

February 20, 2024

Best Brokers
49 Twin Lakes Drive
Waterford, CT 06385

Attn: Mr. Daniel DelGrosso

**RE: Traffic Impact Report
Roberts Village Housing
430 Mohegan Ave Parkway (Route 32)
Waterford, CT
Our File: 23186**

Dear Mr. DelGrosso:

Pursuant to your request our office has prepared this traffic impact report outlining the potential traffic impact of a proposed 24 unit residential development known as Roberts Village on property located at 430 Mohegan Ave Parkway, CT Route 32, in the Town of Waterford, CT. The site proposed for development is shown in Figure 1. This letter presents our findings.

Proposed Development

The property proposed for development has frontage to Route 32 on the east as well as frontage to the cul-de-sac of Roberts Court. The proposed development is depicted on site plans prepared by Indigo Design, LLC. The plan depicts an extension of Roberts Court into the property with a loop roadway that turns to the north and returns to itself. A total of 24 units are proposed in 20 buildings located on the outside and the inside of the loop roadway. A total of 62 parking spaces are proposed. No access is proposed to Route 32.

Description of Area

Route 32 is a state-maintained roadway that originates at Route 82 in Norwich and extends in a southerly direction, along the Thames River, past the subject site to its terminus in downtown New London. Route 32 provides access to Route 2A and I-395 north of the site, and I-95 south of the site. Across the site frontage Route 32 carries two travel lanes and wide shoulders in each direction separated by a Jersey Barrier. The roadway is posted at 45 miles per hour in

each direction. Near the site, traffic signals are provided at Fitzgerald Avenue, north of the site, and Benham Avenue, south of the site. Land use along Route 32, within Waterford is mainly single family residential.

Roberts Court is a town-maintained roadway that originates at Senkow Drive and extends 300 feet to its terminus in a cul-de-sac at the subject property line. The roadway provides 30 feet of pavement with a single lane in each direction. The roadway is unmarked and has no posted speed limit. The roadway serves 7 single family residences.

Senkow Drive is a town-maintained roadway that originates at Route 32 and extends in a westerly direction, a distance of approximately 800 feet, to its terminus at Old Norwich Road. The roadway provides 32 feet of pavement with a single lane in each direction, separated by a painted double yellow centerline. The roadway is posted at 25 miles per hour. Land use along the roadway is single family residential. The Senkow Road approaches to Route 32 and Old Norwich Road each operate under stop sign control.

Old Norwich Road originates at a signalized intersection with Route 32 and extends in a southerly direction through Quaker Hill, past Senkow Drive and then continuing south into the City of New London where the roadway takes on the name of Willams Street. The roadway continues past Connecticut College and then interchanging with Route 32 and I-95. Old Norwich Road provides a width varying from 26 to 35 feet with a single travel lane in each direction, separated by a painted double yellow centerline. The roadway is posted at 30 miles per hour.

Background Traffic

The Connecticut DOT maintains a traffic volume count program on all state highways and some local roadways. Included in the database are counts on Route 32 south of Benham Road and on Old Norwich Road at the New London Townline. The most recent counts were conducted during March and April 2023. The count on Route 32 indicates an average daily traffic volume (ADT) of 25,300 vehicles with peak hour volumes of 2,060 vehicles during the morning peak hour (7:00 a.m.) and 2,001 vehicles during the afternoon peak hour (5:00 p.m.). The count on Old Norwich Road indicates an average daily traffic

volume (ADT) of 3,200 vehicles with peak hour volumes of 242 vehicles during the morning peak hour (8:00 a.m.) and 332 vehicles during the afternoon peak hour (4:00 p.m.). The ConnDOT counts are presented in Tables 1 and 2.

Our office arranged for the installation of an automated traffic volume counter on Senkow Drive west of Robers Court during July 2022. The count indicates that Senkow Drive carries a weekday ADT of 181 vehicles, with peak hour volumes of 15 vehicles during the morning peak hour (8:00 a.m.) and 18 vehicles during the afternoon peak hour (3:00 p.m.). This count is presented in Table 3.

In addition to the automated counts described above, manual turning movement counts were conducted at the intersections of Route 32 with Fitzgerald Avenue, Route 32 with Benham Avenue, Route 32 at Senkow Drive and Old Norwich Road at Senkow Drive during the morning and afternoon peak commuter periods. These counts were conducted during October 2023. Figure 2 presents the observed traffic volumes. Figure 3 represents the 2022 existing traffic volumes for the peak entering and exiting church hours, within the study area, balanced between count locations by holding the higher observed volumes.

A review of recent ConnDOT counts, pre Covid, indicates that traffic volumes have decreased slightly on both Route 32 and Old Norwich Road between 2011 and 2023. To be conservative, a 1% per year growth rate was applied to grow the traffic to a 2025 design year. The results are presented in Figure 4 as the 2025 background traffic volumes.

Site Generated Traffic

The Institute of Transportation Engineers (ITE) *Trip Generation* Report was consulted for the purpose of estimating the trip generation of the proposed facility. *Trip Generation* presents trip generation estimates for many land uses based on counts conducted at existing facilities throughout the country. Included with the ITE database is Land Use Code (LUC) 210 – Single Family Detached Housing. The data for this land use is presented in terms of the number of units. Based on the ITE Data the proposed 24 unit development has a trip generation of 271 trips daily with a morning peak hour of 20 trips and an afternoon peak hour of 26 trips. The trip

generation is summarized in Table 4.

For the purposes of this analysis, we project a directional distribution of 50% to and from the north and 50% to and from the south. Due to the center median on Route 32, traffic to the site will either need to execute a u-turn at one of the signalized intersections north and south of Senkow Drive, or to utilize Old Norwich Road to approach from the south or to depart to the north. Figure 5 presents the anticipated directional distribution of the site generated traffic for the full build development.

Figure 6 depicts the site generated traffic based on this distribution. By adding the site generated traffic to the background traffic, the combined traffic volumes upon completion of the development can be determined. These volumes represent the 2025 combined traffic volumes as presented in Figure 7.

Capacity Analysis

Capacity analyses were conducted for the background and combined traffic volumes for both the entering and exiting Sunday peak hours at each of seven intersections. The analysis was conducted utilizing the intersection capacity analysis program called SYNCHRO. The analysis results are shown in Table 5.

Route 32 at Fitzgerald Avenue - This is an existing, four-way signalized intersection with Route 32 oriented in the north/south direction. Fitzgerald Avenue is oriented in the east/west orientation. The northbound and southbound Route 32 approaches each provide a dedicated left turn lane, one through lane and a shared through/right turn lane. The Fitzgerald Avenue approaches each provide a single lane approach. The intersection is under signalized control and operates with protected northbound and southbound advance left turns, followed by the northbound and southbound through movements, followed by the eastbound and westbound movements simultaneously.

Analysis indicates that the intersection operates at an overall LOS A during the Sunday entering and exiting peak hours under the background traffic volume conditions. With the introduction of

the site generated traffic, the intersection will continue to operate at the same levels of service as in the background conditions.

Route 32 at Benham Avenue - This is an existing, four-way signalized intersection with Route 32 oriented in the north/south direction. Benham Avenue is oriented in the east/west orientation. The northbound and southbound Route 32 approaches each provide a dedicated left turn lane, one through lane and a shared through/right turn lane. The Benham Avenue approaches each provide a single lane approach. The intersection is under signalized control and operates with protected northbound and southbound advance left turns, followed by the northbound and southbound through movements, followed by the eastbound and westbound movements simultaneously.

Analysis indicates that the intersection operates at an overall LOS A during the Sunday entering and exiting peak hours under the background traffic volume conditions. With the introduction of the site generated traffic, the intersection will continue to operate at the same levels of service as in the background conditions.

Route 32 at Senkow Drive - This is an existing unsignalized "T" intersection. Route 32 is oriented in the north/south direction. Senkow Drive approaches from the west. There is a Jersey barrier in the center of Route 32, so only the southbound lanes are accessible from Senkow Drive. Route 32 provides a two lane approach with a single through lane and a shared through/right turn lane. Route 32 operates free. Senkow Drive provides a single lane approach, operates under stop sign control, and is restricted to right turn movements only.

Analysis indicates that under the background traffic volumes the southbound Route 32 approach operates at a LOS A during peak hours. The Senkow Drive approach operates at a LOS B during the Sunday peak hours. With the introduction of the site generated traffic, all approaches will continue to operate at the same levels of service as in the background conditions.

Old Norwich Road at Senkow Drive - This is an existing unsignalized "T" intersection. Old Norwich Road is oriented in the north/south direction. Senkow Drive approaches from the east.

All approaches provide a single lane. The Senkow Drive approach operates under stop sign control.

Analysis indicates that under the background traffic volumes the Old Norwich Road approaches operate at a LOS A during peak hours. The Senkow Drive approach operates at a LOS A during the Sunday peak hours. With the introduction of the site generated traffic, all approaches will continue to operate at the same levels of service as under the background conditions.

Senkow Drive at Roberts Court - This is an existing unsignalized "T" intersection. Senkow Drive is oriented in the east/west direction. Roberts Court approaches from the south. All approaches provide a single lane. The Roberts Court approach operates under stop sign control.

Analysis indicates under the background traffic volumes that the Senkow Drive approaches will operate at a LOS A and the Roberts Court approach will operate at a LOS A during the Sunday peak hours. With the introduction of the site generated traffic all approaches will continue to operate at the same levels of service as under the background conditions.

Driveway Location and Design

The proposed site driveway is an extension of Roberts Court. The driveway as proposed will provide 24 feet of pavement with a single 12 foot lane for entering traffic and a 12 foot lane for exiting traffic, separated by a painted double yellow centerline. We recommend that the driveway approach to the cul-de-sac be striped with a stop bar and stop sign for traffic control. Since the site driveway is an extension of Roberts Court, there are no sight line restrictions.

Accident Data

The University of Connecticut Crash Data Repository gathers and compiles traffic accident data for all state highways and some major local roadways. A list of accidents occurring in the area from October 1st, 2020 through October 1st, 2023 was reviewed. The data is presented by mile marker and includes information such as date, time, roadway and weather conditions, collision types, and other variables.

A 3-year accident history was compiled for Route 32 from a point 100 feet south of Benham Avenue to a point 100 feet north of Fitzgerald Avenue and for the full length of Old Norwich Road. No accidents were identified for either Senkow Drive or Roberts Court. A total of 31 accidents involving 59 vehicles occurred on Route 32 during the three year period reviewed. Twelve accidents occurred at the intersection of Benham Avenue, six accidents at Senkow Drive, and 13 accidents occurred at the intersection of Fitzgerald Avenue. 22 of the accidents were rear end accidents, there was one angle accident, two sideswipe accidents, five accidents involving fixed objects, and one involving a deer. 24 accidents were property damage only, five involved a suspected minor injury, one involved a suspected serious injury, and one accident was listed as a possible injury. There were no reported fatalities.

A total of eleven accidents involving 15 vehicles occurred on Old Norwich Road during the three year period reviewed. There were two accidents recorded at the intersections of Benham Road, one at Senkow Drive and no accidents at Fitzgerald Avenue. There were three rear end accidents, one sideswipe accident and the remaining seven accidents involving fixed objects. Six of the accidents were property damage only, three involved a suspected minor injury, and two accidents were listed as a possible injury. There were no reported fatalities.

Sate Approvals

The proposed development provides less than 100,000 s.f. of floor area and has fewer than 200 parking spaces. Therefore, the development does not fall under the jurisdiction of the Office of the State Traffic Administration (OSTA). Since the development does not propose any access to a State Highway, it is not necessary to obtain an Encroachment Permit from the Connecticut Department of Transportation's District II Office.

Conclusions

Based on the low volume of site generated traffic and the calculated levels of service as outlined in this report, it is my professional opinion that the local roadway network has sufficient capacity to accommodate the traffic volumes associated with the proposed development. The site access is proposed to Roberts Court, a very low volume roadway. The site driveway is properly designed to accommodate the anticipated peak hour volumes.

Mr. Daniel DelGrosso
February 20, 2024
Page 8

We appreciate the opportunity to provide this information to you. A representative from our firm will be available to present testimony before local commissions if needed. If you require any additional information, please do not hesitate to contact our office.

Very truly yours,

F. A. Hesketh & Associates, Inc.



Scott F. Hesketh, P. E.
Manager of Transportation Engineering

cc: Mr. Joe Wren, Indigo Design, LLC

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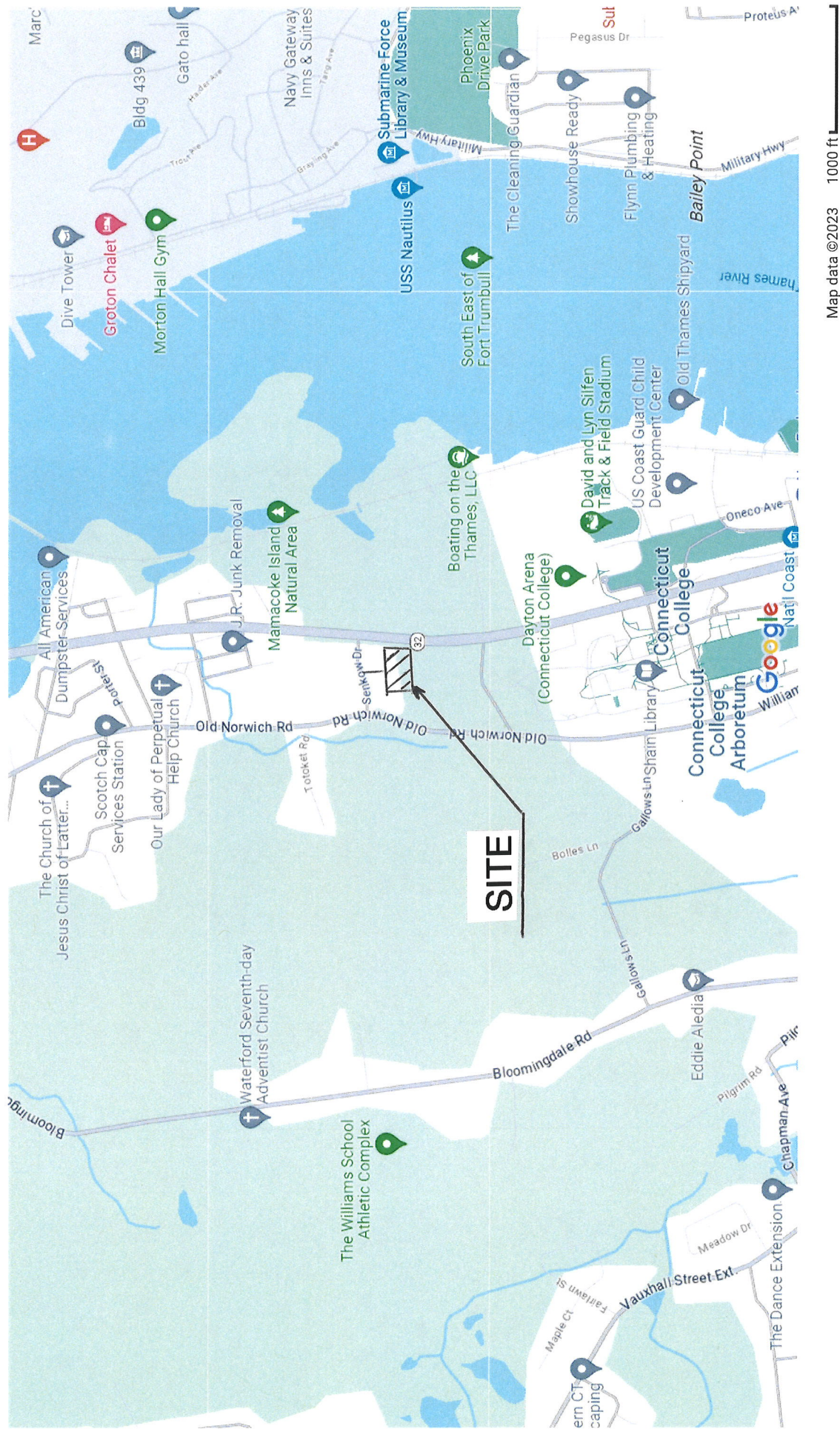


FIGURE 1

TABLE 1
ConnDOT TRAFFIC VOLUMES
Route 32 south of Benham Avenue
Station No. 151

	20-Mar-23 Monday			21-Mar-23 Tuesday			22-Mar-23 Wednesday			23-Mar-23 Thursday		
	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total
12:00				120	115	235	114	83	197	138	92	230
1:00				39	40	79	53	44	97	54	37	91
2:00				29	39	68	64	43	107	33	47	80
3:00				50	69	119	49	74	123	41	72	113
4:00				84	270	354	82	259	341	88	265	353
5:00				168	928	1096	172	944	1116	164	953	1117
6:00				412	1283	1695	416	1267	1683	428	1243	1671
7:00				785	1275	2060	695	1042	1737	819	930	1749
8:00				717	986	1703	594	1069	1663	703	1103	1806
9:00				558	731	1289	575	807	1382	590	851	1441
10:00				535	679	1214	572	710	1282			
11:00	645	651	1296	613	679	1292	625	724	1349			
12:00	664	732	1396	683	765	1448	737	743	1480			
1:00	756	759	1515	822	782	1604	825	806	1631			
2:00	843	909	1752	818	996	1814	809	726	1535			
3:00	835	906	1741	607	713	1320	794	935	1729			
4:00	837	707	1544	1197	654	1851	640	706	1346			
5:00	1048	854	1902	931	901	1832	1125	876	2001			
6:00	722	556	1278	767	661	1428	711	613	1324			
7:00	520	402	922	550	529	1079	601	436	1037			
8:00	414	341	755	430	362	792	473	393	866			
9:00	323	277	600	359	305	664	347	308	655			
10:00	252	222	474	339	246	585	288	246	534			
11:00	341	163	504	361	158	519	351	181	532			
	8200	7479	15679	11974	14166	26140	11712	14035	25747	3058	5593	8651

2023 ADT = 25,300 for station 151 in Waterford

TABLE 2
ConnDOT TRAFFIC VOLUMES
Old Norwich Road at New London Towl Line
Station No. 210

	5-Apr-23 Wednesday			6-Apr-23 Thursday		
	<u>NB</u>	<u>SB</u>	<u>Total</u>	<u>NB</u>	<u>SB</u>	<u>Total</u>
12:00				13	5	18
1:00				3	6	9
2:00				2	0	2
3:00				2	1	3
4:00				2	18	20
5:00				10	37	47
6:00				21	99	120
7:00				39	159	198
8:00				71	171	242
9:00				72	105	177
10:00				72	90	162
11:00	91	110	201	89	105	194
12:00	88	86	174	88	105	193
1:00	96	90	186			
2:00	147	108	255			
3:00	201	125	326			
4:00	199	133	332			
5:00	144	119	263			
6:00	97	65	162			
7:00	75	43	118			
8:00	60	35	95			
9:00	52	19	71			
10:00	20	12	32			
11:00	15	8	23			
	1285	953	2238	484	901	1385

2023 ADT = 3,200 for station 210 in Waterford

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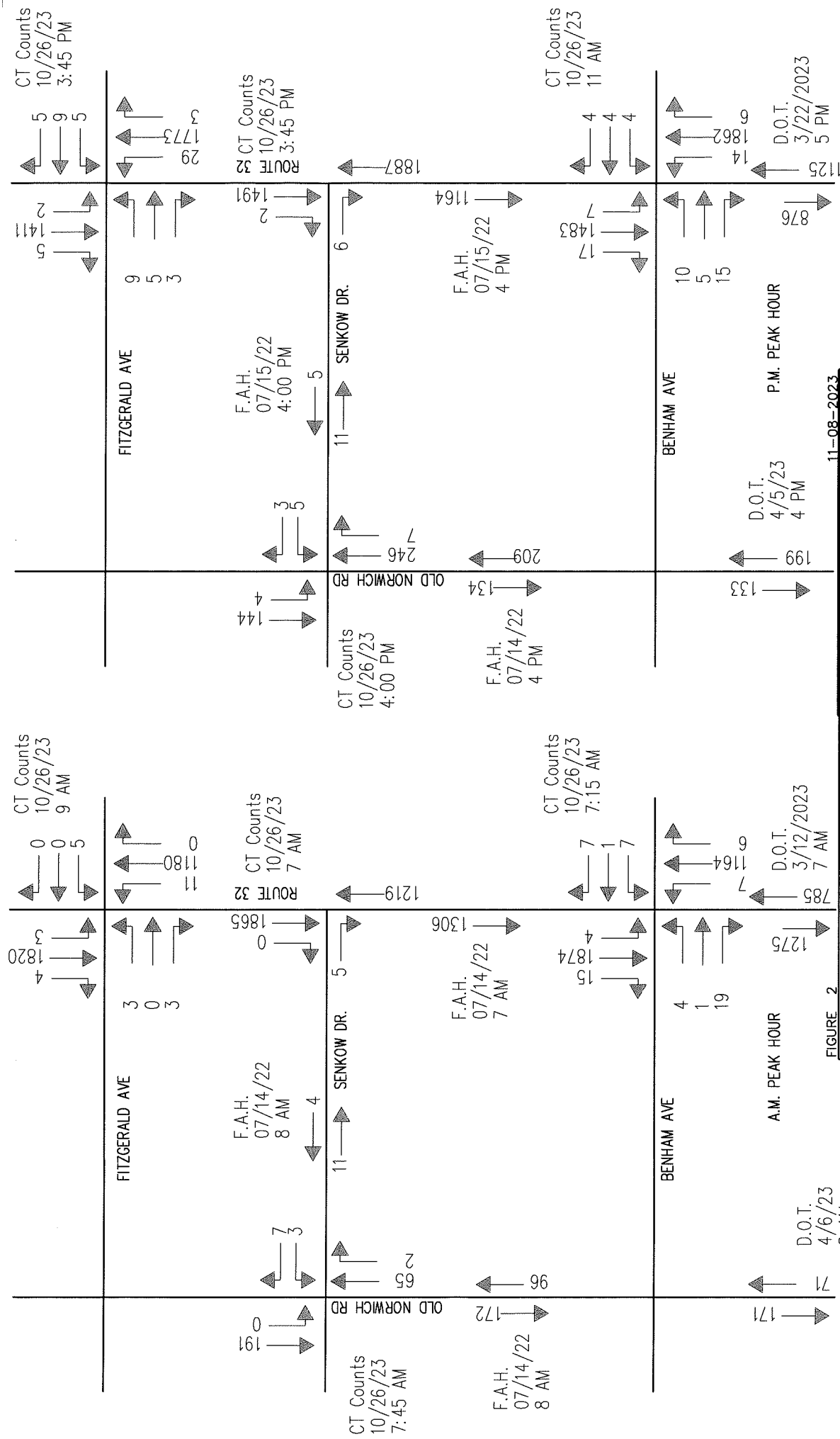
3 Creamery Brook
East Granby, CT 06026
Phone: (860) 653-8000

Senkow Drive
West of Roberts Court
Waterford, CT 06375
Job No. 22069

Date Start: 13-Jul-22
Date End: 18-Jul-22

TABLE 3

Start Time	11-Jul-22		Tue		Wed		Thu		Fri		Weekday Average		Sat		Sun	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
12:00 AM	*	*	*	*	*	*	0	1	0	1	0	1	0	0	0	0
01:00	*	*	*	*	*	*	0	2	1	1	0	2	0	0	0	1
02:00	*	*	*	*	*	*	1	0	2	1	0	0	0	0	0	1
03:00	*	*	*	*	*	*	0	0	0	0	0	0	0	0	0	0
04:00	*	*	*	*	*	*	0	0	0	0	0	0	0	0	0	0
05:00	*	*	*	*	*	*	0	0	0	1	0	0	0	0	0	0
06:00	*	*	*	*	*	*	0	5	0	6	0	6	0	0	0	1
07:00	*	*	*	*	*	*	3	6	2	5	2	6	0	4	1	2
08:00	*	*	*	*	*	*	4	11	5	8	4	10	1	4	1	3
09:00	*	*	*	*	*	*	5	8	5	6	5	7	2	3	0	1
10:00	*	*	*	*	*	*	2	3	4	5	3	4	1	9	1	10
11:00	*	*	*	*	*	*	5	10	5	3	5	6	5	5	3	5
12:00 PM	*	*	*	*	*	*	4	10	5	10	4	10	4	6	1	5
01:00	*	*	*	*	*	*	3	15	5	8	4	12	8	4	4	12
02:00	*	*	*	*	*	*	2	11	4	11	3	11	5	1	3	6
03:00	*	*	*	*	*	*	4	5	3	6	3	9	5	7	1	6
04:00	*	*	*	*	*	*	7	8	5	11	5	9	1	10	5	4
05:00	*	*	*	*	*	*	3	9	3	10	3	9	1	5	1	5
06:00	*	*	*	*	*	*	2	3	3	6	3	6	1	5	1	6
07:00	*	*	*	*	*	*	3	4	1	6	2	6	5	4	6	2
08:00	*	*	*	*	*	*	2	10	2	5	3	6	2	6	1	4
09:00	*	*	*	*	*	*	2	4	0	1	2	3	0	3	3	5
10:00	*	*	*	*	*	*	0	1	0	2	0	2	2	0	0	1
11:00	*	*	*	*	*	*	0	1	0	0	0	1	0	0	0	2
Total	0	0	0	0	24	57	52	128	56	115	53	128	43	77	32	82
Day	0	0	0	0	81	157	180	180	171	181	181	181	120	114	114	114
AM Peak	-	-	-	-	-	-	09:00	08:00	08:00	08:00	09:00	08:00	11:00	10:00	11:00	10:00
Vol.	-	-	-	-	-	-	5	11	5	8	5	10	5	9	3	10
PM Peak	-	-	-	-	20:00	15:00	16:00	13:00	12:00	14:00	16:00	13:00	13:00	16:00	19:00	13:00
Vol.	-	-	-	-	6	15	7	15	5	11	5	12	8	10	6	12



