

# Appendix A

## Project Location Map



**LEGEND**

(X) - Study Intersection

■ - Project Location Area



8440 Allison Pointe Boulevard, Suite 200  
 Indianapolis, IN 46250  
 Phone 317-895-2585  
 www.ucindy.com

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: KMW	DRAWN: AEA	
CHECKED: TF	CHECKED: TF	

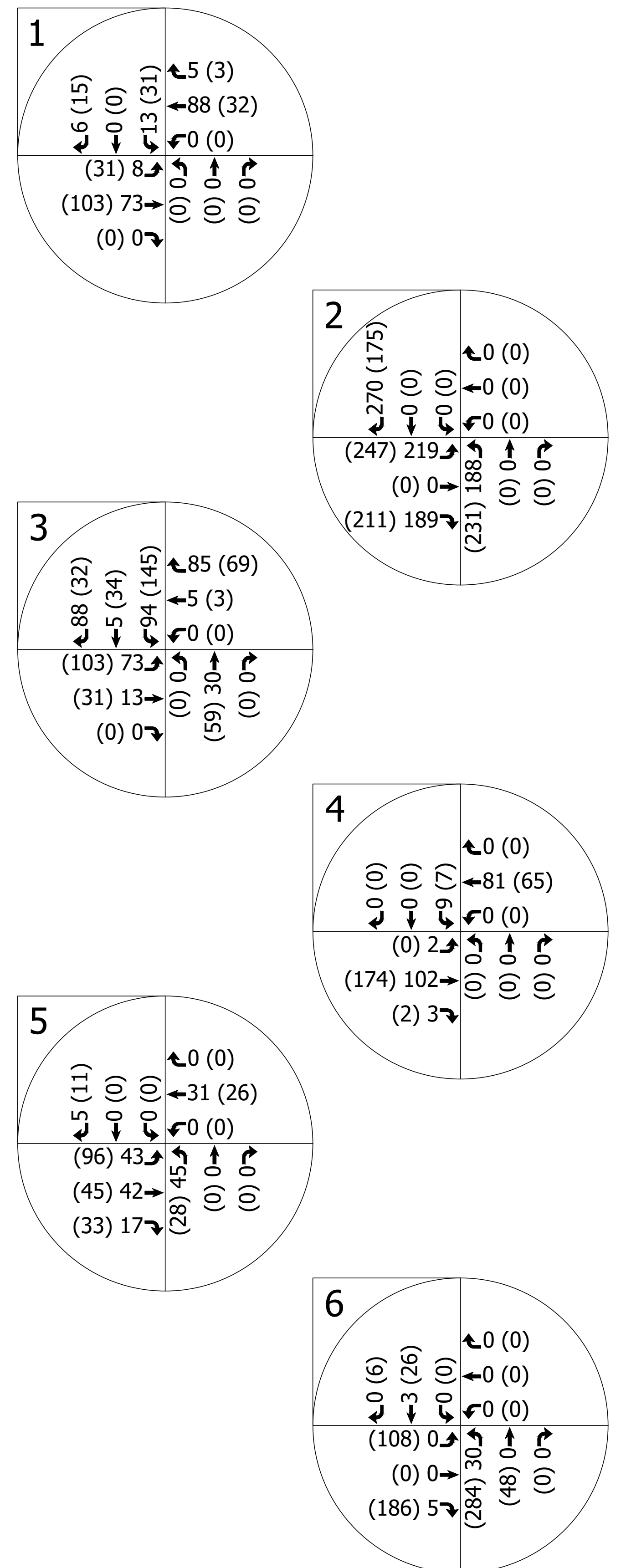
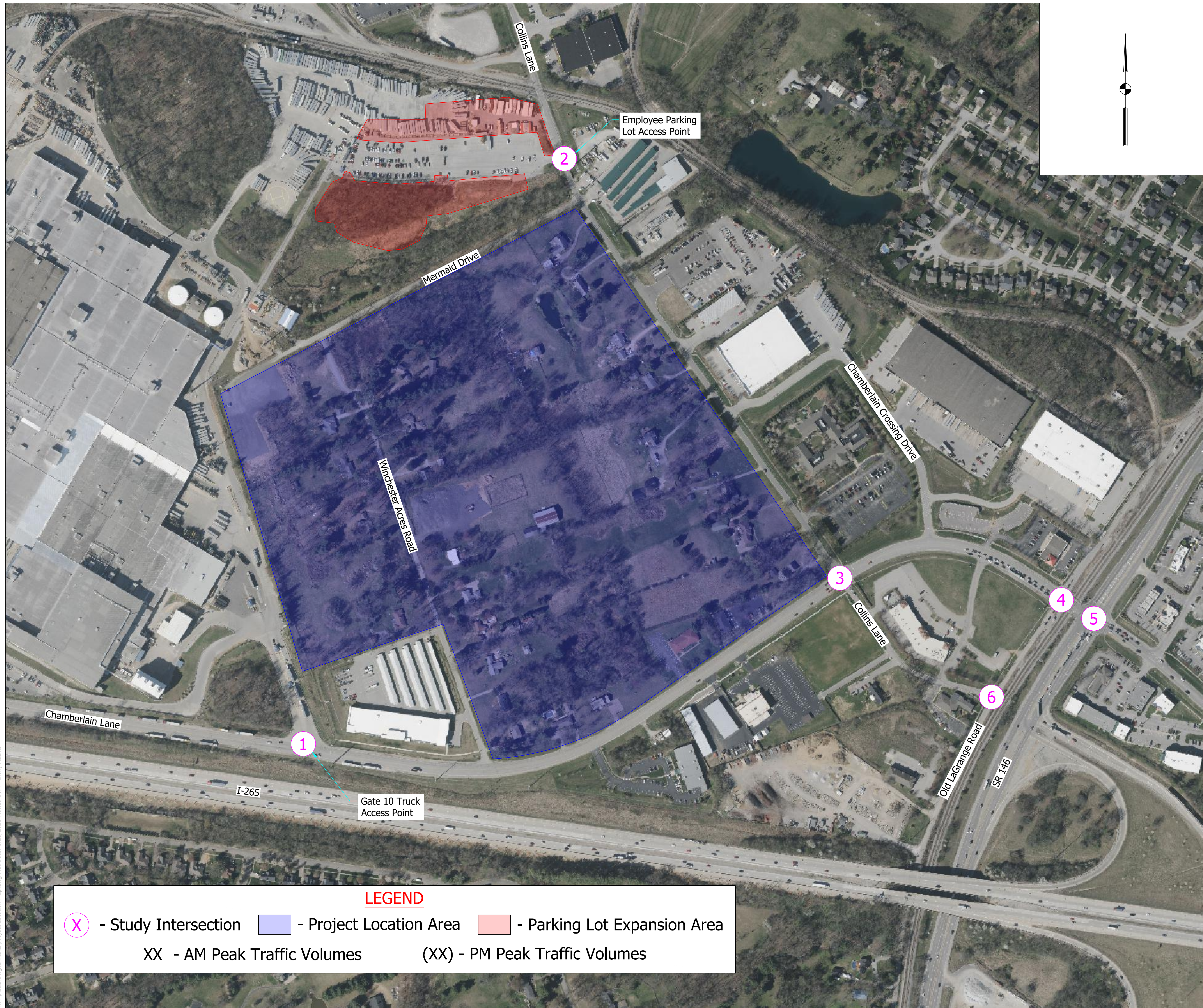
FORD MOTOR COMPANY  
 KENTUCKY TRUCK PLANT

TRAFFIC IMPACT STUDY  
 PROJECT LOCATION MAP

HORIZONTAL SCALE	BRIDGE FILE
1" = 200'	N/A
VERTICAL SCALE	DESIGNATION
N/A	N/A
SURVEY BOOK	SHEETS
N/A	1 of 6
CONTRACT	PROJECT
N/A	26-412

# Appendix B

## Trip Assignment and Distribution



**LEGEND**

(X) - Study Intersection    [Blue Box] - Project Location Area    [Red Box] - Parking Lot Expansion Area

XX - AM Peak Traffic Volumes    (XX) - PM Peak Traffic Volumes



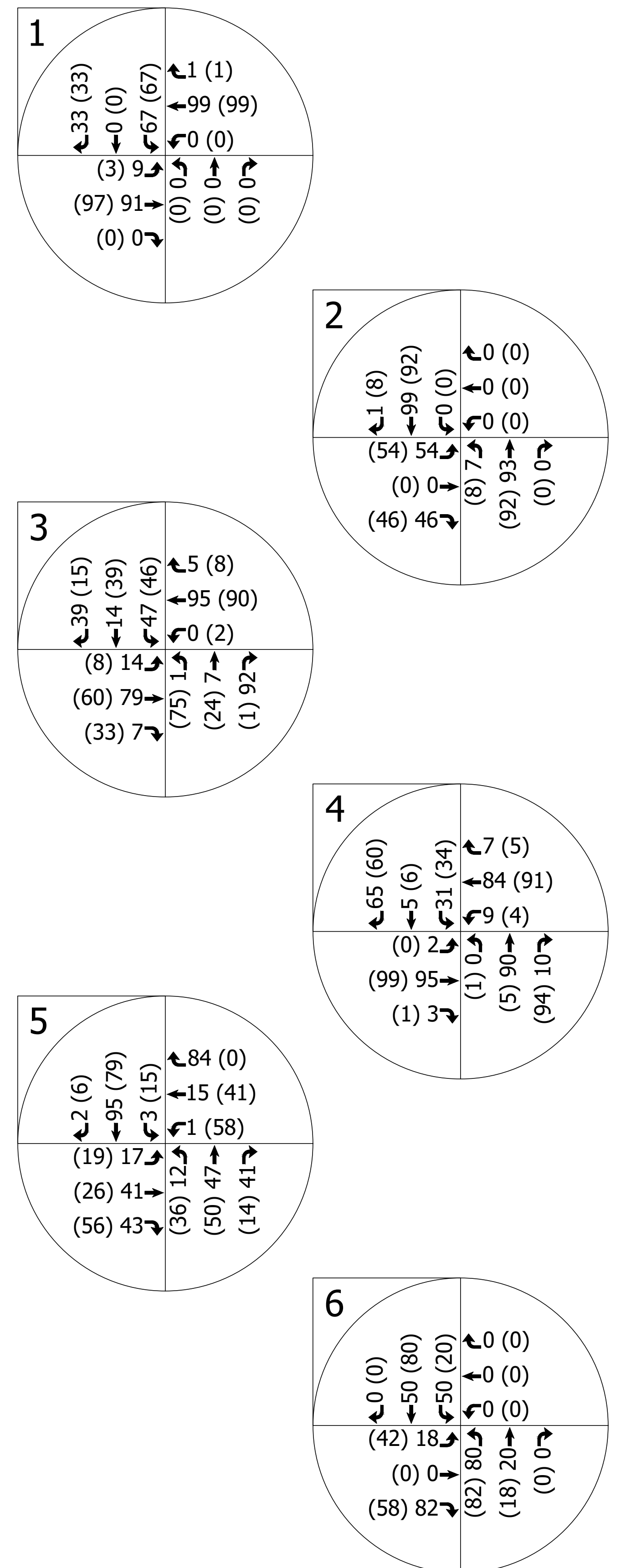
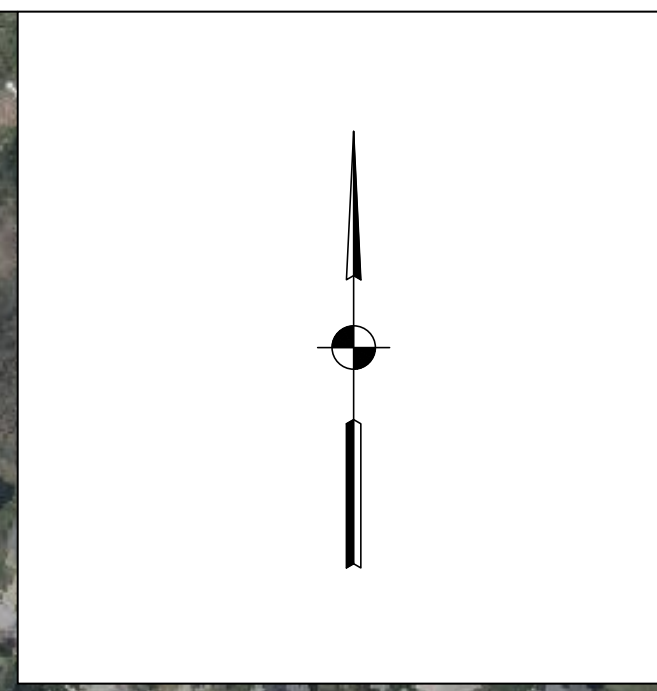
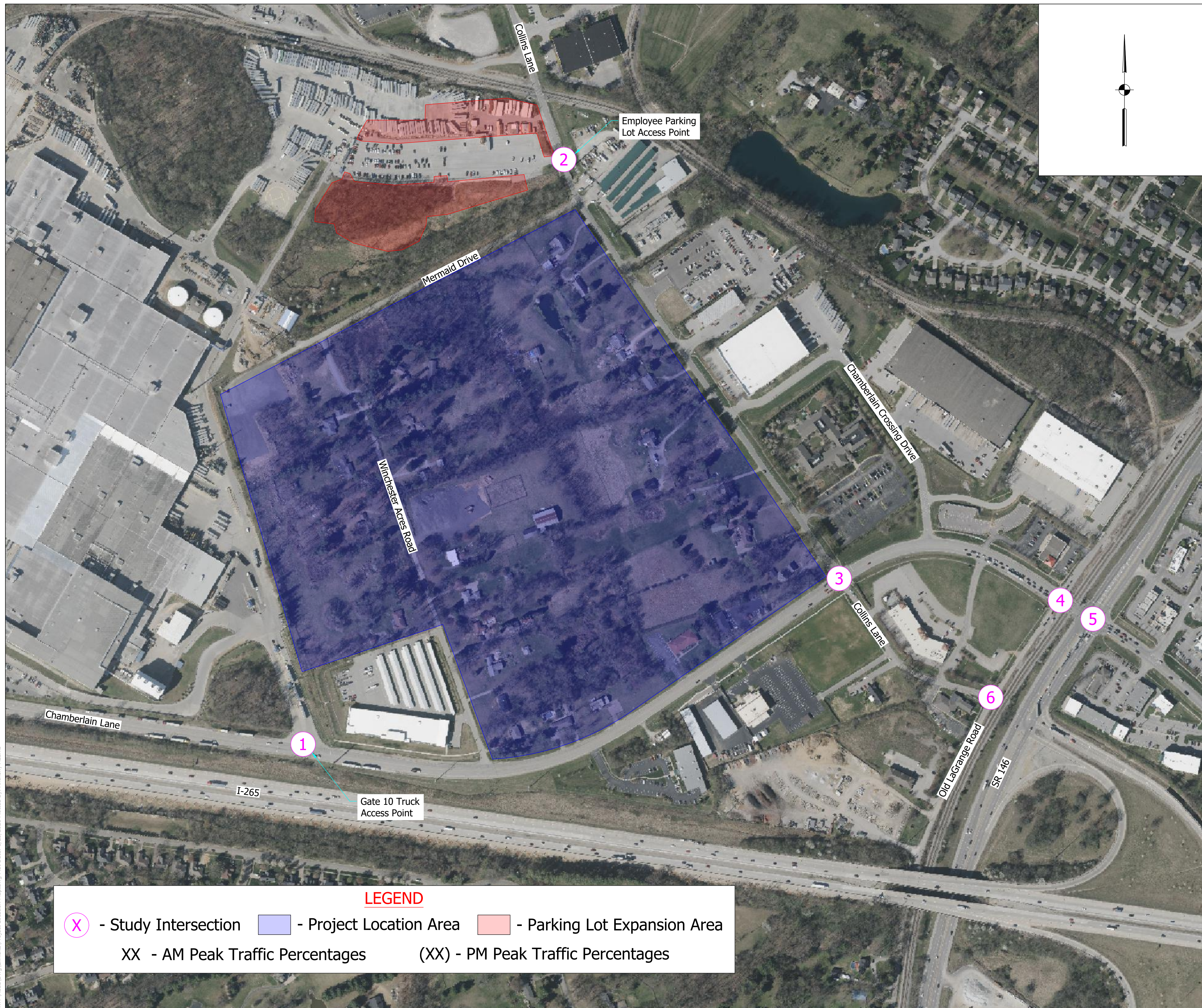
8440 Allison Pointe Boulevard, Suite 200  
 Indianapolis, IN 46250  
 Phone 317-895-2585  
 www.ucindy.com

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: KMW	DRAWN: AEA	
CHECKED: TF	CHECKED: TF	

FORD MOTOR COMPANY  
 KENTUCKY TRUCK PLANT

TRAFFIC VOLUMES  
 AM/PM TRIP GENERATION

HORIZONTAL SCALE	BRIDGE FILE
1" = 200'	N/A
VERTICAL SCALE	DESIGNATION
N/A	N/A
SURVEY BOOK	SHEETS
N/A	7 of 8
CONTRACT	PROJECT
N/A	26-412



**LEGEND**

(X) - Study Intersection    [Blue Box] - Project Location Area    [Red Box] - Parking Lot Expansion Area

XX - AM Peak Traffic Percentages    (XX) - PM Peak Traffic Percentages

**UNITED Consulting**

8440 Allison Pointe Boulevard, Suite 200  
 Indianapolis, IN 46250  
 Phone 317-895-2585  
 www.ucindy.com

RECOMMENDED FOR APPROVAL \_\_\_\_\_

DESIGNED: KMW    DRAWN: AEA

CHECKED: TF    CHECKED: TF

FORD MOTOR COMPANY  
 KENTUCKY TRUCK PLANT

TRAFFIC VOLUMES  
 AM/PM PEAK TRAFFIC PERCENTAGES

HORIZONTAL SCALE	BRIDGE FILE
1" = 200'	N/A
VERTICAL SCALE	DESIGNATION
N/A	N/A
SURVEY BOOK	SHEETS
N/A	8 of 8
CONTRACT	PROJECT
N/A	26-412

# Appendix C

## Traffic Data

Existing Volume Counts  
Gate 10 & Chamberlain Lane

**Ford Truck Plant Expansion - TMC**

Wed Apr 29, 2026

Full Length (1 PM-1 PM (+1))

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1399353, Location: 38.287983, -85.523347

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US

Leg Direction	Gate 10 Entrance Southbound				Chamberlain Lane Westbound				Chamberlain Lane Eastbound				Int
	R	L	U	App	R	T	U	App	T	L	U	App	
2026-04-29 1:00PM	28	22	0	50	20	183	0	203	182	26	0	208	461
2:00PM	23	26	0	49	25	164	0	189	246	23	0	269	507
3:00PM	18	24	0	42	7	188	0	195	361	14	0	375	612
4:00PM	7	10	0	17	8	342	0	350	526	16	0	542	909
5:00PM	21	5	0	26	5	624	0	629	641	33	0	674	1329
6:00PM	22	9	1	32	20	213	0	233	259	20	0	279	544
7:00PM	29	12	0	41	13	134	0	147	142	31	0	173	361
8:00PM	29	10	0	39	11	121	0	132	147	22	0	169	340
9:00PM	28	9	0	37	11	110	0	121	121	37	0	158	316
10:00PM	37	10	0	47	14	52	0	66	65	23	0	88	201
11:00PM	23	11	0	34	14	96	0	110	117	19	0	136	280
2026-04-30 12:00AM	21	5	0	26	7	31	0	38	26	23	0	49	113
1:00AM	28	5	0	33	15	20	0	35	14	17	0	31	99
2:00AM	21	6	0	27	5	47	0	52	66	22	0	88	167
3:00AM	23	10	0	33	12	22	0	34	70	8	0	78	145
4:00AM	11	7	0	18	7	175	0	182	316	10	0	326	526
5:00AM	10	5	0	15	12	816	0	828	211	21	0	232	1075
6:00AM	22	13	0	35	26	195	0	221	160	23	0	183	439
7:00AM	24	20	0	44	22	156	0	178	126	26	1	153	375
8:00AM	37	20	0	57	23	152	0	175	187	30	0	217	449
9:00AM	20	21	0	41	27	178	0	205	180	20	0	200	446
10:00AM	27	25	0	52	26	138	0	164	154	31	0	185	401
11:00AM	27	16	0	43	20	168	0	188	179	35	0	214	445
12:00PM	31	24	0	55	20	220	0	240	220	25	0	245	540
<b>Total</b>	567	325	1	893	370	4545	0	4915	4716	555	1	5272	11080
<b>% Approach</b>	63.5%	36.4%	0.1%	-	7.5%	92.5%	0%	-	89.5%	10.5%	0%	-	-
<b>% Total</b>	5.1%	2.9%	0%	8.1%	3.3%	41.0%	0%	44.4%	42.6%	5.0%	0%	47.6%	-
<b>Motorcycles</b>	0	0	0	0	0	12	0	12	5	0	0	5	17
<b>% Motorcycles</b>	0%	0%	0%	0%	0%	0.3%	0%	0.2%	0.1%	0%	0%	0.1%	0.2%
<b>Lights</b>	38	21	0	59	26	4389	0	4415	4579	37	1	4617	9091
<b>% Lights</b>	6.7%	6.5%	0%	6.6%	7.0%	96.6%	0%	89.8%	97.1%	6.7%	100%	87.6%	82.0%
<b>Single-Unit Trucks</b>	23	33	0	56	43	69	0	112	70	32	0	102	270
<b>% Single-Unit Trucks</b>	4.1%	10.2%	0%	6.3%	11.6%	1.5%	0%	2.3%	1.5%	5.8%	0%	1.9%	2.4%
<b>Articulated Trucks</b>	506	271	1	778	301	71	0	372	59	486	0	545	1695
<b>% Articulated Trucks</b>	89.2%	83.4%	100%	87.1%	81.4%	1.6%	0%	7.6%	1.3%	87.6%	0%	10.3%	15.3%
<b>Buses</b>	0	0	0	0	0	4	0	4	3	0	0	3	7
<b>% Buses</b>	0%	0%	0%	0%	0%	0.1%	0%	0.1%	0.1%	0%	0%	0.1%	0.1%

\* L: Left, R: Right, T: Thru, U: U-Turn

**Ford Truck Plant Expansion - TMC**

Wed Apr 29, 2026

Full Length (1 PM-1 PM (+1))

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1399353, Location: 38.287983, -85.523347

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US

**[N] Gate 10 Entrance**

Total: 1819

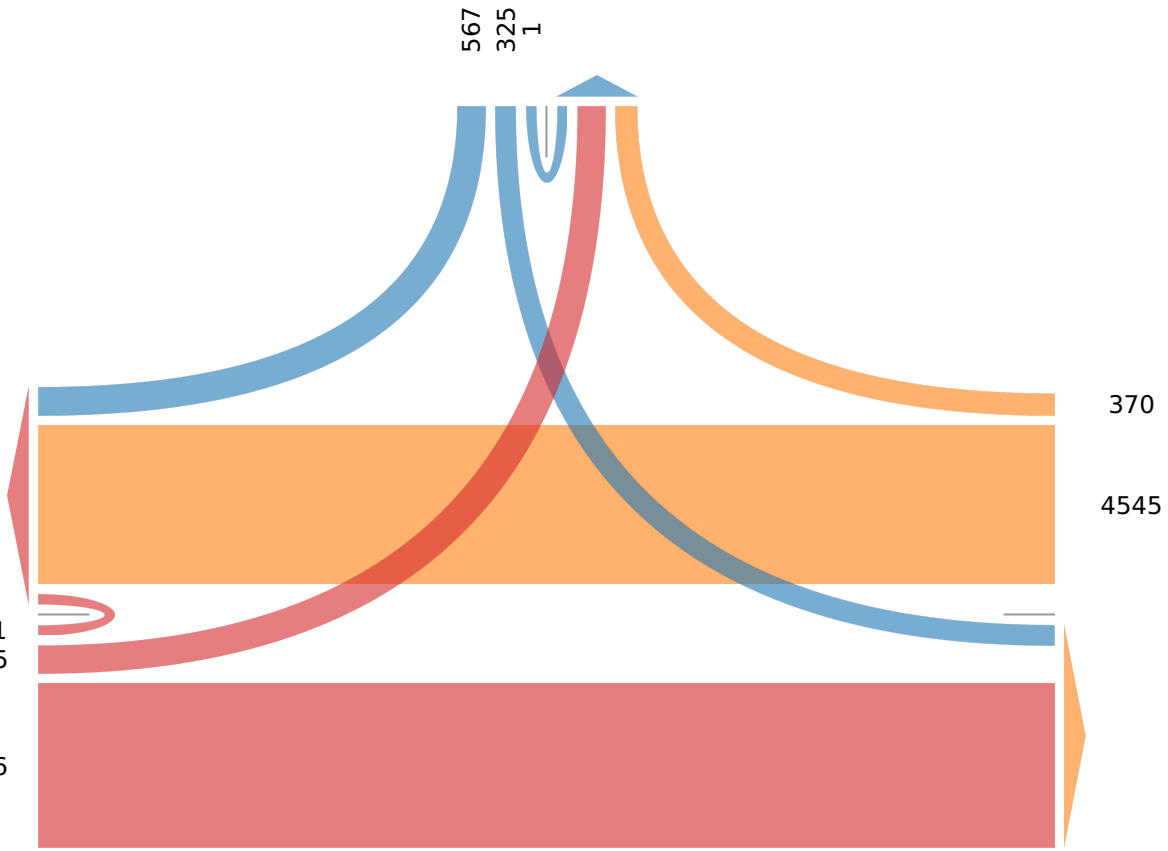
In: 893 Out: 926

567  
325  
1

**[W] Chamberlain Lane**

Total: 10385  
In: 5272 Out: 5113

1  
555  
4716



370  
4545

Out: 5041 In: 4915  
Total: 9956  
**[E] Chamberlain Lane**

**Ford Truck Plant Expansion - TMC**

Wed Apr 29, 2026

PM Peak (Apr 29 2026 4:45PM - 5:45 PM) - Overall Peak Hour

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1399353, Location: 38.287983, -85.523347

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US

Leg Direction	Gate 10 Entrance Southbound				Chamberlain Lane Westbound				Chamberlain Lane Eastbound				Int
	R	L	U	App	R	T	U	App	T	L	U	App	
2026-04-29 4:45PM	3	5	0	8	0	101	0	101	182	4	0	186	295
5:00PM	4	1	0	5	0	159	0	159	149	6	0	155	319
5:15PM	6	2	0	8	0	116	0	116	305	6	0	311	435
5:30PM	7	2	0	9	3	214	0	217	109	11	0	120	346
<b>Total</b>	20	10	0	30	3	590	0	593	745	27	0	772	1395
<b>% Approach</b>	66.7%	33.3%	0%	-	0.5%	99.5%	0%	-	96.5%	3.5%	0%	-	-
<b>% Total</b>	1.4%	0.7%	0%	2.2%	0.2%	42.3%	0%	42.5%	53.4%	1.9%	0%	55.3%	-
<b>PHF</b>	0.714	0.500	-	0.833	0.250	0.689	-	0.683	0.611	0.614	-	0.621	0.802
<b>Motorcycles</b>	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>% Motorcycles</b>	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Lights</b>	4	1	0	5	0	585	0	585	737	3	0	740	1330
<b>% Lights</b>	20.0%	10.0%	0%	16.7%	0%	99.2%	0%	98.7%	98.9%	11.1%	0%	95.9%	95.3%
<b>Single-Unit Trucks</b>	1	2	0	3	2	2	0	4	8	1	0	9	16
<b>% Single-Unit Trucks</b>	5.0%	20.0%	0%	10.0%	66.7%	0.3%	0%	0.7%	1.1%	3.7%	0%	1.2%	1.1%
<b>Articulated Trucks</b>	15	7	0	22	1	3	0	4	0	23	0	23	49
<b>% Articulated Trucks</b>	75.0%	70.0%	0%	73.3%	33.3%	0.5%	0%	0.7%	0%	85.2%	0%	3.0%	3.5%
<b>Buses</b>	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>% Buses</b>	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

\*L: Left, R: Right, T: Thru, U: U-Turn

**Ford Truck Plant Expansion - TMC**

Wed Apr 29, 2026

PM Peak (Apr 29 2026 4:45PM - 5:45 PM) - Overall Peak Hour

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1399353, Location: 38.287983, -85.523347

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US

**[N] Gate 10 Entrance**

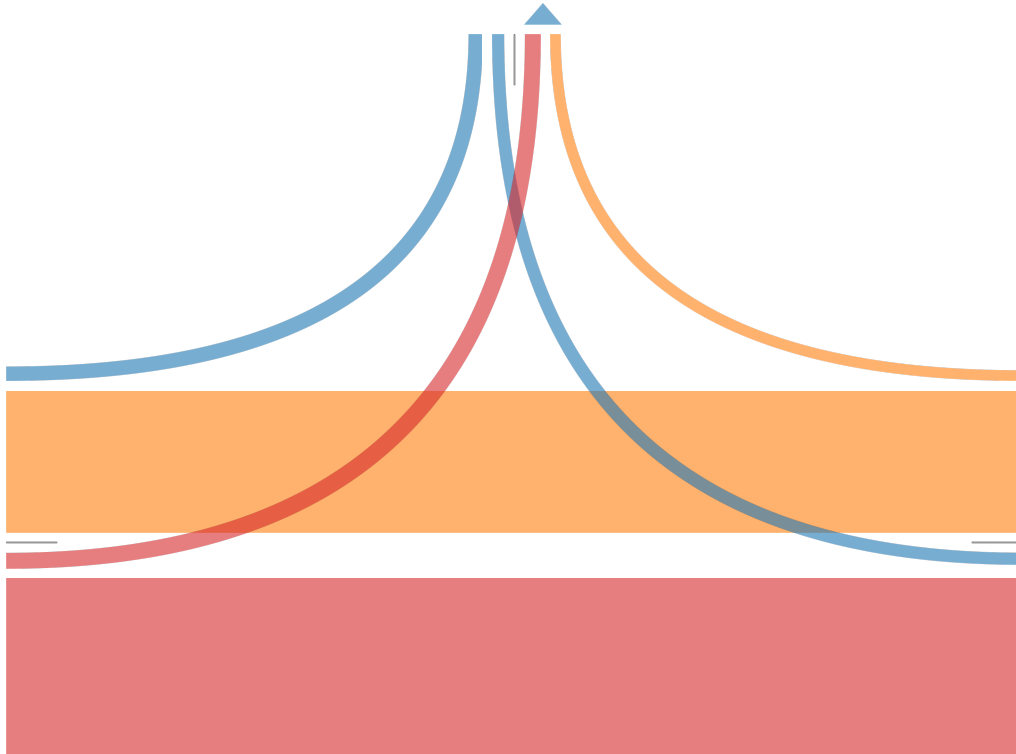
Total: 60

In: 30    Out: 30

20  
10

**[W] Chamberlain Lane**  
Total: 1382  
In: 772    Out: 610

27  
745



3  
590  
Out: 755    In: 593  
Total: 1348  
**[E] Chamberlain Lane**

**Ford Truck Plant Expansion - TMC**

Thu Apr 30, 2026

AM Peak (Apr 30 2026 5AM - 6 AM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1399353, Location: 38.287983, -85.523347

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US

Leg Direction	Gate 10 Entrance Southbound				Chamberlain Lane Westbound				Chamberlain Lane Eastbound				
Time	R	L	U	App	R	T	U	App	T	L	U	App	Int
2026-04-30 5:00AM	3	2	0	5	2	101	0	103	55	2	0	57	165
5:15AM	5	2	0	7	2	191	0	193	80	3	0	83	283
5:30AM	1	0	0	1	2	307	0	309	41	9	0	50	360
5:45AM	1	1	0	2	6	217	0	223	35	7	0	42	267
<b>Total</b>	10	5	0	15	12	816	0	828	211	21	0	232	1075
<b>% Approach</b>	66.7%	33.3%	0%	-	1.4%	98.6%	0%	-	90.9%	9.1%	0%	-	-
<b>% Total</b>	0.9%	0.5%	0%	1.4%	1.1%	75.9%	0%	77.0%	19.6%	2.0%	0%	21.6%	-
<b>PHF</b>	0.500	0.625	-	0.536	0.500	0.664	-	0.670	0.659	0.583	-	0.699	0.747
<b>Motorcycles</b>	0	0	0	0	0	2	0	2	0	0	0	0	2
<b>% Motorcycles</b>	0%	0%	0%	0%	0%	0.2%	0%	0.2%	0%	0%	0%	0%	0.2%
<b>Lights</b>	1	1	0	2	3	808	0	811	209	0	0	209	1022
<b>% Lights</b>	10.0%	20.0%	0%	13.3%	25.0%	99.0%	0%	97.9%	99.1%	0%	0%	90.1%	95.1%
<b>Single-Unit Trucks</b>	2	1	0	3	3	2	0	5	0	2	0	2	10
<b>% Single-Unit Trucks</b>	20.0%	20.0%	0%	20.0%	25.0%	0.2%	0%	0.6%	0%	9.5%	0%	0.9%	0.9%
<b>Articulated Trucks</b>	7	3	0	10	6	4	0	10	2	19	0	21	41
<b>% Articulated Trucks</b>	70.0%	60.0%	0%	66.7%	50.0%	0.5%	0%	1.2%	0.9%	90.5%	0%	9.1%	3.8%
<b>Buses</b>	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>% Buses</b>	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

\*L: Left, R: Right, T: Thru, U: U-Turn

**Ford Truck Plant Expansion - TMC**

Thu Apr 30, 2026

AM Peak (Apr 30 2026 5AM - 6 AM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1399353, Location: 38.287983, -85.523347

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US

**[N] Gate 10 Entrance**

Total: 48

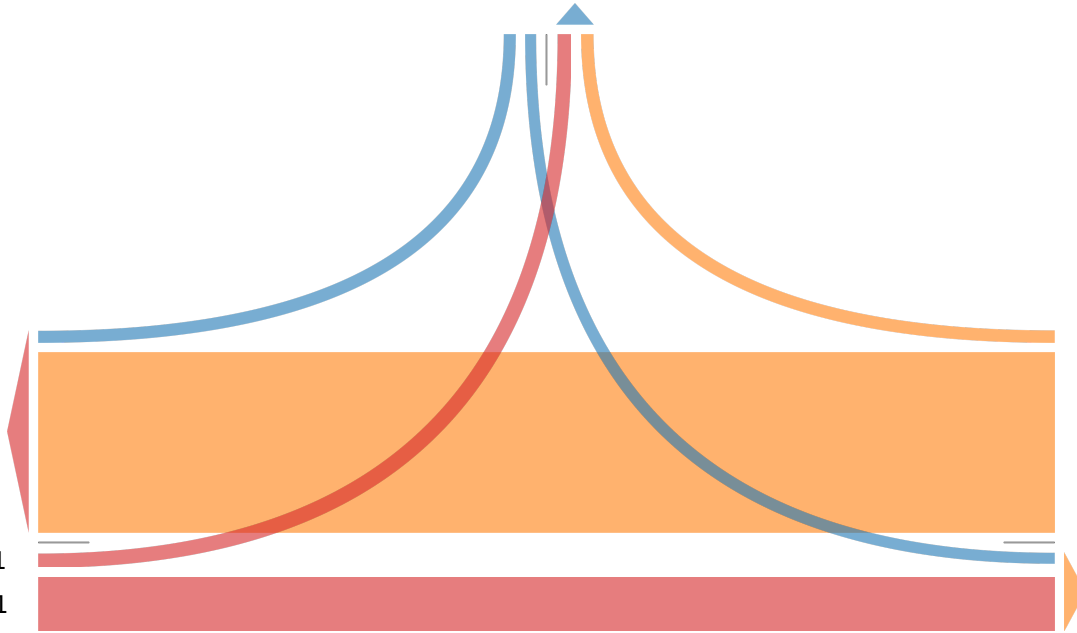
In: 15    Out: 33

10  
15

[W] Chamberlain Lane

Total: 1058  
In: 232    Out: 826

21  
211



12  
816

Out: 216    In: 828  
Total: 1044

[E] Chamberlain Lane

**Ford Truck Plant Expansion - TMC**

Thu Apr 30, 2026

Midday Peak (Apr 30 2026 11:45AM - 12:45 PM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1399353, Location: 38.287983, -85.523347

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US

Leg Direction	Gate 10 Entrance Southbound				Chamberlain Lane Westbound				Chamberlain Lane Eastbound				Int
	R	L	U	App	R	T	U	App	T	L	U	App	
Time													
2026-04-30 11:45AM	7	4	0	<b>11</b>	6	45	0	<b>51</b>	53	10	0	<b>63</b>	<b>125</b>
12:00PM	7	6	0	<b>13</b>	8	57	0	<b>65</b>	63	9	0	<b>72</b>	<b>150</b>
12:15PM	8	7	0	<b>15</b>	4	76	0	<b>80</b>	54	5	0	<b>59</b>	<b>154</b>
12:30PM	9	6	0	<b>15</b>	3	39	0	<b>42</b>	55	7	0	<b>62</b>	<b>119</b>
<b>Total</b>	31	23	0	<b>54</b>	21	217	0	<b>238</b>	225	31	0	<b>256</b>	<b>548</b>
<b>% Approach</b>	57.4%	42.6%	0%	-	8.8%	91.2%	0%	-	87.9%	12.1%	0%	-	-
<b>% Total</b>	5.7%	4.2%	0%	<b>9.9%</b>	3.8%	39.6%	0%	<b>43.4%</b>	41.1%	5.7%	0%	<b>46.7%</b>	-
<b>PHF</b>	0.861	0.821	-	<b>0.900</b>	0.656	0.714	-	<b>0.744</b>	0.893	0.775	-	<b>0.889</b>	0.890
<b>Motorcycles</b>	0	0	0	<b>0</b>	0	0	0	<b>0</b>	0	0	0	<b>0</b>	0
<b>% Motorcycles</b>	0%	0%	0%	<b>0%</b>	0%	0%	0%	<b>0%</b>	0%	0%	0%	<b>0%</b>	0%
<b>Lights</b>	2	3	0	<b>5</b>	1	211	0	<b>212</b>	212	2	0	<b>214</b>	431
<b>% Lights</b>	6.5%	13.0%	0%	<b>9.3%</b>	4.8%	97.2%	0%	<b>89.1%</b>	94.2%	6.5%	0%	<b>83.6%</b>	78.6%
<b>Single-Unit Trucks</b>	1	1	0	<b>2</b>	1	2	0	<b>3</b>	7	3	0	<b>10</b>	15
<b>% Single-Unit Trucks</b>	3.2%	4.3%	0%	<b>3.7%</b>	4.8%	0.9%	0%	<b>1.3%</b>	3.1%	9.7%	0%	<b>3.9%</b>	2.7%
<b>Articulated Trucks</b>	28	19	0	<b>47</b>	19	4	0	<b>23</b>	6	26	0	<b>32</b>	102
<b>% Articulated Trucks</b>	90.3%	82.6%	0%	<b>87.0%</b>	90.5%	1.8%	0%	<b>9.7%</b>	2.7%	83.9%	0%	<b>12.5%</b>	18.6%
<b>Buses</b>	0	0	0	<b>0</b>	0	0	0	<b>0</b>	0	0	0	<b>0</b>	0
<b>% Buses</b>	0%	0%	0%	<b>0%</b>	0%	0%	0%	<b>0%</b>	0%	0%	0%	<b>0%</b>	0%

\*L: Left, R: Right, T: Thru, U: U-Turn

**Ford Truck Plant Expansion - TMC**

Thu Apr 30, 2026

Midday Peak (Apr 30 2026 11:45AM - 12:45 PM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1399353, Location: 38.287983, -85.523347

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US

**[N] Gate 10 Entrance**

Total: 106

In: 54    Out: 52

31    23



Existing Volume Counts  
Collins Lane & Ford Employee Parking Lot

**Ford Truck Plant Expansion - TMC**

Wed Apr 29, 2026

Full Length (1 PM-1 PM (+1))

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1399364, Location: 38.294555, -85.519954

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US

Leg Direction	Collins Lane Southbound				Collins Lane Northbound				Ford Employee Lot Entrance Eastbound				
Time	R	T	U	App	T	L	U	App	R	L	U	App	Int
2026-04-29 1:00PM	0	55	0	55	70	5	1	76	6	1	0	7	138
2:00PM	0	89	0	89	70	1	0	71	10	2	0	12	172
3:00PM	0	124	0	124	50	7	0	57	16	5	0	21	202
4:00PM	2	81	0	83	45	24	0	69	26	15	0	41	193
5:00PM	8	89	0	97	88	47	0	135	16	19	0	35	267
6:00PM	0	44	0	44	32	22	0	54	9	2	0	11	109
7:00PM	0	29	0	29	18	3	4	25	7	0	0	7	61
8:00PM	0	27	0	27	34	0	0	34	1	0	0	1	62
9:00PM	0	24	0	24	14	2	0	16	2	0	0	2	42
10:00PM	0	4	0	4	13	4	1	18	4	0	0	4	26
11:00PM	0	33	0	33	15	2	0	17	4	1	0	5	55
2026-04-30 12:00AM	0	10	0	10	11	3	0	14	2	1	0	3	27
1:00AM	0	14	0	14	6	3	0	9	2	1	0	3	26
2:00AM	0	8	0	8	3	2	0	5	9	2	0	11	24
3:00AM	0	11	0	11	4	3	0	7	15	3	0	18	36
4:00AM	0	10	0	10	9	26	0	35	17	10	0	27	72
5:00AM	9	27	0	36	19	56	0	75	13	9	0	22	133
6:00AM	0	34	0	34	55	23	0	78	15	11	0	26	138
7:00AM	0	74	0	74	61	4	0	65	4	1	0	5	144
8:00AM	0	70	0	70	58	1	0	59	1	0	0	1	130
9:00AM	1	64	0	65	51	4	0	55	3	0	0	3	123
10:00AM	2	76	0	78	60	1	0	61	4	1	0	5	144
11:00AM	0	78	0	78	69	3	0	72	3	4	0	7	157
12:00PM	2	77	0	79	82	6	0	88	5	2	0	7	174
<b>Total</b>	24	1152	0	1176	937	252	6	1195	194	90	0	284	2655
<b>% Approach</b>	2.0%	98.0%	0%	-	78.4%	21.1%	0.5%	-	68.3%	31.7%	0%	-	-
<b>% Total</b>	0.9%	43.4%	0%	44.3%	35.3%	9.5%	0.2%	45.0%	7.3%	3.4%	0%	10.7%	-
<b>Motorcycles</b>	0	1	0	1	3	0	0	3	0	0	0	0	4
<b>% Motorcycles</b>	0%	0.1%	0%	0.1%	0.3%	0%	0%	0.3%	0%	0%	0%	0%	0.2%
<b>Lights</b>	24	884	0	908	744	245	6	995	186	90	0	276	2179
<b>% Lights</b>	100%	76.7%	0%	77.2%	79.4%	97.2%	100%	83.3%	95.9%	100%	0%	97.2%	82.1%
<b>Single-Unit Trucks</b>	0	88	0	88	63	2	0	65	3	0	0	3	156
<b>% Single-Unit Trucks</b>	0%	7.6%	0%	7.5%	6.7%	0.8%	0%	5.4%	1.5%	0%	0%	1.1%	5.9%
<b>Articulated Trucks</b>	0	175	0	175	125	5	0	130	5	0	0	5	310
<b>% Articulated Trucks</b>	0%	15.2%	0%	14.9%	13.3%	2.0%	0%	10.9%	2.6%	0%	0%	1.8%	11.7%
<b>Buses</b>	0	4	0	4	2	0	0	2	0	0	0	0	6
<b>% Buses</b>	0%	0.3%	0%	0.3%	0.2%	0%	0%	0.2%	0%	0%	0%	0%	0.2%

