Scott Street Master Planning

Traffic Impact Study

Missoula, Montana

10/21/2021

Project No: 21-02-37

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INTRODUCTION

Ravara Development LLC partnered with the City of Missoula in the planning of a mixed-use development located on a 9-acre parcel in the North Reserve/Scott Street neighborhood, referred to as the "Ravara Development" in this report. The site vicinity map is shown in **Figure 1**. At the time of this report, the proposed development will consist of 42 townhomes, 36 condos, 248 apartments, 13,000 square feet of grocery, 5,000 square feet of retail (food and beverage), and 5,500 square feet of childcare, as shown in **Figure 2**. The land use assumptions used to develop the trip generation estimates in the TIS were based on the development concepts generated during the master planning efforts and represent a conservatively high level of site-generated traffic. Thus, the traffic operations analysis contained in the TIS is at the "worst case" end of the spectrum. Some of the occupants of the commercial space may vary, but these changes will have no substantive impact on the results of the TIS as the overall amount of commercial space within the project is fixed.

In November 2016, the Missoula Redevelopment Agency (MRA) Board approved the *North Reserve* | *Scott Street Master Plan* (NRSS Plan) as the guiding document for the future of one of the largest undeveloped areas in the Missoula urban area. In addition to the NRSS Plan, the following resources were reviewed to understand currently proposed projects as well as to inform the estimation of future neighborhood development:

- Our Missoula City Growth Policy (2015)
- A Place to Call Home: Meeting Missoula's Housing Needs – The Housing Policy (2019)
- Missoula City Cemetery Strategic Plan (2021)
- Missoula Connect: 2050 Long-Range Transportation Plan (2021)
- MRA Board Meeting Agenda Item "Villagio Apartments – Otis & Scott Street (North Reserve-Scott Street URD)" (June 15, 2020)
- MRA Board Meeting Agenda Item "Scott Street Village – Phase 3 Apartments (NRSS URD)" (June 14, 2021)
- MRA Board Meeting Agenda Item "Public Works Facilities Plan" (July 15, 2021)
- Missoula City Zoning Ordinances
- Missoula County Zoning Ordinances

It is understood that as this neighborhood is developed, improvements to the public infrastructure will be necessary to accommodate the subsequent growth. This traffic impact study (TIS) has a two-part objective. First, it seeks to determine the amount of neighborhood development that would require expansion of the transportation network to maintain traffic operations at an acceptable level of service or better. Second, this TIS considers the estimated impacts to the transportation network resulting from traffic generated by the Ravara Development. The neighborhood growth “area of interest” for this study is shown in **Figure 1** along with the Ravara Development site boundary.

FIGURE 1: VICINITY MAP

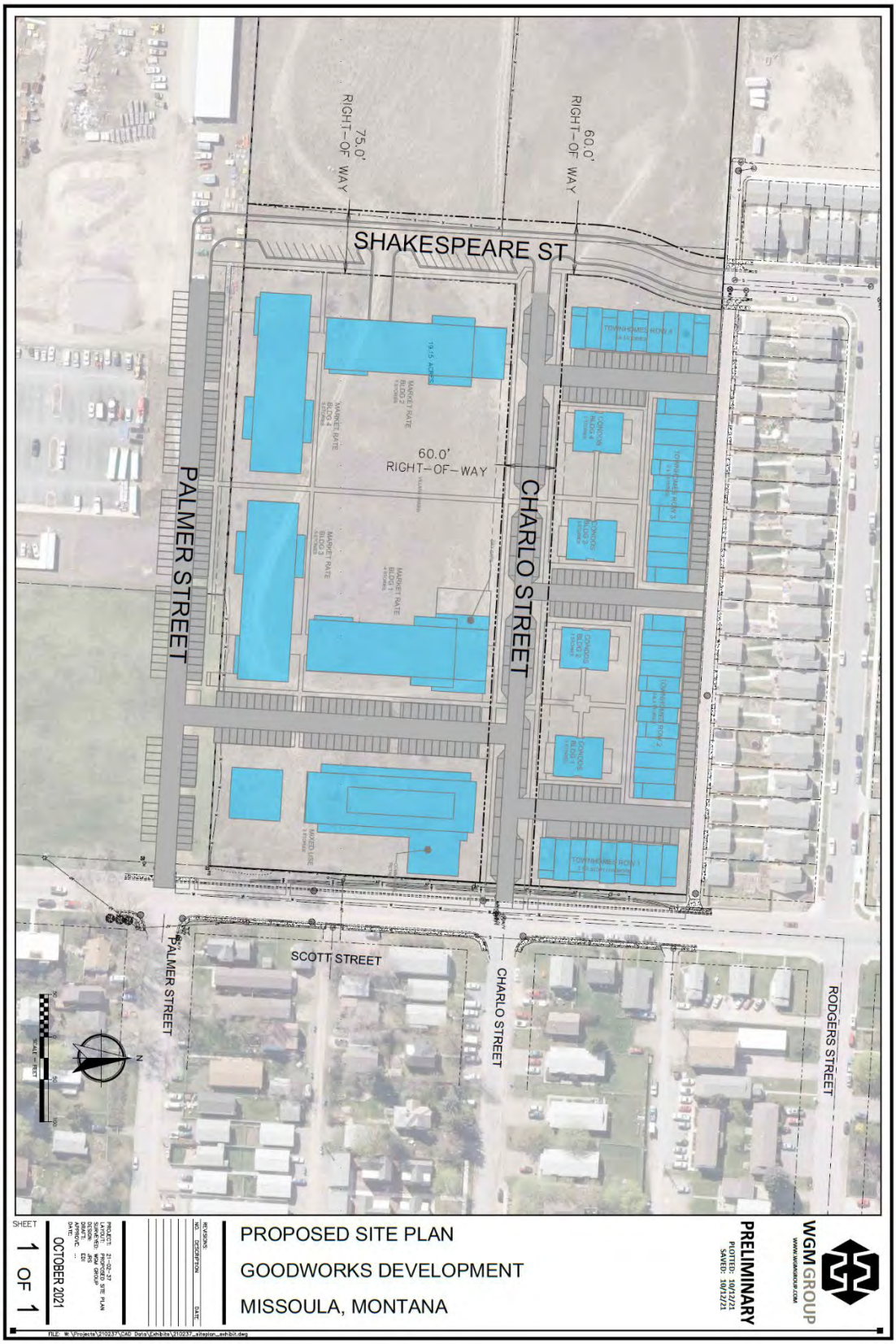


FIGURE 2: RAVARA DEVELOPMENT PRELIMINARY SITE PLAN

This study is organized into three separate traffic operation scenarios:

- No-Build: existing traffic volumes plus currently planned adjacent developments
- Build: The No-Build scenario plus traffic generated by the Ravara Development
- Neighborhood Growth: The Build scenario plus traffic generated by the future neighborhood development, considered in increments of 25%, 50%, 75%, and 100% of neighborhood development.

Furthermore, the Build and Neighborhood Growth scenarios are analyzed on both the existing transportation network as well the NRSS Plan's proposed transportation network that was updated by the City of Missoula's Public Works and Mobility Department in 2021, as shown in **Figure 3**.

The City of Missoula requested detailed traffic analysis of the following existing study intersections:

1. Scott Street and Charlo Street
2. Scott Street and Palmer Street
3. Scott Street and Turner Street
4. Scott Street and Phillips Street
5. Scott Street and Toole Avenue
6. North Orange Street roundabout at I-90
7. Grant Creek Road and Howard Raser Avenue

This traffic impact study (TIS) was prepared using standard traffic engineering techniques to forecast traffic volumes and operations at the study intersections listed above.

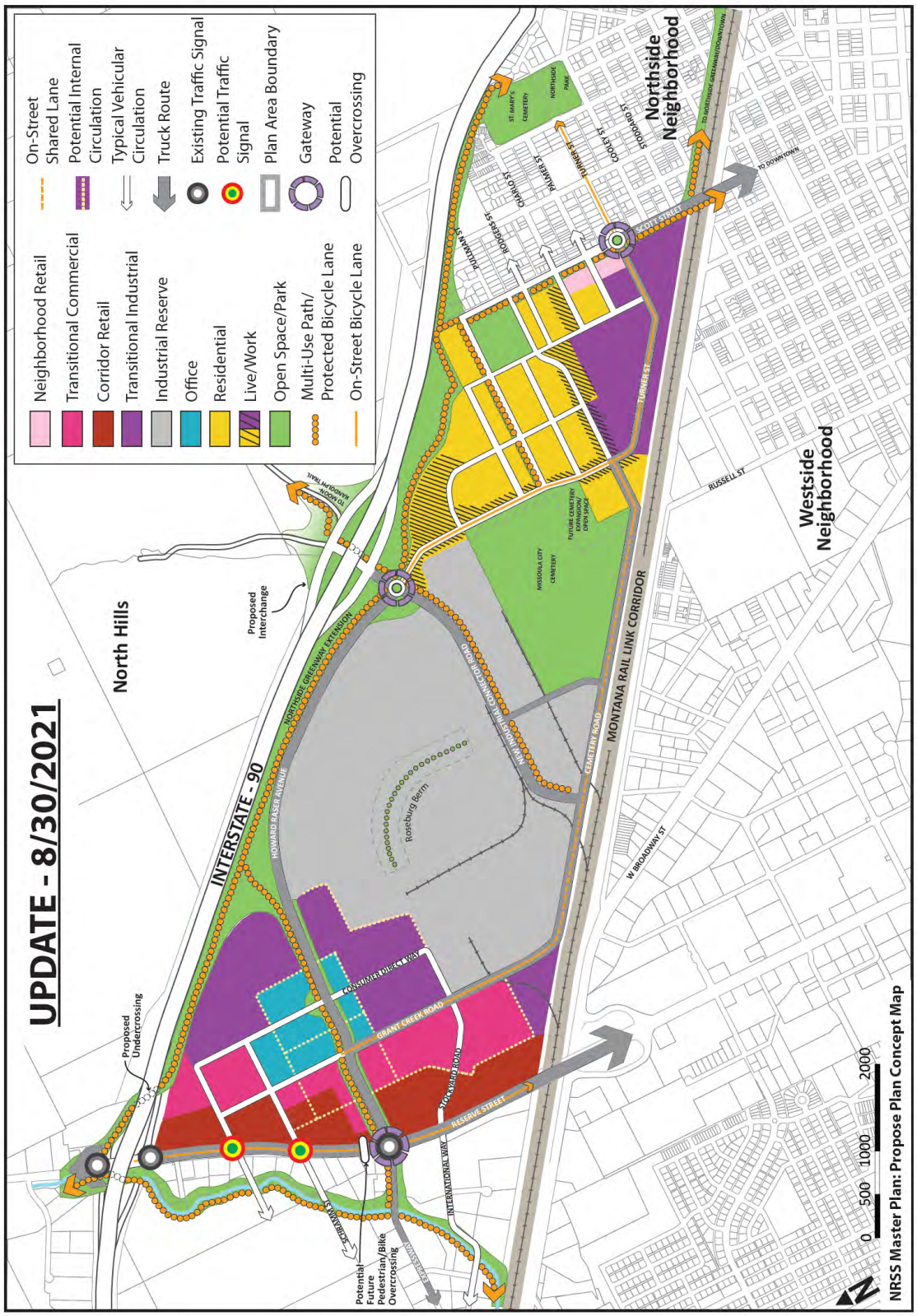


FIGURE 3: PROPOSED TRANSPORTATION NETWORK - NRSS MASTER PLAN (UPDATED 8/30/21)

EXISTING TRAFFIC VOLUME

WGM Group conducted mid-week (Tuesday, Wednesday, Thursday) AM and PM peak-period manual intersection turning-movement counts between June 22nd and 24th, 2021 to identify existing traffic volumes at each of the study intersections. AM peak-period counts were conducted between 7:00 and 9:00 AM. PM peak-period counts were conducted between 4:00 and 6:00 PM. The count data (included in **Appendix A**) was analyzed to determine the existing AM and PM peak-hour traffic volumes at each study intersection. These existing peak-hour volumes are tabulated in **Figures 6, 7, 8** and **9**.

NO-BUILD TRAFFIC VOLUMES

The 2021 existing peak-hour traffic volumes are not grown to a future study year as is typically the practice. Instead, the background growth is accounted for by estimating the amount of traffic generated by future neighborhood growth within the study's area of interest, as shown in **Figure 1**.

ADJACENT DEVELOPMENT TRAFFIC VOLUMES

The following three proposed adjacent developments are currently in the planning process: The Villagio Apartments, Scott Street Village Phase 3, and the proposed Public Works Facilities Plan. No existing traffic impact studies were made available for these proposed developments at the time of this report. Therefore, site-generated traffic as well as estimated arrival and departure patterns for each respective development were determined for this study. Data from the Institute of Transportation Engineers (ITE) publication *Trip Generation* (10th Edition) was used to estimate the number of vehicle trips that will be generated by the proposed developments.

THE VILLAGIO APARTMENTS

The Villagio Apartments will be located south of Interstate 90, along Otis Street between Scott and Shakespeare Streets. The proposed development consists of two five-story buildings with a total of 200 residential units on 3.7 acres. The estimated site-generated vehicle trips are shown in **Table 1**.

SCOTT STREET VILLAGE PHASE 3 APARTMENTS

Scott Street Village Phase 3 Apartments will be located south of Rogers Street and west of Shakespeare Street. The proposed development consists of three three-story apartments with a total of 71 residential units on approximately 1.6 acres. The estimated site-generated vehicle trips are shown in **Table 1**.

MISSOULA PUBLIC WORKS FACILITIES PLAN

Finally, the Missoula Public Works Facilities Plan "Concept 4D" proposed site layout (dated June 15, 2021) consists of various storage structures, Streets Maintenance shops, and an administrative building on approximately 21 acres, located south of Rogers Street and west of Scott Street. The estimated site-generated vehicle trips associated with this plan are shown in **Table 1**.

These three proposed adjacent developments will add new traffic to the intersections studied in this report. This "adjacent development" traffic must be included in the no-build traffic volume forecasts because it will occur regardless of the Ravara Development.

TABLE 1: ADJACENT DEVELOPMENT VEHICLE TRIPS

Land Use	Size	ITE Land Use Code	AM Peak-Hour Trips		PM Peak-Hour Trips		Average Daily Traffic (ADT)	
			Entering	Exiting	Entering	Exiting	Entry	Exit
The Villagio Apartments								
Five Story Apartments	200 Units	221	19	53	54	34	544	544
Scott Street Village Phase 3 Apartments								
Three Story Apartments	71 Units	221	7	19	19	12	192	193
Public Works Facilities								
Administration Building	44,000 Sq. Ft. GFA	710	58	9	8	44	239	239
Maintenance Buildings	57,000 Sq. Ft. GFA	130	18	4	5	18	96	96
		Total	102	85	86	108	1071	1072
						Total ADT	**2143**	

Traffic associated with the adjacent developments are expected to have similar arrival and distribution patterns as shown in **Figures 4** and **5**, including 15% accessing the respective development via Grant Creek Road/Rogers Street and approximately 80% via the Scott Street bridge. Based on existing traffic volumes as well as the development's proximity to the intersection of Scott Street and Turner Street, an assigned proportion of approximately 5% of traffic is expected to utilize the Turner St./Worden Ave./N. 5th W. Street route. Using these distributions, the peak-hour traffic from the adjacent developments was assigned to the study intersections. This resulted in the estimated adjacent development peak-hour trip assignment tabulated in **Figures 6, 7, 8,** and **9**.

The total no-build traffic volumes tabulated in **Figures 6, 7, 8,** and **9** are the sum of the existing traffic volume and the anticipated traffic generated by the Villagio Apartments, Scott Street Village Phase 3 Apartments, and Public Works Facilities. These are the volumes projected to exist without construction of the Ravara Development.

RAVARA DEVELOPMENT SITE-GENERATED TRAFFIC

At the time of this study, the Ravara site plan proposes a mixed-use development including 42 townhomes, 36 condos, 248 apartments, 13,000 square feet of grocery, 5,000 square feet of restaurant space, and 5,500 square feet of childcare. The following types of vehicular trips are associated with this type of mixed-use development: internal, pass-by, and site-generated primary trips.

Internal Trips

Mixed-use developments offer the opportunity for reducing a person's reliance on a personal vehicle by allowing them to complete trips without leaving the subject development. An internal trip is defined as one that is created by complimentary facilities within or directly adjacent to the development. For example, a person that lives within the proposed mixed-use development may complete a trip to the on-site retail or grocer without using the off-site transportation system.

Referencing the National Cooperative Highway Research Program (NCHRP) Report 8-51 titled *Enhancing Internal Trip Capture Estimation for Mixed-Use Developments* and utilizing the Report's "Estimation Tool" (see **Appendix B**), an internal trip capture percentage ranging between 4% to 6% was subtracted from the estimated trip generation associated with the proposed development, as shown in **Table 2**. The difference results in the external trips that will use the adjoining roadways to get to/from the subject development.

Pass-By Trips

A pass-by trip, also known as a shared trip, is defined by ITE as "an intermediate stop on the way from an origin to a primary trip destination without a route diversion." In the context of this study, an example would be a person stopping by the on-site grocer on their way home from work. This is not a new trip to the transportation network as the person is already traveling between work and home. Based on guidance from the ITE *Trip Generation Manual*, an average PM peak pass-by trip percentage of 36% for supermarket trips and 43% for restaurant trips was applied to estimate the number of pass-by trips associated with the proposed Ravara Development. These percentage of pass-by trips were applied to external trips only and are tabulated in **Figure 8** and

9. There were no applied peak AM pass-by trips because insufficient data exists on AM pass-by trips.

Site-Generated Primary Trips

ITE defines a primary trip as one that is "made for the specific purpose of visiting the generator," such as traveling from home to work. To estimate the number of site-generated trips associated with the Ravara development, data from the Institute of Transportation Engineers (ITE) publication *Trip Generation* (10th Edition) was used. As stated above, internal trips and pass-by trips were subtracted from the subtotal site-generated trips to determine the number of site-generated primary trips, as summarized in **Table 2**.

TABLE 2: SITE-GENERATED VEHICLE TRIPS

Land Use	Size	ITE Land Use Code	AM Peak-Hour Trips		PM Peak-Hour Trips		Average Daily Traffic (ADT)	
			Entering	Exiting	Entering	Exiting	Entry	Exit
Apartments (4 to 5 Stories)	248 units	221	23	66	67	43	675	675
Townhomes and Condos	78 units	220	9	29	30	18	274	274
Grocer	13,000 Sq. Ft. GFA	850	30	20	61	59	694	694
Child Care	5,500 Sq. Ft. GFA	565	32	28	29	32	131	131
Retail (Food/Beverage)	5,000 Sq. Ft. GFA	932	27	22	30	19	280	280
Subtotal Site-Generated Trips			121	165	217	171	2055	2055
Internal Trips			-6	-6	-7	-7		
Subtotal External Trips			115	159	210	164		
New Grocery "Pass-by" Trips					22	21		
Retail (Food/Beverage) "Pass-by" Trips					11	7		
Total Site-Generated Primary Trips			**115**	**159**	**177**	**136**		

ASSIGNMENT OF SITE-GENERATED TRIPS

Roadway network connections were analyzed, the Missoula area's retail and employment distribution/density was considered, and traffic volumes on the adjoining streets were reviewed to identify potential arrival and departure patterns for the Ravara Development's site-generated primary trips. The expected site arrival and departure patterns for the existing transportation network are illustrated in **Figures 4** and **5**, respectively**.**

The site-generated primary vehicle trips from **Table 2** were distributed through the study intersections in accordance with the estimated arrival and departure patterns, resulting in the AM and PM peak-hour site-generated primary vehicle trips, as tabulated in **Figures 6**, **7**, **8**, and **9**. These are the vehicle trips that are new to the roadway network as a direct result of the Ravara Development.

FIGURE 4: GOODWORKS DEVELOPMENT ARRIVAL PATTERN (EXISTING TRANSPORTATION NETWORK)

FIGURE 5: GOODWORKS DEVELOPMENT DEPARTURE PATTERN (EXISTING TRANSPORTATION NETWORK)

BUILD TRAFFIC VOLUMES

Combining the Ravara Development's site-generated primary trips with the no-build traffic volumes results in the projected build traffic volumes tabulated in **Figures 6**, **7**, **8**, and **9**. These are the total traffic volumes projected to exist at the study intersections when the Ravara Development is fully built-out and occupied.

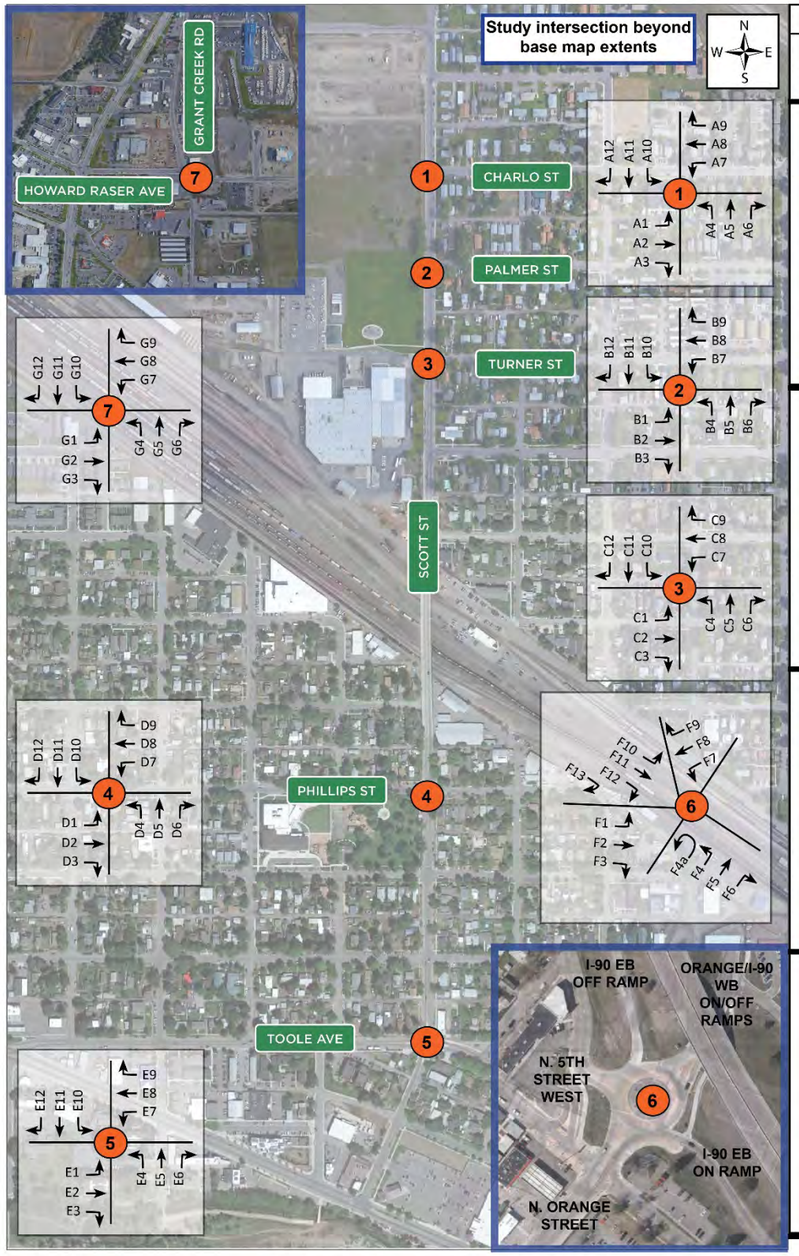
NEIGHBORHOOD GROWTH VOLUMES

As previously mentioned, existing planning documents were reviewed to understand and reasonably estimate growth within the North Reserve - Scott Street neighborhood. Within the "area of interest", 61.8 acres are zoned for residential and 9.5 acres are county land with heavy industrial zoning. Local housing policy objectives were considered and existing residential zoning designations within the "area of interest" were reviewed to determine a density of 43 residential dwelling units per acre. Data from the Institute of Transportation Engineers (ITE) publication *Trip Generation* (10th Edition) was used to estimate the number of vehicle trips that will be generated by this estimated future neighborhood development as summarized in **Table 3**.

TABLE 3: NEIGHBORHOOD GROWTH SITE-GENERATED VEHICLE TRIPS

Land Use	Size	ITE Land Use Code	AM Peak-Hour Trips		PM Peak-Hour Trips		Average Daily Traffic (ADT)	
			Entering	Exiting	Entering	Exiting	Entry	Exit
Multi-Family Residential	2,657 units	221	249	708	713	456	7241	7241
Heavy Industrial	413,000 Sq. Ft. GFA	130	134	31	35	130	696	696
		Total	383	739	748	587	7936	7936
						Total ADT	**15,873**	

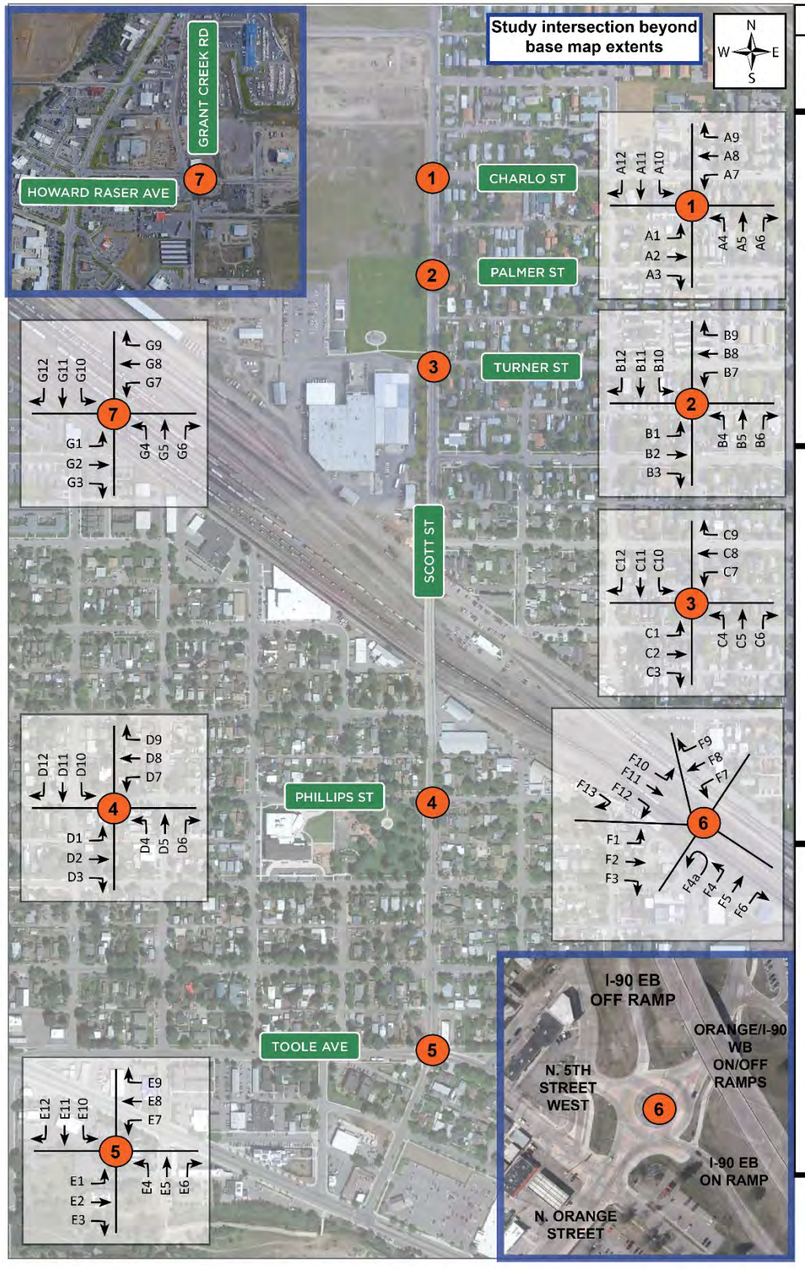
A sensitivity analysis was completed at the request of the City of Missoula to determine how much neighborhood development may occur before the existing transportation network would require significant improvements. In order to complete the sensitivity analysis, vehicle trips generated by the future neighborhood growth were segmented into 25% increments as tabulated in **Figures 6**, **7**, **8**, and **9**.



Peak AM Volumes - Existing Transportation Network

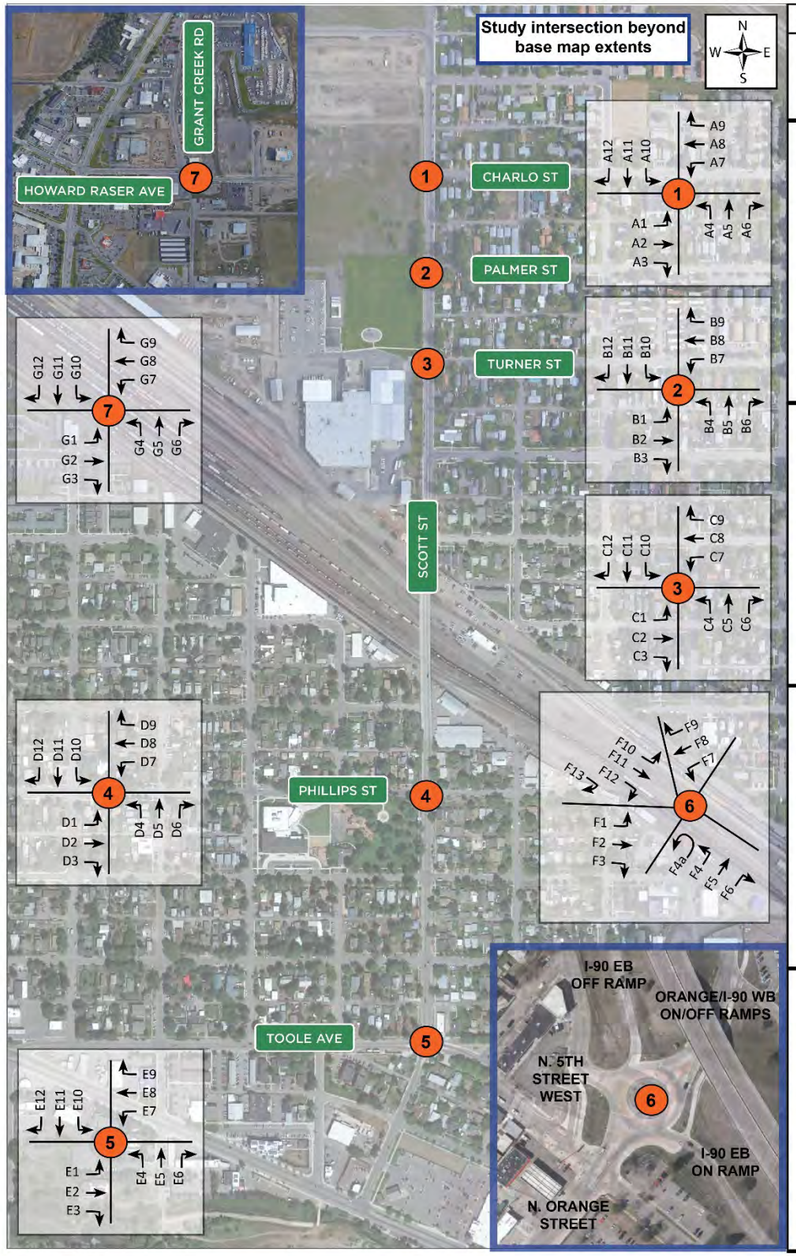
Intersection Name & Number	Movement Number	Existing Volumes	Adjacent Development Volumes	No-Build Volumes (Existing + Adjacent)	Site-Generated Primary Trips	Build Volumes (No-Build + Site Generated)	Build + 25% Neighborhood Growth	Build + 50% Neighborhood Growth	Build + 75% Neighborhood Growth	Build + 100% Neighborhood Growth
#1 - Scott St. & Charlo St.	A1				0	0	0	0	0	0
	A2				0	0	0	0	0	0
	A3				40	40	40	40	40	40
	A4				29	29	29	29	29	29
	A5	129	24	153	12	164	245	327	408	490
	A6	10	0	10	0	10	10	10	10	10
	A7	14	0	14	0	14	14	14	14	14
	A8				0	0	0	0	0	0
	A9	5	0	5	0	5	5	5	5	5
	A10	0	0	0	0	0	0	0	0	0
	A11	133	65	198	16	214	371	528	685	842
	A12				0	0	0	0	0	0
#2 - Scott St. & Palmer St.	B1				0	0	0	0	0	0
	B2				0	0	0	0	0	0
	B3				80	80	80	80	80	80
	B4				58	58	58	58	58	58
	B5	129	24	153	40	193	274	356	437	518
	B6	4	0	4	0	4	4	4	4	4
	B7	11	0	11	0	11	11	11	11	11
	B8				0	0	0	0	0	0
	B9	3	0	3	0	3	3	3	3	3
	B10	0	0	0	0	0	0	0	0	0
	B11	163	65	228	56	284	441	598	755	912
	B12				0	0	0	0	0	0
#3 - Scott St. & Turner St.	C1	2	1	3	0	3	3	3	3	3
	C2	2	1	3	0	3	3	3	3	3
	C3	8	11	19	0	19	19	19	19	19
	C4	17	65	82	0	82	82	82	82	82
	C5	120	20	140	90	230	305	379	454	529
	C6	8	0	8	0	8	8	8	8	8
	C7	13	0	13	0	13	13	13	13	13
	C8	2	8	10	0	10	10	10	10	10
	C9	15	2	17	8	25	32	38	45	52
	C10	4	2	6	5	11	16	22	28	33
	C11	165	59	224	130	354	506	657	809	960
	C12	1	4	5	0	5	5	5	5	5
#4 - Scott St. & Phillips St.	D1	65	30	95	29	123	147	171	195	219
	D2	10	0	10	0	10	10	10	10	10
	D3	99	0	99	0	99	99	99	99	99
	D4	64	0	64	0	64	64	64	64	64
	D5	107	56	163	61	224	275	326	376	427
	D6	7	0	7	0	7	7	7	7	7
	D7	2	0	2	0	2	2	2	2	2
	D8	5	0	5	0	5	5	5	5	5
	D9	5	0	5	0	5	5	5	5	5
	D10	2	0	2	0	2	2	2	2	2
	D11	170	49	219	91	309	415	520	625	731
	D12	121	22	143	40	183	229	275	321	367

FIGURE 6: INTERSECTION #1 TO #4 AM VOLUMES OF ALL ANALYSIS SCENARIOS (EXISTING TRANSPORTATION NETWORK)



Peak AM Volumes - Existing Transportation Network										
Intersection Name & Number	Movement Number	Existing Volumes	Adjacent Development Volumes	No-Build Volumes (Existing + Adjacent)	Site-Generated Primary Trips	Build Volumes (No-Build + Site Generated)	Build + 25% Neighborhood Growth	Build + 50% Neighborhood Growth	Build + 75% Neighborhood Growth	Build + 100% Neighborhood Growth
#5 - Scott St. & Toole Ave.	E1	46	15	61	17	79	93	107	122	136
	E2	232	0	232	0	232	232	232	232	232
	E3	16	0	16	0	16	16	16	16	16
	E4	2	0	2	0	2	2	2	2	2
	E5	38	22	60	23	83	102	121	141	160
	E6	10	0	10	0	10	10	10	10	10
	E7	7	0	7	0	7	7	7	7	7
	E8	185	0	185	0	185	185	185	185	185
	E9	60	19	79	21	99	116	134	151	168
	E10	74	13	87	24	111	138	166	194	222
	E11	114	23	137	43	180	230	280	330	379
	E12	68	13	81	24	105	132	160	188	216
#6 - N. Orange St/N. 5th St. W./I-90 EB Ramps	F1	8	0	8	0	8	8	8	8	8
	F2	42	1	43	2	45	47	48	50	52
	F3	71	2	73	3	76	80	84	87	91
	F4a	1	0	1	0	1	1	1	1	1
	F4	32	4	36	3	39	42	45	48	51
	F5	231	0	231	0	231	231	231	231	231
	F6	181	0	181	0	181	181	181	181	181
	F7	0	0	0	0	0	0	0	0	0
	F8	315	0	315	0	315	315	315	315	315
	F9	22	4	26	3	29	32	35	38	41
	F10	0	0	0	0	0	0	0	0	0
	F11	0	0	0	0	0	0	0	0	0
	F12	390	0	390	0	390	390	390	390	390
	F13	3	2	5	1	6	7	8	9	10
# 7 - Grant Creek Rd. & Howard Raser Ave.	G1	28	0	28	0	28	28	28	28	28
	G2	17	0	17	0	17	17	17	17	17
	G3	71	8	79	17	96	110	125	139	153
	G4	87	12	99	24	123	151	178	206	234
	G5	52	0	52	0	52	52	52	52	52
	G6	2	0	2	0	2	2	2	2	2
	G7	0	0	0	0	0	0	0	0	0
	G8	0	0	0	0	0	0	0	0	0
	G9	1	0	1	0	1	1	1	1	1
	G10	0	0	0	0	0	0	0	0	0
	G11	28	0	28	0	28	28	28	28	28
	G12	44	0	44	0	44	44	44	44	44

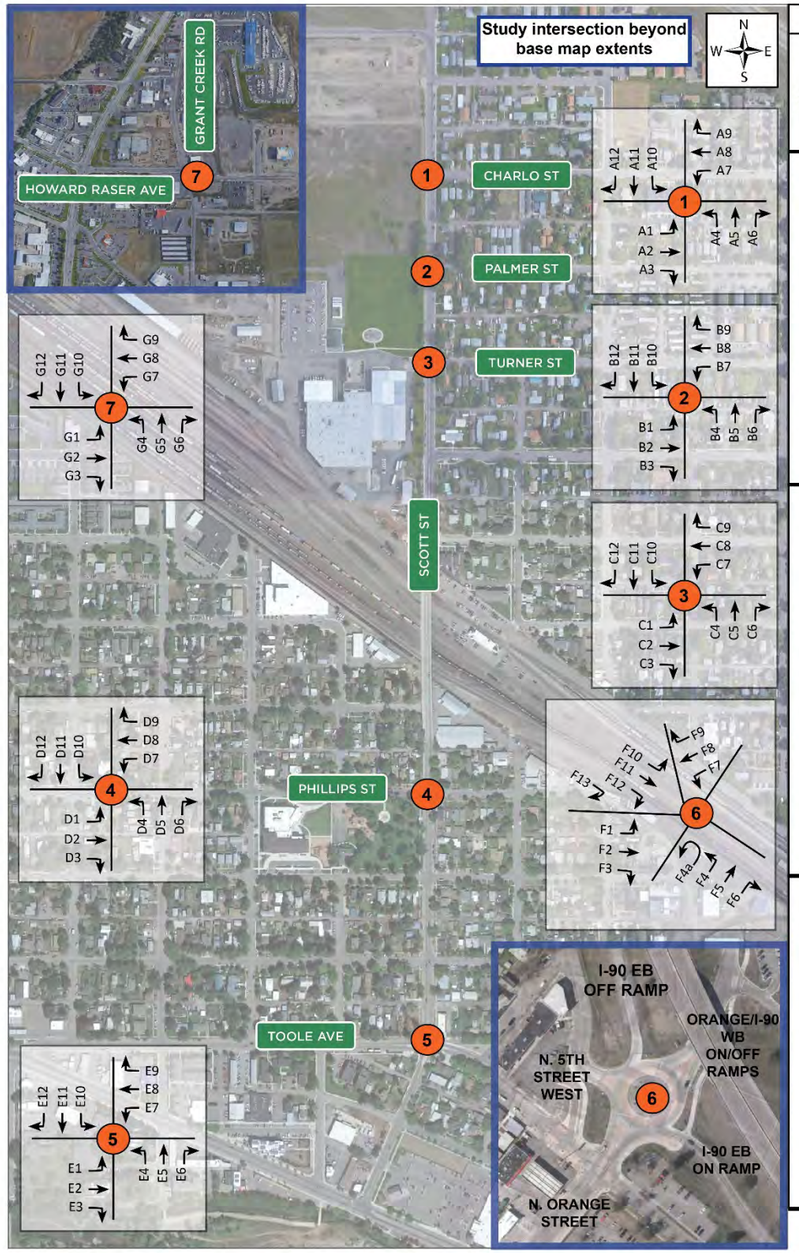
FIGURE 7: INTERSECTION #5 TO #7 AM VOLUMES OF ALL ANALYSIS SCENARIOS (EXISTING TRANSPORTATION NETWORK)



Peak PM Volumes - Existing Transportation Network

Intersection Name & Number	Movement Number	Existing Volumes	Adjacent Development Volumes	No-Build Volumes (Existing + Adjacent)	Passby Trips	Site-Generated Primary Trips	Build Volumes (No-Build + Site Generated)	Build + 25% Neighborhood Growth	Build + 50% Neighborhood Growth	Build + 75% Neighborhood Growth	Build + 100% Neighborhood Growth
#1 - Scott St. & Charlo St.	A1	0	0	0		0	0	0	0	0	0
	A2	0	0	0		0	0	0	0	0	0
	A3	0	0	0	16	34	50	50	50	50	50
	A4	0	0	0		44	44	44	44	44	44
	A5	159	68	227		18	242	401	560	719	878
	A6	27	0	27	-3	0	27	27	27	27	27
	A7	11	0	11		0	11	11	11	11	11
	A8	0	0	0		0	0	0	0	0	0
	A9	8	0	8		0	8	8	8	8	8
	A10	11	0	11		0	11	11	11	11	11
	A11	236	40	276		14	271	396	521	646	770
	A12	0	0	0		0	18	18	18	18	18
#2 - Scott St. & Palmer St.	B1	0	0	0	-18	0	12	12	12	12	12
	B2	0	0	0	18	0	0	0	0	0	0
	B3	0	0	0		68	68	68	68	68	68
	B4	0	0	0	12	89	104	104	104	104	104
	B5	185	68	253		62	300	459	618	777	936
	B6	11	0	11		0	11	11	11	11	11
	B7	13	0	13		0	13	13	13	13	13
	B8	0	0	0	15	0	0	0	0	0	0
	B9	3	0	3	-15	0	3	3	3	3	3
	B10	6	0	6		0	6	6	6	6	6
	B11	244	40	284		48	329	454	579	704	828
	B12	0	0	0		0	0	0	0	0	0
#3 - Scott St. & Turner St.	C1	3	6	9		0	9	9	9	9	9
	C2	6	5	11		0	11	11	11	11	11
	C3	26	51	77		0	77	77	77	77	77
	C4	3	11	14	-2	0	14	14	14	14	14
	C5	167	57	224		138	362	508	654	800	945
	C6	24	0	24		0	24	24	24	24	24
	C7	19	0	19		0	19	19	19	19	19
	C8	2	1	3		0	3	3	3	3	3
	C9	22	5	27		12	40	53	66	79	92
	C10	8	1	9		4	13	18	22	27	31
	C11	264	38	302		112	411	532	652	772	893
	C12	1	1	2		0	2	2	2	2	2
#4 - Scott St. & Phillips St.	D1	145	22	167		44	211	258	305	352	398
	D2	9	0	9		0	9	9	9	9	9
	D3	122	0	122		0	122	122	122	122	122
	D4	118	0	118		0	118	118	118	118	118
	D5	187	46	233		94	327	426	525	624	723
	D6	9	0	9		0	9	9	9	9	9
	D7	0	0	0	-2	0	0	0	0	0	0
	D8	11	0	11		0	11	11	11	11	11
	D9	4	0	4		0	4	4	4	4	4
	D10	2	0	2		0	2	2	2	2	2
	D11	262	60	322		78	398	481	565	649	732
	D12	139	28	167		34	201	238	275	311	348

FIGURE 8: INTERSECTION #1 TO #4 PM VOLUMES OF ALL ANALYSIS SCENARIOS (EXISTING TRANSPORTATION NETWORK)



Peak PM Volumes - Existing Transportation Network

Intersection Name & Number	Movement Number	Existing Volumes	Adjacent Development Volumes	No-Build Volumes (Existing + Adjacent)	Passby Trips	Site-Generated Primary Trips	Build Volumes (No-Build + Site Generated)	Build + 25% Neighborhood Growth	Build + 50% Neighborhood Growth	Build + 75% Neighborhood Growth	Build + 100% Neighborhood Growth
#5 - Scott St. & Toole Ave.	E1	80	13	93		27	119	148	176	204	232
	E2	282	0	282		0	282	282	282	282	282
	E3	37	0	37		0	37	37	37	37	37
	E4	9	0	9		0	9	9	9	9	9
	E5	107	17	124		35	160	197	235	272	309
	E6	37	0	37		0	37	37	37	37	37
	E7	37	0	37		0	37	37	37	37	37
	E8	282	0	282		0	282	282	282	282	282
	E9	83	15	98		32	130	164	198	231	265
	E10	79	16	95	-2	20	116	138	160	182	204
	E11	201	28	229		37	264	303	343	383	422
	E12	83	16	99		20	120	142	164	186	208
#6 - N. Orange St/N. 5th St. W./I-90 EB Ramps	F1	6	0	6		0	6	6	6	6	6
	F2	52	2	54		1	56	57	59	60	62
	F3	48	4	52		3	55	58	61	64	66
	F4a	3	0	3		0	3	3	3	3	3
	F4	119	3	122		5	127	133	138	144	149
	F5	482	0	482		0	482	482	482	482	482
	F6	357	0	357		0	357	357	357	357	357
	F7	1	0	1		0	1	1	1	1	1
	F8	358	0	358		0	358	358	358	358	358
	F9	105	3	108		5	113	119	124	130	135
	F10	1	0	1		0	1	1	1	1	1
	F11	0	0	0		0	0	0	0	0	0
	F12	463	0	463	-2	0	463	463	463	463	463
	F13	23	1	24		2	26	28	30	31	33
# 7 - Grant Creek Rd. & Howard Raser Ave.	G1	33	0	33		0	33	33	33	33	33
	G2	3	0	3		0	3	3	3	3	3
	G3	111	12	123		27	149	177	205	233	261
	G4	157	13	170		20	191	213	235	257	279
	G5	96	0	96		0	96	96	96	96	96
	G6	0	0	0		0	0	0	0	0	0
	G7	3	0	3		0	3	3	3	3	3
	G8	18	0	18		0	18	18	18	18	18
	G9	6	0	6		0	6	6	6	6	6
	G10	1	0	1		0	1	1	1	1	1
	G11	38	0	38		0	38	38	38	38	38
	G12	51	0	51		0	51	51	51	51	51

FIGURE 9: INTERSECTION #5 TO #7 PM VOLUMES OF ALL ANALYSIS SCENARIOS (EXISTING TRANSPORTATION NETWORK)

CAPACITY ANALYSIS – EXISTING TRANSPORTATION NETWORK

Capacity analysis was conducted for each of the study's intersections using the peak AM and PM existing, no-build, build, and incremental neighborhood growth traffic volumes forecasted in this report. Existing intersections were evaluated in accordance with the procedures presented in the *Highway Capacity Manual*, 6th Edition, published by the Transportation Research Board. The analysis results are discussed below and the analysis worksheets are contained in **Appendix C**.

The capacity analysis procedures result in traffic level of service (LOS) rankings from A to F, with A representing essentially free-flow conditions and F representing congested conditions. See **Appendix E** for a description of the various LOS categories for unsignalized intersections.

INTERSECTION OF SCOTT STREET AND CHARLO STREET

EXISTING CONDITIONS

Scott Street is a north/south urban collector with one travel lane in each direction. Charlo Street is an east/west local street with one travel lane in each direction. This T-configured intersection is stop controlled on the westbound approach of Charlo Street, which consist of one shared left/right-turn lane. The northbound and southbound approaches to this intersection are both single-lane approaches. The speed limit is 25 miles per hour on both streets.

As part of the Ravara Development, the eastbound approach of this intersection will be constructed as a site access with one travel lane in each direction. Therefore, beginning in the build-scenario this intersection is modeled as a four-way intersection that is stop controlled on the westbound and eastbound approaches.

CAPACITY ANALYSIS

Capacity analysis of this intersection was conducted using the existing, no-build, and build traffic volumes developed earlier in this report and the intersection configuration described above. The results of this analysis are summarized in **Table 4**.

TABLE 4: SCOTT STREET & CHARLO STREET LOS SUMMARY

	PEAK AM HOUR						PEAK PM HOUR					
	EXISTING		NO-BUILD		BUILD		EXISTING		NO-BUILD		BUILD	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt					10.2	B					10.3	B
Westbound Lt/Th/Rt	10.5	B	11.3	B	13.9	B	10.8	B	11.8	B	14.7	B
Northbound Lt/Th/Rt	---	---	---	---	8.0	A	---	---	---	---	8.0	A
Southbound Lt/Th/Rt	7.7	A	7.7	A	7.8	A	7.7	A	7.8	A	7.9	A

Delay is measured in seconds per vehicle.

The analysis summarized in **Table 4** shows that the subject intersection operates at a good LOS and does not require upgrades to accommodate traffic generated by the Ravara Development.

A sensitivity analysis of the build scenario plus (%) neighborhood growth was completed to determine anticipated delay and level of service at this intersection. The results of this analysis are summarized in **Table 5A** and **5B**.

TABLE 5A: SCOTT STREET & CHARLO STREET PEAK AM SENSITIVITY ANALYSIS

PEAK AM HOUR								
	25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	11.9	B	14.3	B	17.6	C	22.6	C
Westbound Lt/Th/Rt	19.6	C	30.5	D	53.3	F	111.1	F
Northbound Lt/Th/Rt	8.6	A	9.3	A	10.1	B	11.2	B
Southbound Lt/Th/Rt	8.0	A	8.3	A	8.6	A	9.0	A

Delay is measured in seconds per vehicle.

TABLE 5B: SCOTT STREET & CHARLO STREET PEAK PM SENSITIVITY ANALYSIS

PEAK PM HOUR								
	25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	11.5	B	13.0	B	14.8	B	17.1	C
Westbound Lt/Th/Rt	20.9	C	32.7	D	57.0	F	116.5	F
Northbound Lt/Th/Rt	8.4	A	8.9	A	9.4	A	10.0	A
Southbound Lt/Th/Rt	8.4	A	8.9	A	9.6	A	10.3	B

Delay is measured in seconds per vehicle.

The analysis results show that between 50% to 75% of the neighborhood growth, traffic traveling westbound through the subject intersection may begin to experience a LOS F, but this applies to 19 vehicles, which is approximately 1% of the total peak hour traffic traveling through this intersection. Additionally, before these predicted delay levels are approached, traffic should redistribute through the grid network to routes with less delays.

INTERSECTION OF SCOTT STREET AND PALMER STREET

EXISTING CONDITIONS

Scott Street is a north/south urban collector with one travel lane in each direction. Palmer Street is an east/west local street with one travel lane in each direction. This T-configured intersection is stop controlled on the westbound approach of Palmer Street which consist of one shared left/right-turn lane. The northbound and southbound approaches to this intersection are both single-lane approaches. The speed limit is 25 miles per hour on both streets.

As part of the Ravara Development, the eastbound approach of this intersection will be constructed as a site access with one travel lane in each direction. Therefore, beginning in the build-scenario this intersection is modeled as a four-way intersection that is stop controlled on the westbound and eastbound approaches.

CAPACITY ANALYSIS

Capacity analysis of this intersection was conducted using the existing, no-build, and build traffic volumes developed earlier in this report and the intersection configuration described above. The results of this analysis are summarized in **Table 6**.

TABLE 6: SCOTT STREET & PALMER STREET LOS SUMMARY

	PEAK AM HOUR						PEAK PM HOUR					
	EXISTING		NO-BUILD		BUILD		EXISTING		NO-BUILD		BUILD	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt					11.7	B					14.0	B
Westbound Lt/Th/Rt	10.9	B	11.8	B	21.0	C	11.7	B	12.9	B	25.4	D
Northbound Lt/Th/Rt	---	---	---	---	8.4	A	---	---	---	---	8.4	A
Southbound Lt/Th/Rt	7.7	A	7.7	A	7.9	A	7.7	A	7.9	A	8.0	A

Delay is measured in seconds per vehicle.

The analysis summarized in **Table 6** shows that traffic traveling westbound through the subject intersection may begin to experience delays of 25.4 seconds (LOS D), but this applies to 16 vehicles, which is less than 2% of the total peak hour traffic traveling through this intersection. Additionally, before these predicted delay levels are approached, traffic should redistribute through the grid network to routes with less delays.

A sensitivity analysis of the build scenario plus (%) neighborhood growth was completed to determine anticipated delay and level of service for this intersection. The results of this analysis are summarized in **Table 7A** and **7B**.

TABLE 7A: SCOTT STREET & PALMER STREET PEAK AM SENSITIVITY ANALYSIS

PEAK AM HOUR								
	25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	14.6	B	19.1	C	26.7	D	41.5	E
Westbound Lt/Th/Rt	36.7	E	72.3	F	193.4	F	679.7	F
Northbound Lt/Th/Rt	9.2	A	10.1	B	11.4	B	12.9	B
Southbound Lt/Th/Rt	8.2	A	8.5	A	8.8	A	9.2	A

Delay is measured in seconds per vehicle.

TABLE 7B: SCOTT STREET & PALMER STREET PEAK PM SENSITIVITY ANALYSIS

PEAK PM HOUR								
	25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	18.9	C	29.5	D	61.0	F	203.9	F
Westbound Lt/Th/Rt	44.2	E	89.6	F	227.7	F	681.4	F
Northbound Lt/Th/Rt	8.9	A	9.5	A	10.2	B	11.0	B
Southbound Lt/Th/Rt	8.5	A	9.1	A	9.9	A	10.7	B

Delay is measured in seconds per vehicle.

Between 25% to 50% of the neighborhood growth, longer delays are anticipated to be experienced by westbound traffic. As previously mentioned, it is expected that traffic would redistribute through the grid network to find a route with less delays before these anticipated delays are approached.

INTERSECTION OF SCOTT STREET AND TURNER STREET

EXISTING CONDITIONS

Scott Street is a north/south urban collector with one travel lane in each direction. Turner Street is an east/west local collector street with one travel lane in each direction. The eastbound approach of this intersection is a driveway access for several commercial buildings and the current City shops and the westbound approach is stop-controlled. Based on the street classification and adjacent land use, the speed limit is 25 miles per hour.

CAPACITY ANALYSIS

Capacity analysis of this intersection was conducted using the existing, no-build, and build traffic volumes developed earlier in this report and the intersection configuration described above. The results of this analysis are summarized in **Table 8**.

TABLE 8: SCOTT STREET & TURNER STREET LOS SUMMARY

	PEAK AM HOUR						PEAK PM HOUR					
	EXISTING		NO-BUILD		BUILD		EXISTING		NO-BUILD		BUILD	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	10.5	B	12.1	B	15.3	C	11.2	B	12.8	B	16.1	C
Westbound Lt/Th/Rt	11.1	B	15.0	B	19.9	C	12.1	B	14.4	B	19.1	C
Northbound Lt/Th/Rt	7.8	A	8.2	A	8.8	A	7.9	A	8.0	A	8.4	A
Southbound Lt/Th/Rt	7.6	A	7.7	A	8.0	A	7.7	A	7.8	A	8.3	A

Delay is measured in seconds per vehicle.

The analysis summarized in **Table 8** shows that the subject intersection is expected to operate at a LOS of C or better in the Build scenario.

A sensitivity analysis of the build scenario plus (%) neighborhood growth was completed to determine anticipated delay and level of service for this intersection. The results of this analysis are summarized in **Table 9A** and **9B**.

TABLE 9A: SCOTT STREET & TURNER STREET PEAK AM SENSITIVITY ANALYSIS

PEAK AM HOUR								
	25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	21.3	C	33.2	D	64.4	F	211.6	F
Westbound Lt/Th/Rt	30.3	D	59.1	F	179.8	F	608.1	F
Northbound Lt/Th/Rt	9.6	A	10.6	B	11.8	B	13.5	B
Southbound Lt/Th/Rt	8.3	A	8.6	A	9.0	A	9.4	A

Delay is measured in seconds per vehicle.

TABLE 9B: SCOTT STREET & TURNER STREET PEAK PM SENSITIVITY ANALYSIS

PEAK PM HOUR								
	25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	23.1	C	40.6	E	109.8	F	408.2	F
Westbound Lt/Th/Rt	30.2	D	66.2	F	247.7	F	858.8	F
Northbound Lt/Th/Rt	8.8	A	9.3	A	9.8	A	10.5	B
Southbound Lt/Th/Rt	8.8	A	9.4	A	10.2	B	11.1	B

Delay is measured in seconds per vehicle.

Between 25% to 50% of the anticipated neighborhood growth, traffic traveling eastbound and westbound through this intersection will begin to experience delays longer than generally considered acceptable.

As shown in **Figure 2**, The Updated NRSS Master Plan proposes that the intersection of Scott Street and Turner Street is upgraded to a roundabout. Understanding that this upgrade may need to occur before the construction of the entire proposed transportation network, this intersection was also analyzed as a roundabout as part of the existing transportation network analysis.

TABLE 10: SCOTT STREET & TURNER STREET ROUNDABOUT LOS SUMMARY

	PEAK AM HOUR						PEAK PM HOUR					
	EXISTING		NO-BUILD		BUILD		EXISTING		NO-BUILD		BUILD	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	3.8	A	4.1	A	5.2	A	4.4	A	5.0	A	6.1	A
Westbound Lt/Th/Rt	4.5	A	4.7	A	5.3	A	4.8	A	5.2	A	6.1	A
Northbound Lt/Th/Rt	2.3	A	3.2	A	2.8	A	2.0	A	2.2	A	2.2	A
Southbound Lt/Th/Rt	2.1	A	2.7	A	2.8	A	2.0	A	2.1	A	2.2	A

Delay is measured in seconds per vehicle.

The analysis summarized in **Table 10** shows that the subject intersection operates at a very good LOS as a roundabout and traffic will experience relatively minimal delays in the Build scenario.

The neighborhood growth sensitivity analysis was also completed with this intersection modeled as a roundabout. The results of that analysis are summarized in **Table 11A** and **11B.**

TABLE 11A: SCOTT STREET & TURNER ROUNDABOUT STREET PEAK AM SENSITIVITY ANALYSIS

PEAK AM HOUR								
	25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	6.7	A	8.8	A	11.8	B	18.7	B
Westbound Lt/Th/Rt	5.8	A	6.5	A	7.3	A	8.2	A
Northbound Lt/Th/Rt	2.7	A	2.6	A	2.6	A	2.6	A
Southbound Lt/Th/Rt	3.0	A	3.3	A	3.9	A	7.5	A

Delay is measured in seconds per vehicle.

TABLE 11B: SCOTT STREET & TURNER STREET ROUNDABOUT PEAK PM SENSITIVITY ANALYSIS

PEAK PM HOUR								
	25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	7.5	A	9.4	A	11.9	B	15.6	B
Westbound Lt/Th/Rt	7.5	A	9.5	A	12.4	B	20.5	C
Northbound Lt/Th/Rt	2.2	A	2.3	A	2.5	A	2.9	A
Southbound Lt/Th/Rt	2.2	A	2.3	A	2.4	A	2.5	A

Delay is measured in seconds per vehicle.

The analysis summarized in **Table 11A** and **11B** shows that the subject intersection as a roundabout operates at a very good LOS up to 75% of the estimated neighborhood growth and at LOS of C or better when 100% of the neighborhood development has been constructed and occupied.

INTERSECTION OF SCOTT STREET AND PHILLIPS STREET

EXISTING CONDITIONS

Scott Street is a north/south urban collector with one travel lane in each direction. Phillips Street is an east/west corridor with one travel lane in each direction. Phillips Street is classified as an urban collector on the eastbound approach and as a local street on the westbound approach. This intersection is stop controlled on the eastbound and westbound approaches of Phillips Street. The speed limit is 25 miles per hour on both streets.

CRASH ANALYSIS

Community members have expressed their concerns regarding the current traffic speeds, volumes, and overall safety at this intersection to City Leadership. Based on these concerns, it was decided to review crash data for this intersection as part of this study. There were 27 documented crashes between 2007 and 2019 at this intersection of Scott Street and Phillips Street. Right angle crashes were the predominant collision type followed by rear-end crashes. Right angle crashes at two-way stop-controlled intersections with single lane approaches are generally attributed to vehicles turning left or crossing the street without the necessary gap in traffic traveling on a busy intersecting street. This predominant crash trend is likely attributed to impatient drivers trying to “shoot a gap” while turning on or off Scott Street. Furthermore, the existing grade from the Scott Street Bridge increases the average speed of vehicles heading southbound at the intersection.

CAPACITY ANALYSIS

Capacity analysis of this intersection was conducted using the existing, no-build, and build traffic volumes developed earlier in this report and the intersection configuration described above. The results of this analysis are summarized in **Table 12**.

TABLE 12: SCOTT STREET & PHILLIPS STREET LOS SUMMARY

	PEAK AM HOUR						PEAK PM HOUR					
	EXISTING		NO-BUILD		BUILD		EXISTING		NO-BUILD		BUILD	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	16.1	C	25.3	D	79.6	F	52.7	F	140.8	F	474.7	F
Westbound Lt/Th/Rt	13.2	B	15.1	C	19.0	C	17.7	C	20.6	C	27.0	D
Northbound Lt/Th/Rt	8.3	A	8.5	A	9.1	A	8.6	A	8.9	A	9.4	A
Southbound Lt/Th/Rt	7.5	A	7.7	A	7.9	A	7.7	A	7.8	A	8.0	A

Delay is measured in seconds per vehicle.

The analysis summarized in **Table 12** shows that existing eastbound traffic traveling through the subject intersection is currently experiencing congested conditions in the peak PM hour. These findings align with the concerns expressed by community members.

A sensitivity analysis of the build scenario plus (%) neighborhood growth was completed to determine anticipated delay and level of service for this intersection. The results of this analysis are summarized in **Table 13A** and **13B**.

TABLE 13A: SCOTT STREET & PHILLIPS STREET PEAK AM SENSITIVITY ANALYSIS

PEAK AM HOUR								
	25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	305.9	F	738.9	F	1471.8	F	2757.9	F
Westbound Lt/Th/Rt	25.4	D	36.0	E	55.5	F	97.6	F
Northbound Lt/Th/Rt	9.9	A	10.8	B	12.0	B	13.5	B
Southbound Lt/Th/Rt	8.0	A	8.2	A	8.4	A	8.5	A

Delay is measured in seconds per vehicle.

TABLE 13B: SCOTT STREET & PHILLIPS STREET PEAK PM SENSITIVITY ANALYSIS

PEAK PM HOUR								
	25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	1123.6	F	2303.8	F	4569.8	F	9542.7	F
Westbound Lt/Th/Rt	37.8	E	56.3	F	90.7	F	164.4	F
Northbound Lt/Th/Rt	10.0	B	10.7	B	11.6	B	12.6	B
Southbound Lt/Th/Rt	8.3	A	8.6	A	9.0	A	9.3	A

Delay is measured in seconds per vehicle.

As summarized above, significant delays currently exist and are anticipated to increase with any additional traffic at this intersection. Therefore, to accommodate even the anticipated No-Build traffic volumes, it is recommended that this intersection is constructed as an urban mini-roundabout. A capacity analysis for a roundabout configuration is summarized in **Table 14**.

TABLE 14: SCOTT STREET & PHILLIPS STREET ROUNDABOUT LOS SUMMARY

	PEAK AM HOUR						PEAK PM HOUR					
	EXISTING		NO-BUILD		BUILD		EXISTING		NO-BUILD		BUILD	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	5.0	A	5.9	A	7.2	A	6.1	A	6.9	A	8.2	A
Westbound Lt/Th/Rt	4.3	A	5.0	A	5.8	A	5.0	A	5.6	A	7.0	A
Northbound Lt/Th/Rt	3.8	A	3.8	A	3.9	A	4.4	A	4.5	A	4.9	A
Southbound Lt/Th/Rt	2.6	A	2.6	A	2.7	A	3.0	A	3.1	A	3.3	A

Delay is measured in seconds per vehicle.

The analysis summarized in **Table 14** shows that the subject intersection configured as a roundabout operates at a very good LOS and that traffic generated by the Ravara Development will have minimal impact on delay and traffic operations at this intersection.

The neighborhood growth sensitivity analysis was also completed with this intersection modeled as a roundabout. The results of that analysis are summarized in **Table 15A** and **15B.**

TABLE 15A: SCOTT STREET & PHILLIPS STREET ROUNDABOUT PEAK AM SENSITIVITY ANALYSIS

PEAK AM HOUR								
	25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	9.1	A	13.6	B	29.1	C	82.6	F
Westbound Lt/Th/Rt	6.6	A	7.5	A	8.5	A	9.6	A
Northbound Lt/Th/Rt	4.2	A	4.5	A	5.2	A	6.6	A
Southbound Lt/Th/Rt	2.9	A	3.2	A	4.0	A	22.1	C

Delay is measured in seconds per vehicle.

