APPENDIX H
TRAFFIC IMPACT ANALYSIS

Traffic Impact Analysis – Proposed Modernization of the National Wildlife Health Center, Madison, Wisconsin

A. Introduction

This document describes the methodology and results of the traffic impact analysis performed for the proposed modernization of the National Wildlife Health Center (NWHC) located at 6006 Schroeder Road in Madison, Wisconsin. The 24-acre NWHC property is located north of Schroeder Road and bounded by the Beltline Highway (US-12/US-14) to the north, commercial and recreational developments to the west, and residential developments to the east and south (Figure 1). The surrounding roadways are under local, City of Madison jurisdiction.

The facility consists of two principal buildings and a shared parking lot. The Main Building is a 33,000 square-foot structure, and the second building, the Tight Isolation Building (TIB), is 28,000 square feet with both facilities accessed via a private driveway connected to Schroeder Road. The proposed NWHC facility will include a single building located within the existing property limits and once constructed and operational, the existing Main Building and TIB will be demolished. On the south end of the property, there is a restored prairie area that is available to the public for passive recreational use, which will remain. Access to the property and proposed NWHC will remain the same with all traffic access via the existing driveway off Schroeder Road.

Figure 1: National Wildlife Health Center Location

B. Existing Conditions

The NWHC property is located to the north of Schroeder Road, which is a minor arterial roadway providing one travel lane and one bike lane in each direction with the center lane providing a two-way left-turn median. Sidewalks are also present on both sides of the roadway. Schroeder Road is under the jurisdiction of the City of Madison and in 2018 carried an Average Annual Daily Traffic (AADT) volume of 6,200 vehicles west of the study area near Gammon Road (Wisconsin Department of Transportation). The 24-hour daily volume count performed in November 2022, showed approximately 11,000 vehicles per day on Schroeder Road at the facility entrance. The posted speed limit on Schroeder Road is 30 mph. The City of Madison's Metro Transit fixed bus Route #50 also runs east-west along Schroeder Road with stops in both directions near the NWHC entrance driveway.

Located approximately 1,000 feet west of the NWHC entrance is Forward Drive, a collector roadway under one-way stop control at its T-intersection with Schroeder Road. Forward Drive generally provides one lane in each direction with on-street parking and terminates in a cul-de-sac to the north just before reaching the Beltline Highway (US-12/US-14) right-of-way.

In 2022, Forward Drive carried approximately 2,500 vehicles per day. Since there are no speed limit signs posted on Forward Drive, the speed limit is assumed to be 20 mph per local ordinance. The roadway serves the Exact Sciences Laboratories, local NBC 15 WMTV Station, the West Madison Little League Fields, the Madison Ice Arena, and several small commercial developments.

Hathaway Drive creates a second T-intersection approximately 150 feet west of Forward Drive, which primarily serves the residential neighborhood located south of Schroeder Road. White Oaks Lane and Hampshire Place are also under stop control at their intersections with Schroeder Road and each serve a limited number of residential homes. Ellis Potter Court, located approximately 560 feet west of the NWHC entrance, provides access to several small commercial uses.

C. Existing Traffic Volumes

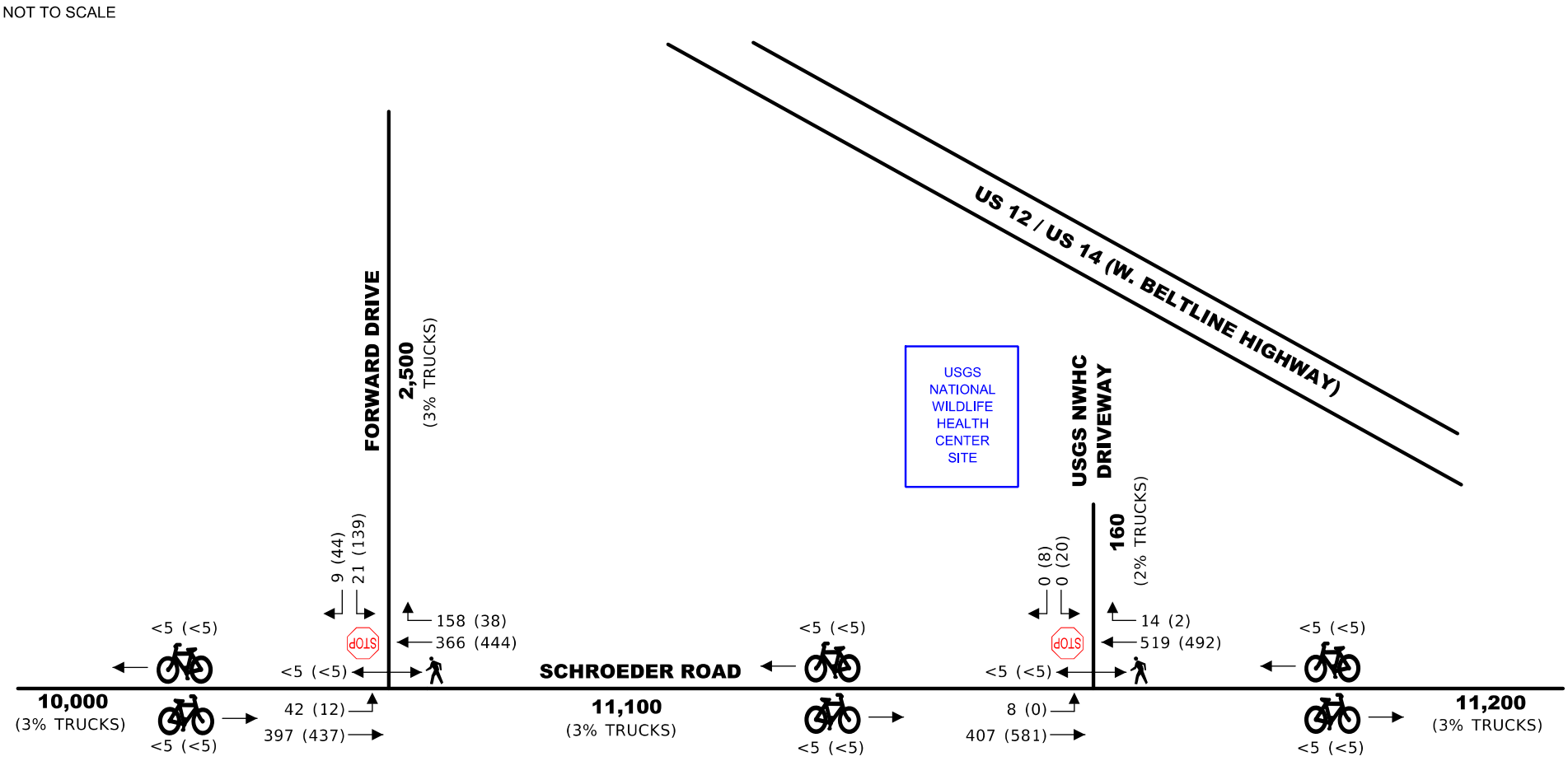
Existing traffic data was collected in order to understand the operation of roadways and intersections that serve the NWHC site. Traffic counts were conducted at the intersections of Schroeder Road with Forward Drive and at the existing NWHC entrance driveway on November 1, 2022 using traffic video cameras (Miovision Scout Units). 24-hour counts were performed at both locations which included multiple vehicle classifications as well as bicycle and pedestrian volumes. The morning peak hour volumes occurred from 7:30 AM to 8:30 AM while the evening peak hour occurred from 4:15 PM to 5:15 PM The existing peak hour traffic volumes are summarized in Exhibit 1.

D. Description of Existing Facility and Operation

The NWHC functions to advance wildlife health science for the benefit of animals, humans, and the environment. The 122 staff members assigned to the NWHC provide veterinary care and laboratory research services, including the study of disease on American wildlife within biosafety laboratories. The facility consists of two main buildings and a shared parking lot that offers approximately 100 paved spaces located immediately west of the buildings with employees, visitors and fleet vehicles having access to all spaces. The facility is typically in operation Monday through Friday. In addition, a prairie area is located on the south end of the property and is available for passive public recreational use.

Access to the site is provided by a single driveway to Schroeder Road. The gated driveway provides one lane in each direction and is under stop control at its intersection with Schroeder Road. The total number of vehicles entering and exiting the facility was captured by the driveway traffic counts and shows a limited volume of traffic entering and exiting the facility during each peak hour and throughout the day (Table 1).

NOT TO SCALE



LEGEND

STOP	STOP SIGN
1,000	DAILY TRAFFIC VOLUME
100	WEEKDAY AM PEAK HOUR (7:30AM - 8:30AM)
(100)	WEEKDAY PM PEAK HOUR (4:15PM - 5:15PM)
	TRAFFIC MOVEMENT
	BICYCLE HOURLY VOLUME
	PEDESTRIAN HOURLY VOLUME

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EXHIBIT 1
EXISTING TRAFFIC VOLUMES

PLOT DATE = 1/25/2023 FILE NAME = EXH_1_NWHC_TIS_2022ExistingTraffic.dgn

Table 1: Existing NWHC Facility Traffic Volumes

Time Period	Entering Vehicles	Exiting Vehicles	Total Vehicles
AM Peak Hour (7:30 AM – 8:30 AM)	22 (100%)	0 (0%)	22
PM Peak Hour (4:15 PM – 5:15 PM)	2 (7%)	28 (93%)	30
Total Daily Traffic Volumes	80 (50%)	80 (50%)	160

E. Proposed National Wildlife Health Center

The proposed NWHC, expected to be fully operational in 2028, is envisioned as a three-story structure with a basement containing administrative offices, various biosafety laboratories and vivarium, and support spaces. The facility will maintain its current workforce of 122 staff members with no plans to increase or decrease the size of the workforce. It should be noted that the modernized facility may accommodate a greater number of employees to work remotely. The proposed facility would:

- Meet NWHC's administrative, operational, health, and safety standards and requirements.
- Provide the spaces needed to conduct research into wildlife disease detection, control, and prevention and other programs that support the mission of the NWHC.
- Incorporate modern mechanical and containment systems to prevent staff and visitor exposure to biological and chemical agents, the escape of harmful pathogens, contamination of assay systems, reagents, and other materials, and cross-contamination between investigations.
- Redesign the internal service driveways, parking areas, and pedestrian walkways to accommodate visitors, students, government vehicles, and staff. The number of on-site parking spaces is not expected to increase significantly over the current number.
- Eliminate the use of incinerators for biological waste disposal to be replaced by bulk autoclaves, biodigesters, and other modern systems.
- Include a utility yard containing emergency generators.
- Include new energy-efficient lighting along internal walkways and parking areas and directional and other signage.
- Maintain the existing prairie area for public recreational use.

F. Projected Traffic Volumes and Analysis

Existing and projected conditions were analyzed using the Synchro 11 traffic analysis/simulation software during the morning (7:30 AM to 8:30 AM) and evening (4:15 PM to 5:15 PM) peak hours. Traffic operation is characterized according to the amount of control delay at each approach and quantified into a Level of Service (LOS). The LOS grades (A through F), which are defined in the Transportation Research Board's *Highway Capacity Manual*, quantify and categorize a driver's discomfort, frustration, fuel consumption, and travel times experienced as a result of intersection control and the resulting traffic queuing. The *HCM* Two-Way Stop Control methodology within the Synchro 11 software package was utilized to calculate and report the LOS and delay for the study area intersections.

There is no comparable land use provided within the *Institute of Transportation Engineer (ITE) Trip Generation Manual* to estimate or predict the number of trips generated to and from the NWHC.

Therefore, the best data available to estimate the site generated trips entering and exiting the facility is the actual traffic data collected at the driveway entrance. Trip Generation for the facility is summarized in Table 2.

