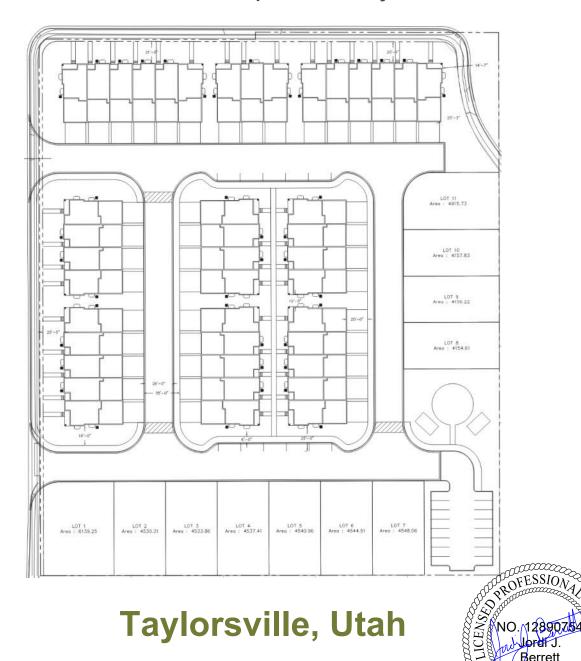


Taylor Villas

Traffic Impact Study



Taylorsville, Utah

October 11, 2024

UT24-2865

Berrett

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EXECUTIVE SUMMARY

This study addresses the traffic impacts associated with the proposed Taylor Villas development located in Taylorsville, Utah. The development is located southeast of 4070 West / 6200 South.

The purpose of this traffic impact study is to analyze traffic operations at key intersections for existing (2024) conditions with and without the proposed project and to recommend mitigation measures as needed. The morning and evening peak hour level of service (LOS) results are shown in Table ES-1. A site plan of the project is provided in Appendix A.

Table ES-1: Peak Hour Level of Service Results

lutarra di an			Level of Service				
			Existing (2024)				
	Intersection			Plus Project			
		AM	PM	AM	PM		
1	4000 West & 3975 West / 6200 South	В	В	В	В		
2	4070 West (Fairwind Drive) / 6200 South		С	b	С		
3	Cheltonham Way & South Access / 4070 West	а	a	a	a		
4	North Access / 4070 West	-	-	a	a		
an	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 upsignalized intersections (lowercase letter).						

Source: Hales Engineering, October 2024

SUMMARY OF KEY FINDINGS & RECOMMENDATIONS

Project Conditions

- The development will consist of 11 single-family detached housing units and 42 townhomes.
- The project is anticipated to generate approximately 404 weekday daily trips, including 28 trips in the morning peak hour, and 36 trips in the evening peak hour

2024	Background	Plus Project
Findings	Acceptable LOS	 Acceptable LOS Northbound queueing at 4070 West / 6200 South is not anticipated to block the North Access. However, if queueing increases in future years, southbound left turns may need to be restricted at the North Access.



TABLE OF CONTENTS

EXE	ECUTIVE SUMMARY	
SUN	MMARY OF KEY FINDINGS & RECOMMENDATIONS	
TAE	BLE OF CONTENTS	i
LIS	T OF TABLES	ii
LIS	T OF FIGURES	ii
I.	INTRODUCTION	
А. В.	Purpose	2
C. D.	Analysis MethodologyLevel of Service Standards	2
II.	EXISTING (2024) BACKGROUND CONDITIONS	
A. B. C. D.	Purpose	4 4
E. F.	Queuing Analysis Mitigation Measures	7 7
III.	PROJECT CONDITIONS	
A. B. C. D. E.	Purpose	8 8 9
IV.	EXISTING (2024) PLUS PROJECT CONDITIONS	13
A. B. C. D.	Purpose Traffic Volumes Level of Service Analysis Queuing Analysis	13 13
D. F	Mitigation Measures	16

Appendix A: Project Site Plan

Appendix B: Turning Movement Counts

Appendix C: LOS Results
Appendix D: Queuing Results



LIST OF TABLES

Table 1: Level of Service Description	3
Table 2: Existing (2024) Background Peak Hour LOS	
Table 3: Project Land Uses	8
Table 4: Trip Generation	9
Table 5: New Trip Distribution	
Table 6: Existing (2024) Plus Project Peak Hour LOS	
LIST OF FIGURES	
Figure 1: Vicinity map showing the project location in Taylorsville, Utah	1
Figure 2: Existing (2024) background peak hour traffic volumes	5
Figure 3: Trip assignment for the peak hours	10
Figure 4: Existing (2024) plus project peak hour traffic volumes	



I. INTRODUCTION

A. Purpose

This study addresses the traffic impacts associated with the proposed Taylor Villas development located in Taylorsville, Utah. The proposed project is located southeast of the 4070 West / 6200 South intersection. 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 (2024) conditions with and without the proposed project and to recommend mitigation measures as needed.



Figure 1: Vicinity map showing the project location in Taylorsville, 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:

- 4000 West & 3975 West / 6200 South
- 4070 West (Fairwind Drive) / 6200 South
- Cheltonham Way / 4070 West (Fairwind Drive)

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), 7th Edition, 2022 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 C. 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.

Many of the figures in this report are printouts of the Synchro model. These figures are not meant to be a design exhibit for exact lane striping and design, due to the limitations of the Synchro software. Instead, the purpose of these figures is to show assumed peak hour turning movement volumes and the conceptual travel lane configuration of the study roadway network.

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)		
		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), 7th Edition, 2022 Methodology (Transportation Research Board)



II. EXISTING (2024) 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:

<u>4070 West</u> – is a city-maintained roadway which is classified by UDOT as a local road. The roadway has one travel lane in each direction. The posted speed limit is 25 mph in the study area.