TABLE 15B: SCOTT STREET & PHILLIPS STREET ROUNDABOUT PEAK PM SENSITIVITY ANALYSIS

PEAK PM HOUR								
	25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	11.6	B	18.5	B	49.3	D	138.9	F
Westbound Lt/Th/Rt	8.9	A	11.6	B	15.8	B	16.2	B
Northbound Lt/Th/Rt	6.7	A	11.9	B	32.2	C	54.6	E
Southbound Lt/Th/Rt	3.5	A	3.8	A	6.0	A	10.3	B

Delay is measured in seconds per vehicle.

The analysis summarized in **Table 15A** and **15B** shows that the subject intersection as a roundabout operates at a very good LOS until approximately 75% of the neighborhood growth.

INTERSECTION OF SCOTT STREET AND TOOLE AVENUE

EXISTING CONDITIONS

Scott Street is a north/south urban collector with one travel lane in each direction. Toole Avenue is an east/west urban collector with one travel lane in each direction. The intersection of these two corridors is an urban mini roundabout. The speed limit is 25 miles per hour on Scott Street and 30 miles per hour on Toole Avenue.

CAPACITY ANALYSIS

Capacity analysis of this intersection was conducted using the existing, no-build, and build traffic volumes developed earlier in this report and the intersection configuration described above. The results of this analysis are summarized in **Table 16**.

TABLE 16: SCOTT STREET & TOOLE AVENUE LOS SUMMARY

	PEAK AM HOUR						PEAK PM HOUR					
	EXISTING		NO-BUILD		BUILD		EXISTING		NO-BUILD		BUILD	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	5.4	A	6.1	A	7.1	A	7.0	A	8.4	A	10.9	B
Westbound Lt/Th/Rt	3.8	A	4.1	A	4.6	A	5.1	A	5.4	A	6.4	A
Northbound Lt/Th/Rt	4.7	A	5.0	A	5.4	A	5.5	A	5.8	A	6.5	A
Southbound Lt/Th/Rt	4.7	A	4.8	A	4.9	A	5.7	A	6.2	A	7.5	A

Delay is measured in seconds per vehicle.

The analysis summarized in **Table 16** shows that the subject intersection operates at a very good LOS and the site-generated traffic will have minimal impact on delay or traffic operations at this intersection.

A sensitivity analysis of the build scenario plus (%) neighborhood growth was completed to determine anticipated delay and level of service for this intersection. The results of this analysis are summarized in **Table 17A** and **17B**.

TABLE 17A: SCOTT STREET & TOOLE AVENUE PEAK AM SENSITIVITY ANALYSIS

PEAK AM HOUR								
	25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	9.3	A	12.6	B	19.3	B	37.1	D
Westbound Lt/Th/Rt	5.0	A	5.4	A	5.9	A	6.7	A
Northbound Lt/Th/Rt	6.0	A	6.6	A	7.2	A	8.0	A
Southbound Lt/Th/Rt	5.2	A	6.4	A	8.9	A	14.8	B

Delay is measured in seconds per vehicle.

TABLE 17B: SCOTT STREET & TOOLE AVENUE PEAK PM SENSITIVITY ANALYSIS

PEAK PM HOUR								
	25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	15.2	B	24.4	C	49.2	D	99.5	F
Westbound Lt/Th/Rt	8.9	A	12.6	B	19.3	B	31.1	C
Northbound Lt/Th/Rt	7.5	A	10.1	B	13.8	B	15.3	B
Southbound Lt/Th/Rt	9.4	A	12.8	B	20.2	C	38.5	D

Delay is measured in seconds per vehicle.

The analysis shows that the subject intersection operates at a good LOS until approximately 75% of the neighborhood growth.

INTERSECTION OF NORTH ORANGE STREET, I-90 EASTBOUND RAMPS, AND NORTH 5TH STREET WEST

EXISTING CONDITIONS

North Orange Street is a principal arterial with one travel lane in each direction that is primarily oriented north/south at this intersection. North 5th Street West is a local collector with one travel lane in each direction that is primarily oriented east/west at this intersection. The I-90 Eastbound on and off ramps are also approaches of this five-leg, single-lane roundabout intersection. The speed limit is 30 miles per hour on North Orange Street and 25 miles per hour on North 5th Street West.

CAPACITY ANALYSIS

Capacity analysis of this intersection was conducted using the no-build and build traffic volumes developed earlier in this report and the intersection configuration described above. The results of this analysis are summarized in **Table 18**.

TABLE 18: NORTH ORANGE STREET, I-90 EASTBOUND RAMPS, & NORTH 5TH STREET WEST LOS SUMMARY

	PEAK AM HOUR						PEAK PM HOUR					
	EXISTING		NO-BUILD		BUILD		EXISTING		NO-BUILD		BUILD	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Northbound Orange St.	1.7	A	1.7	A	1.8	A	2.2	A	2.2	A	2.2	A
Southbound Orange St.	0.8	A	0.8	A	0.8	A	1.4	A	1.4	A	1.5	A
I-90 EB Off-Ramp	2.0	A	2.1	A	2.1	A	5.6	A	5.7	A	6.0	A
Eastbound N. 5th St. W.	6.1	A	6.1	A	6.1	A	8.0	A	8.0	A	8.0	A

Delay is measured in seconds per vehicle.

The analysis summarized in **Table 18** shows that the subject intersection operates at a very good LOS and the site-generated traffic will have no appreciable impact on delay or traffic operations at this intersection.

A sensitivity analysis of the build scenario plus (%) neighborhood growth was completed to determine anticipated delay and level of service for this intersection. The results of this analysis are summarized in **Table 19A** and **19B**.

TABLE 19A: NORTH ORANGE STREET, I-90 EASTBOUND RAMPS, & NORTH 5TH STREET WEST PEAK AM SENSITIVITY ANALYSIS

PEAK AM HOUR								
	25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Northbound Orange St.	1.8	A	1.9	A	1.9	A	1.9	A
Southbound Orange St.	0.8	A	0.9	A	0.9	A	0.9	A
I-90 EB Off-Ramp	2.1	A	2.2	A	2.2	A	2.2	A
Eastbound N. 5th St. W.	6.1	A	6.1	A	6.2	A	6.2	A

Delay is measured in seconds per vehicle.

TABLE 19B: NORTH ORANGE STREET, I-90 EASTBOUND RAMPS, & NORTH 5TH STREET WEST PEAK PM SENSITIVITY ANALYSIS

PEAK PM HOUR								
	25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Northbound Orange St.	2.3	A	2.3	A	2.4	A	2.4	A
Southbound Orange St.	1.5	A	1.5	A	1.6	A	1.6	A
I-90 EB Off-Ramp	6.3	A	6.6	A	6.9	A	7.3	A
Eastbound N. 5th St. W.	8.1	A	8.1	A	8.1	A	8.1	A

Delay is measured in seconds per vehicle.

The analysis shows that the subject intersection will operate at a very good LOS and will be able to accommodate 100% of the neighborhood growth.

INTERSECTION OF GRANT CREEK ROAD & HOWARD RASER AVENUE

EXISTING CONDITIONS

Grant Creek Road is a north/south urban collector with one travel lane in each direction. Howard Raser Avenue is an east/west corridor with one travel lane in each direction. Howard Raser Avenue is classified as a local collector on the eastbound approach and as a local street on the westbound approach. This intersection is stop controlled on the eastbound and westbound approaches of Howard Raser Avenue. The speed limit is 30 miles per hour on Grant Creek Road and 25 miles per hour on Howard Raser Avenue.

CAPACITY ANALYSIS

Capacity analysis of this intersection was conducted using the existing, no-build, and build traffic volumes developed earlier in this report and the intersection configuration described above. The results of this analysis are summarized in **Table 20**.

TABLE 20: GRANT CREEK ROAD & HOWARD RASER AVENUE LOS SUMMARY

	PEAK AM HOUR						PEAK PM HOUR					
	EXISTING		NO-BUILD		BUILD		EXISTING		NO-BUILD		BUILD	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	11.2	B	11.4	B	11.8	B	11.7	B	11.9	B	12.3	B
Westbound Lt/Th/Rt	8.8	A	8.8	A	8.8	A	14.3	B	14.8	B	15.8	C
Northbound Lt/Th/Rt	7.8	A	7.9	A	7.9	A	7.8	A	7.8	A	7.9	A
Southbound Lt/Th/Rt	7.5	A	7.5	A	7.5	A	7.5	A	7.5	A	7.5	A

Delay is measured in seconds per vehicle.

The analysis summarized in **Table 20** shows that the subject intersection operates at a LOS of C or better and will be able to accommodate the Build scenario traffic without requiring intersection improvements.

A sensitivity analysis of the build scenario plus (%) neighborhood growth was completed to determine anticipated delay and level of service for this intersection. The results of this analysis are summarized in **Table 21A** and **21B**.

TABLE 21A: GRANT CREEK ROAD & HOWARD RASER AVENUE PEAK AM SENSITIVITY ANALYSIS

PEAK AM HOUR								
	25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	12.4	B	13.1	B	13.9	B	14.9	B
Westbound Lt/Th/Rt	8.8	A	8.8	A	8.8	A	8.8	A
Northbound Lt/Th/Rt	8.0	A	8.1	A	8.2	A	8.3	A
Southbound Lt/Th/Rt	7.5	A	7.5	A	7.5	A	7.5	A

Delay is measured in seconds per vehicle.

TABLE 21B: GRANT CREEK ROAD & HOWARD RASER AVENUE PEAK PM SENSITIVITY ANALYSIS

PEAK PM HOUR								
	25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	12.8	B	13.5	B	14.3	B	15.3	C
Westbound Lt/Th/Rt	17.0	C	18.4	C	29.9	C	21.7	C
Northbound Lt/Th/Rt	7.9	A	8.0	A	8.0	A	8.1	A
Southbound Lt/Th/Rt	7.5	A	7.5	A	7.5	A	7.5	A

Delay is measured in seconds per vehicle.

The analysis summarized in **Table 21A** and **21B** shows that the subject intersection operates at a LOS of C or better and will be able to accommodate 100% of the anticipated neighborhood growth without requiring intersection improvements.

PROPOSED TRANSPORTATION NETWORK TRIP DIVERSION

The sensitivity analysis completed on the existing transportation network indicates that after approximately 75% of the neighborhood growth, vehicular traffic may begin experiencing delays generally considered longer than acceptable. To address this anticipated congestion, the proposed transportation network in the NRSS Master Plan consists of the following improvements (as shown in **Figure 2)**:

- A new I-90 interchange at the current Coal Mine Road interstate underpass.
- Connecting Howard Raser Avenue to the new I-90 interchange.
- Improving the Industrial Connector Road between Grant Creek Road and Coal Mine Road.
- Connecting Turner Street to Rogers Avenue/Cemetery Road.
- Constructing a roundabout at the intersection of Scott Street and Turner Street.

In 2016, the City of Missoula utilized a TransCAD based traffic demand model to assess the transportation infrastructure needed to support the project development outlined in the NRSS Master Plan. The traffic model scenarios included the 2036 projected traffic volumes with the existing street network (**Figure 10**) and the 2036 projected traffic volumes with Howard Raser Avenue extension and an I-90 interchange near Coal Mine Road (**Figure 11**). It is anticipated that as the transportation network is expanded, trips will be diverted from existing streets to new streets. For example, the improvements outlined above are expected to result in an approximately 30% reduction in traffic along Scott Street, as determined with the TransCAD based traffic demand modeling.

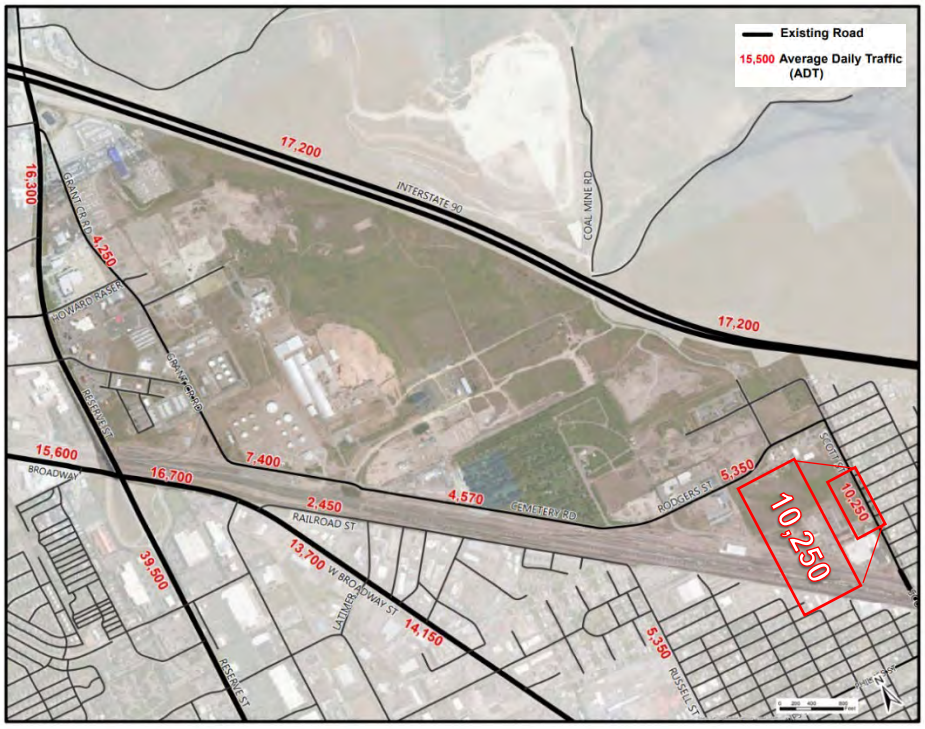


FIGURE 10: 2036 PROJECTED TRAFFIC VOLUMES WITH EXISTING STREET NETWORK (IMAGE SOURCE: NRSS MASTER PLAN)

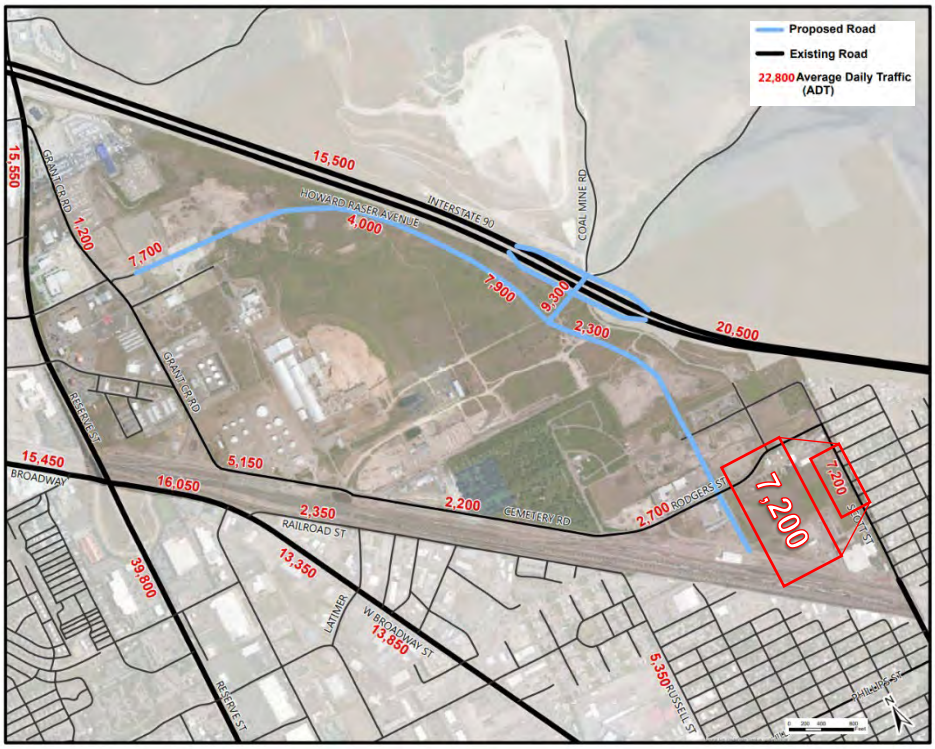


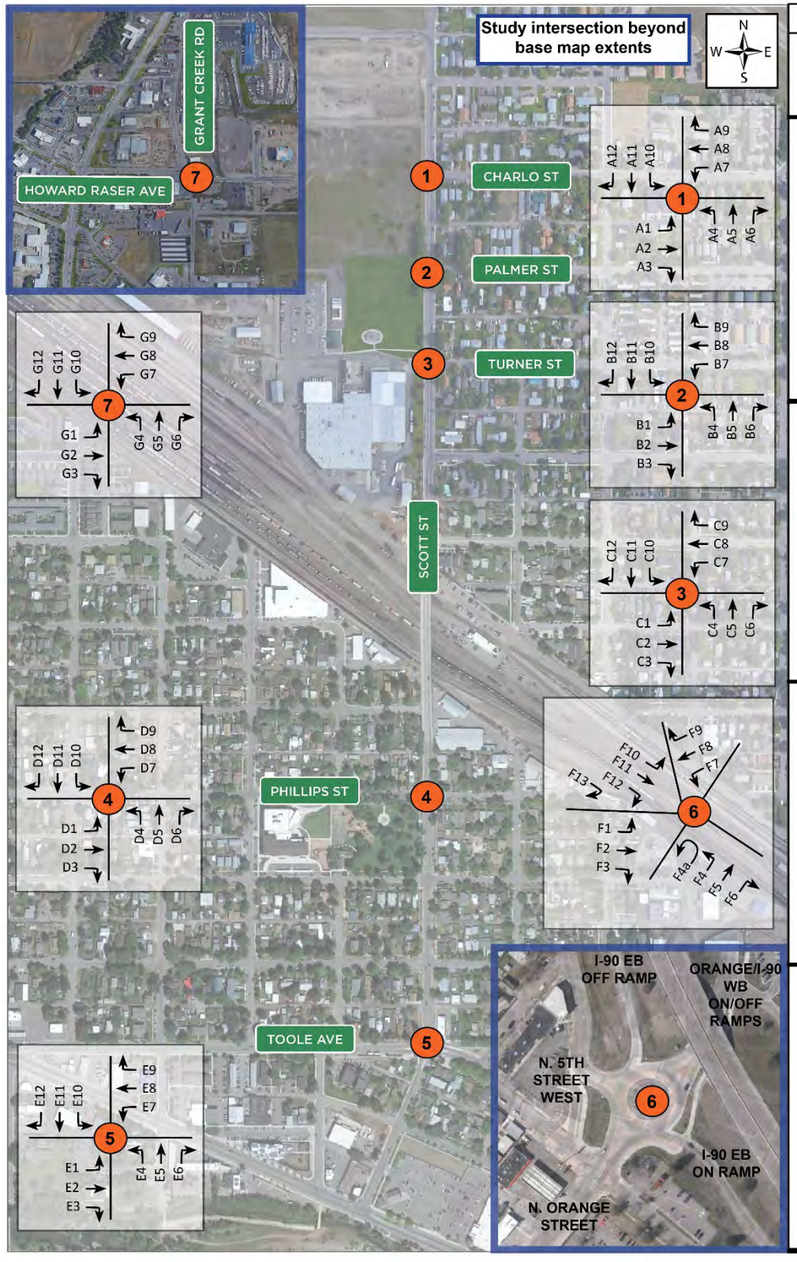
FIGURE 11: 2036 PROJECTED TRAFFIC VOLUMES WITH HOWARD RASER EXTENSION & I-90 INTERCHANGE (IMAGE SOURCE: NRSS MASTER PLAN)

Arrival and departure distribution patterns for the Ravara Development's site-generated traffic were developed for the proposed transportation network, as shown in **Figures 12** and **13**. Furthermore, diverted trips for each of the proposed adjacent developments, the Ravara development, and the neighborhood growth "area of interest" were combined and are tabulated in **Figures 14**, **15**, **16**, and **17**. The proposed network build and neighborhood growth traffic volumes are the existing transportation network volumes plus or minus the diverted trips.

Capacity analysis of the study intersections was completed based on the proposed transportation network to determine estimated vehicular delay and level of service at each of the study intersections.

FIGURE 12: GOODWORKS DEVELOPMENT ARRIVAL PATTERN (PROPOSED TRANSPORTATION NETWORK)

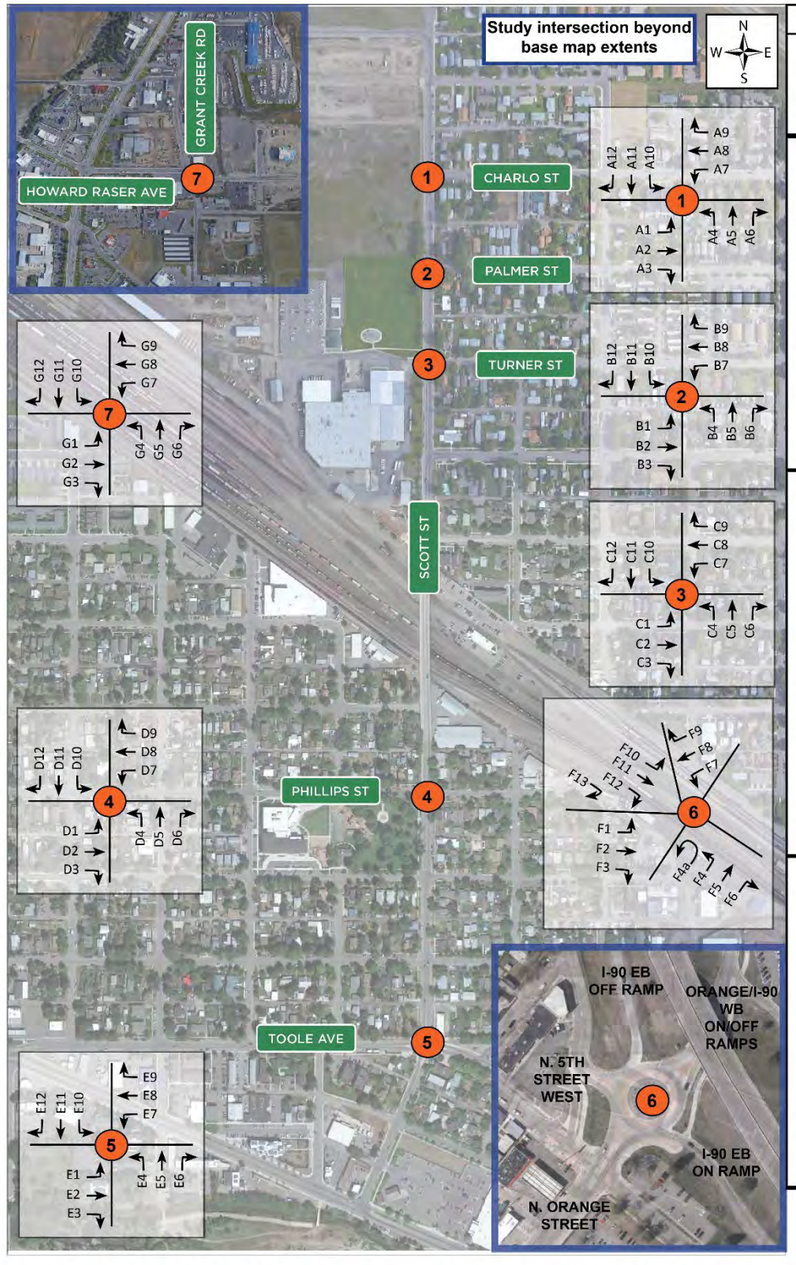
FIGURE 13: GOODWORKS DEVELOPMENT DEPARTURE PATTERN (PROPOSED TRANSPORTATION NETWORK)



Peak AM Volumes - Proposed Transportation Network

Intersection Name & Number	Movement Number	Build Volume [Existing Transportation Network]	Diverted Trips	Build Volume [Proposed Transportation Network]	Build + 25% Neighborhood Growth	Build + 50% Neighborhood Growth	Build + 75% Neighborhood Growth	Build + 100% Neighborhood Growth
#1 - Scott St. & Charlo St.	A1	0	0	0	0	0	0	0
	A2	0	0	0	0	0	0	0
	A3	40	-11	29	29	29	29	29
	A4	29	-8	21	21	21	21	21
	A5	164	-12	152	181	209	238	267
	A6	10	0	10	10	10	10	10
	A7	14	0	14	14	14	14	14
	A8	0	0	0	0	0	0	0
	A9	5	0	5	5	5	5	5
	A10	0	0	0	0	0	0	0
	A11	214	-29	185	241	296	352	407
	A12	0	0	0	0	0	0	0
#2 - Scott St. & Palmer St.	B1	0	0	0	0	0	0	0
	B2	0	0	0	0	0	0	0
	B3	80	-21	58	58	58	58	58
	B4	58	0	57	57	57	57	57
	B5	193	-20	173	201	230	259	288
	B6	4	0	4	4	4	4	4
	B7	11	0	11	11	11	11	11
	B8	0	0	0	0	0	0	0
	B9	3	0	3	3	3	3	3
	B10	0	0	0	0	0	0	0
	B11	284	-40	244	299	355	410	466
	B12	0	0	0	0	0	0	0
#3 - Scott St. & Turner St.	C1	3	-1	2	2	2	2	2
	C2	3	9	12	15	19	23	26
	C3	19	4	23	75	127	179	230
	C4	82	-29	54	81	108	134	161
	C5	230	-17	213	238	264	290	316
	C6	8	0	8	8	8	8	8
	C7	13	0	13	13	13	13	13
	C8	10	6	16	18	20	22	23
	C9	25	-2	23	26	29	32	35
	C10	11	5	16	21	27	32	38
	C11	354	-61	293	343	393	443	492
	C12	5	-4	1	1	1	1	1
#4 - Scott St. & Phillips St.	D1	123	-15	108	125	143	160	177
	D2	10	0	10	10	10	10	10
	D3	99	0	99	99	99	99	99
	D4	64	0	64	64	64	64	64
	D5	224	-31	193	229	264	300	335
	D6	7	0	7	7	7	7	7
	D7	2	0	2	2	2	2	2
	D8	5	0	5	5	5	5	5
	D9	5	0	5	5	5	5	5
	D10	2	0	2	2	2	2	2
	D11	309	-44	266	334	403	471	539
	D12	183	-14	169	202	235	268	302

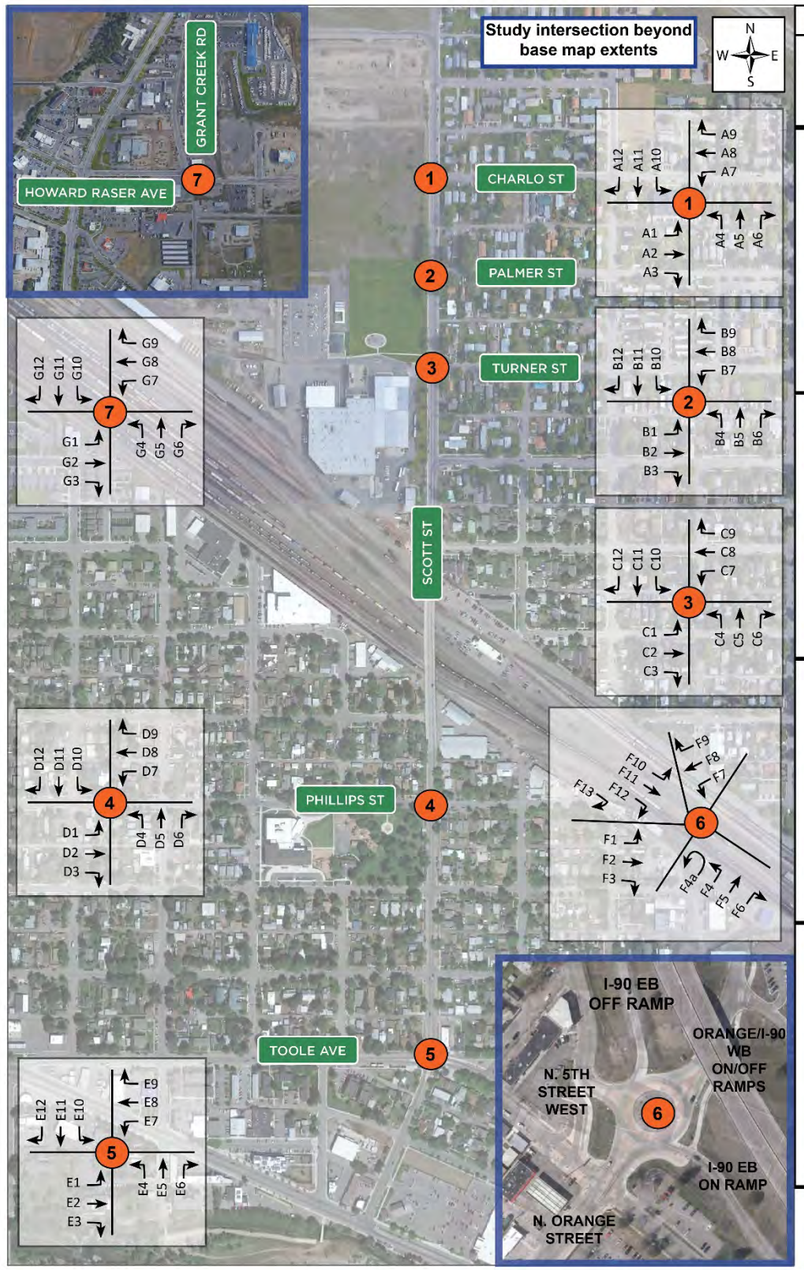
FIGURE 14: INTERSECTION #1 TO #4 AM VOLUMES OF ALL ANALYSIS SCENARIOS (PROPOSED TRANSPORTATION NETWORK)



Peak AM Volumes - Proposed Transportation Network

Intersection Name & Number	Movement Number	Build Volume [Existing Transportation Network]	Diverted Trips	Build Volume [Proposed Transportation Network]	Build + 25% Neighborhood Growth	Build + 50% Neighborhood Growth	Build + 75% Neighborhood Growth	Build + 100% Neighborhood Growth
#5 - Scott St. & Toole Ave.	E1	79	-5	74	84	95	105	116
	E2	232	0	232	232	232	232	232
	E3	16	0	16	16	16	16	16
	E4	2	0	2	2	2	2	2
	E5	83	-15	69	82	95	109	122
	E6	10	0	10	10	10	10	10
	E7	7	0	7	7	7	7	7
	E8	185	0	185	185	185	185	185
	E9	99	-11	88	100	111	123	134
	E10	111	-16	95	110	125	139	154
	E11	180	-21	159	189	218	248	277
	E12	105	-7	98	122	146	170	194
#6 - N. Orange St/N. 5th St. W./I-90 EB Ramps	F1	8	0	8	8	8	8	8
	F2	45	-3	42	42	42	42	42
	F3	76	16	92	101	111	120	129
	F4a	1	0	1	1	1	1	1
	F4	39	15	54	59	64	68	73
	F5	231	4	235	248	261	275	288
	F6	181	0	181	181	181	181	181
	F7	0	0	0	0	0	0	0
	F8	315	0	315	315	315	315	315
	F9	29	-7	22	22	22	22	22
	F10	0	0	0	0	0	0	0
	F11	0	0	0	0	0	0	0
	F12	390	12	402	431	461	490	520
	F13	6	-3	3	3	3	3	3
# 7 - Grant Creek Rd. & Howard Raser Ave.	G1	28	0	28	28	28	28	28
	G2	17	2	19	24	28	33	38
	G3	96	-5	91	96	100	105	110
	G4	123	-17	106	115	125	134	143
	G5	52	0	52	52	52	52	52
	G6	2	0	2	2	2	2	2
	G7	0	0	0	0	0	0	0
	G8	0	5	5	15	24	33	42
	G9	1	0	1	1	1	1	1
	G10	0	0	0	0	0	0	0
	G11	28	0	28	28	28	28	28
	G12	44	0	44	44	44	44	44

FIGURE 15: INTERSECTION #5 TO #7 AM VOLUMES OF ALL ANALYSIS SCENARIOS (PROPOSED TRANSPORTATION NETWORK)



Peak PM Volumes - Proposed Transportation Network

Intersection Name & Number	Movement Number	Build Volume [Existing Transportation Network]	Diverted Trips	Build Volume [Proposed Transportation Network]	Build + 25% Neighborhood Growth	Build + 50% Neighborhood Growth	Build + 75% Neighborhood Growth	Build + 100% Neighborhood Growth
#1 - Scott St. & Charlo St.	0	0	0	0	0	0	0	5
	0	0	0	0	0	0	0	0
	50	-10	40	40	40	40	40	28
	44	-12	32	32	32	32	32	42
	242	-32	210	266	322	379	435	431
	27	0	27	27	27	27	27	27
	11	0	11	11	11	11	11	11
	0	0	0	0	0	0	0	0
	8	0	8	8	8	8	8	8
	11	0	11	11	11	11	11	11
	271	-17	254	298	342	386	430	450
	18	0	18	18	18	18	18	0
#2 - Scott St. & Palmer St.	12	0	12	12	12	12	12	9
	0	0	0	0	0	0	0	0
	68	-8	60	60	60	60	60	68
	104	-24	80	80	80	80	80	84
	300	-44	256	312	368	424	481	490
	11	0	11	11	11	11	11	11
	13	0	13	13	13	13	13	13
	0	0	0	0	0	0	0	0
	3	0	3	3	3	3	3	3
	6	0	6	6	6	6	6	6
	329	-27	302	346	390	434	479	486
	0	0	0	0	0	0	0	0
#3 - Scott St. & Turner St.	9	-6	3	3	3	3	3	3
	11	9	20	23	26	29	32	33
	77	-18	59	100	141	182	223	224
	14	4	18	70	123	175	227	229
	362	-56	306	357	407	458	508	520
	24	0	24	24	24	24	24	24
	19	0	19	19	19	19	19	19
	3	10	13	17	21	24	28	29
	40	-6	34	39	45	51	56	57
	13	4	17	22	26	30	35	36
	411	-38	373	413	453	492	532	546
	2	-1	1	1	1	1	1	1
#4 - Scott St. & Phillips St.	211	-15	196	230	263	297	331	335
	9	0	9	9	9	9	9	9
	122	0	122	122	122	122	122	122
	118	0	118	118	118	118	118	118
	327	-37	290	359	428	498	567	576
	9	0	9	9	9	9	9	9
	0	0	0	0	0	0	0	0
	11	0	11	11	11	11	11	11
	4	0	4	4	4	4	4	4
	2	0	2	2	2	2	2	2
	398	-42	356	411	465	519	573	584
	201	-14	187	213	240	266	293	297

FIGURE 16: INTERSECTION #1 TO #4 PM VOLUMES OF ALL ANALYSIS SCENARIOS (PROPOSED TRANSPORTATION NETWORK)

Peak PM Volumes - Proposed Transportation Network

Intersection Name and Number	Movement Number	Build Volume [Existing Transportation Network]	Diverted Trips	Build Volume [Proposed Transportation Network]	Build + 25% Neighborhood Growth	Build + 50% Neighborhood Growth	Build + 75% Neighborhood Growth	Build + 100% Neighborhood Growth
#5 - Scott St. & Toole Ave.	E1	119	-7	113	133	154	174	195
	E2	282	0	282	282	282	282	282
	E3	37	0	37	37	37	37	37
	E4	9	0	9	9	9	9	9
	E5	160	-16	144	170	196	222	249
	E6	37	0	37	37	37	37	37
	E7	37	0	37	37	37	37	37
	E8	282	0	282	282	282	282	282
	E9	130	-14	116	139	161	184	206
	E10	116	-16	99	111	123	135	146
	E11	264	-19	244	268	291	315	338
	E12	120	-6	113	132	151	171	190
#6 - N. Orange St/N. 5th St. W./I-90 EB Ramps	F1	6	0	6	6	6	6	6
	F2	56	-4	52	52	52	52	52
	F3	55	17	71	79	86	93	101
	F4a	3	0	3	3	3	3	3
	F4	127	15	142	151	161	170	179
	F5	482	10	492	518	545	571	597
	F6	357	0	357	357	357	357	357
	F7	1	0	1	1	1	1	1
	F8	358	0	358	358	358	358	358
	F9	113	-8	105	105	105	105	105
	F10	1	0	1	1	1	1	1
	F11	0	0	0	0	0	0	0
	F12	463	7	470	494	517	541	564
	F13	26	-3	23	23	23	23	23
# 7 - Grant Creek Rd & Howard Raser Ave.	G1	33	0	33	33	33	33	33
	G2	3	5	8	18	27	36	46
	G3	149	-17	132	141	151	160	169
	G4	191	-13	178	185	193	200	207
	G5	96	0	96	96	96	96	96
	G6	0	0	0	0	0	0	0
	G7	3	0	3	3	3	3	3
	G8	18	3	21	29	36	43	51
	G9	6	0	6	6	6	6	6
	G10	1	0	1	1	1	1	1
	G11	38	0	38	38	38	38	38
	G12	51	0	51	51	51	51	51

FIGURE 17: INTERSECTION #5 TO #7 PM VOLUMES OF ALL ANALYSIS SCENARIOS (PROPOSED TRANSPORTATION NETWORK)

CAPACITY ANALYSIS – PROPOSED TRANSPORTATION NETWORK

Capacity analysis was conducted for each of the study's intersections using the proposed transportation network's peak AM and PM build and incremental neighborhood growth traffic volumes forecasted in this report. Existing intersections were evaluated in accordance with the procedures presented in the *Highway Capacity Manual*, 6th Edition, published by the Transportation Research Board. The analysis results are discussed below and the analysis worksheets are contained in **Appendix D**.

INTERSECTION OF SCOTT STREET AND CHARLO STREET

Capacity analysis of this intersection was conducted using the proposed transportation network's build and neighborhood growth traffic volumes and the four-way intersection configuration described previously in this report. The results of this analysis are summarized in **Table 22A** and **22B**.

TABLE 22A: SCOTT STREET & CHARLO STREET PEAK AM HOUR LOS SUMMARY

PEAK AM HOUR										
	BUILD		Build + (%) Neighborhood Growth							
			25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	9.8	A	10.3	B	10.9	B	11.5	B	12.2	B
Westbound Lt/Th/Rt	12.7	B	14.1	B	15.7	C	17.8	C	20.3	C
Northbound Lt/Th/Rt	7.9	A	8.0	A	8.2	A	8.5	A	8.7	A
Southbound Lt/Th/Rt	7.7	A	7.8	A	7.9	A	8.0	A	8.1	A

Delay is measured in seconds per vehicle.

TABLE 22B: SCOTT STREET & CHARLO STREET PEAK PM HOUR LOS SUMMARY

PEAK PM HOUR										
	BUILD		Build + (%) Neighborhood Growth							
			25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	10.1	B	10.5	B	10.9	B	11.3	B	11.7	B
Westbound Lt/Th/Rt	13.4	B	14.9	B	16.7	C	19.0	C	21.7	C
Northbound Lt/Th/Rt	7.9	A	8.1	A	8.2	A	8.3	A	8.5	A
Southbound Lt/Th/Rt	7.8	A	7.9	A	8.1	A	8.3	A	8.5	A

Delay is measured in seconds per vehicle.

The analysis summarized in **Table 22A** and **22B** shows that the subject intersection will operate at a LOS of C or better when all of the anticipated neighborhood development has been constructed and occupied. No additional intersection improvements are necessary.

INTERSECTION OF SCOTT STREET AND PALMER STREET

Capacity analysis of this intersection was conducted using the proposed transportation network's build and neighborhood growth traffic volumes and the four-way intersection configuration described above. The results of this analysis are summarized in **Table 23A** and **23B**.

TABLE 23A: SCOTT STREET & PALMER STREET PEAK AM HOUR LOS SUMMARY

PEAK AM HOUR										
	BUILD		Build + (%) Neighborhood Growth							
			25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	10.9	B	11.6	B	12.4	B	13.3	B	14.4	B
Westbound Lt/Th/Rt	17.8	C	20.6	C	24.3	C	29.1	D	35.4	E
Northbound Lt/Th/Rt	8.2	A	8.5	A	8.7	A	9.0	A	9.3	A
Southbound Lt/Th/Rt	7.8	A	7.9	A	8.0	A	8.1	A	8.2	A

Delay is measured in seconds per vehicle.

TABLE 23B: SCOTT STREET & PALMER STREET PEAK PM HOUR LOS SUMMARY

PEAK PM HOUR										
	BUILD		Build + (%) Neighborhood Growth							
			25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	12.9	B	14.0	B	15.4	C	17.1	C	19.2	C
Westbound Lt/Th/Rt	20.3	C	23.9	D	28.4	D	34.2	D	42.0	E
Northbound Lt/Th/Rt	8.2	A	8.4	A	8.5	A	8.7	A	8.9	A
Southbound Lt/Th/Rt	7.9	A	8.0	A	8.2	A	8.4	A	8.6	A

Delay is measured in seconds per vehicle.

The analysis summarized in **Table 23A** and **23B** shows that the subject intersection will operates at a LOS of C or better in the Build scenario. Westbound traffic is expected to experience longer delays after about 25% of neighborhood development. However, there is no additional traffic assigned to the westbound approach and the existing traffic volumes indicate peak hour volumes of approximately 14-16 vehicles per hour. As previously discussed, this traffic should redistribute through the grid network to routes with less delays before these predicted delay levels are approached.

INTERSECTION OF SCOTT STREET AND TURNER STREET

Capacity analysis of this intersection was conducted using the proposed transportation network's build and neighborhood growth traffic volumes and the intersection configured as a single-lane roundabout. The results of this analysis are summarized in **Table 24A** and **24B**.

TABLE 24A: SCOTT STREET & TURNER STREET PEAK AM HOUR LOS SUMMARY

PEAK AM HOUR										
	BUILD		Build + (%) Neighborhood Growth							
			25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	4.5	A	5.1	A	5.9	A	6.8	A	9.2	A
Westbound Lt/Th/Rt	4.8	A	5.2	A	5.6	A	6.0	A	6.5	A
Northbound Lt/Th/Rt	2.7	A	3.0	A	3.2	A	3.4	A	3.6	A
Southbound Lt/Th/Rt	2.6	A	3.0	A	3.4	A	3.9	A	4.5	A

Delay is measured in seconds per vehicle.

TABLE 24B: SCOTT STREET & TURNER STREET PEAK PM HOUR LOS SUMMARY

PEAK PM HOUR										
	BUILD		Build + (%) Neighborhood Growth							
			25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	5.4	A	6.1	A	6.8	A	7.8	A	11.1	B
Westbound Lt/Th/Rt	5.5	A	6.3	A	7.4	A	8.7	A	10.5	B
Northbound Lt/Th/Rt	2.3	A	2.8	A	3.1	A	3.5	A	3.9	A
Southbound Lt/Th/Rt	2.3	A	3.0	A	3.8	A	5.1	A	8.4	A

Delay is measured in seconds per vehicle.

The analysis summarized in **Table 24A** and **24B** shows that the subject intersection will operate at a good LOS and traffic generated by 100% of the neighborhood growth will have minimal impact on delay or traffic operations.

INTERSECTION OF SCOTT STREET AND PHILLIPS STREET

Capacity analysis of this intersection was conducted using the proposed transportation network's build and neighborhood growth traffic volumes and the intersection configuration described above. The results of this analysis are summarized in **Table 25A** and **25B**.

TABLE 25A: SCOTT STREET & PHILLIPS STREET PEAK AM HOUR LOS SUMMARY

PEAK AM HOUR										
	BUILD		Build + (%) Neighborhood Growth							
			25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	40.8	E	106.2	F	268.0	F	520.0	F	882.4	F
Westbound Lt/Th/Rt	17.0	C	20.2	C	24.6	C	30.8	D	39.9	E
Northbound Lt/Th/Rt	8.8	A	9.3	A	9.8	A	10.5	B	11.2	B
Southbound Lt/Th/Rt	7.8	A	7.9	A	8.0	A	8.1	A	8.2	A

Delay is measured in seconds per vehicle.

TABLE 25B: SCOTT STREET & PHILLIPS STREET PEAK PM HOUR LOS SUMMARY

PEAK PM HOUR										
	BUILD		Build + (%) Neighborhood Growth							
			25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	307.6	F	631.8	F	1109.2	F	1830.9	F	2933.1	F
Westbound Lt/Th/Rt	23.8	C	29.4	D	37.1	E	48.2	E	64.7	F
Northbound Lt/Th/Rt	9.2	A	9.5	A	10.0	B	10.4	B	10.9	B
Southbound Lt/Th/Rt	7.9	A	8.1	A	8.3	A	8.5	A	8.8	A

Delay is measured in seconds per vehicle.

The analysis summarized in **Table 25A** and **25B** shows that traffic traveling through the intersection may experience significant delays if this intersection is maintained as a two-way stop-controlled intersection. Again, it is recommended that this intersection is configured as an urban mini roundabout before any additional traffic is added to the transportation network. Therefore, a capacity analysis of the intersection modeled as a roundabout was also completed.

TABLE 26A: SCOTT STREET & PHILLIPS STREET ROUNDABOUT PEAK AM LOS SUMMARY

PEAK AM HOUR										
	BUILD		Build + (%) Neighborhood Growth							
			25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	6.5	A	7.5	A	8.7	A	11.1	B	15.1	B
Westbound Lt/Th/Rt	5.4	A	5.9	A	6.4	A	7.0	A	7.7	A
Northbound Lt/Th/Rt	3.8	A	4.0	A	4.1	A	4.4	A	4.6	A
Southbound Lt/Th/Rt	2.7	A	2.8	A	2.9	A	3.1	A	3.4	A

Delay is measured in seconds per vehicle.

TABLE 26B: SCOTT STREET & PHILLIPS STREET ROUNDABOUT PEAK PM LOS SUMMARY

PEAK PM HOUR										
	BUILD		Build + (%) Neighborhood Growth							
			25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	7.5	A	8.9	A	11.2	B	14.8	B	22.1	C
Westbound Lt/Th/Rt	6.4	A	7.6	A	9.0	A	10.9	B	13.3	B
Northbound Lt/Th/Rt	4.8	A	5.2	A	6.9	A	10.2	B	17.5	B
Southbound Lt/Th/Rt	3.2	A	3.3	A	3.5	A	3.7	A	4.0	A

Delay is measured in seconds per vehicle.

As shown by the results summarized in **Table 26A** and **26B**, the expected level of service will vary from acceptable to very good during the peak hours if the intersection is upgraded to a roundabout. No additional improvements are needed to accommodate 100% of the neighborhood growth.

INTERSECTION OF SCOTT STREET AND TOOLE AVENUE

Capacity analysis of this intersection was conducted using the proposed transportation network's build and neighborhood growth traffic volumes and the intersection configuration described above. The results of this analysis are summarized in **Table 27A** and **27B**.

TABLE 27A: SCOTT STREET & TOOLE AVENUE PEAK AM HOUR LOS SUMMARY

PEAK AM HOUR										
	BUILD		Build + (%) Neighborhood Growth							
			25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	6.6	A	7.3	A	8.7	A	10.3	B	12.5	B
Westbound Lt/Th/Rt	4.4	A	4.6	A	4.9	A	5.2	A	5.6	A
Northbound Lt/Th/Rt	5.2	A	5.5	A	5.8	A	6.1	A	6.5	A
Southbound Lt/Th/Rt	4.8	A	4.9	A	5.1	A	5.6	A	6.7	A

Delay is measured in seconds per vehicle.

TABLE 27B: SCOTT STREET & TOOLE AVENUE PEAK PM HOUR LOS SUMMARY

PEAK PM HOUR										
	BUILD		Build + (%) Neighborhood Growth							
			25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	9.5	A	11.4	B	14.0	B	18.1	B	24.7	C
Westbound Lt/Th/Rt	5.9	A	7.2	A	9.0	A	11.3	B	14.8	B
Northbound Lt/Th/Rt	6.1	A	6.6	A	7.3	A	8.9	A	10.9	B
Southbound Lt/Th/Rt	6.7	A	7.6	A	8.9	A	10.7	B	13.2	B

Delay is measured in seconds per vehicle.

The analysis summarized in **Table 27A** and **27B** shows that the subject intersection operates between an acceptable LOS to a good LOS when traffic generated by 100% of the neighborhood growth is traveling through the intersection during peak AM and PM hours.

INTERSECTION OF NORTH ORANGE STREET, I-90 EASTBOUND RAMPS, AND NORTH 5TH STREET WEST

Capacity analysis of this intersection was conducted using the proposed transportation network's build and neighborhood growth traffic volumes and the intersection configuration described above. The results of this analysis are summarized in **Table 28A** and **28B**.

TABLE 28A: NORTH ORANGE STREET, I-90 EASTBOUND RAMPS, AND NORTH 5TH STREET WEST PEAK AM HOUR LOS SUMMARY

PEAK AM HOUR										
	BUILD		Build + (%) Neighborhood Growth							
			25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Northbound Orange St.	1.9	A	2.0	A	2.0	A	2.0	A	2.0	A
Southbound Orange St.	0.9	A	0.9	A	0.9	A	0.9	A	0.9	A
I-90 EB Off-Ramp	2.1	A	2.2	A	2.3	A	2.5	A	2.7	A
Eastbound N. 5th St. W.	6.3	A	6.7	A	7.1	A	7.6	A	8.1	A

Delay is measured in seconds per vehicle.

TABLE 28B: NORTH ORANGE STREET, I-90 EASTBOUND RAMPS, AND NORTH 5TH STREET WEST PEAK PM HOUR LOS SUMMARY

PEAK PM HOUR										
	BUILD		Build + (%) Neighborhood Growth							
			25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Northbound Orange St.	2.3	A	2.3	A	2.4	A	2.4	A	2.4	A
Southbound Orange St.	1.5	A	1.6	A	1.6	A	1.7	A	1.7	A
I-90 EB Off-Ramp	6.2	A	6.9	A	7.8	A	8.8	A	10.1	B
Eastbound N. 5th St. W.	8.3	A	8.8	A	9.3	A	9.9	A	10.5	B

Delay is measured in seconds per vehicle.

The analysis summarized in **Table 28A** and **28B** shows that the subject intersection operates at a good LOS when traffic generated by 100% of the neighborhood growth is traveling through the intersection during peak AM and PM hours.

INTERSECTION OF GRANT CREEK ROAD & HOWARD RASER AVENUE

Capacity analysis of this intersection was conducted using the proposed transportation network's build and neighborhood growth traffic volumes and the intersection configuration described above. The results of this analysis are summarized in **Table 29A** and **29B**.

TABLE 29A: GRANT CREEK ROAD & HOWARD RASER AVENUE PEAK AM HOUR LOS SUMMARY

PEAK AM HOUR										
	BUILD		Build + (%) Neighborhood Growth							
			25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	11.6	B	12.2	B	12.7	B	13.4	B	14.1	B
Westbound Lt/Th/Rt	12.4	B	13.4	B	14.1	B	14.9	B	15.7	C
Northbound Lt/Th/Rt	7.8	A	7.9	A	7.9	A	7.9	A	8.0	A
Southbound Lt/Th/Rt	7.5	A	7.5	A	7.5	A	7.5	A	7.5	A

Delay is measured in seconds per vehicle.

TABLE 29B: GRANT CREEK ROAD & HOWARD RASER AVENUE PEAK PM HOUR LOS SUMMARY

PEAK PM HOUR										
	BUILD		Build + (%) Neighborhood Growth							
			25%		50%		75%		100%	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound Lt/Th/Rt	12.5	B	13.6	B	14.7	B	16.1	C	18.0	C
Westbound Lt/Th/Rt	15.5	C	16.5	C	17.5	C	18.5	C	19.7	C
Northbound Lt/Th/Rt	7.8	A	7.8	A	7.9	A	7.9	A	7.9	A
Southbound Lt/Th/Rt	7.5	A	7.5	A	7.5	A	7.5	A	7.5	A

Delay is measured in seconds per vehicle.

The analysis summarized in **Table 29A** and **29B** shows that the subject intersection operates at a LOS of C or better during the peak hours when traffic generated by 100% of the neighborhood growth is traveling through the intersection.

MULTIMODAL TRANSPORTATION

The capacity analysis completed in this study assumes that all trips generated by adjacent developments, site-generated primary trips for the Ravara Development, and site-generated trips associated with the future neighborhood growth “area of interest” will be completed by personal vehicles. This allows for consideration of acute traffic operations on the adjoining streets in the North Reserve/Scott Street neighborhood.

The *Missoula Connect: 2050 Long-Range Transportation Plan (LRTP)* states that the drive-alone commute rate among Missoula area residents is approximately 71.7% and even lower for people that live in the city limits. Mode share targets of reducing the drive-alone commute share by 34%, tripling bicycle and walk shares, and quadrupling transit trips by 2045 are also included in the Plan. It is recommended that the neighborhood’s land use and transportation planning decisions support these mode share goals. For example, leveraging mixed use developments in land use planning allows for internal trips thereby reducing the number of new vehicle trips on the adjoining streets. Transportation projects such as the Howard Raser Complete Street and I-90 Interchange (Project #7 in the 2050 LRTP) increase network connectivity for vehicular and multimodal travel to jobs and services. By prioritizing safe and convenient infrastructure for all modes including walking, biking, and/or transit trips it is reasonable to assume that vehicular congestion will not be as significant as if all trips were completed by personal vehicles with only one primary access in and out of the neighborhood over the Scott Street Bridge.

A combined reduction of as few as 20% of new vehicle trips on the roadway could result in neighborhood intersections operating at an acceptable level of service or better in the peak hours with minimal vehicle delays throughout the entire day. This reduction can be achieved through a combination of additional future mixed-use development, new complete streets, increased transit stops/frequency, and traffic calming design treatments on existing neighborhood streets.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The discussion and analyses contained in this report can be summarized as follows:

- Ravara Development LLC propose to construct a mixed-use development, west of Scott Street from approximately Charlo Street to Palmer Street, that is currently proposed to consist of 42 townhomes, 36 condos, 248 apartments, 13,000 square feet of grocery, 5,000 square feet of restaurant space, and 5,500 square feet of childcare.
- Seven intersections are the focus of this traffic analysis. Traffic operations at these intersections were analyzed based on both the current and proposed transportation network.
- Community members have expressed concerns to City Leadership regarding the intersection of Scott Street and Phillips Street. Findings from this study's analysis indicate that existing traffic experiences congested conditions when traveling through this intersection during the peak PM hour. It is recommended that this intersection is upgraded to an urban mini roundabout independently of any future development to first accommodate the existing traffic volumes while still having capacity to accommodate future traffic volumes.
- The proposed Ravara Development will generate new traffic through the study intersections. *Highway Capacity Manual* based analysis shows that this traffic can be accommodated without the need for improvements to mitigate the site-generated trips.
- A neighborhood growth area of interest, approximately 71 acres in size, was also included in this study to estimate the impacts of traffic generated by future neighborhood growth. *Highway Capacity Manual* based analysis shows that approximately 75% of the traffic generated by this neighborhood growth can be accommodated at the study intersections before improvements to the existing transportation network are needed to mitigate the additional traffic volumes.
- A *Highway Capacity Manual* based analysis of the Build and Neighborhood Growth scenario traffic volumes on the NRSS Master Plan proposed transportation network shows that most of the intersections in this study are able to accommodate traffic when all of the estimated future neighborhood development is constructed and occupied.
- It is recommended that decisions concerning land use and transportation planning in the neighborhood are made to support the mode share targets outlined in the *Missoula Connect: 2050 Long-Range Transportation Plan* to ensure regional transportation equity and reduce future neighborhood traffic congestion.