Table 2: Projected Trip Generation – Modernized National Wildlife Health Center

Weekday Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
	Entering Trips	Exiting Trips	Total AM Trips	Entering Trips	Exiting Trips	Total PM Trips
160 (80 enter/80 exit)	22 (92%)	2 (8%)	24 (100%)	3 (10%)	28 (90%)	31 (100%)

In conducting the analysis, the following conservative assumptions were applied:

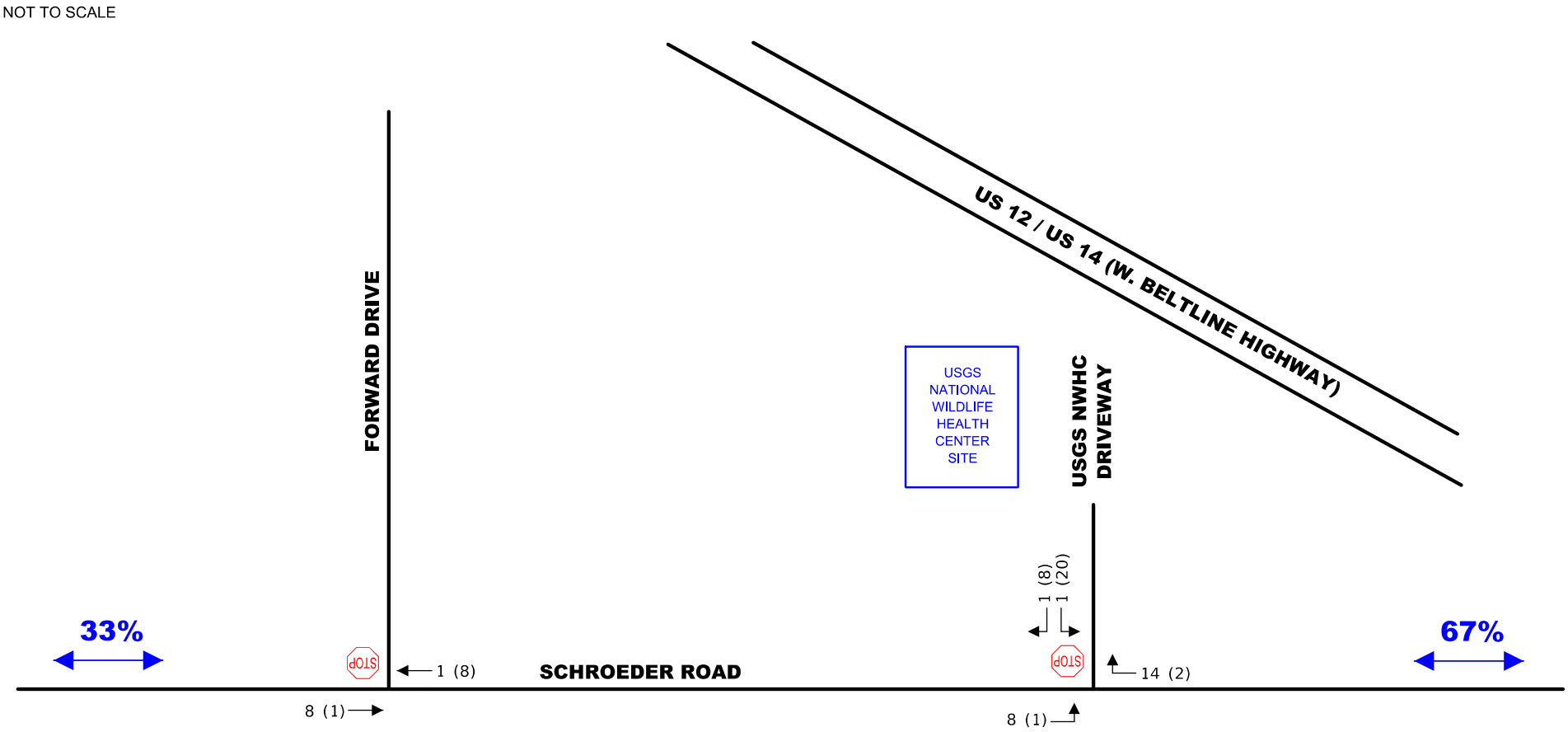
- Several existing turning movements at the NWHC driveway recorded zero vehicles during the peak hours, therefore, one vehicle was added to each of these movements to understand how each movement will operate.
- While the number of NWHC employees working remotely on a daily basis may increase over time, no decrease in existing driveway volumes were made.
- While employees and visitors have access to other transportation modes including pedestrian, bicycle, and bus transit, no changes were made to the existing staff or visitor arrival/departure modes.
- The proposed facility will not affect the volume of recreational traffic from visitors to the prairie area.
- No carpooling was assumed in that each trip is equal to a single-occupancy vehicle.

As previously stated, the proposed facility is not expected to significantly alter internal operations of the NWHC. Furthermore, the number of staff members, visitors, and parking spaces will remain the same. Therefore, the trips generated by the facility and the directional distribution of vehicles entering and exiting the study area were not projected to change for the future conditions analysis. Based on the observed traffic data, 67 percent and 33 percent of traffic arrive and depart the facility from/to the east and west, respectively. The site generated traffic and directional distribution are shown in Exhibit 2.

To estimate the future roadway volumes following completion of the proposed NWHC, a background traffic growth factor was applied along Schroeder Road. This growth factor estimates a one percent increase in traffic per year until the facility is fully operational in 2028. Therefore, the mainline traffic volumes on Schroeder Road and Forward Drive were projected upwards to the year 2028. Exhibit 3 illustrates the projected volumes.

The capacity analysis results for both existing and projected conditions for the intersections within the study area are summarized in Table 3. Under existing conditions, all intersection movements operate with LOS C or better.

NOT TO SCALE



LEGEND

STOP — STOP SIGN

100 — WEEKDAY AM PEAK HOUR SITE VOLUME

(100) — WEEKDAY PM PEAK HOUR SITE VOLUME

TRAFFIC MOVEMENT

20% — DIRECTIONAL DISTRIBUTION

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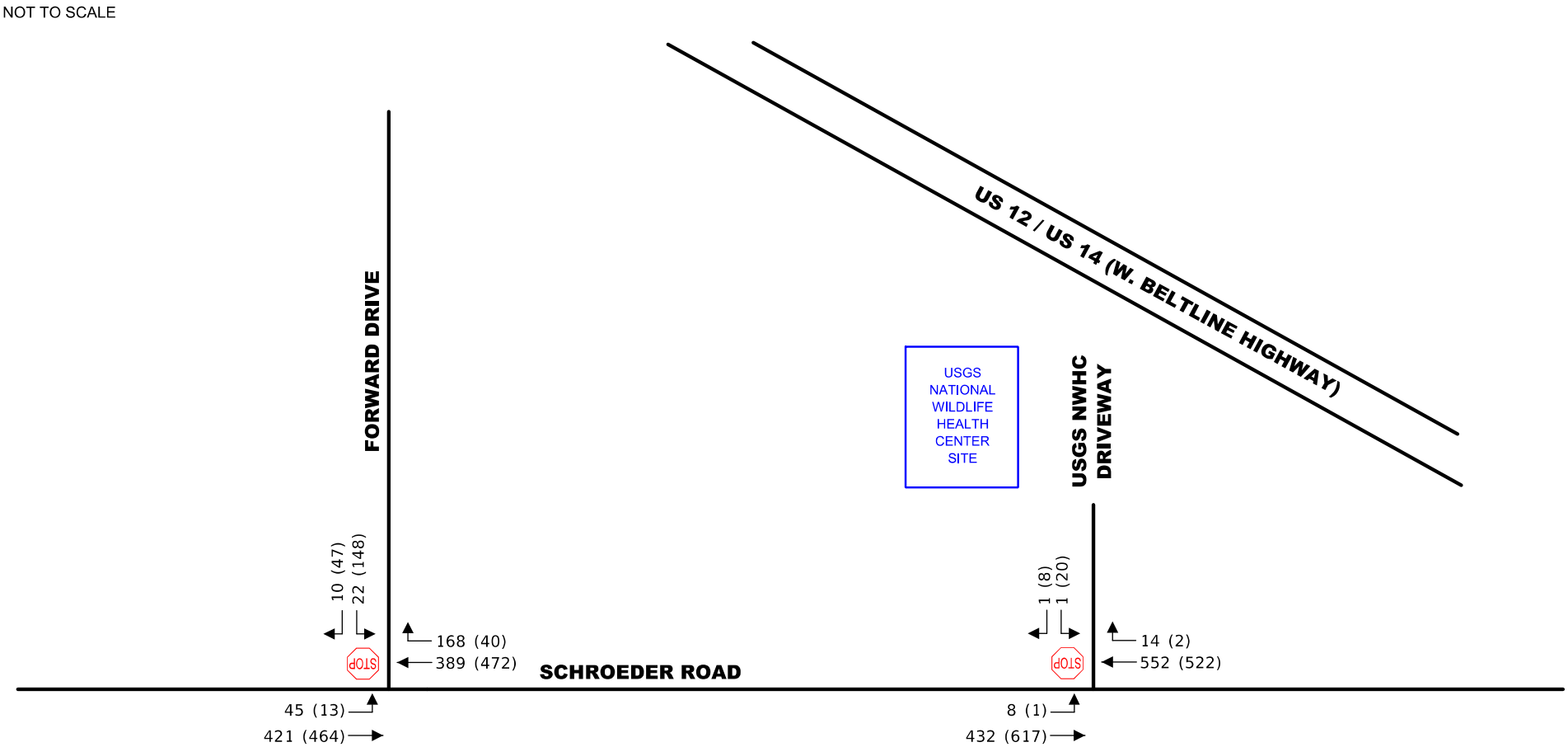
EXHIBIT 2
NWHC SITE TRAFFIC VOLUMES

PLOT DATE = 2/3/2023 FILE NAME = EXH_2_NWHC_TIS_TripGenTraffic.dgn

NOT TO SCALE



LEGEND

STOP STOP SIGN

100 WEEKDAY AM PEAK HOUR VOLUMES

(100) WEEKDAY PM PEAK HOUR VOLUMES

TRAFFIC MOVEMENT

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EXHIBIT 3
PROJECTED TRAFFIC VOLUMES

PLOT DATE = 2/3/2023 FILE NAME = EXH_3_NWHC_TIS_2028ProjectedTraffic.dgn

Table 3: Unsignalized Intersection Capacity Analysis Results (Existing and Projected)

Unsignalized Intersection and Movement	AM Peak Hour (7:30 AM – 8:30 AM)	PM Peak Hour (4:15 PM – 5:15 PM)
Existing Conditions[1]		
Schroeder Road with Forward Drive		
Eastbound Left Turn	LOS A – 8.8	LOS A – 8.6
Southbound Approach	LOS B – 14.3	LOS C – 22.8
Schroeder Road with NWHC Driveway		
Eastbound Left Turn	LOS A – 8.7	N/A[2]
Southbound Approach	N/A[2]	LOS C – 15.4
Proposed Conditions[1]		
Schroeder Road with Forward Drive		
Eastbound Left Turn	LOS A – 9.0	LOS A – 8.7
Southbound Approach	LOS B – 14.8	LOS D – 26.3
Schroeder Road with NWHC Driveway		
Eastbound Left Turn	LOS A – 8.8	LOS A – 8.6
Southbound Approach	LOS B – 13.6	LOS C – 16.0
Proposed Conditions with Improvement[1,3]		
Schroeder Road with NWHC Driveway		
Eastbound Left Turn	LOS A – 8.8	LOS A – 8.6
Southbound Left Turn	LOS B – 14.9	LOS C – 17.1
Southbound Right Turn	LOS B – 12.3	LOS B – 12.2
Southbound Approach	LOS B – 13.6	LOS C – 15.7

[1] Represents seconds of delay per vehicle.
[2] No traffic volume was observed on the movement during the time frame indicated, therefore, an average vehicle delay cannot be estimated.
[3] Proposed improvement consists of widening and striping the access driveway to provide one inbound lane, one outbound left-turn lane, and one outbound right-turn lane.

Under projected conditions, the stop sign-controlled T-intersections of Schroeder Road with Forward Drive and the NWHC driveway will operation at acceptable LOS and delays. During the evening peak hour, the Forward Drive approach will lower from LOS C to a marginal LOS D. The increase in delay at this approach is due to the increase in background traffic anticipated from other surrounding land uses as no NWHC traffic will contribute to Forward Drive. The NWHC driveway will continue to operate at LOS C. Both intersections benefit from the two-way left-turn median. The median provides refuge for southbound left-turn traffic, which increases the number of allowable gaps in traffic along Schroeder Road. The two-way left turn lane also provides adequate storage for eastbound left turning vehicles waiting to perform their maneuver without impeding the eastbound through traffic movement.

