APPENDICES

APPENDIX A:

Turning Movement Counts

Morrisville Parkway at Davis Drive (signaliz... - TMC

Tue Aug 29, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099526, Location: 35.81353, -78.848084

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two,
Orlando, FL, 32801, US

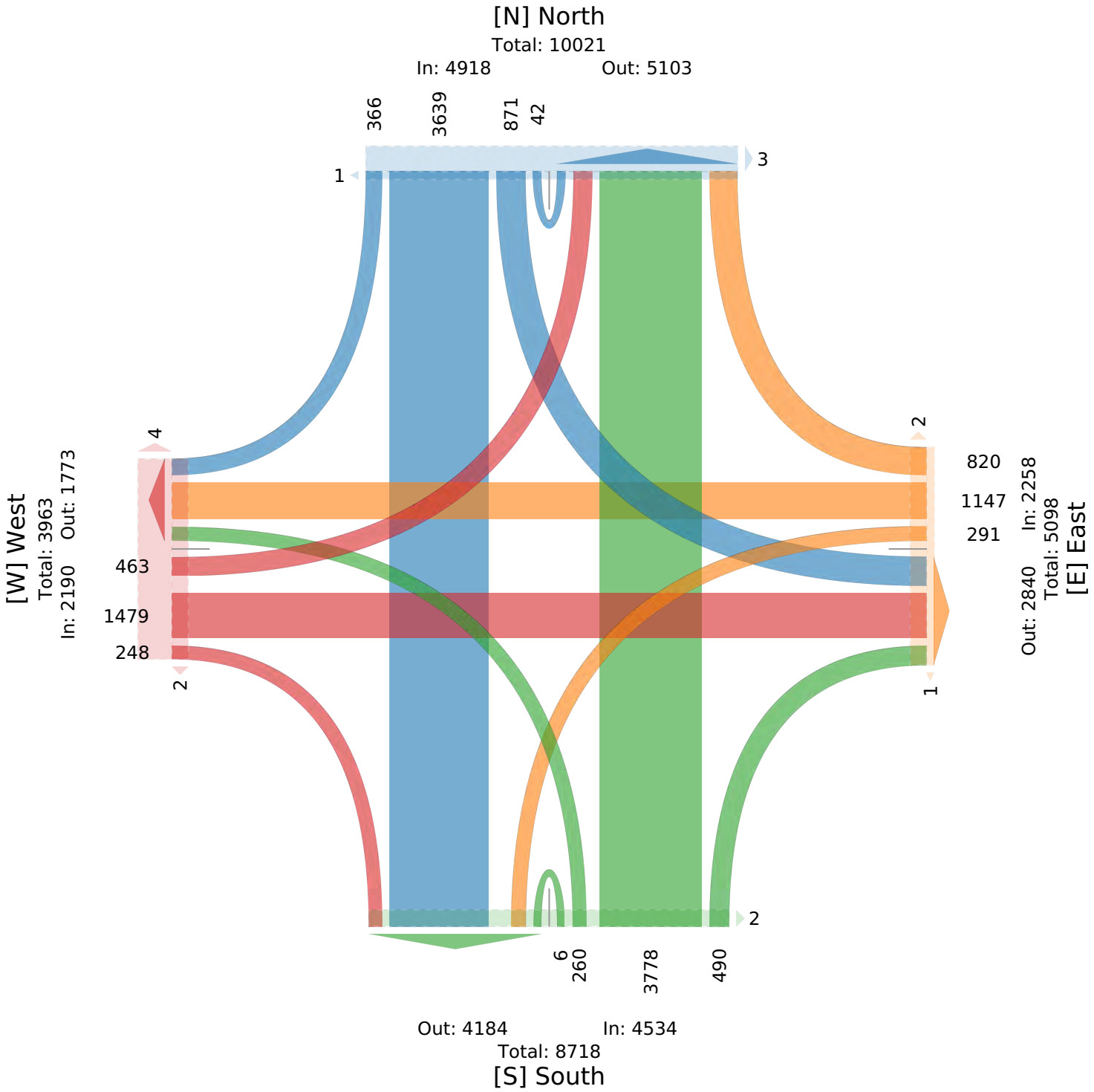
Leg	North						East						South						West						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2023-08-29 7:00AM	24	110	17	1	**152**	0	8	50	35	0	**93**	0	21	173	9	0	**203**	0	28	81	24	0	**133**	0	**581**
7:15AM	24	134	8	3	**169**	0	13	49	32	0	**94**	1	7	215	16	1	**239**	1	30	80	23	0	**133**	0	**635**
7:30AM	35	149	14	2	**200**	0	12	60	49	0	**121**	0	9	259	20	0	**288**	0	17	78	13	0	**108**	2	**717**
7:45AM	34	127	10	2	**173**	0	15	44	49	0	**108**	1	19	301	27	0	**347**	0	27	89	7	0	**123**	0	**751**
Hourly Total	117	520	49	8	**694**	0	48	203	165	0	**416**	2	56	948	72	1	**1077**	1	102	328	67	0	**497**	2	**2684**
8:00AM	27	108	10	3	**148**	0	6	47	52	0	**105**	0	16	287	28	0	**331**	0	31	118	15	0	**164**	1	**748**
8:15AM	25	114	15	1	**155**	2	18	49	54	0	**121**	1	12	318	26	0	**356**	0	40	127	8	0	**175**	0	**807**
8:30AM	31	160	26	4	**221**	0	16	60	51	0	**127**	0	12	307	26	0	**345**	1	33	95	12	0	**140**	0	**833**
8:45AM	41	144	25	5	**215**	0	16	55	58	0	**129**	0	18	274	32	0	**324**	0	41	107	12	0	**160**	1	**828**
Hourly Total	124	526	76	13	**739**	2	56	211	215	0	**482**	1	58	1186	112	0	**1356**	1	145	447	47	0	**639**	2	**3216**
4:00PM	54	209	24	1	**288**	0	25	89	50	0	**164**	0	24	174	21	0	**219**	0	25	73	18	0	**116**	1	**787**
4:15PM	59	339	32	5	**435**	0	23	93	47	0	**163**	0	20	184	41	0	**245**	0	25	76	12	0	**113**	0	**956**
4:30PM	79	336	35	3	**453**	0	18	95	62	0	**175**	0	17	167	35	0	**219**	0	28	83	13	0	**124**	0	**971**
4:45PM	73	313	20	5	**411**	0	23	85	45	0	**153**	0	17	198	28	1	**244**	0	24	93	27	0	**144**	1	**952**
Hourly Total	265	1197	111	14	**1587**	0	89	362	204	0	**655**	0	78	723	125	1	**927**	0	102	325	70	0	**497**	2	**3666**
5:00PM	86	388	33	2	**509**	1	24	90	46	0	**160**	0	20	245	36	1	**302**	0	26	82	21	0	**129**	0	**1100**
5:15PM	96	334	35	0	**465**	1	22	98	55	0	**175**	0	17	198	52	1	**268**	0	41	112	18	0	**171**	0	**1079**
5:30PM	75	327	32	3	**437**	0	30	102	76	0	**208**	0	17	271	45	1	**334**	0	25	109	11	0	**145**	0	**1124**
5:45PM	108	347	30	2	**487**	0	22	81	59	0	**162**	0	14	207	48	1	**270**	0	22	76	14	0	**112**	0	**1031**
Hourly Total	365	1396	130	7	**1898**	2	98	371	236	0	**705**	0	68	921	181	4	**1174**	0	114	379	64	0	**557**	0	**4334**
Total	871	3639	366	42	**4918**	4	291	1147	820	0	**2258**	3	260	3778	490	6	**4534**	2	463	1479	248	0	**2190**	6	**13900**
% Approach	17.7%	74.0%	7.4%	0.9%	**-**	-	12.9%	50.8%	36.3%	0%	**-**	-	5.7%	83.3%	10.8%	0.1%	**-**	-	21.1%	67.5%	11.3%	0%	**-**	-	**-**
% Total	6.3%	26.2%	2.6%	0.3%	**35.4%**	-	2.1%	8.3%	5.9%	0%	**16.2%**	-	1.9%	27.2%	3.5%	0%	**32.6%**	-	3.3%	10.6%	1.8%	0%	**15.8%**	-	**-**
Lights	859	3599	351	42	**4851**	-	285	1122	808	0	**2215**	-	253	3738	480	6	**4477**	-	451	1449	246	0	**2146**	-	13689
% Lights	98.6%	98.9%	95.9%	100%	**98.6%**	-	97.9%	97.8%	98.5%	0%	**98.1%**	-	97.3%	98.9%	98.0%	100%	**98.7%**	-	97.4%	98.0%	99.2%	0%	**98.0%**	-	98.5%
Articulated Trucks	1	8	2	0	**11**	-	0	3	1	0	**4**	-	1	5	0	0	**6**	-	2	4	0	0	**6**	-	27
% Articulated Trucks	0.1%	0.2%	0.5%	0%	**0.2%**	-	0%	0.3%	0.1%	0%	**0.2%**	-	0.4%	0.1%	0%	0%	**0.1%**	-	0.4%	0.3%	0%	0%	**0.3%**	-	0.2%
Buses and Single-Unit Trucks	11	32	13	0	**56**	-	6	21	10	0	**37**	-	6	35	10	0	**51**	-	10	24	2	0	**36**	-	180
% Buses and Single-Unit Trucks	1.3%	0.9%	3.6%	0%	**1.1%**	-	2.1%	1.8%	1.2%	0%	**1.6%**	-	2.3%	0.9%	2.0%	0%	**1.1%**	-	2.2%	1.6%	0.8%	0%	**1.6%**	-	1.3%
Bicycles on Road	0	0	0	0	**0**	-	0	1	1	0	**2**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	4
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0.1%	0.1%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	50.0%	-	-	-	-	-	66.7%	-	-	-	-	-	100%	-	-	-	-	-	33.3%	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	4	
% Bicycles on Crosswalk	-	-	-	-	-	50.0%	-	-	-	-	-	33.3%	-	-	-	-	-	0%	-	-	-	-	-	66.7%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Davis Drive (signaliz... - TMC

Tue Aug 29, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099526, Location: 35.81353, -78.848084

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Davis Drive (signaliz... - TMC

Tue Aug 29, 2023
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099526, Location: 35.81353, -78.848084

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two,
Orlando, FL, 32801, US

Leg	North						East						South						West						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 8:00AM	27	108	10	3	**148**	0	6	47	52	0	**105**	0	16	287	28	0	**331**	0	31	118	15	0	**164**	1	**748**
8:15AM	25	114	15	1	**155**	2	18	49	54	0	**121**	1	12	318	26	0	**356**	0	40	127	8	0	**175**	0	**807**
8:30AM	31	160	26	4	**221**	0	16	60	51	0	**127**	0	12	307	26	0	**345**	1	33	95	12	0	**140**	0	**833**
8:45AM	41	144	25	5	**215**	0	16	55	58	0	**129**	0	18	274	32	0	**324**	0	41	107	12	0	**160**	1	**828**
Total	124	526	76	13	**739**	2	56	211	215	0	**482**	1	58	1186	112	0	**1356**	1	145	447	47	0	**639**	2	**3216**
% Approach	16.8%	71.2%	10.3%	1.8%	**-**	-	11.6%	43.8%	44.6%	0%	**-**	-	4.3%	87.5%	8.3%	0%	**-**	-	22.7%	70.0%	7.4%	0%	**-**	-	**-**
% Total	3.9%	16.4%	2.4%	0.4%	**23.0%**	-	1.7%	6.6%	6.7%	0%	**15.0%**	-	1.8%	36.9%	3.5%	0%	**42.2%**	-	4.5%	13.9%	1.5%	0%	**19.9%**	-	**-**
PHF	0.756	0.822	0.731	0.650	**0.836**	-	0.778	0.879	0.922	-	**0.932**	-	0.806	0.932	0.875	-	**0.952**	-	0.884	0.880	0.783	-	**0.913**	-	0.965
Lights	120	511	71	13	**715**	-	54	203	211	0	**468**	-	56	1169	106	0	**1331**	-	142	439	46	0	**627**	-	3141
% Lights	96.8%	97.1%	93.4%	100%	**96.8%**	-	96.4%	96.2%	98.1%	0%	**97.1%**	-	96.6%	98.6%	94.6%	0%	**98.2%**	-	97.9%	98.2%	97.9%	0%	**98.1%**	-	97.7%
Articulated Trucks	0	4	0	0	**4**	-	0	0	1	0	**1**	-	0	1	0	0	**1**	-	2	2	0	0	**4**	-	10
% Articulated Trucks	0%	0.8%	0%	0%	**0.5%**	-	0%	0%	0.5%	0%	**0.2%**	-	0%	0.1%	0%	0%	**0.1%**	-	1.4%	0.4%	0%	0%	**0.6%**	-	0.3%
Buses and Single-Unit Trucks	4	11	5	0	**20**	-	2	8	2	0	**12**	-	2	16	6	0	**24**	-	1	6	1	0	**8**	-	64
% Buses and Single-Unit Trucks	3.2%	2.1%	6.6%	0%	**2.7%**	-	3.6%	3.8%	0.9%	0%	**2.5%**	-	3.4%	1.3%	5.4%	0%	**1.8%**	-	0.7%	1.3%	2.1%	0%	**1.3%**	-	2.0%
Bicycles on Road	0	0	0	0	**0**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0.5%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	50.0%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	0%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	50.0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Davis Drive (signaliz... - TMC
Tue Aug 29, 2023
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099526, Location: 35.81353, -78.848084

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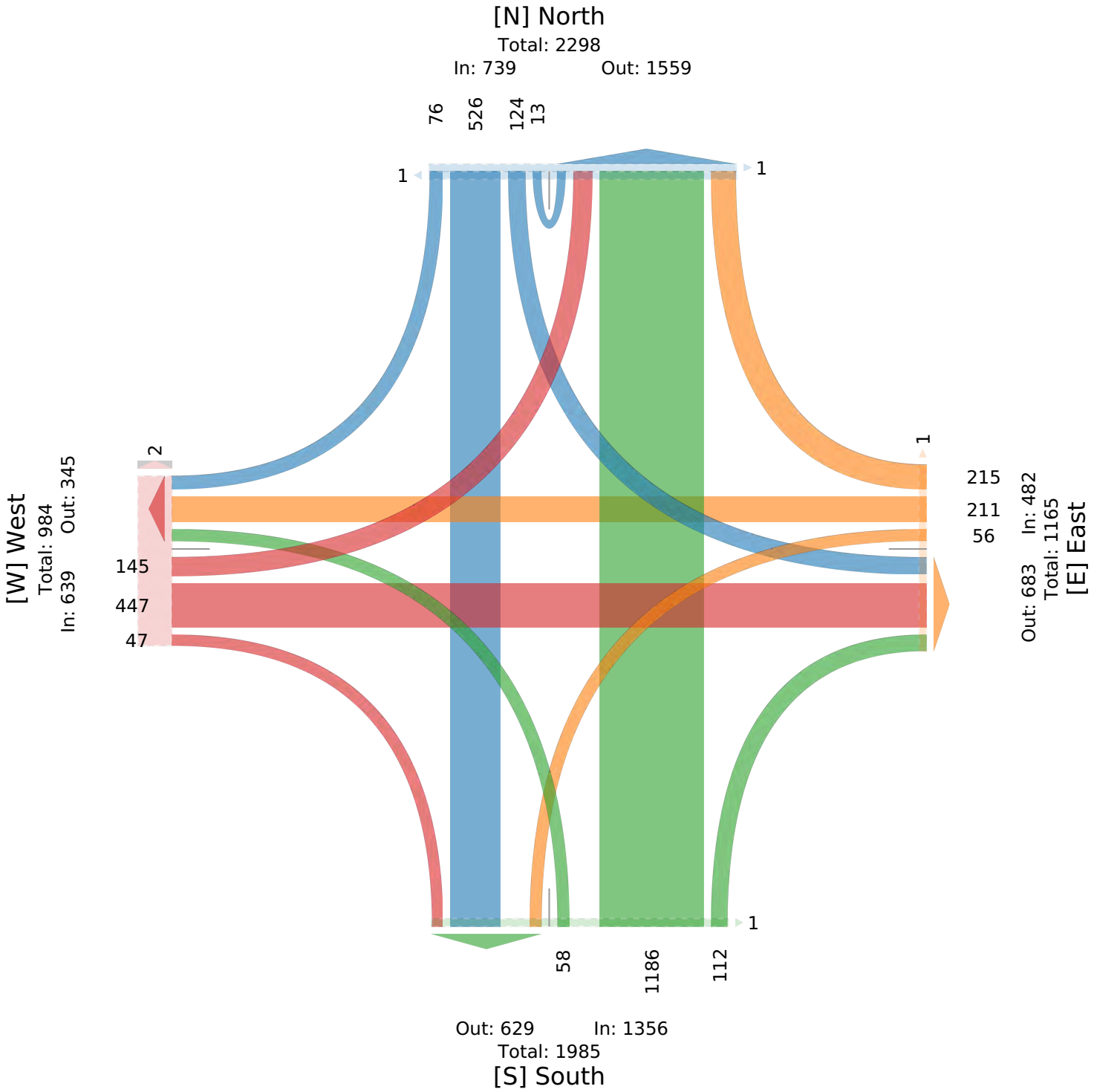

Morrisville Parkway at Davis Drive (signaliz... - TMC

Tue Aug 29, 2023
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099526, Location: 35.81353, -78.848084

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 5:00PM	86	388	33	2	**509**	1	24	90	46	0	**160**	0	20	245	36	1	**302**	0	26	82	21	0	**129**	0	**1100**
5:15PM	96	334	35	0	**465**	1	22	98	55	0	**175**	0	17	198	52	1	**268**	0	41	112	18	0	**171**	0	**1079**
5:30PM	75	327	32	3	**437**	0	30	102	76	0	**208**	0	17	271	45	1	**334**	0	25	109	11	0	**145**	0	**1124**
5:45PM	108	347	30	2	**487**	0	22	81	59	0	**162**	0	14	207	48	1	**270**	0	22	76	14	0	**112**	0	**1031**
Total	365	1396	130	7	**1898**	2	98	371	236	0	**705**	0	68	921	181	4	**1174**	0	114	379	64	0	**557**	0	**4334**
% Approach	19.2%	73.6%	6.8%	0.4%	**-**	-	13.9%	52.6%	33.5%	0%	**-**	-	5.8%	78.4%	15.4%	0.3%	**-**	-	20.5%	68.0%	11.5%	0%	**-**	-	**-**
% Total	8.4%	32.2%	3.0%	0.2%	**43.8%**	-	2.3%	8.6%	5.4%	0%	**16.3%**	-	1.6%	21.3%	4.2%	0.1%	**27.1%**	-	2.6%	8.7%	1.5%	0%	**12.9%**	-	**-**
PHF	0.845	0.899	0.929	0.583	**0.932**	-	0.817	0.916	0.776	-	**0.850**	-	0.850	0.850	0.870	1.000	**0.879**	-	0.695	0.842	0.762	-	**0.811**	-	0.965
Lights	364	1390	126	7	**1887**	-	97	370	235	0	**702**	-	68	911	181	4	**1164**	-	113	374	64	0	**551**	-	4304
% Lights	99.7%	99.6%	96.9%	100%	**99.4%**	-	99.0%	99.7%	99.6%	0%	**99.6%**	-	100%	98.9%	100%	100%	**99.1%**	-	99.1%	98.7%	100%	0%	**98.9%**	-	99.3%
Articulated Trucks	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	2
% Articulated Trucks	0%	0%	0.8%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%
Buses and Single-Unit Trucks	1	6	3	0	**10**	-	1	0	1	0	**2**	-	0	9	0	0	**9**	-	1	3	0	0	**4**	-	25
% Buses and Single-Unit Trucks	0.3%	0.4%	2.3%	0%	**0.5%**	-	1.0%	0%	0.4%	0%	**0.3%**	-	0%	1.0%	0%	0%	**0.8%**	-	0.9%	0.8%	0%	0%	**0.7%**	-	0.6%
Bicycles on Road	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	3
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0.5%	0%	0%	**0.4%**	-	0.1%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	50.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	50.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Davis Drive (signaliz... - TMC

Tue Aug 29, 2023
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099526, Location: 35.81353, -78.848084

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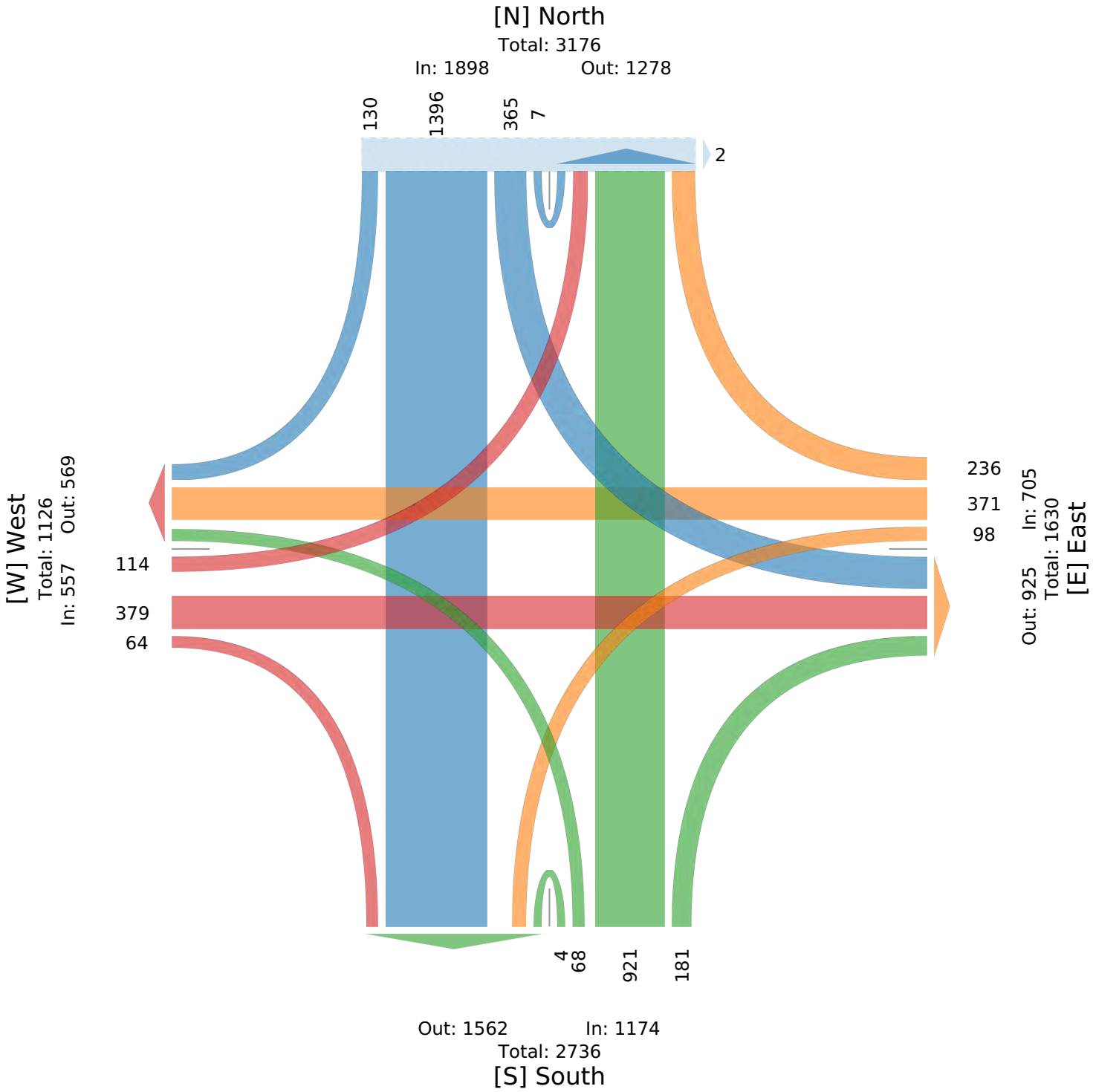


Morrisville Parkway at Carriage Way Trail (u... - TMC

Tue Aug 29, 2023
Full Length (7 AM-9 AM, 2 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099525, Location: 35.813341, -78.84643

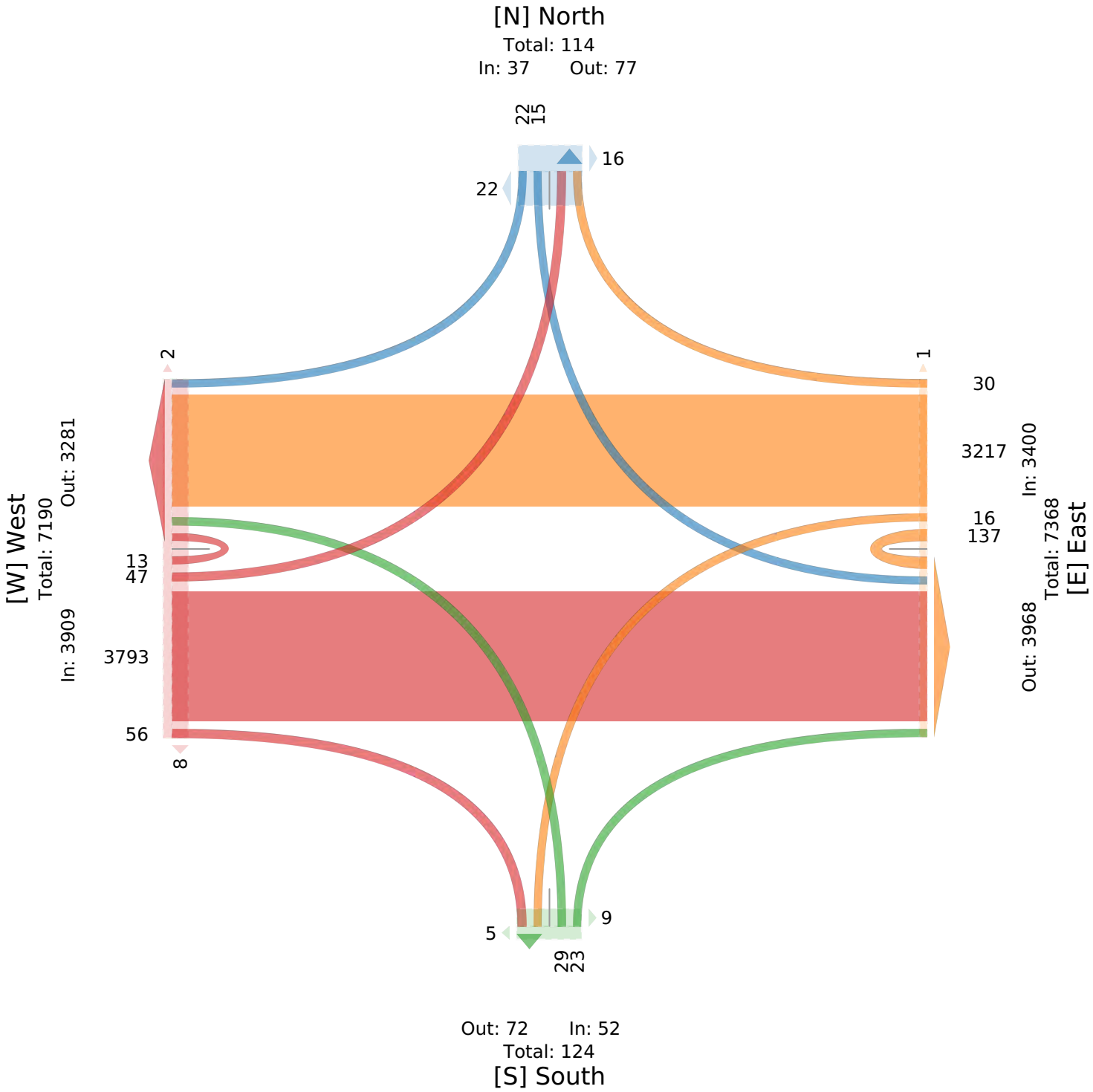
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg	North						East						South						West						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2023-08-29 7:00AM	1	0	0	0	**1**	0	0	93	0	0	**93**	0	0	0	0	0	**0**	0	2	112	0	0	**114**	0	**208**
7:15AM	0	0	1	0	**1**	0	0	88	2	2	**92**	0	0	0	0	0	**0**	1	4	121	0	1	**126**	1	**219**
7:30AM	0	0	1	0	**1**	1	0	116	0	1	**117**	0	0	0	0	0	**0**	2	1	133	2	4	**140**	1	**258**
7:45AM	0	0	0	0	**0**	4	0	117	0	1	**118**	1	0	0	0	0	**0**	1	1	140	5	0	**146**	0	**264**
Hourly Total	1	0	2	0	**3**	5	0	414	2	4	**420**	1	0	0	0	0	**0**	4	8	506	7	5	**526**	2	**949**
8:00AM	1	0	1	0	**2**	5	3	107	0	1	**111**	0	2	0	0	0	**2**	2	2	158	13	0	**173**	2	**288**
8:15AM	0	0	2	0	**2**	1	4	108	2	3	**117**	0	0	0	0	0	**0**	2	0	164	9	0	**173**	2	**292**
8:30AM	0	0	1	0	**1**	6	0	122	3	23	**148**	0	1	0	0	0	**1**	0	1	139	4	0	**144**	0	**294**
8:45AM	0	0	2	0	**2**	6	4	130	0	40	**174**	0	1	0	0	0	**1**	2	3	163	2	0	**168**	0	**345**
Hourly Total	1	0	6	0	**7**	18	11	467	5	67	**550**	0	4	0	0	0	**4**	6	6	624	28	0	**658**	4	**1219**
2:00PM	3	0	1	0	**4**	1	0	106	1	1	**108**	0	0	0	0	0	**0**	0	1	111	0	1	**113**	1	**225**
2:15PM	2	0	1	0	**3**	0	0	116	0	1	**117**	0	0	0	0	0	**0**	0	3	110	0	0	**113**	0	**233**
2:30PM	0	0	2	0	**2**	0	0	127	2	1	**130**	0	0	0	0	0	**0**	1	1	158	0	1	**160**	0	**292**
2:45PM	0	0	0	0	**0**	0	0	115	1	1	**117**	0	0	0	0	0	**0**	0	2	121	0	0	**123**	0	**240**
Hourly Total	5	0	4	0	**9**	1	0	464	4	4	**472**	0	0	0	0	0	**0**	1	7	500	0	2	**509**	1	**990**
3:00PM	2	0	0	0	**2**	0	0	123	4	0	**127**	0	0	0	0	0	**0**	0	1	119	0	0	**120**	0	**249**
3:15PM	1	0	5	0	**6**	1	0	124	0	3	**127**	0	0	0	0	0	**0**	0	2	142	3	1	**148**	0	**281**
3:30PM	1	0	1	0	**2**	2	0	127	0	11	**138**	0	1	0	0	0	**1**	2	1	131	5	2	**139**	0	**280**
3:45PM	2	0	0	0	**2**	4	3	151	0	30	**184**	0	2	0	2	0	**4**	0	2	155	3	1	**161**	0	**351**
Hourly Total	6	0	6	0	**12**	7	3	525	4	44	**576**	0	3	0	2	0	**5**	2	6	547	11	4	**568**	0	**1161**
4:00PM	0	0	0	0	**0**	0	0	170	1	3	**174**	0	4	0	6	0	**10**	0	0	145	3	0	**148**	0	**332**
4:15PM	0	0	0	0	**0**	1	2	155	0	3	**160**	0	8	0	8	0	**16**	0	0	175	3	1	**179**	0	**355**
4:30PM	0	0	0	0	**0**	4	0	160	1	1	**162**	0	5	0	3	0	**8**	0	0	192	1	0	**193**	0	**363**
4:45PM	0	0	1	0	**1**	1	0	154	0	4	**158**	0	1	0	1	0	**2**	0	1	191	0	0	**192**	0	**353**
Hourly Total	0	0	1	0	**1**	6	2	639	2	11	**654**	0	18	0	18	0	**36**	0	1	703	7	1	**712**	0	**1403**
5:00PM	0	0	1	0	**1**	0	0	168	1	2	**171**	0	0	0	1	0	**1**	0	0	202	0	0	**202**	0	**375**
5:15PM	0	0	1	0	**1**	0	0	173	1	2	**176**	0	2	0	1	0	**3**	0	0	261	2	1	**264**	1	**444**
5:30PM	0	0	1	0	**1**	1	0	183	2	1	**186**	0	1	0	1	0	**2**	1	4	233	1	0	**238**	1	**427**
5:45PM	2	0	0	0	**2**	0	0	184	9	2	**195**	0	1	0	0	0	**1**	0	15	217	0	0	**232**	1	**430**
Hourly Total	2	0	3	0	**5**	1	0	708	13	7	**728**	0	4	0	3	0	**7**	1	19	913	3	1	**936**	3	**1676**
Total	15	0	22	0	**37**	38	16	3217	30	137	**3400**	1	29	0	23	0	**52**	14	47	3793	56	13	**3909**	10	**7398**
% Approach	40.5%	0%	59.5%	0%	**-**	-	0.5%	94.6%	0.9%	4.0%	**-**	-	55.8%	0%	44.2%	0%	**-**	-	1.2%	97.0%	1.4%	0.3%	**-**	-	-
% Total	0.2%	0%	0.3%	0%	**0.5%**	-	0.2%	43.5%	0.4%	1.9%	**46.0%**	-	0.4%	0%	0.3%	0%	**0.7%**	-	0.6%	51.3%	0.8%	0.2%	**52.8%**	-	-
Lights	13	0	20	0	**33**	-	12	3141	27	135	**3315**	-	28	0	17	0	**45**	-	47	3728	50	13	**3838**	-	7231
% Lights	86.7%	0%	90.9%	0%	**89.2%**	-	75.0%	97.6%	90.0%	98.5%	**97.5%**	-	96.6%	0%	73.9%	0%	**86.5%**	-	100%	98.3%	89.3%	100%	**98.2%**	-	97.7%
Articulated Trucks	0	0	0	0	**0**	-	0	4	0	0	**4**	-	0	0	0	0	**0**	-	0	5	0	0	**5**	-	9
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Buses and Single-Unit Trucks	1	0	1	0	**2**	-	4	68	0	2	**74**	-	1	0	6	0	**7**	-	0	58	6	0	**64**	-	147
% Buses and Single-Unit Trucks	6.7%	0%	4.5%	0%	**5.4%**	-	25.0%	2.1%	0%	1.5%	**2.2%**	-	3.4%	0%	26.1%	0%	**13.5%**	-	0%	1.5%	10.7%	0%	**1.6%**	-	2.0%
Bicycles on Road	1	0	1	0	**2**	-	0	4	3	0	**7**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	11
% Bicycles on Road	6.7%	0%	4.5%	0%	**5.4%**	-	0%	0.1%	10.0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Pedestrians	-	-	-	-	-	36	-	-	-	-	-	1	-	-	-	-	-	9	-	-	-	-	-	7	
% Pedestrians	-	-	-	-	-	94.7%	-	-	-	-	-	100%	-	-	-	-	-	64.3%	-	-	-	-	-	70.0%	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	5	-	-	-	-	-	3	
% Bicycles on Crosswalk	-	-	-	-	-	5.3%	-	-	-	-	-	0%	-	-	-	-	-	35.7%	-	-	-	-	-	30.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Carriage Way Trail (u... - TMC
Tue Aug 29, 2023
Full Length (7 AM-9 AM, 2 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099525, Location: 35.813341, -78.84643

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Carriage Way Trail (u... - TMC

Tue Aug 29, 2023
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099525, Location: 35.813341, -78.84643

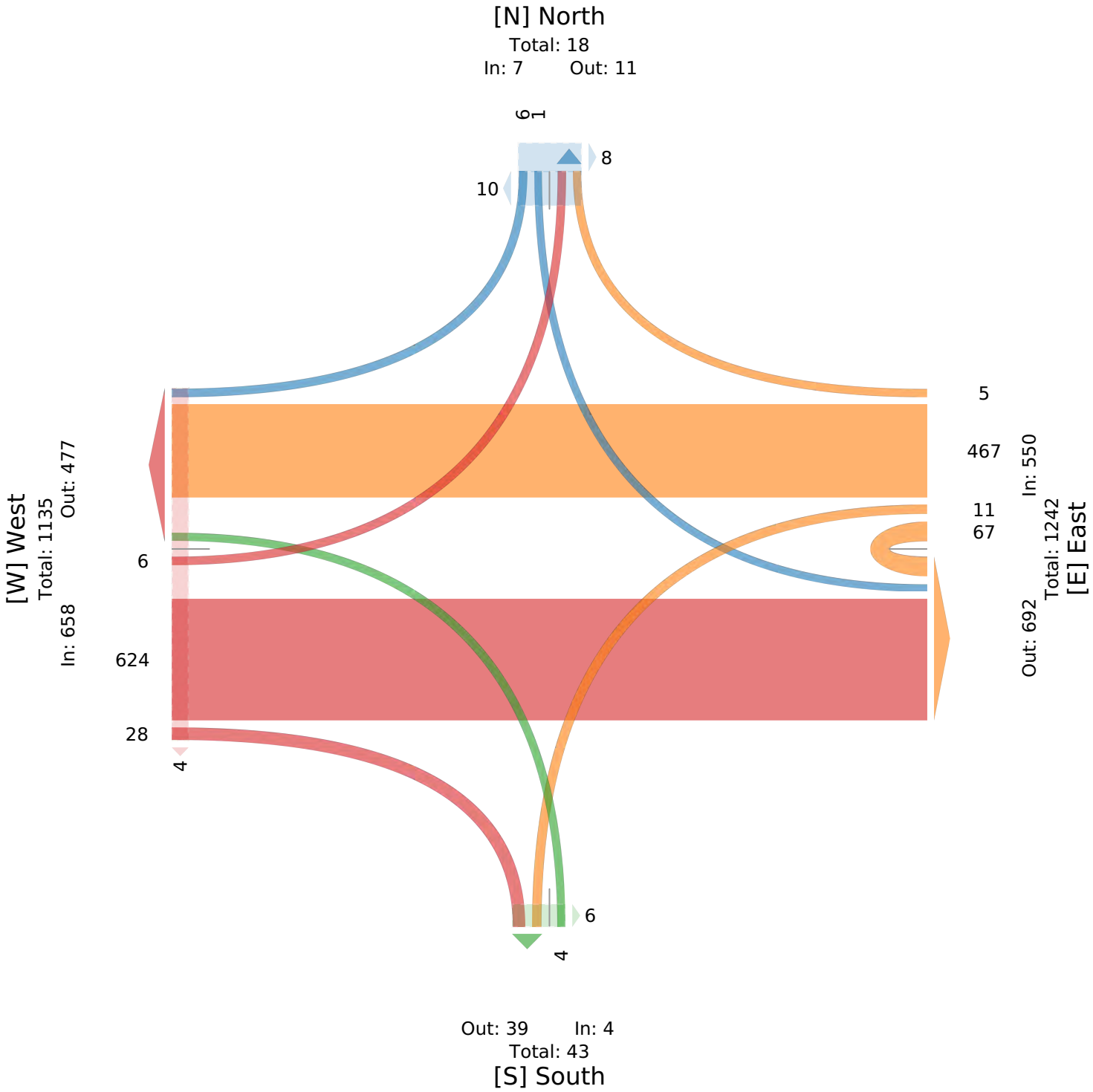
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg	North						East						South						West						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 8:00AM	1	0	1	0	**2**	5	3	107	0	1	**111**	0	2	0	0	0	**2**	2	2	158	13	0	**173**	2	**288**
8:15AM	0	0	2	0	**2**	1	4	108	2	3	**117**	0	0	0	0	0	**0**	2	0	164	9	0	**173**	2	**292**
8:30AM	0	0	1	0	**1**	6	0	122	3	23	**148**	0	1	0	0	0	**1**	0	1	139	4	0	**144**	0	**294**
8:45AM	0	0	2	0	**2**	6	4	130	0	40	**174**	0	1	0	0	0	**1**	2	3	163	2	0	**168**	0	**345**
Total	1	0	6	0	**7**	18	11	467	5	67	**550**	0	4	0	0	0	**4**	6	6	624	28	0	**658**	4	**1219**
% Approach	14.3%	0%	85.7%	0%	**-**	-	2.0%	84.9%	0.9%	12.2%	**-**	-	100%	0%	0%	0%	**-**	-	0.9%	94.8%	4.3%	0%	**-**	-	**-**
% Total	0.1%	0%	0.5%	0%	**0.6%**	-	0.9%	38.3%	0.4%	5.5%	**45.1%**	-	0.3%	0%	0%	0%	**0.3%**	-	0.5%	51.2%	2.3%	0%	**54.0%**	-	**-**
PHF	0.250	-	0.750	-	**0.875**	-	0.688	0.896	0.333	0.419	**0.787**	-	0.500	-	-	-	**0.500**	-	0.500	0.956	0.538	-	**0.949**	-	0.881
Lights	1	0	6	0	**7**	-	9	455	4	67	**535**	-	3	0	0	0	**3**	-	6	607	27	0	**640**	-	1185
% Lights	100%	0%	100%	0%	**100%**	-	81.8%	97.4%	80.0%	100%	**97.3%**	-	75.0%	0%	0%	0%	**75.0%**	-	100%	97.3%	96.4%	0%	**97.3%**	-	97.2%
Articulated Trucks	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	3	0	0	**3**	-	4
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0.5%	0%	0%	**0.5%**	-	0.3%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	2	10	0	0	**12**	-	1	0	0	0	**1**	-	0	13	1	0	**14**	-	27
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	18.2%	2.1%	0%	0%	**2.2%**	-	25.0%	0%	0%	0%	**25.0%**	-	0%	2.1%	3.6%	0%	**2.1%**	-	2.2%
Bicycles on Road	0	0	0	0	**0**	-	0	1	1	0	**2**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	3
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0.2%	20.0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.2%**	-	0.2%
Pedestrians	-	-	-	-	-	17	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	94.4%	-	-	-	-	-	-	-	-	-	-	-	50.0%	-	-	-	-	-	50.0%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	5.6%	-	-	-	-	-	-	-	-	-	-	-	50.0%	-	-	-	-	-	50.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Carriage Way Trail (u... - TMC
Tue Aug 29, 2023
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099525, Location: 35.813341, -78.84643

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Carriage Way Trail (u... - TMC

Tue Aug 29, 2023
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099525, Location: 35.813341, -78.84643

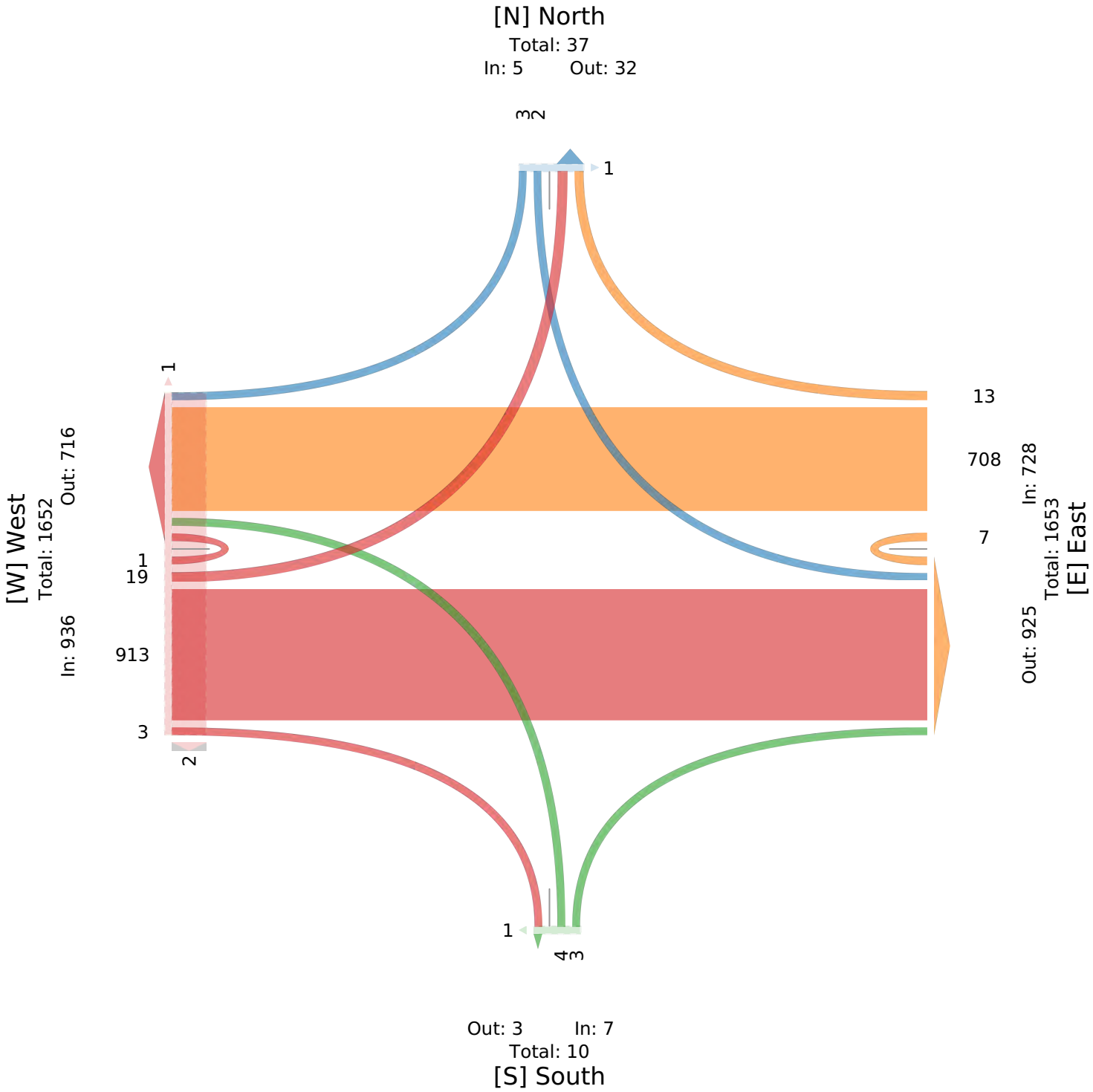
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg	North						East						South						West						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 5:00PM	0	0	1	0	**1**	0	0	168	1	2	**171**	0	0	0	1	0	**1**	0	0	202	0	0	**202**	0	**375**
5:15PM	0	0	1	0	**1**	0	0	173	1	2	**176**	0	2	0	1	0	**3**	0	0	261	2	1	**264**	1	**444**
5:30PM	0	0	1	0	**1**	1	0	183	2	1	**186**	0	1	0	1	0	**2**	1	4	233	1	0	**238**	1	**427**
5:45PM	2	0	0	0	**2**	0	0	184	9	2	**195**	0	1	0	0	0	**1**	0	15	217	0	0	**232**	1	**430**
Total	2	0	3	0	**5**	1	0	708	13	7	**728**	0	4	0	3	0	**7**	1	19	913	3	1	**936**	3	**1676**
% Approach	40.0%	0%	60.0%	0%	**-**	-	0%	97.3%	1.8%	1.0%	**-**	-	57.1%	0%	42.9%	0%	**-**	-	2.0%	97.5%	0.3%	0.1%	**-**	-	-
% Total	0.1%	0%	0.2%	0%	**0.3%**	-	0%	42.2%	0.8%	0.4%	**43.4%**	-	0.2%	0%	0.2%	0%	**0.4%**	-	1.1%	54.5%	0.2%	0.1%	**55.8%**	-	-
PHF	0.250	-	0.500	-	**0.500**	-	-	0.961	0.333	0.875	**0.931**	-	0.500	-	0.750	-	**0.583**	-	0.317	0.874	0.375	0.250	**0.885**	-	0.944
Lights	2	0	2	0	**4**	-	0	705	12	7	**724**	-	4	0	3	0	**7**	-	19	908	3	1	**931**	-	1666
% Lights	100%	0%	66.7%	0%	**80.0%**	-	0%	99.6%	92.3%	100%	**99.5%**	-	100%	0%	100%	0%	**100%**	-	100%	99.5%	100%	100%	**99.5%**	-	99.4%
Articulated Trucks	0	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%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	4	0	0	**4**	-	6
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0.4%	0%	0%	**0.4%**	-	0.4%
Bicycles on Road	0	0	1	0	**1**	-	0	1	1	0	**2**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	4
% Bicycles on Road	0%	0%	33.3%	0%	**20.0%**	-	0%	0.1%	7.7%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.2%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	66.7%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	33.3%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Carriage Way Trail (u... - TMC
Tue Aug 29, 2023
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099525, Location: 35.813341, -78.84643

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Golden Horseshoe Circ... - TMC

Tue Aug 29, 2023
Full Length (7 AM-9 AM, 2 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099524, Location: 35.811925, -78.845043

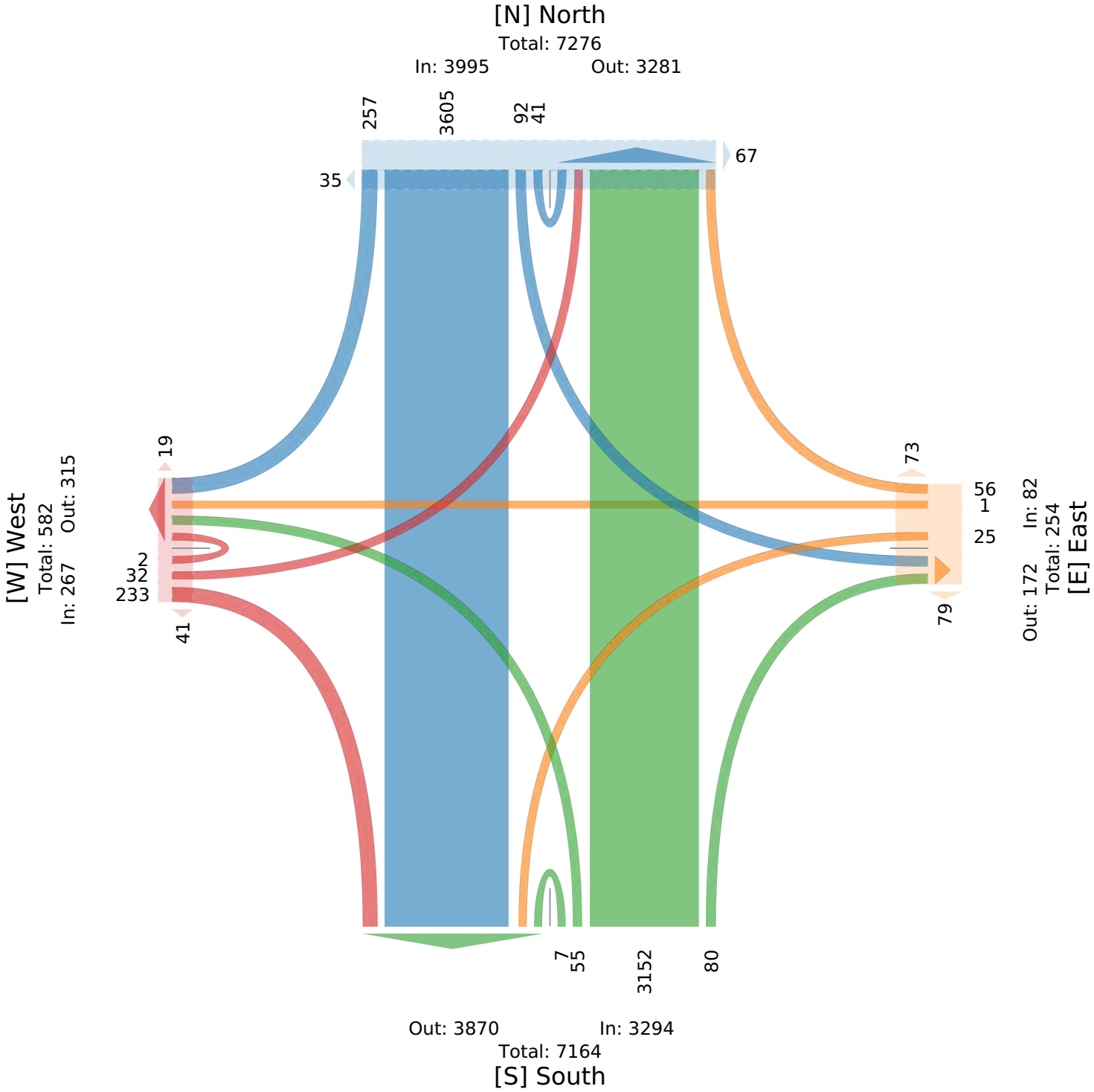
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two,
Orlando, FL, 32801, US

Leg	North						East						South						West						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 7:00AM	1	112	0	0	**113**	0	0	0	0	0	**0**	2	1	83	3	0	**87**	0	0	0	0	0	**0**	4	**200**
7:15AM	2	114	1	1	**118**	0	1	0	2	0	**3**	1	3	82	1	0	**86**	0	1	0	0	0	**1**	2	**208**
7:30AM	1	128	2	2	**133**	0	1	0	4	0	**5**	1	0	109	3	0	**112**	0	1	0	0	0	**1**	2	**251**
7:45AM	1	135	4	0	**140**	1	2	0	0	0	**2**	2	4	101	2	0	**107**	0	2	0	3	0	**5**	2	**254**
Hourly Total	5	489	7	3	**504**	1	4	0	6	0	**10**	6	8	375	9	0	**392**	0	4	0	3	0	**7**	10	**913**
8:00AM	1	145	6	0	**152**	0	1	0	3	0	**4**	3	5	103	2	0	**110**	0	2	0	5	0	**7**	3	**273**
8:15AM	3	157	8	1	**169**	0	5	0	1	0	**6**	1	7	108	0	1	**116**	0	1	0	0	0	**1**	3	**292**
8:30AM	1	123	34	0	**158**	5	0	0	3	0	**3**	19	5	125	3	0	**133**	0	3	0	13	0	**16**	6	**310**
8:45AM	0	167	46	0	**213**	36	0	0	2	0	**2**	58	0	124	9	0	**133**	0	0	0	57	0	**57**	8	**405**
Hourly Total	5	592	94	1	**692**	41	6	0	9	0	**15**	81	17	460	14	1	**492**	0	6	0	75	0	**81**	20	**1280**
2:00PM	3	106	0	2	**111**	0	3	0	4	0	**7**	0	0	105	3	1	**109**	0	0	0	0	0	**0**	0	**227**
2:15PM	2	114	0	2	**118**	0	2	0	3	0	**5**	0	0	112	2	1	**115**	0	0	0	0	0	**0**	0	**238**
2:30PM	5	153	1	3	**162**	0	0	0	1	0	**1**	0	1	125	1	1	**128**	0	0	0	2	0	**2**	1	**293**
2:45PM	4	117	2	2	**125**	0	0	0	1	0	**1**	1	0	105	0	1	**106**	0	2	0	2	1	**5**	0	**237**
Hourly Total	14	490	3	9	**516**	0	5	0	9	0	**14**	1	1	447	6	4	**458**	0	2	0	4	1	**7**	1	**995**
3:00PM	4	109	2	1	**116**	0	1	1	2	0	**4**	2	3	113	1	0	**117**	0	0	0	2	0	**2**	0	**239**
3:15PM	9	151	9	1	**170**	0	0	0	2	0	**2**	1	12	127	6	0	**145**	0	1	0	2	0	**3**	0	**320**
3:30PM	4	111	2	2	**119**	26	0	0	0	0	**0**	14	1	137	8	0	**146**	0	0	0	0	1	**1**	26	**266**
3:45PM	0	151	67	0	**218**	31	0	0	6	0	**6**	38	0	170	5	0	**175**	0	0	0	74	0	**74**	0	**473**
Hourly Total	17	522	80	4	**623**	57	1	1	10	0	**12**	55	16	547	20	0	**583**	0	1	0	78	1	**80**	26	**1298**
4:00PM	6	136	14	2	**158**	2	0	0	2	0	**2**	6	3	173	6	0	**182**	0	2	0	28	0	**30**	0	**372**
4:15PM	8	177	2	4	**191**	0	1	0	2	0	**3**	0	1	155	6	0	**162**	0	4	0	10	0	**14**	0	**370**
4:30PM	4	190	4	2	**200**	0	1	0	2	0	**3**	1	1	150	2	0	**153**	0	1	0	7	0	**8**	0	**364**
4:45PM	7	171	1	2	**181**	0	2	0	3	0	**5**	1	2	133	1	1	**137**	0	1	0	3	0	**4**	0	**327**
Hourly Total	25	674	21	10	**730**	2	4	0	9	0	**13**	8	7	611	15	1	**634**	0	8	0	48	0	**56**	0	**1433**
5:00PM	11	212	4	0	**227**	0	1	0	2	0	**3**	0	1	179	2	0	**182**	0	0	0	2	0	**2**	0	**414**
5:15PM	6	200	28	7	**241**	0	1	0	3	0	**4**	0	2	179	6	0	**187**	0	5	0	7	0	**12**	2	**444**
5:30PM	3	210	13	3	**229**	1	2	0	6	0	**8**	1	3	148	4	1	**156**	0	6	0	9	0	**15**	1	**408**
5:45PM	6	216	7	4	**233**	0	1	0	2	0	**3**	0	0	206	4	0	**210**	0	0	0	7	0	**7**	0	**453**
Hourly Total	26	838	52	14	**930**	1	5	0	13	0	**18**	1	6	712	16	1	**735**	0	11	0	25	0	**36**	3	**1719**
Total	92	3605	257	41	**3995**	102	25	1	56	0	**82**	152	55	3152	80	7	**3294**	0	32	0	233	2	**267**	60	**7638**
% Approach	2.3%	90.2%	6.4%	1.0%	**-**	-	30.5%	1.2%	68.3%	0%	**-**	-	1.7%	95.7%	2.4%	0.2%	**-**	-	12.0%	0%	87.3%	0.7%	**-**	-	**-**
% Total	1.2%	47.2%	3.4%	0.5%	**52.3%**	-	0.3%	0%	0.7%	0%	**1.1%**	-	0.7%	41.3%	1.0%	0.1%	**43.1%**	-	0.4%	0%	3.1%	0%	**3.5%**	-	**-**
Lights	91	3541	255	41	**3928**	-	25	1	55	0	**81**	-	55	3079	76	7	**3217**	-	31	0	233	2	**266**	-	7492
% Lights	98.9%	98.2%	99.2%	100%	**98.3%**	-	100%	100%	98.2%	0%	**98.8%**	-	100%	97.7%	95.0%	100%	**97.7%**	-	96.9%	0%	100%	100%	**99.6%**	-	98.1%
Articulated Trucks	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	3	0	0	**3**	-	0	0	0	0	**0**	-	5
% Articulated Trucks	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses and Single-Unit Trucks	1	59	2	0	**62**	-	0	0	1	0	**1**	-	0	65	3	0	**68**	-	1	0	0	0	**1**	-	132
% Buses and Single-Unit Trucks	1.1%	1.6%	0.8%	0%	**1.6%**	-	0%	0%	1.8%	0%	**1.2%**	-	0%	2.1%	3.8%	0%	**2.1%**	-	3.1%	0%	0%	0%	**0.4%**	-	1.7%
Bicycles on Road	0	3	0	0	**3**	-	0	0	0	0	**0**	-	0	5	1	0	**6**	-	0	0	0	0	**0**	-	9
% Bicycles on Road	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	1.3%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Pedestrians	-	-	-	-	-	101	-	-	-	-	-	150	-	-	-	-	-	0	-	-	-	-	-	56	
% Pedestrians	-	-	-	-	-	99.0%	-	-	-	-	-	98.7%	-	-	-	-	-	-	-	-	-	-	-	93.3%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	4	
% Bicycles on Crosswalk	-	-	-	-	-	1.0%	-	-	-	-	-	1.3%	-	-	-	-	-	-	-	-	-	-	-	6.7%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Golden Horseshoe Circ... - TMC
Tue Aug 29, 2023
Full Length (7 AM-9 AM, 2 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099524, Location: 35.811925, -78.845043

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Golden Horseshoe Circ... - TMC

Tue Aug 29, 2023
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099524, Location: 35.811925, -78.845043