C. Traffic Volumes

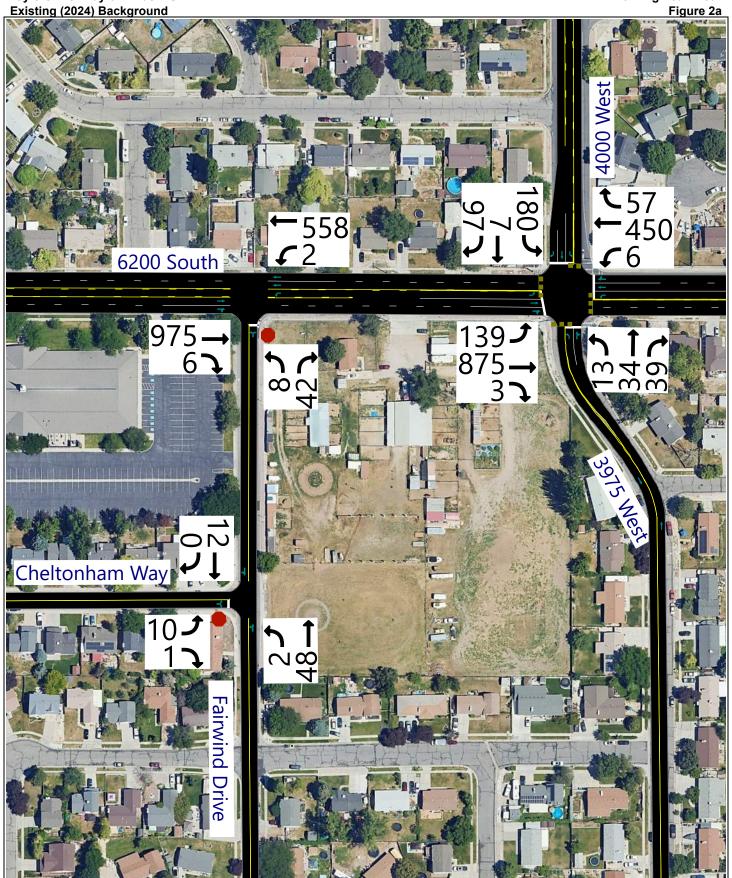
Weekday morning (7:00 to 9:00 a.m.) and evening (4:00 to 6:00 p.m.) peak period traffic counts were performed at the following intersections:

- 4000 West & 3975 West / 6200 South
- 4070 West (Fairwind Drive) / 6200 South
- Cheltonham Way / 4070 West (Fairwind Drive)

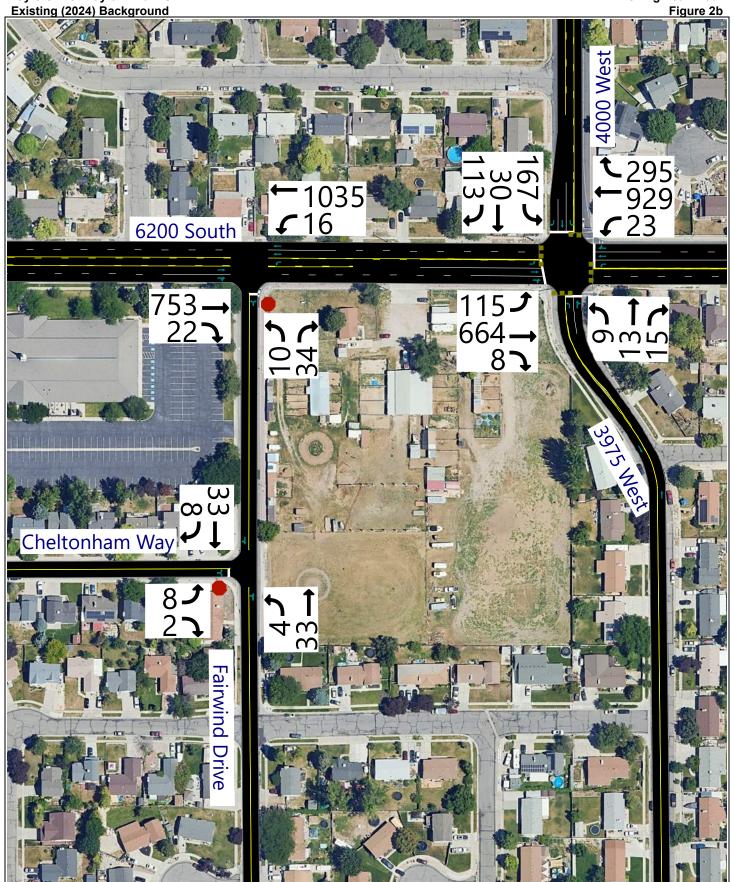
The counts were performed on Tuesday, September 24, 2024. The morning peak hour was determined to be between 7:15 and 8:15 a.m., and the evening peak hour was determined to be between 4:30 and 5:30 p.m. The evening peak hour volumes were approximately 5.6% higher than the morning peak hour volumes. Both the morning and evening peak hour volumes were used in the analysis. Detailed count data are included in Appendix B.

Hales Engineering considered seasonal adjustments to the observed traffic volumes. Monthly traffic volume data were obtained from a nearby UDOT automatic traffic recorder (ATR) on SR-68 (ATR #408). In recent years, traffic volumes in September have been equal to approximately 103% of average traffic volumes. As a conservative measure, the counted volumes were left unadjusted.

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



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



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



D. Level of Service Analysis

Hales Engineering determined that all study intersections are currently operating at acceptable levels of service during the morning and evening peak hours, as shown in Table 2. These results serve as a baseline condition for the impact analysis of the proposed development during existing (2024) 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 morning and evening peak hours.

F. Mitigation Measures

No mitigation measures are recommended.