\* L: Left, R: Right, T: Thru, U: U-Turn

**Ford Truck Plant Expansion - TMC**

Wed Apr 29, 2026

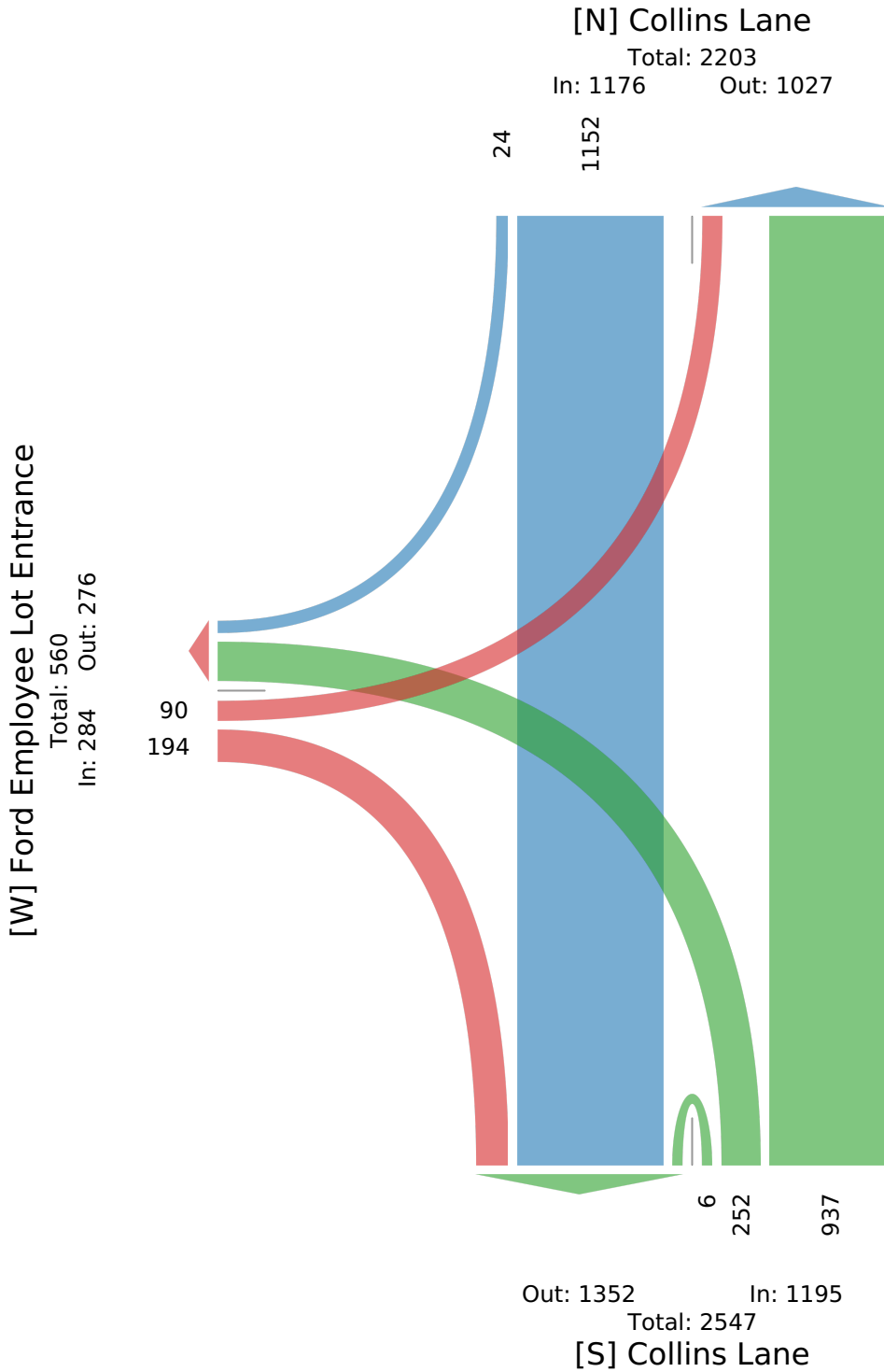
Full Length (1 PM-1 PM (+1))

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1399364, Location: 38.294555, -85.519954

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US



**Ford Truck Plant Expansion - TMC**

Wed Apr 29, 2026

PM Peak (Apr 29 2026 5PM - 6 PM) - Overall Peak Hour

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1399364, Location: 38.294555, -85.519954

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US

Leg Direction	Collins Lane Southbound				Collins Lane Northbound				Ford Employee Lot Entrance Eastbound				
Time	R	T	U	App	T	L	U	App	R	L	U	App	Int
2026-04-29 5:00PM	2	30	0	32	17	5	0	22	6	8	0	14	68
5:15PM	2	25	0	27	27	9	0	36	7	11	0	18	81
5:30PM	4	18	0	22	25	23	0	48	2	0	0	2	72
5:45PM	0	16	0	16	19	10	0	29	1	0	0	1	46
<b>Total</b>	8	89	0	97	88	47	0	135	16	19	0	35	267
<b>% Approach</b>	8.2%	91.8%	0%	-	65.2%	34.8%	0%	-	45.7%	54.3%	0%	-	-
<b>% Total</b>	3.0%	33.3%	0%	36.3%	33.0%	17.6%	0%	50.6%	6.0%	7.1%	0%	13.1%	-
<b>PHF</b>	0.500	0.742	-	0.758	0.815	0.511	-	0.703	0.571	0.432	-	0.486	0.824
<b>Motorcycles</b>	0	0	0	0	2	0	0	2	0	0	0	0	2
<b>% Motorcycles</b>	0%	0%	0%	0%	2.3%	0%	0%	1.5%	0%	0%	0%	0%	0.7%
<b>Lights</b>	8	79	0	87	81	47	0	128	16	19	0	35	250
<b>% Lights</b>	100%	88.8%	0%	89.7%	92.0%	100%	0%	94.8%	100%	100%	0%	100%	93.6%
<b>Single-Unit Trucks</b>	0	7	0	7	5	0	0	5	0	0	0	0	12
<b>% Single-Unit Trucks</b>	0%	7.9%	0%	7.2%	5.7%	0%	0%	3.7%	0%	0%	0%	0%	4.5%
<b>Articulated Trucks</b>	0	3	0	3	0	0	0	0	0	0	0	0	3
<b>% Articulated Trucks</b>	0%	3.4%	0%	3.1%	0%	0%	0%	0%	0%	0%	0%	0%	1.1%
<b>Buses</b>	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>% Buses</b>	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

\*L: Left, R: Right, T: Thru, U: U-Turn

**Ford Truck Plant Expansion - TMC**

Wed Apr 29, 2026

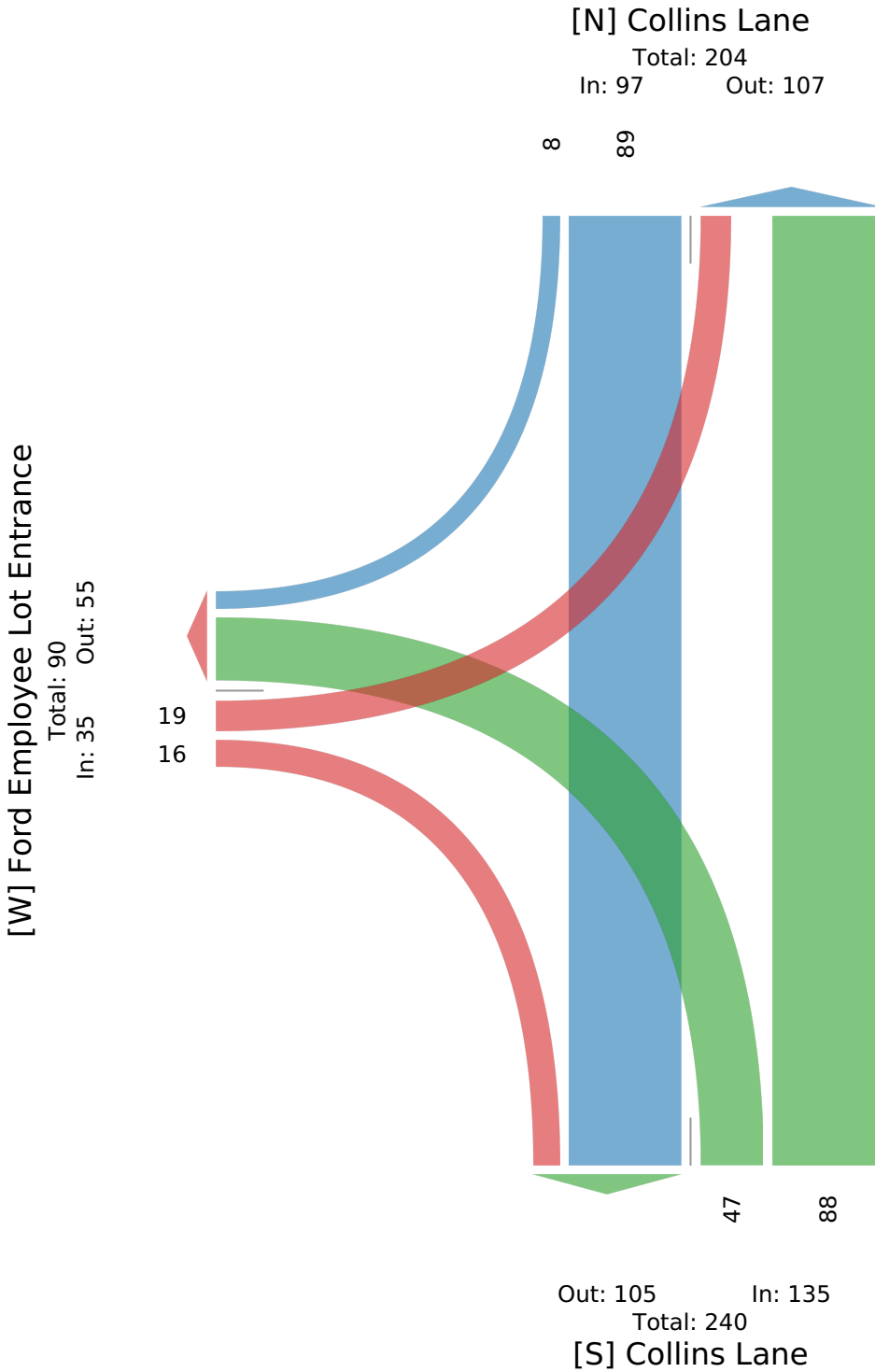
PM Peak (Apr 29 2026 5PM - 6 PM) - Overall Peak Hour

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1399364, Location: 38.294555, -85.519954

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US



**Ford Truck Plant Expansion - TMC**

Thu Apr 30, 2026

AM Peak (Apr 30 2026 8:45AM - 9:45 AM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1399364, Location: 38.294555, -85.519954

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US

Leg Direction	Collins Lane Southbound				Collins Lane Northbound				Ford Employee Lot Entrance Eastbound				
Time	R	T	U	App	T	L	U	App	R	L	U	App	Int
2026-04-30 8:45AM	0	26	0	26	17	0	0	17	0	0	0	0	43
9:00AM	0	14	0	14	9	2	0	11	1	0	0	1	26
9:15AM	1	25	0	26	15	0	0	15	1	0	0	1	42
9:30AM	0	22	0	22	16	2	0	18	0	0	0	0	40
<b>Total</b>	1	87	0	88	57	4	0	61	2	0	0	2	151
<b>% Approach</b>	1.1%	98.9%	0%	-	93.4%	6.6%	0%	-	100%	0%	0%	-	-
<b>% Total</b>	0.7%	57.6%	0%	58.3%	37.7%	2.6%	0%	40.4%	1.3%	0%	0%	1.3%	-
<b>PHF</b>	0.250	0.837	-	0.846	0.838	0.500	-	0.847	0.500	-	-	0.500	0.878
<b>Motorcycles</b>	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>% Motorcycles</b>	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Lights</b>	1	63	0	64	41	1	0	42	1	0	0	1	107
<b>% Lights</b>	100%	72.4%	0%	72.7%	71.9%	25.0%	0%	68.9%	50.0%	0%	0%	50.0%	70.9%
<b>Single-Unit Trucks</b>	0	5	0	5	7	2	0	9	1	0	0	1	15
<b>% Single-Unit Trucks</b>	0%	5.7%	0%	5.7%	12.3%	50.0%	0%	14.8%	50.0%	0%	0%	50.0%	9.9%
<b>Articulated Trucks</b>	0	19	0	19	9	1	0	10	0	0	0	0	29
<b>% Articulated Trucks</b>	0%	21.8%	0%	21.6%	15.8%	25.0%	0%	16.4%	0%	0%	0%	0%	19.2%
<b>Buses</b>	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>% Buses</b>	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

\* L: Left, R: Right, T: Thru, U: U-Turn

**Ford Truck Plant Expansion - TMC**

Thu Apr 30, 2026

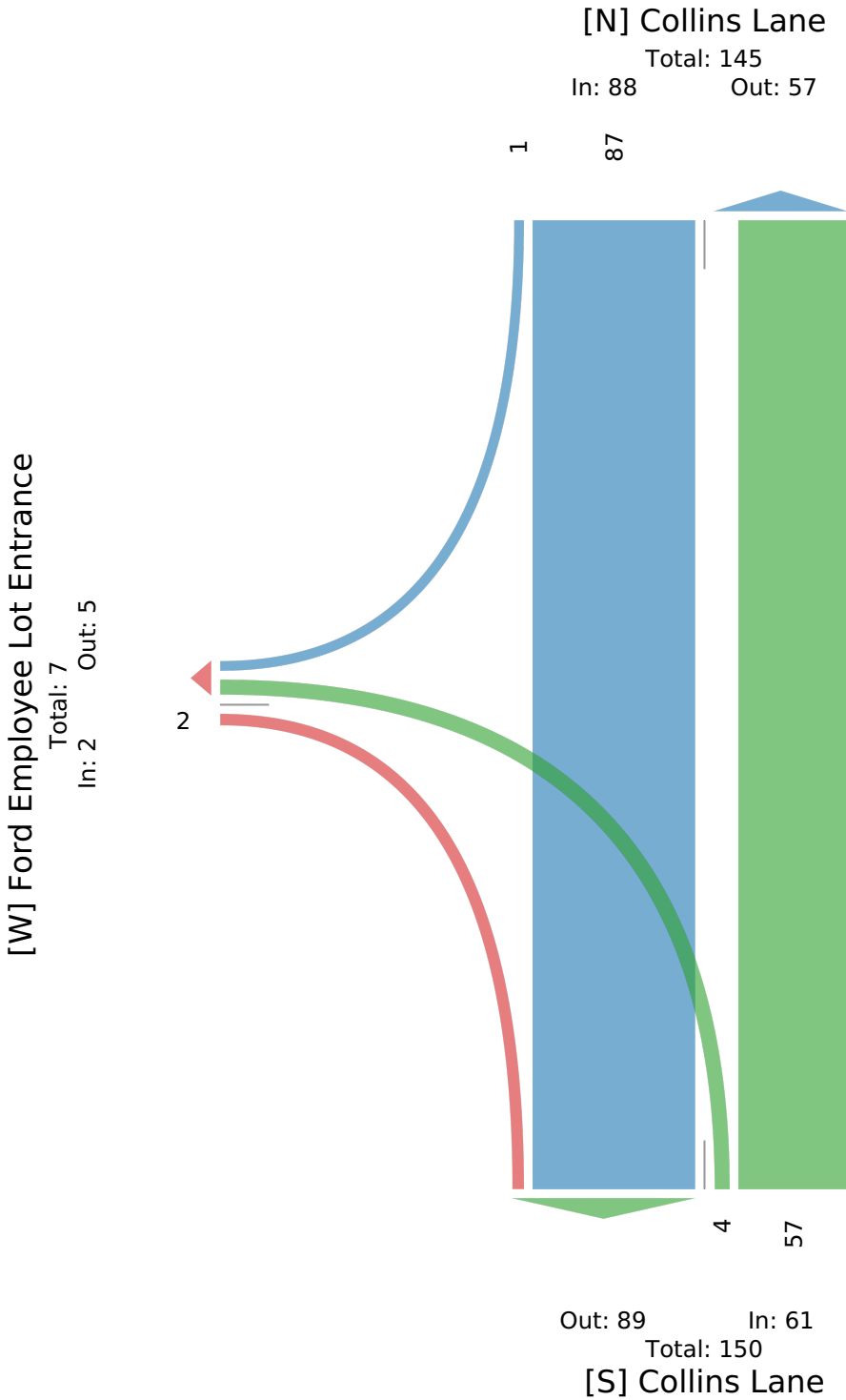
AM Peak (Apr 30 2026 8:45AM - 9:45 AM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1399364, Location: 38.294555, -85.519954

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US



**Ford Truck Plant Expansion - TMC**

Thu Apr 30, 2026

Midday Peak (Apr 30 2026 12PM - 1 PM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1399364, Location: 38.294555, -85.519954

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US

Leg Direction	Collins Lane Southbound				Collins Lane Northbound				Ford Employee Lot Entrance Eastbound				Int
	R	T	U	App	T	L	U	App	R	L	U	App	
2026-04-30 12:00PM	1	21	0	22	21	0	0	21	1	0	0	1	44
12:15PM	0	20	0	20	15	4	0	19	1	1	0	2	41
12:30PM	0	17	0	17	19	2	0	21	1	1	0	2	40
12:45PM	1	19	0	20	27	0	0	27	2	0	0	2	49
<b>Total</b>	2	77	0	79	82	6	0	88	5	2	0	7	174
<b>% Approach</b>	2.5%	97.5%	0%	-	93.2%	6.8%	0%	-	71.4%	28.6%	0%	-	-
<b>% Total</b>	1.1%	44.3%	0%	45.4%	47.1%	3.4%	0%	50.6%	2.9%	1.1%	0%	4.0%	-
<b>PHF</b>	0.500	0.917	-	0.898	0.759	0.375	-	0.815	0.625	0.500	-	0.875	0.888
<b>Motorcycles</b>	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>% Motorcycles</b>	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Lights</b>	2	62	0	64	64	6	0	70	5	2	0	7	141
<b>% Lights</b>	100%	80.5%	0%	81.0%	78.0%	100%	0%	79.5%	100%	100%	0%	100%	81.0%
<b>Single-Unit Trucks</b>	0	6	0	6	4	0	0	4	0	0	0	0	10
<b>% Single-Unit Trucks</b>	0%	7.8%	0%	7.6%	4.9%	0%	0%	4.5%	0%	0%	0%	0%	5.7%
<b>Articulated Trucks</b>	0	9	0	9	14	0	0	14	0	0	0	0	23
<b>% Articulated Trucks</b>	0%	11.7%	0%	11.4%	17.1%	0%	0%	15.9%	0%	0%	0%	0%	13.2%
<b>Buses</b>	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>% Buses</b>	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

\* L: Left, R: Right, T: Thru, U: U-Turn

**Ford Truck Plant Expansion - TMC**

Thu Apr 30, 2026

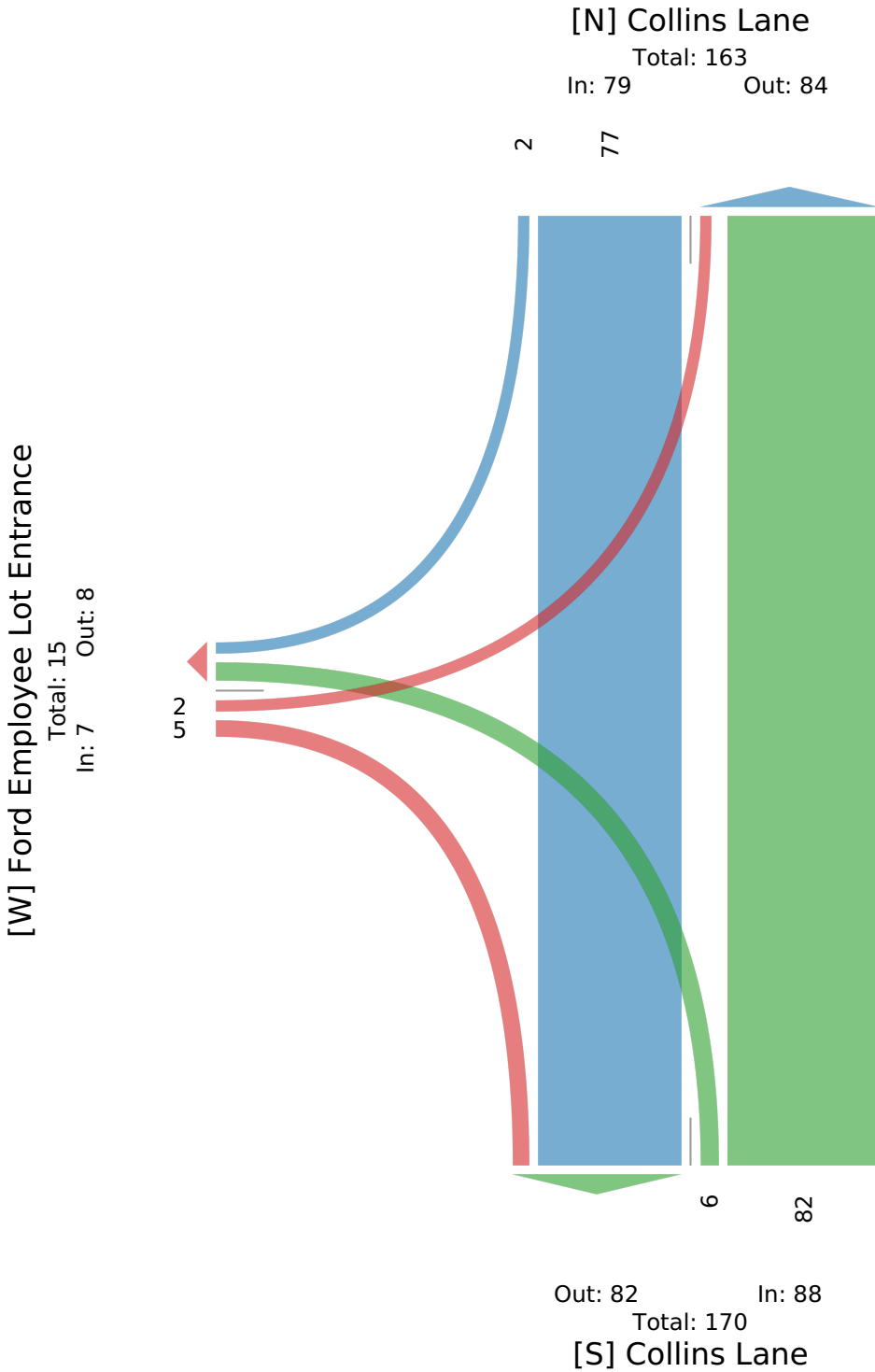
Midday Peak (Apr 30 2026 12PM - 1 PM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1399364, Location: 38.294555, -85.519954

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US



Existing Volume Counts  
Collins Lane & Chamberlain Lane

**Ford Truck Plant Expansion - TMC**

Wed Apr 29, 2026

Full Length (1 PM-1 PM (+1))

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1399342, Location: 38.289801, -85.51574

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US

Leg Direction	Collins Lane Southbound					Chamberlain Lane Westbound					Collins Lane Northbound					Chamberlain Lane Eastbound					Int
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2026-04-29 1:00PM	21	20	39	0	<b>80</b>	43	166	3	0	<b>212</b>	4	17	15	0	<b>36</b>	37	143	22	0	<b>202</b>	<b>530</b>
2:00PM	20	40	56	0	<b>116</b>	50	142	2	0	<b>194</b>	2	17	25	0	<b>44</b>	53	201	16	0	<b>270</b>	<b>624</b>
3:00PM	19	63	72	0	<b>154</b>	33	148	1	0	<b>182</b>	1	12	22	0	<b>35</b>	89	269	12	0	<b>370</b>	<b>741</b>
4:00PM	16	43	62	0	<b>121</b>	28	279	9	0	<b>316</b>	2	18	49	0	<b>69</b>	160	356	14	0	<b>530</b>	<b>1036</b>
5:00PM	19	51	46	0	<b>116</b>	48	450	12	0	<b>510</b>	2	36	135	0	<b>173</b>	202	371	54	0	<b>627</b>	<b>1426</b>
6:00PM	11	25	28	0	<b>64</b>	27	178	3	0	<b>208</b>	1	12	28	0	<b>41</b>	50	214	13	0	<b>277</b>	<b>590</b>
7:00PM	18	9	19	0	<b>46</b>	15	82	6	0	<b>103</b>	9	12	23	0	<b>44</b>	34	119	4	0	<b>157</b>	<b>350</b>
8:00PM	8	4	20	0	<b>32</b>	14	94	2	0	<b>110</b>	2	11	18	0	<b>31</b>	23	121	9	0	<b>153</b>	<b>326</b>
9:00PM	8	8	21	0	<b>37</b>	13	76	1	0	<b>90</b>	3	6	27	0	<b>36</b>	36	82	4	0	<b>122</b>	<b>285</b>
10:00PM	8	0	7	0	<b>15</b>	13	51	1	0	<b>65</b>	3	3	7	0	<b>13</b>	10	54	6	0	<b>70</b>	<b>163</b>
11:00PM	16	5	17	0	<b>38</b>	5	57	2	0	<b>64</b>	0	7	33	0	<b>40</b>	50	69	6	0	<b>125</b>	<b>267</b>
2026-04-30 12:00AM	3	1	9	0	<b>13</b>	10	19	0	0	<b>29</b>	0	2	14	0	<b>16</b>	1	26	3	0	<b>30</b>	<b>88</b>
1:00AM	10	1	6	0	<b>17</b>	4	20	0	0	<b>24</b>	0	0	3	0	<b>3</b>	1	19	4	0	<b>24</b>	<b>68</b>
2:00AM	11	2	7	1	<b>21</b>	1	23	1	1	<b>26</b>	0	0	13	0	<b>13</b>	12	52	4	0	<b>68</b>	<b>128</b>
3:00AM	10	4	15	0	<b>29</b>	6	26	1	0	<b>33</b>	1	4	2	0	<b>7</b>	4	64	2	0	<b>70</b>	<b>139</b>
4:00AM	11	2	10	0	<b>23</b>	17	161	2	0	<b>180</b>	2	2	14	0	<b>18</b>	39	275	11	0	<b>325</b>	<b>546</b>
5:00AM	17	5	14	0	<b>36</b>	34	638	1	0	<b>673</b>	1	12	163	0	<b>176</b>	16	169	29	0	<b>214</b>	<b>1099</b>
6:00AM	16	13	20	0	<b>49</b>	54	196	0	0	<b>250</b>	2	6	9	0	<b>17</b>	11	137	24	0	<b>172</b>	<b>488</b>
7:00AM	13	21	42	0	<b>76</b>	41	152	5	0	<b>198</b>	1	9	8	0	<b>18</b>	23	97	20	0	<b>140</b>	<b>432</b>
8:00AM	15	25	33	0	<b>73</b>	40	149	2	0	<b>191</b>	0	17	16	0	<b>33</b>	32	155	19	0	<b>206</b>	<b>503</b>
9:00AM	30	10	35	0	<b>75</b>	39	160	1	0	<b>200</b>	3	7	21	0	<b>31</b>	43	136	23	0	<b>202</b>	<b>508</b>
10:00AM	18	24	43	0	<b>85</b>	35	135	0	0	<b>170</b>	1	5	14	0	<b>20</b>	29	138	16	0	<b>183</b>	<b>458</b>
11:00AM	19	19	50	0	<b>88</b>	44	145	0	0	<b>189</b>	2	6	23	0	<b>31</b>	34	154	18	0	<b>206</b>	<b>514</b>
12:00PM	25	19	45	0	<b>89</b>	50	185	3	0	<b>238</b>	4	14	29	0	<b>47</b>	52	176	31	0	<b>259</b>	<b>633</b>
<b>Total</b>	<b>362</b>	<b>414</b>	<b>716</b>	<b>1</b>	<b>1493</b>	<b>664</b>	<b>3732</b>	<b>58</b>	<b>1</b>	<b>4455</b>	<b>46</b>	<b>235</b>	<b>711</b>	<b>0</b>	<b>992</b>	<b>1041</b>	<b>3597</b>	<b>364</b>	<b>0</b>	<b>5002</b>	<b>11942</b>
<b>% Approach</b>	24.2%	27.7%	48.0%	0.1%	-	14.9%	83.8%	1.3%	0%	-	4.6%	23.7%	71.7%	0%	-	20.8%	71.9%	7.3%	0%	-	-
<b>% Total</b>	3.0%	3.5%	6.0%	0%	<b>12.5%</b>	5.6%	31.3%	0.5%	0%	<b>37.3%</b>	0.4%	2.0%	6.0%	0%	<b>8.3%</b>	8.7%	30.1%	3.0%	0%	<b>41.9%</b>	-
<b>Motorcycles</b>	1	0	1	1	<b>3</b>	0	6	1	0	<b>7</b>	1	2	2	0	<b>5</b>	0	6	0	0	<b>6</b>	21
<b>% Motorcycles</b>	0.3%	0%	0.1%	100%	<b>0.2%</b>	0%	0.2%	1.7%	0%	<b>0.2%</b>	2.2%	0.9%	0.3%	0%	<b>0.5%</b>	0%	0.2%	0%	0%	<b>0.1%</b>	0.2%
<b>Lights</b>	200	389	601	0	<b>1190</b>	566	3416	57	1	<b>4040</b>	44	213	701	0	<b>958</b>	1026	3260	277	0	<b>4563</b>	10751
<b>% Lights</b>	55.2%	94.0%	83.9%	0%	<b>79.7%</b>	85.2%	91.5%	98.3%	100%	<b>90.7%</b>	95.7%	90.6%	98.6%	0%	<b>96.6%</b>	98.6%	90.6%	76.1%	0%	<b>91.2%</b>	90.0%
<b>Single-Unit Trucks</b>	29	13	42	0	<b>84</b>	37	64	0	0	<b>101</b>	1	15	6	0	<b>22</b>	10	64	18	0	<b>92</b>	299
<b>% Single-Unit Trucks</b>	8.0%	3.1%	5.9%	0%	<b>5.6%</b>	5.6%	1.7%	0%	0%	<b>2.3%</b>	2.2%	6.4%	0.8%	0%	<b>2.2%</b>	1.0%	1.8%	4.9%	0%	<b>1.8%</b>	2.5%
<b>Articulated Trucks</b>	131	9	71	0	<b>211</b>	61	244	0	0	<b>305</b>	0	4	1	0	<b>5</b>	4	265	68	0	<b>337</b>	858
<b>% Articulated Trucks</b>	36.2%	2.2%	9.9%	0%	<b>14.1%</b>	9.2%	6.5%	0%	0%	<b>6.8%</b>	0%	1.7%	0.1%	0%	<b>0.5%</b>	0.4%	7.4%	18.7%	0%	<b>6.7%</b>	7.2%
<b>Buses</b>	1	3	1	0	<b>5</b>	0	2	0	0	<b>2</b>	0	1	1	0	<b>2</b>	1	2	1	0	<b>4</b>	13
<b>% Buses</b>	0.3%	0.7%	0.1%	0%	<b>0.3%</b>	0%	0.1%	0%	0%	<b>0%</b>	0%	0.4%	0.1%	0%	<b>0.2%</b>	0.1%	0.1%	0.3%	0%	<b>0.1%</b>	0.1%

\* L: Left, R: Right, T: Thru, U: U-Turn

Ford Truck Plant Expansion - TMC

Wed Apr 29, 2026

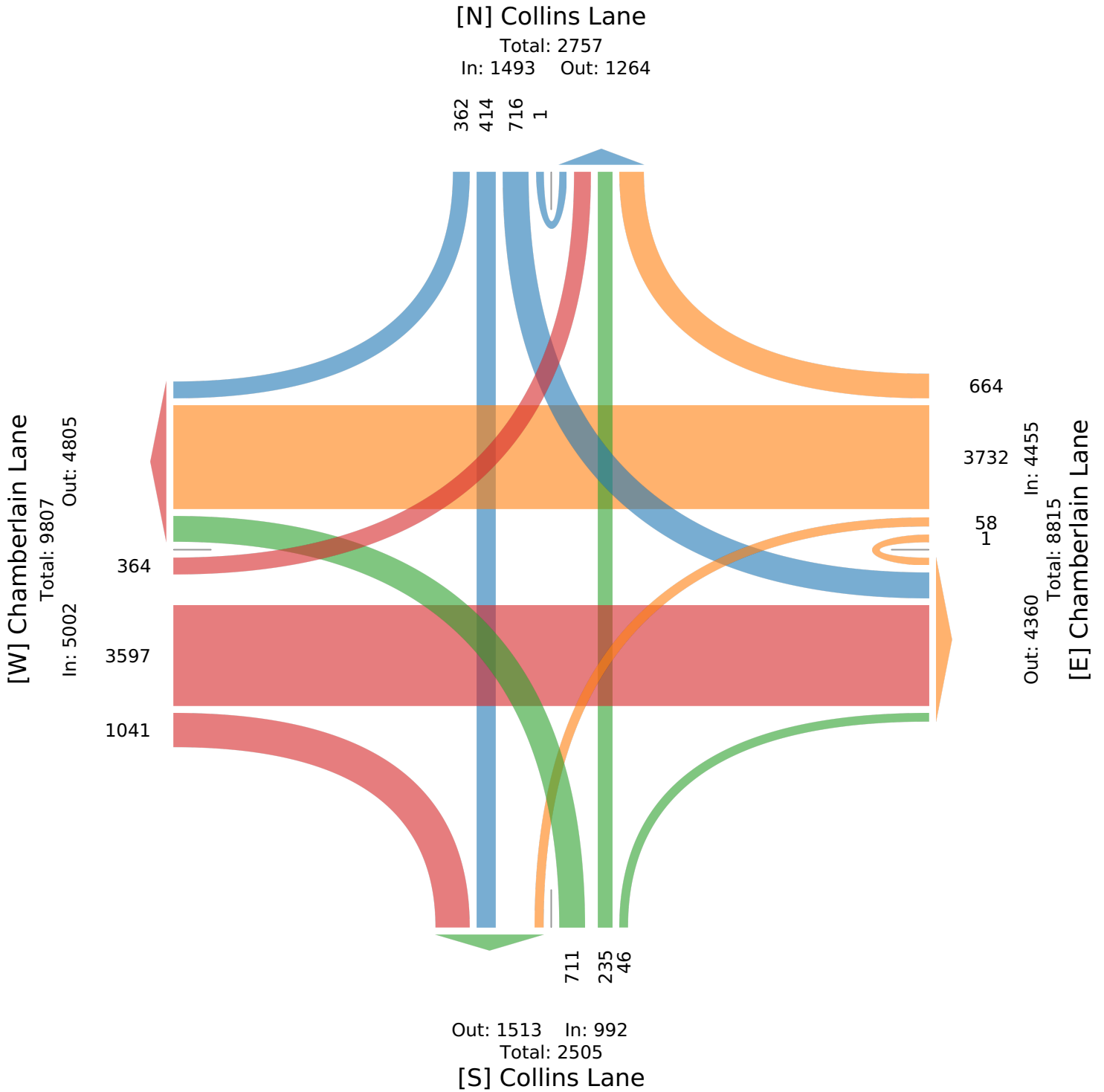
Full Length (1 PM-1 PM (+1))

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1399342, Location: 38.289801, -85.51574

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US



**Ford Truck Plant Expansion - TMC**

Wed Apr 29, 2026

PM Peak (Apr 29 2026 4:45PM - 5:45 PM) - Overall Peak Hour

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1399342, Location: 38.289801, -85.51574

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US

Leg Direction	Collins Lane Southbound					Chamberlain Lane Westbound					Collins Lane Northbound					Chamberlain Lane Eastbound					Int	
	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App		
2026-04-29 4:45PM	3	7	13	0	23	6	84	2	0	92	0	6	17	0	23	55	120	6	0	181	319	
5:00PM	2	14	23	0	39	8	128	2	0	138	0	7	21	0	28	39	100	8	0	147	352	
5:15PM	6	11	17	0	34	5	76	1	0	82	1	13	32	0	46	78	106	20	0	204	366	
5:30PM	7	16	3	0	26	18	156	5	0	179	0	8	37	0	45	68	114	23	0	205	455	
<b>Total</b>	18	48	56	0	122	37	444	10	0	491	1	34	107	0	142	240	440	57	0	737	1492	
<b>% Approach</b>	14.8%	39.3%	45.9%	0%	-	7.5%	90.4%	2.0%	0%	-	0.7%	23.9%	75.4%	0%	-	32.6%	59.7%	7.7%	0%	-	-	
<b>% Total</b>	1.2%	3.2%	3.8%	0%	8.2%	2.5%	29.8%	0.7%	0%	32.9%	0.1%	2.3%	7.2%	0%	9.5%	16.1%	29.5%	3.8%	0%	49.4%	-	
<b>PHF</b>	0.643	0.750	0.609	-	0.782	0.514	0.712	0.500	-	0.686	0.250	0.654	0.723	-	0.772	0.769	0.917	0.620	-	0.899	0.820	
<b>Motorcycles</b>	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
<b>% Motorcycles</b>	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2.9%	0%	0%	0.7%	0%	0%	0%	0%	0%	0%	0.1%
<b>Lights</b>	13	44	52	0	109	34	440	10	0	484	1	33	106	0	140	239	429	57	0	725	1458	
<b>% Lights</b>	72.2%	91.7%	92.9%	0%	89.3%	91.9%	99.1%	100%	0%	98.6%	100%	97.1%	99.1%	0%	98.6%	99.6%	97.5%	100%	0%	98.4%	97.7%	
<b>Single-Unit Trucks</b>	3	3	3	0	9	3	0	0	0	3	0	0	1	0	1	1	2	0	0	3	16	
<b>% Single-Unit Trucks</b>	16.7%	6.3%	5.4%	0%	7.4%	8.1%	0%	0%	0%	0.6%	0%	0%	0.9%	0%	0.7%	0.4%	0.5%	0%	0%	0.4%	1.1%	
<b>Articulated Trucks</b>	2	1	1	0	4	0	4	0	0	4	0	0	0	0	0	0	9	0	0	9	17	
<b>% Articulated Trucks</b>	11.1%	2.1%	1.8%	0%	3.3%	0%	0.9%	0%	0%	0.8%	0%	0%	0%	0%	0%	0%	2.0%	0%	0%	1.2%	1.1%	
<b>Buses</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>% Buses</b>	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	

\*L: Left, R: Right, T: Thru, U: U-Turn

**Ford Truck Plant Expansion - TMC**

Wed Apr 29, 2026

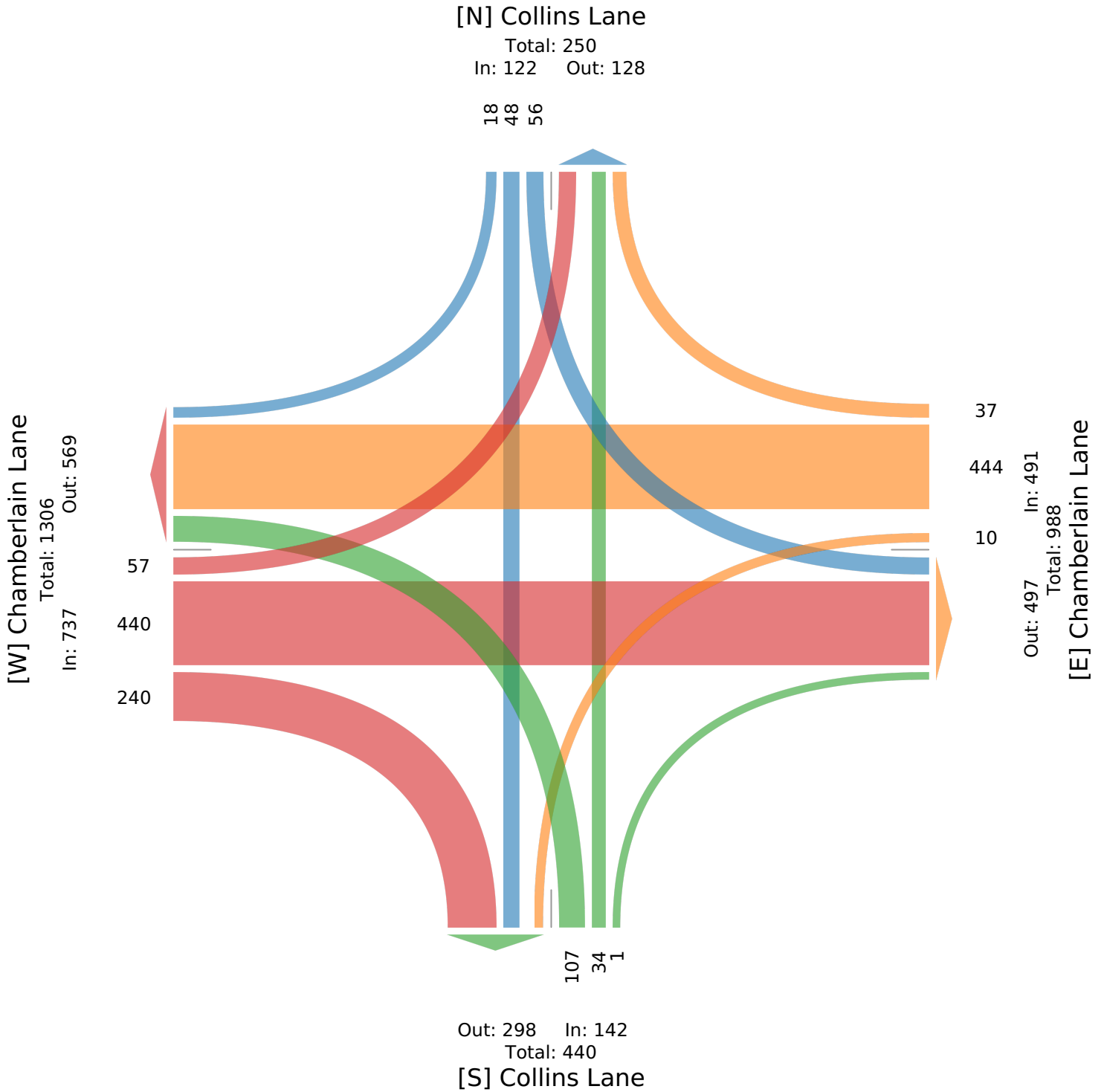
PM Peak (Apr 29 2026 4:45PM - 5:45 PM) - Overall Peak Hour

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1399342, Location: 38.289801, -85.51574

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US



**Ford Truck Plant Expansion - TMC**

Thu Apr 30, 2026

AM Peak (Apr 30 2026 5AM - 6 AM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1399342, Location: 38.289801, -85.51574

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US

Leg Direction	Collins Lane Southbound					Chamberlain Lane Westbound					Collins Lane Northbound					Chamberlain Lane Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2026-04-30 5:00AM	1	3	1	0	5	11	84	1	0	96	1	3	13	0	17	4	47	2	0	53	171
5:15AM	3	1	7	0	11	6	157	0	0	163	0	2	45	0	47	8	67	8	0	83	304
5:30AM	3	1	2	0	6	9	235	0	0	244	0	5	66	0	71	2	29	12	0	43	364
5:45AM	10	0	4	0	14	8	162	0	0	170	0	2	39	0	41	2	26	7	0	35	260
<b>Total</b>	17	5	14	0	36	34	638	1	0	673	1	12	163	0	176	16	169	29	0	214	1099
<b>% Approach</b>	47.2%	13.9%	38.9%	0%	-	5.1%	94.8%	0.1%	0%	-	0.6%	6.8%	92.6%	0%	-	7.5%	79.0%	13.6%	0%	-	-
<b>% Total</b>	1.5%	0.5%	1.3%	0%	3.3%	3.1%	58.1%	0.1%	0%	61.2%	0.1%	1.1%	14.8%	0%	16.0%	1.5%	15.4%	2.6%	0%	19.5%	-
<b>PHF</b>	0.425	0.417	0.500	-	0.643	0.773	0.679	0.250	-	0.690	0.250	0.600	0.617	-	0.620	0.500	0.631	0.604	-	0.645	0.755
<b>Motorcycles</b>	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
<b>% Motorcycles</b>	0%	0%	0%	0%	0%	0%	0.2%	0%	0%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.1%
<b>Lights</b>	7	4	14	0	25	32	631	1	0	664	1	12	163	0	176	16	165	28	0	209	1074
<b>% Lights</b>	41.2%	80.0%	100%	0%	69.4%	94.1%	98.9%	100%	0%	98.7%	100%	100%	100%	0%	100%	100%	97.6%	96.6%	0%	97.7%	97.7%
<b>Single-Unit Trucks</b>	6	0	0	0	6	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	7
<b>% Single-Unit Trucks</b>	35.3%	0%	0%	0%	16.7%	2.9%	0%	0%	0%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.6%
<b>Articulated Trucks</b>	4	1	0	0	5	1	6	0	0	7	0	0	0	0	0	0	4	1	0	5	17
<b>% Articulated Trucks</b>	23.5%	20.0%	0%	0%	13.9%	2.9%	0.9%	0%	0%	1.0%	0%	0%	0%	0%	0%	0%	2.4%	3.4%	0%	2.3%	1.5%
<b>Buses</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>% Buses</b>	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

