Lengths (feet)															
	Intersection		North	bound		Southbound			Eastbound			d	Westbound			d	
	mersection	L	T	RT		ı	т.	R	Т	1	_T	F	RT	- 1	.T	F	RТ
		Е	Р	Е	Р	Е	Р	Е	Р	Е	Р	Е	Р	Е	Р	Е	Р
1	River Road / Main Street (S.R. 113)	-	100	-	-	-	100	-		-	100	-	100	-	100	-	100
2	580 East / Main Street (S.R. 113)	-	-	- 1	-	-	-	_	-	72	100	2	-	21	-		-
3	West Access / Main Street (S.R. 113)	Ē	-	-	-	-	-	-	-		100	-		-	-	-	-

^{1.} Storage lengths are based on 2021 95th percentile queue lengths and do not include required deceleration / taper distances

^{2.} BG = Background (without project traffic), PP = Plus Project (with project traffic)

Source: Hales Engineering, March 2021

^{2.} E = Existing storage length (approximate), if applicable; P = proposed storage length for new turn lanes or changes to existing turn lanes, if applicable Source: Hales Engineering, February 2021



SUMMARY OF KEY FINDINGS & RECOMMENDATIONS

Project Conditions

- The development will consist of residential townhome and single-family units and some commercial
- The project is anticipated to generate approximately 3,832 weekday daily trips, including 256 trips in the morning peak hour, and 322 trips in the evening peak hour

2021	Background	Plus Project
Assumptions	• None	 580 East / Main St (S.R. 113): Construct EB left turn pocket West Access / Main St (S.R. 113): Construct EB left-turn pocket The access shown at 670 East on the site plan is no longer applicable; neither are the 20 townhomes on the east end
Findings	Acceptable LOS	Acceptable LOS
Mitigations	 None. A signal is warranted at the River Rd / Main St (S.R. 113) intersection, but it was not included in the analysis due to acceptable operation. 	None



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I. INTRODUCTION

A. Purpose

This study addresses the traffic impacts associated with the proposed The Village development located in Midway, Utah. The proposed project is located on the north side of Main Street, east of River Road. Figure 1 shows a vicinity map of the proposed development.

The purpose of this traffic impact study is to analyze traffic operations at key intersections for existing (2021) conditions with and without the proposed project and to recommend mitigation measures as needed.



Figure 1: Vicinity map showing the project location in Midway, Utah



B. Scope

The study area was defined based on conversations with the development team. This study was scoped to evaluate the traffic operational performance impacts of the project on the following intersections:

- River Road / Main Street (S.R. 113)
- Fox Den Road / Main Street (S.R. 113)
- 580 East / Main Street (S.R. 113)
- 670 East / Main Street (S.R. 113)

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.

The *Highway Capacity Manual* (HCM), 6th Edition, 2016 methodology was used in this study to remain consistent with "state-of-the-practice" professional standards. This methodology has different quantitative evaluations for signalized and unsignalized intersections. For signalized, roundabout, and all-way stop-controlled (AWSC) 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 movement.

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 B. Hales Engineering also calculated the 95th percentile queue lengths for the study intersections using SimTraffic. The detailed queue length reports are provided in Appendix D.

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. A LOS D threshold is consistent with "state-of-the-practice" traffic engineering principles for urbanized areas.



Table 1: Level of Service Description

	LOS	Description of	Average Delay (seconds/vehicle)			
	LUS	Traffic Conditions	Signalized Intersections	Unsignalized Intersections		
A		Free Flow / Insignificant Delay	≤ 10	≤ 10		
В		Stable Operations / Minimum Delays	> 10 to 20	> 10 to 15		
С		Stable Operations / Acceptable Delays	> 20 to 35	> 15 to 25		
D	0,00	Approaching Unstable Flows / Tolerable Delays	> 35 to 55	> 25 to 35		
E		Unstable Operations / Significant Delays	> 55 to 80	> 35 to 50		
F		Forced Flows / Unpredictable Flows / Excessive Delays	> 80	> 50		

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



II. EXISTING (2021) 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:

Main Street (S.R. 113) – is a state-maintained roadway (classified by UDOT access management standards as a "Community – Urban Importance" facility, or access category 8 roadway). Main Street (S.R. 113) has one travel lane in each direction. As identified and controlled by UDOT, a "Community – Urban Importance" access classification identifies minimum signalized intersection spacing of one-quarter mile (1,320 feet), minimum unsignalized street spacing of 300 feet, and minimum driveway spacing of 150 feet. The posted speed limit on Main Street (S.R. 113) is 35 mph.

<u>River Road</u> – is a city-maintained roadway. The roadway has one travel lane in each direction. The posted speed limit is 25 mph in the study area.