APPENDIX A

TRAFFIC COUNT DATA

Manual Traffic Count
Intersection- Scott St & Charlo St.
Missoula, MT

$$PHF = \frac{V}{V_{15} * 4}$$

Tuesday, June 22, 2021
Peak AM Period

		Southbound		Westbound		Northbound		Interval	Hourly	
		Thru	Left	Right	Left	Right	Thru	Total	Total	
7:00 AM	7:15 AM	15	0	0	5	2	14	36		
7:15 AM	7:30 AM	22	0	1	8	3	11	45		
7:30 AM	7:45 AM	27	0	2	2	2	35	68		
7:45 AM	8:00 AM	42	0	1	7	5	38	93	242	
8:00 AM	8:15 AM	36	0	1	3	2	31	73	279	
8:15 AM	8:30 AM	28	0	1	2	1	25	57	291	<-- Peak Hour
8:30 AM	8:45 AM	26	0	0	4	1	22	53	276	
8:45 AM	9:00 AM	23	1	2	2	2	24	54	237	
	Peak Hour Volume	133	0	5	14	10	129			
							PHF =	**0.78**		

Tuesday, June 22, 2021
Peak PM Period

		Southbound		Westbound		Northbound		Interval	Hourly	
		Thru	Left	Right	Left	Right	Thru	Total	Total	
4:00 PM	4:15 PM	60	0	4	7	2	22	95		
4:15 PM	4:30 PM	55	2	1	3	5	27	93		
4:30 PM	4:45 PM	67	1	1	2	6	41	118		
4:45 PM	5:00 PM	62	6	1	2	5	28	104	410	
5:00 PM	5:15 PM	67	2	4	6	7	39	125	440	
5:15 PM	5:30 PM	40	2	2	1	9	51	105	452	<-- Peak Hour
5:30 PM	5:45 PM	51	1	0	1	6	37	96	430	
5:45 PM	6:00 PM	52	2	1	8	5	45	113	439	
	Peak Hour Volume	236	11	8	11	27	159			
							PHF =	**0.90**		

Manual Traffic Count
Intersection- Scott St & Palmer St.
Missoula, MT

$$PHF = \frac{V}{V_{15} * 4}$$

Tuesday, June 22, 2021
Peak AM Period

		Southbound		Westbound		Northbound		Interval	Hourly	
		Thru	Left	Right	Left	Right	Thru	Total	Total	
7:00 AM	7:15 AM	25	0	0	4	2	19	50		
7:15 AM	7:30 AM	30	0	0	1	0	20	51		
7:30 AM	7:45 AM	35	0	1	6	0	29	71		
7:45 AM	8:00 AM	51	0	2	2	1	50	106	278	
8:00 AM	8:15 AM	38	0	0	3	2	28	71	299	
8:15 AM	8:30 AM	39	0	0	0	1	22	62	310	<-- Peak Hour
8:30 AM	8:45 AM	26	0	0	0	0	29	55	294	
8:45 AM	9:00 AM	27	0	0	3	0	28	58	246	
	Peak Hour Volume	163	0	3	11	4	129			
							PHF =	**0.73**		

Tuesday, June 22, 2021
Peak PM Period

		Southbound		Westbound		Northbound		Interval	Hourly	
		Thru	Left	Right	Left	Right	Thru	Total	Total	
4:00 PM	4:15 PM	71	1	1	4	2	26	105		
4:15 PM	4:30 PM	62	1	0	2	3	28	96		
4:30 PM	4:45 PM	67	2	0	2	2	47	120		
4:45 PM	5:00 PM	66	1	0	4	5	33	109	430	
5:00 PM	5:15 PM	78	0	1	1	3	51	134	459	
5:15 PM	5:30 PM	33	3	2	6	1	54	99	462	<-- Peak Hour
5:30 PM	5:45 PM	44	1	0	2	11	33	91	433	
5:45 PM	6:00 PM	53	2	0	6	1	45	107	431	
	Peak Hour Volume	244	6	3	13	11	185			
							PHF =	**0.86**		

Manual Traffic Count
Intersection- Scott St & Turner St.
Missoula, MT

$$PHF = \frac{V}{V_{15} * 4}$$

Tuesday, June 22, 2021
Peak AM Period

		Southbound			Westbound			Northbound			Eastbound			Interval	Hourly	
		Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Total	Total	
7:00 AM	7:15 AM	0	36	1	0	1	1	2	19	1	4	0	0	65		
7:15 AM	7:30 AM	0	31	1	1	3	5	2	12	2	1	0	1	59		
7:30 AM	7:45 AM	0	38	0	3	1	2	1	31	3	2	0	0	81		
7:45 AM	8:00 AM	0	52	3	5	1	8	3	37	5	2	0	0	116	321	
8:00 AM	8:15 AM	1	41	0	2	0	3	3	30	7	0	0	2	89	345	
8:15 AM	8:30 AM	0	34	1	5	0	0	1	22	2	4	2	0	71	357	<-- Peak Hour
8:30 AM	8:45 AM	0	34	0	1	0	5	0	25	1	2	0	0	68	344	
8:45 AM	9:00 AM	0	32	2	7	1	4	2	20	2	1	0	1	72	300	
	Peak Hour Volume	1	165	4	15	2	13	8	120	17	8	2	2			

PHF = **0.77**

Tuesday, June 22, 2021
Peak PM Period

		Southbound			Westbound			Northbound			Eastbound			Interval	Hourly	
		Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Total	Total	
4:00 PM	4:15 PM	0	73	1	3	0	1	3	25	3	10	0	0	119		
4:15 PM	4:30 PM	0	54	1	1	1	3	5	33	4	11	0	1	114		
4:30 PM	4:45 PM	0	70	3	3	0	3	3	45	2	4	2	2	137		
4:45 PM	5:00 PM	0	69	3	6	0	6	6	27	1	17	4	0	139	509	
5:00 PM	5:15 PM	1	80	0	8	1	4	11	44	0	2	0	1	152	542	
5:15 PM	5:30 PM	0	45	2	5	1	6	4	51	0	3	0	0	117	545	<-- Peak Hour
5:30 PM	5:45 PM	0	39	1	3	1	8	10	47	0	0	1	0	110	518	
5:45 PM	6:00 PM	1	48	6	8	0	6	8	40	0	6	0	1	124	503	
	Peak Hour Volume	1	264	8	22	2	19	24	167	3	26	6	3			

PHF = **0.90**

Manual Traffic Count
Intersection- Scott St & Phillips St.
Missoula, MT

$$PHF = \frac{V}{V_{15} * 4}$$

Wednesday, June 23, 2021
Peak AM Period

		Southbound			Westbound			Northbound			Eastbound			Interval	Hourly	
		Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Total	Total	
7:00 AM	7:15 AM	13	26	1	1	0	0	0	10	6	13	1	12	83		
7:15 AM	7:30 AM	24	39	2	0	1	0	1	21	5	15	2	11	121		
7:30 AM	7:45 AM	23	43	1	1	1	0	0	32	7	14	3	13	138		
7:45 AM	8:00 AM	46	52	1	1	2	0	3	36	10	27	4	18	200	542	
8:00 AM	8:15 AM	26	42	0	2	1	1	3	34	19	27	1	14	170	629	
8:15 AM	8:30 AM	28	36	1	2	1	0	1	18	19	29	2	11	148	656	
8:30 AM	8:45 AM	21	40	0	0	1	1	0	19	16	16	3	22	139	657	<-- Peak Hour
8:45 AM	9:00 AM	17	32	3	0	4	2	0	33	16	23	5	11	146	603	
	Peak Hour Volume	121	170	2	5	5	2	7	107	64	99	10	65			

PHF = **0.82**

Wednesday, June 23, 2021
Peak PM Period

		Southbound			Westbound			Northbound			Eastbound			Interval	Hourly	
		Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Total	Total	
4:00 PM	4:15 PM	27	56	1	3	5	1	0	45	31	24	2	25	220		
4:15 PM	4:30 PM	35	64	1	0	0	1	0	37	23	23	2	26	212		
4:30 PM	4:45 PM	37	75	1	0	2	0	1	37	19	30	5	48	255		
4:45 PM	5:00 PM	33	78	1	1	0	0	1	51	26	29	2	25	247	934	
5:00 PM	5:15 PM	40	69	0	1	5	0	3	50	45	21	0	37	271	985	
5:15 PM	5:30 PM	29	40	0	2	4	0	4	49	28	42	2	35	235	1008	<-- Peak Hour
5:30 PM	5:45 PM	28	65	0	1	2	0	0	53	30	25	1	29	234	987	
5:45 PM	6:00 PM	20	52	0	0	1	0	2	37	23	19	0	26	180	920	
	Peak Hour Volume	139	262	2	4	11	0	9	187	118	122	9	145			

PHF = **0.93**

Manual Traffic Count
Roundabout- Scott St & Toole Ave
Missoula, MT

$$PHF = \frac{V}{V_{15} * 4}$$

Wednesday, June 23, 2021
Peak AM Period

		Southbound			Westbound			Northbound			Eastbound			Interval	Hourly	
		Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Total	Total	
7:00 AM	7:15 AM	8	8	11	6	25	1	1	5	0	2	37	3	107		
7:15 AM	7:30 AM	13	20	10	8	30	2	2	3	0	2	37	11	138		
7:30 AM	7:45 AM	17	19	18	11	27	3	2	14	0	1	44	6	162		
7:45 AM	8:00 AM	21	38	19	16	59	1	2	16	1	2	67	13	255	662	
8:00 AM	8:15 AM	17	29	24	21	39	0	2	6	0	2	59	17	216	771	
8:15 AM	8:30 AM	19	24	17	10	48	2	3	10	0	6	56	8	203	836	
8:30 AM	8:45 AM	11	23	14	13	39	4	3	6	1	6	50	8	178	852	<-- Peak Hour
8:45 AM	9:00 AM	12	24	11	13	40	3	4	7	1	5	54	7	181	778	
	Peak Hour Volume	68	114	74	60	185	7	10	38	2	16	232	46			

PHF = **0.84**

Wednesday, June 23, 2021
Peak PM Period

		Southbound			Westbound			Northbound			Eastbound			Interval	Hourly	
		Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Total	Total	
4:00 PM	4:15 PM	17	34	22	23	68	5	6	15	5	9	63	23	290		
4:15 PM	4:30 PM	15	45	25	16	53	9	5	18	6	8	67	16	283		
4:30 PM	4:45 PM	23	60	20	23	68	9	7	24	6	9	61	20	330		
4:45 PM	5:00 PM	20	42	26	24	49	5	5	23	0	10	73	15	292	1195	
5:00 PM	5:15 PM	17	49	17	18	84	14	13	28	2	3	67	23	335	1240	
5:15 PM	5:30 PM	23	50	16	18	81	9	12	32	1	15	81	22	360	1317	<-- Peak Hour
5:30 PM	5:45 PM	20	44	17	21	52	3	10	31	1	15	62	17	293	1280	
5:45 PM	6:00 PM	19	33	32	11	58	2	10	31	5	10	73	11	295	1283	
	Peak Hour Volume	83	201	79	83	282	37	37	107	9	37	282	80			

PHF = **0.91**

Manual Traffic Count
Roundabout- N Orange St., N. 5th St. W, and I-90 EB Ramps
Missoula, MT

$$PHF = \frac{V}{V_{15} * 4}$$

Thursday, June 24, 2021
Peak AM Period

		I-90 EB Off Ramp			N. 5th St. W.			N. Orange Street - Northbound				N. Orange Street - Southbound			Interval	Hourly	
		Right (To 5th St)	Thru (SB on N Orange St)	Left (NB on N Orange St)	Right (SB on N Orange St)	Thru (I-90 EB On-Ramp)	Left (NB on N Orange St)	Right (I-90 EB On-Ramp)	Thru (NB on N Orange St)	Left (To 5th St)	U-Turn (SB on N Orange St)	Right (To 5th St)	Thru (SB on N Orange St)	Left (I-90 EB On-Ramp)	Total	Total	
7:00 AM	7:15 AM	5	62	0	17	23	1	31	30	7	0	5	61	0	242		
7:15 AM	7:30 AM	1	100	0	18	13	2	47	50	7	1	3	72	0	314		
7:30 AM	7:45 AM	1	108	0	19	5	3	45	53	3	0	6	100	0	343		
7:45 AM	8:00 AM	1	109	0	17	12	3	36	61	9	0	8	86	0	342	1241	
8:00 AM	8:15 AM	0	73	0	17	12	0	53	67	13	0	5	57	0	297	1296	<-- Peak Hour
8:15 AM	8:30 AM	0	63	0	8	5	0	58	71	5	0	9	88	0	307	1289	
8:30 AM	8:45 AM	1	72	0	18	7	1	43	56	9	1	5	64	0	277	1223	
8:45 AM	9:00 AM	0	39	0	11	6	1	56	58	13	0	5	44	0	233	1114	
	Peak Hour Volume	3	390	0	71	42	8	181	231	32	1	22	315	0			

PHF = 0.94

Thursday, June 24, 2021
Peak PM Period

		I-90 EB Off Ramp			N. 5th St. W.			N. Orange Street - Northbound				N. Orange Street - Southbound			Interval	Hourly	
		Right (To 5th St)	Thru (SB on N Orange St)	Left (NB on N Orange St)	Right (SB on N Orange St)	Thru (I-90 EB On-Ramp)	Left (NB on N Orange St)	Right (I-90 EB On-Ramp)	Thru (NB on N Orange St)	Left (To 5th St)	U-Turn (SB on N Orange St)	Right (To 5th St)	Thru (SB on N Orange St)	Left (I-90 EB On-Ramp)	Total	Total	
4:00 PM	4:15 PM	6	60	0	15	16	1	78	75	19	0	14	95	1	380		
4:15 PM	4:30 PM	1	94	0	20	6	0	66	94	19	0	18	92	0	410		
4:30 PM	4:45 PM	4	85	0	9	12	0	77	92	22	1	25	89	0	416		
4:45 PM	5:00 PM	4	101	1	13	15	1	84	86	21	2	23	84	0	435	1641	
5:00 PM	5:15 PM	1	89	0	3	4	0	94	130	37	0	27	99	0	484	1745	
5:15 PM	5:30 PM	9	157	0	16	15	3	74	145	32	1	20	98	0	570	1905	
5:30 PM	5:45 PM	9	116	0	16	18	2	105	121	29	0	35	77	1	529	2018	<-- Peak Hour
5:45 PM	6:00 PM	14	77	0	14	37	0	79	72	26	0	11	38	0	368	1951	
	Peak Hour Volume	23	463	1	48	52	6	357	482	119	3	105	358	1			

PHF = 0.89

Manual Traffic Count
Intersection- Grant Creek Rd & Howard Raser Ave
Missoula, MT

$$PHF = \frac{V}{V_{15} * 4}$$

Thursday, June 24, 2021
Peak AM Period

		Southbound			Westbound			Northbound			Eastbound			Interval	Hourly	
		Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Total	Total	
7:00 AM	7:15 AM	5	6	0	0	1	0	2	7	17	11	3	1	53		
7:15 AM	7:30 AM	6	6	3	0	0	0	0	4	21	16	5	9	70		
7:30 AM	7:45 AM	5	11	0	0	0	1	1	13	12	22	2	9	76		
7:45 AM	8:00 AM	12	7	0	0	0	0	1	14	24	28	6	10	102	301	
8:00 AM	8:15 AM	8	5	0	0	0	0	1	7	20	12	2	6	61	309	
8:15 AM	8:30 AM	15	5	0	0	0	0	0	11	24	9	6	6	76	315	
8:30 AM	8:45 AM	9	11	0	1	0	0	0	20	19	22	3	6	91	330	<-- Peak Hour
8:45 AM	9:00 AM	9	10	0	0	1	0	0	11	22	8	8	7	76	304	
	Peak Hour Volume	44	28	0	1	0	0	2	52	87	71	17	28			

PHF = **0.81**

Wednesday, June 23, 2021
Peak PM Period

		Southbound			Westbound			Northbound			Eastbound			Interval	Hourly	
		Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Total	Total	
4:00 PM	4:15 PM	15	16	0	4	8	1	0	19	43	22	2	16	146		
4:15 PM	4:30 PM	3	10	0	1	1	2	0	23	46	32	1	14	133		
4:30 PM	4:45 PM	18	6	1	2	8	0	0	18	33	29	0	9	124		
4:45 PM	5:00 PM	14	8	0	1	6	0	0	17	40	20	2	4	112	515	
5:00 PM	5:15 PM	16	14	0	2	3	1	0	38	38	30	0	6	148	517	<-- Peak Hour
5:15 PM	5:30 PM	18	15	0	1	2	0	0	14	20	17	0	3	90	474	
5:30 PM	5:45 PM	16	6	0	0	2	1	0	11	16	13	0	2	67	417	
5:45 PM	6:00 PM	15	9	0	0	4	0	0	11	24	13	0	2	78	383	
	Peak Hour Volume	51	38	1	6	18	3	0	96	157	111	3	33			

PHF = **0.87**

APPENDIX B

INTERNAL TRIP CAPTURE CALCULATIONS

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Scott St Master Planning	**Organization:**	WGM Group
Project Location:	Missoula, MT	**Performed By:**	DBG
Scenario Description:	Build Scenario	**Date:**	10/8/2021
Analysis Year:	2021	**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail				0		
Restaurant	932	5	1000 Sq. Ft. GFA	49	27	22
Cinema/Entertainment				0		
Residential	221, 220	326	Residential Units	127	32	95
Hotel				0		
All Other Land Uses[2]	850, 565	19	1000 Sq. Ft. GFA	110	62	48
Total				286	121	165

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	0	0		0	1	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	5	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	286	121	165
Internal Capture Percentage	4%	5%	4%
External Vehicle-Trips[3]	274	115	159
External Transit-Trips[4]	0	0	0
External Non-Motorized Trips[4]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	N/A	N/A
Restaurant	19%	5%
Cinema/Entertainment	N/A	N/A
Residential	3%	5%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	Scott St Master Planning
Analysis Period:	**AM Street Peak Hour**

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	0	0	1.00	0	0
Restaurant	1.00	27	27	1.00	22	22
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	32	32	1.00	95	95
Hotel	1.00	0	0	1.00	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	7	3		0	1	1
Cinema/Entertainment	0	0	0		0	0
Residential	2	1	19	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	6	0	0	0
Retail	0		14	0	1	0
Restaurant	0	0		0	2	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	5	0		0
Hotel	0	0	2	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	0	0	0	0	0	0
Restaurant	5	22	27	22	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	1	31	32	31	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	62	62	62	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	0	0	0	0	0	0
Restaurant	1	21	22	21	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	5	90	95	90	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	48	48	48	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Scott St Master Planning	**Organization:**	WGM Group
Project Location:	Missoula, MT	**Performed By:**	DBG
Scenario Description:	Build Scenario	**Date:**	10/8/2021
Analysis Year:	2021	**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail				0		
Restaurant	932	5	1000 Sq. Ft. GFA	49	30	19
Cinema/Entertainment				0		
Residential	221, 220	326	Residential Units	158	97	61
Hotel				0		
All Other Land Uses[2]	850, 565	19	1000 Sq. Ft. GFA	181	90	91
Total				388	217	171

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	0	0		0	3	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	4	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	388	217	171
Internal Capture Percentage	4%	3%	4%
External Vehicle-Trips[3]	374	210	164
External Transit-Trips[4]	0	0	0
External Non-Motorized Trips[4]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	N/A	N/A
Restaurant	13%	16%
Cinema/Entertainment	N/A	N/A
Residential	3%	7%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	Scott St Master Planning
Analysis Period:	**PM Street Peak Hour**

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	0	0	1.00	0	0
Restaurant	1.00	30	30	1.00	19	19
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	97	97	1.00	61	61
Hotel	1.00	0	0	1.00	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	1	8		2	3	1
Cinema/Entertainment	0	0	0		0	0
Residential	2	26	13	0		2
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	1	0	4	0
Retail	0		9	0	45	0
Restaurant	0	0		0	16	0
Cinema/Entertainment	0	0	1		4	0
Residential	0	0	4	0		0
Hotel	0	0	2	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	0	0	0	0	0	0
Restaurant	4	26	30	26	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	3	94	97	94	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	90	90	90	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	0	0	0	0	0	0
Restaurant	3	16	19	16	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	4	57	61	57	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	91	91	91	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

APPENDIX C

CAPACITY ANALYSIS WORKSHEETS - EXISTING TRANSPORTATION NETWORK

HCS7 Two-Way Stop-Control Report

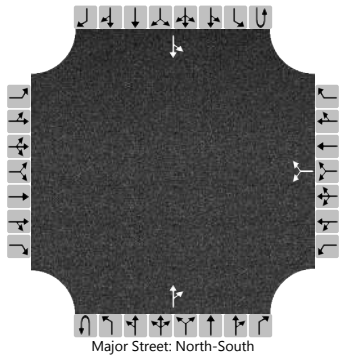
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	8/26/21
Analysis Year	2021
Time Analyzed	AM Existing
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Charlo
Jurisdiction	
East/West Street	Charlo Street
North/South Street	Scott Street
Peak Hour Factor	0.78
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						14		5			129	10		0	133	
Percent Heavy Vehicles (%)						10		10						10		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.50		6.30						4.20		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.59		3.39						2.29		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							24							0		
Capacity, c (veh/h)							683							1351		
v/c Ratio							0.04							0.00		
95% Queue Length, Q_{95} (veh)							0.1							0.0		
Control Delay (s/veh)							10.5							7.7		
Level of Service (LOS)							B							A		
Approach Delay (s/veh)						10.5								0.0		
Approach LOS						B										

HCS7 Two-Way Stop-Control Report

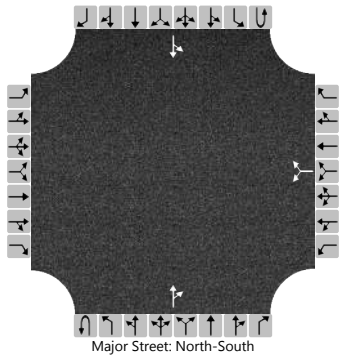
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	8/23/21
Analysis Year	2021
Time Analyzed	AM No-Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Charlo
Jurisdiction	
East/West Street	Charlo Street
North/South Street	Scott Street
Peak Hour Factor	0.78
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						14		5			153	10		0	198	
Percent Heavy Vehicles (%)						10		10						10		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.50		6.30						4.20		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.59		3.39						2.29		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							24							0		
Capacity, c (veh/h)							600							1316		
v/c Ratio							0.04							0.00		
95% Queue Length, Q_{95} (veh)							0.1							0.0		
Control Delay (s/veh)							11.3							7.7		
Level of Service (LOS)							B							A		
Approach Delay (s/veh)						11.3								0.0		
Approach LOS						B										

HCS7 Two-Way Stop-Control Report

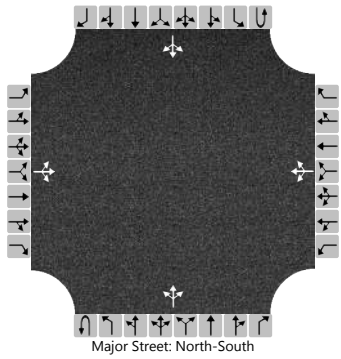
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	AM Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Charlo
Jurisdiction	
East/West Street	Charlo Street
North/South Street	Scott Street
Peak Hour Factor	0.78
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	40		14	0	5		29	164	10		0	214	0
Percent Heavy Vehicles (%)		10	10	10		10	10	10		10				10		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.20	6.60	6.30		7.20	6.60	6.30		4.20				4.20		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.59	4.09	3.39		3.59	4.09	3.39		2.29				2.29		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			51				24			37				0		
Capacity, c (veh/h)			746				430			1244				1300		
v/c Ratio			0.07				0.06			0.03				0.00		
95% Queue Length, Q_{95} (veh)			0.2				0.2			0.1				0.0		
Control Delay (s/veh)			10.2				13.9			8.0				7.8		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)		10.2				13.9				1.4				0.0		
Approach LOS		B				B										

HCS7 Two-Way Stop-Control Report

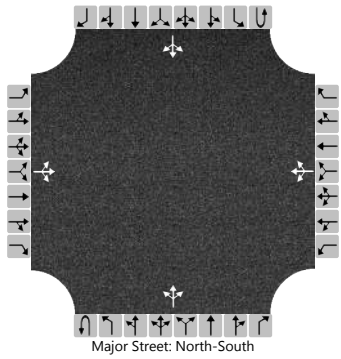
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	AM 25%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Charlo
Jurisdiction	
East/West Street	Charlo Street
North/South Street	Scott Street
Peak Hour Factor	0.78
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	40		14	0	5		29	245	10		0	371	0
Percent Heavy Vehicles (%)		10	10	10		10	10	10		10				10		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.20	6.60	6.30		7.20	6.60	6.30		4.20				4.20		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.59	4.09	3.39		3.59	4.09	3.39		2.29				2.29		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			51				24			37				0		
Capacity, c (veh/h)			573				271			1046				1189		
v/c Ratio			0.09				0.09			0.04				0.00		
95% Queue Length, Q_{95} (veh)			0.3				0.3			0.1				0.0		
Control Delay (s/veh)			11.9				19.6			8.6				8.0		
Level of Service (LOS)			B				C			A				A		
Approach Delay (s/veh)	11.9				19.6				1.2				0.0			
Approach LOS	B				C											

HCS7 Two-Way Stop-Control Report

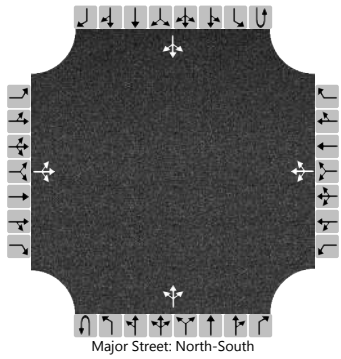
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	AM 50%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Charlo
Jurisdiction	
East/West Street	Charlo Street
North/South Street	Scott Street
Peak Hour Factor	0.78
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	40		14	0	5		29	327	10		0	528	0
Percent Heavy Vehicles (%)		10	10	10		10	10	10		10				10		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.20	6.60	6.30		7.20	6.60	6.30		4.20				4.20		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.59	4.09	3.39		3.59	4.09	3.39		2.29				2.29		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			51				24			37				0		
Capacity, c (veh/h)			439				166			878				1086		
v/c Ratio			0.12				0.15			0.04				0.00		
95% Queue Length, Q_{95} (veh)			0.4				0.5			0.1				0.0		
Control Delay (s/veh)			14.3				30.5			9.3				8.3		
Level of Service (LOS)			B				D			A				A		
Approach Delay (s/veh)		14.3				30.5				1.2				0.0		
Approach LOS		B				D										

HCS7 Two-Way Stop-Control Report

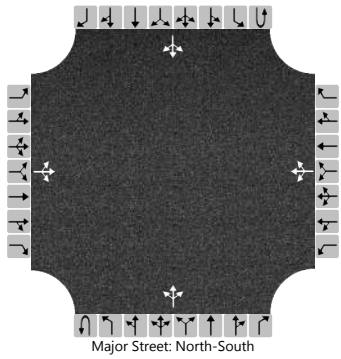
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	AM 75%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Charlo
Jurisdiction	
East/West Street	Charlo Street
North/South Street	Scott Street
Peak Hour Factor	0.78
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	40		14	0	5		29	408	10		0	685	0
Percent Heavy Vehicles (%)		10	10	10		10	10	10		10				10		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.20	6.60	6.30		7.20	6.60	6.30		4.20				4.20		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.59	4.09	3.39		3.59	4.09	3.39		2.29				2.29		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			51				24			37				0		
Capacity, c (veh/h)			336				98			737				993		
v/c Ratio			0.15				0.25			0.05				0.00		
95% Queue Length, Q_{95} (veh)			0.5				0.9			0.2				0.0		
Control Delay (s/veh)			17.6				53.3			10.1				8.6		
Level of Service (LOS)			C				F			B				A		
Approach Delay (s/veh)		17.6				53.3				1.3				0.0		
Approach LOS		C				F										

HCS7 Two-Way Stop-Control Report

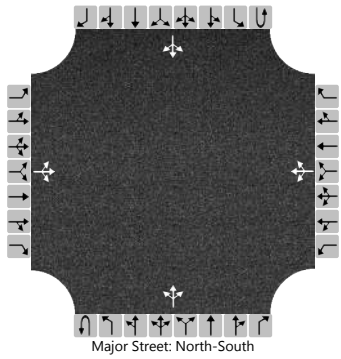
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	AM 100%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Charlo
Jurisdiction	
East/West Street	Charlo Street
North/South Street	Scott Street
Peak Hour Factor	0.78
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	40		14	0	5		29	490	10		0	842	0
Percent Heavy Vehicles (%)		10	10	10		10	10	10		10				10		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.20	6.60	6.30		7.20	6.60	6.30		4.20				4.20		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.59	4.09	3.39		3.59	4.09	3.39		2.29				2.29		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			51				24			37				0		
Capacity, c (veh/h)			256				56			617				906		
v/c Ratio			0.20				0.43			0.06				0.00		
95% Queue Length, Q_{95} (veh)			0.7				1.6			0.2				0.0		
Control Delay (s/veh)			22.6				111.1			11.2				9.0		
Level of Service (LOS)			C				F			B				A		
Approach Delay (s/veh)	22.6				111.1				1.6				0.0			
Approach LOS	C				F											

HCS7 Two-Way Stop-Control Report

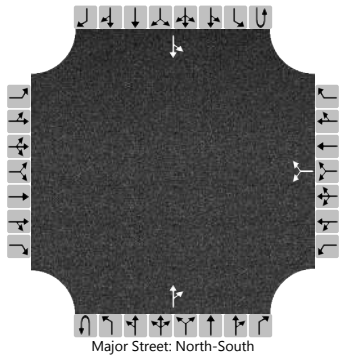
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	8/25/21
Analysis Year	2021
Time Analyzed	PM Existing
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Charlo
Jurisdiction	
East/West Street	Charlo Street
North/South Street	Scott Street
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						11		8			159	27		11	236	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.42		6.22						4.12		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							21							12		
Capacity, c (veh/h)							638							1365		
v/c Ratio							0.03							0.01		
95% Queue Length, Q_{95} (veh)							0.1							0.0		
Control Delay (s/veh)							10.8							7.7		
Level of Service (LOS)							B							A		
Approach Delay (s/veh)						10.8								0.4		
Approach LOS						B										

HCS7 Two-Way Stop-Control Report

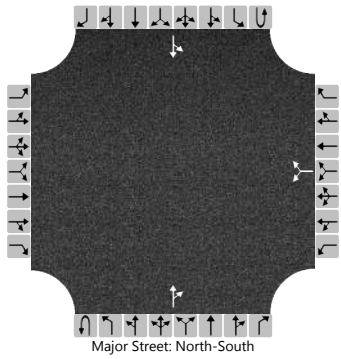
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	8/23/21
Analysis Year	2021
Time Analyzed	PM No-Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Charlo
Jurisdiction	
East/West Street	Charlo Street
North/South Street	Scott Street
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						11		8			227	27		11	276	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.42		6.22						4.12		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							21							12		
Capacity, c (veh/h)							554							1280		
v/c Ratio							0.04							0.01		
95% Queue Length, Q_{95} (veh)							0.1							0.0		
Control Delay (s/veh)							11.8							7.8		
Level of Service (LOS)							B							A		
Approach Delay (s/veh)						11.8								0.4		
Approach LOS						B										

HCS7 Two-Way Stop-Control Report

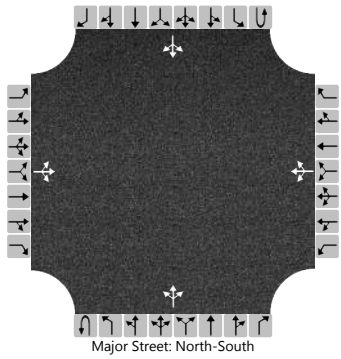
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	PM Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Charlo
Jurisdiction	
East/West Street	Charlo Street
North/South Street	Scott Street
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	50		11	0	8		44	242	27		11	271	18
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			56				21			49				12		
Capacity, c (veh/h)			729				393			1239				1262		
v/c Ratio			0.08				0.05			0.04				0.01		
95% Queue Length, Q_{95} (veh)			0.2				0.2			0.1				0.0		
Control Delay (s/veh)			10.3				14.7			8.0				7.9		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)		10.3				14.7				1.5				0.4		
Approach LOS		B				B										

HCS7 Two-Way Stop-Control Report

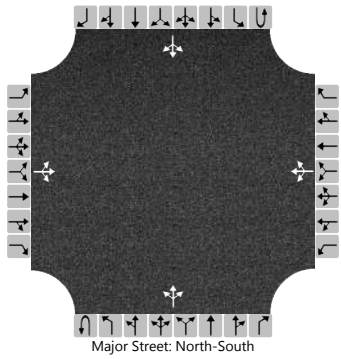
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	PM 25%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Charlo
Jurisdiction	
East/West Street	Charlo Street
North/South Street	Scott Street
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	50		11	0	8		44	401	27		11	396	18
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			56				21			49				12		
Capacity, c (veh/h)			609				247			1101				1087		
v/c Ratio			0.09				0.09			0.04				0.01		
95% Queue Length, Q_{95} (veh)			0.3				0.3			0.1				0.0		
Control Delay (s/veh)			11.5				20.9			8.4				8.4		
Level of Service (LOS)			B				C			A				A		
Approach Delay (s/veh)		11.5				20.9				1.2				0.3		
Approach LOS		B				C										

HCS7 Two-Way Stop-Control Report

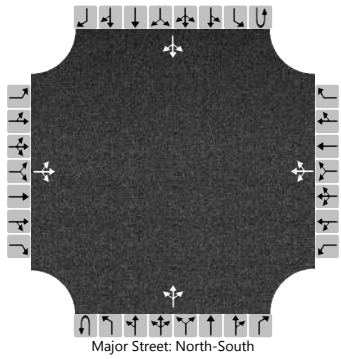
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	PM 50%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Charlo
Jurisdiction	
East/West Street	Charlo Street
North/South Street	Scott Street
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	50		11	0	8		44	560	27		11	521	18
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			56				21			49				12		
Capacity, c (veh/h)			508				151			978				934		
v/c Ratio			0.11				0.14			0.05				0.01		
95% Queue Length, Q_{95} (veh)			0.4				0.5			0.2				0.0		
Control Delay (s/veh)			13.0				32.7			8.9				8.9		
Level of Service (LOS)			B				D			A				A		
Approach Delay (s/veh)	13.0				32.7				1.3				0.3			
Approach LOS	B				D											

HCS7 Two-Way Stop-Control Report

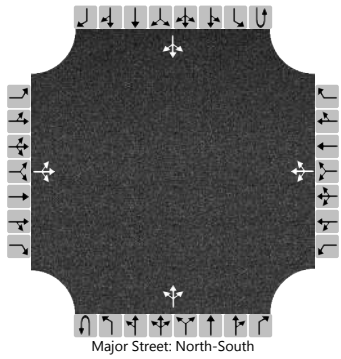
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	PM 75%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Charlo
Jurisdiction	
East/West Street	Charlo Street
North/South Street	Scott Street
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	50		11	0	8		44	719	27		11	646	18
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			56				21			49				12		
Capacity, c (veh/h)			424				90			868				803		
v/c Ratio			0.13				0.24			0.06				0.02		
95% Queue Length, Q_{95} (veh)			0.4				0.8			0.2				0.0		
Control Delay (s/veh)			14.8				57.0			9.4				9.6		
Level of Service (LOS)			B				F			A				A		
Approach Delay (s/veh)		14.8				57.0				1.5				0.4		
Approach LOS		B				F										

HCS7 Two-Way Stop-Control Report

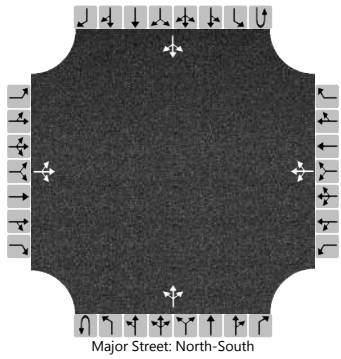
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	PM 100%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Charlo
Jurisdiction	
East/West Street	Charlo Street
North/South Street	Scott Street
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	50		11	0	8		44	878	27		11	770	18
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			56				21			49				12		
Capacity, c (veh/h)			353				52			771				689		
v/c Ratio			0.16				0.41			0.06				0.02		
95% Queue Length, Q_{95} (veh)			0.6				1.5			0.2				0.1		
Control Delay (s/veh)			17.1				116.5			10.0				10.3		
Level of Service (LOS)			C				F			A				B		
Approach Delay (s/veh)		17.1				116.5				1.8				0.5		
Approach LOS		C				F										

HCS7 Two-Way Stop-Control Report

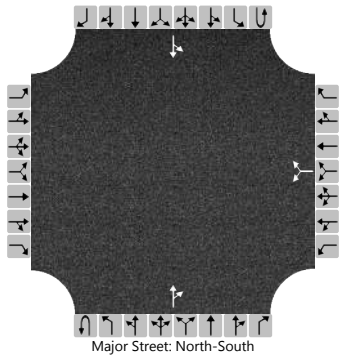
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	8/26/21
Analysis Year	2021
Time Analyzed	AM Existing
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Palmer
Jurisdiction	
East/West Street	Palmer Street
North/South Street	Scott Street
Peak Hour Factor	0.73
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						11		3			129	4		0	163	
Percent Heavy Vehicles (%)						9		9						9		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.49		6.29						4.19		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.58		3.38						2.28		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							19							0		
Capacity, c (veh/h)							631							1352		
v/c Ratio							0.03							0.00		
95% Queue Length, Q_{95} (veh)							0.1							0.0		
Control Delay (s/veh)							10.9							7.7		
Level of Service (LOS)							B							A		
Approach Delay (s/veh)						10.9								0.0		
Approach LOS						B										

HCS7 Two-Way Stop-Control Report

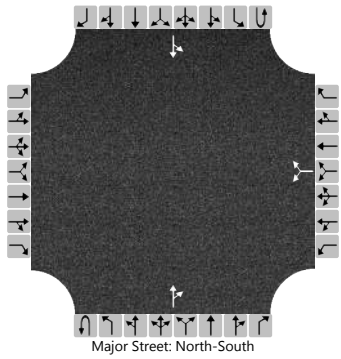
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	8/23/21
Analysis Year	2021
Time Analyzed	AM No-Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Palmer
Jurisdiction	
East/West Street	Palmer Street
North/South Street	Scott Street
Peak Hour Factor	0.73
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						11		3			153	4		0	228	
Percent Heavy Vehicles (%)						9		9						9		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.49		6.29						4.19		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.58		3.38						2.28		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							19							0		
Capacity, c (veh/h)							546							1314		
v/c Ratio							0.04							0.00		
95% Queue Length, Q_{95} (veh)							0.1							0.0		
Control Delay (s/veh)							11.8							7.7		
Level of Service (LOS)							B							A		
Approach Delay (s/veh)						11.8								0.0		
Approach LOS						B										

HCS7 Two-Way Stop-Control Report

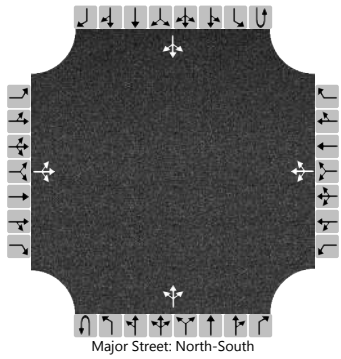
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	AM Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Palmer
Jurisdiction	
East/West Street	Palmer Street
North/South Street	Scott Street
Peak Hour Factor	0.73
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	80		11	0	3		58	193	4		0	284	0
Percent Heavy Vehicles (%)		9	9	9		9	9	9		9				9		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.19	6.59	6.29		7.19	6.59	6.29		4.19				4.19		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.58	4.08	3.38		3.58	4.08	3.38		2.28				2.28		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			110				19			79				0		
Capacity, c (veh/h)			644				244			1132				1254		
v/c Ratio			0.17				0.08			0.07				0.00		
95% Queue Length, Q_{95} (veh)			0.6				0.3			0.2				0.0		
Control Delay (s/veh)			11.7				21.0			8.4				7.9		
Level of Service (LOS)			B				C			A				A		
Approach Delay (s/veh)		11.7				21.0				2.5				0.0		
Approach LOS		B				C										

HCS7 Two-Way Stop-Control Report

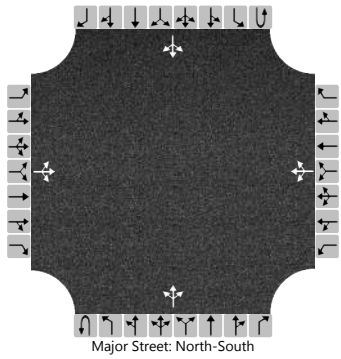
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	AM 25%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Palmer
Jurisdiction	
East/West Street	Palmer Street
North/South Street	Scott Street
Peak Hour Factor	0.73
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	80		11	0	3		58	274	4		0	441	0
Percent Heavy Vehicles (%)		9	9	9		9	9	9		9				9		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.19	6.59	6.29		7.19	6.59	6.29		4.19				4.19		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.58	4.08	3.38		3.58	4.08	3.38		2.28				2.28		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			110				19			79				0		
Capacity, c (veh/h)			486				136			940				1140		
v/c Ratio			0.23				0.14			0.08				0.00		
95% Queue Length, Q_{95} (veh)			0.9				0.5			0.3				0.0		
Control Delay (s/veh)			14.6				35.7			9.2				8.2		
Level of Service (LOS)			B				E			A				A		
Approach Delay (s/veh)		14.6				35.7				2.4				0.0		
Approach LOS		B				E										

HCS7 Two-Way Stop-Control Report

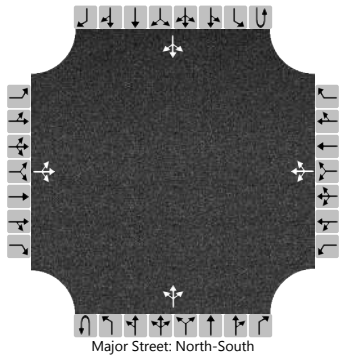
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	AM 50%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Palmer
Jurisdiction	
East/West Street	Palmer Street
North/South Street	Scott Street
Peak Hour Factor	0.73
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	80		11	0	3		58	356	4		0	598	0
Percent Heavy Vehicles (%)		9	9	9		9	9	9		9				9		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.19	6.59	6.29		7.19	6.59	6.29		4.19				4.19		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.58	4.08	3.38		3.58	4.08	3.38		2.28				2.28		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			110				19			79				0		
Capacity, c (veh/h)			365				72			780				1035		
v/c Ratio			0.30				0.27			0.10				0.00		
95% Queue Length, Q_{95} (veh)			1.2				1.0			0.3				0.0		
Control Delay (s/veh)			19.1				72.3			10.1				8.5		
Level of Service (LOS)			C				F			B				A		
Approach Delay (s/veh)		19.1				72.3				2.6				0.0		
Approach LOS		C				F										

HCS7 Two-Way Stop-Control Report

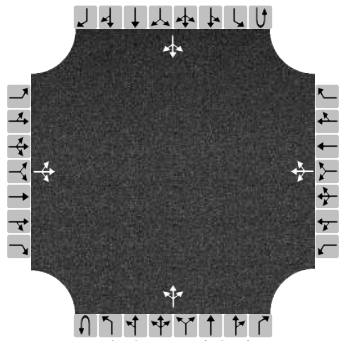
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	AM 75%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Palmer
Jurisdiction	
East/West Street	Palmer Street
North/South Street	Scott Street
Peak Hour Factor	0.73
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	80		11	0	3		58	437	4		0	755	0
Percent Heavy Vehicles (%)		9	9	9		9	9	9		9				9		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.19	6.59	6.29		7.19	6.59	6.29		4.19				4.19		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.58	4.08	3.38		3.58	4.08	3.38		2.28				2.28		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			110				19			79				0		
Capacity, c (veh/h)			273				35			646				940		
v/c Ratio			0.40				0.54			0.12				0.00		
95% Queue Length, Q_{95} (veh)			1.8				1.9			0.4				0.0		
Control Delay (s/veh)			26.7				193.4			11.4				8.8		
Level of Service (LOS)			D				F			B				A		
Approach Delay (s/veh)		26.7				193.4				3.2				0.0		
Approach LOS		D				F										

HCS7 Two-Way Stop-Control Report

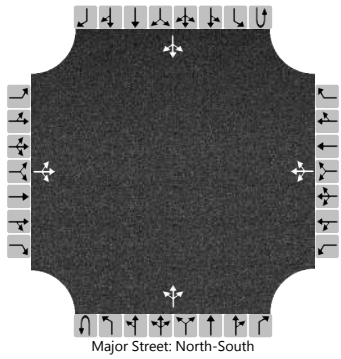
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	AM 100%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Palmer
Jurisdiction	
East/West Street	Palmer Street
North/South Street	Scott Street
Peak Hour Factor	0.73
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	80		11	0	3		58	518	4		0	912	0
Percent Heavy Vehicles (%)		9	9	9		9	9	9		9				9		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.19	6.59	6.29		7.19	6.59	6.29		4.19				4.19		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.58	4.08	3.38		3.58	4.08	3.38		2.28				2.28		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			110				19			79				0		
Capacity, c (veh/h)			204				15			534				854		
v/c Ratio			0.54				1.27			0.15				0.00		
95% Queue Length, Q_{95} (veh)			2.8				3.0			0.5				0.0		
Control Delay (s/veh)			41.5				679.7			12.9				9.2		
Level of Service (LOS)			E				F			B				A		
Approach Delay (s/veh)		41.5				679.7				4.2				0.0		
Approach LOS		E				F										

HCS7 Two-Way Stop-Control Report

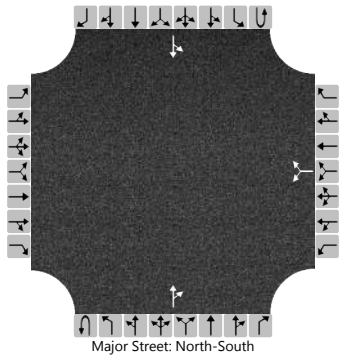
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	8/26/21
Analysis Year	2021
Time Analyzed	PM Existing
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Palmer
Jurisdiction	
East/West Street	Palmer Street
North/South Street	Scott Street
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						13		3			185	11		6	244	
Percent Heavy Vehicles (%)						1		1						1		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.41		6.21						4.11		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.51		3.31						2.21		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							19							7		
Capacity, c (veh/h)							554							1346		
v/c Ratio							0.03							0.01		
95% Queue Length, Q_{95} (veh)							0.1							0.0		
Control Delay (s/veh)							11.7							7.7		
Level of Service (LOS)							B							A		
Approach Delay (s/veh)						11.7								0.2		
Approach LOS						B										

HCS7 Two-Way Stop-Control Report

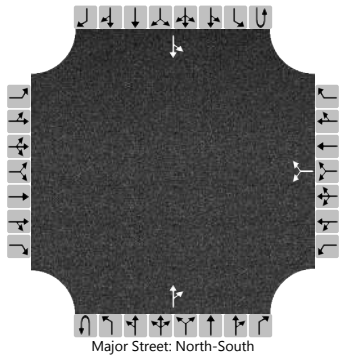
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	8/23/21
Analysis Year	2021
Time Analyzed	PM No-Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Palmer
Jurisdiction	
East/West Street	Palmer Street
North/South Street	Scott Street
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						13		3			253	11		6	284	
Percent Heavy Vehicles (%)						1		1						1		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.41		6.21						4.11		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.51		3.31						2.21		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							19							7		
Capacity, c (veh/h)							472							1259		
v/c Ratio							0.04							0.01		
95% Queue Length, Q_{95} (veh)							0.1							0.0		
Control Delay (s/veh)							12.9							7.9		
Level of Service (LOS)							B							A		
Approach Delay (s/veh)						12.9								0.2		
Approach LOS						B										

HCS7 Two-Way Stop-Control Report

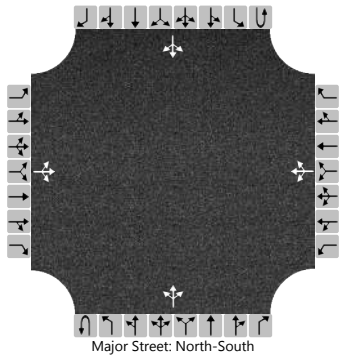
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	PM Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Palmer
Jurisdiction	
East/West Street	Palmer Street
North/South Street	Scott Street
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		12	0	68		13	0	3		104	300	11		6	329	0
Percent Heavy Vehicles (%)		1	1	1		1	1	1		1				1		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.11	6.51	6.21		7.11	6.51	6.21		4.11				4.11		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.51	4.01	3.31		3.51	4.01	3.31		2.21				2.21		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			93				19			121				7		
Capacity, c (veh/h)			494				195			1181				1203		
v/c Ratio			0.19				0.10			0.10				0.01		
95% Queue Length, Q_{95} (veh)			0.7				0.3			0.3				0.0		
Control Delay (s/veh)			14.0				25.4			8.4				8.0		
Level of Service (LOS)			B				D			A				A		
Approach Delay (s/veh)	14.0				25.4				2.9				0.2			
Approach LOS	B				D											

HCS7 Two-Way Stop-Control Report

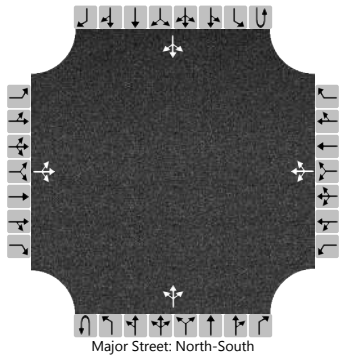
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	PM 25%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Palmer
Jurisdiction	
East/West Street	Palmer Street
North/South Street	Scott Street
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		12	0	68		13	0	3		104	459	11		6	454	0
Percent Heavy Vehicles (%)		1	1	1		1	1	1		1				1		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.11	6.51	6.21		7.11	6.51	6.21		4.11				4.11		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.51	4.01	3.31		3.51	4.01	3.31		2.21				2.21		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			93				19			121				7		
Capacity, c (veh/h)			351				110			1044				1028		
v/c Ratio			0.26				0.17			0.12				0.01		
95% Queue Length, Q_{95} (veh)			1.0				0.6			0.4				0.0		
Control Delay (s/veh)			18.9				44.2			8.9				8.5		
Level of Service (LOS)			C				E			A				A		
Approach Delay (s/veh)	18.9				44.2				2.8				0.2			
Approach LOS	C				E											

HCS7 Two-Way Stop-Control Report

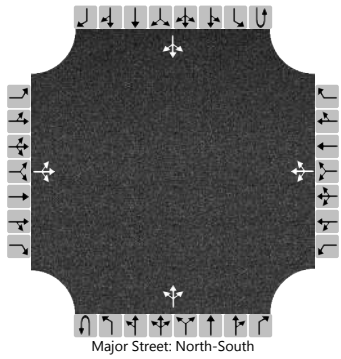
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	PM 50%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Palmer
Jurisdiction	
East/West Street	Palmer Street
North/South Street	Scott Street
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		12	0	68		13	0	3		104	618	11		6	579	0
Percent Heavy Vehicles (%)		1	1	1		1	1	1		1				1		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.11	6.51	6.21		7.11	6.51	6.21		4.11				4.11		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.51	4.01	3.31		3.51	4.01	3.31		2.21				2.21		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			93				19			121				7		
Capacity, c (veh/h)			238				60			922				878		
v/c Ratio			0.39				0.31			0.13				0.01		
95% Queue Length, Q_{95} (veh)			1.8				1.1			0.5				0.0		
Control Delay (s/veh)			29.5				89.6			9.5				9.1		
Level of Service (LOS)			D				F			A				A		
Approach Delay (s/veh)	29.5				89.6				3.1				0.2			
Approach LOS	D				F											

HCS7 Two-Way Stop-Control Report

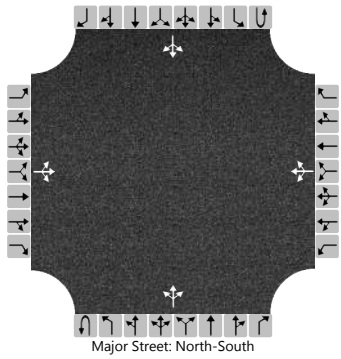
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	PM 75%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Palmer
Jurisdiction	
East/West Street	Palmer Street
North/South Street	Scott Street
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		12	0	68		13	0	3		104	777	11		6	704	0
Percent Heavy Vehicles (%)		1	1	1		1	1	1		1				1		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.11	6.51	6.21		7.11	6.51	6.21		4.11				4.11		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.51	4.01	3.31		3.51	4.01	3.31		2.21				2.21		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			93				19			121				7		
Capacity, c (veh/h)			151				31			814				748		
v/c Ratio			0.62				0.60			0.15				0.01		
95% Queue Length, Q_{95} (veh)			3.3				2.0			0.5				0.0		
Control Delay (s/veh)			61.0				227.7			10.2				9.9		
Level of Service (LOS)			F				F			B				A		
Approach Delay (s/veh)	61.0				227.7				3.9				0.3			
Approach LOS	F				F											

HCS7 Two-Way Stop-Control Report

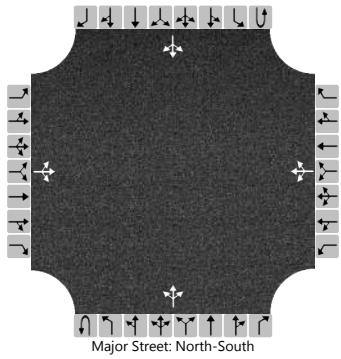
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	PM 100%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Palmer
Jurisdiction	
East/West Street	Palmer Street
North/South Street	Scott Street
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		12	0	68		13	0	3		104	936	11		6	828	0
Percent Heavy Vehicles (%)		1	1	1		1	1	1		1				1		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.11	6.51	6.21		7.11	6.51	6.21		4.11				4.11		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.51	4.01	3.31		3.51	4.01	3.31		2.21				2.21		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			93				19			121				7		
Capacity, c (veh/h)			87				15			719				638		
v/c Ratio			1.07				1.26			0.17				0.01		
95% Queue Length, Q_{95} (veh)			6.3				2.9			0.6				0.0		
Control Delay (s/veh)			203.9				681.4			11.0				10.7		
Level of Service (LOS)			F				F			B				B		
Approach Delay (s/veh)	203.9				681.4				5.4				0.3			
Approach LOS	F				F											

HCS7 Two-Way Stop-Control Report

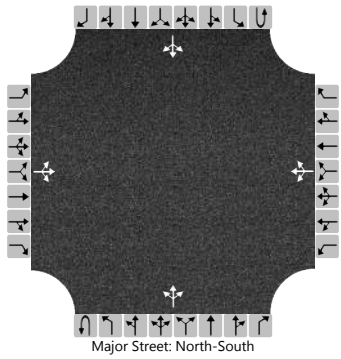
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	8/26/21
Analysis Year	2021
Time Analyzed	AM Existing
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Turner
Jurisdiction	
East/West Street	Turner Street
North/South Street	Scott Street
Peak Hour Factor	0.77
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		2	2	8		13	2	15		17	120	8		4	165	1
Percent Heavy Vehicles (%)		9	9	9		9	9	9		9				9		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.19	6.59	6.29		7.19	6.59	6.29		4.19				4.19		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.58	4.08	3.38		3.58	4.08	3.38		2.28				2.28		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			16				39			22				5		
Capacity, c (veh/h)			665				634			1314				1370		
v/c Ratio			0.02				0.06			0.02				0.00		
95% Queue Length, Q_{95} (veh)			0.1				0.2			0.1				0.0		
Control Delay (s/veh)			10.5				11.1			7.8				7.6		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)		10.5				11.1				1.0				0.2		
Approach LOS		B				B										

HCS7 Two-Way Stop-Control Report

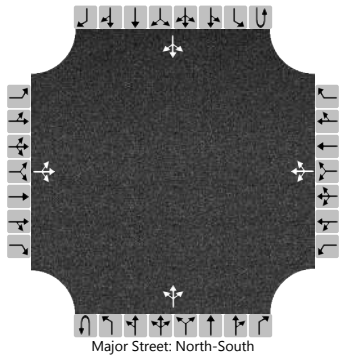
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	8/23/21
Analysis Year	2021
Time Analyzed	AM No-Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Turner
Jurisdiction	
East/West Street	Turner Street
North/South Street	Scott Street
Peak Hour Factor	0.77
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		3	3	19		13	10	17		82	140	8		6	224	5
Percent Heavy Vehicles (%)		9	9	9		9	9	9		9				9		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.19	6.59	6.29		7.19	6.59	6.29		4.19				4.19		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.58	4.08	3.38		3.58	4.08	3.38		2.28				2.28		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			32				52			106				8		
Capacity, c (veh/h)			542				414			1225				1340		
v/c Ratio			0.06				0.13			0.09				0.01		
95% Queue Length, Q_{95} (veh)			0.2				0.4			0.3				0.0		
Control Delay (s/veh)			12.1				15.0			8.2				7.7		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	12.1				15.0				3.4				0.2			
Approach LOS	B				B											

HCS7 Two-Way Stop-Control Report

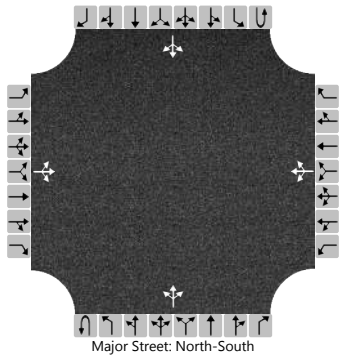
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	AM Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Turner
Jurisdiction	
East/West Street	Turner Street
North/South Street	Scott Street
Peak Hour Factor	0.77
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		3	3	19		13	10	25		82	230	8		11	354	5
Percent Heavy Vehicles (%)		9	9	9		9	9	9		9				9		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.19	6.59	6.29		7.19	6.59	6.29		4.19				4.19		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.58	4.08	3.38		3.58	4.08	3.38		2.28				2.28		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			32				62			106				14		
Capacity, c (veh/h)			382				303			1059				1213		
v/c Ratio			0.08				0.21			0.10				0.01		
95% Queue Length, Q_{95} (veh)			0.3				0.8			0.3				0.0		
Control Delay (s/veh)			15.3				19.9			8.8				8.0		
Level of Service (LOS)			C				C			A				A		
Approach Delay (s/veh)	15.3				19.9				3.0				0.4			
Approach LOS	C				C											

HCS7 Two-Way Stop-Control Report

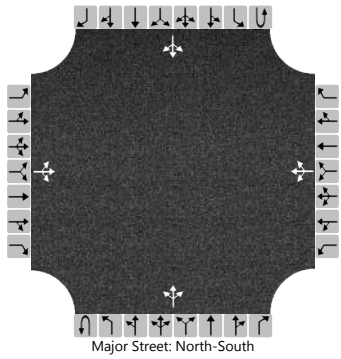
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	AM 25%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Turner
Jurisdiction	
East/West Street	Turner Street
North/South Street	Scott Street
Peak Hour Factor	0.77
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		3	3	19		13	10	32		82	305	8		16	506	5
Percent Heavy Vehicles (%)		9	9	9		9	9	9		9				9		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.19	6.59	6.29		7.19	6.59	6.29		4.19				4.19		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.58	4.08	3.38		3.58	4.08	3.38		2.28				2.28		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			32				71			106				21		
Capacity, c (veh/h)			253				212			893				1115		
v/c Ratio			0.13				0.34			0.12				0.02		
95% Queue Length, Q_{95} (veh)			0.4				1.4			0.4				0.1		
Control Delay (s/veh)			21.3				30.3			9.6				8.3		
Level of Service (LOS)			C				D			A				A		
Approach Delay (s/veh)	21.3				30.3				3.2				0.5			
Approach LOS	C				D											

HCS7 Two-Way Stop-Control Report

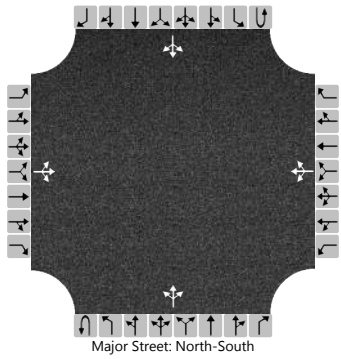
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	AM 50%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Turner
Jurisdiction	
East/West Street	Turner Street
North/South Street	Scott Street
Peak Hour Factor	0.77
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		3	3	19		13	10	38		82	379	8		22	657	5
Percent Heavy Vehicles (%)		9	9	9		9	9	9		9				9		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.19	6.59	6.29		7.19	6.59	6.29		4.19				4.19		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.58	4.08	3.38		3.58	4.08	3.38		2.28				2.28		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			32				79			106				29		
Capacity, c (veh/h)			160				141			753				1027		
v/c Ratio			0.20				0.56			0.14				0.03		
95% Queue Length, Q_{95} (veh)			0.7				2.8			0.5				0.1		
Control Delay (s/veh)			33.2				59.1			10.6				8.6		
Level of Service (LOS)			D				F			B				A		
Approach Delay (s/veh)	33.2				59.1				3.6				0.7			
Approach LOS	D				F											

HCS7 Two-Way Stop-Control Report

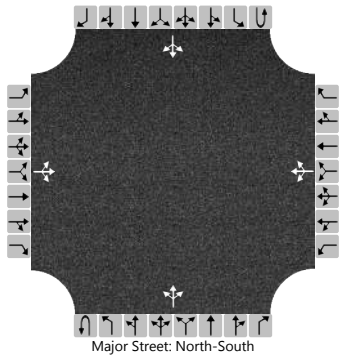
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	AM 75%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Turner
Jurisdiction	
East/West Street	Turner Street
North/South Street	Scott Street
Peak Hour Factor	0.77
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		3	3	19		13	10	45		82	454	8		28	809	5
Percent Heavy Vehicles (%)		9	9	9		9	9	9		9				9		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.19	6.59	6.29		7.19	6.59	6.29		4.19				4.19		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.58	4.08	3.38		3.58	4.08	3.38		2.28				2.28		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			32				88			106				36		
Capacity, c (veh/h)			92				89			633				944		
v/c Ratio			0.35				1.00			0.17				0.04		
95% Queue Length, Q_{95} (veh)			1.4				5.7			0.6				0.1		
Control Delay (s/veh)			64.4				179.8			11.8				9.0		
Level of Service (LOS)			F				F			B				A		
Approach Delay (s/veh)		64.4				179.8				4.3				1.1		
Approach LOS		F				F										

HCS7 Two-Way Stop-Control Report

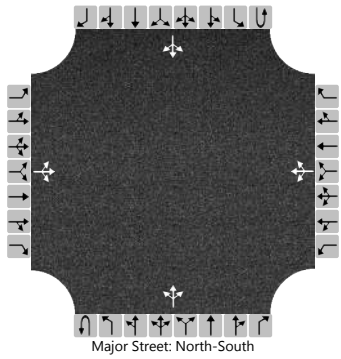
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	AM 100%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Turner
Jurisdiction	
East/West Street	Turner Street
North/South Street	Scott Street
Peak Hour Factor	0.77
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		3	3	19		13	10	52		82	529	8		33	960	5
Percent Heavy Vehicles (%)		9	9	9		9	9	9		9				9		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.19	6.59	6.29		7.19	6.59	6.29		4.19				4.19		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.58	4.08	3.38		3.58	4.08	3.38		2.28				2.28		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			32				97			106				43		
Capacity, c (veh/h)			43				51			532				867		
v/c Ratio			0.76				1.92			0.20				0.05		
95% Queue Length, Q_{95} (veh)			2.9				9.6			0.7				0.2		
Control Delay (s/veh)			211.6				608.1			13.5				9.4		
Level of Service (LOS)			F				F			B				A		
Approach Delay (s/veh)		211.6				608.1				5.6				1.8		
Approach LOS		F				F										

HCS7 Two-Way Stop-Control Report

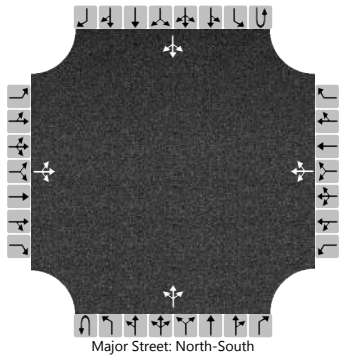
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	8/26/21
Analysis Year	2021
Time Analyzed	PM Existing
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Turner
Jurisdiction	
East/West Street	Turner Street
North/South Street	Scott Street
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		3	6	26		19	2	22		3	167	24		8	264	1
Percent Heavy Vehicles (%)		1	1	1		1	1	1		1				1		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.11	6.51	6.21		7.11	6.51	6.21		4.11				4.11		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.51	4.01	3.31		3.51	4.01	3.31		2.21				2.21		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			41				50			3				9		
Capacity, c (veh/h)			623				560			1258				1353		
v/c Ratio			0.07				0.09			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.2				0.3			0.0				0.0		
Control Delay (s/veh)			11.2				12.1			7.9				7.7		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)		11.2				12.1				0.1				0.3		
Approach LOS		B				B										

HCS7 Two-Way Stop-Control Report

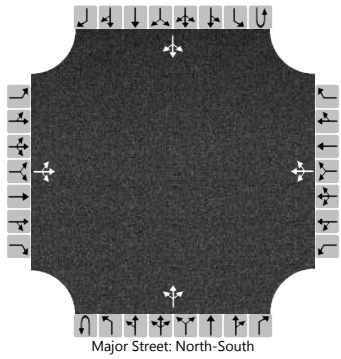
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	8/23/21
Analysis Year	2021
Time Analyzed	PM No-Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Turner
Jurisdiction	
East/West Street	Turner Street
North/South Street	Scott Street
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		9	11	77		19	3	27		14	224	24		9	302	2
Percent Heavy Vehicles (%)		1	1	1		1	1	1		1				1		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.11	6.51	6.21		7.11	6.51	6.21		4.11				4.11		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.51	4.01	3.31		3.51	4.01	3.31		2.21				2.21		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			113				57			16				10		
Capacity, c (veh/h)			575				441			1211				1279		
v/c Ratio			0.20				0.13			0.01				0.01		
95% Queue Length, Q_{95} (veh)			0.7				0.4			0.0				0.0		
Control Delay (s/veh)			12.8				14.4			8.0				7.8		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)		12.8				14.4				0.6				0.3		
Approach LOS		B				B										

HCS7 Two-Way Stop-Control Report

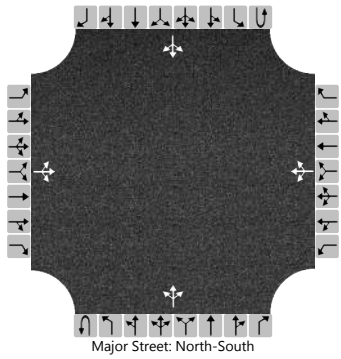
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	PM Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Turner
Jurisdiction	
East/West Street	Turner Street
North/South Street	Scott Street
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		9	11	77		19	3	40		14	362	24		13	411	2
Percent Heavy Vehicles (%)		1	1	1		1	1	1		1				1		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.11	6.51	6.21		7.11	6.51	6.21		4.11				4.11		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.51	4.01	3.31		3.51	4.01	3.31		2.21				2.21		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			113				72			16				15		
Capacity, c (veh/h)			436				327			1087				1117		
v/c Ratio			0.26				0.22			0.01				0.01		
95% Queue Length, Q_{95} (veh)			1.0				0.8			0.0				0.0		
Control Delay (s/veh)			16.1				19.1			8.4				8.3		
Level of Service (LOS)			C				C			A				A		
Approach Delay (s/veh)	16.1				19.1				0.5				0.4			
Approach LOS	C				C											

HCS7 Two-Way Stop-Control Report

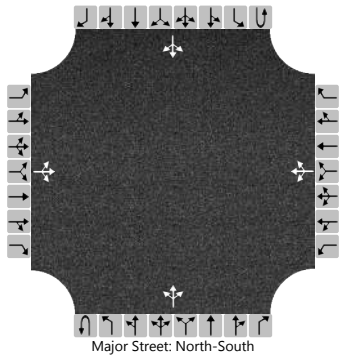
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	PM 25%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Turner
Jurisdiction	
East/West Street	Turner Street
North/South Street	Scott Street
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		9	11	77		19	3	53		14	508	24		18	532	2
Percent Heavy Vehicles (%)		1	1	1		1	1	1		1				1		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.11	6.51	6.21		7.11	6.51	6.21		4.11				4.11		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.51	4.01	3.31		3.51	4.01	3.31		2.21				2.21		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			113				87			16				21		
Capacity, c (veh/h)			310				228			965				967		
v/c Ratio			0.36				0.38			0.02				0.02		
95% Queue Length, Q_{95} (veh)			1.6				1.7			0.1				0.1		
Control Delay (s/veh)			23.1				30.2			8.8				8.8		
Level of Service (LOS)			C				D			A				A		
Approach Delay (s/veh)	23.1				30.2				0.4				0.6			
Approach LOS	C				D											

HCS7 Two-Way Stop-Control Report

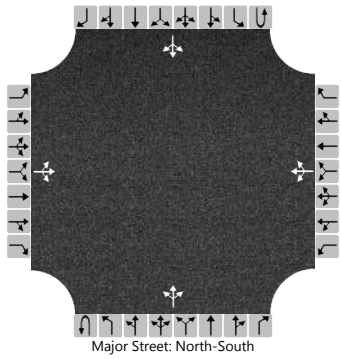
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	PM 50%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Turner
Jurisdiction	
East/West Street	Turner Street
North/South Street	Scott Street
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		9	11	77		19	3	66		14	654	24		22	652	2
Percent Heavy Vehicles (%)		1	1	1		1	1	1		1				1		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.11	6.51	6.21		7.11	6.51	6.21		4.11				4.11		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.51	4.01	3.31		3.51	4.01	3.31		2.21				2.21		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			113				102			16				26		
Capacity, c (veh/h)			209				153			856				836		
v/c Ratio			0.54				0.67			0.02				0.03		
95% Queue Length, Q_{95} (veh)			2.8				3.8			0.1				0.1		
Control Delay (s/veh)			40.6				66.2			9.3				9.4		
Level of Service (LOS)			E				F			A				A		
Approach Delay (s/veh)	40.6				66.2				0.5				0.8			
Approach LOS	E				F											

HCS7 Two-Way Stop-Control Report

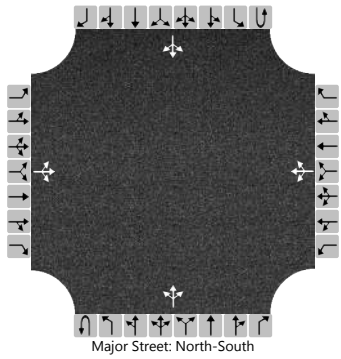
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	PM 75%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Turner
Jurisdiction	
East/West Street	Turner Street
North/South Street	Scott Street
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		9	11	77		19	3	79		14	800	24		27	772	2
Percent Heavy Vehicles (%)		1	1	1		1	1	1		1				1		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.11	6.51	6.21		7.11	6.51	6.21		4.11				4.11		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.51	4.01	3.31		3.51	4.01	3.31		2.21				2.21		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			113				117			16				31		
Capacity, c (veh/h)			131				96			759				722		
v/c Ratio			0.86				1.23			0.02				0.04		
95% Queue Length, Q_{95} (veh)			5.5				8.1			0.1				0.1		
Control Delay (s/veh)			109.8				247.7			9.8				10.2		
Level of Service (LOS)			F				F			A				B		
Approach Delay (s/veh)	109.8				247.7				0.6				1.2			
Approach LOS	F				F											

HCS7 Two-Way Stop-Control Report

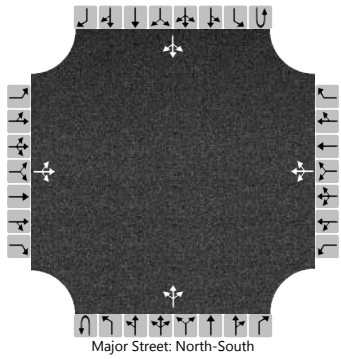
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	PM 100%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Turner
Jurisdiction	
East/West Street	Turner Street
North/South Street	Scott Street
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		9	11	77		19	3	92		14	945	24		31	893	2
Percent Heavy Vehicles (%)		1	1	1		1	1	1		1				1		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.11	6.51	6.21		7.11	6.51	6.21		4.11				4.11		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.51	4.01	3.31		3.51	4.01	3.31		2.21				2.21		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			113				133			16				36		
Capacity, c (veh/h)			72				53			672				624		
v/c Ratio			1.56				2.52			0.02				0.06		
95% Queue Length, Q_{95} (veh)			9.5				13.6			0.1				0.2		
Control Delay (s/veh)			408.2				858.8			10.5				11.1		
Level of Service (LOS)			F				F			B				B		
Approach Delay (s/veh)		408.2				858.8				0.8				1.8		
Approach LOS		F				F										

MOVEMENT SUMMARY

Site: 103 [Scott and Turner (Site Folder: General)]

2021 Peak AM Existing
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	17	2.0	20	2.0	0.115	5.5	LOS A	0.6	4.5	0.07	0.30	0.07	39.8
2	T1	120	2.0	141	2.0	0.115	1.8	LOS A	0.6	4.5	0.07	0.30	0.07	39.7
3	R2	8	2.0	9	2.0	0.115	2.2	LOS A	0.6	4.5	0.07	0.30	0.07	39.0
Approach		145	2.0	171	2.0	0.115	2.3	LOS A	0.6	4.5	0.07	0.30	0.07	39.6
East: Westbound Turner														
4	L2	13	2.0	15	2.0	0.033	6.4	LOS A	0.2	1.2	0.34	0.48	0.34	38.9
5	T1	2	2.0	2	2.0	0.033	2.7	LOS A	0.2	1.2	0.34	0.48	0.34	38.2
6	R2	15	2.0	18	2.0	0.033	3.1	LOS A	0.2	1.2	0.34	0.48	0.34	38.1
Approach		30	2.0	35	2.0	0.033	4.5	LOS A	0.2	1.2	0.34	0.48	0.34	38.5
North: Southbound Scott Street														
7	L2	4	2.0	5	2.0	0.150	5.7	LOS A	0.8	6.0	0.16	0.28	0.16	39.8
8	T1	165	2.0	194	2.0	0.150	2.0	LOS A	0.8	6.0	0.16	0.28	0.16	39.6
9	R2	1	2.0	1	2.0	0.150	2.3	LOS A	0.8	6.0	0.16	0.28	0.16	38.6
Approach		170	2.0	200	2.0	0.150	2.1	LOS A	0.8	6.0	0.16	0.28	0.16	39.6
West: Eastbound Turner														
10	L2	2	2.0	2	2.0	0.014	6.7	LOS A	0.1	0.5	0.39	0.44	0.39	38.8
11	T1	2	2.0	2	2.0	0.014	3.0	LOS A	0.1	0.5	0.39	0.44	0.39	38.6
12	R2	8	2.0	9	2.0	0.014	3.3	LOS A	0.1	0.5	0.39	0.44	0.39	37.7
Approach		12	2.0	14	2.0	0.014	3.8	LOS A	0.1	0.5	0.39	0.44	0.39	38.1
All Vehicles		357	2.0	420	2.0	0.150	2.4	LOS A	0.8	6.0	0.15	0.31	0.15	39.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Scott and Turner (Site Folder: General)]