\*L: Left, R: Right, T: Thru, U: U-Turn

**Ford Truck Plant Expansion - TMC**

Thu Apr 30, 2026

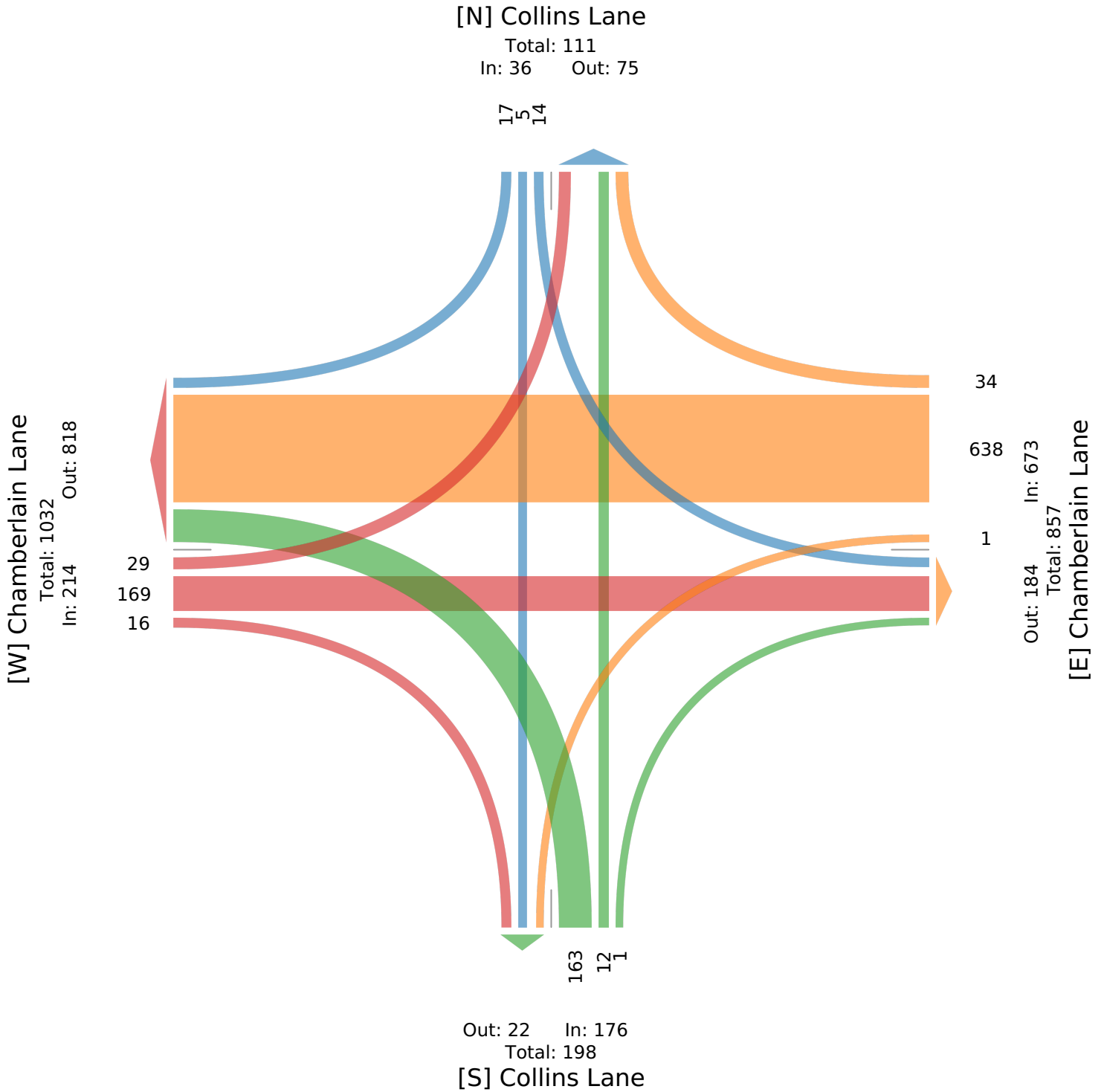
AM Peak (Apr 30 2026 5AM - 6 AM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1399342, Location: 38.289801, -85.51574

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US



**Ford Truck Plant Expansion - TMC**

Thu Apr 30, 2026

Midday Peak (Apr 30 2026 12PM - 1 PM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1399342, Location: 38.289801, -85.51574

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US

Leg Direction	Collins Lane Southbound					Chamberlain Lane Westbound					Collins Lane Northbound					Chamberlain Lane Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2026-04-30 12:00PM	5	5	15	0	25	8	54	1	0	63	0	2	8	0	10	17	51	11	0	79	177
12:15PM	7	3	9	0	19	12	52	1	0	65	1	2	14	0	17	7	52	6	0	65	166
12:30PM	6	6	13	0	25	10	33	0	0	43	3	5	3	0	11	18	34	6	0	58	137
12:45PM	7	5	8	0	20	20	46	1	0	67	0	5	4	0	9	10	39	8	0	57	153
<b>Total</b>	25	19	45	0	89	50	185	3	0	238	4	14	29	0	47	52	176	31	0	259	633
<b>% Approach</b>	28.1%	21.3%	50.6%	0%	-	21.0%	77.7%	1.3%	0%	-	8.5%	29.8%	61.7%	0%	-	20.1%	68.0%	12.0%	0%	-	-
<b>% Total</b>	3.9%	3.0%	7.1%	0%	14.1%	7.9%	29.2%	0.5%	0%	37.6%	0.6%	2.2%	4.6%	0%	7.4%	8.2%	27.8%	4.9%	0%	40.9%	-
<b>PHF</b>	0.893	0.792	0.750	-	0.890	0.625	0.856	0.750	-	0.888	0.333	0.700	0.518	-	0.691	0.722	0.846	0.705	-	0.820	0.894
<b>Motorcycles</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>% Motorcycles</b>	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Lights</b>	19	17	38	0	74	44	165	3	0	212	4	10	29	0	43	52	148	20	0	220	549
<b>% Lights</b>	76.0%	89.5%	84.4%	0%	83.1%	88.0%	89.2%	100%	0%	89.1%	100%	71.4%	100%	0%	91.5%	100%	84.1%	64.5%	0%	84.9%	86.7%
<b>Single-Unit Trucks</b>	1	2	3	0	6	1	2	0	0	3	0	2	0	0	2	0	8	1	0	9	20
<b>% Single-Unit Trucks</b>	4.0%	10.5%	6.7%	0%	6.7%	2.0%	1.1%	0%	0%	1.3%	0%	14.3%	0%	0%	4.3%	0%	4.5%	3.2%	0%	3.5%	3.2%
<b>Articulated Trucks</b>	5	0	4	0	9	5	18	0	0	23	0	2	0	0	2	0	20	10	0	30	64
<b>% Articulated Trucks</b>	20.0%	0%	8.9%	0%	10.1%	10.0%	9.7%	0%	0%	9.7%	0%	14.3%	0%	0%	4.3%	0%	11.4%	32.3%	0%	11.6%	10.1%
<b>Buses</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>% Buses</b>	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

\*L: Left, R: Right, T: Thru, U: U-Turn

**Ford Truck Plant Expansion - TMC**

Thu Apr 30, 2026

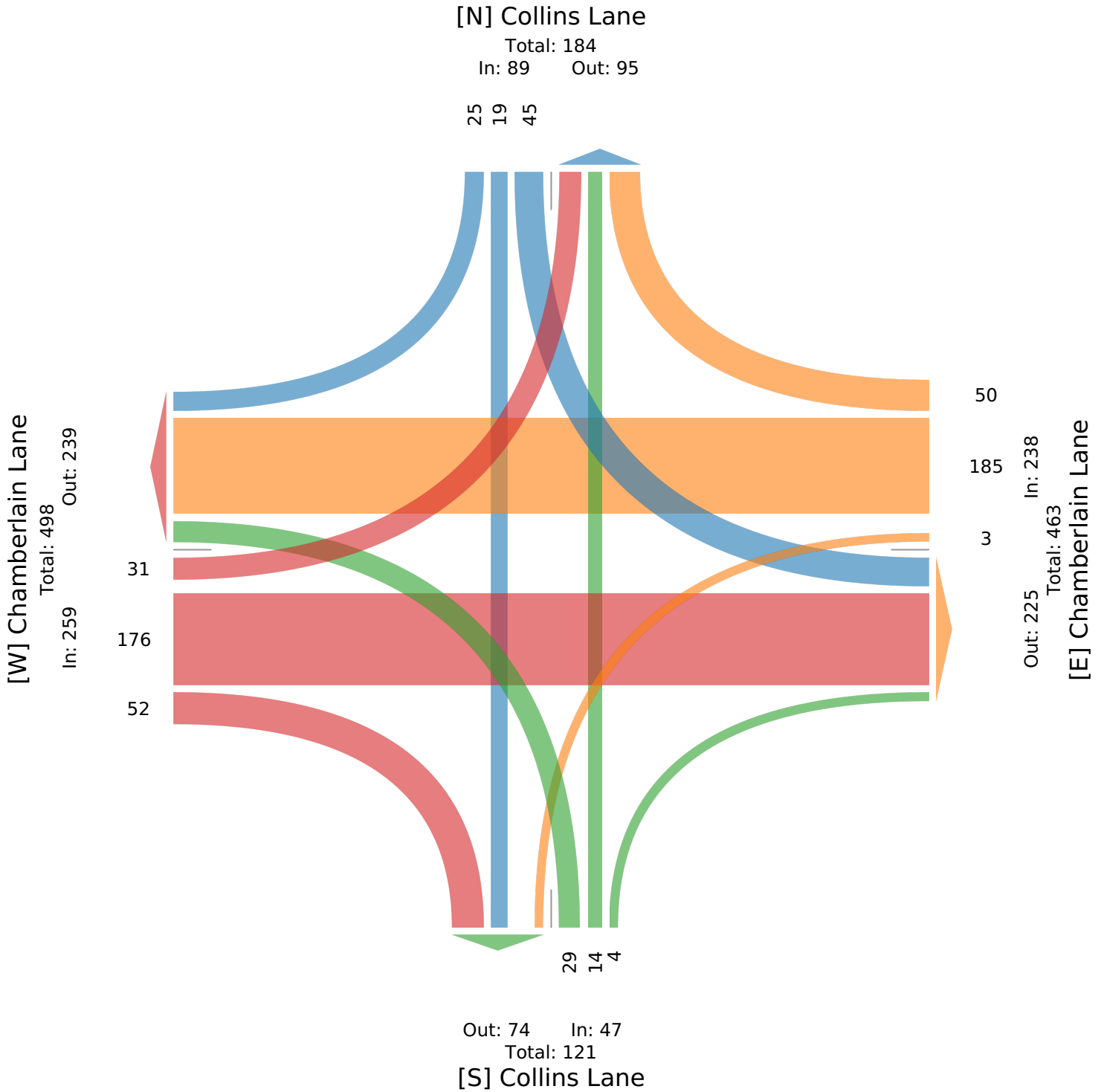
Midday Peak (Apr 30 2026 12PM - 1 PM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1399342, Location: 38.289801, -85.51574

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US



Existing Volume Counts  
Chamberlain Lane & Old LaGrange Road

**Ford Truck Plant Expansion - TMC**

Tue Apr 28, 2026

Full Length (6 AM-6 AM (+1))

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1400570, Location: 38.289696, -85.512746

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US

Leg Direction	Old LaGrange Road Southbound					Chamberlain Lane Westbound					Old LaGrange Road Northbound					Chamberlain Lane Eastbound					Int
	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	
2026-04-28 6:00AM	19	3	26	0	48	11	240	7	0	258	14	0	2	0	16	3	92	1	0	96	418
7:00AM	19	3	39	0	61	16	188	19	0	223	26	3	0	0	29	3	133	4	0	140	453
8:00AM	17	3	27	0	47	17	161	24	0	202	27	1	1	0	29	1	153	6	0	160	438
9:00AM	9	3	24	0	36	15	183	21	0	219	22	1	1	0	24	0	170	2	0	172	451
10:00AM	8	4	18	0	30	6	181	23	0	210	20	1	0	0	21	2	147	4	0	153	414
11:00AM	2	2	12	0	16	12	190	20	0	222	20	2	0	0	22	3	203	5	0	211	471
12:00PM	9	3	20	0	32	17	208	26	0	251	30	2	1	0	33	1	206	3	0	210	526
1:00PM	5	2	16	0	23	18	188	23	0	229	22	0	3	0	25	1	179	3	0	183	460
2:00PM	3	3	26	0	32	22	182	29	0	233	34	3	3	0	40	0	237	3	0	240	545
3:00PM	4	2	19	0	25	15	191	32	0	238	48	1	1	0	50	2	300	6	0	308	621
4:00PM	5	3	23	0	31	27	324	29	0	380	88	11	5	0	104	0	383	3	0	386	901
5:00PM	40	4	23	0	67	27	459	21	0	507	129	7	2	0	138	0	419	6	0	425	1137
6:00PM	21	9	25	0	55	14	174	16	0	204	16	0	2	1	19	7	176	7	1	191	469
7:00PM	5	4	7	0	16	14	82	27	0	123	22	2	2	2	28	2	105	1	0	108	275
8:00PM	2	2	7	0	11	18	114	13	0	145	5	1	0	0	6	2	120	5	0	127	289
9:00PM	7	0	5	0	12	11	82	8	0	101	0	0	0	0	0	2	103	3	0	108	221
10:00PM	3	2	2	0	7	4	41	3	0	48	1	0	4	0	5	4	50	2	0	56	116
11:00PM	2	0	2	0	4	2	48	4	0	54	1	0	0	0	1	0	65	2	0	67	126
2026-04-29 12:00AM	3	0	0	0	3	1	50	3	0	54	1	0	0	0	1	0	69	3	0	72	130
1:00AM	0	0	0	0	0	1	22	0	0	23	1	0	0	0	1	0	29	1	0	30	54
2:00AM	3	5	0	0	8	0	18	1	0	19	1	2	0	0	3	7	14	6	1	28	58
3:00AM	0	5	1	0	6	2	16	0	0	18	1	0	1	0	2	5	44	1	0	50	76
4:00AM	10	0	1	0	11	1	169	2	2	174	5	1	0	0	6	0	219	3	0	222	413
5:00AM	31	1	8	0	40	0	640	0	0	640	8	1	3	0	12	0	226	0	0	226	918
<b>Total</b>	<b>227</b>	<b>63</b>	<b>331</b>	<b>0</b>	<b>621</b>	<b>271</b>	<b>4151</b>	<b>351</b>	<b>2</b>	<b>4775</b>	<b>542</b>	<b>39</b>	<b>31</b>	<b>3</b>	<b>615</b>	<b>45</b>	<b>3842</b>	<b>80</b>	<b>2</b>	<b>3969</b>	<b>9980</b>
<b>% Approach</b>	36.6%	10.1%	53.3%	0%	-	5.7%	86.9%	7.4%	0%	-	88.1%	6.3%	5.0%	0.5%	-	1.1%	96.8%	2.0%	0.1%	-	-
<b>% Total</b>	2.3%	0.6%	3.3%	0%	6.2%	2.7%	41.6%	3.5%	0%	47.8%	5.4%	0.4%	0.3%	0%	6.2%	0.5%	38.5%	0.8%	0%	39.8%	-
<b>Motorcycles</b>	0	0	1	0	1	0	6	1	0	7	0	1	1	0	2	0	5	0	0	5	15
<b>% Motorcycles</b>	0%	0%	0.3%	0%	0.2%	0%	0.1%	0.3%	0%	0.1%	0%	2.6%	3.2%	0%	0.3%	0%	0.1%	0%	0%	0.1%	0.2%
<b>Lights</b>	223	59	319	0	601	251	3742	335	2	4330	522	30	27	3	582	44	3419	75	1	3539	9052
<b>% Lights</b>	98.2%	93.7%	96.4%	0%	96.8%	92.6%	90.1%	95.4%	100%	90.7%	96.3%	76.9%	87.1%	100%	94.6%	97.8%	89.0%	93.8%	50.0%	89.2%	90.7%
<b>Single-Unit Trucks</b>	1	1	6	0	8	4	113	9	0	126	13	0	0	0	13	1	120	2	0	123	270
<b>% Single-Unit Trucks</b>	0.4%	1.6%	1.8%	0%	1.3%	1.5%	2.7%	2.6%	0%	2.6%	2.4%	0%	0%	0%	2.1%	2.2%	3.1%	2.5%	0%	3.1%	2.7%
<b>Articulated Trucks</b>	3	0	2	0	5	12	288	6	0	306	5	5	2	0	12	0	294	3	1	298	621
<b>% Articulated Trucks</b>	1.3%	0%	0.6%	0%	0.8%	4.4%	6.9%	1.7%	0%	6.4%	0.9%	12.8%	6.5%	0%	2.0%	0%	7.7%	3.8%	50.0%	7.5%	6.2%
<b>Buses</b>	0	3	3	0	6	4	2	0	0	6	2	3	1	0	6	0	4	0	0	4	22
<b>% Buses</b>	0%	4.8%	0.9%	0%	1.0%	1.5%	0%	0%	0%	0.1%	0.4%	7.7%	3.2%	0%	1.0%	0%	0.1%	0%	0%	0.1%	0.2%

\* L: Left, R: Right, T: Thru, U: U-Turn

**Ford Truck Plant Expansion - TMC**

Tue Apr 28, 2026

Full Length (6 AM-6 AM (+1))

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1400570, Location: 38.289696, -85.512746

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US

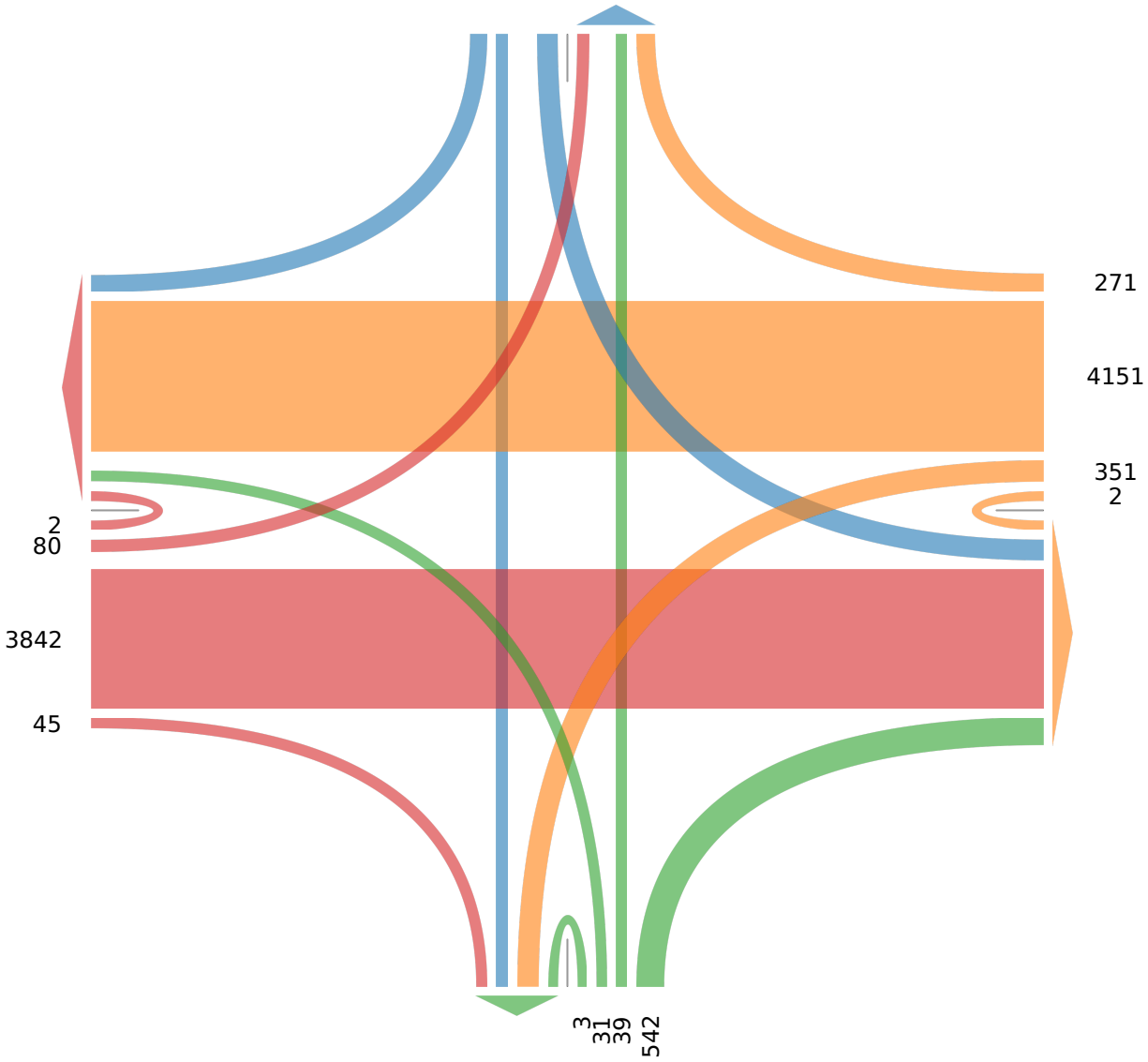
**[N] Old LaGrange Road**

Total: 1011

In: 621 Out: 390

227  
63  
331

**[W] Chamberlain Lane**  
Total: 8380  
In: 3969 Out: 4411



**[E] Chamberlain Lane**  
Total: 9492  
In: 4775 Out: 4717

Out: 462 In: 615  
Total: 1077  
**[S] Old LaGrange Road**

**Ford Truck Plant Expansion - TMC**

Tue Apr 28, 2026

Midday Peak (Apr 28 2026 11:30AM - 12:30 PM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1400570, Location: 38.289696, -85.512746

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US

Leg Direction	Old LaGrange Road Southbound					Chamberlain Lane Westbound					Old LaGrange Road Northbound					Chamberlain Lane Eastbound						
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int	
2026-04-28 11:30AM	1	0	4	0	5	3	56	5	0	64	5	0	0	0	5	1	47	1	0	49	123	
11:45AM	0	1	2	0	3	2	54	6	0	62	8	1	0	0	9	0	45	1	0	46	120	
12:00PM	1	2	3	0	6	7	64	8	0	79	11	0	0	0	11	1	59	0	0	60	156	
12:15PM	3	0	4	0	7	3	59	5	0	67	7	0	0	0	7	0	50	3	0	53	134	
<b>Total</b>	5	3	13	0	21	15	233	24	0	272	31	1	0	0	32	2	201	5	0	208	533	
<b>% Approach</b>	23.8%	14.3%	61.9%	0%	-	5.5%	85.7%	8.8%	0%	-	96.9%	3.1%	0%	0%	-	1.0%	96.6%	2.4%	0%	-	-	
<b>% Total</b>	0.9%	0.6%	2.4%	0%	3.9%	2.8%	43.7%	4.5%	0%	51.0%	5.8%	0.2%	0%	0%	6.0%	0.4%	37.7%	0.9%	0%	39.0%	-	
<b>PHF</b>	0.417	0.375	0.813	-	0.750	0.536	0.910	0.750	-	0.861	0.705	0.250	-	-	0.727	0.500	0.852	0.417	-	0.867	0.854	
<b>Motorcycles</b>	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
<b>% Motorcycles</b>	0%	0%	0%	0%	0%	0%	0.4%	0%	0%	0.4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.2%	
<b>Lights</b>	5	3	11	0	19	15	201	24	0	240	27	0	0	0	27	2	170	5	0	177	463	
<b>% Lights</b>	100%	100%	84.6%	0%	90.5%	100%	86.3%	100%	0%	88.2%	87.1%	0%	0%	0%	84.4%	100%	84.6%	100%	0%	85.1%	86.9%	
<b>Single-Unit Trucks</b>	0	0	1	0	1	0	6	0	0	6	2	0	0	0	2	0	8	0	0	8	17	
<b>% Single-Unit Trucks</b>	0%	0%	7.7%	0%	4.8%	0%	2.6%	0%	0%	2.2%	6.5%	0%	0%	0%	6.3%	0%	4.0%	0%	0%	3.8%	3.2%	
<b>Articulated Trucks</b>	0	0	0	0	0	0	25	0	0	25	2	1	0	0	3	0	22	0	0	22	50	
<b>% Articulated Trucks</b>	0%	0%	0%	0%	0%	0%	10.7%	0%	0%	9.2%	6.5%	100%	0%	0%	9.4%	0%	10.9%	0%	0%	10.6%	9.4%	
<b>Buses</b>	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	
<b>% Buses</b>	0%	0%	7.7%	0%	4.8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.5%	0%	0%	0.5%	0.4%	

\*L: Left, R: Right, T: Thru, U: U-Turn

Ford Truck Plant Expansion - TMC

Tue Apr 28, 2026

Midday Peak (Apr 28 2026 11:30AM - 12:30 PM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1400570, Location: 38.289696, -85.512746

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US

[N] Old LaGrange Road

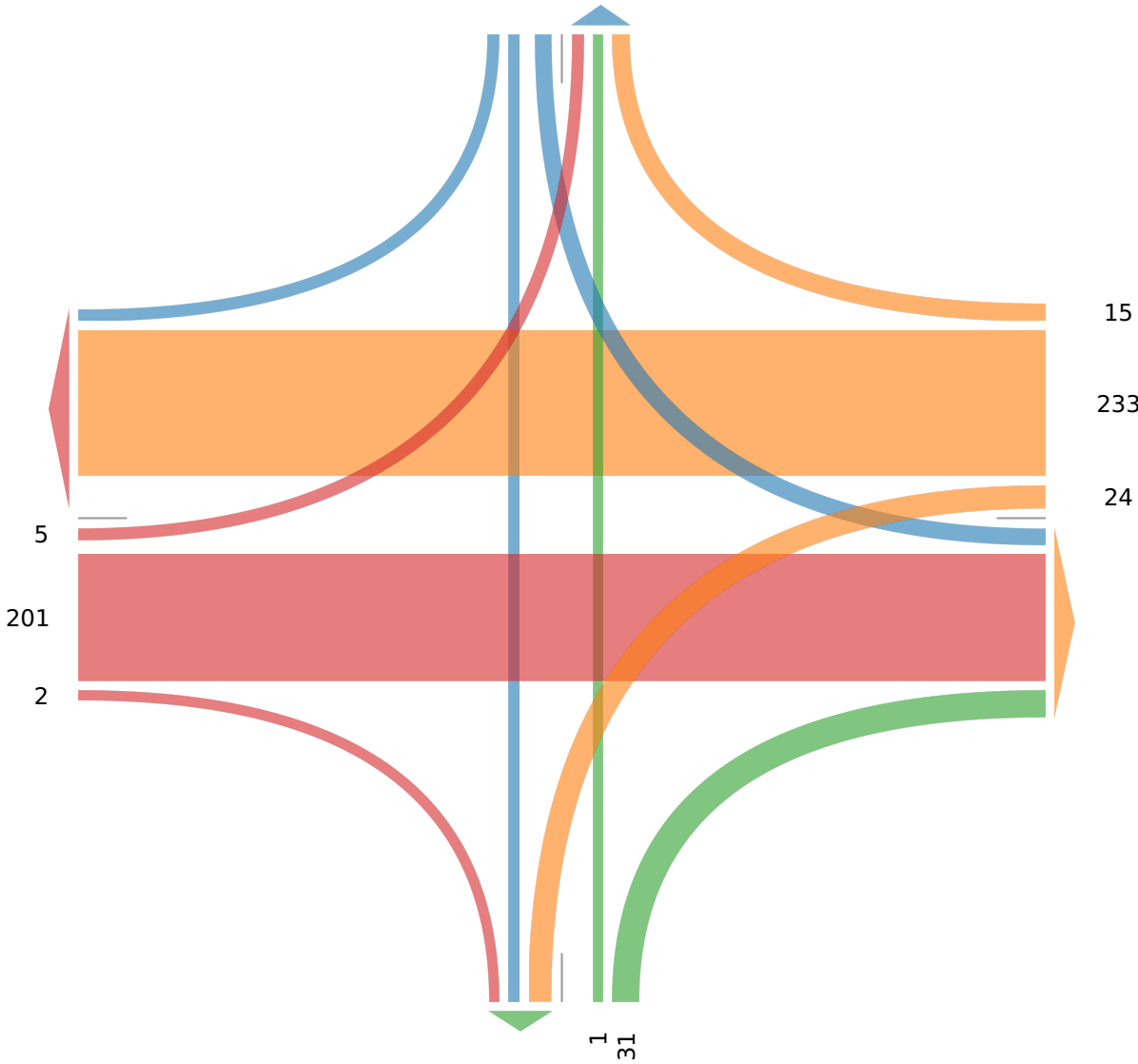
Total: 42

In: 21 Out: 21

53 13

[W] Chamberlain Lane

Total: 446  
In: 208 Out: 238



Out: 245 In: 272  
Total: 517  
[E] Chamberlain Lane

Out: 29 In: 32  
Total: 61  
[S] Old LaGrange Road

**Ford Truck Plant Expansion - TMC**

Tue Apr 28, 2026

PM Peak (Apr 28 2026 4:30PM - 5:30 PM) - Overall Peak Hour

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1400570, Location: 38.289696, -85.512746

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US

Leg Direction	Old LaGrange Road Southbound					Chamberlain Lane Westbound					Old LaGrange Road Northbound					Chamberlain Lane Eastbound					Int
	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	
2026-04-28 4:30PM	4	1	6	0	11	6	92	5	0	103	39	0	0	0	39	0	111	1	0	112	265
4:45PM	0	1	10	0	11	7	112	5	0	124	17	3	1	0	21	0	99	0	0	99	255
5:00PM	14	0	6	0	20	5	138	7	0	150	37	2	1	0	40	0	149	2	0	151	361
5:15PM	7	1	8	0	16	6	131	3	0	140	55	2	0	0	57	0	127	3	0	130	343
<b>Total</b>	25	3	30	0	58	24	473	20	0	517	148	7	2	0	157	0	486	6	0	492	1224
<b>% Approach</b>	43.1%	5.2%	51.7%	0%	-	4.6%	91.5%	3.9%	0%	-	94.3%	4.5%	1.3%	0%	-	0%	98.8%	1.2%	0%	-	-
<b>% Total</b>	2.0%	0.2%	2.5%	0%	4.7%	2.0%	38.6%	1.6%	0%	42.2%	12.1%	0.6%	0.2%	0%	12.8%	0%	39.7%	0.5%	0%	40.2%	-
<b>PHF</b>	0.446	0.750	0.750	-	0.725	0.857	0.857	0.714	-	0.862	0.673	0.583	0.500	-	0.689	-	0.815	0.500	-	0.815	0.848
<b>Motorcycles</b>	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	2
<b>% Motorcycles</b>	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50.0%	0%	0.6%	0%	0.2%	0%	0%	0.2%	0.2%
<b>Lights</b>	25	3	30	0	58	24	457	20	0	501	147	7	1	0	155	0	469	6	0	475	1189
<b>% Lights</b>	100%	100%	100%	0%	100%	100%	96.6%	100%	0%	96.9%	99.3%	100%	50.0%	0%	98.7%	0%	96.5%	100%	0%	96.5%	97.1%
<b>Single-Unit Trucks</b>	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	11	0	0	11	15
<b>% Single-Unit Trucks</b>	0%	0%	0%	0%	0%	0%	0.8%	0%	0%	0.8%	0%	0%	0%	0%	0%	0%	2.3%	0%	0%	2.2%	1.2%
<b>Articulated Trucks</b>	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	0	4	0	0	4	16
<b>% Articulated Trucks</b>	0%	0%	0%	0%	0%	0%	2.5%	0%	0%	2.3%	0%	0%	0%	0%	0%	0%	0.8%	0%	0%	0.8%	1.3%
<b>Buses</b>	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	2
<b>% Buses</b>	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.7%	0%	0%	0%	0.6%	0%	0.2%	0%	0%	0.2%	0.2%

\*L: Left, R: Right, T: Thru, U: U-Turn

**Ford Truck Plant Expansion - TMC**

Tue Apr 28, 2026

PM Peak (Apr 28 2026 4:30PM - 5:30 PM) - Overall Peak Hour

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1400570, Location: 38.289696, -85.512746

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US

**[N] Old LaGrange Road**

Total: 95

In: 58 Out: 37

25  
30

**[W] Chamberlain Lane**

Total: 992  
In: 492 Out: 500

6  
486

24  
473  
20

Out: 664 In: 517  
Total: 1181  
**[E] Chamberlain Lane**

Out: 23 In: 157  
Total: 180

**[S] Old LaGrange Road**

2  
7  
148

**Ford Truck Plant Expansion - TMC**

Wed Apr 29, 2026

AM Peak (Apr 29 2026 4:45AM - 5:45 AM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1400570, Location: 38.289696, -85.512746

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US

Leg Direction	Old LaGrange Road Southbound					Chamberlain Lane Westbound					Old LaGrange Road Northbound					Chamberlain Lane Eastbound					Int	
	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App		
2026-04-29 4:45AM	2	0	0	0	2	1	96	0	0	97	1	1	0	0	2	0	84	0	0	84	185	
5:00AM	4	0	3	0	7	0	112	0	0	112	2	0	0	0	2	0	82	0	0	82	203	
5:15AM	5	1	2	0	8	0	153	0	0	153	3	0	0	0	3	0	116	0	0	116	280	
5:30AM	14	0	2	0	16	0	218	0	0	218	2	0	2	0	4	0	19	0	0	19	257	
<b>Total</b>	25	1	7	0	33	1	579	0	0	580	8	1	2	0	11	0	301	0	0	301	925	
<b>% Approach</b>	75.8%	3.0%	21.2%	0%	-	0.2%	99.8%	0%	0%	-	72.7%	9.1%	18.2%	0%	-	0%	100%	0%	0%	-	-	
<b>% Total</b>	2.7%	0.1%	0.8%	0%	3.6%	0.1%	62.6%	0%	0%	62.7%	0.9%	0.1%	0.2%	0%	1.2%	0%	32.5%	0%	0%	32.5%	-	
<b>PHF</b>	0.446	0.250	0.583	-	0.516	0.250	0.664	-	-	0.665	0.667	0.250	0.250	-	0.688	-	0.649	-	-	0.649	0.826	
<b>Motorcycles</b>	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
<b>% Motorcycles</b>	0%	0%	0%	0%	0%	0%	0.2%	0%	0%	0.2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.1%
<b>Lights</b>	25	1	7	0	33	1	570	0	0	571	8	1	2	0	11	0	296	0	0	296	911	
<b>% Lights</b>	100%	100%	100%	0%	100%	100%	98.4%	0%	0%	98.4%	100%	100%	100%	0%	100%	0%	98.3%	0%	0%	98.3%	98.5%	
<b>Single-Unit Trucks</b>	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	4	
<b>% Single-Unit Trucks</b>	0%	0%	0%	0%	0%	0%	0.2%	0%	0%	0.2%	0%	0%	0%	0%	0%	0%	1.0%	0%	0%	1.0%	0.4%	
<b>Articulated Trucks</b>	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	2	0	0	2	9	
<b>% Articulated Trucks</b>	0%	0%	0%	0%	0%	0%	1.2%	0%	0%	1.2%	0%	0%	0%	0%	0%	0%	0.7%	0%	0%	0.7%	1.0%	
<b>Buses</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>% Buses</b>	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	

\*L: Left, R: Right, T: Thru, U: U-Turn

Ford Truck Plant Expansion - TMC

Wed Apr 29, 2026

AM Peak (Apr 29 2026 4:45AM - 5:45 AM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 1400570, Location: 38.289696, -85.512746

Provided by: United Consulting Engineers Inc.  
1625 North Post Road, Indianapolis, IN, 12345, US

[N] Old LaGrange Road

Total: 35

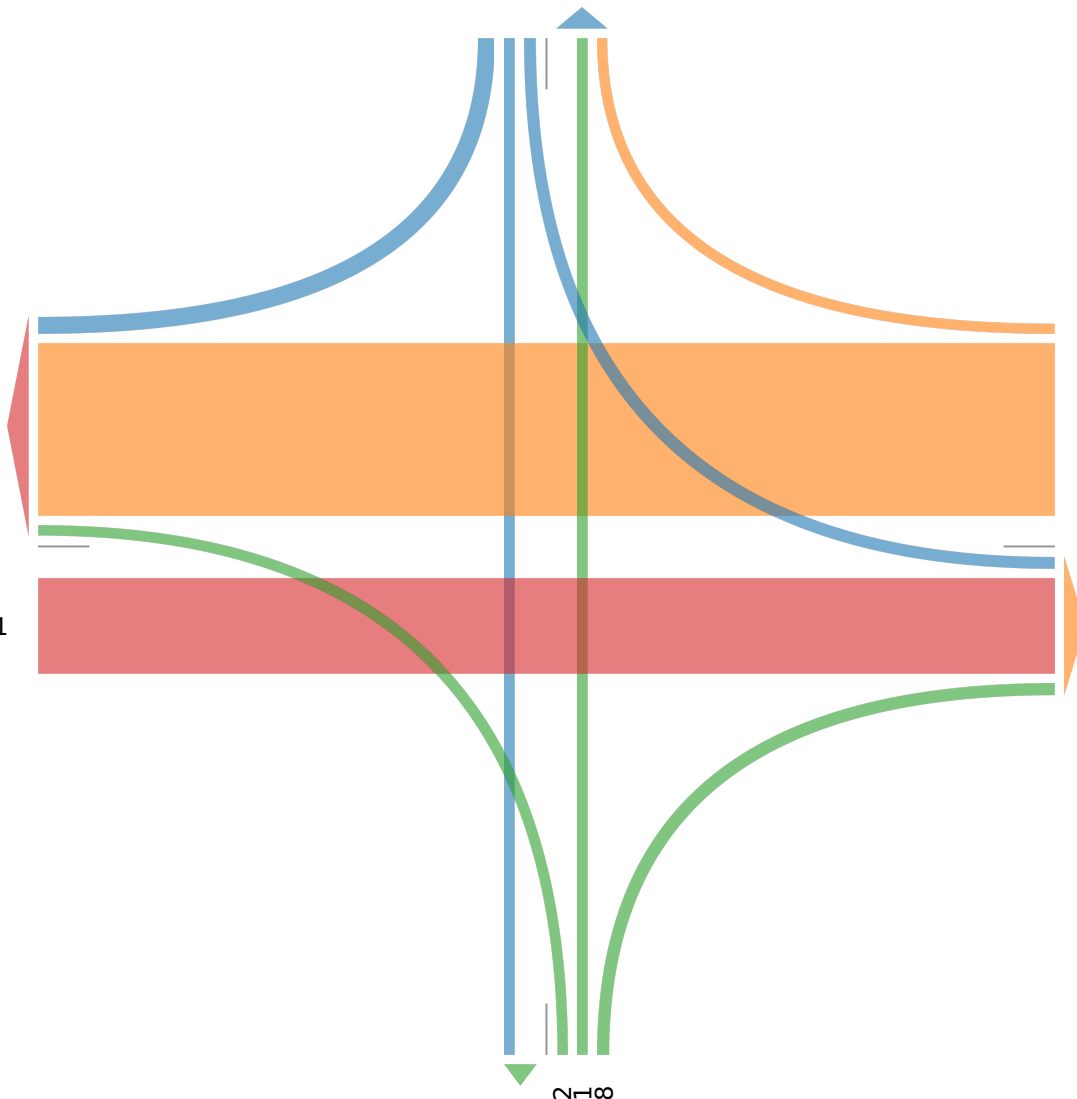
In: 33 Out: 2

25  
1

[W] Chamberlain Lane

Total: 907  
In: 301 Out: 606

301



1  
579

[E] Chamberlain Lane  
Out: 316 In: 580  
Total: 896

Out: 1 In: 11  
Total: 12  
[S] Old LaGrange Road

# Existing Volume Counts

## Chamberlain Lane & LaGrange Road

### Turning Movement Data

Start Time	Chamberlain Lane Eastbound					Chamberlain Lane Westbound					Lagrange Road Northbound					Lagrange Road Southbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
6:00 AM	4	6	26	0	36	40	7	0	0	47	30	24	15	0	69	2	74	5	0	81	233
6:15 AM	3	7	8	0	18	45	8	1	0	54	39	44	17	0	100	1	84	3	0	88	260
6:30 AM	11	10	22	0	43	57	21	0	0	78	52	51	23	0	126	1	90	17	0	108	355
6:45 AM	5	3	22	0	30	56	21	1	0	78	52	84	31	0	167	3	126	4	0	133	408
Hourly Total	23	26	78	0	127	198	57	2	0	257	173	203	86	0	462	7	374	29	0	410	1256
7:00 AM	7	10	28	0	45	88	22	0	0	110	28	80	42	0	150	4	130	7	0	141	446
7:15 AM	3	10	17	0	30	85	14	0	0	99	32	115	70	1	218	1	183	7	0	191	538
7:30 AM	6	18	16	0	40	122	13	0	0	135	34	127	80	0	241	4	181	3	0	188	604
7:45 AM	9	17	30	0	56	112	32	0	0	144	35	106	113	0	254	3	194	3	0	200	654
Hourly Total	25	55	91	0	171	407	81	0	0	488	129	428	305	1	863	12	688	20	0	720	2242
8:00 AM	12	22	23	0	57	122	18	0	0	140	29	125	104	2	260	11	161	3	0	175	632
8:15 AM	7	24	16	0	47	102	19	3	0	124	22	105	102	0	229	6	153	3	0	162	562
8:30 AM	11	26	12	0	49	89	19	1	0	109	29	101	87	0	217	4	148	4	0	156	531
8:45 AM	7	14	14	0	35	95	14	0	0	109	30	115	101	0	246	4	138	6	1	149	539
Hourly Total	37	86	65	0	188	408	70	4	0	482	110	446	394	2	952	25	600	16	1	642	2264
9:00 AM	22	26	16	0	64	85	32	1	0	118	21	104	83	2	210	6	129	10	1	146	538
9:15 AM	7	10	17	0	34	72	33	1	0	106	32	83	52	0	167	8	102	8	0	118	425
9:30 AM	12	14	18	0	44	69	18	1	0	88	23	99	78	0	200	6	98	10	0	114	446
9:45 AM	6	18	17	0	41	71	16	0	0	87	19	103	77	0	199	4	98	6	0	108	435
Hourly Total	47	68	68	0	183	297	99	3	0	399	95	389	290	2	776	24	427	34	1	486	1844
10:00 AM	9	20	11	0	40	66	23	1	0	90	19	94	45	0	158	2	91	7	0	100	388
10:15 AM	11	16	8	0	35	41	21	1	0	63	20	87	66	1	174	5	93	8	0	106	378
10:30 AM	8	12	20	0	40	61	24	0	0	85	24	96	65	0	185	8	113	6	0	127	437
10:45 AM	5	18	10	0	33	65	25	0	0	90	21	99	72	0	192	3	85	10	0	98	413
Hourly Total	33	66	49	0	148	233	93	2	0	328	84	376	248	1	709	18	382	31	0	431	1616
11:00 AM	19	14	16	0	49	64	23	2	0	89	26	83	79	0	188	10	115	7	0	132	458
11:15 AM	16	33	21	0	70	62	29	0	0	91	17	81	61	0	159	12	103	10	0	125	445
11:30 AM	13	22	18	0	53	69	55	2	0	126	22	124	90	0	236	5	115	9	0	129	544
11:45 AM	12	18	20	0	50	101	40	0	0	141	21	157	85	0	263	10	116	7	0	133	587
Hourly Total	60	87	75	0	222	296	147	4	0	447	86	445	315	0	846	37	449	33	0	519	2034
12:00 PM	31	15	27	0	73	76	29	1	0	106	29	145	106	0	280	7	127	21	0	155	614
12:15 PM	16	20	22	0	58	95	33	0	0	128	21	114	84	0	219	10	111	14	0	135	540
12:30 PM	16	16	25	0	57	86	13	0	0	99	26	108	85	1	220	7	108	8	0	123	499
12:45 PM	9	26	28	0	63	100	29	0	0	129	18	123	80	0	221	7	89	12	0	108	521
Hourly Total	72	77	102	0	251	357	104	1	0	462	94	490	355	1	940	31	435	55	0	521	2174
1:00 PM	13	21	11	0	45	48	39	1	0	88	29	106	70	0	205	5	98	5	0	108	446
1:15 PM	17	21	13	0	51	87	19	0	0	106	26	115	98	0	239	8	105	7	0	120	516
1:30 PM	8	12	18	0	38	70	25	0	0	95	33	131	91	0	255	10	75	10	0	95	483
1:45 PM	17	13	25	0	55	58	16	1	0	75	17	130	83	1	231	3	89	10	0	102	463