Table 2: Existing (2024) Background Peak Hour LOS

Intersection	LOS (Sec. Delay / Veh.) / Movement ¹			
Description	Control	Morning Peak	Evening Peak	
4000 West & 3975 West / 6200 South	Signal	B (17.7)	B (13.8)	
4070 West (Fairwind Drive) / 6200 South	NB Stop	c (15.9) / NBL	c (23.0) / NBL	
Cheltonham Way / 4070 West (Fairwind Drive)	EB Stop	a (5.5)	a (4.9)	

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

Source: Hales Engineering, October 2024

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



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 Taylor Villas development is located southeast of the 4070 West / 6200 South intersection. The development will consist of 11 single-family detached housing units and 42 townhomes. A concept plan for the proposed development is provided in Appendix A. 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	11 Units
Townhomes	42 Units

C. Trip Generation

Trip generation for the development was calculated using trip generation rates published in the Institute of Transportation Engineers (ITE), *Trip Generation*, 11th Edition, 2021. Trip generation for the proposed project is included in Table 4. The total trip generation for the development is as follows:

•	Daily Trips:	404
•	Morning Peak Hour Trips:	28
•	Evening Peak Hour Trips:	36



Table 4: Trip Generation

Trip Generation Taylorsville - Taylor Villas TIS								
1	# of	# of Unit Units Type	Trip Generation			New Trips		
Land Use ¹	Units		Total	% In	% Out	ln	Out	Total
Weekday Daily								
Single-Family Detached Housing (210)	11	DU	134	50%	50%	67	67	134
Single-Family Attached Housing (215)	42	DU	270	50%	50%	135	135	270
TOTAL			404			202	202	404
AM Peak Hour								
Single-Family Detached Housing (210)	11	DU	10	26%	74%	3	7	10
Single-Family Attached Housing (215)	42	DU	18	31%	69%	6	12	18
TOTAL			28			9	19	28
PM Peak Hour								
Single-Family Detached Housing (210)	11	DU	14	63%	37%	9	5	14
Single-Family Attached Housing (215)	42	DU	22	57%	43%	13	9	22
TOTAL			36			22	14	36
Land Use Code from the Institute of Transportation Engineers (ITE) <i>Trip Generation</i> , 11th Edition, 2021. SOURCE: Hales Engineering, October 2024								

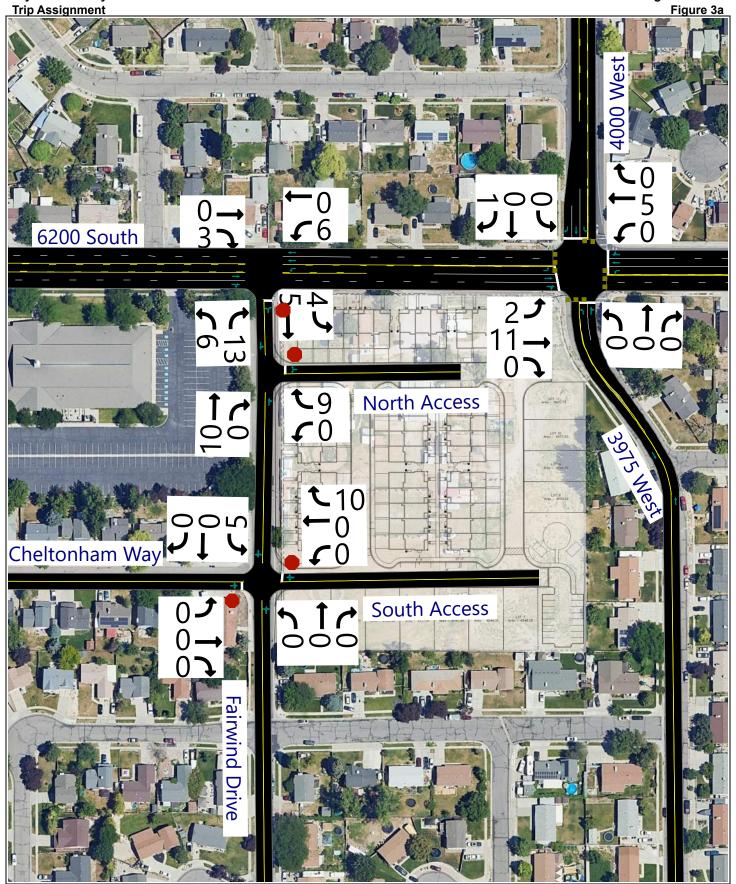
D. Trip Distribution and Assignment

Trip distribution percentages for new trips were 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 were also used to establish these distribution percentages, especially near the site. The assumed distribution of new trips during the morning and evening peak hour is shown in Table 5.

Table 5: New Trip Distribution

Direction	% To/From Project
North	10%
East	55%
West	35%

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



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E. Access

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

4070 West:

- The north access will be located approximately 115 feet south of the 4070 West / 6200
 South intersection. It will access the project on the east side of 4070 West. It is
 anticipated that the access will be stop-controlled.
- The south access will connect to the Cheltonham Way / 4070 West intersection. It will
 access the project on the east side of 4070 West. It is anticipated that the access will
 be stop-controlled.

F. Auxiliary Lanes

Auxiliary lanes are deceleration (ingress) or acceleration (egress) turn lanes that provide for safe turning movements that have less impact on through traffic. These lanes are sometimes needed at accesses or roadway intersections if right- or left-turn volumes are high enough.

Deceleration (ingress) lanes are generally needed when there are at least 50 right-turn vehicles or 25 left-turn vehicles in an hour. These guidelines were used for the City roadways in the study area. Based on these guidelines and the anticipated project traffic, no auxiliary lanes are recommended.



IV. EXISTING (2024) PLUS PROJECT CONDITIONS

A. Purpose

The purpose of the existing (2024) 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 (2024) background traffic volumes to predict turning movement volumes for existing (2024) plus project conditions. Existing (2024) plus project morning and evening peak hour turning movement volumes are shown in Figure 4.

C. Level of Service Analysis

Hales Engineering determined that all intersections are anticipated to operate at acceptable levels of service during the morning and evening peak hours with project traffic added, as shown in Table 6.