Peak AM No Build
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	82	2.0	96	2.0	0.183	5.6	LOS A	1.1	7.8	0.09	0.38	0.09	39.2
2	T1	140	2.0	165	2.0	0.183	1.8	LOS A	1.1	7.8	0.09	0.38	0.09	39.3
3	R2	8	2.0	9	2.0	0.183	2.2	LOS A	1.1	7.8	0.09	0.38	0.09	38.6
Approach		230	2.0	271	2.0	0.183	3.2	LOS A	1.1	7.8	0.09	0.38	0.09	39.2
East: Westbound Turner														
4	L2	13	2.0	15	2.0	0.049	7.1	LOS A	0.2	1.7	0.43	0.51	0.43	38.8
5	T1	10	2.0	12	2.0	0.049	3.3	LOS A	0.2	1.7	0.43	0.51	0.43	38.2
6	R2	17	2.0	20	2.0	0.049	3.7	LOS A	0.2	1.7	0.43	0.51	0.43	38.1
Approach		40	2.0	47	2.0	0.049	4.7	LOS A	0.2	1.7	0.43	0.51	0.43	38.4
North: Southbound Scott Street														
7	L2	6	2.0	7	2.0	0.240	6.4	LOS A	1.4	10.1	0.34	0.36	0.34	39.4
8	T1	224	2.0	264	2.0	0.240	2.6	LOS A	1.4	10.1	0.34	0.36	0.34	39.2
9	R2	5	2.0	6	2.0	0.240	3.0	LOS A	1.4	10.1	0.34	0.36	0.34	38.0
Approach		235	2.0	276	2.0	0.240	2.7	LOS A	1.4	10.1	0.34	0.36	0.34	39.2
West: Eastbound Turner														
10	L2	3	2.0	4	2.0	0.031	7.2	LOS A	0.2	1.2	0.46	0.48	0.46	38.7
11	T1	3	2.0	4	2.0	0.031	3.4	LOS A	0.2	1.2	0.46	0.48	0.46	38.5
12	R2	19	2.0	22	2.0	0.031	3.8	LOS A	0.2	1.2	0.46	0.48	0.46	37.7
Approach		25	2.0	29	2.0	0.031	4.1	LOS A	0.2	1.2	0.46	0.48	0.46	37.9
All Vehicles		530	2.0	624	2.0	0.240	3.1	LOS A	1.4	10.1	0.25	0.39	0.25	39.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Scott and Turner (Site Folder: General)]

Peak AM Build
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	82	2.0	96	2.0	0.256	5.6	LOS A	1.7	11.9	0.13	0.35	0.13	39.3
2	T1	230	2.0	271	2.0	0.256	1.9	LOS A	1.7	11.9	0.13	0.35	0.13	39.4
3	R2	8	2.0	9	2.0	0.256	2.2	LOS A	1.7	11.9	0.13	0.35	0.13	38.7
Approach		320	2.0	376	2.0	0.256	2.8	LOS A	1.7	11.9	0.13	0.35	0.13	39.3
East: Westbound Turner														
4	L2	13	2.0	15	2.0	0.064	7.8	LOS A	0.3	2.3	0.51	0.56	0.51	38.7
5	T1	10	2.0	12	2.0	0.064	4.1	LOS A	0.3	2.3	0.51	0.56	0.51	37.9
6	R2	25	2.0	29	2.0	0.064	4.4	LOS A	0.3	2.3	0.51	0.56	0.51	37.9
Approach		48	2.0	56	2.0	0.064	5.3	LOS A	0.3	2.3	0.51	0.56	0.51	38.1
North: Southbound Scott Street														
7	L2	11	2.0	13	2.0	0.366	6.5	LOS A	2.5	17.7	0.39	0.38	0.39	39.3
8	T1	354	2.0	416	2.0	0.366	2.7	LOS A	2.5	17.7	0.39	0.38	0.39	39.1
9	R2	5	2.0	6	2.0	0.366	3.1	LOS A	2.5	17.7	0.39	0.38	0.39	37.9
Approach		370	2.0	435	2.0	0.366	2.8	LOS A	2.5	17.7	0.39	0.38	0.39	39.1
West: Eastbound Turner														
10	L2	3	2.0	4	2.0	0.036	8.2	LOS A	0.2	1.4	0.57	0.56	0.57	38.2
11	T1	3	2.0	4	2.0	0.036	4.5	LOS A	0.2	1.4	0.57	0.56	0.57	38.0
12	R2	19	2.0	22	2.0	0.036	4.8	LOS A	0.2	1.4	0.57	0.56	0.57	37.1
Approach		25	2.0	29	2.0	0.036	5.2	LOS A	0.2	1.4	0.57	0.56	0.57	37.3
All Vehicles		763	2.0	898	2.0	0.366	3.1	LOS A	2.5	17.7	0.29	0.39	0.29	39.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Scott and Turner (Site Folder: General)]

Peak AM Build with 25% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	82	2.0	96	2.0	0.319	5.7	LOS A	2.3	16.3	0.16	0.34	0.16	39.3
2	T1	305	2.0	359	2.0	0.319	1.9	LOS A	2.3	16.3	0.16	0.34	0.16	39.4
3	R2	8	2.0	9	2.0	0.319	2.3	LOS A	2.3	16.3	0.16	0.34	0.16	38.7
Approach		395	2.0	465	2.0	0.319	2.7	LOS A	2.3	16.3	0.16	0.34	0.16	39.3
East: Westbound Turner														
4	L2	13	2.0	15	2.0	0.079	8.5	LOS A	0.4	3.0	0.57	0.60	0.57	38.5
5	T1	10	2.0	12	2.0	0.079	4.7	LOS A	0.4	3.0	0.57	0.60	0.57	37.6
6	R2	32	2.0	38	2.0	0.079	5.1	LOS A	0.4	3.0	0.57	0.60	0.57	37.7
Approach		55	2.0	65	2.0	0.079	5.8	LOS A	0.4	3.0	0.57	0.60	0.57	37.9
North: Southbound Scott Street														
7	L2	16	2.0	19	2.0	0.510	6.6	LOS A	4.1	29.5	0.46	0.41	0.46	39.1
8	T1	506	2.0	595	2.0	0.510	2.9	LOS A	4.1	29.5	0.46	0.41	0.46	39.0
9	R2	5	2.0	6	2.0	0.510	3.3	LOS A	4.1	29.5	0.46	0.41	0.46	37.7
Approach		527	2.0	620	2.0	0.510	3.0	LOS A	4.1	29.5	0.46	0.41	0.46	39.0
West: Eastbound Turner														
10	L2	3	2.0	4	2.0	0.044	9.7	LOS A	0.3	1.8	0.69	0.64	0.69	37.3
11	T1	3	2.0	4	2.0	0.044	6.0	LOS A	0.3	1.8	0.69	0.64	0.69	37.1
12	R2	19	2.0	22	2.0	0.044	6.4	LOS A	0.3	1.8	0.69	0.64	0.69	36.3
Approach		25	2.0	29	2.0	0.044	6.7	LOS A	0.3	1.8	0.69	0.64	0.69	36.6
All Vehicles		1002	2.0	1179	2.0	0.510	3.1	LOS A	4.1	29.5	0.35	0.40	0.35	39.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Scott and Turner (Site Folder: General)]

Peak AM Build with 50% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	82	2.0	96	2.0	0.384	5.7	LOS A	3.1	21.8	0.21	0.33	0.21	39.3
2	T1	379	2.0	446	2.0	0.384	2.0	LOS A	3.1	21.8	0.21	0.33	0.21	39.3
3	R2	8	2.0	9	2.0	0.384	2.3	LOS A	3.1	21.8	0.21	0.33	0.21	38.7
Approach		469	2.0	552	2.0	0.384	2.6	LOS A	3.1	21.8	0.21	0.33	0.21	39.3
East: Westbound Turner														
4	L2	13	2.0	15	2.0	0.096	9.2	LOS A	0.5	3.7	0.63	0.65	0.63	38.2
5	T1	10	2.0	12	2.0	0.096	5.5	LOS A	0.5	3.7	0.63	0.65	0.63	37.3
6	R2	38	2.0	45	2.0	0.096	5.8	LOS A	0.5	3.7	0.63	0.65	0.63	37.4
Approach		61	2.0	72	2.0	0.096	6.5	LOS A	0.5	3.7	0.63	0.65	0.63	37.6
North: Southbound Scott Street														
7	L2	22	2.0	26	2.0	0.651	6.9	LOS A	6.6	47.3	0.56	0.45	0.56	38.9
8	T1	657	2.0	773	2.0	0.651	3.2	LOS A	6.6	47.3	0.56	0.45	0.56	38.8
9	R2	5	2.0	6	2.0	0.651	3.6	LOS A	6.6	47.3	0.56	0.45	0.56	37.4
Approach		684	2.0	805	2.0	0.651	3.3	LOS A	6.6	47.3	0.56	0.45	0.56	38.8
West: Eastbound Turner														
10	L2	3	2.0	4	2.0	0.056	11.8	LOS B	0.3	2.4	0.80	0.73	0.80	36.3
11	T1	3	2.0	4	2.0	0.056	8.1	LOS A	0.3	2.4	0.80	0.73	0.80	36.1
12	R2	19	2.0	22	2.0	0.056	8.4	LOS A	0.3	2.4	0.80	0.73	0.80	35.3
Approach		25	2.0	29	2.0	0.056	8.8	LOS A	0.3	2.4	0.80	0.73	0.80	35.5
All Vehicles		1239	2.0	1458	2.0	0.651	3.3	LOS A	6.6	47.3	0.44	0.42	0.44	38.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Scott and Turner (Site Folder: General)]

Peak AM Build with 75% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	82	2.0	96	2.0	0.451	5.8	LOS A	4.1	29.3	0.26	0.33	0.26	39.1
2	T1	454	2.0	534	2.0	0.451	2.1	LOS A	4.1	29.3	0.26	0.33	0.26	39.2
3	R2	8	2.0	9	2.0	0.451	2.4	LOS A	4.1	29.3	0.26	0.33	0.26	38.6
Approach		544	2.0	640	2.0	0.451	2.6	LOS A	4.1	29.3	0.26	0.33	0.26	39.2
East: Westbound Turner														
4	L2	13	2.0	15	2.0	0.117	10.1	LOS B	0.7	4.7	0.69	0.70	0.69	37.9
5	T1	10	2.0	12	2.0	0.117	6.3	LOS A	0.7	4.7	0.69	0.70	0.69	36.8
6	R2	45	2.0	53	2.0	0.117	6.7	LOS A	0.7	4.7	0.69	0.70	0.69	37.1
Approach		68	2.0	80	2.0	0.117	7.3	LOS A	0.7	4.7	0.69	0.70	0.69	37.3
North: Southbound Scott Street														
7	L2	28	2.0	33	2.0	0.791	7.5	LOS A	10.9	77.5	0.75	0.52	0.75	38.5
8	T1	809	2.0	952	2.0	0.791	3.7	LOS A	10.9	77.5	0.75	0.52	0.75	38.4
9	R2	5	2.0	6	2.0	0.791	4.1	LOS A	10.9	77.5	0.75	0.52	0.75	36.9
Approach		842	2.0	991	2.0	0.791	3.9	LOS A	10.9	77.5	0.75	0.52	0.75	38.4
West: Eastbound Turner														
10	L2	3	2.0	4	2.0	0.079	14.8	LOS B	0.5	3.7	0.91	0.83	0.91	34.8
11	T1	3	2.0	4	2.0	0.079	11.1	LOS B	0.5	3.7	0.91	0.83	0.91	34.6
12	R2	19	2.0	22	2.0	0.079	11.5	LOS B	0.5	3.7	0.91	0.83	0.91	33.9
Approach		25	2.0	29	2.0	0.079	11.8	LOS B	0.5	3.7	0.91	0.83	0.91	34.1
All Vehicles		1479	2.0	1740	2.0	0.791	3.7	LOS A	10.9	77.5	0.57	0.46	0.57	38.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Scott and Turner (Site Folder: General)]

Peak AM Build with 100% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	82	2.0	96	2.0	0.519	5.9	LOS A	5.5	39.2	0.33	0.34	0.33	39.0
2	T1	529	2.0	622	2.0	0.519	2.1	LOS A	5.5	39.2	0.33	0.34	0.33	39.1
3	R2	8	2.0	9	2.0	0.519	2.5	LOS A	5.5	39.2	0.33	0.34	0.33	38.5
Approach		619	2.0	728	2.0	0.519	2.6	LOS A	5.5	39.2	0.33	0.34	0.33	39.1
East: Westbound Turner														
4	L2	13	2.0	15	2.0	0.143	11.1	LOS B	0.8	6.0	0.74	0.75	0.74	37.5
5	T1	10	2.0	12	2.0	0.143	7.3	LOS A	0.8	6.0	0.74	0.75	0.74	36.3
6	R2	52	2.0	61	2.0	0.143	7.7	LOS A	0.8	6.0	0.74	0.75	0.74	36.8
Approach		75	2.0	88	2.0	0.143	8.2	LOS A	0.8	6.0	0.74	0.75	0.74	36.9
North: Southbound Scott Street														
7	L2	33	2.0	39	2.0	0.929	11.1	LOS B	24.6	174.9	1.00	0.68	1.09	37.8
8	T1	960	2.0	1129	2.0	0.929	7.4	LOS A	24.6	174.9	1.00	0.68	1.09	37.6
9	R2	5	2.0	6	2.0	0.929	7.8	LOS A	24.6	174.9	1.00	0.68	1.09	36.0
Approach		998	2.0	1174	2.0	0.929	7.5	LOS A	24.6	174.9	1.00	0.68	1.09	37.6
West: Eastbound Turner														
10	L2	3	2.0	4	2.0	0.130	21.7	LOS C	0.9	6.6	1.00	0.94	1.00	31.8
11	T1	3	2.0	4	2.0	0.130	18.0	LOS B	0.9	6.6	1.00	0.94	1.00	31.7
12	R2	19	2.0	22	2.0	0.130	18.3	LOS B	0.9	6.6	1.00	0.94	1.00	31.1
Approach		25	2.0	29	2.0	0.130	18.7	LOS B	0.9	6.6	1.00	0.94	1.00	31.2
All Vehicles		1717	2.0	2020	2.0	0.929	6.0	LOS A	24.6	174.9	0.75	0.56	0.80	38.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Scott and Turner (Site Folder: General)]

2021 Peak PM Existing
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	3	2.0	4	2.0	0.160	5.6	LOS A	0.9	6.7	0.12	0.27	0.12	39.8
2	T1	167	2.0	196	2.0	0.160	1.9	LOS A	0.9	6.7	0.12	0.27	0.12	39.7
3	R2	24	2.0	28	2.0	0.160	2.2	LOS A	0.9	6.7	0.12	0.27	0.12	39.1
Approach		194	2.0	228	2.0	0.160	2.0	LOS A	0.9	6.7	0.12	0.27	0.12	39.6
East: Westbound Turner														
4	L2	19	2.0	22	2.0	0.049	6.7	LOS A	0.2	1.8	0.38	0.51	0.38	38.8
5	T1	2	2.0	2	2.0	0.049	3.0	LOS A	0.2	1.8	0.38	0.51	0.38	38.1
6	R2	22	2.0	26	2.0	0.049	3.3	LOS A	0.2	1.8	0.38	0.51	0.38	38.0
Approach		43	2.0	51	2.0	0.049	4.8	LOS A	0.2	1.8	0.38	0.51	0.38	38.4
North: Southbound Scott Street														
7	L2	8	2.0	9	2.0	0.227	5.7	LOS A	1.5	10.4	0.15	0.27	0.15	39.8
8	T1	264	2.0	311	2.0	0.227	1.9	LOS A	1.5	10.4	0.15	0.27	0.15	39.6
9	R2	1	2.0	1	2.0	0.227	2.3	LOS A	1.5	10.4	0.15	0.27	0.15	38.6
Approach		273	2.0	321	2.0	0.227	2.0	LOS A	1.5	10.4	0.15	0.27	0.15	39.6
West: Eastbound Turner														
10	L2	3	2.0	4	2.0	0.045	7.6	LOS A	0.2	1.6	0.49	0.51	0.49	38.6
11	T1	6	2.0	7	2.0	0.045	3.8	LOS A	0.2	1.6	0.49	0.51	0.49	38.4
12	R2	26	2.0	31	2.0	0.045	4.2	LOS A	0.2	1.6	0.49	0.51	0.49	37.5
Approach		35	2.0	41	2.0	0.045	4.4	LOS A	0.2	1.6	0.49	0.51	0.49	37.8
All Vehicles		545	2.0	641	2.0	0.227	2.4	LOS A	1.5	10.4	0.18	0.31	0.18	39.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Scott and Turner (Site Folder: General)]

Peak PM No Build
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	14	2.0	16	2.0	0.223	5.7	LOS A	1.4	10.2	0.17	0.29	0.17	39.6
2	T1	224	2.0	264	2.0	0.223	2.0	LOS A	1.4	10.2	0.17	0.29	0.17	39.5
3	R2	24	2.0	28	2.0	0.223	2.3	LOS A	1.4	10.2	0.17	0.29	0.17	38.9
Approach		262	2.0	308	2.0	0.223	2.2	LOS A	1.4	10.2	0.17	0.29	0.17	39.5
East: Westbound Turner														
4	L2	19	2.0	22	2.0	0.061	7.3	LOS A	0.3	2.2	0.46	0.54	0.46	38.7
5	T1	3	2.0	4	2.0	0.061	3.5	LOS A	0.3	2.2	0.46	0.54	0.46	38.0
6	R2	27	2.0	32	2.0	0.061	3.9	LOS A	0.3	2.2	0.46	0.54	0.46	38.0
Approach		49	2.0	58	2.0	0.061	5.2	LOS A	0.3	2.2	0.46	0.54	0.46	38.2
North: Southbound Scott Street														
7	L2	9	2.0	11	2.0	0.269	5.8	LOS A	1.8	12.6	0.20	0.29	0.20	39.7
8	T1	302	2.0	355	2.0	0.269	2.0	LOS A	1.8	12.6	0.20	0.29	0.20	39.5
9	R2	2	2.0	2	2.0	0.269	2.4	LOS A	1.8	12.6	0.20	0.29	0.20	38.4
Approach		313	2.0	368	2.0	0.269	2.1	LOS A	1.8	12.6	0.20	0.29	0.20	39.5
West: Eastbound Turner														
10	L2	9	2.0	11	2.0	0.131	8.1	LOS A	0.7	5.1	0.55	0.58	0.55	38.3
11	T1	11	2.0	13	2.0	0.131	4.4	LOS A	0.7	5.1	0.55	0.58	0.55	38.1
12	R2	77	2.0	91	2.0	0.131	4.7	LOS A	0.7	5.1	0.55	0.58	0.55	37.2
Approach		97	2.0	114	2.0	0.131	5.0	LOS A	0.7	5.1	0.55	0.58	0.55	37.4
All Vehicles		721	2.0	848	2.0	0.269	2.7	LOS A	1.8	12.6	0.26	0.35	0.26	39.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Scott and Turner (Site Folder: General)]

Peak PM Build
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	14	2.0	16	2.0	0.336	5.8	LOS A	2.5	17.6	0.21	0.29	0.21	39.5
2	T1	362	2.0	426	2.0	0.336	2.0	LOS A	2.5	17.6	0.21	0.29	0.21	39.5
3	R2	24	2.0	28	2.0	0.336	2.4	LOS A	2.5	17.6	0.21	0.29	0.21	38.9
Approach		400	2.0	471	2.0	0.336	2.2	LOS A	2.5	17.6	0.21	0.29	0.21	39.4
East: Westbound Turner														
4	L2	19	2.0	22	2.0	0.089	8.5	LOS A	0.5	3.4	0.58	0.62	0.58	38.3
5	T1	3	2.0	4	2.0	0.089	4.7	LOS A	0.5	3.4	0.58	0.62	0.58	37.5
6	R2	40	2.0	47	2.0	0.089	5.1	LOS A	0.5	3.4	0.58	0.62	0.58	37.6
Approach		62	2.0	73	2.0	0.089	6.1	LOS A	0.5	3.4	0.58	0.62	0.58	37.8
North: Southbound Scott Street														
7	L2	13	2.0	15	2.0	0.360	5.8	LOS A	2.7	19.2	0.23	0.29	0.23	39.6
8	T1	411	2.0	484	2.0	0.360	2.0	LOS A	2.7	19.2	0.23	0.29	0.23	39.5
9	R2	2	2.0	2	2.0	0.360	2.4	LOS A	2.7	19.2	0.23	0.29	0.23	38.4
Approach		426	2.0	501	2.0	0.360	2.2	LOS A	2.7	19.2	0.23	0.29	0.23	39.5
West: Eastbound Turner														
10	L2	9	2.0	11	2.0	0.148	9.2	LOS A	0.8	5.9	0.64	0.66	0.64	37.7
11	T1	11	2.0	13	2.0	0.148	5.4	LOS A	0.8	5.9	0.64	0.66	0.64	37.5
12	R2	77	2.0	91	2.0	0.148	5.8	LOS A	0.8	5.9	0.64	0.66	0.64	36.7
Approach		97	2.0	114	2.0	0.148	6.1	LOS A	0.8	5.9	0.64	0.66	0.64	36.9
All Vehicles		985	2.0	1159	2.0	0.360	2.8	LOS A	2.7	19.2	0.28	0.35	0.28	39.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Scott and Turner (Site Folder: General)]

Peak PM Build with 25% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	14	2.0	16	2.0	0.457	5.8	LOS A	3.9	27.9	0.26	0.30	0.26	39.4
2	T1	508	2.0	598	2.0	0.457	2.1	LOS A	3.9	27.9	0.26	0.30	0.26	39.4
3	R2	24	2.0	28	2.0	0.457	2.5	LOS A	3.9	27.9	0.26	0.30	0.26	38.8
Approach		546	2.0	642	2.0	0.457	2.2	LOS A	3.9	27.9	0.26	0.30	0.26	39.4
East: Westbound Turner														
4	L2	19	2.0	22	2.0	0.127	10.0	LOS B	0.7	5.1	0.69	0.71	0.69	37.8
5	T1	3	2.0	4	2.0	0.127	6.3	LOS A	0.7	5.1	0.69	0.71	0.69	36.7
6	R2	53	2.0	62	2.0	0.127	6.6	LOS A	0.7	5.1	0.69	0.71	0.69	37.1
Approach		75	2.0	88	2.0	0.127	7.5	LOS A	0.7	5.1	0.69	0.71	0.69	37.2
North: Southbound Scott Street														
7	L2	18	2.0	21	2.0	0.459	5.8	LOS A	4.0	28.5	0.26	0.30	0.26	39.5
8	T1	532	2.0	626	2.0	0.459	2.1	LOS A	4.0	28.5	0.26	0.30	0.26	39.4
9	R2	2	2.0	2	2.0	0.459	2.4	LOS A	4.0	28.5	0.26	0.30	0.26	38.3
Approach		552	2.0	649	2.0	0.459	2.2	LOS A	4.0	28.5	0.26	0.30	0.26	39.4
West: Eastbound Turner														
10	L2	9	2.0	11	2.0	0.171	10.6	LOS B	1.0	7.1	0.72	0.74	0.72	36.9
11	T1	11	2.0	13	2.0	0.171	6.9	LOS A	1.0	7.1	0.72	0.74	0.72	36.7
12	R2	77	2.0	91	2.0	0.171	7.2	LOS A	1.0	7.1	0.72	0.74	0.72	35.9
Approach		97	2.0	114	2.0	0.171	7.5	LOS A	1.0	7.1	0.72	0.74	0.72	36.1
All Vehicles		1270	2.0	1494	2.0	0.459	2.9	LOS A	4.0	28.5	0.32	0.36	0.32	39.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Scott and Turner (Site Folder: General)]

Peak PM Build with 50% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	14	2.0	16	2.0	0.577	6.0	LOS A	6.0	42.5	0.33	0.31	0.33	39.2
2	T1	654	2.0	769	2.0	0.577	2.2	LOS A	6.0	42.5	0.33	0.31	0.33	39.2
3	R2	24	2.0	28	2.0	0.577	2.6	LOS A	6.0	42.5	0.33	0.31	0.33	38.6
Approach		692	2.0	814	2.0	0.577	2.3	LOS A	6.0	42.5	0.33	0.31	0.33	39.2
East: Westbound Turner														
4	L2	19	2.0	22	2.0	0.180	12.1	LOS B	1.1	7.8	0.79	0.81	0.79	37.0
5	T1	3	2.0	4	2.0	0.180	8.4	LOS A	1.1	7.8	0.79	0.81	0.79	35.7
6	R2	66	2.0	78	2.0	0.180	8.7	LOS A	1.1	7.8	0.79	0.81	0.79	36.3
Approach		88	2.0	104	2.0	0.180	9.5	LOS A	1.1	7.8	0.79	0.81	0.79	36.5
North: Southbound Scott Street														
7	L2	22	2.0	26	2.0	0.555	5.9	LOS A	5.7	40.9	0.30	0.30	0.30	39.5
8	T1	652	2.0	767	2.0	0.555	2.1	LOS A	5.7	40.9	0.30	0.30	0.30	39.3
9	R2	2	2.0	2	2.0	0.555	2.5	LOS A	5.7	40.9	0.30	0.30	0.30	38.1
Approach		676	2.0	795	2.0	0.555	2.3	LOS A	5.7	40.9	0.30	0.30	0.30	39.3
West: Eastbound Turner														
10	L2	9	2.0	11	2.0	0.201	12.5	LOS B	1.2	8.7	0.80	0.81	0.80	36.0
11	T1	11	2.0	13	2.0	0.201	8.7	LOS A	1.2	8.7	0.80	0.81	0.80	35.8
12	R2	77	2.0	91	2.0	0.201	9.1	LOS A	1.2	8.7	0.80	0.81	0.80	35.0
Approach		97	2.0	114	2.0	0.201	9.4	LOS A	1.2	8.7	0.80	0.81	0.80	35.2
All Vehicles		1553	2.0	1827	2.0	0.577	3.1	LOS A	6.0	42.5	0.38	0.37	0.38	38.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Scott and Turner (Site Folder: General)]

Peak PM Build with 75% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	14	2.0	16	2.0	0.699	6.2	LOS A	9.2	65.4	0.45	0.34	0.45	38.8
2	T1	800	2.0	941	2.0	0.699	2.5	LOS A	9.2	65.4	0.45	0.34	0.45	39.0
3	R2	24	2.0	28	2.0	0.699	2.8	LOS A	9.2	65.4	0.45	0.34	0.45	38.4
Approach		838	2.0	986	2.0	0.699	2.5	LOS A	9.2	65.4	0.45	0.34	0.45	39.0
East: Westbound Turner														
4	L2	19	2.0	22	2.0	0.264	15.2	LOS B	1.7	12.4	0.89	0.92	0.89	36.0
5	T1	3	2.0	4	2.0	0.264	11.4	LOS B	1.7	12.4	0.89	0.92	0.89	34.3
6	R2	79	2.0	93	2.0	0.264	11.8	LOS B	1.7	12.4	0.89	0.92	0.89	35.3
Approach		101	2.0	119	2.0	0.264	12.4	LOS B	1.7	12.4	0.89	0.92	0.89	35.4
North: Southbound Scott Street														
7	L2	27	2.0	32	2.0	0.652	6.0	LOS A	8.3	58.8	0.37	0.31	0.37	39.3
8	T1	772	2.0	908	2.0	0.652	2.2	LOS A	8.3	58.8	0.37	0.31	0.37	39.2
9	R2	2	2.0	2	2.0	0.652	2.6	LOS A	8.3	58.8	0.37	0.31	0.37	38.0
Approach		801	2.0	942	2.0	0.652	2.4	LOS A	8.3	58.8	0.37	0.31	0.37	39.2
West: Eastbound Turner														
10	L2	9	2.0	11	2.0	0.243	15.0	LOS B	1.6	11.2	0.87	0.89	0.87	34.7
11	T1	11	2.0	13	2.0	0.243	11.3	LOS B	1.6	11.2	0.87	0.89	0.87	34.6
12	R2	77	2.0	91	2.0	0.243	11.6	LOS B	1.6	11.2	0.87	0.89	0.87	33.9
Approach		97	2.0	114	2.0	0.243	11.9	LOS B	1.6	11.2	0.87	0.89	0.87	34.0
All Vehicles		1837	2.0	2161	2.0	0.699	3.5	LOS A	9.2	65.4	0.46	0.39	0.46	38.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Scott and Turner (Site Folder: General)]

Peak PM Build with 100% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	14	2.0	16	2.0	0.821	6.6	LOS A	15.2	107.9	0.64	0.39	0.64	38.3
2	T1	945	2.0	1112	2.0	0.821	2.9	LOS A	15.2	107.9	0.64	0.39	0.64	38.6
3	R2	24	2.0	28	2.0	0.821	3.2	LOS A	15.2	107.9	0.64	0.39	0.64	38.0
Approach		983	2.0	1156	2.0	0.821	2.9	LOS A	15.2	107.9	0.64	0.39	0.64	38.6
East: Westbound Turner														
4	L2	19	2.0	22	2.0	0.424	23.3	LOS C	3.3	23.4	1.00	1.08	1.16	33.3
5	T1	3	2.0	4	2.0	0.424	19.6	LOS B	3.3	23.4	1.00	1.08	1.16	31.0
6	R2	92	2.0	108	2.0	0.424	19.9	LOS B	3.3	23.4	1.00	1.08	1.16	32.7
Approach		114	2.0	134	2.0	0.424	20.5	LOS C	3.3	23.4	1.00	1.08	1.16	32.8
North: Southbound Scott Street														
7	L2	31	2.0	36	2.0	0.748	6.1	LOS A	12.2	86.5	0.46	0.33	0.46	39.1
8	T1	893	2.0	1051	2.0	0.748	2.4	LOS A	12.2	86.5	0.46	0.33	0.46	39.0
9	R2	2	2.0	2	2.0	0.748	2.7	LOS A	12.2	86.5	0.46	0.33	0.46	37.7
Approach		926	2.0	1089	2.0	0.748	2.5	LOS A	12.2	86.5	0.46	0.33	0.46	39.0
West: Eastbound Turner														
10	L2	9	2.0	11	2.0	0.312	18.7	LOS B	2.1	15.1	0.95	0.97	0.95	33.1
11	T1	11	2.0	13	2.0	0.312	14.9	LOS B	2.1	15.1	0.95	0.97	0.95	32.9
12	R2	77	2.0	91	2.0	0.312	15.3	LOS B	2.1	15.1	0.95	0.97	0.95	32.3
Approach		97	2.0	114	2.0	0.312	15.6	LOS B	2.1	15.1	0.95	0.97	0.95	32.4
All Vehicles		2120	2.0	2494	2.0	0.821	4.3	LOS A	15.2	107.9	0.60	0.42	0.61	38.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

HCS7 Two-Way Stop-Control Report

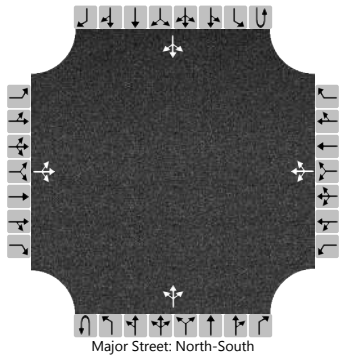
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	8/26/21
Analysis Year	2021
Time Analyzed	AM Existing
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Phillips
Jurisdiction	
East/West Street	Phillips Street
North/South Street	Scott Street
Peak Hour Factor	0.82
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		65	10	99		2	5	5		64	107	7		2	170	121
Percent Heavy Vehicles (%)		6	6	6		6	6	6		6				6		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.16	6.56	6.26		7.16	6.56	6.26		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.55	4.05	3.35		2.25				2.25		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			212				15			78				2		
Capacity, c (veh/h)			534				454			1182				1420		
v/c Ratio			0.40				0.03			0.07				0.00		
95% Queue Length, Q_{95} (veh)			1.9				0.1			0.2				0.0		
Control Delay (s/veh)			16.1				13.2			8.3				7.5		
Level of Service (LOS)			C				B			A				A		
Approach Delay (s/veh)	16.1				13.2				3.3				0.1			
Approach LOS	C				B											

HCS7 Two-Way Stop-Control Report

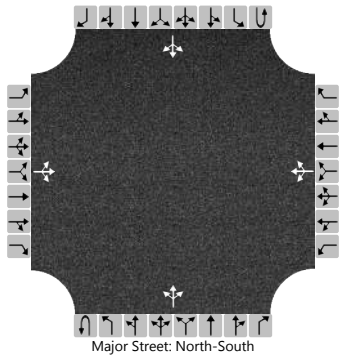
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	8/23/21
Analysis Year	2021
Time Analyzed	AM No-Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Phillips
Jurisdiction	
East/West Street	Phillips Street
North/South Street	Scott Street
Peak Hour Factor	0.82
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		95	10	99		2	5	5		64	163	7		2	219	143
Percent Heavy Vehicles (%)		6	6	6		6	6	6		6				6		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.16	6.56	6.26		7.16	6.56	6.26		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.55	4.05	3.35		2.25				2.25		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			249				15			78				2		
Capacity, c (veh/h)			420				372			1098				1340		
v/c Ratio			0.59				0.04			0.07				0.00		
95% Queue Length, Q_{95} (veh)			3.7				0.1			0.2				0.0		
Control Delay (s/veh)			25.3				15.1			8.5				7.7		
Level of Service (LOS)			D				C			A				A		
Approach Delay (s/veh)		25.3				15.1				2.8				0.1		
Approach LOS		D				C										

HCS7 Two-Way Stop-Control Report

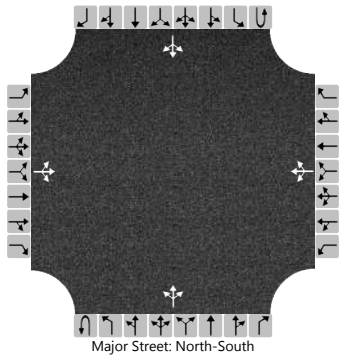
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	AM Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Phillips
Jurisdiction	
East/West Street	Phillips Street
North/South Street	Scott Street
Peak Hour Factor	0.82
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		123	10	99		2	5	5		64	224	7		2	309	183
Percent Heavy Vehicles (%)		6	6	6		6	6	6		6				6		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.16	6.56	6.26		7.16	6.56	6.26		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.55	4.05	3.35		2.25				2.25		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			283				15			78				2		
Capacity, c (veh/h)			297				272			958				1258		
v/c Ratio			0.95				0.05			0.08				0.00		
95% Queue Length, Q_{95} (veh)			9.5				0.2			0.3				0.0		
Control Delay (s/veh)			79.6				19.0			9.1				7.9		
Level of Service (LOS)			F				C			A				A		
Approach Delay (s/veh)		79.6				19.0				2.7				0.1		
Approach LOS		F				C										

HCS7 Two-Way Stop-Control Report

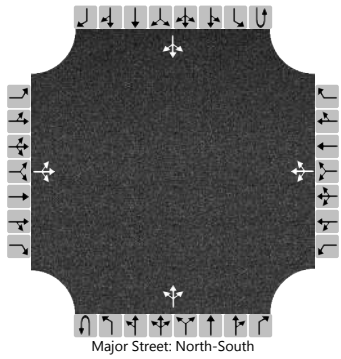
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	AM 25%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Phillips
Jurisdiction	
East/West Street	Phillips Street
North/South Street	Scott Street
Peak Hour Factor	0.82
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		147	10	99		2	5	5		64	275	7		2	415	229
Percent Heavy Vehicles (%)		6	6	6		6	6	6		6				6		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.16	6.56	6.26		7.16	6.56	6.26		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.55	4.05	3.35		2.25				2.25		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			312				15			78				2		
Capacity, c (veh/h)			204				191			816				1193		
v/c Ratio			1.53				0.08			0.10				0.00		
95% Queue Length, Q_{95} (veh)			19.6				0.2			0.3				0.0		
Control Delay (s/veh)			305.9				25.4			9.9				8.0		
Level of Service (LOS)			F				D			A				A		
Approach Delay (s/veh)	305.9				25.4				2.8				0.1			
Approach LOS	F				D											

HCS7 Two-Way Stop-Control Report

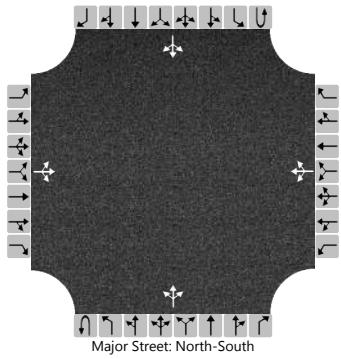
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	AM 50%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Phillips
Jurisdiction	
East/West Street	Phillips Street
North/South Street	Scott Street
Peak Hour Factor	0.82
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		171	10	99		2	5	5		64	326	7		2	520	275
Percent Heavy Vehicles (%)		6	6	6		6	6	6		6				6		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.16	6.56	6.26		7.16	6.56	6.26		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.55	4.05	3.35		2.25				2.25		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			341				15			78				2		
Capacity, c (veh/h)			138				131			695				1131		
v/c Ratio			2.48				0.11			0.11				0.00		
95% Queue Length, Q_{95} (veh)			29.8				0.4			0.4				0.0		
Control Delay (s/veh)			738.9				36.0			10.8				8.2		
Level of Service (LOS)			F				E			B				A		
Approach Delay (s/veh)	738.9				36.0				3.1				0.1			
Approach LOS	F				E											

HCS7 Two-Way Stop-Control Report

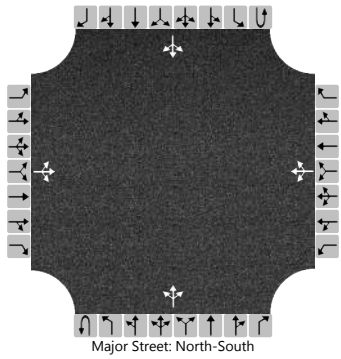
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	AM 75%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Phillips
Jurisdiction	
East/West Street	Phillips Street
North/South Street	Scott Street
Peak Hour Factor	0.82
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		195	10	99		2	5	5		64	376	7		2	625	321
Percent Heavy Vehicles (%)		6	6	6		6	6	6		6				6		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.16	6.56	6.26		7.16	6.56	6.26		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.55	4.05	3.35		2.25				2.25		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			371				15			78				2		
Capacity, c (veh/h)			91				86			591				1074		
v/c Ratio			4.06				0.17			0.13				0.00		
95% Queue Length, Q_{95} (veh)			38.5				0.6			0.5				0.0		
Control Delay (s/veh)			1471.8				55.5			12.0				8.4		
Level of Service (LOS)			F				F			B				A		
Approach Delay (s/veh)	1471.8				55.5				3.6				0.1			
Approach LOS	F				F											

HCS7 Two-Way Stop-Control Report

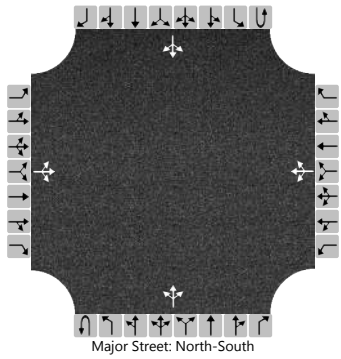
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	AM 100%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Phillips
Jurisdiction	
East/West Street	Phillips Street
North/South Street	Scott Street
Peak Hour Factor	0.82
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		219	10	99		2	5	5		64	427	7		2	731	367
Percent Heavy Vehicles (%)		6	6	6		6	6	6		6				6		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.16	6.56	6.26		7.16	6.56	6.26		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.55	4.05	3.35		2.25				2.25		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			400				15			78				2		
Capacity, c (veh/h)			59				53			502				1018		
v/c Ratio			6.83				0.28			0.16				0.00		
95% Queue Length, Q_{95} (veh)			45.9				1.0			0.5				0.0		
Control Delay (s/veh)			2757.9				97.6			13.5				8.5		
Level of Service (LOS)			F				F			B				A		
Approach Delay (s/veh)	2757.9				97.6				4.3				0.1			
Approach LOS	F				F											

HCS7 Two-Way Stop-Control Report

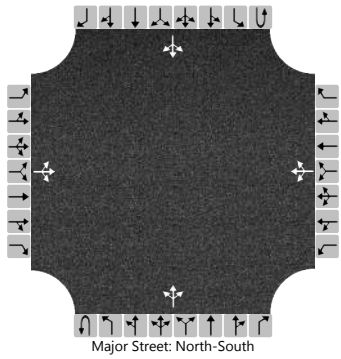
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	8/26/21
Analysis Year	2021
Time Analyzed	PM Existing
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Phillips
Jurisdiction	
East/West Street	Phillips Street
North/South Street	Scott Street
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		145	9	122		0	11	4		118	187	9		2	262	139
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			297				16			127				2		
Capacity, c (veh/h)			349				301			1128				1360		
v/c Ratio			0.85				0.05			0.11				0.00		
95% Queue Length, Q_{95} (veh)			7.8				0.2			0.4				0.0		
Control Delay (s/veh)			52.7				17.7			8.6				7.7		
Level of Service (LOS)			F				C			A				A		
Approach Delay (s/veh)	52.7				17.7				3.9				0.1			
Approach LOS	F				C											

HCS7 Two-Way Stop-Control Report

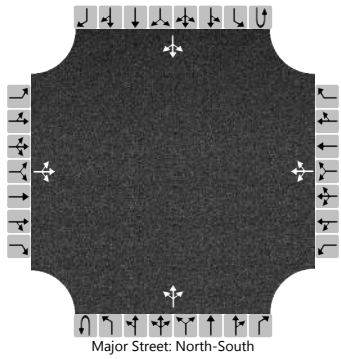
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	8/23/21
Analysis Year	2021
Time Analyzed	PM No-Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Phillips
Jurisdiction	
East/West Street	Phillips Street
North/South Street	Scott Street
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		167	9	122		0	11	4		118	233	9		2	322	167
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			320				16			127				2		
Capacity, c (veh/h)			278				246			1041				1304		
v/c Ratio			1.15				0.07			0.12				0.00		
95% Queue Length, Q_{95} (veh)			13.9				0.2			0.4				0.0		
Control Delay (s/veh)			140.8				20.6			8.9				7.8		
Level of Service (LOS)			F				C			A				A		
Approach Delay (s/veh)	140.8				20.6				3.8				0.1			
Approach LOS	F				C											

HCS7 Two-Way Stop-Control Report

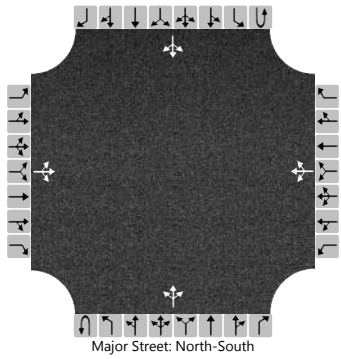
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	PM Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Phillips
Jurisdiction	
East/West Street	Phillips Street
North/South Street	Scott Street
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		211	9	122		0	11	4		118	327	9		2	398	201
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			368				16			127				2		
Capacity, c (veh/h)			191				179			941				1197		
v/c Ratio			1.92				0.09			0.13				0.00		
95% Queue Length, Q_{95} (veh)			27.1				0.3			0.5				0.0		
Control Delay (s/veh)			474.7				27.0			9.4				8.0		
Level of Service (LOS)			F				D			A				A		
Approach Delay (s/veh)		474.7				27.0				3.6				0.0		
Approach LOS		F				D										

HCS7 Two-Way Stop-Control Report

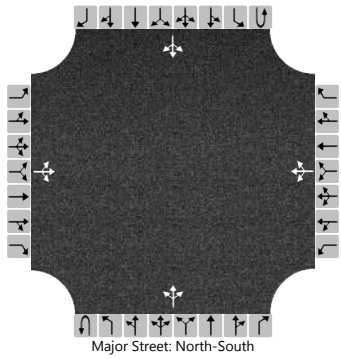
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	PM 25%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Phillips
Jurisdiction	
East/West Street	Phillips Street
North/South Street	Scott Street
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		258	9	122		0	11	4		118	426	9		2	481	238
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			418				16			127				2		
Capacity, c (veh/h)			125				126			842				1094		
v/c Ratio			3.33				0.13			0.15				0.00		
95% Queue Length, Q_{95} (veh)			40.5				0.4			0.5				0.0		
Control Delay (s/veh)			1123.6				37.8			10.0				8.3		
Level of Service (LOS)			F				E			B				A		
Approach Delay (s/veh)	1123.6				37.8				3.7				0.1			
Approach LOS	F				E											

HCS7 Two-Way Stop-Control Report

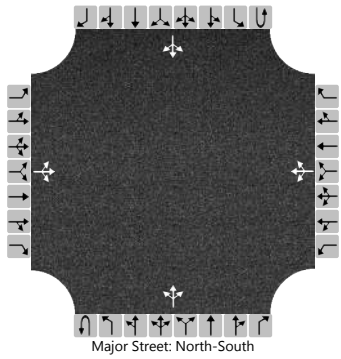
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	PM 50%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Phillips
Jurisdiction	
East/West Street	Phillips Street
North/South Street	Scott Street
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		305	9	122		0	11	4		118	525	9		2	565	275
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			469				16			127				2		
Capacity, c (veh/h)			80				86			753				999		
v/c Ratio			5.89				0.19			0.17				0.00		
95% Queue Length, Q_{95} (veh)			52.0				0.6			0.6				0.0		
Control Delay (s/veh)			2303.8				56.3			10.7				8.6		
Level of Service (LOS)			F				F			B				A		
Approach Delay (s/veh)		2303.8				56.3				4.1				0.1		
Approach LOS		F				F										

HCS7 Two-Way Stop-Control Report

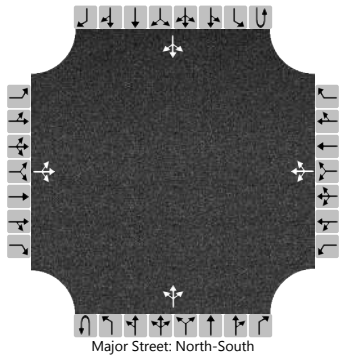
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	PM 75%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Phillips
Jurisdiction	
East/West Street	Phillips Street
North/South Street	Scott Street
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		352	9	122		0	11	4		118	624	9		2	649	311
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			519				16			127				2		
Capacity, c (veh/h)			48				57			673				912		
v/c Ratio			10.80				0.28			0.19				0.00		
95% Queue Length, Q_{95} (veh)			62.0				1.0			0.7				0.0		
Control Delay (s/veh)			4569.8				90.7			11.6				9.0		
Level of Service (LOS)			F				F			B				A		
Approach Delay (s/veh)	4569.8				90.7				4.8				0.1			
Approach LOS	F				F											

HCS7 Two-Way Stop-Control Report

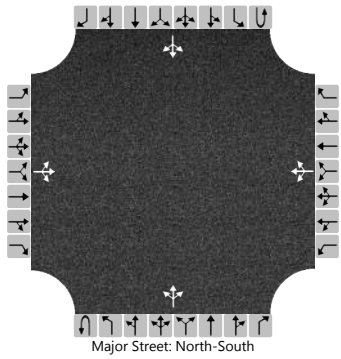
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	PM 100%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Phillips
Jurisdiction	
East/West Street	Phillips Street
North/South Street	Scott Street
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		398	9	122		0	11	4		118	723	9		2	732	348
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			569				16			127				2		
Capacity, c (veh/h)			26				37			602				832		
v/c Ratio			21.58				0.44			0.21				0.00		
95% Queue Length, Q_{95} (veh)			70.8				1.5			0.8				0.0		
Control Delay (s/veh)			9542.7				164.4			12.6				9.3		
Level of Service (LOS)			F				F			B				A		
Approach Delay (s/veh)	9542.7				164.4				5.8				0.1			
Approach LOS	F				F											

MOVEMENT SUMMARY

Site: 102 [Scott and Phillips (Site Folder: General)]

2021 Peak AM Existing
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	64	6.0	78	6.0	0.187	6.2	LOS A	1.1	8.4	0.31	0.43	0.31	38.8
2	T1	107	6.0	130	6.0	0.187	2.4	LOS A	1.1	8.4	0.31	0.43	0.31	38.6
3	R2	7	6.0	9	6.0	0.187	2.8	LOS A	1.1	8.4	0.31	0.43	0.31	36.8
Approach		178	6.0	217	6.0	0.187	3.8	LOS A	1.1	8.4	0.31	0.43	0.31	38.6
East: Westbound Phillips														
4	L2	2	6.0	2	6.0	0.016	7.3	LOS A	0.1	0.6	0.46	0.46	0.46	38.1
5	T1	5	6.0	6	6.0	0.016	3.5	LOS A	0.1	0.6	0.46	0.46	0.46	38.4
6	R2	5	6.0	6	6.0	0.016	3.9	LOS A	0.1	0.6	0.46	0.46	0.46	37.6
Approach		12	6.0	15	6.0	0.016	4.3	LOS A	0.1	0.6	0.46	0.46	0.46	38.0
North: Southbound Scott Street														
7	L2	2	6.0	2	6.0	0.294	6.2	LOS A	1.9	14.2	0.32	0.36	0.32	39.3
8	T1	170	6.0	207	6.0	0.294	2.4	LOS A	1.9	14.2	0.32	0.36	0.32	39.1
9	R2	121	6.0	148	6.0	0.294	2.8	LOS A	1.9	14.2	0.32	0.36	0.32	38.7
Approach		293	6.0	357	6.0	0.294	2.6	LOS A	1.9	14.2	0.32	0.36	0.32	38.9
West: Eastbound Phillips														
10	L2	65	6.0	79	6.0	0.216	7.1	LOS A	1.3	9.4	0.47	0.55	0.47	38.7
11	T1	10	6.0	12	6.0	0.216	3.4	LOS A	1.3	9.4	0.47	0.55	0.47	38.1
12	R2	99	6.0	121	6.0	0.216	3.7	LOS A	1.3	9.4	0.47	0.55	0.47	37.5
Approach		174	6.0	212	6.0	0.216	5.0	LOS A	1.3	9.4	0.47	0.55	0.47	38.1
All Vehicles		657	6.0	801	6.0	0.294	3.6	LOS A	1.9	14.2	0.36	0.43	0.36	38.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 102 [Scott and Phillips (Site Folder: General)]

Peak AM No Build
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	64	6.0	78	6.0	0.259	6.5	LOS A	1.7	12.5	0.40	0.45	0.40	38.7
2	T1	163	6.0	199	6.0	0.259	2.7	LOS A	1.7	12.5	0.40	0.45	0.40	38.5
3	R2	7	6.0	9	6.0	0.259	3.1	LOS A	1.7	12.5	0.40	0.45	0.40	36.7
Approach		234	6.0	285	6.0	0.259	3.8	LOS A	1.7	12.5	0.40	0.45	0.40	38.5
East: Westbound Phillips														
4	L2	2	6.0	2	6.0	0.018	8.0	LOS A	0.1	0.7	0.54	0.50	0.54	37.7
5	T1	5	6.0	6	6.0	0.018	4.2	LOS A	0.1	0.7	0.54	0.50	0.54	38.1
6	R2	5	6.0	6	6.0	0.018	4.6	LOS A	0.1	0.7	0.54	0.50	0.54	37.3
Approach		12	6.0	15	6.0	0.018	5.0	LOS A	0.1	0.7	0.54	0.50	0.54	37.7
North: Southbound Scott Street														
7	L2	2	6.0	2	6.0	0.361	6.2	LOS A	2.6	19.3	0.35	0.37	0.35	39.2
8	T1	219	6.0	267	6.0	0.361	2.5	LOS A	2.6	19.3	0.35	0.37	0.35	39.1
9	R2	143	6.0	174	6.0	0.361	2.8	LOS A	2.6	19.3	0.35	0.37	0.35	38.6
Approach		364	6.0	444	6.0	0.361	2.6	LOS A	2.6	19.3	0.35	0.37	0.35	38.9
West: Eastbound Phillips														
10	L2	95	6.0	116	6.0	0.270	7.7	LOS A	1.7	12.2	0.55	0.62	0.55	38.4
11	T1	10	6.0	12	6.0	0.270	3.9	LOS A	1.7	12.2	0.55	0.62	0.55	37.7
12	R2	99	6.0	121	6.0	0.270	4.3	LOS A	1.7	12.2	0.55	0.62	0.55	37.2
Approach		204	6.0	249	6.0	0.270	5.9	LOS A	1.7	12.2	0.55	0.62	0.55	37.8
All Vehicles		814	6.0	993	6.0	0.361	3.8	LOS A	2.6	19.3	0.42	0.46	0.42	38.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 102 [Scott and Phillips (Site Folder: General)]

Peak AM Build
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	64	6.0	78	6.0	0.341	6.9	LOS A	2.4	18.0	0.49	0.49	0.49	38.6
2	T1	224	6.0	273	6.0	0.341	3.1	LOS A	2.4	18.0	0.49	0.49	0.49	38.4
3	R2	7	6.0	9	6.0	0.341	3.5	LOS A	2.4	18.0	0.49	0.49	0.49	36.6
Approach		295	6.0	360	6.0	0.341	3.9	LOS A	2.4	18.0	0.49	0.49	0.49	38.4
East: Westbound Phillips														
4	L2	2	6.0	2	6.0	0.020	8.8	LOS A	0.1	0.8	0.61	0.55	0.61	37.2
5	T1	5	6.0	6	6.0	0.020	5.0	LOS A	0.1	0.8	0.61	0.55	0.61	37.7
6	R2	5	6.0	6	6.0	0.020	5.4	LOS A	0.1	0.8	0.61	0.55	0.61	36.9
Approach		12	6.0	15	6.0	0.020	5.8	LOS A	0.1	0.8	0.61	0.55	0.61	37.3
North: Southbound Scott Street														
7	L2	2	6.0	2	6.0	0.482	6.3	LOS A	4.2	30.7	0.41	0.38	0.41	39.0
8	T1	309	6.0	377	6.0	0.482	2.6	LOS A	4.2	30.7	0.41	0.38	0.41	38.9
9	R2	183	6.0	223	6.0	0.482	2.9	LOS A	4.2	30.7	0.41	0.38	0.41	38.5
Approach		494	6.0	602	6.0	0.482	2.7	LOS A	4.2	30.7	0.41	0.38	0.41	38.8
West: Eastbound Phillips														
10	L2	123	6.0	150	6.0	0.343	8.8	LOS A	2.2	16.3	0.66	0.72	0.66	37.9
11	T1	10	6.0	12	6.0	0.343	5.0	LOS A	2.2	16.3	0.66	0.72	0.66	37.0
12	R2	99	6.0	121	6.0	0.343	5.4	LOS A	2.2	16.3	0.66	0.72	0.66	36.6
Approach		232	6.0	283	6.0	0.343	7.2	LOS A	2.2	16.3	0.66	0.72	0.66	37.4
All Vehicles		1033	6.0	1260	6.0	0.482	4.1	LOS A	4.2	30.7	0.49	0.49	0.49	38.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 102 [Scott and Phillips (Site Folder: General)]

Peak AM Build with 25% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	64	6.0	78	6.0	0.416	7.2	LOS A	3.2	23.8	0.58	0.54	0.58	38.4
2	T1	275	6.0	335	6.0	0.416	3.5	LOS A	3.2	23.8	0.58	0.54	0.58	38.2
3	R2	7	6.0	9	6.0	0.416	3.8	LOS A	3.2	23.8	0.58	0.54	0.58	36.3
Approach		346	6.0	422	6.0	0.416	4.2	LOS A	3.2	23.8	0.58	0.54	0.58	38.2
East: Westbound Phillips														
4	L2	2	6.0	2	6.0	0.022	9.6	LOS A	0.1	0.9	0.66	0.59	0.66	36.6
5	T1	5	6.0	6	6.0	0.022	5.8	LOS A	0.1	0.9	0.66	0.59	0.66	37.3
6	R2	5	6.0	6	6.0	0.022	6.2	LOS A	0.1	0.9	0.66	0.59	0.66	36.5
Approach		12	6.0	15	6.0	0.022	6.6	LOS A	0.1	0.9	0.66	0.59	0.66	36.9
North: Southbound Scott Street														
7	L2	2	6.0	2	6.0	0.620	6.5	LOS A	6.8	49.9	0.50	0.41	0.50	38.8
8	T1	415	6.0	506	6.0	0.620	2.8	LOS A	6.8	49.9	0.50	0.41	0.50	38.7
9	R2	229	6.0	279	6.0	0.620	3.1	LOS A	6.8	49.9	0.50	0.41	0.50	38.3
Approach		646	6.0	788	6.0	0.620	2.9	LOS A	6.8	49.9	0.50	0.41	0.50	38.6
West: Eastbound Phillips														
10	L2	147	6.0	179	6.0	0.436	10.5	LOS B	3.1	22.9	0.79	0.85	0.82	37.2
11	T1	10	6.0	12	6.0	0.436	6.8	LOS A	3.1	22.9	0.79	0.85	0.82	36.1
12	R2	99	6.0	121	6.0	0.436	7.1	LOS A	3.1	22.9	0.79	0.85	0.82	35.8
Approach		256	6.0	312	6.0	0.436	9.1	LOS A	3.1	22.9	0.79	0.85	0.82	36.7
All Vehicles		1260	6.0	1537	6.0	0.620	4.5	LOS A	6.8	49.9	0.58	0.53	0.59	38.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 102 [Scott and Phillips (Site Folder: General)]

Peak AM Build with 50% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	64	6.0	78	6.0	0.498	7.7	LOS A	4.2	30.9	0.67	0.59	0.67	38.2
2	T1	326	6.0	398	6.0	0.498	3.9	LOS A	4.2	30.9	0.67	0.59	0.67	38.0
3	R2	7	6.0	9	6.0	0.498	4.3	LOS A	4.2	30.9	0.67	0.59	0.67	36.1
Approach		397	6.0	484	6.0	0.498	4.5	LOS A	4.2	30.9	0.67	0.59	0.67	38.0
East: Westbound Phillips														
4	L2	2	6.0	2	6.0	0.025	10.5	LOS B	0.1	1.0	0.72	0.63	0.72	36.0
5	T1	5	6.0	6	6.0	0.025	6.7	LOS A	0.1	1.0	0.72	0.63	0.72	36.8
6	R2	5	6.0	6	6.0	0.025	7.1	LOS A	0.1	1.0	0.72	0.63	0.72	36.1
Approach		12	6.0	15	6.0	0.025	7.5	LOS A	0.1	1.0	0.72	0.63	0.72	36.4
North: Southbound Scott Street														
7	L2	2	6.0	2	6.0	0.756	6.9	LOS A	11.1	81.9	0.67	0.45	0.67	38.3
8	T1	520	6.0	634	6.0	0.756	3.1	LOS A	11.1	81.9	0.67	0.45	0.67	38.3
9	R2	275	6.0	335	6.0	0.756	3.5	LOS A	11.1	81.9	0.67	0.45	0.67	38.0
Approach		797	6.0	972	6.0	0.756	3.2	LOS A	11.1	81.9	0.67	0.45	0.67	38.2
West: Eastbound Phillips														
10	L2	171	6.0	209	6.0	0.569	14.9	LOS B	5.2	38.0	0.92	1.08	1.15	35.6
11	T1	10	6.0	12	6.0	0.569	11.1	LOS B	5.2	38.0	0.92	1.08	1.15	34.0
12	R2	99	6.0	121	6.0	0.569	11.5	LOS B	5.2	38.0	0.92	1.08	1.15	33.9
Approach		280	6.0	341	6.0	0.569	13.6	LOS B	5.2	38.0	0.92	1.08	1.15	35.0
All Vehicles		1486	6.0	1812	6.0	0.756	5.6	LOS A	11.1	81.9	0.72	0.61	0.76	37.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 102 [Scott and Phillips (Site Folder: General)]

Peak AM Build with 75% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	64	6.0	78	6.0	0.584	8.5	LOS A	5.5	40.8	0.77	0.68	0.79	38.0
2	T1	376	6.0	459	6.0	0.584	4.7	LOS A	5.5	40.8	0.77	0.68	0.79	37.8
3	R2	7	6.0	9	6.0	0.584	5.1	LOS A	5.5	40.8	0.77	0.68	0.79	35.7
Approach		447	6.0	545	6.0	0.584	5.2	LOS A	5.5	40.8	0.77	0.68	0.79	37.8
East: Westbound Phillips														
4	L2	2	6.0	2	6.0	0.028	11.5	LOS B	0.2	1.2	0.77	0.67	0.77	35.3
5	T1	5	6.0	6	6.0	0.028	7.8	LOS A	0.2	1.2	0.77	0.67	0.77	36.3
6	R2	5	6.0	6	6.0	0.028	8.1	LOS A	0.2	1.2	0.77	0.67	0.77	35.6
Approach		12	6.0	15	6.0	0.028	8.5	LOS A	0.2	1.2	0.77	0.67	0.77	35.9
North: Southbound Scott Street														
7	L2	2	6.0	2	6.0	0.892	7.6	LOS A	20.3	149.6	1.00	0.54	1.00	37.5
8	T1	625	6.0	762	6.0	0.892	3.9	LOS A	20.3	149.6	1.00	0.54	1.00	37.6
9	R2	321	6.0	391	6.0	0.892	4.2	LOS A	20.3	149.6	1.00	0.54	1.00	37.4
Approach		948	6.0	1156	6.0	0.892	4.0	LOS A	20.3	149.6	1.00	0.54	1.00	37.5
West: Eastbound Phillips														
10	L2	195	6.0	238	6.0	0.819	30.3	LOS C	11.0	80.7	1.00	1.41	1.77	31.0
11	T1	10	6.0	12	6.0	0.819	26.6	LOS C	11.0	80.7	1.00	1.41	1.77	28.4
12	R2	99	6.0	121	6.0	0.819	27.0	LOS C	11.0	80.7	1.00	1.41	1.77	28.8
Approach		304	6.0	371	6.0	0.819	29.1	LOS C	11.0	80.7	1.00	1.41	1.77	30.3
All Vehicles		1711	6.0	2087	6.0	0.892	8.8	LOS A	20.3	149.6	0.94	0.73	1.08	35.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 102 [Scott and Phillips (Site Folder: General)]

Peak AM Build with 100% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	64	6.0	78	6.0	0.662	9.9	LOS A	7.5	55.2	0.84	0.78	0.93	37.7
2	T1	427	6.0	521	6.0	0.662	6.1	LOS A	7.5	55.2	0.84	0.78	0.93	37.6
3	R2	7	6.0	9	6.0	0.662	6.5	LOS A	7.5	55.2	0.84	0.78	0.93	35.4
Approach		498	6.0	607	6.0	0.662	6.6	LOS A	7.5	55.2	0.84	0.78	0.93	37.6
East: Westbound Phillips														
4	L2	2	6.0	2	6.0	0.032	12.6	LOS B	0.2	1.4	0.82	0.71	0.82	34.6
5	T1	5	6.0	6	6.0	0.032	8.8	LOS A	0.2	1.4	0.82	0.71	0.82	35.8
6	R2	5	6.0	6	6.0	0.032	9.2	LOS A	0.2	1.4	0.82	0.71	0.82	35.1
Approach		12	6.0	15	6.0	0.032	9.6	LOS A	0.2	1.4	0.82	0.71	0.82	35.3
North: Southbound Scott Street														
7	L2	2	6.0	2	6.0	1.027	25.7	LOS C	64.2	472.4	1.00	0.80	1.34	30.7
8	T1	731	6.0	891	6.0	1.027	22.0	LOS C	64.2	472.4	1.00	0.80	1.34	31.3
9	R2	367	6.0	448	6.0	1.027	22.3	LOS C	64.2	472.4	1.00	0.80	1.34	32.3
Approach		1100	6.0	1341	6.0	1.027	22.1	LOS C	64.2	472.4	1.00	0.80	1.34	31.7
West: Eastbound Phillips														
10	L2	219	6.0	267	6.0	1.061	83.7	LOS F	25.6	188.3	1.00	2.16	3.25	21.3
11	T1	10	6.0	12	6.0	1.061	80.0	LOS F	25.6	188.3	1.00	2.16	3.25	18.1
12	R2	99	6.0	121	6.0	1.061	80.3	LOS F	25.6	188.3	1.00	2.16	3.25	18.9
Approach		328	6.0	400	6.0	1.061	82.6	LOS F	25.6	188.3	1.00	2.16	3.25	20.6
All Vehicles		1938	6.0	2363	6.0	1.061	28.3	LOS C	64.2	472.4	0.96	1.02	1.55	29.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 102 [Scott and Phillips (Site Folder: General)]