To improve exit operations at the NWHC driveway, the addition of an exclusive southbound right-turn lane should be considered. The additional turn lane would provide no operational benefit in the morning as there is negligible traffic exiting the facility. During the evening peak hour, while there are no significant improvements in average vehicle delay for the southbound approach, operations for the exiting right turning traffic would be improved from LOS C to LOS B. This improvement would only require minimal widening and striping to improve the facility's egress. As proposed, the NWHC driveway would provide one inbound lane with an exclusive left turn lane and right turn lane under one-way stop control.

G. Conclusion and Recommendations

The proposed modernization of the NWHC will result in a new three-story building, which will replace the existing Main Building and TIB. The existing facility has 122 staff members and generates 24 trips during the morning peak hour, 31 trips during the evening peak hour, and a total of 160 trips (80 entering / 80 exiting) throughout the day. The proposed facility is not expected to significantly alter existing traffic operations or the number of employees and visitors per day. Therefore, traffic to the site is expected to remain the same.

Under projected conditions, the stop sign-controlled T-intersections of Schroeder Road with Forward Drive and the NWHC driveway will continue to operate at acceptable Levels of Service (LOS). These intersections benefit from the existing two-way left-turn medians by providing refuge for southbound left-turn traffic, which increasing the number of usable gaps in traffic along Schroeder Road. The two-way left turn lane also provides adequate storage for left turning queues. When compared to existing conditions, delays at both intersections increased as a result of the background traffic growth anticipated by the year 2028 when the new facility is expected to be activated.

An exclusive southbound right-turn lane should be considered to improve egress from the new facility. While this will provide minimal improvement to LOS/delay for left turning vehicles, it does benefit right turning vehicles during the PM peak hour with the LOS improving from C to B. This improvement would require minimal widening and some restriping. The proposed, modernized facility may also allow for increased numbers of staff to work remotely. This potential decrease in on-site staff could lead to less driveway traffic than currently exists, which would translate into a potential improvement in LOS and reduced delay.

H. References

Institute of Transportation Engineers. 2021. Trip Generation Manual, 11th Edition. Washington, DC. Publication No. IR-016L, 500/AGS/0921, ISBN-13: 978-1-7345078-7-4.

Transportation Research Board. 2016. *Highway Capacity Manual*, A Guide for Multimodal Mobility Analysis. Washington, D.C., ISBN 978-0-309-36997-8.

Attachments

Attachment 1 – Traffic Count Data Reports
Attachment 2 – Highway Capacity Reports – Existing/Projected Conditions AM / PM
Attachment 3 – NWHC Conceptual Site Plan / Rendering

Attachment 1 – Traffic Count Data Reports

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Count Name: Forward Dr and Schroeder Rd
Site Code:
Start Date: 11/01/2022

Turning Movement Data

Start Time	Schroeder Road Westbound					Schroeder Road Eastbound					Forward Drive Southbound					
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
12:00 AM	0	6	0	0	6	0	1	6	0	7	0	1	0	0	1	14
12:15 AM	0	5	0	0	5	0	0	4	0	4	0	2	1	0	3	12
12:30 AM	0	3	0	0	3	0	0	4	0	4	0	2	0	0	2	9
12:45 AM	0	9	1	0	10	0	0	7	0	7	0	0	1	0	1	18
Hourly Total	0	23	1	0	24	0	1	21	0	22	0	5	2	0	7	53
1:00 AM	0	6	0	0	6	0	0	10	0	10	0	1	0	0	1	17
1:15 AM	0	6	0	0	6	0	0	3	0	3	0	0	0	0	0	9
1:30 AM	0	2	0	0	2	0	0	3	0	3	0	0	0	0	0	5
1:45 AM	0	8	0	0	8	0	0	3	0	3	0	0	0	0	0	11
Hourly Total	0	22	0	0	22	0	0	19	0	19	0	1	0	0	1	42
2:00 AM	0	3	0	0	3	0	0	3	0	3	0	1	0	0	1	7
2:15 AM	0	2	1	0	3	0	0	2	0	2	0	0	1	0	1	6
2:30 AM	2	2	0	0	4	0	1	0	0	1	0	0	0	0	0	5
2:45 AM	0	1	0	0	1	0	0	2	0	2	0	0	0	0	0	3
Hourly Total	2	8	1	0	11	0	1	7	0	8	0	1	1	0	2	21
3:00 AM	0	5	2	0	7	0	0	0	0	0	0	0	0	0	0	7
3:15 AM	0	3	3	0	6	0	0	3	0	3	0	0	0	0	0	9
3:30 AM	0	2	1	0	3	0	0	3	0	3	0	0	1	0	1	7
3:45 AM	0	1	2	0	3	0	2	1	0	3	0	1	0	0	1	7
Hourly Total	0	11	8	0	19	0	2	7	0	9	0	1	1	0	2	30
4:00 AM	0	4	0	0	4	0	1	6	0	7	0	0	0	0	0	11
4:15 AM	0	4	0	0	4	0	0	5	0	5	0	0	0	0	0	9
4:30 AM	0	2	1	0	3	0	0	4	0	4	0	3	0	0	3	10
4:45 AM	0	4	2	0	6	0	0	8	0	8	0	0	0	0	0	14
Hourly Total	0	14	3	0	17	0	1	23	0	24	0	3	0	0	3	44
5:00 AM	0	8	1	0	9	0	0	4	0	4	0	2	0	0	2	15
5:15 AM	0	8	6	0	14	0	0	11	0	11	0	0	0	0	0	25
5:30 AM	0	11	24	0	35	0	8	9	0	17	0	0	0	0	0	52
5:45 AM	0	23	45	0	68	0	18	20	0	38	0	1	0	0	1	107
Hourly Total	0	50	76	0	126	0	26	44	0	70	0	3	0	0	3	199
6:00 AM	0	21	10	0	31	0	1	16	0	17	0	2	0	0	2	50
6:15 AM	0	10	9	0	19	0	0	18	0	18	0	6	1	0	7	44
6:30 AM	0	26	7	0	33	0	1	32	0	33	0	19	4	0	23	89
6:45 AM	0	39	25	0	64	0	1	32	0	33	0	4	1	0	5	102
Hourly Total	0	96	51	0	147	0	3	98	0	101	0	31	6	0	37	285
7:00 AM	0	44	17	0	61	0	3	54	0	57	0	6	1	0	7	125

7:15 AM	0	87	23	0	110	0	4	63	0	67	0	0	0	1	0	177
7:30 AM	0	79	37	0	116	0	10	117	0	127	0	8	1	0	9	252
7:45 AM	0	115	43	0	158	0	11	101	0	112	0	3	4	1	7	277
Hourly Total	0	325	120	0	445	0	28	335	0	363	0	17	6	2	23	831
8:00 AM	0	84	38	0	122	0	9	106	0	115	0	5	0	1	5	242
8:15 AM	0	92	40	0	132	0	12	74	0	86	0	5	4	0	9	227
8:30 AM	0	81	23	0	104	0	8	90	0	98	0	4	1	3	5	207
8:45 AM	0	80	30	0	110	0	11	64	0	75	0	7	3	0	10	195
Hourly Total	0	337	131	0	468	0	40	334	0	374	0	21	8	4	29	871
9:00 AM	0	59	15	0	74	0	8	72	0	80	0	4	2	2	6	160
9:15 AM	0	78	14	0	92	0	3	58	0	61	0	4	2	2	6	159
9:30 AM	0	65	8	0	73	0	2	68	1	70	0	4	4	0	8	151
9:45 AM	0	54	18	0	72	0	1	55	0	56	0	9	2	0	11	139
Hourly Total	0	256	55	0	311	0	14	253	1	267	0	21	10	4	31	609
10:00 AM	0	55	8	0	63	0	6	54	0	60	0	9	2	1	11	134
10:15 AM	0	52	8	0	60	0	3	57	0	60	0	6	2	0	8	128
10:30 AM	0	67	13	0	80	0	1	72	0	73	0	5	1	0	6	159
10:45 AM	0	67	23	0	90	0	5	72	0	77	0	4	5	0	9	176
Hourly Total	0	241	52	0	293	0	15	255	0	270	0	24	10	1	34	597
11:00 AM	0	87	16	0	103	0	3	70	0	73	0	6	3	0	9	185
11:15 AM	0	53	12	0	65	0	1	77	0	78	0	9	4	1	13	156
11:30 AM	0	78	11	0	89	0	4	66	0	70	0	12	8	1	20	179
11:45 AM	0	74	18	0	92	0	4	82	0	86	0	7	2	0	9	187
Hourly Total	0	292	57	0	349	0	12	295	0	307	0	34	17	2	51	707
12:00 PM	0	77	21	0	98	0	6	88	0	94	0	11	11	1	22	214
12:15 PM	0	87	21	0	108	0	7	70	0	77	0	6	7	4	13	198
12:30 PM	0	73	12	0	85	0	4	82	0	86	0	11	4	0	15	186
12:45 PM	0	50	11	0	61	0	4	66	0	70	0	9	4	2	13	144
Hourly Total	0	287	65	0	352	0	21	306	0	327	0	37	26	7	63	742
1:00 PM	0	63	4	0	67	0	5	61	0	66	0	12	3	0	15	148
1:15 PM	0	69	6	0	75	0	4	63	0	67	0	11	2	1	13	155
1:30 PM	0	75	12	0	87	0	7	71	0	78	0	14	2	0	16	181
1:45 PM	0	65	10	0	75	0	2	78	1	80	0	8	0	0	8	163
Hourly Total	0	272	32	0	304	0	18	273	1	291	0	45	7	1	52	647
2:00 PM	0	79	5	0	84	0	2	75	1	77	0	14	4	9	18	179
2:15 PM	0	75	3	0	78	0	2	81	0	83	0	13	12	2	25	186
2:30 PM	0	84	6	0	90	0	1	105	0	106	0	32	13	0	45	241
2:45 PM	0	82	9	0	91	0	4	85	0	89	0	15	6	0	21	201
Hourly Total	0	320	23	0	343	0	9	346	1	355	0	74	35	11	109	807
3:00 PM	0	105	4	0	109	0	1	90	0	91	0	16	7	1	23	223
3:15 PM	0	90	7	0	97	0	2	88	0	90	0	11	10	0	21	208
3:30 PM	0	110	5	0	115	0	0	109	0	109	0	25	5	2	30	254
3:45 PM	0	107	10	0	117	0	5	113	0	118	0	30	4	0	34	269
Hourly Total	0	412	26	0	438	0	8	400	0	408	0	82	26	3	108	954
4:00 PM	0	108	14	0	122	0	6	118	0	124	0	40	10	1	50	296
4:15 PM	0	102	6	0	108	0	1	102	0	103	0	36	9	1	45	256
4:30 PM	0	109	9	0	118	0	0	113	0	113	0	46	16	0	62	293
4:45 PM	0	102	9	0	111	0	4	92	2	96	0	26	11	0	37	244
Hourly Total	0	421	38	0	459	0	11	425	2	436	0	148	46	2	194	1089
5:00 PM	0	131	14	0	145	0	7	132	0	139	0	31	8	3	39	323
5:15 PM	0	105	14	0	119	0	5	87	0	92	0	15	9	1	24	235
5:30 PM	0	106	7	0	113	0	4	77	0	81	0	26	8	6	34	228