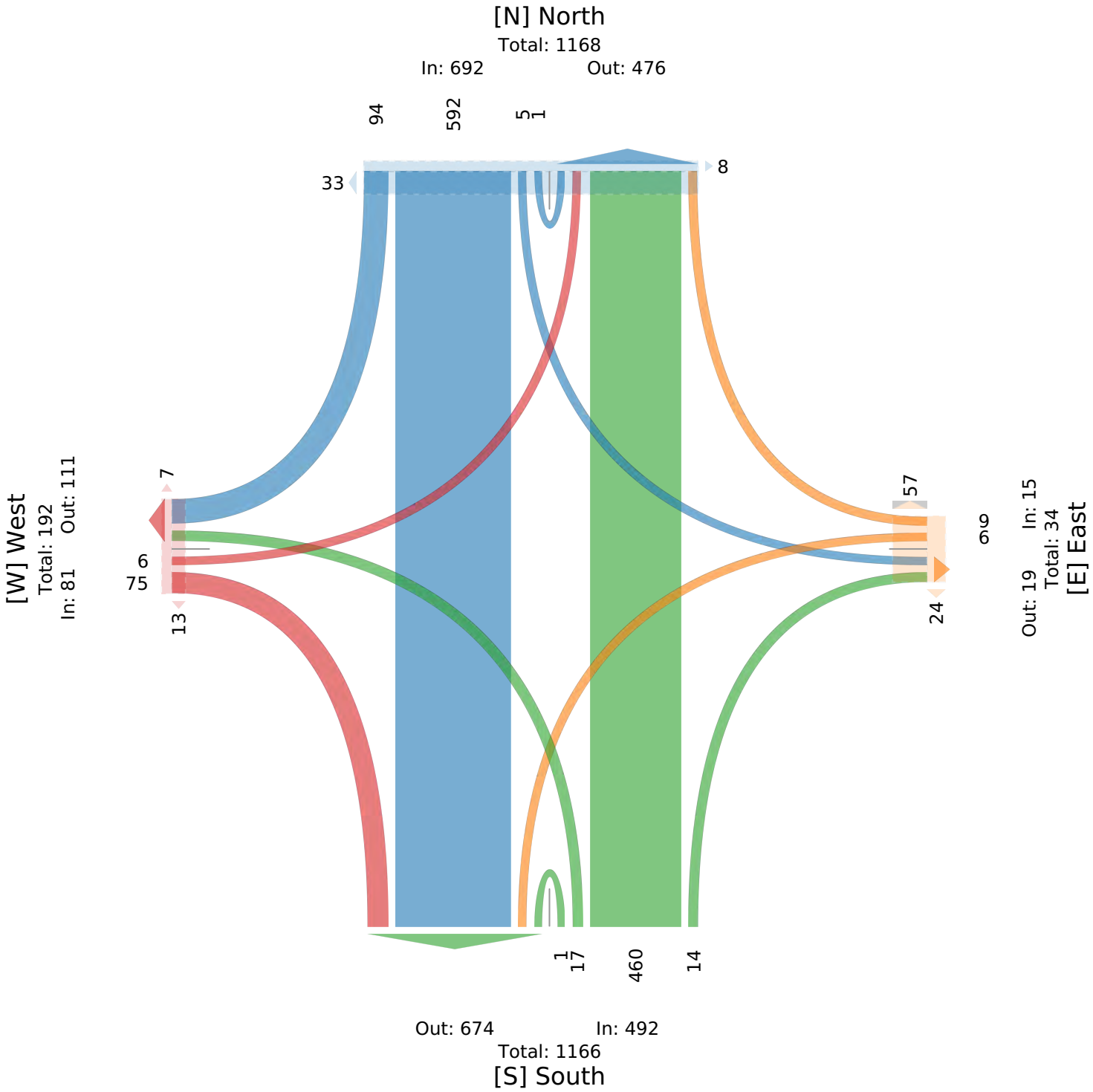
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 8:00AM	1	145	6	0	**152**	0	1	0	3	0	**4**	3	5	103	2	0	**110**	0	2	0	5	0	**7**	3	**273**
8:15AM	3	157	8	1	**169**	0	5	0	1	0	**6**	1	7	108	0	1	**116**	0	1	0	0	0	**1**	3	**292**
8:30AM	1	123	34	0	**158**	5	0	0	3	0	**3**	19	5	125	3	0	**133**	0	3	0	13	0	**16**	6	**310**
8:45AM	0	167	46	0	**213**	36	0	0	2	0	**2**	58	0	124	9	0	**133**	0	0	0	57	0	**57**	8	**405**
Total	5	592	94	1	**692**	41	6	0	9	0	**15**	81	17	460	14	1	**492**	0	6	0	75	0	**81**	20	**1280**
% Approach	0.7%	85.5%	13.6%	0.1%	**-**	-	40.0%	0%	60.0%	0%	**-**	-	3.5%	93.5%	2.8%	0.2%	**-**	-	7.4%	0%	92.6%	0%	**-**	-	**-**
% Total	0.4%	46.3%	7.3%	0.1%	**54.1%**	-	0.5%	0%	0.7%	0%	**1.2%**	-	1.3%	35.9%	1.1%	0.1%	**38.4%**	-	0.5%	0%	5.9%	0%	**6.3%**	-	**-**
PHF	0.417	0.886	0.511	0.250	**0.812**	-	0.300	-	0.750	-	**0.625**	-	0.607	0.916	0.361	0.250	**0.919**	-	0.500	-	0.329	-	**0.355**	-	0.788
Lights	5	577	92	1	**675**	-	6	0	9	0	**15**	-	17	448	13	1	**479**	-	5	0	75	0	**80**	-	1249
% Lights	100%	97.5%	97.9%	100%	**97.5%**	-	100%	0%	100%	0%	**100%**	-	100%	97.4%	92.9%	100%	**97.4%**	-	83.3%	0%	100%	0%	**98.8%**	-	97.6%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	1
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses and Single-Unit Trucks	0	15	2	0	**17**	-	0	0	0	0	**0**	-	0	9	0	0	**9**	-	1	0	0	0	**1**	-	27
% Buses and Single-Unit Trucks	0%	2.5%	2.1%	0%	**2.5%**	-	0%	0%	0%	0%	**0%**	-	0%	2.0%	0%	0%	**1.8%**	-	16.7%	0%	0%	0%	**1.2%**	-	2.1%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	2	1	0	**3**	-	0	0	0	0	**0**	-	3
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.4%	7.1%	0%	**0.6%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Pedestrians	-	-	-	-	-	41	-	-	-	-	-	81	-	-	-	-	-	0	-	-	-	-	-	19	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	95.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	5.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Golden Horseshoe Circ... - TMC
Tue Aug 29, 2023
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099524, Location: 35.811925, -78.845043

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Golden Horseshoe Circ... - TMC

Tue Aug 29, 2023
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099524, Location: 35.811925, -78.845043

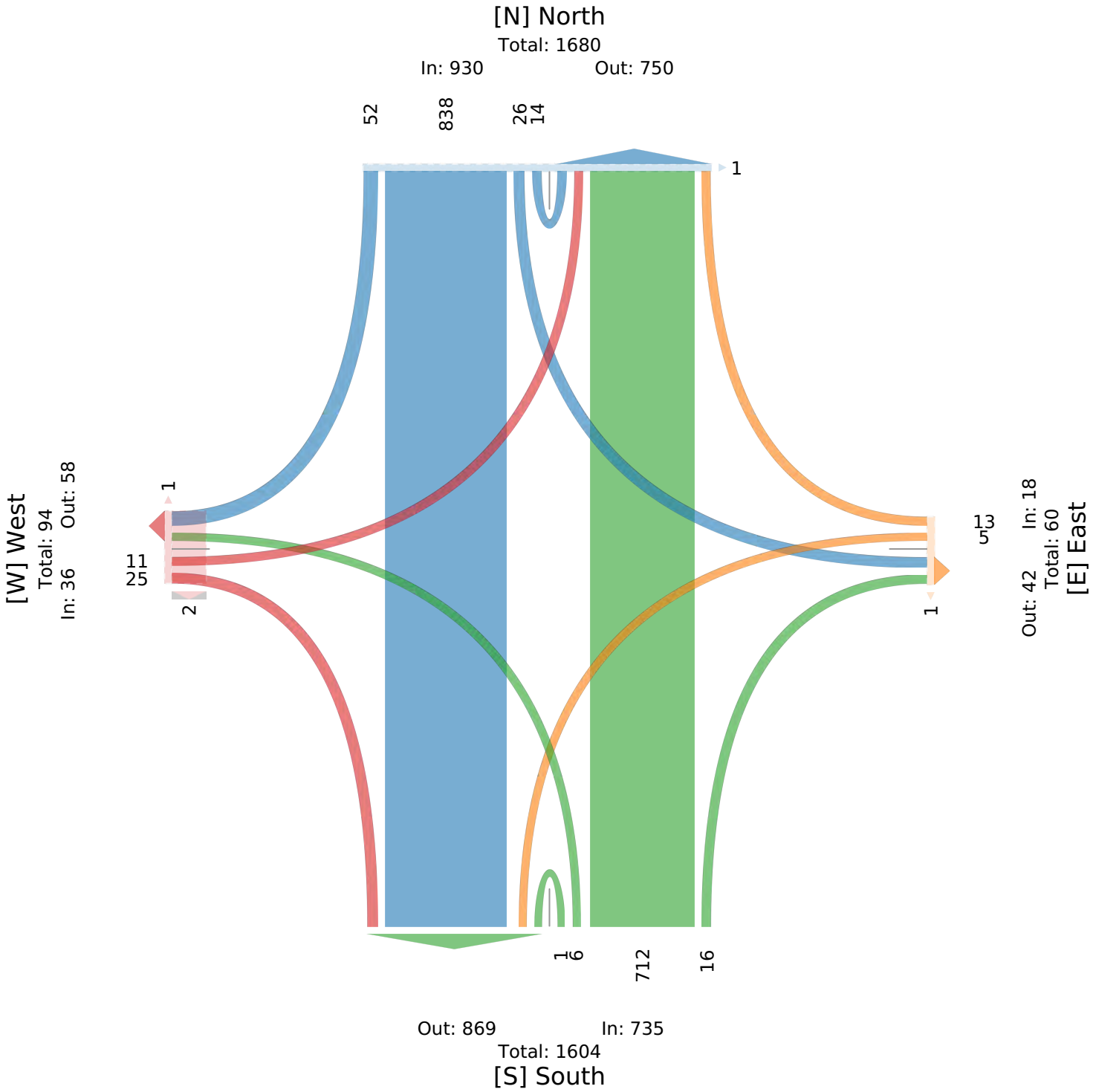
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center
Two, Orlando, FL, 32801, US

Leg Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 5:00PM	11	212	4	0	**227**	0	1	0	2	0	**3**	0	1	179	2	0	**182**	0	0	0	2	0	**2**	0	**414**
5:15PM	6	200	28	7	**241**	0	1	0	3	0	**4**	0	2	179	6	0	**187**	0	5	0	7	0	**12**	2	**444**
5:30PM	3	210	13	3	**229**	1	2	0	6	0	**8**	1	3	148	4	1	**156**	0	6	0	9	0	**15**	1	**408**
5:45PM	6	216	7	4	**233**	0	1	0	2	0	**3**	0	0	206	4	0	**210**	0	0	0	7	0	**7**	0	**453**
Total	26	838	52	14	**930**	1	5	0	13	0	**18**	1	6	712	16	1	**735**	0	11	0	25	0	**36**	3	**1719**
% Approach	2.8%	90.1%	5.6%	1.5%	**-**	-	27.8%	0%	72.2%	0%	**-**	-	0.8%	96.9%	2.2%	0.1%	**-**	-	30.6%	0%	69.4%	0%	**-**	-	**-**
% Total	1.5%	48.7%	3.0%	0.8%	**54.1%**	-	0.3%	0%	0.8%	0%	**1.0%**	-	0.3%	41.4%	0.9%	0.1%	**42.8%**	-	0.6%	0%	1.5%	0%	**2.1%**	-	**-**
PHF	0.591	0.977	0.464	0.500	**0.963**	-	0.625	-	0.542	-	**0.563**	-	0.500	0.863	0.667	0.250	**0.874**	-	0.458	-	0.694	-	**0.600**	-	0.951
Lights	25	833	52	14	**924**	-	5	0	13	0	**18**	-	6	709	16	1	**732**	-	11	0	25	0	**36**	-	1710
% Lights	96.2%	99.4%	100%	100%	**99.4%**	-	100%	0%	100%	0%	**100%**	-	100%	99.6%	100%	100%	**99.6%**	-	100%	0%	100%	0%	**100%**	-	99.5%
Articulated Trucks	0	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%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Buses and Single-Unit Trucks	1	3	0	0	**4**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	6
% Buses and Single-Unit Trucks	3.8%	0.4%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0.3%
Bicycles on Road	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	3
% Bicycles on Road	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	33.3%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	66.7%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Golden Horseshoe Circ... - TMC
Tue Aug 29, 2023
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099524, Location: 35.811925, -78.845043

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Duck Pond Circle (uns... - TMC

Tue Aug 29, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099523, Location: 35.810905, -78.840797

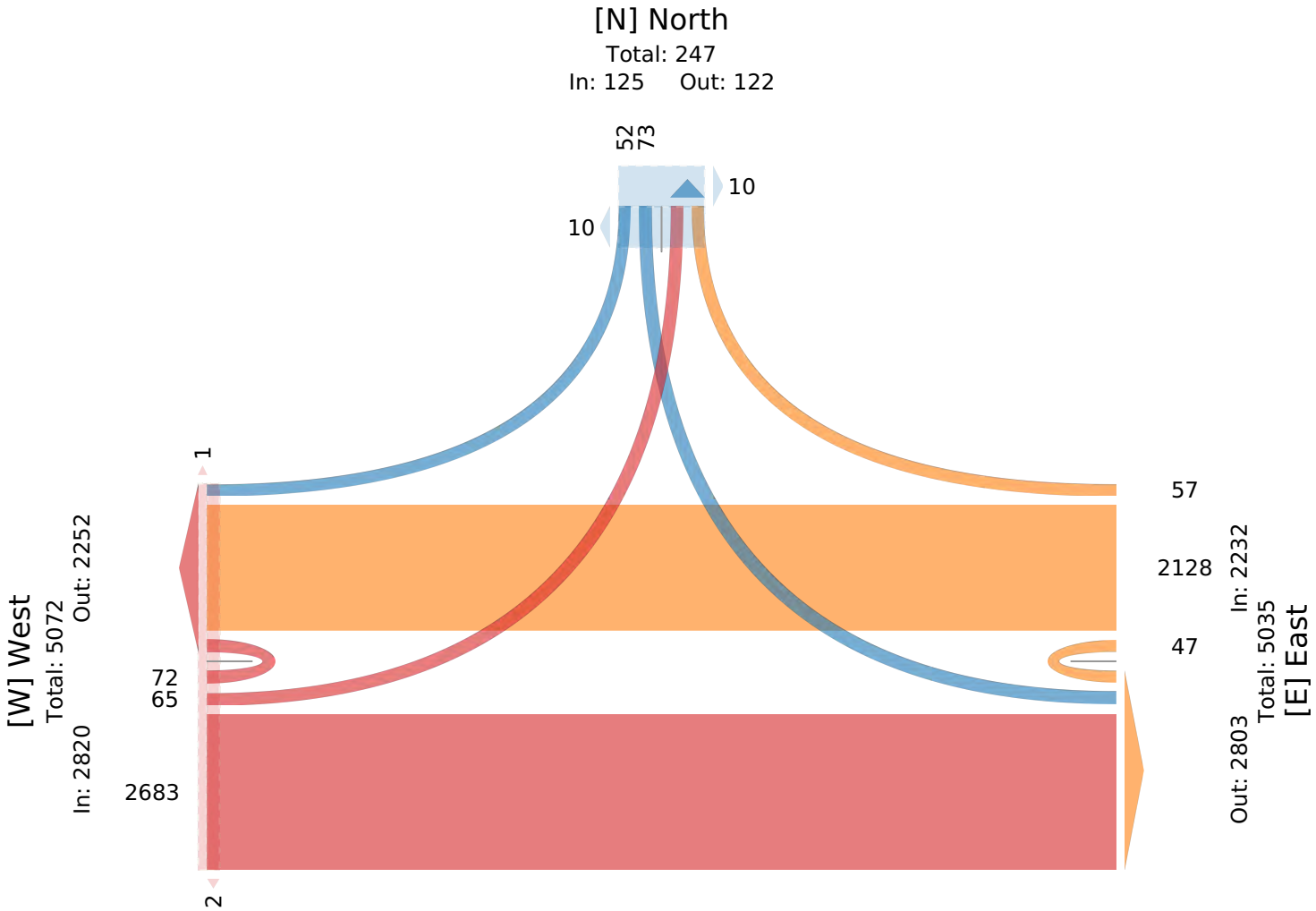
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 7:00AM	4	0	6	0	**10**	0	0	80	0	0	**80**	0	0	0	0	0	**0**	0	2	106	0	3	**111**	0	**201**
7:15AM	9	0	4	0	**13**	0	0	78	1	4	**83**	0	0	0	0	0	**0**	0	3	104	0	1	**108**	0	**204**
7:30AM	3	0	10	0	**13**	1	0	97	2	3	**102**	0	0	0	0	0	**0**	0	0	127	0	2	**129**	2	**244**
7:45AM	4	0	4	0	**8**	2	0	106	1	3	**110**	0	0	0	0	0	**0**	0	2	143	0	1	**146**	0	**264**
Hourly Total	20	0	24	0	**44**	3	0	361	4	10	**375**	0	0	0	0	0	**0**	0	7	480	0	7	**494**	2	**913**
8:00AM	7	0	2	0	**9**	4	0	104	1	8	**113**	0	0	0	0	0	**0**	0	2	149	0	4	**155**	0	**277**
8:15AM	4	0	6	0	**10**	2	0	109	2	6	**117**	0	0	0	0	0	**0**	0	4	178	0	0	**182**	0	**309**
8:30AM	4	0	5	0	**9**	3	0	124	0	3	**127**	0	0	0	0	0	**0**	0	0	140	0	11	**151**	0	**287**
8:45AM	8	0	4	0	**12**	2	0	141	1	1	**143**	0	0	0	0	0	**0**	0	7	200	0	16	**223**	1	**378**
Hourly Total	23	0	17	0	**40**	11	0	478	4	18	**500**	0	0	0	0	0	**0**	0	13	667	0	31	**711**	1	**1251**
4:00PM	3	0	1	0	**4**	2	0	163	8	2	**173**	0	0	0	0	0	**0**	0	3	168	0	12	**183**	0	**360**
4:15PM	4	0	0	0	**4**	0	0	152	6	2	**160**	0	0	0	0	0	**0**	0	6	178	0	4	**188**	0	**352**
4:30PM	4	0	0	0	**4**	1	0	147	5	5	**157**	0	0	0	0	0	**0**	0	10	177	0	3	**190**	0	**351**
4:45PM	4	0	0	0	**4**	0	0	140	7	0	**147**	0	0	0	0	0	**0**	0	10	182	0	0	**192**	0	**343**
Hourly Total	15	0	1	0	**16**	3	0	602	26	9	**637**	0	0	0	0	0	**0**	0	29	705	0	19	**753**	0	**1406**
5:00PM	4	0	2	0	**6**	0	0	165	4	1	**170**	0	0	0	0	0	**0**	0	4	206	0	2	**212**	0	**388**
5:15PM	4	0	4	0	**8**	1	0	179	9	4	**192**	0	0	0	0	0	**0**	0	3	192	0	3	**198**	0	**398**
5:30PM	4	0	2	0	**6**	1	0	147	7	3	**157**	0	0	0	0	0	**0**	0	3	225	0	3	**231**	0	**394**
5:45PM	3	0	2	0	**5**	1	0	196	3	2	**201**	0	0	0	0	0	**0**	0	6	208	0	7	**221**	0	**427**
Hourly Total	15	0	10	0	**25**	3	0	687	23	10	**720**	0	0	0	0	0	**0**	0	16	831	0	15	**862**	0	**1607**
Total	73	0	52	0	**125**	20	0	2128	57	47	**2232**	0	0	0	0	0	**0**	0	65	2683	0	72	**2820**	3	**5177**
% Approach	58.4%	0%	41.6%	0%	**-**	-	0%	95.3%	2.6%	2.1%	**-**	-	0%	0%	0%	0%	**-**	-	2.3%	95.1%	0%	2.6%	**-**	-	**-**
% Total	1.4%	0%	1.0%	0%	**2.4%**	-	0%	41.1%	1.1%	0.9%	**43.1%**	-	0%	0%	0%	0%	**0%**	-	1.3%	51.8%	0%	1.4%	**54.5%**	-	**-**
Lights	73	0	52	0	**125**	-	0	2090	55	47	**2192**	-	0	0	0	0	**0**	-	64	2635	0	72	**2771**	-	5088
% Lights	100%	0%	100%	0%	**100%**	-	0%	98.2%	96.5%	100%	**98.2%**	-	0%	0%	0%	0%	**-**	-	98.5%	98.2%	0%	100%	**98.3%**	-	98.3%
Articulated Trucks	0	0	0	0	**0**	-	0	3	0	0	**3**	-	0	0	0	0	**0**	-	0	4	0	0	**4**	-	7
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**-**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	0	34	2	0	**36**	-	0	0	0	0	**0**	-	1	43	0	0	**44**	-	80
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	1.6%	3.5%	0%	**1.6%**	-	0%	0%	0%	0%	**-**	-	1.5%	1.6%	0%	0%	**1.6%**	-	1.5%
Bicycles on Road	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	2
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	15	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	75.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	5	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	25.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Duck Pond Circle (uns... - TMC
Tue Aug 29, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099523, Location: 35.810905, -78.840797

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Duck Pond Circle (uns... - TMC

Tue Aug 29, 2023
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099523, Location: 35.810905, -78.840797

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

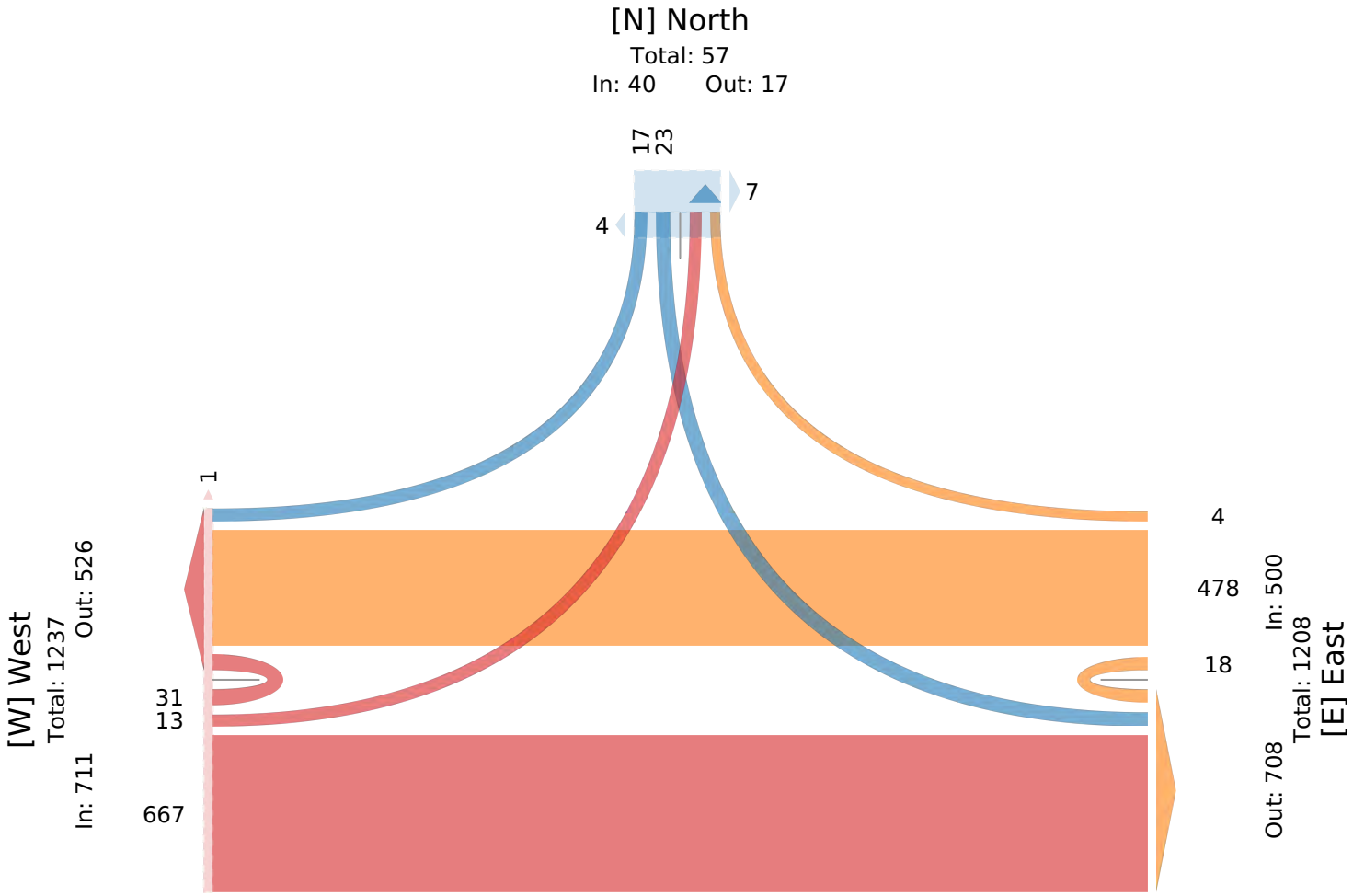
Leg Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 8:00AM	7	0	2	0	**9**	4	0	104	1	8	**113**	0	0	0	0	0	**0**	0	2	149	0	4	**155**	0	**277**
8:15AM	4	0	6	0	**10**	2	0	109	2	6	**117**	0	0	0	0	0	**0**	0	4	178	0	0	**182**	0	**309**
8:30AM	4	0	5	0	**9**	3	0	124	0	3	**127**	0	0	0	0	0	**0**	0	0	140	0	11	**151**	0	**287**
8:45AM	8	0	4	0	**12**	2	0	141	1	1	**143**	0	0	0	0	0	**0**	0	7	200	0	16	**223**	1	**378**
Total	23	0	17	0	**40**	11	0	478	4	18	**500**	0	0	0	0	0	**0**	0	13	667	0	31	**711**	1	**1251**
% Approach	57.5%	0%	42.5%	0%	**-**	-	0%	95.6%	0.8%	3.6%	**-**	-	0%	0%	0%	0%	**-**	-	1.8%	93.8%	0%	4.4%	**-**	-	-
% Total	1.8%	0%	1.4%	0%	**3.2%**	-	0%	38.2%	0.3%	1.4%	**40.0%**	-	0%	0%	0%	0%	**0%**	-	1.0%	53.3%	0%	2.5%	**56.8%**	-	-
PHF	0.719	-	0.708	-	**0.833**	-	-	0.848	0.500	0.563	**0.874**	-	-	-	-	-	**-**	-	0.464	0.834	-	0.484	**0.797**	-	0.827
Lights	23	0	17	0	**40**	-	0	466	4	18	**488**	-	0	0	0	0	**0**	-	13	652	0	31	**696**	-	1224
% Lights	100%	0%	100%	0%	**100%**	-	0%	97.5%	100%	100%	**97.6%**	-	0%	0%	0%	0%	**-**	-	100%	97.8%	0%	100%	**97.9%**	-	97.8%
Articulated Trucks	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	3
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**-**	-	0%	0.3%	0%	0%	**0.3%**	-	0.2%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	0	11	0	0	**11**	-	0	0	0	0	**0**	-	0	13	0	0	**13**	-	24
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	2.3%	0%	0%	**2.2%**	-	0%	0%	0%	0%	**-**	-	0%	1.9%	0%	0%	**1.8%**	-	1.9%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	8	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	72.7%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	27.3%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Duck Pond Circle (uns... - TMC

Tue Aug 29, 2023
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099523, Location: 35.810905, -78.840797

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Duck Pond Circle (uns... - TMC

Tue Aug 29, 2023
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099523, Location: 35.810905, -78.840797

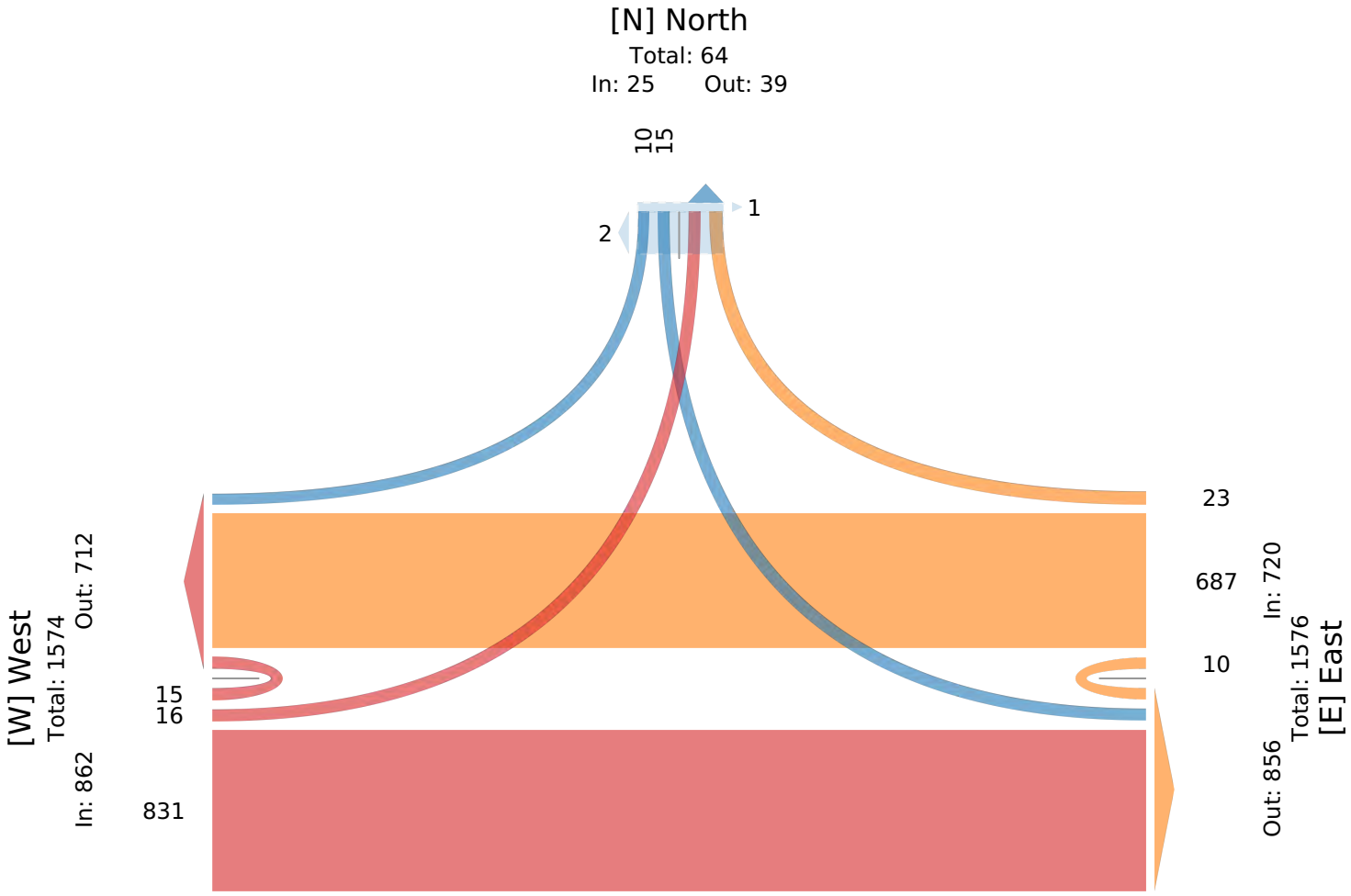
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 5:00PM	4	0	2	0	**6**	0	0	165	4	1	**170**	0	0	0	0	0	**0**	0	4	206	0	2	**212**	0	**388**
5:15PM	4	0	4	0	**8**	1	0	179	9	4	**192**	0	0	0	0	0	**0**	0	3	192	0	3	**198**	0	**398**
5:30PM	4	0	2	0	**6**	1	0	147	7	3	**157**	0	0	0	0	0	**0**	0	3	225	0	3	**231**	0	**394**
5:45PM	3	0	2	0	**5**	1	0	196	3	2	**201**	0	0	0	0	0	**0**	0	6	208	0	7	**221**	0	**427**
Total	15	0	10	0	**25**	3	0	687	23	10	**720**	0	0	0	0	0	**0**	0	16	831	0	15	**862**	0	**1607**
% Approach	60.0%	0%	40.0%	0%	**-**	-	0%	95.4%	3.2%	1.4%	**-**	-	0%	0%	0%	0%	**-**	-	1.9%	96.4%	0%	1.7%	**-**	-	-
% Total	0.9%	0%	0.6%	0%	**1.6%**	-	0%	42.8%	1.4%	0.6%	**44.8%**	-	0%	0%	0%	0%	**0%**	-	1.0%	51.7%	0%	0.9%	**53.6%**	-	-
PHF	0.938	-	0.625	-	**0.781**	-	-	0.875	0.639	0.625	**0.894**	-	-	-	-	-	**-**	-	0.667	0.923	-	0.536	**0.933**	-	0.940
Lights	15	0	10	0	**25**	-	0	684	23	10	**717**	-	0	0	0	0	**0**	-	15	829	0	15	**859**	-	1601
% Lights	100%	0%	100%	0%	**100%**	-	0%	99.6%	100%	100%	**99.6%**	-	0%	0%	0%	0%	**-**	-	93.8%	99.8%	0%	100%	**99.7%**	-	99.6%
Articulated Trucks	0	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%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	1	2	0	0	**3**	-	5
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**-**	-	6.3%	0.2%	0%	0%	**0.3%**	-	0.3%
Bicycles on Road	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0.1%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	66.7%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	33.3%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Duck Pond Circle (uns... - TMC
Tue Aug 29, 2023
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099523, Location: 35.810905, -78.840797

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Black Ridge Street/Cr... - TMC

Tue Aug 29, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099522, Location: 35.810582, -78.838914

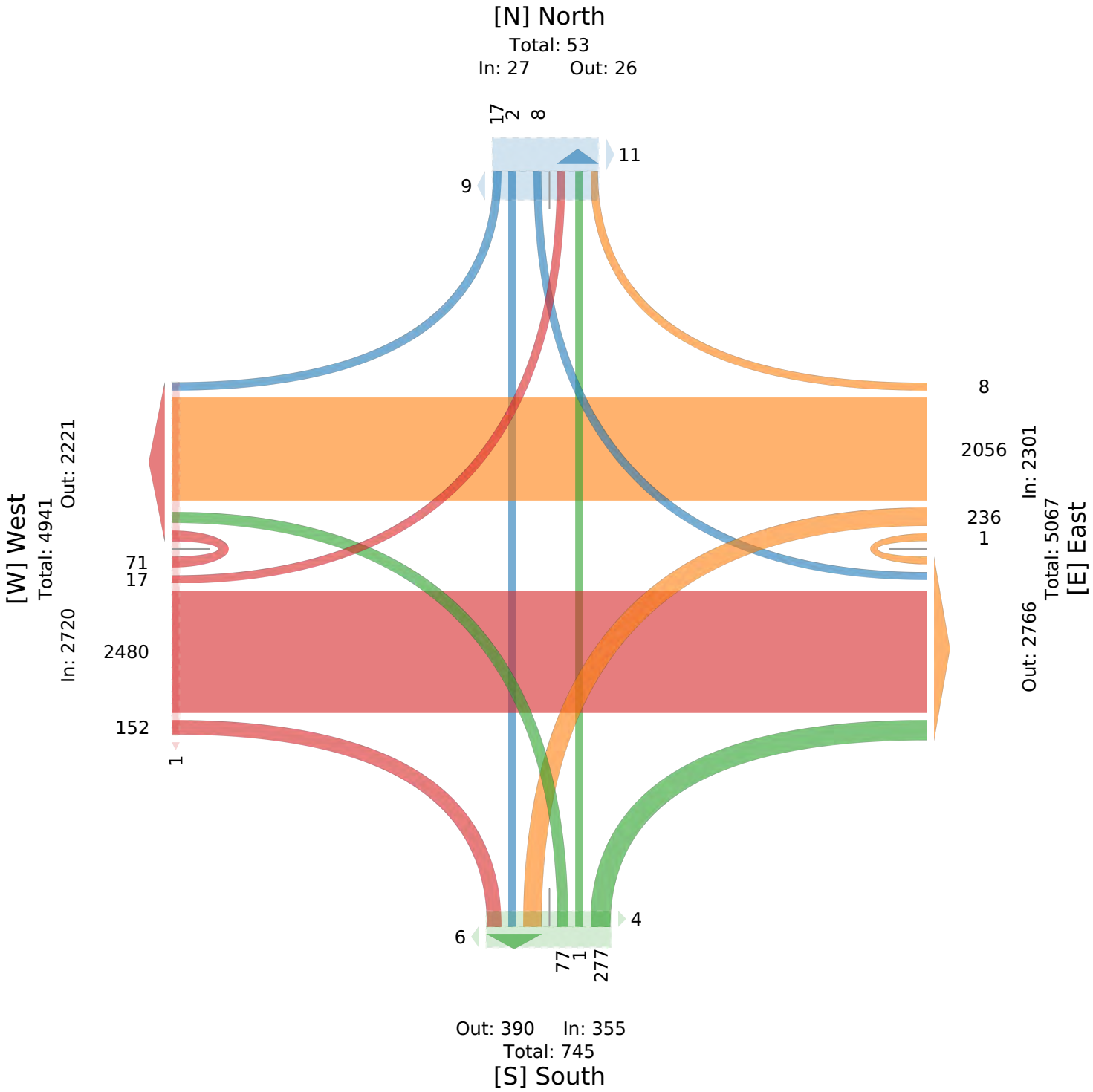
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two,
Orlando, FL, 32801, US

Leg	North						East						South						West						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2023-08-29 7:00AM	0	0	1	0	**1**	0	4	72	0	0	**76**	0	4	0	9	0	**13**	1	1	95	13	4	**113**	0	**203**
7:15AM	0	0	1	0	**1**	1	4	73	0	1	**78**	0	4	0	16	0	**20**	0	1	98	7	4	**110**	0	**209**
7:30AM	0	0	2	0	**2**	0	6	102	0	0	**108**	0	2	0	18	0	**20**	1	0	116	10	3	**129**	0	**259**
7:45AM	1	1	1	0	**3**	4	9	102	0	0	**111**	0	4	0	15	0	**19**	1	0	138	8	2	**148**	0	**281**
Hourly Total	1	1	5	0	**7**	5	23	349	0	1	**373**	0	14	0	58	0	**72**	3	2	447	38	13	**500**	0	**952**
8:00AM	1	0	0	0	**1**	3	6	98	0	0	**104**	0	13	0	14	0	**27**	1	0	143	8	1	**152**	0	**284**
8:15AM	1	0	2	0	**3**	1	12	96	0	0	**108**	0	9	0	22	0	**31**	2	1	171	6	7	**185**	0	**327**
8:30AM	1	0	1	0	**2**	2	10	118	1	0	**129**	0	5	0	28	0	**33**	1	0	144	5	4	**153**	0	**317**
8:45AM	0	0	1	0	**1**	2	16	128	0	0	**144**	0	8	0	19	0	**27**	1	0	184	22	4	**210**	0	**382**
Hourly Total	3	0	4	0	**7**	8	44	440	1	0	**485**	0	35	0	83	0	**118**	5	1	642	41	16	**700**	0	**1310**
4:00PM	0	0	2	0	**2**	1	13	158	2	0	**173**	0	6	1	17	0	**24**	0	2	151	11	6	**170**	0	**369**
4:15PM	2	0	0	0	**2**	2	14	150	0	0	**164**	0	2	0	14	0	**16**	2	2	156	14	3	**175**	0	**357**
4:30PM	1	0	1	0	**2**	1	15	146	0	0	**161**	0	7	0	17	0	**24**	0	0	164	9	6	**179**	0	**366**
4:45PM	0	0	0	0	**0**	0	30	144	1	0	**175**	0	2	0	10	0	**12**	0	0	152	7	4	**163**	0	**350**
Hourly Total	3	0	3	0	**6**	4	72	598	3	0	**673**	0	17	1	58	0	**76**	2	4	623	41	19	**687**	0	**1442**
5:00PM	0	1	1	0	**2**	0	24	162	2	0	**188**	0	0	0	21	0	**21**	0	3	198	6	5	**212**	0	**423**
5:15PM	1	0	1	0	**2**	1	25	172	1	0	**198**	0	6	0	22	0	**28**	0	3	174	11	5	**193**	1	**421**
5:30PM	0	0	2	0	**2**	2	29	161	1	0	**191**	0	2	0	22	0	**24**	0	2	202	10	5	**219**	0	**436**
5:45PM	0	0	1	0	**1**	0	19	174	0	0	**193**	0	3	0	13	0	**16**	0	2	194	5	8	**209**	0	**419**
Hourly Total	1	1	5	0	**7**	3	97	669	4	0	**770**	0	11	0	78	0	**89**	0	10	768	32	23	**833**	1	**1699**
Total	8	2	17	0	**27**	20	236	2056	8	1	**2301**	0	77	1	277	0	**355**	10	17	2480	152	71	**2720**	1	**5403**
% Approach	29.6%	7.4%	63.0%	0%	**-**	-	10.3%	89.4%	0.3%	0%	**-**	-	21.7%	0.3%	78.0%	0%	**-**	-	0.6%	91.2%	5.6%	2.6%	**-**	-	-
% Total	0.1%	0%	0.3%	0%	**0.5%**	-	4.4%	38.1%	0.1%	0%	**42.6%**	-	1.4%	0%	5.1%	0%	**6.6%**	-	0.3%	45.9%	2.8%	1.3%	**50.3%**	-	-
Lights	8	2	15	0	**25**	-	233	2019	7	1	**2260**	-	70	1	272	0	**343**	-	17	2433	147	70	**2667**	-	5295
% Lights	100%	100%	88.2%	0%	**92.6%**	-	98.7%	98.2%	87.5%	100%	**98.2%**	-	90.9%	100%	98.2%	0%	**96.6%**	-	100%	98.1%	96.7%	98.6%	**98.1%**	-	98.0%
Articulated Trucks	0	0	0	0	**0**	-	1	1	0	0	**2**	-	1	0	0	0	**1**	-	0	6	0	0	**6**	-	9
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0.4%	0%	0%	0%	**0.1%**	-	1.3%	0%	0%	0%	**0.3%**	-	0%	0.2%	0%	0%	**0.2%**	-	0.2%
Buses and Single-Unit Trucks	0	0	2	0	**2**	-	2	34	1	0	**37**	-	4	0	2	0	**6**	-	0	41	4	1	**46**	-	91
% Buses and Single-Unit Trucks	0%	0%	11.8%	0%	**7.4%**	-	0.8%	1.7%	12.5%	0%	**1.6%**	-	5.2%	0%	0.7%	0%	**1.7%**	-	0%	1.7%	2.6%	1.4%	**1.7%**	-	1.7%
Bicycles on Road	0	0	0	0	**0**	-	0	2	0	0	**2**	-	2	0	3	0	**5**	-	0	0	1	0	**1**	-	8
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	2.6%	0%	1.1%	0%	**1.4%**	-	0%	0%	0.7%	0%	**0%**	-	0.1%
Pedestrians	-	-	-	-	-	18	-	-	-	-	-	0	-	-	-	-	-	10	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	90.0%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	10.0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Black Ridge Street/Cr... - TMC
Tue Aug 29, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099522, Location: 35.810582, -78.838914

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Black Ridge Street/Cr... - TMC

Tue Aug 29, 2023
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099522, Location: 35.810582, -78.838914

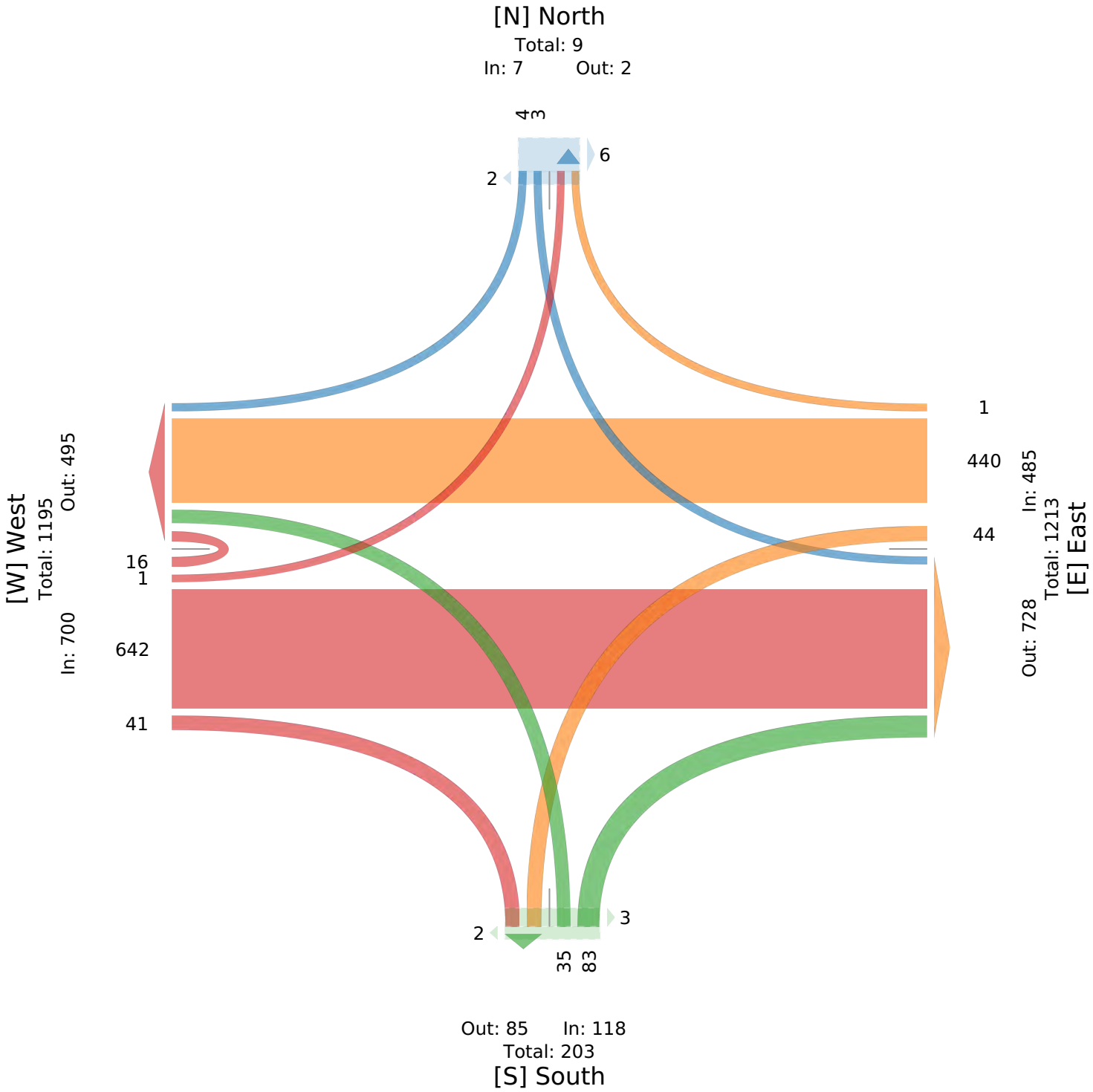
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center
Two, Orlando, FL, 32801, US

Leg Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 8:00AM	1	0	0	0	**1**	3	6	98	0	0	**104**	0	13	0	14	0	**27**	1	0	143	8	1	**152**	0	**284**
8:15AM	1	0	2	0	**3**	1	12	96	0	0	**108**	0	9	0	22	0	**31**	2	1	171	6	7	**185**	0	**327**
8:30AM	1	0	1	0	**2**	2	10	118	1	0	**129**	0	5	0	28	0	**33**	1	0	144	5	4	**153**	0	**317**
8:45AM	0	0	1	0	**1**	2	16	128	0	0	**144**	0	8	0	19	0	**27**	1	0	184	22	4	**210**	0	**382**
Total	3	0	4	0	**7**	8	44	440	1	0	**485**	0	35	0	83	0	**118**	5	1	642	41	16	**700**	0	**1310**
% Approach	42.9%	0%	57.1%	0%	**-**	-	9.1%	90.7%	0.2%	0%	**-**	-	29.7%	0%	70.3%	0%	**-**	-	0.1%	91.7%	5.9%	2.3%	**-**	-	-
% Total	0.2%	0%	0.3%	0%	**0.5%**	-	3.4%	33.6%	0.1%	0%	**37.0%**	-	2.7%	0%	6.3%	0%	**9.0%**	-	0.1%	49.0%	3.1%	1.2%	**53.4%**	-	-
PHF	0.750	-	0.500	-	**0.583**	-	0.688	0.857	0.250	-	**0.840**	-	0.688	-	0.741	-	**0.906**	-	0.250	0.872	0.466	0.571	**0.833**	-	0.855
Lights	3	0	4	0	**7**	-	43	429	1	0	**473**	-	32	0	83	0	**115**	-	1	629	40	15	**685**	-	1280
% Lights	100%	0%	100%	0%	**100%**	-	97.7%	97.5%	100%	0%	**97.5%**	-	91.4%	0%	100%	0%	**97.5%**	-	100%	98.0%	97.6%	93.8%	**97.9%**	-	97.7%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	3	0	0	**3**	-	4
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	2.9%	0%	0%	0%	**0.8%**	-	0%	0.5%	0%	0%	**0.4%**	-	0.3%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	1	10	0	0	**11**	-	0	0	0	0	**0**	-	0	10	1	1	**12**	-	23
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	2.3%	2.3%	0%	0%	**2.3%**	-	0%	0%	0%	0%	**0%**	-	0%	1.6%	2.4%	6.3%	**1.7%**	-	1.8%
Bicycles on Road	0	0	0	0	**0**	-	0	1	0	0	**1**	-	2	0	0	0	**2**	-	0	0	0	0	**0**	-	3
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.2%**	-	5.7%	0%	0%	0%	**1.7%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Pedestrians	-	-	-	-	-	8	-	-	-	-	-	0	-	-	-	-	-	5	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Black Ridge Street/Cr... - TMC
Tue Aug 29, 2023
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099522, Location: 35.810582, -78.838914

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Black Ridge Street/Cr... - TMC

Tue Aug 29, 2023
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099522, Location: 35.810582, -78.838914

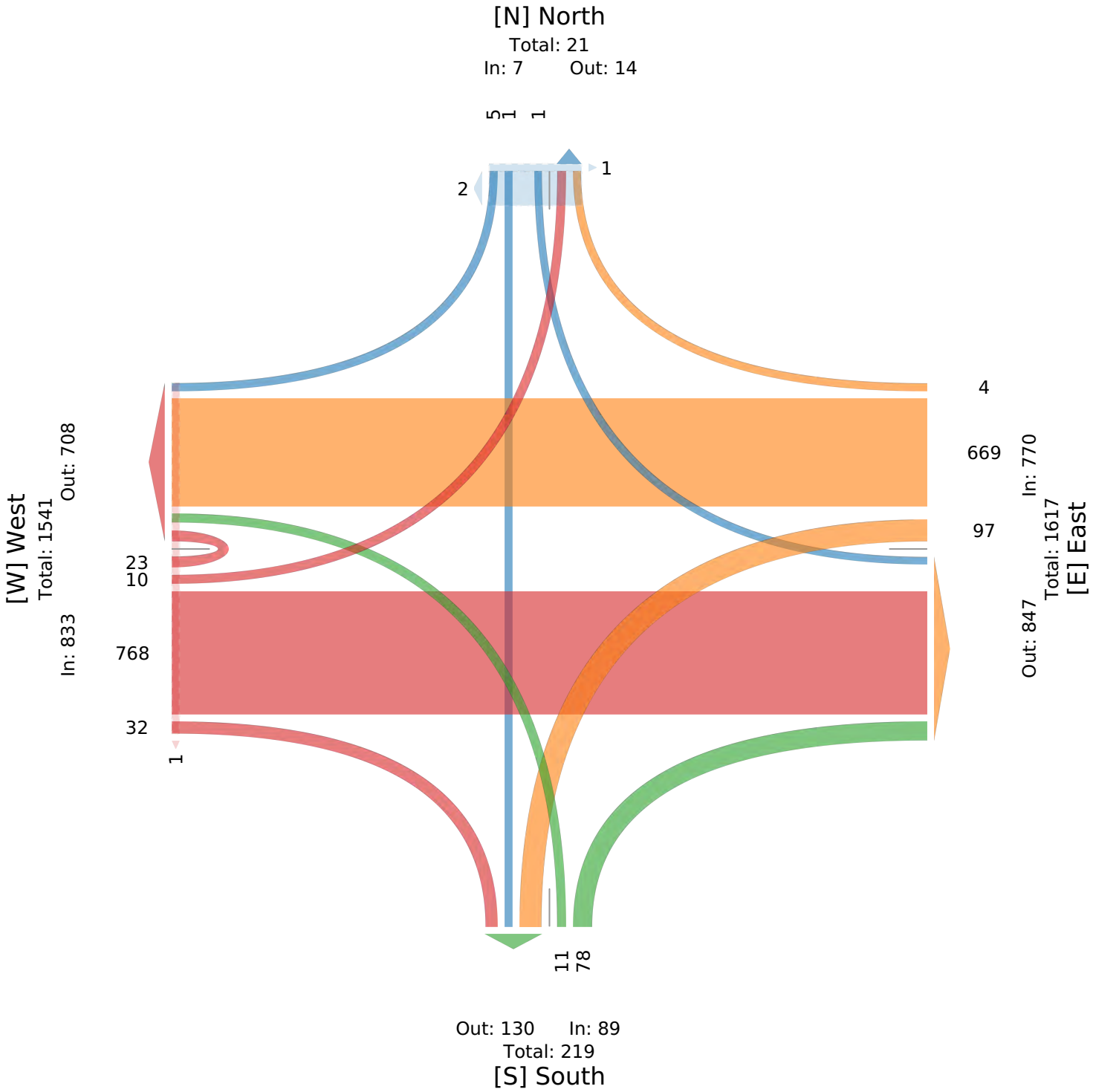
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 5:00PM	0	1	1	0	**2**	0	24	162	2	0	**188**	0	0	0	21	0	**21**	0	3	198	6	5	**212**	0	**423**
5:15PM	1	0	1	0	**2**	1	25	172	1	0	**198**	0	6	0	22	0	**28**	0	3	174	11	5	**193**	1	**421**
5:30PM	0	0	2	0	**2**	2	29	161	1	0	**191**	0	2	0	22	0	**24**	0	2	202	10	5	**219**	0	**436**
5:45PM	0	0	1	0	**1**	0	19	174	0	0	**193**	0	3	0	13	0	**16**	0	2	194	5	8	**209**	0	**419**
Total	1	1	5	0	**7**	3	97	669	4	0	**770**	0	11	0	78	0	**89**	0	10	768	32	23	**833**	1	**1699**
% Approach	14.3%	14.3%	71.4%	0%	**-**	-	12.6%	86.9%	0.5%	0%	**-**	-	12.4%	0%	87.6%	0%	**-**	-	1.2%	92.2%	3.8%	2.8%	**-**	-	**-**
% Total	0.1%	0.1%	0.3%	0%	**0.4%**	-	5.7%	39.4%	0.2%	0%	**45.3%**	-	0.6%	0%	4.6%	0%	**5.2%**	-	0.6%	45.2%	1.9%	1.4%	**49.0%**	-	**-**
PHF	0.250	0.250	0.625	-	**0.875**	-	0.836	0.960	0.500	-	**0.971**	-	0.458	-	0.875	-	**0.786**	-	0.833	0.950	0.727	0.719	**0.951**	-	0.978
Lights	1	1	5	0	**7**	-	97	666	4	0	**767**	-	11	0	77	0	**88**	-	10	764	32	23	**829**	-	1691
% Lights	100%	100%	100%	0%	**100%**	-	100%	99.6%	100%	0%	**99.6%**	-	100%	0%	98.7%	0%	**98.9%**	-	100%	99.5%	100%	100%	**99.5%**	-	99.5%
Articulated Trucks	0	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%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	4	0	0	**4**	-	6
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0.5%	0%	0%	**0.5%**	-	0.4%
Bicycles on Road	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	2
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	1.3%	0%	**1.1%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	66.7%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	33.3%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Black Ridge Street/Cr... - TMC
Tue Aug 29, 2023
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099522, Location: 35.810582, -78.838914

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Waltons Creek Road (u... - TMC

Tue Aug 29, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099521, Location: 35.811323, -78.836476

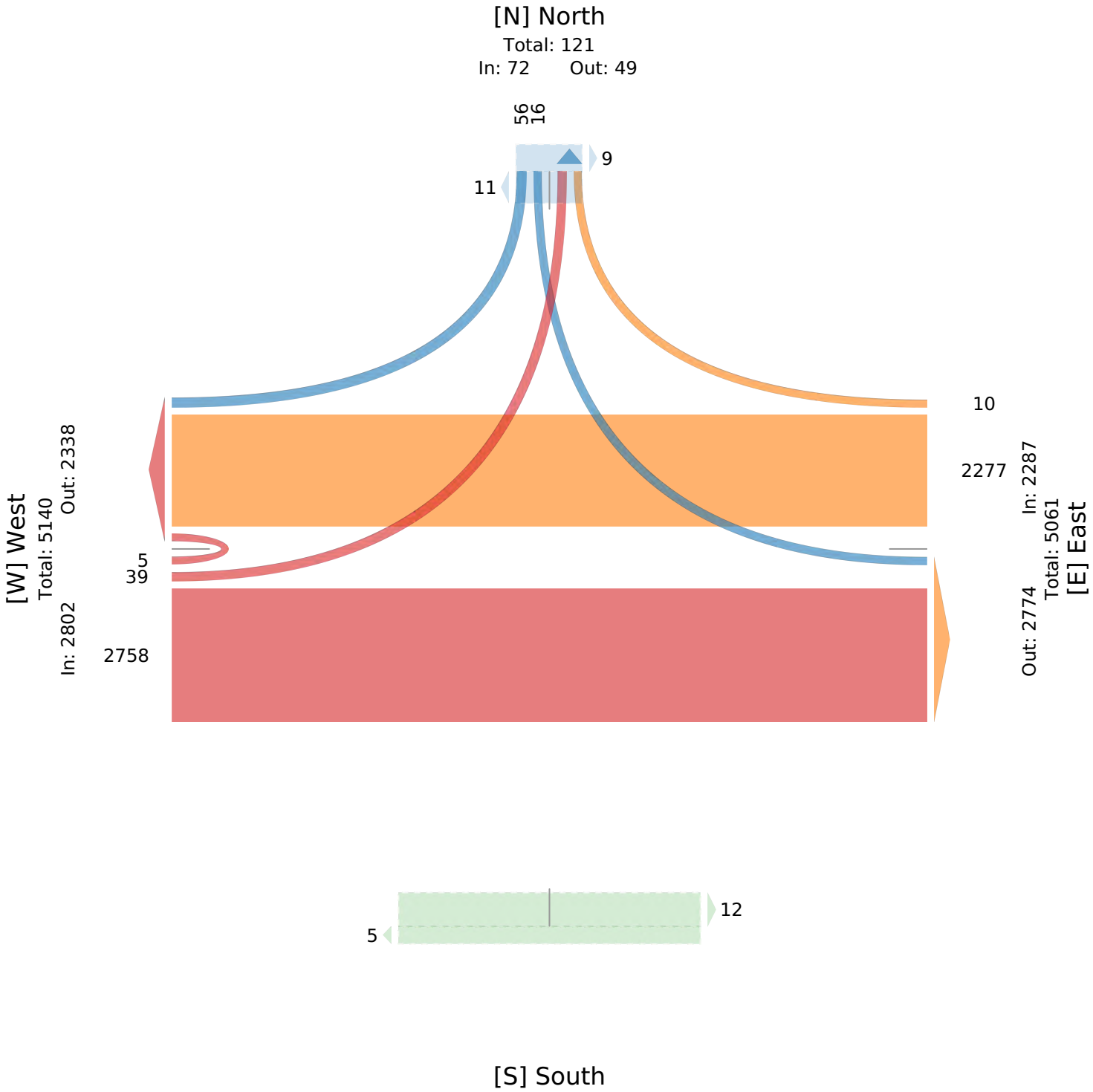
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 7:00AM	0	0	4	0	**4**	0	0	73	0	0	**73**	0	0	0	0	0	**0**	1	0	107	0	0	**107**	0	**184**
7:15AM	1	0	3	0	**4**	1	0	76	0	0	**76**	0	0	0	0	0	**0**	1	1	115	0	0	**116**	0	**196**
7:30AM	4	0	4	0	**8**	0	0	103	1	0	**104**	0	0	0	0	0	**0**	1	0	135	0	0	**135**	0	**247**
7:45AM	0	0	4	0	**4**	4	0	110	0	0	**110**	0	0	0	0	0	**0**	2	0	151	0	0	**151**	0	**265**
Hourly Total	5	0	15	0	**20**	5	0	362	1	0	**363**	0	0	0	0	0	**0**	5	1	508	0	0	**509**	0	**892**
8:00AM	1	0	1	0	**2**	4	0	104	2	0	**106**	0	0	0	0	0	**0**	1	0	155	0	0	**155**	0	**263**
8:15AM	2	0	5	0	**7**	2	0	102	1	0	**103**	0	0	0	0	0	**0**	1	3	188	0	0	**191**	0	**301**
8:30AM	0	0	9	0	**9**	3	0	128	0	0	**128**	0	0	0	0	0	**0**	2	2	170	0	0	**172**	0	**309**
8:45AM	1	0	7	0	**8**	0	0	142	0	0	**142**	0	0	0	0	0	**0**	0	7	198	0	0	**205**	0	**355**
Hourly Total	4	0	22	0	**26**	9	0	476	3	0	**479**	0	0	0	0	0	**0**	4	12	711	0	0	**723**	0	**1228**
4:00PM	0	0	5	0	**5**	0	0	160	1	0	**161**	0	0	0	0	0	**0**	1	3	165	0	1	**169**	0	**335**
4:15PM	0	0	1	0	**1**	0	0	167	0	0	**167**	0	0	0	0	0	**0**	1	4	175	0	0	**179**	0	**347**
4:30PM	1	0	2	0	**3**	1	0	148	0	0	**148**	0	0	0	0	0	**0**	2	3	189	0	0	**192**	0	**343**
4:45PM	1	0	1	0	**2**	0	0	170	1	0	**171**	0	0	0	0	0	**0**	0	1	171	0	1	**173**	0	**346**
Hourly Total	2	0	9	0	**11**	1	0	645	2	0	**647**	0	0	0	0	0	**0**	4	11	700	0	2	**713**	0	**1371**
5:00PM	3	0	4	0	**7**	0	0	197	1	0	**198**	0	0	0	0	0	**0**	1	4	214	0	2	**220**	0	**425**
5:15PM	0	0	3	0	**3**	1	0	196	1	0	**197**	0	0	0	0	0	**0**	0	3	202	0	0	**205**	0	**405**
5:30PM	0	0	0	0	**0**	2	0	210	0	0	**210**	0	0	0	0	0	**0**	1	6	213	0	0	**219**	0	**429**
5:45PM	2	0	3	0	**5**	2	0	191	2	0	**193**	0	0	0	0	0	**0**	2	2	210	0	1	**213**	0	**411**
Hourly Total	5	0	10	0	**15**	5	0	794	4	0	**798**	0	0	0	0	0	**0**	4	15	839	0	3	**857**	0	**1670**
Total	16	0	56	0	**72**	20	0	2277	10	0	**2287**	0	0	0	0	0	**0**	17	39	2758	0	5	**2802**	0	**5161**
% Approach	22.2%	0%	77.8%	0%	**-**	-	0%	99.6%	0.4%	0%	**-**	-	0%	0%	0%	0%	**-**	-	1.4%	98.4%	0%	0.2%	**-**	-	**-**
% Total	0.3%	0%	1.1%	0%	**1.4%**	-	0%	44.1%	0.2%	0%	**44.3%**	-	0%	0%	0%	0%	**0%**	-	0.8%	53.4%	0%	0.1%	**54.3%**	-	**-**
Lights	16	0	51	0	**67**	-	0	2237	10	0	**2247**	-	0	0	0	0	**0**	-	39	2713	0	5	**2757**	-	5071
% Lights	100%	0%	91.1%	0%	**93.1%**	-	0%	98.2%	100%	0%	**98.3%**	-	0%	0%	0%	0%	**-**	-	100%	98.4%	0%	100%	**98.4%**	-	98.3%
Articulated Trucks	0	0	0	0	**0**	-	0	4	0	0	**4**	-	0	0	0	0	**0**	-	0	5	0	0	**5**	-	9
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**-**	-	0%	0.2%	0%	0%	**0.2%**	-	0.2%
Buses and Single-Unit Trucks	0	0	5	0	**5**	-	0	33	0	0	**33**	-	0	0	0	0	**0**	-	0	40	0	0	**40**	-	78
% Buses and Single-Unit Trucks	0%	0%	8.9%	0%	**6.9%**	-	0%	1.4%	0%	0%	**1.4%**	-	0%	0%	0%	0%	**-**	-	0%	1.5%	0%	0%	**1.4%**	-	1.5%
Bicycles on Road	0	0	0	0	**0**	-	0	3	0	0	**3**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	3
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0.1%
Pedestrians	-	-	-	-	-	19	-	-	-	-	-	0	-	-	-	-	-	12	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	95.0%	-	-	-	-	-	-	-	-	-	-	-	70.6%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	5	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	5.0%	-	-	-	-	-	-	-	-	-	-	-	29.4%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Waltons Creek Road (u... - TMC
Tue Aug 29, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099521, Location: 35.811323, -78.836476