2021 Peak PM Existing
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	118	2.0	127	2.0	0.314	6.8	LOS A	2.2	15.4	0.47	0.51	0.47	38.4
2	T1	187	2.0	201	2.0	0.314	3.0	LOS A	2.2	15.4	0.47	0.51	0.47	38.3
3	R2	9	2.0	10	2.0	0.314	3.4	LOS A	2.2	15.4	0.47	0.51	0.47	36.4
Approach		314	2.0	338	2.0	0.314	4.4	LOS A	2.2	15.4	0.47	0.51	0.47	38.3
East: Westbound Phillips														
4	L2	1	2.0	1	2.0	0.022	8.5	LOS A	0.1	0.8	0.59	0.52	0.59	37.7
5	T1	11	2.0	12	2.0	0.022	4.7	LOS A	0.1	0.8	0.59	0.52	0.59	38.1
6	R2	4	2.0	4	2.0	0.022	5.1	LOS A	0.1	0.8	0.59	0.52	0.59	37.3
Approach		16	2.0	17	2.0	0.022	5.0	LOS A	0.1	0.8	0.59	0.52	0.59	37.9
North: Southbound Scott Street														
7	L2	2	2.0	2	2.0	0.378	6.6	LOS A	2.8	19.6	0.45	0.43	0.45	38.9
8	T1	262	2.0	282	2.0	0.378	2.9	LOS A	2.8	19.6	0.45	0.43	0.45	38.8
9	R2	139	2.0	149	2.0	0.378	3.2	LOS A	2.8	19.6	0.45	0.43	0.45	38.4
Approach		403	2.0	433	2.0	0.378	3.0	LOS A	2.8	19.6	0.45	0.43	0.45	38.7
West: Eastbound Phillips														
10	L2	145	2.0	156	2.0	0.319	7.8	LOS A	2.1	14.8	0.58	0.64	0.58	38.3
11	T1	9	2.0	10	2.0	0.319	4.0	LOS A	2.1	14.8	0.58	0.64	0.58	37.5
12	R2	122	2.0	131	2.0	0.319	4.4	LOS A	2.1	14.8	0.58	0.64	0.58	37.0
Approach		276	2.0	297	2.0	0.319	6.1	LOS A	2.1	14.8	0.58	0.64	0.58	37.8
All Vehicles		1009	2.0	1085	2.0	0.378	4.3	LOS A	2.8	19.6	0.49	0.51	0.49	38.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 102 [Scott and Phillips (Site Folder: General)]

Peak PM No Build
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	118	2.0	127	2.0	0.369	7.0	LOS A	2.7	19.2	0.53	0.54	0.53	38.4
2	T1	233	2.0	251	2.0	0.369	3.3	LOS A	2.7	19.2	0.53	0.54	0.53	38.2
3	R2	9	2.0	10	2.0	0.369	3.6	LOS A	2.7	19.2	0.53	0.54	0.53	36.3
Approach		360	2.0	387	2.0	0.369	4.5	LOS A	2.7	19.2	0.53	0.54	0.53	38.2
East: Westbound Phillips														
4	L2	1	2.0	1	2.0	0.024	9.0	LOS A	0.1	0.9	0.63	0.55	0.63	37.3
5	T1	11	2.0	12	2.0	0.024	5.3	LOS A	0.1	0.9	0.63	0.55	0.63	37.8
6	R2	4	2.0	4	2.0	0.024	5.6	LOS A	0.1	0.9	0.63	0.55	0.63	37.0
Approach		16	2.0	17	2.0	0.024	5.6	LOS A	0.1	0.9	0.63	0.55	0.63	37.6
North: Southbound Scott Street														
7	L2	2	2.0	2	2.0	0.455	6.7	LOS A	3.7	26.1	0.49	0.45	0.49	38.8
8	T1	322	2.0	346	2.0	0.455	3.0	LOS A	3.7	26.1	0.49	0.45	0.49	38.7
9	R2	167	2.0	180	2.0	0.455	3.3	LOS A	3.7	26.1	0.49	0.45	0.49	38.4
Approach		491	2.0	528	2.0	0.455	3.1	LOS A	3.7	26.1	0.49	0.45	0.49	38.6
West: Eastbound Phillips														
10	L2	167	2.0	180	2.0	0.367	8.4	LOS A	2.5	17.6	0.65	0.70	0.65	38.0
11	T1	9	2.0	10	2.0	0.367	4.6	LOS A	2.5	17.6	0.65	0.70	0.65	37.2
12	R2	122	2.0	131	2.0	0.367	5.0	LOS A	2.5	17.6	0.65	0.70	0.65	36.7
Approach		298	2.0	320	2.0	0.367	6.9	LOS A	2.5	17.6	0.65	0.70	0.65	37.5
All Vehicles		1165	2.0	1253	2.0	0.455	4.5	LOS A	3.7	26.1	0.55	0.54	0.55	38.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 102 [Scott and Phillips (Site Folder: General)]

Peak PM Build
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	118	2.0	127	2.0	0.493	7.7	LOS A	4.0	28.8	0.66	0.61	0.66	38.1
2	T1	327	2.0	352	2.0	0.493	3.9	LOS A	4.0	28.8	0.66	0.61	0.66	37.9
3	R2	9	2.0	10	2.0	0.493	4.3	LOS A	4.0	28.8	0.66	0.61	0.66	35.9
Approach		454	2.0	488	2.0	0.493	4.9	LOS A	4.0	28.8	0.66	0.61	0.66	38.0
East: Westbound Phillips														
4	L2	1	2.0	1	2.0	0.028	10.4	LOS B	0.2	1.1	0.72	0.62	0.72	36.4
5	T1	11	2.0	12	2.0	0.028	6.7	LOS A	0.2	1.1	0.72	0.62	0.72	37.1
6	R2	4	2.0	4	2.0	0.028	7.0	LOS A	0.2	1.1	0.72	0.62	0.72	36.3
Approach		16	2.0	17	2.0	0.028	7.0	LOS A	0.2	1.1	0.72	0.62	0.72	36.9
North: Southbound Scott Street														
7	L2	2	2.0	2	2.0	0.552	6.9	LOS A	5.2	36.8	0.56	0.47	0.56	38.6
8	T1	398	2.0	428	2.0	0.552	3.1	LOS A	5.2	36.8	0.56	0.47	0.56	38.6
9	R2	201	2.0	216	2.0	0.552	3.5	LOS A	5.2	36.8	0.56	0.47	0.56	38.2
Approach		601	2.0	646	2.0	0.552	3.3	LOS A	5.2	36.8	0.56	0.47	0.56	38.4
West: Eastbound Phillips														
10	L2	211	2.0	227	2.0	0.461	9.5	LOS A	3.4	24.2	0.76	0.80	0.78	37.5
11	T1	9	2.0	10	2.0	0.461	5.8	LOS A	3.4	24.2	0.76	0.80	0.78	36.5
12	R2	122	2.0	131	2.0	0.461	6.1	LOS A	3.4	24.2	0.76	0.80	0.78	36.1
Approach		342	2.0	368	2.0	0.461	8.2	LOS A	3.4	24.2	0.76	0.80	0.78	37.1
All Vehicles		1413	2.0	1519	2.0	0.552	5.0	LOS A	5.2	36.8	0.64	0.60	0.65	37.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 102 [Scott and Phillips (Site Folder: General)]

Peak PM Build with 25% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	118	2.0	127	2.0	0.639	9.7	LOS A	6.9	49.0	0.82	0.78	0.90	37.6
2	T1	426	2.0	458	2.0	0.639	5.9	LOS A	6.9	49.0	0.82	0.78	0.90	37.5
3	R2	9	2.0	10	2.0	0.639	6.3	LOS A	6.9	49.0	0.82	0.78	0.90	35.3
Approach		553	2.0	595	2.0	0.639	6.7	LOS A	6.9	49.0	0.82	0.78	0.90	37.5
East: Westbound Phillips														
4	L2	1	2.0	1	2.0	0.035	12.3	LOS B	0.2	1.5	0.81	0.70	0.81	35.1
5	T1	11	2.0	12	2.0	0.035	8.6	LOS A	0.2	1.5	0.81	0.70	0.81	36.1
6	R2	4	2.0	4	2.0	0.035	8.9	LOS A	0.2	1.5	0.81	0.70	0.81	35.4
Approach		16	2.0	17	2.0	0.035	8.9	LOS A	0.2	1.5	0.81	0.70	0.81	35.9
North: Southbound Scott Street														
7	L2	2	2.0	2	2.0	0.659	7.1	LOS A	7.4	52.9	0.67	0.50	0.67	38.3
8	T1	481	2.0	517	2.0	0.659	3.4	LOS A	7.4	52.9	0.67	0.50	0.67	38.3
9	R2	238	2.0	256	2.0	0.659	3.7	LOS A	7.4	52.9	0.67	0.50	0.67	38.0
Approach		721	2.0	775	2.0	0.659	3.5	LOS A	7.4	52.9	0.67	0.50	0.67	38.2
West: Eastbound Phillips														
10	L2	258	2.0	277	2.0	0.585	12.7	LOS B	5.5	39.2	0.88	0.99	1.07	36.3
11	T1	9	2.0	10	2.0	0.585	9.0	LOS A	5.5	39.2	0.88	0.99	1.07	34.9
12	R2	122	2.0	131	2.0	0.585	9.3	LOS A	5.5	39.2	0.88	0.99	1.07	34.7
Approach		389	2.0	418	2.0	0.585	11.6	LOS B	5.5	39.2	0.88	0.99	1.07	35.8
All Vehicles		1679	2.0	1805	2.0	0.659	6.5	LOS A	7.4	52.9	0.77	0.71	0.84	37.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 102 [Scott and Phillips (Site Folder: General)]

Peak PM Build with 50% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	118	2.0	127	2.0	0.805	14.9	LOS B	13.1	93.1	1.00	1.08	1.34	35.4
2	T1	525	2.0	565	2.0	0.805	11.2	LOS B	13.1	93.1	1.00	1.08	1.34	35.2
3	R2	9	2.0	10	2.0	0.805	11.6	LOS B	13.1	93.1	1.00	1.08	1.34	32.3
Approach		652	2.0	701	2.0	0.805	11.9	LOS B	13.1	93.1	1.00	1.08	1.34	35.2
East: Westbound Phillips														
4	L2	1	2.0	1	2.0	0.046	15.1	LOS B	0.3	2.2	0.90	0.78	0.90	33.5
5	T1	11	2.0	12	2.0	0.046	11.3	LOS B	0.3	2.2	0.90	0.78	0.90	34.8
6	R2	4	2.0	4	2.0	0.046	11.7	LOS B	0.3	2.2	0.90	0.78	0.90	34.2
Approach		16	2.0	17	2.0	0.046	11.6	LOS B	0.3	2.2	0.90	0.78	0.90	34.6
North: Southbound Scott Street														
7	L2	2	2.0	2	2.0	0.767	7.5	LOS A	10.8	76.7	0.82	0.55	0.82	38.0
8	T1	565	2.0	608	2.0	0.767	3.7	LOS A	10.8	76.7	0.82	0.55	0.82	38.0
9	R2	275	2.0	296	2.0	0.767	4.1	LOS A	10.8	76.7	0.82	0.55	0.82	37.7
Approach		842	2.0	905	2.0	0.767	3.8	LOS A	10.8	76.7	0.82	0.55	0.82	37.9
West: Eastbound Phillips														
10	L2	305	2.0	328	2.0	0.750	19.5	LOS B	9.5	67.7	1.00	1.27	1.50	34.0
11	T1	9	2.0	10	2.0	0.750	15.7	LOS B	9.5	67.7	1.00	1.27	1.50	32.1
12	R2	122	2.0	131	2.0	0.750	16.1	LOS B	9.5	67.7	1.00	1.27	1.50	32.2
Approach		436	2.0	469	2.0	0.750	18.5	LOS B	9.5	67.7	1.00	1.27	1.50	33.5
All Vehicles		1946	2.0	2092	2.0	0.805	9.9	LOS A	13.1	93.1	0.92	0.89	1.15	35.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 102 [Scott and Phillips (Site Folder: General)]

Peak PM Build with 75% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	118	2.0	127	2.0	0.982	35.3	LOS D	29.8	212.5	1.00	1.73	2.31	28.5
2	T1	624	2.0	671	2.0	0.982	31.6	LOS C	29.8	212.5	1.00	1.73	2.31	28.4
3	R2	9	2.0	10	2.0	0.982	31.9	LOS C	29.8	212.5	1.00	1.73	2.31	24.2
Approach		751	2.0	808	2.0	0.982	32.2	LOS C	29.8	212.5	1.00	1.73	2.31	28.4
East: Westbound Phillips														
4	L2	1	2.0	1	2.0	0.060	19.3	LOS B	0.4	2.9	0.96	0.84	0.96	31.2
5	T1	11	2.0	12	2.0	0.060	15.5	LOS B	0.4	2.9	0.96	0.84	0.96	33.0
6	R2	4	2.0	4	2.0	0.060	15.9	LOS B	0.4	2.9	0.96	0.84	0.96	32.4
Approach		16	2.0	17	2.0	0.060	15.8	LOS B	0.4	2.9	0.96	0.84	0.96	32.8
North: Southbound Scott Street														
7	L2	2	2.0	2	2.0	0.868	9.6	LOS A	17.9	127.3	1.00	0.68	1.06	37.4
8	T1	649	2.0	698	2.0	0.868	5.8	LOS A	17.9	127.3	1.00	0.68	1.06	37.5
9	R2	311	2.0	334	2.0	0.868	6.2	LOS A	17.9	127.3	1.00	0.68	1.06	37.4
Approach		962	2.0	1034	2.0	0.868	6.0	LOS A	17.9	127.3	1.00	0.68	1.06	37.5
West: Eastbound Phillips														
10	L2	352	2.0	378	2.0	0.983	50.2	LOS E	22.8	162.1	1.00	1.91	2.69	26.5
11	T1	9	2.0	10	2.0	0.983	46.4	LOS D	22.8	162.1	1.00	1.91	2.69	23.5
12	R2	122	2.0	131	2.0	0.983	46.8	LOS D	22.8	162.1	1.00	1.91	2.69	24.1
Approach		483	2.0	519	2.0	0.983	49.3	LOS D	22.8	162.1	1.00	1.91	2.69	25.9
All Vehicles		2212	2.0	2378	2.0	0.983	24.4	LOS C	29.8	212.5	1.00	1.31	1.84	31.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 102 [Scott and Phillips (Site Folder: General)]

Peak PM Build with 100% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	118	2.0	127	2.0	1.067	57.8	LOS E	46.9	334.2	1.00	2.30	3.18	23.4
2	T1	723	2.0	777	2.0	1.067	54.1	LOS E	46.9	334.2	1.00	2.30	3.18	23.3
3	R2	9	2.0	10	2.0	1.067	54.4	LOS E	46.9	334.2	1.00	2.30	3.18	18.9
Approach		850	2.0	914	2.0	1.067	54.6	LOS E	46.9	334.2	1.00	2.30	3.18	23.3
East: Westbound Phillips														
4	L2	1	2.0	1	2.0	0.062	19.6	LOS B	0.4	3.0	0.96	0.85	0.96	31.0
5	T1	11	2.0	12	2.0	0.062	15.9	LOS B	0.4	3.0	0.96	0.85	0.96	32.9
6	R2	4	2.0	4	2.0	0.062	16.2	LOS B	0.4	3.0	0.96	0.85	0.96	32.3
Approach		16	2.0	17	2.0	0.062	16.2	LOS B	0.4	3.0	0.96	0.85	0.96	32.6
North: Southbound Scott Street														
7	L2	2	2.0	2	2.0	0.952	13.9	LOS B	31.4	223.3	1.00	0.76	1.18	35.6
8	T1	732	2.0	787	2.0	0.952	10.2	LOS B	31.4	223.3	1.00	0.76	1.18	35.9
9	R2	348	2.0	374	2.0	0.952	10.5	LOS B	31.4	223.3	1.00	0.76	1.18	36.1
Approach		1082	2.0	1163	2.0	0.952	10.3	LOS B	31.4	223.3	1.00	0.76	1.18	35.9
West: Eastbound Phillips														
10	L2	398	2.0	428	2.0	1.238	139.7	LOS F	51.9	369.8	1.00	3.18	5.14	16.0
11	T1	9	2.0	10	2.0	1.238	136.0	LOS F	51.9	369.8	1.00	3.18	5.14	13.1
12	R2	122	2.0	131	2.0	1.238	136.3	LOS F	51.9	369.8	1.00	3.18	5.14	13.9
Approach		529	2.0	569	2.0	1.238	138.9	LOS F	51.9	369.8	1.00	3.18	5.14	15.5
All Vehicles		2477	2.0	2663	2.0	1.238	53.0	LOS E	51.9	369.8	1.00	1.81	2.71	24.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Scott and Toole (Site Folder: General)]

2021 Peak AM Existing
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	2	4.0	2	4.0	0.073	8.2	LOS A	0.4	2.9	0.58	0.54	0.58	38.4
2	T1	38	4.0	45	4.0	0.073	4.5	LOS A	0.4	2.9	0.58	0.54	0.58	38.2
3	R2	10	4.0	12	4.0	0.073	4.8	LOS A	0.4	2.9	0.58	0.54	0.58	37.3
Approach		50	4.0	60	4.0	0.073	4.7	LOS A	0.4	2.9	0.58	0.54	0.58	38.0
East: Westbound Toole														
4	L2	7	4.0	8	4.0	0.254	7.5	LOS A	1.6	11.6	0.33	0.43	0.33	44.9
5	T1	185	4.0	220	4.0	0.254	3.6	LOS A	1.6	11.6	0.33	0.43	0.33	45.8
6	R2	60	4.0	71	4.0	0.254	3.7	LOS A	1.6	11.6	0.33	0.43	0.33	45.0
Approach		252	4.0	300	4.0	0.254	3.8	LOS A	1.6	11.6	0.33	0.43	0.33	45.6
North: Southbound Scott Street														
7	L2	74	4.0	88	4.0	0.301	7.3	LOS A	1.9	13.9	0.51	0.55	0.51	38.7
8	T1	114	4.0	136	4.0	0.301	3.5	LOS A	1.9	13.9	0.51	0.55	0.51	38.0
9	R2	68	4.0	81	4.0	0.301	3.9	LOS A	1.9	13.9	0.51	0.55	0.51	38.0
Approach		256	4.0	305	4.0	0.301	4.7	LOS A	1.9	13.9	0.51	0.55	0.51	38.3
West: Eastbound Toole														
10	L2	46	4.0	55	4.0	0.358	8.7	LOS A	2.5	17.8	0.56	0.59	0.56	44.9
11	T1	232	4.0	276	4.0	0.358	4.8	LOS A	2.5	17.8	0.56	0.59	0.56	44.9
12	R2	16	4.0	19	4.0	0.358	5.0	LOS A	2.5	17.8	0.56	0.59	0.56	42.7
Approach		294	4.0	350	4.0	0.358	5.4	LOS A	2.5	17.8	0.56	0.59	0.56	44.8
All Vehicles		852	4.0	1014	4.0	0.358	4.7	LOS A	2.5	17.8	0.48	0.53	0.48	42.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Scott and Toole (Site Folder: General)]

2021 Peak AM No Build
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	2	4.0	2	4.0	0.109	8.6	LOS A	0.6	4.5	0.62	0.58	0.62	38.3
2	T1	60	4.0	71	4.0	0.109	4.8	LOS A	0.6	4.5	0.62	0.58	0.62	38.1
3	R2	10	4.0	12	4.0	0.109	5.2	LOS A	0.6	4.5	0.62	0.58	0.62	37.2
Approach		72	4.0	86	4.0	0.109	5.0	LOS A	0.6	4.5	0.62	0.58	0.62	38.0
East: Westbound Toole														
4	L2	7	4.0	8	4.0	0.291	7.9	LOS A	1.9	13.6	0.41	0.48	0.41	44.7
5	T1	185	4.0	220	4.0	0.291	4.0	LOS A	1.9	13.6	0.41	0.48	0.41	45.6
6	R2	79	4.0	94	4.0	0.291	4.1	LOS A	1.9	13.6	0.41	0.48	0.41	44.8
Approach		271	4.0	323	4.0	0.291	4.1	LOS A	1.9	13.6	0.41	0.48	0.41	45.3
North: Southbound Scott Street														
7	L2	87	4.0	104	4.0	0.356	7.3	LOS A	2.4	17.6	0.54	0.57	0.54	38.7
8	T1	137	4.0	163	4.0	0.356	3.6	LOS A	2.4	17.6	0.54	0.57	0.54	38.0
9	R2	81	4.0	96	4.0	0.356	4.0	LOS A	2.4	17.6	0.54	0.57	0.54	37.9
Approach		305	4.0	363	4.0	0.356	4.8	LOS A	2.4	17.6	0.54	0.57	0.54	38.2
West: Eastbound Toole														
10	L2	61	4.0	73	4.0	0.396	9.2	LOS A	2.8	20.2	0.62	0.64	0.62	44.7
11	T1	232	4.0	276	4.0	0.396	5.3	LOS A	2.8	20.2	0.62	0.64	0.62	44.7
12	R2	16	4.0	19	4.0	0.396	5.4	LOS A	2.8	20.2	0.62	0.64	0.62	42.4
Approach		309	4.0	368	4.0	0.396	6.1	LOS A	2.8	20.2	0.62	0.64	0.62	44.6
All Vehicles		957	4.0	1139	4.0	0.396	5.0	LOS A	2.8	20.2	0.54	0.57	0.54	42.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Scott and Toole (Site Folder: General)]

2021 Peak AM Build
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	2	4.0	2	4.0	0.153	9.1	LOS A	0.9	6.5	0.67	0.64	0.67	38.1
2	T1	83	4.0	99	4.0	0.153	5.3	LOS A	0.9	6.5	0.67	0.64	0.67	37.1
3	R2	10	4.0	12	4.0	0.153	5.7	LOS A	0.9	6.5	0.67	0.64	0.67	37.0
Approach		95	4.0	113	4.0	0.153	5.4	LOS A	0.9	6.5	0.67	0.64	0.67	37.1
East: Westbound Toole														
4	L2	7	4.0	8	4.0	0.334	8.3	LOS A	2.2	16.1	0.50	0.53	0.50	44.4
5	T1	185	4.0	220	4.0	0.334	4.5	LOS A	2.2	16.1	0.50	0.53	0.50	45.4
6	R2	99	4.0	118	4.0	0.334	4.6	LOS A	2.2	16.1	0.50	0.53	0.50	43.9
Approach		291	4.0	346	4.0	0.334	4.6	LOS A	2.2	16.1	0.50	0.53	0.50	44.9
North: Southbound Scott Street														
7	L2	111	4.0	132	4.0	0.457	7.5	LOS A	3.5	25.3	0.60	0.59	0.60	38.3
8	T1	180	4.0	214	4.0	0.457	3.8	LOS A	3.5	25.3	0.60	0.59	0.60	37.1
9	R2	105	4.0	125	4.0	0.457	4.1	LOS A	3.5	25.3	0.60	0.59	0.60	37.4
Approach		396	4.0	471	4.0	0.457	4.9	LOS A	3.5	25.3	0.60	0.59	0.60	37.6
West: Eastbound Toole														
10	L2	79	4.0	94	4.0	0.461	10.0	LOS B	3.4	24.4	0.72	0.73	0.72	43.4
11	T1	232	4.0	276	4.0	0.461	6.2	LOS A	3.4	24.4	0.72	0.73	0.72	44.3
12	R2	16	4.0	19	4.0	0.461	6.3	LOS A	3.4	24.4	0.72	0.73	0.72	41.9
Approach		327	4.0	389	4.0	0.461	7.1	LOS A	3.4	24.4	0.72	0.73	0.72	44.0
All Vehicles		1109	4.0	1320	4.0	0.461	5.5	LOS A	3.5	25.3	0.62	0.62	0.62	41.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Scott and Toole (Site Folder: General)]

2021 Peak AM Build with 25% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	2	4.0	2	4.0	0.194	9.6	LOS A	1.2	8.6	0.71	0.69	0.71	37.8
2	T1	102	4.0	121	4.0	0.194	5.9	LOS A	1.2	8.6	0.71	0.69	0.71	36.7
3	R2	10	4.0	12	4.0	0.194	6.2	LOS A	1.2	8.6	0.71	0.69	0.71	36.8
Approach		114	4.0	136	4.0	0.194	6.0	LOS A	1.2	8.6	0.71	0.69	0.71	36.7
East: Westbound Toole														
4	L2	7	4.0	8	4.0	0.372	8.7	LOS A	2.5	18.4	0.56	0.58	0.56	44.2
5	T1	185	4.0	220	4.0	0.372	4.9	LOS A	2.5	18.4	0.56	0.58	0.56	45.3
6	R2	116	4.0	138	4.0	0.372	5.0	LOS A	2.5	18.4	0.56	0.58	0.56	43.7
Approach		308	4.0	367	4.0	0.372	5.0	LOS A	2.5	18.4	0.56	0.58	0.56	44.7
North: Southbound Scott Street														
7	L2	138	4.0	164	4.0	0.570	7.8	LOS A	5.0	36.2	0.69	0.63	0.69	38.1
8	T1	230	4.0	274	4.0	0.570	4.0	LOS A	5.0	36.2	0.69	0.63	0.69	36.8
9	R2	132	4.0	157	4.0	0.570	4.4	LOS A	5.0	36.2	0.69	0.63	0.69	37.2
Approach		500	4.0	595	4.0	0.570	5.2	LOS A	5.0	36.2	0.69	0.63	0.69	37.4
West: Eastbound Toole														
10	L2	93	4.0	111	4.0	0.532	12.1	LOS B	4.6	33.1	0.82	0.87	0.92	42.3
11	T1	232	4.0	276	4.0	0.532	8.3	LOS A	4.6	33.1	0.82	0.87	0.92	43.3
12	R2	16	4.0	19	4.0	0.532	8.4	LOS A	4.6	33.1	0.82	0.87	0.92	40.7
Approach		341	4.0	406	4.0	0.532	9.3	LOS A	4.6	33.1	0.82	0.87	0.92	42.9
All Vehicles		1263	4.0	1504	4.0	0.570	6.3	LOS A	5.0	36.2	0.69	0.69	0.72	40.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Scott and Toole (Site Folder: General)]

2021 Peak AM Build with 50% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	2	4.0	2	4.0	0.241	10.2	LOS B	1.5	11.2	0.76	0.74	0.76	37.4
2	T1	121	4.0	144	4.0	0.241	6.5	LOS A	1.5	11.2	0.76	0.74	0.76	36.3
3	R2	10	4.0	12	4.0	0.241	6.8	LOS A	1.5	11.2	0.76	0.74	0.76	36.5
Approach		133	4.0	158	4.0	0.241	6.6	LOS A	1.5	11.2	0.76	0.74	0.76	36.3
East: Westbound Toole														
4	L2	7	4.0	8	4.0	0.413	9.2	LOS A	2.9	21.1	0.62	0.63	0.62	43.9
5	T1	185	4.0	220	4.0	0.413	5.3	LOS A	2.9	21.1	0.62	0.63	0.62	45.1
6	R2	134	4.0	160	4.0	0.413	5.4	LOS A	2.9	21.1	0.62	0.63	0.62	43.5
Approach		326	4.0	388	4.0	0.413	5.4	LOS A	2.9	21.1	0.62	0.63	0.62	44.5
North: Southbound Scott Street														
7	L2	166	4.0	198	4.0	0.685	9.1	LOS A	8.0	57.7	0.79	0.71	0.85	37.7
8	T1	280	4.0	333	4.0	0.685	5.3	LOS A	8.0	57.7	0.79	0.71	0.85	36.2
9	R2	160	4.0	190	4.0	0.685	5.7	LOS A	8.0	57.7	0.79	0.71	0.85	36.8
Approach		606	4.0	721	4.0	0.685	6.4	LOS A	8.0	57.7	0.79	0.71	0.85	36.9
West: Eastbound Toole														
10	L2	107	4.0	127	4.0	0.623	15.3	LOS B	6.3	45.8	0.93	1.04	1.17	40.4
11	T1	232	4.0	276	4.0	0.623	11.4	LOS B	6.3	45.8	0.93	1.04	1.17	41.7
12	R2	16	4.0	19	4.0	0.623	11.6	LOS B	6.3	45.8	0.93	1.04	1.17	38.7
Approach		355	4.0	423	4.0	0.623	12.6	LOS B	6.3	45.8	0.93	1.04	1.17	41.2
All Vehicles		1420	4.0	1690	4.0	0.685	7.8	LOS A	8.0	57.7	0.78	0.78	0.87	39.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Scott and Toole (Site Folder: General)]

2021 Peak AM Build with 75% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	2	4.0	2	4.0	0.297	10.9	LOS B	2.0	14.2	0.81	0.80	0.81	37.1
2	T1	141	4.0	168	4.0	0.297	7.2	LOS A	2.0	14.2	0.81	0.80	0.81	35.8
3	R2	10	4.0	12	4.0	0.297	7.5	LOS A	2.0	14.2	0.81	0.80	0.81	36.1
Approach		153	4.0	182	4.0	0.297	7.2	LOS A	2.0	14.2	0.81	0.80	0.81	35.9
East: Westbound Toole														
4	L2	7	4.0	8	4.0	0.457	9.7	LOS A	3.3	23.9	0.68	0.68	0.68	43.7
5	T1	185	4.0	220	4.0	0.457	5.8	LOS A	3.3	23.9	0.68	0.68	0.68	44.9
6	R2	151	4.0	180	4.0	0.457	5.9	LOS A	3.3	23.9	0.68	0.68	0.68	43.2
Approach		343	4.0	408	4.0	0.457	5.9	LOS A	3.3	23.9	0.68	0.68	0.68	44.2
North: Southbound Scott Street														
7	L2	194	4.0	231	4.0	0.801	11.5	LOS B	13.2	95.4	0.94	0.85	1.11	36.6
8	T1	330	4.0	393	4.0	0.801	7.8	LOS A	13.2	95.4	0.94	0.85	1.11	34.7
9	R2	188	4.0	224	4.0	0.801	8.1	LOS A	13.2	95.4	0.94	0.85	1.11	35.8
Approach		712	4.0	848	4.0	0.801	8.9	LOS A	13.2	95.4	0.94	0.85	1.11	35.7
West: Eastbound Toole														
10	L2	122	4.0	145	4.0	0.756	21.9	LOS C	9.6	69.2	1.00	1.25	1.52	37.0
11	T1	232	4.0	276	4.0	0.756	18.0	LOS B	9.6	69.2	1.00	1.25	1.52	38.8
12	R2	16	4.0	19	4.0	0.756	18.2	LOS B	9.6	69.2	1.00	1.25	1.52	35.2
Approach		370	4.0	440	4.0	0.756	19.3	LOS B	9.6	69.2	1.00	1.25	1.52	38.1
All Vehicles		1578	4.0	1879	4.0	0.801	10.5	LOS B	13.2	95.4	0.89	0.90	1.08	38.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Scott and Toole (Site Folder: General)]

2021 Peak AM Build with 100% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	2	4.0	2	4.0	0.353	11.7	LOS B	2.4	17.3	0.85	0.85	0.85	36.7
2	T1	160	4.0	190	4.0	0.353	7.9	LOS A	2.4	17.3	0.85	0.85	0.85	35.3
3	R2	10	4.0	12	4.0	0.353	8.3	LOS A	2.4	17.3	0.85	0.85	0.85	35.7
Approach		172	4.0	205	4.0	0.353	8.0	LOS A	2.4	17.3	0.85	0.85	0.85	35.4
East: Westbound Toole														
4	L2	7	4.0	8	4.0	0.500	10.4	LOS B	3.8	27.7	0.73	0.74	0.75	43.3
5	T1	185	4.0	220	4.0	0.500	6.5	LOS A	3.8	27.7	0.73	0.74	0.75	44.6
6	R2	168	4.0	200	4.0	0.500	6.6	LOS A	3.8	27.7	0.73	0.74	0.75	42.9
Approach		360	4.0	429	4.0	0.500	6.7	LOS A	3.8	27.7	0.73	0.74	0.75	43.9
North: Southbound Scott Street														
7	L2	222	4.0	264	4.0	0.914	17.4	LOS B	23.5	170.2	1.00	1.05	1.42	34.2
8	T1	379	4.0	451	4.0	0.914	13.7	LOS B	23.5	170.2	1.00	1.05	1.42	31.3
9	R2	216	4.0	257	4.0	0.914	14.0	LOS B	23.5	170.2	1.00	1.05	1.42	33.4
Approach		817	4.0	973	4.0	0.914	14.8	LOS B	23.5	170.2	1.00	1.05	1.42	32.9
West: Eastbound Toole														
10	L2	136	4.0	162	4.0	0.911	39.6	LOS D	16.2	117.3	1.00	1.54	2.18	30.3
11	T1	232	4.0	276	4.0	0.911	35.7	LOS D	16.2	117.3	1.00	1.54	2.18	32.7
12	R2	16	4.0	19	4.0	0.911	35.8	LOS D	16.2	117.3	1.00	1.54	2.18	28.4
Approach		384	4.0	457	4.0	0.911	37.1	LOS D	16.2	117.3	1.00	1.54	2.18	31.8
All Vehicles		1733	4.0	2063	4.0	0.914	17.4	LOS B	23.5	170.2	0.93	1.08	1.39	34.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Scott and Toole (Site Folder: General)]

2021 Peak PM Existing
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	9	1.0	10	1.0	0.219	9.0	LOS A	1.4	9.6	0.68	0.66	0.68	38.0
2	T1	107	1.0	118	1.0	0.219	5.2	LOS A	1.4	9.6	0.68	0.66	0.68	37.8
3	R2	37	1.0	41	1.0	0.219	5.6	LOS A	1.4	9.6	0.68	0.66	0.68	37.0
Approach		153	1.0	168	1.0	0.219	5.5	LOS A	1.4	9.6	0.68	0.66	0.68	37.6
East: Westbound Toole														
4	L2	37	1.0	41	1.0	0.423	8.6	LOS A	3.1	21.8	0.56	0.57	0.56	44.0
5	T1	282	1.0	310	1.0	0.423	4.7	LOS A	3.1	21.8	0.56	0.57	0.56	45.1
6	R2	83	1.0	91	1.0	0.423	4.8	LOS A	3.1	21.8	0.56	0.57	0.56	44.3
Approach		402	1.0	442	1.0	0.423	5.1	LOS A	3.1	21.8	0.56	0.57	0.56	44.9
North: Southbound Scott Street														
7	L2	79	1.0	87	1.0	0.445	8.5	LOS A	3.2	22.9	0.70	0.69	0.70	38.4
8	T1	201	1.0	221	1.0	0.445	4.8	LOS A	3.2	22.9	0.70	0.69	0.70	37.6
9	R2	83	1.0	91	1.0	0.445	5.1	LOS A	3.2	22.9	0.70	0.69	0.70	37.7
Approach		363	1.0	399	1.0	0.445	5.7	LOS A	3.2	22.9	0.70	0.69	0.70	37.8
West: Eastbound Toole														
10	L2	80	1.0	88	1.0	0.502	10.1	LOS B	4.0	27.9	0.74	0.74	0.75	44.3
11	T1	282	1.0	310	1.0	0.502	6.2	LOS A	4.0	27.9	0.74	0.74	0.75	44.3
12	R2	37	1.0	41	1.0	0.502	6.4	LOS A	4.0	27.9	0.74	0.74	0.75	42.0
Approach		399	1.0	438	1.0	0.502	7.0	LOS A	4.0	27.9	0.74	0.74	0.75	44.2
All Vehicles		1317	1.0	1447	1.0	0.502	5.9	LOS A	4.0	27.9	0.67	0.66	0.67	41.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Scott and Toole (Site Folder: General)]

Peak PM No Build
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	9	1.0	10	1.0	0.253	9.3	LOS A	1.6	11.4	0.72	0.70	0.72	37.8
2	T1	124	1.0	136	1.0	0.253	5.6	LOS A	1.6	11.4	0.72	0.70	0.72	37.6
3	R2	37	1.0	41	1.0	0.253	5.9	LOS A	1.6	11.4	0.72	0.70	0.72	36.8
Approach		170	1.0	187	1.0	0.253	5.8	LOS A	1.6	11.4	0.72	0.70	0.72	37.5
East: Westbound Toole														
4	L2	37	1.0	41	1.0	0.456	8.9	LOS A	3.4	24.1	0.61	0.61	0.61	43.8
5	T1	282	1.0	310	1.0	0.456	5.0	LOS A	3.4	24.1	0.61	0.61	0.61	45.0
6	R2	98	1.0	108	1.0	0.456	5.2	LOS A	3.4	24.1	0.61	0.61	0.61	44.2
Approach		417	1.0	458	1.0	0.456	5.4	LOS A	3.4	24.1	0.61	0.61	0.61	44.7
North: Southbound Scott Street														
7	L2	95	1.0	104	1.0	0.518	9.0	LOS A	4.2	29.9	0.75	0.73	0.78	38.2
8	T1	229	1.0	252	1.0	0.518	5.3	LOS A	4.2	29.9	0.75	0.73	0.78	37.4
9	R2	99	1.0	109	1.0	0.518	5.6	LOS A	4.2	29.9	0.75	0.73	0.78	37.5
Approach		423	1.0	465	1.0	0.518	6.2	LOS A	4.2	29.9	0.75	0.73	0.78	37.6
West: Eastbound Toole														
10	L2	93	1.0	102	1.0	0.549	11.4	LOS B	4.8	34.2	0.80	0.83	0.88	43.7
11	T1	282	1.0	310	1.0	0.549	7.6	LOS A	4.8	34.2	0.80	0.83	0.88	43.7
12	R2	37	1.0	41	1.0	0.549	7.7	LOS A	4.8	34.2	0.80	0.83	0.88	41.2
Approach		412	1.0	453	1.0	0.549	8.4	LOS A	4.8	34.2	0.80	0.83	0.88	43.6
All Vehicles		1422	1.0	1563	1.0	0.549	6.6	LOS A	4.8	34.2	0.72	0.72	0.75	41.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Scott and Toole (Site Folder: General)]

Peak PM Build
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	9	1.0	10	1.0	0.326	10.0	LOS A	2.2	15.6	0.78	0.77	0.78	37.5
2	T1	160	1.0	176	1.0	0.326	6.2	LOS A	2.2	15.6	0.78	0.77	0.78	36.4
3	R2	37	1.0	41	1.0	0.326	6.6	LOS A	2.2	15.6	0.78	0.77	0.78	36.5
Approach		206	1.0	226	1.0	0.326	6.5	LOS A	2.2	15.6	0.78	0.77	0.78	36.5
East: Westbound Toole														
4	L2	37	1.0	41	1.0	0.532	10.0	LOS A	4.3	30.5	0.72	0.71	0.74	43.4
5	T1	282	1.0	310	1.0	0.532	6.1	LOS A	4.3	30.5	0.72	0.71	0.74	44.6
6	R2	130	1.0	143	1.0	0.532	6.2	LOS A	4.3	30.5	0.72	0.71	0.74	43.0
Approach		449	1.0	493	1.0	0.532	6.4	LOS A	4.3	30.5	0.72	0.71	0.74	44.1
North: Southbound Scott Street														
7	L2	116	1.0	127	1.0	0.612	10.3	LOS B	6.2	43.7	0.82	0.83	0.93	37.3
8	T1	264	1.0	290	1.0	0.612	6.5	LOS A	6.2	43.7	0.82	0.83	0.93	35.7
9	R2	120	1.0	132	1.0	0.612	6.9	LOS A	6.2	43.7	0.82	0.83	0.93	36.4
Approach		500	1.0	549	1.0	0.612	7.5	LOS A	6.2	43.7	0.82	0.83	0.93	36.4
West: Eastbound Toole														
10	L2	119	1.0	131	1.0	0.628	13.7	LOS B	6.5	45.9	0.89	0.96	1.09	41.3
11	T1	282	1.0	310	1.0	0.628	9.9	LOS A	6.5	45.9	0.89	0.96	1.09	42.5
12	R2	37	1.0	41	1.0	0.628	10.0	LOS A	6.5	45.9	0.89	0.96	1.09	39.7
Approach		438	1.0	481	1.0	0.628	10.9	LOS B	6.5	45.9	0.89	0.96	1.09	42.0
All Vehicles		1593	1.0	1751	1.0	0.628	8.0	LOS A	6.5	45.9	0.81	0.82	0.90	40.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Scott and Toole (Site Folder: General)]

Peak PM Build with 25% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	9	1.0	10	1.0	0.417	11.1	LOS B	3.1	21.7	0.85	0.86	0.88	36.9
2	T1	197	1.0	216	1.0	0.417	7.3	LOS A	3.1	21.7	0.85	0.86	0.88	35.6
3	R2	37	1.0	41	1.0	0.417	7.7	LOS A	3.1	21.7	0.85	0.86	0.88	36.0
Approach		243	1.0	267	1.0	0.417	7.5	LOS A	3.1	21.7	0.85	0.86	0.88	35.7
East: Westbound Toole														
4	L2	37	1.0	41	1.0	0.622	12.4	LOS B	6.2	44.1	0.83	0.87	0.97	41.8
5	T1	282	1.0	310	1.0	0.622	8.6	LOS A	6.2	44.1	0.83	0.87	0.97	43.5
6	R2	164	1.0	180	1.0	0.622	8.7	LOS A	6.2	44.1	0.83	0.87	0.97	41.6
Approach		483	1.0	531	1.0	0.622	8.9	LOS A	6.2	44.1	0.83	0.87	0.97	42.8
North: Southbound Scott Street														
7	L2	138	1.0	152	1.0	0.715	12.2	LOS B	9.1	64.6	0.92	0.95	1.13	36.4
8	T1	303	1.0	333	1.0	0.715	8.4	LOS A	9.1	64.6	0.92	0.95	1.13	34.4
9	R2	142	1.0	156	1.0	0.715	8.8	LOS A	9.1	64.6	0.92	0.95	1.13	35.6
Approach		583	1.0	641	1.0	0.715	9.4	LOS A	9.1	64.6	0.92	0.95	1.13	35.3
West: Eastbound Toole														
10	L2	148	1.0	163	1.0	0.734	17.9	LOS B	9.3	65.4	0.99	1.15	1.39	39.0
11	T1	282	1.0	310	1.0	0.734	14.0	LOS B	9.3	65.4	0.99	1.15	1.39	40.5
12	R2	37	1.0	41	1.0	0.734	14.1	LOS B	9.3	65.4	0.99	1.15	1.39	37.3
Approach		467	1.0	513	1.0	0.734	15.2	LOS B	9.3	65.4	0.99	1.15	1.39	39.9
All Vehicles		1776	1.0	1952	1.0	0.734	10.6	LOS B	9.3	65.4	0.90	0.97	1.12	38.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Scott and Toole (Site Folder: General)]

Peak PM Build with 50% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	9	1.0	10	1.0	0.515	13.6	LOS B	4.4	31.1	0.91	1.01	1.08	35.6
2	T1	235	1.0	258	1.0	0.515	9.9	LOS A	4.4	31.1	0.91	1.01	1.08	34.0
3	R2	37	1.0	41	1.0	0.515	10.3	LOS B	4.4	31.1	0.91	1.01	1.08	34.7
Approach		281	1.0	309	1.0	0.515	10.1	LOS B	4.4	31.1	0.91	1.01	1.08	34.2
East: Westbound Toole														
4	L2	37	1.0	41	1.0	0.721	16.1	LOS B	8.9	63.2	0.94	1.07	1.27	39.5
5	T1	282	1.0	310	1.0	0.721	12.2	LOS B	8.9	63.2	0.94	1.07	1.27	41.7
6	R2	198	1.0	218	1.0	0.721	12.4	LOS B	8.9	63.2	0.94	1.07	1.27	39.6
Approach		517	1.0	568	1.0	0.721	12.6	LOS B	8.9	63.2	0.94	1.07	1.27	40.8
North: Southbound Scott Street														
7	L2	160	1.0	176	1.0	0.819	15.5	LOS B	13.9	97.9	1.00	1.11	1.38	35.0
8	T1	343	1.0	377	1.0	0.819	11.8	LOS B	13.9	97.9	1.00	1.11	1.38	32.4
9	R2	164	1.0	180	1.0	0.819	12.1	LOS B	13.9	97.9	1.00	1.11	1.38	34.2
Approach		667	1.0	733	1.0	0.819	12.8	LOS B	13.9	97.9	1.00	1.11	1.38	33.7
West: Eastbound Toole														
10	L2	176	1.0	193	1.0	0.858	26.9	LOS C	14.3	101.3	1.00	1.39	1.81	34.8
11	T1	282	1.0	310	1.0	0.858	23.1	LOS C	14.3	101.3	1.00	1.39	1.81	36.8
12	R2	37	1.0	41	1.0	0.858	23.2	LOS C	14.3	101.3	1.00	1.39	1.81	32.9
Approach		495	1.0	544	1.0	0.858	24.4	LOS C	14.3	101.3	1.00	1.39	1.81	35.9
All Vehicles		1960	1.0	2154	1.0	0.858	15.3	LOS B	14.3	101.3	0.97	1.16	1.42	36.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Scott and Toole (Site Folder: General)]

Peak PM Build with 75% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	9	1.0	10	1.0	0.623	17.4	LOS B	6.2	43.9	0.98	1.16	1.31	33.9
2	T1	272	1.0	299	1.0	0.623	13.7	LOS B	6.2	43.9	0.98	1.16	1.31	31.8
3	R2	37	1.0	41	1.0	0.623	14.0	LOS B	6.2	43.9	0.98	1.16	1.31	33.1
Approach		318	1.0	349	1.0	0.623	13.8	LOS B	6.2	43.9	0.98	1.16	1.31	32.1
East: Westbound Toole														
4	L2	37	1.0	41	1.0	0.831	22.9	LOS C	13.4	94.7	1.00	1.31	1.68	35.8
5	T1	282	1.0	310	1.0	0.831	19.0	LOS B	13.4	94.7	1.00	1.31	1.68	38.7
6	R2	231	1.0	254	1.0	0.831	19.1	LOS B	13.4	94.7	1.00	1.31	1.68	36.3
Approach		550	1.0	604	1.0	0.831	19.3	LOS B	13.4	94.7	1.00	1.31	1.68	37.6
North: Southbound Scott Street														
7	L2	182	1.0	200	1.0	0.920	22.9	LOS C	22.4	158.1	1.00	1.36	1.75	32.2
8	T1	383	1.0	421	1.0	0.920	19.2	LOS B	22.4	158.1	1.00	1.36	1.75	28.8
9	R2	186	1.0	204	1.0	0.920	19.5	LOS B	22.4	158.1	1.00	1.36	1.75	31.5
Approach		751	1.0	825	1.0	0.920	20.2	LOS C	22.4	158.1	1.00	1.36	1.75	30.5
West: Eastbound Toole														
10	L2	204	1.0	224	1.0	0.994	51.6	LOS E	25.3	178.9	1.00	1.85	2.81	27.0
11	T1	282	1.0	310	1.0	0.994	47.7	LOS D	25.3	178.9	1.00	1.85	2.81	29.5
12	R2	37	1.0	41	1.0	0.994	47.9	LOS D	25.3	178.9	1.00	1.85	2.81	25.1
Approach		523	1.0	575	1.0	0.994	49.2	LOS D	25.3	178.9	1.00	1.85	2.81	28.3
All Vehicles		2142	1.0	2354	1.0	0.994	26.1	LOS C	25.3	178.9	1.00	1.44	1.93	31.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Scott and Toole (Site Folder: General)]

Peak PM Build with 100% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	9	1.0	10	1.0	0.681	18.9	LOS B	7.3	51.9	0.99	1.22	1.41	33.3
2	T1	309	1.0	340	1.0	0.681	15.2	LOS B	7.3	51.9	0.99	1.22	1.41	31.1
3	R2	37	1.0	41	1.0	0.681	15.5	LOS B	7.3	51.9	0.99	1.22	1.41	32.5
Approach		355	1.0	390	1.0	0.681	15.3	LOS B	7.3	51.9	0.99	1.22	1.41	31.3
East: Westbound Toole														
4	L2	37	1.0	41	1.0	0.931	34.6	LOS C	20.5	144.6	1.00	1.62	2.27	30.8
5	T1	282	1.0	310	1.0	0.931	30.8	LOS C	20.5	144.6	1.00	1.62	2.27	34.4
6	R2	265	1.0	291	1.0	0.931	30.9	LOS C	20.5	144.6	1.00	1.62	2.27	31.7
Approach		584	1.0	642	1.0	0.931	31.1	LOS C	20.5	144.6	1.00	1.62	2.27	33.1
North: Southbound Scott Street														
7	L2	204	1.0	224	1.0	1.016	41.3	LOS D	37.9	267.9	1.00	1.89	2.56	26.8
8	T1	422	1.0	464	1.0	1.016	37.5	LOS D	37.9	267.9	1.00	1.89	2.56	22.4
9	R2	208	1.0	229	1.0	1.016	37.9	LOS D	37.9	267.9	1.00	1.89	2.56	26.3
Approach		834	1.0	916	1.0	1.016	38.5	LOS D	37.9	267.9	1.00	1.89	2.56	24.8
West: Eastbound Toole														
10	L2	232	1.0	255	1.0	1.146	101.7	LOS F	43.7	308.7	1.00	2.59	4.44	18.4
11	T1	282	1.0	310	1.0	1.146	97.9	LOS F	43.7	308.7	1.00	2.59	4.44	20.9
12	R2	37	1.0	41	1.0	1.146	98.0	LOS F	43.7	308.7	1.00	2.59	4.44	16.8
Approach		551	1.0	605	1.0	1.146	99.5	LOS F	43.7	308.7	1.00	2.59	4.44	19.7
All Vehicles		2324	1.0	2554	1.0	1.146	47.6	LOS D	43.7	308.7	1.00	1.89	2.76	25.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Orange Street and N. 5th St./I-90 (Site Folder: General)]

Peak AM Existing
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Orange Street														
1u	U	1	3.0	1	3.0	0.305	9.1	LOS A	1.5	10.5	0.16	0.23	0.16	51.4
1	L2	32	3.0	34	3.0	0.305	7.2	LOS A	1.5	10.5	0.16	0.23	0.16	49.7
2	T1	231	3.0	246	3.0	0.305	0.7	LOS A	1.5	10.5	0.16	0.23	0.16	49.0
3	R2	181	3.0	193	3.0	0.305	1.9	LOS A	1.5	10.5	0.16	0.23	0.16	47.1
Approach		445	3.0	473	3.0	0.305	1.7	LOS A	1.5	10.5	0.16	0.23	0.16	48.1
North: Southbound Orange Street														
7	L2	1	3.0	1	3.0	0.229	7.2	LOS A	1.0	7.5	0.12	0.11	0.12	51.9
8	T1	315	3.0	335	3.0	0.229	0.7	LOS A	1.0	7.5	0.12	0.11	0.12	50.1
9	R2	22	3.0	23	3.0	0.229	1.8	LOS A	1.0	7.5	0.12	0.11	0.12	47.6
Approach		338	3.0	360	3.0	0.229	0.8	LOS A	1.0	7.5	0.12	0.11	0.12	49.9
NorthWest: I-90 EB Off-Ramp														
27b	L3	1	3.0	1	3.0	0.379	9.5	LOS A	1.6	11.6	0.42	0.32	0.42	30.3
27a	L1	1	3.0	1	3.0	0.379	7.5	LOS A	1.6	11.6	0.42	0.32	0.42	48.6
29a	R1	390	3.0	415	3.0	0.379	2.0	LOS A	1.6	11.6	0.42	0.32	0.42	47.8
29b	R3	3	3.0	3	3.0	0.379	3.6	LOS A	1.6	11.6	0.42	0.32	0.42	46.3
Approach		395	3.0	420	3.0	0.379	2.0	LOS A	1.6	11.6	0.42	0.32	0.42	47.7
West: Eastbound N. 5th Street W.														
10	L2	8	3.0	9	3.0	0.153	11.5	LOS B	1.0	7.1	0.74	0.67	0.74	26.4
11	T1	42	3.0	45	3.0	0.153	5.0	LOS A	1.0	7.1	0.74	0.67	0.74	46.3
12	R2	71	3.0	76	3.0	0.153	6.1	LOS A	1.0	7.1	0.74	0.67	0.74	45.0
Approach		121	3.0	129	3.0	0.153	6.1	LOS A	1.0	7.1	0.74	0.67	0.74	44.1
All Vehicles		1299	3.0	1382	3.0	0.379	2.0	LOS A	1.6	11.6	0.28	0.27	0.28	47.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Orange Street and N. 5th St./I-90 (Site Folder: General)]

Peak AM No Build
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Orange Street														
1u	U	1	3.0	1	3.0	0.308	9.1	LOS A	1.5	10.7	0.16	0.23	0.16	51.3
1	L2	36	3.0	38	3.0	0.308	7.2	LOS A	1.5	10.7	0.16	0.23	0.16	49.7
2	T1	231	3.0	246	3.0	0.308	0.7	LOS A	1.5	10.7	0.16	0.23	0.16	49.0
3	R2	181	3.0	193	3.0	0.308	1.9	LOS A	1.5	10.7	0.16	0.23	0.16	47.1
Approach		449	3.0	478	3.0	0.308	1.7	LOS A	1.5	10.7	0.16	0.23	0.16	48.1
North: Southbound Orange Street														
7	L2	1	3.0	1	3.0	0.234	7.2	LOS A	1.1	7.7	0.13	0.11	0.13	51.9
8	T1	315	3.0	335	3.0	0.234	0.7	LOS A	1.1	7.7	0.13	0.11	0.13	50.0
9	R2	26	3.0	28	3.0	0.234	1.9	LOS A	1.1	7.7	0.13	0.11	0.13	47.5
Approach		342	3.0	364	3.0	0.234	0.8	LOS A	1.1	7.7	0.13	0.11	0.13	49.8
NorthWest: I-90 EB Off-Ramp														
27b	L3	1	3.0	1	3.0	0.383	9.5	LOS A	1.7	11.9	0.43	0.33	0.43	30.2
27a	L1	1	3.0	1	3.0	0.383	7.6	LOS A	1.7	11.9	0.43	0.33	0.43	48.5
29a	R1	390	3.0	415	3.0	0.383	2.0	LOS A	1.7	11.9	0.43	0.33	0.43	47.7
29b	R3	5	3.0	5	3.0	0.383	3.6	LOS A	1.7	11.9	0.43	0.33	0.43	46.2
Approach		397	3.0	422	3.0	0.383	2.1	LOS A	1.7	11.9	0.43	0.33	0.43	47.7
West: Eastbound N. 5th Street W.														
10	L2	8	3.0	9	3.0	0.156	11.5	LOS B	1.0	7.3	0.74	0.68	0.74	26.4
11	T1	43	3.0	46	3.0	0.156	5.1	LOS A	1.0	7.3	0.74	0.68	0.74	46.3
12	R2	73	3.0	78	3.0	0.156	6.2	LOS A	1.0	7.3	0.74	0.68	0.74	45.0
Approach		124	3.0	132	3.0	0.156	6.1	LOS A	1.0	7.3	0.74	0.68	0.74	44.2
All Vehicles		1312	3.0	1396	3.0	0.383	2.0	LOS A	1.7	11.9	0.29	0.27	0.29	47.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Orange Street and N. 5th St./I-90 (Site Folder: General)]

Peak AM Build
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Orange Street														
1u	U	1	3.0	1	3.0	0.311	9.1	LOS A	1.5	10.8	0.17	0.23	0.17	51.3
1	L2	39	3.0	41	3.0	0.311	7.2	LOS A	1.5	10.8	0.17	0.23	0.17	49.6
2	T1	231	3.0	246	3.0	0.311	0.7	LOS A	1.5	10.8	0.17	0.23	0.17	48.9
3	R2	181	3.0	193	3.0	0.311	1.9	LOS A	1.5	10.8	0.17	0.23	0.17	47.0
Approach		452	3.0	481	3.0	0.311	1.8	LOS A	1.5	10.8	0.17	0.23	0.17	48.0
North: Southbound Orange Street														
7	L2	1	3.0	1	3.0	0.237	7.2	LOS A	1.1	7.8	0.13	0.12	0.13	51.8
8	T1	315	3.0	335	3.0	0.237	0.7	LOS A	1.1	7.8	0.13	0.12	0.13	50.0
9	R2	29	3.0	31	3.0	0.237	1.9	LOS A	1.1	7.8	0.13	0.12	0.13	47.5
Approach		345	3.0	367	3.0	0.237	0.8	LOS A	1.1	7.8	0.13	0.12	0.13	49.7
NorthWest: I-90 EB Off-Ramp														
27b	L3	1	3.0	1	3.0	0.385	9.6	LOS A	1.7	12.0	0.44	0.34	0.44	30.2
27a	L1	1	3.0	1	3.0	0.385	7.6	LOS A	1.7	12.0	0.44	0.34	0.44	48.5
29a	R1	390	3.0	415	3.0	0.385	2.0	LOS A	1.7	12.0	0.44	0.34	0.44	47.7
29b	R3	6	3.0	6	3.0	0.385	3.7	LOS A	1.7	12.0	0.44	0.34	0.44	46.2
Approach		398	3.0	423	3.0	0.385	2.1	LOS A	1.7	12.0	0.44	0.34	0.44	47.6
West: Eastbound N. 5th Street W.														
10	L2	8	3.0	9	3.0	0.163	11.5	LOS B	1.1	7.6	0.74	0.68	0.74	26.4
11	T1	45	3.0	48	3.0	0.163	5.1	LOS A	1.1	7.6	0.74	0.68	0.74	46.3
12	R2	76	3.0	81	3.0	0.163	6.2	LOS A	1.1	7.6	0.74	0.68	0.74	45.0
Approach		129	3.0	137	3.0	0.163	6.1	LOS A	1.1	7.6	0.74	0.68	0.74	44.2
All Vehicles		1324	3.0	1409	3.0	0.385	2.0	LOS A	1.7	12.0	0.30	0.28	0.30	47.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Orange Street and N. 5th St./I-90 (Site Folder: General)]

Peak AM Build with 25% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Orange Street														
1u	U	1	3.0	1	3.0	0.314	9.1	LOS A	1.5	11.0	0.17	0.24	0.17	51.3
1	L2	42	3.0	45	3.0	0.314	7.2	LOS A	1.5	11.0	0.17	0.24	0.17	49.6
2	T1	231	3.0	246	3.0	0.314	0.7	LOS A	1.5	11.0	0.17	0.24	0.17	48.8
3	R2	181	3.0	193	3.0	0.314	2.0	LOS A	1.5	11.0	0.17	0.24	0.17	47.0
Approach		455	3.0	484	3.0	0.314	1.8	LOS A	1.5	11.0	0.17	0.24	0.17	48.0
North: Southbound Orange Street														
7	L2	1	3.0	1	3.0	0.240	7.2	LOS A	1.1	8.0	0.14	0.12	0.14	51.8
8	T1	315	3.0	335	3.0	0.240	0.7	LOS A	1.1	8.0	0.14	0.12	0.14	49.9
9	R2	32	3.0	34	3.0	0.240	1.9	LOS A	1.1	8.0	0.14	0.12	0.14	47.4
Approach		348	3.0	370	3.0	0.240	0.8	LOS A	1.1	8.0	0.14	0.12	0.14	49.7
NorthWest: I-90 EB Off-Ramp														
27b	L3	1	3.0	1	3.0	0.387	9.6	LOS A	1.7	12.2	0.44	0.34	0.44	30.2
27a	L1	1	3.0	1	3.0	0.387	7.6	LOS A	1.7	12.2	0.44	0.34	0.44	48.5
29a	R1	390	3.0	415	3.0	0.387	2.1	LOS A	1.7	12.2	0.44	0.34	0.44	47.7
29b	R3	7	3.0	7	3.0	0.387	3.7	LOS A	1.7	12.2	0.44	0.34	0.44	46.2
Approach		399	3.0	424	3.0	0.387	2.1	LOS A	1.7	12.2	0.44	0.34	0.44	47.6
West: Eastbound N. 5th Street W.														
10	L2	8	3.0	9	3.0	0.171	11.6	LOS B	1.1	8.0	0.75	0.68	0.75	26.4
11	T1	47	3.0	50	3.0	0.171	5.1	LOS A	1.1	8.0	0.75	0.68	0.75	46.3
12	R2	80	3.0	85	3.0	0.171	6.2	LOS A	1.1	8.0	0.75	0.68	0.75	45.0
Approach		135	3.0	144	3.0	0.171	6.1	LOS A	1.1	8.0	0.75	0.68	0.75	44.3
All Vehicles		1337	3.0	1422	3.0	0.387	2.1	LOS A	1.7	12.2	0.30	0.28	0.30	47.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Orange Street and N. 5th St./I-90 (Site Folder: General)]

Peak AM Build with 50% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Orange Street														
1u	U	1	3.0	1	3.0	0.316	9.2	LOS A	1.5	11.1	0.18	0.24	0.18	51.2
1	L2	45	3.0	48	3.0	0.316	7.2	LOS A	1.5	11.1	0.18	0.24	0.18	49.5
2	T1	231	3.0	246	3.0	0.316	0.7	LOS A	1.5	11.1	0.18	0.24	0.18	48.8
3	R2	181	3.0	193	3.0	0.316	2.0	LOS A	1.5	11.1	0.18	0.24	0.18	47.0
Approach		458	3.0	487	3.0	0.316	1.9	LOS A	1.5	11.1	0.18	0.24	0.18	48.0
North: Southbound Orange Street														
7	L2	1	3.0	1	3.0	0.243	7.2	LOS A	1.1	8.1	0.15	0.12	0.15	51.7
8	T1	315	3.0	335	3.0	0.243	0.7	LOS A	1.1	8.1	0.15	0.12	0.15	49.9
9	R2	35	3.0	37	3.0	0.243	1.9	LOS A	1.1	8.1	0.15	0.12	0.15	47.4
Approach		351	3.0	373	3.0	0.243	0.9	LOS A	1.1	8.1	0.15	0.12	0.15	49.6
NorthWest: I-90 EB Off-Ramp														
27b	L3	1	3.0	1	3.0	0.390	9.6	LOS A	1.7	12.4	0.45	0.35	0.45	30.2
27a	L1	1	3.0	1	3.0	0.390	7.7	LOS A	1.7	12.4	0.45	0.35	0.45	48.5
29a	R1	390	3.0	415	3.0	0.390	2.1	LOS A	1.7	12.4	0.45	0.35	0.45	47.7
29b	R3	8	3.0	9	3.0	0.390	3.7	LOS A	1.7	12.4	0.45	0.35	0.45	46.2
Approach		400	3.0	426	3.0	0.390	2.2	LOS A	1.7	12.4	0.45	0.35	0.45	47.6
West: Eastbound N. 5th Street W.														
10	L2	8	3.0	9	3.0	0.177	11.6	LOS B	1.2	8.4	0.75	0.69	0.75	26.4
11	T1	48	3.0	51	3.0	0.177	5.1	LOS A	1.2	8.4	0.75	0.69	0.75	46.3
12	R2	84	3.0	89	3.0	0.177	6.2	LOS A	1.2	8.4	0.75	0.69	0.75	45.0
Approach		140	3.0	149	3.0	0.177	6.1	LOS A	1.2	8.4	0.75	0.69	0.75	44.3
All Vehicles		1349	3.0	1435	3.0	0.390	2.1	LOS A	1.7	12.4	0.31	0.29	0.31	47.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Orange Street and N. 5th St./I-90 (Site Folder: General)]