F. A. Hesketh & Associates, Inc.

6 CREAMERY BROOK, EAST GRANBY, CT 06026

FA

**TRAFFIC
PLANNING
ENGINEER
DESIGN**

OBSERVED TRAFFIC VOLUMES
A.M. AND P.M. PEAK HOURS

ROBERT'S VILLAGE

430 MOHEGAN AVE PARKWAY (RT 32)
WATERFORD CONNECTICUT

NOT TO SCALE

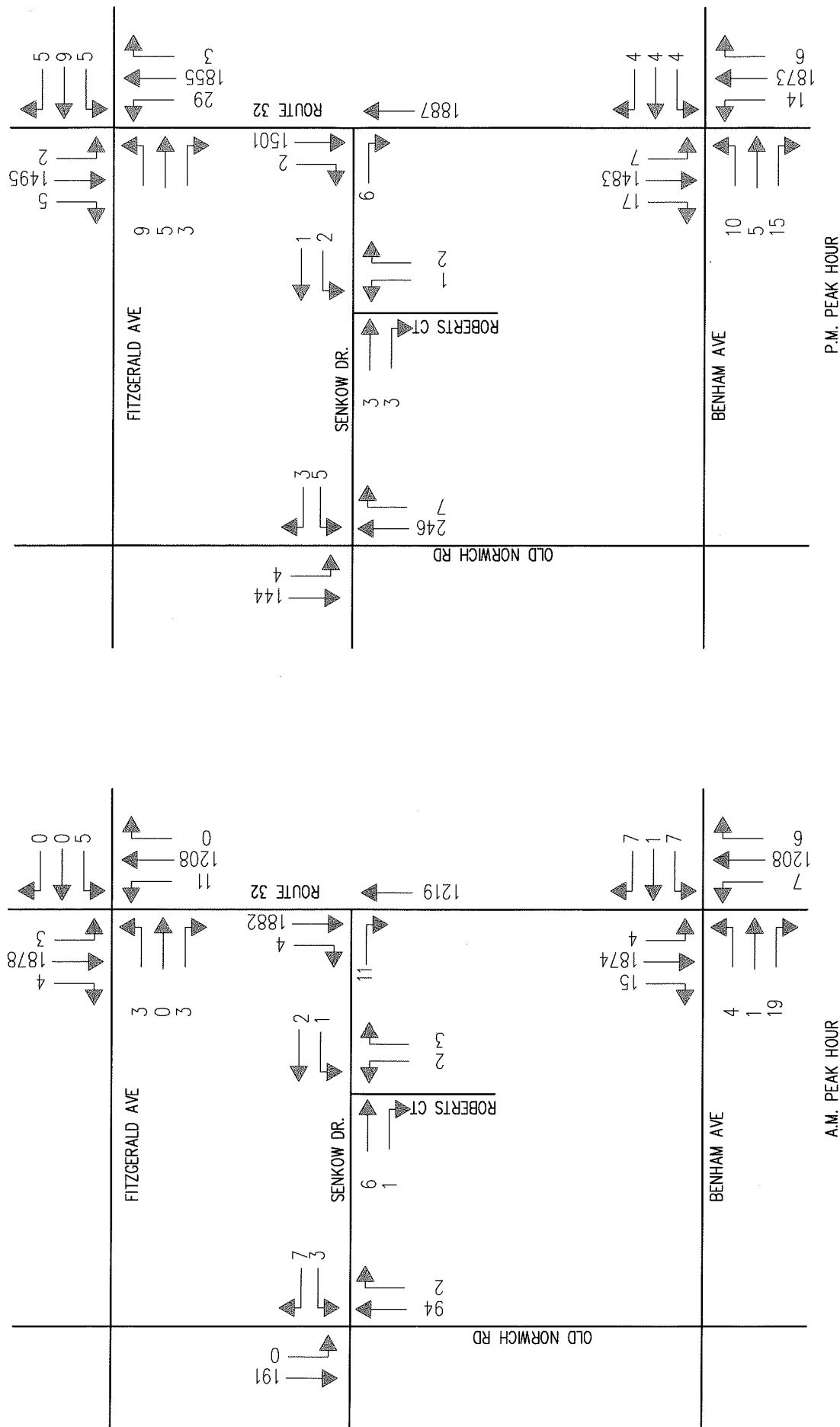


FIGURE 3 11-08-23

2026 BACKGROUND TRAFFIC
A.M. AND P.M. PEAK HOURS

ROBERT'S VILLAGE
430 MOHEGAN AVE PARKWAY (RT 32)
WATERFORD, CONNECTICUT

F. A. Hesketh & Associates, Inc.
6 CREAMERY BROOK, EAST GRANBY, CT 06026

FAH
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PLANNING
ENGINEERING
DESIGN

NOT TO SCALE

Table 4
Trip Generation Summary
Robert's Village Housing
430 Mohegan Ave Parkway (CT Route 32) - Waterford, CT

Land Use	Size	ADT	A.M. Peak Hour			P.M. Peak Hour		
			Enter	Exit	Total	Enter	Exit	Total
LUC: 210								
Single Family Detached Housing								
	24 units	271	5	15	20	16	10	26

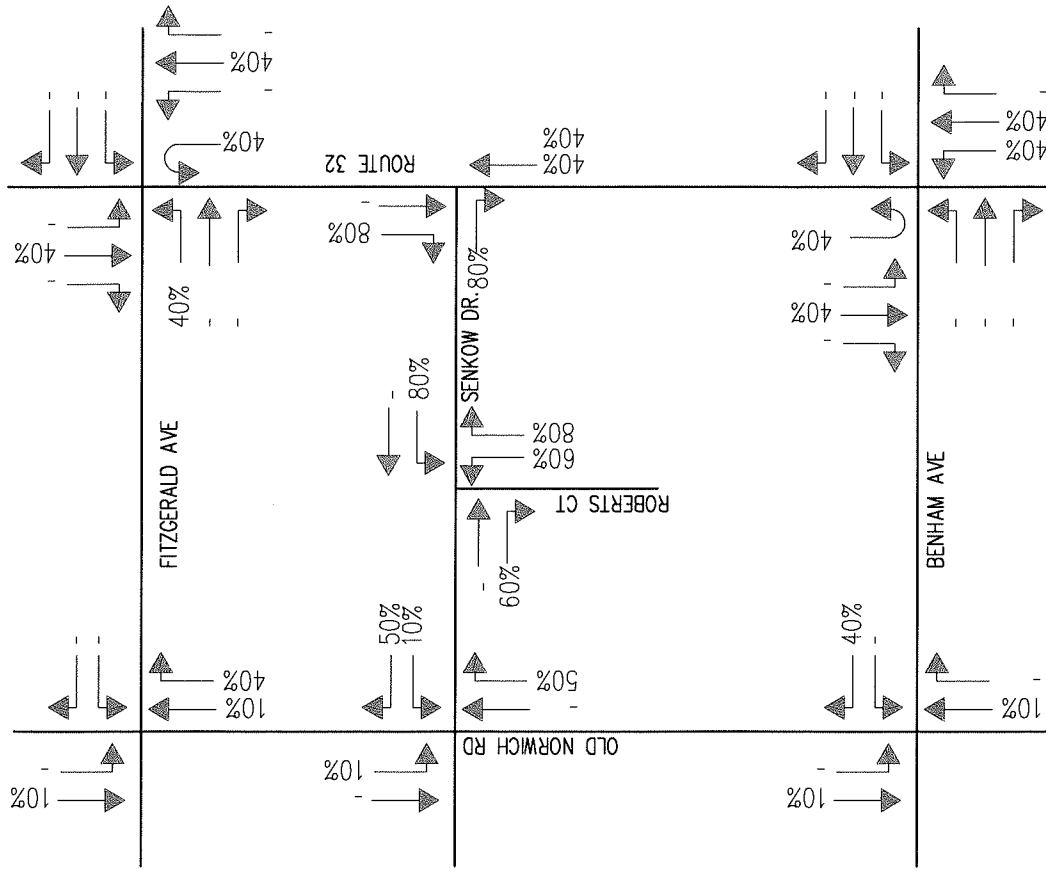


FIGURE 4

11-08-23

DIRECTIONAL DISTRIBUTION OF
SITE GENERATED TRAFFIC VOLUMES

ROBERT'S VILLAGE

430 MOHEGAN AVE PARKWAY (RT 32)
WATERFORD, CONNECTICUT

F. A. Hesketh & Associates, Inc.

6 CREAMERT BROOK, EAST GRANBY, CT 06026

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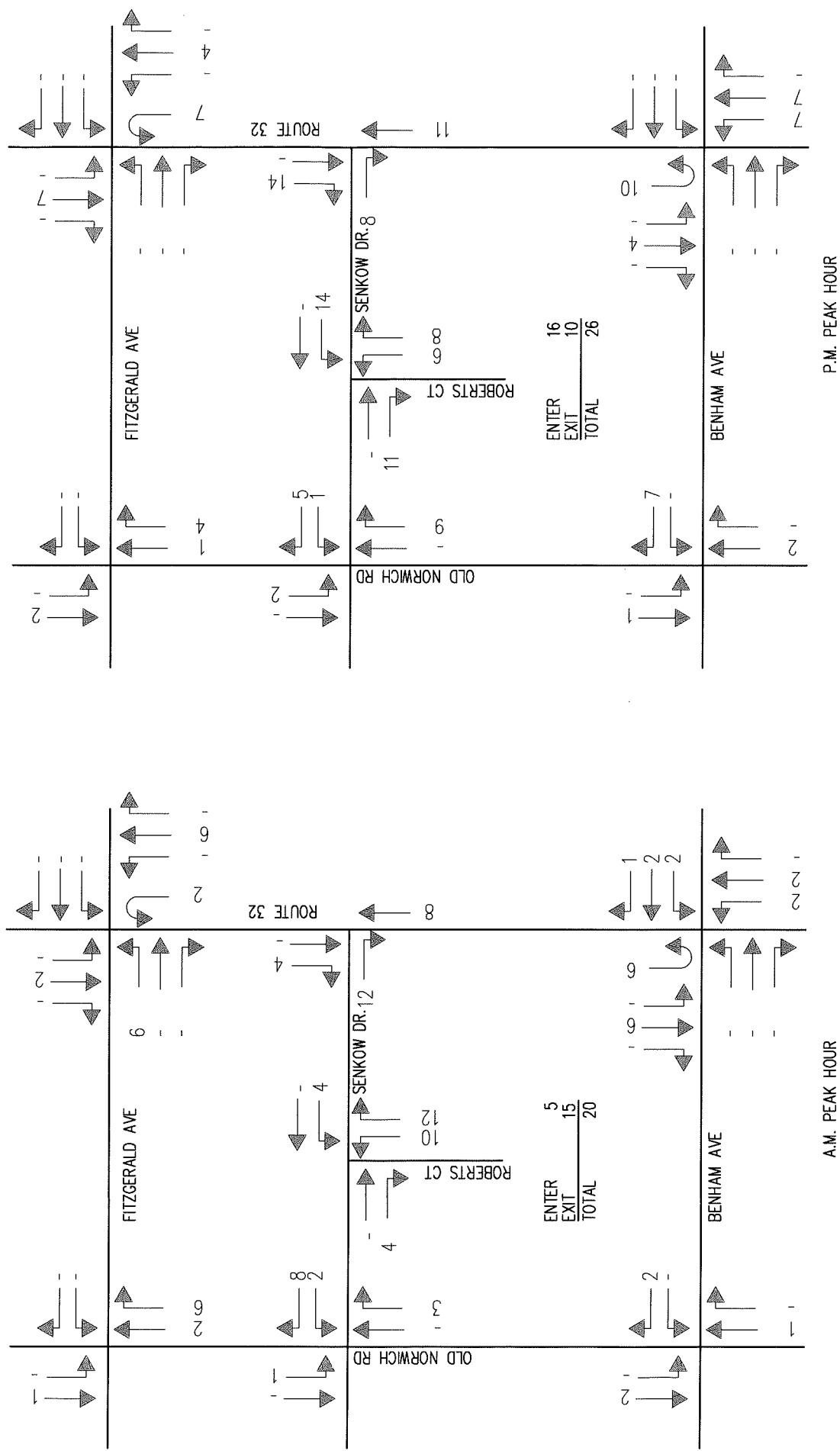


Table 5
Level of Service Summary
Robert's Village
Waterford, CT

Time Period	A.M. Peak Hour								P.M. Peak Hour							
	Background Traffic				Combined Traffic				Background Traffic				Combined Traffic			
	LOS	delay	v/c	Queue	LOS	delay	v/c	Queue	LOS	delay	v/c	Queue	LOS	delay	v/c	Queue
Route 32 and Benham Ave																
EB	C	23.4	0.21	27	C	23.4	0.21	27	C	30.4	0.24	37	C	30.4	0.24	37
WB	C	32.0	0.16	25	C	32.0	0.16	25	C	34.8	0.10	22	C	34.8	0.10	22
NB Left	D	42.9	0.08	19	D	43.1	0.10	21	D	43.5	0.13	28	D	44.8	0.23	45
Thru	A	4.2	0.49	244	A	4.4	0.49	253	A	6.8	0.67	570	A	9.1	0.69	602
SB Left	D	42.5	0.05	13	D	43.2	0.10	23	D	42.9	0.07	19	D	43.9	0.15	33
Thru	A	8.8	0.76	598	A	8.9	0.76	608	A	5.0	0.53	365	A	8.0	0.57	387
Overall:	A	7.4	0.76		A	7.6	0.76		A	6.5	0.67		A	9.3	0.69	
Route 32 and Fitzgerald Ave																
EB	A	0.2	0.02	0	A	0.3	0.04	0	C	24.6	0.08	21	C	24.8	0.11	25
WB	C	26.4	0.03	11	C	26.4	0.03	11	C	23.7	0.10	22	C	23.4	0.10	22
NB Left	C	27.5	0.07	18	C	25.6	0.07	19	C	28.2	0.17	32	C	25.1	0.18	34
Thru	A	3.2	0.39	223	A	3.3	0.40	224	A	7.7	0.64	#552	A	7.9	0.64	#560
SB Left	C	27.3	0.02	8	C	27.3	0.02	8	C	27.0	0.01	6	C	27.0	0.01	6
Thru	A	6.5	0.62	#579	A	7.4	0.90	#612	A	7.9	0.54	351	B	11.0	0.56	#483
Overall:	A	5.4	0.62		A	5.9	0.62		A	8.1	0.64		A	9.6	0.64	
Route 32 and Senkow Drive																
EB	C	20.8	0.05	4	C	21.7	0.10	8	C	17.0	0.02	2	C	17.6	0.05	4
SB Thru	A	0.0	0.79	0	A	0.0	0.79	0	A	0.0	0.66	0	A	0.0	0.66	0
Right	A	0.0	0.39	0	A	0.0	0.40	0	A	0.0	0.33	0	A	0.0	0.34	0
Old Norwich Rd & Senkow Drive																
WB	A	9.3	0.01	1	A	9.2	0.02	2	B	10.7	0.01	1	B	10.4	0.02	2
NB	A	0.0	0.06	0	A	0.0	0.06	0	A	0.0	0.16	0	A	0.0	0.16	0
SB	A	0.0	0.00	0	A	0.0	0.00	0	A	0.2	0.00	0	A	0.3	0.00	0
Senkow Drive & Roberts Court																
EB	A	0.0	0.00	0	A	0.0	0.01	0	A	0.0	0.00	0	A	0.0	0.01	0
WB	A	2.4	0.00	0	A	5.2	0.00	0	A	4.8	0.00	0	A	6.9	0.01	1
NB	A	8.5	0.00	0	A	8.6	0.03	2	A	8.4	0.00	0	A	8.6	0.02	1

APPENDIX

ConnDOT Traffic Counts

Status: OK

North

Combined

South

Class

Speed

WATF-210 - South

[203]-Old Norwich Rd - 2.26 mi at New London TL

Town.....	Waterford	05-Apr	06-Apr
Station.....	210	Wed	Thu
Location.....	41.383933,-72.109588		
2015-Major Collector	5.....2015-Urban		
Start Report.....	05-Apr-2023 11:00AM		
End Report.....	06-Apr-2023 01:00PM		
24-Hour Count...	1644 * G4(0.99) = 1627.6		
UnRounded AADT.....	1627.6 / 1 = 1627.6		
OK 2023 Wed 05-Apr	-this report-...3200		
OK 2020 Mon 06-Apr	2100		
OK 2017 Thu 26-Jan	4000		
OK 2011 Mon 12-Dec	4000		
OK 2008 Wed 16-Jul	4300		
Dataset Details.....	1		
	12:00am		5
	01:00am		6
	02:00am		0
	03:00am		1
	04:00am		18
	05:00am		37
	06:00am		99
	07:00am		159
	08:00am		171
	09:00am		105
	10:00am	x	90
	11:00am	110	105
	12:00pm	86	105
	01:00pm	90	x
	02:00pm	108	
	03:00pm	125	
	04:00pm	133	
	05:00pm	119	
	06:00pm	65	
	07:00pm	43	
	08:00pm	35	
	09:00pm	19	
	10:00pm	12	
	11:00pm	8	
	Totals	953	901

Status: OK

North

Combined

South

Class

Speed

WATF-210 - North

[203]-Old Norwich Rd - 2.26 mi at New London TL

Town.....	Waterford	05-Apr	06-Apr
Station.....	210	Wed	Thu
Location.....	41.383933,-72.109588		
2015-Major Collector	5.....2015-Urban		
Start Report.....	05-Apr-2023 11:00AM		
End Report.....	06-Apr-2023 01:00PM		
UnRounded AADT.....	1592		
24-Hour Count...	1592 * G4(0.99) = 1576.1		
UnRounded AADT.....	1576.1 / 1 = 1576.1		
OK 2023 Wed 05-Apr	-this report-...3200		
OK 2020 Mon 06-Apr	2100		
OK 2017 Thu 26-Jan	4000		
OK 2011 Mon 12-Dec	4000		
OK 2008 Wed 16-Jul	4300		
Dataset Details.....	1		
	12:00am		
	01:00am		
	02:00am		
	03:00am		
	04:00am		
	05:00am		
	06:00am		
	07:00am		
	08:00am		
	09:00am		
	10:00am		
	11:00am		
	12:00pm		
	01:00pm		
	02:00pm		
	03:00pm		
	04:00pm		
	05:00pm		
	06:00pm		
	07:00pm		
	08:00pm		
	09:00pm		
	10:00pm		
	11:00pm		
	Totals	1285	484

Status: OK

North

Combined

South

Class

Speed

WATF-151 - North

Route 32 - 1.94 mi South of Benham Avenue

Town.....	Waterford	20-Mar	21-Mar	22-Mar	23-Mar
Station.....	151	Mon	Tue	Wed	Thu
Location.....	41.384948,-72.105731		120	114	138
Posted Speed Limit.....	45 MPH		39	53	54
2015-Principal Arterial - Other 3...2015-Urban			29	64	33
Start Report.....	20-Mar-2023 11:00AM		50	49	41
End Report.....	23-Mar-2023 10:00AM		84	82	88
UnRounded AADT.....	11697		168	172	164
24-Hour Count.....	11697 * G4(0.98) = 11463.1		412	416	428
Day 1.....	+11974 * G4(0.98) = 23197.6		785	695	819
Day 2.....	+11712 * G4(0.98) = 34675.3		717	594	703
UnRounded AADT.....	34675.3 / 3 = 11558.4		558	575	590
OK 2023 Mon 20-Mar -this report-.....	25300	x	535	572	x
OK 2020 Mon 06-Apr	16100	645	613	625	
OK 2011 Wed 07-Dec	29400	664	683	737	
Dataset Details.....	2	756	822	825	
		843	818	809	
		835	607	794	
		837	1197	640	
		1048	931	1125	
		722	767	711	
		520	550	601	
		414	430	473	
		323	359	347	
		252	339	288	
		341	361	351	
Totals		8200	11974	11712	3058

Status: OK

North

Combined

South

Class

Speed

WATF-151 - Combined - n/s

Route 32 - 1.94 mi South of Benham Avenue

Town.....	Waterford	20-Mar	21-Mar	22-Mar	23-Mar	
Station.....	151	Mon	Tue	Wed	Thu	
Location.....	41.384948,-72.105731		235	197	230	
Posted Speed Limit.....	45 MPH		79	97	91	
2015-Principal Arterial - Other 3...2015-Urban			68	107	80	
Start Report.....	20-Mar-2023 11:00AM		119	123	113	
End Report.....	23-Mar-2023 10:00AM		354	341	353	
Annualized AADT.....	25300		1096	1116	1117	
24-Hour Count.....	25591 * G4(0.98) = 25079.2		1695	1683	1671	
Day 1.....	+26140 * G4(0.98) = 50696.4		2060	1737	1749	
Day 2.....	+25747 * G4(0.98) = 75928.4		1703	1663	1806	
UnRounded AADT.....	75928.4 / 3 = 25309.5		1289	1382	1441	
OK 2023 Mon 20-Mar -this report-.....	25300	10:00am	x	1214	1282	
OK 2020 Mon 06-Apr	16100	11:00am	1296	1292	1349	
OK 2011 Wed 07-Dec	29400	12:00pm	1396	1448	1480	
Dataset Details.....	2	01:00pm	1515	1604	1631	
		02:00pm	1752	1814	1535	
		03:00pm	1741	1320	1729	
		04:00pm	1544	1851	1346	
		05:00pm	1902	1832	2001	
		06:00pm	1278	1428	1324	
		07:00pm	922	1079	1037	
		08:00pm	755	792	866	
		09:00pm	600	664	655	
		10:00pm	474	585	534	
		11:00pm	504	519	532	
		Totals	15679	26140	25747	8651

Status: OK

North

Combined

South

Class

Speed

WATF-151 - South

Route 32 - 1.94 mi South of Benham Avenue

Town.....	Waterford	20-Mar	21-Mar	22-Mar	23-Mar
Station.....	151	Mon	Tue	Wed	Thu
Location.....	41.384948,-72.105731				
Posted Speed Limit.....	45 MPH				
2015-Principal Arterial - Other 3...2015-Urban					
Start Report.....	20-Mar-2023 11:00AM				
End Report.....	23-Mar-2023 10:00AM				
Annualized AADT.....	13894				
24-Hour Count.....	13894 * G4(0.98) = 13616.1				
Day 1.....	+14166 * G4(0.98) = 27498.8				
Day 2.....	+14035 * G4(0.98) = 41253.1				
UnRounded AADT.....	41253.1 / 3 = 13751.0				
OK 2023 Mon 20-Mar -this report-.....	25300				
OK 2020 Mon 06-Apr	16100				
OK 2011 Wed 07-Dec	29400				
Dataset Details.....	2				
		12:00am	115	83	92
		01:00am	40	44	37
		02:00am	39	43	47
		03:00am	69	74	72
		04:00am	270	259	265
		05:00am	928	944	953
		06:00am	1283	1267	1243
		07:00am	1275	1042	930
		08:00am	986	1069	1103
		09:00am	731	807	851
		10:00am	x	679	710
		11:00am	651	679	724
		12:00pm	732	765	743
		01:00pm	759	782	806
		02:00pm	909	996	726
		03:00pm	906	713	935
		04:00pm	707	654	706
		05:00pm	854	901	876
		06:00pm	556	661	613
		07:00pm	402	529	436
		08:00pm	341	362	393
		09:00pm	277	305	308
		10:00pm	222	246	246
		11:00pm	163	158	181
		Totals	7479	14166	14035
					5593

Status: OK

North

Combined

South

Class

Speed

WATF-210 - Combined - n/s

[203]-Old Norwich Rd - 2.26 mi at New London TL

Town.....	Waterford	05-Apr	06-Apr
Station.....	210	Wed	Thu
Location.....	41.383933,-72.109588	12:00am	18
2015-Major Collector	5.....2015-Urban	01:00am	9
Start Report.....	05-Apr-2023 11:00AM	02:00am	2
End Report.....	06-Apr-2023 01:00PM	03:00am	3
UnRounded AADT.....	3203.6	04:00am	20
24-Hour Count... 3236 * G4(0.99) = 3203.6		05:00am	47
UnRounded AADT.....	3203.6 / 1 = 3203.6	06:00am	120
OK 2023 Wed 05-Apr -this report-...	3200	07:00am	198
OK 2020 Mon 06-Apr	2100	08:00am	242
OK 2017 Thu 26-Jan	4000	09:00am	177
OK 2011 Mon 12-Dec	4000	10:00am	x 162
OK 2008 Wed 16-Jul	4300	11:00am	201 194
Dataset Details.....	1	12:00pm	174 193
		01:00pm	186 x
		02:00pm	255
		03:00pm	326
		04:00pm	332
		05:00pm	263
		06:00pm	162
		07:00pm	118
		08:00pm	95
		09:00pm	71
		10:00pm	32
		11:00pm	23
		Totals	2238 1385