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Waltons Creek Road (u... - TMC

Tue Aug 29, 2023
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099521, Location: 35.811323, -78.836476

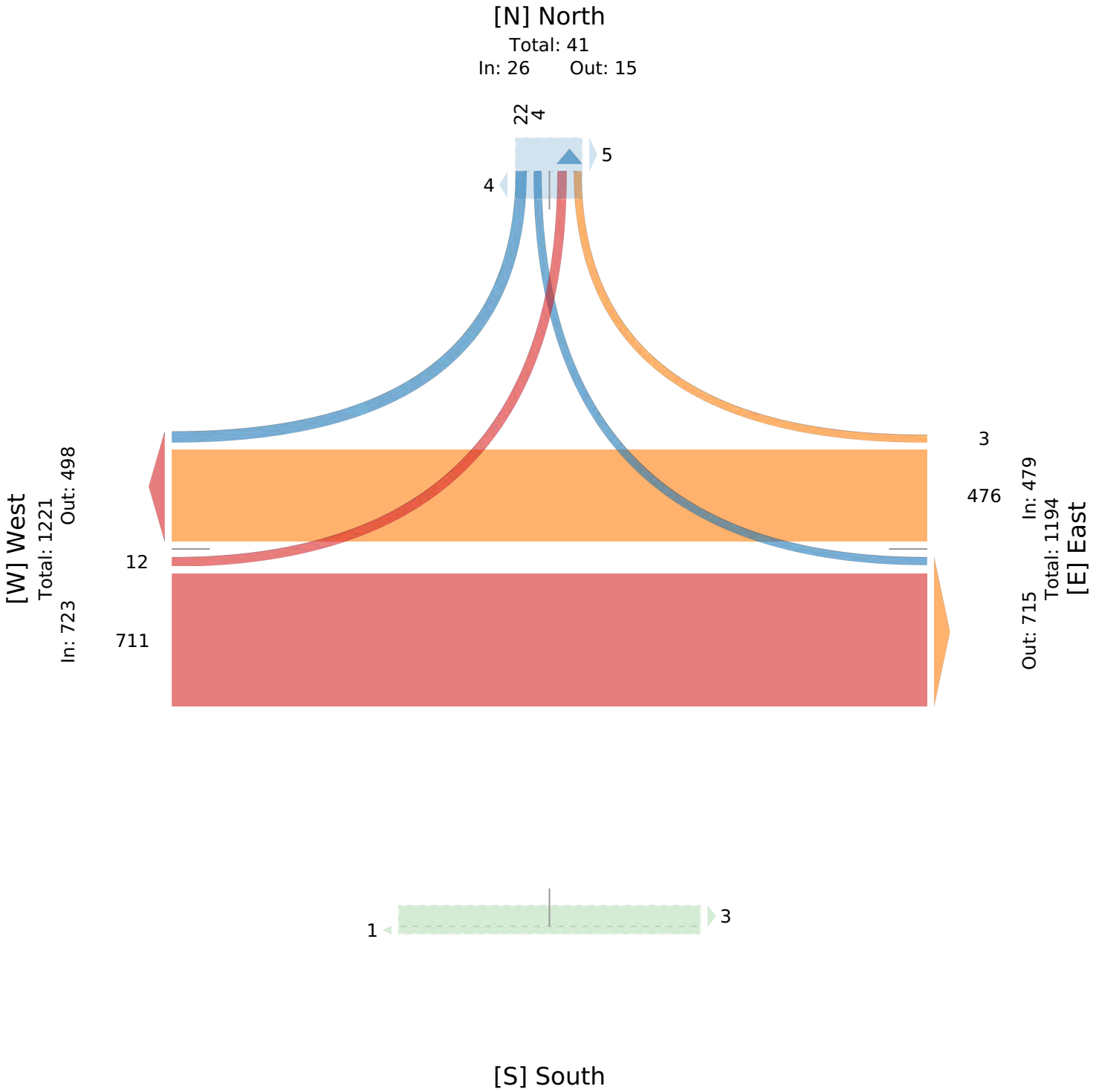
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 8:00AM	1	0	1	0	**2**	4	0	104	2	0	**106**	0	0	0	0	0	**0**	1	0	155	0	0	**155**	0	**263**
8:15AM	2	0	5	0	**7**	2	0	102	1	0	**103**	0	0	0	0	0	**0**	1	3	188	0	0	**191**	0	**301**
8:30AM	0	0	9	0	**9**	3	0	128	0	0	**128**	0	0	0	0	0	**0**	2	2	170	0	0	**172**	0	**309**
8:45AM	1	0	7	0	**8**	0	0	142	0	0	**142**	0	0	0	0	0	**0**	0	7	198	0	0	**205**	0	**355**
Total	4	0	22	0	**26**	9	0	476	3	0	**479**	0	0	0	0	0	**0**	4	12	711	0	0	**723**	0	**1228**
% Approach	15.4%	0%	84.6%	0%	**-**	-	0%	99.4%	0.6%	0%	**-**	-	0%	0%	0%	0%	**-**	-	1.7%	98.3%	0%	0%	**-**	-	-
% Total	0.3%	0%	1.8%	0%	**2.1%**	-	0%	38.8%	0.2%	0%	**39.0%**	-	0%	0%	0%	0%	**0%**	-	1.0%	57.9%	0%	0%	**58.9%**	-	-
PHF	0.500	-	0.611	-	**0.722**	-	-	0.836	0.375	-	**0.842**	-	-	-	-	-	**-**	-	0.429	0.898	-	-	**0.882**	-	0.864
Lights	4	0	20	0	**24**	-	0	464	3	0	**467**	-	0	0	0	0	**0**	-	12	699	0	0	**711**	-	1202
% Lights	100%	0%	90.9%	0%	**92.3%**	-	0%	97.5%	100%	0%	**97.5%**	-	0%	0%	0%	0%	**-**	-	100%	98.3%	0%	0%	**98.3%**	-	97.9%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	2
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%	0.3%	0%	0%	**0.3%**	-	0.2%
Buses and Single-Unit Trucks	0	0	2	0	**2**	-	0	11	0	0	**11**	-	0	0	0	0	**0**	-	0	10	0	0	**10**	-	23
% Buses and Single-Unit Trucks	0%	0%	9.1%	0%	**7.7%**	-	0%	2.3%	0%	0%	**2.3%**	-	0%	0%	0%	0%	**-**	-	0%	1.4%	0%	0%	**1.4%**	-	1.9%
Bicycles on Road	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0.1%
Pedestrians	-	-	-	-	-	9	-	-	-	-	-	0	-	-	-	-	-	4	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Waltons Creek Road (u... - TMC
Tue Aug 29, 2023
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099521, Location: 35.811323, -78.836476

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Waltons Creek Road (u... - TMC

Tue Aug 29, 2023
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099521, Location: 35.811323, -78.836476

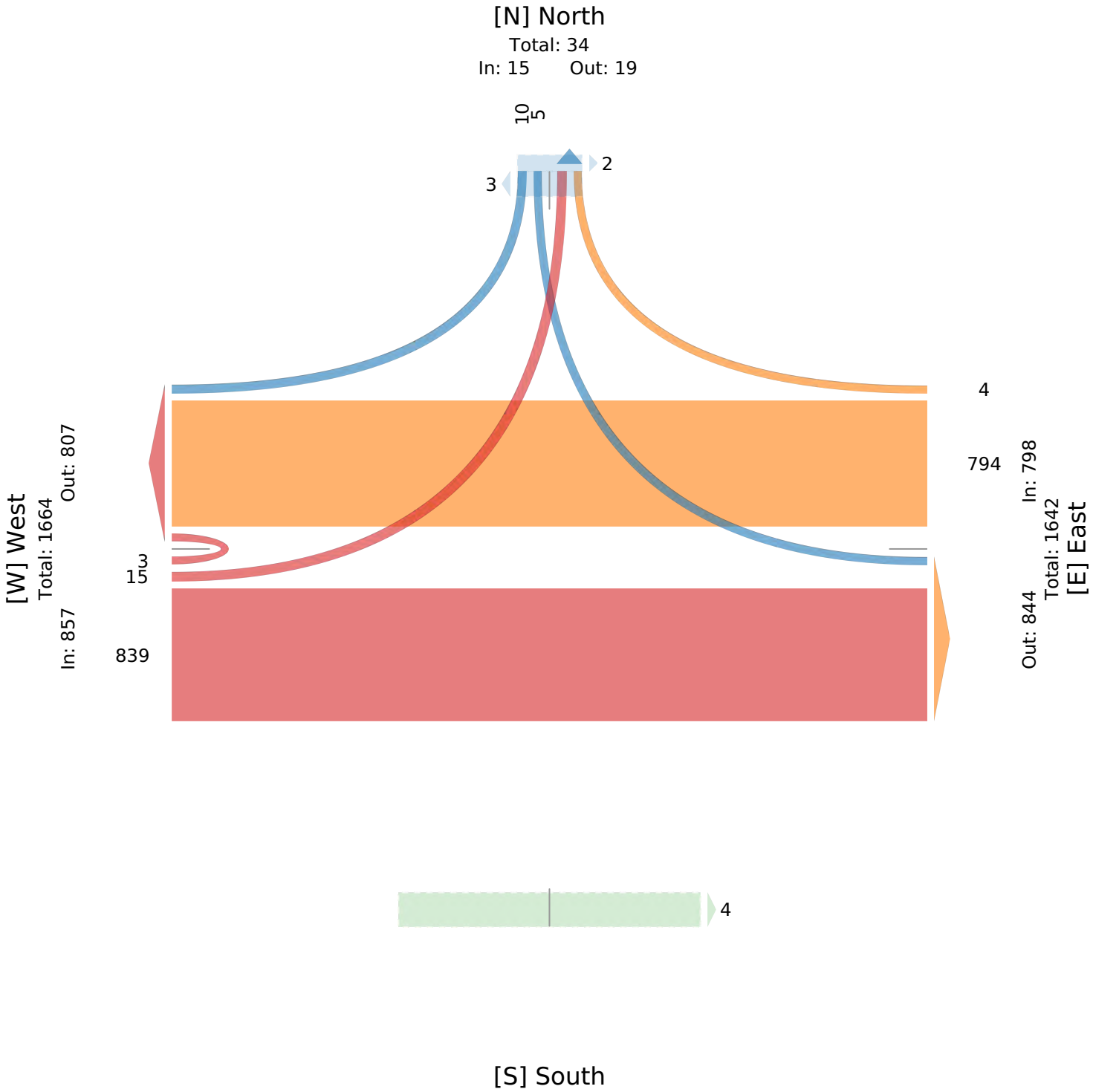
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 5:00PM	3	0	4	0	**7**	0	0	197	1	0	**198**	0	0	0	0	0	**0**	1	4	214	0	2	**220**	0	**425**
5:15PM	0	0	3	0	**3**	1	0	196	1	0	**197**	0	0	0	0	0	**0**	0	3	202	0	0	**205**	0	**405**
5:30PM	0	0	0	0	**0**	2	0	210	0	0	**210**	0	0	0	0	0	**0**	1	6	213	0	0	**219**	0	**429**
5:45PM	2	0	3	0	**5**	2	0	191	2	0	**193**	0	0	0	0	0	**0**	2	2	210	0	1	**213**	0	**411**
Total	5	0	10	0	**15**	5	0	794	4	0	**798**	0	0	0	0	0	**0**	4	15	839	0	3	**857**	0	**1670**
% Approach	33.3%	0%	66.7%	0%	**-**	-	0%	99.5%	0.5%	0%	**-**	-	0%	0%	0%	0%	**-**	-	1.8%	97.9%	0%	0.4%	**-**	-	-
% Total	0.3%	0%	0.6%	0%	**0.9%**	-	0%	47.5%	0.2%	0%	**47.8%**	-	0%	0%	0%	0%	**0%**	-	0.9%	50.2%	0%	0.2%	**51.3%**	-	-
PHF	0.417	-	0.625	-	**0.536**	-	-	0.943	0.500	-	**0.948**	-	-	-	-	-	**-**	-	0.625	0.980	-	0.375	**0.974**	-	0.972
Lights	5	0	10	0	**15**	-	0	790	4	0	**794**	-	0	0	0	0	**0**	-	15	837	0	3	**855**	-	1664
% Lights	100%	0%	100%	0%	**100%**	-	0%	99.5%	100%	0%	**99.5%**	-	0%	0%	0%	0%	**-**	-	100%	99.8%	0%	100%	**99.8%**	-	99.6%
Articulated Trucks	0	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%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	4
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**-**	-	0%	0.2%	0%	0%	**0.2%**	-	0.2%
Bicycles on Road	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0.1%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	80.0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	4	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	20.0%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Waltons Creek Road (u... - TMC
Tue Aug 29, 2023
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099521, Location: 35.811323, -78.836476

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Fairwood Drive (unsig... - TMC

Thu Aug 31, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099520, Location: 35.811613, -78.833992

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2023-08-31 7:00AM	0	0	0	0	**0**	0	0	33	0	0	**33**	0	0	0	0	0	**0**	0	0	41	0	0	**41**	0	**74**
7:15AM	0	0	0	0	**0**	0	1	42	0	0	**43**	0	1	0	0	0	**1**	0	0	72	1	0	**73**	0	**117**
7:30AM	0	0	0	0	**0**	0	0	57	0	0	**57**	0	0	0	0	0	**0**	0	0	89	0	0	**89**	0	**146**
7:45AM	0	0	0	0	**0**	1	1	60	0	0	**61**	0	0	0	0	0	**0**	0	0	108	0	0	**108**	0	**169**
Hourly Total	0	0	0	0	**0**	1	2	192	0	0	**194**	0	1	0	0	0	**1**	0	0	310	1	0	**311**	0	**506**
8:00AM	0	0	0	0	**0**	0	0	64	0	0	**64**	0	1	0	1	0	**2**	0	0	134	1	0	**135**	0	**201**
8:15AM	0	0	0	0	**0**	1	1	69	0	0	**70**	0	1	0	0	0	**1**	0	0	137	0	0	**137**	0	**208**
8:30AM	0	0	0	0	**0**	0	0	94	0	0	**94**	0	0	0	1	0	**1**	0	0	110	0	0	**110**	0	**205**
8:45AM	0	0	0	0	**0**	0	0	86	0	0	**86**	0	0	0	0	0	**0**	1	0	116	0	1	**117**	0	**203**
Hourly Total	0	0	0	0	**0**	1	1	313	0	0	**314**	0	2	0	2	0	**4**	1	0	497	1	1	**499**	0	**817**
4:00PM	0	0	0	0	**0**	0	0	136	0	0	**136**	0	0	0	0	0	**0**	0	0	125	0	0	**125**	0	**261**
4:15PM	0	0	0	0	**0**	0	2	136	0	0	**138**	0	0	0	1	0	**1**	1	0	158	0	0	**158**	0	**297**
4:30PM	0	0	0	0	**0**	0	1	153	0	1	**155**	0	0	0	1	0	**1**	1	0	150	1	0	**151**	0	**307**
4:45PM	0	0	0	0	**0**	0	0	158	0	0	**158**	0	0	0	0	0	**0**	0	0	173	1	0	**174**	0	**332**
Hourly Total	0	0	0	0	**0**	0	3	583	0	1	**587**	0	0	0	2	0	**2**	2	0	606	2	0	**608**	0	**1197**
5:00PM	0	0	0	0	**0**	0	0	195	0	0	**195**	0	1	0	0	0	**1**	1	0	194	2	0	**196**	0	**392**
5:15PM	0	0	0	0	**0**	0	0	174	0	0	**174**	0	1	0	2	0	**3**	0	0	179	1	0	**180**	0	**357**
5:30PM	0	0	0	0	**0**	0	0	216	0	0	**216**	0	0	0	0	0	**0**	2	0	221	1	0	**222**	0	**438**
5:45PM	0	0	0	0	**0**	2	0	189	0	0	**189**	0	0	0	0	0	**0**	2	0	153	1	0	**154**	0	**343**
Hourly Total	0	0	0	0	**0**	2	0	774	0	0	**774**	0	2	0	2	0	**4**	5	0	747	5	0	**752**	0	**1530**
Total	0	0	0	0	**0**	4	6	1862	0	1	**1869**	0	5	0	6	0	**11**	8	0	2160	9	1	**2170**	0	**4050**
% Approach	0%	0%	0%	0%	**-**	-	0.3%	99.6%	0%	0.1%	**-**	-	45.5%	0%	54.5%	0%	**-**	-	0%	99.5%	0.4%	0%	**-**	-	-
% Total	0%	0%	0%	0%	**0%**	-	0.1%	46.0%	0%	0%	**46.1%**	-	0.1%	0%	0.1%	0%	**0.3%**	-	0%	53.3%	0.2%	0%	**53.6%**	-	-
Lights	0	0	0	0	**0**	-	6	1833	0	1	**1840**	-	5	0	6	0	**11**	-	0	2136	8	1	**2145**	-	3996
% Lights	0%	0%	0%	0%	**-**	-	100%	98.4%	0%	100%	**98.4%**	-	100%	0%	100%	0%	**100%**	-	0%	98.9%	88.9%	100%	**98.8%**	-	98.7%
Articulated Trucks	0	0	0	0	**0**	-	0	7	0	0	**7**	-	0	0	0	0	**0**	-	0	5	0	0	**5**	-	12
% Articulated Trucks	0%	0%	0%	0%	**-**	-	0%	0.4%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.2%**	-	0.3%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	0	21	0	0	**21**	-	0	0	0	0	**0**	-	0	12	1	0	**13**	-	34
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**-**	-	0%	1.1%	0%	0%	**1.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0.6%	11.1%	0%	**0.6%**	-	0.8%
Bicycles on Road	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	7	0	0	**7**	-	8
% Bicycles on Road	0%	0%	0%	0%	**-**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.3%**	-	0.2%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	7	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	87.5%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	12.5%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Fairwood Drive (unsig... - TMC
Thu Aug 31, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099520, Location: 35.811613, -78.833992

Provided by: Vanasse Hangen Brustlin, Inc.
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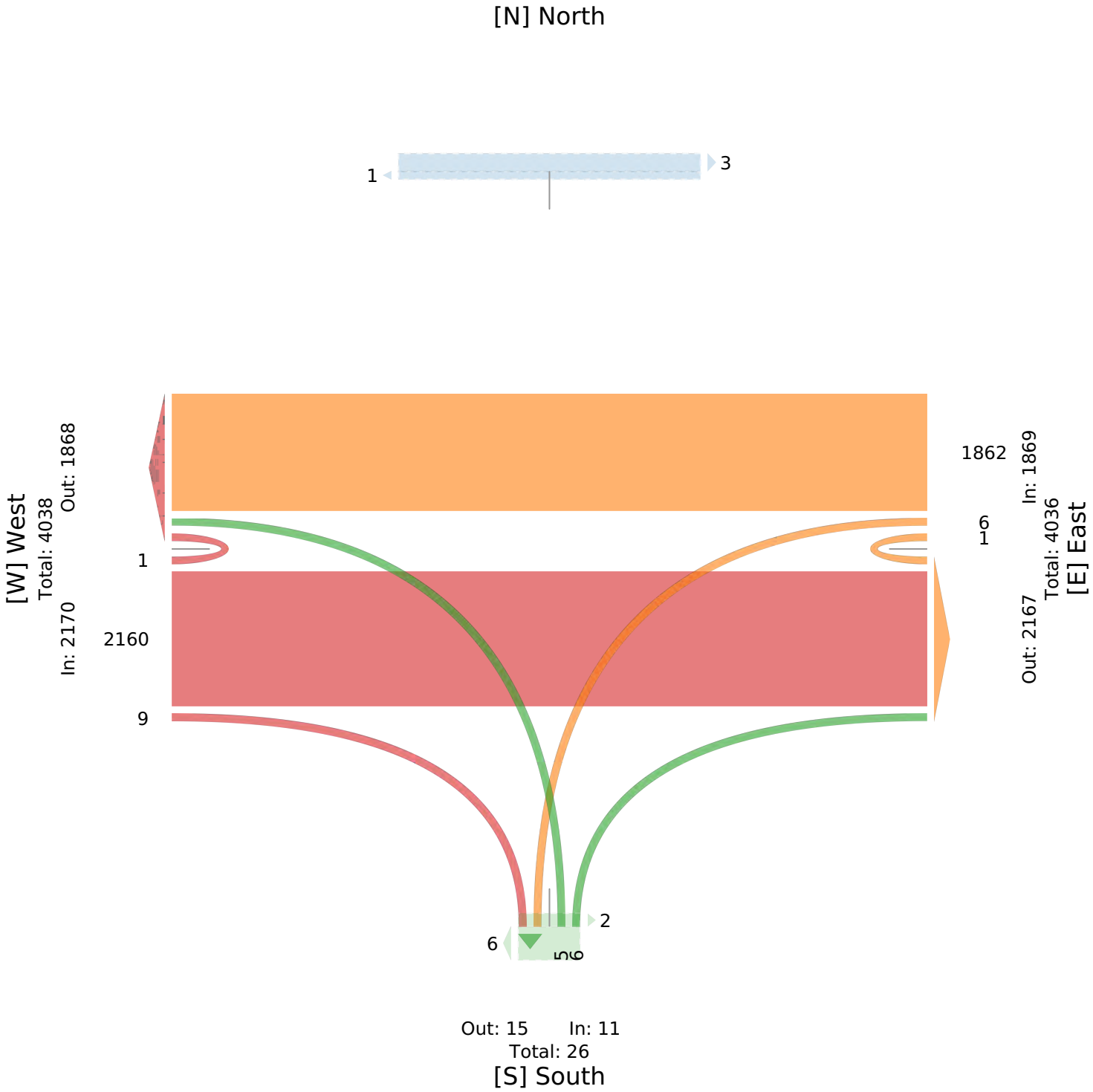


Morrisville Parkway at Fairwood Drive (unsig... - TMC

Thu Aug 31, 2023
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099520, Location: 35.811613, -78.833992

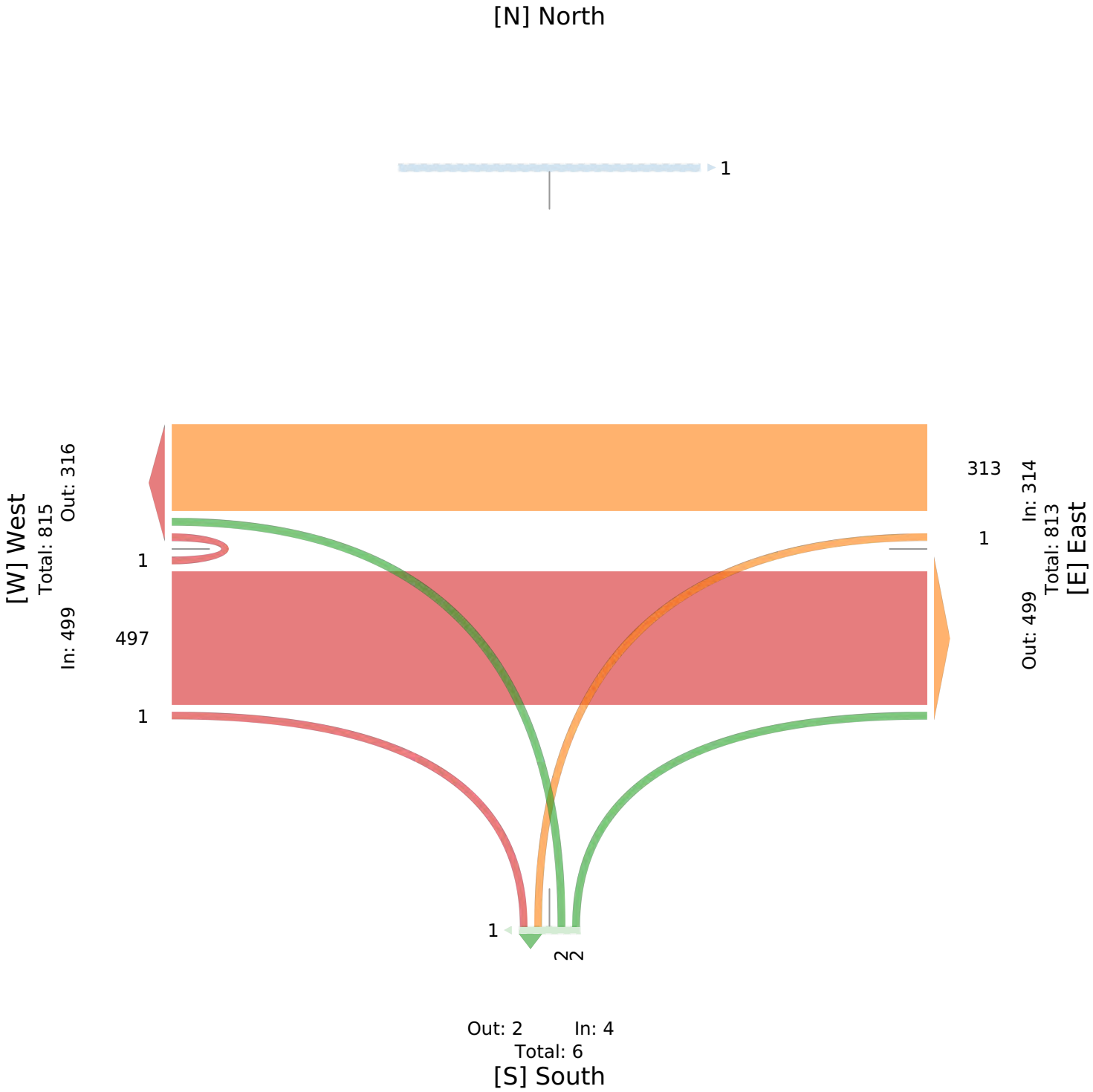
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-31 8:00AM	0	0	0	0	**0**	0	0	64	0	0	**64**	0	1	0	1	0	**2**	0	0	134	1	0	**135**	0	**201**
8:15AM	0	0	0	0	**0**	1	1	69	0	0	**70**	0	1	0	0	0	**1**	0	0	137	0	0	**137**	0	**208**
8:30AM	0	0	0	0	**0**	0	0	94	0	0	**94**	0	0	0	1	0	**1**	0	0	110	0	0	**110**	0	**205**
8:45AM	0	0	0	0	**0**	0	0	86	0	0	**86**	0	0	0	0	0	**0**	1	0	116	0	1	**117**	0	**203**
Total	0	0	0	0	**0**	1	1	313	0	0	**314**	0	2	0	2	0	**4**	1	0	497	1	1	**499**	0	**817**
% Approach	0%	0%	0%	0%	**-**	-	0.3%	99.7%	0%	0%	**-**	-	50.0%	0%	50.0%	0%	**-**	-	0%	99.6%	0.2%	0.2%	**-**	-	-
% Total	0%	0%	0%	0%	**0%**	-	0.1%	38.3%	0%	0%	**38.4%**	-	0.2%	0%	0.2%	0%	**0.5%**	-	0%	60.8%	0.1%	0.1%	**61.1%**	-	-
PHF	-	-	-	-	**-**	-	0.250	0.832	-	-	**0.835**	-	0.500	-	0.500	-	**0.500**	-	-	0.907	0.250	0.250	**0.911**	-	0.982
Lights	0	0	0	0	**0**	-	1	303	0	0	**304**	-	2	0	2	0	**4**	-	0	493	1	1	**495**	-	803
% Lights	0%	0%	0%	0%	**-**	-	100%	96.8%	0%	0%	**96.8%**	-	100%	0%	100%	0%	**100%**	-	0%	99.2%	100%	100%	**99.2%**	-	98.3%
Articulated Trucks	0	0	0	0	**0**	-	0	3	0	0	**3**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	4
% Articulated Trucks	0%	0%	0%	0%	**-**	-	0%	1.0%	0%	0%	**1.0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.2%**	-	0.5%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	0	7	0	0	**7**	-	0	0	0	0	**0**	-	0	3	0	0	**3**	-	10
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**-**	-	0%	2.2%	0%	0%	**2.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0.6%	0%	0%	**0.6%**	-	1.2%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Fairwood Drive (unsig... - TMC
Thu Aug 31, 2023
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099520, Location: 35.811613, -78.833992

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Fairwood Drive (unsig... - TMC

Thu Aug 31, 2023
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099520, Location: 35.811613, -78.833992

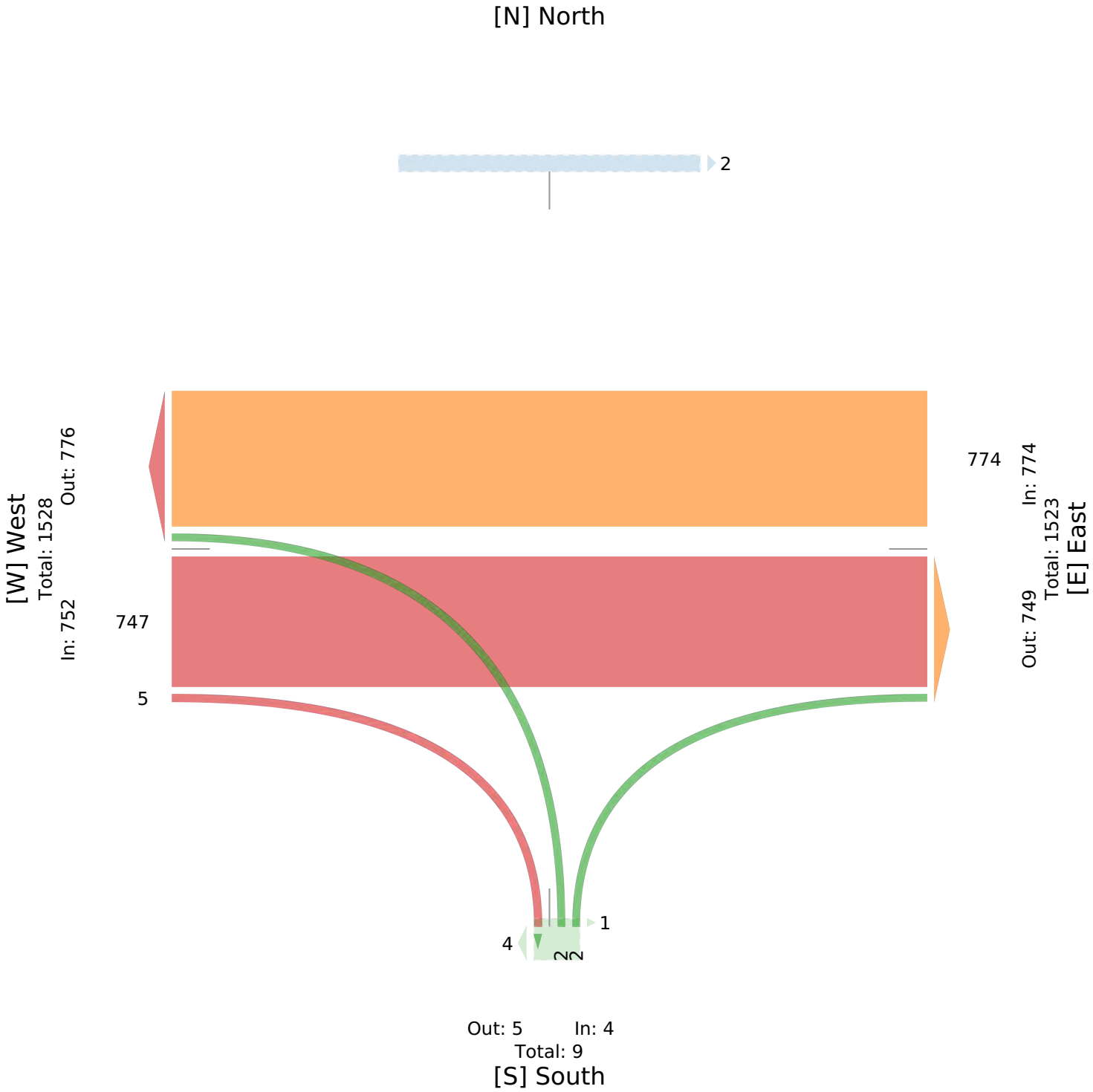
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-31 5:00PM	0	0	0	0	**0**	0	0	195	0	0	**195**	0	1	0	0	0	**1**	1	0	194	2	0	**196**	0	**392**
5:15PM	0	0	0	0	**0**	0	0	174	0	0	**174**	0	1	0	2	0	**3**	0	0	179	1	0	**180**	0	**357**
5:30PM	0	0	0	0	**0**	0	0	216	0	0	**216**	0	0	0	0	0	**0**	2	0	221	1	0	**222**	0	**438**
5:45PM	0	0	0	0	**0**	2	0	189	0	0	**189**	0	0	0	0	0	**0**	2	0	153	1	0	**154**	0	**343**
Total	0	0	0	0	**0**	2	0	774	0	0	**774**	0	2	0	2	0	**4**	5	0	747	5	0	**752**	0	**1530**
% Approach	0%	0%	0%	0%	**-**	-	0%	100%	0%	0%	**-**	-	50.0%	0%	50.0%	0%	**-**	-	0%	99.3%	0.7%	0%	**-**	-	**-**
% Total	0%	0%	0%	0%	**0%**	-	0%	50.6%	0%	0%	**50.6%**	-	0.1%	0%	0.1%	0%	**0.3%**	-	0%	48.8%	0.3%	0%	**49.2%**	-	**-**
PHF	-	-	-	-	**-**	-	-	0.895	-	-	**0.895**	-	0.500	-	0.250	-	**0.333**	-	-	0.847	0.625	-	**0.849**	-	0.874
Lights	0	0	0	0	**0**	-	0	769	0	0	**769**	-	2	0	2	0	**4**	-	0	741	5	0	**746**	-	1519
% Lights	0%	0%	0%	0%	**-**	-	0%	99.4%	0%	0%	**99.4%**	-	100%	0%	100%	0%	**100%**	-	0%	99.2%	100%	0%	**99.2%**	-	99.3%
Articulated Trucks	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Articulated Trucks	0%	0%	0%	0%	**-**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	0	3	0	0	**3**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	4
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**-**	-	0%	0.4%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.3%
Bicycles on Road	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	5	0	0	**5**	-	6
% Bicycles on Road	0%	0%	0%	0%	**-**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0.7%	0%	0%	**0.7%**	-	0.4%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	4	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	80.0%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	20.0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Fairwood Drive (unsig... - TMC
Thu Aug 31, 2023
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099520, Location: 35.811613, -78.833992

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Fairwood Drive/Walton... - TMC

Tue Aug 29, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099519, Location: 35.811372, -78.831132

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 7:00AM	1	0	0	0	**1**	0	0	72	0	5	**77**	0	0	0	0	0	**0**	1	0	102	0	0	**102**	0	**180**
7:15AM	1	0	1	0	**2**	1	0	74	1	11	**86**	0	0	0	1	0	**1**	2	0	115	0	0	**115**	0	**204**
7:30AM	0	0	0	0	**0**	1	0	104	0	6	**110**	0	0	0	2	0	**2**	1	1	135	0	0	**136**	0	**248**
7:45AM	2	0	0	0	**2**	1	0	110	0	11	**121**	1	1	0	0	0	**1**	1	0	152	0	0	**152**	0	**276**
Hourly Total	4	0	1	0	**5**	3	0	360	1	33	**394**	1	1	0	3	0	**4**	5	1	504	0	0	**505**	0	**908**
8:00AM	2	0	1	0	**3**	1	0	105	0	3	**108**	0	0	0	1	0	**1**	2	1	151	0	0	**152**	0	**264**
8:15AM	5	0	3	0	**8**	1	0	98	0	6	**104**	0	1	0	0	0	**1**	1	1	189	0	1	**191**	0	**304**
8:30AM	1	0	0	0	**1**	1	0	128	1	6	**135**	0	0	0	0	0	**0**	3	0	161	0	0	**161**	0	**297**
8:45AM	0	0	4	0	**4**	2	0	137	5	15	**157**	0	2	0	2	0	**4**	1	1	191	0	1	**193**	1	**358**
Hourly Total	8	0	8	0	**16**	5	0	468	6	30	**504**	0	3	0	3	0	**6**	7	3	692	0	2	**697**	1	**1223**
4:00PM	0	0	0	0	**0**	0	2	162	4	7	**175**	0	0	0	1	0	**1**	0	2	167	0	0	**169**	0	**345**
4:15PM	1	0	0	0	**1**	0	0	170	1	4	**175**	0	1	0	5	0	**6**	1	0	167	0	0	**167**	0	**349**
4:30PM	2	0	1	0	**3**	2	3	146	3	7	**159**	0	0	0	1	0	**1**	2	0	184	0	0	**184**	0	**347**
4:45PM	1	0	0	0	**1**	0	2	167	1	8	**178**	0	2	0	2	0	**4**	0	1	180	1	0	**182**	0	**365**
Hourly Total	4	0	1	0	**5**	2	7	645	9	26	**687**	0	3	0	9	0	**12**	3	3	698	1	0	**702**	0	**1406**
5:00PM	0	0	1	0	**1**	0	0	197	2	3	**202**	0	0	0	0	0	**0**	0	0	212	0	0	**212**	0	**415**
5:15PM	3	0	1	0	**4**	1	0	193	1	7	**201**	0	0	0	1	0	**1**	1	1	206	0	0	**207**	0	**413**
5:30PM	0	0	0	0	**0**	2	1	200	4	9	**214**	0	0	0	2	0	**2**	0	2	217	1	0	**220**	0	**436**
5:45PM	0	0	0	0	**0**	1	1	197	2	11	**211**	0	0	0	1	0	**1**	0	0	206	0	0	**206**	0	**418**
Hourly Total	3	0	2	0	**5**	4	2	787	9	30	**828**	0	0	0	4	0	**4**	1	3	841	1	0	**845**	0	**1682**
Total	19	0	12	0	**31**	14	9	2260	25	119	**2413**	1	7	0	19	0	**26**	16	10	2735	2	2	**2749**	1	**5219**
% Approach	61.3%	0%	38.7%	0%	**-**	-	0.4%	93.7%	1.0%	4.9%	**-**	-	26.9%	0%	73.1%	0%	**-**	-	0.4%	99.5%	0.1%	0.1%	**-**	-	-
% Total	0.4%	0%	0.2%	0%	**0.6%**	-	0.2%	43.3%	0.5%	2.3%	**46.2%**	-	0.1%	0%	0.4%	0%	**0.5%**	-	0.2%	52.4%	0%	0%	**52.7%**	-	-
Lights	19	0	12	0	**31**	-	9	2223	22	118	**2372**	-	7	0	18	0	**25**	-	9	2691	2	2	**2704**	-	5132
% Lights	100%	0%	100%	0%	**100%**	-	100%	98.4%	88.0%	99.2%	**98.3%**	-	100%	0%	94.7%	0%	**96.2%**	-	90.0%	98.4%	100%	100%	**98.4%**	-	98.3%
Articulated Trucks	0	0	0	0	**0**	-	0	3	0	0	**3**	-	0	0	0	0	**0**	-	0	5	0	0	**5**	-	8
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.2%**	-	0.2%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	0	31	3	1	**35**	-	0	0	1	0	**1**	-	1	37	0	0	**38**	-	74
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	1.4%	12.0%	0.8%	**1.5%**	-	0%	0%	5.3%	0%	**3.8%**	-	10.0%	1.4%	0%	0%	**1.4%**	-	1.4%
Bicycles on Road	0	0	0	0	**0**	-	0	3	0	0	**3**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	5
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Pedestrians	-	-	-	-	-	13	-	-	-	-	-	1	-	-	-	-	-	15	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	92.9%	-	-	-	-	-	100%	-	-	-	-	-	93.8%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	7.1%	-	-	-	-	-	0%	-	-	-	-	-	6.3%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Fairwood Drive/Walton... - TMC
Tue Aug 29, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099519, Location: 35.811372, -78.831132

Provided by: Vanasse Hangen Brustlin, Inc.
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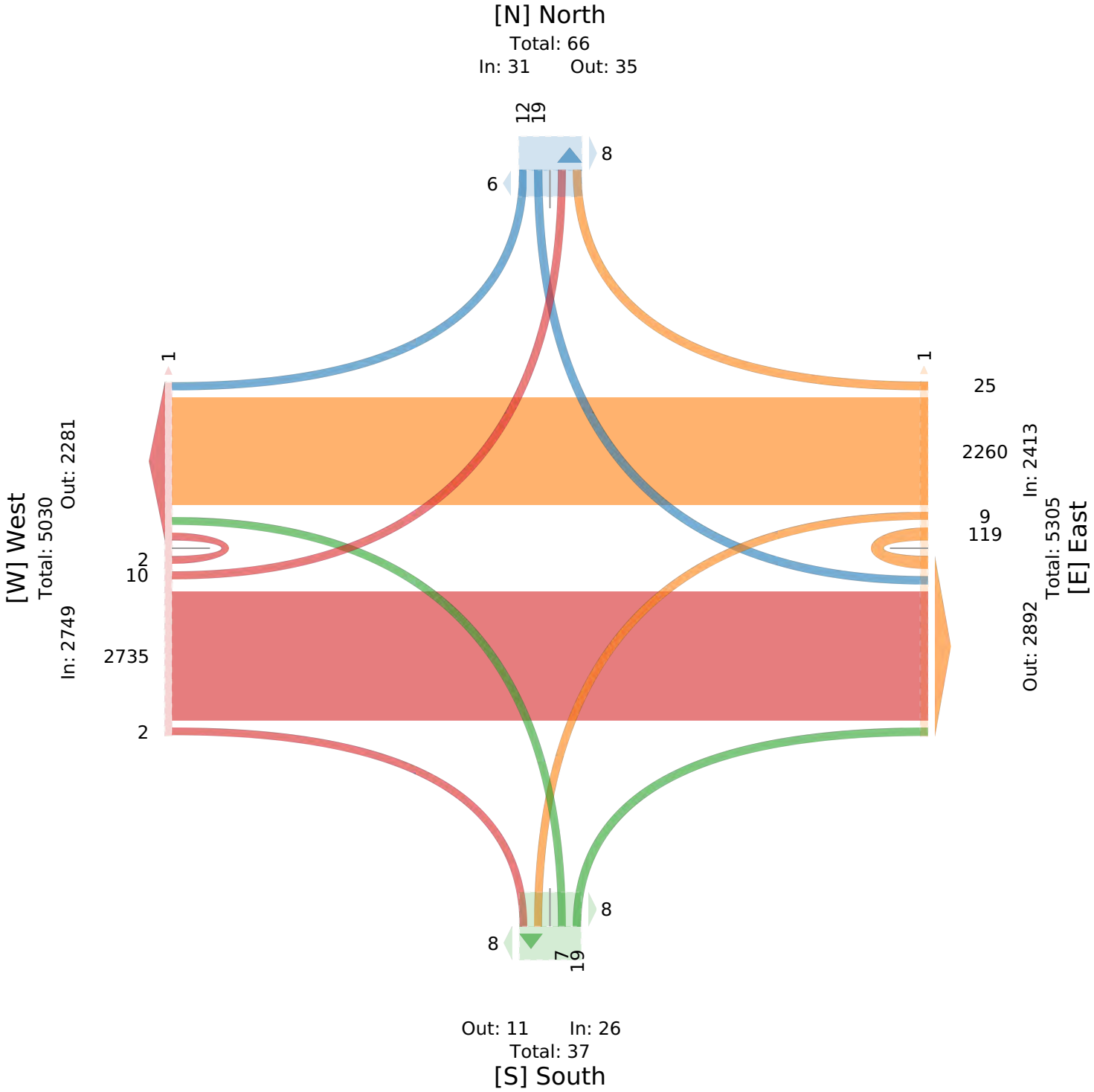


Morrisville Parkway at Fairwood Drive/Walton... - TMC

Tue Aug 29, 2023
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099519, Location: 35.811372, -78.831132

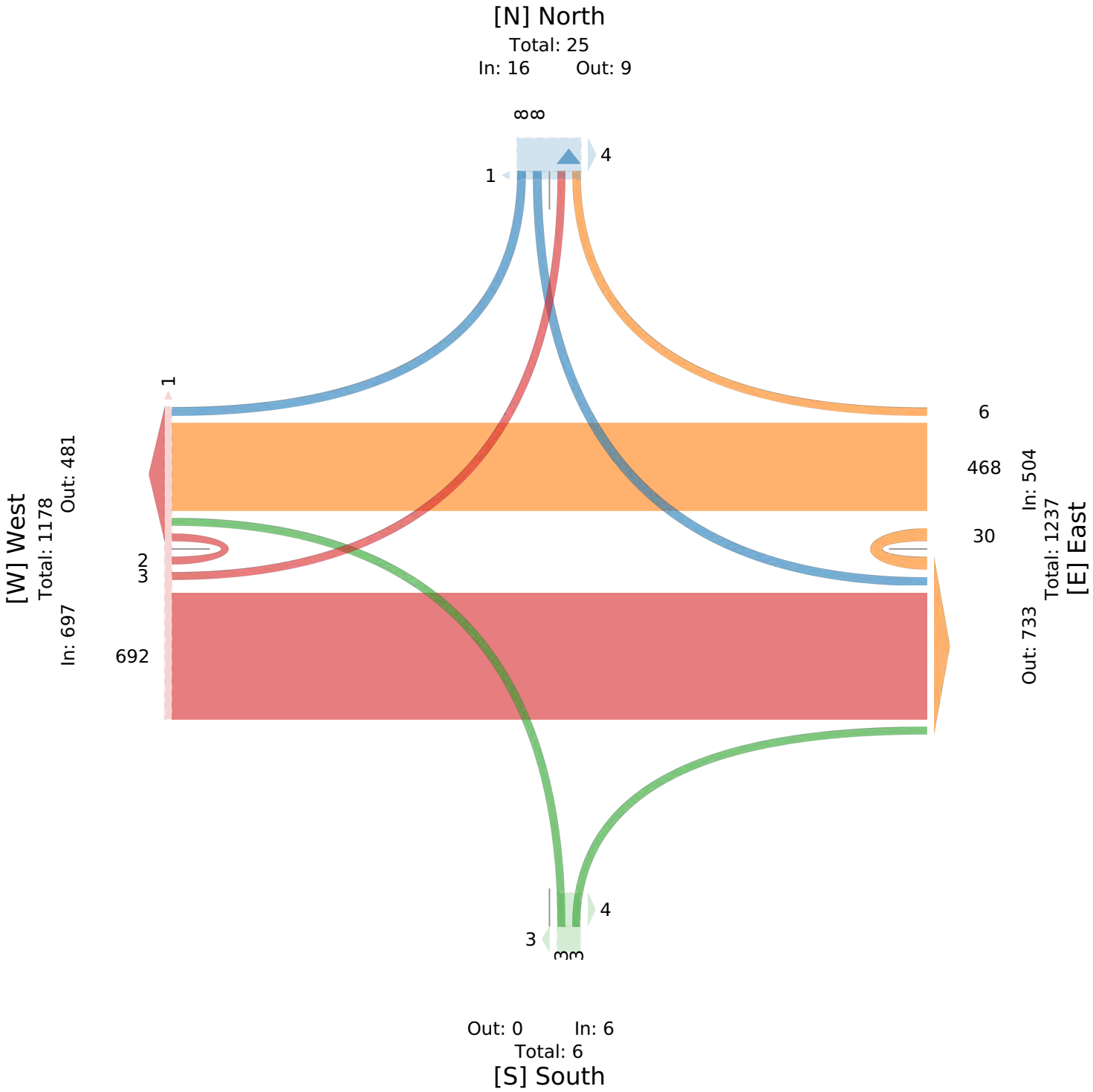
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 8:00AM	2	0	1	0	**3**	1	0	105	0	3	**108**	0	0	0	1	0	**1**	2	1	151	0	0	**152**	0	**264**
8:15AM	5	0	3	0	**8**	1	0	98	0	6	**104**	0	1	0	0	0	**1**	1	1	189	0	1	**191**	0	**304**
8:30AM	1	0	0	0	**1**	1	0	128	1	6	**135**	0	0	0	0	0	**0**	3	0	161	0	0	**161**	0	**297**
8:45AM	0	0	4	0	**4**	2	0	137	5	15	**157**	0	2	0	2	0	**4**	1	1	191	0	1	**193**	1	**358**
Total	8	0	8	0	**16**	5	0	468	6	30	**504**	0	3	0	3	0	**6**	7	3	692	0	2	**697**	1	**1223**
% Approach	50.0%	0%	50.0%	0%	**-**	-	0%	92.9%	1.2%	6.0%	**-**	-	50.0%	0%	50.0%	0%	**-**	-	0.4%	99.3%	0%	0.3%	**-**	-	-
% Total	0.7%	0%	0.7%	0%	**1.3%**	-	0%	38.3%	0.5%	2.5%	**41.2%**	-	0.2%	0%	0.2%	0%	**0.5%**	-	0.2%	56.6%	0%	0.2%	**57.0%**	-	-
PHF	0.400	-	0.500	-	**0.500**	-	-	0.852	0.300	0.500	**0.801**	-	0.375	-	0.375	-	**0.375**	-	0.750	0.906	-	0.500	**0.903**	-	0.853
Lights	8	0	8	0	**16**	-	0	456	4	30	**490**	-	3	0	3	0	**6**	-	3	679	0	2	**684**	-	1196
% Lights	100%	0%	100%	0%	**100%**	-	0%	97.4%	66.7%	100%	**97.2%**	-	100%	0%	100%	0%	**100%**	-	100%	98.1%	0%	100%	**98.1%**	-	97.8%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	3	0	0	**3**	-	3
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.4%	0%	0%	**0.4%**	-	0.2%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	0	11	2	0	**13**	-	0	0	0	0	**0**	-	0	10	0	0	**10**	-	23
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	2.4%	33.3%	0%	**2.6%**	-	0%	0%	0%	0%	**0%**	-	0%	1.4%	0%	0%	**1.4%**	-	1.9%
Bicycles on Road	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Pedestrians	-	-	-	-	-	5	-	-	-	-	-	0	-	-	-	-	-	7	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Fairwood Drive/Walton... - TMC
Tue Aug 29, 2023
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099519, Location: 35.811372, -78.831132

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Fairwood Drive/Walton... - TMC

Tue Aug 29, 2023
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099519, Location: 35.811372, -78.831132

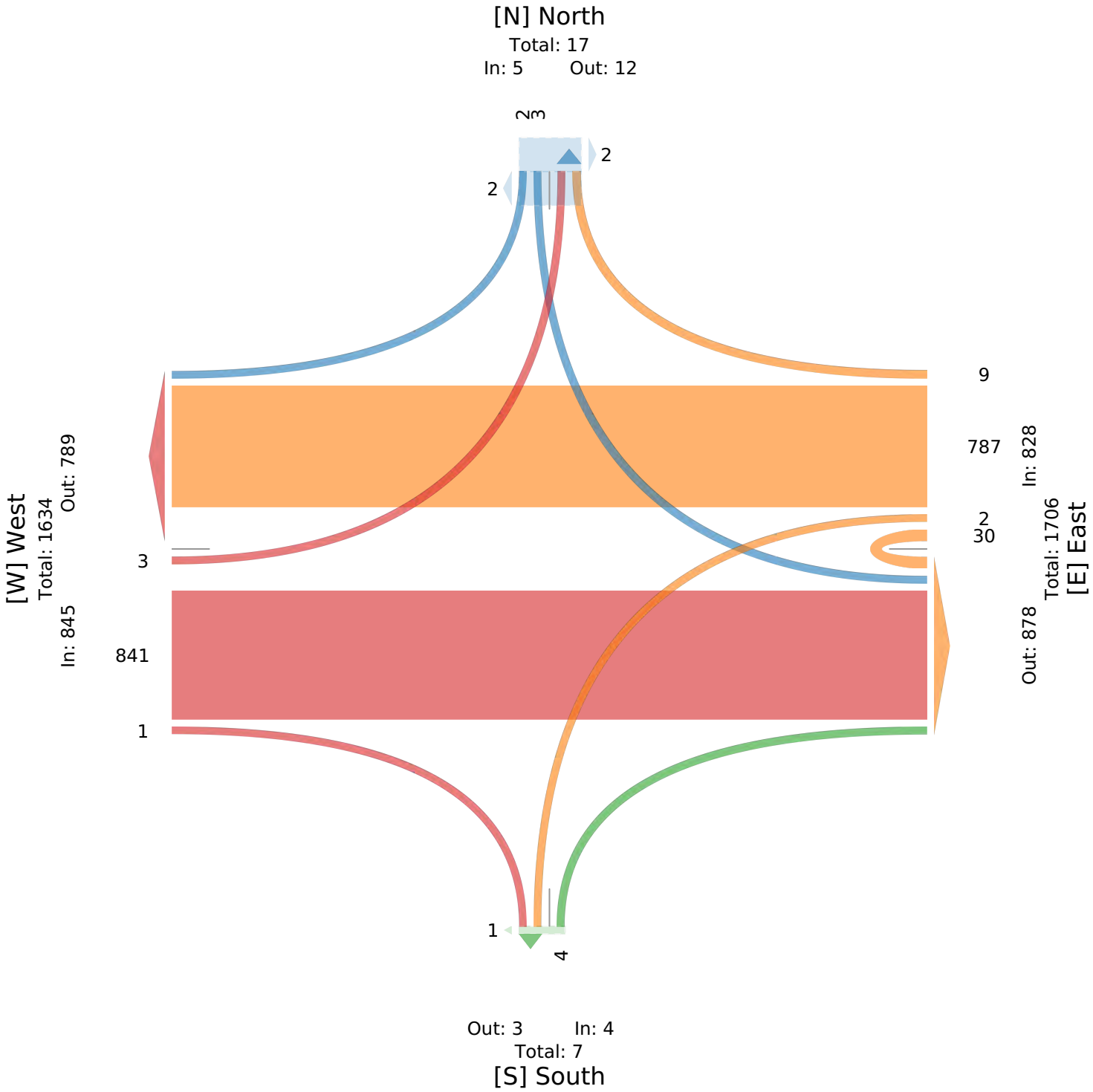
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg	North						East						South						West						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 5:00PM	0	0	1	0	**1**	0	0	197	2	3	**202**	0	0	0	0	0	**0**	0	0	212	0	0	**212**	0	**415**
5:15PM	3	0	1	0	**4**	1	0	193	1	7	**201**	0	0	0	1	0	**1**	1	1	206	0	0	**207**	0	**413**
5:30PM	0	0	0	0	**0**	2	1	200	4	9	**214**	0	0	0	2	0	**2**	0	2	217	1	0	**220**	0	**436**
5:45PM	0	0	0	0	**0**	1	1	197	2	11	**211**	0	0	0	1	0	**1**	0	0	206	0	0	**206**	0	**418**
Total	3	0	2	0	**5**	4	2	787	9	30	**828**	0	0	0	4	0	**4**	1	3	841	1	0	**845**	0	**1682**
% Approach	60.0%	0%	40.0%	0%	**-**	-	0.2%	95.0%	1.1%	3.6%	**-**	-	0%	0%	100%	0%	**-**	-	0.4%	99.5%	0.1%	0%	**-**	-	-
% Total	0.2%	0%	0.1%	0%	**0.3%**	-	0.1%	46.8%	0.5%	1.8%	**49.2%**	-	0%	0%	0.2%	0%	**0.2%**	-	0.2%	50.0%	0.1%	0%	**50.2%**	-	-
PHF	0.250	-	0.500	-	**0.313**	-	0.500	0.981	0.563	0.682	**0.965**	-	-	-	0.500	-	**0.500**	-	0.375	0.967	0.250	-	**0.958**	-	0.962
Lights	3	0	2	0	**5**	-	2	783	9	30	**824**	-	0	0	4	0	**4**	-	3	836	1	0	**840**	-	1673
% Lights	100%	0%	100%	0%	**100%**	-	100%	99.5%	100%	100%	**99.5%**	-	0%	0%	100%	0%	**100%**	-	100%	99.4%	100%	0%	**99.4%**	-	99.5%
Articulated Trucks	0	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%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	3	0	0	**3**	-	5
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0.4%	0%	0%	**0.4%**	-	0.3%
Bicycles on Road	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	4
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.2%**	-	0.2%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	75.0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	25.0%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Fairwood Drive/Walton... - TMC
Tue Aug 29, 2023
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099519, Location: 35.811372, -78.831132

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Crabtree Crossing Par... - TMC

Tue Aug 29, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099518, Location: 35.811429, -78.826496

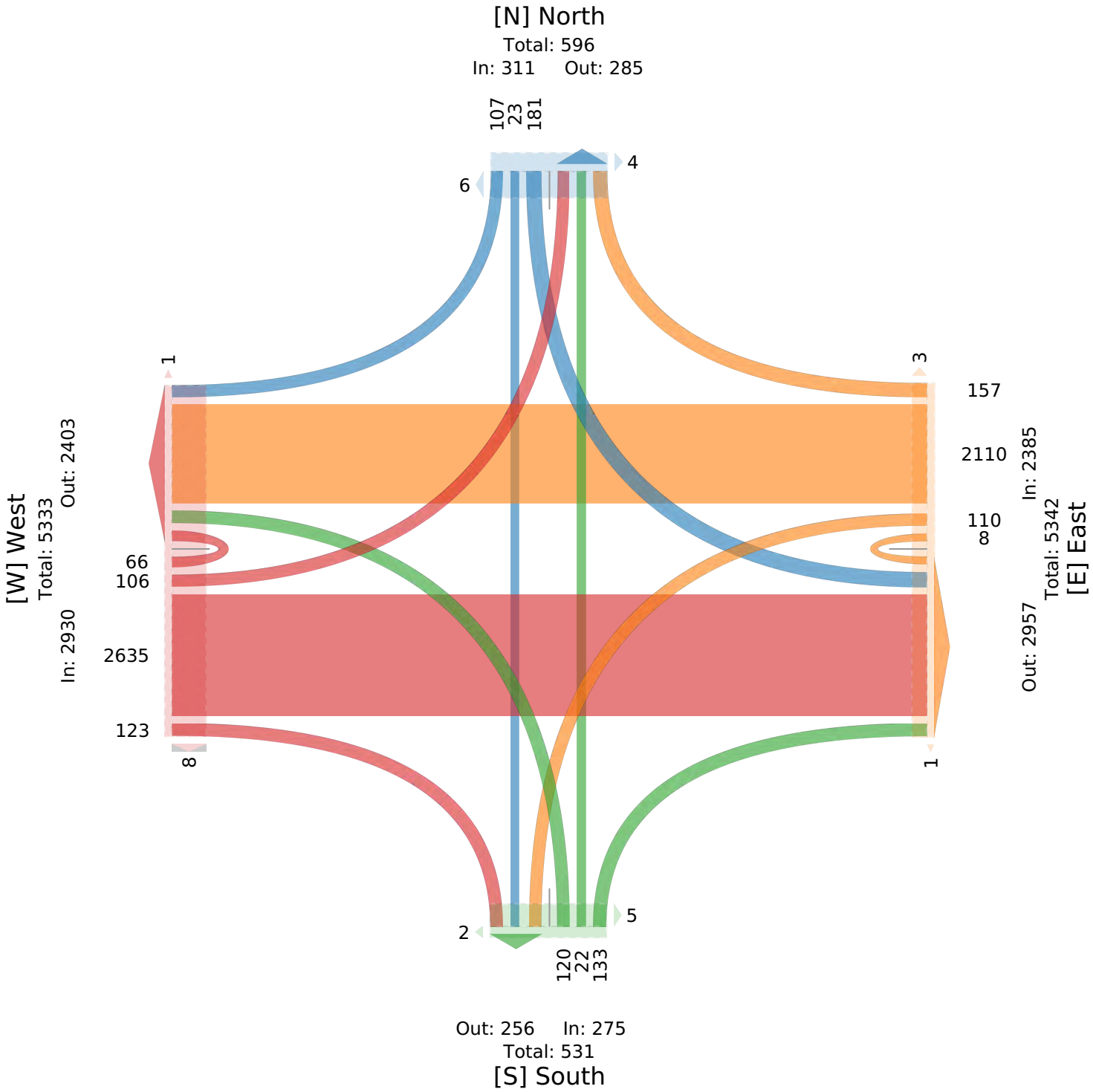
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two,
Orlando, FL, 32801, US