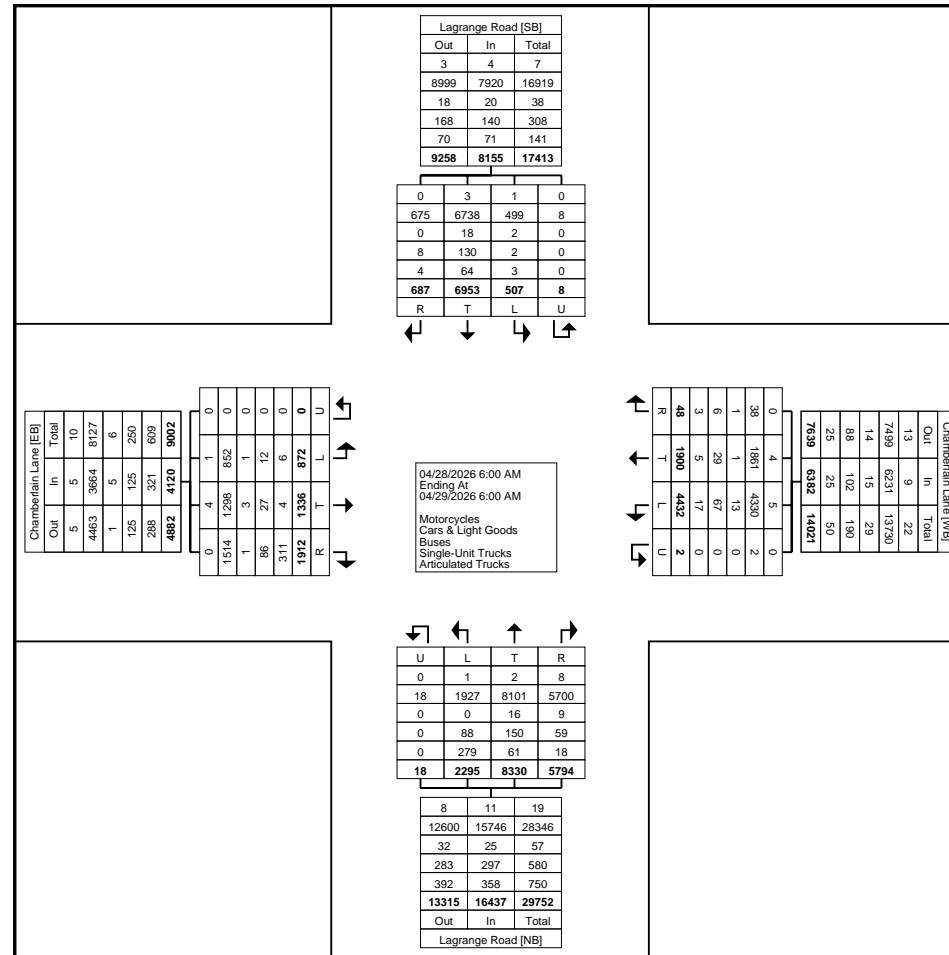
Hourly Total	55	67	67	0	189	263	99	2	0	364	105	482	342	1	930	26	367	32	0	425	1908
2:00 PM	15	19	20	0	54	48	19	1	1	69	32	120	58	0	210	6	111	8	2	127	460
2:15 PM	15	22	38	0	75	60	28	0	0	88	25	103	88	0	216	6	76	5	0	87	466
2:30 PM	13	22	26	0	61	68	23	1	0	92	29	155	77	0	261	4	118	7	0	129	543
2:45 PM	14	32	27	0	73	57	32	0	0	89	16	135	85	1	237	6	91	9	1	107	506
Hourly Total	57	95	111	0	263	233	102	2	1	338	102	513	308	1	924	22	396	29	3	450	1975
3:00 PM	12	25	46	0	83	65	18	0	0	83	23	139	103	0	265	3	101	10	0	114	545
3:15 PM	12	33	39	0	84	56	30	0	0	86	31	150	82	0	263	8	140	8	0	156	589
3:30 PM	19	28	56	0	103	59	28	0	0	87	19	185	135	0	339	3	85	10	0	98	627
3:45 PM	16	32	31	0	79	52	47	0	0	99	32	168	149	1	350	11	93	5	0	109	637
Hourly Total	59	118	172	0	349	232	123	0	0	355	105	642	469	1	1217	25	419	33	0	477	2398
4:00 PM	14	22	14	0	50	74	41	0	0	115	29	167	112	0	308	5	100	12	0	117	590
4:15 PM	17	23	33	0	73	61	25	1	0	87	44	157	124	0	325	9	111	11	1	132	617
4:30 PM	23	35	53	0	111	71	48	2	0	121	46	188	159	0	393	9	113	15	0	137	762
4:45 PM	27	24	51	0	102	83	48	0	0	131	53	208	144	0	405	8	104	26	0	138	776
Hourly Total	81	104	151	0	336	289	162	3	0	454	172	720	539	0	1431	31	428	64	1	524	2745
5:00 PM	27	50	94	0	171	71	62	0	0	133	65	190	123	1	379	7	118	27	0	152	835
5:15 PM	31	40	126	0	197	81	58	0	0	139	61	209	148	0	418	12	140	22	0	174	928
5:30 PM	12	22	39	0	73	77	31	0	0	108	30	218	127	0	375	8	121	24	0	153	709
5:45 PM	18	38	59	0	115	54	45	0	0	99	67	177	103	0	347	6	134	18	0	158	719
Hourly Total	88	150	318	0	556	283	196	0	0	479	223	794	501	1	1519	33	513	91	0	637	3191
6:00 PM	10	24	26	0	60	62	30	0	0	92	30	170	119	0	319	11	113	10	0	134	605
6:15 PM	11	21	20	0	52	60	24	0	0	84	39	143	111	0	293	20	111	11	0	142	571
6:30 PM	11	23	12	0	46	66	24	0	0	90	27	156	93	1	277	4	84	4	0	92	505
6:45 PM	2	3	2	0	7	59	3	0	0	62	6	117	122	1	246	23	129	0	0	152	467
Hourly Total	34	71	60	0	165	247	81	0	0	328	102	586	445	2	1135	58	437	25	0	520	2148
7:00 PM	0	0	0	0	0	66	0	4	0	70	0	130	103	0	233	7	95	0	0	102	405
7:15 PM	6	18	9	0	33	48	23	5	0	76	26	134	98	0	258	8	55	8	0	71	438
7:30 PM	16	16	7	0	39	39	17	2	0	58	16	110	69	0	195	15	52	11	0	78	370
7:45 PM	7	13	8	0	28	26	11	1	0	38	9	117	61	1	188	7	34	5	0	46	300
Hourly Total	29	47	24	0	100	179	51	12	0	242	51	491	331	1	874	37	236	24	0	297	1513
8:00 PM	8	18	11	0	37	32	26	0	0	58	24	111	72	0	207	13	52	2	0	67	369
8:15 PM	6	19	7	0	32	30	12	1	0	43	13	110	82	1	206	6	55	4	0	65	346
8:30 PM	0	19	5	0	24	35	22	0	0	57	12	104	60	1	177	6	55	3	0	64	322
8:45 PM	10	14	11	0	35	21	11	1	0	33	9	98	62	0	169	4	50	6	1	61	298
Hourly Total	24	70	34	0	128	118	71	2	0	191	58	423	276	2	759	29	212	15	1	257	1335
9:00 PM	18	10	7	0	35	31	19	0	0	50	11	83	81	0	175	9	56	7	0	72	332
9:15 PM	1	9	3	0	13	36	15	2	0	53	10	70	50	0	130	11	40	3	0	54	250
9:30 PM	2	11	7	0	20	19	6	1	0	26	7	69	38	0	114	3	31	2	0	36	196
9:45 PM	6	8	4	0	18	19	8	1	0	28	10	55	31	0	96	5	20	2	0	27	169
Hourly Total	27	38	21	0	86	105	48	4	0	157	38	277	200	0	515	28	147	14	0	189	947
10:00 PM	3	6	8	0	17	21	4	1	0	26	6	39	33	0	78	4	37	2	0	43	164
10:15 PM	2	1	2	0	5	19	5	0	0	24	1	39	19	0	59	9	37	0	0	46	134
10:30 PM	0	3	4	0	7	12	4	0	0	16	2	42	14	0	58	0	22	1	0	23	104
10:45 PM	3	5	4	0	12	9	4	1	0	14	13	32	24	0	69	10	14	2	0	26	121
Hourly Total	8	15	18	0	41	61	17	2	0	80	22	152	90	0	264	23	110	5	0	138	523
11:00 PM	4	5	8	0	17	9	5	0	0	14	5	29	13	0	47	0	14	1	0	15	93
11:15 PM	6	7	8	0	21	14	3	0	0	17	3	24	15	0	42	3	12	2	0	17	97
11:30 PM	3	6	4	0	13	12	6	0	0	18	7	24	18	0	49	0	10	2	0	12	92
11:45 PM	4	1	1	0	6	5	12	1	0	18	5	18	10	0	33	0	3	0	0	3	60
Hourly Total	17	19	21	0	57	40	26	1	0	67	20	95	56	0	171	3	39	5	0	47	342
12:00 AM	13	6	3	0	22	5	7	0	0	12	4	14	11	0	29	1	3	4	0	8	71

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Planning and Design

26-ZONE-0056

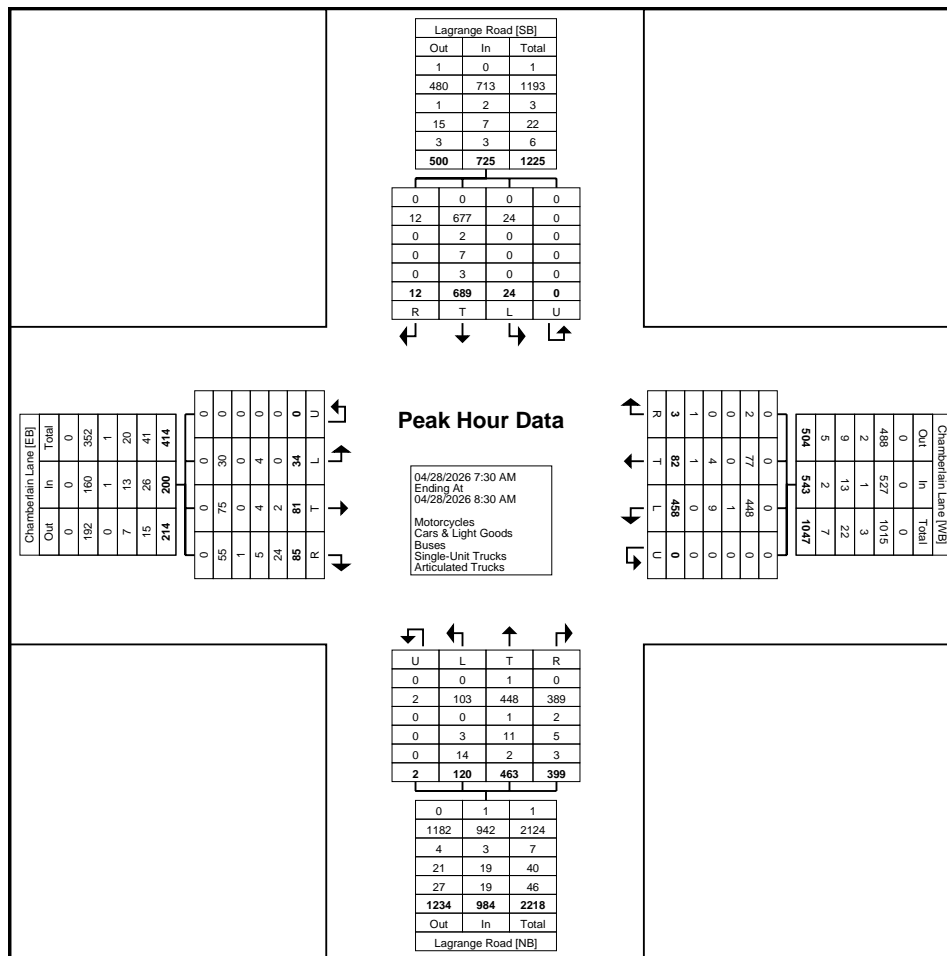
12:15 AM	8	5	2	0	15	6	13	0	0	19	4	9	7	0	20	11	7	4	0	22	76
12:30 AM	3	2	1	0	6	9	3	1	0	13	5	14	5	0	24	1	3	2	0	6	49
12:45 AM	2	1	4	0	7	6	3	0	0	9	3	8	9	0	20	1	3	2	0	6	42
Hourly Total	26	14	10	0	50	26	26	1	0	53	16	45	32	0	93	14	16	12	0	42	238
1:00 AM	0	0	3	0	3	3	1	0	0	4	4	8	5	0	17	5	0	1	0	6	30
1:15 AM	3	0	6	0	9	3	0	2	0	5	4	11	3	0	18	1	5	0	0	6	38
1:30 AM	2	1	7	0	10	4	2	0	0	6	5	10	3	0	18	3	3	0	0	6	40
1:45 AM	1	2	9	0	12	3	2	0	1	6	6	10	4	0	20	0	3	0	0	3	41
Hourly Total	6	3	25	0	34	13	5	2	1	21	19	39	15	0	73	9	11	1	0	21	149
2:00 AM	2	1	6	0	9	6	0	0	0	6	4	9	2	0	15	2	10	0	0	12	42
2:15 AM	0	0	0	0	0	4	0	1	0	5	0	4	4	0	8	2	3	0	0	5	18
2:30 AM	0	0	0	0	0	6	0	0	0	6	0	5	5	1	11	2	7	0	0	9	26
2:45 AM	0	0	6	0	6	2	3	0	0	5	9	3	4	0	16	0	6	2	0	8	35
Hourly Total	2	1	12	0	15	18	3	1	0	22	13	21	15	1	50	6	26	2	0	34	121
3:00 AM	1	4	14	0	19	1	2	0	0	3	2	6	1	0	9	1	4	0	0	5	36
3:15 AM	0	0	8	0	8	2	1	0	0	3	4	5	2	0	11	2	5	0	0	7	29
3:30 AM	0	1	8	0	9	2	1	0	0	3	5	4	2	0	11	1	5	1	0	7	30
3:45 AM	0	0	0	0	0	6	0	0	0	6	0	5	12	1	18	2	10	1	0	13	37
Hourly Total	1	5	30	0	36	11	4	0	0	15	11	20	17	1	49	6	24	2	0	32	132
4:00 AM	6	4	10	0	20	2	14	0	0	16	10	10	8	0	28	0	9	4	0	13	77
4:15 AM	5	3	22	0	30	4	2	0	0	6	20	13	6	0	39	0	12	3	1	16	91
4:30 AM	7	9	50	0	66	12	3	0	0	15	18	20	11	0	49	1	30	2	0	33	163
4:45 AM	10	10	62	0	82	15	21	0	0	36	51	25	20	0	96	0	21	19	0	40	254
Hourly Total	28	26	144	0	198	33	40	0	0	73	99	68	45	0	212	1	72	28	1	102	585
5:00 AM	12	11	53	0	76	16	18	0	0	34	86	18	17	0	121	0	26	8	0	34	265
5:15 AM	15	14	87	0	116	21	68	0	0	89	78	45	40	0	163	1	37	23	0	61	429
5:30 AM	6	1	16	0	23	27	71	0	0	98	105	60	40	0	205	1	41	34	0	76	402
5:45 AM	0	2	10	0	12	21	38	0	0	59	99	62	23	0	184	0	41	22	0	63	318
Hourly Total	33	28	166	0	227	85	195	0	0	280	368	185	120	0	673	2	145	87	0	234	1414
Grand Total	872	1336	1912	0	4120	4432	1900	48	2	6382	2295	8330	5794	18	16437	507	6953	687	8	8155	35094
Approach %	21.2	32.4	46.4	0.0	-	69.4	29.8	0.8	0.0	-	14.0	50.7	35.2	0.1	-	6.2	85.3	8.4	0.1	-	-
Total %	2.5	3.8	5.4	0.0	11.7	12.6	5.4	0.1	0.0	18.2	6.5	23.7	16.5	0.1	46.8	1.4	19.8	2.0	0.0	23.2	-
Motorcycles	1	4	0	0	5	5	4	0	0	9	1	2	8	0	11	1	3	0	0	4	29
% Motorcycles	0.1	0.3	0.0	-	0.1	0.1	0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.1
Cars & Light Goods	852	1298	1514	0	3664	4330	1861	38	2	6231	1927	8101	5700	18	15746	499	6738	675	8	7920	33561
% Cars & Light Goods	97.7	97.2	79.2	-	88.9	97.7	97.9	79.2	100.0	97.6	84.0	97.3	98.4	100.0	95.8	98.4	96.9	98.3	100.0	97.1	95.6
Buses	1	3	1	0	5	13	1	1	0	15	0	16	9	0	25	2	18	0	0	20	65
% Buses	0.1	0.2	0.1	-	0.1	0.3	0.1	2.1	0.0	0.2	0.0	0.2	0.2	0.0	0.2	0.4	0.3	0.0	0.0	0.2	0.2
Single-Unit Trucks	12	27	86	0	125	67	29	6	0	102	88	150	59	0	297	2	130	8	0	140	664
% Single-Unit Trucks	1.4	2.0	4.5	-	3.0	1.5	1.5	12.5	0.0	1.6	3.8	1.8	1.0	0.0	1.8	0.4	1.9	1.2	0.0	1.7	1.9
Articulated Trucks	6	4	311	0	321	17	5	3	0	25	279	61	18	0	358	3	64	4	0	71	775
% Articulated Trucks	0.7	0.3	16.3	-	7.8	0.4	0.3	6.3	0.0	0.4	12.2	0.7	0.3	0.0	2.2	0.6	0.9	0.6	0.0	0.9	2.2



Turning Movement Data Plot

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

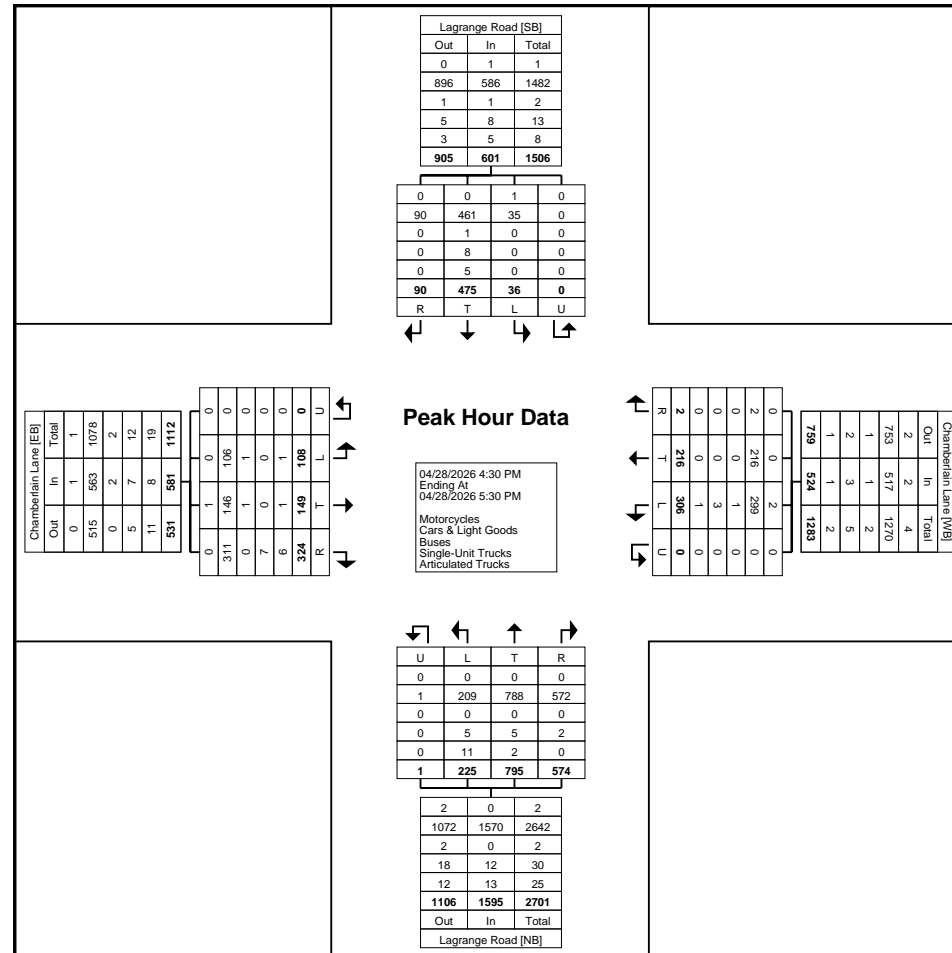
Start Time	Chamberlain Lane Eastbound					Chamberlain Lane Westbound					Lagrange Road Northbound					Lagrange Road Southbound					Int. Total	
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total		
7:30 AM	6	18	16	0	40	122	13	0	0	135	34	127	80	0	241	4	181	3	0	188	604	
7:45 AM	9	17	30	0	56	112	32	0	0	144	35	106	113	0	254	3	194	3	0	200	654	
8:00 AM	12	22	23	0	57	122	18	0	0	140	29	125	104	2	260	11	161	3	0	175	632	
8:15 AM	7	24	16	0	47	102	19	3	0	124	22	105	102	0	229	6	153	3	0	162	562	
Total	34	81	85	0	200	458	82	3	0	543	120	463	399	2	984	24	689	12	0	725	2452	
Approach %	17.0	40.5	42.5	0.0	-	84.3	15.1	0.6	0.0	-	12.2	47.1	40.5	0.2	-	3.3	95.0	1.7	0.0	-	-	
Total %	1.4	3.3	3.5	0.0	8.2	18.7	3.3	0.1	0.0	22.1	4.9	18.9	16.3	0.1	40.1	1.0	28.1	0.5	0.0	29.6	-	
PHF	0.708	0.844	0.708	0.000	0.877	0.939	0.641	0.250	0.000	0.943	0.857	0.911	0.883	0.250	0.946	0.545	0.888	1.000	0.000	0.906	0.937	
Motorcycles	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
% Motorcycles	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.0	-	0.0	0.0	
Cars & Light Goods	30	75	55	0	160	448	77	2	0	527	103	448	389	2	942	24	677	12	0	713	2342	
% Cars & Light Goods	88.2	92.6	64.7	-	80.0	97.8	93.9	66.7	-	97.1	85.8	96.8	97.5	100.0	95.7	100.0	98.3	100.0	-	98.3	95.5	
Buses	0	0	1	0	1	1	0	0	0	1	0	1	2	0	3	0	2	0	0	2	7	
% Buses	0.0	0.0	1.2	-	0.5	0.2	0.0	0.0	-	0.2	0.0	0.2	0.5	0.0	0.3	0.0	0.3	0.0	-	0.3	0.3	
Single-Unit Trucks	4	4	5	0	13	9	4	0	0	13	3	11	5	0	19	0	7	0	0	7	52	
% Single-Unit Trucks	11.8	4.9	5.9	-	6.5	2.0	4.9	0.0	-	2.4	2.5	2.4	1.3	0.0	1.9	0.0	1.0	0.0	-	1.0	2.1	
Articulated Trucks	0	2	24	0	26	0	1	1	0	2	14	2	3	0	19	0	3	0	0	3	50	
% Articulated Trucks	0.0	2.5	28.2	-	13.0	0.0	1.2	33.3	-	0.4	11.7	0.4	0.8	0.0	1.9	0.0	0.4	0.0	-	0.4	2.0	



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

### Turning Movement Peak Hour Data (4:30 PM)

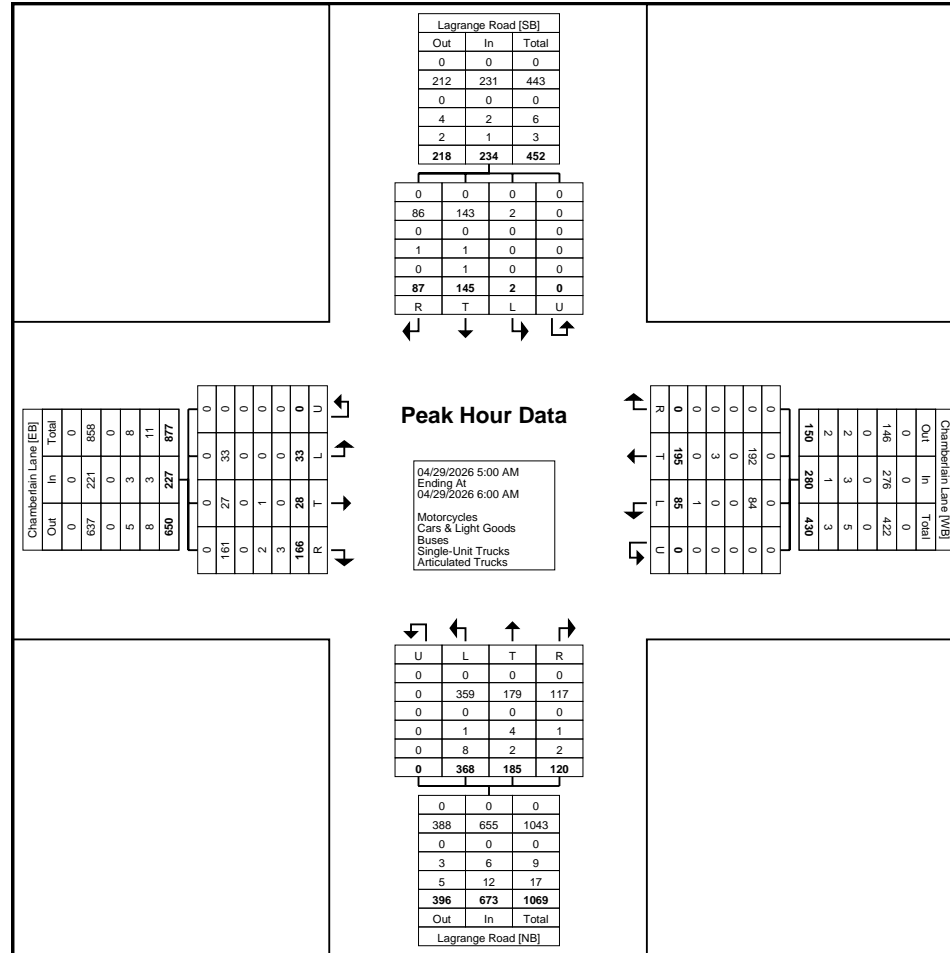
Start Time	Chamberlain Lane Eastbound					Chamberlain Lane Westbound					Lagrange Road Northbound					Lagrange Road Southbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
4:30 PM	23	35	53	0	111	71	48	2	0	121	46	188	159	0	393	9	113	15	0	137	762
4:45 PM	27	24	51	0	102	83	48	0	0	131	53	208	144	0	405	8	104	26	0	138	776
5:00 PM	27	50	94	0	171	71	62	0	0	133	65	190	123	1	379	7	118	27	0	152	835
5:15 PM	31	40	126	0	197	81	58	0	0	139	61	209	148	0	418	12	140	22	0	174	928
Total	108	149	324	0	581	306	216	2	0	524	225	795	574	1	1595	36	475	90	0	601	3301
Approach %	18.6	25.6	55.8	0.0	-	58.4	41.2	0.4	0.0	-	14.1	49.8	36.0	0.1	-	6.0	79.0	15.0	0.0	-	-
Total %	3.3	4.5	9.8	0.0	17.6	9.3	6.5	0.1	0.0	15.9	6.8	24.1	17.4	0.0	48.3	1.1	14.4	2.7	0.0	18.2	-
PHF	0.871	0.745	0.643	0.000	0.737	0.922	0.871	0.250	0.000	0.942	0.865	0.951	0.903	0.250	0.954	0.750	0.848	0.833	0.000	0.864	0.889
Motorcycles	0	1	0	0	1	2	0	0	0	2	0	0	0	0	0	1	0	0	0	1	4
% Motorcycles	0.0	0.7	0.0	-	0.2	0.7	0.0	0.0	-	0.4	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	-	0.2	0.1
Cars & Light Goods	106	146	311	0	563	299	216	2	0	517	209	788	572	1	1570	35	461	90	0	586	3236
% Cars & Light Goods	98.1	98.0	96.0	-	96.9	97.7	100.0	100.0	-	98.7	92.9	99.1	99.7	100.0	98.4	97.2	97.1	100.0	-	97.5	98.0
Buses	1	1	0	0	2	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	4
% Buses	0.9	0.7	0.0	-	0.3	0.3	0.0	0.0	-	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	-	0.2	0.1
Single-Unit Trucks	0	0	7	0	7	3	0	0	0	3	5	5	2	0	12	0	8	0	0	8	30
% Single-Unit Trucks	0.0	0.0	2.2	-	1.2	1.0	0.0	0.0	-	0.6	2.2	0.6	0.3	0.0	0.8	0.0	1.7	0.0	-	1.3	0.9
Articulated Trucks	1	1	6	0	8	1	0	0	0	1	11	2	0	0	13	0	5	0	0	5	27
% Articulated Trucks	0.9	0.7	1.9	-	1.4	0.3	0.0	0.0	-	0.2	4.9	0.3	0.0	0.0	0.8	0.0	1.1	0.0	-	0.8	0.8



Turning Movement Peak Hour Data Plot (4:30 PM)

### Turning Movement Peak Hour Data (5:00 AM)

Start Time	Chamberlain Lane Eastbound					Chamberlain Lane Westbound					Lagrange Road Northbound					Lagrange Road Southbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
5:00 AM	12	11	53	0	76	16	18	0	0	34	86	18	17	0	121	0	26	8	0	34	265
5:15 AM	15	14	87	0	116	21	68	0	0	89	78	45	40	0	163	1	37	23	0	61	429
5:30 AM	6	1	16	0	23	27	71	0	0	98	105	60	40	0	205	1	41	34	0	76	402
5:45 AM	0	2	10	0	12	21	38	0	0	59	99	62	23	0	184	0	41	22	0	63	318
Total	33	28	166	0	227	85	195	0	0	280	368	185	120	0	673	2	145	87	0	234	1414
Approach %	14.5	12.3	73.1	0.0	-	30.4	69.6	0.0	0.0	-	54.7	27.5	17.8	0.0	-	0.9	62.0	37.2	0.0	-	-
Total %	2.3	2.0	11.7	0.0	16.1	6.0	13.8	0.0	0.0	19.8	26.0	13.1	8.5	0.0	47.6	0.1	10.3	6.2	0.0	16.5	-
PHF	0.550	0.500	0.477	0.000	0.489	0.787	0.687	0.000	0.000	0.714	0.876	0.746	0.750	0.000	0.821	0.500	0.884	0.640	0.000	0.770	0.824
Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Motorcycles	0.0	0.0	0.0	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Cars & Light Goods	33	27	161	0	221	84	192	0	0	276	359	179	117	0	655	2	143	86	0	231	1383
% Cars & Light Goods	100.0	96.4	97.0	-	97.4	98.8	98.5	-	-	98.6	97.6	96.8	97.5	-	97.3	100.0	98.6	98.9	-	98.7	97.8
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0.0	0.0	0.0	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	1	2	0	3	0	3	0	0	3	1	4	1	0	6	0	1	1	0	2	14
% Single-Unit Trucks	0.0	3.6	1.2	-	1.3	0.0	1.5	-	-	1.1	0.3	2.2	0.8	-	0.9	0.0	0.7	1.1	-	0.9	1.0
Articulated Trucks	0	0	3	0	3	1	0	0	0	1	8	2	2	0	12	0	1	0	0	1	17
% Articulated Trucks	0.0	0.0	1.8	-	1.3	1.2	0.0	-	-	0.4	2.2	1.1	1.7	-	1.8	0.0	0.7	0.0	-	0.4	1.2



Turning Movement Peak Hour Data Plot (5:00 AM)

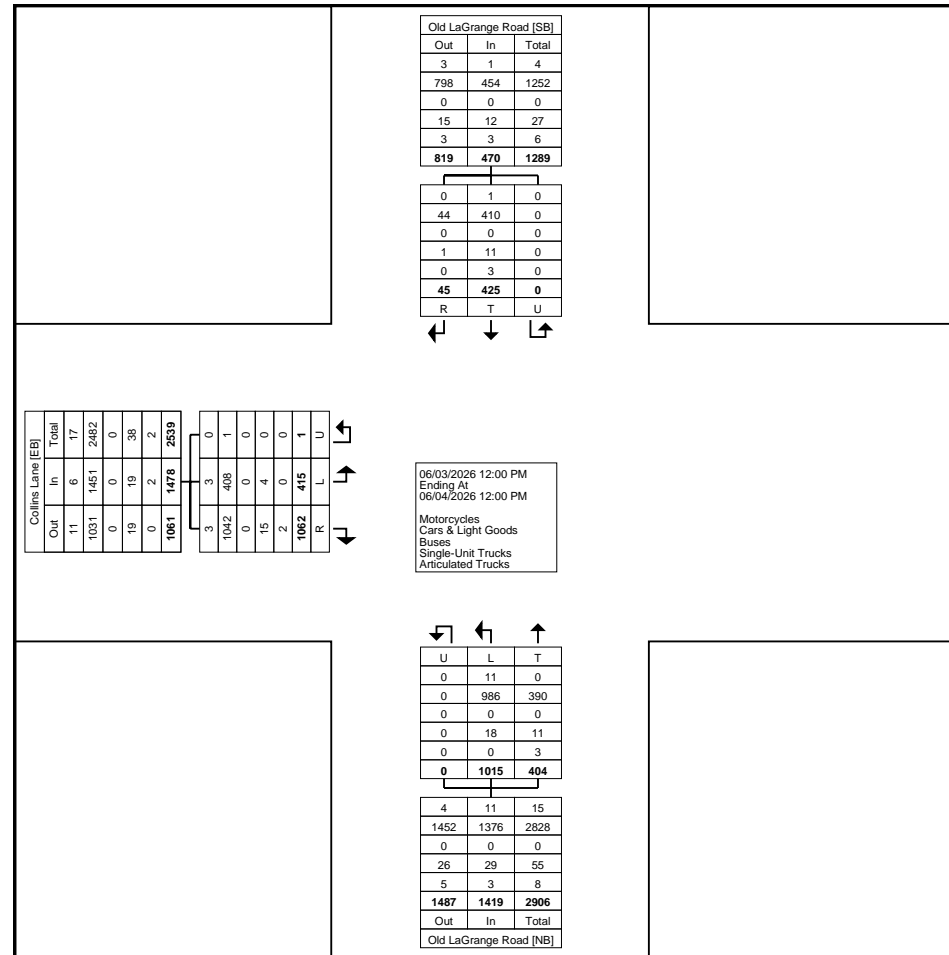
Existing Volume Counts  
Collins Lane & Old LaGrange Road

### Turning Movement Data

Start Time	Collins Lane Eastbound				Old LaGrange Road Northbound				Old LaGrange Road Southbound				Int. Total
	Left	Right	U-Turn	App. Total	Left	Thru	U-Turn	App. Total	Thru	Right	U-Turn	App. Total	
12:00 PM	2	7	0	9	12	7	0	19	5	3	0	8	36
12:15 PM	1	14	0	15	3	4	0	7	3	0	0	3	25
12:30 PM	2	13	0	15	8	8	0	16	9	0	0	9	40
12:45 PM	1	7	0	8	6	8	0	14	10	1	0	11	33
Hourly Total	6	41	0	47	29	27	0	56	27	4	0	31	134
1:00 PM	2	11	0	13	7	5	0	12	8	0	0	8	33
1:15 PM	0	16	0	16	7	4	0	11	8	0	0	8	35
1:30 PM	6	13	0	19	8	11	0	19	4	1	0	5	43
1:45 PM	3	14	0	17	13	6	0	19	10	0	0	10	46
Hourly Total	11	54	0	65	35	26	0	61	30	1	0	31	157
2:00 PM	4	27	0	31	5	4	0	9	6	0	0	6	46
2:15 PM	2	11	0	13	9	6	0	15	9	2	0	11	39
2:30 PM	1	20	0	21	11	7	0	18	5	0	0	5	44
2:45 PM	14	19	0	33	7	5	0	12	12	0	0	12	57
Hourly Total	21	77	0	98	32	22	0	54	32	2	0	34	186
3:00 PM	13	23	0	36	4	8	0	12	7	0	0	7	55
3:15 PM	8	30	0	38	8	9	0	17	7	0	0	7	62
3:30 PM	18	31	0	49	11	13	0	24	10	0	0	10	83
3:45 PM	12	25	0	37	11	8	0	19	9	1	0	10	66
Hourly Total	51	109	0	160	34	38	0	72	33	1	0	34	266
4:00 PM	11	38	0	49	11	5	0	16	5	2	0	7	72
4:15 PM	10	15	0	25	7	7	0	14	7	2	0	9	48
4:30 PM	42	36	0	78	17	4	0	21	9	2	0	11	110
4:45 PM	16	36	0	52	37	9	0	46	9	2	0	11	109
Hourly Total	79	125	0	204	72	25	0	97	30	8	0	38	339
5:00 PM	42	38	0	80	49	10	0	59	5	2	0	7	146
5:15 PM	29	45	0	74	65	15	0	80	7	1	0	8	162
5:30 PM	21	33	0	54	74	14	0	88	3	1	0	4	146
5:45 PM	8	25	0	33	56	15	0	71	3	0	0	3	107
Hourly Total	100	141	0	241	244	54	0	298	18	4	0	22	561
6:00 PM	13	14	0	27	33	8	0	41	8	1	0	9	77
6:15 PM	10	16	0	26	24	7	0	31	7	0	0	7	64
6:30 PM	3	12	0	15	18	3	0	21	4	0	0	4	40
6:45 PM	3	10	0	13	9	2	0	11	9	0	0	9	33
Hourly Total	29	52	0	81	84	20	0	104	28	1	0	29	214
7:00 PM	0	12	0	12	10	3	0	13	4	1	0	5	30
7:15 PM	0	7	0	7	10	2	0	12	15	0	0	15	34
7:30 PM	0	13	0	13	10	0	0	10	8	0	0	8	31
7:45 PM	0	13	0	13	8	1	0	9	10	0	0	10	32

Hourly Total	0	45	0	45	38	6	0	44	37	1	0	38	127
8:00 PM	1	16	0	17	12	1	0	13	7	0	0	7	37
8:15 PM	2	5	0	7	3	8	0	11	4	4	0	8	26
8:30 PM	0	6	0	6	4	1	0	5	4	0	0	4	15
8:45 PM	1	7	0	8	8	3	0	11	5	1	0	6	25
Hourly Total	4	34	0	38	27	13	0	40	20	5	0	25	103
9:00 PM	0	4	0	4	9	2	0	11	3	1	0	4	19
9:15 PM	1	2	0	3	4	1	0	5	3	0	0	3	11
9:30 PM	1	4	0	5	3	2	0	5	1	0	0	1	11
9:45 PM	0	3	0	3	0	0	0	0	2	0	0	2	5
Hourly Total	2	13	0	15	16	5	0	21	9	1	0	10	46
10:00 PM	0	2	0	2	1	1	0	2	1	0	0	1	5
10:15 PM	1	0	0	1	3	0	0	3	2	0	0	2	6
10:30 PM	0	0	0	0	5	1	0	6	8	0	0	8	14
10:45 PM	1	6	0	7	3	1	0	4	4	0	0	4	15
Hourly Total	2	8	0	10	12	3	0	15	15	0	0	15	40
11:00 PM	1	2	0	3	0	0	0	0	1	0	0	1	4
11:15 PM	0	3	0	3	0	5	0	5	0	0	0	0	8
11:30 PM	0	0	0	0	0	1	0	1	2	1	0	3	4
11:45 PM	0	1	0	1	1	1	0	2	1	2	0	3	6
Hourly Total	1	6	0	7	1	7	0	8	4	3	0	7	22
12:00 AM	3	1	1	5	2	1	0	3	1	1	0	2	10
12:15 AM	0	2	0	2	4	0	0	4	1	0	0	1	7
12:30 AM	0	1	0	1	0	0	0	0	1	0	0	1	2
12:45 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
Hourly Total	3	4	1	8	7	1	0	8	3	1	0	4	20
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 AM	0	2	0	2	0	0	0	0	2	0	0	2	4
1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 AM	0	1	0	1	0	0	0	0	1	0	0	1	2
Hourly Total	0	3	0	3	0	0	0	0	3	0	0	3	6
2:00 AM	0	3	0	3	1	0	0	1	0	1	0	1	5
2:15 AM	0	2	0	2	0	0	0	0	0	0	0	0	2
2:30 AM	0	2	0	2	2	0	0	2	0	0	0	0	4
2:45 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
Hourly Total	0	7	0	7	4	0	0	4	0	1	0	1	12
3:00 AM	1	1	0	2	0	0	0	0	0	0	0	0	2
3:15 AM	0	1	0	1	1	0	0	1	6	0	0	6	8
3:30 AM	0	3	0	3	0	0	0	0	2	0	0	2	5
3:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	1	5	0	6	1	0	0	1	8	0	0	8	15
4:00 AM	3	5	0	8	3	0	0	3	1	0	0	1	12
4:15 AM	1	6	0	7	1	0	0	1	0	0	0	0	8
4:30 AM	2	2	0	4	7	0	0	7	0	0	0	0	11
4:45 AM	2	10	0	12	2	0	0	2	0	0	0	0	14
Hourly Total	8	23	0	31	13	0	0	13	1	0	0	1	45
5:00 AM	2	6	0	8	23	0	0	23	0	1	0	1	32
5:15 AM	0	7	0	7	27	2	0	29	1	0	0	1	37
5:30 AM	4	2	0	6	48	16	0	64	0	1	0	1	71
5:45 AM	0	12	0	12	76	25	0	101	1	0	0	1	114
Hourly Total	6	27	0	33	174	43	0	217	2	2	0	4	254
6:00 AM	1	4	0	5	11	4	0	15	2	0	0	2	22

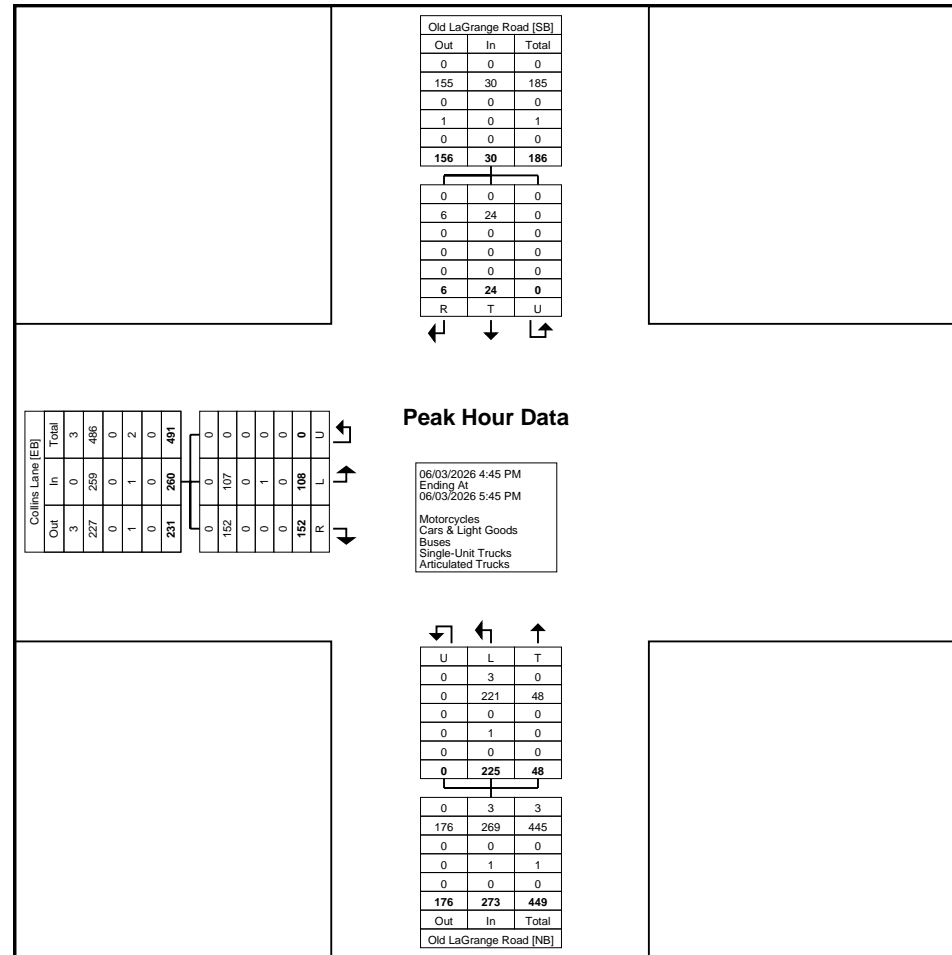
6:15 AM	4	1	0	5	8	0	0	8	0	0	0	0	13
6:30 AM	3	3	0	6	10	1	0	11	0	0	0	0	17
6:45 AM	1	1	0	2	7	2	0	9	5	0	0	5	16
Hourly Total	9	9	0	18	36	7	0	43	7	0	0	7	68
7:00 AM	0	3	0	3	1	4	0	5	1	0	0	1	9
7:15 AM	1	6	0	7	3	6	0	9	2	1	0	3	19
7:30 AM	3	10	0	13	10	5	0	15	5	0	0	5	33
7:45 AM	2	19	0	21	11	5	0	16	5	1	0	6	43
Hourly Total	6	38	0	44	25	20	0	45	13	2	0	15	104
8:00 AM	3	10	0	13	8	8	0	16	12	0	0	12	41
8:15 AM	5	18	0	23	7	7	0	14	5	1	0	6	43
8:30 AM	4	14	0	18	5	8	0	13	6	0	0	6	37
8:45 AM	3	11	0	14	5	9	0	14	2	1	0	3	31
Hourly Total	15	53	0	68	25	32	0	57	25	2	0	27	152
9:00 AM	28	39	0	67	10	1	0	11	7	0	0	7	85
9:15 AM	5	10	0	15	6	5	0	11	4	0	0	4	30
9:30 AM	3	11	0	14	12	4	0	16	5	0	0	5	35
9:45 AM	3	13	0	16	9	3	0	12	8	0	0	8	36
Hourly Total	39	73	0	112	37	13	0	50	24	0	0	24	186
10:00 AM	1	8	0	9	8	4	0	12	8	1	0	9	30
10:15 AM	4	7	0	11	7	2	0	9	6	2	0	8	28
10:30 AM	5	10	0	15	6	12	0	18	3	0	0	3	36
10:45 AM	3	19	0	22	10	4	0	14	6	2	0	8	44
Hourly Total	13	44	0	57	31	22	0	53	23	5	0	28	138
11:00 AM	1	16	0	17	11	3	0	14	6	0	0	6	37
11:15 AM	5	15	0	20	7	7	0	14	9	0	0	9	43
11:30 AM	2	15	0	17	12	4	0	16	8	1	0	9	42
11:45 AM	1	25	0	26	8	6	0	14	10	0	0	10	50
Hourly Total	9	71	0	80	38	20	0	58	33	1	0	34	172
Grand Total	415	1062	1	1478	1015	404	0	1419	425	45	0	470	3367
Approach %	28.1	71.9	0.1	-	71.5	28.5	0.0	-	90.4	9.6	0.0	-	-
Total %	12.3	31.5	0.0	43.9	30.1	12.0	0.0	42.1	12.6	1.3	0.0	14.0	-
Motorcycles	3	3	0	6	11	0	0	11	1	0	0	1	18
% Motorcycles	0.7	0.3	0.0	0.4	1.1	0.0	-	0.8	0.2	0.0	-	0.2	0.5
Cars & Light Goods	408	1042	1	1451	986	390	0	1376	410	44	0	454	3281
% Cars & Light Goods	98.3	98.1	100.0	98.2	97.1	96.5	-	97.0	96.5	97.8	-	96.6	97.4
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	4	15	0	19	18	11	0	29	11	1	0	12	60
% Single-Unit Trucks	1.0	1.4	0.0	1.3	1.8	2.7	-	2.0	2.6	2.2	-	2.6	1.8
Articulated Trucks	0	2	0	2	0	3	0	3	3	0	0	3	8
% Articulated Trucks	0.0	0.2	0.0	0.1	0.0	0.7	-	0.2	0.7	0.0	-	0.6	0.2