Table 6: Existing (2024) Plus Project Peak Hour LOS

Intersection	LOS (Sec. Delay / Veh.) / Movement ¹			
Description Con		Morning Peak	Evening Peak	
3975 West & 4000 West / 6200 South	Signal	B (16.8)	B (13.4)	
Fairwind Drive / 6200 South	NB Stop	b (14.9)	c (22.2)	
Cheltonham Way & South Access / Fairwind Drive	EB/WB Stop	a (4.8)	a (4.6)	
North Access / Fairwind Drive	WB Stop	a (4.0)	a (4.3)	

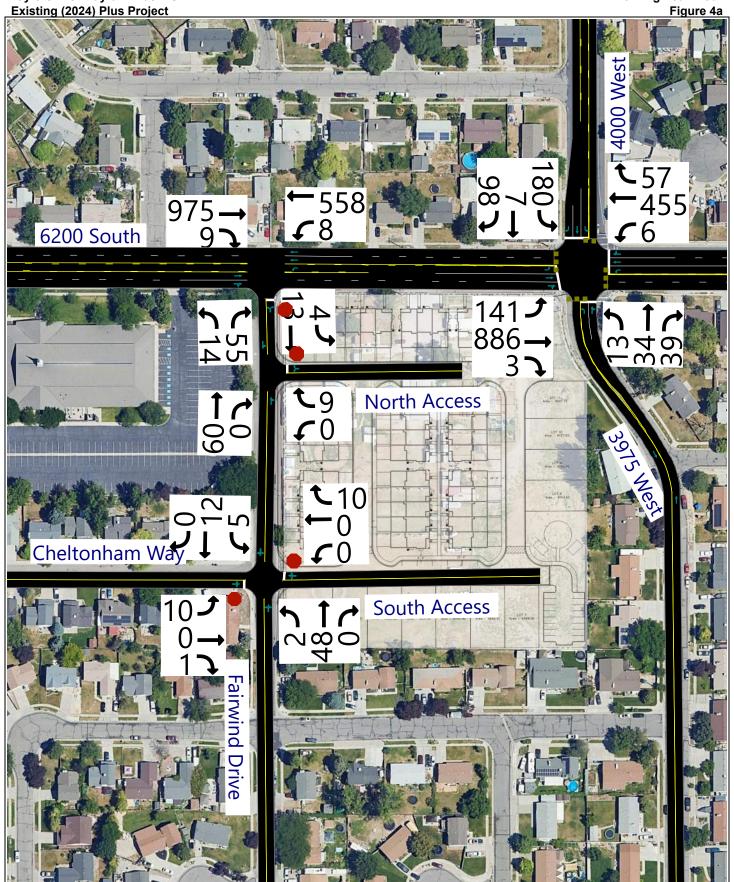
^{1.} Movement indicated for unsignalized intersections where delay and LOS represents worst movement. SBL = Southbound left movement, etc.

Source: Hales Engineering, October 2024

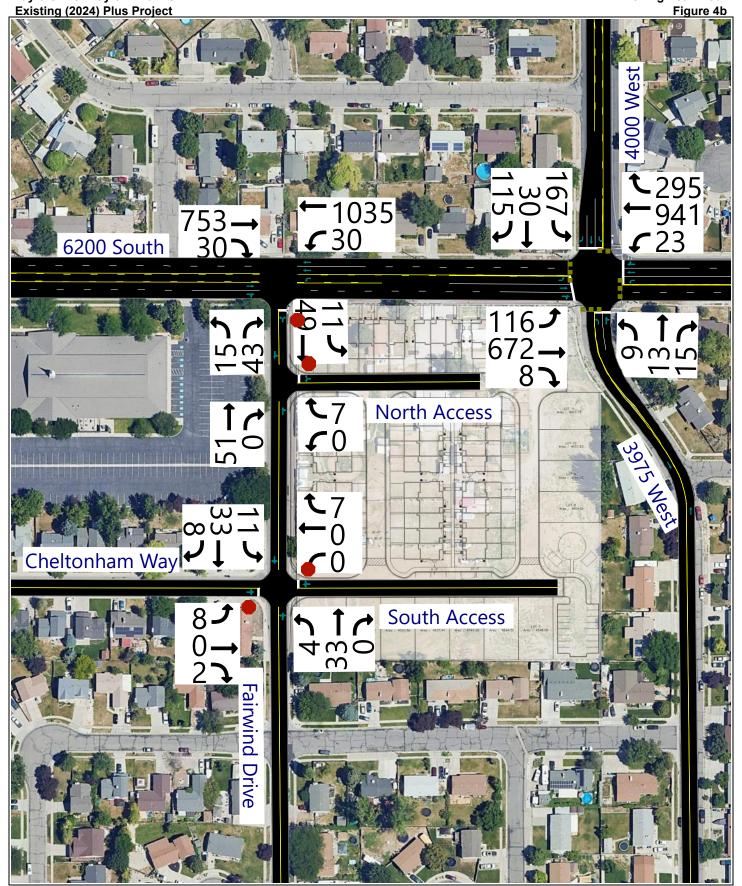
D. Queuing Analysis

Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. No significant queueing is anticipated during the morning and evening peak hours. It is, however, anticipated that northbound Fairwind Drive / 6200 South will generate a 75-foot queue. Greater queueing would potentially block the North Access / Fairwind Drive intersection if volumes increase on 6200 South in future years.

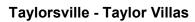
^{2.} Uppercase LOS used for signalized, roundabout, and AWSC intersections. Lowercase LOS used for all other unsignalized intersections.