C. Traffic Volumes

Weekday morning (7:00 to 9:00 a.m.) and evening (4:00 to 6:00 p.m.) peak period traffic counts were performed at the following intersections:

- River Road / Main Street (S.R. 113)
- Fox Den Road / Main Street (S.R. 113)
- 580 East / Main Street (S.R. 113)
- 670 East / Main Street (S.R. 113)

The counts were performed on Thursday, February 4 and Tuesday, February 9, 2021. The morning peak hour was determined to be between 7:30 and 8:30 a.m., and the evening peak hour was determined to be between 5:00 and 6:00 p.m. The evening peak hour volumes were approximately 22% higher than the morning peak hour volumes. Therefore, the evening peak hour volumes were used in the analysis to represent the worst-case conditions. Detailed count data are included in Appendix A.

The traffic counts were collected during the COVID-19 pandemic when traffic volumes were slightly reduced due to social distancing measures. According to the UDOT Automatic Traffic



Signal Performance Measures (ATSPM) website, the traffic volumes on February 6, 2020 (presocial distancing) were approximately 17% higher than those on February 4, 2021. Therefore, the collected data were increased by 17% to represent normal conditions.

Figure 2 shows the existing evening peak hour volumes as well as intersection geometry at the study intersections.

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, as shown in Table 2. These results serve as a baseline condition for the impact analysis of the proposed development during existing (2021) conditions.

E. Queuing Analysis

Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. No significant queueing was observed during the evening peak hour.

F. Mitigation Measures

No mitigation measures are recommended. According to UDOT guidelines, a traffic signal is warranted at the River Road / Main Street (S.R. 113) intersection. However, because it operates at an acceptable LOS, it was not included in the analysis.

Hales Engineering 1220 North 500 West Ste 202, Lehi, UT, 84043

801.766.4343 02/12/2021

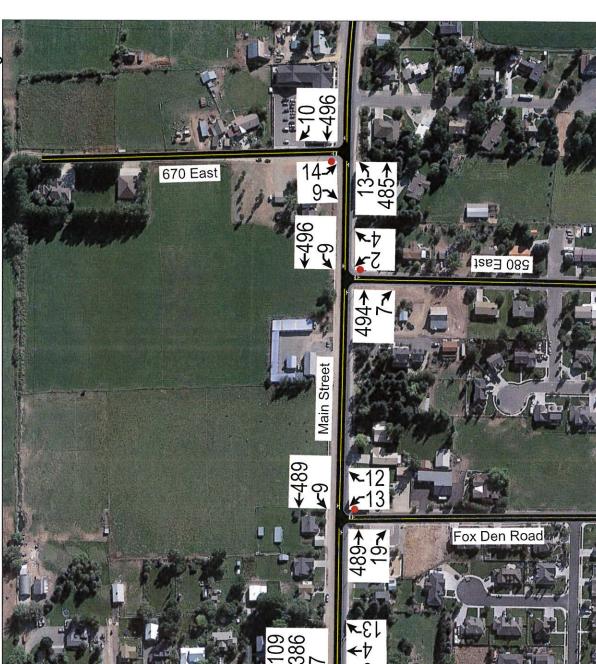






Table 2: Existing (2021) Background Evening Peak Hour LOS

Intersection		Lev	el of Service	
Description	Control	Movement ¹	Aver. Delay (Sec. / Veh.)	LOS ²
River Road / Main Street (S.R. 113)	NB/SB Stop	SBL	23.6	С
Fox Den Road / Main Street (S.R. 113)	NB Stop	NBL	9.9	а
580 East / Main Street (S.R. 113)	NB Stop	NBL	9.9	а
670 East / Main Street (S.R. 113)	SB Stop	SBL	11.5	b

Movement indicated for unsignalized intersections where delay and LOS represents worst movement. SBL = Southbound left movement, etc.
 Uppercase LOS used for signalized, roundabout, and AWSC intersections. Lowercase LOS used for all other unsignalized intersections.

Source: Hales Engineering, March 2021



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 The Village development is located on the north side of Main Street, east of River Road. The development will consist of residential townhome and single-family units and some commercial. A concept plan for the proposed development is provided in Appendix C. The 20 townhomes shown on the east side of the project are no longer planned. The proposed land use for the development has been identified in Table 3.

Table 3: Project Land Uses

Land Use	Intensity
Single-family detached housing	25 Units
Townhomes	137 Units
Commercial / Retail	28,170 sq. ft.

C. Trip Generation

Trip generation for the development was calculated using trip generation rates published in the Institute of Transportation Engineers (ITE), *Trip Generation*, 10th Edition, 2017. Trip generation for the proposed project is included in Table 4.