Turning Movement Data Plot

### Turning Movement Peak Hour Data (4:45 PM)

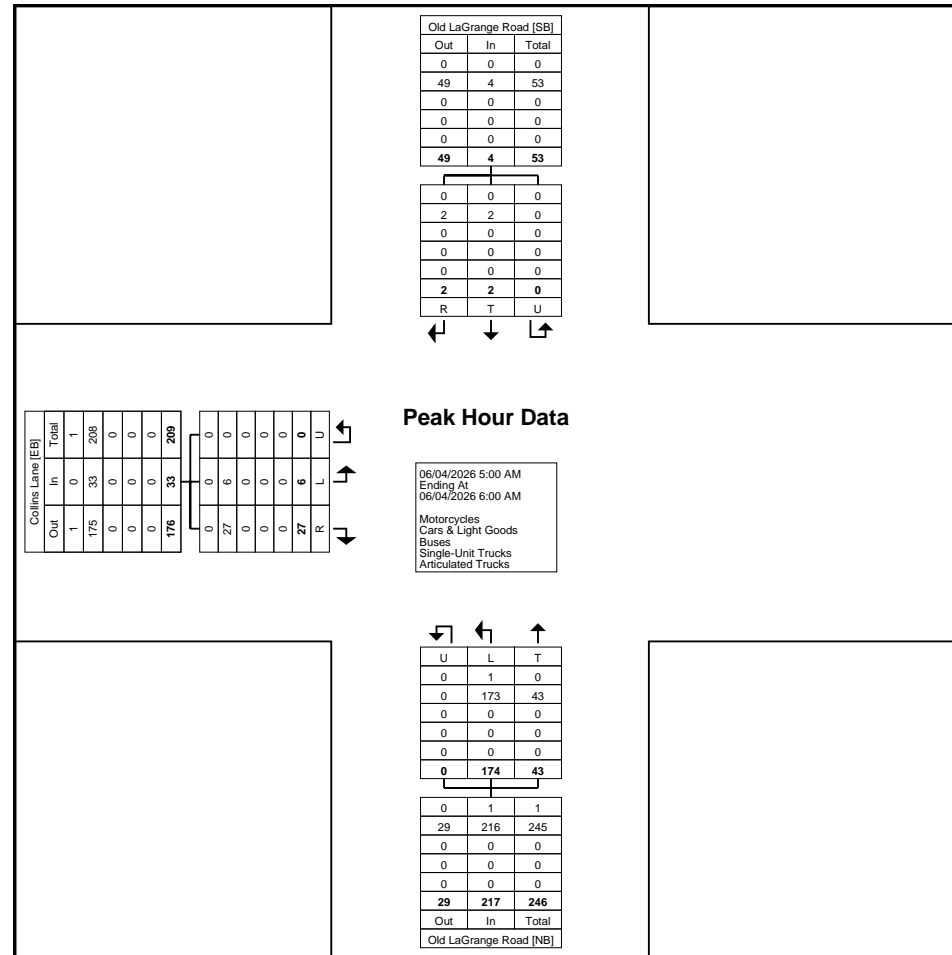
Start Time	Collins Lane Eastbound				Old LaGrange Road Northbound				Old LaGrange Road Southbound				Int. Total
	Left	Right	U-Turn	App. Total	Left	Thru	U-Turn	App. Total	Thru	Right	U-Turn	App. Total	
4:45 PM	16	36	0	52	37	9	0	46	9	2	0	11	109
5:00 PM	42	38	0	80	49	10	0	59	5	2	0	7	146
5:15 PM	29	45	0	74	65	15	0	80	7	1	0	8	162
5:30 PM	21	33	0	54	74	14	0	88	3	1	0	4	146
Total	108	152	0	260	225	48	0	273	24	6	0	30	563
Approach %	41.5	58.5	0.0	-	82.4	17.6	0.0	-	80.0	20.0	0.0	-	-
Total %	19.2	27.0	0.0	46.2	40.0	8.5	0.0	48.5	4.3	1.1	0.0	5.3	-
PHF	0.643	0.844	0.000	0.813	0.760	0.800	0.000	0.776	0.667	0.750	0.000	0.682	0.869
Motorcycles	0	0	0	0	3	0	0	3	0	0	0	0	3
% Motorcycles	0.0	0.0	-	0.0	1.3	0.0	-	1.1	0.0	0.0	-	0.0	0.5
Cars & Light Goods	107	152	0	259	221	48	0	269	24	6	0	30	558
% Cars & Light Goods	99.1	100.0	-	99.6	98.2	100.0	-	98.5	100.0	100.0	-	100.0	99.1
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	1	0	0	1	1	0	0	1	0	0	0	0	2
% Single-Unit Trucks	0.9	0.0	-	0.4	0.4	0.0	-	0.4	0.0	0.0	-	0.0	0.4
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
% Articulated Trucks	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0



Turning Movement Peak Hour Data Plot (4:45 PM)

### Turning Movement Peak Hour Data (5:00 AM)

Start Time	Collins Lane Eastbound				Old LaGrange Road Northbound				Old LaGrange Road Southbound				Int. Total
	Left	Right	U-Turn	App. Total	Left	Thru	U-Turn	App. Total	Thru	Right	U-Turn	App. Total	
5:00 AM	2	6	0	8	23	0	0	23	0	1	0	1	32
5:15 AM	0	7	0	7	27	2	0	29	1	0	0	1	37
5:30 AM	4	2	0	6	48	16	0	64	0	1	0	1	71
5:45 AM	0	12	0	12	76	25	0	101	1	0	0	1	114
Total	6	27	0	33	174	43	0	217	2	2	0	4	254
Approach %	18.2	81.8	0.0	-	80.2	19.8	0.0	-	50.0	50.0	0.0	-	-
Total %	2.4	10.6	0.0	13.0	68.5	16.9	0.0	85.4	0.8	0.8	0.0	1.6	-
PHF	0.375	0.563	0.000	0.688	0.572	0.430	0.000	0.537	0.500	0.500	0.000	1.000	0.557
Motorcycles	0	0	0	0	1	0	0	1	0	0	0	0	1
% Motorcycles	0.0	0.0	-	0.0	0.6	0.0	-	0.5	0.0	0.0	-	0.0	0.4
Cars & Light Goods	6	27	0	33	173	43	0	216	2	2	0	4	253
% Cars & Light Goods	100.0	100.0	-	100.0	99.4	100.0	-	99.5	100.0	100.0	-	100.0	99.6
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
% Single-Unit Trucks	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
% Articulated Trucks	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0



Turning Movement Peak Hour Data Plot (5:00 AM)

# Appendix D

## Trip Generation

# Ford Employee Headcounts

**KTP Current Employee Count Body and Paint Shop**

..	Count (Total)	Count (Shift)	Comment
<b>Body Shop</b>			<b>(2 shift pattern with current state 5x8's).</b>
Salary Staff	37	19	
Operators	327	164	262 * 25% absenteeism Coverage = 65 (327 Total)
Maintenance	106	53	
MP&L	32	16	
<b>Sub-Total</b>	<b>502</b>	<b>251</b>	
<b>Paint Shop</b>			<b>(3 crew pattern with current state).</b>
Salary Staff	30	15	
Operators	274	137	219 * 25% absenteeism coverage = 55 (274 Total)
Maintenance	67	34	
MP&L	3	2	
<b>Sub-Total</b>	<b>374</b>	<b>187</b>	
<b>Total</b>	<b>876</b>	<b>438</b>	

Existing Lot                    384  
 Parking Lot                    150  
 Avaiavblity New               234  
  
    514  
    280

**Parking Capacity**

Existing Total Parking Stalls	384
Proposed Parking Lot Expansion	280
<hr/>	
Total Available Parking	664

**Peak Parking Demand**

Current Parking	150
New Development Parking	458
<hr/>	
Total Required Parking	608

**B / (W) 56**

Time	Body Shop				Paint Shop				Total
	Salary Staff	Operators	Maintenance	MP&L	Salary Staff	Operators	Maintenance	MP&L	Count
5:00 AM									
6:00 AM	37	164	53	16	15	137	34	2	458
7:00 AM	37	164	53	16	15	137	34	2	458
8:00 AM	37	164	53	16	15	137	34	2	458
9:00 AM	37	164	53	16	15	137	34	2	458
10:00 AM	37	164	53	16	15	137	34	2	458
11:00 AM	37	164	53	16	15	137	34	2	458
12:00 PM	37	164	53	16	15	137	34	2	458
1:00 PM	37	164	53	16	15	137	34	2	458
2:00 PM	37	164	53	16	15	137	34	2	458
3:00 PM	37	164	53	16	15	137	34	2	458
4:00 PM	37	164	53	16	15	137	34	2	458
5:00 PM									
6:00 PM	0	164	53	16	0	137	34	2	406
7:00 PM	0	164	53	16	0	137	34	2	406
8:00 PM	0	164	53	16	0	137	34	2	406
9:00 PM	0	164	53	16	0	137	34	2	406
10:00 PM	0	164	53	16	0	137	34	2	406
11:00 PM	0	164	53	16	0	137	34	2	406
12:00 AM	0	164	53	16	0	137	34	2	406
1:00 AM	0	164	53	16	0	137	34	2	406
2:00 AM	0	164	53	16	0	137	34	2	406
3:00 AM	0	164	53	16	0	137	34	2	406
4:00 AM	0	164	53	16	0	137	34	2	406

Area	Count	Count (Total)	Count (Shift)
<b>Body Shop</b>			
Salary Staff	66	37	19
Operators	275	327	164
Maintenance	40	106	53
MP&L	30	32	16
<b>Sub-Total</b>	<b>411</b>	<b>502</b>	<b>251</b>
<b>Paint Shop</b>	<b>Count</b>		
Salary Staff	40	30	15
Operators	231	274	137
Maintenance	39	67	34
MP&L	6	3	2
<b>Sub-Total</b>	<b>316</b>	<b>374</b>	<b>187</b>
<b>Total</b>	<b>727</b>	<b>876</b>	<b>438</b>

# ITE Trip Generation

## Trucks AM Peak

# Manufacturing (140)

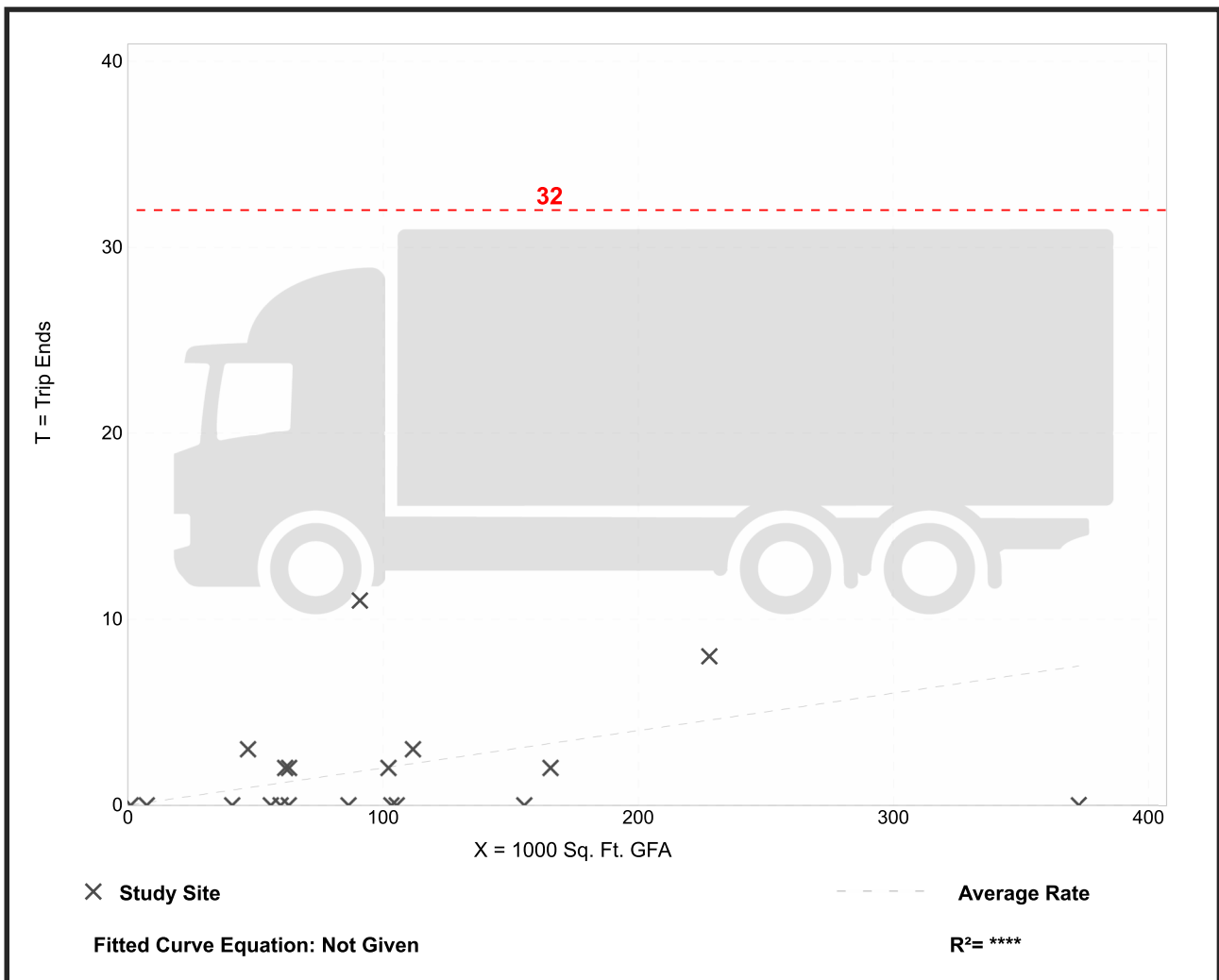
**Truck Trip Ends vs: 1000 Sq. Ft. GFA**  
**On a: Weekday,**  
**AM Peak Hour of Generator**

**Setting/Location: General Urban/Suburban**  
 Number of Studies: 19  
 Avg. 1000 Sq. Ft. GFA: 101  
 Directional Distribution: 42% entering, 58% exiting

## Truck Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.02	0.00 - 0.12	0.03

## Data Plot and Equation



# ITE Trip Generation

## Trucks PM Peak

# Manufacturing (140)

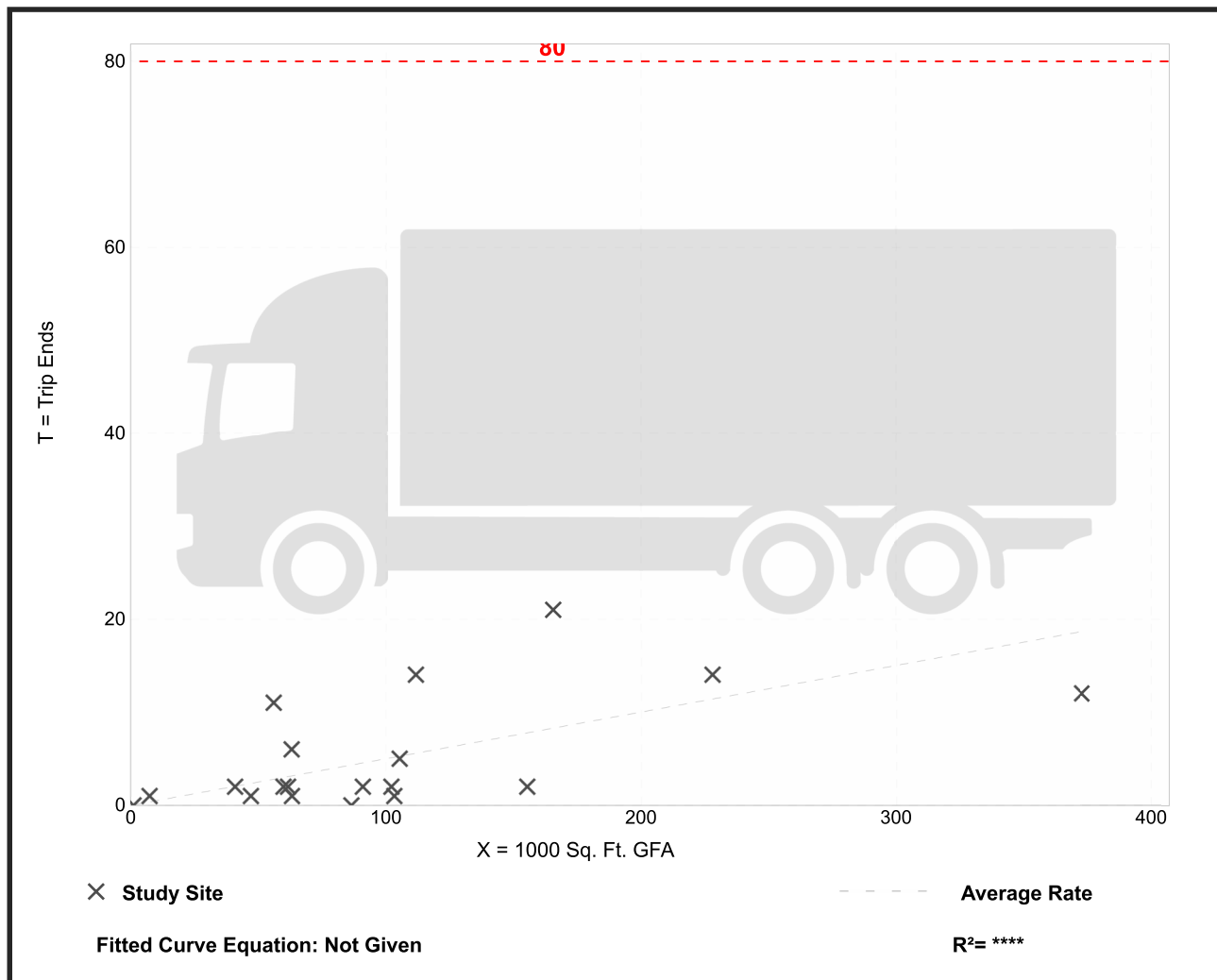
**Truck Trip Ends vs: 1000 Sq. Ft. GFA**  
**On a: Weekday,**  
**PM Peak Hour of Generator**

**Setting/Location: General Urban/Suburban**  
 Number of Studies: 19  
 Avg. 1000 Sq. Ft. GFA: 101  
 Directional Distribution: 43% entering, 57% exiting

## Truck Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.05	0.00 - 0.20	0.05

## Data Plot and Equation



# Appendix E

## Growth Rate Calculation



# TIS Simplified Traffic Forecast

Count Year	2025
Opening Year	2026
Design Year	2036
Years Back	15

Number of Counts 16

Growth Rate -0.68%

## KYTC Traffic Count Station #1

STA ID 056A04

Year	AADT
2026	
2025	
2024	2822
2023	
2022	
2021	
2020	
2019	
2018	2665
2017	
Year	AADT
2016	3054
2015	3534
2014	2597
2013	
2012	
2011	
2010	
2009	
2008	
2007	
Year	AADT
2006	
2005	
2004	
2003	
2002	
2001	
2000	
1999	
1998	
1997	

## KYTC Traffic Count Station #2

STA ID 56065

Year	AADT
2026	
2025	9838
2024	12244
2023	
2022	
2021	
2020	14564
2019	
2018	
2017	
Year	AADT
2016	10276
2015	12477
2014	11637
2013	
2012	
2011	
2010	
2009	
2008	
2007	
Year	AADT
2006	
2005	
2004	
2003	
2002	
2001	
2000	
1999	
1998	
1997	

## KYTC Traffic Count Station #3

STA ID 56069

Year	AADT
2026	
2025	16489
2024	
2023	16266
2022	
2021	
2020	17070
2019	
2018	
2017	
Year	AADT
2016	18656
2015	
2014	
2013	17627
2012	
2011	
2010	18100
2009	
2008	
2007	18800
Year	AADT
2006	
2005	
2004	18800
2003	
2002	17500
2001	
2000	
1999	
1998	14900
1997	

# Appendix F

## Turn Lane Analysis

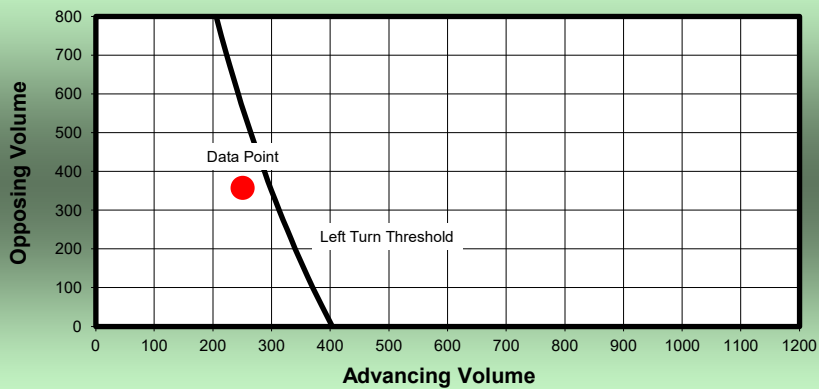
Left Turn Lane Warrant  
2026 Build AM Peak

## Left Turn Lane Warrants

### Input Fields

Left Turn Volume (vph)	192	Speed Limit (mph)	35
Advancing Volume (vph)	249	No. of through lanes	2
Opposing Volume (vph)	358	Percent Heavy Vehicles (decimal percent)	0.05

### Left Turn Lane Warrants



**Left Turn Lane NOT Warranted**

Note: This spreadsheet is intended to supplement the guidance provided in the Auxiliary Turn Lane policy outlined in the KYTC Highway Design Manual. This policy should be fully reviewed and understood prior to using this application.

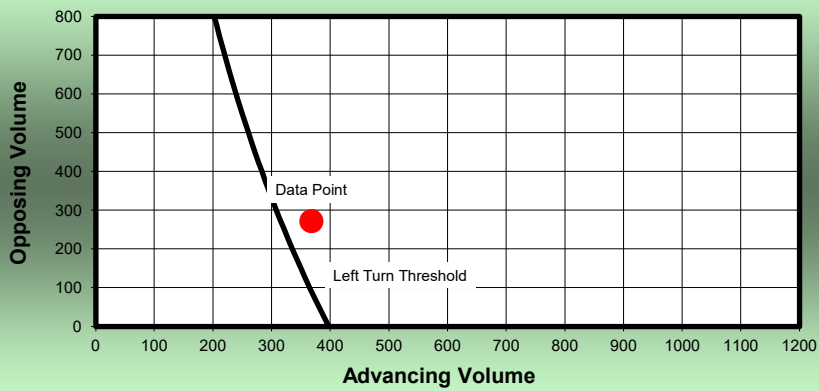
Left Turn Lane Warrant  
2026 Build PM Peak

## Left Turn Lane Warrants

### Input Fields

Left Turn Volume (vph)	278	Speed Limit (mph)	35
Advancing Volume (vph)	366	No. of through lanes	2
Opposing Volume (vph)	272	Percent Heavy Vehicles (decimal percent)	0.05

### Left Turn Lane Warrants



**Left Turn Lane WARRANTED**

Note: This spreadsheet is intended to supplement the guidance provided in the Auxiliary Turn Lane policy outlined in the KYTC Highway Design Manual. This policy should be fully reviewed and understood prior to using this application.

# Right Turn Lane Warrant

## 2026 Build AM Peak

## Right Turn Lane Warrants

### Input Fields

Right Turn Volume (vph)

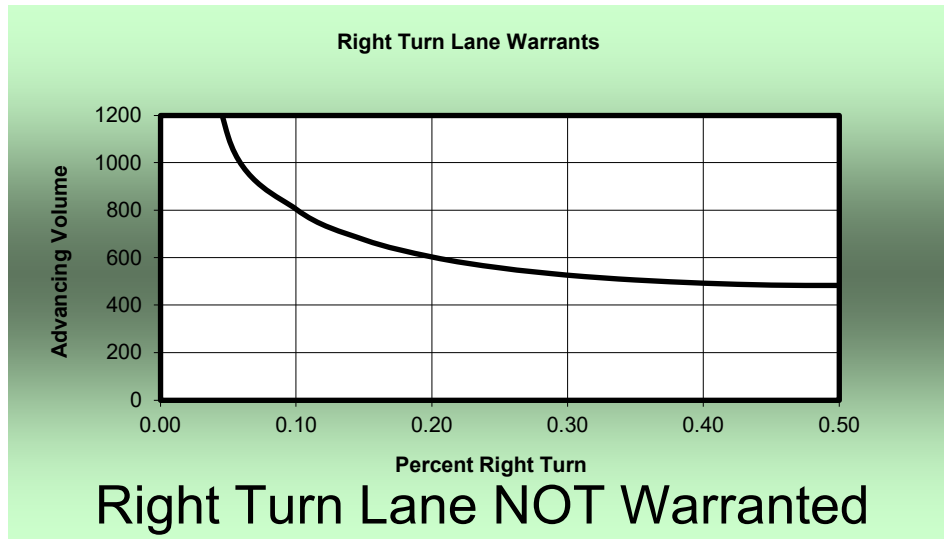
271

Speed Limit (mph)

35

Advancing Volume (vph)

358



Note: This spreadsheet is intended to supplement the guidance provided in the Auxiliary Turn Lane policy outlined in the KYTC Highway Design Manual. This policy should be fully reviewed and understood prior to using this application.

# Right Turn Lane Warrant

## 2026 Build PM Peak

## Right Turn Lane Warrants

### Input Fields

Right Turn Volume (vph)

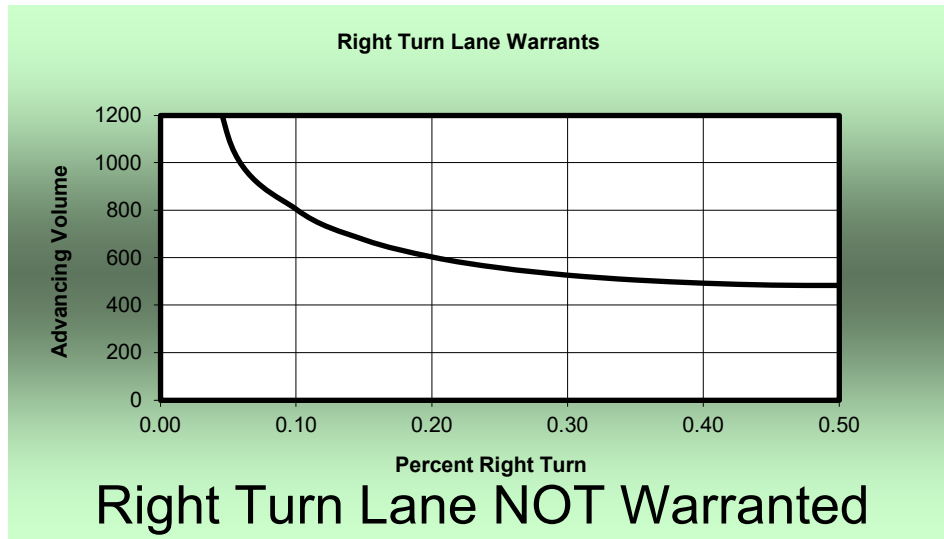
183

Speed Limit (mph)

35

Advancing Volume (vph)

272



Note: This spreadsheet is intended to supplement the guidance provided in the Auxiliary Turn Lane policy outlined in the KYTC Highway Design Manual. This policy should be fully reviewed and understood prior to using this application.

# Left Turn Lane Length Calculation

## 2026 Build

## Turn Lane Length

### Input Fields

Turn Volume	192	Calculated Turn Lane Length (ft)	
Speed Limit	35	Desirable	<b>125</b>
Cycle Length	0	Minimum	<b>125</b>
<i>(Enter 0 for Uncontrolled, 60 for Stop Controlled)</i>			
Approach Percent Grade (G)	3		
Is this a Rural Arterial (Y or N)	N		

Note: This spreadsheet is intended to supplement the guidance provided in the Auxiliary Turn Lane policy outlined in the KYTC Highway Design Manual. This policy should be fully reviewed and understood prior to using this application.

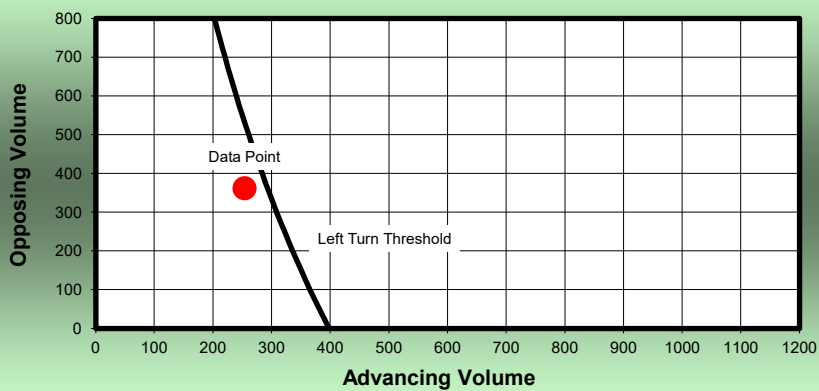
Left Turn Lane Warrant  
2036 Build AM Peak

## Left Turn Lane Warrants

### Input Fields

Left Turn Volume (vph)	192	Speed Limit (mph)	35
Advancing Volume (vph)	252	No. of through lanes	2
Opposing Volume (vph)	362	Percent Heavy Vehicles (decimal percent)	0.05

### Left Turn Lane Warrants



**Left Turn Lane NOT Warranted**

Note: This spreadsheet is intended to supplement the guidance provided in the Auxiliary Turn Lane policy outlined in the KYTC Highway Design Manual. This policy should be fully reviewed and understood prior to using this application.

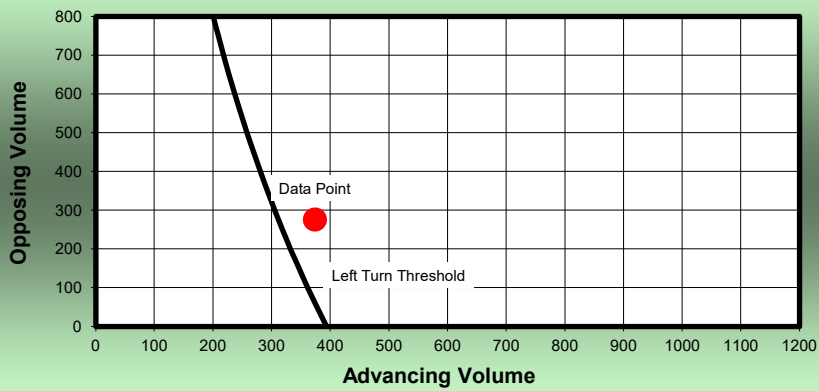
Left Turn Lane Warrant  
2036 Build PM Peak

## Left Turn Lane Warrants

### Input Fields

Left Turn Volume (vph)	280	Speed Limit (mph)	35
Advancing Volume (vph)	372	No. of through lanes	2
Opposing Volume (vph)	276	Percent Heavy Vehicles (decimal percent)	0.05

### Left Turn Lane Warrants



**Left Turn Lane WARRANTED**

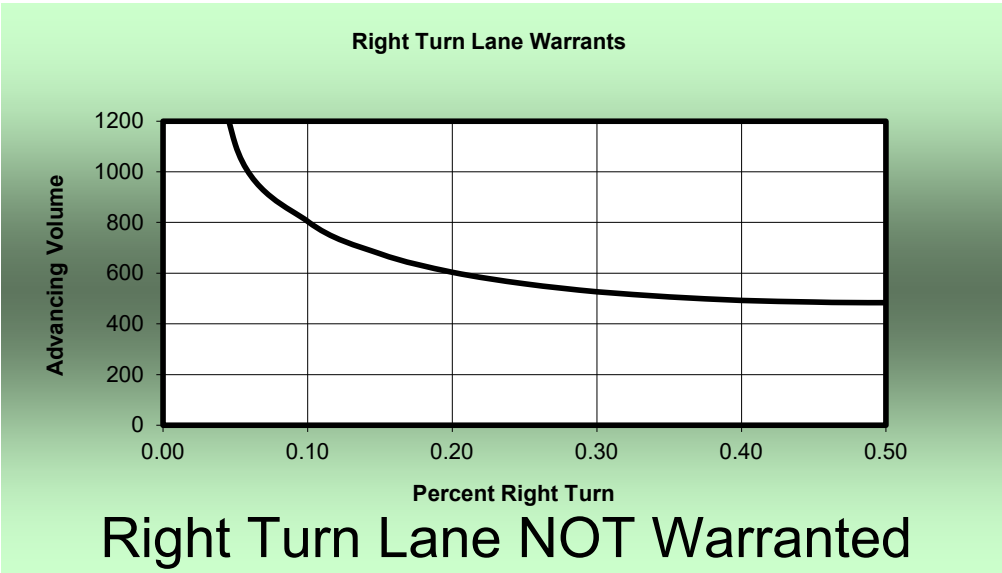
Note: This spreadsheet is intended to supplement the guidance provided in the Auxiliary Turn Lane policy outlined in the KYTC Highway Design Manual. This policy should be fully reviewed and understood prior to using this application.

Right Turn Lane Warrant  
2036 Build AM Peak

## Right Turn Lane Warrants

### Input Fields

Right Turn Volume (vph)	271	Speed Limit (mph)	35
Advancing Volume (vph)	362		



Note: This spreadsheet is intended to supplement the guidance provided in the Auxiliary Turn Lane policy outlined in the KYTC Highway Design Manual. This policy should be fully reviewed and understood prior to using this application.

Right Turn Lane Warrant  
2036 Build PM Peak

## Right Turn Lane Warrants

### Input Fields

Right Turn Volume (vph)

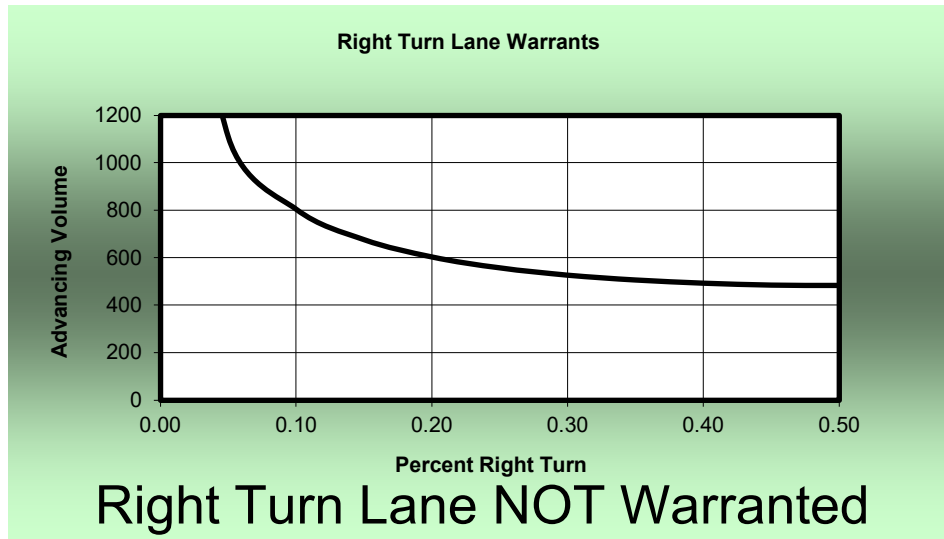
183

Speed Limit (mph)

35

Advancing Volume (vph)

276



Note: This spreadsheet is intended to supplement the guidance provided in the Auxiliary Turn Lane policy outlined in the KYTC Highway Design Manual. This policy should be fully reviewed and understood prior to using this application.

# Left Turn Lane Length Calculation

## 2036 Build

## Turn Lane Length

### Input Fields

Turn Volume	406	Calculated Turn Lane Length (ft)	
Speed Limit	35	Desirable	<b>125</b>
Cycle Length	0	Minimum	<b>125</b>
<i>(Enter 0 for Uncontrolled, 60 for Stop Controlled)</i>			
Approach Percent Grade (G)	3		
Is this a Rural Arterial (Y or N)	N		

Note: This spreadsheet is intended to supplement the guidance provided in the Auxiliary Turn Lane policy outlined in the KYTC Highway Design Manual. This policy should be fully reviewed and understood prior to using this application.

# Appendix G

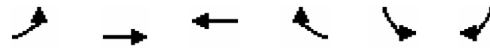
## Capacity Analysis

# Synchro Reports

## 2026 No-Build AM Peak

HCM 7th Signalized Intersection Summary  
 1: Chamberlain Ln & Gate 10

2026 No-Build AM Peak  
 06/24/2026



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↕	↕
Traffic Volume (veh/h)	21	211	816	12	5	10
Future Volume (veh/h)	21	211	816	12	5	10
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	418	1826	1826	418	418	418
Adj Flow Rate, veh/h	28	281	1088	16	7	13
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	100	5	5	100	100	100
Cap, veh/h	154	1303	1632	24	116	103
Arrive On Green	0.47	0.47	0.47	0.47	0.29	0.29
Sat Flow, veh/h	108	2877	3591	51	398	354
Grp Volume(v), veh/h	154	155	539	565	7	13
Grp Sat Flow(s),veh/h/ln	1324	1578	1735	1817	398	354
Q Serve(g_s), s	0.3	2.4	9.9	9.9	0.5	1.1
Cycle Q Clear(g_c), s	10.2	2.4	9.9	9.9	0.5	1.1
Prop In Lane	0.18			0.03	1.00	1.00
Lane Grp Cap(c), veh/h	720	736	809	847	116	103
V/C Ratio(X)	0.21	0.21	0.67	0.67	0.06	0.13
Avail Cap(c_a), veh/h	1281	1455	1599	1675	116	103
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.5	6.5	8.5	8.5	10.5	10.7
Incr Delay (d2), s/veh	0.1	0.1	1.0	0.9	1.0	2.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.5	2.2	2.3	0.1	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.6	6.7	9.5	9.4	11.5	13.3
LnGrp LOS	A	A	A	A	B	B
Approach Vol, veh/h		309	1104		20	
Approach Delay, s/veh		6.6	9.5		12.7	
Approach LOS		A	A		B	
Timer - Assigned Phs				4	6	8
Phs Duration (G+Y+Rc), s				24.2	17.0	24.2
Change Period (Y+Rc), s				5.0	5.0	5.0
Max Green Setting (Gmax), s				38.0	12.0	38.0
Max Q Clear Time (g_c+I1), s				12.2	3.1	11.9
Green Ext Time (p_c), s				1.8	0.0	7.3
<b>Intersection Summary</b>						
HCM 7th Control Delay, s/veh			8.9			
HCM 7th LOS			A			

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	2	4	57	87	1
Future Vol, veh/h	0	2	4	57	87	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	29	29	0
Mvmt Flow	0	2	5	65	99	1




















Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	173	99	100	0	-
Stage 1	99	-	-	-	-
Stage 2	74	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	821	962	1505	-	-
Stage 1	930	-	-	-	-
Stage 2	954	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	819	962	1505	-	-
Mov Cap-2 Maneuver	819	-	-	-	-
Stage 1	927	-	-	-	-
Stage 2	954	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	8.75	0.49	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	118	-	962	-	-
HCM Lane V/C Ratio	0.003	-	0.002	-	-
HCM Ctrl Dly (s/v)	7.4	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

HCM 7th Signalized Intersection Summary  
 3: Chamberlain Ln & Collins Ln

2026 No-Build AM Peak  
 06/24/2026

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	14	5	17	163	12	1	29	169	16	1	638	34
Future Volume (veh/h)	14	5	17	163	12	1	29	169	16	1	638	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	7	22	214	16	1	38	222	21	1	839	45
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	621	223	724	724	50	3	138	762	77	72	1157	62
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1091	487	1585	1283	109	6	130	2210	224	1	3359	180
Grp Volume(v), veh/h	25	0	22	231	0	0	125	0	156	468	0	417
Grp Sat Flow(s),veh/h/ln	1578	0	1585	1397	0	0	902	0	1662	1870	0	1670
Q Serve(g_s), s	0.0	0.0	0.4	5.2	0.0	0.0	0.8	0.0	3.4	0.0	0.0	11.0
Cycle Q Clear(g_c), s	0.4	0.0	0.4	5.6	0.0	0.0	11.8	0.0	3.4	11.0	0.0	11.0
Prop In Lane	0.72		1.00	0.93		0.00	0.30		0.13	0.00		0.11
Lane Grp Cap(c), veh/h	844	0	724	776	0	0	404	0	573	716	0	575
V/C Ratio(X)	0.03	0.00	0.03	0.30	0.00	0.00	0.31	0.00	0.27	0.65	0.00	0.73
Avail Cap(c_a), veh/h	844	0	724	776	0	0	628	0	891	1074	0	895
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.5	0.0	7.5	9.0	0.0	0.0	12.1	0.0	11.9	14.4	0.0	14.4
Incr Delay (d2), s/veh	0.1	0.0	0.1	1.0	0.0	0.0	0.4	0.0	0.3	1.0	0.0	1.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1	1.5	0.0	0.0	0.8	0.0	1.0	3.7	0.0	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	7.6	0.0	7.6	10.0	0.0	0.0	12.5	0.0	12.2	15.4	0.0	16.2
LnGrp LOS	A		A	A			B		B	B		B
Approach Vol, veh/h		47			231			281				885
Approach Delay, s/veh		7.6			10.0			12.3				15.8
Approach LOS		A			A			B				B
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		28.0		22.4		28.0		22.4				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		23.0		27.0		23.0		27.0				
Max Q Clear Time (g_c+I1), s		7.6		13.8		2.4		13.0				
Green Ext Time (p_c), s		1.1		1.3		0.1		4.3				
<b>Intersection Summary</b>												
HCM 7th Control Delay, s/veh			13.9									
HCM 7th LOS			B									

Timings  
4: Old LaGrange Rd & Chamberlain Ln

2026 No-Build AM Peak  
06/24/2026

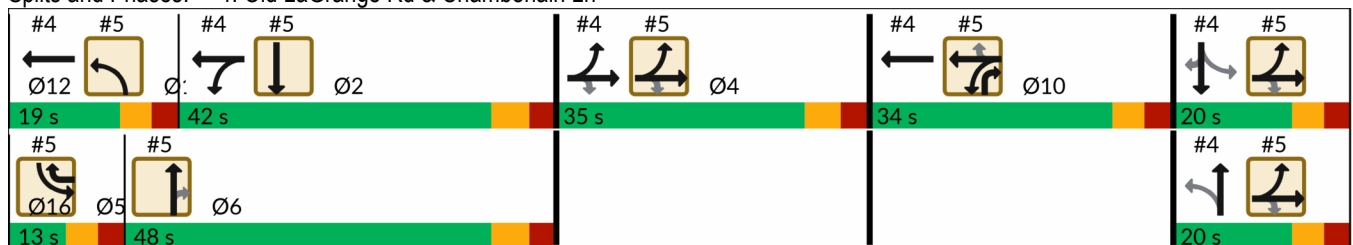


Lane Group	EBT	EBR	WBT	NBT	SBL	SBT	SBR	Ø1	Ø2	Ø5	Ø6	Ø10
Lane Configurations	↕	↗	↔	↕		↕	↗					
Traffic Volume (vph)	134	3	180	3	40	3	19					
Future Volume (vph)	134	3	180	3	40	3	19					
Turn Type	NA	Perm	NA	NA	Perm	NA	Perm					
Protected Phases	4		10 1 2	16		12		1	2	5	6	10
Permitted Phases		4			12		12					
Detector Phase	4	4	10 1 2	16	12	12	12					
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	5.0	5.0	5.0	5.0	8.0	5.0	15.0	8.0
Minimum Split (s)	35.0	35.0		20.0	20.0	20.0	20.0	14.5	32.0	11.5	28.5	26.0
Total Split (s)	35.0	35.0		20.0	20.0	20.0	20.0	19.0	42.0	13.0	48.0	34.0
Total Split (%)	23.3%	23.3%		13.3%	13.3%	13.3%	13.3%	13%	28%	9%	32%	23%
Yellow Time (s)	4.0	4.0		3.5	3.5	3.5	3.5	3.5	4.3	3.5	4.3	3.5
All-Red Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	2.7	3.0	2.7	3.0
Lost Time Adjust (s)	0.0	0.0		0.0		0.0	0.0					
Total Lost Time (s)	7.0	7.0		6.5		6.5	6.5					
Lead/Lag								Lead	Lag	Lead	Lag	
Lead-Lag Optimize?								Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None	None	None	None	Max	None	Max	None
Act Effct Green (s)	18.7	18.7	75.5	10.6		10.6	10.6					
Actuated g/C Ratio	0.14	0.14	0.55	0.08		0.08	0.08					
v/c Ratio	0.65	0.01	0.21	0.28		0.50	0.08					
Control Delay (s/veh)	69.2	0.0	4.1	67.2		79.6	0.6					
Queue Delay	0.0	0.0	1.9	0.0		0.0	0.0					
Total Delay (s/veh)	69.2	0.0	6.0	67.2		79.6	0.6					
LOS	E	A	A	E		E	A					
Approach Delay (s/veh)	67.6		6.0	67.2		55.4						
Approach LOS	E		A	E		E						