Leg	North						East						South						West						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2023-08-29 7:00AM	9	0	4	0	**13**	2	3	51	2	0	**56**	0	6	0	7	0	**13**	1	3	102	4	0	**109**	0	**191**
7:15AM	17	3	1	0	**21**	0	3	82	3	0	**88**	0	4	1	11	0	**16**	0	2	124	3	0	**129**	0	**254**
7:30AM	15	1	12	0	**28**	0	3	94	5	0	**102**	0	2	1	10	0	**13**	1	5	136	5	1	**147**	2	**290**
7:45AM	12	1	8	0	**21**	2	4	93	9	0	**106**	0	5	1	9	0	**15**	0	1	154	5	1	**161**	1	**303**
Hourly Total	53	5	25	0	**83**	4	13	320	19	0	**352**	0	17	3	37	0	**57**	2	11	516	17	2	**546**	3	**1038**
8:00AM	12	0	11	0	**23**	0	3	87	3	0	**93**	0	5	1	9	0	**15**	0	3	155	5	2	**165**	0	**296**
8:15AM	12	3	5	0	**20**	0	4	88	7	0	**99**	0	13	0	13	0	**26**	1	2	191	6	1	**200**	1	**345**
8:30AM	12	1	9	0	**22**	1	5	95	3	0	**103**	0	6	0	6	0	**12**	1	8	165	7	2	**182**	0	**319**
8:45AM	11	1	10	0	**22**	0	5	114	5	1	**125**	1	9	0	8	0	**17**	0	5	192	11	6	**214**	1	**378**
Hourly Total	47	5	35	0	**87**	1	17	384	18	1	**420**	1	33	1	36	0	**70**	2	18	703	29	11	**761**	2	**1338**
4:00PM	8	0	5	0	**13**	0	6	158	11	0	**175**	0	8	1	4	0	**13**	0	7	133	10	12	**162**	0	**363**
4:15PM	14	2	3	0	**19**	0	9	162	15	1	**187**	1	7	2	10	0	**19**	1	7	157	4	7	**175**	0	**400**
4:30PM	9	2	8	0	**19**	0	16	142	6	0	**164**	0	6	2	9	0	**17**	1	13	164	14	8	**199**	1	**399**
4:45PM	10	1	7	0	**18**	2	9	168	16	0	**193**	1	11	4	10	0	**25**	0	11	169	10	2	**192**	1	**428**
Hourly Total	41	5	23	0	**69**	2	40	630	48	1	**719**	2	32	9	33	0	**74**	2	38	623	38	29	**728**	2	**1590**
5:00PM	3	3	6	0	**12**	0	8	186	17	1	**212**	0	4	1	9	0	**14**	0	16	194	6	5	**221**	0	**459**
5:15PM	10	1	11	0	**22**	0	11	201	19	0	**231**	0	10	3	8	0	**21**	0	5	193	8	8	**214**	1	**488**
5:30PM	17	0	2	0	**19**	2	8	188	20	5	**221**	1	9	5	5	0	**19**	0	9	207	15	4	**235**	1	**494**
5:45PM	10	4	5	0	**19**	1	13	201	16	0	**230**	0	15	0	5	0	**20**	1	9	199	10	7	**225**	0	**494**
Hourly Total	40	8	24	0	**72**	3	40	776	72	6	**894**	1	38	9	27	0	**74**	1	39	793	39	24	**895**	2	**1935**
Total	181	23	107	0	**311**	10	110	2110	157	8	**2385**	4	120	22	133	0	**275**	7	106	2635	123	66	**2930**	9	**5901**
% Approach	58.2%	7.4%	34.4%	0%	**-**	-	4.6%	88.5%	6.6%	0.3%	**-**	-	43.6%	8.0%	48.4%	0%	**-**	-	3.6%	89.9%	4.2%	2.3%	**-**	-	**-**
% Total	3.1%	0.4%	1.8%	0%	**5.3%**	-	1.9%	35.8%	2.7%	0.1%	**40.4%**	-	2.0%	0.4%	2.3%	0%	**4.7%**	-	1.8%	44.7%	2.1%	1.1%	**49.7%**	-	**-**
Lights	177	20	103	0	**300**	-	107	2077	153	7	**2344**	-	117	18	132	0	**267**	-	102	2598	119	66	**2885**	-	5796
% Lights	97.8%	87.0%	96.3%	0%	**96.5%**	-	97.3%	98.4%	97.5%	87.5%	**98.3%**	-	97.5%	81.8%	99.2%	0%	**97.1%**	-	96.2%	98.6%	96.7%	100%	**98.5%**	-	98.2%
Articulated Trucks	0	0	1	0	**1**	-	0	2	1	0	**3**	-	0	0	0	0	**0**	-	0	3	0	0	**3**	-	7
% Articulated Trucks	0%	0%	0.9%	0%	**0.3%**	-	0%	0.1%	0.6%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Buses and Single-Unit Trucks	4	0	3	0	**7**	-	2	31	3	1	**37**	-	1	0	1	0	**2**	-	4	34	0	0	**38**	-	84
% Buses and Single-Unit Trucks	2.2%	0%	2.8%	0%	**2.3%**	-	1.8%	1.5%	1.9%	12.5%	**1.6%**	-	0.8%	0%	0.8%	0%	**0.7%**	-	3.8%	1.3%	0%	0%	**1.3%**	-	1.4%
Bicycles on Road	0	3	0	0	**3**	-	1	0	0	0	**1**	-	2	4	0	0	**6**	-	0	0	4	0	**4**	-	14
% Bicycles on Road	0%	13.0%	0%	0%	**1.0%**	-	0.9%	0%	0%	0%	**0%**	-	1.7%	18.2%	0%	0%	**2.2%**	-	0%	0%	3.3%	0%	**0.1%**	-	0.2%
Pedestrians	-	-	-	-	-	9	-	-	-	-	-	2	-	-	-	-	-	6	-	-	-	-	-	7	
% Pedestrians	-	-	-	-	-	90.0%	-	-	-	-	-	50.0%	-	-	-	-	-	85.7%	-	-	-	-	-	77.8%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	10.0%	-	-	-	-	-	50.0%	-	-	-	-	-	14.3%	-	-	-	-	-	22.2%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Crabtree Crossing Par... - TMC
Tue Aug 29, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099518, Location: 35.811429, -78.826496

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Crabtree Crossing Par... - TMC

Tue Aug 29, 2023
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099518, Location: 35.811429, -78.826496

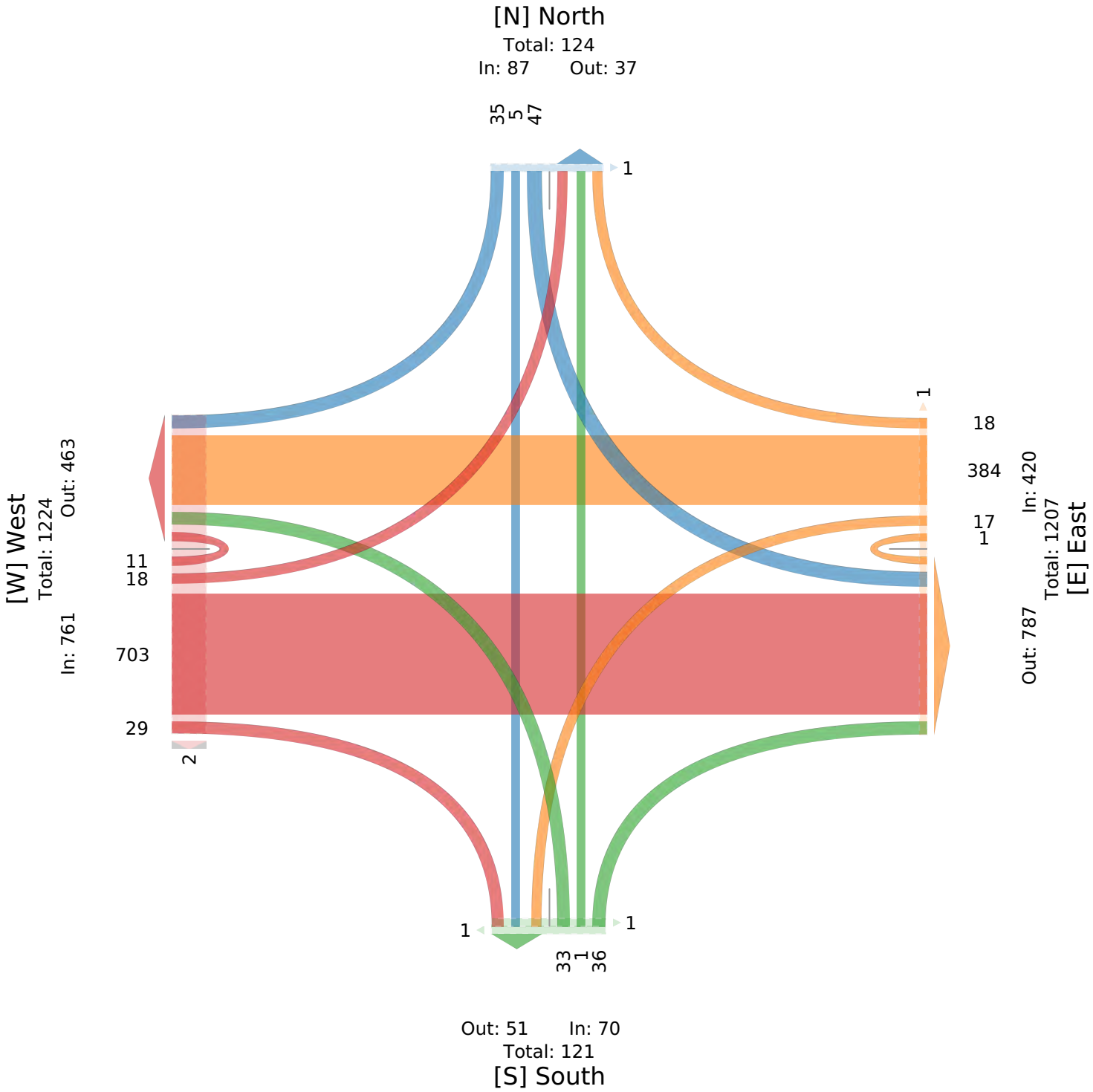
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two,
Orlando, FL, 32801, US

Leg	North						East						South						West						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 8:00AM	12	0	11	0	**23**	0	3	87	3	0	**93**	0	5	1	9	0	**15**	0	3	155	5	2	**165**	0	**296**
8:15AM	12	3	5	0	**20**	0	4	88	7	0	**99**	0	13	0	13	0	**26**	1	2	191	6	1	**200**	1	**345**
8:30AM	12	1	9	0	**22**	1	5	95	3	0	**103**	0	6	0	6	0	**12**	1	8	165	7	2	**182**	0	**319**
8:45AM	11	1	10	0	**22**	0	5	114	5	1	**125**	1	9	0	8	0	**17**	0	5	192	11	6	**214**	1	**378**
Total	47	5	35	0	**87**	1	17	384	18	1	**420**	1	33	1	36	0	**70**	2	18	703	29	11	**761**	2	**1338**
% Approach	54.0%	5.7%	40.2%	0%	**-**	-	4.0%	91.4%	4.3%	0.2%	**-**	-	47.1%	1.4%	51.4%	0%	**-**	-	2.4%	92.4%	3.8%	1.4%	**-**	-	-
% Total	3.5%	0.4%	2.6%	0%	**6.5%**	-	1.3%	28.7%	1.3%	0.1%	**31.4%**	-	2.5%	0.1%	2.7%	0%	**5.2%**	-	1.3%	52.5%	2.2%	0.8%	**56.9%**	-	-
PHF	0.979	0.417	0.795	-	**0.946**	-	0.800	0.842	0.643	0.250	**0.838**	-	0.635	-	0.692	-	**0.663**	-	0.563	0.915	0.659	0.458	**0.889**	-	0.884
Lights	46	5	33	0	**84**	-	15	374	16	0	**405**	-	32	0	35	0	**67**	-	17	692	29	11	**749**	-	1305
% Lights	97.9%	100%	94.3%	0%	**96.6%**	-	88.2%	97.4%	88.9%	0%	**96.4%**	-	97.0%	0%	97.2%	0%	**95.7%**	-	94.4%	98.4%	100%	100%	**98.4%**	-	97.5%
Articulated Trucks	0	0	0	0	**0**	-	0	1	1	0	**2**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	4
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0.3%	5.6%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.3%**	-	0.3%
Buses and Single-Unit Trucks	1	0	2	0	**3**	-	1	9	1	1	**12**	-	1	0	1	0	**2**	-	1	9	0	0	**10**	-	27
% Buses and Single-Unit Trucks	2.1%	0%	5.7%	0%	**3.4%**	-	5.9%	2.3%	5.6%	100%	**2.9%**	-	3.0%	0%	2.8%	0%	**2.9%**	-	5.6%	1.3%	0%	0%	**1.3%**	-	2.0%
Bicycles on Road	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	2
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	5.9%	0%	0%	0%	**0.2%**	-	0%	100%	0%	0%	**1.4%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	0%	-	-	-	-	-	100%	-	-	-	-	-	50.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	100%	-	-	-	-	-	0%	-	-	-	-	-	50.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Crabtree Crossing Par... - TMC
Tue Aug 29, 2023
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099518, Location: 35.811429, -78.826496

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Crabtree Crossing Par... - TMC

Tue Aug 29, 2023
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099518, Location: 35.811429, -78.826496

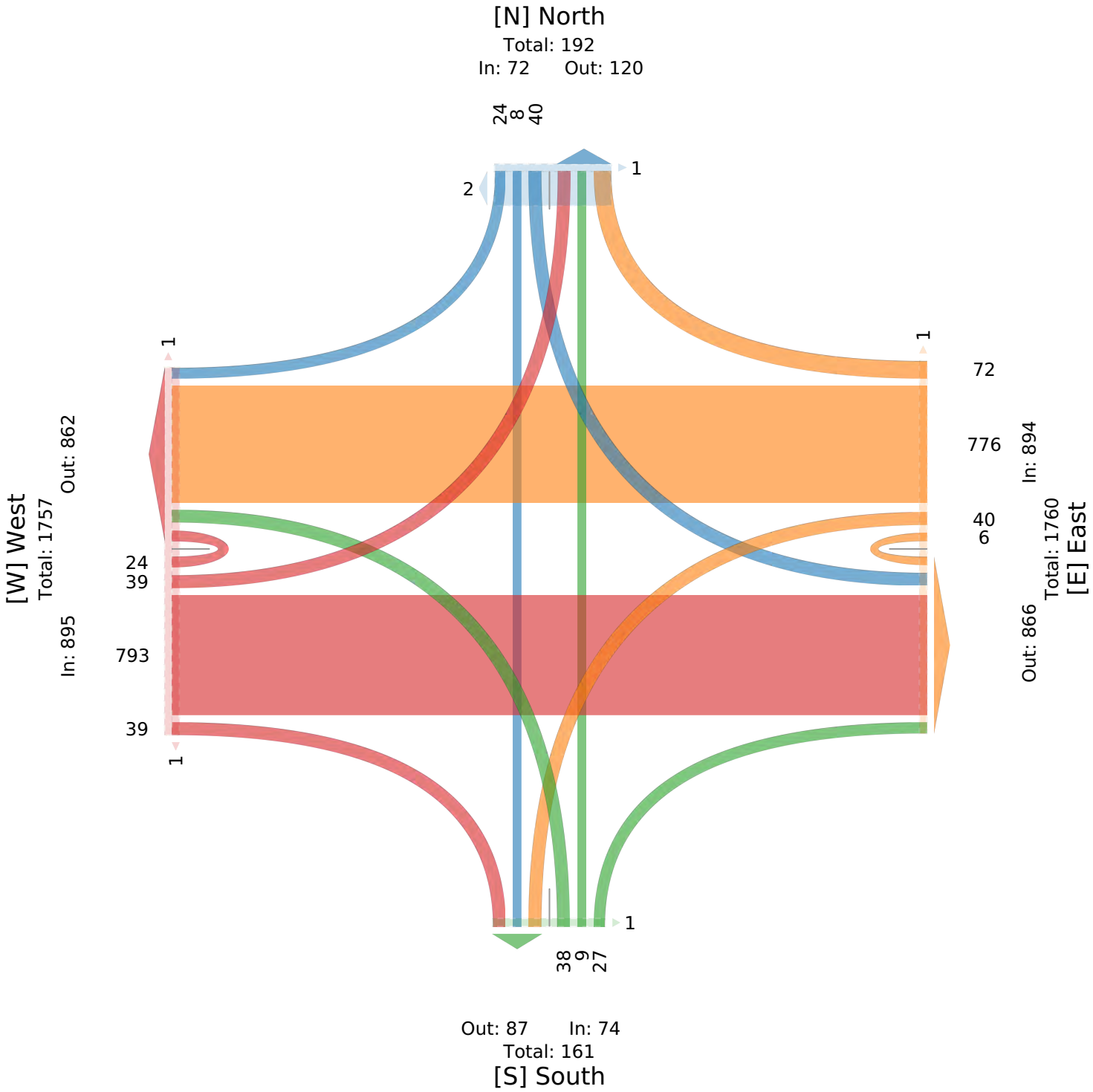
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two,
Orlando, FL, 32801, US

Leg	North						East						South						West						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 5:00PM	3	3	6	0	**12**	0	8	186	17	1	**212**	0	4	1	9	0	**14**	0	16	194	6	5	**221**	0	**459**
5:15PM	10	1	11	0	**22**	0	11	201	19	0	**231**	0	10	3	8	0	**21**	0	5	193	8	8	**214**	1	**488**
5:30PM	17	0	2	0	**19**	2	8	188	20	5	**221**	1	9	5	5	0	**19**	0	9	207	15	4	**235**	1	**494**
5:45PM	10	4	5	0	**19**	1	13	201	16	0	**230**	0	15	0	5	0	**20**	1	9	199	10	7	**225**	0	**494**
Total	40	8	24	0	**72**	3	40	776	72	6	**894**	1	38	9	27	0	**74**	1	39	793	39	24	**895**	2	**1935**
% Approach	55.6%	11.1%	33.3%	0%	**-**	-	4.5%	86.8%	8.1%	0.7%	**-**	-	51.4%	12.2%	36.5%	0%	**-**	-	4.4%	88.6%	4.4%	2.7%	**-**	-	-
% Total	2.1%	0.4%	1.2%	0%	**3.7%**	-	2.1%	40.1%	3.7%	0.3%	**46.2%**	-	2.0%	0.5%	1.4%	0%	**3.8%**	-	2.0%	41.0%	2.0%	1.2%	**46.3%**	-	-
PHF	0.588	0.583	0.545	-	**0.807**	-	0.769	0.965	0.900	0.300	**0.968**	-	0.643	0.450	0.750	-	**0.900**	-	0.609	0.958	0.661	0.750	**0.954**	-	0.979
Lights	39	7	24	0	**70**	-	39	774	71	6	**890**	-	36	9	27	0	**72**	-	39	791	37	24	**891**	-	1923
% Lights	97.5%	87.5%	100%	0%	**97.2%**	-	97.5%	99.7%	98.6%	100%	**99.6%**	-	94.7%	100%	100%	0%	**97.3%**	-	100%	99.7%	94.9%	100%	**99.6%**	-	99.4%
Articulated Trucks	0	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%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Buses and Single-Unit Trucks	1	0	0	0	**1**	-	1	2	1	0	**4**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	7
% Buses and Single-Unit Trucks	2.5%	0%	0%	0%	**1.4%**	-	2.5%	0.3%	1.4%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.2%**	-	0.4%
Bicycles on Road	0	1	0	0	**1**	-	0	0	0	0	**0**	-	2	0	0	0	**2**	-	0	0	2	0	**2**	-	5
% Bicycles on Road	0%	12.5%	0%	0%	**1.4%**	-	0%	0%	0%	0%	**0%**	-	5.3%	0%	0%	0%	**2.7%**	-	0%	0%	5.1%	0%	**0.2%**	-	0.3%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	66.7%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	50.0%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	33.3%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	50.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Crabtree Crossing Par... - TMC
Tue Aug 29, 2023
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099518, Location: 35.811429, -78.826496

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Bristol Creek Drive (... - TMC

Tue Aug 29, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099517, Location: 35.809592, -78.822769

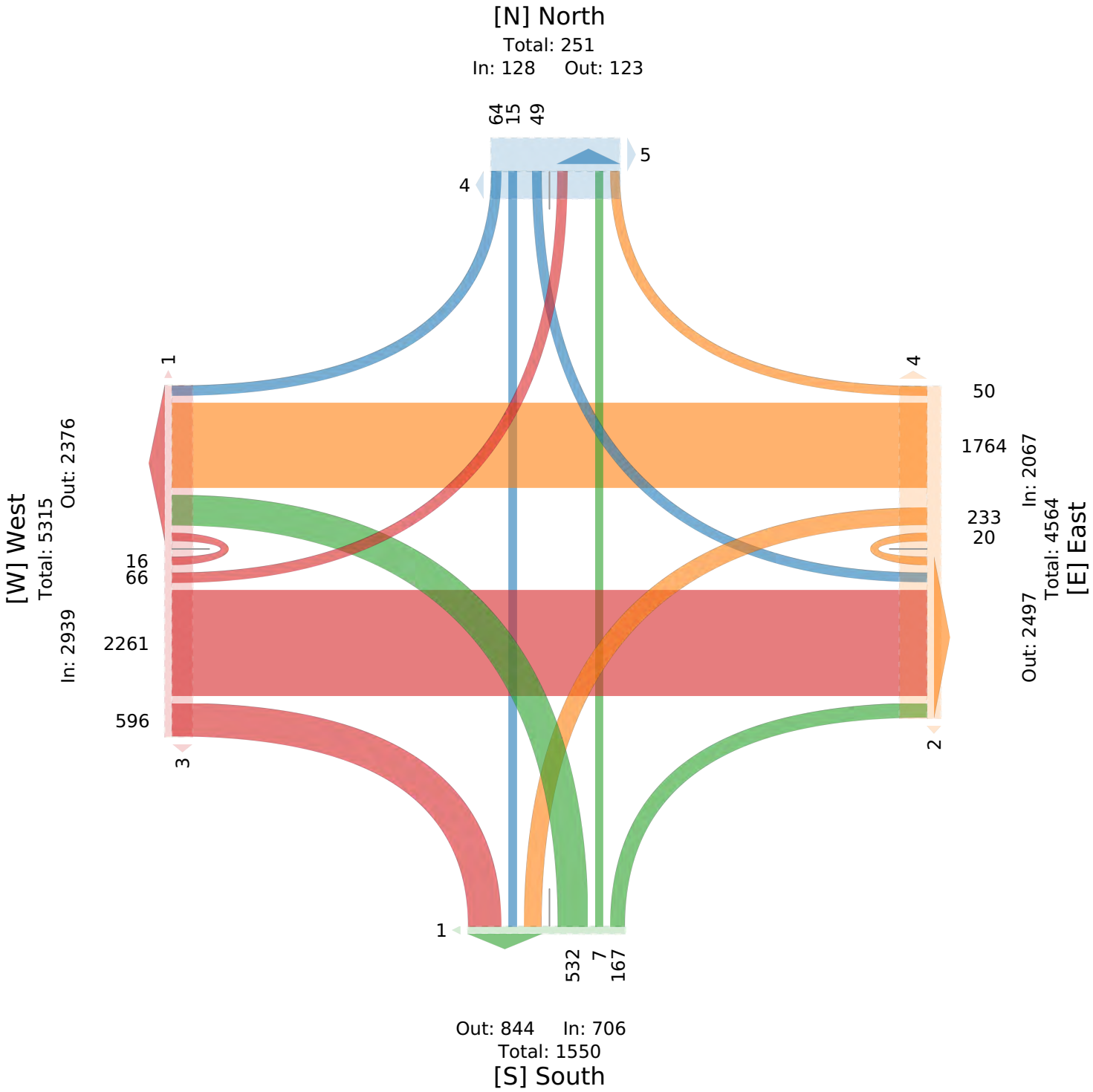
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two,
Orlando, FL, 32801, US

Leg	North						East						South						West						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2023-08-29 7:00AM	2	0	3	0	**5**	0	7	47	1	1	**56**	0	6	0	5	0	**11**	0	1	106	11	0	**118**	0	**190**
7:15AM	2	0	3	0	**5**	0	8	67	2	1	**78**	1	11	0	8	0	**19**	0	0	133	12	0	**145**	1	**247**
7:30AM	3	3	5	0	**11**	0	15	76	5	0	**96**	0	17	0	9	0	**26**	0	4	130	23	0	**157**	0	**290**
7:45AM	4	3	4	0	**11**	1	6	85	2	1	**94**	0	15	1	13	0	**29**	0	1	160	14	0	**175**	0	**309**
Hourly Total	11	6	15	0	**32**	1	36	275	10	3	**324**	1	49	1	35	0	**85**	0	6	529	60	0	**595**	1	**1036**
8:00AM	5	0	2	0	**7**	1	13	74	2	1	**90**	0	17	0	12	0	**29**	1	3	158	16	0	**177**	0	**303**
8:15AM	2	1	6	0	**9**	0	9	67	2	0	**78**	0	22	0	12	0	**34**	0	5	192	15	1	**213**	0	**334**
8:30AM	3	0	9	0	**12**	1	10	75	0	1	**86**	0	13	0	13	0	**26**	0	0	156	14	0	**170**	0	**294**
8:45AM	0	1	1	0	**2**	0	11	103	0	0	**114**	0	24	0	12	0	**36**	0	2	181	29	0	**212**	0	**364**
Hourly Total	10	2	18	0	**30**	2	43	319	4	2	**368**	0	76	0	49	0	**125**	1	10	687	74	1	**772**	0	**1295**
4:00PM	2	0	2	0	**4**	0	18	142	2	1	**163**	0	32	0	4	0	**36**	0	3	107	44	2	**156**	0	**359**
4:15PM	0	0	3	0	**3**	0	12	138	0	4	**154**	0	46	1	9	0	**56**	0	4	127	43	0	**174**	0	**387**
4:30PM	0	0	4	0	**4**	0	20	114	3	2	**139**	0	46	0	6	0	**52**	0	6	123	61	0	**190**	0	**385**
4:45PM	7	2	4	0	**13**	2	19	146	9	0	**174**	0	44	1	10	0	**55**	0	8	118	51	0	**177**	0	**419**
Hourly Total	9	2	13	0	**24**	2	69	540	14	7	**630**	0	168	2	29	0	**199**	0	21	475	199	2	**697**	0	**1550**
5:00PM	5	1	8	0	**14**	2	28	134	5	1	**168**	2	67	1	11	0	**79**	0	17	132	64	2	**215**	0	**476**
5:15PM	9	3	4	0	**16**	1	15	174	7	4	**200**	3	57	2	15	0	**74**	0	3	148	54	3	**208**	0	**498**
5:30PM	2	1	3	0	**6**	0	23	160	6	0	**189**	0	51	0	12	0	**63**	0	7	150	70	8	**235**	2	**493**
5:45PM	3	0	3	0	**6**	1	19	162	4	3	**188**	0	64	1	16	0	**81**	0	2	140	75	0	**217**	1	**492**
Hourly Total	19	5	18	0	**42**	4	85	630	22	8	**745**	5	239	4	54	0	**297**	0	29	570	263	13	**875**	3	**1959**
Total	49	15	64	0	**128**	9	233	1764	50	20	**2067**	6	532	7	167	0	**706**	1	66	2261	596	16	**2939**	4	**5840**
% Approach	38.3%	11.7%	50.0%	0%	**-**	-	11.3%	85.3%	2.4%	1.0%	**-**	-	75.4%	1.0%	23.7%	0%	**-**	-	2.2%	76.9%	20.3%	0.5%	**-**	-	-
% Total	0.8%	0.3%	1.1%	0%	**2.2%**	-	4.0%	30.2%	0.9%	0.3%	**35.4%**	-	9.1%	0.1%	2.9%	0%	**12.1%**	-	1.1%	38.7%	10.2%	0.3%	**50.3%**	-	-
Lights	49	15	64	0	**128**	-	226	1732	50	20	**2028**	-	522	7	165	0	**694**	-	66	2220	589	16	**2891**	-	5741
% Lights	100%	100%	100%	0%	**100%**	-	97.0%	98.2%	100%	100%	**98.1%**	-	98.1%	100%	98.8%	0%	**98.3%**	-	100%	98.2%	98.8%	100%	**98.4%**	-	98.3%
Articulated Trucks	0	0	0	0	**0**	-	1	2	0	0	**3**	-	2	0	0	0	**2**	-	0	3	2	0	**5**	-	10
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0.4%	0.1%	0%	0%	**0.1%**	-	0.4%	0%	0%	0%	**0.3%**	-	0%	0.1%	0.3%	0%	**0.2%**	-	0.2%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	5	29	0	0	**34**	-	8	0	2	0	**10**	-	0	38	5	0	**43**	-	87
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	2.1%	1.6%	0%	0%	**1.6%**	-	1.5%	0%	1.2%	0%	**1.4%**	-	0%	1.7%	0.8%	0%	**1.5%**	-	1.5%
Bicycles on Road	0	0	0	0	**0**	-	1	1	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0.4%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	9	-	-	-	-	-	5	-	-	-	-	-	1	-	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	83.3%	-	-	-	-	-	100%	-	-	-	-	-	75.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	16.7%	-	-	-	-	-	0%	-	-	-	-	-	25.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Bristol Creek Drive (... - TMC
Tue Aug 29, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099517, Location: 35.809592, -78.822769

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Bristol Creek Drive (... - TMC

Tue Aug 29, 2023
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099517, Location: 35.809592, -78.822769

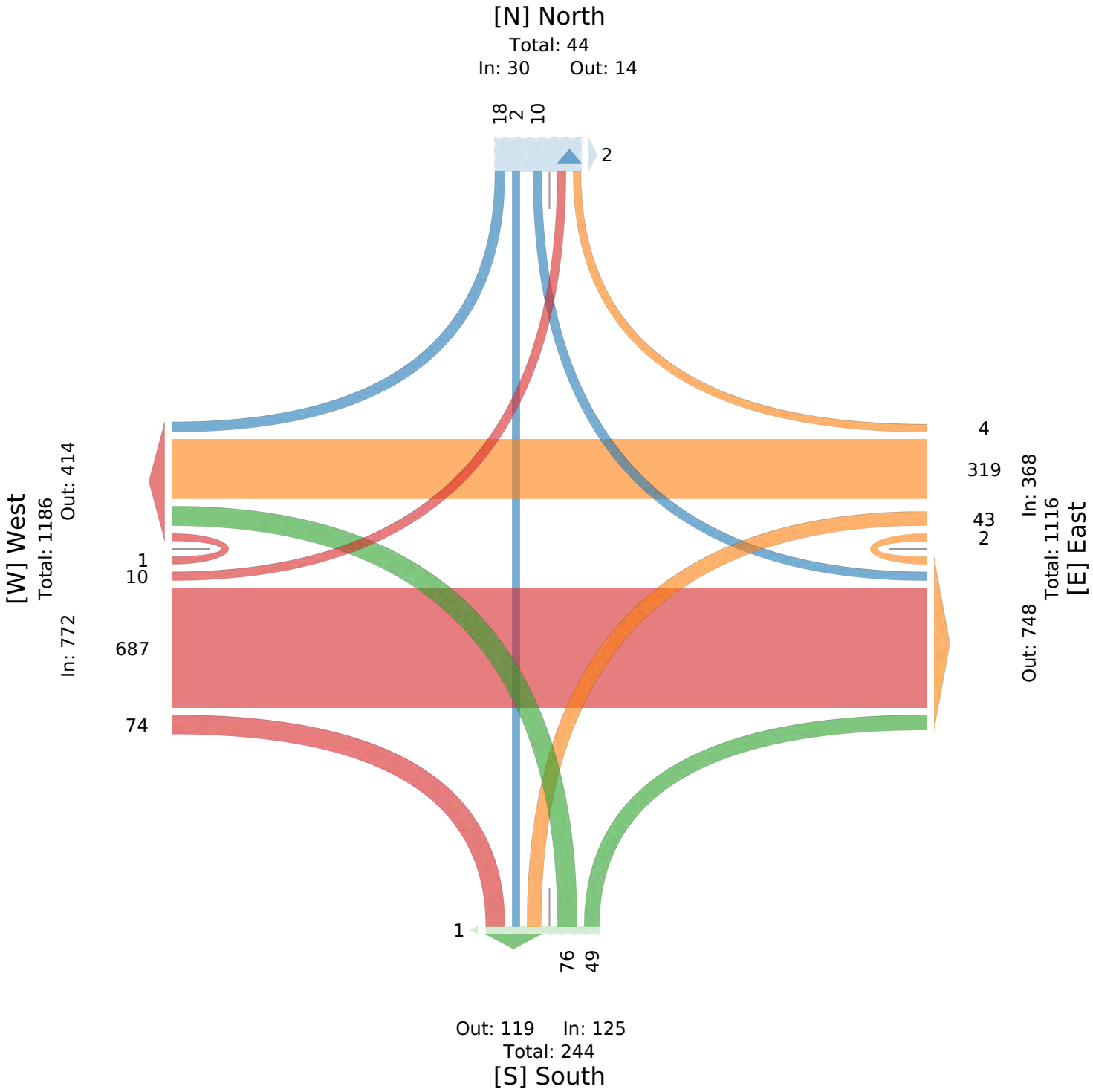
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 8:00AM	5	0	2	0	**7**	1	13	74	2	1	**90**	0	17	0	12	0	**29**	1	3	158	16	0	**177**	0	**303**
8:15AM	2	1	6	0	**9**	0	9	67	2	0	**78**	0	22	0	12	0	**34**	0	5	192	15	1	**213**	0	**334**
8:30AM	3	0	9	0	**12**	1	10	75	0	1	**86**	0	13	0	13	0	**26**	0	0	156	14	0	**170**	0	**294**
8:45AM	0	1	1	0	**2**	0	11	103	0	0	**114**	0	24	0	12	0	**36**	0	2	181	29	0	**212**	0	**364**
Total	10	2	18	0	**30**	2	43	319	4	2	**368**	0	76	0	49	0	**125**	1	10	687	74	1	**772**	0	**1295**
% Approach	33.3%	6.7%	60.0%	0%	**-**	-	11.7%	86.7%	1.1%	0.5%	**-**	-	60.8%	0%	39.2%	0%	**-**	-	1.3%	89.0%	9.6%	0.1%	**-**	-	-
% Total	0.8%	0.2%	1.4%	0%	**2.3%**	-	3.3%	24.6%	0.3%	0.2%	**28.4%**	-	5.9%	0%	3.8%	0%	**9.7%**	-	0.8%	53.1%	5.7%	0.1%	**59.6%**	-	-
PHF	0.500	0.500	0.500	-	**0.625**	-	0.827	0.772	0.500	0.500	**0.805**	-	0.792	-	0.942	-	**0.868**	-	0.500	0.895	0.638	0.250	**0.906**	-	0.889
Lights	10	2	18	0	**30**	-	41	306	4	2	**353**	-	75	0	48	0	**123**	-	10	676	71	1	**758**	-	1264
% Lights	100%	100%	100%	0%	**100%**	-	95.3%	95.9%	100%	100%	**95.9%**	-	98.7%	0%	98.0%	0%	**98.4%**	-	100%	98.4%	95.9%	100%	**98.2%**	-	97.6%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	1	1	0	**2**	-	3
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.3%	0%	0%	0%	**0.8%**	-	0%	0.1%	1.4%	0%	**0.3%**	-	0.2%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	2	12	0	0	**14**	-	0	0	1	0	**1**	-	0	10	2	0	**12**	-	27
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	4.7%	3.8%	0%	0%	**3.8%**	-	0%	0%	2.0%	0%	**0.8%**	-	0%	1.5%	2.7%	0%	**1.6%**	-	2.1%
Bicycles on Road	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Bristol Creek Drive (... - TMC
Tue Aug 29, 2023
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099517, Location: 35.809592, -78.822769

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Bristol Creek Drive (... - TMC

Tue Aug 29, 2023
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099517, Location: 35.809592, -78.822769

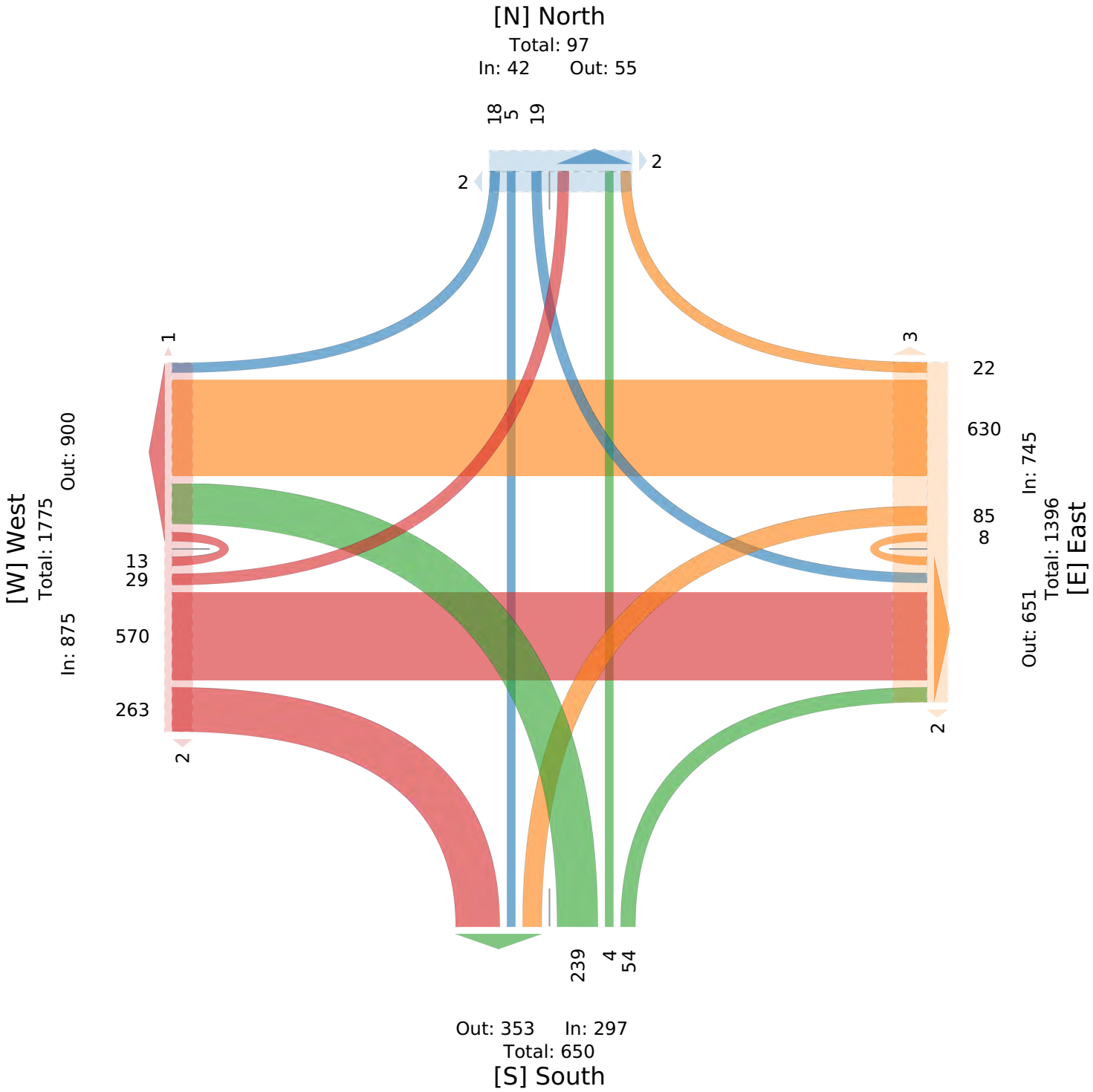
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg	North						East						South						West						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 5:00PM	5	1	8	0	**14**	2	28	134	5	1	**168**	2	67	1	11	0	**79**	0	17	132	64	2	**215**	0	**476**
5:15PM	9	3	4	0	**16**	1	15	174	7	4	**200**	3	57	2	15	0	**74**	0	3	148	54	3	**208**	0	**498**
5:30PM	2	1	3	0	**6**	0	23	160	6	0	**189**	0	51	0	12	0	**63**	0	7	150	70	8	**235**	2	**493**
5:45PM	3	0	3	0	**6**	1	19	162	4	3	**188**	0	64	1	16	0	**81**	0	2	140	75	0	**217**	1	**492**
Total	19	5	18	0	**42**	4	85	630	22	8	**745**	5	239	4	54	0	**297**	0	29	570	263	13	**875**	3	**1959**
% Approach	45.2%	11.9%	42.9%	0%	**-**	-	11.4%	84.6%	3.0%	1.1%	**-**	-	80.5%	1.3%	18.2%	0%	**-**	-	3.3%	65.1%	30.1%	1.5%	**-**	-	**-**
% Total	1.0%	0.3%	0.9%	0%	**2.1%**	-	4.3%	32.2%	1.1%	0.4%	**38.0%**	-	12.2%	0.2%	2.8%	0%	**15.2%**	-	1.5%	29.1%	13.4%	0.7%	**44.7%**	-	**-**
PHF	0.528	0.417	0.563	-	**0.656**	-	0.759	0.905	0.786	0.500	**0.931**	-	0.892	0.500	0.844	-	**0.917**	-	0.426	0.950	0.877	0.406	**0.931**	-	0.983
Lights	19	5	18	0	**42**	-	85	629	22	8	**744**	-	236	4	54	0	**294**	-	29	567	263	13	**872**	-	1952
% Lights	100%	100%	100%	0%	**100%**	-	100%	99.8%	100%	100%	**99.9%**	-	98.7%	100%	100%	0%	**99.0%**	-	100%	99.5%	100%	100%	**99.7%**	-	99.6%
Articulated Trucks	0	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%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	0	1	0	0	**1**	-	3	0	0	0	**3**	-	0	3	0	0	**3**	-	7
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.1%**	-	1.3%	0%	0%	0%	**1.0%**	-	0%	0.5%	0%	0%	**0.3%**	-	0.4%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	5	-	-	-	-	-	0	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	66.7%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	33.3%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Bristol Creek Drive (... - TMC
Tue Aug 29, 2023
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099517, Location: 35.809592, -78.822769

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Park West Village Sho... - TMC

Tue Aug 29, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099516, Location: 35.809598, -78.820133

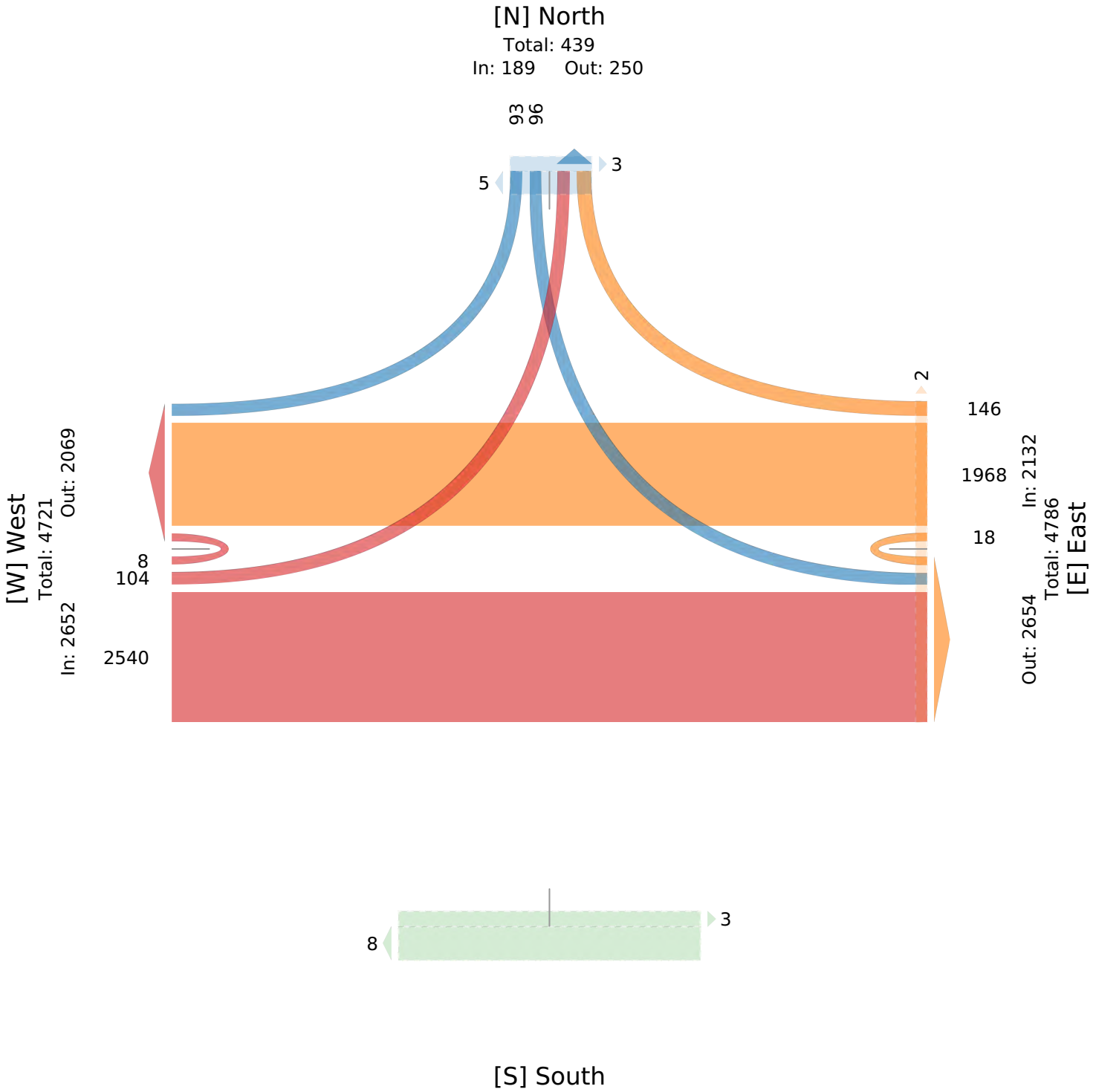
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 7:00AM	3	0	0	0	**3**	0	0	55	3	2	**60**	0	0	0	0	0	**0**	1	1	124	0	1	**126**	0	**189**
7:15AM	0	0	1	0	**1**	0	0	74	4	1	**79**	0	0	0	0	0	**0**	1	2	152	0	3	**157**	0	**237**
7:30AM	8	0	4	0	**12**	0	0	92	4	1	**97**	0	0	0	0	0	**0**	1	2	158	0	0	**160**	0	**269**
7:45AM	6	0	2	0	**8**	1	0	90	9	2	**101**	0	0	0	0	0	**0**	1	3	184	0	0	**187**	0	**296**
Hourly Total	17	0	7	0	**24**	1	0	311	20	6	**337**	0	0	0	0	0	**0**	4	8	618	0	4	**630**	0	**991**
8:00AM	4	0	2	0	**6**	1	0	88	5	0	**93**	0	0	0	0	0	**0**	1	4	192	0	0	**196**	0	**295**
8:15AM	2	0	1	0	**3**	0	0	77	1	0	**78**	0	0	0	0	0	**0**	1	2	209	0	0	**211**	0	**292**
8:30AM	4	0	3	0	**7**	1	0	88	1	2	**91**	0	0	0	0	0	**0**	0	4	182	0	0	**186**	0	**284**
8:45AM	3	0	1	0	**4**	0	0	114	7	0	**121**	0	0	0	0	0	**0**	2	0	197	0	0	**197**	0	**322**
Hourly Total	13	0	7	0	**20**	2	0	367	14	2	**383**	0	0	0	0	0	**0**	4	10	780	0	0	**790**	0	**1193**
4:00PM	7	0	7	0	**14**	0	0	164	11	3	**178**	0	0	0	0	0	**0**	0	10	127	0	0	**137**	0	**329**
4:15PM	8	0	12	0	**20**	0	0	129	6	2	**137**	0	0	0	0	0	**0**	0	10	124	0	0	**134**	0	**291**
4:30PM	9	0	6	0	**15**	0	0	133	12	3	**148**	0	0	0	0	0	**0**	0	10	140	0	1	**151**	0	**314**
4:45PM	6	0	4	0	**10**	2	0	179	9	1	**189**	0	0	0	0	0	**0**	0	5	126	0	0	**131**	0	**330**
Hourly Total	30	0	29	0	**59**	2	0	605	38	9	**652**	0	0	0	0	0	**0**	0	35	517	0	1	**553**	0	**1264**
5:00PM	10	0	4	0	**14**	0	0	154	15	0	**169**	0	0	0	0	0	**0**	2	8	141	0	2	**151**	0	**334**
5:15PM	12	0	5	0	**17**	0	0	202	9	0	**211**	0	0	0	0	0	**0**	0	10	174	0	0	**184**	0	**412**
5:30PM	5	0	9	0	**14**	1	0	173	25	1	**199**	0	0	0	0	0	**0**	1	16	154	0	1	**171**	0	**384**
5:45PM	9	0	32	0	**41**	2	0	156	25	0	**181**	2	0	0	0	0	**0**	0	17	156	0	0	**173**	0	**395**
Hourly Total	36	0	50	0	**86**	3	0	685	74	1	**760**	2	0	0	0	0	**0**	3	51	625	0	3	**679**	0	**1525**
Total	96	0	93	0	**189**	8	0	1968	146	18	**2132**	2	0	0	0	0	**0**	11	104	2540	0	8	**2652**	0	**4973**
% Approach	50.8%	0%	49.2%	0%	**-**	-	0%	92.3%	6.8%	0.8%	**-**	-	0%	0%	0%	0%	**-**	-	3.9%	95.8%	0%	0.3%	**-**	-	**-**
% Total	1.9%	0%	1.9%	0%	**3.8%**	-	0%	39.6%	2.9%	0.4%	**42.9%**	-	0%	0%	0%	0%	**0%**	-	2.1%	51.1%	0%	0.2%	**53.3%**	-	**-**
Lights	94	0	93	0	**187**	-	0	1926	143	18	**2087**	-	0	0	0	0	**0**	-	102	2490	0	8	**2600**	-	4874
% Lights	97.9%	0%	100%	0%	**98.9%**	-	0%	97.9%	97.9%	100%	**97.9%**	-	0%	0%	0%	0%	**-**	-	98.1%	98.0%	0%	100%	**98.0%**	-	98.0%
Articulated Trucks	0	0	0	0	**0**	-	0	4	1	0	**5**	-	0	0	0	0	**0**	-	0	5	0	0	**5**	-	10
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0.2%	0.7%	0%	**0.2%**	-	0%	0%	0%	0%	**-**	-	0%	0.2%	0%	0%	**0.2%**	-	0.2%
Buses and Single-Unit Trucks	2	0	0	0	**2**	-	0	36	2	0	**38**	-	0	0	0	0	**0**	-	2	44	0	0	**46**	-	86
% Buses and Single-Unit Trucks	2.1%	0%	0%	0%	**1.1%**	-	0%	1.8%	1.4%	0%	**1.8%**	-	0%	0%	0%	0%	**-**	-	1.9%	1.7%	0%	0%	**1.7%**	-	1.7%
Bicycles on Road	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	3
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0.1%
Pedestrians	-	-	-	-	-	8	-	-	-	-	-	2	-	-	-	-	-	11	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Park West Village Sho... - TMC
Tue Aug 29, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099516, Location: 35.809598, -78.820133

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Park West Village Sho... - TMC

Tue Aug 29, 2023
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099516, Location: 35.809598, -78.820133

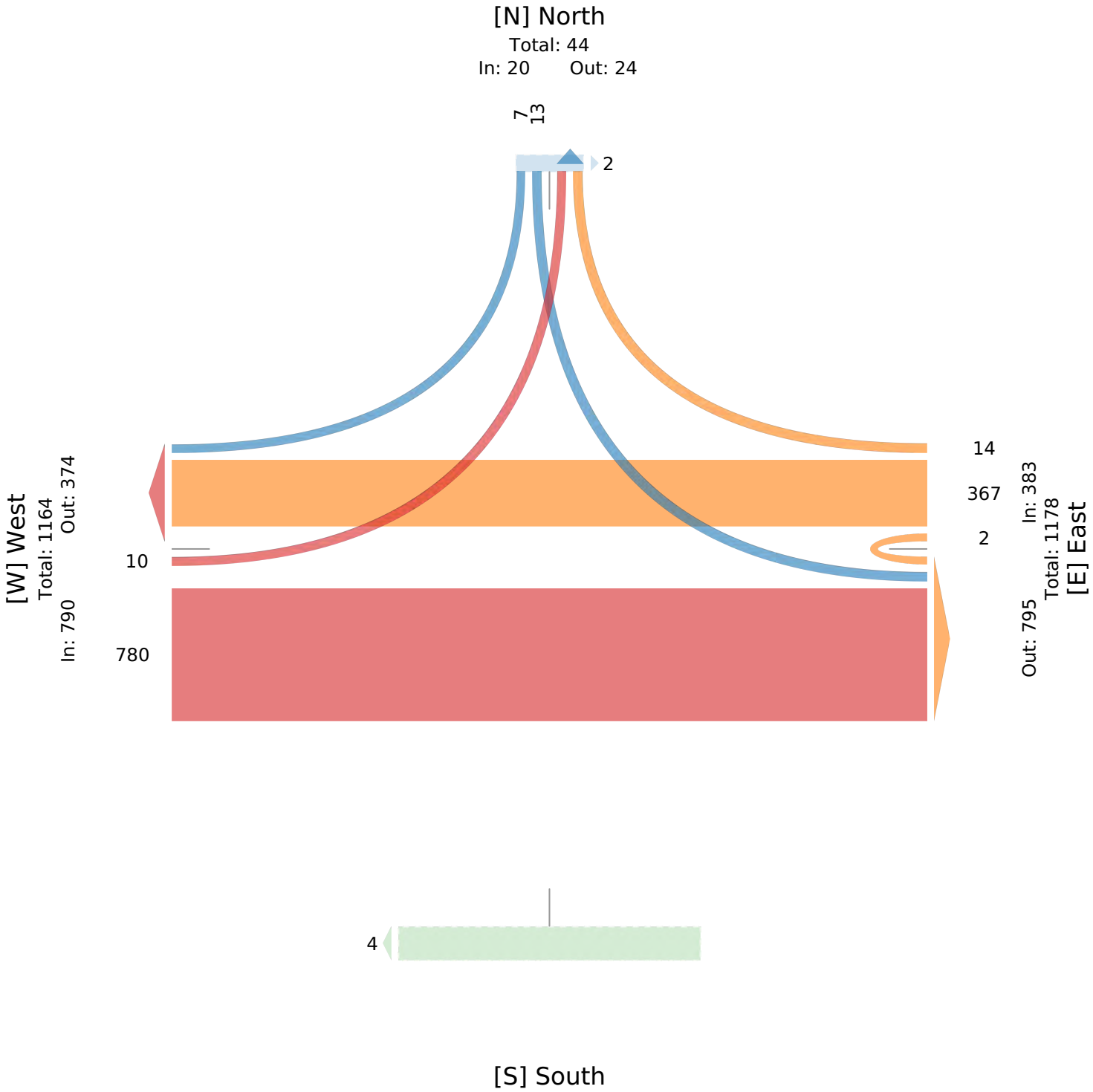
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 8:00AM	4	0	2	0	**6**	1	0	88	5	0	**93**	0	0	0	0	0	**0**	1	4	192	0	0	**196**	0	**295**
8:15AM	2	0	1	0	**3**	0	0	77	1	0	**78**	0	0	0	0	0	**0**	1	2	209	0	0	**211**	0	**292**
8:30AM	4	0	3	0	**7**	1	0	88	1	2	**91**	0	0	0	0	0	**0**	0	4	182	0	0	**186**	0	**284**
8:45AM	3	0	1	0	**4**	0	0	114	7	0	**121**	0	0	0	0	0	**0**	2	0	197	0	0	**197**	0	**322**
Total	13	0	7	0	**20**	2	0	367	14	2	**383**	0	0	0	0	0	**0**	4	10	780	0	0	**790**	0	**1193**
% Approach	65.0%	0%	35.0%	0%	**-**	-	0%	95.8%	3.7%	0.5%	**-**	-	0%	0%	0%	0%	**-**	-	1.3%	98.7%	0%	0%	**-**	-	-
% Total	1.1%	0%	0.6%	0%	**1.7%**	-	0%	30.8%	1.2%	0.2%	**32.1%**	-	0%	0%	0%	0%	**0%**	-	0.8%	65.4%	0%	0%	**66.2%**	-	-
PHF	0.813	-	0.583	-	**0.714**	-	-	0.803	0.500	0.250	**0.789**	-	-	-	-	-	**-**	-	0.625	0.933	-	-	**0.936**	-	0.925
Lights	12	0	7	0	**19**	-	0	351	13	2	**366**	-	0	0	0	0	**0**	-	10	765	0	0	**775**	-	1160
% Lights	92.3%	0%	100%	0%	**95.0%**	-	0%	95.6%	92.9%	100%	**95.6%**	-	0%	0%	0%	0%	**-**	-	100%	98.1%	0%	0%	**98.1%**	-	97.2%
Articulated Trucks	0	0	0	0	**0**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	3
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	7.1%	0%	**0.3%**	-	0%	0%	0%	0%	**-**	-	0%	0.3%	0%	0%	**0.3%**	-	0.3%
Buses and Single-Unit Trucks	1	0	0	0	**1**	-	0	15	0	0	**15**	-	0	0	0	0	**0**	-	0	13	0	0	**13**	-	29
% Buses and Single-Unit Trucks	7.7%	0%	0%	0%	**5.0%**	-	0%	4.1%	0%	0%	**3.9%**	-	0%	0%	0%	0%	**-**	-	0%	1.7%	0%	0%	**1.6%**	-	2.4%
Bicycles on Road	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0.1%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	4	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Park West Village Sho... - TMC
Tue Aug 29, 2023
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099516, Location: 35.809598, -78.820133

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Park West Village Sho... - TMC

Tue Aug 29, 2023
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099516, Location: 35.809598, -78.820133

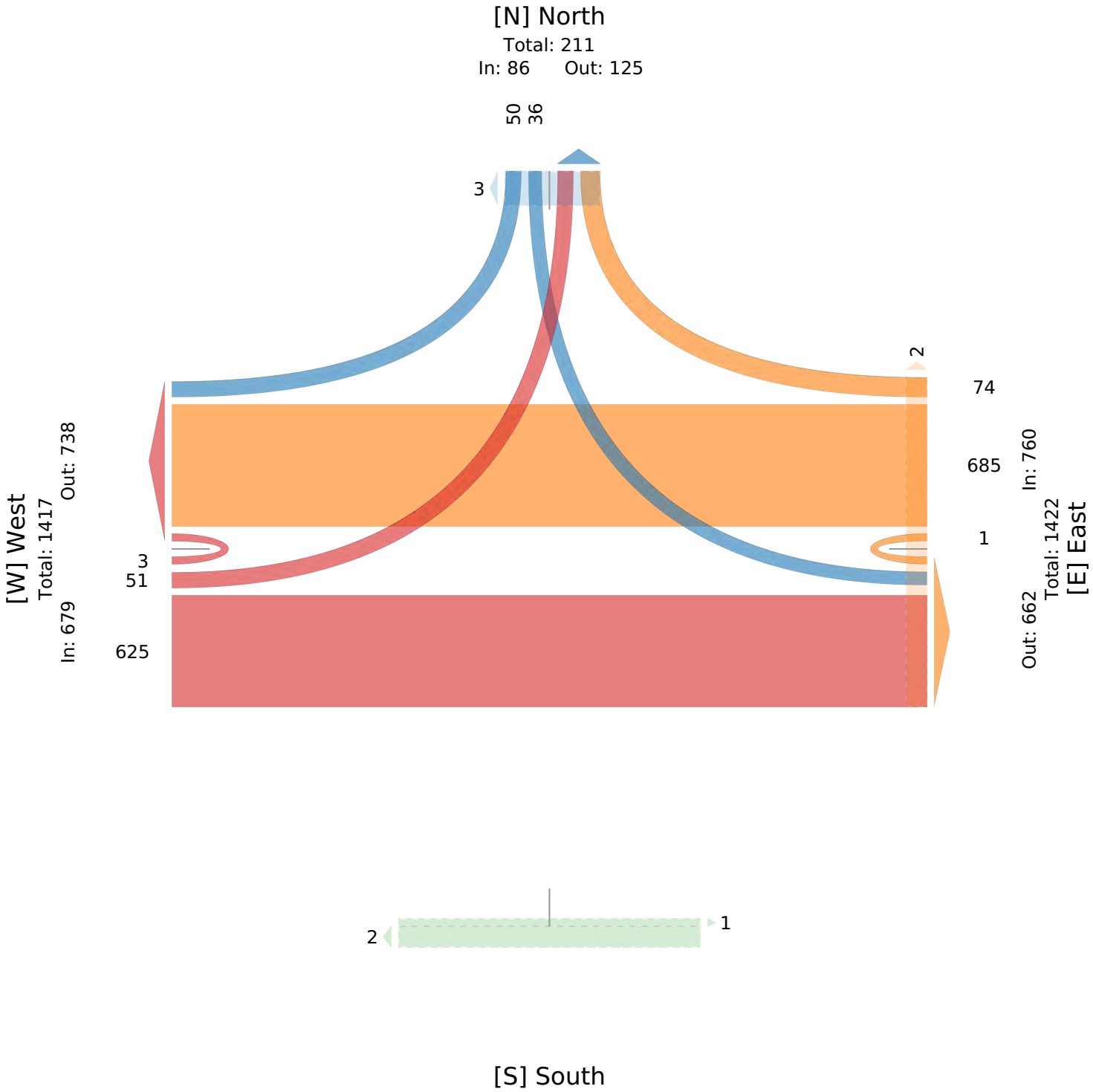
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 5:00PM	10	0	4	0	**14**	0	0	154	15	0	**169**	0	0	0	0	0	**0**	2	8	141	0	2	**151**	0	**334**
5:15PM	12	0	5	0	**17**	0	0	202	9	0	**211**	0	0	0	0	0	**0**	0	10	174	0	0	**184**	0	**412**
5:30PM	5	0	9	0	**14**	1	0	173	25	1	**199**	0	0	0	0	0	**0**	1	16	154	0	1	**171**	0	**384**
5:45PM	9	0	32	0	**41**	2	0	156	25	0	**181**	2	0	0	0	0	**0**	0	17	156	0	0	**173**	0	**395**
Total	36	0	50	0	**86**	3	0	685	74	1	**760**	2	0	0	0	0	**0**	3	51	625	0	3	**679**	0	**1525**
% Approach	41.9%	0%	58.1%	0%	**-**	-	0%	90.1%	9.7%	0.1%	**-**	-	0%	0%	0%	0%	**-**	-	7.5%	92.0%	0%	0.4%	**-**	-	-
% Total	2.4%	0%	3.3%	0%	**5.6%**	-	0%	44.9%	4.9%	0.1%	**49.8%**	-	0%	0%	0%	0%	**0%**	-	3.3%	41.0%	0%	0.2%	**44.5%**	-	-
PHF	0.750	-	0.391	-	**0.524**	-	-	0.848	0.740	0.250	**0.900**	-	-	-	-	-	**-**	-	0.750	0.898	-	0.375	**0.923**	-	0.925
Lights	36	0	50	0	**86**	-	0	684	73	1	**758**	-	0	0	0	0	**0**	-	51	621	0	3	**675**	-	1519
% Lights	100%	0%	100%	0%	**100%**	-	0%	99.9%	98.6%	100%	**99.7%**	-	0%	0%	0%	0%	**-**	-	100%	99.4%	0%	100%	**99.4%**	-	99.6%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	1
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%	0.2%	0%	0%	**0.1%**	-	0.1%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	0	1	1	0	**2**	-	0	0	0	0	**0**	-	0	3	0	0	**3**	-	5
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	0.1%	1.4%	0%	**0.3%**	-	0%	0%	0%	0%	**-**	-	0%	0.5%	0%	0%	**0.4%**	-	0.3%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	2	-	-	-	-	-	3	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Park West Village Sho... - TMC
Tue Aug 29, 2023
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099516, Location: 35.809598, -78.820133

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Park West Village Sho... - TMC

Tue Aug 29, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099515, Location: 35.809805, -78.818285