Peak AM Build with 75% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Orange Street														
1u	U	1	3.0	1	3.0	0.319	9.2	LOS A	1.6	11.3	0.18	0.24	0.18	51.2
1	L2	48	3.0	51	3.0	0.319	7.2	LOS A	1.6	11.3	0.18	0.24	0.18	49.5
2	T1	231	3.0	246	3.0	0.319	0.7	LOS A	1.6	11.3	0.18	0.24	0.18	48.7
3	R2	181	3.0	193	3.0	0.319	2.0	LOS A	1.6	11.3	0.18	0.24	0.18	46.9
Approach		461	3.0	490	3.0	0.319	1.9	LOS A	1.6	11.3	0.18	0.24	0.18	47.9
North: Southbound Orange Street														
7	L2	1	3.0	1	3.0	0.247	7.2	LOS A	1.2	8.3	0.15	0.13	0.15	51.7
8	T1	315	3.0	335	3.0	0.247	0.7	LOS A	1.2	8.3	0.15	0.13	0.15	49.8
9	R2	38	3.0	40	3.0	0.247	1.9	LOS A	1.2	8.3	0.15	0.13	0.15	47.3
Approach		354	3.0	377	3.0	0.247	0.9	LOS A	1.2	8.3	0.15	0.13	0.15	49.5
NorthWest: I-90 EB Off-Ramp														
27b	L3	1	3.0	1	3.0	0.392	9.7	LOS A	1.7	12.5	0.45	0.35	0.45	30.2
27a	L1	1	3.0	1	3.0	0.392	7.7	LOS A	1.7	12.5	0.45	0.35	0.45	48.4
29a	R1	390	3.0	415	3.0	0.392	2.1	LOS A	1.7	12.5	0.45	0.35	0.45	47.7
29b	R3	9	3.0	10	3.0	0.392	3.8	LOS A	1.7	12.5	0.45	0.35	0.45	46.2
Approach		401	3.0	427	3.0	0.392	2.2	LOS A	1.7	12.5	0.45	0.35	0.45	47.6
West: Eastbound N. 5th Street W.														
10	L2	8	3.0	9	3.0	0.184	11.6	LOS B	1.2	8.7	0.75	0.69	0.75	26.3
11	T1	50	3.0	53	3.0	0.184	5.1	LOS A	1.2	8.7	0.75	0.69	0.75	46.3
12	R2	87	3.0	93	3.0	0.184	6.2	LOS A	1.2	8.7	0.75	0.69	0.75	44.9
Approach		145	3.0	154	3.0	0.184	6.2	LOS A	1.2	8.7	0.75	0.69	0.75	44.3
All Vehicles		1361	3.0	1448	3.0	0.392	2.2	LOS A	1.7	12.5	0.31	0.29	0.31	47.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Orange Street and N. 5th St./I-90 (Site Folder: General)]

Peak AM Build with 100% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Orange Street														
1u	U	1	3.0	1	3.0	0.322	9.2	LOS A	1.6	11.4	0.18	0.25	0.18	51.1
1	L2	51	3.0	54	3.0	0.322	7.2	LOS A	1.6	11.4	0.18	0.25	0.18	49.5
2	T1	231	3.0	246	3.0	0.322	0.7	LOS A	1.6	11.4	0.18	0.25	0.18	48.7
3	R2	181	3.0	193	3.0	0.322	2.0	LOS A	1.6	11.4	0.18	0.25	0.18	46.9
Approach		464	3.0	494	3.0	0.322	1.9	LOS A	1.6	11.4	0.18	0.25	0.18	47.9
North: Southbound Orange Street														
7	L2	1	3.0	1	3.0	0.250	7.2	LOS A	1.2	8.4	0.16	0.13	0.16	51.6
8	T1	315	3.0	335	3.0	0.250	0.8	LOS A	1.2	8.4	0.16	0.13	0.16	49.8
9	R2	41	3.0	44	3.0	0.250	1.9	LOS A	1.2	8.4	0.16	0.13	0.16	47.3
Approach		357	3.0	380	3.0	0.250	0.9	LOS A	1.2	8.4	0.16	0.13	0.16	49.5
NorthWest: I-90 EB Off-Ramp														
27b	L3	1	3.0	1	3.0	0.395	9.7	LOS A	1.8	12.7	0.46	0.36	0.46	30.2
27a	L1	1	3.0	1	3.0	0.395	7.7	LOS A	1.8	12.7	0.46	0.36	0.46	48.4
29a	R1	390	3.0	415	3.0	0.395	2.2	LOS A	1.8	12.7	0.46	0.36	0.46	47.6
29b	R3	10	3.0	11	3.0	0.395	3.8	LOS A	1.8	12.7	0.46	0.36	0.46	46.1
Approach		402	3.0	428	3.0	0.395	2.2	LOS A	1.8	12.7	0.46	0.36	0.46	47.6
West: Eastbound N. 5th Street W.														
10	L2	8	3.0	9	3.0	0.191	11.6	LOS B	1.3	9.1	0.76	0.70	0.76	26.3
11	T1	52	3.0	55	3.0	0.191	5.2	LOS A	1.3	9.1	0.76	0.70	0.76	46.3
12	R2	91	3.0	97	3.0	0.191	6.3	LOS A	1.3	9.1	0.76	0.70	0.76	44.9
Approach		151	3.0	161	3.0	0.191	6.2	LOS A	1.3	9.1	0.76	0.70	0.76	44.4
All Vehicles		1374	3.0	1462	3.0	0.395	2.2	LOS A	1.8	12.7	0.32	0.30	0.32	47.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Orange Street and N. 5th St./I-90 (Site Folder: General)]

Peak PM Existing
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Orange Street														
1u	U	3	3.0	3	3.0	0.686	9.3	LOS A	6.3	45.4	0.33	0.27	0.33	50.6
1	L2	119	3.0	134	3.0	0.686	7.3	LOS A	6.3	45.4	0.33	0.27	0.33	48.9
2	T1	482	3.0	542	3.0	0.686	0.9	LOS A	6.3	45.4	0.33	0.27	0.33	47.8
3	R2	357	3.0	401	3.0	0.686	2.1	LOS A	6.3	45.4	0.33	0.27	0.33	46.4
Approach		961	3.0	1080	3.0	0.686	2.2	LOS A	6.3	45.4	0.33	0.27	0.33	47.3
North: Southbound Orange Street														
7	L2	1	3.0	1	3.0	0.373	7.6	LOS A	2.1	15.2	0.32	0.21	0.32	50.4
8	T1	358	3.0	402	3.0	0.373	1.1	LOS A	2.1	15.2	0.32	0.21	0.32	48.7
9	R2	105	3.0	118	3.0	0.373	2.3	LOS A	2.1	15.2	0.32	0.21	0.32	46.3
Approach		464	3.0	521	3.0	0.373	1.4	LOS A	2.1	15.2	0.32	0.21	0.32	48.1
NorthWest: I-90 EB Off-Ramp														
27b	L3	1	3.0	1	3.0	0.594	13.0	LOS B	4.5	32.4	0.72	0.81	0.90	29.2
27a	L1	1	3.0	1	3.0	0.594	11.0	LOS B	4.5	32.4	0.72	0.81	0.90	47.0
29a	R1	463	3.0	520	3.0	0.594	5.4	LOS A	4.5	32.4	0.72	0.81	0.90	46.2
29b	R3	23	3.0	26	3.0	0.594	7.1	LOS A	4.5	32.4	0.72	0.81	0.90	44.8
Approach		488	3.0	548	3.0	0.594	5.6	LOS A	4.5	32.4	0.72	0.81	0.90	46.1
West: Eastbound N. 5th Street W.														
10	L2	6	3.0	7	3.0	0.179	13.6	LOS B	1.3	9.3	0.87	0.78	0.87	25.9
11	T1	52	3.0	58	3.0	0.179	7.1	LOS A	1.3	9.3	0.87	0.78	0.87	45.3
12	R2	48	3.0	54	3.0	0.179	8.2	LOS A	1.3	9.3	0.87	0.78	0.87	44.0
Approach		106	3.0	119	3.0	0.179	8.0	LOS A	1.3	9.3	0.87	0.78	0.87	43.6
All Vehicles		2019	3.0	2269	3.0	0.686	3.1	LOS A	6.3	45.4	0.45	0.41	0.49	46.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Orange Street and N. 5th St./I-90 (Site Folder: General)]

Peak PM No Build
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Orange Street														
1u	U	3	3.0	3	3.0	0.690	9.3	LOS A	6.4	46.0	0.34	0.27	0.34	50.5
1	L2	122	3.0	137	3.0	0.690	7.4	LOS A	6.4	46.0	0.34	0.27	0.34	48.9
2	T1	482	3.0	542	3.0	0.690	0.9	LOS A	6.4	46.0	0.34	0.27	0.34	47.8
3	R2	357	3.0	401	3.0	0.690	2.1	LOS A	6.4	46.0	0.34	0.27	0.34	46.4
Approach		964	3.0	1083	3.0	0.690	2.2	LOS A	6.4	46.0	0.34	0.27	0.34	47.3
North: Southbound Orange Street														
7	L2	1	3.0	1	3.0	0.376	7.6	LOS A	2.2	15.4	0.32	0.21	0.32	50.4
8	T1	358	3.0	402	3.0	0.376	1.1	LOS A	2.2	15.4	0.32	0.21	0.32	48.6
9	R2	108	3.0	121	3.0	0.376	2.3	LOS A	2.2	15.4	0.32	0.21	0.32	46.2
Approach		467	3.0	525	3.0	0.376	1.4	LOS A	2.2	15.4	0.32	0.21	0.32	48.1
NorthWest: I-90 EB Off-Ramp														
27b	L3	1	3.0	1	3.0	0.599	13.1	LOS B	4.6	33.2	0.73	0.83	0.91	29.2
27a	L1	1	3.0	1	3.0	0.599	11.1	LOS B	4.6	33.2	0.73	0.83	0.91	46.9
29a	R1	463	3.0	520	3.0	0.599	5.6	LOS A	4.6	33.2	0.73	0.83	0.91	46.1
29b	R3	24	3.0	27	3.0	0.599	7.2	LOS A	4.6	33.2	0.73	0.83	0.91	44.7
Approach		489	3.0	549	3.0	0.599	5.7	LOS A	4.6	33.2	0.73	0.83	0.91	46.0
West: Eastbound N. 5th Street W.														
10	L2	6	3.0	7	3.0	0.190	13.6	LOS B	1.4	9.8	0.87	0.79	0.87	25.9
11	T1	54	3.0	61	3.0	0.190	7.2	LOS A	1.4	9.8	0.87	0.79	0.87	45.3
12	R2	52	3.0	58	3.0	0.190	8.3	LOS A	1.4	9.8	0.87	0.79	0.87	44.0
Approach		112	3.0	126	3.0	0.190	8.0	LOS A	1.4	9.8	0.87	0.79	0.87	43.6
All Vehicles		2032	3.0	2283	3.0	0.690	3.2	LOS A	6.4	46.0	0.46	0.42	0.50	46.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Orange Street and N. 5th St./I-90 (Site Folder: General)]

Peak PM Build
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Orange Street														
1u	U	3	3.0	3	3.0	0.695	9.3	LOS A	6.5	46.9	0.35	0.27	0.35	50.5
1	L2	127	3.0	143	3.0	0.695	7.4	LOS A	6.5	46.9	0.35	0.27	0.35	48.8
2	T1	482	3.0	542	3.0	0.695	0.9	LOS A	6.5	46.9	0.35	0.27	0.35	47.7
3	R2	357	3.0	401	3.0	0.695	2.1	LOS A	6.5	46.9	0.35	0.27	0.35	46.3
Approach		969	3.0	1089	3.0	0.695	2.2	LOS A	6.5	46.9	0.35	0.27	0.35	47.3
North: Southbound Orange Street														
7	L2	1	3.0	1	3.0	0.382	7.6	LOS A	2.2	15.8	0.33	0.22	0.33	50.3
8	T1	358	3.0	402	3.0	0.382	1.2	LOS A	2.2	15.8	0.33	0.22	0.33	48.6
9	R2	113	3.0	127	3.0	0.382	2.3	LOS A	2.2	15.8	0.33	0.22	0.33	46.2
Approach		472	3.0	530	3.0	0.382	1.5	LOS A	2.2	15.8	0.33	0.22	0.33	48.0
NorthWest: I-90 EB Off-Ramp														
27b	L3	1	3.0	1	3.0	0.608	13.4	LOS B	4.8	34.5	0.74	0.85	0.94	29.1
27a	L1	1	3.0	1	3.0	0.608	11.4	LOS B	4.8	34.5	0.74	0.85	0.94	46.7
29a	R1	463	3.0	520	3.0	0.608	5.9	LOS A	4.8	34.5	0.74	0.85	0.94	46.0
29b	R3	26	3.0	29	3.0	0.608	7.5	LOS A	4.8	34.5	0.74	0.85	0.94	44.6
Approach		491	3.0	552	3.0	0.608	6.0	LOS A	4.8	34.5	0.74	0.85	0.94	45.9
West: Eastbound N. 5th Street W.														
10	L2	6	3.0	7	3.0	0.199	13.7	LOS B	1.4	10.4	0.87	0.79	0.87	25.9
11	T1	56	3.0	63	3.0	0.199	7.2	LOS A	1.4	10.4	0.87	0.79	0.87	45.3
12	R2	55	3.0	62	3.0	0.199	8.3	LOS A	1.4	10.4	0.87	0.79	0.87	44.0
Approach		117	3.0	131	3.0	0.199	8.0	LOS A	1.4	10.4	0.87	0.79	0.87	43.6
All Vehicles		2049	3.0	2302	3.0	0.695	3.3	LOS A	6.5	46.9	0.47	0.43	0.52	46.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Orange Street and N. 5th St./I-90 (Site Folder: General)]

Peak PM Build with 25% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Orange Street														
1u	U	3	3.0	3	3.0	0.700	9.3	LOS A	6.7	47.8	0.36	0.28	0.36	50.4
1	L2	133	3.0	149	3.0	0.700	7.4	LOS A	6.7	47.8	0.36	0.28	0.36	48.8
2	T1	482	3.0	542	3.0	0.700	0.9	LOS A	6.7	47.8	0.36	0.28	0.36	47.6
3	R2	357	3.0	401	3.0	0.700	2.2	LOS A	6.7	47.8	0.36	0.28	0.36	46.3
Approach		975	3.0	1096	3.0	0.700	2.3	LOS A	6.7	47.8	0.36	0.28	0.36	47.2
North: Southbound Orange Street														
7	L2	1	3.0	1	3.0	0.390	7.7	LOS A	2.3	16.3	0.35	0.22	0.35	50.3
8	T1	358	3.0	402	3.0	0.390	1.2	LOS A	2.3	16.3	0.35	0.22	0.35	48.5
9	R2	119	3.0	134	3.0	0.390	2.4	LOS A	2.3	16.3	0.35	0.22	0.35	46.1
Approach		478	3.0	537	3.0	0.390	1.5	LOS A	2.3	16.3	0.35	0.22	0.35	47.9
NorthWest: I-90 EB Off-Ramp														
27b	L3	1	3.0	1	3.0	0.618	13.7	LOS B	5.0	36.0	0.76	0.87	0.97	29.0
27a	L1	1	3.0	1	3.0	0.618	11.7	LOS B	5.0	36.0	0.76	0.87	0.97	46.5
29a	R1	463	3.0	520	3.0	0.618	6.2	LOS A	5.0	36.0	0.76	0.87	0.97	45.8
29b	R3	28	3.0	31	3.0	0.618	7.8	LOS A	5.0	36.0	0.76	0.87	0.97	44.4
Approach		493	3.0	554	3.0	0.618	6.3	LOS A	5.0	36.0	0.76	0.87	0.97	45.7
West: Eastbound N. 5th Street W.														
10	L2	6	3.0	7	3.0	0.206	13.7	LOS B	1.5	10.8	0.88	0.80	0.88	25.9
11	T1	57	3.0	64	3.0	0.206	7.2	LOS A	1.5	10.8	0.88	0.80	0.88	45.3
12	R2	58	3.0	65	3.0	0.206	8.3	LOS A	1.5	10.8	0.88	0.80	0.88	44.0
Approach		121	3.0	136	3.0	0.206	8.1	LOS A	1.5	10.8	0.88	0.80	0.88	43.6
All Vehicles		2067	3.0	2322	3.0	0.700	3.4	LOS A	6.7	47.8	0.48	0.44	0.53	46.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Orange Street and N. 5th St./I-90 (Site Folder: General)]

Peak PM Build with 50% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Orange Street														
1u	U	3	3.0	3	3.0	0.706	9.4	LOS A	6.8	48.8	0.37	0.28	0.37	50.4
1	L2	138	3.0	155	3.0	0.706	7.4	LOS A	6.8	48.8	0.37	0.28	0.37	48.8
2	T1	482	3.0	542	3.0	0.706	0.9	LOS A	6.8	48.8	0.37	0.28	0.37	47.6
3	R2	357	3.0	401	3.0	0.706	2.2	LOS A	6.8	48.8	0.37	0.28	0.37	46.3
Approach		980	3.0	1101	3.0	0.706	2.3	LOS A	6.8	48.8	0.37	0.28	0.37	47.2
North: Southbound Orange Street														
7	L2	1	3.0	1	3.0	0.396	7.7	LOS A	2.3	16.7	0.35	0.23	0.35	50.2
8	T1	358	3.0	402	3.0	0.396	1.2	LOS A	2.3	16.7	0.35	0.23	0.35	48.4
9	R2	124	3.0	139	3.0	0.396	2.4	LOS A	2.3	16.7	0.35	0.23	0.35	46.1
Approach		483	3.0	543	3.0	0.396	1.5	LOS A	2.3	16.7	0.35	0.23	0.35	47.8
NorthWest: I-90 EB Off-Ramp														
27b	L3	1	3.0	1	3.0	0.627	14.0	LOS B	5.2	37.5	0.77	0.90	1.00	28.8
27a	L1	1	3.0	1	3.0	0.627	12.0	LOS B	5.2	37.5	0.77	0.90	1.00	46.4
29a	R1	463	3.0	520	3.0	0.627	6.5	LOS A	5.2	37.5	0.77	0.90	1.00	45.6
29b	R3	30	3.0	34	3.0	0.627	8.1	LOS A	5.2	37.5	0.77	0.90	1.00	44.2
Approach		495	3.0	556	3.0	0.627	6.6	LOS A	5.2	37.5	0.77	0.90	1.00	45.5
West: Eastbound N. 5th Street W.														
10	L2	6	3.0	7	3.0	0.216	13.7	LOS B	1.6	11.3	0.88	0.81	0.88	25.9
11	T1	59	3.0	66	3.0	0.216	7.2	LOS A	1.6	11.3	0.88	0.81	0.88	45.3
12	R2	61	3.0	69	3.0	0.216	8.4	LOS A	1.6	11.3	0.88	0.81	0.88	44.0
Approach		126	3.0	142	3.0	0.216	8.1	LOS A	1.6	11.3	0.88	0.81	0.88	43.7
All Vehicles		2084	3.0	2342	3.0	0.706	3.5	LOS A	6.8	48.8	0.49	0.45	0.55	46.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Orange Street and N. 5th St./I-90 (Site Folder: General)]

Peak PM Build with 75% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Orange Street														
1u	U	3	3.0	3	3.0	0.711	9.4	LOS A	6.9	49.7	0.38	0.28	0.38	50.3
1	L2	144	3.0	162	3.0	0.711	7.4	LOS A	6.9	49.7	0.38	0.28	0.38	48.7
2	T1	482	3.0	542	3.0	0.711	0.9	LOS A	6.9	49.7	0.38	0.28	0.38	47.5
3	R2	357	3.0	401	3.0	0.711	2.2	LOS A	6.9	49.7	0.38	0.28	0.38	46.2
Approach		986	3.0	1108	3.0	0.711	2.4	LOS A	6.9	49.7	0.38	0.28	0.38	47.1
North: Southbound Orange Street														
7	L2	1	3.0	1	3.0	0.403	7.7	LOS A	2.4	17.2	0.37	0.24	0.37	50.1
8	T1	358	3.0	402	3.0	0.403	1.3	LOS A	2.4	17.2	0.37	0.24	0.37	48.4
9	R2	130	3.0	146	3.0	0.403	2.4	LOS A	2.4	17.2	0.37	0.24	0.37	46.0
Approach		489	3.0	549	3.0	0.403	1.6	LOS A	2.4	17.2	0.37	0.24	0.37	47.7
NorthWest: I-90 EB Off-Ramp														
27b	L3	1	3.0	1	3.0	0.637	14.3	LOS B	5.4	39.1	0.79	0.92	1.04	28.7
27a	L1	1	3.0	1	3.0	0.637	12.4	LOS B	5.4	39.1	0.79	0.92	1.04	46.2
29a	R1	463	3.0	520	3.0	0.637	6.8	LOS A	5.4	39.1	0.79	0.92	1.04	45.4
29b	R3	31	3.0	35	3.0	0.637	8.5	LOS A	5.4	39.1	0.79	0.92	1.04	44.1
Approach		496	3.0	557	3.0	0.637	6.9	LOS A	5.4	39.1	0.79	0.92	1.04	45.3
West: Eastbound N. 5th Street W.														
10	L2	6	3.0	7	3.0	0.223	13.7	LOS B	1.6	11.8	0.89	0.81	0.89	25.8
11	T1	60	3.0	67	3.0	0.223	7.3	LOS A	1.6	11.8	0.89	0.81	0.89	45.3
12	R2	64	3.0	72	3.0	0.223	8.4	LOS A	1.6	11.8	0.89	0.81	0.89	44.0
Approach		130	3.0	146	3.0	0.223	8.1	LOS A	1.6	11.8	0.89	0.81	0.89	43.7
All Vehicles		2101	3.0	2361	3.0	0.711	3.6	LOS A	6.9	49.7	0.50	0.46	0.56	46.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Orange Street and N. 5th St./I-90 (Site Folder: General)]

Peak PM Build with 100% Neighborhood Growth
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Orange Street														
1u	U	3	3.0	3	3.0	0.716	9.4	LOS A	7.1	50.7	0.39	0.29	0.39	50.3
1	L2	149	3.0	167	3.0	0.716	7.4	LOS A	7.1	50.7	0.39	0.29	0.39	48.7
2	T1	482	3.0	542	3.0	0.716	0.9	LOS A	7.1	50.7	0.39	0.29	0.39	47.4
3	R2	357	3.0	401	3.0	0.716	2.2	LOS A	7.1	50.7	0.39	0.29	0.39	46.2
Approach		991	3.0	1113	3.0	0.716	2.4	LOS A	7.1	50.7	0.39	0.29	0.39	47.1
North: Southbound Orange Street														
7	L2	1	3.0	1	3.0	0.409	7.8	LOS A	2.5	17.6	0.38	0.24	0.38	50.0
8	T1	358	3.0	402	3.0	0.409	1.3	LOS A	2.5	17.6	0.38	0.24	0.38	48.3
9	R2	135	3.0	152	3.0	0.409	2.5	LOS A	2.5	17.6	0.38	0.24	0.38	45.9
Approach		494	3.0	555	3.0	0.409	1.6	LOS A	2.5	17.6	0.38	0.24	0.38	47.6
NorthWest: I-90 EB Off-Ramp														
27b	L3	1	3.0	1	3.0	0.647	14.7	LOS B	5.7	40.7	0.80	0.95	1.07	28.6
27a	L1	1	3.0	1	3.0	0.647	12.7	LOS B	5.7	40.7	0.80	0.95	1.07	46.0
29a	R1	463	3.0	520	3.0	0.647	7.2	LOS A	5.7	40.7	0.80	0.95	1.07	45.2
29b	R3	33	3.0	37	3.0	0.647	8.8	LOS A	5.7	40.7	0.80	0.95	1.07	43.9
Approach		498	3.0	560	3.0	0.647	7.3	LOS A	5.7	40.7	0.80	0.95	1.07	45.1
West: Eastbound N. 5th Street W.														
10	L2	6	3.0	7	3.0	0.231	13.8	LOS B	1.7	12.2	0.89	0.82	0.89	25.8
11	T1	62	3.0	70	3.0	0.231	7.3	LOS A	1.7	12.2	0.89	0.82	0.89	45.3
12	R2	66	3.0	74	3.0	0.231	8.4	LOS A	1.7	12.2	0.89	0.82	0.89	44.0
Approach		134	3.0	151	3.0	0.231	8.1	LOS A	1.7	12.2	0.89	0.82	0.89	43.7
All Vehicles		2117	3.0	2379	3.0	0.716	3.7	LOS A	7.1	50.7	0.51	0.47	0.58	46.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

HCS7 Two-Way Stop-Control Report

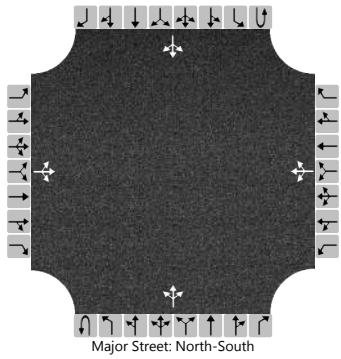
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	8/26/21
Analysis Year	2021
Time Analyzed	AM Existing
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Grant Cr & Howard Raser
Jurisdiction	
East/West Street	Howard Raser Avenue
North/South Street	Grant Creek Road
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		28	17	71		0	0	1		87	52	2		0	28	44
Percent Heavy Vehicles (%)		21	21	21		21	21	21		21				21		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.31	6.71	6.41		7.31	6.71	6.41		4.31				4.31		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.69	4.19	3.49		3.69	4.19	3.49		2.39				2.39		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			143				1			107				0		
Capacity, c (veh/h)			725				948			1395				1422		
v/c Ratio			0.20				0.00			0.08				0.00		
95% Queue Length, Q_{95} (veh)			0.7				0.0			0.2				0.0		
Control Delay (s/veh)			11.2				8.8			7.8				7.5		
Level of Service (LOS)			B				A			A				A		
Approach Delay (s/veh)	11.2				8.8				5.0				0.0			
Approach LOS	B				A											

HCS7 Two-Way Stop-Control Report

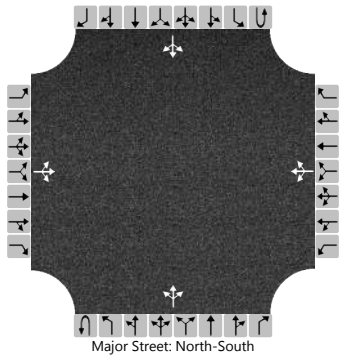
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	8/23/21
Analysis Year	2021
Time Analyzed	AM No-Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Grant Cr & Howard Raser
Jurisdiction	
East/West Street	Howard Raser Avenue
North/South Street	Grant Creek Road
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		28	17	79		0	0	1		99	52	2		0	28	44
Percent Heavy Vehicles (%)		21	21	21		21	21	21		21				21		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.31	6.71	6.41		7.31	6.71	6.41		4.31				4.31		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.69	4.19	3.49		3.69	4.19	3.49		2.39				2.39		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			153				1			122				0		
Capacity, c (veh/h)			717				948			1395				1422		
v/c Ratio			0.21				0.00			0.09				0.00		
95% Queue Length, Q_{95} (veh)			0.8				0.0			0.3				0.0		
Control Delay (s/veh)			11.4				8.8			7.8				7.5		
Level of Service (LOS)			B				A			A				A		
Approach Delay (s/veh)	11.4				8.8				5.3				0.0			
Approach LOS	B				A											

HCS7 Two-Way Stop-Control Report

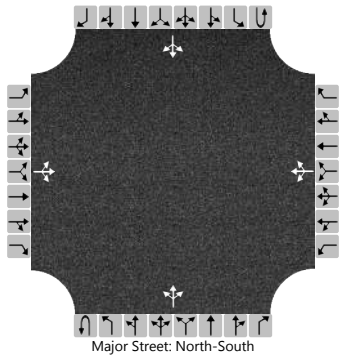
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	AM Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Grant Cr & Howard Raser
Jurisdiction	
East/West Street	Howard Raser Avenue
North/South Street	Grant Creek Road
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		28	17	96		0	0	1		123	52	2		0	28	44
Percent Heavy Vehicles (%)		21	21	21		21	21	21		21				21		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.31	6.71	6.41		7.31	6.71	6.41		4.31				4.31		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.69	4.19	3.49		3.69	4.19	3.49		2.39				2.39		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			174				1			152				0		
Capacity, c (veh/h)			701				948			1395				1422		
v/c Ratio			0.25				0.00			0.11				0.00		
95% Queue Length, Q_{95} (veh)			1.0				0.0			0.4				0.0		
Control Delay (s/veh)			11.8				8.8			7.9				7.5		
Level of Service (LOS)			B				A			A				A		
Approach Delay (s/veh)	11.8				8.8				5.8				0.0			
Approach LOS	B				A											

HCS7 Two-Way Stop-Control Report

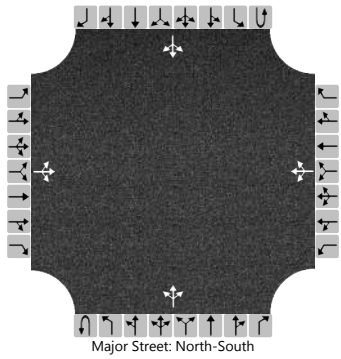
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	AM 25%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Grant Cr & Howard Raser
Jurisdiction	
East/West Street	Howard Raser Avenue
North/South Street	Grant Creek Road
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		28	17	110		0	0	1		151	52	2		0	28	44
Percent Heavy Vehicles (%)		21	21	21		21	21	21		21				21		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.31	6.71	6.41		7.31	6.71	6.41		4.31				4.31		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.69	4.19	3.49		3.69	4.19	3.49		2.39				2.39		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			191				1			186				0		
Capacity, c (veh/h)			676				948			1395				1422		
v/c Ratio			0.28				0.00			0.13				0.00		
95% Queue Length, Q_{95} (veh)			1.2				0.0			0.5				0.0		
Control Delay (s/veh)			12.4				8.8			8.0				7.5		
Level of Service (LOS)			B				A			A				A		
Approach Delay (s/veh)	12.4				8.8				6.2				0.0			
Approach LOS	B				A											

HCS7 Two-Way Stop-Control Report

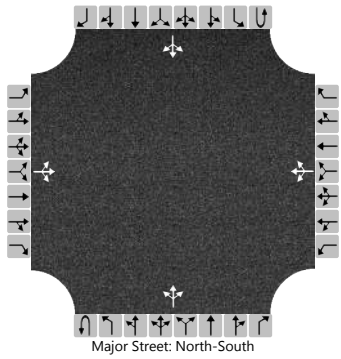
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	AM 50%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Grant Cr & Howard Raser
Jurisdiction	
East/West Street	Howard Raser Avenue
North/South Street	Grant Creek Road
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		28	17	125		0	0	1		178	52	2		0	28	44
Percent Heavy Vehicles (%)		21	21	21		21	21	21		21				21		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.31	6.71	6.41		7.31	6.71	6.41		4.31				4.31		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.69	4.19	3.49		3.69	4.19	3.49		2.39				2.39		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			210				1			220				0		
Capacity, c (veh/h)			654				948			1395				1422		
v/c Ratio			0.32				0.00			0.16				0.00		
95% Queue Length, Q_{95} (veh)			1.4				0.0			0.6				0.0		
Control Delay (s/veh)			13.1				8.8			8.1				7.5		
Level of Service (LOS)			B				A			A				A		
Approach Delay (s/veh)	13.1				8.8				6.5				0.0			
Approach LOS	B				A											

HCS7 Two-Way Stop-Control Report

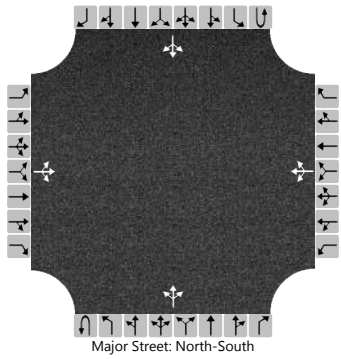
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	AM 75%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Grant Cr & Howard Raser
Jurisdiction	
East/West Street	Howard Raser Avenue
North/South Street	Grant Creek Road
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		28	17	139		0	0	1		206	52	2		0	28	44
Percent Heavy Vehicles (%)		21	21	21		21	21	21		21				21		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.31	6.71	6.41		7.31	6.71	6.41		4.31				4.31		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.69	4.19	3.49		3.69	4.19	3.49		2.39				2.39		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			227				1			254				0		
Capacity, c (veh/h)			629				948			1395				1422		
v/c Ratio			0.36				0.00			0.18				0.00		
95% Queue Length, Q_{95} (veh)			1.6				0.0			0.7				0.0		
Control Delay (s/veh)			13.9				8.8			8.2				7.5		
Level of Service (LOS)			B				A			A				A		
Approach Delay (s/veh)	13.9				8.8				6.8				0.0			
Approach LOS	B				A											

HCS7 Two-Way Stop-Control Report

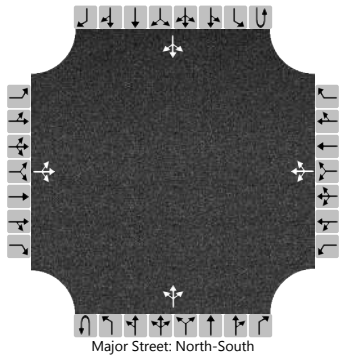
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	AM 100%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Grant Cr & Howard Raser
Jurisdiction	
East/West Street	Howard Raser Avenue
North/South Street	Grant Creek Road
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		28	17	153		0	0	1		234	52	2		0	28	44
Percent Heavy Vehicles (%)		21	21	21		21	21	21		21				21		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.31	6.71	6.41		7.31	6.71	6.41		4.31				4.31		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.69	4.19	3.49		3.69	4.19	3.49		2.39				2.39		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			244				1			289				0		
Capacity, c (veh/h)			605				948			1395				1422		
v/c Ratio			0.40				0.00			0.21				0.00		
95% Queue Length, Q_{95} (veh)			2.0				0.0			0.8				0.0		
Control Delay (s/veh)			14.9				8.8			8.3				7.5		
Level of Service (LOS)			B				A			A				A		
Approach Delay (s/veh)	14.9				8.8				7.0				0.0			
Approach LOS	B				A											

HCS7 Two-Way Stop-Control Report

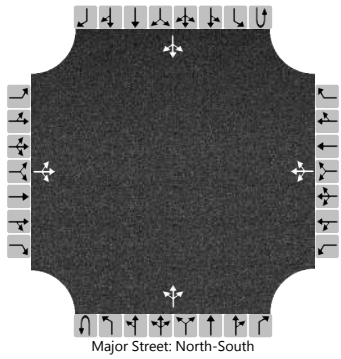
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	8/26/21
Analysis Year	2021
Time Analyzed	PM Existing
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Grant Cr & Howard Raser
Jurisdiction	
East/West Street	Howard Raser Avenue
North/South Street	Grant Creek Road
Peak Hour Factor	0.87
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		33	3	111		3	18	6		157	96	0		1	38	51
Percent Heavy Vehicles (%)		4	4	4		4	4	4		4				4		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.14	6.54	6.24		7.14	6.54	6.24		4.14				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.54	4.04	3.34		3.54	4.04	3.34		2.24				2.24		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			169				31			180				1		
Capacity, c (veh/h)			703				417			1477				1467		
v/c Ratio			0.24				0.07			0.12				0.00		
95% Queue Length, Q_{95} (veh)			0.9				0.2			0.4				0.0		
Control Delay (s/veh)			11.7				14.3			7.8				7.5		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	11.7				14.3				5.2				0.1			
Approach LOS	B				B											

HCS7 Two-Way Stop-Control Report

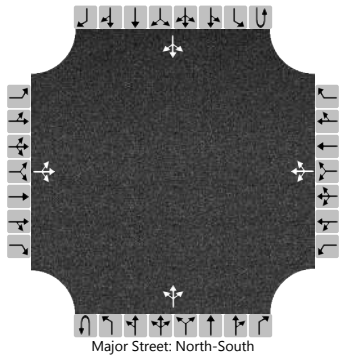
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	8/23/21
Analysis Year	2021
Time Analyzed	PM No-Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Grant Cr & Howard Raser
Jurisdiction	
East/West Street	Howard Raser Avenue
North/South Street	Grant Creek Road
Peak Hour Factor	0.87
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		33	3	123		3	18	6		170	96	0		1	38	51
Percent Heavy Vehicles (%)		4	4	4		4	4	4		4				4		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.14	6.54	6.24		7.14	6.54	6.24		4.14				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.54	4.04	3.34		3.54	4.04	3.34		2.24				2.24		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			183				31			195				1		
Capacity, c (veh/h)			700				396			1477				1467		
v/c Ratio			0.26				0.08			0.13				0.00		
95% Queue Length, Q_{95} (veh)			1.0				0.3			0.5				0.0		
Control Delay (s/veh)			11.9				14.8			7.8				7.5		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)		11.9				14.8				5.4				0.1		
Approach LOS		B				B										

HCS7 Two-Way Stop-Control Report

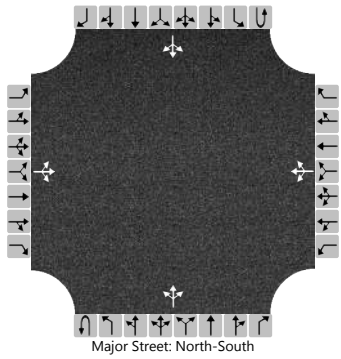
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	PM Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Grant Cr & Howard Raser
Jurisdiction	
East/West Street	Howard Raser Avenue
North/South Street	Grant Creek Road
Peak Hour Factor	0.87
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		33	3	149		3	18	6		191	96	0		1	38	51
Percent Heavy Vehicles (%)		4	4	4		4	4	4		4				4		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.14	6.54	6.24		7.14	6.54	6.24		4.14				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.54	4.04	3.34		3.54	4.04	3.34		2.24				2.24		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			213				31			220				1		
Capacity, c (veh/h)			702				363			1477				1467		
v/c Ratio			0.30				0.09			0.15				0.00		
95% Queue Length, Q_{95} (veh)			1.3				0.3			0.5				0.0		
Control Delay (s/veh)			12.3				15.8			7.9				7.5		
Level of Service (LOS)			B				C			A				A		
Approach Delay (s/veh)	12.3				15.8				5.6				0.1			
Approach LOS	B				C											

HCS7 Two-Way Stop-Control Report

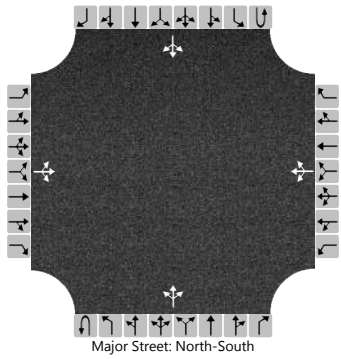
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	PM 25%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Grant Cr & Howard Raser
Jurisdiction	
East/West Street	Howard Raser Avenue
North/South Street	Grant Creek Road
Peak Hour Factor	0.87
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		33	3	177		3	18	6		213	96	0		1	38	51
Percent Heavy Vehicles (%)		4	4	4		4	4	4		4				4		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.14	6.54	6.24		7.14	6.54	6.24		4.14				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.54	4.04	3.34		3.54	4.04	3.34		2.24				2.24		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			245				31			245				1		
Capacity, c (veh/h)			702				331			1477				1467		
v/c Ratio			0.35				0.09			0.17				0.00		
95% Queue Length, Q_{95} (veh)			1.6				0.3			0.6				0.0		
Control Delay (s/veh)			12.8				17.0			7.9				7.5		
Level of Service (LOS)			B				C			A				A		
Approach Delay (s/veh)	12.8				17.0				5.9				0.1			
Approach LOS	B				C											

HCS7 Two-Way Stop-Control Report

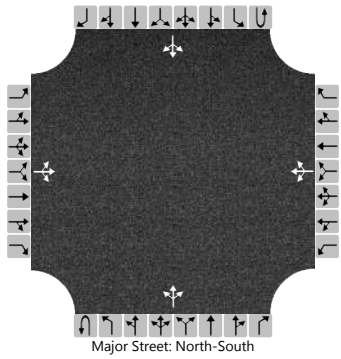
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	PM 50%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Grant Cr & Howard Raser
Jurisdiction	
East/West Street	Howard Raser Avenue
North/South Street	Grant Creek Road
Peak Hour Factor	0.87
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		33	3	205		3	18	6		235	96	0		1	38	51
Percent Heavy Vehicles (%)		4	4	4		4	4	4		4				4		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.14	6.54	6.24		7.14	6.54	6.24		4.14				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.54	4.04	3.34		3.54	4.04	3.34		2.24				2.24		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			277				31			270				1		
Capacity, c (veh/h)			699				301			1477				1467		
v/c Ratio			0.40				0.10			0.18				0.00		
95% Queue Length, Q_{95} (veh)			1.9				0.3			0.7				0.0		
Control Delay (s/veh)			13.5				18.4			8.0				7.5		
Level of Service (LOS)			B				C			A				A		
Approach Delay (s/veh)	13.5				18.4				6.1				0.1			
Approach LOS	B				C											

HCS7 Two-Way Stop-Control Report

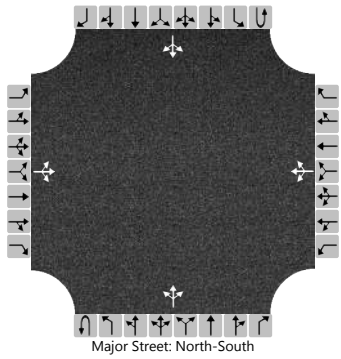
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	PM 75%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Grant Cr & Howard Raser
Jurisdiction	
East/West Street	Howard Raser Avenue
North/South Street	Grant Creek Road
Peak Hour Factor	0.87
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		33	3	233		3	18	6		257	96	0		1	38	51
Percent Heavy Vehicles (%)		4	4	4		4	4	4		4				4		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.14	6.54	6.24		7.14	6.54	6.24		4.14				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.54	4.04	3.34		3.54	4.04	3.34		2.24				2.24		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			309				31			295				1		
Capacity, c (veh/h)			694				272			1477				1467		
v/c Ratio			0.45				0.11			0.20				0.00		
95% Queue Length, Q_{95} (veh)			2.3				0.4			0.7				0.0		
Control Delay (s/veh)			14.3				19.9			8.0				7.5		
Level of Service (LOS)			B				C			A				A		
Approach Delay (s/veh)	14.3				19.9				6.3				0.1			
Approach LOS	B				C											

HCS7 Two-Way Stop-Control Report

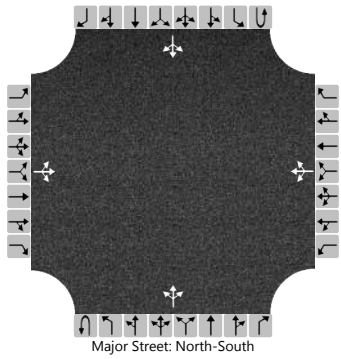
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/8/21
Analysis Year	2021
Time Analyzed	PM 100%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Grant Cr & Howard Raser
Jurisdiction	
East/West Street	Howard Raser Avenue
North/South Street	Grant Creek Road
Peak Hour Factor	0.87
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		33	3	261		3	18	6		279	96	0		1	38	51
Percent Heavy Vehicles (%)		4	4	4		4	4	4		4				4		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.14	6.54	6.24		7.14	6.54	6.24		4.14				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.54	4.04	3.34		3.54	4.04	3.34		2.24				2.24		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			341				31			321				1		
Capacity, c (veh/h)			687				246			1477				1467		
v/c Ratio			0.50				0.13			0.22				0.00		
95% Queue Length, Q_{95} (veh)			2.8				0.4			0.8				0.0		
Control Delay (s/veh)			15.3				21.7			8.1				7.5		
Level of Service (LOS)			C				C			A				A		
Approach Delay (s/veh)	15.3				21.7				6.5				0.1			
Approach LOS	C				C											

APPENDIX D

CAPACITY ANALYSIS WORKSHEETS - PROPOSED TRANSPORTATION NETWORK

HCS7 Two-Way Stop-Control Report

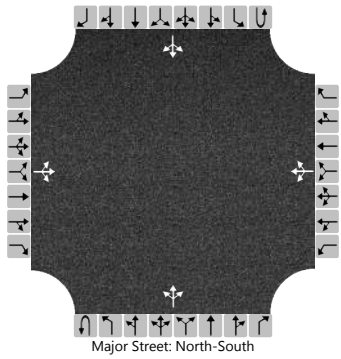
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro AM Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Charlo
Jurisdiction	
East/West Street	Charlo Street
North/South Street	Scott Street
Peak Hour Factor	0.78
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	29		14	0	5		21	152	10		0	185	0
Percent Heavy Vehicles (%)		10	10	10		10	10	10		10				10		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.20	6.60	6.30		7.20	6.60	6.30		4.20				4.20		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.59	4.09	3.39		3.59	4.09	3.39		2.29				2.29		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			37				24			27				0		
Capacity, c (veh/h)			782				492			1284				1317		
v/c Ratio			0.05				0.05			0.02				0.00		
95% Queue Length, Q_{95} (veh)			0.1				0.2			0.1				0.0		
Control Delay (s/veh)			9.8				12.7			7.9				7.7		
Level of Service (LOS)			A				B			A				A		
Approach Delay (s/veh)		9.8				12.7				1.1				0.0		
Approach LOS		A				B										

HCS7 Two-Way Stop-Control Report

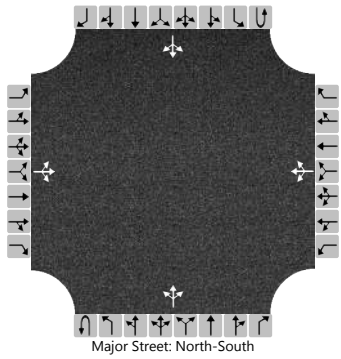
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	PRO AM 25%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Charlo
Jurisdiction	
East/West Street	Charlo Street
North/South Street	Scott Street
Peak Hour Factor	0.78
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	29		14	0	5		21	181	10		0	241	0
Percent Heavy Vehicles (%)		10	10	10		10	10	10		10				10		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.20	6.60	6.30		7.20	6.60	6.30		4.20				4.20		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.59	4.09	3.39		3.59	4.09	3.39		2.29				2.29		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			37				24			27				0		
Capacity, c (veh/h)			713				421			1208				1276		
v/c Ratio			0.05				0.06			0.02				0.00		
95% Queue Length, Q_{95} (veh)			0.2				0.2			0.1				0.0		
Control Delay (s/veh)			10.3				14.1			8.0				7.8		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	10.3				14.1				1.0				0.0			
Approach LOS	B				B											

HCS7 Two-Way Stop-Control Report

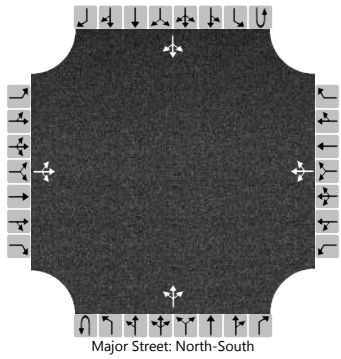
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro AM 50%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Charlo
Jurisdiction	
East/West Street	Charlo Street
North/South Street	Scott Street
Peak Hour Factor	0.78
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	29		14	0	5		21	209	10		0	296	0
Percent Heavy Vehicles (%)		10	10	10		10	10	10		10				10		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.20	6.60	6.30		7.20	6.60	6.30		4.20				4.20		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.59	4.09	3.39		3.59	4.09	3.39		2.29				2.29		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			37				24			27				0		
Capacity, c (veh/h)			650				360			1136				1237		
v/c Ratio			0.06				0.07			0.02				0.00		
95% Queue Length, Q_{95} (veh)			0.2				0.2			0.1				0.0		
Control Delay (s/veh)			10.9				15.7			8.2				7.9		
Level of Service (LOS)			B				C			A				A		
Approach Delay (s/veh)		10.9				15.7				0.9				0.0		
Approach LOS		B				C										

HCS7 Two-Way Stop-Control Report

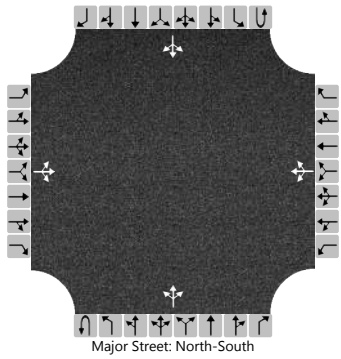
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro AM 75%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Charlo
Jurisdiction	
East/West Street	Charlo Street
North/South Street	Scott Street
Peak Hour Factor	0.78
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	29		14	0	5		21	238	10		0	352	0
Percent Heavy Vehicles (%)		10	10	10		10	10	10		10				10		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.20	6.60	6.30		7.20	6.60	6.30		4.20				4.20		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.59	4.09	3.39		3.59	4.09	3.39		2.29				2.29		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			37				24			27				0		
Capacity, c (veh/h)			592				306			1068				1198		
v/c Ratio			0.06				0.08			0.03				0.00		
95% Queue Length, Q_{95} (veh)			0.2				0.3			0.1				0.0		
Control Delay (s/veh)			11.5				17.8			8.5				8.0		
Level of Service (LOS)			B				C			A				A		
Approach Delay (s/veh)	11.5				17.8				0.9				0.0			
Approach LOS	B				C											

HCS7 Two-Way Stop-Control Report

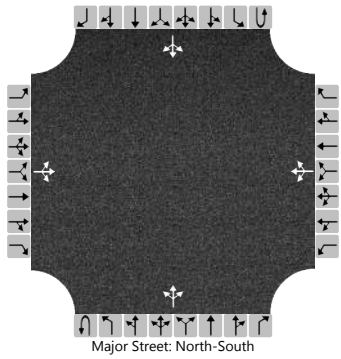
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	ProAM 100%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Charlo
Jurisdiction	
East/West Street	Charlo Street
North/South Street	Scott Street
Peak Hour Factor	0.78
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	29		14	0	5		21	267	10		0	407	0
Percent Heavy Vehicles (%)		10	10	10		10	10	10		10				10		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.20	6.60	6.30		7.20	6.60	6.30		4.20				4.20		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.59	4.09	3.39		3.59	4.09	3.39		2.29				2.29		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			37				24			27				0		
Capacity, c (veh/h)			539				260			1005				1161		
v/c Ratio			0.07				0.09			0.03				0.00		
95% Queue Length, Q_{95} (veh)			0.2				0.3			0.1				0.0		
Control Delay (s/veh)			12.2				20.3			8.7				8.1		
Level of Service (LOS)			B				C			A				A		
Approach Delay (s/veh)		12.2				20.3				0.9				0.0		
Approach LOS		B				C										

HCS7 Two-Way Stop-Control Report

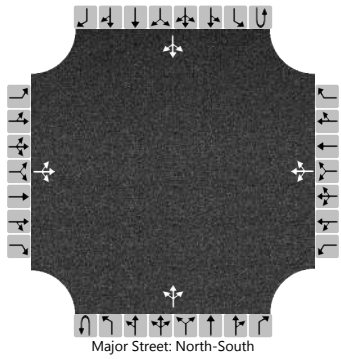
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro PM Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Charlo
Jurisdiction	
East/West Street	Charlo Street
North/South Street	Scott Street
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	40		11	0	8		32	210	27		11	254	18
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			44				21			36				12		
Capacity, c (veh/h)			747				450			1259				1301		
v/c Ratio			0.06				0.05			0.03				0.01		
95% Queue Length, Q_{95} (veh)			0.2				0.1			0.1				0.0		
Control Delay (s/veh)			10.1				13.4			7.9				7.8		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)		10.1				13.4				1.2				0.4		
Approach LOS		B				B										

HCS7 Two-Way Stop-Control Report

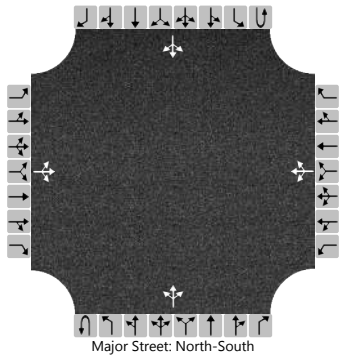
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	PRO PM 25%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Charlo
Jurisdiction	
East/West Street	Charlo Street
North/South Street	Scott Street
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	40		11	0	8		32	266	27		11	298	18
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			44				21			36				12		
Capacity, c (veh/h)			701				385			1208				1234		
v/c Ratio			0.06				0.05			0.03				0.01		
95% Queue Length, Q_{95} (veh)			0.2				0.2			0.1				0.0		
Control Delay (s/veh)			10.5				14.9			8.1				7.9		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)		10.5				14.9				1.1				0.4		
Approach LOS		B				B										

HCS7 Two-Way Stop-Control Report

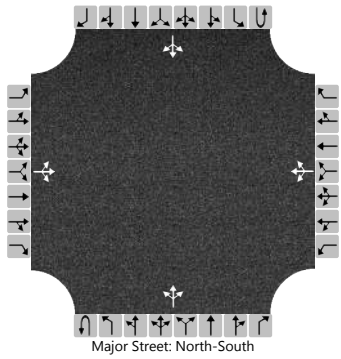
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro PM 50%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Charlo
Jurisdiction	
East/West Street	Charlo Street
North/South Street	Scott Street
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	40		11	0	8		32	322	27		11	342	18
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			44				21			36				12		
Capacity, c (veh/h)			658				329			1159				1171		
v/c Ratio			0.07				0.06			0.03				0.01		
95% Queue Length, Q_{95} (veh)			0.2				0.2			0.1				0.0		
Control Delay (s/veh)			10.9				16.7			8.2				8.1		
Level of Service (LOS)			B				C			A				A		
Approach Delay (s/veh)	10.9				16.7				1.0				0.3			
Approach LOS	B				C											

HCS7 Two-Way Stop-Control Report

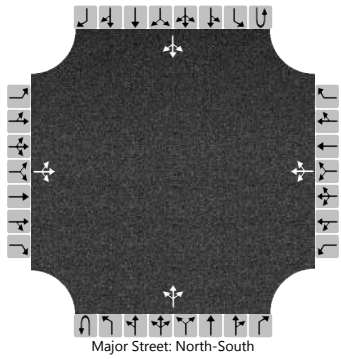
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro PM 75%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Charlo
Jurisdiction	
East/West Street	Charlo Street
North/South Street	Scott Street
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	40		11	0	8		32	379	27		11	386	18
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			44				21			36				12		
Capacity, c (veh/h)			618				279			1111				1109		
v/c Ratio			0.07				0.08			0.03				0.01		
95% Queue Length, Q_{95} (veh)			0.2				0.2			0.1				0.0		
Control Delay (s/veh)			11.3				19.0			8.3				8.3		
Level of Service (LOS)			B				C			A				A		
Approach Delay (s/veh)		11.3				19.0				0.9				0.3		
Approach LOS		B				C										

HCS7 Two-Way Stop-Control Report

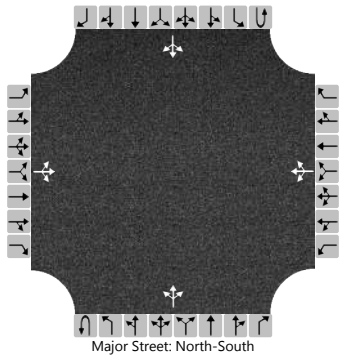
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	ProPM 100%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Charlo
Jurisdiction	
East/West Street	Charlo Street
North/South Street	Scott Street
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	40		11	0	8		32	435	27		11	430	18
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			44				21			36				12		
Capacity, c (veh/h)			580				236			1066				1052		
v/c Ratio			0.08				0.09			0.03				0.01		
95% Queue Length, Q_{95} (veh)			0.2				0.3			0.1				0.0		
Control Delay (s/veh)			11.7				21.7			8.5				8.5		
Level of Service (LOS)			B				C			A				A		
Approach Delay (s/veh)		11.7				21.7				0.9				0.3		
Approach LOS		B				C										

HCS7 Two-Way Stop-Control Report

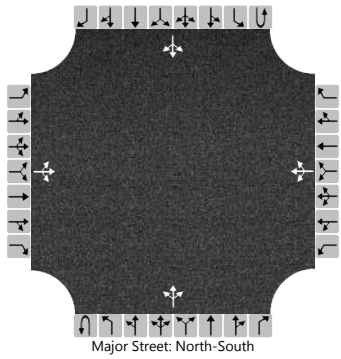
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro AM Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Palmer
Jurisdiction	
East/West Street	Palmer Street
North/South Street	Scott Street
Peak Hour Factor	0.73
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	58		11	0	3		57	173	4		0	244	0
Percent Heavy Vehicles (%)		9	9	9		9	9	9		9				9		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.19	6.59	6.29		7.19	6.59	6.29		4.19				4.19		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.58	4.08	3.38		3.58	4.08	3.38		2.28				2.28		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			79				19			78				0		
Capacity, c (veh/h)			692				301			1187				1284		
v/c Ratio			0.11				0.06			0.07				0.00		
95% Queue Length, Q_{95} (veh)			0.4				0.2			0.2				0.0		
Control Delay (s/veh)			10.9				17.8			8.2				7.8		
Level of Service (LOS)			B				C			A				A		
Approach Delay (s/veh)		10.9				17.8				2.5				0.0		
Approach LOS		B				C										

HCS7 Two-Way Stop-Control Report

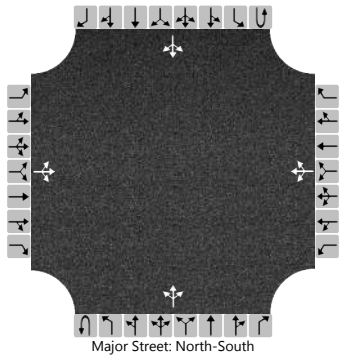
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	PRO AM 25%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Palmer
Jurisdiction	
East/West Street	Palmer Street
North/South Street	Scott Street
Peak Hour Factor	0.73
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	58		11	0	3		57	201	4		0	299	0
Percent Heavy Vehicles (%)		9	9	9		9	9	9		9				9		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.19	6.59	6.29		7.19	6.59	6.29		4.19				4.19		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.58	4.08	3.38		3.58	4.08	3.38		2.28				2.28		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			79				19			78				0		
Capacity, c (veh/h)			627				250			1112				1242		
v/c Ratio			0.13				0.08			0.07				0.00		
95% Queue Length, Q_{95} (veh)			0.4				0.2			0.2				0.0		
Control Delay (s/veh)			11.6				20.6			8.5				7.9		
Level of Service (LOS)			B				C			A				A		
Approach Delay (s/veh)	11.6				20.6				2.4				0.0			
Approach LOS	B				C											

HCS7 Two-Way Stop-Control Report

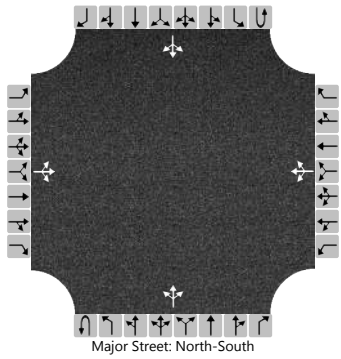
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro AM 50%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Palmer
Jurisdiction	
East/West Street	Palmer Street
North/South Street	Scott Street
Peak Hour Factor	0.73
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	58		11	0	3		57	230	4		0	355	0
Percent Heavy Vehicles (%)		9	9	9		9	9	9		9				9		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.19	6.59	6.29		7.19	6.59	6.29		4.19				4.19		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.58	4.08	3.38		3.58	4.08	3.38		2.28				2.28		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			79				19			78				0		
Capacity, c (veh/h)			567				206			1041				1201		
v/c Ratio			0.14				0.09			0.07				0.00		
95% Queue Length, Q_{95} (veh)			0.5				0.3			0.2				0.0		
Control Delay (s/veh)			12.4				24.3			8.7				8.0		
Level of Service (LOS)			B				C			A				A		
Approach Delay (s/veh)		12.4				24.3				2.4				0.0		
Approach LOS		B				C										

HCS7 Two-Way Stop-Control Report

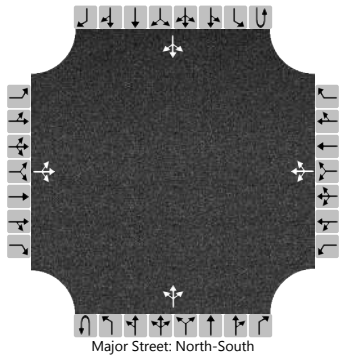
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro AM 75%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Palmer
Jurisdiction	
East/West Street	Palmer Street
North/South Street	Scott Street
Peak Hour Factor	0.73
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	58		11	0	3		57	259	4		0	410	0
Percent Heavy Vehicles (%)		9	9	9		9	9	9		9				9		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.19	6.59	6.29		7.19	6.59	6.29		4.19				4.19		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.58	4.08	3.38		3.58	4.08	3.38		2.28				2.28		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			79				19			78				0		
Capacity, c (veh/h)			514				169			976				1161		
v/c Ratio			0.15				0.11			0.08				0.00		
95% Queue Length, Q_{95} (veh)			0.5				0.4			0.3				0.0		
Control Delay (s/veh)			13.3				29.1			9.0				8.1		
Level of Service (LOS)			B				D			A				A		
Approach Delay (s/veh)		13.3				29.1				2.3				0.0		
Approach LOS		B				D										

HCS7 Two-Way Stop-Control Report

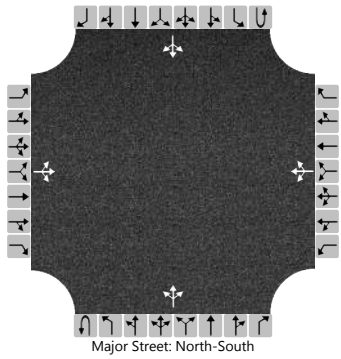
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	ProAM 100%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Palmer
Jurisdiction	
East/West Street	Palmer Street
North/South Street	Scott Street
Peak Hour Factor	0.73
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	58		11	0	3		57	288	4		0	466	0
Percent Heavy Vehicles (%)		9	9	9		9	9	9		9				9		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.19	6.59	6.29		7.19	6.59	6.29		4.19				4.19		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.58	4.08	3.38		3.58	4.08	3.38		2.28				2.28		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			79				19			78				0		
Capacity, c (veh/h)			464				137			913				1122		
v/c Ratio			0.17				0.14			0.09				0.00		
95% Queue Length, Q_{95} (veh)			0.6				0.5			0.3				0.0		
Control Delay (s/veh)			14.4				35.4			9.3				8.2		
Level of Service (LOS)			B				E			A				A		
Approach Delay (s/veh)	14.4				35.4				2.4				0.0			
Approach LOS	B				E											

HCS7 Two-Way Stop-Control Report

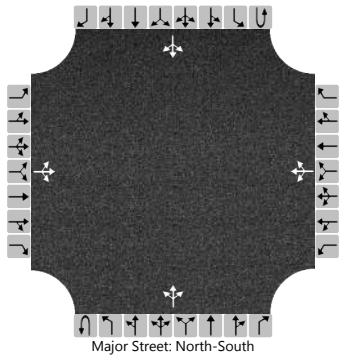
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro PM Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Palmer
Jurisdiction	
East/West Street	Palmer Street
North/South Street	Scott Street
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		12	0	60		13	0	3		80	256	11		6	302	0
Percent Heavy Vehicles (%)		1	1	1		1	1	1		1				1		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.11	6.51	6.21		7.11	6.51	6.21		4.11				4.11		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.51	4.01	3.31		3.51	4.01	3.31		2.21				2.21		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			84				19			93				7		
Capacity, c (veh/h)			540				253			1213				1256		
v/c Ratio			0.15				0.07			0.08				0.01		
95% Queue Length, Q_{95} (veh)			0.5				0.2			0.2				0.0		
Control Delay (s/veh)			12.9				20.3			8.2				7.9		
Level of Service (LOS)			B				C			A				A		
Approach Delay (s/veh)		12.9				20.3				2.5				0.2		
Approach LOS		B				C										

HCS7 Two-Way Stop-Control Report

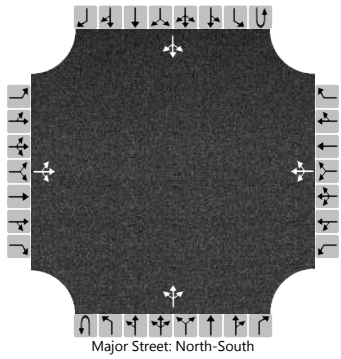
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	PRO PM 25%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Palmer
Jurisdiction	
East/West Street	Palmer Street
North/South Street	Scott Street
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		12	0	60		13	0	3		80	312	11		6	346	0
Percent Heavy Vehicles (%)		1	1	1		1	1	1		1				1		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.11	6.51	6.21		7.11	6.51	6.21		4.11				4.11		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.51	4.01	3.31		3.51	4.01	3.31		2.21				2.21		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			84				19			93				7		
Capacity, c (veh/h)			484				209			1162				1188		
v/c Ratio			0.17				0.09			0.08				0.01		
95% Queue Length, Q_{95} (veh)			0.6				0.3			0.3				0.0		
Control Delay (s/veh)			14.0				23.9			8.4				8.0		
Level of Service (LOS)			B				C			A				A		
Approach Delay (s/veh)		14.0				23.9				2.3				0.2		
Approach LOS		B				C										