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 137.9  
 Natural Cycle: 140  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.87  
 Intersection Signal Delay (s/veh): 36.3  
 Intersection LOS: D  
 Intersection Capacity Utilization 39.6%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 4: Old LaGrange Rd & Chamberlain Ln



Timings  
5: LaGrange Rd & Chamberlain Ln/Factory Ln

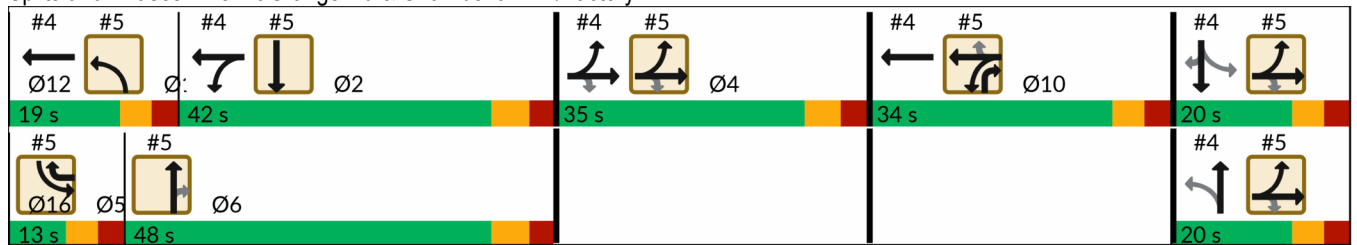
2026 No-Build AM Peak  
06/24/2026

	→	↘	↙	←	↖	↗	↑	↘	↙	↓	Ø4	Ø12
Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	Ø4	Ø12
Lane Configurations	↕	↕	↘	↕	↕	↘	↕	↕	↘	↕		
Traffic Volume (vph)	81	85	458	82	3	120	463	399	24	689		
Future Volume (vph)	81	85	458	82	3	120	463	399	24	689		
Turn Type	NA	Perm	Split	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		
Protected Phases	4 12 16		10	10	5	1	6	10	5	2	4	12
Permitted Phases		4 12 16			10			6				
Detector Phase	4 12 16	4 12 16	10	10	5	1	6	10	5	2		
Switch Phase												
Minimum Initial (s)			8.0	8.0	5.0	5.0	15.0	8.0	5.0	8.0	8.0	5.0
Minimum Split (s)			26.0	26.0	11.5	14.5	28.5	26.0	11.5	32.0	35.0	20.0
Total Split (s)			34.0	34.0	13.0	19.0	48.0	34.0	13.0	42.0	35.0	20.0
Total Split (%)			22.7%	22.7%	8.7%	12.7%	32.0%	22.7%	8.7%	28.0%	23%	13%
Yellow Time (s)			3.5	3.5	3.5	3.5	4.3	3.5	3.5	4.3	4.0	3.5
All-Red Time (s)			3.0	3.0	3.0	3.0	2.7	3.0	3.0	2.7	3.0	3.0
Lost Time Adjust (s)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)			6.5	6.5	6.5	6.5	7.0	6.5	6.5	7.0		
Lead/Lag					Lead	Lead	Lag		Lead	Lag		
Lead-Lag Optimize?					Yes	Yes	Yes		Yes	Yes		
Recall Mode			None	None	None	None	Max	None	None	Max	None	None
Act Effect Green (s)	28.8	28.8	27.6	27.6	34.0	12.4	46.5	74.5	6.4	35.1		
Actuated g/C Ratio	0.21	0.21	0.20	0.20	0.25	0.09	0.34	0.54	0.05	0.25		
v/c Ratio	0.33	0.21	0.87	0.86	0.01	0.83	0.42	0.41	0.33	0.85		
Control Delay (s/veh)	3.2	1.1	80.2	77.9	0.0	99.5	39.1	2.2	77.4	59.8		
Queue Delay	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2		
Total Delay (s/veh)	3.5	1.5	80.2	77.9	0.0	99.5	39.1	2.2	77.4	60.0		
LOS	A	A	F	E	A	F	D	A	E	E		
Approach Delay (s/veh)	2.7			78.6			31.5			60.6		
Approach LOS	A			E			C			E		

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 137.9  
 Natural Cycle: 140  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.87  
 Intersection Signal Delay (s/veh): 48.2  
 Intersection LOS: D  
 Intersection Capacity Utilization 64.2%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 5: LaGrange Rd & Chamberlain Ln/Factory Ln



Lane Group	Ø16
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Turn Type	
Protected Phases	16
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	13%
Yellow Time (s)	3.5
All-Red Time (s)	3.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Intersection Summary	

Intersection						
Int Delay, s/veh	6.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	6	27	174	43	2	2
Future Vol, veh/h	6	27	174	43	2	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	56	56	56	56	56	56
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	11	48	311	77	4	4

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	704	5	7	0	0
Stage 1	5	-	-	-	-
Stage 2	698	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	407	1084	1627	-	-
Stage 1	1023	-	-	-	-
Stage 2	497	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	325	1084	1627	-	-
Mov Cap-2 Maneuver	325	-	-	-	-
Stage 1	819	-	-	-	-
Stage 2	497	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.13	6.2	0
HCM LOS	B		

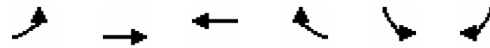
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1443	-	761	-	-
HCM Lane V/C Ratio	0.191	-	0.077	-	-
HCM Ctrl Dly (s/v)	7.7	0	10.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.7	-	0.3	-	-

# Synchro Reports

## 2026 No-Build PM Peak

HCM 7th Signalized Intersection Summary  
 1: Chamberlain Ln & Gate 10

2026 No-Build PM Peak  
 06/24/2026



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔↕	↔↕		↕↔	↕↔
Traffic Volume (veh/h)	27	745	590	3	10	20
Future Volume (veh/h)	27	745	590	3	10	20
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	418	1826	1826	418	418	418
Adj Flow Rate, veh/h	34	931	738	4	12	25
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	100	5	5	100	100	100
Cap, veh/h	120	1440	1558	8	122	108
Arrive On Green	0.44	0.44	0.44	0.44	0.31	0.31
Sat Flow, veh/h	52	3353	3629	19	398	354
Grp Volume(v), veh/h	508	457	362	380	12	25
Grp Sat Flow(s),veh/h/ln	1743	1578	1735	1822	398	354
Q Serve(g_s), s	0.0	9.0	5.8	5.8	0.8	2.1
Cycle Q Clear(g_c), s	8.5	9.0	5.8	5.8	0.8	2.1
Prop In Lane	0.07			0.01	1.00	1.00
Lane Grp Cap(c), veh/h	865	695	764	802	122	108
V/C Ratio(X)	0.59	0.66	0.47	0.47	0.10	0.23
Avail Cap(c_a), veh/h	1733	1526	1677	1762	122	108
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.5	8.7	7.8	7.8	9.8	10.2
Incr Delay (d2), s/veh	0.6	1.1	0.5	0.4	1.6	4.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	1.8	1.3	1.3	0.1	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	9.2	9.7	8.2	8.2	11.4	15.1
LnGrp LOS	A	A	A	A	B	B
Approach Vol, veh/h		965	742		37	
Approach Delay, s/veh		9.4	8.2		13.9	
Approach LOS		A	A		B	
Timer - Assigned Phs				4	6	8
Phs Duration (G+Y+Rc), s				22.3	17.0	22.3
Change Period (Y+Rc), s				5.0	5.0	5.0
Max Green Setting (Gmax), s				38.0	12.0	38.0
Max Q Clear Time (g_c+I1), s				11.0	4.1	7.8
Green Ext Time (p_c), s				6.4	0.0	4.4
<b>Intersection Summary</b>						
HCM 7th Control Delay, s/veh			9.0			
HCM 7th LOS			A			

Intersection						
Int Delay, s/veh	2.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	19	16	47	88	89	8
Future Vol, veh/h	19	16	47	88	89	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	6	6	0
Mvmt Flow	23	20	57	107	109	10




















Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	335	113	118	0	0
Stage 1	113	-	-	-	-
Stage 2	222	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	664	945	1482	-	-
Stage 1	916	-	-	-	-
Stage 2	820	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	637	945	1482	-	-
Mov Cap-2 Maneuver	637	-	-	-	-
Stage 1	879	-	-	-	-
Stage 2	820	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.1	2.62	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	627	-	748	-	-
HCM Lane V/C Ratio	0.039	-	0.057	-	-
HCM Ctrl Dly (s/v)	7.5	0	10.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

HCM 7th Signalized Intersection Summary  
 3: Chamberlain Ln & Collins Ln

2026 No-Build PM Peak  
 06/24/2026

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	56	48	18	107	34	1	57	440	240	10	444	37
Future Volume (veh/h)	56	48	18	107	34	1	57	440	240	10	444	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	68	59	22	130	41	1	70	537	293	12	541	45
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	436	347	649	522	148	3	145	760	404	85	1235	101
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	789	847	1585	959	363	8	156	1970	1048	21	3202	263
Grp Volume(v), veh/h	127	0	22	172	0	0	477	0	423	315	0	283
Grp Sat Flow(s),veh/h/ln	1636	0	1585	1329	0	0	1660	0	1513	1831	0	1655
Q Serve(g_s), s	0.0	0.0	0.4	3.3	0.0	0.0	5.4	0.0	11.6	0.0	0.0	6.2
Cycle Q Clear(g_c), s	2.1	0.0	0.4	5.4	0.0	0.0	11.6	0.0	11.6	6.1	0.0	6.2
Prop In Lane	0.54		1.00	0.76		0.01	0.15		0.69	0.04		0.16
Lane Grp Cap(c), veh/h	783	0	649	674	0	0	725	0	584	783	0	638
V/C Ratio(X)	0.16	0.00	0.03	0.26	0.00	0.00	0.66	0.00	0.73	0.40	0.00	0.44
Avail Cap(c_a), veh/h	783	0	649	674	0	0	1086	0	930	1183	0	1017
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.1	0.0	8.6	10.4	0.0	0.0	12.6	0.0	12.8	11.1	0.0	11.1
Incr Delay (d2), s/veh	0.4	0.0	0.1	0.9	0.0	0.0	1.0	0.0	1.7	0.3	0.0	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.1	1.2	0.0	0.0	3.3	0.0	3.1	1.9	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	9.6	0.0	8.7	11.3	0.0	0.0	13.6	0.0	14.5	11.4	0.0	11.6
LnGrp LOS	A		A	B			B		B	B		B
Approach Vol, veh/h		149			172			900				598
Approach Delay, s/veh		9.5			11.3			14.0				11.5
Approach LOS		A			B			B				B
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		25.0		23.8		25.0		23.8				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		20.0		30.0		20.0		30.0				
Max Q Clear Time (g_c+I1), s		7.4		13.6		4.1		8.2				
Green Ext Time (p_c), s		0.7		5.2		0.6		3.3				
<b>Intersection Summary</b>												
HCM 7th Control Delay, s/veh			12.6									
HCM 7th LOS			B									

Timings  
4: Old LaGrange Rd & Chamberlain Ln

2026 No-Build PM Peak  
06/24/2026

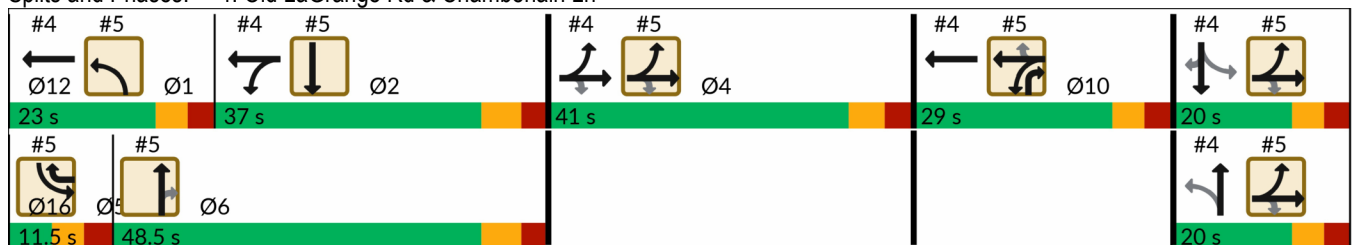


Lane Group	EBT	WBT	NBL	NBT	SBL	SBT	SBR	Ø1	Ø2	Ø5	Ø6	Ø10
Lane Configurations	↔	↔↔		↔		↔	↔					
Traffic Volume (vph)	424	483	2	7	23	4	40					
Future Volume (vph)	424	483	2	7	23	4	40					
Turn Type	NA	NA	Perm	NA	Perm	NA	Perm					
Protected Phases	4	10 12		16		12		1	2	5	6	10
Permitted Phases			16		12		12					
Detector Phase	4	10 12	16	16	12	12	12					
Switch Phase												
Minimum Initial (s)	8.0		5.0	5.0	5.0	5.0	5.0	5.0	8.0	5.0	15.0	8.0
Minimum Split (s)	35.0		20.0	20.0	20.0	20.0	20.0	14.5	32.0	11.5	28.5	26.0
Total Split (s)	41.0		20.0	20.0	20.0	20.0	20.0	23.0	37.0	11.5	48.5	29.0
Total Split (%)	27.3%		13.3%	13.3%	13.3%	13.3%	13.3%	15%	25%	8%	32%	19%
Yellow Time (s)	4.0		3.5	3.5	3.5	3.5	3.5	3.5	4.3	3.5	4.3	3.5
All-Red Time (s)	3.0		3.0	3.0	3.0	3.0	3.0	3.0	2.7	3.0	2.7	3.0
Lost Time Adjust (s)	0.0			0.0		0.0	0.0					
Total Lost Time (s)	7.0			6.5		6.5	6.5					
Lead/Lag								Lead	Lag	Lead	Lag	
Lead-Lag Optimize?								Yes	Yes	Yes	Yes	
Recall Mode	None		None	None	None	None	None	None	Max	None	Max	None
Act Effect Green (s)	34.0	69.5		13.5		13.5	13.5					
Actuated g/C Ratio	0.23	0.46		0.09		0.09	0.09					
v/c Ratio	1.21	0.69		1.17		0.71	0.14					
Control Delay (s/veh)	164.2	23.1		183.4		131.6	0.8					
Queue Delay	0.0	55.6		0.0		0.0	0.0					
Total Delay (s/veh)	164.2	78.7		183.4		131.6	0.8					
LOS	F	E		F		F	A					
Approach Delay (s/veh)	164.2	78.7		183.4		53.8						
Approach LOS	F	E		F		D						

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Natural Cycle: 150  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 1.37  
 Intersection Signal Delay (s/veh): 121.4      Intersection LOS: F  
 Intersection Capacity Utilization 56.9%      ICU Level of Service B  
 Analysis Period (min) 15

Splits and Phases: 4: Old LaGrange Rd & Chamberlain Ln



Timings  
5: LaGrange Rd & Chamberlain Ln/Factory Ln

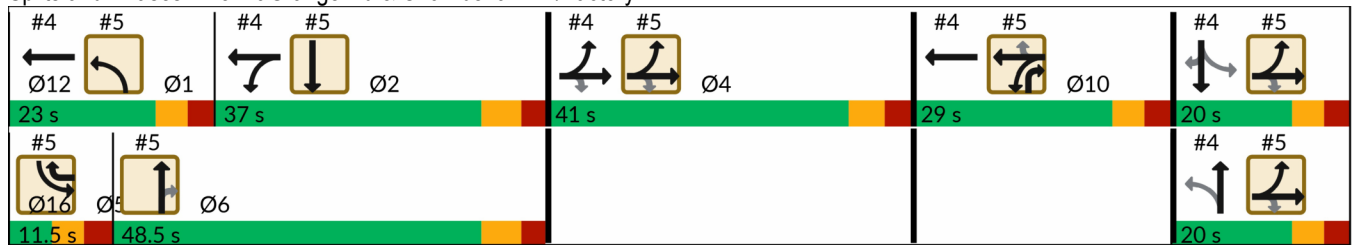
2026 No-Build PM Peak  
06/24/2026

	→	↘	↙	←	↖	↗	↑	↘	↙	↓	Ø4	Ø12
Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	Ø4	Ø12
Lane Configurations	↕	↕	↘	↕	↕	↘	↕	↕	↘	↕		
Traffic Volume (vph)	149	324	306	216	2	225	795	574	36	475		
Future Volume (vph)	149	324	306	216	2	225	795	574	36	475		
Turn Type	NA	Perm	Split	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		
Protected Phases	4 12 16		10	10	5	1	6	10	5	2	4	12
Permitted Phases		4 12 16			10			6				
Detector Phase	4 12 16	4 12 16	10	10	5	1	6	10	5	2		
Switch Phase												
Minimum Initial (s)			8.0	8.0	5.0	5.0	15.0	8.0	5.0	8.0	8.0	5.0
Minimum Split (s)			26.0	26.0	11.5	14.5	28.5	26.0	11.5	32.0	35.0	20.0
Total Split (s)			29.0	29.0	11.5	23.0	48.5	29.0	11.5	37.0	41.0	20.0
Total Split (%)			19.3%	19.3%	7.7%	15.3%	32.3%	19.3%	7.7%	24.7%	27%	13%
Yellow Time (s)			3.5	3.5	3.5	3.5	4.3	3.5	3.5	4.3	4.0	3.5
All-Red Time (s)			3.0	3.0	3.0	3.0	2.7	3.0	3.0	2.7	3.0	3.0
Lost Time Adjust (s)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)			6.5	6.5	6.5	6.5	7.0	6.5	6.5	7.0		
Lead/Lag					Lead	Lead	Lag		Lead	Lag		
Lead-Lag Optimize?					Yes	Yes	Yes		Yes	Yes		
Recall Mode			None	None	None	None	Max	None	None	Max	None	None
Act Effect Green (s)	47.0	47.0	22.5	22.5	27.5	16.5	43.8	66.8	5.0	30.0		
Actuated g/C Ratio	0.31	0.31	0.15	0.15	0.18	0.11	0.29	0.45	0.03	0.20		
v/c Ratio	0.53	0.60	1.20	1.19	0.00	1.37	0.91	0.69	0.71	0.96		
Control Delay (s/veh)	4.6	1.0	173.4	168.3	0.0	241.4	64.3	8.0	124.1	85.4		
Queue Delay	18.4	38.6	0.0	3.9	0.0	16.4	0.0	0.0	0.0	0.0		
Total Delay (s/veh)	23.0	39.7	173.4	172.2	0.0	257.8	64.3	8.0	124.1	85.4		
LOS	C	D	F	F	A	F	E	A	F	F		
Approach Delay (s/veh)	32.3			172.2			71.4			87.7		
Approach LOS	C			F			E			F		

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Natural Cycle: 150  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 1.37  
 Intersection Signal Delay (s/veh): 83.5  
 Intersection LOS: F  
 Intersection Capacity Utilization 78.9%  
 ICU Level of Service D  
 Analysis Period (min) 15

Splits and Phases: 5: LaGrange Rd & Chamberlain Ln/Factory Ln



Lane Group	Ø16
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Turn Type	
Protected Phases	16
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	13%
Yellow Time (s)	3.5
All-Red Time (s)	3.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Intersection Summary	

Intersection						
Int Delay, s/veh	10.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	108	152	225	48	24	6
Future Vol, veh/h	108	152	225	48	24	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	120	169	250	53	27	7

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	583	30	33	0	0
Stage 1	30	-	-	-	-
Stage 2	553	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	478	1050	1592	-	-
Stage 1	998	-	-	-	-
Stage 2	580	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	400	1050	1592	-	-
Mov Cap-2 Maneuver	400	-	-	-	-
Stage 1	836	-	-	-	-
Stage 2	580	-	-	-	-

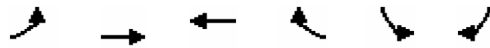
Approach	EB	NB	SB
HCM Ctrl Dly, s/v	15.54	6.33	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1484	-	627	-	-
HCM Lane V/C Ratio	0.157	-	0.46	-	-
HCM Ctrl Dly (s/v)	7.7	0	15.5	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.6	-	2.4	-	-

Synchro Reports  
2036 No-Build AM Peak

HCM 7th Signalized Intersection Summary  
 1: Chamberlain Ln & Gate 10

2036 No-Build AM Peak  
 06/24/2026



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↕	↕
Traffic Volume (veh/h)	22	222	857	13	5	11
Future Volume (veh/h)	22	222	857	13	5	11
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	418	1826	1826	418	418	418
Adj Flow Rate, veh/h	29	296	1143	17	7	15
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	100	5	5	100	100	100
Cap, veh/h	150	1323	1684	25	113	100
Arrive On Green	0.48	0.48	0.48	0.48	0.28	0.28
Sat Flow, veh/h	104	2833	3590	52	398	354
Grp Volume(v), veh/h	160	165	567	593	7	15
Grp Sat Flow(s),veh/h/ln	1275	1578	1735	1817	398	354
Q Serve(g_s), s	0.4	2.6	10.7	10.7	0.5	1.3
Cycle Q Clear(g_c), s	11.1	2.6	10.7	10.7	0.5	1.3
Prop In Lane	0.18			0.03	1.00	1.00
Lane Grp Cap(c), veh/h	714	760	835	874	113	100
V/C Ratio(X)	0.22	0.22	0.68	0.68	0.06	0.15
Avail Cap(c_a), veh/h	1212	1414	1554	1627	113	100
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.4	6.4	8.5	8.5	11.1	11.4
Incr Delay (d2), s/veh	0.2	0.1	1.0	0.9	1.1	3.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.5	2.4	2.5	0.1	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.5	6.5	9.4	9.4	12.2	14.5
LnGrp LOS	A	A	A	A	B	B
Approach Vol, veh/h		325	1160		22	
Approach Delay, s/veh		6.5	9.4		13.8	
Approach LOS		A	A		B	
Timer - Assigned Phs				4	6	8
Phs Duration (G+Y+Rc), s				25.4	17.0	25.4
Change Period (Y+Rc), s				5.0	5.0	5.0
Max Green Setting (Gmax), s				38.0	12.0	38.0
Max Q Clear Time (g_c+I1), s				13.1	3.3	12.7
Green Ext Time (p_c), s				2.0	0.0	7.7
<b>Intersection Summary</b>						
HCM 7th Control Delay, s/veh			8.9			
HCM 7th LOS			A			

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	2	4	60	91	1
Future Vol, veh/h	0	2	4	60	91	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	29	29	0
Mvmt Flow	0	2	5	68	103	1




















Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	181	104	105	0	0
Stage 1	104	-	-	-	-
Stage 2	77	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	813	956	1500	-	-
Stage 1	925	-	-	-	-
Stage 2	951	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	810	956	1500	-	-
Mov Cap-2 Maneuver	810	-	-	-	-
Stage 1	922	-	-	-	-
Stage 2	951	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	8.77	0.46	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	113	-	956	-	-
HCM Lane V/C Ratio	0.003	-	0.002	-	-
HCM Ctrl Dly (s/v)	7.4	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

HCM 7th Signalized Intersection Summary  
 3: Chamberlain Ln & Collins Ln

2036 No-Build AM Peak  
 06/24/2026

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	15	5	18	171	13	1	30	177	17	1	670	36
Future Volume (veh/h)	15	5	18	171	13	1	30	177	17	1	670	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	7	24	225	17	1	39	233	22	1	882	47
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	627	202	711	709	49	3	135	777	79	71	1196	64
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	1125	451	1585	1278	109	6	122	2183	223	1	3360	179
Grp Volume(v), veh/h	27	0	24	243	0	0	130	0	164	491	0	439
Grp Sat Flow(s),veh/h/ln	1575	0	1585	1393	0	0	866	0	1662	1870	0	1670
Q Serve(g_s), s	0.0	0.0	0.4	5.7	0.0	0.0	0.9	0.0	3.6	0.0	0.0	11.8
Cycle Q Clear(g_c), s	0.4	0.0	0.4	6.1	0.0	0.0	12.7	0.0	3.6	11.8	0.0	11.8
Prop In Lane	0.74		1.00	0.93		0.00	0.30		0.13	0.00		0.11
Lane Grp Cap(c), veh/h	829	0	711	760	0	0	399	0	592	736	0	594
V/C Ratio(X)	0.03	0.00	0.03	0.32	0.00	0.00	0.32	0.00	0.28	0.67	0.00	0.74
Avail Cap(c_a), veh/h	829	0	711	760	0	0	595	0	876	1055	0	880
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.9	0.0	7.9	9.5	0.0	0.0	12.0	0.0	11.8	14.4	0.0	14.4
Incr Delay (d2), s/veh	0.1	0.0	0.1	1.1	0.0	0.0	0.5	0.0	0.3	1.1	0.0	1.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1	1.6	0.0	0.0	0.8	0.0	1.1	3.9	0.0	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.0	0.0	8.0	10.6	0.0	0.0	12.5	0.0	12.0	15.5	0.0	16.2
LnGrp LOS	A		A	B			B		B	B		B
Approach Vol, veh/h		51			243			294				930
Approach Delay, s/veh		8.0			10.6			12.2				15.8
Approach LOS		A			B			B				B
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		28.0		23.2		28.0		23.2				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		23.0		27.0		23.0		27.0				
Max Q Clear Time (g_c+I1), s		8.1		14.7		2.4		13.8				
Green Ext Time (p_c), s		1.1		1.3		0.1		4.5				
<b>Intersection Summary</b>												
HCM 7th Control Delay, s/veh			14.0									
HCM 7th LOS			B									

Timings  
4: Old LaGrange Rd & Chamberlain Ln

2036 No-Build AM Peak  
06/24/2026

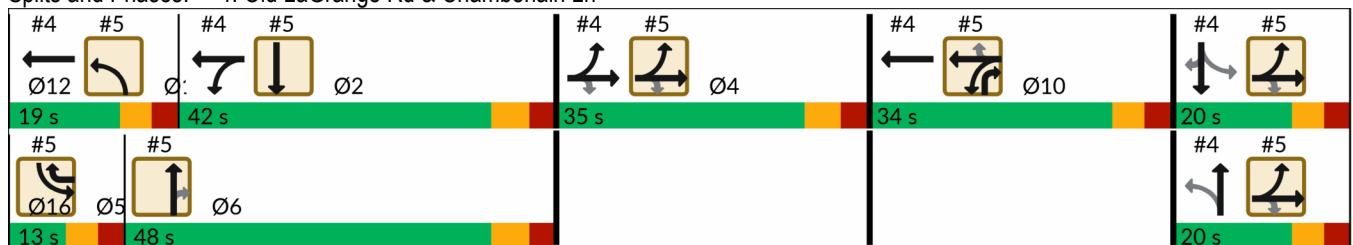


Lane Group	EBT	EBR	WBT	NBT	SBL	SBT	SBR	Ø1	Ø2	Ø5	Ø6	Ø10
Lane Configurations	↕	↗	↔	↕		↕	↗					
Traffic Volume (vph)	141	3	189	3	42	3	20					
Future Volume (vph)	141	3	189	3	42	3	20					
Turn Type	NA	Perm	NA	NA	Perm	NA	Perm					
Protected Phases	4		10 1 2	16		12		1	2	5	6	10
Permitted Phases		4			12		12					
Detector Phase	4	4	10 1 2	16	12	12	12					
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	5.0	5.0	5.0	5.0	8.0	5.0	15.0	8.0
Minimum Split (s)	35.0	35.0		20.0	20.0	20.0	20.0	14.5	32.0	11.5	28.5	26.0
Total Split (s)	35.0	35.0		20.0	20.0	20.0	20.0	19.0	42.0	13.0	48.0	34.0
Total Split (%)	23.3%	23.3%		13.3%	13.3%	13.3%	13.3%	13%	28%	9%	32%	23%
Yellow Time (s)	4.0	4.0		3.5	3.5	3.5	3.5	3.5	4.3	3.5	4.3	3.5
All-Red Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	2.7	3.0	2.7	3.0
Lost Time Adjust (s)	0.0	0.0		0.0		0.0	0.0					
Total Lost Time (s)	7.0	7.0		6.5		6.5	6.5					
Lead/Lag								Lead	Lag	Lead	Lag	
Lead-Lag Optimize?								Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None	None	None	None	Max	None	Max	None
Act Effct Green (s)	19.5	19.5	75.7	10.8		10.8	10.8					
Actuated g/C Ratio	0.14	0.14	0.54	0.08		0.08	0.08					
v/c Ratio	0.67	0.01	0.23	0.29		0.53	0.08					
Control Delay (s/veh)	69.5	0.0	4.5	68.0		81.5	0.6					
Queue Delay	0.0	0.0	2.4	0.0		0.0	0.0					
Total Delay (s/veh)	69.5	0.0	6.9	68.0		81.5	0.6					
LOS	E	A	A	E		F	A					
Approach Delay (s/veh)	67.9		6.9	68.0		57.0						
Approach LOS	E		A	E		E						

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 139.2  
 Natural Cycle: 140  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.92  
 Intersection Signal Delay (s/veh): 37.2  
 Intersection LOS: D  
 Intersection Capacity Utilization 40.1%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 4: Old LaGrange Rd & Chamberlain Ln



Timings  
5: LaGrange Rd & Chamberlain Ln/Factory Ln

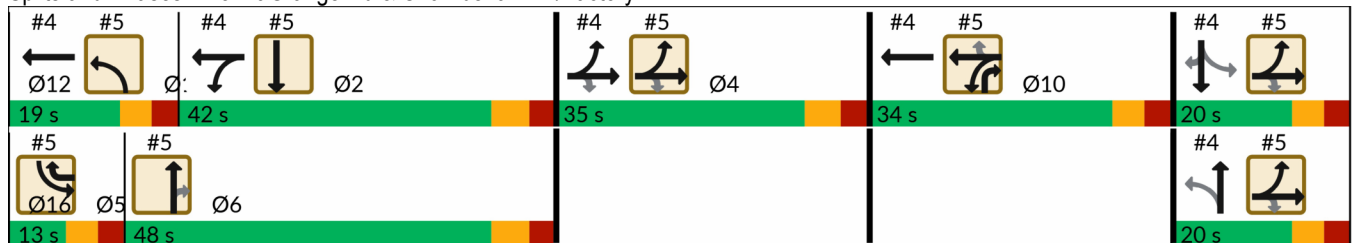
2036 No-Build AM Peak  
06/24/2026

	→	↘	↙	←	↖	↗	↑	↘	↙	↓	Ø4	Ø12
Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	Ø4	Ø12
Lane Configurations	↕	↕	↙	↕	↕	↙	↕	↕	↙	↕		
Traffic Volume (vph)	85	89	481	86	3	126	486	419	25	723		
Future Volume (vph)	85	89	481	86	3	126	486	419	25	723		
Turn Type	NA	Perm	Split	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		
Protected Phases	4 12 16		10	10	5	1	6	10	5	2	4	12
Permitted Phases		4 12 16			10			6				
Detector Phase	4 12 16	4 12 16	10	10	5	1	6	10	5	2		
Switch Phase												
Minimum Initial (s)			8.0	8.0	5.0	5.0	15.0	8.0	5.0	8.0	8.0	5.0
Minimum Split (s)			26.0	26.0	11.5	14.5	28.5	26.0	11.5	32.0	35.0	20.0
Total Split (s)			34.0	34.0	13.0	19.0	48.0	34.0	13.0	42.0	35.0	20.0
Total Split (%)			22.7%	22.7%	8.7%	12.7%	32.0%	22.7%	8.7%	28.0%	23%	13%
Yellow Time (s)			3.5	3.5	3.5	3.5	4.3	3.5	3.5	4.3	4.0	3.5
All-Red Time (s)			3.0	3.0	3.0	3.0	2.7	3.0	3.0	2.7	3.0	3.0
Lost Time Adjust (s)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)			6.5	6.5	6.5	6.5	7.0	6.5	6.5	7.0		
Lead/Lag					Lead	Lead	Lag		Lead	Lag		
Lead-Lag Optimize?					Yes	Yes	Yes		Yes	Yes		
Recall Mode			None	None	None	None	Max	None	None	Max	None	None
Act Effect Green (s)	29.8	29.8	27.6	27.6	34.0	12.5	46.7	74.7	6.4	35.1		
Actuated g/C Ratio	0.21	0.21	0.20	0.20	0.24	0.09	0.34	0.54	0.05	0.25		
v/c Ratio	0.33	0.22	0.91	0.92	0.01	0.86	0.44	0.43	0.34	0.90		
Control Delay (s/veh)	3.3	1.1	86.5	88.3	0.0	105.4	40.1	2.3	79.0	64.8		
Queue Delay	0.4	0.5	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.5		
Total Delay (s/veh)	3.7	1.6	86.5	88.3	0.0	108.1	40.1	2.3	79.0	65.3		
LOS	A	A	F	F	A	F	D	A	E	E		
Approach Delay (s/veh)	2.8			87.0			33.0			65.7		
Approach LOS	A			F			C			E		

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 139.2  
 Natural Cycle: 140  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.92  
 Intersection Signal Delay (s/veh): 52.2      Intersection LOS: D  
 Intersection Capacity Utilization 66.3%      ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 5: LaGrange Rd & Chamberlain Ln/Factory Ln



Lane Group	Ø16
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Turn Type	
Protected Phases	16
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	13%
Yellow Time (s)	3.5
All-Red Time (s)	3.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Intersection Summary	

Intersection						
Int Delay, s/veh	6.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	28	183	45	2	2
Future Vol, veh/h	6	28	183	45	2	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	56	56	56	56	56	56
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	11	50	327	80	4	4

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	739	5	7	0	0
Stage 1	5	-	-	-	-
Stage 2	734	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	387	1084	1627	-	-
Stage 1	1023	-	-	-	-
Stage 2	479	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	306	1084	1627	-	-
Mov Cap-2 Maneuver	306	-	-	-	-
Stage 1	808	-	-	-	-
Stage 2	479	-	-	-	-

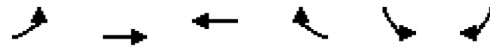
Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.24	6.24	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1445	-	748	-	-
HCM Lane V/C Ratio	0.201	-	0.081	-	-
HCM Ctrl Dly (s/v)	7.8	0	10.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.8	-	0.3	-	-

Synchro Reports  
2036 No-Build PM Peak

HCM 7th Signalized Intersection Summary  
 1: Chamberlain Ln & Gate 10

2036 No-Build PM Peak  
 06/24/2026



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↕	↕
Traffic Volume (veh/h)	28	782	620	3	11	21
Future Volume (veh/h)	28	782	620	3	11	21
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	418	1826	1826	418	418	418
Adj Flow Rate, veh/h	35	978	775	4	14	26
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	100	5	5	100	100	100
Cap, veh/h	118	1486	1610	8	118	105
Arrive On Green	0.45	0.45	0.45	0.45	0.30	0.30
Sat Flow, veh/h	51	3350	3630	18	398	354
Grp Volume(v), veh/h	533	480	380	399	14	26
Grp Sat Flow(s),veh/h/ln	1739	1578	1735	1823	398	354
Q Serve(g_s), s	0.0	9.6	6.2	6.2	1.0	2.2
Cycle Q Clear(g_c), s	9.1	9.6	6.2	6.2	1.0	2.2
Prop In Lane	0.07			0.01	1.00	1.00
Lane Grp Cap(c), veh/h	886	718	789	829	118	105
V/C Ratio(X)	0.60	0.67	0.48	0.48	0.12	0.25
Avail Cap(c_a), veh/h	1685	1486	1633	1716	118	105
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.5	8.6	7.7	7.7	10.3	10.8
Incr Delay (d2), s/veh	0.7	1.1	0.5	0.4	2.0	5.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	2.0	1.3	1.4	0.1	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	9.1	9.7	8.1	8.1	12.4	16.3
LnGrp LOS	A	A	A	A	B	B
Approach Vol, veh/h		1013	779		40	
Approach Delay, s/veh		9.4	8.1		14.9	
Approach LOS		A	A		B	
Timer - Assigned Phs				4	6	8
Phs Duration (G+Y+Rc), s				23.4	17.0	23.4
Change Period (Y+Rc), s				5.0	5.0	5.0
Max Green Setting (Gmax), s				38.0	12.0	38.0
Max Q Clear Time (g_c+I1), s				11.6	4.2	8.2
Green Ext Time (p_c), s				6.8	0.0	4.7
<b>Intersection Summary</b>						
HCM 7th Control Delay, s/veh			9.0			
HCM 7th LOS			A			

Intersection						
Int Delay, s/veh	2.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	20	17	49	92	93	8
Future Vol, veh/h	20	17	49	92	93	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	6	6	0
Mvmt Flow	24	21	60	112	113	10




















Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	350	118	123	0	0
Stage 1	118	-	-	-	-
Stage 2	232	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	651	939	1476	-	-
Stage 1	912	-	-	-	-
Stage 2	812	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	623	939	1476	-	-
Mov Cap-2 Maneuver	623	-	-	-	-
Stage 1	872	-	-	-	-
Stage 2	812	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.2	2.62	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	626	-	737	-	-
HCM Lane V/C Ratio	0.04	-	0.061	-	-
HCM Ctrl Dly (s/v)	7.5	0	10.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

HCM 7th Signalized Intersection Summary  
 3: Chamberlain Ln & Collins Ln

2036 No-Build PM Peak  
 06/24/2026

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	59	50	19	112	36	1	60	462	252	11	466	39
Future Volume (veh/h)	59	50	19	112	36	1	60	462	252	11	466	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	72	61	23	137	44	1	73	563	307	13	568	48
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	430	333	633	503	145	3	144	781	418	84	1279	107
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	798	834	1585	942	364	7	154	1948	1044	22	3193	266
Grp Volume(v), veh/h	133	0	23	182	0	0	498	0	445	331	0	298
Grp Sat Flow(s),veh/h/ln	1633	0	1585	1313	0	0	1632	0	1514	1827	0	1654
Q Serve(g_s), s	0.0	0.0	0.4	3.8	0.0	0.0	6.1	0.0	12.5	0.0	0.0	6.6
Cycle Q Clear(g_c), s	2.3	0.0	0.4	6.1	0.0	0.0	12.7	0.0	12.5	6.4	0.0	6.6
Prop In Lane	0.54		1.00	0.75		0.01	0.15		0.69	0.04		0.16
Lane Grp Cap(c), veh/h	763	0	633	651	0	0	736	0	607	807	0	663
V/C Ratio(X)	0.17	0.00	0.04	0.28	0.00	0.00	0.68	0.00	0.73	0.41	0.00	0.45
Avail Cap(c_a), veh/h	763	0	633	651	0	0	1048	0	907	1152	0	991
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.7	0.0	9.2	11.2	0.0	0.0	12.6	0.0	12.7	10.9	0.0	11.0
Incr Delay (d2), s/veh	0.5	0.0	0.1	1.1	0.0	0.0	1.1	0.0	1.7	0.3	0.0	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.1	1.4	0.0	0.0	3.4	0.0	3.3	2.0	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	10.2	0.0	9.3	12.2	0.0	0.0	13.7	0.0	14.5	11.3	0.0	11.4
LnGrp LOS	B		A	B			B		B	B		B
Approach Vol, veh/h		156			182			943				629
Approach Delay, s/veh		10.1			12.2			14.0				11.3
Approach LOS		B			B			B				B
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		25.0		25.1		25.0		25.1				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		20.0		30.0		20.0		30.0				
Max Q Clear Time (g_c+I1), s		8.1		14.7		4.3		8.6				
Green Ext Time (p_c), s		0.7		5.3		0.6		3.5				
<b>Intersection Summary</b>												
HCM 7th Control Delay, s/veh				12.7								
HCM 7th LOS				B								

Timings  
4: Old LaGrange Rd & Chamberlain Ln

2036 No-Build PM Peak  
06/24/2026

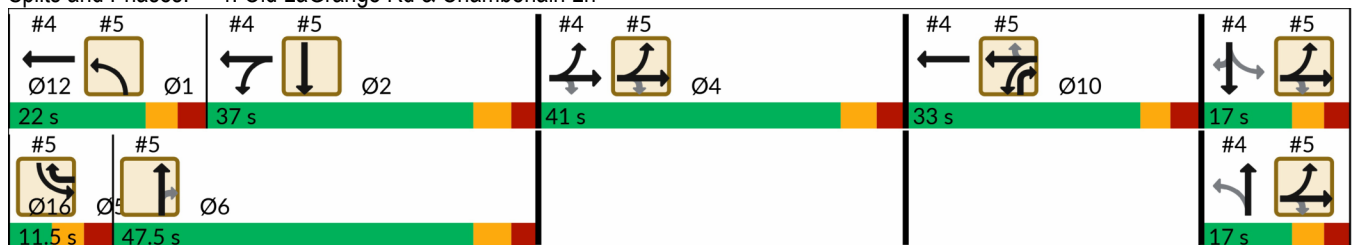


Lane Group	EBT	WBT	NBL	NBT	SBL	SBT	SBR	Ø1	Ø2	Ø5	Ø6	Ø10
Lane Configurations	↕	↕↔		↕		↕	↕					
Traffic Volume (vph)	445	507	2	7	24	4	42					
Future Volume (vph)	445	507	2	7	24	4	42					
Turn Type	NA	NA	Perm	NA	Perm	NA	Perm					
Protected Phases	4	10 12		16		12		1	2	5	6	10
Permitted Phases			16		12		12					
Detector Phase	4	10 12	16	16	12	12	12					
Switch Phase												
Minimum Initial (s)	8.0		5.0	5.0	5.0	5.0	5.0	5.0	8.0	5.0	15.0	8.0
Minimum Split (s)	35.0		12.0	12.0	12.0	12.0	12.0	14.5	32.0	11.5	28.5	26.0
Total Split (s)	41.0		17.0	17.0	17.0	17.0	17.0	22.0	37.0	11.5	47.5	33.0
Total Split (%)	27.3%		11.3%	11.3%	11.3%	11.3%	11.3%	15%	25%	8%	32%	22%
Yellow Time (s)	4.0		3.5	3.5	3.5	3.5	3.5	3.5	4.3	3.5	4.3	3.5
All-Red Time (s)	3.0		3.0	3.0	3.0	3.0	3.0	3.0	2.7	3.0	2.7	3.0
Lost Time Adjust (s)	0.0			0.0		0.0	0.0					
Total Lost Time (s)	7.0			6.5		6.5	6.5					
Lead/Lag								Lead	Lag	Lead	Lag	
Lead-Lag Optimize?								Yes	Yes	Yes	Yes	
Recall Mode	None		None	None	None	None	None	None	Max	None	Max	None
Act Effect Green (s)	34.0	72.5		10.5		10.5	10.5					
Actuated g/C Ratio	0.23	0.48		0.07		0.07	0.07					
v/c Ratio	1.27	0.72		1.57		0.73	0.16					
Control Delay (s/veh)	186.4	27.3		337.5		137.1	1.0					
Queue Delay	0.0	55.7		0.0		0.0	0.0					
Total Delay (s/veh)	186.4	82.9		337.5		137.1	1.0					
LOS	F	F		F		F	A					
Approach Delay (s/veh)	186.4	82.9		337.5		55.8						
Approach LOS	F	F		F		E						

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Natural Cycle: 150  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 1.57  
 Intersection Signal Delay (s/veh): 150.4  
 Intersection LOS: F  
 Intersection Capacity Utilization 59.1%  
 ICU Level of Service B  
 Analysis Period (min) 15