The total trip generation for the development is as follows:

•	Daily Trips:	3,832
•	Morning Peak Hour Trips:	256
•	Evening Peak Hour Trips:	322



Trip Generation Midway - The Village TIS Weekday Daily

Table 4: Trip Generation

Land Use ¹	Units		Generation	Entering	Exiting	Entering	Exiting	Daily Trips
Single-Family Detached Housing (210)	25	Dwelling Units	292	50%	50%	146	146	292
Multifamily Housing (Low-Rise) (220)	137	Dwelling Units	996	50%	50%	498	498	996
Shopping Center (820)	28	1,000 Sq. Ft. GLA	2,544	50%	50%	1,272	1,272	2,544
Total			3,832			1,916	1,916	3,832
Morning Peak Hour Land Use ¹	# of Units	Unit Type	Trip Generation	% Entering	% Exiting	Trips Entering	Trips Exiting	Total New AM Trips
Single-Family Detached Housing (210)	25	Dwelling Units	24	25%	75%	6	18	24
Multifamily Housing (Low-Rise) (220)	137	Dwelling Units	66	23%	77%	15	51	66
Shopping Center (820)	28	1,000 Sq. Ft. GLA	166	62%	38%	103	63	166
Total			256			124	132	256
Evening Peak Hour Land Use ¹	# of Units	Unit Type	Trip Generation	% Entering	% Exiting	Trips Entering	Trips Exiting	Total New PM Trips
Single-Family Detached Housing (210)	25	Dwelling Units	28	63%	37%	18	10	28
Multifamily Housing (Low-Rise) (220)	137	Dwelling Units	80	63%	37%	50	30	80
Shopping Center (820)	28	1,000 Sq. Ft. GLA	214	48%	52%	103	111	214
Total			322			171	151	322

SOURCE: Hales Engineering, March 2021

D. **Trip Distribution and Assignment**

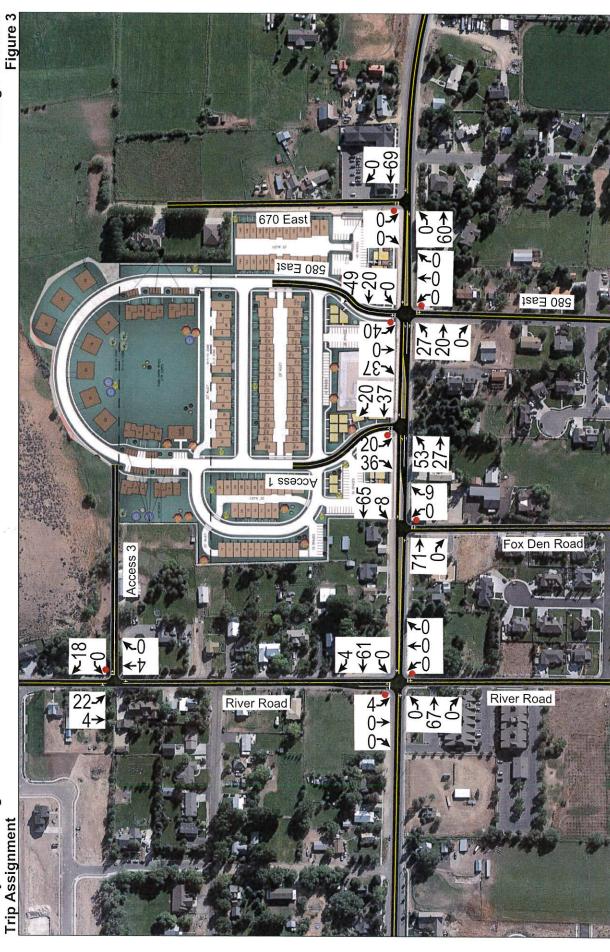
Project traffic is assigned to the roadway network based on the type of trip and the proximity of project access points to major streets, high population densities, and regional trip attractions. Existing travel patterns observed during data collection also provide helpful guidance to establishing these distribution percentages, especially near the site. The resulting distribution of project generated trips during the evening peak hour is shown in Table 5.

Table 5: Trip Distribution

Direction	% To/From Project
North	15%
South	5%
East	40%
West	40%

These trip distribution assumptions were used to assign the evening peak hour generated traffic at the study intersections to create trip assignment for the proposed development. Trip assignment for the development is shown in Figure 3.

Midway - The Village TIS



801.766.4343



E. Access

The proposed access for the site will be gained at the following locations (see also concept plan in Appendix C):

Main Street (S.R. 113):

- Access 1 will be located approximately 265 feet east of the Fox Den Road / Main Street (S.R. 113) intersection. It will access the project on the north side of Main Street (S.R. 113). It is anticipated that the access will be stop-controlled.
- Access 2 will be located directly across from the 580 East / Main Street (S.R. 113) intersection. It will access the project on the north side of Main Street (S.R. 113). It is anticipated that the access will be stop-controlled.

River Road:

 Access 3 will be located approximately 900 feet north of the River Road / Main Street (S.R. 113) intersection. It will access the project on the east side of River Road. It is anticipated that the access will be stop-controlled.