Manual Turning Movement Counts

Connecticut Counts LLC
Kensington, Connecticut 06037
(860) 828-1693

Old Norwich Road at Senkow Drive
Waterford, Connecticut

File Name : 24858
Site Code : 24858
Start Date : 10/26/2023
Page No : 1

Groups Printed- Lights - Trucks - Buses

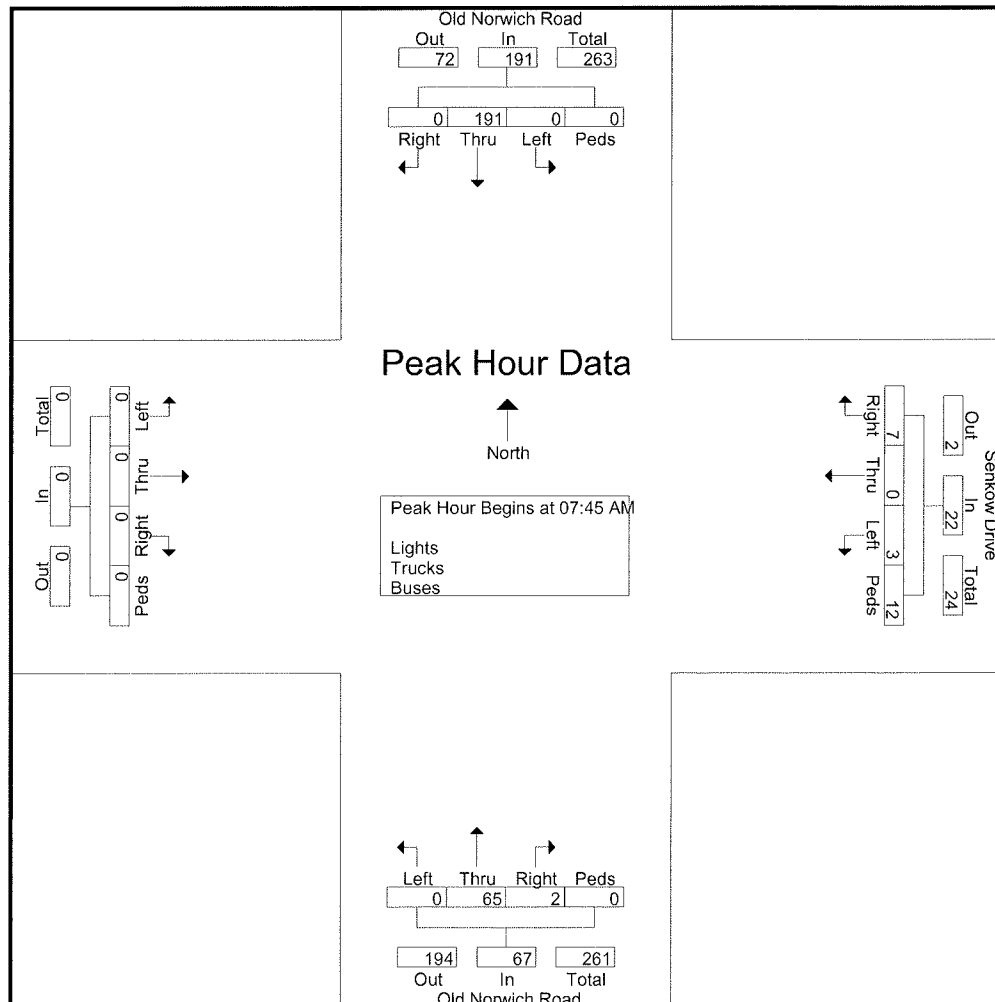
Start Time	Old Norwich Road From North					Senkow Drive From East					Old Norwich Road From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
07:00 AM	0	32	1	0	33	0	0	0	1	1	0	9	0	0	9	0	0	0	0	0	43
07:15 AM	0	55	0	0	55	0	0	0	0	0	0	11	0	10	21	0	0	0	0	0	76
07:30 AM	0	50	2	0	52	0	0	0	1	1	0	9	0	0	9	0	0	0	0	0	62
07:45 AM	0	61	0	0	61	1	0	0	0	1	0	12	0	0	12	0	0	0	0	0	74
Total	0	198	3	0	201	1	0	0	2	3	0	41	0	10	51	0	0	0	0	0	255
08:00 AM	0	36	0	0	36	1	0	0	8	9	1	19	0	0	20	0	0	0	0	0	65
08:15 AM	0	48	0	0	48	4	0	2	1	7	0	14	0	0	14	0	0	0	0	0	69
08:30 AM	0	46	0	0	46	1	0	1	3	5	1	20	0	0	21	0	0	0	0	0	72
08:45 AM	0	43	3	0	46	1	0	0	2	3	0	17	0	0	17	0	0	0	0	0	66
Total	0	173	3	0	176	7	0	3	14	24	2	70	0	0	72	0	0	0	0	0	272
Grand Total	0	371	6	0	377	8	0	3	16	27	2	111	0	10	123	0	0	0	0	0	527
Apprch %	0	98.4	1.6	0		29.6	0	11.1	59.3		1.6	90.2	0	8.1		0	0	0	0		
Total %	0	70.4	1.1	0	71.5	1.5	0	0.6	3	5.1	0.4	21.1	0	1.9	23.3	0	0	0	0	0	
Lights	0	360	6	0	366	6	0	3	15	24	1	102	0	10	113	0	0	0	0	0	503
% Lights	0	97	100	0	97.1	75	0	100	93.8	88.9	50	91.9	0	100	91.9	0	0	0	0	0	95.4
Trucks	0	2	0	0	2	0	0	0	1	1	0	3	0	0	3	0	0	0	0	0	6
% Trucks	0	0.5	0	0	0.5	0	0	0	6.2	3.7	0	2.7	0	0	2.4	0	0	0	0	0	1.1
Buses	0	9	0	0	9	2	0	0	0	2	1	6	0	0	7	0	0	0	0	0	18
% Buses	0	2.4	0	0	2.4	25	0	0	0	7.4	50	5.4	0	0	5.7	0	0	0	0	0	3.4

Connecticut Counts LLC

Kensington, Connecticut 06037
(860) 828-1693

File Name : 24858
Site Code : 24858
Start Date : 10/26/2023
Page No : 2

	Old Norwich Road From North					Senkow Drive From East					Old Norwich Road From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	61	0	0	61	1	0	0	0	1	0	12	0	0	12	0	0	0	0	0	74
08:00 AM	0	36	0	0	36	1	0	0	8	9	1	19	0	0	20	0	0	0	0	0	65
08:15 AM	0	48	0	0	48	4	0	2	1	7	0	14	0	0	14	0	0	0	0	0	69
08:30 AM	0	46	0	0	46	1	0	1	3	5	1	20	0	0	21	0	0	0	0	0	72
Total Volume	0	191	0	0	191	7	0	3	12	22	2	65	0	0	67	0	0	0	0	0	280
% App. Total	0	100	0	0		31.8	0	13.6	54.5		3	97	0	0		0	0	0	0		
PHF	.000	.783	.000	.000	.783	.438	.000	.375	.375	.611	.500	.813	.000	.000	.798	.000	.000	.000	.000	.000	.946



Connecticut Counts LLC

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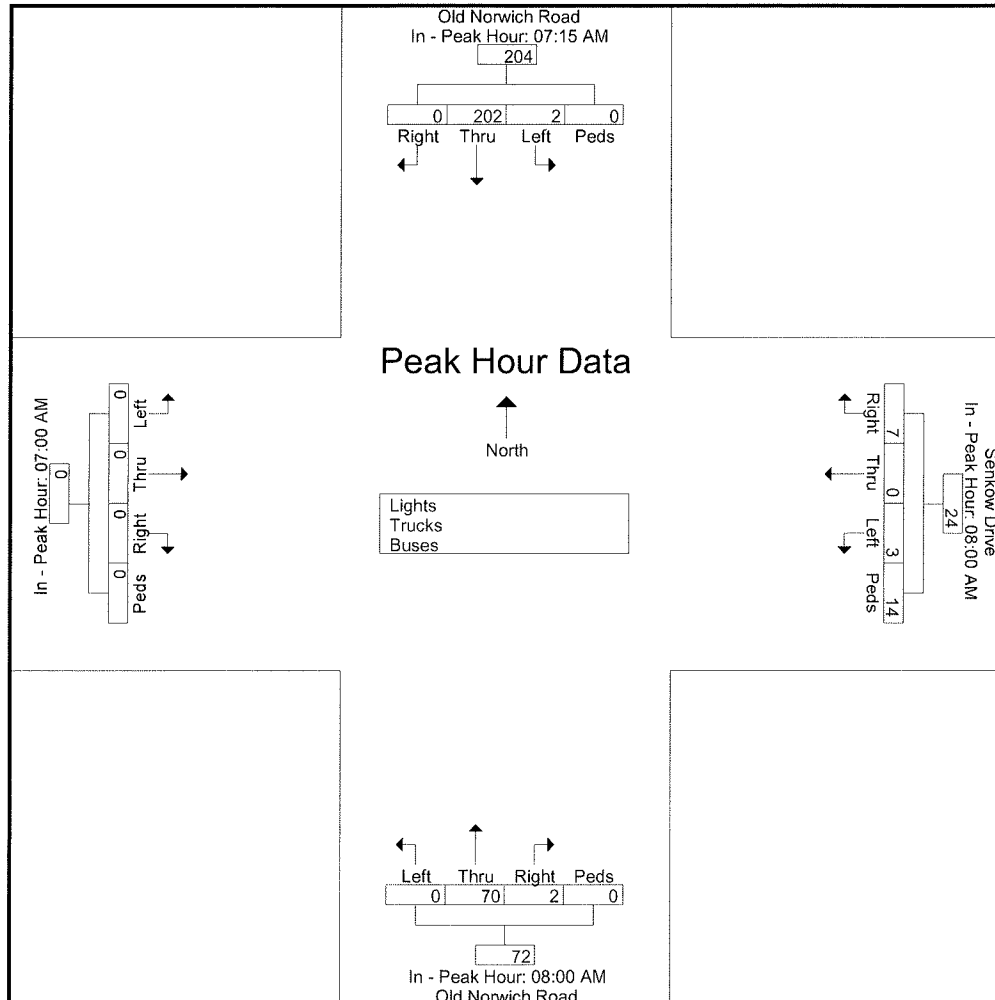
File Name : 24858
Site Code : 24858
Start Date : 10/26/2023
Page No : 3

	Old Norwich Road From North					Senkow Drive From East					Old Norwich Road From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM					08:00 AM					08:00 AM					07:00 AM				
+0 mins.	0	55	0	0	55	1	0	0	8	9	1	19	0	0	20	0	0	0	0	0
+15 mins.	0	50	2	0	52	4	0	2	1	7	0	14	0	0	14	0	0	0	0	0
+30 mins.	0	61	0	0	61	1	0	1	3	5	1	20	0	0	21	0	0	0	0	0
+45 mins.	0	36	0	0	36	1	0	0	2	3	0	17	0	0	17	0	0	0	0	0
Total Volume	0	202	2	0	204	7	0	3	14	24	2	70	0	0	72	0	0	0	0	0
% App. Total	0	99	1	0		29.2	0	12.5	58.3		2.8	97.2	0	0		0	0	0	0	
PHF	.000	.828	.250	.000	.836	.438	.000	.375	.438	.667	.500	.875	.000	.000	.857	.000	.000	.000	.000	.000



Connecticut Counts LLC
Kensington, Connecticut 06037
(860) 828-1693

Old Norwich Road at Senkow Drive
Waterford, Connecticut

File Name : 24859
Site Code : 24859
Start Date : 10/26/2023
Page No : 1

Groups Printed- Lights - Trucks - Buses

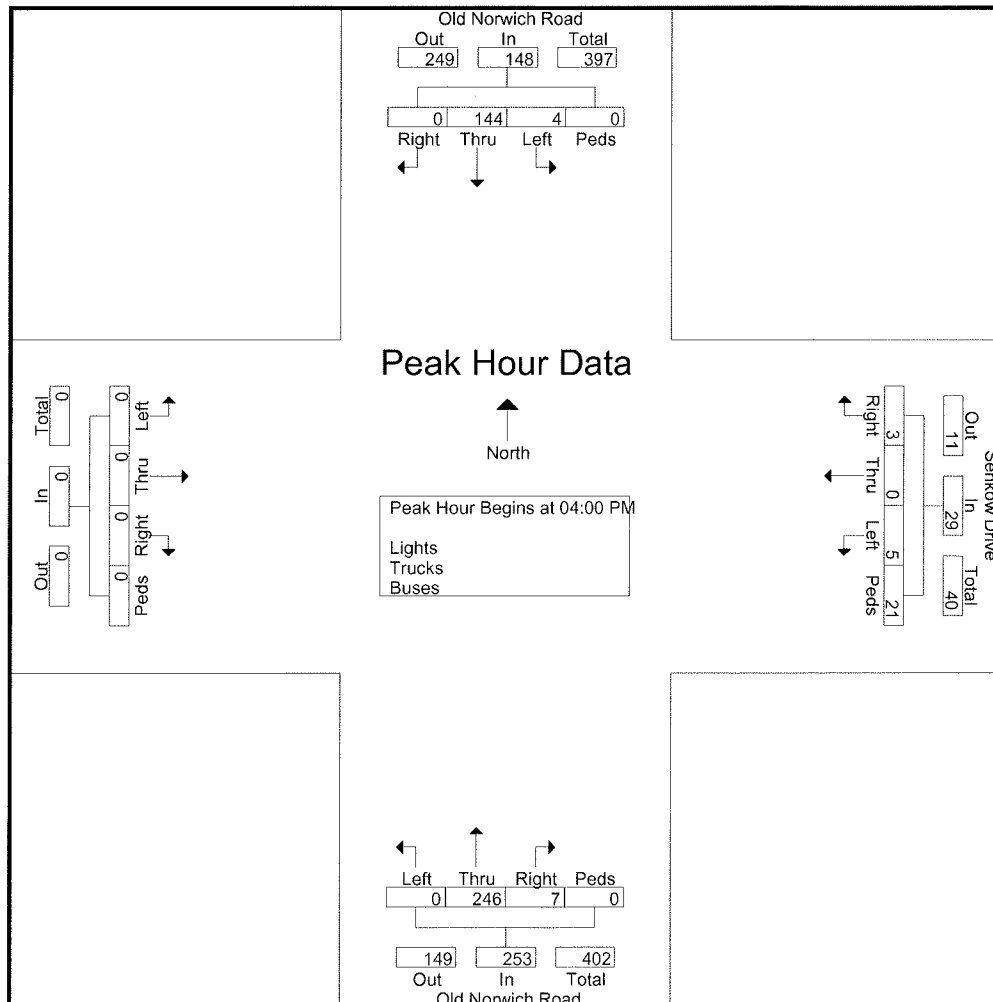
	Old Norwich Road From North					Senkow Drive From East					Old Norwich Road From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
03:30 PM	0	35	6	0	41	1	1	2	0	4	3	78	0	0	81	0	0	0	0	0	126
03:45 PM	0	21	0	0	21	0	0	1	1	2	0	38	0	0	38	0	0	0	0	0	61
Total	0	56	6	0	62	1	1	3	1	6	3	116	0	0	119	0	0	0	0	0	187
04:00 PM	0	35	0	0	35	1	0	3	1	5	4	65	0	0	69	0	0	0	0	0	109
04:15 PM	0	40	2	0	42	1	0	1	7	9	0	61	0	0	61	0	0	0	0	0	112
04:30 PM	0	24	2	0	26	0	0	1	6	7	2	59	0	0	61	0	0	0	0	0	94
04:45 PM	0	45	0	0	45	1	0	0	7	8	1	61	0	0	62	0	0	0	0	0	115
Total	0	144	4	0	148	3	0	5	21	29	7	246	0	0	253	0	0	0	0	0	430
05:00 PM	0	30	0	0	30	0	0	0	6	6	1	45	0	0	46	0	0	0	1	1	83
05:15 PM	0	43	1	0	44	0	0	1	1	2	1	49	0	0	50	0	0	0	0	0	96
Grand Total	0	273	11	0	284	4	1	9	29	43	12	456	0	0	468	0	0	0	1	1	796
Apprch %	0	96.1	3.9	0		9.3	2.3	20.9	67.4		2.6	97.4	0	0		0	0	0	100		
Total %	0	34.3	1.4	0	35.7	0.5	0.1	1.1	3.6	5.4	1.5	57.3	0	0	58.8	0	0	0	0.1	0.1	
Lights	0	271	11	0	282	4	1	8	28	41	12	453	0	0	465	0	0	0	1	1	789
% Lights	0	99.3	100	0	99.3	100	100	88.9	96.6	95.3	100	99.3	0	0	99.4	0	0	0	100	100	99.1
Trucks	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
% Trucks	0	0	0	0	0	0	0	0	3.4	2.3	0	0	0	0	0	0	0	0	0	0	0.1
Buses	0	2	0	0	2	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	6
% Buses	0	0.7	0	0	0.7	0	0	11.1	0	2.3	0	0.7	0	0	0.6	0	0	0	0	0	0.8

Connecticut Counts LLC

Kensington, Connecticut 06037
(860) 828-1693

File Name : 24859
Site Code : 24859
Start Date : 10/26/2023
Page No : 2

	Old Norwich Road From North					Senkow Drive From East					Old Norwich Road From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	35	0	0	35	1	0	3	1	5	4	65	0	0	69	0	0	0	0	0	109
04:15 PM	0	40	2	0	42	1	0	1	7	9	0	61	0	0	61	0	0	0	0	0	112
04:30 PM	0	24	2	0	26	0	0	1	6	7	2	59	0	0	61	0	0	0	0	0	94
04:45 PM	0	45	0	0	45	1	0	0	7	8	1	61	0	0	62	0	0	0	0	0	115
Total Volume	0	144	4	0	148	3	0	5	21	29	7	246	0	0	253	0	0	0	0	0	430
% App. Total	0	97.3	2.7	0		10.3	0	17.2	72.4		2.8	97.2	0	0		0	0	0	0		
PHF	.000	.800	.500	.000	.822	.750	.000	.417	.750	.806	.438	.946	.000	.000	.917	.000	.000	.000	.000	.000	.935



Connecticut Counts LLC

Kensington, Connecticut 06037
(860) 828-1693

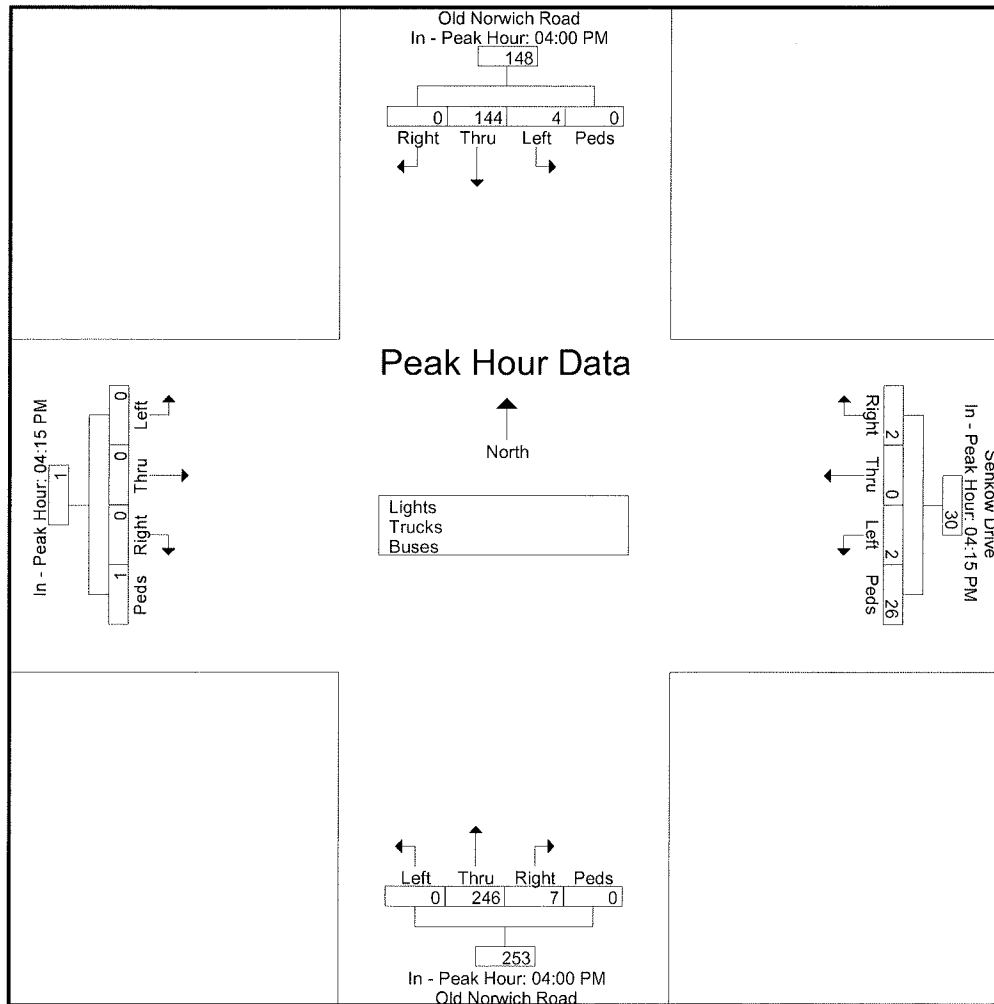
File Name : 24859
Site Code : 24859
Start Date : 10/26/2023
Page No : 3

	Old Norwich Road From North					Senkow Drive From East					Old Norwich Road From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total

Peak Hour Analysis From 03:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM					04:15 PM					04:00 PM					04:15 PM				
+0 mins.	0	35	0	0	35	1	0	1	7	9	4	65	0	0	69	0	0	0	0	0
+15 mins.	0	40	2	0	42	0	0	1	6	7	0	61	0	0	61	0	0	0	0	0
+30 mins.	0	24	2	0	26	1	0	0	7	8	2	59	0	0	61	0	0	0	0	0
+45 mins.	0	45	0	0	45	0	0	0	6	6	1	61	0	0	62	0	0	0	1	1
Total Volume	0	144	4	0	148	2	0	2	26	30	7	246	0	0	253	0	0	0	1	1
% App. Total	0	97.3	2.7	0		6.7	0	6.7	86.7		2.8	97.2	0	0		0	0	0	100	
PHF	.000	.800	.500	.000	.822	.500	.000	.500	.929	.833	.438	.946	.000	.000	.917	.000	.000	.000	.250	.250



Connecticut Counts LLC
Kensington, Connecticut 06037
(860) 828-1693

Route 32 at Fitzgerald Avenue
Waterford, Connecticut

File Name : 24860
Site Code : 24860
Start Date : 10/26/2023
Page No : 1

Groups Printed- Lights - Trucks - Buses

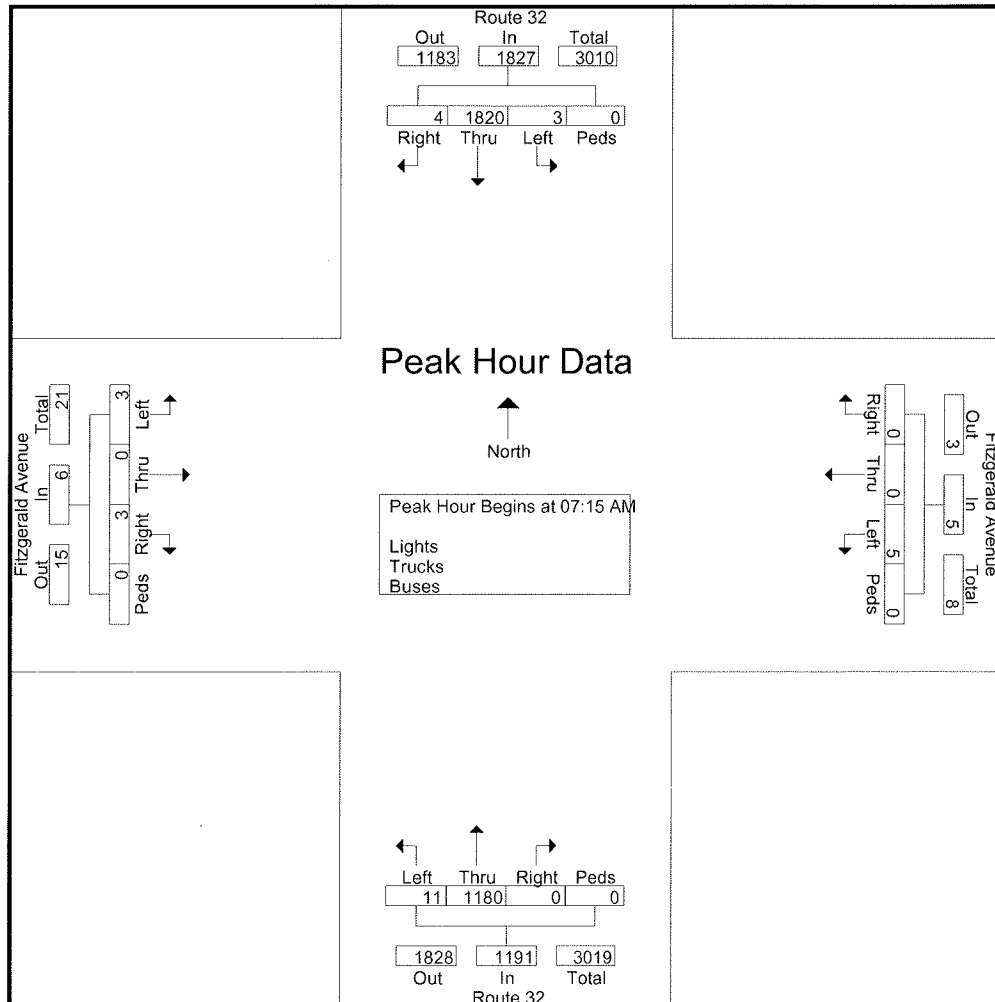
Start Time	Route 32 From North					Fitzgerald Avenue From East					Route 32 From South					Fitzgerald Avenue From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
07:00 AM	0	360	1	0	361	1	0	1	0	2	0	222	4	0	226	1	0	0	0	1	590
07:15 AM	2	495	1	0	498	0	0	0	0	0	0	291	4	0	295	0	0	1	0	1	794
07:30 AM	0	472	2	0	474	0	0	1	0	1	0	305	2	0	307	0	0	0	0	0	782
07:45 AM	1	447	0	0	448	0	0	1	0	1	0	298	3	0	301	0	0	2	0	2	752
Total	3	1774	4	0	1781	1	0	3	0	4	0	1116	13	0	1129	1	0	3	0	4	2918
08:00 AM	1	406	0	0	407	0	0	3	0	3	0	286	2	0	288	3	0	0	0	3	701
08:15 AM	0	399	1	0	400	3	0	2	0	5	0	240	2	0	242	2	0	3	0	5	652
08:30 AM	0	331	0	0	331	3	0	0	0	3	0	262	1	0	263	2	0	0	0	2	599
08:45 AM	1	317	0	0	318	0	0	0	0	0	1	236	0	0	237	1	0	0	0	1	556
Total	2	1453	1	0	1456	6	0	5	0	11	1	1024	5	0	1030	8	0	3	0	11	2508
Grand Total	5	3227	5	0	3237	7	0	8	0	15	1	2140	18	0	2159	9	0	6	0	15	5426
Apprch %	0.2	99.7	0.2	0		46.7	0	53.3	0		0	99.1	0.8	0		60	0	40	0		
Total %	0.1	59.5	0.1	0	59.7	0.1	0	0.1	0	0.3	0	39.4	0.3	0	39.8	0.2	0	0.1	0	0.3	
Lights	5	3166										2098									
% Lights	100	98.1	100	0	98.1	85.7	0	100	0	93.3	100	98	100	0	98.1	66.7	0	100	0	80	98
Trucks	0	49	0	0	49	1	0	0	0	1	0	32	0	0	32	0	0	0	0	0	82
% Trucks	0	1.5	0	0	1.5	14.3	0	0	0	6.7	0	1.5	0	0	1.5	0	0	0	0	0	1.5
Buses	0	12	0	0	12	0	0	0	0	0	0	10	0	0	10	3	0	0	0	3	25
% Buses	0	0.4	0	0	0.4	0	0	0	0	0	0	0.5	0	0	0.5	33.3	0	0	0	20	0.5