Splits and Phases: 4: Old LaGrange Rd & Chamberlain Ln



Timings  
5: LaGrange Rd & Chamberlain Ln/Factory Ln

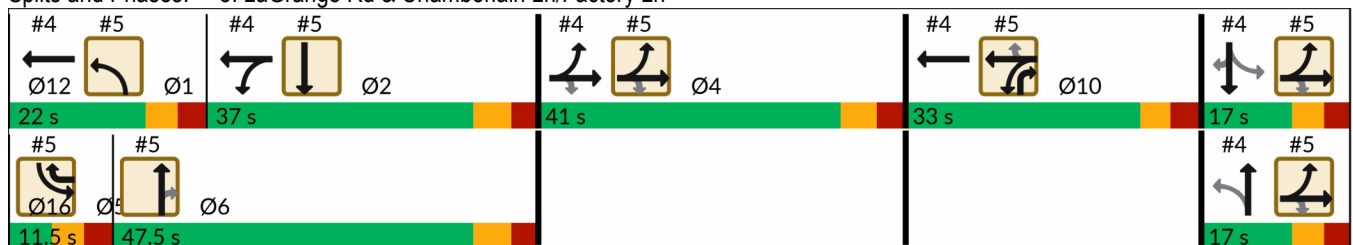
2036 No-Build PM Peak  
06/24/2026

	→	↘	↙	←	↖	↗	↑	↘	↙	↓	Ø4	Ø12
Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	Ø4	Ø12
Lane Configurations	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕		
Traffic Volume (vph)	156	340	321	327	2	236	835	603	38	499		
Future Volume (vph)	156	340	321	327	2	236	835	603	38	499		
Turn Type	NA	Perm	Split	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		
Protected Phases	4 12 16		10	10	5	1	6	10	5	2	4	12
Permitted Phases		4 12 16			10			6				
Detector Phase	4 12 16	4 12 16	10	10	5	1	6	10	5	2		
Switch Phase												
Minimum Initial (s)			8.0	8.0	5.0	5.0	15.0	8.0	5.0	8.0	8.0	5.0
Minimum Split (s)			26.0	26.0	11.5	14.5	28.5	26.0	11.5	32.0	35.0	12.0
Total Split (s)			33.0	33.0	11.5	22.0	47.5	33.0	11.5	37.0	41.0	17.0
Total Split (%)			22.0%	22.0%	7.7%	14.7%	31.7%	22.0%	7.7%	24.7%	27%	11%
Yellow Time (s)			3.5	3.5	3.5	3.5	4.3	3.5	3.5	4.3	4.0	3.5
All-Red Time (s)			3.0	3.0	3.0	3.0	2.7	3.0	3.0	2.7	3.0	3.0
Lost Time Adjust (s)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)			6.5	6.5	6.5	6.5	7.0	6.5	6.5	7.0		
Lead/Lag					Lead	Lead	Lag		Lead	Lag		
Lead-Lag Optimize?					Yes	Yes	Yes		Yes	Yes		
Recall Mode			None	None	None	None	Max	None	None	Max	None	None
Act Effect Green (s)	44.0	44.0	26.5	26.5	31.5	15.5	42.8	69.8	5.0	30.0		
Actuated g/C Ratio	0.29	0.29	0.18	0.18	0.21	0.10	0.29	0.47	0.03	0.20		
v/c Ratio	0.59	0.67	1.15	1.36	0.00	1.53	0.97	0.72	0.76	1.01		
Control Delay (s/veh)	5.8	2.6	151.8	226.5	0.0	305.5	75.3	10.4	132.5	96.0		
Queue Delay	42.0	56.4	0.0	6.4	0.0	18.6	0.0	0.0	0.0	0.0		
Total Delay (s/veh)	47.8	59.1	151.8	232.9	0.0	324.1	75.3	10.4	132.5	96.0		
LOS	D	E	F	F	A	F	E	B	F	F		
Approach Delay (s/veh)	54.1			196.2			87.0			98.2		
Approach LOS	D			F			F			F		

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Natural Cycle: 150  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 1.57  
 Intersection Signal Delay (s/veh): 103.3  
 Intersection LOS: F  
 Intersection Capacity Utilization 84.3%  
 ICU Level of Service E  
 Analysis Period (min) 15

Splits and Phases: 5: LaGrange Rd & Chamberlain Ln/Factory Ln



Lane Group	Ø16
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Turn Type	
Protected Phases	16
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	12.0
Total Split (s)	17.0
Total Split (%)	11%
Yellow Time (s)	3.5
All-Red Time (s)	3.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Intersection Summary	

Intersection						
Int Delay, s/veh	10.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	113	160	236	50	25	6
Future Vol, veh/h	113	160	236	50	25	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	126	178	262	56	28	7

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	611	31	34	0	0
Stage 1	31	-	-	-	-
Stage 2	580	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	460	1049	1590	-	-
Stage 1	997	-	-	-	-
Stage 2	564	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	382	1049	1590	-	-
Mov Cap-2 Maneuver	382	-	-	-	-
Stage 1	827	-	-	-	-
Stage 2	564	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	16.64	6.36	0
HCM LOS	C		

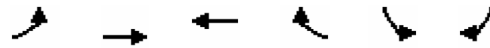
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1485	-	609	-	-
HCM Lane V/C Ratio	0.165	-	0.498	-	-
HCM Ctrl Dly (s/v)	7.7	0	16.6	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.6	-	2.8	-	-

# Synchro Reports

## 2026 Build AM Peak

HCM 7th Signalized Intersection Summary  
 1: Chamberlain Ln & Gate 10

2026 Build AM Peak  
 06/24/2026



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔↔	↔↔		↔	↔
Traffic Volume (veh/h)	29	284	904	17	18	16
Future Volume (veh/h)	29	284	904	17	18	16
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	418	1826	1826	418	418	418
Adj Flow Rate, veh/h	39	379	1205	23	24	21
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	100	5	5	100	100	100
Cap, veh/h	150	1311	1738	33	109	97
Arrive On Green	0.50	0.50	0.50	0.50	0.27	0.27
Sat Flow, veh/h	104	2709	3573	66	398	354
Grp Volume(v), veh/h	199	219	600	628	24	21
Grp Sat Flow(s),veh/h/ln	1151	1578	1735	1814	398	354
Q Serve(g_s), s	0.9	3.5	11.6	11.6	2.0	2.0
Cycle Q Clear(g_c), s	12.5	3.5	11.6	11.6	2.0	2.0
Prop In Lane	0.20			0.04	1.00	1.00
Lane Grp Cap(c), veh/h	673	788	866	905	109	97
V/C Ratio(X)	0.30	0.28	0.69	0.69	0.22	0.22
Avail Cap(c_a), veh/h	1087	1366	1501	1569	109	97
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.4	6.4	8.4	8.4	12.3	12.3
Incr Delay (d2), s/veh	0.2	0.2	1.0	1.0	4.6	5.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.7	2.6	2.7	0.3	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.7	6.6	9.4	9.4	17.0	17.4
LnGrp LOS	A	A	A	A	B	B
Approach Vol, veh/h		418	1228		45	
Approach Delay, s/veh		6.6	9.4		17.2	
Approach LOS		A	A		B	
Timer - Assigned Phs				4	6	8
Phs Duration (G+Y+Rc), s				26.9	17.0	26.9
Change Period (Y+Rc), s				5.0	5.0	5.0
Max Green Setting (Gmax), s				38.0	12.0	38.0
Max Q Clear Time (g_c+I1), s				14.5	4.0	13.6
Green Ext Time (p_c), s				2.6	0.0	8.3
<b>Intersection Summary</b>						
HCM 7th Control Delay, s/veh			8.9			
HCM 7th LOS			A			

Intersection						
Int Delay, s/veh	14.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↙	↗	↙	↑	↗	
Traffic Vol, veh/h	219	189	192	57	87	271
Future Vol, veh/h	219	189	192	57	87	271
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	125	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	29	29	0
Mvmt Flow	249	215	218	65	99	308

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	754	253	407	0	-	0
Stage 1	253	-	-	-	-	-
Stage 2	501	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	380	791	1163	-	-	-
Stage 1	794	-	-	-	-	-
Stage 2	613	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	309	791	1163	-	-	-
Mov Cap-2 Maneuver	309	-	-	-	-	-
Stage 1	645	-	-	-	-	-
Stage 2	613	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	32.81	6.79	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1163	-	309	791	-	-
HCM Lane V/C Ratio	0.188	-	0.806	0.272	-	-
HCM Ctrl Dly (s/v)	8.8	-	51.4	11.2	-	-
HCM Lane LOS	A	-	F	B	-	-
HCM 95th %tile Q(veh)	0.7	-	6.6	1.1	-	-

HCM 7th Signalized Intersection Summary  
 3: Chamberlain Ln & Collins Ln

2026 Build AM Peak  
 06/24/2026



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕	↗		↕			↕			↕	
Traffic Volume (veh/h)	108	10	105	163	42	1	102	182	16	1	643	119
Future Volume (veh/h)	108	10	105	163	42	1	102	182	16	1	643	119
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	142	13	138	214	55	1	134	239	21	1	846	157
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	644	54	634	458	106	2	233	670	59	60	1270	235
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	1321	135	1585	875	266	4	262	1546	136	0	2931	543
Grp Volume(v), veh/h	155	0	138	270	0	0	136	0	258	540	0	464
Grp Sat Flow(s),veh/h/ln	1457	0	1585	1145	0	0	267	0	1677	1870	0	1604
Q Serve(g_s), s	0.0	0.0	3.4	9.3	0.0	0.0	12.2	0.0	6.2	0.0	0.0	13.8
Cycle Q Clear(g_c), s	4.1	0.0	3.4	13.3	0.0	0.0	26.0	0.0	6.2	13.8	0.0	13.8
Prop In Lane	0.92		1.00	0.79		0.00	0.99		0.08	0.00		0.34
Lane Grp Cap(c), veh/h	698	0	634	566	0	0	235	0	727	870	0	695
V/C Ratio(X)	0.22	0.00	0.22	0.48	0.00	0.00	0.58	0.00	0.36	0.62	0.00	0.67
Avail Cap(c_a), veh/h	698	0	634	566	0	0	235	0	727	870	0	695
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.0	0.0	11.8	16.0	0.0	0.0	24.7	0.0	11.4	13.5	0.0	13.5
Incr Delay (d2), s/veh	0.7	0.0	0.8	2.9	0.0	0.0	3.4	0.0	0.3	1.4	0.0	2.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	1.2	3.1	0.0	0.0	1.9	0.0	1.8	4.8	0.0	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.7	0.0	12.6	18.8	0.0	0.0	28.1	0.0	11.7	14.9	0.0	16.0
LnGrp LOS	B		B	B			C		B	B		B
Approach Vol, veh/h		293			270			394				1004
Approach Delay, s/veh		12.7			18.8			17.3				15.4
Approach LOS		B			B			B				B
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		29.0		31.0		29.0		31.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		24.0		26.0		24.0		26.0				
Max Q Clear Time (g_c+I1), s		15.3		28.0		6.1		15.8				
Green Ext Time (p_c), s		1.0		0.0		1.2		4.3				
<b>Intersection Summary</b>												
HCM 7th Control Delay, s/veh			15.9									
HCM 7th LOS			B									

Timings  
4: Old LaGrange Rd & Chamberlain Ln

2026 Build AM Peak  
06/24/2026

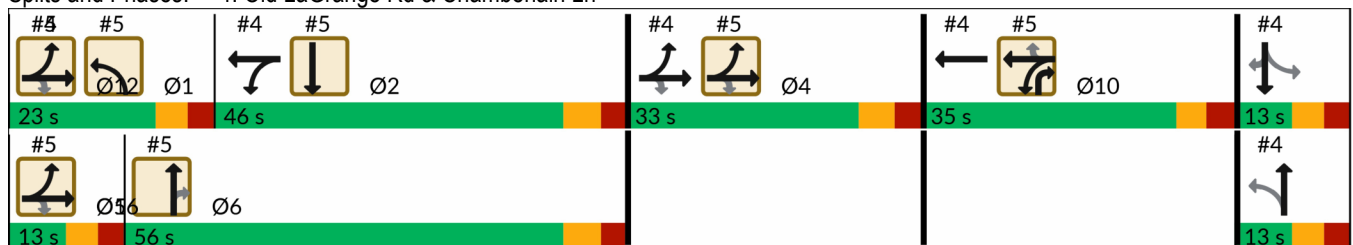


Lane Group	EBT	EBR	WBT	NBT	SBL	SBT	SBR	Ø1	Ø2	Ø5	Ø6	Ø10
Lane Configurations	↕	↕	↕↔	↕		↕	↕					
Traffic Volume (vph)	236	6	261	3	49	3	19					
Future Volume (vph)	236	6	261	3	49	3	19					
Turn Type	NA	Perm	NA	NA	Perm	NA	Perm					
Protected Phases	4		10 1 2	16		12		1	2	5	6	10
Permitted Phases		4			12		12					
Detector Phase	4	4	10 1 2	16	12	12	12					
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	5.0	5.0	5.0	5.0	8.0	5.0	15.0	8.0
Minimum Split (s)	33.0	33.0		12.0	12.0	12.0	12.0	14.5	32.0	11.5	28.5	26.0
Total Split (s)	33.0	33.0		13.0	13.0	13.0	13.0	23.0	46.0	13.0	56.0	35.0
Total Split (%)	22.0%	22.0%		8.7%	8.7%	8.7%	8.7%	15%	31%	9%	37%	23%
Yellow Time (s)	4.0	4.0		3.5	3.5	3.5	3.5	3.5	4.3	3.5	4.3	3.5
All-Red Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	2.7	3.0	2.7	3.0
Lost Time Adjust (s)	0.0	0.0		0.0		0.0	0.0					
Total Lost Time (s)	7.0	7.0		6.5		6.5	6.5					
Lead/Lag								Lead	Lag	Lead	Lag	
Lead-Lag Optimize?								Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None	None	None	None	Max	None	Max	None
Act Effct Green (s)	25.3	25.3	84.5	6.5		6.5	6.5					
Actuated g/C Ratio	0.17	0.17	0.57	0.04		0.04	0.04					
v/c Ratio	0.92	0.02	0.29	0.49		1.09	0.08					
Control Delay (s/veh)	93.5	0.0	5.2	92.9		205.8	0.6					
Queue Delay	0.0	0.0	6.3	0.0		0.0	0.0					
Total Delay (s/veh)	93.5	0.0	11.5	92.9		205.8	0.6					
LOS	F	A	B	F		F	A					
Approach Delay (s/veh)	91.3		11.5	92.9		150.9						
Approach LOS	F		B	F		F						

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 149.3  
 Natural Cycle: 130  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 1.09  
 Intersection Signal Delay (s/veh): 61.4  
 Intersection LOS: E  
 Intersection Capacity Utilization 42.5%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 4: Old LaGrange Rd & Chamberlain Ln



Timings  
5: LaGrange Rd & Chamberlain Ln/Factory Ln

2026 Build AM Peak  
06/24/2026

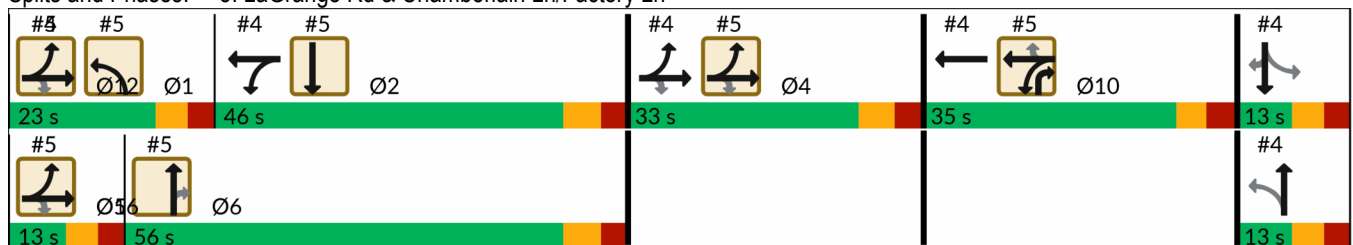


Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	Ø4	Ø12
Lane Configurations	↗	↗	↖	↖	↗	↖	↕	↗	↖	↕		
Traffic Volume (vph)	123	102	458	113	3	165	463	399	24	689		
Future Volume (vph)	123	102	458	113	3	165	463	399	24	689		
Turn Type	NA	Perm	Split	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		
Protected Phases	4 12 16		10	10	5	1	6	10	5	2	4	12
Permitted Phases		4 12 16			10			6				
Detector Phase	4 12 16	4 12 16	10	10	5	1	6	10	5	2		
Switch Phase												
Minimum Initial (s)			8.0	8.0	5.0	5.0	15.0	8.0	5.0	8.0	8.0	5.0
Minimum Split (s)			26.0	26.0	11.5	14.5	28.5	26.0	11.5	32.0	33.0	12.0
Total Split (s)			35.0	35.0	13.0	23.0	56.0	35.0	13.0	46.0	33.0	13.0
Total Split (%)			23.3%	23.3%	8.7%	15.3%	37.3%	23.3%	8.7%	30.7%	22%	9%
Yellow Time (s)			3.5	3.5	3.5	3.5	4.3	3.5	3.5	4.3	4.0	3.5
All-Red Time (s)			3.0	3.0	3.0	3.0	2.7	3.0	3.0	2.7	3.0	3.0
Lost Time Adjust (s)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)			6.5	6.5	6.5	6.5	7.0	6.5	6.5	7.0		
Lead/Lag					Lead	Lead	Lag		Lead	Lag		
Lead-Lag Optimize?					Yes	Yes	Yes		Yes	Yes		
Recall Mode			None	None	None	None	Max	None	None	Max	None	None
Act Effct Green (s)	31.3	31.3	28.5	28.5	34.9	16.5	54.2	83.2	6.4	39.0		
Actuated g/C Ratio	0.21	0.21	0.19	0.19	0.23	0.11	0.36	0.56	0.04	0.26		
v/c Ratio	0.57	0.24	0.96	0.95	0.01	0.92	0.39	0.40	0.35	0.83		
Control Delay (s/veh)	9.2	0.9	100.9	97.9	0.0	112.5	37.6	2.0	82.9	61.4		
Queue Delay	4.7	3.2	0.0	0.0	0.0	10.8	0.0	0.0	0.0	0.2		
Total Delay (s/veh)	14.0	4.1	100.9	97.9	0.0	123.3	37.6	2.0	82.9	61.6		
LOS	B	A	F	F	A	F	D	A	F	E		
Approach Delay (s/veh)	10.6			98.9			37.6			62.3		
Approach LOS	B			F			D			E		

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 149.3  
 Natural Cycle: 130  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 1.09  
 Intersection Signal Delay (s/veh): 54.7  
 Intersection Capacity Utilization 77.6%  
 Analysis Period (min) 15  
 Intersection LOS: D  
 ICU Level of Service D

Splits and Phases: 5: LaGrange Rd & Chamberlain Ln/Factory Ln



Lane Group	Ø16
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Turn Type	
Protected Phases	16
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	12.0
Total Split (s)	13.0
Total Split (%)	9%
Yellow Time (s)	3.5
All-Red Time (s)	3.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Intersection Summary	

Intersection						
Int Delay, s/veh	6.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	6	32	204	43	5	2
Future Vol, veh/h	6	32	204	43	5	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	56	56	56	56	56	56
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	11	57	364	77	9	4

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	816	11	12	0	0
Stage 1	11	-	-	-	-
Stage 2	805	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	349	1076	1619	-	-
Stage 1	1017	-	-	-	-
Stage 2	443	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	267	1076	1619	-	-
Mov Cap-2 Maneuver	267	-	-	-	-
Stage 1	778	-	-	-	-
Stage 2	443	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.45	6.5	0
HCM LOS	B		

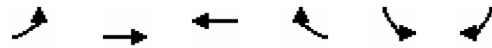
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1487	-	728	-	-
HCM Lane V/C Ratio	0.225	-	0.093	-	-
HCM Ctrl Dly (s/v)	7.9	0	10.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.9	-	0.3	-	-

# Synchro Reports

## 2026 Build PM Peak

HCM 7th Signalized Intersection Summary  
 1: Chamberlain Ln & Gate 10

2026 Build PM Peak  
 06/24/2026



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↕	↕
Traffic Volume (veh/h)	58	848	622	6	41	35
Future Volume (veh/h)	58	848	622	6	41	35
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	418	1826	1826	418	418	418
Adj Flow Rate, veh/h	72	1060	778	8	51	44
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	100	5	5	100	100	100
Cap, veh/h	152	1531	1750	18	109	97
Arrive On Green	0.50	0.50	0.50	0.50	0.27	0.27
Sat Flow, veh/h	121	3160	3609	36	398	354
Grp Volume(v), veh/h	578	554	384	402	51	44
Grp Sat Flow(s),veh/h/ln	1619	1578	1735	1819	398	354
Q Serve(g_s), s	3.3	11.9	6.2	6.2	4.7	4.5
Cycle Q Clear(g_c), s	11.0	11.9	6.2	6.2	4.7	4.5
Prop In Lane	0.12			0.02	1.00	1.00
Lane Grp Cap(c), veh/h	898	785	863	905	109	97
V/C Ratio(X)	0.64	0.71	0.44	0.44	0.47	0.45
Avail Cap(c_a), veh/h	1455	1370	1506	1579	109	97
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.1	8.5	7.1	7.1	13.2	13.2
Incr Delay (d2), s/veh	0.8	1.2	0.4	0.3	13.7	14.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	2.4	1.3	1.4	0.8	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	8.9	9.7	7.5	7.4	26.9	27.7
LnGrp LOS	A	A	A	A	C	C
Approach Vol, veh/h		1132	786		95	
Approach Delay, s/veh		9.3	7.4		27.3	
Approach LOS		A	A		C	
Timer - Assigned Phs				4	6	8
Phs Duration (G+Y+Rc), s				26.8	17.0	26.8
Change Period (Y+Rc), s				5.0	5.0	5.0
Max Green Setting (Gmax), s				38.0	12.0	38.0
Max Q Clear Time (g_c+I1), s				13.9	6.7	8.2
Green Ext Time (p_c), s				7.9	0.1	4.8
<b>Intersection Summary</b>						
HCM 7th Control Delay, s/veh			9.4			
HCM 7th LOS			A			

Intersection						
Int Delay, s/veh	89					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↙	↗	↙	↑	↗	
Traffic Vol, veh/h	266	227	278	88	89	183
Future Vol, veh/h	266	227	278	88	89	183
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	125	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	6	6	0
Mvmt Flow	324	277	339	107	109	223

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	1005	220	332	0	0
Stage 1	220	-	-	-	-
Stage 2	785	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	~ 270	825	1239	-	-
Stage 1	821	-	-	-	-
Stage 2	453	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	~ 196	825	1239	-	-
Mov Cap-2 Maneuver	~ 196	-	-	-	-
Stage 1	597	-	-	-	-
Stage 2	453	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	199.02	6.83	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1239	-	196	825	-	-
HCM Lane V/C Ratio	0.274	-	1.655	0.336	-	-
HCM Ctrl Dly (s/v)	9	-	\$ 359	11.6	-	-
HCM Lane LOS	A	-	F	B	-	-
HCM 95th %tile Q(veh)	1.1	-	21.7	1.5	-	-

Notes	
~: Volume exceeds capacity	\$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

HCM 7th Signalized Intersection Summary  
 3: Chamberlain Ln & Collins Ln

2026 Build PM Peak  
 06/24/2026



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕	↗		↖			↕			↕	
Traffic Volume (veh/h)	201	82	50	107	93	1	160	471	240	10	447	106
Future Volume (veh/h)	201	82	50	107	93	1	160	471	240	10	447	106
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	245	100	61	130	113	1	195	574	293	12	545	129
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	392	118	555	151	106	1	253	675	380	71	1335	311
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	827	337	1585	169	302	2	350	1397	787	18	2761	643
Grp Volume(v), veh/h	345	0	61	244	0	0	481	0	581	368	0	318
Grp Sat Flow(s),veh/h/ln	1164	0	1585	474	0	0	973	0	1560	1836	0	1586
Q Serve(g_s), s	0.0	0.0	1.6	4.6	0.0	0.0	21.2	0.0	18.4	0.0	0.0	7.8
Cycle Q Clear(g_c), s	16.4	0.0	1.6	21.0	0.0	0.0	29.0	0.0	18.4	7.6	0.0	7.8
Prop In Lane	0.71		1.00	0.53		0.00	0.41		0.50	0.03		0.41
Lane Grp Cap(c), veh/h	510	0	555	258	0	0	555	0	754	949	0	767
V/C Ratio(X)	0.68	0.00	0.11	0.95	0.00	0.00	0.87	0.00	0.77	0.39	0.00	0.42
Avail Cap(c_a), veh/h	510	0	555	258	0	0	555	0	754	949	0	767
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.0	0.0	13.2	24.5	0.0	0.0	17.7	0.0	12.8	10.0	0.0	10.0
Incr Delay (d2), s/veh	7.0	0.0	0.4	43.9	0.0	0.0	13.6	0.0	4.9	0.3	0.0	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	0.0	0.6	6.4	0.0	0.0	7.3	0.0	5.7	2.4	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.1	0.0	13.6	68.3	0.0	0.0	31.3	0.0	17.7	10.2	0.0	10.4
LnGrp LOS	C		B	E			C		B	B		B
Approach Vol, veh/h		406			244			1062				686
Approach Delay, s/veh		23.3			68.3			23.8				10.3
Approach LOS		C			E			C				B
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		26.0		34.0		26.0		34.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		21.0		29.0		21.0		29.0				
Max Q Clear Time (g_c+I1), s		23.0		31.0		18.4		9.8				
Green Ext Time (p_c), s		0.0		0.0		0.6		3.8				
<b>Intersection Summary</b>												
HCM 7th Control Delay, s/veh			24.4									
HCM 7th LOS			C									

Timings  
4: Old LaGrange Rd & Chamberlain Ln

2026 Build PM Peak  
06/24/2026

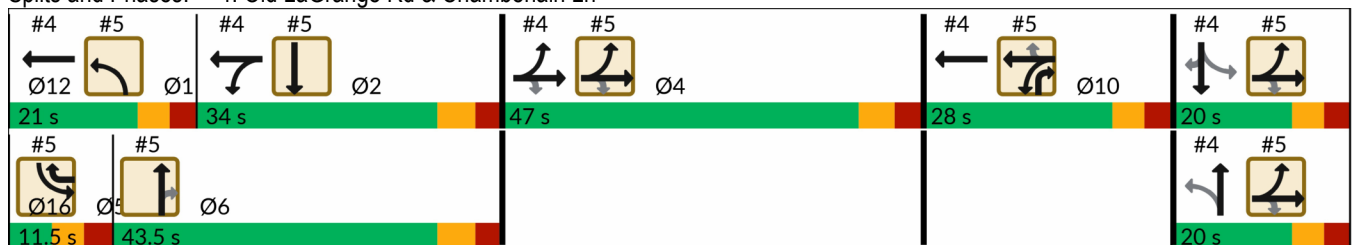


Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR	Ø1	Ø2	Ø5	Ø6
Lane Configurations	↕	↗	↔		↔		↕	↗				
Traffic Volume (vph)	598	2	548	2	7	23	4	47				
Future Volume (vph)	598	2	548	2	7	23	4	47				
Turn Type	NA	Perm	NA	Perm	NA	Perm	NA	Perm				
Protected Phases	4		10 1 2		16		12		1	2	5	6
Permitted Phases		4		16		12		12				
Detector Phase	4	4	10 1 2	16	16	12	12	12				
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	5.0	5.0	5.0	5.0	5.0	8.0	5.0	15.0
Minimum Split (s)	35.0	35.0		20.0	20.0	20.0	20.0	20.0	14.5	32.0	11.5	28.5
Total Split (s)	47.0	47.0		20.0	20.0	20.0	20.0	20.0	21.0	34.0	11.5	43.5
Total Split (%)	31.3%	31.3%		13.3%	13.3%	13.3%	13.3%	13.3%	14%	23%	8%	29%
Yellow Time (s)	4.0	4.0		3.5	3.5	3.5	3.5	3.5	3.5	4.3	3.5	4.3
All-Red Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	2.7	3.0	2.7
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0				
Total Lost Time (s)	7.0	7.0			6.5		6.5	6.5				
Lead/Lag									Lead	Lag	Lead	Lag
Lead-Lag Optimize?									Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	None	None	Max	None	Max
Act Effct Green (s)	40.0	40.0	63.5		13.5		13.5	13.5				
Actuated g/C Ratio	0.27	0.27	0.42		0.09		0.09	0.09				
v/c Ratio	1.45	0.00	0.87		1.17		0.71	0.16				
Control Delay (s/veh)	250.7	0.0	27.8		183.4		131.6	1.0				
Queue Delay	0.0	0.0	53.4		0.0		0.0	0.0				
Total Delay (s/veh)	250.7	0.0	81.2		183.4		131.6	1.0				
LOS	F	A	F		F		F	A				
Approach Delay (s/veh)	250.0		81.2		183.4		49.0					
Approach LOS	F		F		F		D					

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Natural Cycle: 150  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 1.66  
 Intersection Signal Delay (s/veh): 161.8      Intersection LOS: F  
 Intersection Capacity Utilization 63.8%      ICU Level of Service B  
 Analysis Period (min) 15

Splits and Phases: 4: Old LaGrange Rd & Chamberlain Ln



Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	8.0
Minimum Split (s)	26.0
Total Split (s)	28.0
Total Split (%)	19%
Yellow Time (s)	3.5
All-Red Time (s)	3.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Intersection Summary	

Timings  
5: LaGrange Rd & Chamberlain Ln/Factory Ln

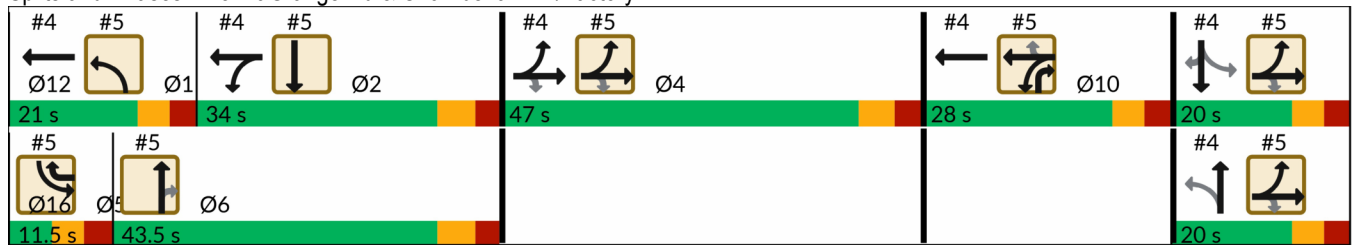
2026 Build PM Peak  
06/24/2026

	→	↘	↙	←	↖	↗	↑	↘	↙	↓	Ø4	Ø12
Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	Ø4	Ø12
Lane Configurations	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕		
Traffic Volume (vph)	194	357	306	242	2	253	795	574	36	475		
Future Volume (vph)	194	357	306	242	2	253	795	574	36	475		
Turn Type	NA	Perm	Split	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		
Protected Phases	4 12 16		10	10	5	1	6	10	5	2	4	12
Permitted Phases		4 12 16			10			6				
Detector Phase	4 12 16	4 12 16	10	10	5	1	6	10	5	2		
Switch Phase												
Minimum Initial (s)			8.0	8.0	5.0	5.0	15.0	8.0	5.0	8.0	8.0	5.0
Minimum Split (s)			26.0	26.0	11.5	14.5	28.5	26.0	11.5	32.0	35.0	20.0
Total Split (s)			28.0	28.0	11.5	21.0	43.5	28.0	11.5	34.0	47.0	20.0
Total Split (%)			18.7%	18.7%	7.7%	14.0%	29.0%	18.7%	7.7%	22.7%	31%	13%
Yellow Time (s)			3.5	3.5	3.5	3.5	4.3	3.5	3.5	4.3	4.0	3.5
All-Red Time (s)			3.0	3.0	3.0	3.0	2.7	3.0	3.0	2.7	3.0	3.0
Lost Time Adjust (s)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)			6.5	6.5	6.5	6.5	7.0	6.5	6.5	7.0		
Lead/Lag					Lead	Lead	Lag		Lead	Lag		
Lead-Lag Optimize?					Yes	Yes	Yes		Yes	Yes		
Recall Mode			None	None	None	None	Max	None	None	Max	None	None
Act Effct Green (s)	53.0	53.0	21.5	21.5	26.5	14.5	38.8	60.8	5.0	27.0		
Actuated g/C Ratio	0.35	0.35	0.14	0.14	0.18	0.10	0.26	0.41	0.03	0.18		
v/c Ratio	0.70	0.59	1.26	1.25	0.00	1.66	0.98	0.70	0.68	1.04		
Control Delay (s/veh)	4.0	0.8	197.0	190.4	0.0	360.7	79.1	9.6	119.0	106.2		
Queue Delay	55.4	56.9	0.0	6.6	0.0	3.2	0.0	0.0	0.0	11.3		
Total Delay (s/veh)	59.4	57.7	197.0	197.0	0.0	364.0	79.1	9.6	119.0	117.5		
LOS	E	E	F	F	A	F	E	A	F	F		
Approach Delay (s/veh)	58.6			196.3			98.9			117.6		
Approach LOS	E			F			F			F		

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Natural Cycle: 150  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 1.66  
 Intersection Signal Delay (s/veh): 108.7  
 Intersection LOS: F  
 Intersection Capacity Utilization 89.2%  
 ICU Level of Service E  
 Analysis Period (min) 15

Splits and Phases: 5: LaGrange Rd & Chamberlain Ln/Factory Ln



Lane Group	Ø16
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Turn Type	
Protected Phases	16
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	13%
Yellow Time (s)	3.5
All-Red Time (s)	3.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Intersection Summary	

Intersection						
Int Delay, s/veh	12.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	108	186	284	48	26	6
Future Vol, veh/h	108	186	284	48	26	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	120	207	316	53	29	7

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	717	32	36	0	0
Stage 1	32	-	-	-	-
Stage 2	684	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	399	1047	1589	-	-
Stage 1	995	-	-	-	-
Stage 2	505	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	318	1047	1589	-	-
Mov Cap-2 Maneuver	318	-	-	-	-
Stage 1	792	-	-	-	-
Stage 2	505	-	-	-	-

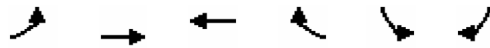
Approach	EB	NB	SB
HCM Ctrl Dly, s/v	19.56	6.7	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1540	-	568	-	-
HCM Lane V/C Ratio	0.199	-	0.575	-	-
HCM Ctrl Dly (s/v)	7.8	0	19.6	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.7	-	3.6	-	-

Synchro Reports  
2036 Build AM Peak

HCM 7th Signalized Intersection Summary  
 1: Chamberlain Ln & Gate 10

2036 Build AM Peak  
 06/24/2026



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↕	↕
Traffic Volume (veh/h)	30	295	904	17	18	17
Future Volume (veh/h)	30	295	904	17	18	17
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	418	1826	1826	418	418	418
Adj Flow Rate, veh/h	40	393	1205	23	24	23
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	100	5	5	100	100	100
Cap, veh/h	149	1316	1738	33	109	97
Arrive On Green	0.50	0.50	0.50	0.50	0.27	0.27
Sat Flow, veh/h	103	2719	3573	66	398	354
Grp Volume(v), veh/h	206	227	600	628	24	23
Grp Sat Flow(s),veh/h/ln	1160	1578	1735	1814	398	354
Q Serve(g_s), s	0.9	3.7	11.6	11.6	2.0	2.2
Cycle Q Clear(g_c), s	12.6	3.7	11.6	11.6	2.0	2.2
Prop In Lane	0.19			0.04	1.00	1.00
Lane Grp Cap(c), veh/h	677	788	866	905	109	97
V/C Ratio(X)	0.30	0.29	0.69	0.69	0.22	0.24
Avail Cap(c_a), veh/h	1093	1366	1501	1569	109	97
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.4	6.4	8.4	8.4	12.3	12.4
Incr Delay (d2), s/veh	0.3	0.2	1.0	1.0	4.6	5.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.7	2.6	2.7	0.3	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.7	6.6	9.4	9.4	17.0	18.1
LnGrp LOS	A	A	A	A	B	B
Approach Vol, veh/h		433	1228		47	
Approach Delay, s/veh		6.7	9.4		17.5	
Approach LOS		A	A		B	
Timer - Assigned Phs				4	6	8
Phs Duration (G+Y+Rc), s				26.9	17.0	26.9
Change Period (Y+Rc), s				5.0	5.0	5.0
Max Green Setting (Gmax), s				38.0	12.0	38.0
Max Q Clear Time (g_c+I1), s				14.6	4.2	13.6
Green Ext Time (p_c), s				2.7	0.0	8.3
<b>Intersection Summary</b>						
HCM 7th Control Delay, s/veh			8.9			
HCM 7th LOS			A			

Intersection						
Int Delay, s/veh	15.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↙	↗	↙	↑	↗	
Traffic Vol, veh/h	219	189	192	60	91	271
Future Vol, veh/h	219	189	192	60	91	271
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	125	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	29	29	0
Mvmt Flow	249	215	218	68	103	308

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	762	257	411	0	-	0
Stage 1	257	-	-	-	-	-
Stage 2	505	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	376	786	1158	-	-	-
Stage 1	790	-	-	-	-	-
Stage 2	611	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	305	786	1158	-	-	-
Mov Cap-2 Maneuver	305	-	-	-	-	-
Stage 1	641	-	-	-	-	-
Stage 2	611	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	33.77	6.73	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1158	-	305	786	-	-
HCM Lane V/C Ratio	0.188	-	0.816	0.273	-	-
HCM Ctrl Dly (s/v)	8.8	-	53.2	11.3	-	-
HCM Lane LOS	A	-	F	B	-	-
HCM 95th %tile Q(veh)	0.7	-	6.8	1.1	-	-

HCM 7th Signalized Intersection Summary  
 3: Chamberlain Ln & Collins Ln

2036 Build AM Peak  
 06/24/2026



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕	↗		↖			↕			↖	↗
Traffic Volume (veh/h)	109	10	106	171	43	1	103	190	17	1	675	121
Future Volume (veh/h)	109	10	106	171	43	1	103	190	17	1	675	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	143	13	139	225	57	1	136	250	22	1	888	159
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	646	54	634	458	105	2	221	669	59	60	1278	229
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	1326	135	1585	876	262	4	234	1544	136	0	2949	527
Grp Volume(v), veh/h	156	0	139	283	0	0	137	0	271	564	0	484
Grp Sat Flow(s),veh/h/ln	1461	0	1585	1141	0	0	237	0	1678	1870	0	1607
Q Serve(g_s), s	0.0	0.0	3.5	9.9	0.0	0.0	11.3	0.0	6.6	0.0	0.0	14.7
Cycle Q Clear(g_c), s	4.1	0.0	3.5	14.0	0.0	0.0	26.0	0.0	6.6	14.7	0.0	14.7
Prop In Lane	0.92		1.00	0.80		0.00	0.99		0.08	0.00		0.33
Lane Grp Cap(c), veh/h	699	0	634	564	0	0	222	0	727	870	0	696
V/C Ratio(X)	0.22	0.00	0.22	0.50	0.00	0.00	0.62	0.00	0.37	0.65	0.00	0.70
Avail Cap(c_a), veh/h	699	0	634	564	0	0	222	0	727	870	0	696
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.0	0.0	11.8	16.2	0.0	0.0	25.7	0.0	11.5	13.8	0.0	13.8
Incr Delay (d2), s/veh	0.7	0.0	0.8	3.2	0.0	0.0	5.0	0.0	0.3	1.7	0.0	3.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	1.2	3.3	0.0	0.0	2.1	0.0	2.0	5.1	0.0	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.7	0.0	12.6	19.4	0.0	0.0	30.7	0.0	11.8	15.5	0.0	16.8
LnGrp LOS	B		B	B			C		B	B		B
Approach Vol, veh/h		295			283			408				1048
Approach Delay, s/veh		12.7			19.4			18.2				16.1
Approach LOS		B			B			B				B
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		29.0		31.0		29.0		31.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		24.0		26.0		24.0		26.0				
Max Q Clear Time (g_c+I1), s		16.0		28.0		6.1		16.7				
Green Ext Time (p_c), s		1.0		0.0		1.2		4.2				
<b>Intersection Summary</b>												
HCM 7th Control Delay, s/veh			16.5									
HCM 7th LOS			B									

Timings  
4: Old LaGrange Rd & Chamberlain Ln

2036 Build AM Peak  
06/24/2026

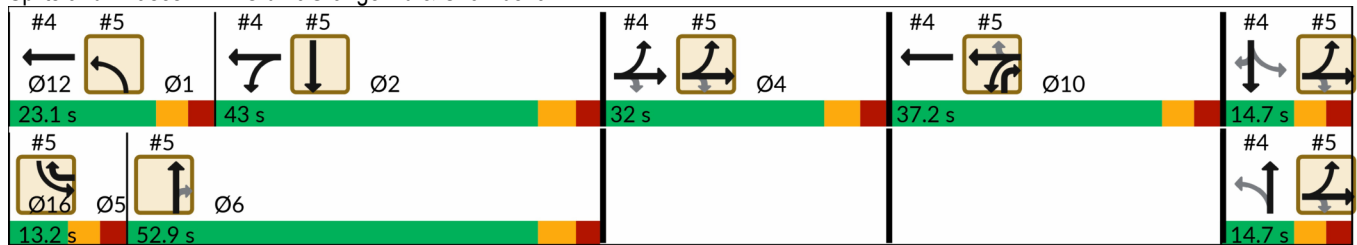


Lane Group	EBT	EBR	WBT	NBT	SBL	SBT	SBR	Ø1	Ø2	Ø5	Ø6	Ø10
Lane Configurations	↕	↗	↔	↕		↕	↗					
Traffic Volume (vph)	243	6	270	3	51	3	20					
Future Volume (vph)	243	6	270	3	51	3	20					
Turn Type	NA	Perm	NA	NA	Perm	NA	Perm					
Protected Phases	4		10 1 2	16		12		1	2	5	6	10
Permitted Phases		4			12		12					
Detector Phase	4	4	10 1 2	16	12	12	12					
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	5.0	5.0	5.0	5.0	8.0	5.0	15.0	8.0
Minimum Split (s)	31.0	31.0		11.5	11.5	11.5	11.5	11.5	15.0	11.5	28.5	14.5
Total Split (s)	32.0	32.0		14.7	14.7	14.7	14.7	23.1	43.0	13.2	52.9	37.2
Total Split (%)	21.3%	21.3%		9.8%	9.8%	9.8%	9.8%	15%	29%	9%	35%	25%
Yellow Time (s)	4.0	4.0		3.5	3.5	3.5	3.5	3.5	4.3	3.5	4.3	3.5
All-Red Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	2.7	3.0	2.7	3.0
Lost Time Adjust (s)	0.0	0.0		0.0		0.0	0.0					
Total Lost Time (s)	7.0	7.0		6.5		6.5	6.5					
Lead/Lag								Lead	Lag	Lead	Lag	
Lead-Lag Optimize?								Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None	None	None	None	Max	None	Max	None
Act Effct Green (s)	25.0	25.0	83.8	8.2		8.2	8.2					
Actuated g/C Ratio	0.17	0.17	0.56	0.05		0.05	0.05					
v/c Ratio	0.96	0.02	0.32	0.41		0.89	0.08					
Control Delay (s/veh)	102.5	0.0	6.1	82.6		146.3	0.6					
Queue Delay	0.0	0.0	11.2	0.0		0.0	0.0					
Total Delay (s/veh)	102.5	0.0	17.3	82.6		146.3	0.6					
LOS	F	A	B	F		F	A					
Approach Delay (s/veh)	100.2		17.3	82.6		107.0						
Approach LOS	F		B	F		F						

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Natural Cycle: 140  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.96  
 Intersection Signal Delay (s/veh): 62.1  
 Intersection LOS: E  
 Intersection Capacity Utilization 43.7%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 4: Old LaGrange Rd & Chamberlain Ln