While the site plan currently shows accesses to 670 East, a recent decision was made to eliminate them and confine access to River Road and Main Street (S.R. 113).

F. Auxiliary Lane Requirements

UDOT Administrative Rule R930-6 outlines minimum turn volumes (measured in vehicles per hour) to warrant auxiliary lanes. It is anticipated that auxiliary lanes are required for these accesses, as shown in Table 6 and Table 7.

Table 6: Auxiliary Lane Summary - Access 1

A	uxiliary Lane Type	Minimum Requirement	Measure	Met?
Left turn	Deceleration (EB-to-NB)	25 vph	53 vph	Yes
Right turn	Deceleration (WB-to-NB)	50 vph	20 vph	No

Table 7: Auxiliary Lane Summary – Access 2

A	uxiliary Lane Type	Minimum Requirement	Measure	Met?
Left turn	Deceleration (EB-to-NB)	25 vph	27 vph	Yes
Right turn	Deceleration (WB-to-NB)	50 vph	49 vph	No



IV. EXISTING (2021) PLUS PROJECT CONDITIONS

A. Purpose

The purpose of the existing (2021) plus project analysis is to study the intersections and roadways during the peak travel periods of the day for existing 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 background traffic conditions.

B. Traffic Volumes

Hales Engineering added the project trips discussed in Chapter III to the existing (2021) background traffic volumes to predict turning movement volumes for existing (2021) plus project conditions. Existing (2021) plus project evening peak hour turning movement volumes are shown in Figure 4.

C. 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 with project traffic added, as shown in Table 8.

D. Queuing Analysis

Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. No significant queuing is anticipated during the evening peak hour.

E. Mitigation Measures

No additional mitigation measures are recommended.

F. Recommended Storage Lengths

Hales Engineering determined recommended storage lengths based on the 95th 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 9. Intersections shown in Table 9 include new intersections and existing intersections that have recommended storage length changes.



Table 8: Existing (2021) Plus Project Evening Peak Hour LOS

Intersection		Lev	el of Service	
Description	Control	Movement ¹	Aver. Delay (Sec. / Veh.)	LOS ²
River Road / Main Street (S.R. 113)	NB/SB Stop	SBL	29.6	d
Fox Den Road / Main Street (S.R. 113)	NB Stop	NBL	15.0	b
580 East / Main Street (S.R. 113)	NB/SB Stop	SBL	16.0	С
670 East / Main Street (S.R. 113)	SB Stop	SBL	12.5	b
Access 1 / Main Street (S.R. 113)	SB Stop	SBL	12.5	b
Access 3 / River Road	WB Stop	WBR	3.2	а

^{1.} Movement indicated for unsignalized intersections where delay and LOS represents worst movement. SBL = Southbound left movement, etc.

Source: Hales Engineering, March 2021

Table 9: Recommended Storage Lengths

^{2.} Uppercase LOS used for signalized, roundabout, and AWSC intersections. Lowercase LOS used for all other unsignalized intersections.

Midway - The Village TIS

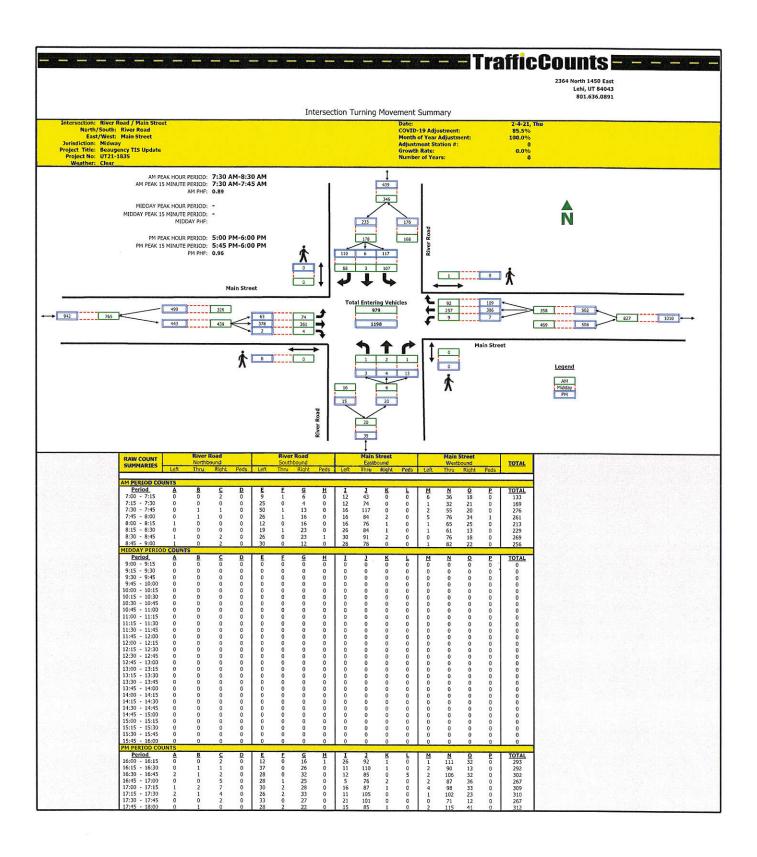
Hales Engineering 1220 North 500 West Ste 202, Lehi, UT, 84043