5:45 PM	0	66	14	0	80	0	1	92	0	93	0	12	8	4	20	193
Hourly Total	0	408	49	0	457	0	17	388	0	405	0	84	33	14	117	979
6:00 PM	0	78	9	0	87	0	13	93	0	106	0	10	10	2	20	213
6:15 PM	0	87	25	0	112	0	10	84	0	94	0	15	9	0	24	230
6:30 PM	0	60	6	0	66	0	6	71	0	77	0	10	10	0	20	163
6:45 PM	0	54	7	0	61	0	6	58	0	64	0	18	5	0	23	148
Hourly Total	0	279	47	0	326	0	35	306	0	341	0	53	34	2	87	754
7:00 PM	0	53	6	0	59	0	3	70	0	73	0	12	3	0	15	147
7:15 PM	0	44	19	0	63	0	7	57	0	64	0	4	3	0	7	134
7:30 PM	0	36	19	0	55	0	12	39	0	51	0	19	10	0	29	135
7:45 PM	0	50	22	0	72	0	16	37	0	53	0	13	7	0	20	145
Hourly Total	0	183	66	0	249	0	38	203	0	241	0	48	23	0	71	561
8:00 PM	0	41	5	0	46	0	0	31	0	31	0	6	7	0	13	90
8:15 PM	0	42	9	0	51	0	5	37	0	42	0	6	3	0	9	102
8:30 PM	0	32	12	0	44	0	4	29	0	33	0	5	0	0	5	82
8:45 PM	0	21	6	0	27	0	2	31	0	33	0	11	3	0	14	74
Hourly Total	0	136	32	0	168	0	11	128	0	139	0	28	13	0	41	348
9:00 PM	0	22	3	0	25	0	1	27	0	28	0	13	2	0	15	68
9:15 PM	1	33	0	0	34	0	0	26	0	26	0	16	3	0	19	79
9:30 PM	0	22	1	0	23	0	0	30	1	30	0	19	9	1	28	81
9:45 PM	0	19	5	0	24	0	1	15	0	16	0	6	1	0	7	47
Hourly Total	1	96	9	0	106	0	2	98	1	100	0	54	15	1	69	275
10:00 PM	0	27	3	0	30	0	0	22	0	22	0	12	4	0	16	68
10:15 PM	0	19	0	0	19	0	1	20	0	21	0	17	3	0	20	60
10:30 PM	0	9	1	0	10	0	0	16	0	16	0	14	5	0	19	45
10:45 PM	0	13	1	0	14	0	0	13	0	13	0	5	0	0	5	32
Hourly Total	0	68	5	0	73	0	1	71	0	72	0	48	12	0	60	205
11:00 PM	0	12	0	0	12	0	0	9	0	9	0	11	12	0	23	44
11:15 PM	0	15	1	0	16	0	0	9	0	9	0	1	0	0	1	26
11:30 PM	0	18	2	0	20	0	0	9	0	9	0	0	0	0	0	29
11:45 PM	0	8	1	0	9	0	0	8	0	8	0	1	1	0	2	19
Hourly Total	0	53	4	0	57	0	0	35	0	35	0	13	13	0	26	118
Grand Total	3	4610	951	0	5564	0	314	4670	6	4984	0	876	344	54	1220	11768
Approach %	0.1	82.9	17.1	-	-	0.0	6.3	93.7	-	-	0.0	71.8	28.2	-	-	-
Total %	0.0	39.2	8.1	-	47.3	0.0	2.7	39.7	-	42.4	0.0	7.4	2.9	-	10.4	-
Lights	3	4501	928	-	5432	0	306	4531	-	4837	0	845	337	-	1182	11451
% Lights	100.0	97.6	97.6	-	97.6	-	97.5	97.0	-	97.1	-	96.5	98.0	-	96.9	97.3
Buses	0	19	2	-	21	0	0	55	-	55	0	1	0	-	1	77
% Buses	0.0	0.4	0.2	-	0.4	-	0.0	1.2	-	1.1	-	0.1	0.0	-	0.1	0.7
Single-Unit Trucks	0	79	14	-	93	0	5	71	-	76	0	23	5	-	28	197
% Single-Unit Trucks	0.0	1.7	1.5	-	1.7	-	1.6	1.5	-	1.5	-	2.6	1.5	-	2.3	1.7
Articulated Trucks	0	8	7	-	15	0	2	4	-	6	0	6	1	-	7	28
% Articulated Trucks	0.0	0.2	0.7	-	0.3	-	0.6	0.1	-	0.1	-	0.7	0.3	-	0.6	0.2
Bicycles on Road	0	3	0	-	3	0	1	9	-	10	0	1	1	-	2	15
% Bicycles on Road	0.0	0.1	0.0	-	0.1	-	0.3	0.2	-	0.2	-	0.1	0.3	-	0.2	0.1
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	5	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	0.0	-	-	-	-	9.3	-	-
Pedestrians	-	-	-	0	-	-	-	-	6	-	-	-	-	49	-	-
% Pedestrians	-	-	-	-	-	-	-	-	100.0	-	-	-	-	90.7	-	-

WSP USA
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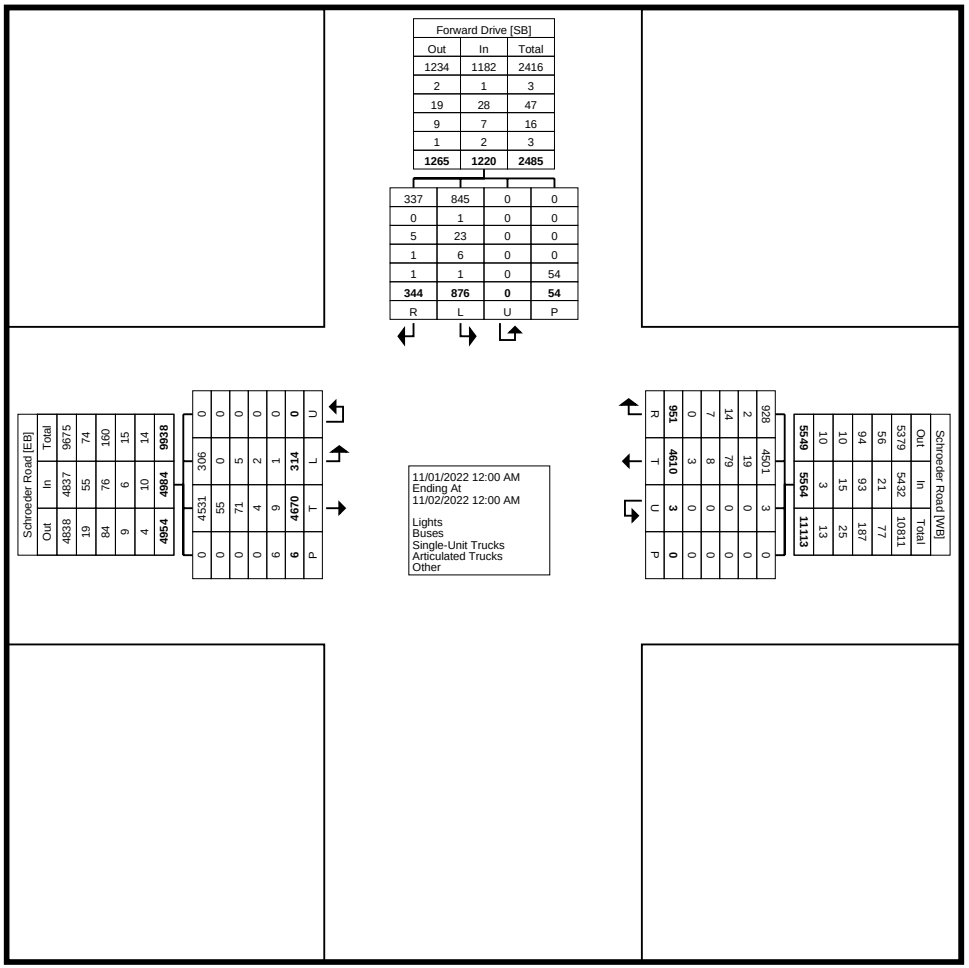
Count Name: Forward Dr and Schroeder Rd
Site Code:
Start Date: 11/01/2022



Turning Movement Data Plot

WSP USA
221 N. LaSalle Street
Suite 300
Chicago, Illinois, United States 60601
(312) 577-3300 matthew.maestranzi@wsp.com

Count Name: Forward Dr and Schroeder Rd
Site Code:
Start Date: 11/01/2022

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Schroeder Road Westbound					Schroeder Road Eastbound					Forward Drive Southbound					
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
7:30 AM	0	79	37	0	116	0	10	117	0	127	0	8	1	0	9	252
7:45 AM	0	115	43	0	158	0	11	101	0	112	0	3	4	1	7	277
8:00 AM	0	84	38	0	122	0	9	106	0	115	0	5	0	1	5	242
8:15 AM	0	92	40	0	132	0	12	74	0	86	0	5	4	0	9	227
Total	0	370	158	0	528	0	42	398	0	440	0	21	9	2	30	998
Approach %	0.0	70.1	29.9	-	-	0.0	9.5	90.5	-	-	0.0	70.0	30.0	-	-	-
Total %	0.0	37.1	15.8	-	52.9	0.0	4.2	39.9	-	44.1	0.0	2.1	0.9	-	3.0	-
PHF	0.000	0.804	0.919	-	0.835	0.000	0.875	0.850	-	0.866	0.000	0.656	0.563	-	0.833	0.901
Lights	0	356	157	-	513	0	41	387	-	428	0	21	8	-	29	970
% Lights	-	96.2	99.4	-	97.2	-	97.6	97.2	-	97.3	-	100.0	88.9	-	96.7	97.2
Buses	0	2	0	-	2	0	0	4	-	4	0	0	0	-	0	6
% Buses	-	0.5	0.0	-	0.4	-	0.0	1.0	-	0.9	-	0.0	0.0	-	0.0	0.6
Single-Unit Trucks	0	8	1	-	9	0	0	6	-	6	0	0	1	-	1	16
% Single-Unit Trucks	-	2.2	0.6	-	1.7	-	0.0	1.5	-	1.4	-	0.0	11.1	-	3.3	1.6
Articulated Trucks	0	3	0	-	3	0	0	0	-	0	0	0	0	-	0	3
% Articulated Trucks	-	0.8	0.0	-	0.6	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.3
Bicycles on Road	0	1	0	-	1	0	1	1	-	2	0	0	0	-	0	3
% Bicycles on Road	-	0.3	0.0	-	0.2	-	2.4	0.3	-	0.5	-	0.0	0.0	-	0.0	0.3
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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Count Name: Forward Dr and Schroeder Rd
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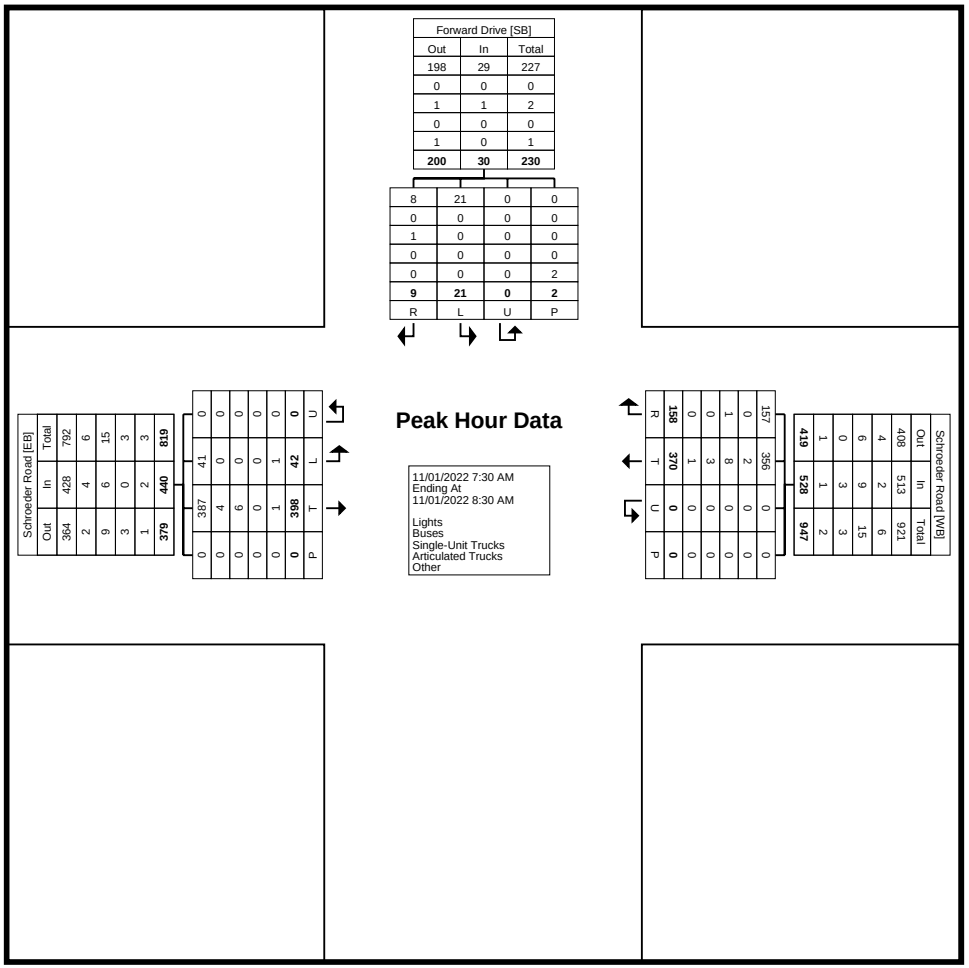
Start Date: 11/01/2022