Connecticut Counts LLC

Kensington, Connecticut 06037
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File Name : 24860
Site Code : 24860
Start Date : 10/26/2023
Page No : 2

	Route 32 From North					Fitzgerald Avenue From East					Route 32 From South					Fitzgerald Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	2	495	1	0	498	0	0	0	0	0	0	291	4	0	295	0	0	1	0	1	794
07:30 AM	0	472	2	0	474	0	0	1	0	1	0	305	2	0	307	0	0	0	0	0	782
07:45 AM	1	447	0	0	448	0	0	1	0	1	0	298	3	0	301	0	0	2	0	2	752
08:00 AM	1	406	0	0	407	0	0	3	0	3	0	286	2	0	288	3	0	0	0	3	701
Total Volume	4	1820	3	0	1827	0	0	5	0	5	0	1180	11	0	1191	3	0	3	0	6	3029
% App. Total	0.2	99.6	0.2	0		0	0	100	0		0	99.1	0.9	0		50	0	50	0		
PHF	.500	.919	.375	.000	.917	.000	.000	.417	.000	.417	.000	.967	.688	.000	.970	.250	.000	.375	.000	.500	.954



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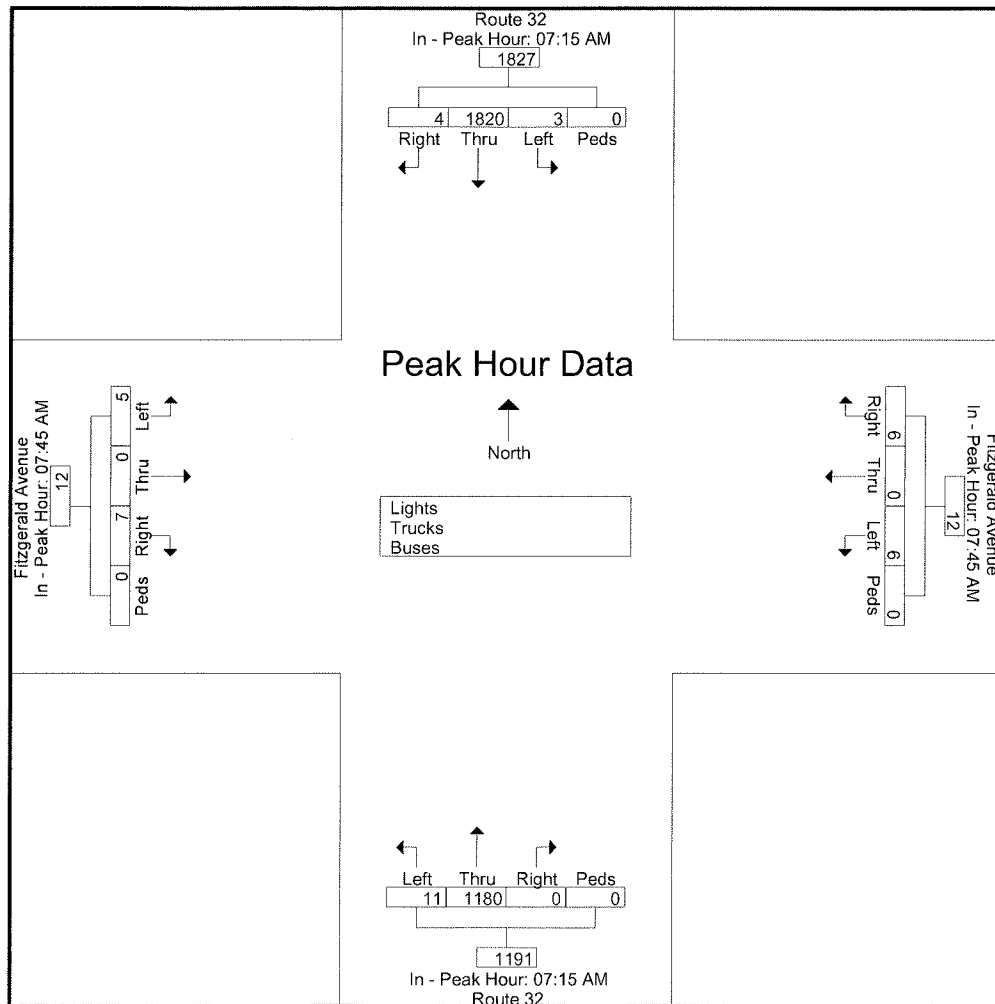
File Name : 24860
Site Code : 24860
Start Date : 10/26/2023
Page No : 3

Start Time	Route 32 From North					Fitzgerald Avenue From East					Route 32 From South					Fitzgerald Avenue From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM					07:45 AM					07:15 AM					07:45 AM				
+0 mins.	2	495	1	0	498	0	0	1	0	1	0	291	4	0	295	0	0	2	0	2
+15 mins.	0	472	2	0	474	0	0	3	0	3	0	305	2	0	307	3	0	0	0	3
+30 mins.	1	447	0	0	448	3	0	2	0	5	0	298	3	0	301	2	0	3	0	5
+45 mins.	1	406	0	0	407	3	0	0	0	3	0	286	2	0	288	2	0	0	0	2
Total Volume	4	1820	3	0	1827	6	0	6	0	12	0	1180	11	0	1191	7	0	5	0	12
% App. Total	0.2	99.6	0.2	0		50	0	50	0		0	99.1	0.9	0		58.3	0	41.7	0	
PHF	.500	.919	.375	.000	.917	.500	.000	.500	.000	.600	.000	.967	.688	.000	.970	.583	.000	.417	.000	.600



Connecticut Counts LLC
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Route 32 at Fitzgerald Avenue
Waterford, Connecticut

File Name : 24861
Site Code : 24861
Start Date : 10/26/2023
Page No : 1

Groups Printed- Lights - Trucks - Buses

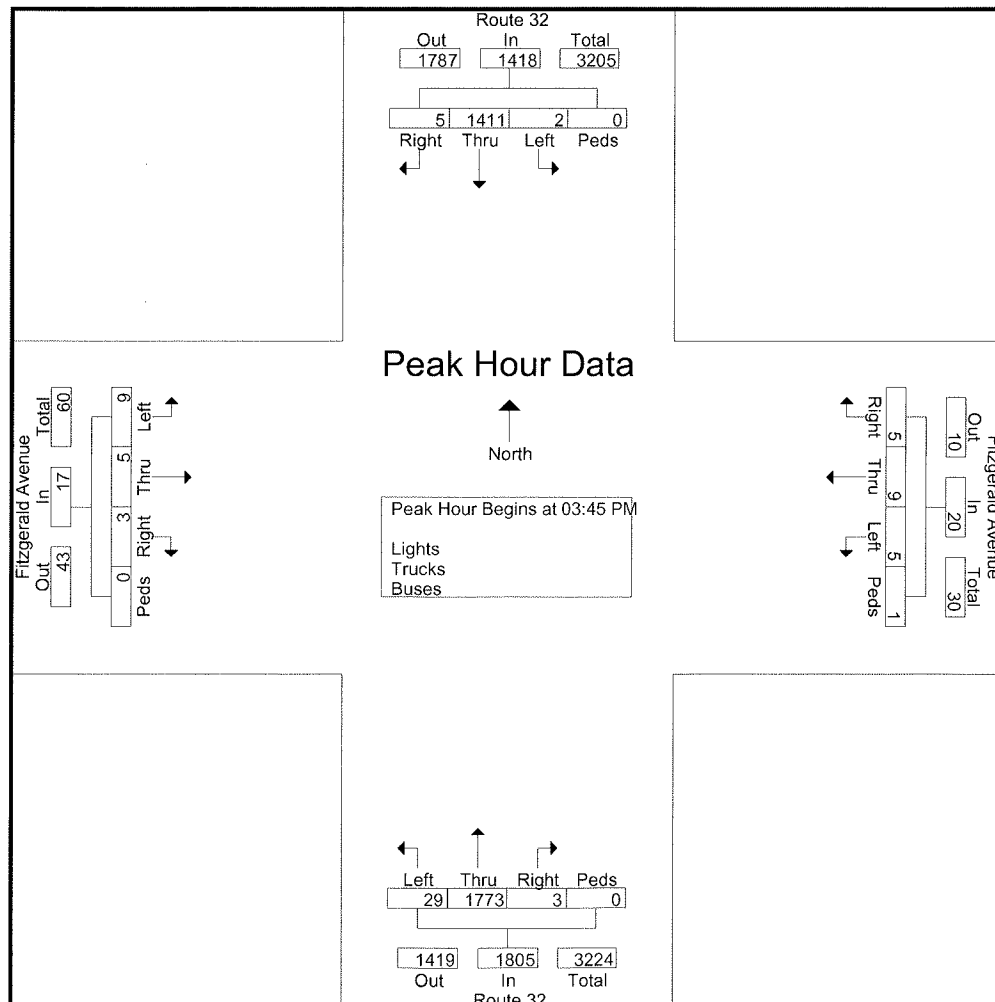
	Route 32 From North					Fitzgerald Avenue From East					Route 32 From South					Fitzgerald Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
03:30 PM	0	275	0	0	275	0	0	0	0	0	1	430	14	0	445	2	0	3	0	5	725
03:45 PM	0	339	0	0	339	1	6	1	0	8	0	448	4	0	452	1	3	1	0	5	804
Total	0	614	0	0	614	1	6	1	0	8	1	878	18	0	897	3	3	4	0	10	1529
04:00 PM	1	364	0	0	365	1	0	1	1	3	0	454	8	0	462	0	0	1	0	1	831
04:15 PM	2	381	1	0	384	1	2	0	0	3	2	449	9	0	460	0	2	1	0	3	850
04:30 PM	2	327	1	0	330	2	1	3	0	6	1	422	8	0	431	2	0	6	0	8	775
04:45 PM	0	306	1	0	307	0	0	1	0	1	0	367	10	0	377	3	0	0	0	3	688
Total	5	1378	3	0	1386	4	3	5	1	13	3	1692	35	0	1730	5	2	8	0	15	3144
05:00 PM	0	352	1	0	353	0	0	1	0	1	0	496	5	0	501	3	0	0	0	3	858
05:15 PM	0	280	2	0	282	0	0	0	0	0	0	322	6	0	328	1	0	1	0	2	612
Grand Total	5	2624	6	0	2635	5	9	7	1	22	4	3388	64	0	3456	12	5	13	0	30	6143
Apprch %	0.2	99.6	0.2	0		22.7	40.9	31.8	4.5		0.1	98	1.9	0		40	16.7	43.3	0		
Total %	0.1	42.7	0.1	0	42.9	0.1	0.1	0.1	0	0.4	0.1	55.2	1	0	56.3	0.2	0.1	0.2	0	0.5	
Lights	5	2603										3368									
% Lights	100	99.2	100	0	99.2	100	100	100	100	100	100	99.4	98.4	0	99.4	91.7	100	100	0	96.7	99.3
Trucks	0	12	0	0	12	0	0	0	0	0	0	14	0	0	14	0	0	0	0	0	26
% Trucks	0	0.5	0	0	0.5	0	0	0	0	0	0	0.4	0	0	0.4	0	0	0	0	0	0.4
Buses	0	9	0	0	9	0	0	0	0	0	0	6	1	0	7	1	0	0	0	1	17
% Buses	0	0.3	0	0	0.3	0	0	0	0	0	0	0.2	1.6	0	0.2	8.3	0	0	0	3.3	0.3

Connecticut Counts LLC

Kensington, Connecticut 06037
(860) 828-1693

File Name : 24861
Site Code : 24861
Start Date : 10/26/2023
Page No : 2

	Route 32 From North					Fitzgerald Avenue From East					Route 32 From South					Fitzgerald Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:45 PM																					
03:45 PM	0	339	0	0	339	1	6	1	0	8	0	448	4	0	452	1	3	1	0	5	804
04:00 PM	1	364	0	0	365	1	0	1	1	3	0	454	8	0	462	0	0	1	0	1	831
04:15 PM	2	381	1	0	384	1	2	0	0	3	2	449	9	0	460	0	2	1	0	3	850
04:30 PM	2	327	1	0	330	2	1	3	0	6	1	422	8	0	431	2	0	6	0	8	775
Total Volume	5	1411	2	0	1418	5	9	5	1	20	3	1773	29	0	1805	3	5	9	0	17	3260
% App. Total	0.4	99.5	0.1	0		25	45	25	5		0.2	98.2	1.6	0		17.6	29.4	52.9	0		
PHF	.625	.926	.500	.000	.923	.625	.375	.417	.250	.625	.375	.976	.806	.000	.977	.375	.417	.375	.000	.531	.959



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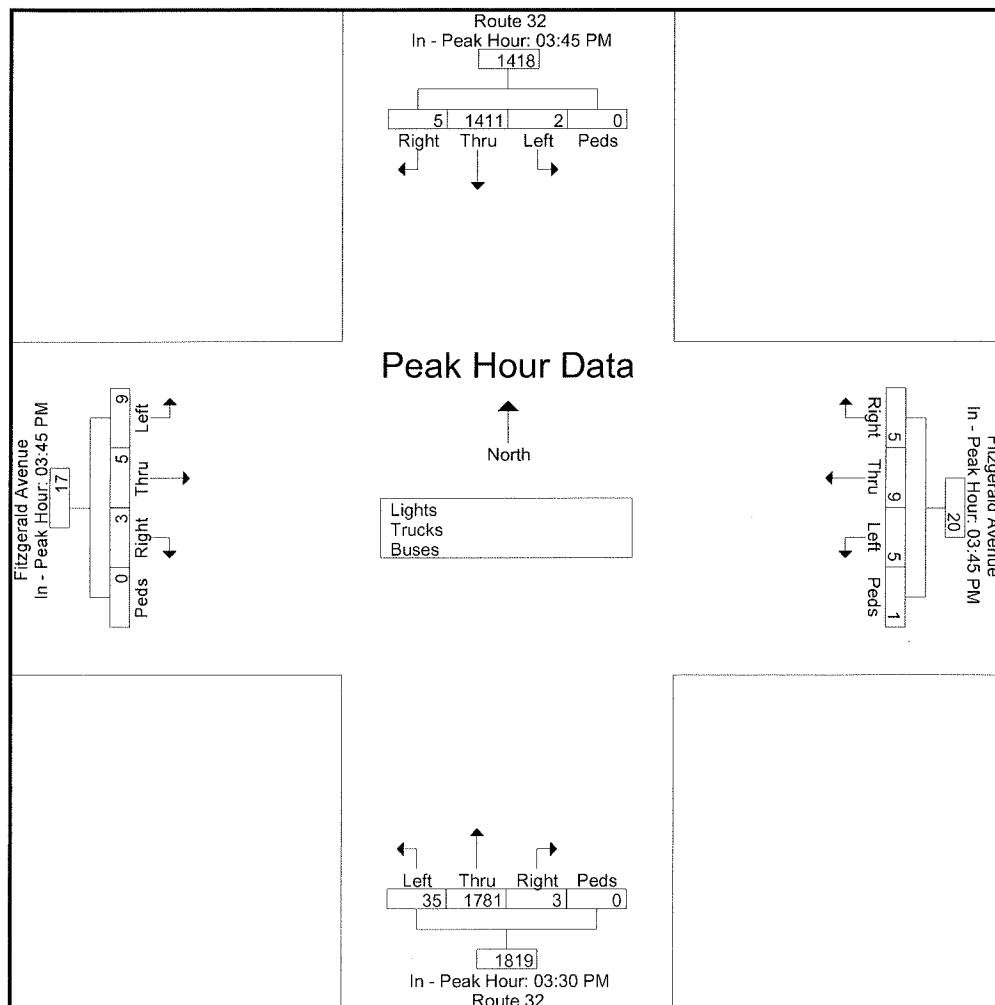
File Name : 24861
Site Code : 24861
Start Date : 10/26/2023
Page No : 3

Start Time	Route 32 From North					Fitzgerald Avenue From East					Route 32 From South					Fitzgerald Avenue From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	

Peak Hour Analysis From 03:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:45 PM					03:45 PM					03:30 PM					03:45 PM				
+0 mins.	0	339	0	0	339	1	6	1	0	8	1	430	14	0	445	1	3	1	0	5
+15 mins.	1	364	0	0	365	1	0	1	1	3	0	448	4	0	452	0	0	1	0	1
+30 mins.	2	381	1	0	384	1	2	0	0	3	0	454	8	0	462	0	2	1	0	3
+45 mins.	2	327	1	0	330	2	1	3	0	6	2	449	9	0	460	2	0	6	0	8
Total Volume	5	1411	2	0	1418	5	9	5	1	20	3	1781	35	0	1819	3	5	9	0	17
% App. Total	0.4	99.5	0.1	0		25	45	25	5		0.2	97.9	1.9	0		17.6	29.4	52.9	0	
PHF	.625	.926	.500	.000	.923	.625	.375	.417	.250	.625	.375	.981	.625	.000	.984	.375	.417	.375	.000	.531



Connecticut Counts LLC
Kensington, Connecticut 06037
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Route 32 at Senkow Drive
Waterford, Connecticut

File Name : 24862
Site Code : 24862
Start Date : 10/26/2023
Page No : 1

Groups Printed- Lights - Trucks - Buses

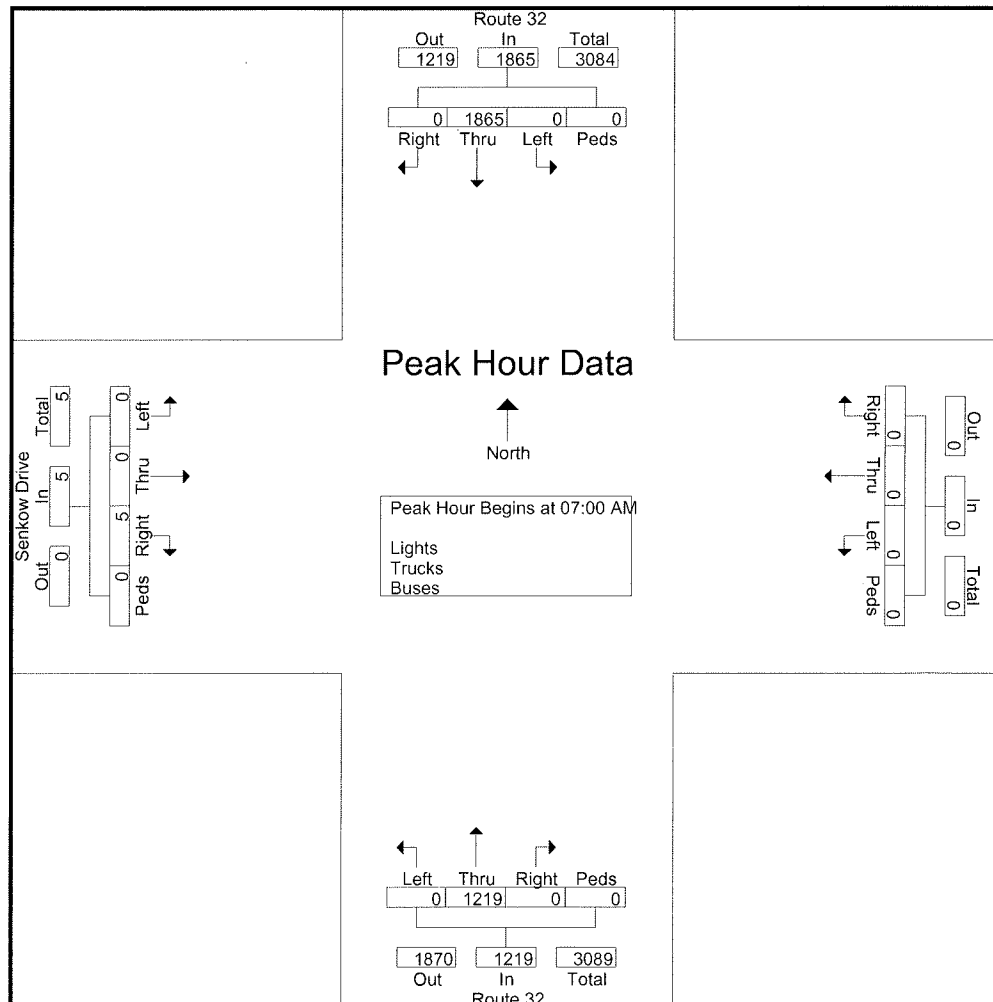
Start Time	Route 32 From North					From East					Route 32 From South					Senkow Drive From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
07:00 AM	0	444	0	0	444	0	0	0	0	0	0	290	0	0	290	3	0	0	0	3	737
07:15 AM	0	446	0	0	446	0	0	0	0	0	0	325	0	0	325	0	0	0	0	0	771
07:30 AM	0	501	0	0	501	0	0	0	0	0	0	318	0	0	318	2	0	0	0	2	821
07:45 AM	0	474	0	0	474	0	0	0	0	0	0	286	0	0	286	0	0	0	0	0	760
Total	0	1865	0	0	1865	0	0	0	0	0	0	1219	0	0	1219	5	0	0	0	5	3089
08:00 AM	0	386	0	0	386	0	0	0	0	0	0	271	0	0	271	0	0	0	0	0	657
08:15 AM	1	336	0	0	337	0	0	0	0	0	0	229	0	0	229	1	0	0	0	1	567
08:30 AM	2	439	0	0	441	0	0	0	0	0	0	270	0	0	270	2	0	0	0	2	713
08:45 AM	0	383	0	0	383	0	0	0	0	0	0	272	0	0	272	3	0	0	0	3	658
Total	3	1544	0	0	1547	0	0	0	0	0	0	1042	0	0	1042	6	0	0	0	6	2595
Grand Total	3	3409	0	0	3412	0	0	0	0	0	0	2261	0	0	2261	11	0	0	0	11	5684
Apprch %	0.1	99.9	0	0		0	0	0	0		0	100	0	0		100	0	0	0		
Total %	0.1	60	0	0	60	0	0	0	0	0	0	39.8	0	0	39.8	0.2	0	0	0	0.2	
Lights	2	3335										2225									
% Lights	66.7	97.8	0	0	97.8	0	0	0	0	0	0	98.4	0	0	98.4	100	0	0	0	100	98
Trucks	0	62	0	0	62	0	0	0	0	0	0	26	0	0	26	0	0	0	0	0	88
% Trucks	0	1.8	0	0	1.8	0	0	0	0	0	0	1.1	0	0	1.1	0	0	0	0	0	1.5
Buses	1	12	0	0	13	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	23
% Buses	33.3	0.4	0	0	0.4	0	0	0	0	0	0	0.4	0	0	0.4	0	0	0	0	0	0.4

Connecticut Counts LLC

Kensington, Connecticut 06037
(860) 828-1693

File Name : 24862
Site Code : 24862
Start Date : 10/26/2023
Page No : 2

	Route 32 From North					From East					Route 32 From South					Senkow Drive From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	444	0	0	444	0	0	0	0	0	0	290	0	0	290	3	0	0	0	3	737
07:15 AM	0	446	0	0	446	0	0	0	0	0	0	325	0	0	325	0	0	0	0	0	771
07:30 AM	0	501	0	0	501	0	0	0	0	0	0	318	0	0	318	2	0	0	0	2	821
07:45 AM	0	474	0	0	474	0	0	0	0	0	0	286	0	0	286	0	0	0	0	0	760
Total Volume	0	1865	0	0	1865	0	0	0	0	0	0	1219	0	0	1219	5	0	0	0	5	3089
% App. Total	0	100	0	0		0	0	0	0	0	0	100	0	0		100	0	0	0		
PHF	.000	.931	.000	.000	.931	.000	.000	.000	.000	.000	.000	.938	.000	.000	.938	.417	.000	.000	.000	.417	.941