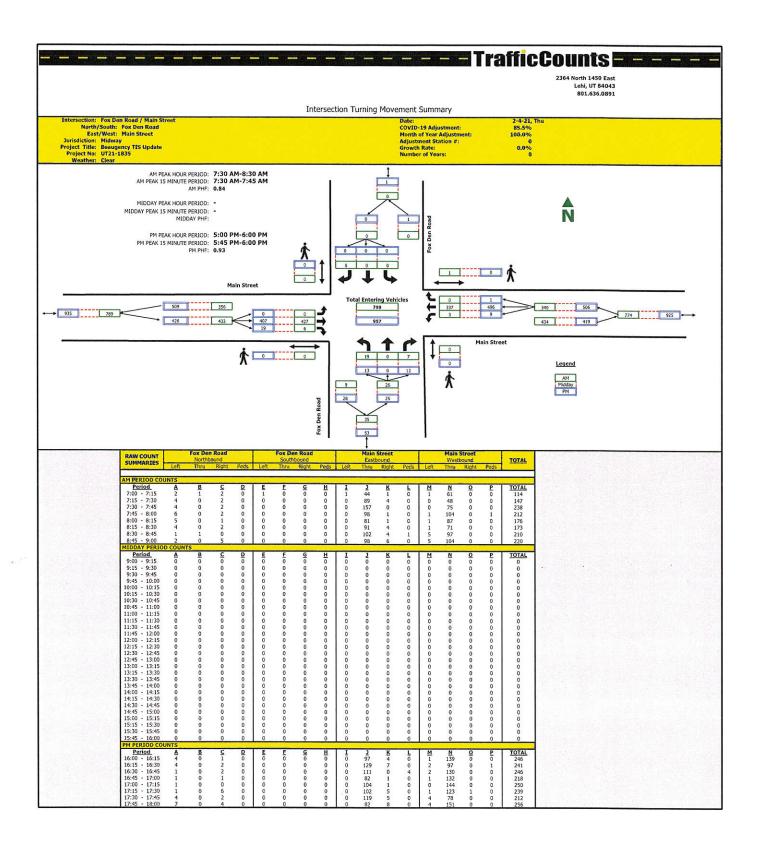
801.766.4343 03/23/2021

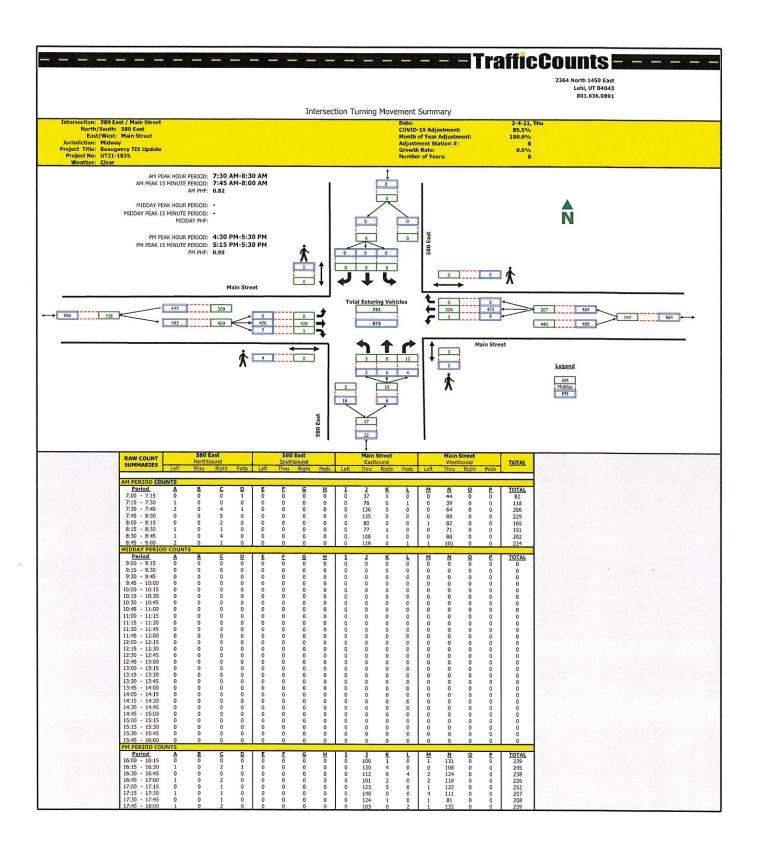


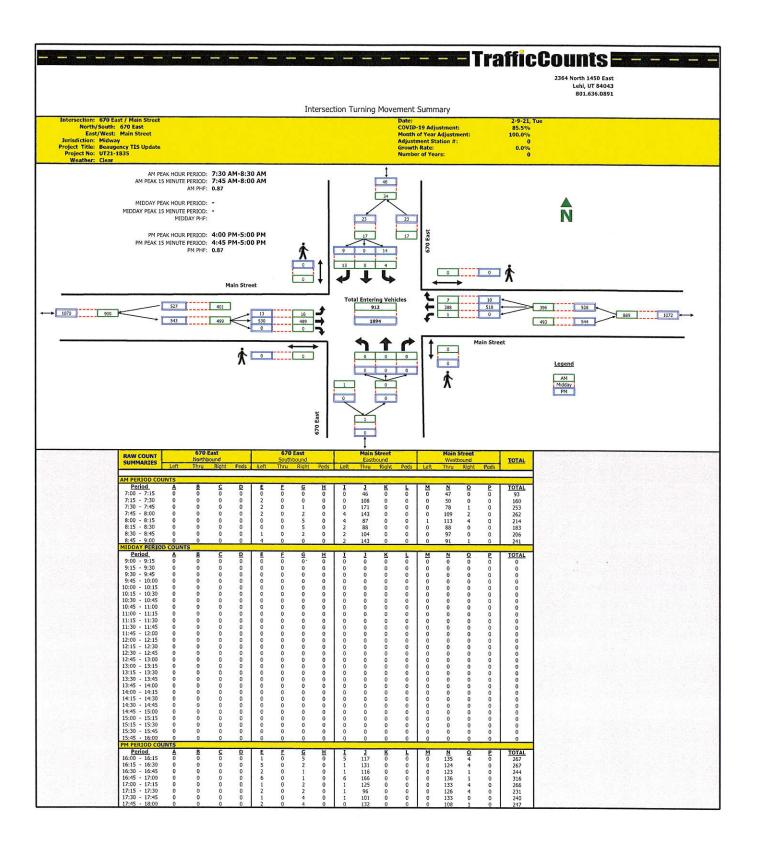
APPENDIX A

Turning Movement Counts











APPENDIX B

LOS Results



Project:

Midway - The Village TIS

Analysis Period: Time Period:

Existing (2021) Background Evening Peak Hour

Project #: UT21-1835

Intersection:

River Road & Main Street

Type:

Unsignalized

1700.		Onorginanzea				
Approach	Movement	Demand	Volume	Served	Delay/Ve	h (sec)
Approach	Movement	Volume	Avg	%	Avg	LOS
	L	3	2	67	7.7	Α
NB	T	4	4	100	15.2	С
IND IND	R	13	15	113	6.1	Α
	Subtotal	20	21	105	8.0	Α
	L	117	121	104	23.6	С
SB	Т	6	6	100	18.2	С
3 <i>B</i>	R	110	106	97	6.4	Α
	Subtotal	233	233	100	15.6	С
	L	63	61	97	5.4	Α
EB	T	378	376	99	2.4	Α
LD	R	2	3	150	0.6	Α
	Subtotal	443	440	99	2.8	Α
	L	7	7	100	3.9	Α
WB	T	393	396	101	2.2	Α
VVD	R	109	112	103	1.0	Α
	Subtotal	509	515	101	2.0	A
Total		1,205	1,209	100	5.0	Α