Turning Movement Peak Hour Data Plot (7:30 AM)

WSP USA
221 N. LaSalle Street
Suite 300
Chicago, Illinois, United States 60601
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Count Name: Forward Dr and Schroeder Rd
Site Code:
Start Date: 11/01/2022

Turning Movement Peak Hour Data (4:15 PM)

Start Time	Schroeder Road Westbound					Schroeder Road Eastbound					Forward Drive Southbound					
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
4:15 PM	0	102	6	0	108	0	1	102	0	103	0	36	9	1	45	256
4:30 PM	0	109	9	0	118	0	0	113	0	113	0	46	16	0	62	293
4:45 PM	0	102	9	0	111	0	4	92	2	96	0	26	11	0	37	244
5:00 PM	0	131	14	0	145	0	7	132	0	139	0	31	8	3	39	323
Total	0	444	38	0	482	0	12	439	2	451	0	139	44	4	183	1116
Approach %	0.0	92.1	7.9	-	-	0.0	2.7	97.3	-	-	0.0	76.0	24.0	-	-	-
Total %	0.0	39.8	3.4	-	43.2	0.0	1.1	39.3	-	40.4	0.0	12.5	3.9	-	16.4	-
PHF	0.000	0.847	0.679	-	0.831	0.000	0.429	0.831	-	0.811	0.000	0.755	0.688	-	0.738	0.864
Lights	0	444	36	-	480	0	12	431	-	443	0	138	44	-	182	1105
% Lights	-	100.0	94.7	-	99.6	-	100.0	98.2	-	98.2	-	99.3	100.0	-	99.5	99.0
Buses	0	0	0	-	0	0	0	4	-	4	0	0	0	-	0	4
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.9	-	0.9	-	0.0	0.0	-	0.0	0.4
Single-Unit Trucks	0	0	1	-	1	0	0	2	-	2	0	0	0	-	0	3
% Single-Unit Trucks	-	0.0	2.6	-	0.2	-	0.0	0.5	-	0.4	-	0.0	0.0	-	0.0	0.3
Articulated Trucks	0	0	1	-	1	0	0	0	-	0	0	1	0	-	1	2
% Articulated Trucks	-	0.0	2.6	-	0.2	-	0.0	0.0	-	0.0	-	0.7	0.0	-	0.5	0.2
Bicycles on Road	0	0	0	-	0	0	0	2	-	2	0	0	0	-	0	2
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.5	-	0.4	-	0.0	0.0	-	0.0	0.2
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	0.0	-	-	-	-	25.0	-	-
Pedestrians	-	-	-	0	-	-	-	-	2	-	-	-	-	3	-	-
% Pedestrians	-	-	-	-	-	-	-	-	100.0	-	-	-	-	75.0	-	-

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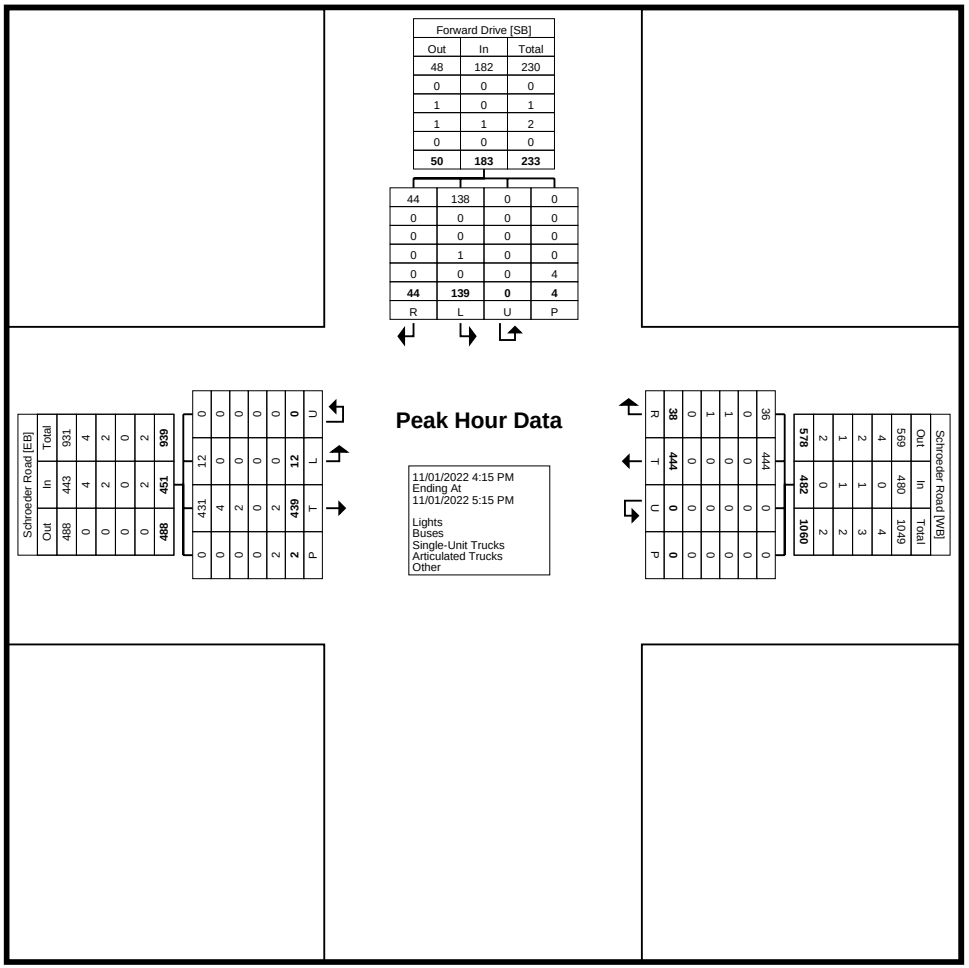
Count Name: Forward Dr and Schroeder Rd
Site Code:
Start Date: 11/01/2022



Turning Movement Peak Hour Data Plot (4:15 PM)

WSP USA
221 N. LaSalle Street
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Count Name: Schroeder Dr and NWHC Ex Driveway
Site Code:
Start Date: 11/01/2022

Turning Movement Data

Start Time	Schroeder Road Westbound					Schroeder Road Eastbound					NWHC Ex Driveway Southbound					Int. Total
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	
12:00 AM	0	6	0	0	6	0	0	8	0	8	0	0	0	0	0	14
12:15 AM	0	5	0	0	5	0	0	5	0	5	0	0	0	0	0	10
12:30 AM	0	3	0	0	3	0	0	6	0	6	0	0	0	0	0	9
12:45 AM	0	11	0	0	11	0	0	8	0	8	0	0	0	0	0	19
Hourly Total	0	25	0	0	25	0	0	27	0	27	0	0	0	0	0	52
1:00 AM	0	7	0	0	7	0	0	10	0	10	0	0	0	0	0	17
1:15 AM	0	8	0	0	8	0	0	6	0	6	0	0	0	0	0	14
1:30 AM	0	3	0	0	3	0	0	3	0	3	0	0	0	0	0	6
1:45 AM	0	7	0	0	7	0	0	3	0	3	0	0	0	0	0	10
Hourly Total	0	25	0	0	25	0	0	22	0	22	0	0	0	0	0	47
2:00 AM	0	4	0	0	4	0	0	3	0	3	0	0	0	0	0	7
2:15 AM	0	6	0	0	6	0	0	3	0	3	0	0	0	0	0	9
2:30 AM	0	2	0	0	2	0	0	1	0	1	0	0	0	0	0	3
2:45 AM	0	2	0	0	2	0	0	2	0	2	0	0	0	0	0	4
Hourly Total	0	14	0	0	14	0	0	9	0	9	0	0	0	0	0	23
3:00 AM	0	7	0	0	7	0	0	1	0	1	0	0	0	0	0	8
3:15 AM	0	6	0	0	6	0	0	3	0	3	0	0	0	0	0	9
3:30 AM	0	3	0	0	3	0	0	3	0	3	0	0	0	0	0	6
3:45 AM	0	4	0	0	4	0	0	1	0	1	0	0	0	0	0	5
Hourly Total	0	20	0	0	20	0	0	8	0	8	0	0	0	0	0	28
4:00 AM	0	3	0	0	3	0	0	5	0	5	0	0	0	0	0	8
4:15 AM	0	4	0	0	4	0	0	5	0	5	0	0	0	0	0	9
4:30 AM	0	4	0	0	4	0	0	6	0	6	0	0	0	0	0	10
4:45 AM	0	8	0	0	8	0	0	9	0	9	0	0	0	0	0	17
Hourly Total	0	19	0	0	19	0	0	25	0	25	0	0	0	0	0	44
5:00 AM	0	10	0	0	10	0	0	7	0	7	0	0	0	0	0	17
5:15 AM	0	16	1	0	17	0	0	14	0	14	0	0	0	0	0	31
5:30 AM	0	39	0	0	39	0	0	9	0	9	0	0	0	0	0	48
5:45 AM	0	64	0	0	64	0	0	19	0	19	0	0	0	0	0	83
Hourly Total	0	129	1	0	130	0	0	49	0	49	0	0	0	0	0	179
6:00 AM	0	30	0	0	30	0	0	17	0	17	0	0	0	0	0	47
6:15 AM	0	21	0	0	21	0	0	25	0	25	0	0	0	0	0	46
6:30 AM	0	36	0	0	36	0	0	49	0	49	0	0	0	0	0	85
6:45 AM	0	64	0	0	64	0	1	37	0	38	0	0	0	0	0	102
Hourly Total	0	151	0	0	151	0	1	128	0	129	0	0	0	0	0	280
7:00 AM	0	62	1	0	63	1	0	55	0	56	0	0	0	0	0	119