HCS7 Two-Way Stop-Control Report

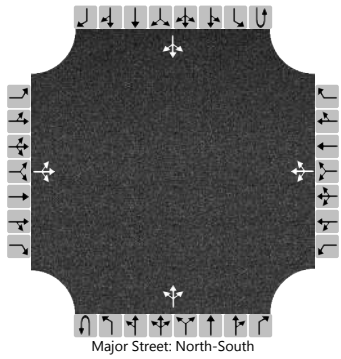
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro PM 50%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Palmer
Jurisdiction	
East/West Street	Palmer Street
North/South Street	Scott Street
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		12	0	60		13	0	3		80	368	11		6	390	0
Percent Heavy Vehicles (%)		1	1	1		1	1	1		1				1		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.11	6.51	6.21		7.11	6.51	6.21		4.11				4.11		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.51	4.01	3.31		3.51	4.01	3.31		2.21				2.21		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			84				19			93				7		
Capacity, c (veh/h)			431				173			1112				1125		
v/c Ratio			0.19				0.11			0.08				0.01		
95% Queue Length, Q_{95} (veh)			0.7				0.4			0.3				0.0		
Control Delay (s/veh)			15.4				28.4			8.5				8.2		
Level of Service (LOS)			C				D			A				A		
Approach Delay (s/veh)	15.4				28.4				2.3				0.2			
Approach LOS	C				D											

HCS7 Two-Way Stop-Control Report

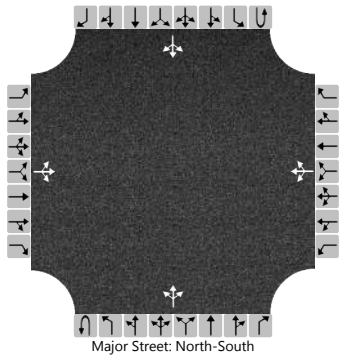
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro PM 75%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Palmer
Jurisdiction	
East/West Street	Palmer Street
North/South Street	Scott Street
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		12	0	60		13	0	3		80	424	11		6	434	0
Percent Heavy Vehicles (%)		1	1	1		1	1	1		1				1		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.11	6.51	6.21		7.11	6.51	6.21		4.11				4.11		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.51	4.01	3.31		3.51	4.01	3.31		2.21				2.21		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			84				19			93				7		
Capacity, c (veh/h)			382				142			1065				1064		
v/c Ratio			0.22				0.13			0.09				0.01		
95% Queue Length, Q_{95} (veh)			0.8				0.4			0.3				0.0		
Control Delay (s/veh)			17.1				34.2			8.7				8.4		
Level of Service (LOS)			C				D			A				A		
Approach Delay (s/veh)	17.1				34.2				2.2				0.2			
Approach LOS	C				D											

HCS7 Two-Way Stop-Control Report

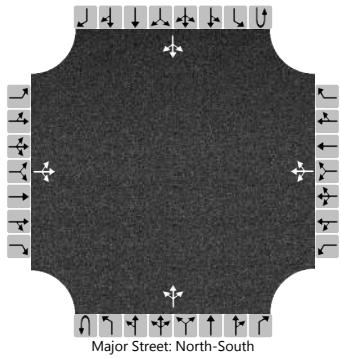
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	ProPM 100%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Palmer
Jurisdiction	
East/West Street	Palmer Street
North/South Street	Scott Street
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		12	0	60		13	0	3		80	481	11		6	479	0
Percent Heavy Vehicles (%)		1	1	1		1	1	1		1				1		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.11	6.51	6.21		7.11	6.51	6.21		4.11				4.11		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.51	4.01	3.31		3.51	4.01	3.31		2.21				2.21		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			84				19			93				7		
Capacity, c (veh/h)			336				116			1019				1006		
v/c Ratio			0.25				0.16			0.09				0.01		
95% Queue Length, Q_{95} (veh)			1.0				0.6			0.3				0.0		
Control Delay (s/veh)			19.2				42.0			8.9				8.6		
Level of Service (LOS)			C				E			A				A		
Approach Delay (s/veh)	19.2				42.0				2.3				0.2			
Approach LOS	C				E											

MOVEMENT SUMMARY

Site: 103 [Scott and Turner (Site Folder: General)]

Peak AM Build - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	54	2.0	64	2.0	0.234	5.7	LOS A	1.5	10.5	0.17	0.34	0.17	39.3
2	T1	213	2.0	251	2.0	0.234	2.0	LOS A	1.5	10.5	0.17	0.34	0.17	39.3
3	R2	8	2.0	9	2.0	0.234	2.3	LOS A	1.5	10.5	0.17	0.34	0.17	38.7
Approach		275	2.0	324	2.0	0.234	2.7	LOS A	1.5	10.5	0.17	0.34	0.17	39.3
East: Westbound Turner														
4	L2	13	2.0	15	2.0	0.066	7.5	LOS A	0.3	2.4	0.48	0.53	0.48	38.8
5	T1	16	2.0	19	2.0	0.066	3.7	LOS A	0.3	2.4	0.48	0.53	0.48	38.1
6	R2	23	2.0	27	2.0	0.066	4.1	LOS A	0.3	2.4	0.48	0.53	0.48	38.0
Approach		52	2.0	61	2.0	0.066	4.8	LOS A	0.3	2.4	0.48	0.53	0.48	38.3
North: Southbound Scott Street														
7	L2	16	2.0	19	2.0	0.298	6.2	LOS A	1.9	13.7	0.33	0.35	0.33	39.4
8	T1	293	2.0	345	2.0	0.298	2.4	LOS A	1.9	13.7	0.33	0.35	0.33	39.2
9	R2	1	2.0	1	2.0	0.298	2.8	LOS A	1.9	13.7	0.33	0.35	0.33	38.1
Approach		310	2.0	365	2.0	0.298	2.6	LOS A	1.9	13.7	0.33	0.35	0.33	39.2
West: Eastbound Turner														
10	L2	2	2.0	2	2.0	0.050	7.8	LOS A	0.3	1.9	0.53	0.52	0.53	38.5
11	T1	12	2.0	14	2.0	0.050	4.1	LOS A	0.3	1.9	0.53	0.52	0.53	38.3
12	R2	23	2.0	27	2.0	0.050	4.4	LOS A	0.3	1.9	0.53	0.52	0.53	37.4
Approach		37	2.0	44	2.0	0.050	4.5	LOS A	0.3	1.9	0.53	0.52	0.53	37.8
All Vehicles		674	2.0	793	2.0	0.298	2.9	LOS A	1.9	13.7	0.29	0.37	0.29	39.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Scott and Turner (Site Folder: General)]

Peak AM Build with 25% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	81	2.0	95	2.0	0.283	5.8	LOS A	1.9	13.4	0.21	0.36	0.21	39.1
2	T1	238	2.0	280	2.0	0.283	2.0	LOS A	1.9	13.4	0.21	0.36	0.21	39.2
3	R2	8	2.0	9	2.0	0.283	2.4	LOS A	1.9	13.4	0.21	0.36	0.21	38.6
Approach		327	2.0	385	2.0	0.283	3.0	LOS A	1.9	13.4	0.21	0.36	0.21	39.2
East: Westbound Turner														
4	L2	13	2.0	15	2.0	0.077	7.9	LOS A	0.4	2.9	0.53	0.56	0.53	38.7
5	T1	18	2.0	21	2.0	0.077	4.1	LOS A	0.4	2.9	0.53	0.56	0.53	37.9
6	R2	26	2.0	31	2.0	0.077	4.5	LOS A	0.4	2.9	0.53	0.56	0.53	37.9
Approach		57	2.0	67	2.0	0.077	5.2	LOS A	0.4	2.9	0.53	0.56	0.53	38.1
North: Southbound Scott Street														
7	L2	21	2.0	25	2.0	0.367	6.5	LOS A	2.5	17.8	0.40	0.40	0.40	39.2
8	T1	343	2.0	404	2.0	0.367	2.8	LOS A	2.5	17.8	0.40	0.40	0.40	39.1
9	R2	1	2.0	1	2.0	0.367	3.1	LOS A	2.5	17.8	0.40	0.40	0.40	37.8
Approach		365	2.0	429	2.0	0.367	3.0	LOS A	2.5	17.8	0.40	0.40	0.40	39.1
West: Eastbound Turner														
10	L2	2	2.0	2	2.0	0.134	8.5	LOS A	0.8	5.4	0.61	0.61	0.61	38.2
11	T1	15	2.0	18	2.0	0.134	4.8	LOS A	0.8	5.4	0.61	0.61	0.61	38.0
12	R2	75	2.0	88	2.0	0.134	5.1	LOS A	0.8	5.4	0.61	0.61	0.61	37.2
Approach		92	2.0	108	2.0	0.134	5.1	LOS A	0.8	5.4	0.61	0.61	0.61	37.3
All Vehicles		841	2.0	989	2.0	0.367	3.4	LOS A	2.5	17.8	0.36	0.42	0.36	38.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Scott and Turner (Site Folder: General)]

Peak AM Build with 50% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	108	2.0	127	2.0	0.335	5.9	LOS A	2.4	16.9	0.26	0.38	0.26	38.9
2	T1	264	2.0	311	2.0	0.335	2.1	LOS A	2.4	16.9	0.26	0.38	0.26	39.1
3	R2	8	2.0	9	2.0	0.335	2.5	LOS A	2.4	16.9	0.26	0.38	0.26	38.5
Approach		380	2.0	447	2.0	0.335	3.2	LOS A	2.4	16.9	0.26	0.38	0.26	39.0
East: Westbound Turner														
4	L2	13	2.0	15	2.0	0.089	8.4	LOS A	0.5	3.4	0.58	0.59	0.58	38.5
5	T1	20	2.0	24	2.0	0.089	4.6	LOS A	0.5	3.4	0.58	0.59	0.58	37.8
6	R2	29	2.0	34	2.0	0.089	5.0	LOS A	0.5	3.4	0.58	0.59	0.58	37.8
Approach		62	2.0	73	2.0	0.089	5.6	LOS A	0.5	3.4	0.58	0.59	0.58	38.0
North: Southbound Scott Street														
7	L2	27	2.0	32	2.0	0.440	6.9	LOS A	3.2	23.0	0.49	0.46	0.49	39.0
8	T1	393	2.0	462	2.0	0.440	3.2	LOS A	3.2	23.0	0.49	0.46	0.49	38.9
9	R2	1	2.0	1	2.0	0.440	3.5	LOS A	3.2	23.0	0.49	0.46	0.49	37.6
Approach		421	2.0	495	2.0	0.440	3.4	LOS A	3.2	23.0	0.49	0.46	0.49	38.9
West: Eastbound Turner														
10	L2	2	2.0	2	2.0	0.232	9.3	LOS A	1.4	10.2	0.69	0.70	0.69	37.8
11	T1	19	2.0	22	2.0	0.232	5.6	LOS A	1.4	10.2	0.69	0.70	0.69	37.6
12	R2	127	2.0	149	2.0	0.232	5.9	LOS A	1.4	10.2	0.69	0.70	0.69	36.7
Approach		148	2.0	174	2.0	0.232	5.9	LOS A	1.4	10.2	0.69	0.70	0.69	36.9
All Vehicles		1011	2.0	1189	2.0	0.440	3.8	LOS A	3.2	23.0	0.44	0.47	0.44	38.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Scott and Turner (Site Folder: General)]

Peak AM Build with 75% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	134	2.0	158	2.0	0.386	6.0	LOS A	2.9	20.8	0.30	0.40	0.30	38.7
2	T1	290	2.0	341	2.0	0.386	2.3	LOS A	2.9	20.8	0.30	0.40	0.30	39.0
3	R2	8	2.0	9	2.0	0.386	2.6	LOS A	2.9	20.8	0.30	0.40	0.30	38.3
Approach		432	2.0	508	2.0	0.386	3.4	LOS A	2.9	20.8	0.30	0.40	0.30	38.9
East: Westbound Turner														
4	L2	13	2.0	15	2.0	0.102	8.9	LOS A	0.6	4.0	0.62	0.63	0.62	38.4
5	T1	22	2.0	26	2.0	0.102	5.1	LOS A	0.6	4.0	0.62	0.63	0.62	37.5
6	R2	32	2.0	38	2.0	0.102	5.5	LOS A	0.6	4.0	0.62	0.63	0.62	37.6
Approach		67	2.0	79	2.0	0.102	6.0	LOS A	0.6	4.0	0.62	0.63	0.62	37.8
North: Southbound Scott Street														
7	L2	32	2.0	38	2.0	0.517	7.4	LOS A	4.1	29.3	0.58	0.52	0.58	38.8
8	T1	443	2.0	521	2.0	0.517	3.6	LOS A	4.1	29.3	0.58	0.52	0.58	38.7
9	R2	1	2.0	1	2.0	0.517	4.0	LOS A	4.1	29.3	0.58	0.52	0.58	37.3
Approach		476	2.0	560	2.0	0.517	3.9	LOS A	4.1	29.3	0.58	0.52	0.58	38.7
West: Eastbound Turner														
10	L2	2	2.0	2	2.0	0.348	10.2	LOS B	2.3	16.5	0.78	0.79	0.78	37.3
11	T1	23	2.0	27	2.0	0.348	6.5	LOS A	2.3	16.5	0.78	0.79	0.78	37.1
12	R2	179	2.0	211	2.0	0.348	6.9	LOS A	2.3	16.5	0.78	0.79	0.78	36.3
Approach		204	2.0	240	2.0	0.348	6.8	LOS A	2.3	16.5	0.78	0.79	0.78	36.4
All Vehicles		1179	2.0	1387	2.0	0.517	4.4	LOS A	4.1	29.3	0.52	0.53	0.52	38.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Scott and Turner (Site Folder: General)]

Peak AM Build with 100% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	161	2.0	189	2.0	0.440	6.1	LOS A	3.6	25.5	0.35	0.42	0.35	38.6
2	T1	316	2.0	372	2.0	0.440	2.4	LOS A	3.6	25.5	0.35	0.42	0.35	38.8
3	R2	8	2.0	9	2.0	0.440	2.7	LOS A	3.6	25.5	0.35	0.42	0.35	38.2
Approach		485	2.0	571	2.0	0.440	3.6	LOS A	3.6	25.5	0.35	0.42	0.35	38.8
East: Westbound Turner														
4	L2	13	2.0	15	2.0	0.116	9.4	LOS A	0.7	4.7	0.66	0.67	0.66	38.2
5	T1	23	2.0	27	2.0	0.116	5.7	LOS A	0.7	4.7	0.66	0.67	0.66	37.2
6	R2	35	2.0	41	2.0	0.116	6.0	LOS A	0.7	4.7	0.66	0.67	0.66	37.4
Approach		71	2.0	84	2.0	0.116	6.5	LOS A	0.7	4.7	0.66	0.67	0.66	37.5
North: Southbound Scott Street														
7	L2	38	2.0	45	2.0	0.598	8.0	LOS A	5.2	37.3	0.68	0.60	0.68	38.6
8	T1	492	2.0	579	2.0	0.598	4.3	LOS A	5.2	37.3	0.68	0.60	0.68	38.5
9	R2	1	2.0	1	2.0	0.598	4.6	LOS A	5.2	37.3	0.68	0.60	0.68	37.0
Approach		531	2.0	625	2.0	0.598	4.5	LOS A	5.2	37.3	0.68	0.60	0.68	38.5
West: Eastbound Turner														
10	L2	2	2.0	2	2.0	0.482	12.6	LOS B	3.9	27.7	0.88	0.95	0.99	36.0
11	T1	26	2.0	31	2.0	0.482	8.9	LOS A	3.9	27.7	0.88	0.95	0.99	35.8
12	R2	230	2.0	271	2.0	0.482	9.2	LOS A	3.9	27.7	0.88	0.95	0.99	35.1
Approach		258	2.0	304	2.0	0.482	9.2	LOS A	3.9	27.7	0.88	0.95	0.99	35.2
All Vehicles		1345	2.0	1582	2.0	0.598	5.2	LOS A	5.2	37.3	0.60	0.61	0.62	38.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Scott and Turner (Site Folder: General)]

Peak PM Build - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	18	2.0	21	2.0	0.301	5.8	LOS A	2.1	14.9	0.23	0.31	0.23	39.4
2	T1	306	2.0	360	2.0	0.301	2.1	LOS A	2.1	14.9	0.23	0.31	0.23	39.4
3	R2	24	2.0	28	2.0	0.301	2.4	LOS A	2.1	14.9	0.23	0.31	0.23	38.8
Approach		348	2.0	409	2.0	0.301	2.3	LOS A	2.1	14.9	0.23	0.31	0.23	39.4
East: Westbound Turner														
4	L2	19	2.0	22	2.0	0.090	8.0	LOS A	0.5	3.4	0.54	0.58	0.54	38.6
5	T1	13	2.0	15	2.0	0.090	4.2	LOS A	0.5	3.4	0.54	0.58	0.54	37.8
6	R2	34	2.0	40	2.0	0.090	4.6	LOS A	0.5	3.4	0.54	0.58	0.54	37.8
Approach		66	2.0	78	2.0	0.090	5.5	LOS A	0.5	3.4	0.54	0.58	0.54	38.0
North: Southbound Scott Street														
7	L2	17	2.0	20	2.0	0.345	5.9	LOS A	2.5	17.8	0.27	0.31	0.27	39.5
8	T1	373	2.0	439	2.0	0.345	2.2	LOS A	2.5	17.8	0.27	0.31	0.27	39.4
9	R2	1	2.0	1	2.0	0.345	2.5	LOS A	2.5	17.8	0.27	0.31	0.27	38.2
Approach		391	2.0	460	2.0	0.345	2.3	LOS A	2.5	17.8	0.27	0.31	0.27	39.4
West: Eastbound Turner														
10	L2	3	2.0	4	2.0	0.121	8.8	LOS A	0.7	4.8	0.61	0.62	0.61	38.1
11	T1	20	2.0	24	2.0	0.121	5.0	LOS A	0.7	4.8	0.61	0.62	0.61	37.8
12	R2	59	2.0	69	2.0	0.121	5.4	LOS A	0.7	4.8	0.61	0.62	0.61	37.0
Approach		82	2.0	96	2.0	0.121	5.4	LOS A	0.7	4.8	0.61	0.62	0.61	37.3
All Vehicles		887	2.0	1044	2.0	0.345	2.8	LOS A	2.5	17.8	0.30	0.36	0.30	39.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Scott and Turner (Site Folder: General)]

Peak PM Build with 25% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	70	2.0	82	2.0	0.393	5.9	LOS A	3.1	21.7	0.28	0.35	0.28	39.1
2	T1	357	2.0	420	2.0	0.393	2.2	LOS A	3.1	21.7	0.28	0.35	0.28	39.2
3	R2	24	2.0	28	2.0	0.393	2.5	LOS A	3.1	21.7	0.28	0.35	0.28	38.6
Approach		451	2.0	531	2.0	0.393	2.8	LOS A	3.1	21.7	0.28	0.35	0.28	39.1
East: Westbound Turner														
4	L2	19	2.0	22	2.0	0.114	8.9	LOS A	0.6	4.5	0.62	0.65	0.62	38.2
5	T1	17	2.0	20	2.0	0.114	5.2	LOS A	0.6	4.5	0.62	0.65	0.62	37.4
6	R2	39	2.0	46	2.0	0.114	5.6	LOS A	0.6	4.5	0.62	0.65	0.62	37.5
Approach		75	2.0	88	2.0	0.114	6.3	LOS A	0.6	4.5	0.62	0.65	0.62	37.7
North: Southbound Scott Street														
7	L2	22	2.0	26	2.0	0.429	6.5	LOS A	3.2	22.8	0.43	0.40	0.43	39.2
8	T1	413	2.0	486	2.0	0.429	2.8	LOS A	3.2	22.8	0.43	0.40	0.43	39.0
9	R2	1	2.0	1	2.0	0.429	3.2	LOS A	3.2	22.8	0.43	0.40	0.43	37.8
Approach		436	2.0	513	2.0	0.429	3.0	LOS A	3.2	22.8	0.43	0.40	0.43	39.0
West: Eastbound Turner														
10	L2	3	2.0	4	2.0	0.201	9.4	LOS A	1.2	8.5	0.68	0.69	0.68	37.7
11	T1	23	2.0	27	2.0	0.201	5.7	LOS A	1.2	8.5	0.68	0.69	0.68	37.5
12	R2	100	2.0	118	2.0	0.201	6.0	LOS A	1.2	8.5	0.68	0.69	0.68	36.7
Approach		126	2.0	148	2.0	0.201	6.1	LOS A	1.2	8.5	0.68	0.69	0.68	36.8
All Vehicles		1088	2.0	1280	2.0	0.429	3.5	LOS A	3.2	22.8	0.41	0.43	0.41	38.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Scott and Turner (Site Folder: General)]

Peak PM Build with 50% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	123	2.0	145	2.0	0.485	6.0	LOS A	4.3	30.5	0.34	0.38	0.34	38.8
2	T1	407	2.0	479	2.0	0.485	2.3	LOS A	4.3	30.5	0.34	0.38	0.34	39.0
3	R2	24	2.0	28	2.0	0.485	2.7	LOS A	4.3	30.5	0.34	0.38	0.34	38.4
Approach		554	2.0	652	2.0	0.485	3.1	LOS A	4.3	30.5	0.34	0.38	0.34	38.9
East: Westbound Turner														
4	L2	19	2.0	22	2.0	0.147	10.1	LOS B	0.9	6.1	0.70	0.72	0.70	37.8
5	T1	21	2.0	25	2.0	0.147	6.4	LOS A	0.9	6.1	0.70	0.72	0.70	36.8
6	R2	45	2.0	53	2.0	0.147	6.7	LOS A	0.9	6.1	0.70	0.72	0.70	37.1
Approach		85	2.0	100	2.0	0.147	7.4	LOS A	0.9	6.1	0.70	0.72	0.70	37.2
North: Southbound Scott Street														
7	L2	26	2.0	31	2.0	0.517	7.3	LOS A	4.1	29.5	0.57	0.51	0.57	38.9
8	T1	453	2.0	533	2.0	0.517	3.6	LOS A	4.1	29.5	0.57	0.51	0.57	38.7
9	R2	1	2.0	1	2.0	0.517	3.9	LOS A	4.1	29.5	0.57	0.51	0.57	37.4
Approach		480	2.0	565	2.0	0.517	3.8	LOS A	4.1	29.5	0.57	0.51	0.57	38.7
West: Eastbound Turner														
10	L2	3	2.0	4	2.0	0.293	10.2	LOS B	1.9	13.5	0.76	0.77	0.76	37.3
11	T1	26	2.0	31	2.0	0.293	6.4	LOS A	1.9	13.5	0.76	0.77	0.76	37.1
12	R2	141	2.0	166	2.0	0.293	6.8	LOS A	1.9	13.5	0.76	0.77	0.76	36.3
Approach		170	2.0	200	2.0	0.293	6.8	LOS A	1.9	13.5	0.76	0.77	0.76	36.4
All Vehicles		1289	2.0	1516	2.0	0.517	4.1	LOS A	4.3	30.5	0.51	0.50	0.51	38.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Scott and Turner (Site Folder: General)]

Peak PM Build with 75% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	175	2.0	206	2.0	0.579	6.2	LOS A	5.9	42.1	0.42	0.41	0.42	38.5
2	T1	458	2.0	539	2.0	0.579	2.5	LOS A	5.9	42.1	0.42	0.41	0.42	38.8
3	R2	24	2.0	28	2.0	0.579	2.8	LOS A	5.9	42.1	0.42	0.41	0.42	38.2
Approach		657	2.0	773	2.0	0.579	3.5	LOS A	5.9	42.1	0.42	0.41	0.42	38.7
East: Westbound Turner														
4	L2	19	2.0	22	2.0	0.188	11.5	LOS B	1.2	8.2	0.78	0.79	0.78	37.3
5	T1	24	2.0	28	2.0	0.188	7.8	LOS A	1.2	8.2	0.78	0.79	0.78	36.1
6	R2	51	2.0	60	2.0	0.188	8.2	LOS A	1.2	8.2	0.78	0.79	0.78	36.6
Approach		94	2.0	111	2.0	0.188	8.7	LOS A	1.2	8.2	0.78	0.79	0.78	36.7
North: Southbound Scott Street														
7	L2	30	2.0	35	2.0	0.610	8.7	LOS A	5.7	40.4	0.72	0.65	0.75	38.5
8	T1	492	2.0	579	2.0	0.610	4.9	LOS A	5.7	40.4	0.72	0.65	0.75	38.4
9	R2	1	2.0	1	2.0	0.610	5.3	LOS A	5.7	40.4	0.72	0.65	0.75	36.9
Approach		523	2.0	615	2.0	0.610	5.1	LOS A	5.7	40.4	0.72	0.65	0.75	38.4
West: Eastbound Turner														
10	L2	3	2.0	4	2.0	0.403	11.2	LOS B	2.9	20.4	0.85	0.87	0.87	36.7
11	T1	29	2.0	34	2.0	0.403	7.5	LOS A	2.9	20.4	0.85	0.87	0.87	36.5
12	R2	182	2.0	214	2.0	0.403	7.8	LOS A	2.9	20.4	0.85	0.87	0.87	35.8
Approach		214	2.0	252	2.0	0.403	7.8	LOS A	2.9	20.4	0.85	0.87	0.87	35.9
All Vehicles		1488	2.0	1751	2.0	0.610	5.0	LOS A	5.9	42.1	0.61	0.59	0.62	38.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 103 [Scott and Turner (Site Folder: General)]

Peak PM Build with 100% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	227	2.0	267	2.0	0.675	6.5	LOS A	8.2	58.3	0.53	0.45	0.53	38.2
2	T1	508	2.0	598	2.0	0.675	2.8	LOS A	8.2	58.3	0.53	0.45	0.53	38.6
3	R2	24	2.0	28	2.0	0.675	3.1	LOS A	8.2	58.3	0.53	0.45	0.53	38.0
Approach		759	2.0	893	2.0	0.675	3.9	LOS A	8.2	58.3	0.53	0.45	0.53	38.5
East: Westbound Turner														
4	L2	19	2.0	22	2.0	0.246	13.3	LOS B	1.6	11.4	0.87	0.88	0.87	36.7
5	T1	28	2.0	33	2.0	0.246	9.6	LOS A	1.6	11.4	0.87	0.88	0.87	35.2
6	R2	56	2.0	66	2.0	0.246	10.0	LOS A	1.6	11.4	0.87	0.88	0.87	36.0
Approach		103	2.0	121	2.0	0.246	10.5	LOS B	1.6	11.4	0.87	0.88	0.87	36.0
North: Southbound Scott Street														
7	L2	35	2.0	41	2.0	0.717	11.9	LOS B	9.0	64.2	0.87	0.89	1.06	37.5
8	T1	532	2.0	626	2.0	0.717	8.1	LOS A	9.0	64.2	0.87	0.89	1.06	37.3
9	R2	1	2.0	1	2.0	0.717	8.5	LOS A	9.0	64.2	0.87	0.89	1.06	35.6
Approach		568	2.0	668	2.0	0.717	8.4	LOS A	9.0	64.2	0.87	0.89	1.06	37.3
West: Eastbound Turner														
10	L2	3	2.0	4	2.0	0.539	14.5	LOS B	4.8	33.9	0.94	1.06	1.13	35.1
11	T1	32	2.0	38	2.0	0.539	10.8	LOS B	4.8	33.9	0.94	1.06	1.13	34.9
12	R2	223	2.0	262	2.0	0.539	11.2	LOS B	4.8	33.9	0.94	1.06	1.13	34.2
Approach		258	2.0	304	2.0	0.539	11.1	LOS B	4.8	33.9	0.94	1.06	1.13	34.3
All Vehicles		1688	2.0	1986	2.0	0.717	6.9	LOS A	9.0	64.2	0.73	0.72	0.82	37.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

HCS7 Two-Way Stop-Control Report

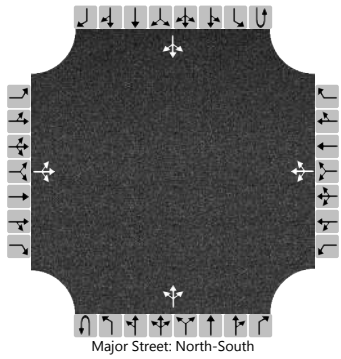
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro AM Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Phillips
Jurisdiction	
East/West Street	Phillips Street
North/South Street	Scott Street
Peak Hour Factor	0.82
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		108	10	99		2	5	5		64	193	7		2	266	169
Percent Heavy Vehicles (%)		6	6	6		6	6	6		6				6		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.16	6.56	6.26		7.16	6.56	6.26		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.55	4.05	3.35		2.25				2.25		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			265				15			78				2		
Capacity, c (veh/h)			351				316			1017				1299		
v/c Ratio			0.75				0.05			0.08				0.00		
95% Queue Length, Q_{95} (veh)			5.9				0.1			0.2				0.0		
Control Delay (s/veh)			40.8				17.0			8.8				7.8		
Level of Service (LOS)			E				C			A				A		
Approach Delay (s/veh)	40.8				17.0				2.7				0.1			
Approach LOS	E				C											

HCS7 Two-Way Stop-Control Report

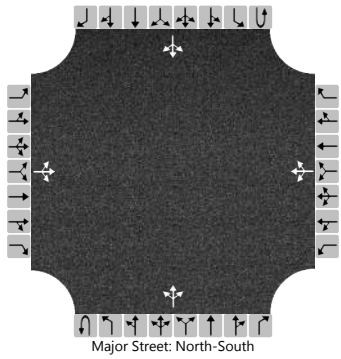
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro AM 25%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Phillips
Jurisdiction	
East/West Street	Phillips Street
North/South Street	Scott Street
Peak Hour Factor	0.82
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		125	10	99		2	5	5		64	229	7		2	334	202
Percent Heavy Vehicles (%)		6	6	6		6	6	6		6				6		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.16	6.56	6.26		7.16	6.56	6.26		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.55	4.05	3.35		2.25				2.25		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			285				15			78				2		
Capacity, c (veh/h)			274				252			914				1252		
v/c Ratio			1.04				0.06			0.09				0.00		
95% Queue Length, Q_{95} (veh)			11.1				0.2			0.3				0.0		
Control Delay (s/veh)			106.2				20.2			9.3				7.9		
Level of Service (LOS)			F				C			A				A		
Approach Delay (s/veh)	106.2				20.2				2.7				0.1			
Approach LOS	F				C											

HCS7 Two-Way Stop-Control Report

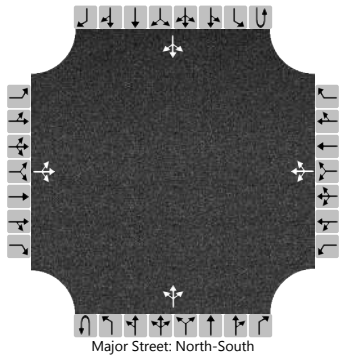
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro AM 50%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Phillips
Jurisdiction	
East/West Street	Phillips Street
North/South Street	Scott Street
Peak Hour Factor	0.82
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		143	10	99		2	5	5		64	264	7		2	403	235
Percent Heavy Vehicles (%)		6	6	6		6	6	6		6				6		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.16	6.56	6.26		7.16	6.56	6.26		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.55	4.05	3.35		2.25				2.25		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			307				15			78				2		
Capacity, c (veh/h)			212				198			821				1207		
v/c Ratio			1.45				0.07			0.10				0.00		
95% Queue Length, Q_{95} (veh)			18.2				0.2			0.3				0.0		
Control Delay (s/veh)			268.0				24.6			9.8				8.0		
Level of Service (LOS)			F				C			A				A		
Approach Delay (s/veh)	268.0				24.6				2.8				0.1			
Approach LOS	F				C											

HCS7 Two-Way Stop-Control Report

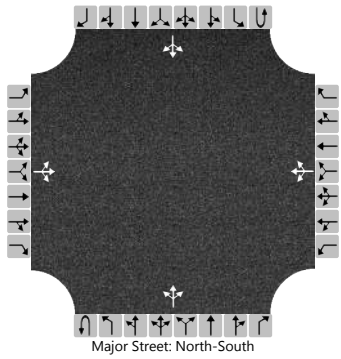
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro AM 75%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Phillips
Jurisdiction	
East/West Street	Phillips Street
North/South Street	Scott Street
Peak Hour Factor	0.82
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		160	10	99		2	5	5		64	300	7		2	471	268
Percent Heavy Vehicles (%)		6	6	6		6	6	6		6				6		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.16	6.56	6.26		7.16	6.56	6.26		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.55	4.05	3.35		2.25				2.25		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			328				15			78				2		
Capacity, c (veh/h)			164				154			738				1162		
v/c Ratio			2.01				0.10			0.11				0.00		
95% Queue Length, Q_{95} (veh)			25.4				0.3			0.4				0.0		
Control Delay (s/veh)			520.0				30.8			10.5				8.1		
Level of Service (LOS)			F				D			B				A		
Approach Delay (s/veh)	520.0				30.8				3.0				0.1			
Approach LOS	F				D											

HCS7 Two-Way Stop-Control Report

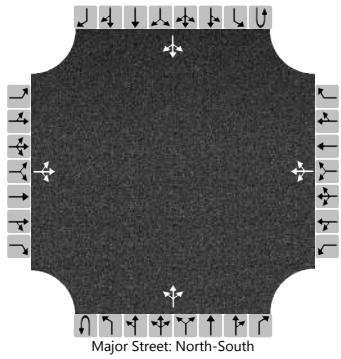
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	ProAM 100%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Phillips
Jurisdiction	
East/West Street	Phillips Street
North/South Street	Scott Street
Peak Hour Factor	0.82
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		177	10	99		2	5	5		64	335	7		2	539	302
Percent Heavy Vehicles (%)		6	6	6		6	6	6		6				6		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.16	6.56	6.26		7.16	6.56	6.26		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.55	4.05	3.35		2.25				2.25		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			349				15			78				2		
Capacity, c (veh/h)			125				118			662				1121		
v/c Ratio			2.79				0.12			0.12				0.00		
95% Queue Length, Q_{95} (veh)			32.1				0.4			0.4				0.0		
Control Delay (s/veh)			882.4				39.9			11.2				8.2		
Level of Service (LOS)			F				E			B				A		
Approach Delay (s/veh)		882.4				39.9				3.2				0.1		
Approach LOS		F				E										

HCS7 Two-Way Stop-Control Report

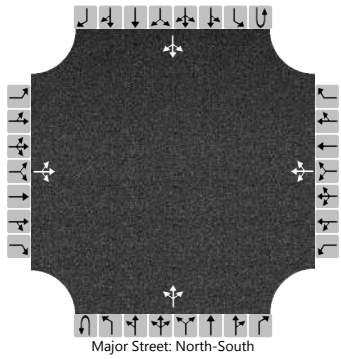
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro PM Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Phillips
Jurisdiction	
East/West Street	Phillips Street
North/South Street	Scott Street
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		196	9	122		0	11	4		118	290	9		2	356	187
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			352				16			127				2		
Capacity, c (veh/h)			227				208			991				1238		
v/c Ratio			1.55				0.08			0.13				0.00		
95% Queue Length, Q_{95} (veh)			21.7				0.3			0.4				0.0		
Control Delay (s/veh)			307.6				23.8			9.2				7.9		
Level of Service (LOS)			F				C			A				A		
Approach Delay (s/veh)		307.6				23.8				3.6				0.0		
Approach LOS		F				C										

HCS7 Two-Way Stop-Control Report

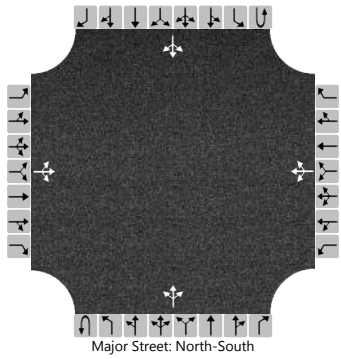
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro PM 25%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Phillips
Jurisdiction	
East/West Street	Phillips Street
North/South Street	Scott Street
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		230	9	122		0	11	4		118	359	9		2	411	213
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			388				16			127				2		
Capacity, c (veh/h)			171				164			919				1163		
v/c Ratio			2.27				0.10			0.14				0.00		
95% Queue Length, Q_{95} (veh)			31.7				0.3			0.5				0.0		
Control Delay (s/veh)			631.8				29.4			9.5				8.1		
Level of Service (LOS)			F				D			A				A		
Approach Delay (s/veh)		631.8				29.4				3.6				0.1		
Approach LOS		F				D										

HCS7 Two-Way Stop-Control Report

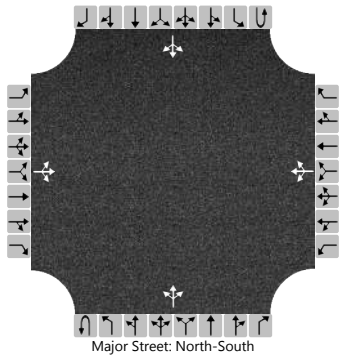
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro PM 50%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Phillips
Jurisdiction	
East/West Street	Phillips Street
North/South Street	Scott Street
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		263	9	122		0	11	4		118	428	9		2	465	240
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			424				16			127				2		
Capacity, c (veh/h)			128				128			853				1092		
v/c Ratio			3.31				0.13			0.15				0.00		
95% Queue Length, Q_{95} (veh)			40.8				0.4			0.5				0.0		
Control Delay (s/veh)			1109.2				37.1			10.0				8.3		
Level of Service (LOS)			F				E			A				A		
Approach Delay (s/veh)		1109.2				37.1				3.7				0.1		
Approach LOS		F				E										

HCS7 Two-Way Stop-Control Report

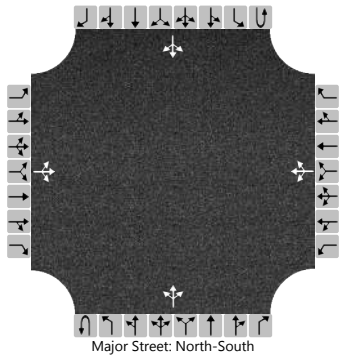
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro PM 75%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Phillips
Jurisdiction	
East/West Street	Phillips Street
North/South Street	Scott Street
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		297	9	122		0	11	4		118	498	9		2	519	266
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			460				16			127				2		
Capacity, c (veh/h)			95				99			792				1024		
v/c Ratio			4.87				0.16			0.16				0.00		
95% Queue Length, Q_{95} (veh)			49.2				0.6			0.6				0.0		
Control Delay (s/veh)			1830.9				48.2			10.4				8.5		
Level of Service (LOS)			F				E			B				A		
Approach Delay (s/veh)		1830.9				48.2				3.9				0.1		
Approach LOS		F				E										

HCS7 Two-Way Stop-Control Report

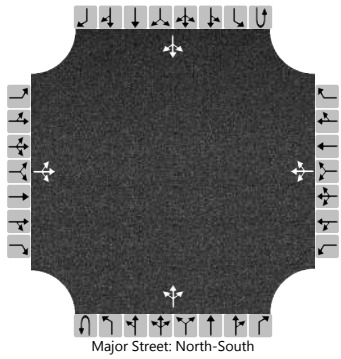
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	PM 100%NeighborhoodGrowth
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Scott & Phillips
Jurisdiction	
East/West Street	Phillips Street
North/South Street	Scott Street
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		331	9	122		0	11	4		118	567	9		2	573	293
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			497				16			127				2		
Capacity, c (veh/h)			68				76			735				961		
v/c Ratio			7.26				0.21			0.17				0.00		
95% Queue Length, Q_{95} (veh)			56.8				0.7			0.6				0.0		
Control Delay (s/veh)			2933.1				64.7			10.9				8.8		
Level of Service (LOS)			F				F			B				A		
Approach Delay (s/veh)		2933.1				64.7				4.2				0.1		
Approach LOS		F				F										

MOVEMENT SUMMARY

Site: 102 [Scott and Phillips (Site Folder: General)]

Peak AM Build - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	64	6.0	78	6.0	0.298	6.7	LOS A	2.0	15.1	0.45	0.47	0.45	38.7
2	T1	193	6.0	235	6.0	0.298	2.9	LOS A	2.0	15.1	0.45	0.47	0.45	38.5
3	R2	7	6.0	9	6.0	0.298	3.3	LOS A	2.0	15.1	0.45	0.47	0.45	36.7
Approach		264	6.0	322	6.0	0.298	3.8	LOS A	2.0	15.1	0.45	0.47	0.45	38.5
East: Westbound Phillips														
4	L2	2	6.0	2	6.0	0.019	8.3	LOS A	0.1	0.7	0.57	0.53	0.57	37.5
5	T1	5	6.0	6	6.0	0.019	4.6	LOS A	0.1	0.7	0.57	0.53	0.57	37.9
6	R2	5	6.0	6	6.0	0.019	5.0	LOS A	0.1	0.7	0.57	0.53	0.57	37.1
Approach		12	6.0	15	6.0	0.019	5.4	LOS A	0.1	0.7	0.57	0.53	0.57	37.5
North: Southbound Scott Street														
7	L2	2	6.0	2	6.0	0.429	6.3	LOS A	3.4	25.2	0.38	0.38	0.38	39.1
8	T1	266	6.0	324	6.0	0.429	2.5	LOS A	3.4	25.2	0.38	0.38	0.38	39.0
9	R2	169	6.0	206	6.0	0.429	2.9	LOS A	3.4	25.2	0.38	0.38	0.38	38.6
Approach		437	6.0	533	6.0	0.429	2.7	LOS A	3.4	25.2	0.38	0.38	0.38	38.8
West: Eastbound Phillips														
10	L2	108	6.0	132	6.0	0.305	8.2	LOS A	1.9	14.1	0.61	0.67	0.61	38.2
11	T1	10	6.0	12	6.0	0.305	4.5	LOS A	1.9	14.1	0.61	0.67	0.61	37.3
12	R2	99	6.0	121	6.0	0.305	4.8	LOS A	1.9	14.1	0.61	0.67	0.61	36.9
Approach		217	6.0	265	6.0	0.305	6.5	LOS A	1.9	14.1	0.61	0.67	0.61	37.6
All Vehicles		930	6.0	1134	6.0	0.429	3.9	LOS A	3.4	25.2	0.45	0.47	0.45	38.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 102 [Scott and Phillips (Site Folder: General)]

Peak AM Build with 25% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	64	6.0	78	6.0	0.348	6.9	LOS A	2.5	18.6	0.50	0.49	0.50	38.6
2	T1	229	6.0	279	6.0	0.348	3.1	LOS A	2.5	18.6	0.50	0.49	0.50	38.4
3	R2	7	6.0	9	6.0	0.348	3.5	LOS A	2.5	18.6	0.50	0.49	0.50	36.5
Approach		300	6.0	366	6.0	0.348	4.0	LOS A	2.5	18.6	0.50	0.49	0.50	38.4
East: Westbound Phillips														
4	L2	2	6.0	2	6.0	0.020	8.9	LOS A	0.1	0.8	0.61	0.55	0.61	37.1
5	T1	5	6.0	6	6.0	0.020	5.1	LOS A	0.1	0.8	0.61	0.55	0.61	37.7
6	R2	5	6.0	6	6.0	0.020	5.5	LOS A	0.1	0.8	0.61	0.55	0.61	36.9
Approach		12	6.0	15	6.0	0.020	5.9	LOS A	0.1	0.8	0.61	0.55	0.61	37.3
North: Southbound Scott Street														
7	L2	2	6.0	2	6.0	0.522	6.4	LOS A	4.8	35.2	0.43	0.39	0.43	39.0
8	T1	334	6.0	407	6.0	0.522	2.6	LOS A	4.8	35.2	0.43	0.39	0.43	38.9
9	R2	202	6.0	246	6.0	0.522	3.0	LOS A	4.8	35.2	0.43	0.39	0.43	38.5
Approach		538	6.0	656	6.0	0.522	2.8	LOS A	4.8	35.2	0.43	0.39	0.43	38.7
West: Eastbound Phillips														
10	L2	125	6.0	152	6.0	0.357	9.1	LOS A	2.3	17.2	0.69	0.74	0.69	37.8
11	T1	10	6.0	12	6.0	0.357	5.3	LOS A	2.3	17.2	0.69	0.74	0.69	36.9
12	R2	99	6.0	121	6.0	0.357	5.7	LOS A	2.3	17.2	0.69	0.74	0.69	36.4
Approach		234	6.0	285	6.0	0.357	7.5	LOS A	2.3	17.2	0.69	0.74	0.69	37.2
All Vehicles		1084	6.0	1322	6.0	0.522	4.1	LOS A	4.8	35.2	0.51	0.50	0.51	38.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 102 [Scott and Phillips (Site Folder: General)]

Peak AM Build with 50% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	64	6.0	78	6.0	0.401	7.2	LOS A	3.1	22.5	0.56	0.53	0.56	38.4
2	T1	264	6.0	322	6.0	0.401	3.4	LOS A	3.1	22.5	0.56	0.53	0.56	38.3
3	R2	7	6.0	9	6.0	0.401	3.8	LOS A	3.1	22.5	0.56	0.53	0.56	36.4
Approach		335	6.0	409	6.0	0.401	4.1	LOS A	3.1	22.5	0.56	0.53	0.56	38.3
East: Westbound Phillips														
4	L2	2	6.0	2	6.0	0.021	9.4	LOS A	0.1	0.9	0.65	0.58	0.65	36.7
5	T1	5	6.0	6	6.0	0.021	5.6	LOS A	0.1	0.9	0.65	0.58	0.65	37.4
6	R2	5	6.0	6	6.0	0.021	6.0	LOS A	0.1	0.9	0.65	0.58	0.65	36.6
Approach		12	6.0	15	6.0	0.021	6.4	LOS A	0.1	0.9	0.65	0.58	0.65	37.0
North: Southbound Scott Street														
7	L2	2	6.0	2	6.0	0.615	6.5	LOS A	6.6	48.8	0.50	0.41	0.50	38.8
8	T1	403	6.0	491	6.0	0.615	2.7	LOS A	6.6	48.8	0.50	0.41	0.50	38.7
9	R2	235	6.0	287	6.0	0.615	3.1	LOS A	6.6	48.8	0.50	0.41	0.50	38.3
Approach		640	6.0	780	6.0	0.615	2.9	LOS A	6.6	48.8	0.50	0.41	0.50	38.6
West: Eastbound Phillips														
10	L2	143	6.0	174	6.0	0.423	10.2	LOS B	2.9	21.5	0.77	0.82	0.78	37.3
11	T1	10	6.0	12	6.0	0.423	6.4	LOS A	2.9	21.5	0.77	0.82	0.78	36.3
12	R2	99	6.0	121	6.0	0.423	6.8	LOS A	2.9	21.5	0.77	0.82	0.78	35.9
Approach		252	6.0	307	6.0	0.423	8.7	LOS A	2.9	21.5	0.77	0.82	0.78	36.8
All Vehicles		1239	6.0	1511	6.0	0.615	4.4	LOS A	6.6	48.8	0.57	0.53	0.57	38.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 102 [Scott and Phillips (Site Folder: General)]

Peak AM Build with 75% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	64	6.0	78	6.0	0.456	7.5	LOS A	3.7	27.2	0.62	0.56	0.62	38.3
2	T1	300	6.0	366	6.0	0.456	3.7	LOS A	3.7	27.2	0.62	0.56	0.62	38.1
3	R2	7	6.0	9	6.0	0.456	4.1	LOS A	3.7	27.2	0.62	0.56	0.62	36.2
Approach		371	6.0	452	6.0	0.456	4.4	LOS A	3.7	27.2	0.62	0.56	0.62	38.1
East: Westbound Phillips														
4	L2	2	6.0	2	6.0	0.023	10.0	LOS B	0.1	1.0	0.69	0.61	0.69	36.3
5	T1	5	6.0	6	6.0	0.023	6.3	LOS A	0.1	1.0	0.69	0.61	0.69	37.1
6	R2	5	6.0	6	6.0	0.023	6.6	LOS A	0.1	1.0	0.69	0.61	0.69	36.3
Approach		12	6.0	15	6.0	0.023	7.0	LOS A	0.1	1.0	0.69	0.61	0.69	36.6
North: Southbound Scott Street														
7	L2	2	6.0	2	6.0	0.706	6.7	LOS A	9.2	67.6	0.59	0.43	0.59	38.5
8	T1	471	6.0	574	6.0	0.706	3.0	LOS A	9.2	67.6	0.59	0.43	0.59	38.5
9	R2	268	6.0	327	6.0	0.706	3.3	LOS A	9.2	67.6	0.59	0.43	0.59	38.2
Approach		741	6.0	904	6.0	0.706	3.1	LOS A	9.2	67.6	0.59	0.43	0.59	38.4
West: Eastbound Phillips														
10	L2	160	6.0	195	6.0	0.500	12.5	LOS B	4.1	30.0	0.86	0.96	0.98	36.5
11	T1	10	6.0	12	6.0	0.500	8.7	LOS A	4.1	30.0	0.86	0.96	0.98	35.1
12	R2	99	6.0	121	6.0	0.500	9.1	LOS A	4.1	30.0	0.86	0.96	0.98	34.9
Approach		269	6.0	328	6.0	0.500	11.1	LOS B	4.1	30.0	0.86	0.96	0.98	35.9
All Vehicles		1393	6.0	1699	6.0	0.706	5.0	LOS A	9.2	67.6	0.65	0.57	0.68	37.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 102 [Scott and Phillips (Site Folder: General)]

Peak AM Build with 100% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	64	6.0	78	6.0	0.515	7.8	LOS A	4.4	32.5	0.69	0.60	0.69	38.2
2	T1	335	6.0	409	6.0	0.515	4.0	LOS A	4.4	32.5	0.69	0.60	0.69	38.0
3	R2	7	6.0	9	6.0	0.515	4.4	LOS A	4.4	32.5	0.69	0.60	0.69	36.0
Approach		406	6.0	495	6.0	0.515	4.6	LOS A	4.4	32.5	0.69	0.60	0.69	38.0
East: Westbound Phillips														
4	L2	2	6.0	2	6.0	0.025	10.7	LOS B	0.1	1.1	0.73	0.64	0.73	35.9
5	T1	5	6.0	6	6.0	0.025	6.9	LOS A	0.1	1.1	0.73	0.64	0.73	36.7
6	R2	5	6.0	6	6.0	0.025	7.3	LOS A	0.1	1.1	0.73	0.64	0.73	36.0
Approach		12	6.0	15	6.0	0.025	7.7	LOS A	0.1	1.1	0.73	0.64	0.73	36.3
North: Southbound Scott Street														
7	L2	2	6.0	2	6.0	0.797	7.0	LOS A	13.1	96.4	0.74	0.47	0.74	38.2
8	T1	539	6.0	657	6.0	0.797	3.3	LOS A	13.1	96.4	0.74	0.47	0.74	38.2
9	R2	302	6.0	368	6.0	0.797	3.6	LOS A	13.1	96.4	0.74	0.47	0.74	37.9
Approach		843	6.0	1028	6.0	0.797	3.4	LOS A	13.1	96.4	0.74	0.47	0.74	38.1
West: Eastbound Phillips														
10	L2	177	6.0	216	6.0	0.609	16.4	LOS B	5.9	43.3	0.95	1.14	1.25	35.1
11	T1	10	6.0	12	6.0	0.609	12.6	LOS B	5.9	43.3	0.95	1.14	1.25	33.4
12	R2	99	6.0	121	6.0	0.609	13.0	LOS B	5.9	43.3	0.95	1.14	1.25	33.4
Approach		286	6.0	349	6.0	0.609	15.1	LOS B	5.9	43.3	0.95	1.14	1.25	34.5
All Vehicles		1547	6.0	1887	6.0	0.797	5.9	LOS A	13.1	96.4	0.77	0.63	0.82	37.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 102 [Scott and Phillips (Site Folder: General)]

Peak PM Build - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	118	2.0	127	2.0	0.444	7.4	LOS A	3.5	24.7	0.61	0.58	0.61	38.2
2	T1	290	2.0	312	2.0	0.444	3.7	LOS A	3.5	24.7	0.61	0.58	0.61	38.0
3	R2	9	2.0	10	2.0	0.444	4.0	LOS A	3.5	24.7	0.61	0.58	0.61	36.1
Approach		417	2.0	448	2.0	0.444	4.8	LOS A	3.5	24.7	0.61	0.58	0.61	38.1
East: Westbound Phillips														
4	L2	1	2.0	1	2.0	0.026	9.8	LOS A	0.1	1.0	0.69	0.59	0.69	36.8
5	T1	11	2.0	12	2.0	0.026	6.1	LOS A	0.1	1.0	0.69	0.59	0.69	37.4
6	R2	4	2.0	4	2.0	0.026	6.5	LOS A	0.1	1.0	0.69	0.59	0.69	36.6
Approach		16	2.0	17	2.0	0.026	6.4	LOS A	0.1	1.0	0.69	0.59	0.69	37.2
North: Southbound Scott Street														
7	L2	2	2.0	2	2.0	0.503	6.8	LOS A	4.4	31.1	0.52	0.46	0.52	38.7
8	T1	356	2.0	383	2.0	0.503	3.0	LOS A	4.4	31.1	0.52	0.46	0.52	38.7
9	R2	187	2.0	201	2.0	0.503	3.4	LOS A	4.4	31.1	0.52	0.46	0.52	38.3
Approach		545	2.0	586	2.0	0.503	3.2	LOS A	4.4	31.1	0.52	0.46	0.52	38.5
West: Eastbound Phillips														
10	L2	196	2.0	211	2.0	0.420	8.8	LOS A	2.9	20.9	0.71	0.74	0.71	37.8
11	T1	9	2.0	10	2.0	0.420	5.1	LOS A	2.9	20.9	0.71	0.74	0.71	36.9
12	R2	122	2.0	131	2.0	0.420	5.4	LOS A	2.9	20.9	0.71	0.74	0.71	36.5
Approach		327	2.0	352	2.0	0.420	7.5	LOS A	2.9	20.9	0.71	0.74	0.71	37.3
All Vehicles		1305	2.0	1403	2.0	0.503	4.8	LOS A	4.4	31.1	0.60	0.57	0.60	38.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 102 [Scott and Phillips (Site Folder: General)]

Peak PM Build with 25% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	118	2.0	127	2.0	0.541	8.0	LOS A	4.6	32.9	0.71	0.64	0.71	38.0
2	T1	359	2.0	386	2.0	0.541	4.2	LOS A	4.6	32.9	0.71	0.64	0.71	37.8
3	R2	9	2.0	10	2.0	0.541	4.6	LOS A	4.6	32.9	0.71	0.64	0.71	35.8
Approach		486	2.0	523	2.0	0.541	5.2	LOS A	4.6	32.9	0.71	0.64	0.71	37.8
East: Westbound Phillips														
4	L2	1	2.0	1	2.0	0.030	11.0	LOS B	0.2	1.3	0.75	0.64	0.75	36.0
5	T1	11	2.0	12	2.0	0.030	7.3	LOS A	0.2	1.3	0.75	0.64	0.75	36.8
6	R2	4	2.0	4	2.0	0.030	7.6	LOS A	0.2	1.3	0.75	0.64	0.75	36.0
Approach		16	2.0	17	2.0	0.030	7.6	LOS A	0.2	1.3	0.75	0.64	0.75	36.6
North: Southbound Scott Street														
7	L2	2	2.0	2	2.0	0.575	6.9	LOS A	5.6	39.9	0.58	0.48	0.58	38.6
8	T1	411	2.0	442	2.0	0.575	3.2	LOS A	5.6	39.9	0.58	0.48	0.58	38.5
9	R2	213	2.0	229	2.0	0.575	3.5	LOS A	5.6	39.9	0.58	0.48	0.58	38.2
Approach		626	2.0	673	2.0	0.575	3.3	LOS A	5.6	39.9	0.58	0.48	0.58	38.4
West: Eastbound Phillips														
10	L2	230	2.0	247	2.0	0.496	10.2	LOS B	3.9	28.0	0.79	0.84	0.84	37.3
11	T1	9	2.0	10	2.0	0.496	6.4	LOS A	3.9	28.0	0.79	0.84	0.84	36.1
12	R2	122	2.0	131	2.0	0.496	6.8	LOS A	3.9	28.0	0.79	0.84	0.84	35.8
Approach		361	2.0	388	2.0	0.496	8.9	LOS A	3.9	28.0	0.79	0.84	0.84	36.8
All Vehicles		1489	2.0	1601	2.0	0.575	5.3	LOS A	5.6	39.9	0.68	0.62	0.69	37.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 102 [Scott and Phillips (Site Folder: General)]

Peak PM Build with 50% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	118	2.0	127	2.0	0.645	9.9	LOS A	7.0	50.2	0.83	0.79	0.92	37.6
2	T1	428	2.0	460	2.0	0.645	6.1	LOS A	7.0	50.2	0.83	0.79	0.92	37.4
3	R2	9	2.0	10	2.0	0.645	6.5	LOS A	7.0	50.2	0.83	0.79	0.92	35.2
Approach		555	2.0	597	2.0	0.645	6.9	LOS A	7.0	50.2	0.83	0.79	0.92	37.4
East: Westbound Phillips														
4	L2	1	2.0	1	2.0	0.035	12.4	LOS B	0.2	1.6	0.82	0.70	0.82	35.0
5	T1	11	2.0	12	2.0	0.035	8.7	LOS A	0.2	1.6	0.82	0.70	0.82	36.1
6	R2	4	2.0	4	2.0	0.035	9.0	LOS A	0.2	1.6	0.82	0.70	0.82	35.4
Approach		16	2.0	17	2.0	0.035	9.0	LOS A	0.2	1.6	0.82	0.70	0.82	35.8
North: Southbound Scott Street														
7	L2	2	2.0	2	2.0	0.647	7.1	LOS A	7.2	51.0	0.66	0.50	0.66	38.4
8	T1	465	2.0	500	2.0	0.647	3.3	LOS A	7.2	51.0	0.66	0.50	0.66	38.3
9	R2	240	2.0	258	2.0	0.647	3.7	LOS A	7.2	51.0	0.66	0.50	0.66	38.1
Approach		707	2.0	760	2.0	0.647	3.5	LOS A	7.2	51.0	0.66	0.50	0.66	38.2
West: Eastbound Phillips														
10	L2	263	2.0	283	2.0	0.580	12.4	LOS B	5.4	38.6	0.87	0.98	1.04	36.4
11	T1	9	2.0	10	2.0	0.580	8.6	LOS A	5.4	38.6	0.87	0.98	1.04	35.1
12	R2	122	2.0	131	2.0	0.580	9.0	LOS A	5.4	38.6	0.87	0.98	1.04	34.9
Approach		394	2.0	424	2.0	0.580	11.2	LOS B	5.4	38.6	0.87	0.98	1.04	36.0
All Vehicles		1672	2.0	1798	2.0	0.647	6.5	LOS A	7.2	51.0	0.77	0.71	0.84	37.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 102 [Scott and Phillips (Site Folder: General)]

Peak PM Build with 75% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	118	2.0	127	2.0	0.763	13.2	LOS B	11.0	78.6	0.97	1.00	1.23	36.1
2	T1	498	2.0	535	2.0	0.763	9.5	LOS A	11.0	78.6	0.97	1.00	1.23	35.9
3	R2	9	2.0	10	2.0	0.763	9.8	LOS A	11.0	78.6	0.97	1.00	1.23	33.3
Approach		625	2.0	672	2.0	0.763	10.2	LOS B	11.0	78.6	0.97	1.00	1.23	35.9
East: Westbound Phillips														
4	L2	1	2.0	1	2.0	0.043	14.3	LOS B	0.3	2.0	0.88	0.76	0.88	33.9
5	T1	11	2.0	12	2.0	0.043	10.6	LOS B	0.3	2.0	0.88	0.76	0.88	35.2
6	R2	4	2.0	4	2.0	0.043	10.9	LOS B	0.3	2.0	0.88	0.76	0.88	34.5
Approach		16	2.0	17	2.0	0.043	10.9	LOS B	0.3	2.0	0.88	0.76	0.88	34.9
North: Southbound Scott Street														
7	L2	2	2.0	2	2.0	0.719	7.3	LOS A	9.2	65.4	0.75	0.53	0.75	38.1
8	T1	519	2.0	558	2.0	0.719	3.5	LOS A	9.2	65.4	0.75	0.53	0.75	38.1
9	R2	266	2.0	286	2.0	0.719	3.9	LOS A	9.2	65.4	0.75	0.53	0.75	37.9
Approach		787	2.0	846	2.0	0.719	3.7	LOS A	9.2	65.4	0.75	0.53	0.75	38.0
West: Eastbound Phillips														
10	L2	297	2.0	319	2.0	0.684	15.9	LOS B	7.7	54.8	0.96	1.15	1.30	35.2
11	T1	9	2.0	10	2.0	0.684	12.1	LOS B	7.7	54.8	0.96	1.15	1.30	33.5
12	R2	122	2.0	131	2.0	0.684	12.5	LOS B	7.7	54.8	0.96	1.15	1.30	33.5
Approach		428	2.0	460	2.0	0.684	14.8	LOS B	7.7	54.8	0.96	1.15	1.30	34.7
All Vehicles		1856	2.0	1996	2.0	0.763	8.5	LOS A	11.0	78.6	0.88	0.83	1.04	36.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 102 [Scott and Phillips (Site Folder: General)]

Peak PM Build with 100% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	118	2.0	127	2.0	0.886	20.6	LOS C	18.4	130.9	1.00	1.29	1.63	33.1
2	T1	567	2.0	610	2.0	0.886	16.9	LOS B	18.4	130.9	1.00	1.29	1.63	33.0
3	R2	9	2.0	10	2.0	0.886	17.2	LOS B	18.4	130.9	1.00	1.29	1.63	29.6
Approach		694	2.0	746	2.0	0.886	17.5	LOS B	18.4	130.9	1.00	1.29	1.63	33.0
East: Westbound Phillips														
4	L2	1	2.0	1	2.0	0.052	16.8	LOS B	0.3	2.4	0.93	0.81	0.93	32.5
5	T1	11	2.0	12	2.0	0.052	13.0	LOS B	0.3	2.4	0.93	0.81	0.93	34.1
6	R2	4	2.0	4	2.0	0.052	13.4	LOS B	0.3	2.4	0.93	0.81	0.93	33.4
Approach		16	2.0	17	2.0	0.052	13.3	LOS B	0.3	2.4	0.93	0.81	0.93	33.8
North: Southbound Scott Street														
7	L2	2	2.0	2	2.0	0.789	7.7	LOS A	11.7	83.6	0.86	0.58	0.86	37.9
8	T1	573	2.0	616	2.0	0.789	3.9	LOS A	11.7	83.6	0.86	0.58	0.86	37.9
9	R2	293	2.0	315	2.0	0.789	4.3	LOS A	11.7	83.6	0.86	0.58	0.86	37.7
Approach		868	2.0	933	2.0	0.789	4.0	LOS A	11.7	83.6	0.86	0.58	0.86	37.8
West: Eastbound Phillips														
10	L2	331	2.0	356	2.0	0.810	23.0	LOS C	11.7	83.4	1.00	1.37	1.67	32.9
11	T1	9	2.0	10	2.0	0.810	19.3	LOS B	11.7	83.4	1.00	1.37	1.67	30.7
12	R2	122	2.0	131	2.0	0.810	19.7	LOS B	11.7	83.4	1.00	1.37	1.67	30.9
Approach		462	2.0	497	2.0	0.810	22.1	LOS C	11.7	83.4	1.00	1.37	1.67	32.4
All Vehicles		2040	2.0	2194	2.0	0.886	12.8	LOS B	18.4	130.9	0.94	1.00	1.31	34.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Scott and Toole (Site Folder: General)]