Intersection:

Fox Den Road & Main Street

Type:

Unsignalized Demand Volume Served Delay/Veh (sec) Approach Movement Volume LOS 13 98 9.9 A R 12 14 114 4.5 Α NB Subtotal 25 27 108 7.1 496 498 100 1.1 Α R 19 21 109 0.9 A ΕB Subtotal 515 519 101 1.1 Α L 9 8 89 3.4 Α T 489 496 101 0.9 A **WB** Subtotal 498 504 101 0.9 A 1,039 1,050 101 Total 1.2 Α



Project:

Midway - The Village TIS Existing (2021) Background Evening Peak Hour

Analysis Period: Time Period:

Project #: UT21-1835

Intersection:

580 East & Main Street

Type:

Unsignalized

1700.		Onorginanzea				
Approach	Movement	Demand	Volume	Served	Delay/Ve	h (sec)
Approach	Movement	Volume	Avg	%	Avg	LOS
	L	2	1	50	9.9	Α
NB	R	4	4	100	4.2	Α
	Subtotal	6	5	83	5.3	Α
	T	494	497	101	0.7	Α
EB	R	7	8	114	0.3	Α
	Subtotal	501	505	101	0.7	Α
	L	9	7	78	3.6	Α
WB	Т	496	503	101	0.5	Α
	Subtotal	505	510	101	0.5	Α
						,
Total		1,012	1,020	101	0.7	A

Intersection:

Main Street & 670 East

Type: Unsignalized

турс.		Onsignanzeu	27/0			
Annroach	Movement	Demand	Volume	Served	Delay/Ve	h (sec)
Approach	Movement	Volume	Avg	%	Avg	LOS
	L	14	14	98	11.5	В
SB	R	9	9	100	5.0	Α
	Subtotal	23	23	100	9.0	Α
	L	13	11	83	3.6	Α
EB	Т	486	490	101	0.6	Α
	Subtotal	499	501	100	0.7	Α
	Т	496	501	101	1.1	Α
WB	R	10	10	100	0.7	Α
	Subtotal	506	511	101	1.1	Α
Total		1,028	1,035	101	1.1	Α



Project: Analysis Period: Time Period: Midway The Village TIS Existing (2021) Plus Project Evening Peak Hour

Project #: UT21-1835

Intersection:

River Road & Main Street

Type:

Unsignalized

Type.		Onsignanzea				
Annroach	Movement	Demand	Volume	Served	Delay/Ve	h (sec)
Approach	Movement	Volume	Avg	%	Avg	LOS
	L	3	3	100	19.5	С
NB	Т	4	5	125	21.6	С
IND	R	13	13	98	6.8	Α
	Subtotal	20	21	105	12.1	В
	L	121	116	96	29.6	D
SB	Т	7	6	89	18.7	C
3B	R	110	111	101	6.7	Α
	Subtotal	238	233	98	18.4	С
	· L	63	64	102	6.8	Α
EB	Т	445	437	98	2.6	Α
	R	2	1	50	3.4	Α
	Subtotal	510	502	98	3.1	Α
	L	7	7	100	4.5	Α
WB	Т	454	463	102	2.4	Α
''	R	113	113	100	1.1	Α
	Subtotal	574	583	102	2.2	Α
Total		1,342	1,339	100	5.5	Α

Intersection:

Fox Den Road & Main Street Unsignalized

Type:

Type:		Unsignalized				
Annroach	Mayamant	Demand	Volume	Served	Delay/Ve	h (sec)
Approach	Movement	Volume	Avg	%	Avg	LOS
	L	13	15	113	15.0	В
NB	R	21	23	108	6.1	Α
	Subtotal	34	38	112	9.6	Α
	T	567	552	97	1.2	Α
EB	R	19	19	99	0.8	Α
	Subtotal	586	571	97	1.2	Α
	L	17	16	93	4.5	Α
WB	Т	555	564	102	0.8	Α
	Subtotal	572	580	101	0.9	Α
Total		1,193	1,189	100	1.3	Α



Project: Analysis Period: Time Period: Midway The Village TIS Existing (2021) Plus Project Evening Peak Hour

Time Period: Evening Peak Hour

Project #: UT21-1835

Intersection:

580 East & Main Street

Type:

Unsignalized

Approach	Movement	Demand	Volume	Served	Delay/Ve	h (sec)
Approach	Movement	Volume	Avg	%	Avg	LOS
	L	2	2	100	8.7	Α
NB	R	4	5	125	4.8	Α
	Subtotal	6	7	117	5.9	Α
	L	40	38	96	16.0	С
SB	R	37	37	101	7.5	Α
	Subtotal	77	75	97	11.8	В
	L	27	25	92	4.4	Α
EB	Т	514	500	97	0.5	Α
EB	R	7	7	100	0.2	Α
	Subtotal	548	532	97	0.7	Α
	L	9	8	89	4.3	Α
\A/D	Т	519	530	102	1.3	Α
WB	R	49	46	94	0.5	Α
	Subtotal	577	584	101	1.3	Α
Total		1,208	1,198	99	1.7	Α

Intersection:

Main Street & 670 East

Type:

Unsignalized

Type.		Unsignanzeu				
Annroach	Movement	Demand	Volume	Served	Delay/Ve	h (sec)
Approach	wovement	Volume	Avg	%	Avg	LOS
	L	14	14	98	12.5	В
SB	R	9	10	111	4.8	Α
	Subtotal	23	24	104	9.3	Α
	L	13	13	98	4.1	Α
EB	Т	546	530	97	0.7	Α
	Subtotal	559	543	97	0.8	Α
	T	565	569	101	1.4	Α
WB	R	10	11	110	1.1	Α
	Subtotal	575	580	101	1.4	Α
Total		1,157	1,147	99	1.3	Α



Project: Analysis Period: Time Period: Midway The Village TIS

Existing (2021) Plus Project Evening Peak Hour

Project #: UT21-1835

Intersection:

Main Street & Access 1

Type:

Unsignalized

, , , , ,		Demand	Volume	Served	Delay/Ve	h (sec)
Approach	Movement	Volume	Avg	%	Avg	LOS
	L	20	18	89	12.5	В
SB	R	36	35	96	5.9	Α
	Subtotal	56	53	95	8.1	Α
0	L	53	53	100	4.2	Α
EB	Т	530	517	98	0.4	Α
	Subtotal	583	570	98	0.8	Α
	T	536	545	102	1.1	Α
WB	R	20	21	104	0.5	Α
	Subtotal	556	566	102	1.1	Α
Total	4	1,195	1,189	99	1.2	Α

Intersection:

River Road & Access 3

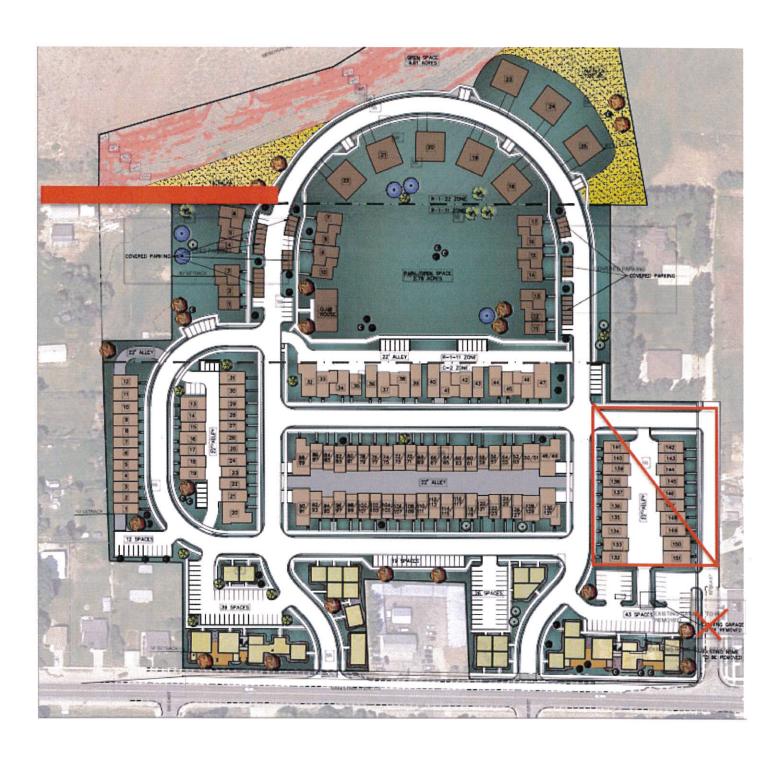
Type:

Unsignalized Demand Volume Served Delay/Veh (sec) Approach Movement Volume LOS Avg 181 183 101 0.5 NB Subtotal 181 183 101 0.5 22 23 103 2.2 Α L T 232 237 98 0.3 Α SB Subtotal 259 255 98 0.5 R 18 20 110 A 3.2 WB Subtotal 18 20 3.2 111 Α Total 458 458 100 0.6 Α



APPENDIX C

Site Plan





APPENDIX D

95th Percentile Queue Length Reports

SimTraffic Queueing Report
Project: Midway - The Village TIS
Analysis: Existing (2021) Background

Time Period: Evening Peak Hour 95" Percentile Queue Length (feet)

HALES | ENGINEERING innovative transportation solutions

Project #: UT21-1835

		NB		SB			#		N E
Intersection	LR	LTR	LR	-	R	-	LTR	-1	LTR
01: River Road & Main Street	1	41		134	84	ŀ	88	ſ	56
02: Fox Den Road & Main Street	46	I	ŀ	ł	ŀ	ŀ	I	27	ŀ
03: 580 East & Main Street	24	ı	ı	ı	ı	ŀ	ŀ	34	ł
04: Main Street & 670 East	ł	ı	44	ŀ	ŀ	36	ı	1	1

SimTraffic Queueing Report Project: Midway The Village TIS Analysis: Existing (2021) Plus Project

Time Period: Evening Peak Hour 95th Percentile Queue Length (feet)

HALES DENGINEERING innovative transportation solutions

Project #: UT21-1835

		9		(C)	SB			## ##				NB	
Intersection	LR	LTR LR	LR	LT	LTR	2		П	LT LTR LR	LR		. LTR	TR
01: River Road & Main Street	ŀ	45	ł	124	ł	02	ł	ł	108	ł	1	33	!
02: Fox Den Road & Main Street	53	ŀ	ŀ	I	ŀ	l	ŀ	ŀ	ŀ	ł	53	ł	ŀ
03: 580 East & Main Street	ŀ	27	ı	ŀ	29	l	34	I	ŀ	ı	ŀ	38	ŀ
04: Main Street & 670 East	ŀ	ł	43	ī	ı	ŀ	ł	45	ł	ł	ŀ	ı	ı
05: Main Street & Access 1	ŀ	l	22	1	ŀ	ŀ	47	ł	1	ŀ	ł	ł	က
06: River Road & Access 3	ı	1	1	27	3	1	1	1	1	42	1	1	1