7:15 AM	0	116	2	0	118	0	2	58	0	60	0	0	0	0	0	178
7:30 AM	0	111	6	0	117	0	1	128	0	129	0	0	0	0	0	246
7:45 AM	0	162	0	0	162	0	2	99	0	101	0	0	0	0	0	263
Hourly Total	0	451	9	0	460	1	5	340	0	346	0	0	0	0	0	806
8:00 AM	0	115	6	0	121	0	3	109	0	112	0	0	0	0	0	233
8:15 AM	0	133	2	0	135	0	2	72	0	74	0	0	0	0	0	209
8:30 AM	0	97	4	0	101	0	2	81	0	83	0	0	0	0	0	184
8:45 AM	0	100	3	0	103	0	0	73	0	73	0	0	0	0	0	176
Hourly Total	0	445	15	0	460	0	7	335	0	342	0	0	0	0	0	802
9:00 AM	0	74	0	0	74	0	1	70	0	71	0	0	0	0	0	145
9:15 AM	0	92	1	0	93	0	0	67	0	67	0	0	0	0	0	160
9:30 AM	0	72	0	0	72	0	0	68	0	68	0	0	0	0	0	140
9:45 AM	0	72	5	0	77	0	1	63	0	64	0	0	1	0	1	142
Hourly Total	0	310	6	0	316	0	2	268	0	270	0	0	1	0	1	587
10:00 AM	0	59	1	0	60	0	1	64	0	65	0	0	1	0	1	126
10:15 AM	0	68	1	0	69	0	0	61	0	61	0	0	0	0	0	130
10:30 AM	0	82	1	0	83	0	1	78	0	79	0	0	0	0	0	162
10:45 AM	0	90	0	0	90	0	0	66	0	66	0	1	0	0	1	157
Hourly Total	0	299	3	0	302	0	2	269	0	271	0	1	1	0	2	575
11:00 AM	0	91	1	0	92	0	0	75	0	75	0	0	0	0	0	167
11:15 AM	0	76	0	0	76	0	0	80	0	80	0	1	0	0	1	157
11:30 AM	0	84	1	0	85	0	0	81	0	81	0	1	0	0	1	167
11:45 AM	0	81	4	0	85	0	0	88	0	88	0	2	4	0	6	179
Hourly Total	0	332	6	0	338	0	0	324	0	324	0	4	4	0	8	670
12:00 PM	0	95	0	0	95	0	0	92	0	92	0	0	2	0	2	189
12:15 PM	0	106	1	0	107	0	0	73	0	73	0	1	0	0	1	181
12:30 PM	0	84	2	0	86	0	1	88	0	89	0	0	1	0	1	176
12:45 PM	0	59	6	0	65	0	2	84	0	86	0	3	1	0	4	155
Hourly Total	0	344	9	0	353	0	3	337	0	340	0	4	4	0	8	701
1:00 PM	0	73	2	0	75	0	1	73	0	74	0	0	0	1	0	149
1:15 PM	0	76	0	0	76	0	0	75	0	75	0	0	0	0	0	151
1:30 PM	0	83	0	0	83	0	0	85	0	85	0	1	0	0	1	169
1:45 PM	0	77	0	0	77	0	0	83	0	83	0	1	0	0	1	161
Hourly Total	0	309	2	0	311	0	1	316	0	317	0	2	0	1	2	630
2:00 PM	0	78	0	0	78	0	0	81	0	81	0	1	0	0	1	160
2:15 PM	0	89	3	1	92	0	0	98	0	98	0	1	1	1	2	192
2:30 PM	0	95	0	0	95	0	0	142	0	142	0	2	0	0	2	239
2:45 PM	0	89	0	0	89	0	0	107	0	107	0	1	0	0	1	197
Hourly Total	0	351	3	1	354	0	0	428	0	428	0	5	1	1	6	788
3:00 PM	0	112	0	0	112	0	0	100	0	100	0	1	0	0	1	213
3:15 PM	0	96	0	0	96	0	0	106	1	106	0	1	2	1	3	205
3:30 PM	0	111	1	1	112	0	0	130	1	130	0	3	0	0	3	245
3:45 PM	0	109	0	0	109	0	0	137	0	137	0	1	2	0	3	249
Hourly Total	0	428	1	1	429	0	0	473	2	473	0	6	4	1	10	912
4:00 PM	0	127	0	0	127	0	0	158	0	158	0	5	3	0	8	293
4:15 PM	0	110	0	0	110	0	0	143	0	143	0	3	1	0	4	257
4:30 PM	0	111	2	0	113	0	0	164	0	164	0	1	3	0	4	281
4:45 PM	0	116	0	0	116	0	0	124	0	124	0	11	1	0	12	252
Hourly Total	0	464	2	0	466	0	0	589	0	589	0	20	8	0	28	1083
5:00 PM	0	155	0	0	155	0	0	151	0	151	0	5	3	0	8	314
5:15 PM	0	126	0	0	126	0	0	114	0	114	0	2	1	0	3	243
5:30 PM	0	108	0	0	108	0	0	101	0	101	0	0	0	0	0	209

5:45 PM	0	77	0	0	77	0	0	103	0	103	0	1	0	0	1	181
Hourly Total	0	466	0	0	466	0	0	469	0	469	0	8	4	0	12	947
6:00 PM	0	91	0	0	91	0	0	98	0	98	0	2	0	0	2	191
6:15 PM	0	109	0	0	109	0	0	96	0	96	0	0	0	0	0	205
6:30 PM	0	62	0	0	62	0	0	83	0	83	0	0	0	0	0	145
6:45 PM	0	65	0	0	65	0	0	69	0	69	0	0	0	0	0	134
Hourly Total	0	327	0	0	327	0	0	346	0	346	0	2	0	0	2	675
7:00 PM	0	50	1	0	51	0	0	87	0	87	0	0	0	0	0	138
7:15 PM	0	59	0	0	59	0	0	56	0	56	0	0	0	0	0	115
7:30 PM	0	56	0	0	56	0	0	56	0	56	0	0	0	0	0	112
7:45 PM	0	74	0	0	74	0	0	59	0	59	0	0	0	0	0	133
Hourly Total	0	239	1	0	240	0	0	258	0	258	0	0	0	0	0	498
8:00 PM	0	51	1	0	52	0	0	32	0	32	0	0	0	0	0	84
8:15 PM	0	46	0	0	46	0	0	45	0	45	0	0	1	0	1	92
8:30 PM	0	48	0	0	48	0	0	33	0	33	0	0	0	0	0	81
8:45 PM	0	29	0	0	29	0	0	45	0	45	0	0	0	0	0	74
Hourly Total	0	174	1	0	175	0	0	155	0	155	0	0	1	0	1	331
9:00 PM	0	24	0	0	24	0	0	40	0	40	0	0	0	0	0	64
9:15 PM	0	30	0	0	30	0	0	37	0	37	0	0	0	0	0	67
9:30 PM	0	18	0	0	18	0	0	47	0	47	0	1	0	0	1	66
9:45 PM	0	25	0	0	25	0	0	23	0	23	0	0	0	0	0	48
Hourly Total	0	97	0	0	97	0	0	147	0	147	0	1	0	0	1	245
10:00 PM	0	28	0	0	28	0	0	36	1	36	0	0	0	0	0	64
10:15 PM	0	18	0	0	18	0	0	39	0	39	0	0	0	0	0	57
10:30 PM	0	12	0	0	12	0	0	31	0	31	0	0	0	0	0	43
10:45 PM	0	13	0	0	13	0	0	16	0	16	0	0	0	0	0	29
Hourly Total	0	71	0	0	71	0	0	122	1	122	0	0	0	0	0	193
11:00 PM	0	13	0	0	13	0	0	24	0	24	0	0	0	0	0	37
11:15 PM	0	14	0	0	14	0	0	11	0	11	0	0	0	0	0	25
11:30 PM	0	19	0	0	19	0	0	9	0	9	0	0	0	0	0	28
11:45 PM	0	9	0	0	9	0	0	10	0	10	0	0	0	0	0	19
Hourly Total	0	55	0	0	55	0	0	54	0	54	0	0	0	0	0	109
Grand Total	0	5545	59	2	5604	1	21	5498	3	5520	0	53	28	3	81	11205
Approach %	0.0	98.9	1.1	-	-	0.0	0.4	99.6	-	-	0.0	65.4	34.6	-	-	-
Total %	0.0	49.5	0.5	-	50.0	0.0	0.2	49.1	-	49.3	0.0	0.5	0.2	-	0.7	-
Lights	0	5427	58	-	5485	1	21	5354	-	5376	0	51	27	-	78	10939
% Lights	-	97.9	98.3	-	97.9	100.0	100.0	97.4	-	97.4	-	96.2	96.4	-	96.3	97.6
Buses	0	19	0	-	19	0	0	58	-	58	0	0	0	-	0	77
% Buses	-	0.3	0.0	-	0.3	0.0	0.0	1.1	-	1.1	-	0.0	0.0	-	0.0	0.7
Single-Unit Trucks	0	82	1	-	83	0	0	69	-	69	0	1	1	-	2	154
% Single-Unit Trucks	-	1.5	1.7	-	1.5	0.0	0.0	1.3	-	1.3	-	1.9	3.6	-	2.5	1.4
Articulated Trucks	0	9	0	-	9	0	0	8	-	8	0	0	0	-	0	17
% Articulated Trucks	-	0.2	0.0	-	0.2	0.0	0.0	0.1	-	0.1	-	0.0	0.0	-	0.0	0.2
Bicycles on Road	0	8	0	-	8	0	0	9	-	9	0	1	0	-	1	18
% Bicycles on Road	-	0.1	0.0	-	0.1	0.0	0.0	0.2	-	0.2	-	1.9	0.0	-	1.2	0.2
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	0.0	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	2	-	-	-	-	3	-	-	-	-	3	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

WSP USA
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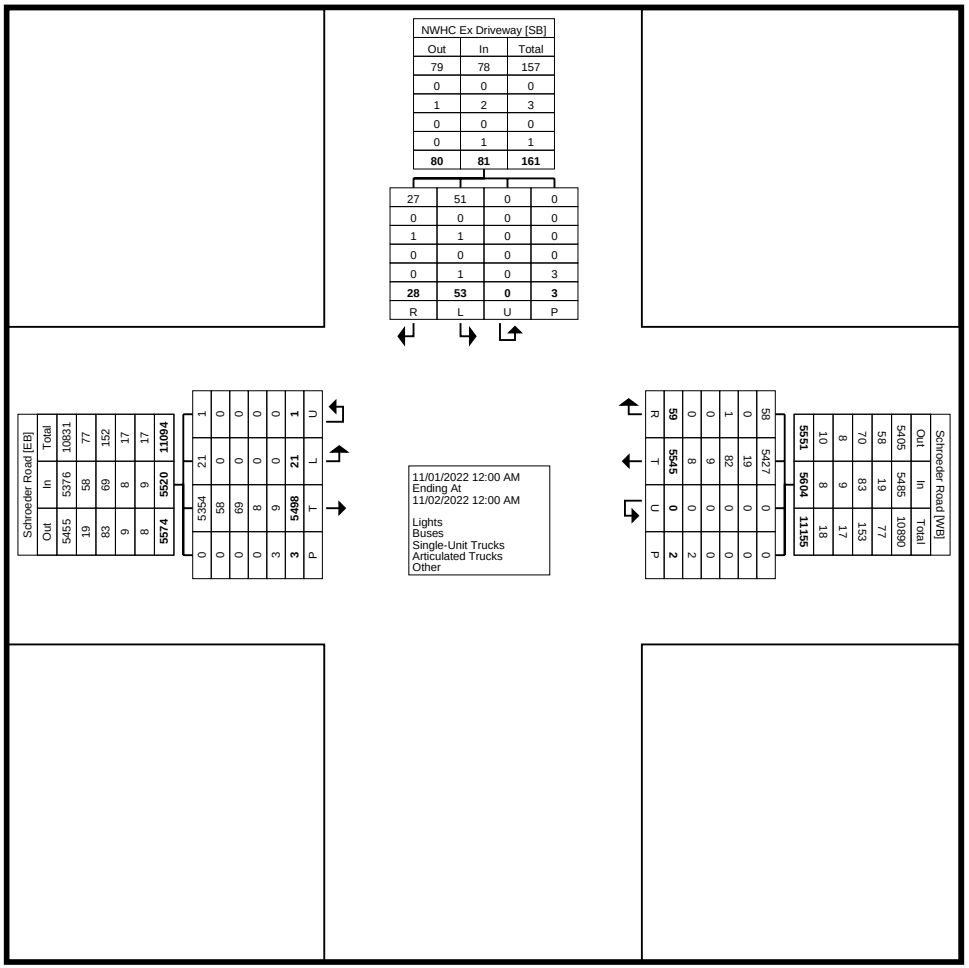
Count Name: Schroeder Dr and NWHC Ex Driveway
Site Code:
Start Date: 11/01/2022
Page No: 4



Turning Movement Data Plot

ATTACHMENT 1

WSP USA
221 N. LaSalle Street
Suite 300
Chicago, Illinois, United States 60601
(312) 577-3300 matthew.maestranzi@wsp.com