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Traffic Impact Study



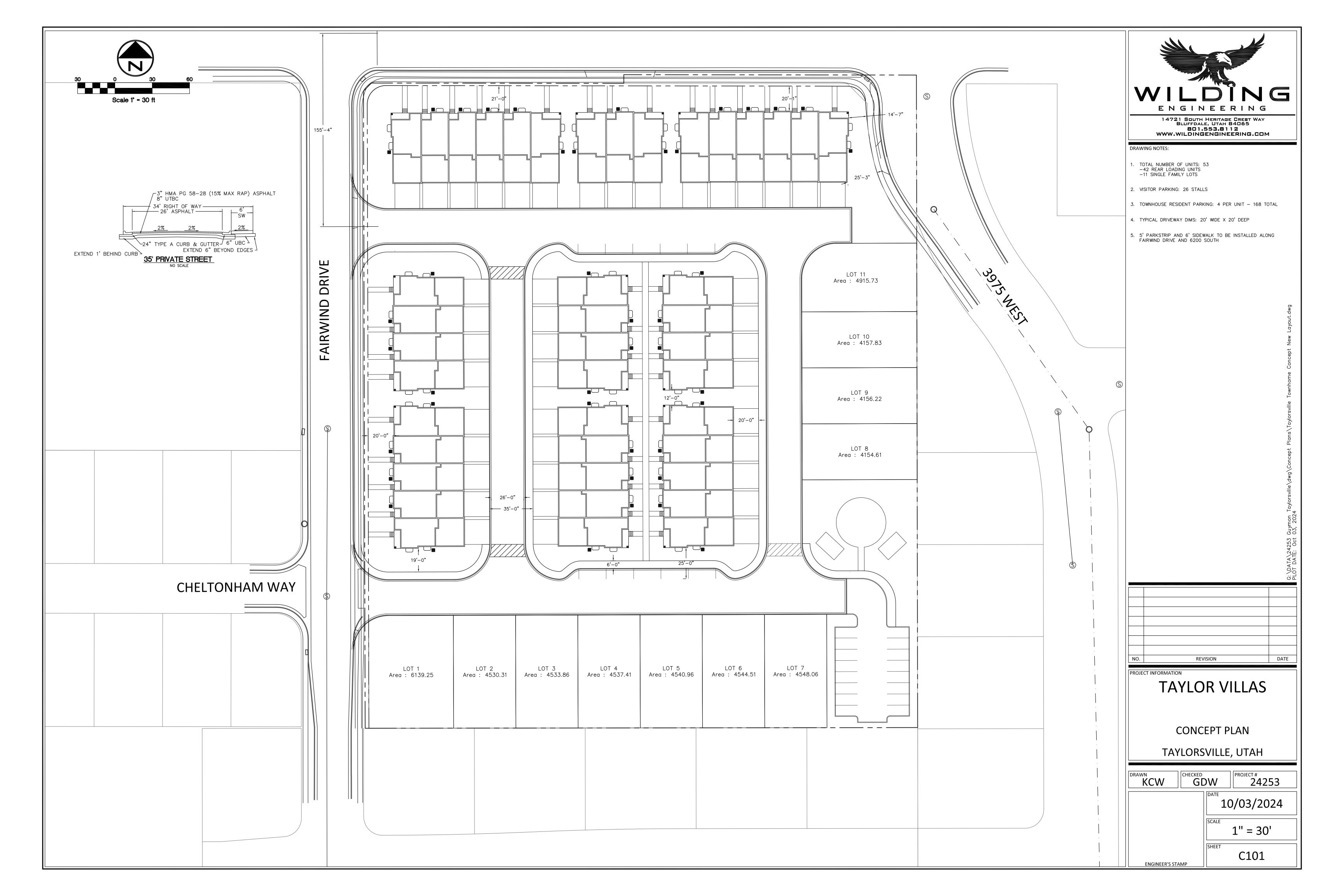
E. Mitigation Measures

No mitigation measures are recommended.