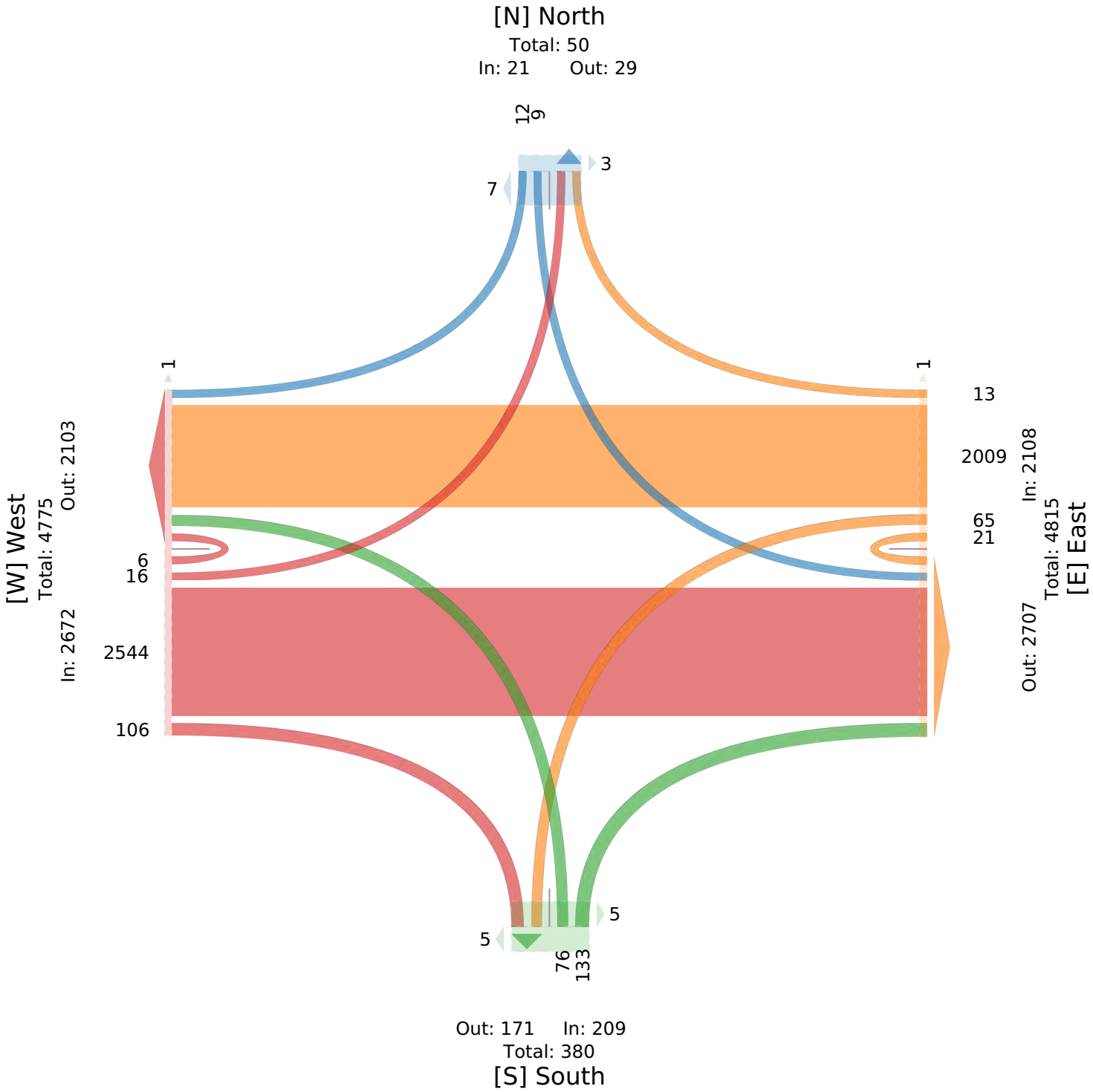
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg	North						East						South						West						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 7:00AM	0	0	0	0	**0**	0	2	65	0	0	**67**	0	0	0	2	0	**2**	1	1	127	1	0	**129**	1	**198**
7:15AM	0	0	0	0	**0**	0	0	77	0	0	**77**	0	0	0	1	0	**1**	1	0	150	3	0	**153**	0	**231**
7:30AM	0	0	0	0	**0**	0	1	95	0	0	**96**	0	1	0	2	0	**3**	0	0	166	0	1	**167**	0	**266**
7:45AM	0	0	0	0	**0**	4	0	100	0	0	**100**	1	0	0	0	0	**0**	0	1	185	1	2	**189**	0	**289**
Hourly Total	0	0	0	0	**0**	4	3	337	0	0	**340**	1	1	0	5	0	**6**	2	2	628	5	3	**638**	1	**984**
8:00AM	0	0	0	0	**0**	0	2	89	1	1	**93**	0	0	0	2	0	**2**	1	1	195	2	0	**198**	0	**293**
8:15AM	1	0	0	0	**1**	0	2	80	1	0	**83**	0	2	0	3	0	**5**	0	1	209	1	0	**211**	0	**300**
8:30AM	1	0	0	0	**1**	0	3	84	3	0	**90**	0	0	0	1	0	**1**	3	0	188	1	0	**189**	0	**281**
8:45AM	2	0	0	0	**2**	0	1	122	2	1	**126**	0	0	0	4	0	**4**	1	1	191	6	0	**198**	0	**330**
Hourly Total	4	0	0	0	**4**	0	8	375	7	2	**392**	0	2	0	10	0	**12**	5	3	783	10	0	**796**	0	**1204**
4:00PM	0	0	1	0	**1**	0	5	169	1	4	**179**	0	8	0	9	0	**17**	0	1	126	10	1	**138**	0	**335**
4:15PM	0	0	2	0	**2**	0	9	128	1	0	**138**	0	7	0	15	0	**22**	0	1	122	12	0	**135**	0	**297**
4:30PM	0	0	1	0	**1**	0	7	130	2	2	**141**	0	14	0	12	0	**26**	0	2	137	11	0	**150**	0	**318**
4:45PM	0	0	0	0	**0**	2	5	179	1	2	**187**	0	10	0	11	0	**21**	0	2	132	8	1	**143**	0	**351**
Hourly Total	0	0	4	0	**4**	2	26	606	5	8	**645**	0	39	0	47	0	**86**	0	6	517	41	2	**566**	0	**1301**
5:00PM	1	0	3	0	**4**	0	12	145	0	1	**158**	0	8	0	22	0	**30**	1	2	140	10	0	**152**	0	**344**
5:15PM	3	0	0	0	**3**	0	3	196	0	6	**205**	0	8	0	19	0	**27**	1	0	175	11	0	**186**	0	**421**
5:30PM	1	0	3	0	**4**	2	6	185	1	0	**192**	0	10	0	13	0	**23**	1	1	150	14	1	**166**	0	**385**
5:45PM	0	0	2	0	**2**	2	7	165	0	4	**176**	0	8	0	17	0	**25**	0	2	151	15	0	**168**	0	**371**
Hourly Total	5	0	8	0	**13**	4	28	691	1	11	**731**	0	34	0	71	0	**105**	3	5	616	50	1	**672**	0	**1521**
Total	9	0	12	0	**21**	10	65	2009	13	21	**2108**	1	76	0	133	0	**209**	10	16	2544	106	6	**2672**	1	**5010**
% Approach	42.9%	0%	57.1%	0%	**-**	-	3.1%	95.3%	0.6%	1.0%	**-**	-	36.4%	0%	63.6%	0%	**-**	-	0.6%	95.2%	4.0%	0.2%	**-**	-	-
% Total	0.2%	0%	0.2%	0%	**0.4%**	-	1.3%	40.1%	0.3%	0.4%	**42.1%**	-	1.5%	0%	2.7%	0%	**4.2%**	-	0.3%	50.8%	2.1%	0.1%	**53.3%**	-	-
Lights	8	0	12	0	**20**	-	64	1969	13	21	**2067**	-	76	0	132	0	**208**	-	15	2495	105	6	**2621**	-	4916
% Lights	88.9%	0%	100%	0%	**95.2%**	-	98.5%	98.0%	100%	100%	**98.1%**	-	100%	0%	99.2%	0%	**99.5%**	-	93.8%	98.1%	99.1%	100%	**98.1%**	-	98.1%
Articulated Trucks	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	4	1	0	**5**	-	7
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0.9%	0%	**0.2%**	-	0.1%
Buses and Single-Unit Trucks	1	0	0	0	**1**	-	1	37	0	0	**38**	-	0	0	1	0	**1**	-	1	44	0	0	**45**	-	85
% Buses and Single-Unit Trucks	11.1%	0%	0%	0%	**4.8%**	-	1.5%	1.8%	0%	0%	**1.8%**	-	0%	0%	0.8%	0%	**0.5%**	-	6.3%	1.7%	0%	0%	**1.7%**	-	1.7%
Bicycles on Road	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	2
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	10	-	-	-	-	-	1	-	-	-	-	-	10	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Park West Village Sho... - TMC
Tue Aug 29, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099515, Location: 35.809805, -78.818285

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Park West Village Sho... - TMC

Tue Aug 29, 2023
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099515, Location: 35.809805, -78.818285

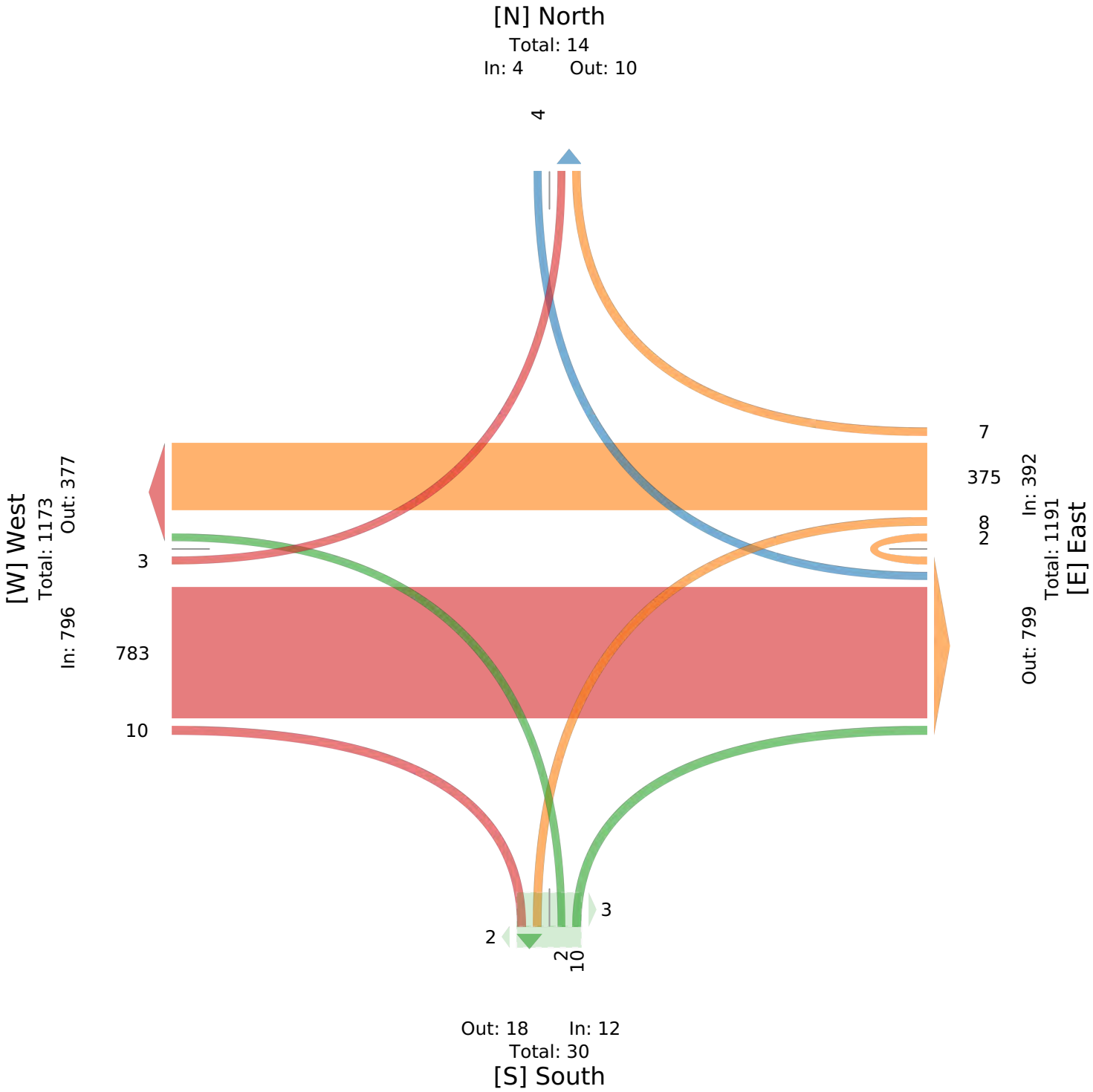
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg	North						East						South						West						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 8:00AM	0	0	0	0	**0**	0	2	89	1	1	**93**	0	0	0	2	0	**2**	1	1	195	2	0	**198**	0	**293**
8:15AM	1	0	0	0	**1**	0	2	80	1	0	**83**	0	2	0	3	0	**5**	0	1	209	1	0	**211**	0	**300**
8:30AM	1	0	0	0	**1**	0	3	84	3	0	**90**	0	0	0	1	0	**1**	3	0	188	1	0	**189**	0	**281**
8:45AM	2	0	0	0	**2**	0	1	122	2	1	**126**	0	0	0	4	0	**4**	1	1	191	6	0	**198**	0	**330**
Total	4	0	0	0	**4**	0	8	375	7	2	**392**	0	2	0	10	0	**12**	5	3	783	10	0	**796**	0	**1204**
% Approach	100%	0%	0%	0%	**-**	-	2.0%	95.7%	1.8%	0.5%	**-**	-	16.7%	0%	83.3%	0%	**-**	-	0.4%	98.4%	1.3%	0%	**-**	-	-
% Total	0.3%	0%	0%	0%	**0.3%**	-	0.7%	31.1%	0.6%	0.2%	**32.6%**	-	0.2%	0%	0.8%	0%	**1.0%**	-	0.2%	65.0%	0.8%	0%	**66.1%**	-	-
PHF	0.500	-	-	-	**0.500**	-	0.667	0.766	0.583	0.500	**0.776**	-	0.250	-	0.625	-	**0.600**	-	0.750	0.937	0.417	-	**0.943**	-	0.911
Lights	3	0	0	0	**3**	-	8	359	7	2	**376**	-	2	0	10	0	**12**	-	3	768	9	0	**780**	-	1171
% Lights	75.0%	0%	0%	0%	**75.0%**	-	100%	95.7%	100%	100%	**95.9%**	-	100%	0%	100%	0%	**100%**	-	100%	98.1%	90.0%	0%	**98.0%**	-	97.3%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	1	0	**2**	-	2
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	10.0%	0%	**0.3%**	-	0.2%
Buses and Single-Unit Trucks	1	0	0	0	**1**	-	0	15	0	0	**15**	-	0	0	0	0	**0**	-	0	14	0	0	**14**	-	30
% Buses and Single-Unit Trucks	25.0%	0%	0%	0%	**25.0%**	-	0%	4.0%	0%	0%	**3.8%**	-	0%	0%	0%	0%	**0%**	-	0%	1.8%	0%	0%	**1.8%**	-	2.5%
Bicycles on Road	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	5	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Park West Village Sho... - TMC
Tue Aug 29, 2023
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099515, Location: 35.809805, -78.818285

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at Park West Village Sho... - TMC

Tue Aug 29, 2023
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099515, Location: 35.809805, -78.818285

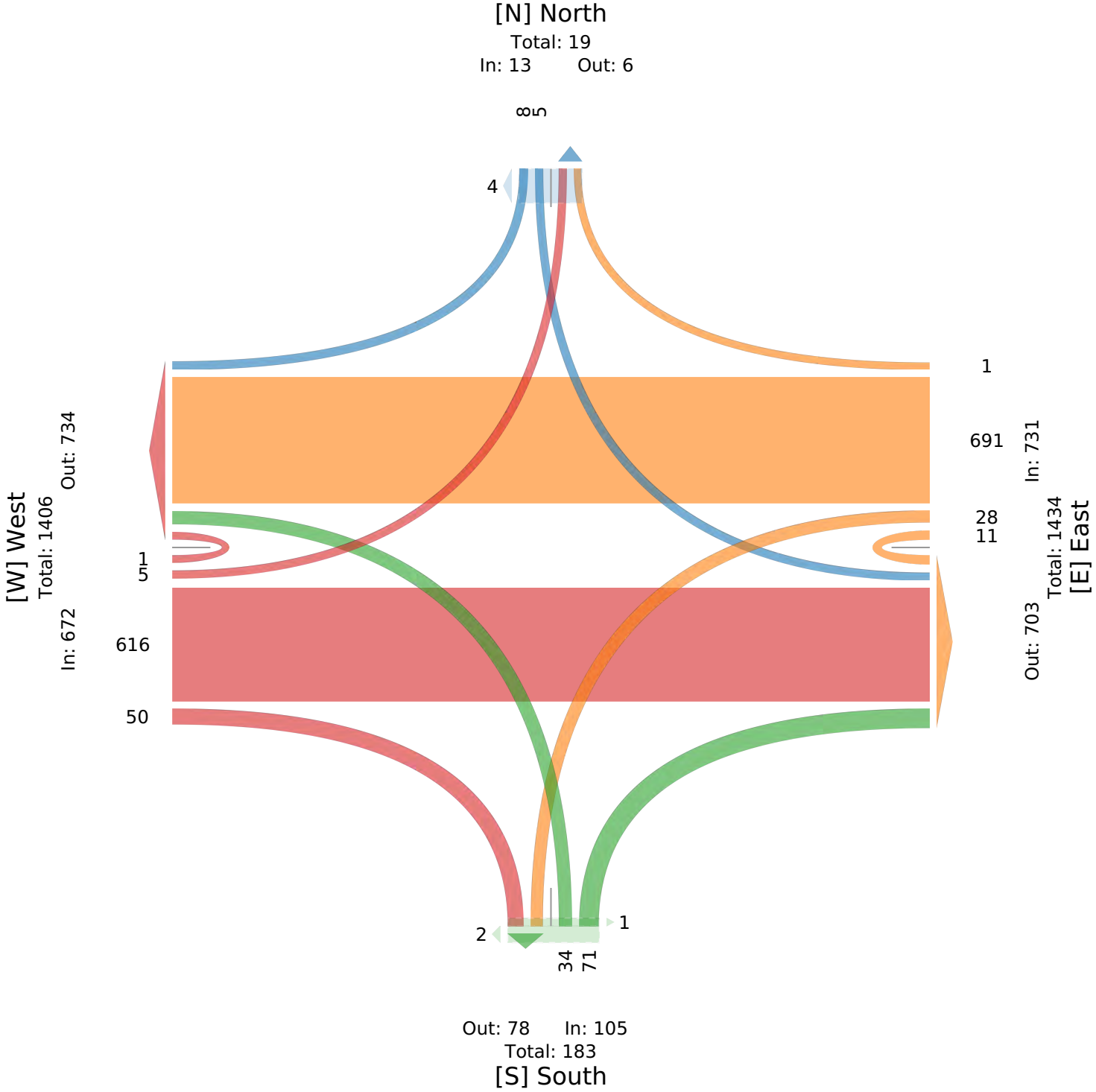
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg	North						East						South						West						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 5:00PM	1	0	3	0	**4**	0	12	145	0	1	**158**	0	8	0	22	0	**30**	1	2	140	10	0	**152**	0	**344**
5:15PM	3	0	0	0	**3**	0	3	196	0	6	**205**	0	8	0	19	0	**27**	1	0	175	11	0	**186**	0	**421**
5:30PM	1	0	3	0	**4**	2	6	185	1	0	**192**	0	10	0	13	0	**23**	1	1	150	14	1	**166**	0	**385**
5:45PM	0	0	2	0	**2**	2	7	165	0	4	**176**	0	8	0	17	0	**25**	0	2	151	15	0	**168**	0	**371**
Total	5	0	8	0	**13**	4	28	691	1	11	**731**	0	34	0	71	0	**105**	3	5	616	50	1	**672**	0	**1521**
% Approach	38.5%	0%	61.5%	0%	**-**	-	3.8%	94.5%	0.1%	1.5%	**-**	-	32.4%	0%	67.6%	0%	**-**	-	0.7%	91.7%	7.4%	0.1%	**-**	-	-
% Total	0.3%	0%	0.5%	0%	**0.9%**	-	1.8%	45.4%	0.1%	0.7%	**48.1%**	-	2.2%	0%	4.7%	0%	**6.9%**	-	0.3%	40.5%	3.3%	0.1%	**44.2%**	-	-
PHF	0.417	-	0.667	-	**0.813**	-	0.583	0.881	0.250	0.458	**0.891**	-	0.850	-	0.807	-	**0.875**	-	0.625	0.880	0.833	0.250	**0.903**	-	0.903
Lights	5	0	8	0	**13**	-	28	691	1	11	**731**	-	34	0	71	0	**105**	-	5	612	50	1	**668**	-	1517
% Lights	100%	0%	100%	0%	**100%**	-	100%	100%	100%	100%	**100%**	-	100%	0%	100%	0%	**100%**	-	100%	99.4%	100%	100%	**99.4%**	-	99.7%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	1
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.1%**	-	0.1%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	3	0	0	**3**	-	3
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.5%	0%	0%	**0.4%**	-	0.2%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at Park West Village Sho... - TMC
Tue Aug 29, 2023
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099515, Location: 35.809805, -78.818285

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at NC 54 (signalized) - TMC

Tue Aug 29, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099514, Location: 35.810178, -78.816478

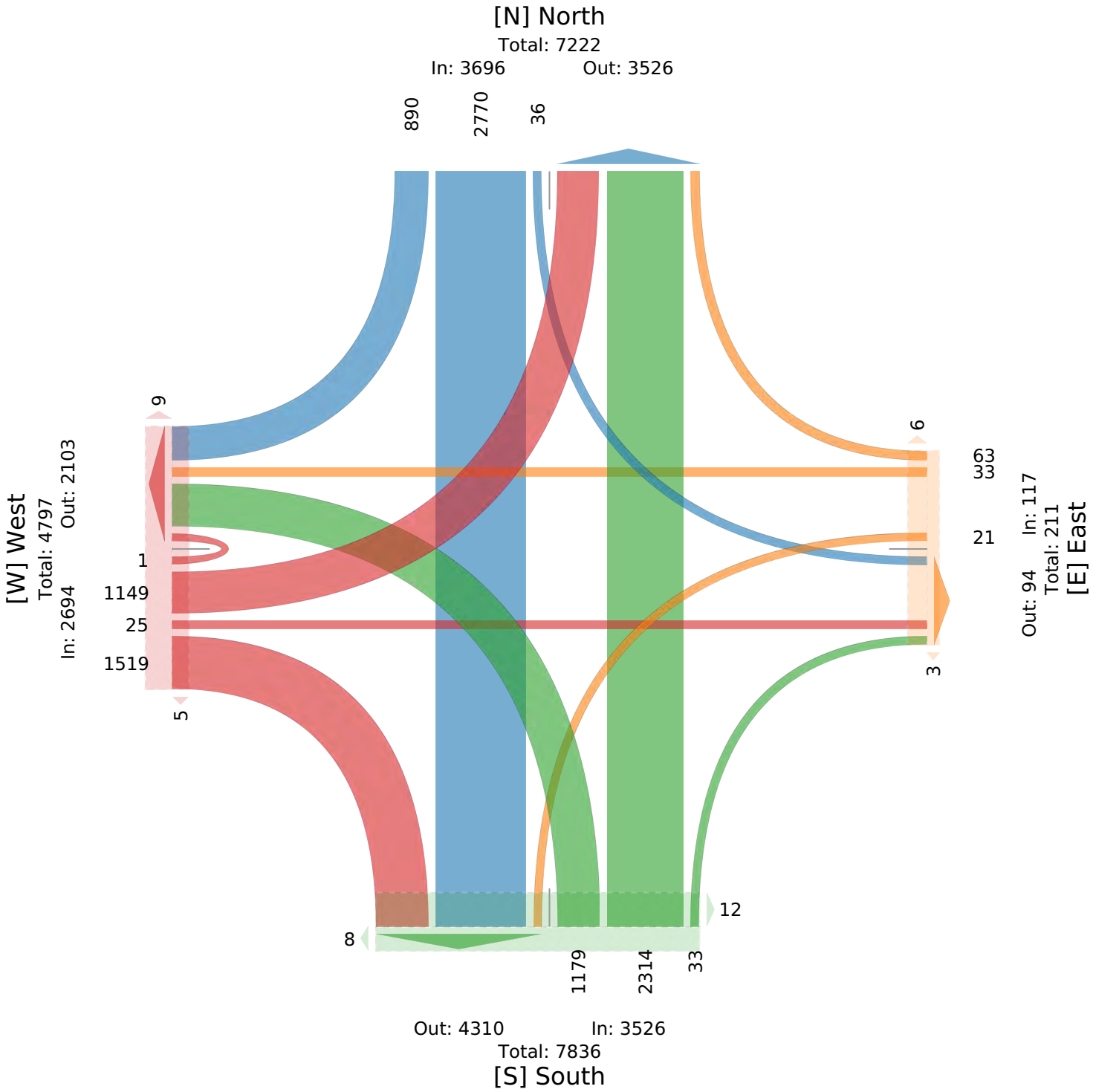
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg	North						East						South						West						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2023-08-29 7:00AM	1	118	18	0	**137**	0	0	2	0	0	**2**	0	47	77	0	0	**124**	0	34	0	94	0	**128**	0	**391**
7:15AM	0	112	21	0	**133**	0	2	0	2	0	**4**	1	59	95	1	0	**155**	0	66	1	87	0	**154**	0	**446**
7:30AM	0	106	19	0	**125**	0	3	1	7	0	**11**	1	69	127	1	0	**197**	2	80	0	91	0	**171**	2	**504**
7:45AM	1	127	36	0	**164**	0	0	0	3	0	**3**	2	68	141	0	0	**209**	0	85	0	100	0	**185**	0	**561**
Hourly Total	2	463	94	0	**559**	0	5	3	12	0	**20**	4	243	440	2	0	**685**	2	265	1	372	0	**638**	2	**1902**
8:00AM	0	123	29	0	**152**	0	2	0	4	0	**6**	0	63	144	1	0	**208**	0	94	2	95	0	**191**	1	**557**
8:15AM	0	117	20	0	**137**	0	0	1	2	0	**3**	0	63	197	0	0	**260**	0	113	0	107	0	**220**	0	**620**
8:30AM	1	112	33	0	**146**	0	0	3	8	0	**11**	0	54	139	3	0	**196**	1	87	1	94	0	**182**	0	**535**
8:45AM	1	164	37	0	**202**	0	2	5	12	0	**19**	0	85	143	4	0	**232**	3	112	3	83	0	**198**	2	**651**
Hourly Total	2	516	119	0	**637**	0	4	9	26	0	**39**	0	265	623	8	0	**896**	4	406	6	379	0	**791**	3	**2363**
4:00PM	4	174	66	0	**244**	0	1	2	3	0	**6**	0	107	129	3	0	**239**	0	44	5	86	1	**136**	2	**625**
4:15PM	4	173	56	0	**233**	0	1	1	5	0	**7**	2	83	145	1	0	**229**	2	54	3	90	0	**147**	0	**616**
4:30PM	2	213	63	0	**278**	0	1	2	4	0	**7**	0	65	155	0	0	**220**	0	48	1	77	0	**126**	1	**631**
4:45PM	5	193	104	0	**302**	0	0	1	5	0	**6**	0	81	151	4	0	**236**	2	67	1	94	0	**162**	2	**706**
Hourly Total	15	753	289	0	**1057**	0	3	6	17	0	**26**	2	336	580	8	0	**924**	4	213	10	347	1	**571**	5	**2578**
5:00PM	4	235	99	0	**338**	0	3	1	3	0	**7**	0	67	171	2	0	**240**	3	66	0	108	0	**174**	3	**759**
5:15PM	5	279	117	0	**401**	0	2	4	1	0	**7**	0	87	172	4	0	**263**	0	73	2	101	0	**176**	0	**847**
5:30PM	2	267	91	0	**360**	0	1	3	2	0	**6**	0	96	168	3	0	**267**	5	58	4	119	0	**181**	1	**814**
5:45PM	6	257	81	0	**344**	0	3	7	2	0	**12**	3	85	160	6	0	**251**	2	68	2	93	0	**163**	0	**770**
Hourly Total	17	1038	388	0	**1443**	0	9	15	8	0	**32**	3	335	671	15	0	**1021**	10	265	8	421	0	**694**	4	**3190**
Total	36	2770	890	0	**3696**	0	21	33	63	0	**117**	9	1179	2314	33	0	**3526**	20	1149	25	1519	1	**2694**	14	**10033**
% Approach	1.0%	74.9%	24.1%	0%	**-**	-	17.9%	28.2%	53.8%	0%	**-**	-	33.4%	65.6%	0.9%	0%	**-**	-	42.7%	0.9%	56.4%	0%	**-**	-	**-**
% Total	0.4%	27.6%	8.9%	0%	**36.8%**	-	0.2%	0.3%	0.6%	0%	**1.2%**	-	11.8%	23.1%	0.3%	0%	**35.1%**	-	11.5%	0.2%	15.1%	0%	**26.9%**	-	**-**
Lights	35	2688	874	0	**3597**	-	21	32	59	0	**112**	-	1151	2251	33	0	**3435**	-	1131	22	1488	1	**2642**	-	9786
% Lights	97.2%	97.0%	98.2%	0%	**97.3%**	-	100%	97.0%	93.7%	0%	**95.7%**	-	97.6%	97.3%	100%	0%	**97.4%**	-	98.4%	88.0%	98.0%	100%	**98.1%**	-	97.5%
Articulated Trucks	0	9	2	0	**11**	-	0	0	0	0	**0**	-	2	12	0	0	**14**	-	1	0	4	0	**5**	-	30
% Articulated Trucks	0%	0.3%	0.2%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0.2%	0.5%	0%	0%	**0.4%**	-	0.1%	0%	0.3%	0%	**0.2%**	-	0.3%
Buses and Single-Unit Trucks	1	72	13	0	**86**	-	0	1	4	0	**5**	-	26	51	0	0	**77**	-	17	3	27	0	**47**	-	215
% Buses and Single-Unit Trucks	2.8%	2.6%	1.5%	0%	**2.3%**	-	0%	3.0%	6.3%	0%	**4.3%**	-	2.2%	2.2%	0%	0%	**2.2%**	-	1.5%	12.0%	1.8%	0%	**1.7%**	-	2.1%
Bicycles on Road	0	1	1	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Bicycles on Road	0%	0%	0.1%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	9	-	-	-	-	-	20	-	-	-	-	-	14	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at NC 54 (signalized) - TMC
Tue Aug 29, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099514, Location: 35.810178, -78.816478

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



Morrisville Parkway at NC 54 (signalized) - TMC

Tue Aug 29, 2023
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099514, Location: 35.810178, -78.816478

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US

Leg	North						East						South						West						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 8:00AM	0	123	29	0	**152**	0	2	0	4	0	**6**	0	63	144	1	0	**208**	0	94	2	95	0	**191**	1	**557**
8:15AM	0	117	20	0	**137**	0	0	1	2	0	**3**	0	63	197	0	0	**260**	0	113	0	107	0	**220**	0	**620**
8:30AM	1	112	33	0	**146**	0	0	3	8	0	**11**	0	54	139	3	0	**196**	1	87	1	94	0	**182**	0	**535**
8:45AM	1	164	37	0	**202**	0	2	5	12	0	**19**	0	85	143	4	0	**232**	3	112	3	83	0	**198**	2	**651**
Total	2	516	119	0	**637**	0	4	9	26	0	**39**	0	265	623	8	0	**896**	4	406	6	379	0	**791**	3	**2363**
% Approach	0.3%	81.0%	18.7%	0%	**-**	-	10.3%	23.1%	66.7%	0%	**-**	-	29.6%	69.5%	0.9%	0%	**-**	-	51.3%	0.8%	47.9%	0%	**-**	-	-
% Total	0.1%	21.8%	5.0%	0%	**27.0%**	-	0.2%	0.4%	1.1%	0%	**1.7%**	-	11.2%	26.4%	0.3%	0%	**37.9%**	-	17.2%	0.3%	16.0%	0%	**33.5%**	-	-
PHF	0.500	0.785	0.804	-	**0.787**	-	0.500	0.450	0.542	-	**0.513**	-	0.779	0.791	0.500	-	**0.862**	-	0.898	0.500	0.886	-	**0.899**	-	0.907
Lights	1	489	112	0	**602**	-	4	9	25	0	**38**	-	255	609	8	0	**872**	-	401	5	370	0	**776**	-	2288
% Lights	50.0%	94.8%	94.1%	0%	**94.5%**	-	100%	100%	96.2%	0%	**97.4%**	-	96.2%	97.8%	100%	0%	**97.3%**	-	98.8%	83.3%	97.6%	0%	**98.1%**	-	96.8%
Articulated Trucks	0	3	0	0	**3**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	1	0	**1**	-	5
% Articulated Trucks	0%	0.6%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.1%**	-	0%	0%	0.3%	0%	**0.1%**	-	0.2%
Buses and Single-Unit Trucks	1	23	7	0	**31**	-	0	0	1	0	**1**	-	10	13	0	0	**23**	-	5	1	8	0	**14**	-	69
% Buses and Single-Unit Trucks	50.0%	4.5%	5.9%	0%	**4.9%**	-	0%	0%	3.8%	0%	**2.6%**	-	3.8%	2.1%	0%	0%	**2.6%**	-	1.2%	16.7%	2.1%	0%	**1.8%**	-	2.9%
Bicycles on Road	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Bicycles on Road	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	4	-	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at NC 54 (signalized) - TMC
Tue Aug 29, 2023
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099514, Location: 35.810178, -78.816478

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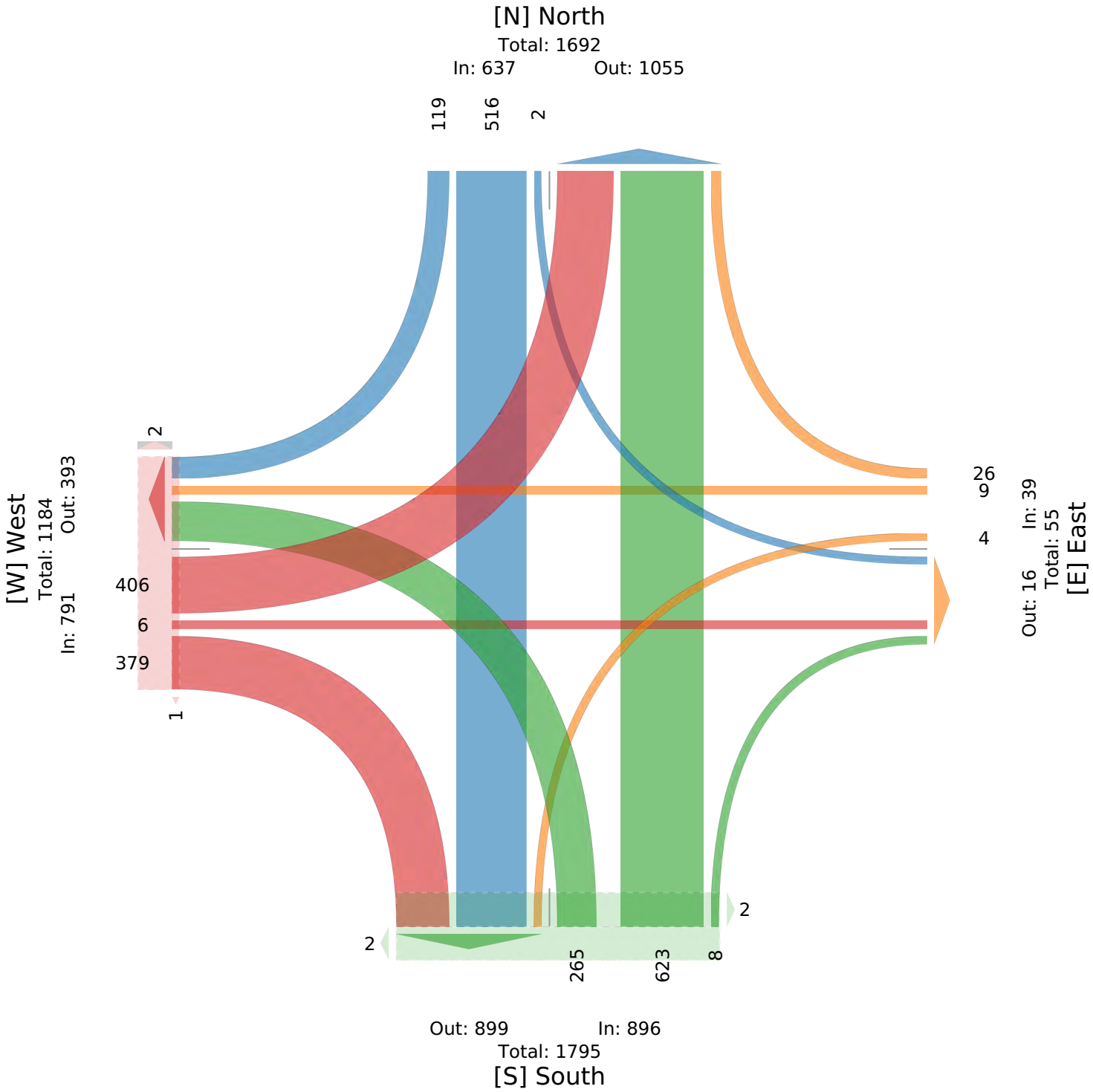


Morrisville Parkway at NC 54 (signalized) - TMC

Tue Aug 29, 2023
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099514, Location: 35.810178, -78.816478

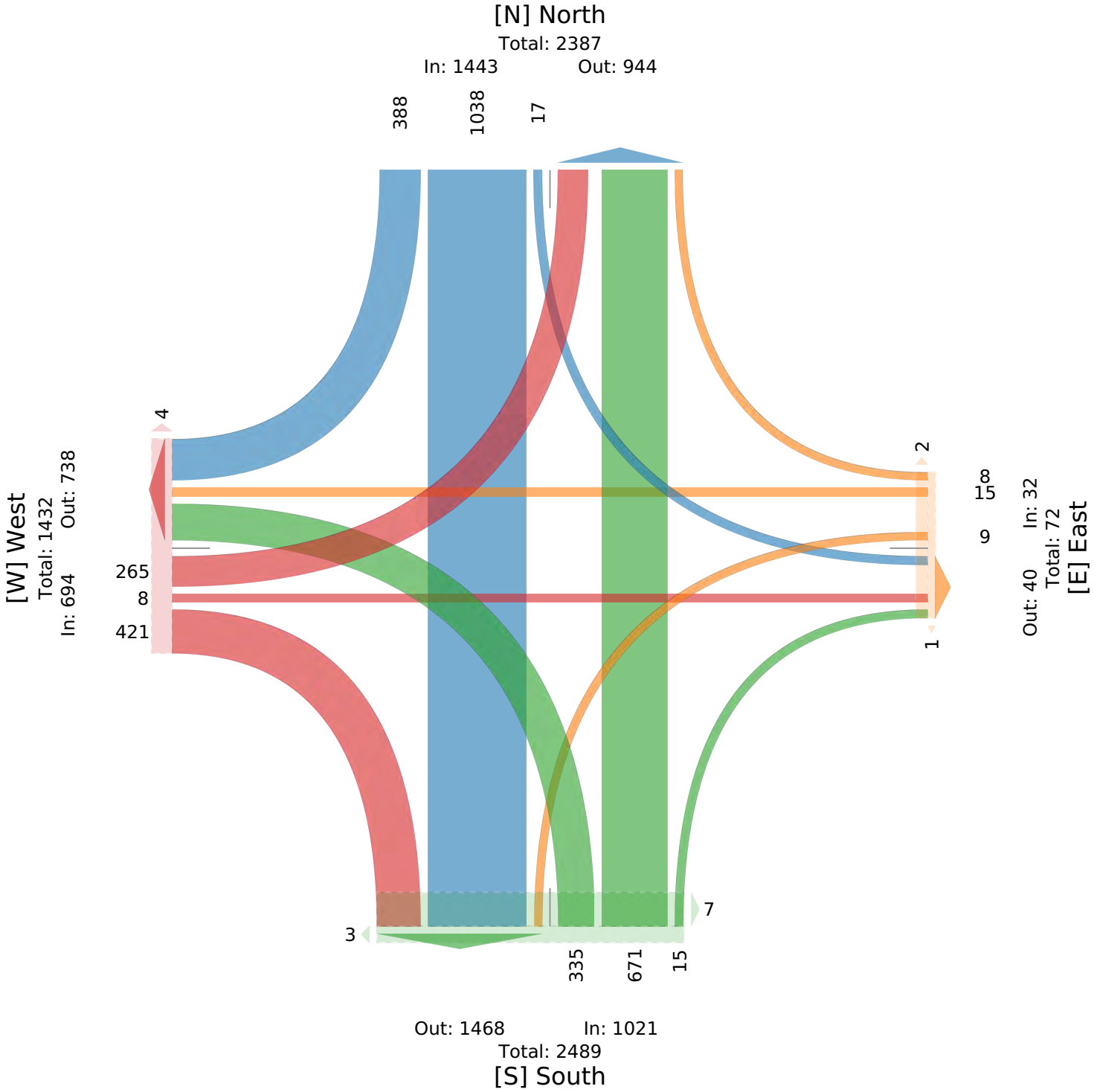
Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center
Two, Orlando, FL, 32801, US

Leg Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-08-29 5:00PM	4	235	99	0	**338**	0	3	1	3	0	**7**	0	67	171	2	0	**240**	3	66	0	108	0	**174**	3	**759**
5:15PM	5	279	117	0	**401**	0	2	4	1	0	**7**	0	87	172	4	0	**263**	0	73	2	101	0	**176**	0	**847**
5:30PM	2	267	91	0	**360**	0	1	3	2	0	**6**	0	96	168	3	0	**267**	5	58	4	119	0	**181**	1	**814**
5:45PM	6	257	81	0	**344**	0	3	7	2	0	**12**	3	85	160	6	0	**251**	2	68	2	93	0	**163**	0	**770**
Total	17	1038	388	0	**1443**	0	9	15	8	0	**32**	3	335	671	15	0	**1021**	10	265	8	421	0	**694**	4	**3190**
% Approach	1.2%	71.9%	26.9%	0%	**-**	-	28.1%	46.9%	25.0%	0%	**-**	-	32.8%	65.7%	1.5%	0%	**-**	-	38.2%	1.2%	60.7%	0%	**-**	-	**-**
% Total	0.5%	32.5%	12.2%	0%	**45.2%**	-	0.3%	0.5%	0.3%	0%	**1.0%**	-	10.5%	21.0%	0.5%	0%	**32.0%**	-	8.3%	0.3%	13.2%	0%	**21.8%**	-	**-**
PHF	0.708	0.930	0.829	-	**0.900**	-	0.750	0.536	0.667	-	**0.667**	-	0.872	0.975	0.625	-	**0.956**	-	0.908	0.500	0.884	-	**0.959**	-	0.942
Lights	17	1022	387	0	**1426**	-	9	15	8	0	**32**	-	334	664	15	0	**1013**	-	264	8	418	0	**690**	-	3161
% Lights	100%	98.5%	99.7%	0%	**98.8%**	-	100%	100%	100%	0%	**100%**	-	99.7%	99.0%	100%	0%	**99.2%**	-	99.6%	100%	99.3%	0%	**99.4%**	-	99.1%
Articulated Trucks	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	2
% Articulated Trucks	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0.2%	0%	**0.1%**	-	0.1%
Buses and Single-Unit Trucks	0	15	1	0	**16**	-	0	0	0	0	**0**	-	1	7	0	0	**8**	-	1	0	2	0	**3**	-	27
% Buses and Single-Unit Trucks	0%	1.4%	0.3%	0%	**1.1%**	-	0%	0%	0%	0%	**0%**	-	0.3%	1.0%	0%	0%	**0.8%**	-	0.4%	0%	0.5%	0%	**0.4%**	-	0.8%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	10	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Morrisville Parkway at NC 54 (signalized) - TMC
Tue Aug 29, 2023
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1099514, Location: 35.810178, -78.816478

Provided by: Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300, Landmark Center Two, Orlando, FL, 32801, US



APPENDIX B:

Signal Plans

DocuSign Envelope ID: 1DACDB31-5FB0-4FCC-87E6-584316DD089B

PROJECT REFERENCE NO.	SHEET NO.
FR 1038	Sig. 1.0

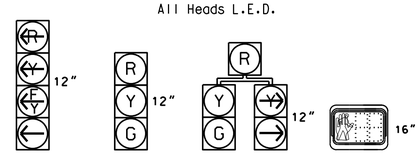
EMERGENCY VEHICLE PREEMPTION

FUNCTION	EVP 3	EVP 4	EVP 5	EVP 6
DELAY BEFORE PREEMPT	0	0	0	0
PMT OVERRIDE	OFF	OFF	OFF	OFF
PED CLEAR THROUGH YELLOW	Y	Y	Y	Y
TERMINATE PHASES	N	N	N	N
ENTRANCE WALK	1	1	1	1
ENTRANCE PED CLEAR	13	13	13	13
ENTRANCE MIN GREEN	1	1	1	1
ENTRANCE YELLOW CLEAR	25.5*	25.5*	25.5*	25.5*
ENTRANCE RED CLEAR	25.5*	25.5*	25.5*	25.5*
MIN DWELL GREEN	7	7	7	7
MAX CALL TIME	120	120	120	120
EXIT PHASE(S)	2+6	2+6	4+8	4+8
EXIT YELLOW CLEAR	25.5*	25.5*	25.5*	25.5*
EXIT RED CLEAR	25.5*	25.5*	25.5*	25.5*

* Time defaults to time used for phase during normal operation.

SIGNAL FACE I.D.

All Heads L.E.D.



11
31
51
71

21
41, 42
61, 62
81, 82

22

P21, P22
P41, P42
P61, P62
P81, P82

LOOP & DETECTOR INSTALLATION CHART

ASC/3-2070LN2 CONTROLLER w/ TS-2 CABINET

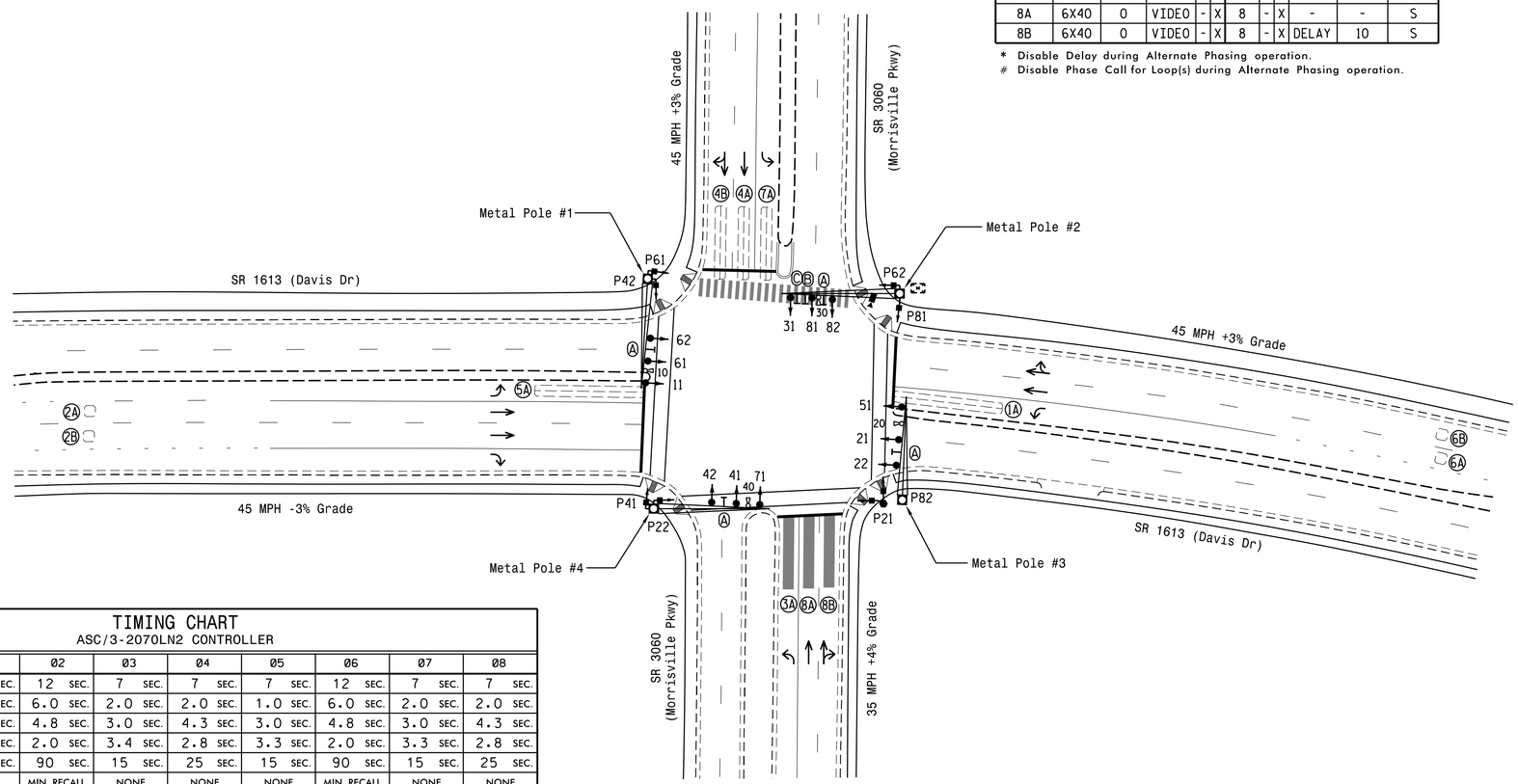
INDUCTIVE LOOPS						DETECTOR UNITS					
LOOP NO.	SIZE (ft)	DIST. FROM STOPBAR (ft)	TURNS	NEW	EXISTING	NEMA PHASE	NEW	EXISTING	TIMING FEATURE	TIMING TIME	DET. TYPE
1A	6X60	0	2-4-2	-	X	1	-	X	DELAY	15*	S
						6#	-	X	DELAY	3	G
2A	6X6	300	EXIST	-	X	2	-	X	-	-	S
2B	6X6	300	EXIST	-	X	2	-	X	-	-	S
3A	6X40	0	VIDEO	-	X	3	-	X	DELAY	15*	S
						8#	-	X	-	-	S
4A	6X40	+5	2-4-2	-	X	4	-	X	-	-	S
4B	6X40	+5	2-4-2	-	X	4	-	X	DELAY	10	S
5A	6X60	0	2-4-2	-	X	5	-	X	DELAY	15*	S
						2#	-	X	DELAY	3	G
6A	6X6	300	EXIST	-	X	6	-	X	-	-	S
6B	6X6	300	EXIST	-	X	6	-	X	-	-	S
7A	6X40	+5	2-4-2	-	X	7	-	X	DELAY	15*	S
						4#	-	X	-	-	S
8A	6X40	0	VIDEO	-	X	8	-	X	-	-	S
8B	6X40	0	VIDEO	-	X	8	-	X	DELAY	10	S

* Disable Delay during Alternate Phasing operation.
\# Disable Phase Call for Loop(s) during Alternate Phasing operation.

8 Phase
Fully Actuated
w/ Emergency Vehicle Preemption
(Cary Signal System)

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 and/or phase 5 may be lagged.
4. Phase 3 and/or phase 7 may be lagged.
5. Set all detector units to presence mode.
6. In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
7. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
8. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
9. Pavement markings are existing.
10. This intersection features an optical preemption system. Shown locations of optical detectors are conceptual only.
11. Optical detector 10 calls EVP 3;
    Optical detector 20 calls EVP 4;
    Optical detector 30 calls EVP 5;
    Optical detector 40 calls EVP 6.
12. The Town Traffic Engineer will determine the hours of use for each phasing plan.
13. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
14. Update ASC/3 software in existing controller.



LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Sign	
	Pedestrian Signal Head	
	Metal Pole with Mastarm	
	Inductive Loop Detector	
	Optical Detector	
	Video Detector	
	Video Detection Area	
	Controller & Cabinet	
	Directional Arrow	
	Metal Pole with Mastarm	
	Type II Signal Pedestal	
N/A	Curb Ramp	
Ⓐ	Street Name Sign (D3-1)	Ⓐ
Ⓑ	Through Arrow "ONLY" Sign (R3-5A)	Ⓑ
Ⓒ	"U-TURN YIELD TO RIGHT TURN" Sign (R10-16)	Ⓒ

TIMING CHART

ASC/3-2070LN2 CONTROLLER

PHASE	01	02	03	04	05	06	07	08
MINIMUM GREEN *	7 SEC.	12 SEC.	7 SEC.	7 SEC.	7 SEC.	12 SEC.	7 SEC.	7 SEC.
VEHICLE EXT. *	1.0 SEC.	6.0 SEC.	2.0 SEC.	2.0 SEC.	1.0 SEC.	6.0 SEC.	2.0 SEC.	2.0 SEC.
YELLOW CHANGE INT.	3.0 SEC.	4.8 SEC.	3.0 SEC.	4.3 SEC.	3.0 SEC.	4.8 SEC.	3.0 SEC.	4.3 SEC.
RED CLEARANCE	3.3 SEC.	2.0 SEC.	3.4 SEC.	2.8 SEC.	3.3 SEC.	2.0 SEC.	3.3 SEC.	2.8 SEC.
MAX. 1 *	15 SEC.	90 SEC.	15 SEC.	25 SEC.	15 SEC.	90 SEC.	15 SEC.	25 SEC.
RECALL POSITION	NONE	MIN. RECALL	NONE	NONE	NONE	MIN. RECALL	NONE	NONE
LOCK DET.	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
WALK *	– SEC.	7 SEC.	– SEC.	7 SEC.	– SEC.	7 SEC.	– SEC.	7 SEC.
PED. CLEAR	– SEC.	24 SEC.	– SEC.	25 SEC.	– SEC.	23 SEC.	– SEC.	21 SEC.
VOLUME DENSITY	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
ACTUATION B4 ADD *	– VEH.	0 VEH.	– VEH.	– VEH.	– VEH.	0 VEH.	– VEH.	– VEH.
SEC. PER ACTUATION *	– SEC.	1.5 SEC.	– SEC.	– SEC.	– SEC.	1.5 SEC.	– SEC.	– SEC.
MAX. INITIAL *	– SEC.	34 SEC.	– SEC.	– SEC.	– SEC.	34 SEC.	– SEC.	– SEC.
TIME B4 REDUCTION *	– SEC.	15 SEC.	– SEC.	– SEC.	– SEC.	15 SEC.	– SEC.	– SEC.
TIME TO REDUCE *	– SEC.	30 SEC.	– SEC.	– SEC.	– SEC.	30 SEC.	– SEC.	– SEC.
MINIMUM GAP	– SEC.	3.0 SEC.	– SEC.	– SEC.	– SEC.	3.0 SEC.	– SEC.	– SEC.
DUAL ENTRY	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON
SIMULTANEOUS GAP	ON	ON	ON	ON	ON	ON	ON	ON

* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

NC Dept of Transportation
Division of Highways
Final Drawing Date: 5/21/2019
DocuSigned by: Changsek Baek
ITS & Signals Unit

AECOM
NC Firm License No.: F-0342
701 Corporate Center Drive
Suite 475 Raleigh, NC 27607
Phone: 919-854-6200

Signal Upgrade — Sheet 1 of 2

Prepared for the Offices of: Transportation Mobility and Safety Division, Traffic Engineering Branch, Signal Design Section, 750 N.Greenfield Pkwy.Garner,NC 27529

SCALE 0 40 1"=40'

SR 1613 (Davis Drive)
at
SR 3060 (Morrisville Parkway)

Division 5 Wake County Morrisville

PLAN DATE: February 2019 REVIEWED BY: C.L. Kalencik
PREPARED BY: S. W. Cox REVIEWED BY:

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

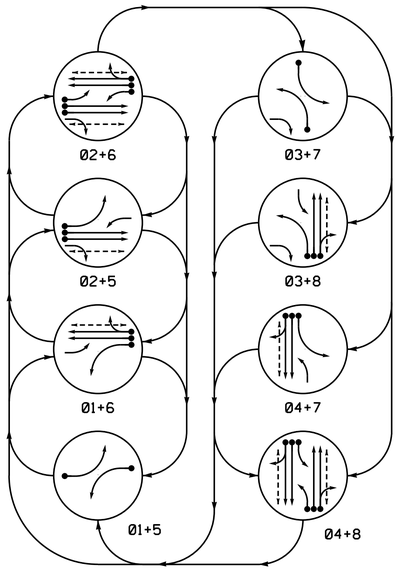
NORTH CAROLINA PROFESSIONAL SEAL 040715 ENGINEER COURTNEY L. KALENCIK
DocuSigned by: Courtney L. Kalencik 4/30/2019
SIG. INVENTORY NO. 05-1984

4/26/2019
\\wcs13pw001\Workprojects\60595640 - Cary On-Call EVP Upgrades\400_Technical\431_Traffic Signals\05-1984 Davis at Morrisville Parkway\051984_sig_dsn_2019XXXX.dgn
Coxsi

DocuSign Envelope ID: 1DACDB31-5FB0-4FCC-87E6-584316DD089B

PROJECT REFERENCE NO.	SHEET NO.
FR 1038	Sig. 1.1

DEFAULT PHASING DIAGRAM

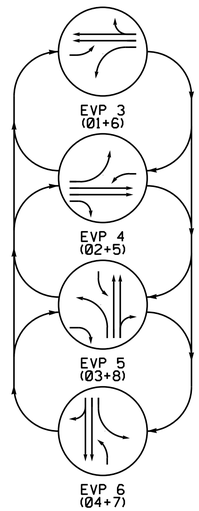


PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

DEFAULT EV PREEMPT PHASES

(Medium Priority)



DEFAULT TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8	EVP 3	EVP 4	EVP 5	EVP 6	FLASH
11	~~—~~	~~—~~	~~F/Y~~	~~F/Y~~	~~R~~	~~R~~	~~R~~	~~R~~	~~—~~	~~F/Y~~	~~R~~	~~R~~	~~Y~~
21	R	R	G	G	R	R	R	R	R	G	R	R	Y
22	R	R	G	G	R/—	R/—	R	R	R	G	R/—	R	Y
31	~~R~~	~~R~~	~~R~~	~~R~~	~~—~~	~~—~~	~~F/Y~~	~~F/Y~~	~~R~~	~~R~~	~~—~~	~~F/Y~~	~~R~~
41, 42	R	R	R	R	R	R	G	G	R	R	R	G	R
51	~~—~~	~~F/Y~~	~~—~~	~~F/Y~~	~~R~~	~~R~~	~~R~~	~~R~~	~~F/Y~~	~~—~~	~~R~~	~~R~~	~~Y~~
61, 62	R	G	R	G	R	R	R	G	R	R	R	R	Y
71	~~R~~	~~R~~	~~R~~	~~R~~	~~—~~	~~F/Y~~	~~—~~	~~F/Y~~	~~R~~	~~R~~	~~F/Y~~	~~—~~	~~R~~
81, 82	R	R	R	R	R	G	R	G	R	R	G	R	R
P21, P22	DW	DW	W	W	DW	DW	DW	DW	DW	DW	DW	DW	DRK
P41, P42	DW	DW	DW	DW	DW	DW	W	W	DW	DW	DW	DW	DRK
P61, P62	DW	W	DW	W	DW	DW	DW	DW	DW	DW	DW	DW	DRK
P81, P82	DW	DW	DW	DW	DW	W	DW	W	DW	DW	DW	DW	DRK

8 Phase
Fully Actuated
w/ Emergency Vehicle Preemption
(Cary Signal System)

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
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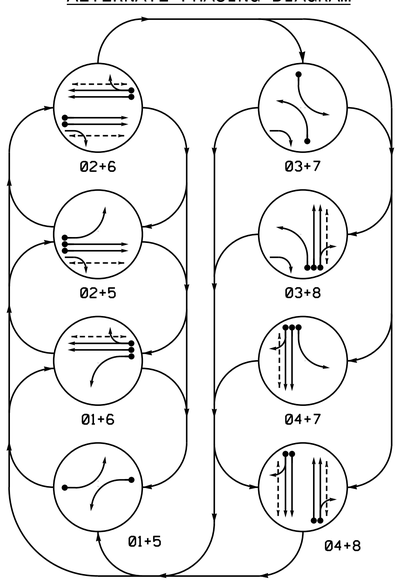
ALTERNATE PHASING DIAGRAM

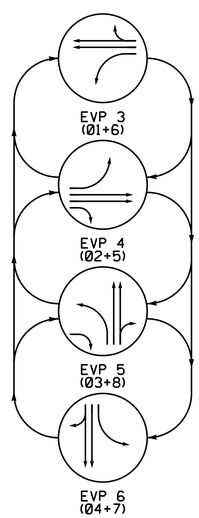


PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

ALTERNATE EV PREEMPT PHASES

(Medium Priority)



ALTERNATE TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8	EVP 3	EVP 4	EVP 5	EVP 6	FLASH
11	~~—~~	~~—~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~—~~	~~R~~	~~R~~	~~R~~	~~Y~~
21	R	R	G	G	R	R	R	R	R	G	R	R	Y
22	R	R	G	G	R/—	R/—	R	R	R	G	R/—	R	Y
31	~~R~~	~~R~~	~~R~~	~~R~~	~~—~~	~~—~~	~~R~~	~~R~~	~~R~~	~~R~~	~~—~~	~~R~~	~~R~~
41, 42	R	R	R	R	R	R	G	G	R	R	R	G	R
51	~~—~~	~~R~~	~~—~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~—~~	~~R~~	~~R~~	~~Y~~
61, 62	R	G	R	G	R	R	R	G	R	R	R	Y
71	~~R~~	~~R~~	~~R~~	~~R~~	~~—~~	~~R~~	~~—~~	~~R~~	~~R~~	~~R~~	~~R~~	~~—~~	~~R~~
81, 82	R	R	R	R	R	G	R	G	R	R	G	R	R
P21, P22	DW	DW	W	W	DW	DW	DW	DW	DW	DW	DW	DW	DRK
P41, P42	DW	DW	DW	DW	DW	DW	W	W	DW	DW	DW	DW	DRK
P61, P62	DW	W	DW	W	DW	DW	DW	DW	DW	DW	DW	DW	DRK
P81, P82	DW	DW	DW	DW	DW	W	DW	W	DW	DW	DW	DW	DRK

NC Dept of Transportation
Division of Highways
Final Drawing Date: 5/21/2019
DocuSigned by: Changseok Park
ITS & Signals Unit

AECOM
NC Firm License No.: F-0342
701 Corporate Center Drive
Suite 475 Raleigh, NC 27607
Phone: 919-854-6200

Signal Upgrade — Sheet 2 of 2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared for the Offices of:
Transportation Mobility and Safety Division
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

SR 1613 (Davis Drive)
at
SR 3060 (Morrisville Parkway)

Division 5 — Wake County — Morrisville

PLAN DATE: January 2019 — REVIEWED BY: C.L. Kalencik
PREPARED BY: S. W. Cox — REVIEWED BY:

SCALE: 0 — 40, 1"=40'

REVISIONS	INIT.	DATE

NORTH CAROLINA PROFESSIONAL SEAL 040715 ENGINEER COURTNEY L. KALENCIK
DocuSigned by: Courtney L. Kalencik 4/30/2019
0FE9158CE2964FE

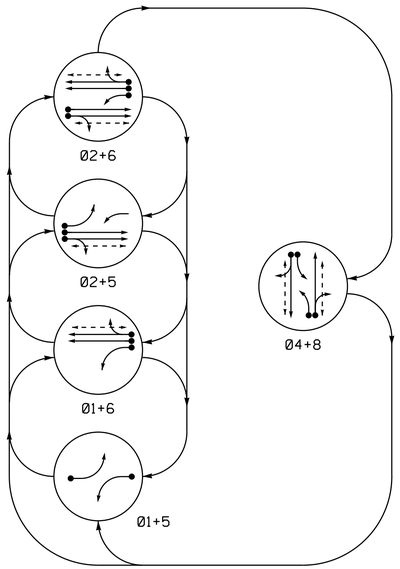
SIG. INVENTORY NO. 05-1984

4/26/2019
\\aecom\ut\p001\active\Projects\60595640 - Cary On-Call EVP Upgrades\400_Technical\431_Traffic Signals\05-1984 Davis at Morrisville Parkway\051984_sig_dsn_2019XXXX.dgn
cox1

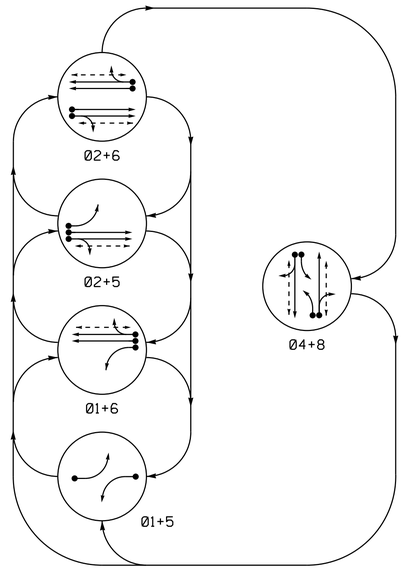
PROJECT REFERENCE NO.	SHEET NO.
LPI	Sig. 1

5 Phase
Fully Actuated
(Cary Signal System)

DEFAULT PHASING DIAGRAM



ALTERNATE PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	04+8	FLASH
11	~~←~~	~~←~~	~~F Y~~	~~F Y~~	~~R~~	~~Y~~
21, 22	R	R	G	G	R	Y
41	~~R~~	~~R~~	~~R~~	~~R~~	~~F Y~~	~~R~~
42, 43	R	R	R	R	G	R
51	~~←~~	~~R~~	~~←~~	~~R~~	~~R~~	~~R~~
61, 62	R	G	R	G	R	Y
81	~~R~~	~~R~~	~~R~~	~~R~~	~~F Y~~	~~R~~
82, 83	R	R	R	R	G	R
P21, P22	DW	DW	W	W	DW	DRK
P41, P42	DW	DW	DW	DW	W	DRK
P61, P62	DW	W	DW	W	DW	DRK
P81, P82	DW	DW	DW	DW	W	DRK

W - Walk
DW - Don't Walk
DRK - Dark

LOOP & DETECTOR INSTALLATION CHART

ASC/3-2070LXN2 CONTROLLER w/ TS-2 CABINET

INDUCTIVE LOOPS						DETECTOR UNITS					
LOOP NO.	SIZE (ft)	DIST. FROM STOPBAR (ft)	TURNS	NEW	EXISTING	NEMA PHASE	NEW	EXISTING	TIMING FEATURE	TIMING TIME	DET. TYPE
1A	6X40	0	2-4-2	-	X	1	-	X	DELAY	15 *	N
						6 #	X	-	-	-	N
2A, 2B	6X6	70	3	-	X	2	-	X	-	-	N
4A	6X40	0	2-4-2	-	X	4	-	X	-	-	N
4B	6X40	0	2-4-2	-	X	4	-	X	DELAY	10	N
5A	6X40	0	2-4-2	-	X	5	-	X	-	-	N
6A, 6B	6X6	70	3	-	X	6	-	X	-	-	N
8A	6X40	0	2-4-2	-	X	8	-	X	-	-	N
8B	6X40	0	2-4-2	-	X	8	-	X	DELAY	10	N

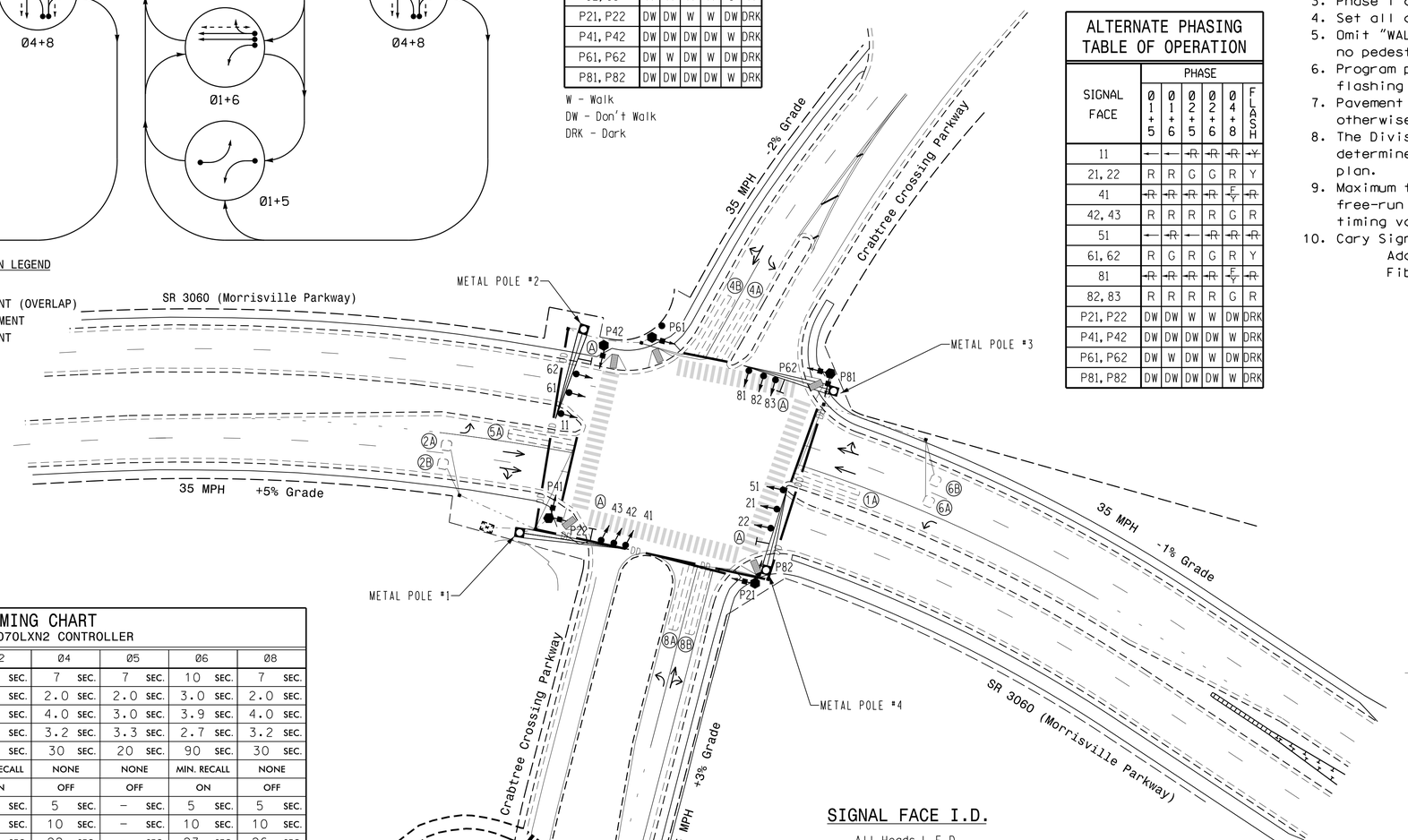
* Disable Delay During Alternate Phasing Operation.
\# Disable Phase Call For Loop(s) During Alternate Phasing Operation.

ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	04+8	FLASH
11	~~←~~	~~←~~	~~R~~	~~R~~	~~R~~	~~Y~~
21, 22	R	R	G	G	R	Y
41	~~R~~	~~R~~	~~R~~	~~R~~	~~F Y~~	~~R~~
42, 43	R	R	R	R	G	R
51	~~←~~	~~R~~	~~←~~	~~R~~	~~R~~	~~R~~
61, 62	R	G	R	G	R	Y
81	~~R~~	~~R~~	~~R~~	~~R~~	~~F Y~~	~~R~~
82, 83	R	R	R	R	G	R
P21, P22	DW	DW	W	W	DW	DRK
P41, P42	DW	DW	DW	DW	W	DRK
P61, P62	DW	W	DW	W	DW	DRK
P81, P82	DW	DW	DW	DW	W	DRK

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. Do not program signal for late night flashing operation unless otherwise directed by the engineer.
3. Phase 1 and/or phase 5 may be lagged.
4. Set all dectector units to presence mode.
5. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
6. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
7. Pavement markings are existing unless otherwise shown.
8. The Division (City) Traffic Engineer will determine the hours of use for each phasing plan.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal timing values supersede these values.
10. Cary Signal System data:
    Address #: 8.
    Fiber Channel #: 17.



TIMING CHART

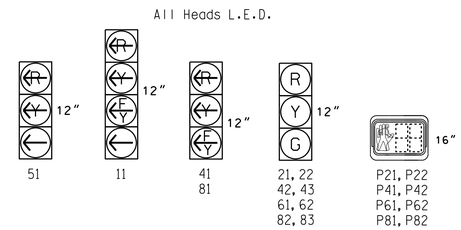
ASC/3-2070LXN2 CONTROLLER

PHASE	01	02	04	05	06	08
MINIMUM GREEN *	7 SEC.	10 SEC.	7 SEC.	7 SEC.	10 SEC.	7 SEC.
VEHICLE EXT. *	2.0 SEC.	3.0 SEC.	2.0 SEC.	2.0 SEC.	3.0 SEC.	2.0 SEC.
YELLOW CHANGE INT.	3.0 SEC.	3.9 SEC.	4.0 SEC.	3.0 SEC.	3.9 SEC.	4.0 SEC.
RED CLEARANCE	3.3 SEC.	2.7 SEC.	3.2 SEC.	3.3 SEC.	2.7 SEC.	3.2 SEC.
MAX. 1 *	20 SEC.	90 SEC.	30 SEC.	20 SEC.	90 SEC.	30 SEC.
RECALL POSITION	NONE	MIN. RECALL	NONE	NONE	MIN. RECALL	NONE
LOCK DET.	OFF	ON	OFF	OFF	ON	OFF
DELAYED GREEN	– SEC.	5 SEC.	5 SEC.	– SEC.	5 SEC.	5 SEC.
WALK *	– SEC.	10 SEC.	10 SEC.	– SEC.	10 SEC.	10 SEC.
PED. CLEAR	– SEC.	28 SEC.	22 SEC.	– SEC.	23 SEC.	26 SEC.
ACTUATION B4 ADD *	– VEH.	– VEH.	– VEH.	– VEH.	– VEH.	– VEH.
SEC. PER ACTUATION *	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.
MAX. INITIAL *	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.
TIME B4 REDUCTION *	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.
TIME TO REDUCE *	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.
MINIMUM GAP	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.
DUAL ENTRY	OFF	OFF	ON	OFF	OFF	ON
SIMULTANEOUS GAP	ON	ON	ON	ON	ON	ON

* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

SIGNAL FACE I.D.

All Heads L.E.D.



LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
	Metal Pole with Mastarm	
N/A	Guardrail	
	Type II Signal Pedestal	
N/A	Directional Drill	
N/A	Curb Ramp	
	Street Name Sign (D3-1)	

Signal Upgrade

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Offices of:
Transportation Mobility and Safety Division
Signal Design Section
750 N.Greenfield Pkwy.Garner,NC 27529

SR 3060 (Morrisville Pkwy.) at Crabtree Crossing Parkway

Division 5 Wake County Morrisville

PLAN DATE: February 2022 REVIEWED BY:
PREPARED BY: IO Umozurike REVIEWED BY:

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 026486 ENGINEER ROBERT J. ZIEMBA

DocuSigned by: 03/16/2022
SIGNATURE DATE
SIG. INVENTORY NO. 05-2257

16-MAR-2022 10:51
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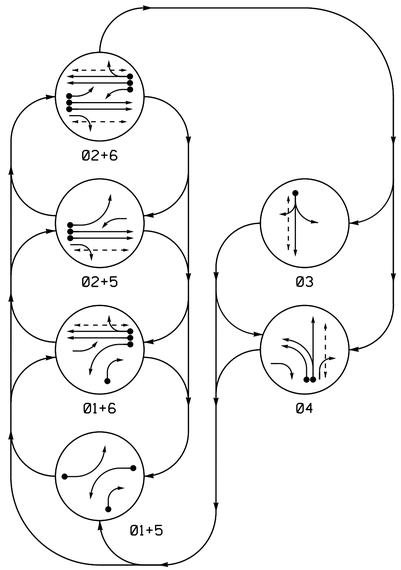
rziemba

PROJECT REFERENCE NO.	SHEET NO.
05-2348	Sig. 1

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	03	04	FLASH
11	←	←	F Y	F Y	~~R~~	~~R~~	~~Y~~
21	R	R	G	G	R	R	Y
22	R	R	G	G	R/←	R	Y
31	R	R	R	R	G	R	R
32	R	R	R	R	G	R	R
41	R	R	R	R	R	G	R
42	R/←	R/←	R	R	R	G	R
51	←	F Y	←	F Y	~~R~~	~~R~~	~~Y~~
61, 62, 63	R	G	R	G	R	R	Y
P21, P22	DW	DW	W	W	DW	DW	DRK
P31, P32	DW	DW	DW	DW	W	DW	DRK
P41, P42	DW	DW	DW	DW	DW	W	DRK
P61, P62	DW	W	DW	W	DW	DW	DRK

W - Walk
DW - Don't Walk
DRK - Dark

LOOP & DETECTOR INSTALLATION CHART

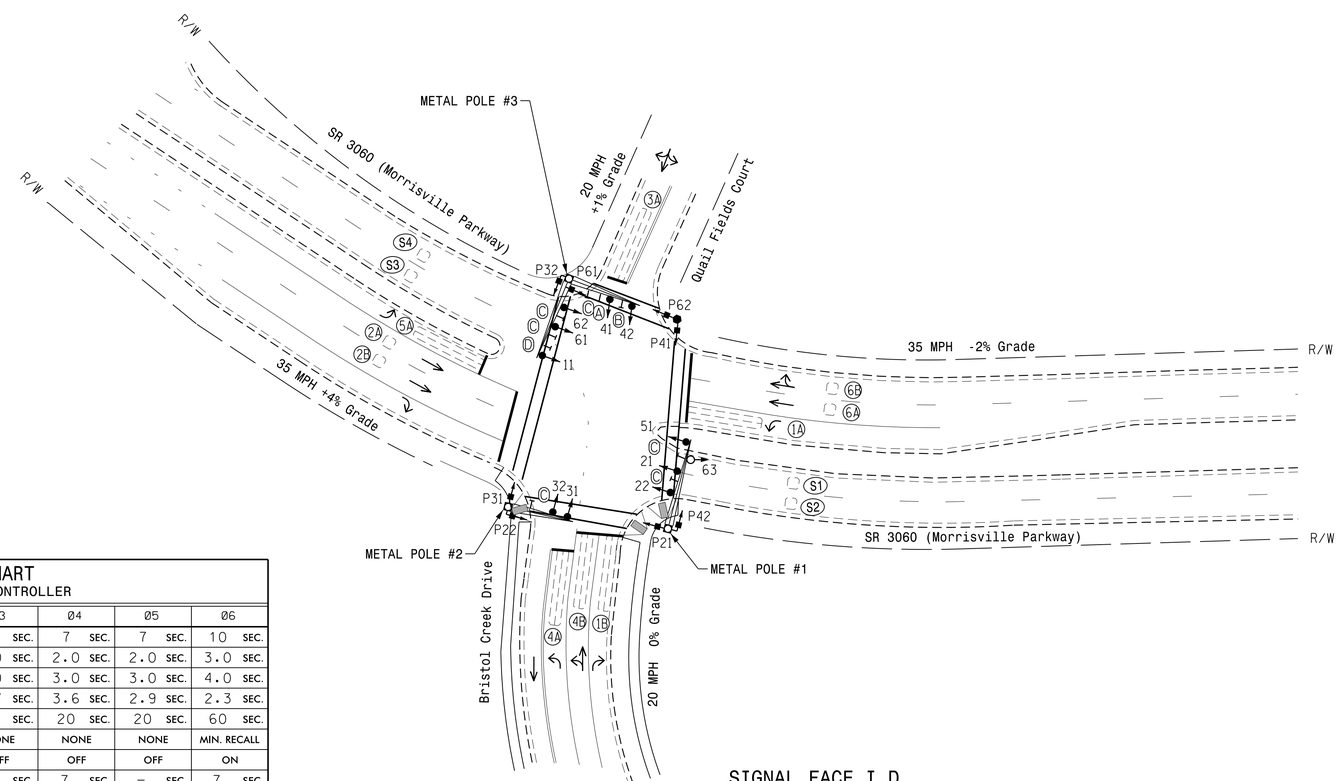
ASC/3-2070LN2 CONTROLLER w/ TS-2 CABINET

INDUCTIVE LOOPS						DETECTOR UNITS					
LOOP NO.	SIZE (ft)	DIST. FROM STOPBAR (ft)	TURNS	NEW	EXISTING	NEMA PHASE	NEW	EXISTING	TIMING FEATURE	TIMING TIME (sec)	DET. TYPE
1A	6X40	0	2-4-2	-	X	1	-	X	DELAY	15	S
						6	-	X	-	-	S
1B	6X40	0	2-4-2	-	X	1	-	X	DELAY	15	S
2A	6X6	70	EXIST	-	X	2	-	X	-	-	S
2B	6X6	70	EXIST	-	X	2	-	X	-	-	S
3A	6X40	0	2-4-2	-	X	3	-	X	DELAY	5	S
4A	6X40	0	2-4-2	-	X	4	-	X	DELAY	3	S
4B	6X40	0	2-4-2	-	X	4	-	X	-	-	S
5A	6X40	0	2-4-2	-	X	5	-	X	DELAY	15	S
						2	-	X	-	-	S
6A	6X6	70	EXIST	-	X	6	-	X	-	-	S
6B	6X6	70	EXIST	-	X	6	-	X	-	-	S
S1	6X6	+150	EXIST	-	X	-	-	X	SYSTEM DETECTOR		N
S2	6X6	+150	EXIST	-	X	-	-	X	SYSTEM DETECTOR		N
S3	6X6	+150	EXIST	-	X	-	-	X	SYSTEM DETECTOR		N
S4	6X6	+150	EXIST	-	X	-	-	X	SYSTEM DETECTOR		N

6 Phase
Fully Actuated
(Cary Signal System)

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 and/or phase 5 may be lagged.
4. The order of phase 3 and phase 4 may be reversed.
5. Set all detector units to presence mode.
6. Omit "WALK" and flashing "DON'T WALK" time only.
7. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
8. Pavement markings are existing.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
10. Cary signal system data:
    Fiber channel #: 17.



LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
N/A	Curb Ramp	
	Metal Pole with Mastarm	
	Type II Signal Pedestal	
A	Left Arrow "ONLY" Sign (R3-5L)	A
B	Combined Through and Left Arrow Sign (R3-6L)	B
C	Street Name Sign (D3-1)	C
D	"U-TURN YIELD TO RIGHT TURN" Sign (R10-16)	D

TIMING CHART

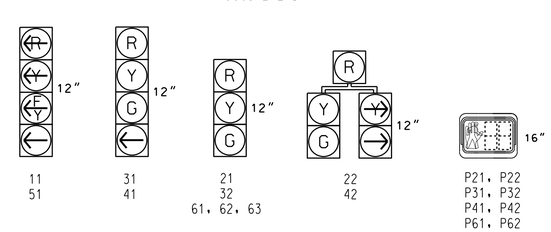
ASC/3-2070LN2 CONTROLLER

PHASE	01	02	03	04	05	06
MINIMUM GREEN *	7 SEC.	10 SEC.	7 SEC.	7 SEC.	7 SEC.	10 SEC.
VEHICLE EXT. *	2.0 SEC.	3.0 SEC.	2.0 SEC.	2.0 SEC.	2.0 SEC.	3.0 SEC.
YELLOW CHANGE INT.	3.0 SEC.	4.0 SEC.	3.0 SEC.	3.0 SEC.	3.0 SEC.	4.0 SEC.
RED CLEARANCE	2.6 SEC.	2.3 SEC.	3.7 SEC.	3.6 SEC.	2.9 SEC.	2.3 SEC.
MAX. 1 *	30 SEC.	60 SEC.	20 SEC.	20 SEC.	20 SEC.	60 SEC.
RECALL POSITION	NONE	MIN. RECALL	NONE	NONE	NONE	MIN. RECALL
LOCK DET.	OFF	ON	OFF	OFF	OFF	ON
WALK *	– SEC.	7 SEC.	7 SEC.	7 SEC.	– SEC.	7 SEC.
PED. CLEAR	– SEC.	13 SEC.	26 SEC.	21 SEC.	– SEC.	9 SEC.
VOLUME DENSITY	OFF	OFF	OFF	OFF	OFF	OFF
ACTUATION B4 ADD *	– VEH.	– VEH.	– VEH.	– VEH.	– VEH.	– VEH.
SEC. PER ACTUATION *	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.
MAX. INITIAL *	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.
TIME B4 REDUCTION *	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.
TIME TO REDUCE *	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.
MINIMUM GAP	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.
DUAL ENTRY	OFF	OFF	OFF	OFF	OFF	OFF
SIMULTANEOUS GAP	ON	ON	ON	ON	ON	ON

* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

SIGNAL FACE I.D.

All Heads L.E.D.



Signal Upgrade

Prepared in the Offices of:
Transportation Mobility and Safety Division
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

SR 3060 (Morrisville Parkway) at Bristol Creek Drive/ Quail Fields Court

Division 5 Wake County Morrisville

PLAN DATE: March 2019 REVIEWED BY:
PREPARED BY: R.J. Ziemba REVIEWED BY:

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 026486 ENGINEER ROBERT J. ZIEMBA

DocuSigned by: 3/14/2019
SIGNATURE DATE

SIG. INVENTORY NO. 05-2348

14-MAR-2019 16:52
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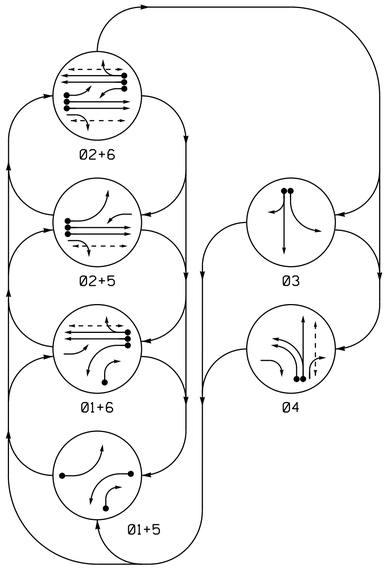
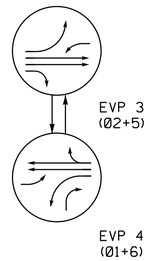
rziemba

PROJECT REFERENCE NO.	SHEET NO.
36249.3486	Sig. 157.0

PHASING DIAGRAM

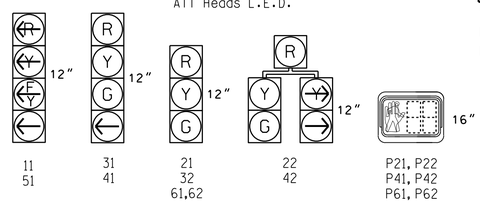


EV PREEMPT PHASES



SIGNAL FACE I.D.

All Heads L.E.D.



PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	03	04	EVP3	EVP4	FLASH
11	←	←	F Y	F Y	R	R	F Y	←	Y
21	R	R	G	G	R	R	G	R	Y
22	R	R	G	G	R	R/	G	R	Y
31	R	R	R	R	G	R	R	R	R
32	R	R	R	R	G	R	R	R	R
41	R	R	R	R	R	G	R	R	R
42	R/	R/	R	R	R	G	R	R/	R
51	←	F Y	←	F Y	R	R	←	F Y	Y
61, 62	R	G	R	G	R	R	R	G	Y
P21, P22	DW	DW	W	W	DW	DW	DW	DW	DRK
P41, P42	DW	DW	DW	DW	DW	W	DW	DW	DRK
P61, P62	DW	W	DW	W	DW	DW	DW	DW	DRK

W - Walk
DW - Don't Walk
DRK - Dark

LOOP & DETECTOR INSTALLATION CHART

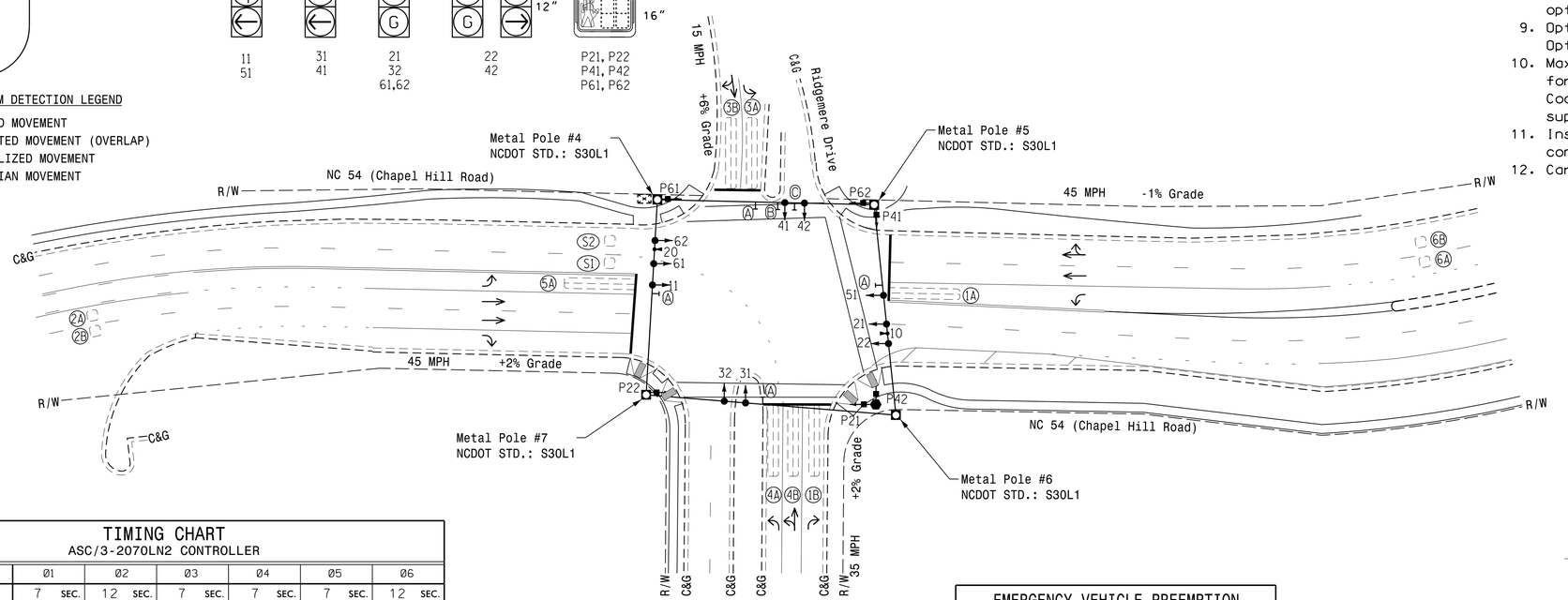
ASC/3-2070LN2 CONTROLLER w/ TS-2 CABINET

INDUCTIVE LOOPS						DETECTOR UNITS					
LOOP NO.	SIZE (ft)	DIST. FROM STOPBAR (ft)	TURNS	NEW	EXISTING	NEMA PHASE	NEW	EXISTING	TIMING FEATURE	TIMING TIME (sec.)	DET. TYPE
1A	6X40	0	2-4-2	-	X	1	-	X	DELAY	15	S
						6	-	X	DELAY	3	G
1B	6X40	0	2-4-2	-	X	1	-	X	DELAY	15	S
2A	6X6	300	EXIST	-	X	2	-	X	-	-	N
2B	6X6	300	EXIST	-	X	2	-	X	-	-	N
3A	6X40	0	2-4-2	-	X	3	-	X	-	-	S
3B	6X40	0	2-4-2	-	X	3	-	X	DELAY	10	S
4A	6X40	0	2-4-2	-	X	4	-	X	-	-	S
4B	6X40	0	2-4-2	-	X	4	-	X	-	-	S
5A	6X40	0	2-4-2	-	X	5	-	X	DELAY	15	S
						2	-	X	DELAY	3	G
6A	6X6	300	EXIST	-	X	6	-	X	-	-	N
6B	6X6	300	EXIST	-	X	6	-	X	-	-	N
S1	6X6	+150	EXIST	-	X	-	-	X	SYSTEM DETECTOR		N
S2	6X6	+150	EXIST	-	X	-	-	X	SYSTEM DETECTOR		N

6 Phase
w/ Emergency Vehicle Preemption
Fully Actuated
(Cary Signal System)

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 and/or phase 5 may be lagged.
4. The order of phase 3 and phase 4 may be reversed.
5. Set all detector units to presence mode.
6. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
7. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
8. This intersection features an optical preemption system. Shown locations of optical detectors are conceptual only.
9. Optical detector 10 calls EVP 3; Optical detector 20 calls EVP 4.
10. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
11. Install new ASC/3 software in existing controller.
12. Cary signal system data: Fiber channel #: 17.



LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Type II Signal Pedestal	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Metal Strain Pole	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
	Optical Detector	
N/A	Curb Ramp	
Ⓐ	Street Name Sign (D3-1)	Ⓐ
Ⓑ	Left Arrow "ONLY" Sign (R3-5L)	Ⓑ
Ⓒ	Combined Through and Left Arrow Sign (R3-6L)	Ⓒ

TIMING CHART

ASC/3-2070LN2 CONTROLLER

PHASE	01	02	03	04	05	06
MINIMUM GREEN *	7 SEC.	12 SEC.	7 SEC.	7 SEC.	7 SEC.	12 SEC.
VEHICLE EXT. *	2.0 SEC.	6.0 SEC.	2.0 SEC.	2.0 SEC.	2.0 SEC.	6.0 SEC.
YELLOW CHANGE INT.	3.0 SEC.	4.6 SEC.	3.0 SEC.	3.7 SEC.	3.0 SEC.	4.6 SEC.
RED CLEARANCE	3.3 SEC.	2.0 SEC.	3.4 SEC.	2.6 SEC.	3.2 SEC.	2.0 SEC.
MAX. 1 *	15 SEC.	75 SEC.	20 SEC.	40 SEC.	15 SEC.	75 SEC.
RECALL POSITION	NONE	MIN. RECALL	NONE	NONE	NONE	MIN. RECALL
LOCK DET.	OFF	ON	OFF	OFF	OFF	ON
WALK *	– SEC.	7 SEC.	– SEC.	7 SEC.	– SEC.	7 SEC.
PED. CLEAR	– SEC.	23 SEC.	– SEC.	24 SEC.	– SEC.	20 SEC.
VOLUME DENSITY	OFF	ON	OFF	OFF	OFF	ON
ACTUATION B4 ADD *	– VEH.	0 VEH.	– VEH.	– VEH.	– VEH.	0 VEH.
SEC. PER ACTUATION *	– SEC.	1.5 SEC.	– SEC.	– SEC.	– SEC.	1.5 SEC.
MAX. INITIAL *	– SEC.	34 SEC.	– SEC.	– SEC.	– SEC.	34 SEC.
TIME B4 REDUCTION *	– SEC.	15 SEC.	– SEC.	– SEC.	– SEC.	15 SEC.
TIME TO REDUCE *	– SEC.	45 SEC.	– SEC.	– SEC.	– SEC.	45 SEC.
MINIMUM GAP	– SEC.	3.0 SEC.	– SEC.	– SEC.	– SEC.	3.0 SEC.
DUAL ENTRY	OFF	OFF	OFF	OFF	OFF	OFF
SIMULTANEOUS GAP	ON	ON	ON	ON	ON	ON

* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

EMERGENCY VEHICLE PREEMPTION

FUNCTION	EVP 3	EVP 4
DELAY BEFORE PREEMPT	0	0
PMT OVERRIDE	OFF	OFF
PED CLEAR THROUGH YELLOW	Y	Y
TERMINATE PHASES	N	N
ENTRANCE WALK	1	1
ENTRANCE PED CLEAR	12	12
ENTRANCE MIN GREEN	1	1
ENTRANCE YELLOW CLEAR	25.5*	25.5*
ENTRANCE RED CLEAR	25.5*	25.5*
MIN DWELL GREEN	7	7
MAX CALL TIME	120	120
EXIT PHASE(S)	2+6	2+6
EXIT YELLOW CLEAR	25.5*	25.5*
EXIT RED CLEAR	25.5*	25.5*

* Time defaults to time used for phase during normal operation.

Signal Upgrade

Prepared in the Offices of:
Transportation Mobility and Safety Division
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

NC 54 (Chapel Hill Road)
at
SR 3060 (Morrisville Parkway)/
Ridgemere Drive

Division 5 Wake County Morrisville

PLAN DATE: October 2015 REVIEWED BY:
PREPARED BY: M.E. Giles REVIEWED BY:

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 026486 ENGINEER ROBERT J. ZIEMBA
DocuSigned by: 11/19/2015
SIGNATURE DATE
SIG. INVENTORY NO. 05-1722

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APPENDIX C:

Intersection Capacity Analysis

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	145	447	47	56	211	215	58	1186	112	13	156	526
Future Volume (vph)	145	447	47	56	211	215	58	1186	112	13	156	526
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			4%			-3%				3%
Storage Length (ft)	200		0	200		0	325		350		850	
Storage Lanes	1		0	1		0	1		1		1	
Taper Length (ft)	100			100			100				100	
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	1.00	0.95	1.00	0.95
Ped Bike Factor		1.00		1.00			1.00					1.00
Frt		0.986			0.924				0.850			0.981
Flt Protected	0.950			0.950			0.950				0.950	
Satd. Flow (prot)	1743	3433	0	1734	3205	0	1796	3592	1607	0	1743	3414
Flt Permitted	0.175			0.247			0.371				0.073	
Satd. Flow (perm)	321	3433	0	451	3205	0	701	3592	1607	0	134	3414
Right Turn on Red			No			No			No			
Satd. Flow (RTOR)												
Link Speed (mph)		45			35			45				45
Link Distance (ft)		1496			481			1971				1155
Travel Time (s)		22.7			9.4			29.9				17.5
Confl. Peds. (#/hr)			1	1			2					
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	161	497	52	62	234	239	64	1318	124	14	173	584
Shared Lane Traffic (%)												
Lane Group Flow (vph)	161	549	0	62	473	0	64	1318	124	0	187	668
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	custom	pm+pt	NA
Protected Phases	7	4		3	8		5	2	3		1	6
Permitted Phases	4			8			2		2	1	6	
Detector Phase	7	4		3	8		5	2	3	1	1	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	12.0	7.0	7.0	7.0	12.0
Minimum Split (s)	13.3	14.1		13.4	14.1		13.3	37.8	13.4	13.3	13.3	36.8
Total Split (s)	24.0	25.0		23.0	24.0		25.0	54.0	23.0	28.0	28.0	57.0
Total Split (%)	18.5%	19.2%		17.7%	18.5%		19.2%	41.5%	17.7%	21.5%	21.5%	43.8%
Maximum Green (s)	17.7	17.9		16.6	16.9		18.7	47.2	16.6	21.7	21.7	50.2
Yellow Time (s)	3.0	4.3		3.0	4.3		3.0	4.8	3.0	3.0	3.0	4.8
All-Red Time (s)	3.3	2.8		3.4	2.8		3.3	2.0	3.4	3.3	3.3	2.0
Lost Time Adjust (s)	-1.3	-2.1		-1.4	-2.1		-1.3	-1.8	-1.4		-1.3	-1.8
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0		5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.0	6.0	2.0	1.0	1.0	6.0
Recall Mode	None	None		None	None		None	Min	None	None	None	Min
Walk Time (s)								7.0				7.0
Flash Dont Walk (s)								24.0				23.0
Pedestrian Calls (#/hr)								0				0
Act Effct Green (s)	36.8	23.7		28.6	19.2		57.6	49.2	63.7		66.4	56.8
Actuated g/C Ratio	0.32	0.21		0.25	0.17		0.50	0.43	0.55		0.58	0.49
v/c Ratio	0.59	0.78		0.29	0.93dr		0.15	0.86	0.14		0.72	0.40

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	76
Future Volume (vph)	76
Ideal Flow (vphpl)	1900
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.95
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Peak Hour Factor	0.90
Adj. Flow (vph)	84
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	

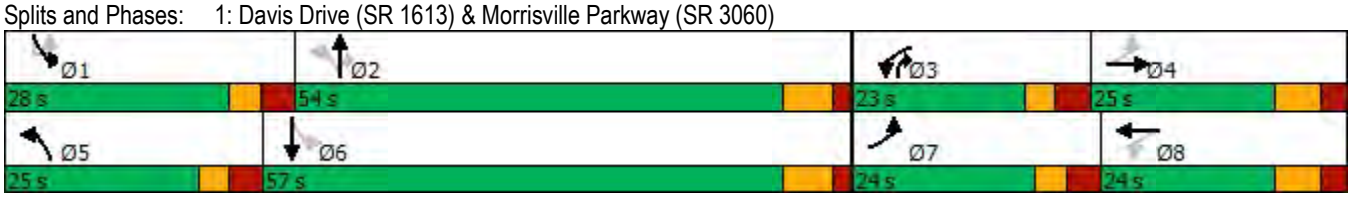
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Control Delay	38.5	52.6		31.4	67.0		12.6	38.0	14.3		41.5	20.4
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0		0.0	0.0
Total Delay	38.5	52.6		31.4	67.0		12.6	38.0	14.3		41.5	20.4
LOS	D	D		C	E		B	D	B		D	C
Approach Delay		49.4			62.9			35.0				25.0
Approach LOS		D			E			C				C
Queue Length 50th (ft)	87	201		30	182		19	453	43		84	167
Queue Length 95th (ft)	155	294		m67	#323		42	#702	87		170	233
Internal Link Dist (ft)		1416			401			1891				1075
Turn Bay Length (ft)	200			200			325		350		850	
Base Capacity (vph)	341	704		341	532		593	1532	1007		400	1688
Starvation Cap Reductn	0	0		0	0		0	0	0		0	0
Spillback Cap Reductn	0	0		0	0		0	0	0		0	0
Storage Cap Reductn	0	0		0	0		0	0	0		0	0
Reduced v/c Ratio	0.47	0.78		0.18	0.89		0.11	0.86	0.12		0.47	0.40

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 115.4
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.89
Intersection Signal Delay: 39.6 Intersection LOS: D
Intersection Capacity Utilization 79.6% ICU Level of Service D
Analysis Period (min) 15

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 1: Davis Drive (SR 1613) & Morrisville Parkway (SR 3060)



Lane Group	SBR
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	6	681	28	67	11	472	5	4	0	0	1	0
Future Volume (vph)	6	681	28	67	11	472	5	4	0	0	1	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%				4%			0%			0%
Storage Length (ft)	50		0		250		0	0		0	0	
Storage Lanes	1		0		1		0	0		0	0	
Taper Length (ft)	100				100			100			100	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Frt		0.994				0.998						0.882
Flt Protected	0.950				0.950				0.950			0.994
Satd. Flow (prot)	1770	3518	0	0	1734	3461	0	0	1770	0	0	1633
Flt Permitted	0.950				0.950				0.950			0.994
Satd. Flow (perm)	1770	3518	0	0	1734	3461	0	0	1770	0	0	1633
Link Speed (mph)		35				35			30			30
Link Distance (ft)		481				711			498			605
Travel Time (s)		9.4				13.9			11.3			13.8
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	7	757	31	74	12	524	6	4	0	0	1	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	7	788	0	0	86	530	0	0	4	0	0	8
Sign Control		Free				Free			Stop			Stop

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 37.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	6
Future Volume (vph)	6
Ideal Flow (vphpl)	1900
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Adj. Flow (vph)	7
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Sign Control	

Intersection Summary

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	6	681	28	67	11	472	5	4	0	0	1	0	6
Future Vol, veh/h	6	681	28	67	11	472	5	4	0	0	1	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	-	250	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	4	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	757	31	74	12	524	6	4	0	0	1	0	7

Major/Minor	Major1			Major2				Minor1			Minor2		
Conflicting Flow All	530	0	0	788	788	0	0	1221	1489	394	1092	1501	265
Stage 1	-	-	-	-	-	-	-	787	787	-	699	699	-
Stage 2	-	-	-	-	-	-	-	434	702	-	393	802	-
Critical Hdwy	4.14	-	-	6.44	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.52	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1033	-	-	454	827	-	-	136	123	605	169	121	733
Stage 1	-	-	-	-	-	-	-	351	401	-	397	440	-
Stage 2	-	-	-	-	-	-	-	570	439	-	603	395	-
Platoon blocked, %		-	-			-	-						
Mov Cap-1 Maneuver	1033	-	-	485	485	-	-	116	100	605	145	99	733
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	116	100	-	145	99	-
Stage 1	-	-	-	-	-	-	-	349	398	-	394	361	-
Stage 2	-	-	-	-	-	-	-	463	360	-	599	392	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	2	37.3	12.9
HCM LOS			E	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	116	1033	-	-	485	-	-	464
HCM Lane V/C Ratio	0.038	0.006	-	-	0.179	-	-	0.017
HCM Control Delay (s)	37.3	8.5	-	-	14	-	-	12.9
HCM Lane LOS	E	A	-	-	B	-	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0.6	-	-	0.1

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	5	649	94	1	17	539	14	6	0	75	6
Future Volume (vph)	1	5	649	94	1	17	539	14	6	0	75	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	16	12	12
Grade (%)			0%				4%			0%		
Storage Length (ft)		100		0		0		125	0		0	0
Storage Lanes		1		0		0		1	0		0	0
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Frt			0.981					0.850		0.875		
Flt Protected		0.950					0.998			0.996		
Satd. Flow (prot)	0	1770	3472	0	0	0	3461	1552	0	1840	0	0
Flt Permitted		0.950					0.998			0.996		
Satd. Flow (perm)	0	1770	3472	0	0	0	3461	1552	0	1840	0	0
Link Speed (mph)			35				35			30		
Link Distance (ft)			711				611			253		
Travel Time (s)			13.9				11.9			5.8		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	6	721	104	1	19	599	16	7	0	83	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	7	825	0	0	0	619	16	0	90	0	0
Sign Control			Free				Free			Stop		

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 39.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	9
Future Volume (vph)	0	9
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.921	
Flt Protected	0.980	
Satd. Flow (prot)	1681	0
Flt Permitted	0.980	
Satd. Flow (perm)	1681	0
Link Speed (mph)	30	
Link Distance (ft)	462	
Travel Time (s)	10.5	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	0	10
Shared Lane Traffic (%)		
Lane Group Flow (vph)	17	0
Sign Control	Stop	

Intersection Summary

Intersection	
Int Delay, s/veh	1.2

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Vol, veh/h	1	5	649	94	1	17	539	14	6	0	75	6	0	9
Future Vol, veh/h	1	5	649	94	1	17	539	14	6	0	75	6	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	-	100	-	-	-	-	-	125	-	-	-	-	-	-
Veh in Median Storage, #	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	-	4	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	6	721	104	1	19	599	16	7	0	83	7	0	10

Major/Minor	Major1				Major2				Minor1			Minor2		
Conflicting Flow All	599	615	0	0	826	825	0	0	1127	1442	413	1014	1478	300
Stage 1	-	-	-	-	-	-	-	-	787	787	-	639	639	-
Stage 2	-	-	-	-	-	-	-	-	340	655	-	375	839	-
Critical Hdwy	6.44	4.14	-	-	6.44	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.52	2.22	-	-	2.52	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	599	961	-	-	429	801	-	-	159	131	588	193	125	696
Stage 1	-	-	-	-	-	-	-	-	351	401	-	431	469	-
Stage 2	-	-	-	-	-	-	-	-	648	461	-	618	379	-
Platoon blocked, %			-	-			-	-						
Mov Cap-1 Maneuver	870	870	-	-	753	753	-	-	151	125	588	160	119	696
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	151	125	-	160	119	-
Stage 1	-	-	-	-	-	-	-	-	348	398	-	428	450	-
Stage 2	-	-	-	-	-	-	-	-	613	443	-	526	376	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.3	14.1	17.8
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	484	870	-	-	753	-	-	297
HCM Lane V/C Ratio	0.186	0.008	-	-	0.025	-	-	0.056
HCM Control Delay (s)	14.1	9.2	-	-	9.9	-	-	17.8
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.7	0	-	-	0.1	-	-	0.2

Lane Group	EBU	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations								
Traffic Volume (vph)	31	13	687	18	523	4	23	17
Future Volume (vph)	31	13	687	18	523	4	23	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		125		0		0	0	0
Storage Lanes		1		0		0	1	0
Taper Length (ft)		100		100			100	
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.999		0.943	
Flt Protected		0.950			0.998		0.972	
Satd. Flow (prot)	0	1770	3539	0	3529	0	1707	0
Flt Permitted		0.950			0.998		0.972	
Satd. Flow (perm)	0	1770	3539	0	3529	0	1707	0
Link Speed (mph)			35		35		30	
Link Distance (ft)			957		577		155	
Travel Time (s)			18.6		11.2		3.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	34	14	763	20	581	4	26	19
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	48	763	0	605	0	45	0
Sign Control			Free		Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 46.6%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	1.2

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations								
Traffic Vol, veh/h	31	13	687	18	523	4	23	17
Future Vol, veh/h	31	13	687	18	523	4	23	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	Yield	-	None
Storage Length	-	125	-	-	-	-	0	-
Veh in Median Storage, #	-	-	0	-	0	-	0	-
Grade, %	-	-	0	-	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2
Mvmt Flow	34	14	763	20	581	4	26	19

Major/Minor	Major1			Major2			Minor2	
Conflicting Flow All	586	581	0	763	-	0	1101	293
Stage 1	-	-	-	-	-	-	623	-
Stage 2	-	-	-	-	-	-	478	-
Critical Hdwy	6.44	4.14	-	6.44	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	-
Follow-up Hdwy	2.52	2.22	-	2.52	-	-	3.52	3.32
Pot Cap-1 Maneuver	610	989	-	471	-	-	206	703
Stage 1	-	-	-	-	-	-	497	-
Stage 2	-	-	-	-	-	-	590	-
Platoon blocked, %			-		-	-		
Mov Cap-1 Maneuver	674	674	-	471	-	-	179	703
Mov Cap-2 Maneuver	-	-	-	-	-	-	179	-
Stage 1	-	-	-	-	-	-	461	-
Stage 2	-	-	-	-	-	-	553	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0.4	21.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	674	-	-	-	262
HCM Lane V/C Ratio	0.073	-	-	-	0.17
HCM Control Delay (s)	10.8	-	-	-	21.5
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	0.6

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	16	1	670	41	44	490	1	35	0	83	3	0
Future Volume (vph)	16	1	670	41	44	490	1	35	0	83	3	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		0	150		0	0		0	0	
Storage Lanes		0		0	1		0	0		0	0	
Taper Length (ft)		100			100			100			100	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Frt			0.991						0.905			0.923
Flt Protected			0.999		0.950				0.985			0.979
Satd. Flow (prot)	0	0	3504	0	1770	3539	0	0	1660	0	0	1683
Flt Permitted			0.999		0.950				0.985			0.979
Satd. Flow (perm)	0	0	3504	0	1770	3539	0	0	1660	0	0	1683
Link Speed (mph)			35			35			30			25
Link Distance (ft)			577			755			677			734
Travel Time (s)			11.2			14.7			15.4			20.0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	18	1	744	46	49	544	1	39	0	92	3	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	809	0	49	545	0	0	131	0	0	7
Sign Control			Free			Free			Stop			Stop

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 51.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	4
Future Volume (vph)	4
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Adj. Flow (vph)	4
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Sign Control	

Intersection Summary

Intersection	
Int Delay, s/veh	3.1

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	16	1	670	41	44	490	1	35	0	83	3	0	4
Future Vol, veh/h	16	1	670	41	44	490	1	35	0	83	3	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	1	744	46	49	544	1	39	0	92	3	0	4

Major/Minor	Major1				Major2			Minor1			Minor2		
Conflicting Flow All	546	545	0	0	790	0	0	1175	1448	395	1053	1471	273
Stage 1	-	-	-	-	-	-	-	805	805	-	643	643	-
Stage 2	-	-	-	-	-	-	-	370	643	-	410	828	-
Critical Hdwy	6.44	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.52	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	647	1020	-	-	826	-	-	147	130	604	181	126	725
Stage 1	-	-	-	-	-	-	-	342	393	-	428	467	-
Stage 2	-	-	-	-	-	-	-	622	467	-	589	384	-
Platoon blocked, %			-	-		-	-						
Mov Cap-1 Maneuver	657	657	-	-	826	-	-	134	116	604	141	112	725
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	134	116	-	141	112	-
Stage 1	-	-	-	-	-	-	-	324	373	-	406	439	-
Stage 2	-	-	-	-	-	-	-	582	439	-	473	364	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.8	26.5	19.2
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	296	657	-	-	826	-	-	261
HCM Lane V/C Ratio	0.443	0.002	-	-	0.059	-	-	0.03
HCM Control Delay (s)	26.5	10.6	0.6	-	9.6	-	-	19.2
HCM Lane LOS	D	B	A	-	A	-	-	C
HCM 95th %tile Q(veh)	2.2	0	-	-	0.2	-	-	0.1

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	12	744	513	3	4	22
Future Volume (vph)	12	744	513	3	4	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.999		0.884	
Flt Protected		0.999			0.993	
Satd. Flow (prot)	0	3536	3536	0	1635	0
Flt Permitted		0.999			0.993	
Satd. Flow (perm)	0	3536	3536	0	1635	0
Link Speed (mph)		35	35		30	
Link Distance (ft)		755	765		518	
Travel Time (s)		14.7	14.9		11.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	13	827	570	3	4	24
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	840	573	0	28	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 39.1%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	744	513	3	4	22
Future Vol, veh/h	12	744	513	3	4	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
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, %	2	2	2	2	2	2
Mvmt Flow	13	827	570	3	4	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	573	0	-	0	1012	287
Stage 1	-	-	-	-	572	-
Stage 2	-	-	-	-	440	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	996	-	-	-	236	710
Stage 1	-	-	-	-	528	-
Stage 2	-	-	-	-	616	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	996	-	-	-	230	710
Mov Cap-2 Maneuver	-	-	-	-	230	-
Stage 1	-	-	-	-	515	-
Stage 2	-	-	-	-	616	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	12.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	996	-	-	-	537
HCM Lane V/C Ratio	0.013	-	-	-	0.054
HCM Control Delay (s)	8.7	0.1	-	-	12.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	1	746	1	1	513	2	2
Future Volume (vph)	1	746	1	1	513	2	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	1.00	1.00
Frt						0.932	
Flt Protected						0.976	
Satd. Flow (prot)	0	3539	0	0	3539	1694	0
Flt Permitted						0.976	
Satd. Flow (perm)	0	3539	0	0	3539	1694	0
Link Speed (mph)		35			35	30	
Link Distance (ft)		765			840	435	
Travel Time (s)		14.9			16.4	9.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	829	1	1	570	2	2
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	831	0	0	571	4	0
Sign Control		Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 31.3%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	0.1

Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Vol, veh/h	1	746	1	1	513	2	2
Future Vol, veh/h	1	746	1	1	513	2	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
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	90
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	1	829	1	1	570	2	2

Major/Minor	Major1			Major2		Minor1	
Conflicting Flow All	570	0	0	830	0	1119	415
Stage 1	-	-	-	-	-	832	-
Stage 2	-	-	-	-	-	287	-
Critical Hdwy	6.44	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	-	5.84	-
Follow-up Hdwy	2.52	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	625	-	-	798	-	201	586
Stage 1	-	-	-	-	-	388	-
Stage 2	-	-	-	-	-	736	-
Platoon blocked, %		-	-		-		
Mov Cap-1 Maneuver	625	-	-	798	-	200	586
Mov Cap-2 Maneuver	-	-	-	-	-	200	-
Stage 1	-	-	-	-	-	387	-
Stage 2	-	-	-	-	-	735	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	17.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	298	-	-	798	-
HCM Lane V/C Ratio	0.015	-	-	0.001	-
HCM Control Delay (s)	17.3	-	-	9.5	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	3	743	0	30	0	501	6	3	0	3	8
Future Volume (vph)	2	3	743	0	30	0	501	6	3	0	3	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		0		125		0	0		0	0
Storage Lanes		0		0		1		0	0		0	0
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt							0.998			0.932		
Flt Protected						0.950				0.976		
Satd. Flow (prot)	0	0	3539	0	0	1770	3532	0	0	1694	0	0
Flt Permitted						0.950				0.976		
Satd. Flow (perm)	0	0	3539	0	0	1770	3532	0	0	1694	0	0
Link Speed (mph)			35				35			30		
Link Distance (ft)			840				1394			303		
Travel Time (s)			16.4				27.2			6.9		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	2	3	826	0	33	0	557	7	3	0	3	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	831	0	0	33	564	0	0	6	0	0
Sign Control			Free				Free			Stop		

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 34.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	8
Future Volume (vph)	0	8
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.932	
Flt Protected	0.976	
Satd. Flow (prot)	1694	0
Flt Permitted	0.976	
Satd. Flow (perm)	1694	0
Link Speed (mph)	30	
Link Distance (ft)	445	
Travel Time (s)	10.1	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	0	9
Shared Lane Traffic (%)		
Lane Group Flow (vph)	18	0
Sign Control	Stop	

Intersection Summary

Intersection	
Int Delay, s/veh	0.7

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Vol, veh/h	2	3	743	0	30	0	501	6	3	0	3	8	0	8
Future Vol, veh/h	2	3	743	0	30	0	501	6	3	0	3	8	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	125	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	3	826	0	33	0	557	7	3	0	3	9	0	9

Major/Minor	Major1				Major2				Minor1			Minor2		
Conflicting Flow All	563	564	0	-	826	826	0	0	1181	1466	413	1050	1463	282
Stage 1	-	-	-	-	-	-	-	-	836	836	-	627	627	-
Stage 2	-	-	-	-	-	-	-	-	345	630	-	423	836	-
Critical Hdwy	6.44	4.14	-	-	6.44	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.52	2.22	-	-	2.52	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	631	1004	-	0	429	800	-	-	145	127	588	181	127	715
Stage 1	-	-	-	0	-	-	-	-	328	381	-	438	474	-
Stage 2	-	-	-	0	-	-	-	-	644	473	-	579	381	-
Platoon blocked, %			-				-	-						
Mov Cap-1 Maneuver	807	807	-	-	427	427	-	-	133	116	588	168	116	715
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	133	116	-	168	116	-
Stage 1	-	-	-	-	-	-	-	-	323	376	-	432	438	-
Stage 2	-	-	-	-	-	-	-	-	587	437	-	568	376	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.8	22.1	19.2
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	217	807	-	427	-	-	272
HCM Lane V/C Ratio	0.031	0.004	-	0.078	-	-	0.065
HCM Control Delay (s)	22.1	9.5	-	14.1	-	-	19.2
HCM Lane LOS	C	A	-	B	-	-	C
HCM 95th %tile Q(veh)	0.1	0	-	0.3	-	-	0.2

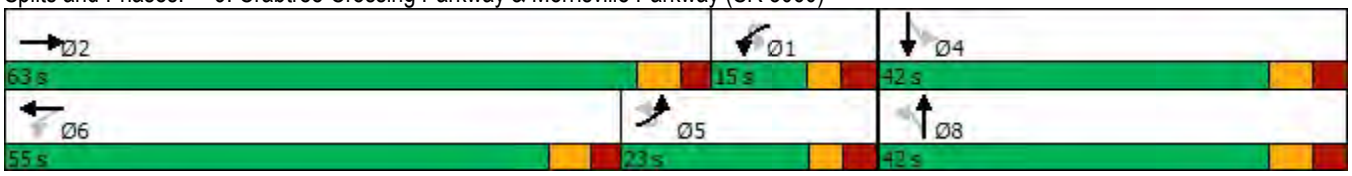
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	11	18	726	29	1	17	458	18	33	1	36	47
Future Volume (vph)	11	18	726	29	1	17	458	18	33	1	36	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			5%				-1%			3%		
Storage Length (ft)		75		0		200		0	100		0	100
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.994				0.994			0.854		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1725	3430	0	0	1778	3536	0	1743	1567	0	1787
Flt Permitted						0.299			0.728			0.730
Satd. Flow (perm)	0	1816	3430	0	0	560	3536	0	1336	1567	0	1373
Right Turn on Red				No				No			No	
Satd. Flow (RTOR)												
Link Speed (mph)			35				35			25		
Link Distance (ft)			1394				1279			1392		
Travel Time (s)			27.2				24.9			38.0		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	12	20	807	32	1	19	509	20	37	1	40	52
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	32	839	0	0	20	529	0	37	41	0	52
Turn Type	custom	Prot	NA		custom	pm+pt	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			8		
Permitted Phases	5				1	6			8			4
Detector Phase	5	5	2		1	1	6		8	8		4
Switch Phase												
Minimum Initial (s)	7.0	7.0	10.0		7.0	7.0	10.0		7.0	7.0		7.0
Minimum Split (s)	13.2	13.2	41.5		13.4	13.4	36.5		40.2	40.2		36.2
Total Split (s)	23.0	23.0	63.0		15.0	15.0	55.0		42.0	42.0		42.0
Total Split (%)	19.2%	19.2%	52.5%		12.5%	12.5%	45.8%		35.0%	35.0%		35.0%
Maximum Green (s)	16.8	16.8	56.5		8.6	8.6	48.5		34.8	34.8		34.8
Yellow Time (s)	3.0	3.0	3.9		3.0	3.0	3.9		4.0	4.0		4.0
All-Red Time (s)	3.2	3.2	2.6		3.4	3.4	2.6		3.2	3.2		3.2
Lost Time Adjust (s)		-1.2	-1.5			-1.4	-1.5		-2.2	-2.2		-2.2
Total Lost Time (s)		5.0	5.0			5.0	5.0		5.0	5.0		5.0
Lead/Lag	Lag	Lag	Lead		Lag	Lag	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	2.0	2.0	3.0		2.0	2.0	3.0		2.0	2.0		2.0
Recall Mode	None	None	Min		None	None	Min		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Dont Walk (s)			28.0				23.0		26.0	26.0		22.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		9.9	28.5			29.4	27.6		10.5	10.5		10.5
Actuated g/C Ratio		0.24	0.69			0.72	0.67		0.26	0.26		0.26
v/c Ratio		0.07	0.35			0.03	0.22		0.11	0.10		0.15
Control Delay		16.8	7.3			3.2	7.9		17.8	17.5		17.9
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	5	35
Future Volume (vph)	5	35
Ideal Flow (vphpl)	1900	1900
Grade (%)	-2%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.870	
Flt Protected		
Satd. Flow (prot)	1637	0
Flt Permitted		
Satd. Flow (perm)	1637	0
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	35	
Link Distance (ft)	1120	
Travel Time (s)	21.8	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	6	39
Shared Lane Traffic (%)		
Lane Group Flow (vph)	45	0
Turn Type	NA	
Protected Phases	4	
Permitted Phases		
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	7.0	
Minimum Split (s)	36.2	
Total Split (s)	42.0	
Total Split (%)	35.0%	
Maximum Green (s)	34.8	
Yellow Time (s)	4.0	
All-Red Time (s)	3.2	
Lost Time Adjust (s)	-2.2	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	2.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Dont Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	10.5	
Actuated g/C Ratio	0.26	
v/c Ratio	0.11	
Control Delay	17.4	
Queue Delay	0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Total Delay		16.8	7.3			3.2	7.9		17.8	17.5		17.9
LOS		B	A			A	A		B	B		B
Approach Delay			7.6				7.8			17.6		
Approach LOS			A				A			B		
Queue Length 50th (ft)		5	56			1	30		6	6		8
Queue Length 95th (ft)		29	172			8	122		35	37		45
Internal Link Dist (ft)			1314				1199			1312		
Turn Bay Length (ft)		75				200			100			100
Base Capacity (vph)		863	3362			734	3378		1178	1381		1210
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		0.04	0.25			0.03	0.16		0.03	0.03		0.04

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 41.1	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.35	
Intersection Signal Delay: 8.8	Intersection LOS: A
Intersection Capacity Utilization 41.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 9: Crabtree Crossing Parkway & Morrisville Parkway (SR 3060)



Lane Group	SBT	SBR
Total Delay	17.4	
LOS	B	
Approach Delay	17.6	
Approach LOS	B	
Queue Length 50th (ft)	7	
Queue Length 95th (ft)	40	
Internal Link Dist (ft)	1040	
Turn Bay Length (ft)		
Base Capacity (vph)	1443	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.03	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	10	725	74	2	43	399	4	76	0	49	10
Future Volume (vph)	1	10	725	74	2	43	399	4	76	0	49	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%				-1%			0%		
Storage Length (ft)		250		150		150		0	150		0	0
Storage Lanes		1		1		1		0	1		1	0
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	1.00	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	1.00	1.00
Frt				0.850			0.999				0.850	
Flt Protected		0.950				0.950			0.950	0.950		
Satd. Flow (prot)	0	1770	3539	1583	0	1778	3553	0	1681	1681	1583	0
Flt Permitted		0.486				0.308			0.950	0.950		
Satd. Flow (perm)	0	905	3539	1583	0	577	3553	0	1681	1681	1583	0
Right Turn on Red				No				No			No	
Satd. Flow (RTOR)												
Link Speed (mph)			35				35			30		
Link Distance (ft)			1279				770			504		
Travel Time (s)			24.9				15.0			11.5		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	11	806	82	2	48	443	4	84	0	54	11
Shared Lane Traffic (%)									50%			
Lane Group Flow (vph)	0	12	806	82	0	50	447	0	42	42	54	0
Turn Type	custom	D.P+P	NA	pm+ov	custom	D.P+P	NA		Split	NA	pm+ov	Perm
Protected Phases		5	2	4		1	6		4	4	1!	
Permitted Phases	5	6		2	1!	2					4	3
Detector Phase	5	5	2	4	1	1	6		4	4	1	3
Switch Phase												
Minimum Initial (s)	7.0	7.0	10.0	7.0	7.0	7.0	10.0		7.0	7.0	7.0	7.0
Minimum Split (s)	12.9	12.9	26.3	34.6	12.6	12.6	22.3		34.6	34.6	12.6	39.7
Total Split (s)	12.9	12.9	33.1	34.6	12.6	12.6	32.8		34.6	34.6	12.6	39.7
Total Split (%)	10.8%	10.8%	27.6%	28.8%	10.5%	10.5%	27.3%		28.8%	28.8%	10.5%	33.1%
Maximum Green (s)	7.0	7.0	26.8	28.0	7.0	7.0	26.5		28.0	28.0	7.0	33.0
Yellow Time (s)	3.0	3.0	4.0	3.0	3.0	3.0	4.0		3.0	3.0	3.0	3.0
All-Red Time (s)	2.9	2.9	2.3	3.6	2.6	2.6	2.3		3.6	3.6	2.6	3.7
Lost Time Adjust (s)		-0.9	-1.3	-1.3		-0.6	-1.3		-1.6	-1.6	-0.6	
Total Lost Time (s)		5.0	5.0	5.3		5.0	5.0		5.0	5.0	5.0	
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag		Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	3.0	2.0	2.0	2.0	3.0		2.0	2.0	2.0	2.0
Recall Mode	None	None	C-Min	None	None	None	C-Min		None	None	None	None
Walk Time (s)			7.0	7.0			7.0		7.0	7.0		7.0
Flash Dont Walk (s)			13.0	21.0			9.0		21.0	21.0		26.0
Pedestrian Calls (#/hr)			0	0			0		0	0		0
Act Effct Green (s)		89.5	82.4	91.0		87.5	87.3		9.8	9.8	19.7	
Actuated g/C Ratio		0.75	0.69	0.76		0.73	0.73		0.08	0.08	0.16	
v/c Ratio		0.02	0.33	0.07		0.10	0.17		0.31	0.31	0.21	
Control Delay		7.3	11.8	3.8		7.1	9.0		57.5	57.5	42.9	
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	

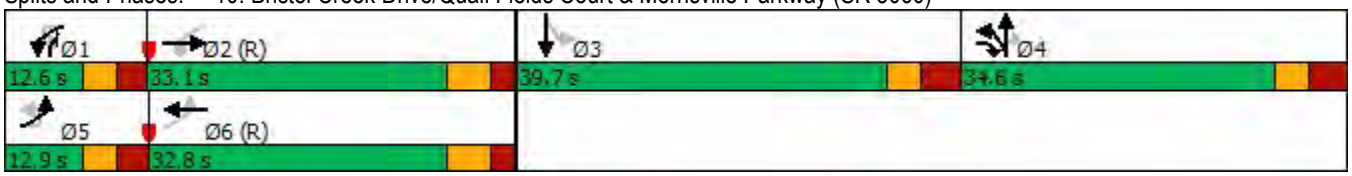
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	2	18
Future Volume (vph)	2	18
Ideal Flow (vphpl)	1900	1900
Grade (%)	0%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.918	
Flt Protected	0.984	
Satd. Flow (prot)	1683	0
Flt Permitted	0.293	
Satd. Flow (perm)	501	0
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	30	
Link Distance (ft)	386	
Travel Time (s)	8.8	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	2	20
Shared Lane Traffic (%)		
Lane Group Flow (vph)	33	0
Turn Type	NA	
Protected Phases	3	
Permitted Phases		
Detector Phase	3	
Switch Phase		
Minimum Initial (s)	7.0	
Minimum Split (s)	39.7	
Total Split (s)	39.7	
Total Split (%)	33.1%	
Maximum Green (s)	33.0	
Yellow Time (s)	3.0	
All-Red Time (s)	3.7	
Lost Time Adjust (s)	-1.7	
Total Lost Time (s)	5.0	
Lead/Lag	Lead	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	2.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Dont Walk (s)	26.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	11.9	
Actuated g/C Ratio	0.10	
v/c Ratio	0.67	
Control Delay	106.0	
Queue Delay	0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Total Delay		7.3	11.8	3.8		7.1	9.0		57.5	57.5	42.9	
LOS		A	B	A		A	A		E	E	D	
Approach Delay			11.0				8.8			51.8		
Approach LOS			B				A			D		
Queue Length 50th (ft)		2	159	9		10	54		32	32	36	
Queue Length 95th (ft)		11	245	25		29	128		70	70	72	
Internal Link Dist (ft)			1199				690			424		
Turn Bay Length (ft)		250		150		150			150			
Base Capacity (vph)		731	2429	1388		496	2585		414	414	259	
Starvation Cap Reductn		0	0	0		0	0		0	0	0	
Spillback Cap Reductn		0	0	0		0	0		0	0	0	
Storage Cap Reductn		0	0	0		0	0		0	0	0	
Reduced v/c Ratio		0.02	0.33	0.06		0.10	0.17		0.10	0.10	0.21	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBWB and 6:EBWB, Start of Green
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.67
Intersection Signal Delay: 15.9 Intersection LOS: B
Intersection Capacity Utilization 54.2% ICU Level of Service A
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
! Phase conflict between lane groups.