2021 Peak AM Build - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	2	4.0	2	4.0	0.126	8.8	LOS A	0.7	5.3	0.64	0.61	0.64	38.2
2	T1	69	4.0	82	4.0	0.126	5.1	LOS A	0.7	5.3	0.64	0.61	0.64	37.3
3	R2	10	4.0	12	4.0	0.126	5.4	LOS A	0.7	5.3	0.64	0.61	0.64	37.2
Approach		81	4.0	96	4.0	0.126	5.2	LOS A	0.7	5.3	0.64	0.61	0.64	37.3
East: Westbound Toole														
4	L2	7	4.0	8	4.0	0.312	8.1	LOS A	2.0	14.8	0.46	0.51	0.46	44.5
5	T1	185	4.0	220	4.0	0.312	4.2	LOS A	2.0	14.8	0.46	0.51	0.46	45.5
6	R2	88	4.0	105	4.0	0.312	4.4	LOS A	2.0	14.8	0.46	0.51	0.46	44.0
Approach		280	4.0	333	4.0	0.312	4.4	LOS A	2.0	14.8	0.46	0.51	0.46	45.0
North: Southbound Scott Street														
7	L2	95	4.0	113	4.0	0.408	7.4	LOS A	3.0	21.4	0.57	0.58	0.57	38.3
8	T1	159	4.0	189	4.0	0.408	3.7	LOS A	3.0	21.4	0.57	0.58	0.57	37.2
9	R2	98	4.0	117	4.0	0.408	4.0	LOS A	3.0	21.4	0.57	0.58	0.57	37.4
Approach		352	4.0	419	4.0	0.408	4.8	LOS A	3.0	21.4	0.57	0.58	0.57	37.6
West: Eastbound Toole														
10	L2	74	4.0	88	4.0	0.430	9.6	LOS A	3.1	22.5	0.67	0.68	0.67	43.7
11	T1	232	4.0	276	4.0	0.430	5.7	LOS A	3.1	22.5	0.67	0.68	0.67	44.5
12	R2	16	4.0	19	4.0	0.430	5.8	LOS A	3.1	22.5	0.67	0.68	0.67	42.2
Approach		322	4.0	383	4.0	0.430	6.6	LOS A	3.1	22.5	0.67	0.68	0.67	44.2
All Vehicles		1035	4.0	1232	4.0	0.430	5.3	LOS A	3.1	22.5	0.58	0.59	0.58	42.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Scott and Toole (Site Folder: General)]

2021 Peak AM Build with 25% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	2	4.0	2	4.0	0.152	9.1	LOS A	0.9	6.5	0.67	0.64	0.67	38.0
2	T1	82	4.0	98	4.0	0.152	5.4	LOS A	0.9	6.5	0.67	0.64	0.67	37.1
3	R2	10	4.0	12	4.0	0.152	5.7	LOS A	0.9	6.5	0.67	0.64	0.67	37.0
Approach		94	4.0	112	4.0	0.152	5.5	LOS A	0.9	6.5	0.67	0.64	0.67	37.1
East: Westbound Toole														
4	L2	7	4.0	8	4.0	0.338	8.4	LOS A	2.3	16.3	0.50	0.54	0.50	44.4
5	T1	185	4.0	220	4.0	0.338	4.5	LOS A	2.3	16.3	0.50	0.54	0.50	45.4
6	R2	100	4.0	119	4.0	0.338	4.6	LOS A	2.3	16.3	0.50	0.54	0.50	43.8
Approach		292	4.0	348	4.0	0.338	4.6	LOS A	2.3	16.3	0.50	0.54	0.50	44.9
North: Southbound Scott Street														
7	L2	110	4.0	131	4.0	0.484	7.6	LOS A	3.8	27.6	0.62	0.60	0.62	38.3
8	T1	189	4.0	225	4.0	0.484	3.8	LOS A	3.8	27.6	0.62	0.60	0.62	37.1
9	R2	122	4.0	145	4.0	0.484	4.2	LOS A	3.8	27.6	0.62	0.60	0.62	37.4
Approach		421	4.0	501	4.0	0.484	4.9	LOS A	3.8	27.6	0.62	0.60	0.62	37.5
West: Eastbound Toole														
10	L2	84	4.0	100	4.0	0.473	10.2	LOS B	3.5	25.5	0.74	0.74	0.74	43.3
11	T1	232	4.0	276	4.0	0.473	6.3	LOS A	3.5	25.5	0.74	0.74	0.74	44.2
12	R2	16	4.0	19	4.0	0.473	6.5	LOS A	3.5	25.5	0.74	0.74	0.74	41.8
Approach		332	4.0	395	4.0	0.473	7.3	LOS A	3.5	25.5	0.74	0.74	0.74	43.9
All Vehicles		1139	4.0	1356	4.0	0.484	5.6	LOS A	3.8	27.6	0.63	0.63	0.63	41.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Scott and Toole (Site Folder: General)]

2021 Peak AM Build with 50% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	2	4.0	2	4.0	0.180	9.5	LOS A	1.1	7.9	0.70	0.67	0.70	37.8
2	T1	95	4.0	113	4.0	0.180	5.7	LOS A	1.1	7.9	0.70	0.67	0.70	36.8
3	R2	10	4.0	12	4.0	0.180	6.1	LOS A	1.1	7.9	0.70	0.67	0.70	36.8
Approach		107	4.0	127	4.0	0.180	5.8	LOS A	1.1	7.9	0.70	0.67	0.70	36.9
East: Westbound Toole														
4	L2	7	4.0	8	4.0	0.364	8.7	LOS A	2.5	17.9	0.55	0.57	0.55	44.2
5	T1	185	4.0	220	4.0	0.364	4.8	LOS A	2.5	17.9	0.55	0.57	0.55	45.3
6	R2	111	4.0	132	4.0	0.364	4.9	LOS A	2.5	17.9	0.55	0.57	0.55	43.7
Approach		303	4.0	361	4.0	0.364	4.9	LOS A	2.5	17.9	0.55	0.57	0.55	44.7
North: Southbound Scott Street														
7	L2	125	4.0	149	4.0	0.558	7.8	LOS A	4.8	34.9	0.68	0.62	0.68	38.2
8	T1	218	4.0	260	4.0	0.558	4.0	LOS A	4.8	34.9	0.68	0.62	0.68	36.9
9	R2	146	4.0	174	4.0	0.558	4.4	LOS A	4.8	34.9	0.68	0.62	0.68	37.3
Approach		489	4.0	582	4.0	0.558	5.1	LOS A	4.8	34.9	0.68	0.62	0.68	37.4
West: Eastbound Toole														
10	L2	95	4.0	113	4.0	0.519	11.5	LOS B	4.3	31.2	0.80	0.83	0.87	42.6
11	T1	232	4.0	276	4.0	0.519	7.6	LOS A	4.3	31.2	0.80	0.83	0.87	43.6
12	R2	16	4.0	19	4.0	0.519	7.8	LOS A	4.3	31.2	0.80	0.83	0.87	41.1
Approach		343	4.0	408	4.0	0.519	8.7	LOS A	4.3	31.2	0.80	0.83	0.87	43.3
All Vehicles		1242	4.0	1479	4.0	0.558	6.1	LOS A	4.8	34.9	0.68	0.67	0.70	41.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Scott and Toole (Site Folder: General)]

2021 Peak AM Build with 75% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	2	4.0	2	4.0	0.211	9.8	LOS A	1.3	9.5	0.73	0.71	0.73	37.7
2	T1	109	4.0	130	4.0	0.211	6.1	LOS A	1.3	9.5	0.73	0.71	0.73	36.6
3	R2	10	4.0	12	4.0	0.211	6.4	LOS A	1.3	9.5	0.73	0.71	0.73	36.7
Approach		121	4.0	144	4.0	0.211	6.1	LOS A	1.3	9.5	0.73	0.71	0.73	36.6
East: Westbound Toole														
4	L2	7	4.0	8	4.0	0.392	9.0	LOS A	2.7	19.7	0.59	0.61	0.59	44.1
5	T1	185	4.0	220	4.0	0.392	5.1	LOS A	2.7	19.7	0.59	0.61	0.59	45.2
6	R2	123	4.0	146	4.0	0.392	5.2	LOS A	2.7	19.7	0.59	0.61	0.59	43.6
Approach		315	4.0	375	4.0	0.392	5.2	LOS A	2.7	19.7	0.59	0.61	0.59	44.6
North: Southbound Scott Street														
7	L2	139	4.0	165	4.0	0.632	8.3	LOS A	6.4	46.0	0.74	0.66	0.76	38.0
8	T1	248	4.0	295	4.0	0.632	4.6	LOS A	6.4	46.0	0.74	0.66	0.76	36.7
9	R2	170	4.0	202	4.0	0.632	4.9	LOS A	6.4	46.0	0.74	0.66	0.76	37.1
Approach		557	4.0	663	4.0	0.632	5.6	LOS A	6.4	46.0	0.74	0.66	0.76	37.2
West: Eastbound Toole														
10	L2	105	4.0	125	4.0	0.568	13.1	LOS B	5.2	37.9	0.86	0.93	1.00	41.7
11	T1	232	4.0	276	4.0	0.568	9.2	LOS A	5.2	37.9	0.86	0.93	1.00	42.8
12	R2	16	4.0	19	4.0	0.568	9.3	LOS A	5.2	37.9	0.86	0.93	1.00	40.0
Approach		353	4.0	420	4.0	0.568	10.3	LOS B	5.2	37.9	0.86	0.93	1.00	42.4
All Vehicles		1346	4.0	1602	4.0	0.632	6.8	LOS A	6.4	46.0	0.74	0.72	0.78	40.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Scott and Toole (Site Folder: General)]

2021 Peak AM Build with 100% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	2	4.0	2	4.0	0.243	10.2	LOS B	1.6	11.3	0.76	0.74	0.76	37.5
2	T1	122	4.0	145	4.0	0.243	6.4	LOS A	1.6	11.3	0.76	0.74	0.76	36.3
3	R2	10	4.0	12	4.0	0.243	6.8	LOS A	1.6	11.3	0.76	0.74	0.76	36.5
Approach		134	4.0	160	4.0	0.243	6.5	LOS A	1.6	11.3	0.76	0.74	0.76	36.4
East: Westbound Toole														
4	L2	7	4.0	8	4.0	0.419	9.3	LOS A	3.0	21.5	0.63	0.64	0.63	43.9
5	T1	185	4.0	220	4.0	0.419	5.4	LOS A	3.0	21.5	0.63	0.64	0.63	45.0
6	R2	134	4.0	160	4.0	0.419	5.6	LOS A	3.0	21.5	0.63	0.64	0.63	43.4
Approach		326	4.0	388	4.0	0.419	5.6	LOS A	3.0	21.5	0.63	0.64	0.63	44.4
North: Southbound Scott Street														
7	L2	154	4.0	183	4.0	0.706	9.4	LOS A	8.7	63.0	0.82	0.73	0.89	37.6
8	T1	277	4.0	330	4.0	0.706	5.6	LOS A	8.7	63.0	0.82	0.73	0.89	36.1
9	R2	194	4.0	231	4.0	0.706	6.0	LOS A	8.7	63.0	0.82	0.73	0.89	36.7
Approach		625	4.0	744	4.0	0.706	6.7	LOS A	8.7	63.0	0.82	0.73	0.89	36.8
West: Eastbound Toole														
10	L2	116	4.0	138	4.0	0.628	15.1	LOS B	6.5	46.7	0.92	1.03	1.16	40.4
11	T1	232	4.0	276	4.0	0.628	11.2	LOS B	6.5	46.7	0.92	1.03	1.16	41.7
12	R2	16	4.0	19	4.0	0.628	11.4	LOS B	6.5	46.7	0.92	1.03	1.16	38.8
Approach		364	4.0	433	4.0	0.628	12.5	LOS B	6.5	46.7	0.92	1.03	1.16	41.3
All Vehicles		1449	4.0	1725	4.0	0.706	7.9	LOS A	8.7	63.0	0.80	0.79	0.89	39.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Scott and Toole (Site Folder: General)]

Peak PM Build - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	9	1.0	10	1.0	0.292	9.6	LOS A	1.9	13.6	0.75	0.73	0.75	37.7
2	T1	144	1.0	158	1.0	0.292	5.9	LOS A	1.9	13.6	0.75	0.73	0.75	36.6
3	R2	37	1.0	41	1.0	0.292	6.3	LOS A	1.9	13.6	0.75	0.73	0.75	36.7
Approach		190	1.0	209	1.0	0.292	6.1	LOS A	1.9	13.6	0.75	0.73	0.75	36.7
East: Westbound Toole														
4	L2	37	1.0	41	1.0	0.501	9.4	LOS A	3.8	27.1	0.68	0.66	0.68	43.6
5	T1	282	1.0	310	1.0	0.501	5.6	LOS A	3.8	27.1	0.68	0.66	0.68	44.8
6	R2	116	1.0	127	1.0	0.501	5.7	LOS A	3.8	27.1	0.68	0.66	0.68	43.2
Approach		435	1.0	478	1.0	0.501	5.9	LOS A	3.8	27.1	0.68	0.66	0.68	44.3
North: Southbound Scott Street														
7	L2	99	1.0	109	1.0	0.559	9.5	LOS A	5.0	35.5	0.78	0.78	0.84	37.7
8	T1	244	1.0	268	1.0	0.559	5.8	LOS A	5.0	35.5	0.78	0.78	0.84	36.2
9	R2	113	1.0	124	1.0	0.559	6.1	LOS A	5.0	35.5	0.78	0.78	0.84	36.8
Approach		456	1.0	501	1.0	0.559	6.7	LOS A	5.0	35.5	0.78	0.78	0.84	36.8
West: Eastbound Toole														
10	L2	113	1.0	124	1.0	0.590	12.4	LOS B	5.7	40.1	0.84	0.89	0.97	42.2
11	T1	282	1.0	310	1.0	0.590	8.5	LOS A	5.7	40.1	0.84	0.89	0.97	43.2
12	R2	37	1.0	41	1.0	0.590	8.6	LOS A	5.7	40.1	0.84	0.89	0.97	40.5
Approach		432	1.0	475	1.0	0.590	9.5	LOS A	5.7	40.1	0.84	0.89	0.97	42.8
All Vehicles		1513	1.0	1663	1.0	0.590	7.2	LOS A	5.7	40.1	0.77	0.77	0.82	41.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Scott and Toole (Site Folder: General)]

Peak PM Build with 25% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	9	1.0	10	1.0	0.347	10.1	LOS B	2.4	16.9	0.80	0.78	0.80	37.4
2	T1	170	1.0	187	1.0	0.347	6.4	LOS A	2.4	16.9	0.80	0.78	0.80	36.3
3	R2	37	1.0	41	1.0	0.347	6.7	LOS A	2.4	16.9	0.80	0.78	0.80	36.4
Approach		216	1.0	237	1.0	0.347	6.6	LOS A	2.4	16.9	0.80	0.78	0.80	36.4
East: Westbound Toole														
4	L2	37	1.0	41	1.0	0.559	10.7	LOS B	4.9	34.3	0.75	0.76	0.81	43.0
5	T1	282	1.0	310	1.0	0.559	6.8	LOS A	4.9	34.3	0.75	0.76	0.81	44.4
6	R2	139	1.0	153	1.0	0.559	7.0	LOS A	4.9	34.3	0.75	0.76	0.81	42.7
Approach		458	1.0	503	1.0	0.559	7.2	LOS A	4.9	34.3	0.75	0.76	0.81	43.8
North: Southbound Scott Street														
7	L2	111	1.0	122	1.0	0.626	10.5	LOS B	6.6	46.3	0.84	0.85	0.96	37.2
8	T1	268	1.0	295	1.0	0.626	6.7	LOS A	6.6	46.3	0.84	0.85	0.96	35.6
9	R2	132	1.0	145	1.0	0.626	7.1	LOS A	6.6	46.3	0.84	0.85	0.96	36.4
Approach		511	1.0	562	1.0	0.626	7.6	LOS A	6.6	46.3	0.84	0.85	0.96	36.2
West: Eastbound Toole														
10	L2	133	1.0	146	1.0	0.648	14.1	LOS B	7.0	49.4	0.91	0.99	1.12	41.1
11	T1	282	1.0	310	1.0	0.648	10.3	LOS B	7.0	49.4	0.91	0.99	1.12	42.2
12	R2	37	1.0	41	1.0	0.648	10.4	LOS B	7.0	49.4	0.91	0.99	1.12	39.4
Approach		452	1.0	497	1.0	0.648	11.4	LOS B	7.0	49.4	0.91	0.99	1.12	41.7
All Vehicles		1637	1.0	1799	1.0	0.648	8.4	LOS A	7.0	49.4	0.83	0.85	0.94	40.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Scott and Toole (Site Folder: General)]

Peak PM Build with 50% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	9	1.0	10	1.0	0.411	10.9	LOS B	3.0	21.1	0.85	0.85	0.87	37.0
2	T1	196	1.0	215	1.0	0.411	7.1	LOS A	3.0	21.1	0.85	0.85	0.87	35.8
3	R2	37	1.0	41	1.0	0.411	7.5	LOS A	3.0	21.1	0.85	0.85	0.87	36.1
Approach		242	1.0	266	1.0	0.411	7.3	LOS A	3.0	21.1	0.85	0.85	0.87	35.9
East: Westbound Toole														
4	L2	37	1.0	41	1.0	0.621	12.5	LOS B	6.2	44.0	0.83	0.88	0.98	41.8
5	T1	282	1.0	310	1.0	0.621	8.7	LOS A	6.2	44.0	0.83	0.88	0.98	43.4
6	R2	161	1.0	177	1.0	0.621	8.8	LOS A	6.2	44.0	0.83	0.88	0.98	41.6
Approach		480	1.0	527	1.0	0.621	9.0	LOS A	6.2	44.0	0.83	0.88	0.98	42.8
North: Southbound Scott Street														
7	L2	123	1.0	135	1.0	0.694	11.7	LOS B	8.5	59.8	0.90	0.93	1.09	36.7
8	T1	291	1.0	320	1.0	0.694	8.0	LOS A	8.5	59.8	0.90	0.93	1.09	34.7
9	R2	151	1.0	166	1.0	0.694	8.3	LOS A	8.5	59.8	0.90	0.93	1.09	35.8
Approach		565	1.0	621	1.0	0.694	8.9	LOS A	8.5	59.8	0.90	0.93	1.09	35.6
West: Eastbound Toole														
10	L2	154	1.0	169	1.0	0.716	16.6	LOS B	8.8	62.0	0.97	1.10	1.31	39.6
11	T1	282	1.0	310	1.0	0.716	12.8	LOS B	8.8	62.0	0.97	1.10	1.31	41.0
12	R2	37	1.0	41	1.0	0.716	12.9	LOS B	8.8	62.0	0.97	1.10	1.31	37.9
Approach		473	1.0	520	1.0	0.716	14.0	LOS B	8.8	62.0	0.97	1.10	1.31	40.4
All Vehicles		1760	1.0	1934	1.0	0.716	10.1	LOS B	8.8	62.0	0.89	0.95	1.09	39.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Scott and Toole (Site Folder: General)]

Peak PM Build with 75% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	9	1.0	10	1.0	0.477	12.4	LOS B	3.9	27.2	0.89	0.94	1.00	36.2
2	T1	222	1.0	244	1.0	0.477	8.7	LOS A	3.9	27.2	0.89	0.94	1.00	34.7
3	R2	37	1.0	41	1.0	0.477	9.0	LOS A	3.9	27.2	0.89	0.94	1.00	35.3
Approach		268	1.0	295	1.0	0.477	8.9	LOS A	3.9	27.2	0.89	0.94	1.00	34.9
East: Westbound Toole														
4	L2	37	1.0	41	1.0	0.688	14.9	LOS B	7.9	56.1	0.90	1.00	1.17	40.3
5	T1	282	1.0	310	1.0	0.688	11.0	LOS B	7.9	56.1	0.90	1.00	1.17	42.3
6	R2	184	1.0	202	1.0	0.688	11.1	LOS B	7.9	56.1	0.90	1.00	1.17	40.3
Approach		503	1.0	553	1.0	0.688	11.3	LOS B	7.9	56.1	0.90	1.00	1.17	41.5
North: Southbound Scott Street														
7	L2	135	1.0	148	1.0	0.763	13.5	LOS B	11.1	78.1	0.97	1.03	1.25	35.9
8	T1	315	1.0	346	1.0	0.763	9.7	LOS A	11.1	78.1	0.97	1.03	1.25	33.6
9	R2	171	1.0	188	1.0	0.763	10.1	LOS B	11.1	78.1	0.97	1.03	1.25	35.1
Approach		621	1.0	682	1.0	0.763	10.7	LOS B	11.1	78.1	0.97	1.03	1.25	34.7
West: Eastbound Toole														
10	L2	174	1.0	191	1.0	0.790	20.5	LOS C	11.3	79.9	1.00	1.23	1.53	37.6
11	T1	282	1.0	310	1.0	0.790	16.7	LOS B	11.3	79.9	1.00	1.23	1.53	39.3
12	R2	37	1.0	41	1.0	0.790	16.8	LOS B	11.3	79.9	1.00	1.23	1.53	35.8
Approach		493	1.0	542	1.0	0.790	18.1	LOS B	11.3	79.9	1.00	1.23	1.53	38.5
All Vehicles		1885	1.0	2071	1.0	0.790	12.5	LOS B	11.3	79.9	0.95	1.06	1.27	37.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Scott and Toole (Site Folder: General)]

Peak PM Build with 100% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Scott Street														
1	L2	9	1.0	10	1.0	0.548	14.4	LOS B	4.9	34.7	0.93	1.05	1.14	35.3
2	T1	249	1.0	274	1.0	0.548	10.7	LOS B	4.9	34.7	0.93	1.05	1.14	33.5
3	R2	37	1.0	41	1.0	0.548	11.0	LOS B	4.9	34.7	0.93	1.05	1.14	34.4
Approach		295	1.0	324	1.0	0.548	10.9	LOS B	4.9	34.7	0.93	1.05	1.14	33.7
East: Westbound Toole														
4	L2	37	1.0	41	1.0	0.761	18.3	LOS B	10.3	72.6	0.98	1.16	1.42	38.2
5	T1	282	1.0	310	1.0	0.761	14.4	LOS B	10.3	72.6	0.98	1.16	1.42	40.6
6	R2	206	1.0	226	1.0	0.761	14.6	LOS B	10.3	72.6	0.98	1.16	1.42	38.5
Approach		525	1.0	577	1.0	0.761	14.8	LOS B	10.3	72.6	0.98	1.16	1.42	39.7
North: Southbound Scott Street														
7	L2	146	1.0	160	1.0	0.830	16.1	LOS B	14.6	102.8	1.00	1.13	1.41	34.8
8	T1	338	1.0	371	1.0	0.830	12.3	LOS B	14.6	102.8	1.00	1.13	1.41	32.2
9	R2	190	1.0	209	1.0	0.830	12.7	LOS B	14.6	102.8	1.00	1.13	1.41	34.0
Approach		674	1.0	741	1.0	0.830	13.2	LOS B	14.6	102.8	1.00	1.13	1.41	33.5
West: Eastbound Toole														
10	L2	195	1.0	214	1.0	0.867	27.1	LOS C	15.1	106.4	1.00	1.40	1.83	34.7
11	T1	282	1.0	310	1.0	0.867	23.2	LOS C	15.1	106.4	1.00	1.40	1.83	36.7
12	R2	37	1.0	41	1.0	0.867	23.3	LOS C	15.1	106.4	1.00	1.40	1.83	32.9
Approach		514	1.0	565	1.0	0.867	24.7	LOS C	15.1	106.4	1.00	1.40	1.83	35.8
All Vehicles		2008	1.0	2207	1.0	0.867	16.2	LOS B	15.1	106.4	0.98	1.20	1.48	35.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Orange Street and N. 5th St./I-90 (Site Folder: General)]

Peak AM Build - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Orange Street														
1u	U	1	3.0	1	3.0	0.322	9.1	LOS A	1.6	11.5	0.17	0.25	0.17	51.2
1	L2	54	3.0	57	3.0	0.322	7.2	LOS A	1.6	11.5	0.17	0.25	0.17	49.5
2	T1	235	3.0	250	3.0	0.322	0.7	LOS A	1.6	11.5	0.17	0.25	0.17	48.8
3	R2	181	3.0	193	3.0	0.322	1.9	LOS A	1.6	11.5	0.17	0.25	0.17	46.9
Approach		471	3.0	501	3.0	0.322	1.9	LOS A	1.6	11.5	0.17	0.25	0.17	48.0
North: Southbound Orange Street														
7	L2	1	3.0	1	3.0	0.238	7.2	LOS A	1.1	7.9	0.16	0.12	0.16	51.6
8	T1	315	3.0	335	3.0	0.238	0.8	LOS A	1.1	7.9	0.16	0.12	0.16	49.8
9	R2	22	3.0	23	3.0	0.238	1.9	LOS A	1.1	7.9	0.16	0.12	0.16	47.3
Approach		338	3.0	360	3.0	0.238	0.9	LOS A	1.1	7.9	0.16	0.12	0.16	49.6
NorthWest: I-90 EB Off-Ramp														
27b	L3	1	3.0	1	3.0	0.396	9.6	LOS A	1.8	12.6	0.45	0.34	0.45	30.2
27a	L1	1	3.0	1	3.0	0.396	7.6	LOS A	1.8	12.6	0.45	0.34	0.45	48.5
29a	R1	402	3.0	428	3.0	0.396	2.1	LOS A	1.8	12.6	0.45	0.34	0.45	47.7
29b	R3	3	3.0	3	3.0	0.396	3.7	LOS A	1.8	12.6	0.45	0.34	0.45	46.2
Approach		407	3.0	433	3.0	0.396	2.1	LOS A	1.8	12.6	0.45	0.34	0.45	47.6
West: Eastbound N. 5th Street W.														
10	L2	8	3.0	9	3.0	0.182	11.7	LOS B	1.2	8.7	0.76	0.70	0.76	26.3
11	T1	42	3.0	45	3.0	0.182	5.3	LOS A	1.2	8.7	0.76	0.70	0.76	46.2
12	R2	92	3.0	98	3.0	0.182	6.4	LOS A	1.2	8.7	0.76	0.70	0.76	44.9
Approach		142	3.0	151	3.0	0.182	6.3	LOS A	1.2	8.7	0.76	0.70	0.76	44.2
All Vehicles		1358	3.0	1445	3.0	0.396	2.2	LOS A	1.8	12.6	0.31	0.29	0.31	47.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Orange Street and N. 5th St./I-90 (Site Folder: General)]

Peak AM Build with 25% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Orange Street														
1u	U	1	3.0	1	3.0	0.334	9.1	LOS A	1.7	12.2	0.17	0.25	0.17	51.2
1	L2	59	3.0	63	3.0	0.334	7.2	LOS A	1.7	12.2	0.17	0.25	0.17	49.5
2	T1	248	3.0	264	3.0	0.334	0.7	LOS A	1.7	12.2	0.17	0.25	0.17	48.7
3	R2	181	3.0	193	3.0	0.334	1.9	LOS A	1.7	12.2	0.17	0.25	0.17	46.9
Approach		489	3.0	520	3.0	0.334	2.0	LOS A	1.7	12.2	0.17	0.25	0.17	48.0
North: Southbound Orange Street														
7	L2	1	3.0	1	3.0	0.240	7.3	LOS A	1.1	8.0	0.17	0.13	0.17	51.6
8	T1	315	3.0	335	3.0	0.240	0.8	LOS A	1.1	8.0	0.17	0.13	0.17	49.7
9	R2	22	3.0	23	3.0	0.240	1.9	LOS A	1.1	8.0	0.17	0.13	0.17	47.2
Approach		338	3.0	360	3.0	0.240	0.9	LOS A	1.1	8.0	0.17	0.13	0.17	49.6
NorthWest: I-90 EB Off-Ramp														
27b	L3	1	3.0	1	3.0	0.426	9.7	LOS A	2.0	14.1	0.47	0.36	0.47	30.2
27a	L1	1	3.0	1	3.0	0.426	7.7	LOS A	2.0	14.1	0.47	0.36	0.47	48.4
29a	R1	431	3.0	459	3.0	0.426	2.2	LOS A	2.0	14.1	0.47	0.36	0.47	47.6
29b	R3	3	3.0	3	3.0	0.426	3.8	LOS A	2.0	14.1	0.47	0.36	0.47	46.1
Approach		436	3.0	464	3.0	0.426	2.2	LOS A	2.0	14.1	0.47	0.36	0.47	47.6
West: Eastbound N. 5th Street W.														
10	L2	8	3.0	9	3.0	0.201	12.1	LOS B	1.4	9.7	0.78	0.72	0.78	26.2
11	T1	42	3.0	45	3.0	0.201	5.6	LOS A	1.4	9.7	0.78	0.72	0.78	46.0
12	R2	101	3.0	107	3.0	0.201	6.7	LOS A	1.4	9.7	0.78	0.72	0.78	44.7
Approach		151	3.0	161	3.0	0.201	6.7	LOS A	1.4	9.7	0.78	0.72	0.78	44.0
All Vehicles		1414	3.0	1504	3.0	0.426	2.3	LOS A	2.0	14.1	0.33	0.30	0.33	47.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Orange Street and N. 5th St./I-90 (Site Folder: General)]

Peak AM Build with 50% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Orange Street														
1u	U	1	3.0	1	3.0	0.346	9.1	LOS A	1.8	12.9	0.17	0.25	0.17	51.1
1	L2	64	3.0	68	3.0	0.346	7.2	LOS A	1.8	12.9	0.17	0.25	0.17	49.5
2	T1	261	3.0	278	3.0	0.346	0.7	LOS A	1.8	12.9	0.17	0.25	0.17	48.7
3	R2	181	3.0	193	3.0	0.346	1.9	LOS A	1.8	12.9	0.17	0.25	0.17	46.9
Approach		507	3.0	539	3.0	0.346	2.0	LOS A	1.8	12.9	0.17	0.25	0.17	48.0
North: Southbound Orange Street														
7	L2	1	3.0	1	3.0	0.242	7.3	LOS A	1.1	8.1	0.18	0.13	0.18	51.5
8	T1	315	3.0	335	3.0	0.242	0.8	LOS A	1.1	8.1	0.18	0.13	0.18	49.7
9	R2	22	3.0	23	3.0	0.242	2.0	LOS A	1.1	8.1	0.18	0.13	0.18	47.2
Approach		338	3.0	360	3.0	0.242	0.9	LOS A	1.1	8.1	0.18	0.13	0.18	49.5
NorthWest: I-90 EB Off-Ramp														
27b	L3	1	3.0	1	3.0	0.457	9.8	LOS A	2.2	15.6	0.49	0.37	0.49	30.1
27a	L1	1	3.0	1	3.0	0.457	7.8	LOS A	2.2	15.6	0.49	0.37	0.49	48.3
29a	R1	461	3.0	490	3.0	0.457	2.3	LOS A	2.2	15.6	0.49	0.37	0.49	47.6
29b	R3	3	3.0	3	3.0	0.457	3.9	LOS A	2.2	15.6	0.49	0.37	0.49	46.1
Approach		466	3.0	496	3.0	0.457	2.3	LOS A	2.2	15.6	0.49	0.37	0.49	47.5
West: Eastbound N. 5th Street W.														
10	L2	8	3.0	9	3.0	0.222	12.5	LOS B	1.5	11.0	0.81	0.75	0.81	26.0
11	T1	42	3.0	45	3.0	0.222	6.0	LOS A	1.5	11.0	0.81	0.75	0.81	45.8
12	R2	111	3.0	118	3.0	0.222	7.2	LOS A	1.5	11.0	0.81	0.75	0.81	44.5
Approach		161	3.0	171	3.0	0.222	7.1	LOS A	1.5	11.0	0.81	0.75	0.81	43.8
All Vehicles		1472	3.0	1566	3.0	0.457	2.4	LOS A	2.2	15.6	0.34	0.31	0.34	47.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Orange Street and N. 5th St./I-90 (Site Folder: General)]

Peak AM Build with 75% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Orange Street														
1u	U	1	3.0	1	3.0	0.358	9.1	LOS A	1.9	13.7	0.18	0.25	0.18	51.1
1	L2	68	3.0	72	3.0	0.358	7.2	LOS A	1.9	13.7	0.18	0.25	0.18	49.4
2	T1	275	3.0	293	3.0	0.358	0.7	LOS A	1.9	13.7	0.18	0.25	0.18	48.6
3	R2	181	3.0	193	3.0	0.358	1.9	LOS A	1.9	13.7	0.18	0.25	0.18	46.9
Approach		525	3.0	559	3.0	0.358	2.0	LOS A	1.9	13.7	0.18	0.25	0.18	48.0
North: Southbound Orange Street														
7	L2	1	3.0	1	3.0	0.243	7.3	LOS A	1.1	8.1	0.19	0.13	0.19	51.4
8	T1	315	3.0	335	3.0	0.243	0.8	LOS A	1.1	8.1	0.19	0.13	0.19	49.6
9	R2	22	3.0	23	3.0	0.243	2.0	LOS A	1.1	8.1	0.19	0.13	0.19	47.1
Approach		338	3.0	360	3.0	0.243	0.9	LOS A	1.1	8.1	0.19	0.13	0.19	49.5
NorthWest: I-90 EB Off-Ramp														
27b	L3	1	3.0	1	3.0	0.486	10.0	LOS A	2.5	17.9	0.50	0.41	0.52	30.1
27a	L1	1	3.0	1	3.0	0.486	8.0	LOS A	2.5	17.9	0.50	0.41	0.52	48.3
29a	R1	490	3.0	521	3.0	0.486	2.5	LOS A	2.5	17.9	0.50	0.41	0.52	47.5
29b	R3	3	3.0	3	3.0	0.486	4.1	LOS A	2.5	17.9	0.50	0.41	0.52	46.0
Approach		495	3.0	527	3.0	0.486	2.5	LOS A	2.5	17.9	0.50	0.41	0.52	47.4
West: Eastbound N. 5th Street W.														
10	L2	8	3.0	9	3.0	0.243	13.0	LOS B	1.7	12.3	0.83	0.78	0.83	25.9
11	T1	42	3.0	45	3.0	0.243	6.5	LOS A	1.7	12.3	0.83	0.78	0.83	45.6
12	R2	120	3.0	128	3.0	0.243	7.6	LOS A	1.7	12.3	0.83	0.78	0.83	44.2
Approach		170	3.0	181	3.0	0.243	7.6	LOS A	1.7	12.3	0.83	0.78	0.83	43.6
All Vehicles		1528	3.0	1626	3.0	0.486	2.5	LOS A	2.5	17.9	0.36	0.33	0.36	47.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Orange Street and N. 5th St./I-90 (Site Folder: General)]

Peak AM Build with 100% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Orange Street														
1u	U	1	3.0	1	3.0	0.370	9.1	LOS A	2.0	14.6	0.18	0.25	0.18	51.1
1	L2	73	3.0	78	3.0	0.370	7.2	LOS A	2.0	14.6	0.18	0.25	0.18	49.4
2	T1	288	3.0	306	3.0	0.370	0.7	LOS A	2.0	14.6	0.18	0.25	0.18	48.6
3	R2	181	3.0	193	3.0	0.370	2.0	LOS A	2.0	14.6	0.18	0.25	0.18	46.9
Approach		543	3.0	578	3.0	0.370	2.0	LOS A	2.0	14.6	0.18	0.25	0.18	48.0
North: Southbound Orange Street														
7	L2	1	3.0	1	3.0	0.244	7.3	LOS A	1.1	8.2	0.19	0.13	0.19	51.4
8	T1	315	3.0	335	3.0	0.244	0.8	LOS A	1.1	8.2	0.19	0.13	0.19	49.6
9	R2	22	3.0	23	3.0	0.244	2.0	LOS A	1.1	8.2	0.19	0.13	0.19	47.1
Approach		338	3.0	360	3.0	0.244	0.9	LOS A	1.1	8.2	0.19	0.13	0.19	49.4
NorthWest: I-90 EB Off-Ramp														
27b	L3	1	3.0	1	3.0	0.516	10.2	LOS B	2.8	20.4	0.52	0.46	0.56	30.0
27a	L1	1	3.0	1	3.0	0.516	8.2	LOS A	2.8	20.4	0.52	0.46	0.56	48.2
29a	R1	520	3.0	553	3.0	0.516	2.7	LOS A	2.8	20.4	0.52	0.46	0.56	47.4
29b	R3	3	3.0	3	3.0	0.516	4.3	LOS A	2.8	20.4	0.52	0.46	0.56	45.9
Approach		525	3.0	559	3.0	0.516	2.7	LOS A	2.8	20.4	0.52	0.46	0.56	47.4
West: Eastbound N. 5th Street W.														
10	L2	8	3.0	9	3.0	0.266	13.4	LOS B	1.9	13.8	0.86	0.81	0.86	25.7
11	T1	42	3.0	45	3.0	0.266	7.0	LOS A	1.9	13.8	0.86	0.81	0.86	45.3
12	R2	129	3.0	137	3.0	0.266	8.1	LOS A	1.9	13.8	0.86	0.81	0.86	44.0
Approach		179	3.0	190	3.0	0.266	8.1	LOS A	1.9	13.8	0.86	0.81	0.86	43.4
All Vehicles		1585	3.0	1686	3.0	0.516	2.7	LOS A	2.8	20.4	0.38	0.36	0.39	47.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Orange Street and N. 5th St./I-90 (Site Folder: General)]

Peak PM Build - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Orange Street														
1u	U	3	3.0	3	3.0	0.709	9.3	LOS A	6.9	49.8	0.35	0.27	0.35	50.4
1	L2	142	3.0	160	3.0	0.709	7.4	LOS A	6.9	49.8	0.35	0.27	0.35	48.8
2	T1	492	3.0	553	3.0	0.709	0.9	LOS A	6.9	49.8	0.35	0.27	0.35	47.6
3	R2	357	3.0	401	3.0	0.709	2.1	LOS A	6.9	49.8	0.35	0.27	0.35	46.3
Approach		994	3.0	1117	3.0	0.709	2.3	LOS A	6.9	49.8	0.35	0.27	0.35	47.2
North: Southbound Orange Street														
7	L2	1	3.0	1	3.0	0.382	7.7	LOS A	2.2	15.8	0.35	0.22	0.35	50.2
8	T1	358	3.0	402	3.0	0.382	1.2	LOS A	2.2	15.8	0.35	0.22	0.35	48.5
9	R2	105	3.0	118	3.0	0.382	2.4	LOS A	2.2	15.8	0.35	0.22	0.35	46.1
Approach		464	3.0	521	3.0	0.382	1.5	LOS A	2.2	15.8	0.35	0.22	0.35	47.9
NorthWest: I-90 EB Off-Ramp														
27b	L3	1	3.0	1	3.0	0.618	13.6	LOS B	5.0	35.9	0.75	0.87	0.97	29.0
27a	L1	1	3.0	1	3.0	0.618	11.6	LOS B	5.0	35.9	0.75	0.87	0.97	46.6
29a	R1	470	3.0	528	3.0	0.618	6.1	LOS A	5.0	35.9	0.75	0.87	0.97	45.8
29b	R3	23	3.0	26	3.0	0.618	7.7	LOS A	5.0	35.9	0.75	0.87	0.97	44.5
Approach		495	3.0	556	3.0	0.618	6.2	LOS A	5.0	35.9	0.75	0.87	0.97	45.8
West: Eastbound N. 5th Street W.														
10	L2	6	3.0	7	3.0	0.222	13.9	LOS B	1.6	11.7	0.89	0.81	0.89	25.8
11	T1	52	3.0	58	3.0	0.222	7.4	LOS A	1.6	11.7	0.89	0.81	0.89	45.2
12	R2	71	3.0	80	3.0	0.222	8.5	LOS A	1.6	11.7	0.89	0.81	0.89	43.9
Approach		129	3.0	145	3.0	0.222	8.3	LOS A	1.6	11.7	0.89	0.81	0.89	43.5
All Vehicles		2082	3.0	2339	3.0	0.709	3.4	LOS A	6.9	49.8	0.48	0.44	0.53	46.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Orange Street and N. 5th St./I-90 (Site Folder: General)]

Peak PM Build with 25% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Orange Street														
1u	U	3	3.0	3	3.0	0.733	9.3	LOS A	7.8	55.9	0.37	0.28	0.37	50.3
1	L2	151	3.0	170	3.0	0.733	7.4	LOS A	7.8	55.9	0.37	0.28	0.37	48.7
2	T1	518	3.0	582	3.0	0.733	0.9	LOS A	7.8	55.9	0.37	0.28	0.37	47.5
3	R2	357	3.0	401	3.0	0.733	2.2	LOS A	7.8	55.9	0.37	0.28	0.37	46.2
Approach		1029	3.0	1156	3.0	0.733	2.3	LOS A	7.8	55.9	0.37	0.28	0.37	47.2
North: Southbound Orange Street														
7	L2	1	3.0	1	3.0	0.386	7.8	LOS A	2.2	16.1	0.37	0.23	0.37	50.1
8	T1	358	3.0	402	3.0	0.386	1.3	LOS A	2.2	16.1	0.37	0.23	0.37	48.4
9	R2	105	3.0	118	3.0	0.386	2.5	LOS A	2.2	16.1	0.37	0.23	0.37	46.0
Approach		464	3.0	521	3.0	0.386	1.6	LOS A	2.2	16.1	0.37	0.23	0.37	47.8
NorthWest: I-90 EB Off-Ramp														
27b	L3	1	3.0	1	3.0	0.654	14.3	LOS B	5.7	41.1	0.79	0.92	1.05	28.7
27a	L1	1	3.0	1	3.0	0.654	12.4	LOS B	5.7	41.1	0.79	0.92	1.05	46.2
29a	R1	494	3.0	555	3.0	0.654	6.8	LOS A	5.7	41.1	0.79	0.92	1.05	45.5
29b	R3	23	3.0	26	3.0	0.654	8.4	LOS A	5.7	41.1	0.79	0.92	1.05	44.1
Approach		519	3.0	583	3.0	0.654	6.9	LOS A	5.7	41.1	0.79	0.92	1.05	45.4
West: Eastbound N. 5th Street W.														
10	L2	6	3.0	7	3.0	0.246	14.3	LOS B	1.8	13.3	0.91	0.84	0.91	25.6
11	T1	52	3.0	58	3.0	0.246	7.9	LOS A	1.8	13.3	0.91	0.84	0.91	44.9
12	R2	79	3.0	89	3.0	0.246	9.0	LOS A	1.8	13.3	0.91	0.84	0.91	43.6
Approach		137	3.0	154	3.0	0.246	8.8	LOS A	1.8	13.3	0.91	0.84	0.91	43.3
All Vehicles		2149	3.0	2415	3.0	0.733	3.7	LOS A	7.8	55.9	0.51	0.46	0.57	46.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Orange Street and N. 5th St./I-90 (Site Folder: General)]

Peak PM Build with 50% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Orange Street														
1u	U	3	3.0	3	3.0	0.758	9.4	LOS A	8.8	63.4	0.40	0.28	0.40	50.2
1	L2	161	3.0	181	3.0	0.758	7.4	LOS A	8.8	63.4	0.40	0.28	0.40	48.6
2	T1	545	3.0	612	3.0	0.758	0.9	LOS A	8.8	63.4	0.40	0.28	0.40	47.4
3	R2	357	3.0	401	3.0	0.758	2.2	LOS A	8.8	63.4	0.40	0.28	0.40	46.1
Approach		1066	3.0	1198	3.0	0.758	2.4	LOS A	8.8	63.4	0.40	0.28	0.40	47.1
North: Southbound Orange Street														
7	L2	1	3.0	1	3.0	0.390	7.8	LOS A	2.3	16.5	0.39	0.24	0.39	50.0
8	T1	358	3.0	402	3.0	0.390	1.3	LOS A	2.3	16.5	0.39	0.24	0.39	48.3
9	R2	105	3.0	118	3.0	0.390	2.5	LOS A	2.3	16.5	0.39	0.24	0.39	45.9
Approach		464	3.0	521	3.0	0.390	1.6	LOS A	2.3	16.5	0.39	0.24	0.39	47.7
NorthWest: I-90 EB Off-Ramp														
27b	L3	1	3.0	1	3.0	0.691	15.2	LOS B	6.6	47.2	0.82	0.99	1.14	28.4
27a	L1	1	3.0	1	3.0	0.691	13.2	LOS B	6.6	47.2	0.82	0.99	1.14	45.7
29a	R1	517	3.0	581	3.0	0.691	7.7	LOS A	6.6	47.2	0.82	0.99	1.14	45.0
29b	R3	23	3.0	26	3.0	0.691	9.3	LOS A	6.6	47.2	0.82	0.99	1.14	43.6
Approach		542	3.0	609	3.0	0.691	7.8	LOS A	6.6	47.2	0.82	0.99	1.14	44.9
West: Eastbound N. 5th Street W.														
10	L2	6	3.0	7	3.0	0.271	14.8	LOS B	2.1	14.9	0.93	0.87	0.93	25.4
11	T1	52	3.0	58	3.0	0.271	8.4	LOS A	2.1	14.9	0.93	0.87	0.93	44.6
12	R2	86	3.0	97	3.0	0.271	9.5	LOS A	2.1	14.9	0.93	0.87	0.93	43.3
Approach		144	3.0	162	3.0	0.271	9.3	LOS A	2.1	14.9	0.93	0.87	0.93	43.0
All Vehicles		2216	3.0	2490	3.0	0.758	4.0	LOS A	8.8	63.4	0.53	0.48	0.61	46.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Orange Street and N. 5th St./I-90 (Site Folder: General)]

Peak PM Build with 75% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Orange Street														
1u	U	3	3.0	3	3.0	0.783	9.4	LOS A	10.0	71.9	0.43	0.28	0.43	50.1
1	L2	170	3.0	191	3.0	0.783	7.4	LOS A	10.0	71.9	0.43	0.28	0.43	48.5
2	T1	571	3.0	642	3.0	0.783	1.0	LOS A	10.0	71.9	0.43	0.28	0.43	47.2
3	R2	357	3.0	401	3.0	0.783	2.2	LOS A	10.0	71.9	0.43	0.28	0.43	46.0
Approach		1101	3.0	1237	3.0	0.783	2.4	LOS A	10.0	71.9	0.43	0.28	0.43	47.0
North: Southbound Orange Street														
7	L2	1	3.0	1	3.0	0.394	7.9	LOS A	2.4	16.9	0.40	0.25	0.40	49.9
8	T1	358	3.0	402	3.0	0.394	1.4	LOS A	2.4	16.9	0.40	0.25	0.40	48.2
9	R2	105	3.0	118	3.0	0.394	2.6	LOS A	2.4	16.9	0.40	0.25	0.40	45.8
Approach		464	3.0	521	3.0	0.394	1.7	LOS A	2.4	16.9	0.40	0.25	0.40	47.6
NorthWest: I-90 EB Off-Ramp														
27b	L3	1	3.0	1	3.0	0.729	16.2	LOS B	7.6	54.5	0.85	1.05	1.24	28.1
27a	L1	1	3.0	1	3.0	0.729	14.3	LOS B	7.6	54.5	0.85	1.05	1.24	45.1
29a	R1	541	3.0	608	3.0	0.729	8.7	LOS A	7.6	54.5	0.85	1.05	1.24	44.4
29b	R3	23	3.0	26	3.0	0.729	10.3	LOS B	7.6	54.5	0.85	1.05	1.24	43.1
Approach		566	3.0	636	3.0	0.729	8.8	LOS A	7.6	54.5	0.85	1.05	1.24	44.3
West: Eastbound N. 5th Street W.														
10	L2	6	3.0	7	3.0	0.298	15.4	LOS B	2.3	16.7	0.96	0.90	0.96	25.3
11	T1	52	3.0	58	3.0	0.298	8.9	LOS A	2.3	16.7	0.96	0.90	0.96	44.3
12	R2	93	3.0	104	3.0	0.298	10.0	LOS B	2.3	16.7	0.96	0.90	0.96	43.1
Approach		151	3.0	170	3.0	0.298	9.9	LOS A	2.3	16.7	0.96	0.90	0.96	42.7
All Vehicles		2282	3.0	2564	3.0	0.783	4.3	LOS A	10.0	71.9	0.57	0.51	0.66	45.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Orange Street and N. 5th St./I-90 (Site Folder: General)]

Peak PM Build with 100% Neighborhood Growth - Proposed Network
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Northbound Orange Street														
1u	U	3	3.0	3	3.0	0.807	9.4	LOS A	11.4	82.1	0.47	0.28	0.47	50.0
1	L2	179	3.0	201	3.0	0.807	7.5	LOS A	11.4	82.1	0.47	0.28	0.47	48.4
2	T1	597	3.0	671	3.0	0.807	1.0	LOS A	11.4	82.1	0.47	0.28	0.47	47.0
3	R2	357	3.0	401	3.0	0.807	2.3	LOS A	11.4	82.1	0.47	0.28	0.47	45.9
Approach		1136	3.0	1276	3.0	0.807	2.4	LOS A	11.4	82.1	0.47	0.28	0.47	46.9
North: Southbound Orange Street														
7	L2	1	3.0	1	3.0	0.399	7.9	LOS A	2.4	17.3	0.42	0.25	0.42	49.8
8	T1	358	3.0	402	3.0	0.399	1.4	LOS A	2.4	17.3	0.42	0.25	0.42	48.1
9	R2	105	3.0	118	3.0	0.399	2.6	LOS A	2.4	17.3	0.42	0.25	0.42	45.7
Approach		464	3.0	521	3.0	0.399	1.7	LOS A	2.4	17.3	0.42	0.25	0.42	47.5
NorthWest: I-90 EB Off-Ramp														
27b	L3	1	3.0	1	3.0	0.768	17.5	LOS B	8.8	63.4	0.89	1.13	1.37	27.6
27a	L1	1	3.0	1	3.0	0.768	15.6	LOS B	8.8	63.4	0.89	1.13	1.37	44.4
29a	R1	564	3.0	634	3.0	0.768	10.0	LOS B	8.8	63.4	0.89	1.13	1.37	43.7
29b	R3	23	3.0	26	3.0	0.768	11.7	LOS B	8.8	63.4	0.89	1.13	1.37	42.5
Approach		589	3.0	662	3.0	0.768	10.1	LOS B	8.8	63.4	0.89	1.13	1.37	43.7
West: Eastbound N. 5th Street W.														
10	L2	6	3.0	7	3.0	0.331	16.0	LOS B	2.6	18.9	0.98	0.93	0.98	25.1
11	T1	52	3.0	58	3.0	0.331	9.5	LOS A	2.6	18.9	0.98	0.93	0.98	44.0
12	R2	101	3.0	113	3.0	0.331	10.6	LOS B	2.6	18.9	0.98	0.93	0.98	42.8
Approach		159	3.0	179	3.0	0.331	10.5	LOS B	2.6	18.9	0.98	0.93	0.98	42.5
All Vehicles		2348	3.0	2638	3.0	0.807	4.8	LOS A	11.4	82.1	0.60	0.53	0.72	45.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

HCS7 Two-Way Stop-Control Report

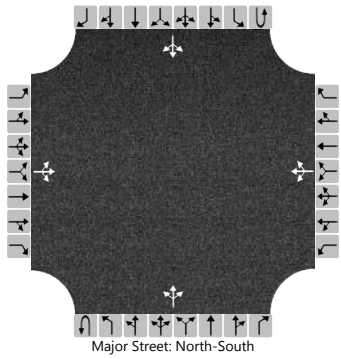
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro AM Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Grant Cr & Howard Raser
Jurisdiction	
East/West Street	Howard Raser Avenue
North/South Street	Grant Creek Road
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		28	19	91		0	5	1		106	52	2		0	28	44
Percent Heavy Vehicles (%)		21	21	21		21	21	21		21				21		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.31	6.71	6.41		7.31	6.71	6.41		4.31				4.31		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.69	4.19	3.49		3.69	4.19	3.49		2.39				2.39		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			170				7			131				0		
Capacity, c (veh/h)			713				494			1395				1422		
v/c Ratio			0.24				0.02			0.09				0.00		
95% Queue Length, Q_{95} (veh)			0.9				0.0			0.3				0.0		
Control Delay (s/veh)			11.6				12.4			7.8				7.5		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)		11.6				12.4				5.5				0.0		
Approach LOS		B				B										

HCS7 Two-Way Stop-Control Report

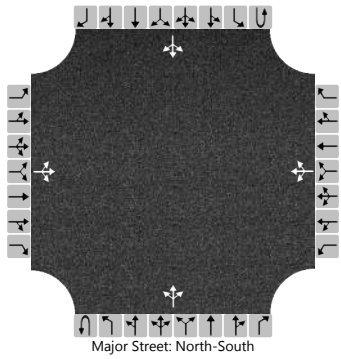
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro AM 25%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Grant Cr & Howard Raser
Jurisdiction	
East/West Street	Howard Raser Avenue
North/South Street	Grant Creek Road
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		28	24	96		0	15	1		115	52	2		0	28	44
Percent Heavy Vehicles (%)		21	21	21		21	21	21		21				21		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.31	6.71	6.41		7.31	6.71	6.41		4.31				4.31		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.69	4.19	3.49		3.69	4.19	3.49		2.39				2.39		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			183				20			142				0		
Capacity, c (veh/h)			685				449			1395				1422		
v/c Ratio			0.27				0.04			0.10				0.00		
95% Queue Length, Q_{95} (veh)			1.1				0.1			0.3				0.0		
Control Delay (s/veh)			12.2				13.4			7.9				7.5		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	12.2				13.4				5.6				0.0			
Approach LOS	B				B											

HCS7 Two-Way Stop-Control Report

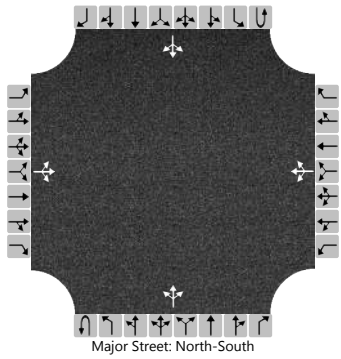
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro AM 50%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Grant Cr & Howard Raser
Jurisdiction	
East/West Street	Howard Raser Avenue
North/South Street	Grant Creek Road
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		28	28	100		0	24	1		125	52	2		0	28	44
Percent Heavy Vehicles (%)		21	21	21		21	21	21		21				21		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.31	6.71	6.41		7.31	6.71	6.41		4.31				4.31		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.69	4.19	3.49		3.69	4.19	3.49		2.39				2.39		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			193				31			154				0		
Capacity, c (veh/h)			659				425			1395				1422		
v/c Ratio			0.29				0.07			0.11				0.00		
95% Queue Length, Q_{95} (veh)			1.2				0.2			0.4				0.0		
Control Delay (s/veh)			12.7				14.1			7.9				7.5		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	12.7				14.1				5.8				0.0			
Approach LOS	B				B											

HCS7 Two-Way Stop-Control Report

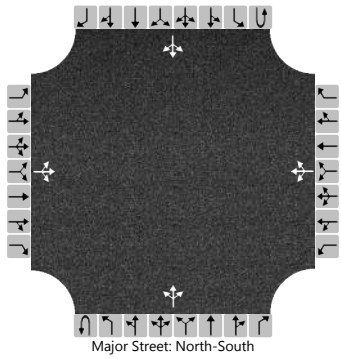
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro AM 75%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Grant Cr & Howard Raser
Jurisdiction	
East/West Street	Howard Raser Avenue
North/South Street	Grant Creek Road
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		28	33	105		0	33	1		134	52	2		0	28	44
Percent Heavy Vehicles (%)		21	21	21		21	21	21		21				21		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.31	6.71	6.41		7.31	6.71	6.41		4.31				4.31		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.69	4.19	3.49		3.69	4.19	3.49		2.39				2.39		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			205				42			165				0		
Capacity, c (veh/h)			634				406			1395				1422		
v/c Ratio			0.32				0.10			0.12				0.00		
95% Queue Length, Q_{95} (veh)			1.4				0.3			0.4				0.0		
Control Delay (s/veh)			13.4				14.9			7.9				7.5		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	13.4				14.9				5.9				0.0			
Approach LOS	B				B											

HCS7 Two-Way Stop-Control Report

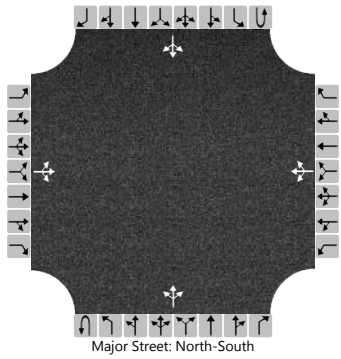
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	ProAM 100%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Grant Cr & Howard Raser
Jurisdiction	
East/West Street	Howard Raser Avenue
North/South Street	Grant Creek Road
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		28	38	110		0	42	1		143	52	2		0	28	44
Percent Heavy Vehicles (%)		21	21	21		21	21	21		21				21		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.31	6.71	6.41		7.31	6.71	6.41		4.31				4.31		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.69	4.19	3.49		3.69	4.19	3.49		2.39				2.39		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			217				53			177				0		
Capacity, c (veh/h)			610				389			1395				1422		
v/c Ratio			0.36				0.14			0.13				0.00		
95% Queue Length, Q_{95} (veh)			1.6				0.5			0.4				0.0		
Control Delay (s/veh)			14.1				15.7			8.0				7.5		
Level of Service (LOS)			B				C			A				A		
Approach Delay (s/veh)	14.1				15.7				6.1				0.0			
Approach LOS	B				C											

HCS7 Two-Way Stop-Control Report

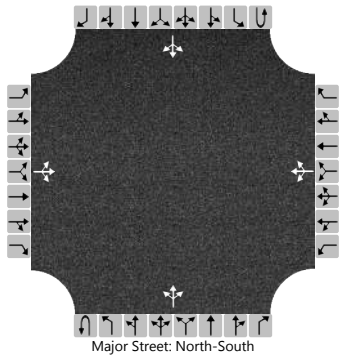
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro PM Build
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Grant Cr & Howard Raser
Jurisdiction	
East/West Street	Howard Raser Avenue
North/South Street	Grant Creek Road
Peak Hour Factor	0.87
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		33	8	132		3	21	6		178	96	0		1	38	51
Percent Heavy Vehicles (%)		4	4	4		4	4	4		4				4		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.14	6.54	6.24		7.14	6.54	6.24		4.14				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.54	4.04	3.34		3.54	4.04	3.34		2.24				2.24		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			199				34			205				1		
Capacity, c (veh/h)			678				378			1477				1467		
v/c Ratio			0.29				0.09			0.14				0.00		
95% Queue Length, Q_{95} (veh)			1.2				0.3			0.5				0.0		
Control Delay (s/veh)			12.5				15.5			7.8				7.5		
Level of Service (LOS)			B				C			A				A		
Approach Delay (s/veh)	12.5				15.5				5.5				0.1			
Approach LOS	B				C											

HCS7 Two-Way Stop-Control Report

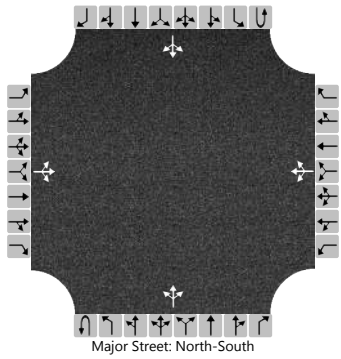
General Information

Analyst	DBG
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro PM 25%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Grant Cr & Howard Raser
Jurisdiction	
East/West Street	Howard Raser Avenue
North/South Street	Grant Creek Road
Peak Hour Factor	0.87
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		33	18	141		3	29	6		185	96	0		1	38	51
Percent Heavy Vehicles (%)		4	4	4		4	4	4		4				4		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.14	6.54	6.24		7.14	6.54	6.24		4.14				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.54	4.04	3.34		3.54	4.04	3.34		2.24				2.24		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			221				44			213				1		
Capacity, c (veh/h)			640				357			1477				1467		
v/c Ratio			0.34				0.12			0.14				0.00		
95% Queue Length, Q_{95} (veh)			1.5				0.4			0.5				0.0		
Control Delay (s/veh)			13.6				16.5			7.8				7.5		
Level of Service (LOS)			B				C			A				A		
Approach Delay (s/veh)	13.6				16.5				5.6				0.1			
Approach LOS	B				C											

HCS7 Two-Way Stop-Control Report

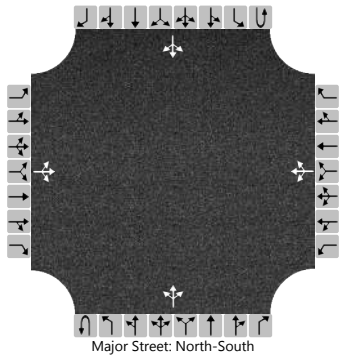
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro PM 50%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Grant Cr & Howard Raser
Jurisdiction	
East/West Street	Howard Raser Avenue
North/South Street	Grant Creek Road
Peak Hour Factor	0.87
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		33	27	151		3	36	6		193	96	0		1	38	51
Percent Heavy Vehicles (%)		4	4	4		4	4	4		4				4		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.14	6.54	6.24		7.14	6.54	6.24		4.14				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.54	4.04	3.34		3.54	4.04	3.34		2.24				2.24		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			243				52			222				1		
Capacity, c (veh/h)			610				340			1477				1467		
v/c Ratio			0.40				0.15			0.15				0.00		
95% Queue Length, Q_{95} (veh)			1.9				0.5			0.5				0.0		
Control Delay (s/veh)			14.7				17.5			7.9				7.5		
Level of Service (LOS)			B				C			A				A		
Approach Delay (s/veh)	14.7				17.5				5.7				0.1			
Approach LOS	B				C											

HCS7 Two-Way Stop-Control Report

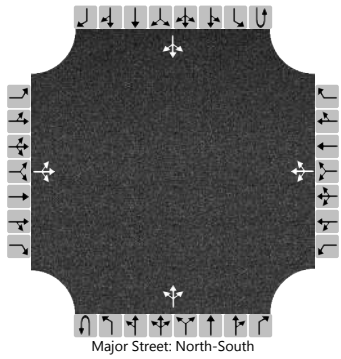
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	Pro PM 75%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Grant Cr & Howard Raser
Jurisdiction	
East/West Street	Howard Raser Avenue
North/South Street	Grant Creek Road
Peak Hour Factor	0.87
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		33	36	160		3	43	6		200	96	0		1	38	51
Percent Heavy Vehicles (%)		4	4	4		4	4	4		4				4		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.14	6.54	6.24		7.14	6.54	6.24		4.14				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.54	4.04	3.34		3.54	4.04	3.34		2.24				2.24		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			263				60			230				1		
Capacity, c (veh/h)			584				327			1477				1467		
v/c Ratio			0.45				0.18			0.16				0.00		
95% Queue Length, Q_{95} (veh)			2.3				0.7			0.6				0.0		
Control Delay (s/veh)			16.1				18.5			7.9				7.5		
Level of Service (LOS)			C				C			A				A		
Approach Delay (s/veh)	16.1				18.5				5.8				0.1			
Approach LOS	C				C											

HCS7 Two-Way Stop-Control Report

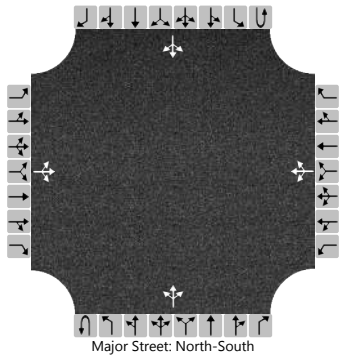
General Information

Analyst	AM
Agency/Co.	WGM Group
Date Performed	10/11/21
Analysis Year	2021
Time Analyzed	ProPM 100%NeighborhoodGrw
Intersection Orientation	North-South
Project Description	Scott Street Master Planning

Site Information

Intersection	Grant Cr & Howard Raser
Jurisdiction	
East/West Street	Howard Raser Avenue
North/South Street	Grant Creek Road
Peak Hour Factor	0.87
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		33	46	169		3	51	6		207	96	0		1	38	51
Percent Heavy Vehicles (%)		4	4	4		4	4	4		4				4		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.14	6.54	6.24		7.14	6.54	6.24		4.14				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.54	4.04	3.34		3.54	4.04	3.34		2.24				2.24		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			285				69			238				1		
Capacity, c (veh/h)			558				314			1477				1467		
v/c Ratio			0.51				0.22			0.16				0.00		
95% Queue Length, Q_{95} (veh)			2.9				0.8			0.6				0.0		
Control Delay (s/veh)			18.0				19.7			7.9				7.5		
Level of Service (LOS)			C				C			A				A		
Approach Delay (s/veh)	18.0				19.7				5.8				0.1			
Approach LOS	C				C											

APPENDIX E

LEVEL OF SERVICE DEFINITIONS

UNSIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINED

Level of Service (LOS) for unsignalized (two-way-stop-controlled) intersections is determined by the control delay experienced by drivers on each minor approach. Minor movements are those entering from or exiting onto the stop-controlled side street(s). LOS is not defined for the intersection as a whole, but rather for each minor movement individually.

The delay value used in determining LOS is known as “control delay.” Control delay is defined as the total delay experienced by a driver and includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The delay a vehicle experiences is a function of the capacity of the approach and the degree of saturation on the uncontrolled (unstopped) roadway (i.e. the number of acceptable gaps in the passing traffic stream).

LOS values range from A to F. The delay range for each LOS value is as shown in the following table.

LOS CRITERIA FOR TWO-WAY STOP-CONTROLLED INTERSECTIONS

LOS	AVERAGE CONTROL DELAY (SECONDS/VEHICLE)
A	0-10
B	>10-15
C	>15-25
D	>25-35
E	>35-50
F	>50

Source: Transportation Research Board, *Highway Capacity Manual*, HCM 6th Edition