Count Name: Schroeder Dr and NWHC Ex Driveway
Site Code:
Start Date: 11/01/2022

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Schroeder Road Westbound					Schroeder Road Eastbound					NWHC Ex Driveway Southbound					
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
7:30 AM	0	111	6	0	117	0	1	128	0	129	0	0	0	0	0	246
7:45 AM	0	162	0	0	162	0	2	99	0	101	0	0	0	0	0	263
8:00 AM	0	115	6	0	121	0	3	109	0	112	0	0	0	0	0	233
8:15 AM	0	133	2	0	135	0	2	72	0	74	0	0	0	0	0	209
Total	0	521	14	0	535	0	8	408	0	416	0	0	0	0	0	951
Approach %	0.0	97.4	2.6	-	-	0.0	1.9	98.1	-	-	0.0	0.0	0.0	-	-	-
Total %	0.0	54.8	1.5	-	56.3	0.0	0.8	42.9	-	43.7	0.0	0.0	0.0	-	0.0	-
PHF	0.000	0.804	0.583	-	0.826	0.000	0.667	0.797	-	0.806	0.000	0.000	0.000	-	0.000	0.904
Lights	0	508	14	-	522	0	8	398	-	406	0	0	0	-	0	928
% Lights	-	97.5	100.0	-	97.6	-	100.0	97.5	-	97.6	-	-	-	-	-	97.6
Buses	0	1	0	-	1	0	0	4	-	4	0	0	0	-	0	5
% Buses	-	0.2	0.0	-	0.2	-	0.0	1.0	-	1.0	-	-	-	-	-	0.5
Single-Unit Trucks	0	9	0	-	9	0	0	5	-	5	0	0	0	-	0	14
% Single-Unit Trucks	-	1.7	0.0	-	1.7	-	0.0	1.2	-	1.2	-	-	-	-	-	1.5
Articulated Trucks	0	1	0	-	1	0	0	0	-	0	0	0	0	-	0	1
% Articulated Trucks	-	0.2	0.0	-	0.2	-	0.0	0.0	-	0.0	-	-	-	-	-	0.1
Bicycles on Road	0	2	0	-	2	0	0	1	-	1	0	0	0	-	0	3
% Bicycles on Road	-	0.4	0.0	-	0.4	-	0.0	0.2	-	0.2	-	-	-	-	-	0.3
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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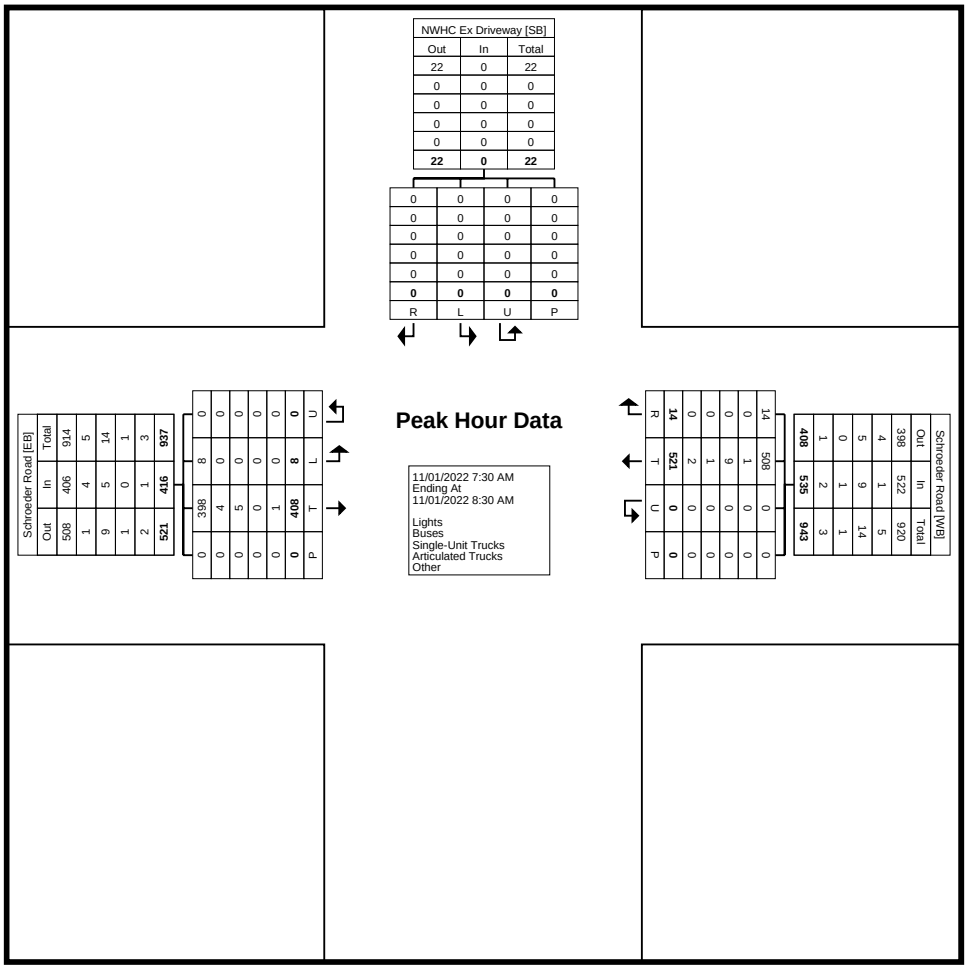

Turning Movement Peak Hour Data Plot (7:30 AM)

ATTACHMENT 1

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221 N. LaSalle Street
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(312) 577-3300 matthew.maestranzi@wsp.com

Count Name: Schroeder Dr and NWHC Ex Driveway
Site Code:
Start Date: 11/01/2022

Turning Movement Peak Hour Data (4:15 PM)

Start Time	Schroeder Road Westbound					Schroeder Road Eastbound					NWHC Ex Driveway Southbound					
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
4:15 PM	0	110	0	0	110	0	0	143	0	143	0	3	1	0	4	257
4:30 PM	0	111	2	0	113	0	0	164	0	164	0	1	3	0	4	281
4:45 PM	0	116	0	0	116	0	0	124	0	124	0	11	1	0	12	252
5:00 PM	0	155	0	0	155	0	0	151	0	151	0	5	3	0	8	314
Total	0	492	2	0	494	0	0	582	0	582	0	20	8	0	28	1104
Approach %	0.0	99.6	0.4	-	-	0.0	0.0	100.0	-	-	0.0	71.4	28.6	-	-	-
Total %	0.0	44.6	0.2	-	44.7	0.0	0.0	52.7	-	52.7	0.0	1.8	0.7	-	2.5	-
PHF	0.000	0.794	0.250	-	0.797	0.000	0.000	0.887	-	0.887	0.000	0.455	0.667	-	0.583	0.879
Lights	0	485	2	-	487	0	0	571	-	571	0	20	8	-	28	1086
% Lights	-	98.6	100.0	-	98.6	-	-	98.1	-	98.1	-	100.0	100.0	-	100.0	98.4
Buses	0	0	0	-	0	0	0	5	-	5	0	0	0	-	0	5
% Buses	-	0.0	0.0	-	0.0	-	-	0.9	-	0.9	-	0.0	0.0	-	0.0	0.5
Single-Unit Trucks	0	7	0	-	7	0	0	4	-	4	0	0	0	-	0	11
% Single-Unit Trucks	-	1.4	0.0	-	1.4	-	-	0.7	-	0.7	-	0.0	0.0	-	0.0	1.0
Articulated Trucks	0	0	0	-	0	0	0	1	-	1	0	0	0	-	0	1
% Articulated Trucks	-	0.0	0.0	-	0.0	-	-	0.2	-	0.2	-	0.0	0.0	-	0.0	0.1
Bicycles on Road	0	0	0	-	0	0	0	1	-	1	0	0	0	-	0	1
% Bicycles on Road	-	0.0	0.0	-	0.0	-	-	0.2	-	0.2	-	0.0	0.0	-	0.0	0.1
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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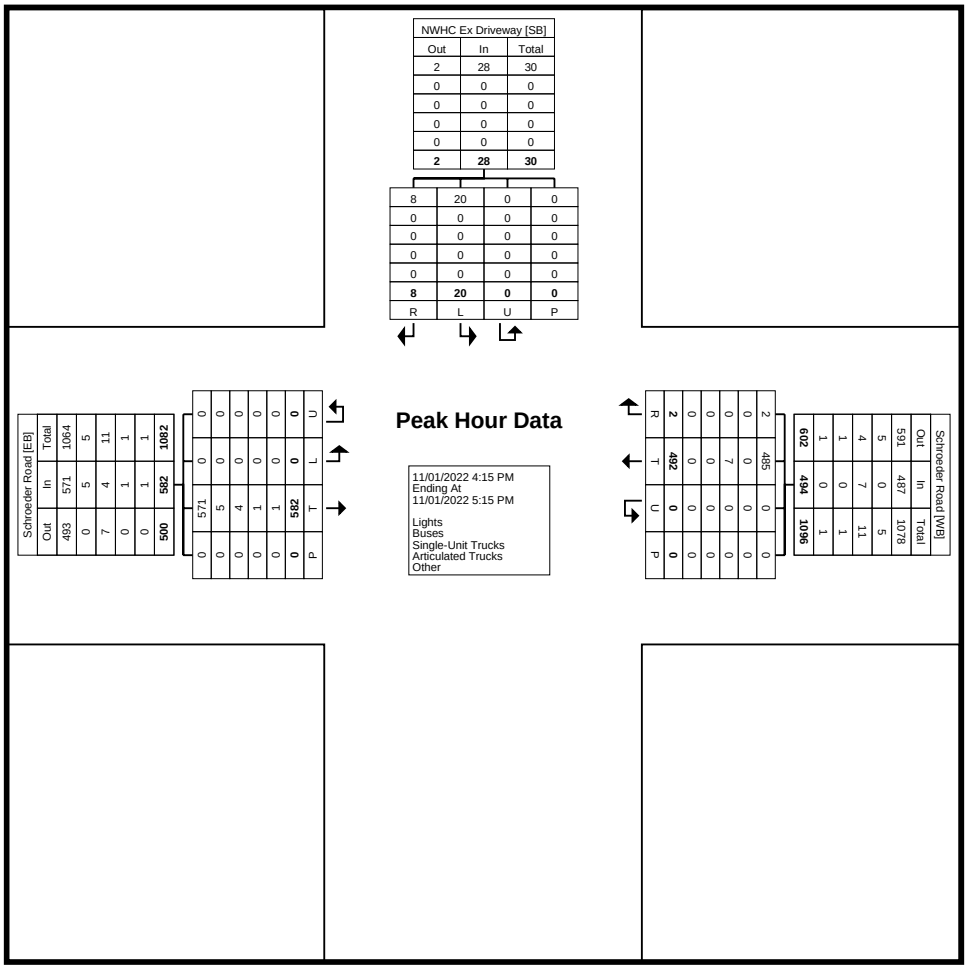
Count Name: Schroeder Dr and NWHC Ex Driveway
Site Code:
Start Date: 11/01/2022



Turning Movement Peak Hour Data Plot (4:15 PM)

Attachment 2 – Highway Capacity Reports– Existing/Projected Conditions AM/PM

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	42	397	366	158	21	9
Future Vol, veh/h	42	397	366	158	21	9
Conflicting Peds, #/hr	2	0	0	2	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	3	3	1	0	11
Mvmt Flow	47	441	407	176	23	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	585	0	-	0	1032	497
Stage 1	-	-	-	-	497	-
Stage 2	-	-	-	-	535	-
Critical Hdwy	4.12	-	-	-	6.4	6.31
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.218	-	-	-	3.5	3.399
Pot Cap-1 Maneuver	990	-	-	-	260	555
Stage 1	-	-	-	-	615	-
Stage 2	-	-	-	-	591	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	988	-	-	-	246	554
Mov Cap-2 Maneuver	-	-	-	-	380	-
Stage 1	-	-	-	-	584	-
Stage 2	-	-	-	-	590	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	14.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	988	-	-	-	420
HCM Lane V/C Ratio	0.047	-	-	-	0.079
HCM Control Delay (s)	8.8	-	-	-	14.3
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	407	519	14	0	0
Future Vol, veh/h	8	407	519	14	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	2	2	0	0	0
Mvmt Flow	9	452	577	16	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	593	0	-	0	1055	585
Stage 1	-	-	-	-	585	-
Stage 2	-	-	-	-	470	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	993	-	-	-	252	515
Stage 1	-	-	-	-	561	-
Stage 2	-	-	-	-	633	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	993	-	-	-	250	515
Mov Cap-2 Maneuver	-	-	-	-	383	-
Stage 1	-	-	-	-	556	-
Stage 2	-	-	-	-	633	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	993	-	-	-	-
HCM Lane V/C Ratio	0.009	-	-	-	-
HCM Control Delay (s)	8.7	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	437	444	38	139	44
Future Vol, veh/h	12	437	444	38	139	44
Conflicting Peds, #/hr	0	0	0	3	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	1	0	5	1	0
Mvmt Flow	14	502	510	44	160	51