Splits and Phases: 10: Bristol Creek Drive/Quail Fields Court & Morrisville Parkway (SR 3060)



Lane Group	SBT	SBR
Total Delay	106.0	
LOS	F	
Approach Delay	106.0	
Approach LOS	F	
Queue Length 50th (ft)	25	
Queue Length 95th (ft)	#66	
Internal Link Dist (ft)	306	
Turn Bay Length (ft)		
Base Capacity (vph)	144	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.23	

Intersection Summary

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	10	776	2	441	14	13	7
Future Volume (vph)	10	776	2	441	14	13	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%		0%		0%	
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	1.00	1.00
Frt				0.995		0.951	
Flt Protected		0.999				0.969	
Satd. Flow (prot)	0	3500	0	3522	0	1717	0
Flt Permitted		0.999				0.969	
Satd. Flow (perm)	0	3500	0	3522	0	1717	0
Link Speed (mph)		35		35		30	
Link Distance (ft)		770		560		315	
Travel Time (s)		15.0		10.9		7.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	11	862	2	490	16	14	8
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	873	0	508	0	22	0
Sign Control		Free		Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 38.5%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Vol, veh/h	10	776	2	441	14	13	7
Future Vol, veh/h	10	776	2	441	14	13	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	-	None	-	None
Storage Length	-	-	-	-	-	0	-
Veh in Median Storage, #	-	0	-	0	-	0	-
Grade, %	-	2	-	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	11	862	2	490	16	14	8

Major/Minor	Major1		Major2			Minor2	
Conflicting Flow All	506	0	862	-	0	955	253
Stage 1	-	-	-	-	-	502	-
Stage 2	-	-	-	-	-	453	-
Critical Hdwy	4.14	-	6.44	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	2.52	-	-	3.52	3.32
Pot Cap-1 Maneuver	1055	-	407	-	-	256	746
Stage 1	-	-	-	-	-	573	-
Stage 2	-	-	-	-	-	607	-
Platoon blocked, %		-		-	-		
Mov Cap-1 Maneuver	1055	-	407	-	-	249	746
Mov Cap-2 Maneuver	-	-	-	-	-	249	-
Stage 1	-	-	-	-	-	562	-
Stage 2	-	-	-	-	-	603	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0.1	16.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1055	-	-	-	325
HCM Lane V/C Ratio	0.011	-	-	-	0.068
HCM Control Delay (s)	8.4	0.1	-	-	16.9
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	3	775	10	2	8	452	7	2	0	10	4
Future Volume (vph)	3	3	775	10	2	8	452	7	2	0	10	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			2%				0%			0%		
Storage Length (ft)		0		0		150		0	0		0	0
Storage Lanes		0		0		0		0	0		0	0
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.998				0.998			0.886		
Flt Protected							0.999			0.992		
Satd. Flow (prot)	0	0	3497	0	0	0	3529	0	0	1637	0	0
Flt Permitted							0.999			0.992		
Satd. Flow (perm)	0	0	3497	0	0	0	3529	0	0	1637	0	0
Link Speed (mph)			35				35			30		
Link Distance (ft)			560				571			242		
Travel Time (s)			10.9				11.1			5.5		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	3	3	861	11	2	9	502	8	2	0	11	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	878	0	0	0	521	0	0	13	0	0
Sign Control			Free				Free			Stop		

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 36.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	0
Future Volume (vph)	0	0
Ideal Flow (vphpl)	1900	1900
Grade (%)	0%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt		
Flt Protected	0.950	
Satd. Flow (prot)	1770	0
Flt Permitted	0.950	
Satd. Flow (perm)	1770	0
Link Speed (mph)	30	
Link Distance (ft)	282	
Travel Time (s)	6.4	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	0	0
Shared Lane Traffic (%)		
Lane Group Flow (vph)	4	0
Sign Control	Stop	

Intersection Summary

Intersection	
Int Delay, s/veh	0.5

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Vol, veh/h	3	3	775	10	2	8	452	7	2	0	10	4	0	0
Future Vol, veh/h	3	3	775	10	2	8	452	7	2	0	10	4	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	2	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	3	861	11	2	9	502	8	2	0	11	4	0	0

Major/Minor	Major1				Major2				Minor1			Minor2		
Conflicting Flow All	510	510	0	0	872	872	0	0	1152	1411	436	971	1412	255
Stage 1	-	-	-	-	-	-	-	-	879	879	-	528	528	-
Stage 2	-	-	-	-	-	-	-	-	273	532	-	443	884	-
Critical Hdwy	6.44	4.14	-	-	6.44	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.52	2.22	-	-	2.52	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	682	1051	-	-	401	769	-	-	153	137	568	207	137	744
Stage 1	-	-	-	-	-	-	-	-	309	363	-	502	526	-
Stage 2	-	-	-	-	-	-	-	-	710	524	-	564	362	-
Platoon blocked, %			-	-			-	-						
Mov Cap-1 Maneuver	827	827	-	-	646	646	-	-	148	132	568	197	132	744
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	148	132	-	197	132	-
Stage 1	-	-	-	-	-	-	-	-	304	357	-	494	513	-
Stage 2	-	-	-	-	-	-	-	-	693	511	-	544	356	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.4	14.7	23.7
HCM LOS			B	C

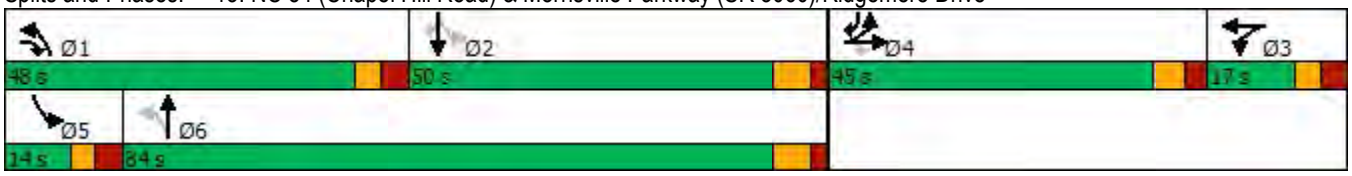
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	386	827	-	-	646	-	-	197
HCM Lane V/C Ratio	0.035	0.004	-	-	0.014	-	-	0.023
HCM Control Delay (s)	14.7	9.4	0.1	-	10.7	0.2	-	23.7
HCM Lane LOS	B	A	A	-	B	A	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	406	6	379	4	9	26	322	623	8	2	516	138
Future Volume (vph)	406	6	379	4	9	26	322	623	8	2	516	138
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			6%			-1%			2%	
Storage Length (ft)	475		0	100		0	650		0	150		150
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (ft)	0			100			100			100		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850		0.888			0.998				0.850
Flt Protected	0.950	0.954		0.950			0.950			0.950		
Satd. Flow (prot)	1664	1671	1567	1717	1604	0	1778	3550	0	1752	3504	1567
Flt Permitted	0.950	0.954		0.950			0.295			0.385		
Satd. Flow (perm)	1664	1671	1567	1717	1604	0	552	3550	0	710	3504	1567
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			15			45			45	
Link Distance (ft)		571			835			1433			1407	
Travel Time (s)		11.1			38.0			21.7			21.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	451	7	421	4	10	29	358	692	9	2	573	153
Shared Lane Traffic (%)	49%											
Lane Group Flow (vph)	230	228	421	4	39	0	358	701	0	2	573	153
Turn Type	Split	NA	pm+ov	Split	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	4	4	1	3	3		1	6		5	2	4
Permitted Phases			4				6			2		2
Detector Phase	4	4	1	3	3		1	6		5	2	4
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	12.0		7.0	12.0	7.0
Minimum Split (s)	37.3	37.3	13.3	13.4	13.4		13.3	33.6		13.2	36.6	37.3
Total Split (s)	45.0	45.0	48.0	17.0	17.0		48.0	84.0		14.0	50.0	45.0
Total Split (%)	28.1%	28.1%	30.0%	10.6%	10.6%		30.0%	52.5%		8.8%	31.3%	28.1%
Maximum Green (s)	38.7	38.7	41.7	10.6	10.6		41.7	77.4		7.8	43.4	38.7
Yellow Time (s)	3.7	3.7	3.0	3.0	3.0		3.0	4.6		3.0	4.6	3.7
All-Red Time (s)	2.6	2.6	3.3	3.4	3.4		3.3	2.0		3.2	2.0	2.6
Lost Time Adjust (s)	-1.3	-1.3	-1.3	-1.4	-1.4		-1.3	-1.6		-1.2	-1.6	-1.3
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	6.0		2.0	6.0	2.0
Recall Mode	None	None	None	None	None		None	Min		None	Min	None
Walk Time (s)	7.0	7.0						7.0			7.0	7.0
Flash Dont Walk (s)	24.0	24.0						20.0			23.0	24.0
Pedestrian Calls (#/hr)	0	0						0			0	0
Act Effct Green (s)	21.5	21.5	43.6	10.2	10.2		54.8	53.0		39.2	30.1	57.1
Actuated g/C Ratio	0.23	0.23	0.46	0.11	0.11		0.58	0.56		0.41	0.32	0.60
v/c Ratio	0.61	0.60	0.59	0.02	0.23		0.63	0.35		0.01	0.52	0.16
Control Delay	44.8	44.5	17.5	52.5	53.4		18.3	15.0		15.0	31.3	11.1
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	44.8	44.5	17.5	52.5	53.4		18.3	15.0		15.0	31.3	11.1
LOS	D	D	B	D	D		B	B		B	C	B
Approach Delay		31.6			53.3			16.1			27.0	
Approach LOS		C			D			B			C	
Queue Length 50th (ft)	136	135	132	2	23		119	121		1	154	42
Queue Length 95th (ft)	286	284	259	16	72		239	269		5	286	97
Internal Link Dist (ft)		491			755			1353			1327	
Turn Bay Length (ft)	475			100			650			150		150
Base Capacity (vph)	780	783	1167	241	225		956	2903		410	1848	1274
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	0
Reduced v/c Ratio	0.29	0.29	0.36	0.02	0.17		0.37	0.24		0.00	0.31	0.12

Intersection Summary	
Area Type:	Other
Cycle Length: 160	
Actuated Cycle Length: 94.9	
Natural Cycle: 105	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 24.7	Intersection LOS: C
Intersection Capacity Utilization 62.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 13: NC 54 (Chapel Hill Road) & Morrisville Parkway (SR 3060)/Ridgemere Drive



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	114	379	64	98	413	236	4	68	921	181	7	420
Future Volume (vph)	114	379	64	98	413	236	4	68	921	181	7	420
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			4%				-3%			
Storage Length (ft)	200		0	200		0		325		350		850
Storage Lanes	1		0	1		0		1		1		1
Taper Length (ft)	100			100				100				100
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	0.95	1.00	0.95	1.00	0.95	1.00
Ped Bike Factor		1.00		1.00								
Frt		0.978			0.945					0.850		
Flt Protected	0.950			0.950				0.950				0.950
Satd. Flow (prot)	1743	3403	0	1734	3278	0	0	1796	3592	1607	0	1743
Flt Permitted	0.157			0.180				0.074				0.078
Satd. Flow (perm)	288	3403	0	328	3278	0	0	140	3592	1607	0	143
Right Turn on Red			No			No				No		
Satd. Flow (RTOR)												
Link Speed (mph)		45			35				45			
Link Distance (ft)		1496			481				1971			
Travel Time (s)		22.7			9.4				29.9			
Confl. Peds. (#/hr)			1	1				2				
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	127	421	71	109	459	262	4	76	1023	201	8	467
Shared Lane Traffic (%)												
Lane Group Flow (vph)	127	492	0	109	721	0	0	80	1023	201	0	475
Turn Type	pm+pt	NA		pm+pt	NA		custom	pm+pt	NA	pm+ov	custom	pm+pt
Protected Phases	7	4		3	8			5	2	3		1
Permitted Phases	4			8			5	2		2	1	6
Detector Phase	7	4		3	8		5	5	2	3	1	1
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0	12.0	7.0	7.0	7.0
Minimum Split (s)	13.3	14.1		13.4	14.1		13.3	13.3	37.8	13.4	13.3	13.3
Total Split (s)	25.0	30.0		25.0	30.0		20.0	20.0	60.0	25.0	45.0	45.0
Total Split (%)	15.6%	18.8%		15.6%	18.8%		12.5%	12.5%	37.5%	15.6%	28.1%	28.1%
Maximum Green (s)	18.7	22.9		18.6	22.9		13.7	13.7	53.2	18.6	38.7	38.7
Yellow Time (s)	3.0	4.3		3.0	4.3		3.0	3.0	4.8	3.0	3.0	3.0
All-Red Time (s)	3.3	2.8		3.4	2.8		3.3	3.3	2.0	3.4	3.3	3.3
Lost Time Adjust (s)	-1.3	-2.1		-1.4	-2.1			-1.3	-1.8	-1.4		-1.3
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0	5.0		5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.0	1.0	6.0	2.0	1.0	1.0
Recall Mode	None	None		None	None		None	None	Min	None	None	None
Walk Time (s)									7.0			
Flash Dont Walk (s)									24.0			
Pedestrian Calls (#/hr)									0			
Act Effct Green (s)	40.8	26.3		38.2	25.0			63.5	54.2	72.4		98.7
Actuated g/C Ratio	0.27	0.17		0.25	0.16			0.41	0.35	0.47		0.64
v/c Ratio	0.60	0.84		0.54	1.35			0.51	0.81	0.27		0.94

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	1396	130
Future Volume (vph)	1396	130
Ideal Flow (vphpl)	1900	1900
Grade (%)	3%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.95	0.95
Ped Bike Factor	1.00	
Frt	0.987	
Flt Protected		
Satd. Flow (prot)	3436	0
Flt Permitted		
Satd. Flow (perm)	3436	0
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	45	
Link Distance (ft)	1155	
Travel Time (s)	17.5	
Confl. Peds. (#/hr)		2
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	1551	144
Shared Lane Traffic (%)		
Lane Group Flow (vph)	1695	0
Turn Type	NA	
Protected Phases	6	
Permitted Phases		
Detector Phase	6	
Switch Phase		
Minimum Initial (s)	12.0	
Minimum Split (s)	36.8	
Total Split (s)	85.0	
Total Split (%)	53.1%	
Maximum Green (s)	78.2	
Yellow Time (s)	4.8	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	-1.8	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	6.0	
Recall Mode	Min	
Walk Time (s)	7.0	
Flash Dont Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	84.4	
Actuated g/C Ratio	0.55	
v/c Ratio	0.90	

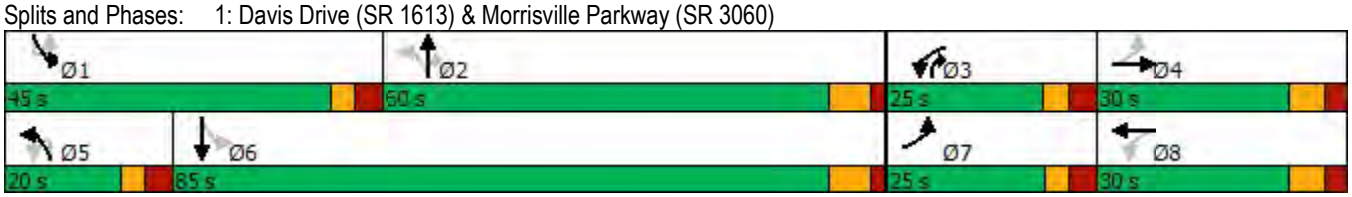
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Control Delay	53.8	75.8		51.7	215.2			39.2	51.1	25.5		71.8
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0		0.0
Total Delay	53.8	75.8		51.7	215.2			39.2	51.1	25.5		71.8
LOS	D	E		D	F			D	D	C		E
Approach Delay		71.3			193.7				46.4			
Approach LOS		E			F				D			
Queue Length 50th (ft)	99	256		84	~501			28	488	120		410
Queue Length 95th (ft)	158	#356		137	#663			83	608	180		#671
Internal Link Dist (ft)		1416			401				1891			
Turn Bay Length (ft)	200			200				325		350		850
Base Capacity (vph)	272	584		276	535			225	1291	831		510
Starvation Cap Reductn	0	0		0	0			0	0	0		0
Spillback Cap Reductn	0	0		0	0			0	0	0		0
Storage Cap Reductn	0	0		0	0			0	0	0		0
Reduced v/c Ratio	0.47	0.84		0.39	1.35			0.36	0.79	0.24		0.93

Intersection Summary	
Area Type: Other	
Cycle Length: 160	
Actuated Cycle Length: 153.2	
Natural Cycle: 130	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.35	
Intersection Signal Delay: 74.1	Intersection LOS: E
Intersection Capacity Utilization 91.1%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Davis Drive (SR 1613) & Morrisville Parkway (SR 3060)



Lane Group	SBT	SBR
Control Delay	38.4	
Queue Delay	0.0	
Total Delay	38.4	
LOS	D	
Approach Delay	45.7	
Approach LOS	D	
Queue Length 50th (ft)	756	
Queue Length 95th (ft)	#1056	
Internal Link Dist (ft)	1075	
Turn Bay Length (ft)		
Base Capacity (vph)	1892	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.90	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	19	957	3	7	0	739	13	4	0	3	2
Future Volume (vph)	1	19	957	3	7	0	739	13	4	0	3	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%				4%			0%		
Storage Length (ft)		50		0		250		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt							0.997			0.942		
Flt Protected		0.950				0.950				0.972		
Satd. Flow (prot)	0	1770	3539	0	0	1734	3458	0	0	1706	0	0
Flt Permitted		0.950				0.950				0.972		
Satd. Flow (perm)	0	1770	3539	0	0	1734	3458	0	0	1706	0	0
Link Speed (mph)			35				35			30		
Link Distance (ft)			481				711			498		
Travel Time (s)			9.4				13.9			11.3		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	21	1063	3	8	0	821	14	4	0	3	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	22	1066	0	0	8	835	0	0	7	0	0
Sign Control			Free				Free			Stop		

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 36.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	3
Future Volume (vph)	0	3
Ideal Flow (vphpl)	1900	1900
Grade (%)	0%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.919	
Flt Protected	0.980	
Satd. Flow (prot)	1678	0
Flt Permitted	0.980	
Satd. Flow (perm)	1678	0
Link Speed (mph)	30	
Link Distance (ft)	605	
Travel Time (s)	13.8	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	0	3
Shared Lane Traffic (%)		
Lane Group Flow (vph)	5	0
Sign Control	Stop	

Intersection Summary

Intersection	
Int Delay, s/veh	0.4

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Vol, veh/h	1	19	957	3	7	0	739	13	4	0	3	2	0	3
Future Vol, veh/h	1	19	957	3	7	0	739	13	4	0	3	2	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	-	50	-	-	-	250	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	-	4	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	21	1063	3	8	0	821	14	4	0	3	2	0	3

Major/Minor	Major1				Major2				Minor1			Minor2		
Conflicting Flow All	836	835	0	0	1067	1066	0	0	1536	1960	533	1420	1954	418
Stage 1	-	-	-	-	-	-	-	-	1109	1109	-	844	844	-
Stage 2	-	-	-	-	-	-	-	-	427	851	-	576	1110	-
Critical Hdwy	6.44	4.14	-	-	6.44	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.52	2.22	-	-	2.52	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	423	794	-	-	301	649	-	-	79	63	491	97	63	584
Stage 1	-	-	-	-	-	-	-	-	223	283	-	324	377	-
Stage 2	-	-	-	-	-	-	-	-	576	375	-	470	283	-
Platoon blocked, %			-	-			-	-						
Mov Cap-1 Maneuver	760	760	-	-	299	299	-	-	75	60	491	92	60	584
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	75	60	-	92	60	-
Stage 1	-	-	-	-	-	-	-	-	217	275	-	315	367	-
Stage 2	-	-	-	-	-	-	-	-	557	365	-	453	275	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	37.7	25
HCM LOS			E	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	118	760	-	-	299	-	-	186
HCM Lane V/C Ratio	0.066	0.029	-	-	0.026	-	-	0.03
HCM Control Delay (s)	37.7	9.9	-	-	17.4	-	-	25
HCM Lane LOS	E	A	-	-	C	-	-	D
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0.1	-	-	0.1

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	14	26	877	52	1	6	721	16	11	0	25	5
Future Volume (vph)	14	26	877	52	1	6	721	16	11	0	25	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	16	12	12
Grade (%)			0%				4%			0%		
Storage Length (ft)		100		0		0		125	0		0	0
Storage Lanes		1		0		0		1	0		0	0
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Frt			0.992					0.850		0.905		
Flt Protected		0.950								0.985		
Satd. Flow (prot)	0	1770	3511	0	0	0	3468	1552	0	1882	0	0
Flt Permitted		0.950								0.985		
Satd. Flow (perm)	0	1770	3511	0	0	0	3468	1552	0	1882	0	0
Link Speed (mph)			35				35			30		
Link Distance (ft)			711				611			253		
Travel Time (s)			13.9				11.9			5.8		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	16	29	974	58	1	7	801	18	12	0	28	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	45	1032	0	0	0	809	18	0	40	0	0
Sign Control			Free				Free			Stop		

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 43.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	13
Future Volume (vph)	0	13
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.905	
Flt Protected	0.985	
Satd. Flow (prot)	1660	0
Flt Permitted	0.985	
Satd. Flow (perm)	1660	0
Link Speed (mph)	30	
Link Distance (ft)	462	
Travel Time (s)	10.5	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	0	14
Shared Lane Traffic (%)		
Lane Group Flow (vph)	20	0
Sign Control	Stop	

Intersection Summary

Intersection	
Int Delay, s/veh	1.2

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Vol, veh/h	14	26	877	52	1	6	721	16	11	0	25	5	0	13
Future Vol, veh/h	14	26	877	52	1	6	721	16	11	0	25	5	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	-	100	-	-	-	-	-	125	-	-	-	-	-	-
Veh in Median Storage, #	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	-	4	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	29	974	58	1	7	801	18	12	0	28	6	0	14

Major/Minor	Major1				Major2				Minor1			Minor2		
Conflicting Flow All	801	819	0	0	1032	1032	0	0	1510	1928	516	1394	1939	401
Stage 1	-	-	-	-	-	-	-	-	1093	1093	-	817	817	-
Stage 2	-	-	-	-	-	-	-	-	417	835	-	577	1122	-
Critical Hdwy	6.44	4.14	-	-	6.44	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.52	2.22	-	-	2.52	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	445	805	-	-	317	669	-	-	83	66	504	101	65	599
Stage 1	-	-	-	-	-	-	-	-	229	288	-	337	388	-
Stage 2	-	-	-	-	-	-	-	-	584	381	-	469	279	-
Platoon blocked, %			-	-			-	-						
Mov Cap-1 Maneuver	620	620	-	-	570	570	-	-	75	60	504	88	59	599
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	75	60	-	88	59	-
Stage 1	-	-	-	-	-	-	-	-	213	268	-	313	378	-
Stage 2	-	-	-	-	-	-	-	-	555	371	-	412	259	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.1	30.1	22.2
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	183	620	-	-	570	-	-	229
HCM Lane V/C Ratio	0.219	0.072	-	-	0.012	-	-	0.087
HCM Control Delay (s)	30.1	11.3	-	-	11.4	-	-	22.2
HCM Lane LOS	D	B	-	-	B	-	-	C
HCM 95th %tile Q(veh)	0.8	0.2	-	-	0	-	-	0.3

Lane Group	EBU	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations								
Traffic Volume (vph)	15	16	877	10	719	23	15	10
Future Volume (vph)	15	16	877	10	719	23	15	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		125		0		0	0	0
Storage Lanes		1		0		0	1	0
Taper Length (ft)		100		100			100	
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.995		0.947	
Flt Protected		0.950			0.999		0.971	
Satd. Flow (prot)	0	1770	3539	0	3518	0	1713	0
Flt Permitted		0.950			0.999		0.971	
Satd. Flow (perm)	0	1770	3539	0	3518	0	1713	0
Link Speed (mph)			35		35		25	
Link Distance (ft)			957		577		155	
Travel Time (s)			18.6		11.2		4.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	17	18	974	11	799	26	17	11
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	35	974	0	836	0	28	0
Sign Control			Free		Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 37.7%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	0.7

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations								
Traffic Vol, veh/h	15	16	877	10	719	23	15	10
Future Vol, veh/h	15	16	877	10	719	23	15	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	Yield	-	None
Storage Length	-	125	-	-	-	-	0	-
Veh in Median Storage, #	-	-	0	-	0	-	0	-
Grade, %	-	-	0	-	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2
Mvmt Flow	17	18	974	11	799	26	17	11

Major/Minor	Major1			Major2			Minor2	
Conflicting Flow All	824	799	0	974	-	0	1391	413
Stage 1	-	-	-	-	-	-	834	-
Stage 2	-	-	-	-	-	-	557	-
Critical Hdwy	6.44	4.14	-	6.44	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	-
Follow-up Hdwy	2.52	2.22	-	2.52	-	-	3.52	3.32
Pot Cap-1 Maneuver	431	819	-	345	-	-	133	588
Stage 1	-	-	-	-	-	-	387	-
Stage 2	-	-	-	-	-	-	537	-
Platoon blocked, %			-		-	-		
Mov Cap-1 Maneuver	565	565	-	345	-	-	118	588
Mov Cap-2 Maneuver	-	-	-	-	-	-	118	-
Stage 1	-	-	-	-	-	-	364	-
Stage 2	-	-	-	-	-	-	505	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0.2	29.7
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	565	-	-	-	173
HCM Lane V/C Ratio	0.061	-	-	-	0.161
HCM Control Delay (s)	11.8	-	-	-	29.7
HCM Lane LOS	B	-	-	-	D
HCM 95th %tile Q(veh)	0.2	-	-	-	0.6

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	23	10	837	32	97	713	4	11	0	78	1	1
Future Volume (vph)	23	10	837	32	97	713	4	11	0	78	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		0	150		0	0		0	0	
Storage Lanes		0		0	1		0	0		0	0	
Taper Length (ft)		100			100			100			100	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Frt			0.995			0.999			0.881			0.899
Flt Protected			0.998		0.950				0.994			0.994
Satd. Flow (prot)	0	0	3514	0	1770	3536	0	0	1631	0	0	1665
Flt Permitted			0.998		0.950				0.994			0.994
Satd. Flow (perm)	0	0	3514	0	1770	3536	0	0	1631	0	0	1665
Link Speed (mph)			35			35			30			25
Link Distance (ft)			577			755			677			734
Travel Time (s)			11.2			14.7			15.4			20.0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	26	11	930	36	108	792	4	12	0	87	1	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	1003	0	108	796	0	0	99	0	0	8
Sign Control			Free			Free			Stop			Stop

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 61.9%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	5
Future Volume (vph)	5
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Adj. Flow (vph)	6
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Sign Control	

Intersection Summary

Intersection	
Int Delay, s/veh	3.3

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	23	10	837	32	97	713	4	11	0	78	1	1	5
Future Vol, veh/h	23	10	837	32	97	713	4	11	0	78	1	1	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	26	11	930	36	108	792	4	12	0	87	1	1	6

Major/Minor	Major1				Major2			Minor1			Minor2		
Conflicting Flow All	797	796	0	0	966	0	0	1635	2034	483	1549	2050	398
Stage 1	-	-	-	-	-	-	-	1022	1022	-	1010	1010	-
Stage 2	-	-	-	-	-	-	-	613	1012	-	539	1040	-
Critical Hdwy	6.44	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.52	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	448	822	-	-	709	-	-	67	56	530	77	55	601
Stage 1	-	-	-	-	-	-	-	253	312	-	257	316	-
Stage 2	-	-	-	-	-	-	-	446	315	-	494	306	-
Platoon blocked, %			-	-		-	-						
Mov Cap-1 Maneuver	516	516	-	-	709	-	-	51	40	530	50	39	601
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	51	40	-	50	39	-
Stage 1	-	-	-	-	-	-	-	214	263	-	217	268	-
Stage 2	-	-	-	-	-	-	-	373	267	-	349	258	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.2	1.3	29.3	34.4
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	245	516	-	-	709	-	-	130
HCM Lane V/C Ratio	0.404	0.022	-	-	0.152	-	-	0.06
HCM Control Delay (s)	29.3	12.5	1.9	-	11	-	-	34.4
HCM Lane LOS	D	B	A	-	B	-	-	D
HCM 95th %tile Q(veh)	1.8	0.1	-	-	0.5	-	-	0.2

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	3	15	898	801	4	5	10
Future Volume (vph)	3	15	898	801	4	5	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	1.00	1.00
Frt				0.999		0.913	
Flt Protected			0.999			0.983	
Satd. Flow (prot)	0	0	3536	3536	0	1672	0
Flt Permitted			0.999			0.983	
Satd. Flow (perm)	0	0	3536	3536	0	1672	0
Link Speed (mph)			35	35		30	
Link Distance (ft)			755	765		518	
Travel Time (s)			14.7	14.9		11.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	3	17	998	890	4	6	11
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	1018	894	0	17	0
Sign Control			Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 47.7%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	0.7

Movement	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Vol, veh/h	3	15	898	801	4	5	10
Future Vol, veh/h	3	15	898	801	4	5	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
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	90
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	3	17	998	890	4	6	11

Major/Minor	Major1			Major2		Minor2	
Conflicting Flow All	894	894	0	-	0	1431	447
Stage 1	-	-	-	-	-	892	-
Stage 2	-	-	-	-	-	539	-
Critical Hdwy	6.44	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	-	5.84	-
Follow-up Hdwy	2.52	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	388	755	-	-	-	125	559
Stage 1	-	-	-	-	-	361	-
Stage 2	-	-	-	-	-	549	-
Platoon blocked, %			-	-	-		
Mov Cap-1 Maneuver	649	649	-	-	-	116	559
Mov Cap-2 Maneuver	-	-	-	-	-	116	-
Stage 1	-	-	-	-	-	336	-
Stage 2	-	-	-	-	-	549	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	20.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	649	-	-	-	246
HCM Lane V/C Ratio	0.026	-	-	-	0.068
HCM Control Delay (s)	10.7	0.7	-	-	20.7
HCM Lane LOS	B	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	898	5	0	803	2	2
Future Volume (vph)	898	5	0	803	2	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.999				0.932	
Flt Protected					0.976	
Satd. Flow (prot)	3536	0	0	3539	1694	0
Flt Permitted					0.976	
Satd. Flow (perm)	3536	0	0	3539	1694	0
Link Speed (mph)	35			35	30	
Link Distance (ft)	765			840	435	
Travel Time (s)	14.9			16.4	9.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	998	6	0	892	2	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1004	0	0	892	4	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 35.0%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	898	5	0	803	2	2
Future Vol, veh/h	898	5	0	803	2	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
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, %	2	2	2	2	2	2
Mvmt Flow	998	6	0	892	2	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1004	0	1447	502
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	446	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	686	-	122	515
Stage 1	-	-	-	-	316	-
Stage 2	-	-	-	-	612	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	686	-	122	515
Mov Cap-2 Maneuver	-	-	-	-	122	-
Stage 1	-	-	-	-	316	-
Stage 2	-	-	-	-	612	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	23.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	197	-	-	686	-
HCM Lane V/C Ratio	0.023	-	-	-	-
HCM Control Delay (s)	23.7	-	-	0	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	896	1	30	2	801	9	0	0	4	3	0
Future Volume (vph)	3	896	1	30	2	801	9	0	0	4	3	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0		125		0	0		0	0	
Storage Lanes	0		0		1		0	0		0	0	
Taper Length (ft)	100				100			100			100	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Frt						0.998			0.865			0.946
Flt Protected					0.950							0.971
Satd. Flow (prot)	0	3539	0	0	1770	3532	0	0	1611	0	0	1711
Flt Permitted					0.950							0.971
Satd. Flow (perm)	0	3539	0	0	1770	3532	0	0	1611	0	0	1711
Link Speed (mph)		35				35			30			30
Link Distance (ft)		840				1394			303			445
Travel Time (s)		16.4				27.2			6.9			10.1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	3	996	1	33	2	890	10	0	0	4	3	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1000	0	0	35	900	0	0	4	0	0	5
Sign Control		Free				Free			Stop			Stop

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 36.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	2
Future Volume (vph)	2
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Adj. Flow (vph)	2
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Sign Control	

Intersection Summary

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	3	896	1	30	2	801	9	0	0	4	3	0	2
Future Vol, veh/h	3	896	1	30	2	801	9	0	0	4	3	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	125	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	996	1	33	2	890	10	0	0	4	3	0	2

Major/Minor	Major1			Major2				Minor1			Minor2		
Conflicting Flow All	900	0	0	997	997	0	0	1518	1973	499	1469	1968	450
Stage 1	-	-	-	-	-	-	-	1003	1003	-	965	965	-
Stage 2	-	-	-	-	-	-	-	515	970	-	504	1003	-
Critical Hdwy	4.14	-	-	6.44	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.52	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	751	-	-	334	690	-	-	82	62	517	89	62	556
Stage 1	-	-	-	-	-	-	-	259	318	-	274	331	-
Stage 2	-	-	-	-	-	-	-	511	330	-	518	318	-
Platoon blocked, %		-	-			-	-						
Mov Cap-1 Maneuver	751	-	-	342	342	-	-	75	55	517	81	55	556
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	75	55	-	81	55	-
Stage 1	-	-	-	-	-	-	-	257	315	-	272	296	-
Stage 2	-	-	-	-	-	-	-	455	295	-	509	315	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.6	12	35.6
HCM LOS			B	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	517	751	-	-	342	-	-	123
HCM Lane V/C Ratio	0.009	0.004	-	-	0.104	-	-	0.045
HCM Control Delay (s)	12	9.8	-	-	16.7	-	-	35.6
HCM Lane LOS	B	A	-	-	C	-	-	E
HCM 95th %tile Q(veh)	0	0	-	-	0.3	-	-	0.1

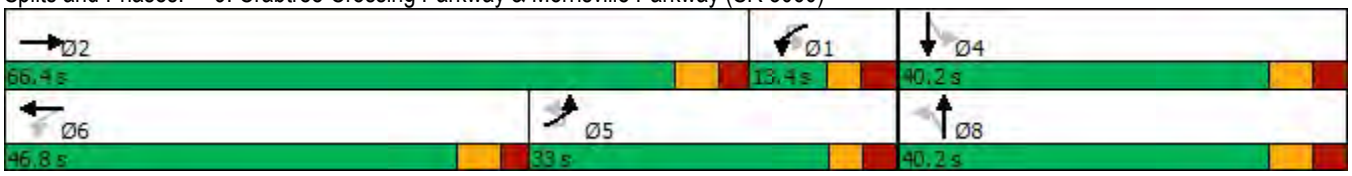
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	24	39	831	39	6	40	756	72	38	9	27	40
Future Volume (vph)	24	39	831	39	6	40	756	72	38	9	27	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			5%				-1%			3%		
Storage Length (ft)		75		0		200		0	100		0	100
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.993				0.987			0.887		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1725	3427	0	0	1778	3511	0	1743	1627	0	1787
Flt Permitted		0.310				0.225			0.734			0.731
Satd. Flow (perm)	0	563	3427	0	0	421	3511	0	1347	1627	0	1375
Right Turn on Red				No				No			No	
Satd. Flow (RTOR)												
Link Speed (mph)			35				35			25		
Link Distance (ft)			1394				1279			1392		
Travel Time (s)			27.2				24.9			38.0		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	43	923	43	7	44	840	80	42	10	30	44
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	70	966	0	0	51	920	0	42	40	0	44
Turn Type	custom	Prot	NA		custom	pm+pt	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			8		
Permitted Phases	5				1	6			8			4
Detector Phase	5	5	2		1	1	6		8	8		4
Switch Phase												
Minimum Initial (s)	7.0	7.0	10.0		7.0	7.0	10.0		7.0	7.0		7.0
Minimum Split (s)	13.2	13.2	41.5		13.4	13.4	36.5		40.2	40.2		36.2
Total Split (s)	33.0	33.0	66.4		13.4	13.4	46.8		40.2	40.2		40.2
Total Split (%)	27.5%	27.5%	55.3%		11.2%	11.2%	39.0%		33.5%	33.5%		33.5%
Maximum Green (s)	26.8	26.8	59.9		7.0	7.0	40.3		33.0	33.0		33.0
Yellow Time (s)	3.0	3.0	3.9		3.0	3.0	3.9		4.0	4.0		4.0
All-Red Time (s)	3.2	3.2	2.6		3.4	3.4	2.6		3.2	3.2		3.2
Lost Time Adjust (s)		-1.2	-1.5			-1.4	-1.5		-2.2	-2.2		-2.2
Total Lost Time (s)		5.0	5.0			5.0	5.0		5.0	5.0		5.0
Lead/Lag	Lag	Lag	Lead		Lag	Lag	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	2.0	2.0	3.0		2.0	2.0	3.0		2.0	2.0		2.0
Recall Mode	None	None	Min		None	None	Min		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Dont Walk (s)			28.0				23.0		26.0	26.0		22.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		16.1	40.0			43.2	34.7		11.4	11.4		11.4
Actuated g/C Ratio		0.24	0.61			0.65	0.53		0.17	0.17		0.17
v/c Ratio		0.51	0.47			0.09	0.50		0.18	0.14		0.19
Control Delay		40.6	14.3			4.2	17.3		34.1	33.1		34.0
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	8	24
Future Volume (vph)	8	24
Ideal Flow (vphpl)	1900	1900
Grade (%)	-2%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.887	
Flt Protected		
Satd. Flow (prot)	1669	0
Flt Permitted		
Satd. Flow (perm)	1669	0
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	35	
Link Distance (ft)	1120	
Travel Time (s)	21.8	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	9	27
Shared Lane Traffic (%)		
Lane Group Flow (vph)	36	0
Turn Type	NA	
Protected Phases	4	
Permitted Phases		
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	7.0	
Minimum Split (s)	36.2	
Total Split (s)	40.2	
Total Split (%)	33.5%	
Maximum Green (s)	33.0	
Yellow Time (s)	4.0	
All-Red Time (s)	3.2	
Lost Time Adjust (s)	-2.2	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	2.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Dont Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	11.4	
Actuated g/C Ratio	0.17	
v/c Ratio	0.13	
Control Delay	32.9	
Queue Delay	0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Total Delay		40.6	14.3			4.2	17.3		34.1	33.1		34.0
LOS		D	B			A	B		C	C		C
Approach Delay			16.1				16.6			33.6		
Approach LOS			B				B			C		
Queue Length 50th (ft)		25	148			5	152		15	15		16
Queue Length 95th (ft)		79	308			14	291		55	53		58
Internal Link Dist (ft)			1314				1199			1312		
Turn Bay Length (ft)		75				200			100			100
Base Capacity (vph)		274	2978			564	2334		796	962		813
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		0.26	0.32			0.09	0.39		0.05	0.04		0.05

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 66	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay: 17.6	Intersection LOS: B
Intersection Capacity Utilization 51.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 9: Crabtree Crossing Parkway & Morrisville Parkway (SR 3060)



Lane Group	SBT	SBR
Total Delay	32.9	
LOS	C	
Approach Delay	33.5	
Approach LOS	C	
Queue Length 50th (ft)	13	
Queue Length 95th (ft)	49	
Internal Link Dist (ft)	1040	
Turn Bay Length (ft)		
Base Capacity (vph)	987	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.04	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	13	29	599	263	8	85	604	22	239	4	54	19
Future Volume (vph)	13	29	599	263	8	85	604	22	239	4	54	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%				-1%			0%		
Storage Length (ft)		250		150		150		0	150		0	0
Storage Lanes		1		1		1		0	1		1	0
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	1.00	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	1.00	1.00
Frt				0.850			0.995				0.850	
Flt Protected		0.950				0.950			0.950	0.954		
Satd. Flow (prot)	0	1770	3539	1583	0	1778	3539	0	1681	1688	1583	0
Flt Permitted		0.326				0.334			0.950	0.954		
Satd. Flow (perm)	0	607	3539	1583	0	625	3539	0	1681	1688	1583	0
Right Turn on Red				No				No			No	
Satd. Flow (RTOR)												
Link Speed (mph)			35				35			30		
Link Distance (ft)			1279				770			504		
Travel Time (s)			24.9				15.0			11.5		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	14	32	666	292	9	94	671	24	266	4	60	21
Shared Lane Traffic (%)									49%			
Lane Group Flow (vph)	0	46	666	292	0	103	695	0	136	134	60	0
Turn Type	custom	D.P+P	NA	pm+ov	custom	D.P+P	NA		Split	NA	pm+ov	Perm
Protected Phases		5	2	4		1	6		4	4	1!	
Permitted Phases	5	6		2	1!	2					4	3
Detector Phase	5	5	2	4	1	1	6		4	4	1	3
Switch Phase												
Minimum Initial (s)	7.0	7.0	10.0	7.0	7.0	7.0	10.0		7.0	7.0	7.0	7.0
Minimum Split (s)	12.9	12.9	26.3	34.6	12.6	12.6	22.3		34.6	34.6	12.6	39.7
Total Split (s)	12.9	12.9	33.1	34.6	12.6	12.6	32.8		34.6	34.6	12.6	39.7
Total Split (%)	10.8%	10.8%	27.6%	28.8%	10.5%	10.5%	27.3%		28.8%	28.8%	10.5%	33.1%
Maximum Green (s)	7.0	7.0	26.8	28.0	7.0	7.0	26.5		28.0	28.0	7.0	33.0
Yellow Time (s)	3.0	3.0	4.0	3.0	3.0	3.0	4.0		3.0	3.0	3.0	3.0
All-Red Time (s)	2.9	2.9	2.3	3.6	2.6	2.6	2.3		3.6	3.6	2.6	3.7
Lost Time Adjust (s)		-0.9	-1.3	-1.3		-0.6	-1.3		-1.6	-1.6	-0.6	
Total Lost Time (s)		5.0	5.0	5.3		5.0	5.0		5.0	5.0	5.0	
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag		Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	3.0	2.0	2.0	2.0	3.0		2.0	2.0	2.0	2.0
Recall Mode	None	None	C-Min	None	None	None	C-Min		None	None	None	None
Walk Time (s)			7.0	7.0			7.0		7.0	7.0		7.0
Flash Dont Walk (s)			13.0	21.0			9.0		21.0	21.0		26.0
Pedestrian Calls (#/hr)			0	0			0		0	0		0
Act Effct Green (s)		71.2	61.2	77.9		70.2	64.7		16.2	16.2	30.2	
Actuated g/C Ratio		0.59	0.51	0.65		0.58	0.54		0.14	0.14	0.25	
v/c Ratio		0.11	0.37	0.28		0.23	0.36		0.60	0.59	0.15	
Control Delay		14.0	22.0	7.0		14.0	20.7		59.0	58.3	33.4	
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	

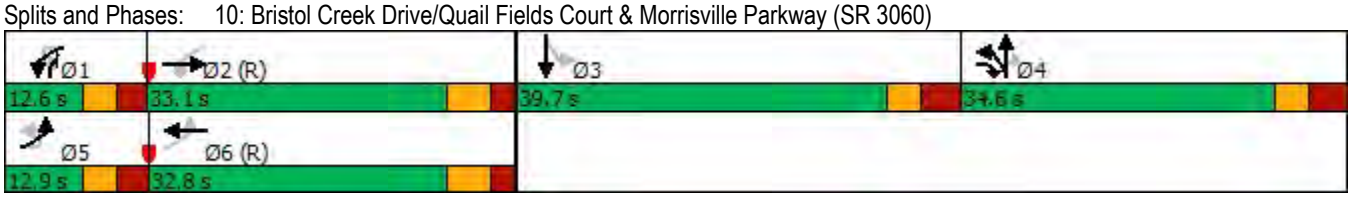
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	5	18
Future Volume (vph)	5	18
Ideal Flow (vphpl)	1900	1900
Grade (%)	0%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.943	
Flt Protected	0.978	
Satd. Flow (prot)	1718	0
Flt Permitted	0.194	
Satd. Flow (perm)	341	0
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	30	
Link Distance (ft)	386	
Travel Time (s)	8.8	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	6	20
Shared Lane Traffic (%)		
Lane Group Flow (vph)	47	0
Turn Type	NA	
Protected Phases	3	
Permitted Phases		
Detector Phase	3	
Switch Phase		
Minimum Initial (s)	7.0	
Minimum Split (s)	39.7	
Total Split (s)	39.7	
Total Split (%)	33.1%	
Maximum Green (s)	33.0	
Yellow Time (s)	3.0	
All-Red Time (s)	3.7	
Lost Time Adjust (s)	-1.7	
Total Lost Time (s)	5.0	
Lead/Lag	Lead	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	2.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Dont Walk (s)	26.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	16.3	
Actuated g/C Ratio	0.14	
v/c Ratio	1.02	
Control Delay	192.2	
Queue Delay	0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Total Delay		14.0	22.0	7.0		14.0	20.7		59.0	58.3	33.4	
LOS		B	C	A		B	C		E	E	C	
Approach Delay			17.3				19.9			54.1		
Approach LOS			B				B			D		
Queue Length 50th (ft)		13	161	50		31	168		106	104	37	
Queue Length 95th (ft)		41	287	112		78	288		165	163	65	
Internal Link Dist (ft)			1199				690			424		
Turn Bay Length (ft)		250		150		150			150			
Base Capacity (vph)		438	1805	1199		451	1907		414	416	398	
Starvation Cap Reductn		0	0	0		0	0		0	0	0	
Spillback Cap Reductn		0	0	0		0	0		0	0	0	
Storage Cap Reductn		0	0	0		0	0		0	0	0	
Reduced v/c Ratio		0.11	0.37	0.24		0.23	0.36		0.33	0.32	0.15	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBWB and 6:EBWB, Start of Green
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.02
Intersection Signal Delay: 27.6 Intersection LOS: C
Intersection Capacity Utilization 50.7% ICU Level of Service A
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
! Phase conflict between lane groups.

Splits and Phases: 10: Bristol Creek Drive/Quail Fields Court & Morrisville Parkway (SR 3060)



Lane Group	SBT	SBR
Total Delay	192.2	
LOS	F	
Approach Delay	192.2	
Approach LOS	F	
Queue Length 50th (ft)	~40	
Queue Length 95th (ft)	#99	
Internal Link Dist (ft)	306	
Turn Bay Length (ft)		
Base Capacity (vph)	98	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.48	

Intersection Summary

Lane Group	EBU	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations								
Traffic Volume (vph)	3	51	626	1	666	74	36	50
Future Volume (vph)	3	51	626	1	666	74	36	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			2%		0%		0%	
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.985		0.921	
Flt Protected			0.996				0.980	
Satd. Flow (prot)	0	0	3490	0	3486	0	1681	0
Flt Permitted			0.996				0.980	
Satd. Flow (perm)	0	0	3490	0	3486	0	1681	0
Link Speed (mph)			35		35		30	
Link Distance (ft)			770		560		315	
Travel Time (s)			15.0		10.9		7.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	3	57	696	1	740	82	40	56
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	0	756	0	823	0	96	0
Sign Control			Free		Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 54.7%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	2.4

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations								
Traffic Vol, veh/h	3	51	626	1	666	74	36	50
Future Vol, veh/h	3	51	626	1	666	74	36	50
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	None
Storage Length	-	-	-	-	-	-	0	-
Veh in Median Storage, #	-	-	0	-	0	-	0	-
Grade, %	-	-	2	-	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2
Mvmt Flow	3	57	696	1	740	82	40	56

Major/Minor	Major1			Major2			Minor2	
Conflicting Flow All	822	822	0	696	-	0	1251	411
Stage 1	-	-	-	-	-	-	783	-
Stage 2	-	-	-	-	-	-	468	-
Critical Hdwy	6.44	4.14	-	6.44	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	-
Follow-up Hdwy	2.52	2.22	-	2.52	-	-	3.52	3.32
Pot Cap-1 Maneuver	432	803	-	520	-	-	165	590
Stage 1	-	-	-	-	-	-	411	-
Stage 2	-	-	-	-	-	-	597	-
Platoon blocked, %			-		-	-		
Mov Cap-1 Maneuver	759	759	-	520	-	-	143	590
Mov Cap-2 Maneuver	-	-	-	-	-	-	143	-
Stage 1	-	-	-	-	-	-	358	-
Stage 2	-	-	-	-	-	-	595	-

Approach	EB	WB	SB
HCM Control Delay, s	1.8	0	27.2
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	759	-	-	-	256
HCM Lane V/C Ratio	0.075	-	-	-	0.373
HCM Control Delay (s)	10.1	1.1	-	-	27.2
HCM Lane LOS	B	A	-	-	D
HCM 95th %tile Q(veh)	0.2	-	-	-	1.7

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	5	607	50	11	28	698	1	34	0	71	5
Future Volume (vph)	1	5	607	50	11	28	698	1	34	0	71	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			2%				0%			0%		
Storage Length (ft)		0		0		150		0	0		0	0
Storage Lanes		0		0		0		0	0		0	0
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.989							0.909		
Flt Protected							0.997			0.984		
Satd. Flow (prot)	0	0	3465	0	0	0	3529	0	0	1666	0	0
Flt Permitted							0.997			0.984		
Satd. Flow (perm)	0	0	3465	0	0	0	3529	0	0	1666	0	0
Link Speed (mph)			35				35			30		
Link Distance (ft)			560				571			242		
Travel Time (s)			10.9				11.1			5.5		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	6	674	56	12	31	776	1	38	0	79	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	737	0	0	0	820	0	0	117	0	0
Sign Control			Free				Free			Stop		

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 56.7%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	8
Future Volume (vph)	0	8
Ideal Flow (vphpl)	1900	1900
Grade (%)	0%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.919	
Flt Protected	0.980	
Satd. Flow (prot)	1678	0
Flt Permitted	0.980	
Satd. Flow (perm)	1678	0
Link Speed (mph)	30	
Link Distance (ft)	282	
Travel Time (s)	6.4	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	0	9
Shared Lane Traffic (%)		
Lane Group Flow (vph)	15	0
Sign Control	Stop	

Intersection Summary

Intersection	
Int Delay, s/veh	3

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Vol, veh/h	1	5	607	50	11	28	698	1	34	0	71	5	0	8
Future Vol, veh/h	1	5	607	50	11	28	698	1	34	0	71	5	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	2	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	6	674	56	12	31	776	1	38	0	79	6	0	9

Major/Minor	Major1				Major2				Minor1			Minor2		
Conflicting Flow All	777	777	0	0	730	730	0	0	1190	1579	365	1214	1607	389
Stage 1	-	-	-	-	-	-	-	-	716	716	-	863	863	-
Stage 2	-	-	-	-	-	-	-	-	474	863	-	351	744	-
Critical Hdwy	6.44	4.14	-	-	6.44	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.52	2.22	-	-	2.52	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	461	835	-	-	494	870	-	-	143	108	632	137	104	610
Stage 1	-	-	-	-	-	-	-	-	387	432	-	316	370	-
Stage 2	-	-	-	-	-	-	-	-	540	370	-	639	420	-
Platoon blocked, %			-	-			-	-						
Mov Cap-1 Maneuver	733	733	-	-	681	681	-	-	127	95	632	108	91	610
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	127	95	-	108	91	-
Stage 1	-	-	-	-	-	-	-	-	381	425	-	311	329	-
Stage 2	-	-	-	-	-	-	-	-	473	329	-	550	413	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	1.6	27.3	22.6
HCM LOS			D	C

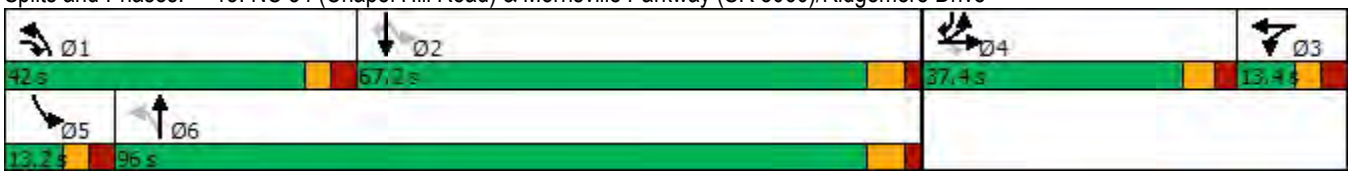
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	276	733	-	-	681	-	-	219
HCM Lane V/C Ratio	0.423	0.008	-	-	0.046	-	-	0.066
HCM Control Delay (s)	27.3	10	0.2	-	10.6	1.1	-	22.6
HCM Lane LOS	D	A	A	-	B	A	-	C
HCM 95th %tile Q(veh)	2	0	-	-	0.1	-	-	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	265	8	421	9	15	8	335	671	15	17	1038	388
Future Volume (vph)	265	8	421	9	15	8	335	671	15	17	1038	388
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			6%			-1%			2%	
Storage Length (ft)	475		0	100		0	650		0	150		150
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (ft)	0			100			100			100		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850		0.948			0.997				0.850
Flt Protected	0.950	0.955		0.950			0.950			0.950		
Satd. Flow (prot)	1664	1673	1567	1717	1713	0	1778	3546	0	1752	3504	1567
Flt Permitted	0.950	0.955		0.950			0.107			0.362		
Satd. Flow (perm)	1664	1673	1567	1717	1713	0	200	3546	0	668	3504	1567
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			15			45			45	
Link Distance (ft)		571			835			1433			1407	
Travel Time (s)		11.1			38.0			21.7			21.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	294	9	468	10	17	9	372	746	17	19	1153	431
Shared Lane Traffic (%)	49%											
Lane Group Flow (vph)	150	153	468	10	26	0	372	763	0	19	1153	431
Turn Type	Split	NA	pm+ov	Split	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	4	4	1	3	3		1	6		5	2	4
Permitted Phases			4				6			2		2
Detector Phase	4	4	1	3	3		1	6		5	2	4
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	12.0		7.0	12.0	7.0
Minimum Split (s)	37.3	37.3	13.3	13.4	13.4		13.3	33.6		13.2	36.6	37.3
Total Split (s)	37.4	37.4	42.0	13.4	13.4		42.0	96.0		13.2	67.2	37.4
Total Split (%)	23.4%	23.4%	26.3%	8.4%	8.4%		26.3%	60.0%		8.3%	42.0%	23.4%
Maximum Green (s)	31.1	31.1	35.7	7.0	7.0		35.7	89.4		7.0	60.6	31.1
Yellow Time (s)	3.7	3.7	3.0	3.0	3.0		3.0	4.6		3.0	4.6	3.7
All-Red Time (s)	2.6	2.6	3.3	3.4	3.4		3.3	2.0		3.2	2.0	2.6
Lost Time Adjust (s)	-1.3	-1.3	-1.3	-1.4	-1.4		-1.3	-1.6		-1.2	-1.6	-1.3
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	6.0		2.0	6.0	2.0
Recall Mode	None	None	None	None	None		None	Min		None	Min	None
Walk Time (s)	7.0	7.0						7.0			7.0	7.0
Flash Dont Walk (s)	24.0	24.0						20.0			23.0	24.0
Pedestrian Calls (#/hr)	0	0						0			0	0
Act Effct Green (s)	18.8	18.8	49.8	8.9	8.9		90.2	83.5		65.4	56.6	80.8
Actuated g/C Ratio	0.15	0.15	0.39	0.07	0.07		0.71	0.66		0.52	0.45	0.64
v/c Ratio	0.61	0.61	0.76	0.08	0.21		0.75	0.33		0.05	0.74	0.43
Control Delay	65.4	65.8	38.3	69.9	71.3		37.9	12.4		11.5	35.2	14.9
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	65.4	65.8	38.3	69.9	71.3		37.9	12.4		11.5	35.2	14.9
LOS	E	E	D	E	E		D	B		B	D	B
Approach Delay		49.0			70.9			20.8			29.5	
Approach LOS		D			E			C			C	
Queue Length 50th (ft)	138	142	307	9	23		223	178		5	458	200
Queue Length 95th (ft)	227	232	418	32	60		378	253		16	647	308
Internal Link Dist (ft)		491			755			1353			1327	
Turn Bay Length (ft)	475			100			650			150		150
Base Capacity (vph)	453	456	755	121	121		634	2635		420	1834	1194
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	0
Reduced v/c Ratio	0.33	0.34	0.62	0.08	0.21		0.59	0.29		0.05	0.63	0.36

Intersection Summary	
Area Type:	Other
Cycle Length: 160	
Actuated Cycle Length: 126.5	
Natural Cycle: 125	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 31.4	Intersection LOS: C
Intersection Capacity Utilization 74.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 13: NC 54 (Chapel Hill Road) & Morrisville Parkway (SR 3060)/Ridgemere Drive