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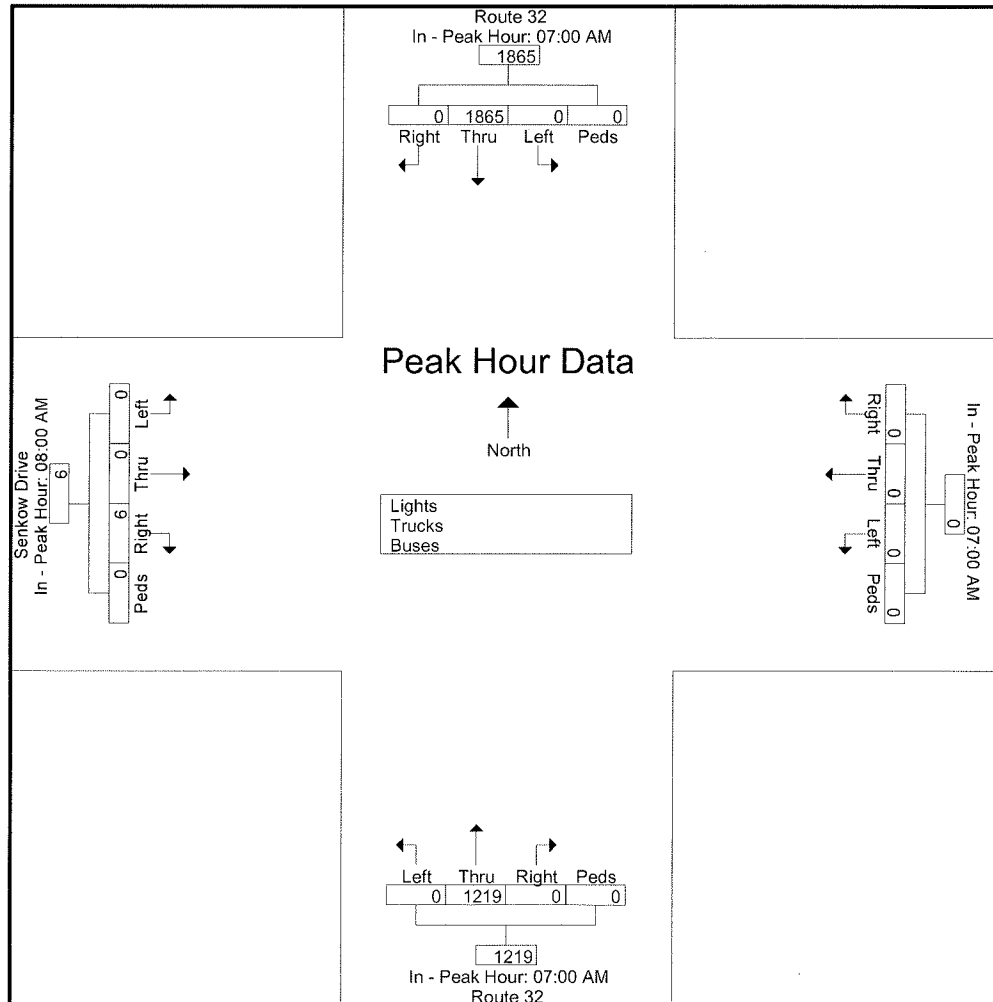
File Name : 24862
Site Code : 24862
Start Date : 10/26/2023
Page No : 3

Start Time	Route 32 From North					From East					Route 32 From South					Senkow Drive From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM					07:00 AM					07:00 AM					08:00 AM					
+0 mins.	0	444	0	0	444	0	0	0	0	0	0	290	0	0	290	0	0	0	0	0	
+15 mins.	0	446	0	0	446	0	0	0	0	0	0	325	0	0	325	1	0	0	0	1	
+30 mins.	0	501	0	0	501	0	0	0	0	0	0	318	0	0	318	2	0	0	0	2	
+45 mins.	0	474	0	0	474	0	0	0	0	0	0	286	0	0	286	3	0	0	0	3	
Total Volume	0	1865	0	0	1865	0	0	0	0	0	0	1219	0	0	1219	6	0	0	0	6	
% App. Total	0	100	0	0		0	0	0	0		0	100	0	0		100	0	0	0		
PHF	.000	.931	.000	.000	.931	.000	.000	.000	.000	.000	.000	.938	.000	.000	.938	.500	.000	.000	.000	.500	



Connecticut Counts LLC
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Route 32 at Senkow Drive
Waterford, Connecticut

File Name : 24863
Site Code : 24863
Start Date : 10/26/2023
Page No : 1

Groups Printed- Lights - Trucks - Buses

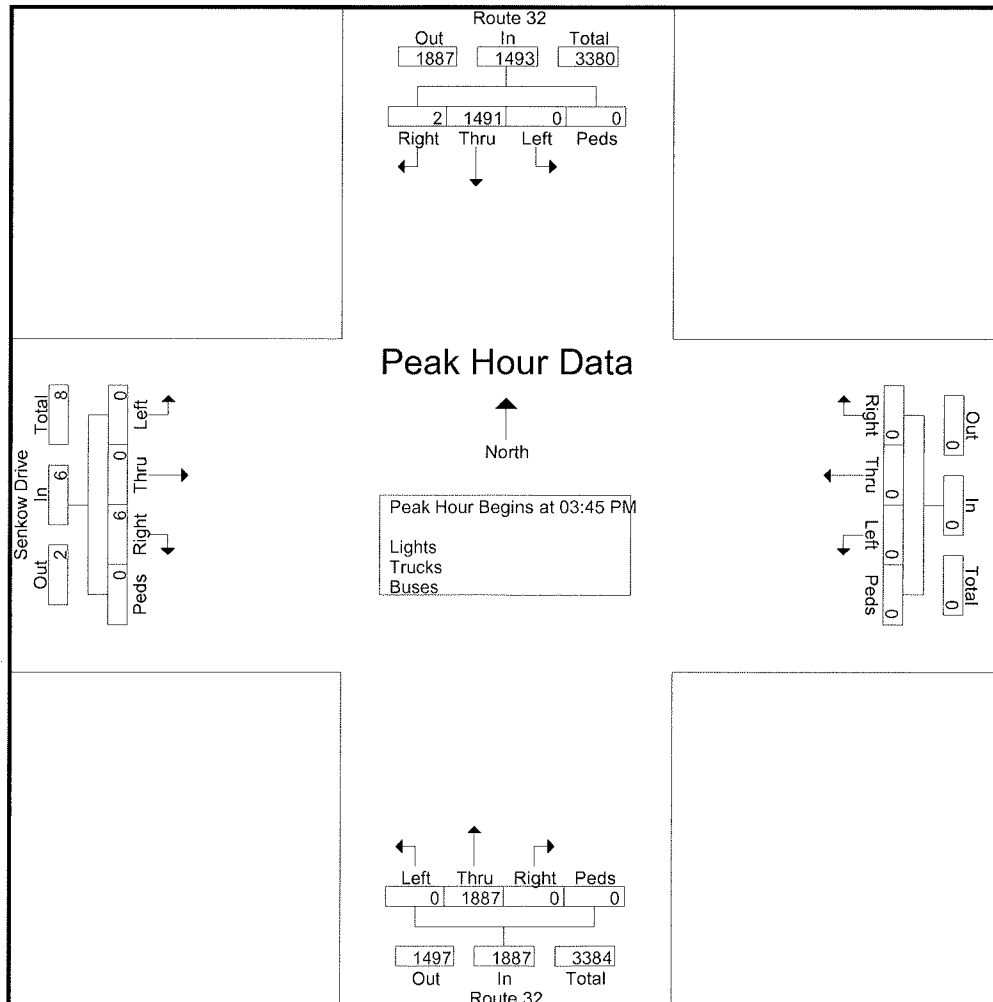
Start Time	Route 32 From North					From East					Route 32 From South					Senkow Drive From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
03:30 PM	4	297	0	0	301	0	0	0	0	0	0	433	0	0	433	1	0	0	0	1	735
03:45 PM	1	367	0	0	368	0	0	0	0	0	0	511	0	0	511	1	0	0	0	1	880
Total	5	664	0	0	669	0	0	0	0	0	0	944	0	0	944	2	0	0	0	2	1615
04:00 PM	1	305	0	0	306	0	0	0	0	0	0	387	0	0	387	1	0	0	0	1	694
04:15 PM	0	390	0	0	390	0	0	0	0	0	0	475	0	0	475	0	0	0	0	0	865
04:30 PM	0	429	0	0	429	0	0	0	0	0	0	514	0	0	514	4	0	0	0	4	947
04:45 PM	0	354	0	0	354	0	0	0	0	0	0	408	0	0	408	0	0	0	0	0	762
Total	1	1478	0	0	1479	0	0	0	0	0	0	1784	0	0	1784	5	0	0	0	5	3268
05:00 PM	0	250	0	0	250	0	0	0	0	0	0	267	0	0	267	3	0	0	0	3	520
05:15 PM	0	327	0	0	327	0	0	0	0	0	0	398	0	0	398	2	0	0	0	2	727
Grand Total	6	2719	0	0	2725	0	0	0	0	0	0	3393	0	0	3393	12	0	0	0	12	6130
Apprch %	0.2	99.8	0	0		0	0	0	0		0	100	0	0		100	0	0	0		
Total %	0.1	44.4	0	0	44.5	0	0	0	0	0	0	55.4	0	0	55.4	0.2	0	0	0	0.2	
Lights	5	2697										3377									
% Lights	83.3	99.2	0	0	99.2	0	0	0	0	0	0	99.5	0	0	99.5	100	0	0	0	100	99.4
Trucks	0	16	0	0	16	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	26
% Trucks	0	0.6	0	0	0.6	0	0	0	0	0	0	0.3	0	0	0.3	0	0	0	0	0	0.4
Buses	1	6	0	0	7	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	13
% Buses	16.7	0.2	0	0	0.3	0	0	0	0	0	0	0.2	0	0	0.2	0	0	0	0	0	0.2

Connecticut Counts LLC

Kensington, Connecticut 06037
(860) 828-1693

File Name : 24863
Site Code : 24863
Start Date : 10/26/2023
Page No : 2

	Route 32 From North					From East					Route 32 From South					Senkow Drive From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:45 PM																					
03:45 PM	1	367	0	0	368	0	0	0	0	0	0	511	0	0	511	1	0	0	0	1	880
04:00 PM	1	305	0	0	306	0	0	0	0	0	0	387	0	0	387	1	0	0	0	1	694
04:15 PM	0	390	0	0	390	0	0	0	0	0	0	475	0	0	475	0	0	0	0	0	865
04:30 PM	0	429	0	0	429	0	0	0	0	0	0	514	0	0	514	4	0	0	0	4	947
Total Volume	2	1491	0	0	1493	0	0	0	0	0	0	1887	0	0	1887	6	0	0	0	6	3386
% App. Total	0.1	99.9	0	0		0	0	0	0	0	0	100	0	0		100	0	0	0		
PHF	.500	.869	.000	.000	.870	.000	.000	.000	.000	.000	.000	.918	.000	.000	.918	.375	.000	.000	.000	.375	.894



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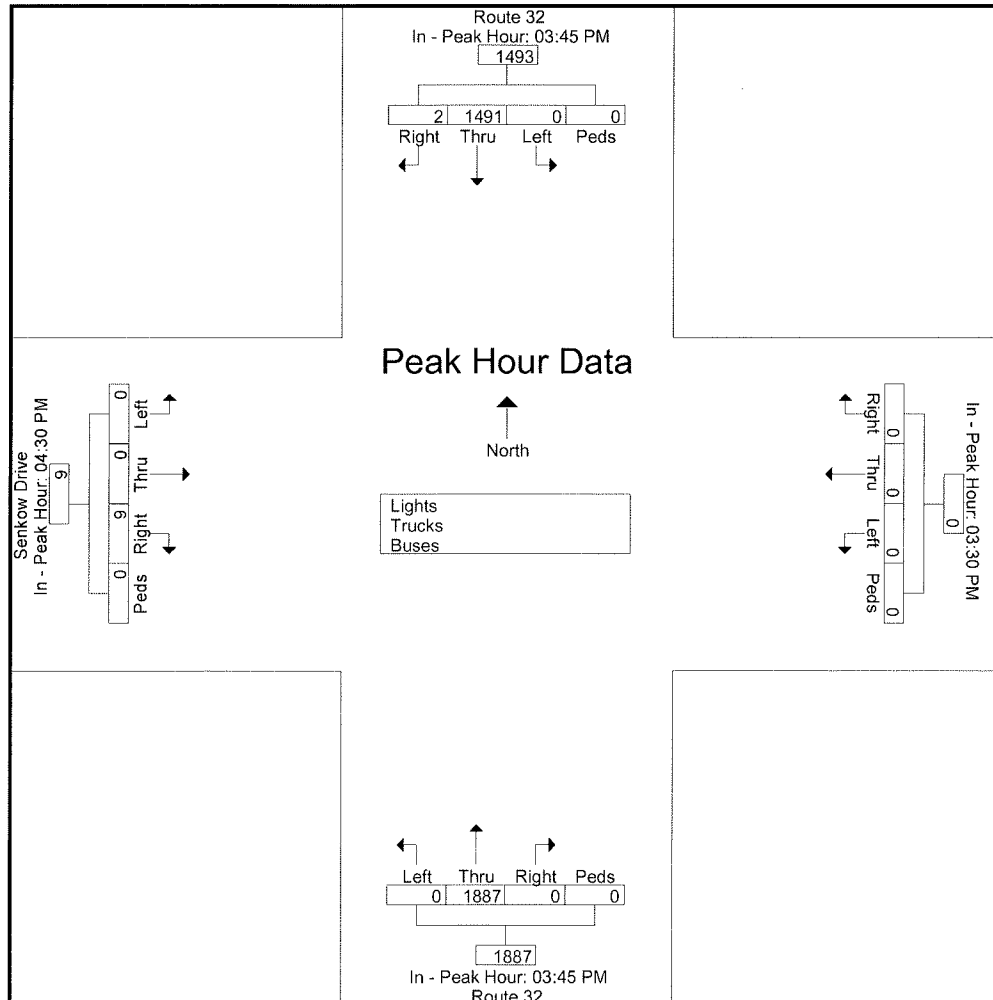
File Name : 24863
Site Code : 24863
Start Date : 10/26/2023
Page No : 3

Start Time	Route 32 From North					From East					Route 32 From South					Senkow Drive From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	

Peak Hour Analysis From 03:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:45 PM					03:30 PM					03:45 PM					04:30 PM				
+0 mins.	1	367	0	0	368	0	0	0	0	0	0	511	0	0	511	4	0	0	0	4
+15 mins.	1	305	0	0	306	0	0	0	0	0	0	387	0	0	387	0	0	0	0	0
+30 mins.	0	390	0	0	390	0	0	0	0	0	0	475	0	0	475	3	0	0	0	3
+45 mins.	0	429	0	0	429	0	0	0	0	0	0	514	0	0	514	2	0	0	0	2
Total Volume	2	1491	0	0	1493	0	0	0	0	0	0	1887	0	0	1887	9	0	0	0	9
% App. Total	0.1	99.9	0	0		0	0	0	0		0	100	0	0		100	0	0	0	
PHF	.500	.869	.000	.000	.870	.000	.000	.000	.000	.000	.000	.918	.000	.000	.918	.563	.000	.000	.000	.563



Connecticut Counts LLC
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Route 32 at Benham Avenue
Waterford, Connecticut

File Name : 24864
Site Code : 24864
Start Date : 10/26/2023
Page No : 1

Groups Printed- Lights - Trucks - Buses

	Route 32 From North					Benham Avenue From East					Route 32 From South					Benham Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	3	434	0	0	437	1	0	2	0	3	0	264	0	0	264	1	1	1	0	3	707
07:15 AM	4	531	0	0	535	2	0	2	0	4	0	392	1	0	393	9	0	2	0	11	943
07:30 AM	3	491	1	0	495	0	0	1	0	1	0	276	0	0	276	3	0	0	0	3	775
07:45 AM	3	425	1	0	429	1	0	2	0	3	4	235	3	0	242	5	1	0	0	6	680
Total	13	1881	2	0	1896	4	0	7	0	11	4	1167	4	0	1175	18	2	3	0	23	3105
08:00 AM	5	427	2	0	434	4	1	2	0	7	2	261	3	0	266	2	0	2	0	4	711
08:15 AM	4	429	0	0	433	0	1	1	0	2	1	259	0	0	260	3	0	0	0	3	698
08:30 AM	0	363	0	0	363	1	1	3	0	5	1	280	1	0	282	4	1	0	0	5	655
08:45 AM	3	388	1	0	392	0	0	2	0	2	0	286	1	0	287	4	2	0	0	6	687
Total	12	1607	3	0	1622	5	3	8	0	16	4	1086	5	0	1095	13	3	2	0	18	2751
Grand Total	25	3488	5	0	3518	9	3	15	0	27	8	2253	9	0	2270	31	5	5	0	41	5856
Apprch %	0.7	99.1	0.1	0		33.3	11.1	55.6	0		0.4	99.3	0.4	0		75.6	12.2	12.2	0		
Total %	0.4	59.6	0.1	0	60.1	0.2	0.1	0.3	0	0.5	0.1	38.5	0.2	0	38.8	0.5	0.1	0.1	0	0.7	
Lights	24	3423										2212									
% Lights	96	98.1	60	0	98.1	88.9	66.7	100	0	92.6	87.5	98.2	88.9	0	98.1	96.8	100	100	0	97.6	98.1
Trucks	0	54	1	0	55	1	0	0	0	1	1	31	1	0	33	0	0	0	0	0	89
% Trucks	0	1.5	20	0	1.6	11.1	0	0	0	3.7	12.5	1.4	11.1	0	1.5	0	0	0	0	0	1.5
Buses	1	11	1	0	13	0	1	0	0	1	0	10	0	0	10	1	0	0	0	1	25
% Buses	4	0.3	20	0	0.4	0	33.3	0	0	3.7	0	0.4	0	0	0.4	3.2	0	0	0	2.4	0.4

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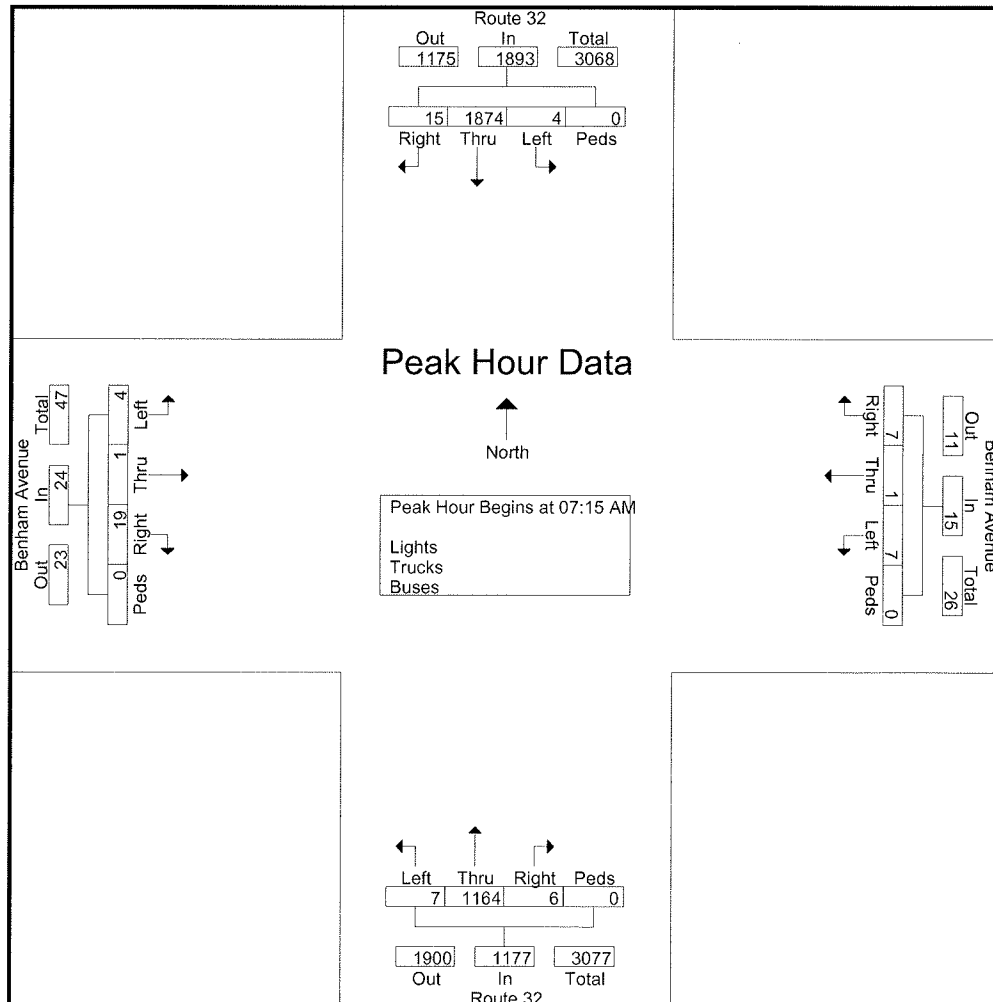
File Name : 24864
Site Code : 24864
Start Date : 10/26/2023
Page No : 2

Start Time	Route 32 From North					Benham Avenue From East					Route 32 From South					Benham Avenue From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM

07:15 AM	4	531	0	0	535	2	0	2	0	4	0	392	1	0	393	9	0	2	0	11	943
07:30 AM	3	491	1	0	495	0	0	1	0	1	0	276	0	0	276	3	0	0	0	3	775
07:45 AM	3	425	1	0	429	1	0	2	0	3	4	235	3	0	242	5	1	0	0	6	680
08:00 AM	5	427	2	0	434	4	1	2	0	7	2	261	3	0	266	2	0	2	0	4	711
Total Volume	15	1874	4	0	1893	7	1	7	0	15	6	1164	7	0	1177	19	1	4	0	24	3109
% App. Total	0.8	99	0.2	0		46.7	6.7	46.7	0		0.5	98.9	0.6	0		79.2	4.2	16.7	0		
PHF	.750	.882	.500	.000	.885	.438	.250	.875	.000	.536	.375	.742	.583	.000	.749	.528	.250	.500	.000	.545	.824



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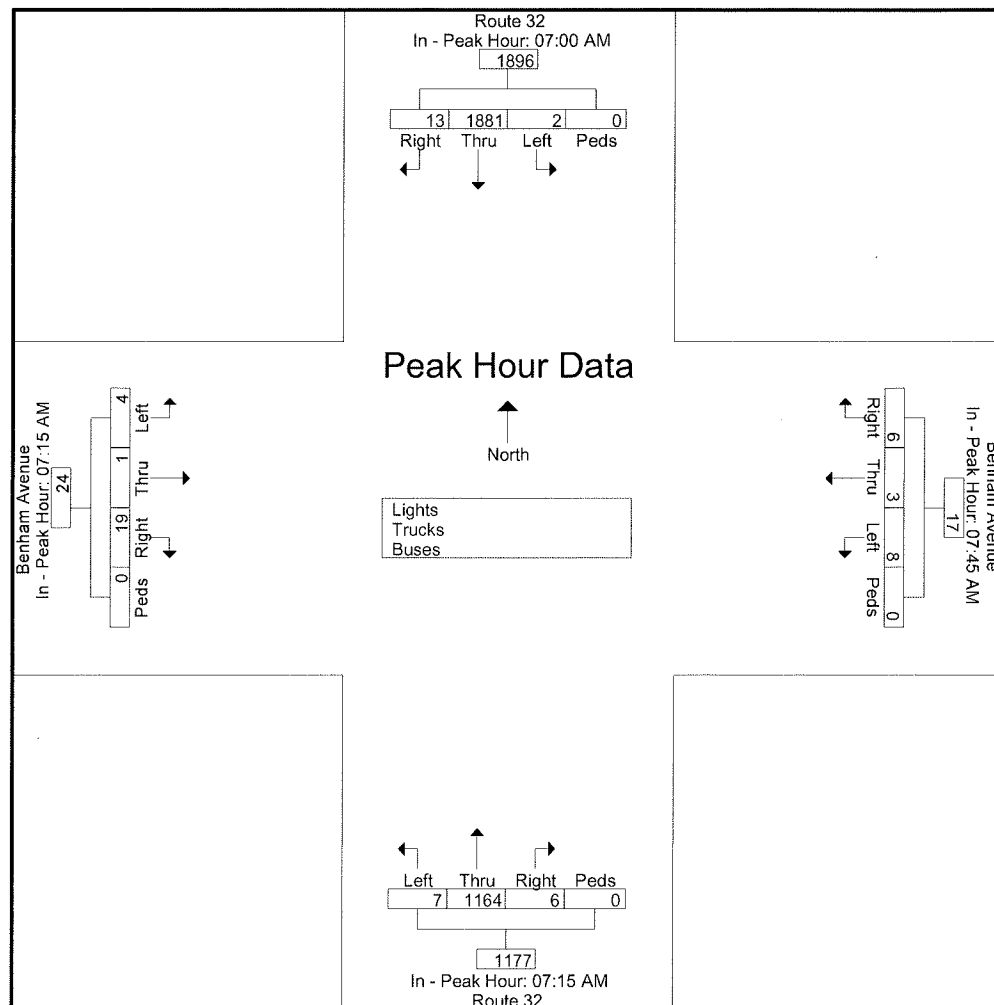
File Name : 24864
Site Code : 24864
Start Date : 10/26/2023
Page No : 3

	Route 32 From North					Benham Avenue From East					Route 32 From South					Benham Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM					07:45 AM					07:15 AM					07:15 AM				
+0 mins.	3	434	0	0	437	1	0	2	0	3	0	392	1	0	393	9	0	2	0	11
+15 mins.	4	531	0	0	535	4	1	2	0	7	0	276	0	0	276	3	0	0	0	3
+30 mins.	3	491	1	0	495	0	1	1	0	2	4	235	3	0	242	5	1	0	0	6
+45 mins.	3	425	1	0	429	1	1	3	0	5	2	261	3	0	266	2	0	2	0	4
Total Volume	13	1881	2	0	1896	6	3	8	0	17	6	1164	7	0	1177	19	1	4	0	24
% App. Total	0.7	99.2	0.1	0		35.3	17.6	47.1	0		0.5	98.9	0.6	0		79.2	4.2	16.7	0	
PHF	.813	.886	.500	.000	.886	.375	.750	.667	.000	.607	.375	.742	.583	.000	.749	.528	.250	.500	.000	.545



Connecticut Counts LLC
Kensington, Connecticut 06037
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Route 32 at Benham Avenue
Waterford, Connecticut