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	557	0	-	0	1065	537
Stage 1	-	-	-	-	535	-
Stage 2	-	-	-	-	530	-
Critical Hdwy	4.1	-	-	-	6.41	6.2
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.2	-	-	-	3.509	3.3
Pot Cap-1 Maneuver	1024	-	-	-	248	548
Stage 1	-	-	-	-	589	-
Stage 2	-	-	-	-	592	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1021	-	-	-	243	545
Mov Cap-2 Maneuver	-	-	-	-	378	-
Stage 1	-	-	-	-	579	-
Stage 2	-	-	-	-	590	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	22.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1021	-	-	-	408
HCM Lane V/C Ratio	0.014	-	-	-	0.516
HCM Control Delay (s)	8.6	-	-	-	22.8
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	2.9

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	581	492	2	20	8
Future Vol, veh/h	0	581	492	2	20	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	2	1	0	0	0
Mvmt Flow	0	660	559	2	23	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	561	0	-	0	1220	560
Stage 1	-	-	-	-	560	-
Stage 2	-	-	-	-	660	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1020	-	-	-	201	532
Stage 1	-	-	-	-	576	-
Stage 2	-	-	-	-	518	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1020	-	-	-	201	532
Mov Cap-2 Maneuver	-	-	-	-	340	-
Stage 1	-	-	-	-	576	-
Stage 2	-	-	-	-	518	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	15.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1020	-	-	-	379
HCM Lane V/C Ratio	-	-	-	-	0.084
HCM Control Delay (s)	0	-	-	-	15.4
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	432	552	14	1	1
Future Vol, veh/h	8	432	552	14	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	40
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	2	2	0	0	0
Mvmt Flow	9	480	613	16	1	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	629	0	-	0	1119	621
Stage 1	-	-	-	-	621	-
Stage 2	-	-	-	-	498	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	963	-	-	-	231	491
Stage 1	-	-	-	-	540	-
Stage 2	-	-	-	-	615	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	963	-	-	-	229	491
Mov Cap-2 Maneuver	-	-	-	-	365	-
Stage 1	-	-	-	-	535	-
Stage 2	-	-	-	-	615	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	13.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	963	-	-	-	365	491
HCM Lane V/C Ratio	0.009	-	-	-	0.003	0.002
HCM Control Delay (s)	8.8	-	-	-	14.9	12.3
HCM Lane LOS	A	-	-	-	B	B
HCM 95th %tile Q(veh)	0	-	-	-	0	0

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	45	421	389	168	22	10
Future Vol, veh/h	45	421	389	168	22	10
Conflicting Peds, #/hr	2	0	0	2	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	3	3	1	0	11
Mvmt Flow	50	468	432	187	24	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	621	0	-	0	1096	528
Stage 1	-	-	-	-	528	-
Stage 2	-	-	-	-	568	-
Critical Hdwy	4.12	-	-	-	6.4	6.31
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.218	-	-	-	3.5	3.399
Pot Cap-1 Maneuver	960	-	-	-	238	533
Stage 1	-	-	-	-	596	-
Stage 2	-	-	-	-	571	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	958	-	-	-	225	532
Mov Cap-2 Maneuver	-	-	-	-	361	-
Stage 1	-	-	-	-	564	-
Stage 2	-	-	-	-	570	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	14.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	958	-	-	-	401
HCM Lane V/C Ratio	0.052	-	-	-	0.089
HCM Control Delay (s)	9	-	-	-	14.8
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.3

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	432	552	14	1	1
Future Vol, veh/h	8	432	552	14	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	2	2	0	0	0
Mvmt Flow	9	480	613	16	1	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	629	0	-	0	1119	621
Stage 1	-	-	-	-	621	-
Stage 2	-	-	-	-	498	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	963	-	-	-	231	491
Stage 1	-	-	-	-	540	-
Stage 2	-	-	-	-	615	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	963	-	-	-	229	491
Mov Cap-2 Maneuver	-	-	-	-	365	-
Stage 1	-	-	-	-	535	-
Stage 2	-	-	-	-	615	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	13.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	963	-	-	-	419
HCM Lane V/C Ratio	0.009	-	-	-	0.005
HCM Control Delay (s)	8.8	-	-	-	13.6
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	617	522	2	20	8
Future Vol, veh/h	1	617	522	2	20	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	40
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	2	1	0	0	0
Mvmt Flow	1	701	593	2	23	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	595	0	-	0	1297	594
Stage 1	-	-	-	-	594	-
Stage 2	-	-	-	-	703	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	991	-	-	-	180	509
Stage 1	-	-	-	-	555	-
Stage 2	-	-	-	-	495	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	991	-	-	-	180	509
Mov Cap-2 Maneuver	-	-	-	-	320	-
Stage 1	-	-	-	-	554	-
Stage 2	-	-	-	-	495	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	15.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	991	-	-	-	320	509
HCM Lane V/C Ratio	0.001	-	-	-	0.071	0.018
HCM Control Delay (s)	8.6	-	-	-	17.1	12.2
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0.1

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	13	464	472	40	148	47
Future Vol, veh/h	13	464	472	40	148	47
Conflicting Peds, #/hr	0	0	0	3	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	1	0	5	1	0
Mvmt Flow	15	533	543	46	170	54

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	592	0	-	0	1132	571
Stage 1	-	-	-	-	569	-
Stage 2	-	-	-	-	563	-
Critical Hdwy	4.1	-	-	-	6.41	6.2
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.2	-	-	-	3.509	3.3
Pot Cap-1 Maneuver	994	-	-	-	226	524
Stage 1	-	-	-	-	568	-
Stage 2	-	-	-	-	572	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	991	-	-	-	221	522
Mov Cap-2 Maneuver	-	-	-	-	358	-
Stage 1	-	-	-	-	558	-
Stage 2	-	-	-	-	570	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	26.3
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	991	-	-	-	387
HCM Lane V/C Ratio	0.015	-	-	-	0.579
HCM Control Delay (s)	8.7	-	-	-	26.3
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	3.5

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	617	522	2	20	8
Future Vol, veh/h	1	617	522	2	20	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	2	1	0	0	0
Mvmt Flow	1	701	593	2	23	9

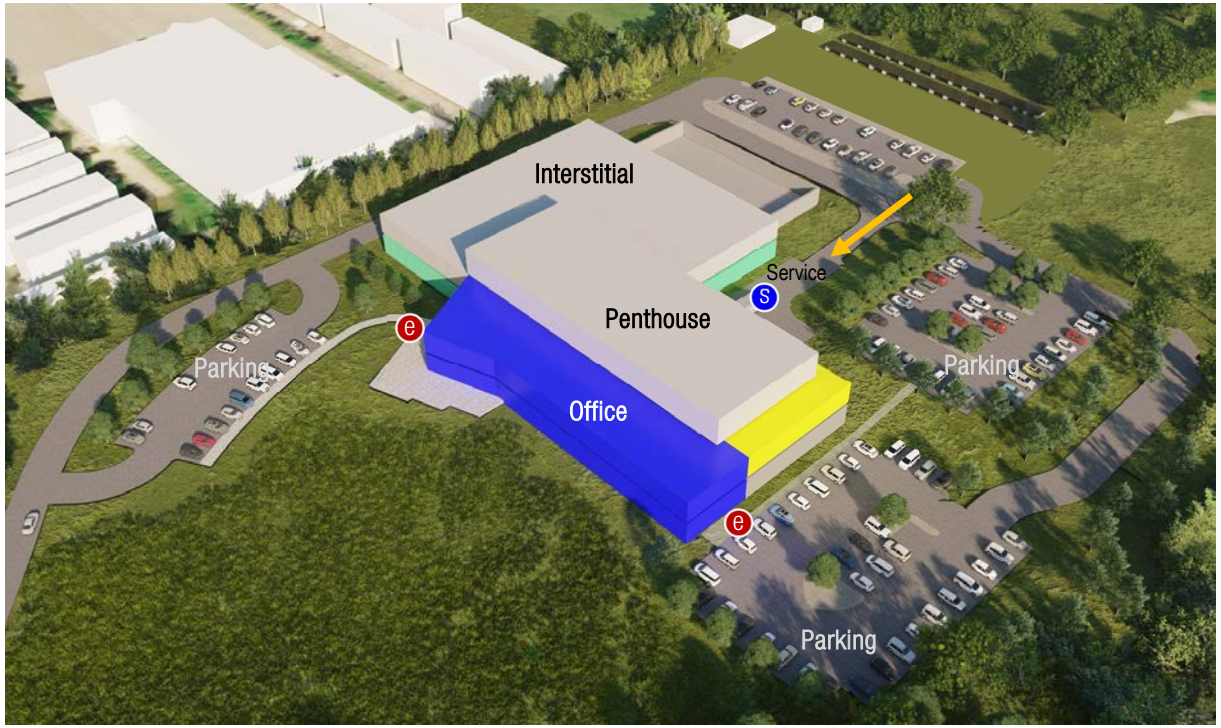
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	595	0	-	0	1297	594
Stage 1	-	-	-	-	594	-
Stage 2	-	-	-	-	703	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	991	-	-	-	180	509
Stage 1	-	-	-	-	555	-
Stage 2	-	-	-	-	495	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	991	-	-	-	180	509
Mov Cap-2 Maneuver	-	-	-	-	320	-
Stage 1	-	-	-	-	554	-
Stage 2	-	-	-	-	495	-

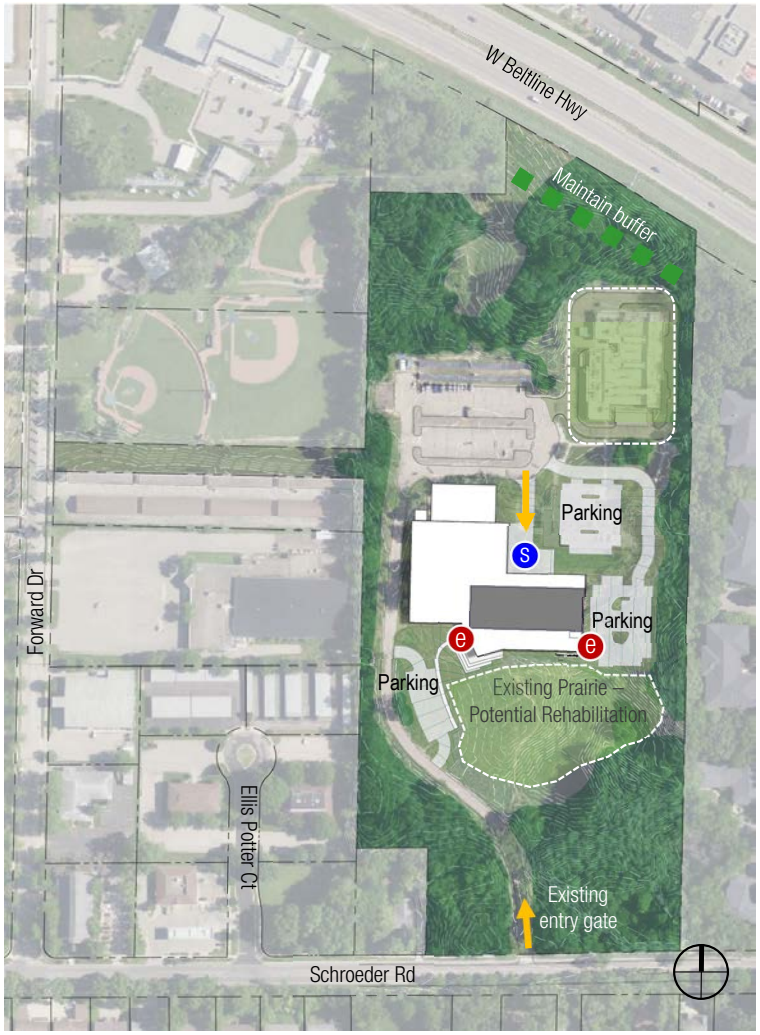
Approach	EB	WB	SB
HCM Control Delay, s	0	0	16
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	991	-	-	-	358
HCM Lane V/C Ratio	0.001	-	-	-	0.089
HCM Control Delay (s)	8.6	-	-	-	16
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Attachment 3 – NWHC Conceptual Site Plan/ Rendering

NWHC Modernizaion Concept





ATTACHMENT 3