APPENDIX A

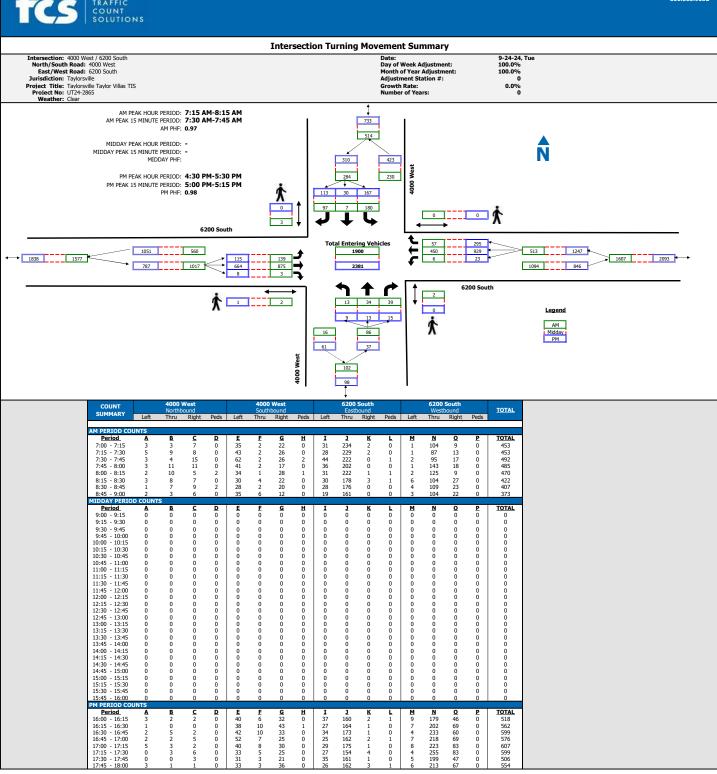
Site Plan

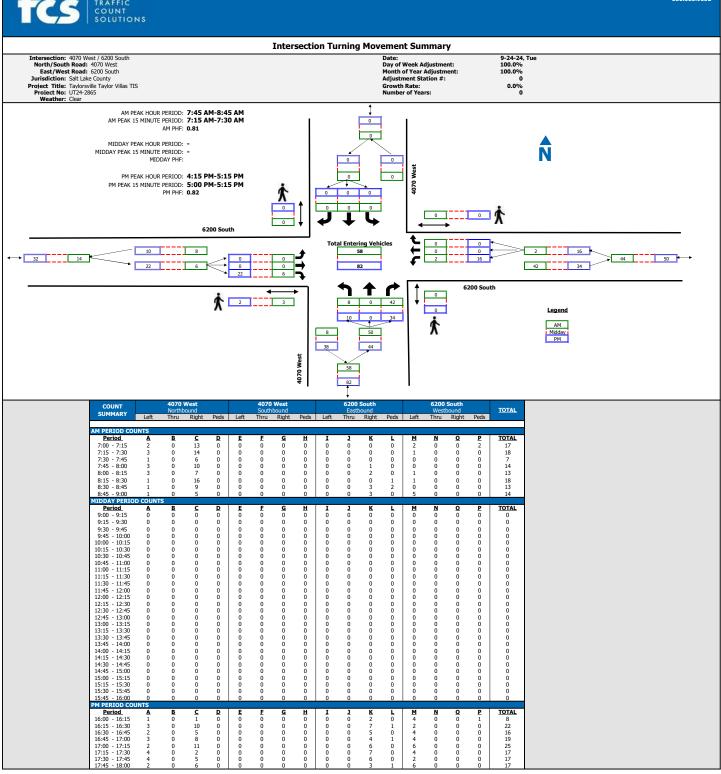


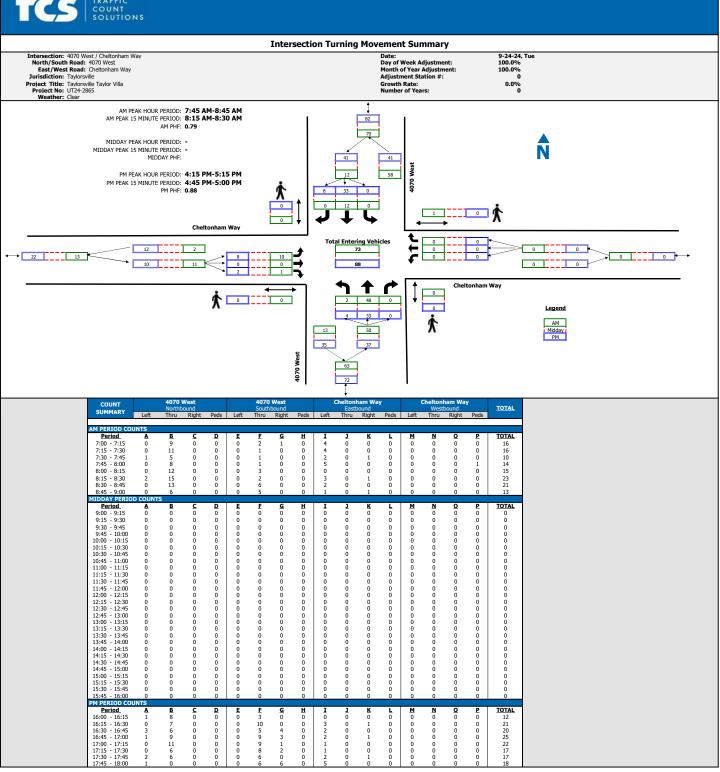


APPENDIX B

Turning Movement Counts









APPENDIX C

LOS Results



Taylorsville - Taylor Villa TIS Project:

Existing (2024) Background Morning Peak Hour Analysis Period:

Time Period: Project #: UT24-2865

Intersection: 3975 West/4000 West & 6200 South

Signalized Type:

Approach	Mayamant	Demand	Volume	e Served	Delay/Vel	n (sec)
Approach	Movement	Volume	Avg	%	Avg	LOS
	L	13	12	92	107.1	F
NB	Т	34	34	99	72.4	E
IND	R	39	38	97	32.6	С
	Subtotal	86	84	98	59.4	E
	L	180	184	102	95.0	F
SB	Т	7	7	100	62.7	E
SB	R	97	102	105	17.5	В
	Subtotal	284	293	103	67.2	Ε
	L	139	135	97	11.9	В
EB	Т	927	940	101	5.4	Α
ED	R	3	3	100	3.4	Α
	Subtotal	1,069	1,078	101	6.2	Α
	L	6	7	117	15.4	В
WB	Т	450	447	99	6.1	Α
VVD	R	57	57	100	2.9	Α
	Subtotal	513	511	100	5.9	Α
Total		1,952	1,966	101	17.7	В

Intersection: Fairwind Drive & 6200 South

турс.		Onsignanzed				
Annyonah	Mayamant	Demand	Volume	Served	Delay/Ve	h (sec)
Approach	Movement	Volume	Avg	%	Avg	LOS
	L	8	6	77	15.9	С
NB	Т	8	8	97	0.3	Α
ND	R	42	41	97	7.2	Α
	Subtotal	58	55	95	7.1	Α
	Т	975	986	101	1.1	Α
EB	R	6	8	128	0.5	Α
EB						
	Subtotal	981	994	101	1.1	Α
	L	2	1	50	9.9	Α
WB	Т	586	591	101	1.2	Α
WB						
	Subtotal	588	592	101	1.2	Α
Total		1,628	1,641	101	1.3	Α



Taylorsville - Taylor Villa TIS Project:

Analysis Period: Time Period: Existing (2024) Background Morning Peak Hour

Project #: UT24-2865

Intersection: Fairwind Drive & Cheltonham Way

ijpe.		onoignanizea				
Annuasah	Mayramant	Demand	Volume	Served	Delay/Ve	h (sec)
Approach	Movement	Volume	Avg	%	Avg	LOS
	L	2	2	89	2.5	Α
NB	Т	48	47	97	0.1	Α
	Subtotal	50	49	98	0.2	Α
	Т	12	14	117	0.2	Α
SB						
	Subtotal	12	14	117	0.2	Α
	L	10	8	80	5.5	Α
EB	R	1	1	100	5.1	Α
	Subtotal	11	9	82	5.5	Α
Total		74	72	98	0.8	Α



Taylorsville - Taylor Villa TIS Project:

Existing (2024) Background Evening Peak Hour Analysis Period:

Time Period: Project #: UT24-2865

Intersection: 3975 West/4000 West & 6200 South

Signalized Type:

Approach	Mayamant	Demand	Volume	e Served	Delay/Vel	n (sec)
Approach	Movement	Volume	Avg	%	Avg	LOS
	L	9	9	100	170.1	F
NB	Т	13	12	92	67.1	E
IND	R	15	16	107	17.6	В
	Subtotal	37	37	100	70.7	E
	L	167	164	98	63.8	Ε
SB	Т	30	30	99	56.6	E
SB	R	113	111	98	11.1	В
	Subtotal	310	305	98	43.9	D
	L	115	116	101	23.5	С
EB	Т	703	709	101	5.0	Α
ED	R	8	7	88	4.0	Α
	Subtotal	826	832	101	7.6	Α
	L	23	25	109	14.1	В
WB	Т	929	940	101	8.9	Α
VVD	R	295	303	103	8.3	Α
	Subtotal	1,247	1,268	102	8.9	Α
Total		2,420	2,442	101	13.8	В