Timings  
5: LaGrange Rd & Chamberlain Ln/Factory Ln

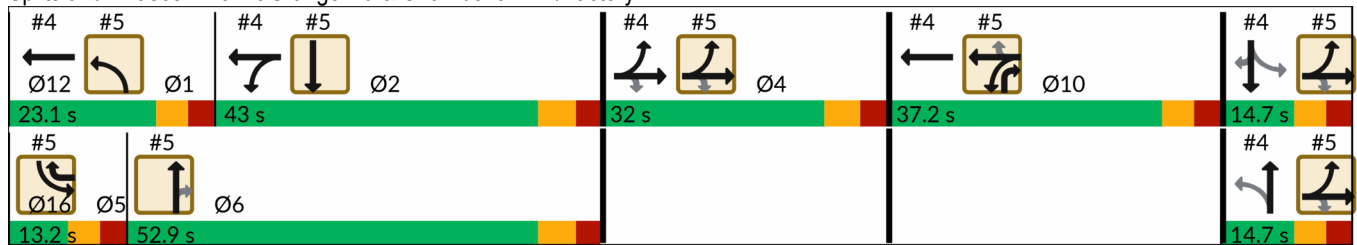
2036 Build AM Peak  
06/24/2026

	→	↘	↙	←	↖	↗	↑	↘	↙	↓	Ø4	Ø12
Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	Ø4	Ø12
Lane Configurations	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕		
Traffic Volume (vph)	127	106	481	117	3	171	486	419	25	723		
Future Volume (vph)	127	106	481	117	3	171	486	419	25	723		
Turn Type	NA	Perm	Split	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		
Protected Phases	4 12 16		10	10	5	1	6	10	5	2	4	12
Permitted Phases		4 12 16			10			6				
Detector Phase	4 12 16	4 12 16	10	10	5	1	6	10	5	2		
Switch Phase												
Minimum Initial (s)			8.0	8.0	5.0	5.0	15.0	8.0	5.0	8.0	8.0	5.0
Minimum Split (s)			14.5	14.5	11.5	11.5	28.5	14.5	11.5	15.0	31.0	11.5
Total Split (s)			37.2	37.2	13.2	23.1	52.9	37.2	13.2	43.0	32.0	14.7
Total Split (%)			24.8%	24.8%	8.8%	15.4%	35.3%	24.8%	8.8%	28.7%	21%	10%
Yellow Time (s)			3.5	3.5	3.5	3.5	4.3	3.5	3.5	4.3	4.0	3.5
All-Red Time (s)			3.0	3.0	3.0	3.0	2.7	3.0	3.0	2.7	3.0	3.0
Lost Time Adjust (s)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)			6.5	6.5	6.5	6.5	7.0	6.5	6.5	7.0		
Lead/Lag					Lead	Lead	Lag		Lead	Lag		
Lead-Lag Optimize?					Yes	Yes	Yes		Yes	Yes		
Recall Mode			None	None	None	None	Max	None	None	Max	None	None
Act Effct Green (s)	32.7	32.7	30.7	30.7	37.3	16.6	51.2	82.4	6.6	36.0		
Actuated g/C Ratio	0.22	0.22	0.20	0.20	0.25	0.11	0.34	0.55	0.04	0.24		
v/c Ratio	0.56	0.24	0.94	0.93	0.01	0.95	0.44	0.42	0.36	0.95		
Control Delay (s/veh)	7.3	0.7	94.3	91.3	0.0	117.7	40.8	2.1	83.0	77.1		
Queue Delay	5.0	3.3	0.0	0.0	0.0	19.6	0.0	0.0	0.0	1.3		
Total Delay (s/veh)	12.2	4.0	94.3	91.3	0.0	137.3	40.8	2.1	83.0	78.4		
LOS	B	A	F	F	A	F	D	A	F	E		
Approach Delay (s/veh)	9.4			92.4			41.0			78.6		
Approach LOS	A			F			D			E		

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Natural Cycle: 140  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.96  
 Intersection Signal Delay (s/veh): 59.1  
 Intersection LOS: E  
 Intersection Capacity Utilization 80.0%  
 ICU Level of Service D  
 Analysis Period (min) 15

Splits and Phases: 5: LaGrange Rd & Chamberlain Ln/Factory Ln



Lane Group	Ø16
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Turn Type	
Protected Phases	16
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	11.5
Total Split (s)	14.7
Total Split (%)	10%
Yellow Time (s)	3.5
All-Red Time (s)	3.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Intersection Summary	

Intersection						
Int Delay, s/veh	6.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	6	33	213	45	5	2
Future Vol, veh/h	6	33	213	45	5	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	56	56	56	56	56	56
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	11	59	380	80	9	4

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	852	11	12	0	0
Stage 1	11	-	-	-	-
Stage 2	841	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	333	1076	1619	-	-
Stage 1	1017	-	-	-	-
Stage 2	426	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	251	1076	1619	-	-
Mov Cap-2 Maneuver	251	-	-	-	-
Stage 1	767	-	-	-	-
Stage 2	426	-	-	-	-

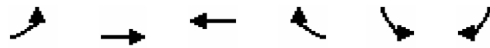
Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.58	6.53	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1486	-	715	-	-
HCM Lane V/C Ratio	0.235	-	0.097	-	-
HCM Ctrl Dly (s/v)	7.9	0	10.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.9	-	0.3	-	-

Synchro Reports  
2036 Build PM Peak

HCM 7th Signalized Intersection Summary  
 1: Chamberlain Ln & Gate 10

2036 Build PM Peak  
 06/24/2026



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↓	↓
Traffic Volume (veh/h)	59	885	652	6	42	36
Future Volume (veh/h)	59	885	652	6	42	36
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	418	1826	1826	418	418	418
Adj Flow Rate, veh/h	74	1106	815	8	52	45
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	100	5	5	100	100	100
Cap, veh/h	151	1568	1799	18	106	94
Arrive On Green	0.51	0.51	0.51	0.51	0.27	0.27
Sat Flow, veh/h	120	3150	3611	35	398	354
Grp Volume(v), veh/h	601	579	402	421	52	45
Grp Sat Flow(s),veh/h/ln	1609	1578	1735	1820	398	354
Q Serve(g_s), s	3.9	12.7	6.6	6.6	5.0	4.8
Cycle Q Clear(g_c), s	11.8	12.7	6.6	6.6	5.0	4.8
Prop In Lane	0.12			0.02	1.00	1.00
Lane Grp Cap(c), veh/h	912	807	887	930	106	94
V/C Ratio(X)	0.66	0.72	0.45	0.45	0.49	0.48
Avail Cap(c_a), veh/h	1410	1333	1465	1537	106	94
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.1	8.5	7.0	7.0	13.9	13.9
Incr Delay (d2), s/veh	0.8	1.2	0.4	0.3	15.3	16.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	2.6	1.4	1.5	0.8	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	8.9	9.7	7.4	7.3	29.2	30.1
LnGrp LOS	A	A	A	A	C	C
Approach Vol, veh/h		1180	823		97	
Approach Delay, s/veh		9.3	7.4		29.6	
Approach LOS		A	A		C	
Timer - Assigned Phs				4	6	8
Phs Duration (G+Y+Rc), s				28.0	17.0	28.0
Change Period (Y+Rc), s				5.0	5.0	5.0
Max Green Setting (Gmax), s				38.0	12.0	38.0
Max Q Clear Time (g_c+I1), s				14.7	7.0	8.6
Green Ext Time (p_c), s				8.3	0.1	5.0
<b>Intersection Summary</b>						
HCM 7th Control Delay, s/veh			9.5			
HCM 7th LOS			A			

Intersection						
Int Delay, s/veh	93.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↙	↗	↙	↑	↗	
Traffic Vol, veh/h	267	228	280	92	93	183
Future Vol, veh/h	267	228	280	92	93	183
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	125	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	6	6	0
Mvmt Flow	326	278	341	112	113	223

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	1020	225	337	0	0
Stage 1	225	-	-	-	-
Stage 2	795	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	~ 264	819	1234	-	-
Stage 1	817	-	-	-	-
Stage 2	448	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	~ 191	819	1234	-	-
Mov Cap-2 Maneuver	~ 191	-	-	-	-
Stage 1	591	-	-	-	-
Stage 2	448	-	-	-	-




















Approach	EB	NB	SB
HCM Ctrl Dly, s/v	210.52	6.8	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1234	-	191	819	-	-
HCM Lane V/C Ratio	0.277	-	1.702	0.339	-	-
HCM Ctrl Dly (s/v)	9	-	\$ 380.4	11.6	-	-
HCM Lane LOS	A	-	F	B	-	-
HCM 95th %tile Q(veh)	1.1	-	22.3	1.5	-	-

Notes	
~: Volume exceeds capacity	\$. Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

HCM 7th Signalized Intersection Summary  
 3: Chamberlain Ln & Collins Ln

2036 Build PM Peak  
 06/24/2026

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	204	84	51	112	95	1	163	493	252	11	469	108
Future Volume (veh/h)	204	84	51	112	95	1	163	493	252	11	469	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	249	102	62	137	116	1	199	601	307	13	572	132
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	394	120	555	150	102	1	245	666	380	71	1332	304
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	834	342	1585	164	290	2	334	1379	786	19	2756	629
Grp Volume(v), veh/h	351	0	62	254	0	0	498	0	609	384	0	333
Grp Sat Flow(s),veh/h/ln	1175	0	1585	456	0	0	938	0	1561	1815	0	1589
Q Serve(g_s), s	0.0	0.0	1.6	4.4	0.0	0.0	20.8	0.0	19.9	0.1	0.0	8.2
Cycle Q Clear(g_c), s	16.6	0.0	1.6	21.0	0.0	0.0	29.0	0.0	19.9	19.9	0.0	8.2
Prop In Lane	0.71		1.00	0.54		0.00	0.40		0.50	0.03		0.40
Lane Grp Cap(c), veh/h	514	0	555	252	0	0	537	0	754	939	0	768
V/C Ratio(X)	0.68	0.00	0.11	1.01	0.00	0.00	0.93	0.00	0.81	0.41	0.00	0.43
Avail Cap(c_a), veh/h	514	0	555	252	0	0	537	0	754	939	0	768
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.1	0.0	13.2	24.8	0.0	0.0	18.7	0.0	13.1	10.1	0.0	10.1
Incr Delay (d2), s/veh	7.2	0.0	0.4	58.8	0.0	0.0	22.3	0.0	6.5	0.3	0.0	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	0.0	0.6	7.5	0.0	0.0	9.0	0.0	6.4	2.5	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.3	0.0	13.6	83.7	0.0	0.0	41.0	0.0	19.7	10.4	0.0	10.5
LnGrp LOS	C		B	F			D		B	B		B
Approach Vol, veh/h		413			254			1107				717
Approach Delay, s/veh		23.5			83.7			29.3				10.4
Approach LOS		C			F			C				B
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		26.0		34.0		26.0		34.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		21.0		29.0		21.0		29.0				
Max Q Clear Time (g_c+I1), s		23.0		31.0		18.6		21.9				
Green Ext Time (p_c), s		0.0		0.0		0.6		2.4				
<b>Intersection Summary</b>												
HCM 7th Control Delay, s/veh			28.4									
HCM 7th LOS			C									

Timings  
4: Old LaGrange Rd & Chamberlain Ln

2036 Build PM Peak  
06/24/2026

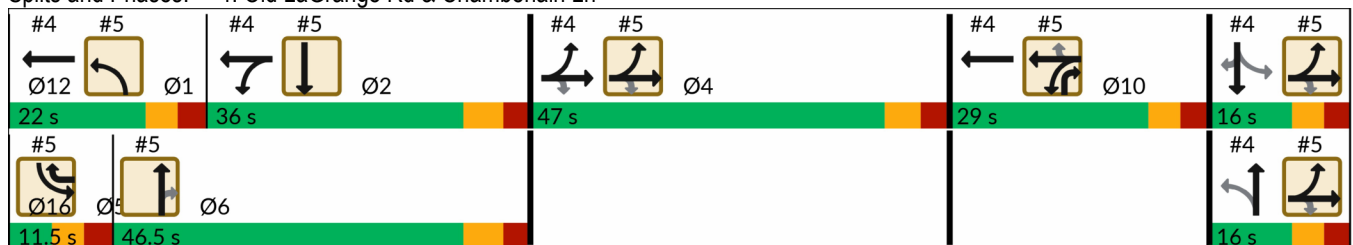


Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR	Ø1	Ø2	Ø5	Ø6
Lane Configurations	↕	↗	↔		↕		↕	↗				
Traffic Volume (vph)	619	2	572	2	7	24	4	49				
Future Volume (vph)	619	2	572	2	7	24	4	49				
Turn Type	NA	Perm	NA	Perm	NA	Perm	NA	Perm				
Protected Phases	4		10 1 2		16		12		1	2	5	6
Permitted Phases		4		16		12		12				
Detector Phase	4	4	10 1 2	16	16	12	12	12				
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	5.0	5.0	5.0	5.0	5.0	8.0	5.0	15.0
Minimum Split (s)	35.0	35.0		12.0	12.0	12.0	12.0	12.0	14.5	32.0	11.5	28.5
Total Split (s)	47.0	47.0		16.0	16.0	16.0	16.0	16.0	22.0	36.0	11.5	46.5
Total Split (%)	31.3%	31.3%		10.7%	10.7%	10.7%	10.7%	10.7%	15%	24%	8%	31%
Yellow Time (s)	4.0	4.0		3.5	3.5	3.5	3.5	3.5	3.5	4.3	3.5	4.3
All-Red Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	2.7	3.0	2.7
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0				
Total Lost Time (s)	7.0	7.0			6.5		6.5	6.5				
Lead/Lag									Lead	Lag	Lead	Lag
Lead-Lag Optimize?									Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	None	None	Max	None	Max
Act Effect Green (s)	40.0	40.0	67.5		9.5		9.5	9.5				
Actuated g/C Ratio	0.27	0.27	0.45		0.06		0.06	0.06				
v/c Ratio	1.49	0.00	0.85		1.74		0.73	0.19				
Control Delay (s/veh)	270.7	0.0	27.1		409.5		137.6	1.4				
Queue Delay	0.0	0.0	53.7		0.0		0.0	0.0				
Total Delay (s/veh)	270.8	0.0	80.7		409.5		137.6	1.4				
LOS	F	A	F		F		F	A				
Approach Delay (s/veh)	270.0		80.7		409.5		50.8					
Approach LOS	F		F		F		D					

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Natural Cycle: 150  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 1.74  
 Intersection Signal Delay (s/veh): 192.9  
 Intersection LOS: F  
 Intersection Capacity Utilization 65.8%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 4: Old LaGrange Rd & Chamberlain Ln



Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	8.0
Minimum Split (s)	26.0
Total Split (s)	29.0
Total Split (%)	19%
Yellow Time (s)	3.5
All-Red Time (s)	3.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Intersection Summary	

Timings  
5: LaGrange Rd & Chamberlain Ln/Factory Ln

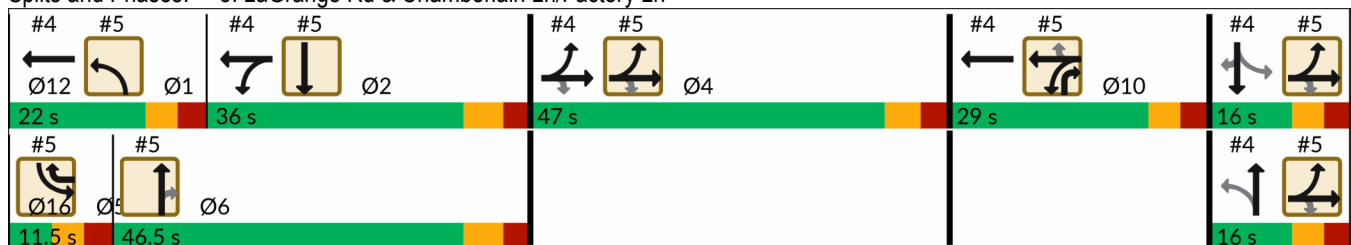
2036 Build PM Peak  
06/24/2026

	→	↘	↙	←	↖	↗	↑	↘	↙	↓	Ø4	Ø12
Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	Ø4	Ø12
Lane Configurations	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕		
Traffic Volume (vph)	201	373	321	253	2	264	835	603	38	499		
Future Volume (vph)	201	373	321	253	2	264	835	603	38	499		
Turn Type	NA	Perm	Split	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		
Protected Phases	4 12 16		10	10	5	1	6	10	5	2	4	12
Permitted Phases		4 12 16			10			6				
Detector Phase	4 12 16	4 12 16	10	10	5	1	6	10	5	2		
Switch Phase												
Minimum Initial (s)			8.0	8.0	5.0	5.0	15.0	8.0	5.0	8.0	8.0	5.0
Minimum Split (s)			26.0	26.0	11.5	14.5	28.5	26.0	11.5	32.0	35.0	12.0
Total Split (s)			29.0	29.0	11.5	22.0	46.5	29.0	11.5	36.0	47.0	16.0
Total Split (%)			19.3%	19.3%	7.7%	14.7%	31.0%	19.3%	7.7%	24.0%	31%	11%
Yellow Time (s)			3.5	3.5	3.5	3.5	4.3	3.5	3.5	4.3	4.0	3.5
All-Red Time (s)			3.0	3.0	3.0	3.0	2.7	3.0	3.0	2.7	3.0	3.0
Lost Time Adjust (s)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)			6.5	6.5	6.5	6.5	7.0	6.5	6.5	7.0		
Lead/Lag					Lead	Lead	Lag		Lead	Lag		
Lead-Lag Optimize?					Yes	Yes	Yes		Yes	Yes		
Recall Mode			None	None	None	None	Max	None	None	Max	None	None
Act Effect Green (s)	49.0	49.0	22.5	22.5	27.5	15.5	41.8	64.8	5.0	29.0		
Actuated g/C Ratio	0.33	0.33	0.15	0.15	0.18	0.10	0.28	0.43	0.03	0.19		
v/c Ratio	0.78	0.65	1.25	1.26	0.00	1.63	0.95	0.73	0.73	1.02		
Control Delay (s/veh)	6.4	1.5	189.7	193.1	0.0	347.4	72.2	12.5	126.8	98.8		
Queue Delay	54.8	57.1	0.0	6.7	0.0	2.9	0.0	0.0	0.0	9.2		
Total Delay (s/veh)	61.2	58.7	189.7	199.8	0.0	350.3	72.2	12.5	126.8	108.1		
LOS	E	E	F	F	A	F	E	B	F	F		
Approach Delay (s/veh)	60.0			194.3			94.2			109.2		
Approach LOS	E			F			F			F		

**Intersection Summary**

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Natural Cycle: 150  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 1.74  
 Intersection Signal Delay (s/veh): 105.1      Intersection LOS: F  
 Intersection Capacity Utilization 92.0%      ICU Level of Service F  
 Analysis Period (min) 15

Splits and Phases: 5: LaGrange Rd & Chamberlain Ln/Factory Ln



Lane Group	Ø16
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Turn Type	
Protected Phases	16
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	12.0
Total Split (s)	16.0
Total Split (%)	11%
Yellow Time (s)	3.5
All-Red Time (s)	3.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Intersection Summary	

Intersection						
Int Delay, s/veh	13.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	113	194	295	50	27	6
Future Vol, veh/h	113	194	295	50	27	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	126	216	328	56	30	7

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	744	33	37	0	0
Stage 1	33	-	-	-	-
Stage 2	711	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	385	1046	1587	-	-
Stage 1	994	-	-	-	-
Stage 2	490	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	303	1046	1587	-	-
Mov Cap-2 Maneuver	303	-	-	-	-
Stage 1	782	-	-	-	-
Stage 2	490	-	-	-	-

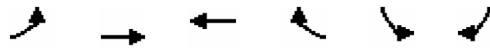
Approach	EB	NB	SB
HCM Ctrl Dly, s/v	21.68	6.72	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1538	-	549	-	-
HCM Lane V/C Ratio	0.207	-	0.621	-	-
HCM Ctrl Dly (s/v)	7.9	0	21.7	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.8	-	4.2	-	-

Synchro Reports  
2036 Build w/ Closure AM Peak

HCM 7th Signalized Intersection Summary  
 1: Chamberlain Ln & Gate 10

2036 Build w Closure AM Peak  
 06/24/2026



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↕	↕
Traffic Volume (veh/h)	30	295	944	18	18	17
Future Volume (veh/h)	30	295	944	18	18	17
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	418	1826	1826	418	418	418
Adj Flow Rate, veh/h	40	393	1259	24	24	23
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	100	5	5	100	100	100
Cap, veh/h	147	1322	1786	34	106	94
Arrive On Green	0.51	0.51	0.51	0.51	0.27	0.27
Sat Flow, veh/h	100	2662	3573	66	398	354
Grp Volume(v), veh/h	203	230	627	656	24	23
Grp Sat Flow(s),veh/h/ln	1100	1578	1735	1814	398	354
Q Serve(g_s), s	1.1	3.8	12.5	12.5	2.1	2.3
Cycle Q Clear(g_c), s	13.6	3.8	12.5	12.5	2.1	2.3
Prop In Lane	0.20			0.04	1.00	1.00
Lane Grp Cap(c), veh/h	660	809	890	930	106	94
V/C Ratio(X)	0.31	0.28	0.70	0.71	0.23	0.24
Avail Cap(c_a), veh/h	1022	1328	1460	1526	106	94
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.4	6.3	8.4	8.4	13.0	13.0
Incr Delay (d2), s/veh	0.3	0.2	1.0	1.0	4.9	6.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.7	2.7	2.9	0.3	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.6	6.5	9.4	9.4	17.9	19.1
LnGrp LOS	A	A	A	A	B	B
Approach Vol, veh/h		433	1283		47	
Approach Delay, s/veh		6.5	9.4		18.5	
Approach LOS		A	A		B	
Timer - Assigned Phs				4	6	8
Phs Duration (G+Y+Rc), s				28.2	17.0	28.2
Change Period (Y+Rc), s				5.0	5.0	5.0
Max Green Setting (Gmax), s				38.0	12.0	38.0
Max Q Clear Time (g_c+I1), s				15.6	4.3	14.5
Green Ext Time (p_c), s				2.7	0.0	8.7
<b>Intersection Summary</b>						
HCM 7th Control Delay, s/veh			8.9			
HCM 7th LOS			A			

Intersection						
Int Delay, s/veh	15.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↙	↗	↙	↑	↗	
Traffic Vol, veh/h	219	189	192	60	91	271
Future Vol, veh/h	219	189	192	60	91	271
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	125	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	29	29	0
Mvmt Flow	249	215	218	68	103	308




















Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	762	257	411	0	-	0
Stage 1	257	-	-	-	-	-
Stage 2	505	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	376	786	1158	-	-	-
Stage 1	790	-	-	-	-	-
Stage 2	611	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	305	786	1158	-	-	-
Mov Cap-2 Maneuver	305	-	-	-	-	-
Stage 1	641	-	-	-	-	-
Stage 2	611	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	33.77	6.73	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1158	-	305	786	-	-
HCM Lane V/C Ratio	0.188	-	0.816	0.273	-	-
HCM Ctrl Dly (s/v)	8.8	-	53.2	11.3	-	-
HCM Lane LOS	A	-	F	B	-	-
HCM 95th %tile Q(veh)	0.7	-	6.8	1.1	-	-

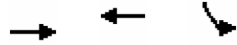
HCM 7th Signalized Intersection Summary  
 3: Chamberlain Ln & Collins Ln

2036 Build w Closure AM Peak  
 06/24/2026

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	95	4	105	171	43	46	103	196	12	27	675	121
Future Volume (veh/h)	95	4	105	171	43	46	103	196	12	27	675	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	125	5	138	225	57	61	136	258	16	36	888	159
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	604	22	634	398	102	87	213	688	43	90	1245	219
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	1215	55	1585	747	254	217	216	1587	99	60	2874	506
Grp Volume(v), veh/h	130	0	138	343	0	0	136	0	274	577	0	506
Grp Sat Flow(s),veh/h/ln	1270	0	1585	1218	0	0	217	0	1684	1829	0	1611
Q Serve(g_s), s	0.0	0.0	3.4	11.5	0.0	0.0	10.4	0.0	6.6	3.3	0.0	15.6
Cycle Q Clear(g_c), s	4.1	0.0	3.4	15.6	0.0	0.0	26.0	0.0	6.6	15.4	0.0	15.6
Prop In Lane	0.96		1.00	0.66		0.18	1.00		0.06	0.06		0.31
Lane Grp Cap(c), veh/h	626	0	634	586	0	0	214	0	730	856	0	698
V/C Ratio(X)	0.21	0.00	0.22	0.58	0.00	0.00	0.64	0.00	0.37	0.67	0.00	0.72
Avail Cap(c_a), veh/h	626	0	634	586	0	0	214	0	730	856	0	698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.0	0.0	11.8	16.4	0.0	0.0	26.4	0.0	11.5	13.9	0.0	14.0
Incr Delay (d2), s/veh	0.8	0.0	0.8	4.2	0.0	0.0	6.2	0.0	0.3	2.1	0.0	3.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	1.2	4.2	0.0	0.0	2.2	0.0	2.0	5.4	0.0	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.8	0.0	12.6	20.6	0.0	0.0	32.5	0.0	11.8	16.0	0.0	17.8
LnGrp LOS	B		B	C			C		B	B		B
Approach Vol, veh/h		268			343			410				1083
Approach Delay, s/veh		12.7			20.6			18.7				16.9
Approach LOS		B			C			B				B
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		29.0		31.0		29.0		31.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		24.0		26.0		24.0		26.0				
Max Q Clear Time (g_c+I1), s		17.6		28.0		6.1		17.6				
Green Ext Time (p_c), s		1.1		0.0		1.1		4.1				
<b>Intersection Summary</b>												
HCM 7th Control Delay, s/veh			17.3									
HCM 7th LOS			B									

Timings  
4: Chamberlain Ln & Old LaGrange Rd

2036 Build w Closure AM Peak  
06/24/2026

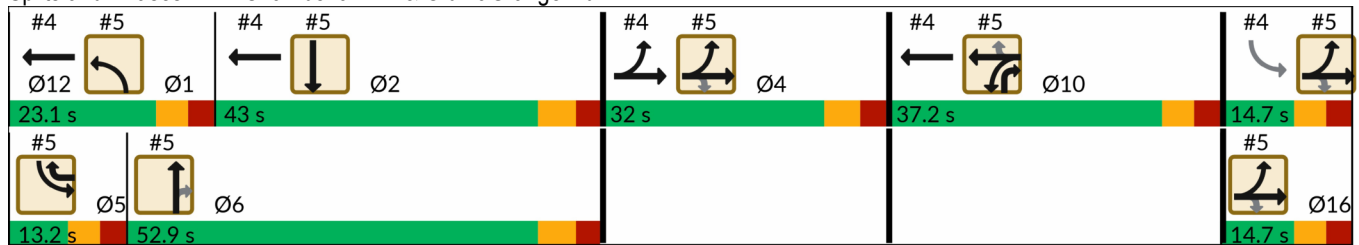


Lane Group	EBT	WBT	SBL	Ø1	Ø2	Ø5	Ø6	Ø10	Ø16
Lane Configurations	↕	↕↔	↔						
Traffic Volume (vph)	281	290	42						
Future Volume (vph)	281	290	42						
Turn Type	NA	NA	Perm						
Protected Phases	4	10 12		1	2	5	6	10	16
Permitted Phases									
Detector Phase	4	10 12	12						
Switch Phase									
Minimum Initial (s)	8.0		5.0	5.0	8.0	5.0	15.0	8.0	5.0
Minimum Split (s)	31.0		11.5	11.5	15.0	11.5	28.5	14.5	11.5
Total Split (s)	32.0		14.7	23.1	43.0	13.2	52.9	37.2	14.7
Total Split (%)	21.3%		9.8%	15%	29%	9%	35%	25%	10%
Yellow Time (s)	4.0		3.5	3.5	4.3	3.5	4.3	3.5	3.5
All-Red Time (s)	3.0		3.0	3.0	2.7	3.0	2.7	3.0	3.0
Lost Time Adjust (s)	0.0		0.0						
Total Lost Time (s)	7.0		6.5						
Lead/Lag				Lead	Lag	Lead	Lag		
Lead-Lag Optimize?				Yes	Yes	Yes	Yes		
Recall Mode	None		None	None	Max	None	Max	None	None
Act Effect Green (s)	25.0	90.3	8.2						
Actuated g/C Ratio	0.17	0.60	0.05						
v/c Ratio	1.11	0.17	0.80						
Control Delay (s/veh)	137.9	1.1	98.4						
Queue Delay	0.0	2.2	0.0						
Total Delay (s/veh)	137.9	3.2	98.4						
LOS	F	A	F						
Approach Delay (s/veh)	137.9	3.2	98.4						
Approach LOS	F	A	F						

Intersection Summary

Cycle Length: 150	
Actuated Cycle Length: 150	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.11	
Intersection Signal Delay (s/veh): 71.8	Intersection LOS: E
Intersection Capacity Utilization 35.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4: Chamberlain Ln & Old LaGrange Rd



Timings  
5: LaGrange Rd & Chamberlain Ln/Factory Ln

2036 Build w Closure AM Peak  
06/24/2026

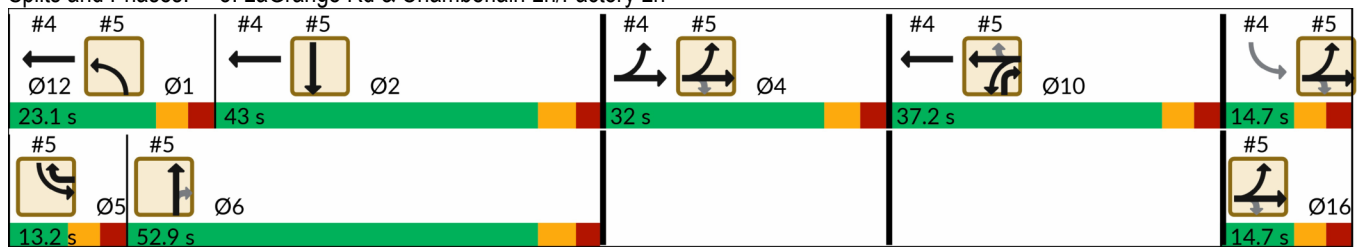


Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	Ø4	Ø12
Lane Configurations	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕
Traffic Volume (vph)	133	115	481	117	3	171	486	419	25	723		
Future Volume (vph)	133	115	481	117	3	171	486	419	25	723		
Turn Type	NA	Perm	Split	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		
Protected Phases	4 12 16		10	10	5	1	6	10	5	2	4	12
Permitted Phases		4 12 16			10			6				
Detector Phase	4 12 16	4 12 16	10	10	5	1	6	10	5	2		
Switch Phase												
Minimum Initial (s)			8.0	8.0	5.0	5.0	15.0	8.0	5.0	8.0	8.0	5.0
Minimum Split (s)			14.5	14.5	11.5	11.5	28.5	14.5	11.5	15.0	31.0	11.5
Total Split (s)			37.2	37.2	13.2	23.1	52.9	37.2	13.2	43.0	32.0	14.7
Total Split (%)			24.8%	24.8%	8.8%	15.4%	35.3%	24.8%	8.8%	28.7%	21%	10%
Yellow Time (s)			3.5	3.5	3.5	3.5	4.3	3.5	3.5	4.3	4.0	3.5
All-Red Time (s)			3.0	3.0	3.0	3.0	2.7	3.0	3.0	2.7	3.0	3.0
Lost Time Adjust (s)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)			6.5	6.5	6.5	6.5	7.0	6.5	6.5	7.0		
Lead/Lag					Lead	Lead	Lag		Lead	Lag		
Lead-Lag Optimize?					Yes	Yes	Yes		Yes	Yes		
Recall Mode			None	None	None	None	Max	None	None	Max	None	None
Act Effct Green (s)	32.7	32.7	30.7	30.7	37.3	16.6	51.2	82.4	6.6	36.0		
Actuated g/C Ratio	0.22	0.22	0.20	0.20	0.25	0.11	0.34	0.55	0.04	0.24		
v/c Ratio	0.57	0.26	0.94	0.93	0.01	0.95	0.44	0.42	0.36	0.95		
Control Delay (s/veh)	5.3	0.4	94.3	91.3	0.0	117.7	40.8	2.1	83.0	77.1		
Queue Delay	7.5	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay (s/veh)	12.9	4.2	94.3	91.3	0.0	117.7	40.8	2.1	83.0	77.1		
LOS	B	A	F	F	A	F	D	A	F	E		
Approach Delay (s/veh)	9.8			92.4			37.9			77.3		
Approach LOS	A			F			D			E		

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Natural Cycle: 150  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 1.11  
 Intersection Signal Delay (s/veh): 57.4  
 Intersection LOS: E  
 Intersection Capacity Utilization 80.1%  
 ICU Level of Service D  
 Analysis Period (min) 15

Splits and Phases: 5: LaGrange Rd & Chamberlain Ln/Factory Ln

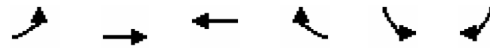


Lane Group	Ø16
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Turn Type	
Protected Phases	16
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	11.5
Total Split (s)	14.7
Total Split (%)	10%
Yellow Time (s)	3.5
All-Red Time (s)	3.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Intersection Summary	

Synchro Reports  
2036 Build w/ Closure PM Peak

HCM 7th Signalized Intersection Summary  
 1: Chamberlain Ln & Gate 10

2036 Build w Closure PM Peak  
 06/24/2026



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↕	↕
Traffic Volume (veh/h)	59	887	649	6	42	36
Future Volume (veh/h)	59	887	649	6	42	36
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	418	1826	1826	418	418	418
Adj Flow Rate, veh/h	74	1109	811	8	52	45
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	100	5	5	100	100	100
Cap, veh/h	151	1570	1801	18	106	94
Arrive On Green	0.51	0.51	0.51	0.51	0.27	0.27
Sat Flow, veh/h	120	3152	3611	35	398	354
Grp Volume(v), veh/h	603	580	400	419	52	45
Grp Sat Flow(s),veh/h/ln	1610	1578	1735	1820	398	354
Q Serve(g_s), s	3.9	12.8	6.6	6.6	5.0	4.8
Cycle Q Clear(g_c), s	11.9	12.8	6.6	6.6	5.0	4.8
Prop In Lane	0.12			0.02	1.00	1.00
Lane Grp Cap(c), veh/h	914	808	888	931	106	94
V/C Ratio(X)	0.66	0.72	0.45	0.45	0.49	0.48
Avail Cap(c_a), veh/h	1409	1331	1463	1535	106	94
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.1	8.5	7.0	7.0	13.9	13.9
Incr Delay (d2), s/veh	0.8	1.2	0.4	0.3	15.3	16.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	2.6	1.4	1.5	0.8	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	8.9	9.7	7.3	7.3	29.3	30.2
LnGrp LOS	A	A	A	A	C	C
Approach Vol, veh/h		1183	819		97	
Approach Delay, s/veh		9.3	7.3		29.7	
Approach LOS		A	A		C	
Timer - Assigned Phs				4	6	8
Phs Duration (G+Y+Rc), s				28.1	17.0	28.1
Change Period (Y+Rc), s				5.0	5.0	5.0
Max Green Setting (Gmax), s				38.0	12.0	38.0
Max Q Clear Time (g_c+I1), s				14.8	7.0	8.6
Green Ext Time (p_c), s				8.3	0.1	5.0
<b>Intersection Summary</b>						
HCM 7th Control Delay, s/veh			9.5			
HCM 7th LOS			A			

Intersection						
Int Delay, s/veh	96.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↙	↗	↙	↑	↗	
Traffic Vol, veh/h	267	228	284	92	93	183
Future Vol, veh/h	267	228	284	92	93	183
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	125	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	6	6	0
Mvmt Flow	326	278	346	112	113	223

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1030	225	337	0	-	0
Stage 1	225	-	-	-	-	-
Stage 2	805	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	~261	819	1234	-	-	-
Stage 1	817	-	-	-	-	-
Stage 2	443	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~188	819	1234	-	-	-
Mov Cap-2 Maneuver	~188	-	-	-	-	-
Stage 1	588	-	-	-	-	-
Stage 2	443	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	218.53	6.84	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1234	-	188	819	-	-
HCM Lane V/C Ratio	0.281	-	1.735	0.339	-	-
HCM Ctrl Dly (s/v)	9.1	-	\$ 395.2	11.6	-	-
HCM Lane LOS	A	-	F	B	-	-
HCM 95th %tile Q(veh)	1.2	-	22.6	1.5	-	-

Notes  
 ~: Volume exceeds capacity      \$: Delay exceeds 300s  
 +: Computation Not Defined      \*: All major volume in platoon

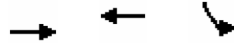
HCM 7th Signalized Intersection Summary  
 3: Chamberlain Ln & Collins Ln

2036 Build w Closure PM Peak  
 06/24/2026

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	207	32	48	112	96	51	165	588	158	37	469	109
Future Volume (veh/h)	207	32	48	112	96	51	165	588	158	37	469	109
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	252	39	59	137	117	62	201	717	193	45	572	133
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	387	43	555	115	88	28	241	809	241	95	1082	279
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	787	122	1585	82	251	81	322	1673	499	58	2238	578
Grp Volume(v), veh/h	291	0	59	316	0	0	488	0	623	382	0	368
Grp Sat Flow(s),veh/h/ln	908	0	1585	414	0	0	883	0	1612	1276	0	1598
Q Serve(g_s), s	0.0	0.0	1.5	2.6	0.0	0.0	19.7	0.0	19.5	2.5	0.0	9.3
Cycle Q Clear(g_c), s	18.4	0.0	1.5	21.0	0.0	0.0	29.0	0.0	19.5	22.0	0.0	9.3
Prop In Lane	0.87		1.00	0.43		0.20	0.41		0.31	0.12		0.36
Lane Grp Cap(c), veh/h	430	0	555	231	0	0	511	0	779	684	0	772
V/C Ratio(X)	0.68	0.00	0.11	1.37	0.00	0.00	0.95	0.00	0.80	0.56	0.00	0.48
Avail Cap(c_a), veh/h	430	0	555	231	0	0	511	0	779	684	0	772
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.6	0.0	13.2	22.9	0.0	0.0	19.5	0.0	13.1	10.7	0.0	10.4
Incr Delay (d2), s/veh	8.3	0.0	0.4	190.7	0.0	0.0	28.5	0.0	5.9	1.0	0.0	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.0	0.5	15.4	0.0	0.0	9.9	0.0	6.4	2.6	0.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.9	0.0	13.6	213.6	0.0	0.0	48.0	0.0	19.0	11.7	0.0	10.9
LnGrp LOS	C		B	F			D		B	B		B
Approach Vol, veh/h		350			316			1111				750
Approach Delay, s/veh		24.7			213.6			31.7				11.3
Approach LOS		C			F			C				B
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		26.0		34.0		26.0		34.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		21.0		29.0		21.0		29.0				
Max Q Clear Time (g_c+I1), s		23.0		31.0		20.4		24.0				
Green Ext Time (p_c), s		0.0		0.0		0.1		2.0				
<b>Intersection Summary</b>												
HCM 7th Control Delay, s/veh			47.4									
HCM 7th LOS			D									

Timings  
4: Chamberlain Ln & Old LaGrange Rd

2036 Build w Closure PM Peak  
06/24/2026

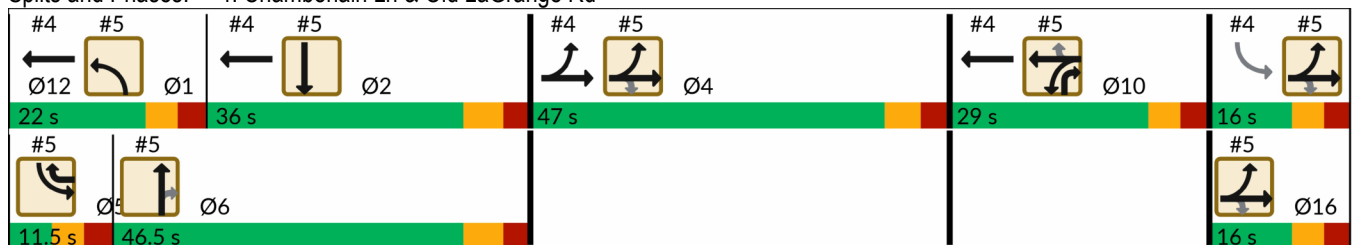


Lane Group	EBT	WBT	SBL	Ø1	Ø2	Ø5	Ø6	Ø10	Ø16
Lane Configurations	↕	↕↕	↕↕						
Traffic Volume (vph)	765	594	24						
Future Volume (vph)	765	594	24						
Turn Type	NA	NA	Perm						
Protected Phases	4	10 12		1	2	5	6	10	16
Permitted Phases									12
Detector Phase	4	10 12	12						
Switch Phase									
Minimum Initial (s)	8.0		5.0	5.0	8.0	5.0	15.0	8.0	5.0
Minimum Split (s)	35.0		12.0	14.5	32.0	11.5	28.5	26.0	12.0
Total Split (s)	47.0		16.0	22.0	36.0	11.5	46.5	29.0	16.0
Total Split (%)	31.3%		10.7%	15%	24%	8%	31%	19%	11%
Yellow Time (s)	4.0		3.5	3.5	4.3	3.5	4.3	3.5	3.5
All-Red Time (s)	3.0		3.0	3.0	2.7	3.0	2.7	3.0	3.0
Lost Time Adjust (s)	0.0		0.0						
Total Lost Time (s)	7.0		6.5						
Lead/Lag				Lead	Lag	Lead	Lag		
Lead-Lag Optimize?				Yes	Yes	Yes	Yes		
Recall Mode	None		None	None	Max	None	Max	None	None
Act Effect Green (s)	40.0	74.0	9.5						
Actuated g/C Ratio	0.27	0.49	0.06						
v/c Ratio	1.85	0.43	0.58						
Control Delay (s/veh)	420.2	1.6	43.1						
Queue Delay	0.2	52.5	0.6						
Total Delay (s/veh)	420.5	54.0	43.8						
LOS	F	D	D						
Approach Delay (s/veh)	420.5	54.0	43.8						
Approach LOS	F	D	D						

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Natural Cycle: 150  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 1.85  
 Intersection Signal Delay (s/veh): 245.7  
 Intersection LOS: F  
 Intersection Capacity Utilization 62.5%  
 ICU Level of Service B  
 Analysis Period (min) 15

Splits and Phases: 4: Chamberlain Ln & Old LaGrange Rd



Timings

5: LaGrange Rd & Chamberlain Ln/Factory Ln

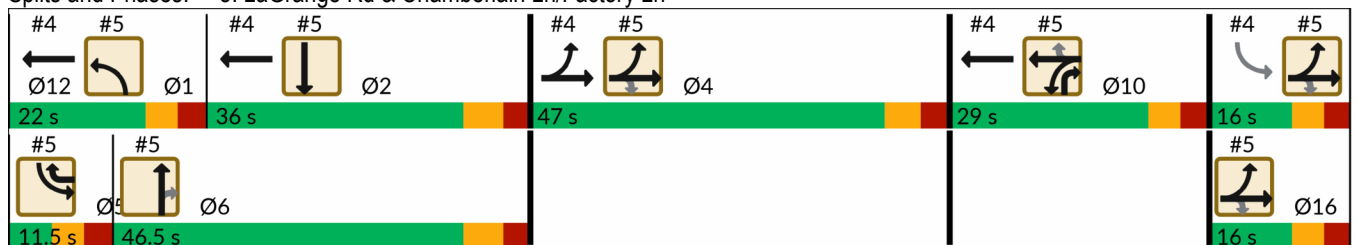


Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	Ø4	Ø12
Lane Configurations	↕	↕	↙	↕	↕	↙	↕	↕	↙	↕		
Traffic Volume (vph)	205	384	321	253	2	264	835	603	38	499		
Future Volume (vph)	205	384	321	253	2	264	835	603	38	499		
Turn Type	NA	Perm	Split	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		
Protected Phases	4 12 16		10	10	5	1	6	10	5	2	4	12
Permitted Phases		4 12 16			10			6				
Detector Phase	4 12 16	4 12 16	10	10	5	1	6	10	5	2		
Switch Phase												
Minimum Initial (s)			8.0	8.0	5.0	5.0	15.0	8.0	5.0	8.0	8.0	5.0
Minimum Split (s)			26.0	26.0	11.5	14.5	28.5	26.0	11.5	32.0	35.0	12.0
Total Split (s)			29.0	29.0	11.5	22.0	46.5	29.0	11.5	36.0	47.0	16.0
Total Split (%)			19.3%	19.3%	7.7%	14.7%	31.0%	19.3%	7.7%	24.0%	31%	11%
Yellow Time (s)			3.5	3.5	3.5	3.5	4.3	3.5	3.5	4.3	4.0	3.5
All-Red Time (s)			3.0	3.0	3.0	3.0	2.7	3.0	3.0	2.7	3.0	3.0
Lost Time Adjust (s)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)			6.5	6.5	6.5	6.5	7.0	6.5	6.5	7.0		
Lead/Lag					Lead	Lead	Lag		Lead	Lag		
Lead-Lag Optimize?					Yes	Yes	Yes		Yes	Yes		
Recall Mode			None	None	None	None	Max	None	None	Max	None	None
Act Effct Green (s)	49.0	49.0	22.5	22.5	27.5	15.5	41.8	64.8	5.0	29.0		
Actuated g/C Ratio	0.33	0.33	0.15	0.15	0.18	0.10	0.28	0.43	0.03	0.19		
v/c Ratio	0.74	0.67	1.25	1.26	0.00	1.63	0.95	0.74	0.73	1.02		
Control Delay (s/veh)	4.9	5.3	189.7	193.1	0.0	347.4	72.2	12.9	126.8	98.8		
Queue Delay	56.3	57.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay (s/veh)	61.3	62.6	189.7	193.1	0.0	347.4	72.2	12.9	126.8	98.8		
LOS	E	E	F	F	A	F	E	B	F	F		
Approach Delay (s/veh)	61.9			190.8			93.9			100.5		
Approach LOS	E			F			F			F		

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Natural Cycle: 150  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 1.85  
 Intersection Signal Delay (s/veh): 103.4      Intersection LOS: F  
 Intersection Capacity Utilization 91.0%      ICU Level of Service F  
 Analysis Period (min) 15

Splits and Phases: 5: LaGrange Rd & Chamberlain Ln/Factory Ln



Lane Group	Ø16
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Turn Type	
Protected Phases	16
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	12.0
Total Split (s)	16.0
Total Split (%)	11%
Yellow Time (s)	3.5
All-Red Time (s)	3.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Intersection Summary	