File Name : 24865
Site Code : 24865
Start Date : 10/26/2023
Page No : 1

Groups Printed- Lights - Trucks - Buses

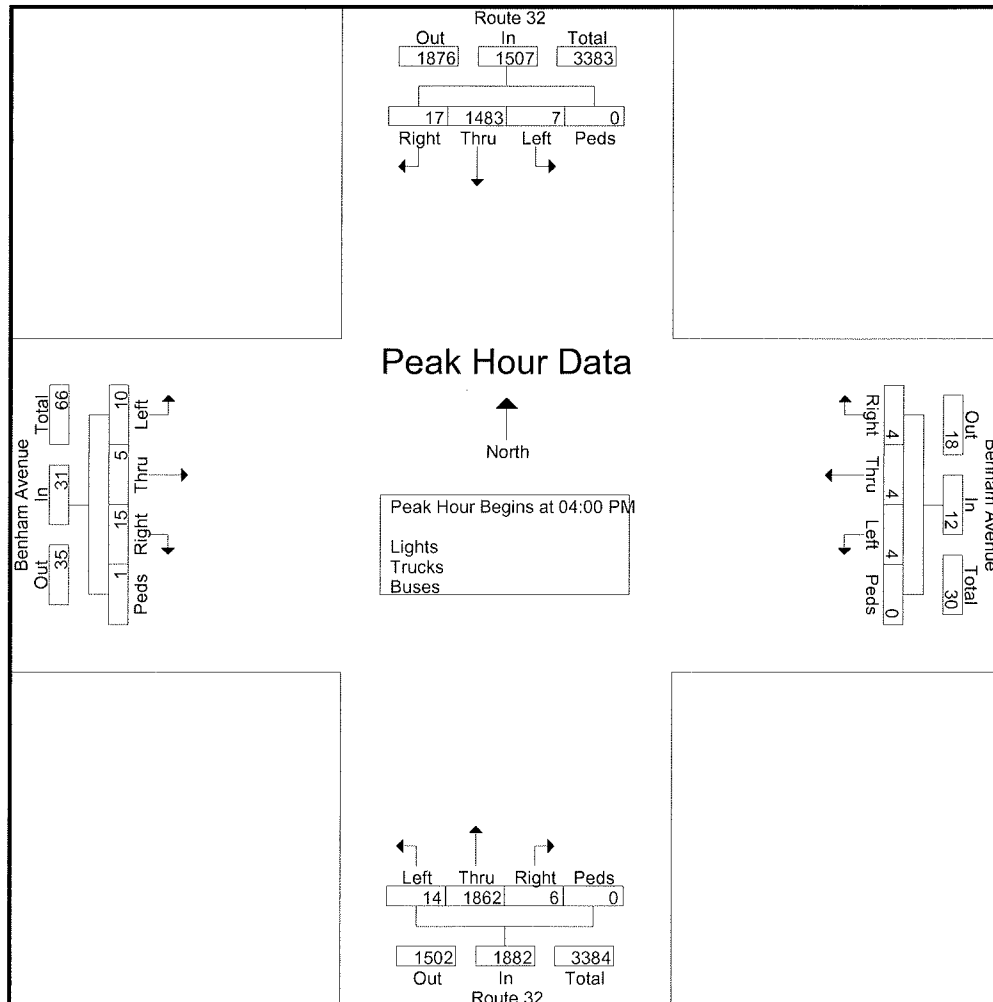
Start Time	Route 32 From North					Benham Avenue From East					Route 32 From South					Benham Avenue From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
03:30 PM	4	335	2	0	341	1	0	5	0	6	2	471	4	0	477	4	1	4	0	9	833
03:45 PM	5	286	2	0	293	0	1	3	0	4	1	410	0	0	411	2	1	3	0	6	714
Total	9	621	4	0	634	1	1	8	0	10	3	881	4	0	888	6	2	7	0	15	1547
04:00 PM	4	373	2	0	379	0	3	2	0	5	1	480	4	0	485	2	1	4	0	7	876
04:15 PM	4	353	2	0	359	1	1	0	0	2	2	413	7	0	422	2	1	3	0	6	789
04:30 PM	1	353	1	0	355	1	0	1	0	2	2	469	3	0	474	5	1	3	1	10	841
04:45 PM	8	404	2	0	414	2	0	1	0	3	1	500	0	0	501	6	2	0	0	8	926
Total	17	1483	7	0	1507	4	4	4	0	12	6	1862	14	0	1882	15	5	10	1	31	3432
05:00 PM	1	292	3	0	296	1	1	0	0	2	3	320	2	1	326	2	3	5	0	10	634
05:15 PM	1	295	1	0	297	4	0	2	0	6	2	337	2	0	341	1	1	4	0	6	650
Grand Total	28	2691	15	0	2734	10	6	14	0	30	14	3400	22	1	3437	24	11	26	1	62	6263
Apprch %	1	98.4	0.5	0		33.3	20	46.7	0		0.4	98.9	0.6	0		38.7	17.7	41.9	1.6		
Total %	0.4	43	0.2	0	43.7	0.2	0.1	0.2	0	0.5	0.2	54.3	0.4	0	54.9	0.4	0.2	0.4	0	1	
Lights	26	2669									3379										
% Lights	92.9	99.2	100	0	99.1	100	100	100	0	100	100	99.4	100	100	99.4	100	100	96.2	100	98.4	99.3
Trucks	0	16	0	0	16	0	0	0	0	0	0	15	0	0	15	0	0	0	0	0	31
% Trucks	0	0.6	0	0	0.6	0	0	0	0	0	0	0.4	0	0	0.4	0	0	0	0	0	0.5
Buses	2	6	0	0	8	0	0	0	0	0	0	6	0	0	6	0	0	1	0	1	15
% Buses	7.1	0.2	0	0	0.3	0	0	0	0	0	0	0.2	0	0	0.2	0	0	3.8	0	1.6	0.2

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File Name : 24865
Site Code : 24865
Start Date : 10/26/2023
Page No : 2

	Route 32 From North					Benham Avenue From East					Route 32 From South					Benham Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	4	373	2	0	379	0	3	2	0	5	1	480	4	0	485	2	1	4	0	7	876
04:15 PM	4	353	2	0	359	1	1	0	0	2	2	413	7	0	422	2	1	3	0	6	789
04:30 PM	1	353	1	0	355	1	0	1	0	2	2	469	3	0	474	5	1	3	1	10	841
04:45 PM	8	404	2	0	414	2	0	1	0	3	1	500	0	0	501	6	2	0	0	8	926
Total Volume	17	1483	7	0	1507	4	4	4	0	12	6	1862	14	0	1882	15	5	10	1	31	3432
% App. Total	1.1	98.4	0.5	0		33.3	33.3	33.3	0		0.3	98.9	0.7	0		48.4	16.1	32.3	3.2		
PHF	.531	.918	.875	.000	.910	.500	.333	.500	.000	.600	.750	.931	.500	.000	.939	.625	.625	.625	.250	.775	.927



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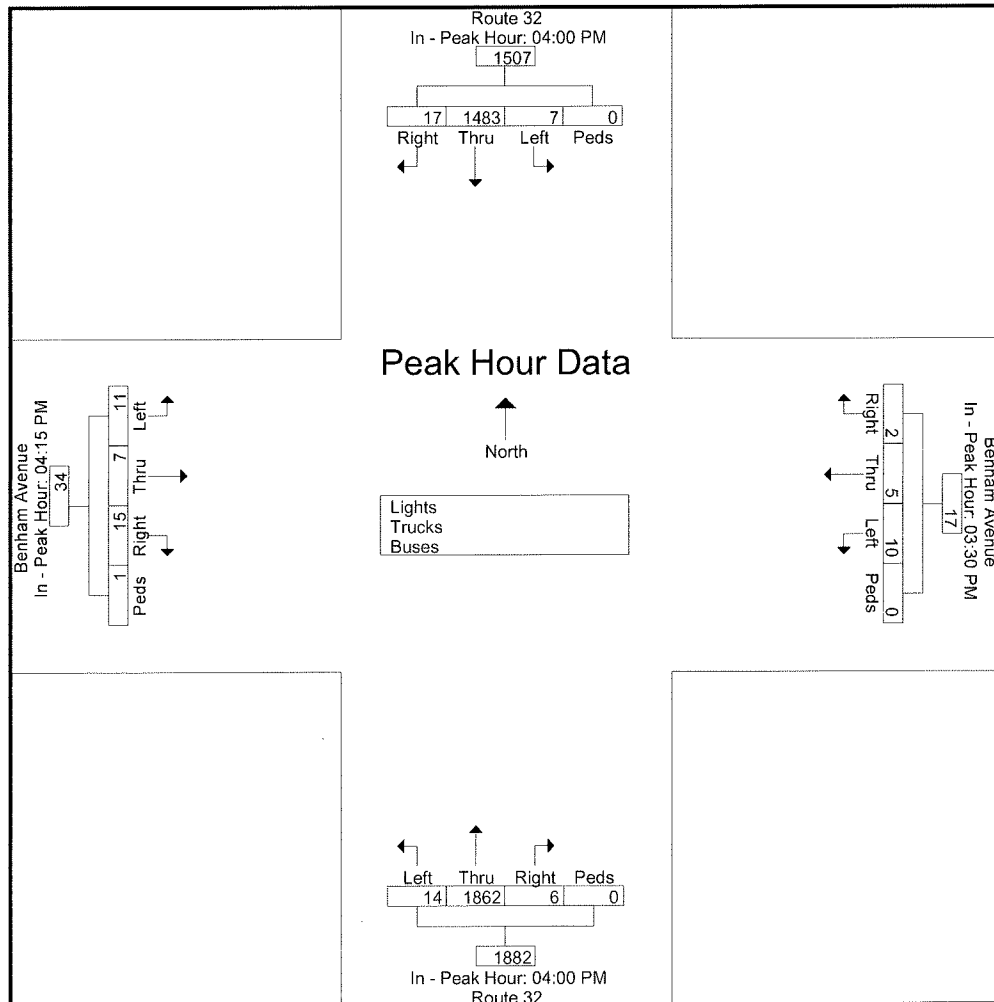
File Name : 24865
Site Code : 24865
Start Date : 10/26/2023
Page No : 3

	Route 32 From North					Benham Avenue From East					Route 32 From South					Benham Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total

Peak Hour Analysis From 03:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM					03:30 PM					04:00 PM					04:15 PM				
+0 mins.	4	373	2	0	379	1	0	5	0	6	1	480	4	0	485	2	1	3	0	6
+15 mins.	4	353	2	0	359	0	1	3	0	4	2	413	7	0	422	5	1	3	1	10
+30 mins.	1	353	1	0	355	0	3	2	0	5	2	469	3	0	474	6	2	0	0	8
+45 mins.	8	404	2	0	414	1	1	0	0	2	1	500	0	0	501	2	3	5	0	10
Total Volume	17	1483	7	0	1507	2	5	10	0	17	6	1862	14	0	1882	15	7	11	1	34
% App. Total	1.1	98.4	0.5	0		11.8	29.4	58.8	0		0.3	98.9	0.7	0		44.1	20.6	32.4	2.9	
PHF	.531	.918	.875	.000	.910	.500	.417	.500	.000	.708	.750	.931	.500	.000	.939	.625	.583	.550	.250	.850



ITE *Trip Generation* Worksheets



Graph Look Up

ITETripGen Web-based App

Graph Look Up

How to Use ITETripGen

TGM Desk Reference

TGM Appendices

Support Documents

Add Users

Comments

Add-ons to do more

Try OTISS Pro

Data Plot and Equation

Query Filter

DATA SOURCE:

Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:

210

LAND USE GROUP:

(200-299) Residential

LAND USE:

210 - Single-Family Detached Housing

LAND USE SUBCATEGORY:

All Sites

SETTING/LOCATION:

General Urban/Suburban

INDEPENDENT VARIABLE (IV):

Dwelling Units

TIME PERIOD:

Weekday

TRIP TYPE:

Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:

24

Calculate

DATA STATISTICS

Land Use:

Single-Family Detached Housing (210) [Click for Description and Data Plots](#)

Independent Variable:

Dwelling Units

Time Period:

Weekday

Setting/Location:

General Urban/Suburban

Trip Type:

Vehicle

Number of Studies:

174

Avg. Num. of Dwelling Units:

246

Average Rate:

9.43

Range of Rates:

4.45 - 22.61

Standard Deviation:

2.13

Fitted Curve Equation:

$\ln(T) = 0.92 \ln(X) + 2.68$

R^2

0.95

Directional Distribution:

50% entering, 50% exiting

Calculated Trip Ends:

Average Rate: 226 (Total), 113 (Entry), 113 (Exit)
Fitted Curve: 271 (Total), 136 (Entry), 135 (Exit)

X

20,000

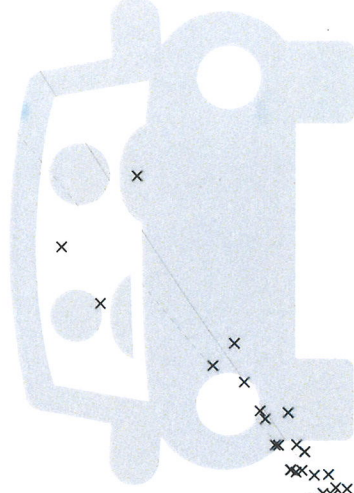
15,000

10,000

5,000

0

T = Trip Ends



3,000

2,500

2,000

1,500

1,000

500

0

X = Number of Dwelling Units

Reset Zoom

Restore

X Study Site

— Fitted Curve

Average Rate

Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.



Graph Look Up

ITE TripGen Web-based App

[Graph Look Up](#)[How to Use ITE TripGen](#)[TGM Desk Reference](#)[TGM Appendices](#)[Support Documents](#)[Add Users](#)[Comments](#)[Add-ons to do more](#)[Try OTISS Pro](#)

Data Plot and Equation

Query Filter

DATA SOURCE:

Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:

210

LAND USE GROUP:

(200-299) Residential

LAND USE:

210 - Single-Family Detached Housing

LAND USE SUBCATEGORY:

All Sites

SETTING/LOCATION:

General Urban/Suburban

INDEPENDENT VARIABLE (IV):

Dwelling Units

TIME PERIOD:

Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE:

Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:

24

Calculate

DATA STATISTICS

Land Use:

Single-Family Detached Housing (210) [Click for Description and Data Plots](#)

Independent Variable:

Dwelling Units

Time Period:

Weekday

Peak Hour of Adjacent Street Traffic

One Hour Between 7 and 9 a.m.

Setting/Location:

General Urban/Suburban

Trip Type:

Vehicle

Number of Studies:

192

Avg. Num. of Dwelling Units:

226

Average Rate:

0.70

Range of Rates:

0.27 - 2.27

Standard Deviation:

0.24

Fitted Curve Equation:

 $\ln(T) = 0.91 \ln(X) + 0.12$ $R^2 =$

0.90

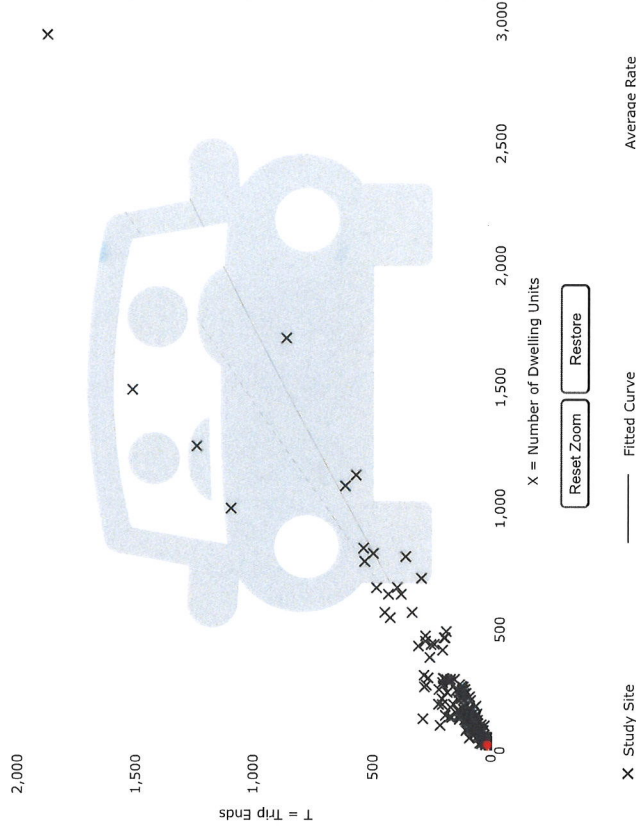
Directional Distribution:

25% entering, 75% exiting

Calculated Trip Ends:

Average Rate: 17 (Total), 4 (Entry), 13 (Exit)

Fitted Curve: 20 (Total), 5 (Entry), 15 (Exit)



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

Graph Look Up

ITETripGen Web-based App

Graph Look Up

How to Use ITETripGen

TGM Desk Reference

TGM Appendices

Support Documents

Add Users

Comments

Add-ons to do more

Try OTISS Pro



Data Plot and Equation

Query Filter

DATA SOURCE:

Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:

210

LAND USE GROUP:

(200-299) Residential

LAND USE:

210 - Single-Family Detached Housing

LAND USE SUBCATEGORY:

All Sites

SETTING/LOCATION:

General Urban/Suburban

INDEPENDENT VARIABLE (IV):

Dwelling Units

TIME PERIOD:

Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE:

Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:

24

Calculate

DATA STATISTICS

Land Use:

Single-Family Detached Housing (210) [Click for Description and Data Plots](#)

Independent Variable:

Dwelling Units

Time Period:

Weekday

Peak Hour of Adjacent Street Traffic

One Hour Between 4 and 6 p.m.

Setting/Location:

General Urban/Suburban

Trip Type:

Vehicle

Number of Studies:

208

Avg. Num. of Dwelling Units:

248

Average Rate:

0.94

Range of Rates:

0.35 - 2.98

Standard Deviation:

0.31

Fitted Curve Equation:

 $\ln(T) = 0.94 \ln(X) + 0.27$ R^2

0.92

Directional Distribution:

63% entering, 37% exiting

Calculated Trip Ends:

Average Rate: 23 (Total), 14 (Entry), 9 (Exit)

Fitted Curve: 26 (Total), 16 (Entry), 10 (Exit)

X

2,500

2,000

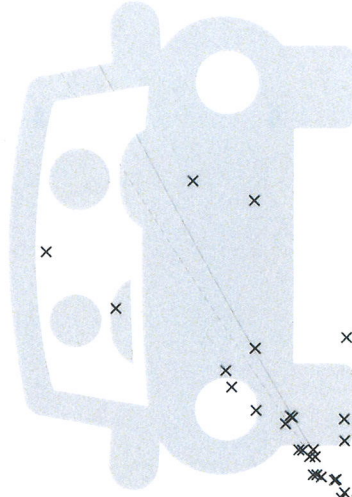
1,500

1,000

500

0

T = Trip Ends



1,000 1,500 2,000 2,500 3,000

X = Number of Dwelling Units

Reset Zoom

Restore

X Study Site

Fitted Curve

Average Rate

Use the mouse wheel to Zoom Out or Zoom In.

Hover the mouse pointer on data points to view X and T values.

SYNCHRO Capacity Analysis Worksheets
Background Traffic

Lanes, Volumes, Timings
1: RT 32 & Benham Ave

2026 Background Traffic

AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	1	19	7	1	7	7	1208	6	4	1874	15
Future Volume (vph)	4	1	19	7	1	7	7	1208	6	4	1874	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	350		0	300		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Fr't		0.893			0.936			0.999			0.999	
Flt Protected		0.991			0.977		0.950			0.950		
Satd. Flow (prot)	0	1648	0	0	1703	0	1770	3536	0	1770	3536	0
Flt Permitted		0.935			0.835		0.950			0.950		
Satd. Flow (perm)	0	1555	0	0	1456	0	1770	3536	0	1770	3536	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		23			9			1			1	
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		1146			499			641			780	
Travel Time (s)		26.0			11.3			9.7			11.8	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	5	1	23	9	1	9	9	1473	7	5	2285	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	29	0	0	19	0	9	1480	0	5	2303	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	custom	NA		custom	NA		Prot	NA		Prot	NA	
Protected Phases							1	6		5	2	
Permitted Phases	4	4		4	4							

Lanes, Volumes, Timings
1: RT 32 & Benham Ave

2026 Background Traffic
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		4	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	14.1		5.0	15.0	
Minimum Split (s)	27.0	27.0		27.0	27.0		10.0	20.0		10.0	20.9	
Total Split (s)	32.0	32.0		32.0	32.0		16.0	47.0		16.0	47.0	
Total Split (%)	33.7%	33.7%		33.7%	33.7%		16.8%	49.5%		16.8%	49.5%	
Maximum Green (s)	27.0	27.0		27.0	27.0		11.0	41.1		11.0	41.1	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	4.9		3.0	4.9	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	1.0		2.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0		5.0	5.9		5.0	5.9	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)		7.2			7.2		6.1	81.7		5.9	81.6	
Actuated g/C Ratio		0.08			0.08		0.06	0.86		0.06	0.86	
v/c Ratio		0.21			0.16		0.08	0.49		0.05	0.76	
Control Delay		23.4			32.0		42.9	4.2		42.5	8.8	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		23.4			32.0		42.9	4.2		42.5	8.8	
LOS		C			C		D	A		D	A	
Approach Delay		23.4			32.0			4.4			8.9	
Approach LOS		C			C			A			A	
90th %ile Green (s)	8.2	8.2		8.2	8.2		7.2	64.3		6.6	63.7	
90th %ile Term Code	Gap	Gap		Gap	Gap		Gap	Coord		Gap	Coord	
70th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	77.1		0.0	77.1	
70th %ile Term Code	Min	Min		Min	Min		Skip	Coord		Skip	Coord	
50th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	77.1		0.0	77.1	
50th %ile Term Code	Min	Min		Min	Min		Skip	Coord		Skip	Coord	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	89.1		0.0	89.1	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Coord		Skip	Coord	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	89.1		0.0	89.1	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Coord		Skip	Coord	
Stops (vph)		12			12		9	315		6	735	
Fuel Used(gal)		0			0		0	10		0	29	
CO Emissions (g/hr)		28			16		14	700		10	2021	
NOx Emissions (g/hr)		5			3		3	136		2	393	
VOC Emissions (g/hr)		6			4		3	162		2	468	
Dilemma Vehicles (#)		0			0		0	42		0	61	
Queue Length 50th (ft)		3			6		5	111		3	288	
Queue Length 95th (ft)		27			25		19	244		13	598	
Internal Link Dist (ft)		1066			419			561			700	
Turn Bay Length (ft)							350			300		
Base Capacity (vph)		458			420		204	3041		204	3036	
Starvation Cap Reductn		0			0		0	0		0	0	

Lanes, Volumes, Timings
1: RT 32 & Benham Ave

2026 Background Traffic
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.06			0.05		0.04	0.49		0.02	0.76	

Intersection Summary

Area Type: Other

Cycle Length: 95

Actuated Cycle Length: 95

Offset: 1 (1%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 7.4

Intersection LOS: A

Intersection Capacity Utilization 67.2%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: RT 32 & Benham Ave

 Ø1	 Ø2 (R)	 Ø4
16 s	47 s	32 s
 Ø5	 Ø6 (R)	
16 s	47 s	

Lanes, Volumes, Timings
7: RT 32 & Fitzgerald Ave

2026 Background Traffic

AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	0	3	5	0	0	11	1208	0	3	1878	4
Future Volume (vph)	3	0	3	5	0	0	11	1208	0	3	1878	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	175		0	175		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.932										
Flt Protected		0.976			0.950		0.950			0.950		
Satd. Flow (prot)	0	1694	0	0	1770	0	1770	3539	0	1770	3539	0
Flt Permitted							0.950			0.950		
Satd. Flow (perm)	0	1736	0	0	1863	0	1770	3539	0	1770	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		116										
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		1151			741			1797			578	
Travel Time (s)		26.2			16.8			27.2			8.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	3	0	3	5	0	0	12	1272	0	3	1977	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	6	0	0	5	0	12	1272	0	3	1981	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	custom	NA		custom	NA		Prot	NA		Prot	NA	
Protected Phases							1	6		5	2	
Permitted Phases	4	4		4	4							

Lanes, Volumes, Timings
7: RT 32 & Fitzgerald Ave

2026 Background Traffic
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		4	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	15.0		5.0	15.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		10.0	20.9		10.0	20.9	
Total Split (s)	20.0	20.0		20.0	20.0		14.0	31.0		14.0	31.0	
Total Split (%)	30.8%	30.8%		30.8%	30.8%		21.5%	47.7%		21.5%	47.7%	
Maximum Green (s)	14.7	14.7		14.7	14.7		10.0	25.1		10.0	25.1	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	4.9		3.0	4.9	
All-Red Time (s)	2.3	2.3		2.3	2.3		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.3			5.3		4.0	5.9		4.0	5.9	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)		7.0			7.0		6.1	59.3		5.7	59.2	
Actuated g/C Ratio		0.11			0.11		0.09	0.91		0.09	0.91	
v/c Ratio		0.02			0.03		0.07	0.39		0.02	0.62	
Control Delay		0.2			26.4		27.5	3.2		27.3	6.5	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		0.2			26.4		27.5	3.2		27.3	6.5	
LOS		A			C		C	A		C	A	
Approach Delay		0.2			26.4			3.5			6.6	
Approach LOS		A			C			A			A	
90th %ile Green (s)	7.0	7.0		7.0	7.0		7.0	36.6		6.2	35.8	
90th %ile Term Code	Min	Min		Min	Min		Gap	Coord		Gap	Coord	
70th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	59.1		0.0	59.1	
70th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Coord		Skip	Coord	
50th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	59.1		0.0	59.1	
50th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Coord		Skip	Coord	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	59.1		0.0	59.1	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Coord		Skip	Coord	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	59.1		0.0	59.1	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Coord		Skip	Coord	
Stops (vph)		0			7		14	220		6	335	
Fuel Used(gal)		0			0		0	18		0	14	
CO Emissions (g/hr)		4			7		25	1232		7	960	
NOx Emissions (g/hr)		1			1		5	240		1	187	
VOC Emissions (g/hr)		1			2		6	286		2	222	
Dilemma Vehicles (#)		0			0		0	24		0	29	
Queue Length 50th (ft)		0			2		4	0		1	0	
Queue Length 95th (ft)		0			11		18	223		8	#579	
Internal Link Dist (ft)		1071			661			1717			498	
Turn Bay Length (ft)							175			175		
Base Capacity (vph)		482			421		272	3230		272	3221	
Starvation Cap Reductn		0			0		0	0		0	0	

Lanes, Volumes, Timings
7: RT 32 & Fitzgerald Ave

2026 Background Traffic
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.01			0.01		0.04	0.39		0.01	0.62	

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 65

Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay: 5.4

Intersection LOS: A

Intersection Capacity Utilization 67.2%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 7: RT 32 & Fitzgerald Ave