Intersection: Fairwind Drive & 6200 South

iype.		Officialized							
Ammussah	Mayramant	Demand	Volume	Served	Delay/Ve	h (sec)			
Approach	Movement	Volume	Avg	%	Avg	LOS			
	L	10	9	92	23.0	С			
NB	R	34	34	99	6.4	Α			
, NB									
	Subtotal	44	43	98	9.9	Α			
	Т	753	760	101	0.9	Α			
EB	R	22	22	101	0.4	Α			
	Subtotal	775	782	101	0.9	Α			
	L	16	17	105	7.8	Α			
WB	Т	1,087	1,094	101	1.8	Α			
""									
	Subtotal	1,103	1,111	101	1.9	Α			
Total		1,922	1,936	101	1.7	Α			
iotai		1,922	1,930	101	1.7	A			



Taylorsville - Taylor Villa TIS Project:

Analysis Period: Time Period: Existing (2024) Background Evening Peak Hour

Project #: UT24-2865

Intersection: Fairwind Drive & Cheltonham Way

Approach	Mayamant	Demand	Volume	e Served	Delay/Ve	h (sec)
Approach	Movement	Volume	Avg	%	Avg	LOS
	L	4	6	141	1.9	Α
NB	Т	33	32	98	0.1	Α
	Subtotal	37	38	103	0.4	Α
	Т	33	33	101	0.5	Α
SB	R	8	8	97	0.6	Α
	Subtotal	41	41	100	0.5	Α
	L	8	7	85	4.3	Α
EB	R	2	2	100	4.9	Α
	Subtotal	10	9	90	4.4	Α
Total		88	88	100	0.9	Α



Taylorsville - Taylor Villa TIS Project:

Existing (2024) Plus Project Morning Peak Hour Analysis Period:

Time Period: Project #: UT24-2865

Intersection: 3975 West/4000 West & 6200 South

Signalized Type:

Approach	Mayamant	Demand	Volume	e Served	Delay/Vel	n (sec)
Approach	Movement	Volume	Avg	%	Avg	LOS
	L	13	12	92	118.3	F
NB	Т	34	33	96	74.2	E
IND	R	39	40	102	31.8	С
	Subtotal	86	85	99	60.5	E
	L	180	180	100	89.1	F
SB	Т	7	6	86	61.9	E
SB	R	98	97	99	14.3	В
	Subtotal	285	283	99	62.9	Ε
	L	141	139	98	11.9	В
EB	Т	939	953	102	5.0	Α
EB	R	3	4	133	1.0	Α
	Subtotal	1,083	1,096	101	5.9	Α
	L	6	4	67	17.8	В
WB	Т	455	455	100	5.7	Α
W VV D	R	57	56	99	2.8	Α
	Subtotal	518	515	99	5.5	Α
Total		1,972	1,979	100	16.4	В

Intersection: Fairwind Drive & 6200 South

турс.		Onsignanzea				
Annuarah	Mayramant	Demand	Volume	Served	Delay/Ve	h (sec)
Approach	Movement	Volume	Avg	%	Avg	LOS
	L	14	14	100	18.3	С
NB	Т	3	3	100	0.2	Α
NB	R	55	60	109	8.0	Α
	Subtotal	72	77	107	9.6	Α
	Т	975	985	101	1.1	Α
EB	R	9	9	103	0.7	Α
LD						
	Subtotal	984	994	101	1.1	Α
	L	8	8	103	8.2	Α
WB	Т	587	583	99	1.1	Α
WB						
	Subtotal	595	591	99	1.2	Α
Total		1,651	1,662	101	1.6	Α



Taylorsville - Taylor Villa TIS Project:

Existing (2024) Plus Project Morning Peak Hour Analysis Period:

Time Period: Project #: UT24-2865

Intersection: Fairwind Drive & Cheltonham Way/South Access

Unsignalized Type:

Annvessh	Mayamant	Demand	Volume	e Served	Delay/Ve	h (sec)
Approach	Movement	Volume	Avg	%	Avg	LOS
	L	2	2	89	2.0	Α
NB	Т	48	51	106	0.1	Α
	Subtotal	50	53	106	0.2	Α
	L	5	6	120	1.8	Α
SB	Т	12	12	100	0.1	Α
	Subtotal	17	18	106	0.7	Α
	L	10	9	90	5.2	Α
EB	R	1	1	100	4.2	Α
	Subtotal	11	10	91	5.1	Α
	R	10	10	100	4.1	Α
WB						
	Subtotal	10	10	100	4.1	Α
Total		88	91	103	1.2	Α

Fairwind Drive & North Access Intersection:

Type: Unsignalized

турс.		Olisignanzea				
Annyosoh	Movement	Demand	Volume	Served	Delay/Ve	h (sec)
Approach	Movement	Volume	Avg	%	Avg	LOS
	T	68	70	103	0.5	Α
NB						
	Subtotal	68	70	103	0.5	Α
	L	4	4	100	1.8	Α
SB	Т	14	14	100	0.6	Α
	Subtotal	18	18	100	0.9	Α
	R	9	9	100	4.3	A
WB	Subtotal	9	9	100	4.3	A
Total		95	97	102	0.9	Α



Taylorsville - Taylor Villa TIS Project:

Existing (2024) Plus Project Evening Peak Hour Analysis Period:

Time Period: Project #: UT24-2865

Intersection: 3975 West/4000 West & 6200 South

Signalized Type:

Approach	Mayamant	Demand	Volume	e Served	Delay/Vel	h (sec)
Approach	Movement	Volume	Avg	%	Avg	LOS
	L	9	9	100	152.5	F
NB	Т	13	14	108	65.1	E
IND	R	15	15	100	17.9	В
	Subtotal	37	38	103	67.2	E
	L	167	164	98	65.8	Ε
SB	Т	30	29	96	52.1	D
SB	R	115	112	98	10.1	В
	Subtotal	312	305	98	44.0	D
	L	116	118	102	24.1	С
EB	Т	711	713	100	4.7	Α
EB	R	8	8	100	3.2	Α
	Subtotal	835	839	100	7.4	Α
	L	23	23	100	13.1	В
WB	Т	941	929	99	8.6	Α
VVD	R	295	312	106	6.9	Α
	Subtotal	1,259	1,264	100	8.3	Α
Total		2,443	2,446	100	13.4	В

Intersection: Fairwind Drive & 6200 South

Type.		Onorginanzea				
Annagash	Mayanaant	Demand	Volume	Served	Delay/Ve	h (sec)
Approach	Movement	Volume	Avg	%	Avg	LOS
	L	15	15	100	22.2	С
NB	Т	3	4	133	0.8	Α
NB	R	43	42	98	6.5	Α
	Subtotal	61	61	100	10.0	Α
	Т	753	759	101	1.0	Α
EB	R	30	34	112	0.6	Α
ЕВ						
	Subtotal	783	793	101	1.0	Α
	L	30	30	99	7.7	Α
WB	Т	1,088	1,070	98	1.9	Α
VVD						
	Subtotal	1,118	1,100	98	2.1	Α
Total		1,962	1,954	100	1.8	Α



Taylorsville - Taylor Villa TIS Project:

Existing (2024) Plus Project Evening Peak Hour Analysis Period:

Time Period: Project #: UT24-2865

Intersection: Fairwind Drive & Cheltonham Way/South Access

Unsignalized Type:

ijpo.		Onoignanizea				
Ammussah	Mayramant	Demand	Volume	Served	Delay/Ve	h (sec)
Approach	Movement	Volume	Avg	%	Avg	LOS
	L	4	4	94	1.9	Α
NB	Т	33	34	104	0.0	Α
IND						
	Subtotal	37	38	103	0.2	Α
	L	11	12	109	2.2	Α
SB	Т	33	37	113	0.1	Α
35	R	8	7	85	0.0	Α
	Subtotal	52	56	108	0.5	Α
	L	8	8	97	4.6	Α
EB	R	2	3	150	4.3	Α
LB						
	Subtotal	10	11	110	4.5	Α
	R	7	6	86	3.9	Α
WB						

	Subtotal	7	6	86	3.9	Α
Total		106	111	104	1.0	Α

Fairwind Drive & North Access Intersection:

Type: Unsignalized

турс.		Olisignanzea				
Annyosoh	Movement	Demand	Volume	e Served	Delay/Ve	h (sec)
Approach	Movement	Volume	Avg	%	Avg	LOS
	T	52	51	99	0.5	Α
NB						
	Subtotal	52	51	98	0.5	Α
	L	11	9	82	2.0	Α
SB	Т	53	58	109	0.6	Α
	Subtotal	64	67	105	8.0	Α
WB	R	7	7	100	4.3	Α
	Subtotal	7	7	100	4.3	Α
Total		123	125	102	0.9	A



APPENDIX D

95th Percentile Queue Length Reports

SimTraffic Queueing Report Project: Taylorsville - Taylor Villa TIS

Analysis: Existing (2024) Background **Time Period: Morning Peak Hour**

95th Percentile Queue Length (feet) - Rounded Up to Nearest Multiple of 25 ft



	Pro	iect #:	UT24-	2865
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		NB			SB				ЕВ			WB	
Intersection	٦	LR	TR	L	R	T	L	LR	T	TR	L	T	TR
01: 3975 West/4000 West & 6200 South	50		125	200	100	400	75		175	175		125	100
02: Fairwind Drive & 6200 South		75											
03: Fairwind Drive & Cheltonham Way								50					

SimTraffic Queueing Report

Project: Taylorsville - Taylor Villa TIS

Analysis: Existing (2024) Background Time Period: Evening Peak Hour

95th Percentile Queue Length (feet) - Rounded Up to Nearest Multiple of 25 ft



Project #: UT24-2865

	NB			SB					ЕΒ		WB			
Intersection	L	LR	LT	TR	L	R	T	L	LR	Т	TR	L	T	TR
01: 3975 West/4000 West & 6200 South	50			75	200	125	225	100		125	125	75	275	275
02: Fairwind Drive & 6200 South		75										50	50	
03: Fairwind Drive & Cheltonham Way									50					

SimTraffic Queueing Report Project: Taylorsville - Taylor Villa TIS

Analysis: Existing (2024) Plus Project **Time Period: Morning Peak Hour**

95th Percentile Queue Length (feet) - Rounded Up to Nearest Multiple of 25 ft



Project #: UT24-2865

	NB			SB					E	В		WB				
Intersection	L	LR	TR	L	LT	R	Т	L	LTR	T	TR	L	LR	LTR	Т	TR
01: 3975 West/4000 West & 6200 South	75		125	200		100	350	75		150	150				125	100
02: Fairwind Drive & 6200 South		75														
03: Fairwind Drive & Cheltonham Way/South Access									50					50		
04: Fairwind Drive & North Access													50			

SimTraffic Queueing Report

Project: Taylorsville - Taylor Villa TIS

Analysis: Existing (2024) Plus Project Time Period: Evening Peak Hour

95th Percentile Queue Length (feet) - Rounded Up to Nearest Multiple of 25 ft



Project #: UT24-2865

	NB			SB						=	В		WB					
Intersection	L	LR	LTR	TR	L	LT	LTR	R	T	L	LTR	Т	TR	L	LR	LTR	Т	TR
01: 3975 West/4000 West & 6200 South	50			75	200			100	250	100		125	125	50			250	250
02: Fairwind Drive & 6200 South		75												50			50	
03: Fairwind Drive & Cheltonham Way/South Access											50					50		
04: Fairwind Drive & North Access															50			