 Ø1	 Ø2 (R)		 Ø4
14 s	31 s		20 s
 Ø5	 Ø6 (R)		
14 s	31 s		

HCM Unsignalized Intersection Capacity Analysis

2: RT 32 & Senkow Drive

2026 Background Traffic

AM Peak Hour

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	11	0	1219	1882	4
Future Volume (Veh/h)	0	11	0	1219	1882	4
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	12	0	1297	2002	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2652	1003	2006			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2652	1003	2006			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	95	100			
cM capacity (veh/h)	19	240	281			
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	12	648	648	1335	671	
Volume Left	0	0	0	0	0	
Volume Right	12	0	0	0	4	
cSH	240	1700	1700	1700	1700	
Volume to Capacity	0.05	0.38	0.38	0.79	0.39	
Queue Length 95th (ft)	4	0	0	0	0	
Control Delay (s)	20.8	0.0	0.0	0.0	0.0	
Lane LOS	C					
Approach Delay (s)	20.8	0.0		0.0		
Approach LOS	C					
Intersection Summary						
Average Delay		0.1				
Intersection Capacity Utilization		62.2%		ICU Level of Service		B
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis

11: Old Norwich Rd & Senkow Drive

2026 Background Traffic
AM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	3	7	94	2	0	191
Future Volume (Veh/h)	3	7	94	2	0	191
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	3	7	99	2	0	201
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	301	100			101	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	301	100			101	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			100	
cM capacity (veh/h)	691	956			1491	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	10	101	201			
Volume Left	3	0	0			
Volume Right	7	2	0			
cSH	857	1700	1491			
Volume to Capacity	0.01	0.06	0.00			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	9.3	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	9.3	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		20.1%		ICU Level of Service		A
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis 14: Roberts Ct & Senkow Drive

2026 Background Traffic
AM Peak Hour

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	6	1	1	2	2	3
Future Volume (Veh/h)	6	1	1	2	2	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	1	1	2	2	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			8		12	8
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			8		12	8
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1612		1008	1075
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	8	3	5			
Volume Left	0	1	2			
Volume Right	1	0	3			
cSH	1700	1612	1047			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	2.4	8.5			
Lane LOS		A	A			
Approach Delay (s)	0.0	2.4	8.5			
Approach LOS			A			
Intersection Summary						
Average Delay		3.1				
Intersection Capacity Utilization		13.3%		ICU Level of Service		A
Analysis Period (min)		15				

Lanes, Volumes, Timings
1: RT 32 & Benham Ave

2026 Background Traffic
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	5	15	4	4	4	14	1873	6	7	1483	17
Future Volume (vph)	10	5	15	4	4	4	14	1873	6	7	1483	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	350		0	300		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.932			0.955						0.998	
Flt Protected		0.983			0.984		0.950			0.950		
Satd. Flow (prot)	0	1707	0	0	1750	0	1770	3539	0	1770	3532	0
Flt Permitted		0.881			0.876		0.950			0.950		
Satd. Flow (perm)	0	1529	0	0	1558	0	1770	3539	0	1770	3532	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			4						1	
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		1146			499			641			780	
Travel Time (s)		26.0			11.3			9.7			11.8	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	11	5	16	4	4	4	15	2014	6	8	1595	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	32	0	0	12	0	15	2020	0	8	1613	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	custom	NA		custom	NA		Prot	NA		Prot	NA	
Protected Phases							1	6		5	2	
Permitted Phases	4	4		4	4							

Lanes, Volumes, Timings
1: RT 32 & Benham Ave

2026 Background Traffic
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		4	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	14.1		5.0	15.0	
Minimum Split (s)	27.0	27.0		27.0	27.0		10.0	20.0		10.0	20.9	
Total Split (s)	32.0	32.0		32.0	32.0		16.0	47.0		16.0	47.0	
Total Split (%)	33.7%	33.7%		33.7%	33.7%		16.8%	49.5%		16.8%	49.5%	
Maximum Green (s)	27.0	27.0		27.0	27.0		11.0	41.1		11.0	41.1	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	4.9		3.0	4.9	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	1.0		2.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0		5.0	5.9		5.0	5.9	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)		7.5			7.5		6.4	81.4		6.0	81.2	
Actuated g/C Ratio		0.08			0.08		0.07	0.86		0.06	0.85	
v/c Ratio		0.24			0.10		0.13	0.67		0.07	0.53	
Control Delay		30.4			34.8		43.5	6.8		42.9	5.0	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		30.4			34.8		43.5	6.8		42.9	5.0	
LOS		C			C		D	A		D	A	
Approach Delay		30.4			34.8			7.1			5.2	
Approach LOS		C			C			A			A	
90th %ile Green (s)	9.0	9.0		9.0	9.0		7.8	63.1		7.0	62.3	
90th %ile Term Code	Gap	Gap		Gap	Gap		Gap	Coord		Gap	Coord	
70th %ile Green (s)	7.4	7.4		7.4	7.4		0.0	76.7		0.0	76.7	
70th %ile Term Code	Gap	Gap		Gap	Gap		Skip	Coord		Skip	Coord	
50th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	77.1		0.0	77.1	
50th %ile Term Code	Min	Min		Min	Min		Skip	Coord		Skip	Coord	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	89.1		0.0	89.1	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Coord		Skip	Coord	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	89.1		0.0	89.1	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Coord		Skip	Coord	
Stops (vph)		19			9		15	705		8	440	
Fuel Used(gal)		1			0		0	19		0	20	
CO Emissions (g/hr)		39			12		26	1341		15	1400	
NOx Emissions (g/hr)		8			2		5	261		3	272	
VOC Emissions (g/hr)		9			3		6	311		4	324	
Dilemma Vehicles (#)		0			0		0	64		0	52	
Queue Length 50th (ft)		9			5		9	205		5	129	
Queue Length 95th (ft)		37			22		28	570		19	365	
Internal Link Dist (ft)		1066			419			561			700	
Turn Bay Length (ft)							350			300		
Base Capacity (vph)		446			445		204	3031		204	3019	
Starvation Cap Reductn		0			0		0	0		0	0	

Lanes, Volumes, Timings
1: RT 32 & Benham Ave

2026 Background Traffic
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.07			0.03		0.07	0.67		0.04	0.53	

Intersection Summary

Area Type:	Other
Cycle Length:	95
Actuated Cycle Length:	95
Offset:	1 (1%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle:	90
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.67
Intersection Signal Delay:	6.5
Intersection Capacity Utilization	66.9%
Intersection LOS:	A
ICU Level of Service	C
Analysis Period (min)	15

Splits and Phases: 1: RT 32 & Benham Ave

 Ø1	 Ø2 (R)	 Ø4
16 s	47 s	32 s
 Ø5	 Ø6 (R)	
16 s	47 s	

Lanes, Volumes, Timings
7: RT 32 & Fitzgerald Ave

2026 Background Traffic
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	5	3	5	9	5	29	1855	3	2	1495	5
Future Volume (vph)	9	5	3	5	9	5	29	1855	3	2	1495	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	175		0	175		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.976			0.964							
Flt Protected		0.974			0.987		0.950			0.950		
Satd. Flow (prot)	0	1771	0	0	1772	0	1770	3539	0	1770	3539	0
Flt Permitted					0.905		0.950			0.950		
Satd. Flow (perm)	0	1818	0	0	1625	0	1770	3539	0	1770	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			5							1
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		1151			741			1797			578	
Travel Time (s)		26.2			16.8			27.2			8.8	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	9	5	3	5	9	5	30	1932	3	2	1557	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	17	0	0	19	0	30	1935	0	2	1562	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	custom	NA		custom	NA		Prot	NA		Prot	NA	
Protected Phases							1	6		5	2	
Permitted Phases	4	4		4	4							

Lanes, Volumes, Timings
7: RT 32 & Fitzgerald Ave

2026 Background Traffic
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		4	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	15.0		5.0	15.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		10.0	20.9		10.0	20.9	
Total Split (s)	20.0	20.0		20.0	20.0		14.0	31.0		14.0	31.0	
Total Split (%)	30.8%	30.8%		30.8%	30.8%		21.5%	47.7%		21.5%	47.7%	
Maximum Green (s)	14.7	14.7		14.7	14.7		10.0	25.1		10.0	25.1	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	4.9		3.0	4.9	
All-Red Time (s)	2.3	2.3		2.3	2.3		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.3			5.3		4.0	5.9		4.0	5.9	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)		7.1			7.1		6.7	55.6		5.6	52.9	
Actuated g/C Ratio		0.11			0.11		0.10	0.86		0.09	0.81	
v/c Ratio		0.08			0.10		0.17	0.64		0.01	0.54	
Control Delay		24.6			23.7		28.2	7.7		27.0	7.9	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		24.6			23.7		28.2	7.7		27.0	7.9	
LOS		C			C		C	A		C	A	
Approach Delay		24.6			23.7			8.0			7.9	
Approach LOS		C			C			A			A	
90th %ile Green (s)	7.5	7.5		7.5	7.5		8.3	36.3		6.0	34.0	
90th %ile Term Code	Gap	Gap		Gap	Gap		Gap	Coord		Gap	Coord	
70th %ile Green (s)	7.0	7.0		7.0	7.0		7.2	46.8		0.0	35.6	
70th %ile Term Code	Min	Min		Min	Min		Gap	Coord		Skip	Coord	
50th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	59.1		0.0	59.1	
50th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Coord		Skip	Coord	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	59.1		0.0	59.1	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Coord		Skip	Coord	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	59.1		0.0	59.1	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Coord		Skip	Coord	
Stops (vph)		15			16		29	578		4	583	
Fuel Used(gal)		0			0		1	32		0	15	
CO Emissions (g/hr)		21			20		61	2221		5	1069	
NOx Emissions (g/hr)		4			4		12	432		1	208	
VOC Emissions (g/hr)		5			5		14	515		1	248	
Dilemma Vehicles (#)		0			0		0	60		0	53	
Queue Length 50th (ft)		5			5		11	0		1	0	
Queue Length 95th (ft)		21			22		32	#552		6	351	
Internal Link Dist (ft)		1071			661			1717			498	
Turn Bay Length (ft)							175			175		
Base Capacity (vph)		413			371		272	3028		272	2881	
Starvation Cap Reductn		0			0		0	0		0	0	

Lanes, Volumes, Timings
7: RT 32 & Fitzgerald Ave

2026 Background Traffic
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.04			0.05		0.11	0.64		0.01	0.54	

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 65

Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 8.1

Intersection LOS: A

Intersection Capacity Utilization 66.5%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 7: RT 32 & Fitzgerald Ave

 Ø1	 Ø2 (R)	 Ø4
14 s	31 s	20 s
 Ø5	 Ø6 (R)	
14 s	31 s	

HCM Unsignalized Intersection Capacity Analysis

2: RT 32 & Senkow Drive

2026 Background Traffic
PM Peak Hour

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	6	0	1887	1501	2
Future Volume (Veh/h)	0	6	0	1887	1501	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	0	7	0	2120	1687	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2748	844	1689			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2748	844	1689			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	16	306	374			
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	7	1060	1060	1125	564	
Volume Left	0	0	0	0	0	
Volume Right	7	0	0	0	2	
cSH	306	1700	1700	1700	1700	
Volume to Capacity	0.02	0.62	0.62	0.66	0.33	
Queue Length 95th (ft)	2	0	0	0	0	
Control Delay (s)	17.0	0.0	0.0	0.0	0.0	
Lane LOS	C					
Approach Delay (s)	17.0	0.0		0.0		
Approach LOS	C					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			55.5%	ICU Level of Service		B
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

11: Old Norwich Rd & Senkow Drive

2026 Background Traffic
PM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	5	3	246	7	4	144
Future Volume (Veh/h)	5	3	246	7	4	144
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	5	3	262	7	4	153
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	426	266			269	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	426	266			269	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	100			100	
cM capacity (veh/h)	583	773			1295	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	8	269	157			
Volume Left	5	0	4			
Volume Right	3	7	0			
cSH	642	1700	1295			
Volume to Capacity	0.01	0.16	0.00			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	10.7	0.0	0.2			
Lane LOS	B		A			
Approach Delay (s)	10.7	0.0	0.2			
Approach LOS	B					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization		23.4%		ICU Level of Service		A
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis 14: Roberts Ct & Senkow Drive

2026 Background Traffic
PM Peak Hour

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	3	3	2	1	1	2
Future Volume (Veh/h)	3	3	2	1	1	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	3	2	1	1	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			6		10	4
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			6		10	4
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1615		1010	1079
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	6	3	3			
Volume Left	0	2	1			
Volume Right	3	0	2			
cSH	1700	1615	1055			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	4.8	8.4			
Lane LOS		A	A			
Approach Delay (s)	0.0	4.8	8.4			
Approach LOS			A			
Intersection Summary						
Average Delay			3.3			
Intersection Capacity Utilization		13.3%		ICU Level of Service		A
Analysis Period (min)		15				

SYNCHRO Capacity Analysis Worksheets
Combined Traffic

Lanes, Volumes, Timings
1: RT 32 & Benham Ave

2026 Combined Traffic
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	4	1	19	7	1	7	9	1210	6	6	4	1880
Future Volume (vph)	4	1	19	7	1	7	9	1210	6	6	4	1880
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	350		0		300	
Storage Lanes	0		0	0		0	1		0		1	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95
Frt		0.893			0.936			0.999				0.999
Flt Protected		0.991			0.977		0.950				0.950	
Satd. Flow (prot)	0	1648	0	0	1703	0	1770	3536	0	0	1770	3536
Flt Permitted		0.935			0.835		0.950				0.950	
Satd. Flow (perm)	0	1555	0	0	1456	0	1770	3536	0	0	1770	3536
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		23			9			1				1
Link Speed (mph)		30			30			45				45
Link Distance (ft)		1146			499			641				780
Travel Time (s)		26.0			11.3			9.7				11.8
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	5	1	23	9	1	9	11	1476	7	7	5	2293
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	29	0	0	19	0	11	1483	0	0	12	2311
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors	1	2		1	2		1	2		1	1	2
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Left	Thru
Leading Detector (ft)	20	100		20	100		20	100		20	20	100
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	20	6
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex				CI+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	custom	NA		custom	NA		Prot	NA		Prot	Prot	NA
Protected Phases							1	6		5	5	2
Permitted Phases	4	4		4	4							

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	15
Future Volume (vph)	15
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.95
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.82
Adj. Flow (vph)	18
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	

Lanes, Volumes, Timings
1: RT 32 & Benham Ave

2026 Combined Traffic
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Detector Phase	4	4		4	4		1	6		5	5	2
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	14.1		5.0	5.0	15.0
Minimum Split (s)	27.0	27.0		27.0	27.0		10.0	20.0		10.0	10.0	20.9
Total Split (s)	32.0	32.0		32.0	32.0		16.0	47.0		16.0	16.0	47.0
Total Split (%)	33.7%	33.7%		33.7%	33.7%		16.8%	49.5%		16.8%	16.8%	49.5%
Maximum Green (s)	27.0	27.0		27.0	27.0		11.0	41.1		11.0	11.0	41.1
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	4.9		3.0	3.0	4.9
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	1.0		2.0	2.0	1.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)		5.0			5.0		5.0	5.9			5.0	5.9
Lead/Lag							Lead	Lag		Lead	Lead	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Max		None	None	C-Max
Walk Time (s)	7.0	7.0		7.0	7.0			7.0				7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0				11.0
Pedestrian Calls (#/hr)	0	0		0	0			0				0
Act Effct Green (s)		7.2			7.2		6.2	81.5			6.2	81.5
Actuated g/C Ratio		0.08			0.08		0.07	0.86			0.07	0.86
v/c Ratio		0.21			0.16		0.10	0.49			0.10	0.76
Control Delay		23.4			32.0		43.1	4.4			43.2	8.9
Queue Delay		0.0			0.0		0.0	0.0			0.0	0.0
Total Delay		23.4			32.0		43.1	4.4			43.2	8.9
LOS		C			C		D	A			D	A
Approach Delay		23.4			32.0			4.7				9.1
Approach LOS		C			C			A				A
90th %ile Green (s)	8.2	8.2		8.2	8.2		7.4	63.4		7.5	7.5	63.5
90th %ile Term Code	Gap	Gap		Gap	Gap		Gap	Coord		Gap	Gap	Coord
70th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	77.1		0.0	0.0	77.1
70th %ile Term Code	Min	Min		Min	Min		Skip	Coord		Skip	Skip	Coord
50th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	77.1		0.0	0.0	77.1
50th %ile Term Code	Min	Min		Min	Min		Skip	Coord		Skip	Skip	Coord
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	89.1		0.0	0.0	89.1
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Coord		Skip	Skip	Coord
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	89.1		0.0	0.0	89.1
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Coord		Skip	Skip	Coord
Stops (vph)		12			12		11	321			11	737
Fuel Used(gal)		0			0		0	10			0	29
CO Emissions (g/hr)		28			16		18	708			22	2031
NOx Emissions (g/hr)		5			3		3	138			4	395
VOC Emissions (g/hr)		6			4		4	164			5	471
Dilemma Vehicles (#)		0			0		0	42			0	62
Queue Length 50th (ft)		3			6		6	111			7	291
Queue Length 95th (ft)		27			25		21	253			23	608
Internal Link Dist (ft)		1066			419			561				700
Turn Bay Length (ft)							350				300	
Base Capacity (vph)		458			420		204	3034			204	3035
Starvation Cap Reductn		0			0		0	0			0	0

Lane Group	SBR
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
90th %ile Green (s)	
90th %ile Term Code	
70th %ile Green (s)	
70th %ile Term Code	
50th %ile Green (s)	
50th %ile Term Code	
30th %ile Green (s)	
30th %ile Term Code	
10th %ile Green (s)	
10th %ile Term Code	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	

Lanes, Volumes, Timings
1: RT 32 & Benham Ave

2026 Combined Traffic
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Spillback Cap Reductn		0			0		0	0			0	0
Storage Cap Reductn		0			0		0	0			0	0
Reduced v/c Ratio		0.06			0.05		0.05	0.49			0.06	0.76

Intersection Summary

Area Type: Other

Cycle Length: 95

Actuated Cycle Length: 95

Offset: 1 (1%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 7.6

Intersection LOS: A

Intersection Capacity Utilization 67.4%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: RT 32 & Benham Ave

 Ø1	 Ø2 (R)	 Ø4
16 s	47 s	32 s
 Ø5	 Ø6 (R)	
16 s	47 s	

Lane Group	SBR
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lanes, Volumes, Timings
7: RT 32 & Fitzgerald Ave

2026 Combined Traffic
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	9	0	3	5	0	0	2	11	1214	0	3	1880
Future Volume (vph)	9	0	3	5	0	0	2	11	1214	0	3	1880
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0		175		0	175	
Storage Lanes	0		0	0		0		1		0	1	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	0.95
Frt		0.966										
Flt Protected		0.964			0.950			0.950			0.950	
Satd. Flow (prot)	0	1735	0	0	1770	0	0	1770	3539	0	1770	3539
Flt Permitted											0.950	
Satd. Flow (perm)	0	1799	0	0	1863	0	0	1863	3539	0	1770	3539
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		116										
Link Speed (mph)		30			30				45			45
Link Distance (ft)		1151			741				1797			578
Travel Time (s)		26.2			16.8				27.2			8.8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	9	0	3	5	0	0	2	12	1278	0	3	1979
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	12	0	0	5	0	0	14	1278	0	3	1983
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		0			0				12			12
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Number of Detectors	1	2		1	2		1	1	2		1	2
Detector Template	Left	Thru		Left	Thru		Left	Left	Thru		Left	Thru
Leading Detector (ft)	20	100		20	100		20	20	100		20	100
Trailing Detector (ft)	0	0		0	0		0	0	0		0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0		0	0
Detector 1 Size(ft)	20	6		20	6		20	20	6		20	6
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94			94				94			94
Detector 2 Size(ft)		6			6				6			6
Detector 2 Type		CI+Ex			CI+Ex				CI+Ex			CI+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0				0.0			0.0
Turn Type	custom	NA		custom	NA		custom	Prot	NA		Prot	NA
Protected Phases								1	6		5	2
Permitted Phases	4	4		4	4		1					



Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	4
Future Volume (vph)	4
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.95
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.95
Adj. Flow (vph)	4
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	

Lanes, Volumes, Timings
7: RT 32 & Fitzgerald Ave

2026 Combined Traffic
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Detector Phase	4	4		4	4		1	1	6		5	2
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	5.0	15.0		5.0	15.0
Minimum Split (s)	15.0	15.0		15.0	15.0		10.0	10.0	20.9		10.0	20.9
Total Split (s)	20.0	20.0		20.0	20.0		14.0	14.0	31.0		14.0	31.0
Total Split (%)	30.8%	30.8%		30.8%	30.8%		21.5%	21.5%	47.7%		21.5%	47.7%
Maximum Green (s)	14.7	14.7		14.7	14.7		10.0	10.0	25.1		10.0	25.1
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	4.9		3.0	4.9
All-Red Time (s)	2.3	2.3		2.3	2.3		1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0			0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)		5.3			5.3			4.0	5.9		4.0	5.9
Lead/Lag							Lead	Lead	Lag		Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None		None	None		None	None	C-Max		None	C-Max
Walk Time (s)	7.0	7.0		7.0	7.0				7.0			7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0				11.0			11.0
Pedestrian Calls (#/hr)	0	0		0	0				0			0
Act Effct Green (s)		7.0			7.0			7.0	59.3		5.7	58.6
Actuated g/C Ratio		0.11			0.11			0.11	0.91		0.09	0.90
v/c Ratio		0.04			0.03			0.07	0.40		0.02	0.62
Control Delay		0.3			26.4			25.6	3.3		27.3	7.4
Queue Delay		0.0			0.0			0.0	0.0		0.0	0.0
Total Delay		0.3			26.4			25.6	3.3		27.3	7.4
LOS		A			C			C	A		C	A
Approach Delay		0.3			26.4				3.5			7.5
Approach LOS		A			C				A			A
90th %ile Green (s)	7.0	7.0		7.0	7.0		9.6	9.6	36.6		6.2	33.2
90th %ile Term Code	Min	Min		Min	Min		Gap	Gap	Coord		Gap	Coord
70th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	0.0	59.1		0.0	59.1
70th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Skip	Coord		Skip	Coord
50th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	0.0	59.1		0.0	59.1
50th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Skip	Coord		Skip	Coord
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	0.0	59.1		0.0	59.1
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Skip	Coord		Skip	Coord
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	0.0	59.1		0.0	59.1
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Skip	Coord		Skip	Coord
Stops (vph)		0			7			14	222		6	314
Fuel Used(gal)		0			0			0	18		0	14
CO Emissions (g/hr)		7			7			28	1239		7	967
NOx Emissions (g/hr)		1			1			5	241		1	188
VOC Emissions (g/hr)		2			2			6	287		2	224
Dilemma Vehicles (#)		0			0			0	24		0	26
Queue Length 50th (ft)		0			2			5	0		1	0
Queue Length 95th (ft)		0			11			19	224		8	#612
Internal Link Dist (ft)		1071			661				1717			498
Turn Bay Length (ft)								175			175	
Base Capacity (vph)		496			421			286	3230		272	3193
Starvation Cap Reductn		0			0			0	0		0	0



Lane Group	SBR
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
90th %ile Green (s)	
90th %ile Term Code	
70th %ile Green (s)	
70th %ile Term Code	
50th %ile Green (s)	
50th %ile Term Code	
30th %ile Green (s)	
30th %ile Term Code	
10th %ile Green (s)	
10th %ile Term Code	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	

Lanes, Volumes, Timings
7: RT 32 & Fitzgerald Ave

2026 Combined Traffic
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Spillback Cap Reductn		0			0			0	0		0	0
Storage Cap Reductn		0			0			0	0		0	0
Reduced v/c Ratio		0.02			0.01			0.05	0.40		0.01	0.62

Intersection Summary	
Area Type:	Other
Cycle Length:	65
Actuated Cycle Length:	65
Offset:	0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle:	80
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.62
Intersection Signal Delay:	5.9
Intersection LOS:	A
Intersection Capacity Utilization	67.3%
ICU Level of Service	C
Analysis Period (min)	15
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 7: RT 32 & Fitzgerald Ave

 Ø1	 Ø2 (R)	 Ø4
14 s	31 s	20 s
 Ø5	 Ø6 (R)	
14 s	31 s	



Lane Group	SBR
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

HCM Unsignalized Intersection Capacity Analysis

2: RT 32 & Senkow Drive

2026 Combined Traffic
AM Peak Hour

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations				 	 	
Traffic Volume (veh/h)	0	23	0	1227	1882	8
Future Volume (Veh/h)	0	23	0	1227	1882	8
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	24	0	1305	2002	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2659	1006	2011			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2659	1006	2011			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	90	100			
cM capacity (veh/h)	18	239	280			
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	24	652	652	1335	676	
Volume Left	0	0	0	0	0	
Volume Right	24	0	0	0	9	
cSH	239	1700	1700	1700	1700	
Volume to Capacity	0.10	0.38	0.38	0.79	0.40	
Queue Length 95th (ft)	8	0	0	0	0	
Control Delay (s)	21.7	0.0	0.0	0.0	0.0	
Lane LOS	C					
Approach Delay (s)	21.7	0.0		0.0		
Approach LOS	C					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			62.3%		ICU Level of Service	B
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

11: Old Norwich Rd & Senkow Drive

2026 Combined Traffic
AM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	5	15	94	5	1	191
Future Volume (Veh/h)	5	15	94	5	1	191
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	5	16	99	5	1	201
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	304	102			104	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	304	102			104	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	98			100	
cM capacity (veh/h)	687	954			1488	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	21	104	202			
Volume Left	5	0	1			
Volume Right	16	5	0			
cSH	873	1700	1488			
Volume to Capacity	0.02	0.06	0.00			
Queue Length 95th (ft)	2	0	0			
Control Delay (s)	9.2	0.0	0.0			
Lane LOS	A		A			
Approach Delay (s)	9.2	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.6				
Intersection Capacity Utilization		20.8%		ICU Level of Service	A	
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis

14: Roberts Ct & Senkow Drive

2026 Combined Traffic
AM Peak Hour

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	6	5	5	2	12	15
Future Volume (Veh/h)	6	5	5	2	12	15
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	5	5	2	13	16
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			12		22	10
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			12		22	10
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			1607		992	1072
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	12	7	29			
Volume Left	0	5	13			
Volume Right	5	0	16			
cSH	1700	1607	1035			
Volume to Capacity	0.01	0.00	0.03			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	5.2	8.6			
Lane LOS		A	A			
Approach Delay (s)	0.0	5.2	8.6			
Approach LOS		A				
Intersection Summary						
Average Delay			5.9			
Intersection Capacity Utilization			14.5%	ICU Level of Service		A
Analysis Period (min)			15			

Lanes, Volumes, Timings
1: RT 32 & Benham Ave

2026 Combined Traffic
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	10	5	15	4	4	4	28	1880	6	10	7	1487
Future Volume (vph)	10	5	15	4	4	4	28	1880	6	10	7	1487
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	350		0		300	
Storage Lanes	0		0	0		0	1		0		1	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95
Frt		0.932			0.955							0.998
Flt Protected		0.983			0.984		0.950				0.950	
Satd. Flow (prot)	0	1707	0	0	1750	0	1770	3539	0	0	1770	3532
Flt Permitted		0.881			0.876		0.950				0.950	
Satd. Flow (perm)	0	1529	0	0	1558	0	1770	3539	0	0	1770	3532
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		16			4							1
Link Speed (mph)		30			30			45				45
Link Distance (ft)		1146			499			641				780
Travel Time (s)		26.0			11.3			9.7				11.8
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	11	5	16	4	4	4	30	2022	6	11	8	1599
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	32	0	0	12	0	30	2028	0	0	19	1617
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors	1	2		1	2		1	2		1	1	2
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Left	Thru
Leading Detector (ft)	20	100		20	100		20	100		20	20	100
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	custom	NA		custom	NA		Prot	NA		Prot	Prot	NA
Protected Phases							1	6		5	5	2
Permitted Phases	4	4		4	4							

Lanes, Volumes, Timings
1: RT 32 & Benham Ave

2026 Combined Traffic
PM Peak Hour



Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	17
Future Volume (vph)	17
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.95
Fr	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.93
Adj. Flow (vph)	18
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	

Lanes, Volumes, Timings
1: RT 32 & Benham Ave

2026 Combined Traffic

PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Detector Phase	4	4		4	4		1	6		5	5	2
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	14.1		5.0	5.0	15.0
Minimum Split (s)	27.0	27.0		27.0	27.0		10.0	20.0		10.0	10.0	20.9
Total Split (s)	32.0	32.0		32.0	32.0		16.0	47.0		16.0	16.0	47.0
Total Split (%)	33.7%	33.7%		33.7%	33.7%		16.8%	49.5%		16.8%	16.8%	49.5%
Maximum Green (s)	27.0	27.0		27.0	27.0		11.0	41.1		11.0	11.0	41.1
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	4.9		3.0	3.0	4.9
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	1.0		2.0	2.0	1.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)		5.0			5.0		5.0	5.9			5.0	5.9
Lead/Lag							Lead	Lag		Lead	Lead	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Max		None	None	C-Max
Walk Time (s)	7.0	7.0		7.0	7.0			7.0				7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0				11.0
Pedestrian Calls (#/hr)	0	0		0	0			0				0
Act Effct Green (s)		7.5			7.5		7.1	78.7			6.6	76.0
Actuated g/C Ratio		0.08			0.08		0.07	0.83			0.07	0.80
v/c Ratio		0.24			0.10		0.23	0.69			0.15	0.57
Control Delay		30.4			34.8		44.8	9.1			43.9	8.0
Queue Delay		0.0			0.0		0.0	0.0			0.0	0.0
Total Delay		30.4			34.8		44.8	9.1			43.9	8.0
LOS		C			C		D	A			D	A
Approach Delay		30.4			34.8			9.6				8.4
Approach LOS		C			C			A				A
90th %ile Green (s)	9.0	9.0		9.0	9.0		9.2	61.9		8.2	8.2	60.9
90th %ile Term Code	Gap	Gap		Gap	Gap		Gap	Coord		Gap	Gap	Coord
70th %ile Green (s)	7.4	7.4		7.4	7.4		7.9	64.5		7.2	7.2	63.8
70th %ile Term Code	Gap	Gap		Gap	Gap		Gap	Coord		Gap	Gap	Coord
50th %ile Green (s)	7.0	7.0		7.0	7.0		7.0	77.1		0.0	0.0	65.1
50th %ile Term Code	Min	Min		Min	Min		Gap	Coord		Skip	Skip	Coord
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	89.1		0.0	0.0	89.1
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Coord		Skip	Skip	Coord
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	89.1		0.0	0.0	89.1
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Coord		Skip	Skip	Coord
Stops (vph)		19			9		27	835			19	611
Fuel Used(gal)		1			0		1	22			1	23
CO Emissions (g/hr)		39			12		49	1518			39	1615
NOx Emissions (g/hr)		8			2		10	295			8	314
VOC Emissions (g/hr)		9			3		11	352			9	374
Dilemma Vehicles (#)		0			0		0	64			0	52
Queue Length 50th (ft)		9			5		17	207			11	261
Queue Length 95th (ft)		37			22		45	602			33	387
Internal Link Dist (ft)		1066			419			561				700
Turn Bay Length (ft)							350				300	
Base Capacity (vph)		446			445		204	2931			204	2824
Starvation Cap Reductn		0			0		0	0			0	0



Lane Group	SBR
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
90th %ile Green (s)	
90th %ile Term Code	
70th %ile Green (s)	
70th %ile Term Code	
50th %ile Green (s)	
50th %ile Term Code	
30th %ile Green (s)	
30th %ile Term Code	
10th %ile Green (s)	
10th %ile Term Code	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	

Lanes, Volumes, Timings
1: RT 32 & Benham Ave

2026 Combined Traffic
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Spillback Cap Reductn		0			0		0	0			0	0
Storage Cap Reductn		0			0		0	0			0	0
Reduced v/c Ratio		0.07			0.03		0.15	0.69			0.09	0.57

Intersection Summary	
Area Type:	Other
Cycle Length:	95
Actuated Cycle Length:	95
Offset:	1 (1%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle:	90
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.69
Intersection Signal Delay:	9.3
Intersection Capacity Utilization	67.1%
Analysis Period (min)	15
	Intersection LOS: A
	ICU Level of Service C

Splits and Phases: 1: RT 32 & Benham Ave

 Ø1	 Ø2 (R)	 Ø4
16 s	47 s	32 s
 Ø5	 Ø6 (R)	
16 s	47 s	

Lane Group	SBR
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lanes, Volumes, Timings
7: RT 32 & Fitzgerald Ave

2026 Combined Traffic
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	13	5	3	5	9	5	7	29	1859	3	2	1502
Future Volume (vph)	13	5	3	5	9	5	7	29	1859	3	2	1502
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0		175		0	175	
Storage Lanes	0		0	0		0		1		0	1	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	0.95
Frt		0.982			0.964							
Flt Protected		0.969			0.987			0.950			0.950	
Satd. Flow (prot)	0	1773	0	0	1772	0	0	1770	3539	0	1770	3539
Flt Permitted					0.903			0.833			0.950	
Satd. Flow (perm)	0	1829	0	0	1622	0	0	1552	3539	0	1770	3539
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		3			5							1
Link Speed (mph)		30			30				45			45
Link Distance (ft)		1151			741				1797			578
Travel Time (s)		26.2			16.8				27.2			8.8
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	14	5	3	5	9	5	7	30	1936	3	2	1565
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	22	0	0	19	0	0	37	1939	0	2	1570
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		0			0				12			12
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Number of Detectors	1	2		1	2		1	1	2		1	2
Detector Template	Left	Thru		Left	Thru		Left	Left	Thru		Left	Thru
Leading Detector (ft)	20	100		20	100		20	20	100		20	100
Trailing Detector (ft)	0	0		0	0		0	0	0		0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0		0	0
Detector 1 Size(ft)	20	6		20	6		20	20	6		20	6
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94			94				94			94
Detector 2 Size(ft)		6			6				6			6
Detector 2 Type		CI+Ex			CI+Ex				CI+Ex			CI+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0				0.0			0.0
Turn Type	custom	NA		custom	NA		custom	Prot	NA		Prot	NA
Protected Phases								1	6		5	2
Permitted Phases	4	4		4	4		1					

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	5
Future Volume (vph)	5
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.95
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.96
Adj. Flow (vph)	5
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	

Lanes, Volumes, Timings
7: RT 32 & Fitzgerald Ave

2026 Combined Traffic
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Detector Phase	4	4		4	4		1	1	6		5	2
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	5.0	15.0		5.0	15.0
Minimum Split (s)	15.0	15.0		15.0	15.0		10.0	10.0	20.9		10.0	20.9
Total Split (s)	20.0	20.0		20.0	20.0		14.0	14.0	31.0		14.0	31.0
Total Split (%)	30.8%	30.8%		30.8%	30.8%		21.5%	21.5%	47.7%		21.5%	47.7%
Maximum Green (s)	14.7	14.7		14.7	14.7		10.0	10.0	25.1		10.0	25.1
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	4.9		3.0	4.9
All-Red Time (s)	2.3	2.3		2.3	2.3		1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0			0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)		5.3			5.3			4.0	5.9		4.0	5.9
Lead/Lag							Lead	Lead	Lag		Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None		None	None		None	None	C-Max		None	C-Max
Walk Time (s)	7.0	7.0		7.0	7.0				7.0			7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0				11.0			11.0
Pedestrian Calls (#/hr)	0	0		0	0				0			0
Act Effct Green (s)		7.2			7.2			8.9	55.5		5.6	51.2
Actuated g/C Ratio		0.11			0.11			0.14	0.85		0.09	0.79
v/c Ratio		0.11			0.10			0.18	0.64		0.01	0.56
Control Delay		24.8			23.4			25.1	7.9		27.0	11.0
Queue Delay		0.0			0.0			0.0	0.0		0.0	0.0
Total Delay		24.8			23.4			25.1	7.9		27.0	11.0
LOS		C			C			C	A		C	B
Approach Delay		24.8			23.4				8.2			11.0
Approach LOS		C			C				A			B
90th %ile Green (s)	8.0	8.0		8.0	8.0		13.3	13.3	35.8		6.0	28.5
90th %ile Term Code	Gap	Gap		Gap	Gap		Gap	Gap	Coord		Gap	Coord
70th %ile Green (s)	7.0	7.0		7.0	7.0		10.5	10.5	46.8		0.0	32.3
70th %ile Term Code	Min	Min		Min	Min		Gap	Gap	Coord		Skip	Coord
50th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	0.0	59.1		0.0	59.1
50th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Skip	Coord		Skip	Coord
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	0.0	59.1		0.0	59.1
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Skip	Coord		Skip	Coord
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	0.0	59.1		0.0	59.1
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Skip	Coord		Skip	Coord
Stops (vph)		19			16			32	575		4	572
Fuel Used(gal)		0			0			1	32		0	16
CO Emissions (g/hr)		28			19			70	2227		5	1128
NOx Emissions (g/hr)		5			4			14	433		1	219
VOC Emissions (g/hr)		6			5			16	516		1	261
Dilemma Vehicles (#)		0			0			0	60		0	48
Queue Length 50th (ft)		7			5			13	0		1	0
Queue Length 95th (ft)		25			22			34	#560		6	#483
Internal Link Dist (ft)		1071			661				1717			498
Turn Bay Length (ft)								175			175	
Base Capacity (vph)		415			370			256	3023		272	2786
Starvation Cap Reductn		0			0			0	0		0	0



Lane Group	SBR
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
90th %ile Green (s)	
90th %ile Term Code	
70th %ile Green (s)	
70th %ile Term Code	
50th %ile Green (s)	
50th %ile Term Code	
30th %ile Green (s)	
30th %ile Term Code	
10th %ile Green (s)	
10th %ile Term Code	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	

Lanes, Volumes, Timings
7: RT 32 & Fitzgerald Ave

2026 Combined Traffic
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Spillback Cap Reductn		0			0			0	0		0	0
Storage Cap Reductn		0			0			0	0		0	0
Reduced v/c Ratio		0.05			0.05			0.14	0.64		0.01	0.56

Intersection Summary	
Area Type:	Other
Cycle Length:	65
Actuated Cycle Length:	65
Offset:	0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle:	75
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.64
Intersection Signal Delay:	9.6
Intersection LOS:	A
Intersection Capacity Utilization	66.6%
ICU Level of Service	C
Analysis Period (min)	15
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 7: RT 32 & Fitzgerald Ave

 Ø1	 Ø2 (R)	 Ø4
14 s	31 s	20 s
 Ø5	 Ø6 (R)	
14 s	31 s	

Lane Group	SBR
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

HCM Unsignalized Intersection Capacity Analysis

2: RT 32 & Senkow Drive

2026 Combined Traffic
PM Peak Hour

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	14	0	1898	1501	16
Future Volume (Veh/h)	0	14	0	1898	1501	16
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	0	16	0	2133	1687	18
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2762	852	1705			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2762	852	1705			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	95	100			
cM capacity (veh/h)	16	303	369			
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	16	1066	1066	1125	580	
Volume Left	0	0	0	0	0	
Volume Right	16	0	0	0	18	
cSH	303	1700	1700	1700	1700	
Volume to Capacity	0.05	0.63	0.63	0.66	0.34	
Queue Length 95th (ft)	4	0	0	0	0	
Control Delay (s)	17.6	0.0	0.0	0.0	0.0	
Lane LOS	C					
Approach Delay (s)	17.6	0.0		0.0		
Approach LOS	C					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			55.8%		ICU Level of Service	B
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

11: Old Norwich Rd & Senkow Drive

2026 Combined Traffic
PM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	6	8	246	16	6	144
Future Volume (Veh/h)	6	8	246	16	6	144
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	6	9	262	17	6	153
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	436	270			279	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	436	270			279	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			100	
cM capacity (veh/h)	575	768			1284	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	15	279	159			
Volume Left	6	0	6			
Volume Right	9	17	0			
cSH	677	1700	1284			
Volume to Capacity	0.02	0.16	0.00			
Queue Length 95th (ft)	2	0	0			
Control Delay (s)	10.4	0.0	0.3			
Lane LOS	B		A			
Approach Delay (s)	10.4	0.0	0.3			
Approach LOS	B					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		23.9%		ICU Level of Service	A	
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis

14: Roberts Ct & Senkow Drive

2026 Combined Traffic
PM Peak Hour

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	3	14	16	1	7	10
Future Volume (Veh/h)	3	14	16	1	7	10
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	15	17	1	8	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			18	46		10
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			18	46		10
tC, single (s)			4.1	6.4		6.2
tC, 2 stage (s)						
tF (s)			2.2	3.5		3.3
p0 queue free %			99	99		99
cM capacity (veh/h)			1599	954		1071
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	18	18	19			
Volume Left	0	17	8			
Volume Right	15	0	11			
cSH	1700	1599	1018			
Volume to Capacity	0.01	0.01	0.02			
Queue Length 95th (ft)	0	1	1			
Control Delay (s)	0.0	6.9	8.6			
Lane LOS		A	A			
Approach Delay (s)	0.0	6.9	8.6			
Approach LOS		A				
Intersection Summary						
Average Delay			5.2			
Intersection Capacity Utilization			17.6%	ICU Level of Service	A	
Analysis Period (min)			15			

UCONN Crash Data

Accident Data
Town of Waterford
Oct 1, 2020 thru October 1, 2023
Route 32
Mile Marker 1.96 thru 2.60

	CrashId	Date	Day of Wee	Time	Crash Severity	Number Of Motor Vehicles	Number Of Non-Motoris	Milemarker	Roadway Name	ntersecting Roadwa	Distance	Unit	Direction	First Harmful Event	Manner of Crash	Loc of First Even	Weather Cond	Light Condition	d Surface Cond
1	873569	11/23/2021	Tuesday	6:50 AM	Prop Dam Only	3	0	1.96	32-N	Benham Avenue	95	Feet	S	Other Vehicle	Front to rear	On Roadway	Clear	Daylight	Dry
2	1041560	4/17/2023	Monday	3:36 PM	Prop Dam Only	2	0	1.96	32-S	BENHAM AVE	100	Feet	S	Other Vehicle	Front to rear	On Roadway	Fog, Smog	Daylight	Wet
3	814087	5/13/2021	Thursday	1:50 PM	Prop Dam Only	2	0	1.97	32-S	Benham Ave	15	Feet	S	Other Vehicle	Front to rear	On Roadway	Clear	Daylight	Dry
4	876905	11/21/2021	Sunday	4:27 PM	Prop Dam Only	2	0	1.97	32-N	BENHAM AVE	20	Feet	S	Other Vehicle	Front to rear	On Roadway	Clear	Daylight	Dry
5	896272	1/13/2022	Thursday	8:51 AM	Susp Minor Injury	3	0	1.97	32-N	Benham Drive	20	Feet	S	Other Vehicle	Front to rear	On Roadway	Clear	Daylight	Dry
6	898145	1/23/2022	Sunday	7:29 PM	Prop Dam Only	2	0	1.97	32-N	BENHAM AVE	5	Feet	S	Other Vehicle	Front to rear	On Roadway	Clear	Dark-Not Lighted	Dry
7	1042620	4/24/2023	Monday	4:47 PM	Prop Dam Only	2	0	1.97	32-N	Benham Avenue	40	Feet		Other Vehicle	Front to rear	On Roadway	Clear	Daylight	Dry
8	753474	11/4/2020	Wednesday	2:30 PM	Prop Dam Only	2	0	1.98	32-S	BENHAM AV				Other Vehicle	Front to rear	On Roadway	Clear	Daylight	Dry
9	1060401	10/5/2022	Wednesday	8:17 PM	Susp Serious Injury	1	0	1.98	32-N	BENHAM AV				Impact Attenuator	Not Applicable	Median	Clear	Dark-Lighted	Wet
10	842035	8/25/2021	Wednesday	6:01 PM	Prop Dam Only	2	0	1.99	32-S	BENHAM AVE	65	Feet	N	Other Vehicle	Front to rear	On Roadway	Clear	Daylight	Dry
11	951372	7/1/2022	Friday	12:30 PM	Prop Dam Only	2	0	2.01	32-S	Benham	100	Feet	N	Other Vehicle	Front to rear	On Roadway	Clear	Daylight	Dry
12	862332	10/15/2021	Friday	2:32 PM	Prop Dam Only	2	0	2.02	32-N	Benham Ave	200	Feet	N	Other Vehicle	Angle	On Roadway	Clear	Daylight	Dry
13	896956	1/4/2022	Tuesday	5:54 AM	Prop Dam Only	2	0	2.12	32-N	Senkow Road	621	Feet	S	Other Vehicle	SS SD	On Roadway	Clear	Dark-Lighted	Dry
14	1038723	4/3/2023	Monday	11:13 AM	Prop Dam Only	1	0	2.21	32-N	Senkow Rd.	169	Feet	S	Fixed Object (wall)	Not Applicable	On Roadway	Clear	Daylight	Dry
15	776968	12/18/2020	Friday	1:15 PM	Susp Minor Injury	2	0	2.22	32-N	Senkow Drive	15	Feet	S	Other Vehicle	Front to rear	On Roadway	Clear	Daylight	Dry
16	863252	10/14/2021	Thursday	8:00 AM	Prop Dam Only	2	0	2.25	32-S	Senkow Drive	75	Feet	N	Other Vehicle	Front to rear	On Roadway	Clear	Daylight	Dry
17	866560	11/3/2021	Wednesday	7:47 PM	Susp Minor Injury	1	0	2.33	32-S	Senkow DR	0.1	Tehts	N	Deer	Not Applicable	On Roadway	Clear	Dark-Not Lighted	Dry
18	819752	6/9/2021	Wednesday	1:35 PM	Prop Dam Only	2	0	2.34	32-N	Senkow Dr	500	Feet	N	Other Vehicle	Front to rear	On Roadway	Clear	Daylight	Dry
19	778307	1/4/2021	Monday	8:21 AM	Prop Dam Only	2	0	2.55	32-S	Fitzgerald AVE	0.01	Tehts	S	Other Vehicle	Front to rear	On Roadway	Clear	Daylight	Dry
20	976190	9/19/2022	Monday	3:39 PM	Prop Dam Only	2	0	2.55	32-N	FITZGERALD AVE.	185	Feet	S	Other Vehicle	Front to rear	On Roadway	Clear	Daylight	Dry
21	821555	6/1/2021	Tuesday	6:03 AM	Prop Dam Only	2	0	2.56	32-N	Fitzgerald RD	47	Feet	S	Tree (standing)	Not Applicable	Shoulder	Clear	Dawn	Dry
22	826913	6/24/2021	Thursday	5:09 PM	Prop Dam Only	2	0	2.57	32-N	FITZGERALD AVE	25	Feet	S	Other Vehicle	Front to rear	On Roadway	Clear	Daylight	Dry
23	936466	5/17/2022	Tuesday	7:33 PM	Poss Injury	2	0	2.57	32-N	Fitzgerald AVE	10	Feet	S	Other Vehicle	Front to rear	On Roadway	Clear	Dark-Lighted	Dry
24	980749	9/29/2022	Thursday	1:48 PM	Prop Dam Only	2	0	2.57	32-N	Fitzgerald Ave	80	Feet	S	Other Vehicle	Front to rear	On Roadway	Clear	Daylight	Wet
25	773231	12/18/2020	Friday	3:15 PM	Prop Dam Only	2	0	2.58	32-S	FITZGERALD AV				Other Vehicle	Front to rear	On Roadway	Cloudy	Daylight	Wet
26	787594	2/7/2021	Sunday	3:45 PM	Prop Dam Only	2	0	2.58	32-N	FITZGERALD AV				Other Vehicle	Front to rear	On Roadway	Snow	Daylight	Snow
27	843243	6/24/2021	Thursday	11:32 AM	Prop Dam Only	1	0	2.58	32-S	FITZGERALD AV			S	Guardrail End	Not Applicable	On Roadway	Clear	Daylight	Dry
28	844576	9/3/2021	Friday	12:04 PM	Susp Minor Injury	1	0	2.58	32-N	FITZGERALD AV				Curb	Not Applicable	Shoulder	Clear	Daylight	Dry
29	847382	9/2/2021	Thursday	1:35 PM	Prop Dam Only	2	0	2.58	32-N	Fitzgerald	10	Feet	N	Other Vehicle	Front to rear	On Roadway	Clear	Daylight	Dry
30	1038718	3/28/2023	Tuesday	1:00 PM	Susp Minor Injury	2	0	2.58	32-S	FITZGERALD AV				Other Vehicle	Front to rear	On Roadway	Rain	Daylight	Wet
31	838925	8/10/2021	Tuesday	3:13 PM	Prop Dam Only	2	0	2.59	32-S	Fitzgerald Ave				Other Vehicle	SS SD	On Roadway	Clear	Daylight	Dry

Accident Data
Town of Waterford
Oct 1, 2020 thru October 1, 2023
Old Norwich Road

	CrashId	Date	Day of Wee	Time	Crash Severity	Number Of Motor Vehicles	Number Of Non-Motoris	Milemarker	Roadway Name	ntersecting Roadwa	Distance	Unit	Direction	First Harmful Event	Manner of Crash	Loc of First Even	Weather Cond	Light Condition	d Surface Cond
1	783391	1/26/2021	Tuesday	6:03 PM	Prop Dam Only	1	0	0.49	OLD NORWICH RD	Hardwick RD	200	Feet	N	Utility Pole	Not Applicable	Roadside	Snow	Dark-Not Lighted	Snow
2	818862	6/5/2021	Saturday	3:10 PM	Prop Dam Only	2	0	0.09	OLD NORWICH RD	ROXWOOD RD				Other Vehicle	Front to rear	On Roadway	Clear	Daylight	Dry
3	1020251	2/1/2023	Wednesday	10:15 AM	Susp Minor Injury	2	0	0.09	OLD NORWICH RD	ROXWOOD RD				Other Vehicle	Front to rear	On Roadway	Clear	Daylight	Dry
4	843242	4/13/2021	Tuesday	11:04 PM	Susp Minor Injury	1	0	0.47	OLD NORWICH RD	Rosemary Lane	30	Feet	S	Mailbox	Not Applicable	Roadside	Clear	Dark-Not Lighted	Dry
5	1063146	6/7/2023	Wednesday	5:45 PM	Prop Dam Only	2	0	1.29	OLD NORWICH RD	RICHARDS GROVE RD				Other Vehicle	SS SD	On Roadway	Clear	Daylight	Dry
6	958023	7/29/2022	Friday	2:48 PM	Prop Dam Only	2	0	1.3	OLD NORWICH RD	Richards Grove Road	100	Feet	S	Other Vehicle	Front to rear	On Roadway	Clear	Daylight	Dry
7	876908	11/28/2021	Sunday	1:20 AM	Poss Injury	1	0	1.87	OLD NORWICH RD	TOTOKET RD	45	Feet	S	Utility Pole	Not Applicable	Roadside	Clear	Dark-Lighted	Dry
8	1001909	11/13/2022	Sunday	4:02 AM	Prop Dam Only	1	0	1.92	OLD NORWICH RD	Totoket Road	1	Tehts	S	Utility Pole	Not Applicable	Shoulder	Clear	Dark-Lighted	Dry
9	917991	3/15/2022	Tuesday	4:44 PM	Susp Minor Injury	1	2	2.03	OLD NORWICH RD	SENKOW DR	250	Feet	S	Mailbox	Not Applicable	Roadside	Clear	Daylight	Dry
10	1079894	8/11/2023	Friday	7:11 PM	Poss Injury	1	0	2.25	OLD NORWICH RD	Benham Ave	110	Feet	N	Other Non-Collision	Not Applicable	On Roadway	Clear	Daylight	Dry
11	842030	8/22/2021	Sunday	10:47 AM	Prop Dam Only	1	0	2.26	OLD NORWICH RD	Benham Ave	50	Feet	N	Other Non-Fixed Obje	Not Applicable	On Roadway	Rain	Daylight	Wet