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	177	549	58	78	264	287	76	1552	149	17	206	688
Future Volume (vph)	177	549	58	78	264	287	76	1552	149	17	206	688
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			4%			-3%				3%
Storage Length (ft)	200		0	200		0	325		350		850	
Storage Lanes	1		0	1		0	1		1		1	
Taper Length (ft)	100			100			100				100	
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	1.00	0.95	1.00	0.95
Ped Bike Factor		1.00		1.00			1.00					1.00
Frt		0.986			0.922				0.850			0.981
Flt Protected	0.950			0.950			0.950				0.950	
Satd. Flow (prot)	1743	3433	0	1734	3198	0	1796	3592	1607	0	1743	3413
Flt Permitted	0.133			0.143			0.292				0.950	
Satd. Flow (perm)	244	3433	0	261	3198	0	552	3592	1607	0	1743	3413
Right Turn on Red			No			No			No			
Satd. Flow (RTOR)												
Link Speed (mph)		45			35			45				45
Link Distance (ft)		1496			481			1971				1155
Travel Time (s)		22.7			9.4			29.9				17.5
Confl. Peds. (#/hr)			1	1			2					
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	197	610	64	87	293	319	84	1724	166	19	229	764
Shared Lane Traffic (%)												
Lane Group Flow (vph)	197	674	0	87	612	0	84	1724	166	0	248	874
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	Prot	Prot	NA
Protected Phases	7	4		3	8		5	2	3	1	1	6
Permitted Phases	4			8			2		2			
Detector Phase	7	4		3	8		5	2	3	1	1	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	12.0	7.0	7.0	7.0	12.0
Minimum Split (s)	15.3	14.8		15.4	14.8		15.3	38.0	15.4	15.3	15.3	37.0
Total Split (s)	17.1	34.7		15.4	33.0		15.3	73.9	15.4	26.0	26.0	84.6
Total Split (%)	11.4%	23.1%		10.3%	22.0%		10.2%	49.3%	10.3%	17.3%	17.3%	56.4%
Maximum Green (s)	10.1	27.7		8.4	26.0		8.3	66.9	8.4	19.0	19.0	77.6
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0		-2.0	-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0		5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.0	6.0	2.0	1.0	1.0	6.0
Recall Mode	None	None		None	None		None	Min	None	None	None	Min
Walk Time (s)								7.0				7.0
Flash Dont Walk (s)								24.0				23.0
Pedestrian Calls (#/hr)								0				0
Act Effct Green (s)	42.1	30.0		38.1	28.0		78.1	68.9	84.0		21.0	80.7
Actuated g/C Ratio	0.28	0.20		0.25	0.19		0.52	0.46	0.56		0.14	0.54
v/c Ratio	1.04	0.98		0.53	1.10dr		0.23	1.05	0.18		1.02	0.48

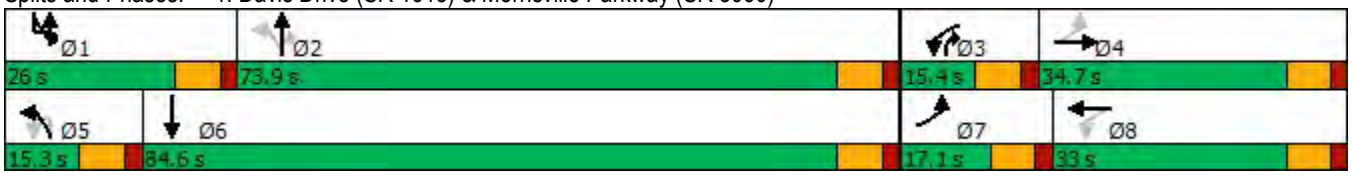
Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	99
Future Volume (vph)	99
Ideal Flow (vphpl)	1900
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.95
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Peak Hour Factor	0.90
Adj. Flow (vph)	110
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Control Delay	120.0	89.6		50.7	102.2		13.3	74.4	16.8		124.1	22.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0		0.0	0.0
Total Delay	120.0	89.6		50.7	102.2		13.3	74.4	16.8		124.1	22.7
LOS	F	F		D	F		B	E	B		F	C
Approach Delay		96.5			95.8			67.0				45.1
Approach LOS		F			F			E				D
Queue Length 50th (ft)	~158	350		63	~335		30	~960	77		~256	271
Queue Length 95th (ft)	#326	#485		m110	m#459		53	#1097	119		#438	332
Internal Link Dist (ft)		1416			401			1891				1075
Turn Bay Length (ft)	200			200			325		350		850	
Base Capacity (vph)	189	685		168	596		376	1649	903		244	1835
Starvation Cap Reductn	0	0		0	0		0	0	0		0	0
Spillback Cap Reductn	0	0		0	0		0	0	0		0	0
Storage Cap Reductn	0	0		0	0		0	0	0		0	0
Reduced v/c Ratio	1.04	0.98		0.52	1.03		0.22	1.05	0.18		1.02	0.48

Intersection Summary	
Area Type: Other	
Cycle Length: 150	
Actuated Cycle Length: 150	
Natural Cycle: 145	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay: 71.6	Intersection LOS: E
Intersection Capacity Utilization 98.3%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 1: Davis Drive (SR 1613) & Morrisville Parkway (SR 3060)



Lane Group	SBR
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	7	865	32	77	13	617	6	5	0	0	1	0
Future Volume (vph)	7	865	32	77	13	617	6	5	0	0	1	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%				4%			0%			0%
Storage Length (ft)	50		0		250		0	0		0	0	
Storage Lanes	1		0		1		0	0		0	0	
Taper Length (ft)	100				100			100			100	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Frt		0.995				0.998						0.880
Flt Protected	0.950				0.950				0.950			0.994
Satd. Flow (prot)	1770	3522	0	0	1734	3461	0	0	1770	0	0	1629
Flt Permitted	0.950				0.950				0.950			0.994
Satd. Flow (perm)	1770	3522	0	0	1734	3461	0	0	1770	0	0	1629
Link Speed (mph)		35				35			30			30
Link Distance (ft)		481				711			498			605
Travel Time (s)		9.4				13.9			11.3			13.8
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	8	961	36	86	14	686	7	6	0	0	1	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	997	0	0	100	693	0	0	6	0	0	9
Sign Control		Free				Free			Stop			Stop

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 43.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	7
Future Volume (vph)	7
Ideal Flow (vphpl)	1900
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Adj. Flow (vph)	8
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Sign Control	

Intersection Summary

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	7	865	32	77	13	617	6	5	0	0	1	0	7
Future Vol, veh/h	7	865	32	77	13	617	6	5	0	0	1	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	-	250	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	4	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	961	36	86	14	686	7	6	0	0	1	0	8

Major/Minor	Major1			Major2				Minor1			Minor2		
Conflicting Flow All	693	0	0	997	997	0	0	1538	1888	499	1387	1903	347
Stage 1	-	-	-	-	-	-	-	995	995	-	890	890	-
Stage 2	-	-	-	-	-	-	-	543	893	-	497	1013	-
Critical Hdwy	4.14	-	-	6.44	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.52	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	898	-	-	334	690	-	-	79	70	517	102	68	649
Stage 1	-	-	-	-	-	-	-	262	321	-	304	359	-
Stage 2	-	-	-	-	-	-	-	492	358	-	523	315	-
Platoon blocked, %		-	-			-	-						
Mov Cap-1 Maneuver	898	-	-	361	361	-	-	61	50	517	80	49	649
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	61	50	-	80	49	-
Stage 1	-	-	-	-	-	-	-	260	318	-	301	260	-
Stage 2	-	-	-	-	-	-	-	351	259	-	518	312	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	2.4	69.8	15.7
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	61	898	-	-	361	-	-	344
HCM Lane V/C Ratio	0.091	0.009	-	-	0.277	-	-	0.026
HCM Control Delay (s)	69.8	9	-	-	18.8	-	-	15.7
HCM Lane LOS	F	A	-	-	C	-	-	C
HCM 95th %tile Q(veh)	0.3	0	-	-	1.1	-	-	0.1

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	6	828	108	1	19	695	16	7	0	86	7
Future Volume (vph)	1	6	828	108	1	19	695	16	7	0	86	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	16	12	12
Grade (%)			0%				4%			0%		
Storage Length (ft)		100		0		0		125	0		0	0
Storage Lanes		1		0		0		1	0		0	0
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Frt			0.983					0.850		0.875		
Flt Protected		0.950					0.999			0.996		
Satd. Flow (prot)	0	1770	3479	0	0	0	3465	1552	0	1840	0	0
Flt Permitted		0.950					0.999			0.996		
Satd. Flow (perm)	0	1770	3479	0	0	0	3465	1552	0	1840	0	0
Link Speed (mph)			35				35			30		
Link Distance (ft)			711				611			253		
Travel Time (s)			13.9				11.9			5.8		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	7	920	120	1	21	772	18	8	0	96	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	8	1040	0	0	0	794	18	0	104	0	0
Sign Control			Free				Free			Stop		

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 46.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	10
Future Volume (vph)	0	10
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.922	
Flt Protected	0.979	
Satd. Flow (prot)	1681	0
Flt Permitted	0.979	
Satd. Flow (perm)	1681	0
Link Speed (mph)	30	
Link Distance (ft)	462	
Travel Time (s)	10.5	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	0	11
Shared Lane Traffic (%)		
Lane Group Flow (vph)	19	0
Sign Control	Stop	

Intersection Summary

Intersection	
Int Delay, s/veh	1.4

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Vol, veh/h	1	6	828	108	1	19	695	16	7	0	86	7	0	10
Future Vol, veh/h	1	6	828	108	1	19	695	16	7	0	86	7	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	-	100	-	-	-	-	-	125	-	-	-	-	-	-
Veh in Median Storage, #	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	-	4	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	7	920	120	1	21	772	18	8	0	96	8	0	11

Major/Minor	Major1				Major2				Minor1			Minor2		
Conflicting Flow All	772	790	0	0	1040	1040	0	0	1426	1830	520	1292	1872	386
Stage 1	-	-	-	-	-	-	-	-	996	996	-	816	816	-
Stage 2	-	-	-	-	-	-	-	-	430	834	-	476	1056	-
Critical Hdwy	6.44	4.14	-	-	6.44	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.52	2.22	-	-	2.52	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	465	826	-	-	313	664	-	-	96	76	501	120	71	612
Stage 1	-	-	-	-	-	-	-	-	262	320	-	337	389	-
Stage 2	-	-	-	-	-	-	-	-	574	381	-	539	300	-
Platoon blocked, %			-	-			-	-						
Mov Cap-1 Maneuver	741	741	-	-	616	616	-	-	89	70	501	92	66	612
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	89	70	-	92	66	-
Stage 1	-	-	-	-	-	-	-	-	259	316	-	333	364	-
Stage 2	-	-	-	-	-	-	-	-	528	357	-	431	297	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.3	18.4	26.8
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	372	741	-	-	616	-	-	184
HCM Lane V/C Ratio	0.278	0.01	-	-	0.034	-	-	0.103
HCM Control Delay (s)	18.4	9.9	-	-	11.1	-	-	26.8
HCM Lane LOS	C	A	-	-	B	-	-	D
HCM 95th %tile Q(veh)	1.1	0	-	-	0.1	-	-	0.3

Lane Group	EBU	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations								
Traffic Volume (vph)	35	15	872	21	677	5	26	19
Future Volume (vph)	35	15	872	21	677	5	26	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		125		0		0	0	0
Storage Lanes		1		0		0	1	0
Taper Length (ft)		100		100			100	
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.999		0.943	
Flt Protected		0.950			0.999		0.972	
Satd. Flow (prot)	0	1770	3539	0	3532	0	1707	0
Flt Permitted		0.950			0.999		0.972	
Satd. Flow (perm)	0	1770	3539	0	3532	0	1707	0
Link Speed (mph)			35		35		25	
Link Distance (ft)			957		577		155	
Travel Time (s)			18.6		11.2		4.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	39	17	969	23	752	6	29	21
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	56	969	0	781	0	50	0
Sign Control			Free		Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 51.6%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	1.1

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations								
Traffic Vol, veh/h	35	15	872	21	677	5	26	19
Future Vol, veh/h	35	15	872	21	677	5	26	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	Yield	-	None
Storage Length	-	125	-	-	-	-	0	-
Veh in Median Storage, #	-	-	0	-	0	-	1	-
Grade, %	-	-	0	-	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2
Mvmt Flow	39	17	969	23	752	6	29	21

Major/Minor	Major1			Major2			Minor2	
Conflicting Flow All	758	752	0	969	-	0	1398	379
Stage 1	-	-	-	-	-	-	801	-
Stage 2	-	-	-	-	-	-	597	-
Critical Hdwy	6.44	4.14	-	6.44	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	-
Follow-up Hdwy	2.52	2.22	-	2.52	-	-	3.52	3.32
Pot Cap-1 Maneuver	474	853	-	348	-	-	132	619
Stage 1	-	-	-	-	-	-	402	-
Stage 2	-	-	-	-	-	-	513	-
Platoon blocked, %			-		-	-		
Mov Cap-1 Maneuver	533	533	-	348	-	-	105	619
Mov Cap-2 Maneuver	-	-	-	-	-	-	227	-
Stage 1	-	-	-	-	-	-	360	-
Stage 2	-	-	-	-	-	-	455	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0.5	18.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	533	-	-	-	310
HCM Lane V/C Ratio	0.104	-	-	-	0.161
HCM Control Delay (s)	12.5	-	-	-	18.8
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.3	-	-	-	0.6

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	18	1	853	47	50	640	1	40	0	95	3	0
Future Volume (vph)	18	1	853	47	50	640	1	40	0	95	3	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		150		0	150		0	0		0	0	
Storage Lanes		0		0	1		0	0		0	0	
Taper Length (ft)		100			100			100			100	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Frt			0.992						0.905			0.910
Flt Protected			0.999		0.950				0.986			0.984
Satd. Flow (prot)	0	0	3507	0	1770	3539	0	0	1662	0	0	1668
Flt Permitted			0.999		0.950				0.986			0.984
Satd. Flow (perm)	0	0	3507	0	1770	3539	0	0	1662	0	0	1668
Link Speed (mph)			35			35			30			25
Link Distance (ft)			577			755			677			734
Travel Time (s)			11.2			14.7			15.4			20.0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	20	1	948	52	56	711	1	44	0	106	3	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	1021	0	56	712	0	0	150	0	0	9
Sign Control			Free			Free			Stop			Stop

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 58.0%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	5
Future Volume (vph)	5
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Adj. Flow (vph)	6
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Sign Control	

Intersection Summary

Intersection	
Int Delay, s/veh	3

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	18	1	853	47	50	640	1	40	0	95	3	0	5
Future Vol, veh/h	18	1	853	47	50	640	1	40	0	95	3	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	1	948	52	56	711	1	44	0	106	3	0	6

Major/Minor	Major1				Major2			Minor1			Minor2		
Conflicting Flow All	712	712	0	0	1000	0	0	1484	1840	500	1340	1866	356
Stage 1	-	-	-	-	-	-	-	1016	1016	-	824	824	-
Stage 2	-	-	-	-	-	-	-	468	824	-	516	1042	-
Critical Hdwy	6.44	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.52	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	508	884	-	-	688	-	-	87	75	516	111	72	640
Stage 1	-	-	-	-	-	-	-	255	314	-	333	385	-
Stage 2	-	-	-	-	-	-	-	545	385	-	510	305	-
Platoon blocked, %			-	-		-	-						
Mov Cap-1 Maneuver	516	516	-	-	688	-	-	75	63	516	77	60	640
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	171	169	-	175	150	-
Stage 1	-	-	-	-	-	-	-	231	285	-	302	354	-
Stage 2	-	-	-	-	-	-	-	496	354	-	368	277	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0.8	25.5	16.5
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	323	516	-	-	688	-	-	321
HCM Lane V/C Ratio	0.464	0.002	-	-	0.081	-	-	0.028
HCM Control Delay (s)	25.5	12.3	1.1	-	10.7	-	-	16.5
HCM Lane LOS	D	B	A	-	B	-	-	C
HCM 95th %tile Q(veh)	2.3	0	-	-	0.3	-	-	0.1

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	14	937	666	3	5	25
Future Volume (vph)	14	937	666	3	5	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.999		0.889	
Flt Protected		0.999			0.991	
Satd. Flow (prot)	0	3536	3536	0	1641	0
Flt Permitted		0.999			0.991	
Satd. Flow (perm)	0	3536	3536	0	1641	0
Link Speed (mph)		35	35		30	
Link Distance (ft)		755	765		518	
Travel Time (s)		14.7	14.9		11.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	16	1041	740	3	6	28
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1057	743	0	34	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 45.8%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	937	666	3	5	25
Future Vol, veh/h	14	937	666	3	5	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
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, %	2	2	2	2	2	2
Mvmt Flow	16	1041	740	3	6	28

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	743	0	-	0	1295	372
Stage 1	-	-	-	-	742	-
Stage 2	-	-	-	-	553	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	860	-	-	-	154	625
Stage 1	-	-	-	-	432	-
Stage 2	-	-	-	-	540	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	860	-	-	-	147	625
Mov Cap-2 Maneuver	-	-	-	-	147	-
Stage 1	-	-	-	-	413	-
Stage 2	-	-	-	-	540	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	14.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	860	-	-	-	405
HCM Lane V/C Ratio	0.018	-	-	-	0.082
HCM Control Delay (s)	9.3	0.2	-	-	14.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	1	940	1	1	666	2	2
Future Volume (vph)	1	940	1	1	666	2	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	1.00	1.00
Frt						0.932	
Flt Protected						0.976	
Satd. Flow (prot)	0	3539	0	0	3539	1694	0
Flt Permitted						0.976	
Satd. Flow (perm)	0	3539	0	0	3539	1694	0
Link Speed (mph)		35			35	30	
Link Distance (ft)		765			840	435	
Travel Time (s)		14.9			16.4	9.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	1044	1	1	740	2	2
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1046	0	0	741	4	0
Sign Control		Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 36.7%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	0.1

Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Vol, veh/h	1	940	1	1	666	2	2
Future Vol, veh/h	1	940	1	1	666	2	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
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	90
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	1	1044	1	1	740	2	2

Major/Minor	Major1			Major2		Minor1	
Conflicting Flow All	740	0	0	1045	0	1419	523
Stage 1	-	-	-	-	-	1047	-
Stage 2	-	-	-	-	-	372	-
Critical Hdwy	6.44	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	-	5.84	-
Follow-up Hdwy	2.52	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	487	-	-	661	-	128	499
Stage 1	-	-	-	-	-	299	-
Stage 2	-	-	-	-	-	667	-
Platoon blocked, %		-	-		-		
Mov Cap-1 Maneuver	487	-	-	661	-	127	499
Mov Cap-2 Maneuver	-	-	-	-	-	127	-
Stage 1	-	-	-	-	-	298	-
Stage 2	-	-	-	-	-	665	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	23.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	202	-	-	661	-
HCM Lane V/C Ratio	0.022	-	-	0.002	-
HCM Control Delay (s)	23.2	-	-	10.5	0
HCM Lane LOS	C	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	3	937	0	34	0	653	7	3	0	3	9
Future Volume (vph)	2	3	937	0	34	0	653	7	3	0	3	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		0		125		0	0		0	0
Storage Lanes		0		0		1		0	0		0	0
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt							0.998			0.932		
Flt Protected						0.950				0.976		
Satd. Flow (prot)	0	0	3539	0	0	1770	3532	0	0	1694	0	0
Flt Permitted						0.950				0.976		
Satd. Flow (perm)	0	0	3539	0	0	1770	3532	0	0	1694	0	0
Link Speed (mph)			35				35			30		
Link Distance (ft)			840				1394			303		
Travel Time (s)			16.4				27.2			6.9		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	2	3	1041	0	38	0	726	8	3	0	3	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	1046	0	0	38	734	0	0	6	0	0
Sign Control			Free				Free			Stop		

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 39.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	9
Future Volume (vph)	0	9
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.932	
Flt Protected	0.976	
Satd. Flow (prot)	1694	0
Flt Permitted	0.976	
Satd. Flow (perm)	1694	0
Link Speed (mph)	30	
Link Distance (ft)	445	
Travel Time (s)	10.1	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	0	10
Shared Lane Traffic (%)		
Lane Group Flow (vph)	20	0
Sign Control	Stop	

Intersection Summary

Intersection	
Int Delay, s/veh	0.9

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Vol, veh/h	2	3	937	0	34	0	653	7	3	0	3	9	0	9
Future Vol, veh/h	2	3	937	0	34	0	653	7	3	0	3	9	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	125	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	3	1041	0	38	0	726	8	3	0	3	10	0	10

Major/Minor	Major1				Major2				Minor1			Minor2		
Conflicting Flow All	733	734	0	-	1041	1041	0	0	1490	1861	521	1337	1857	367
Stage 1	-	-	-	-	-	-	-	-	1051	1051	-	806	806	-
Stage 2	-	-	-	-	-	-	-	-	439	810	-	531	1051	-
Critical Hdwy	6.44	4.14	-	-	6.44	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.52	2.22	-	-	2.52	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	492	867	-	0	312	664	-	-	86	72	500	111	73	630
Stage 1	-	-	-	0	-	-	-	-	243	302	-	342	393	-
Stage 2	-	-	-	0	-	-	-	-	567	391	-	500	302	-
Platoon blocked, %			-				-	-						
Mov Cap-1 Maneuver	659	659	-	-	310	310	-	-	75	62	500	98	63	630
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	75	62	-	98	63	-
Stage 1	-	-	-	-	-	-	-	-	238	295	-	334	345	-
Stage 2	-	-	-	-	-	-	-	-	490	343	-	486	295	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.9	34.2	29
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	130	659	-	310	-	-	170
HCM Lane V/C Ratio	0.051	0.005	-	0.122	-	-	0.118
HCM Control Delay (s)	34.2	10.5	-	18.2	-	-	29
HCM Lane LOS	D	B	-	C	-	-	D
HCM 95th %tile Q(veh)	0.2	0	-	0.4	-	-	0.4

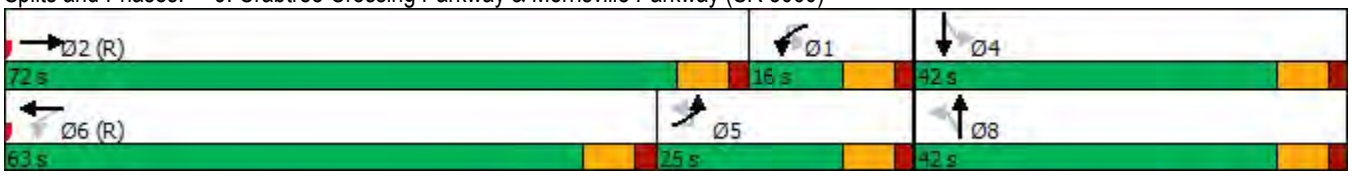
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	13	21	916	33	1	19	603	21	38	1	41	54
Future Volume (vph)	13	21	916	33	1	19	603	21	38	1	41	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			5%				-1%			3%		
Storage Length (ft)		75		0		200		0	100		0	100
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.995				0.995			0.853		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1725	3433	0	0	1778	3539	0	1743	1565	0	1787
Flt Permitted		0.388				0.243			0.724			0.726
Satd. Flow (perm)	0	705	3433	0	0	455	3539	0	1328	1565	0	1366
Right Turn on Red				No				No			No	
Satd. Flow (RTOR)												
Link Speed (mph)			35				35			25		
Link Distance (ft)			1394				1279			1392		
Travel Time (s)			27.2				24.9			38.0		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	14	23	1018	37	1	21	670	23	42	1	46	60
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	37	1055	0	0	22	693	0	42	47	0	60
Turn Type	custom	Prot	NA		custom	pm+pt	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			8		
Permitted Phases	5				1	6			8			4
Detector Phase	5	5	2		1	1	6		8	8		4
Switch Phase												
Minimum Initial (s)	7.0	7.0	10.0		7.0	7.0	10.0		7.0	7.0		7.0
Minimum Split (s)	15.2	15.2	42.6		15.4	15.4	37.6		41.2	41.2		37.2
Total Split (s)	25.0	25.0	72.0		16.0	16.0	63.0		42.0	42.0		42.0
Total Split (%)	19.2%	19.2%	55.4%		12.3%	12.3%	48.5%		32.3%	32.3%		32.3%
Maximum Green (s)	18.0	18.0	65.0		9.0	9.0	56.0		35.0	35.0		35.0
Yellow Time (s)	5.0	5.0	5.0		5.0	5.0	5.0		5.0	5.0		5.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0	2.0		2.0	2.0		2.0
Lost Time Adjust (s)		-2.0	-2.0			-2.0	-2.0		-2.0	-2.0		-2.0
Total Lost Time (s)		5.0	5.0			5.0	5.0		5.0	5.0		5.0
Lead/Lag	Lag	Lag	Lead		Lag	Lag	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	2.0	2.0	3.0		2.0	2.0	3.0		2.0	2.0		2.0
Recall Mode	None	None	C-Min		None	None	C-Min		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Dont Walk (s)			28.0				23.0		26.0	26.0		22.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		14.3	102.6			104.4	97.9		12.5	12.5		12.5
Actuated g/C Ratio		0.11	0.79			0.80	0.75		0.10	0.10		0.10
v/c Ratio		0.48	0.39			0.05	0.26		0.33	0.31		0.46
Control Delay		74.1	6.9			1.3	2.8		60.7	59.1		66.0
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	6	40
Future Volume (vph)	6	40
Ideal Flow (vphpl)	1900	1900
Grade (%)	-2%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.871	
Flt Protected		
Satd. Flow (prot)	1639	0
Flt Permitted		
Satd. Flow (perm)	1639	0
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	35	
Link Distance (ft)	1120	
Travel Time (s)	21.8	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	7	44
Shared Lane Traffic (%)		
Lane Group Flow (vph)	51	0
Turn Type	NA	
Protected Phases	4	
Permitted Phases		
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	7.0	
Minimum Split (s)	37.2	
Total Split (s)	42.0	
Total Split (%)	32.3%	
Maximum Green (s)	35.0	
Yellow Time (s)	5.0	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	-2.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	2.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Dont Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	12.5	
Actuated g/C Ratio	0.10	
v/c Ratio	0.32	
Control Delay	59.3	
Queue Delay	0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Total Delay		74.1	6.9			1.3	2.8		60.7	59.1		66.0
LOS		E	A			A	A		E	E		E
Approach Delay			9.2				2.7			59.9		
Approach LOS			A				A			E		
Queue Length 50th (ft)		29	172			1	47		34	38		49
Queue Length 95th (ft)		66	251			7	70		70	75		92
Internal Link Dist (ft)			1314				1199			1312		
Turn Bay Length (ft)		75				200			100			100
Base Capacity (vph)		108	2710			481	2664		377	445		388
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		0.34	0.39			0.05	0.26		0.11	0.11		0.15

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 38 (29%), Referenced to phase 2:EBT and 6:WBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.48	
Intersection Signal Delay: 12.1	Intersection LOS: B
Intersection Capacity Utilization 46.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 9: Crabtree Crossing Parkway & Morrisville Parkway (SR 3060)



Lane Group	SBT	SBR
Total Delay	59.3	
LOS	E	
Approach Delay	62.9	
Approach LOS	E	
Queue Length 50th (ft)	41	
Queue Length 95th (ft)	81	
Internal Link Dist (ft)	1040	
Turn Bay Length (ft)		
Base Capacity (vph)	466	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.11	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	11	915	85	2	49	535	5	87	0	56	11
Future Volume (vph)	1	11	915	85	2	49	535	5	87	0	56	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%				-1%			0%		
Storage Length (ft)		250		150		150		0	150		0	0
Storage Lanes		1		1		1		0	1		1	0
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	1.00	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	1.00	1.00
Frt				0.850			0.998				0.850	
Flt Protected		0.950				0.950			0.950	0.950		
Satd. Flow (prot)	0	1770	3539	1583	0	1778	3550	0	1681	1681	1583	0
Flt Permitted		0.398				0.231			0.950	0.950		
Satd. Flow (perm)	0	741	3539	1583	0	432	3550	0	1681	1681	1583	0
Right Turn on Red				No				No			No	
Satd. Flow (RTOR)												
Link Speed (mph)			35				35			30		
Link Distance (ft)			1279				770			504		
Travel Time (s)			24.9				15.0			11.5		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	12	1017	94	2	54	594	6	97	0	62	12
Shared Lane Traffic (%)									50%			
Lane Group Flow (vph)	0	13	1017	94	0	56	600	0	48	49	62	0
Turn Type	custom	D.P+P	NA	pm+ov	custom	D.P+P	NA		Split	NA	pm+ov	Perm
Protected Phases		5	2	4		1	6		4	4	1!	
Permitted Phases	5	6		2	1!	2					4	3
Detector Phase	5	5	2	4	1	1	6		4	4	1	3
Switch Phase												
Minimum Initial (s)	7.0	7.0	10.0	7.0	7.0	7.0	10.0		7.0	7.0	7.0	7.0
Minimum Split (s)	14.9	14.9	27.3	36.6	14.6	14.6	23.3		36.6	36.6	14.6	41.7
Total Split (s)	14.9	14.9	37.1	36.6	14.6	14.6	36.8		36.6	36.6	14.6	41.7
Total Split (%)	11.5%	11.5%	28.5%	28.2%	11.2%	11.2%	28.3%		28.2%	28.2%	11.2%	32.1%
Maximum Green (s)	7.9	7.9	30.1	29.6	7.6	7.6	29.8		29.6	29.6	7.6	34.7
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0	
Total Lost Time (s)		5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead		Lead	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	3.0	2.0	2.0	2.0	3.0		2.0	2.0	2.0	2.0
Recall Mode	None	None	C-Min	None	None	None	C-Min		None	None	None	None
Walk Time (s)			7.0	7.0			7.0		7.0	7.0		7.0
Flash Dont Walk (s)			13.0	21.0			9.0		21.0	21.0		26.0
Pedestrian Calls (#/hr)			0	0			0		0	0		0
Act Effct Green (s)		94.8	85.4	102.2		92.8	87.5		10.7	10.7	20.9	
Actuated g/C Ratio		0.73	0.66	0.79		0.71	0.67		0.08	0.08	0.16	
v/c Ratio		0.02	0.44	0.08		0.14	0.25		0.35	0.36	0.24	
Control Delay		4.4	9.3	2.2		2.9	3.9		62.7	62.9	35.7	
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	

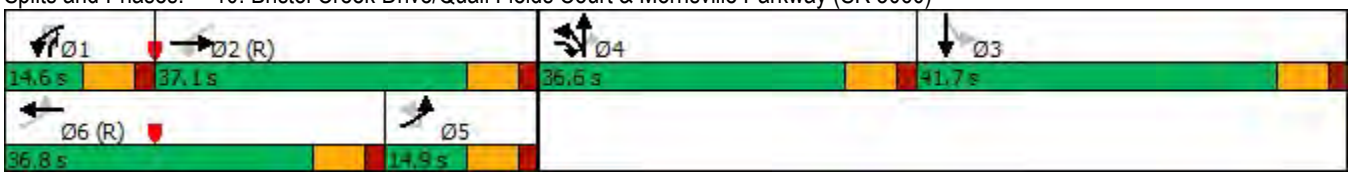
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	2	21
Future Volume (vph)	2	21
Ideal Flow (vphpl)	1900	1900
Grade (%)	0%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.916	
Flt Protected	0.984	
Satd. Flow (prot)	1679	0
Flt Permitted	0.872	
Satd. Flow (perm)	1488	0
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	30	
Link Distance (ft)	386	
Travel Time (s)	8.8	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	2	23
Shared Lane Traffic (%)		
Lane Group Flow (vph)	37	0
Turn Type	NA	
Protected Phases	3	
Permitted Phases		
Detector Phase	3	
Switch Phase		
Minimum Initial (s)	7.0	
Minimum Split (s)	41.7	
Total Split (s)	41.7	
Total Split (%)	32.1%	
Maximum Green (s)	34.7	
Yellow Time (s)	5.0	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	-2.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	2.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Dont Walk (s)	26.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	10.2	
Actuated g/C Ratio	0.08	
v/c Ratio	0.32	
Control Delay	63.4	
Queue Delay	0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Total Delay		4.4	9.3	2.2		2.9	3.9		62.7	62.9	35.7	
LOS		A	A	A		A	A		E	E	D	
Approach Delay			8.6				3.8			52.2		
Approach LOS			A				A			D		
Queue Length 50th (ft)		1	97	8		3	21		41	42	38	
Queue Length 95th (ft)		m5	149	17		m6	m50		83	85	68	
Internal Link Dist (ft)			1199				690			424		
Turn Bay Length (ft)		250		150		150			150			
Base Capacity (vph)		645	2325	1443		409	2388		408	408	260	
Starvation Cap Reductn		0	0	0		0	0		0	0	0	
Spillback Cap Reductn		0	0	0		0	0		0	0	0	
Storage Cap Reductn		0	0	0		0	0		0	0	0	
Reduced v/c Ratio		0.02	0.44	0.07		0.14	0.25		0.12	0.12	0.24	

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 46 (35%), Referenced to phase 2:EBWB and 6:EBWB, Start of Green
Natural Cycle: 135
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.44
Intersection Signal Delay: 11.6 Intersection LOS: B
Intersection Capacity Utilization 59.5% ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.
! Phase conflict between lane groups.

Splits and Phases: 10: Bristol Creek Drive/Quail Fields Court & Morrisville Parkway (SR 3060)



Lane Group	SBT	SBR
Total Delay	63.4	
LOS	E	
Approach Delay	63.4	
Approach LOS	E	
Queue Length 50th (ft)	30	
Queue Length 95th (ft)	66	
Internal Link Dist (ft)	306	
Turn Bay Length (ft)		
Base Capacity (vph)	420	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.09	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	11	969	3	2	7	572	16	11	0	20	15	0
Future Volume (vph)	11	969	3	2	7	572	16	11	0	20	15	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%				0%			0%			0%
Storage Length (ft)	0		0		100		0	0		0	0	
Storage Lanes	0		0		1		0	0		0	0	
Taper Length (ft)	100				100			100			100	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Frt						0.996			0.913			0.953
Flt Protected		0.999			0.950				0.983			0.968
Satd. Flow (prot)	0	3500	0	0	1770	3525	0	0	1672	0	0	1718
Flt Permitted		0.999			0.950				0.983			0.968
Satd. Flow (perm)	0	3500	0	0	1770	3525	0	0	1672	0	0	1718
Link Speed (mph)		35				35			30			30
Link Distance (ft)		770				560			287			315
Travel Time (s)		15.0				10.9			6.5			7.2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	12	1077	3	2	8	636	18	12	0	22	17	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1092	0	0	10	654	0	0	34	0	0	26
Sign Control		Free				Free			Stop			Stop

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 44.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	8
Future Volume (vph)	8
Ideal Flow (vphpl)	1900
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Adj. Flow (vph)	9
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Sign Control	

Intersection Summary

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	11	969	3	2	7	572	16	11	0	20	15	0	8
Future Vol, veh/h	11	969	3	2	7	572	16	11	0	20	15	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	1077	3	2	8	636	18	12	0	22	17	0	9

Major/Minor	Major1			Major2				Minor1			Minor2		
Conflicting Flow All	654	0	0	1080	1080	0	0	1441	1777	540	1228	1769	327
Stage 1	-	-	-	-	-	-	-	1103	1103	-	665	665	-
Stage 2	-	-	-	-	-	-	-	338	674	-	563	1104	-
Critical Hdwy	4.14	-	-	6.44	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.52	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	929	-	-	295	641	-	-	93	82	486	134	83	669
Stage 1	-	-	-	-	-	-	-	225	285	-	416	456	-
Stage 2	-	-	-	-	-	-	-	650	452	-	478	285	-
Platoon blocked, %		-	-			-	-						
Mov Cap-1 Maneuver	929	-	-	500	500	-	-	88	78	486	123	79	669
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	88	78	-	123	79	-
Stage 1	-	-	-	-	-	-	-	218	276	-	403	447	-
Stage 2	-	-	-	-	-	-	-	629	443	-	442	276	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	28.5	29.5
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	187	929	-	-	500	-	-	172
HCM Lane V/C Ratio	0.184	0.013	-	-	0.02	-	-	0.149
HCM Control Delay (s)	28.5	8.9	0.1	-	12.3	-	-	29.5
HCM Lane LOS	D	A	A	-	B	-	-	D
HCM 95th %tile Q(veh)	0.7	0	-	-	0.1	-	-	0.5

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	3	985	15	2	14	585	8	9	0	23	5
Future Volume (vph)	3	3	985	15	2	14	585	8	9	0	23	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			2%				0%			0%		
Storage Length (ft)		0		150		150		0	0		0	0
Storage Lanes		0		1		1		0	0		0	0
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt				0.850			0.998			0.902		
Flt Protected						0.950				0.986		
Satd. Flow (prot)	0	0	3504	1567	0	1770	3532	0	0	1657	0	0
Flt Permitted						0.950				0.986		
Satd. Flow (perm)	0	0	3504	1567	0	1770	3532	0	0	1657	0	0
Link Speed (mph)			35				35			30		
Link Distance (ft)			560				571			242		
Travel Time (s)			10.9				11.1			5.5		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	3	3	1094	17	2	16	650	9	10	0	26	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	1100	17	0	18	659	0	0	36	0	0
Sign Control			Free				Free			Stop		

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 41.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	0
Future Volume (vph)	0	0
Ideal Flow (vphpl)	1900	1900
Grade (%)	0%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt		
Flt Protected	0.950	
Satd. Flow (prot)	1770	0
Flt Permitted	0.950	
Satd. Flow (perm)	1770	0
Link Speed (mph)	30	
Link Distance (ft)	282	
Travel Time (s)	6.4	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	0	0
Shared Lane Traffic (%)		
Lane Group Flow (vph)	6	0
Sign Control	Stop	

Intersection Summary

Intersection	
Int Delay, s/veh	1

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Vol, veh/h	3	3	985	15	2	14	585	8	9	0	23	5	0	0
Future Vol, veh/h	3	3	985	15	2	14	585	8	9	0	23	5	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	150	-	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	2	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	3	1094	17	2	16	650	9	10	0	26	6	0	0

Major/Minor	Major1				Major2				Minor1			Minor2		
Conflicting Flow All	659	659	0	0	1094	1111	0	0	1467	1801	547	1250	1814	330
Stage 1	-	-	-	-	-	-	-	-	1106	1106	-	691	691	-
Stage 2	-	-	-	-	-	-	-	-	361	695	-	559	1123	-
Critical Hdwy	6.44	4.14	-	-	6.44	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.52	2.22	-	-	2.52	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	549	925	-	-	289	624	-	-	89	79	481	129	77	666
Stage 1	-	-	-	-	-	-	-	-	224	284	-	401	444	-
Stage 2	-	-	-	-	-	-	-	-	630	442	-	481	279	-
Platoon blocked, %			-	-			-	-						
Mov Cap-1 Maneuver	689	689	-	-	539	539	-	-	85	74	481	117	72	666
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	85	74	-	117	72	-
Stage 1	-	-	-	-	-	-	-	-	218	276	-	390	429	-
Stage 2	-	-	-	-	-	-	-	-	609	427	-	443	271	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.3	25.8	37.3
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	208	689	-	-	539	-	-	117
HCM Lane V/C Ratio	0.171	0.005	-	-	0.033	-	-	0.047
HCM Control Delay (s)	25.8	10.3	0.3	-	11.9	-	-	37.3
HCM Lane LOS	D	B	A	-	B	-	-	E
HCM 95th %tile Q(veh)	0.6	0	-	-	0.1	-	-	0.1

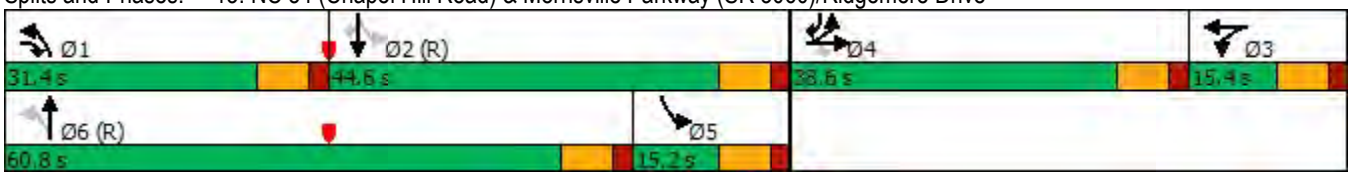
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	526	7	483	5	14	30	407	1213	9	2	1005	188
Future Volume (vph)	526	7	483	5	14	30	407	1213	9	2	1005	188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			6%			-1%			2%	
Storage Length (ft)	475		0	100		0	650		0	150		150
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (ft)	0			100			100			100		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850		0.899			0.999				0.850
Flt Protected	0.950	0.954		0.950			0.950			0.950		
Satd. Flow (prot)	1664	1671	1567	1717	1624	0	1778	3553	0	1752	3504	1567
Flt Permitted	0.950	0.954		0.950			0.106			0.200		
Satd. Flow (perm)	1664	1671	1567	1717	1624	0	198	3553	0	369	3504	1567
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			15			45			45	
Link Distance (ft)		571			835			1436			1407	
Travel Time (s)		11.1			38.0			21.8			21.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	584	8	537	6	16	33	452	1348	10	2	1117	209
Shared Lane Traffic (%)	49%											
Lane Group Flow (vph)	298	294	537	6	49	0	452	1358	0	2	1117	209
Turn Type	Split	NA	pm+ov	Split	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	4	4	1	3	3		1	6		5	2	4
Permitted Phases			4				6			2		2
Detector Phase	4	4	1	3	3		1	6		5	2	4
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	12.0		7.0	12.0	7.0
Minimum Split (s)	38.6	38.6	15.3	15.4	15.4		15.3	34.0		15.2	37.0	38.6
Total Split (s)	38.6	38.6	31.4	15.4	15.4		31.4	60.8		15.2	44.6	38.6
Total Split (%)	29.7%	29.7%	24.2%	11.8%	11.8%		24.2%	46.8%		11.7%	34.3%	29.7%
Maximum Green (s)	31.6	31.6	24.4	8.4	8.4		24.4	53.8		8.2	37.6	31.6
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag		Lead	Lead		Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	6.0		2.0	6.0	2.0
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	None
Walk Time (s)	7.0	7.0						7.0			7.0	7.0
Flash Dont Walk (s)	24.0	24.0						20.0			23.0	24.0
Pedestrian Calls (#/hr)	0	0						0			0	0
Act Effct Green (s)	29.0	29.0	61.4	9.8	9.8		75.9	75.9		42.6	42.6	76.6
Actuated g/C Ratio	0.22	0.22	0.47	0.08	0.08		0.58	0.58		0.33	0.33	0.59
v/c Ratio	0.80	0.79	0.73	0.05	0.40		0.91	0.65		0.01	0.97	0.23
Control Delay	52.0	50.7	16.5	56.2	67.2		58.9	23.1		32.5	64.7	13.4
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	52.0	50.7	16.5	56.2	67.2		58.9	23.1		32.5	64.7	13.4
LOS	D	D	B	E	E		E	C		C	E	B
Approach Delay		34.8			66.0			32.1			56.6	
Approach LOS		C			E			C			E	
Queue Length 50th (ft)	186	181	297	5	40		315	399		1	~537	82
Queue Length 95th (ft)	238	232	195	19	83		#610	653		8	#673	119
Internal Link Dist (ft)		491			755			1356			1327	
Turn Bay Length (ft)	475			100			650			150		150
Base Capacity (vph)	430	431	740	137	129		497	2074		229	1147	978
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	0
Reduced v/c Ratio	0.69	0.68	0.73	0.04	0.38		0.91	0.65		0.01	0.97	0.21

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 120 (92%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.97
Intersection Signal Delay: 40.7 Intersection LOS: D
Intersection Capacity Utilization 84.3% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: NC 54 (Chapel Hill Road) & Morrisville Parkway (SR 3060)/Ridgemere Drive



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	139	464	78	120	505	289	5	83	1127	221	9	514
Future Volume (vph)	139	464	78	120	505	289	5	83	1127	221	9	514
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			4%				-3%			
Storage Length (ft)	200		0	200		0		325		350		850
Storage Lanes	1		0	1		0		1		1		1
Taper Length (ft)	100			100				100				100
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	0.95	1.00	0.95	1.00	0.95	1.00
Ped Bike Factor		1.00		1.00				1.00				
Frt		0.978			0.945					0.850		
Flt Protected	0.950			0.950				0.950				0.950
Satd. Flow (prot)	1743	3403	0	1734	3278	0	0	1796	3592	1607	0	1743
Flt Permitted	0.950			0.165				0.950				0.950
Satd. Flow (perm)	1743	3403	0	301	3278	0	0	1796	3592	1607	0	1743
Right Turn on Red			No			No				No		
Satd. Flow (RTOR)												
Link Speed (mph)		45			35				45			
Link Distance (ft)		1496			481				1971			
Travel Time (s)		22.7			9.4				29.9			
Confl. Peds. (#/hr)			1	1				2				
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	154	516	87	133	561	321	6	92	1252	246	10	571
Shared Lane Traffic (%)												
Lane Group Flow (vph)	154	603	0	133	882	0	0	98	1252	246	0	581
Turn Type	Prot	NA		pm+pt	NA		Prot	Prot	NA	pm+ov	Prot	Prot
Protected Phases	7	4		3	8		5	5	2	3	1	1
Permitted Phases				8						2		
Detector Phase	7	4		3	8		5	5	2	3	1	1
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0	12.0	7.0	7.0	7.0
Minimum Split (s)	15.3	14.8		15.4	14.8		15.3	15.3	38.0	15.4	15.3	15.3
Total Split (s)	17.0	37.6		16.4	37.0		15.3	15.3	52.0	16.4	44.0	44.0
Total Split (%)	11.3%	25.1%		10.9%	24.7%		10.2%	10.2%	34.7%	10.9%	29.3%	29.3%
Maximum Green (s)	10.0	30.6		9.4	30.0		8.3	8.3	45.0	9.4	37.0	37.0
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0			-2.0	-2.0	-2.0		-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0	5.0		5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.0	1.0	6.0	2.0	1.0	1.0
Recall Mode	None	None		None	None		None	None	Min	None	None	None
Walk Time (s)									7.0			
Flash Dont Walk (s)									24.0			
Pedestrian Calls (#/hr)									0			
Act Effct Green (s)	12.0	32.6		43.4	32.0			10.1	47.0	58.4		39.0
Actuated g/C Ratio	0.08	0.22		0.29	0.21			0.07	0.31	0.39		0.26
v/c Ratio	1.11	0.82		0.68	1.26			0.81	1.11	0.39		1.28

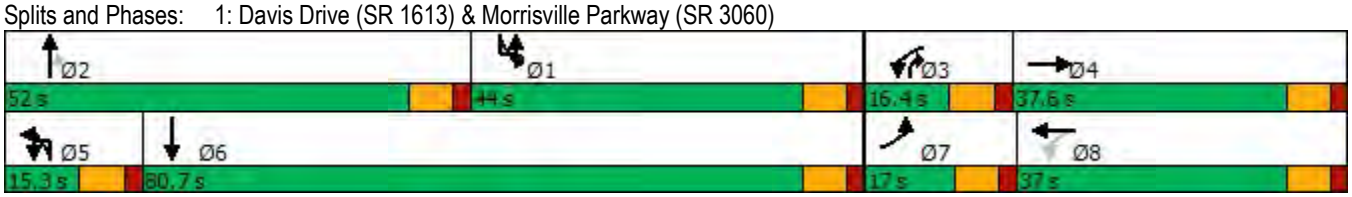
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	1708	159
Future Volume (vph)	1708	159
Ideal Flow (vphpl)	1900	1900
Grade (%)	3%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.95	0.95
Ped Bike Factor	1.00	
Frt	0.987	
Flt Protected		
Satd. Flow (prot)	3436	0
Flt Permitted		
Satd. Flow (perm)	3436	0
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	45	
Link Distance (ft)	1155	
Travel Time (s)	17.5	
Confl. Peds. (#/hr)		2
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	1898	177
Shared Lane Traffic (%)		
Lane Group Flow (vph)	2075	0
Turn Type	NA	
Protected Phases	6	
Permitted Phases		
Detector Phase	6	
Switch Phase		
Minimum Initial (s)	12.0	
Minimum Split (s)	37.0	
Total Split (s)	80.7	
Total Split (%)	53.8%	
Maximum Green (s)	73.7	
Yellow Time (s)	5.0	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	-2.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	6.0	
Recall Mode	Min	
Walk Time (s)	7.0	
Flash Dont Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	75.9	
Actuated g/C Ratio	0.51	
v/c Ratio	1.19	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Control Delay	168.5	65.8		55.9	176.0			110.8	110.3	19.4		187.1
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0		0.0
Total Delay	168.5	65.8		55.9	176.0			110.8	110.3	19.4		187.1
LOS	F	E		E	F			F	F	B		F
Approach Delay		86.7			160.3				96.3			
Approach LOS		F			F				F			
Queue Length 50th (ft)	~171	298		95	~568			96	~735	87		~719
Queue Length 95th (ft)	#323	372		#159	#704			#200	#875	126		#956
Internal Link Dist (ft)		1416			401				1891			
Turn Bay Length (ft)	200			200				325		350		850
Base Capacity (vph)	139	739		195	699			123	1125	625		453
Starvation Cap Reductn	0	0		0	0			0	0	0		0
Spillback Cap Reductn	0	0		0	0			0	0	0		0
Storage Cap Reductn	0	0		0	0			0	0	0		0
Reduced v/c Ratio	1.11	0.82		0.68	1.26			0.80	1.11	0.39		1.28

Intersection Summary	
Area Type: Other	
Cycle Length: 150	
Actuated Cycle Length: 150	
Natural Cycle: 145	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.28	
Intersection Signal Delay: 125.4	Intersection LOS: F
Intersection Capacity Utilization 107.7%	ICU Level of Service G
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Davis Drive (SR 1613) & Morrisville Parkway (SR 3060)



Lane Group	SBT	SBR
Control Delay	127.5	
Queue Delay	0.0	
Total Delay	127.5	
LOS	F	
Approach Delay	140.5	
Approach LOS	F	
Queue Length 50th (ft)	~1289	
Queue Length 95th (ft)	#1421	
Internal Link Dist (ft)	1075	
Turn Bay Length (ft)		
Base Capacity (vph)	1738	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	1.19	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	22	1173	3	8	0	905	15	5	0	3	2
Future Volume (vph)	1	22	1173	3	8	0	905	15	5	0	3	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%				4%			0%		
Storage Length (ft)		50		0		250		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt							0.998			0.955		
Flt Protected		0.950				0.950				0.968		
Satd. Flow (prot)	0	1770	3539	0	0	1734	3461	0	0	1722	0	0
Flt Permitted		0.950				0.950				0.968		
Satd. Flow (perm)	0	1770	3539	0	0	1734	3461	0	0	1722	0	0
Link Speed (mph)			35				35			30		
Link Distance (ft)			481				711			498		
Travel Time (s)			9.4				13.9			11.3		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	24	1303	3	9	0	1006	17	6	0	3	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	25	1306	0	0	9	1023	0	0	9	0	0
Sign Control			Free				Free			Stop		

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 42.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	3
Future Volume (vph)	0	3
Ideal Flow (vphpl)	1900	1900
Grade (%)	0%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.919	
Flt Protected	0.980	
Satd. Flow (prot)	1678	0
Flt Permitted	0.980	
Satd. Flow (perm)	1678	0
Link Speed (mph)	30	
Link Distance (ft)	605	
Travel Time (s)	13.8	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	0	3
Shared Lane Traffic (%)		
Lane Group Flow (vph)	5	0
Sign Control	Stop	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	16	30	1081	59	1	7	884	18	13	0	29	6
Future Volume (vph)	16	30	1081	59	1	7	884	18	13	0	29	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	16	12	12
Grade (%)			0%				4%			0%		
Storage Length (ft)		100		0		0		125	0		0	0
Storage Lanes		1		0		0		1	0		0	0
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Frt			0.992					0.850		0.906		
Flt Protected		0.950								0.985		
Satd. Flow (prot)	0	1770	3511	0	0	0	3468	1552	0	1884	0	0
Flt Permitted		0.950								0.985		
Satd. Flow (perm)	0	1770	3511	0	0	0	3468	1552	0	1884	0	0
Link Speed (mph)			35				35			30		
Link Distance (ft)			711				611			253		
Travel Time (s)			13.9				11.9			5.8		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	18	33	1201	66	1	8	982	20	14	0	32	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	51	1267	0	0	0	991	20	0	46	0	0
Sign Control			Free				Free			Stop		

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 48.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	15
Future Volume (vph)	0	15
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.904	
Flt Protected	0.986	
Satd. Flow (prot)	1660	0
Flt Permitted	0.986	
Satd. Flow (perm)	1660	0
Link Speed (mph)	30	
Link Distance (ft)	462	
Travel Time (s)	10.5	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	0	17
Shared Lane Traffic (%)		
Lane Group Flow (vph)	24	0
Sign Control	Stop	

Intersection Summary

Lane Group	EBU	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations								
Traffic Volume (vph)	17	18	1082	11	882	26	17	11
Future Volume (vph)	17	18	1082	11	882	26	17	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		125		0		0	0	0
Storage Lanes		1		0		0	1	0
Taper Length (ft)		100		100			100	
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.996		0.948	
Flt Protected		0.950			0.999		0.970	
Satd. Flow (prot)	0	1770	3539	0	3522	0	1713	0
Flt Permitted		0.950			0.999		0.970	
Satd. Flow (perm)	0	1770	3539	0	3522	0	1713	0
Link Speed (mph)			35		35		25	
Link Distance (ft)			957		577		155	
Travel Time (s)			18.6		11.2		4.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	19	20	1202	12	980	29	19	12
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	39	1202	0	1021	0	31	0
Sign Control			Free		Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 43.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	26	11	1036	37	111	874	5	13	0	89	1	1
Future Volume (vph)	26	11	1036	37	111	874	5	13	0	89	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		150		0	150		0	0		0	0	
Storage Lanes		0		0	1		0	0		0	0	
Taper Length (ft)		100			100			100			100	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Frt			0.995			0.999			0.882			0.895
Flt Protected			0.998		0.950				0.994			0.994
Satd. Flow (prot)	0	0	3514	0	1770	3536	0	0	1633	0	0	1657
Flt Permitted			0.998		0.950				0.994			0.994
Satd. Flow (perm)	0	0	3514	0	1770	3536	0	0	1633	0	0	1657
Link Speed (mph)			35			35			30			25
Link Distance (ft)			577			755			677			734
Travel Time (s)			11.2			14.7			15.4			20.0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	29	12	1151	41	123	971	6	14	0	99	1	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	1233	0	123	977	0	0	113	0	0	9
Sign Control			Free			Free			Stop			Stop

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 73.5%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	6
Future Volume (vph)	6
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Adj. Flow (vph)	7
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Sign Control	

Intersection Summary

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	3	17	1106	976	5	6	11
Future Volume (vph)	3	17	1106	976	5	6	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	1.00	1.00
Frt				0.999		0.915	
Flt Protected			0.999			0.982	
Satd. Flow (prot)	0	0	3536	3536	0	1674	0
Flt Permitted			0.999			0.982	
Satd. Flow (perm)	0	0	3536	3536	0	1674	0
Link Speed (mph)			35	35		30	
Link Distance (ft)			755	765		518	
Travel Time (s)			14.7	14.9		11.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	3	19	1229	1084	6	7	12
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	1251	1090	0	19	0
Sign Control			Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 54.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1106	6	0	979	2	2
Future Volume (vph)	1106	6	0	979	2	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.999				0.932	
Flt Protected					0.976	
Satd. Flow (prot)	3536	0	0	3539	1694	0
Flt Permitted					0.976	
Satd. Flow (perm)	3536	0	0	3539	1694	0
Link Speed (mph)	35			35	30	
Link Distance (ft)	765			840	435	
Travel Time (s)	14.9			16.4	9.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1229	7	0	1088	2	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1236	0	0	1088	4	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 40.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	1104	1	34	2	977	10	0	0	5	3	0
Future Volume (vph)	3	1104	1	34	2	977	10	0	0	5	3	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0		125		0	0		0	0	
Storage Lanes	0		0		1		0	0		0	0	
Taper Length (ft)	100				100			100			100	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Frt						0.998			0.865			0.946
Flt Protected					0.950							0.971
Satd. Flow (prot)	0	3539	0	0	1770	3532	0	0	1611	0	0	1711
Flt Permitted					0.950							0.971
Satd. Flow (perm)	0	3539	0	0	1770	3532	0	0	1611	0	0	1711
Link Speed (mph)		35				35			30			30
Link Distance (ft)		840				1394			303			445
Travel Time (s)		16.4				27.2			6.9			10.1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	3	1227	1	38	2	1086	11	0	0	6	3	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1231	0	0	40	1097	0	0	6	0	0	5
Sign Control		Free				Free			Stop			Stop

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 42.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	2
Future Volume (vph)	2
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Adj. Flow (vph)	2
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Sign Control	

Intersection Summary

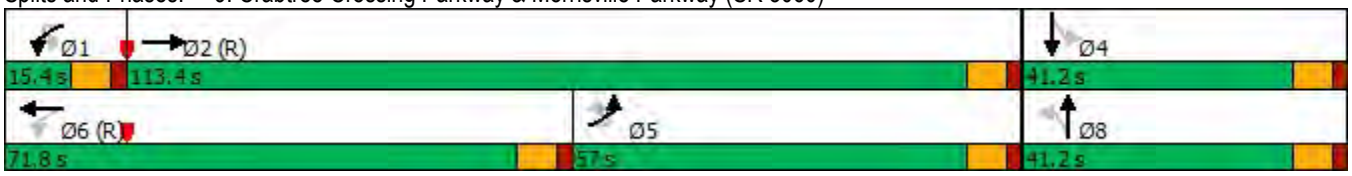
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	27	45	1029	45	7	46	926	82	43	10	31	46
Future Volume (vph)	27	45	1029	45	7	46	926	82	43	10	31	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			5%				-1%			3%		
Storage Length (ft)		75		0		200		0	100		0	100
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.994				0.988			0.887		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1725	3430	0	0	1778	3514	0	1743	1627	0	1787
Flt Permitted		0.254				0.191			0.731			0.728
Satd. Flow (perm)	0	461	3430	0	0	358	3514	0	1341	1627	0	1370
Right Turn on Red				No				No			No	
Satd. Flow (RTOR)												
Link Speed (mph)			35				35			25		
Link Distance (ft)			1394				1279			1392		
Travel Time (s)			27.2				24.9			38.0		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	30	50	1143	50	8	51	1029	91	48	11	34	51
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	80	1193	0	0	59	1120	0	48	45	0	51
Turn Type	custom	Prot	NA		custom	pm+pt	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			8		
Permitted Phases	5				1	6			8			4
Detector Phase	5	5	2		1	1	6		8	8		4
Switch Phase												
Minimum Initial (s)	7.0	7.0	10.0		7.0	7.0	10.0		7.0	7.0		7.0
Minimum Split (s)	15.2	15.2	42.6		15.4	15.4	37.6		41.2	41.2		37.2
Total Split (s)	57.0	57.0	113.4		15.4	15.4	71.8		41.2	41.2		41.2
Total Split (%)	33.5%	33.5%	66.7%		9.1%	9.1%	42.2%		24.2%	24.2%		24.2%
Maximum Green (s)	50.0	50.0	106.4		8.4	8.4	64.8		34.2	34.2		34.2
Yellow Time (s)	5.0	5.0	5.0		5.0	5.0	5.0		5.0	5.0		5.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0	2.0		2.0	2.0		2.0
Lost Time Adjust (s)		-2.0	-2.0			-2.0	-2.0		-2.0	-2.0		-2.0
Total Lost Time (s)		5.0	5.0			5.0	5.0		5.0	5.0		5.0
Lead/Lag	Lag	Lag	Lag		Lead	Lead	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	2.0	2.0	3.0		2.0	2.0	3.0		2.0	2.0		2.0
Recall Mode	None	None	C-Min		None	None	C-Min		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Dont Walk (s)			28.0				23.0		26.0	26.0		22.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		35.4	138.9			109.4	109.4		13.0	13.0		13.0
Actuated g/C Ratio		0.21	0.82			0.64	0.64		0.08	0.08		0.08
v/c Ratio		0.83	0.43			0.19	0.50		0.47	0.36		0.49
Control Delay		116.5	6.4			8.8	11.2		89.1	81.5		89.8
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	9	27
Future Volume (vph)	9	27
Ideal Flow (vphpl)	1900	1900
Grade (%)	-2%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.887	
Flt Protected		
Satd. Flow (prot)	1669	0
Flt Permitted		
Satd. Flow (perm)	1669	0
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	35	
Link Distance (ft)	1120	
Travel Time (s)	21.8	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	10	30
Shared Lane Traffic (%)		
Lane Group Flow (vph)	40	0
Turn Type	NA	
Protected Phases	4	
Permitted Phases		
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	7.0	
Minimum Split (s)	37.2	
Total Split (s)	41.2	
Total Split (%)	24.2%	
Maximum Green (s)	34.2	
Yellow Time (s)	5.0	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	-2.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	2.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Dont Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	13.0	
Actuated g/C Ratio	0.08	
v/c Ratio	0.31	
Control Delay	79.4	
Queue Delay	0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Total Delay		116.5	6.4			8.8	11.2		89.1	81.5		89.8
LOS		F	A			A	B		F	F		F
Approach Delay			13.3				11.1			85.4		
Approach LOS			B				B			F		
Queue Length 50th (ft)		86	203			20	235		52	49		56
Queue Length 95th (ft)		145	286			44	487		98	92		104
Internal Link Dist (ft)			1314				1199			1312		
Turn Bay Length (ft)		75				200			100			100
Base Capacity (vph)		141	2802			319	2260		285	346		291
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		0.57	0.43			0.18	0.50		0.17	0.13		0.18

Intersection Summary	
Area Type: Other	
Cycle Length: 170	
Actuated Cycle Length: 170	
Offset: 148 (87%), Referenced to phase 2:EBT and 6:WBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 17.4	Intersection LOS: B
Intersection Capacity Utilization 57.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: Crabtree Crossing Parkway & Morrisville Parkway (SR 3060)



Lane Group	SBT	SBR
Total Delay	79.4	
LOS	E	
Approach Delay	85.3	
Approach LOS	F	
Queue Length 50th (ft)	43	
Queue Length 95th (ft)	84	
Internal Link Dist (ft)	1040	
Turn Bay Length (ft)		
Base Capacity (vph)	355	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.11	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	15	33	764	301	9	97	752	25	273	5	62	22
Future Volume (vph)	15	33	764	301	9	97	752	25	273	5	62	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%				-1%			0%		
Storage Length (ft)		250		150		150		0	150		0	0
Storage Lanes		1		1		1		0	1		1	0
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	1.00	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	1.00	1.00
Frt				0.850			0.995				0.850	
Flt Protected		0.950				0.950			0.950	0.954		
Satd. Flow (prot)	0	1770	3539	1583	0	1778	3539	0	1681	1688	1583	0
Flt Permitted		0.279				0.276			0.950	0.954		
Satd. Flow (perm)	0	520	3539	1583	0	517	3539	0	1681	1688	1583	0
Right Turn on Red				No				No			No	
Satd. Flow (RTOR)												
Link Speed (mph)			35				35			30		
Link Distance (ft)			1279				770			504		
Travel Time (s)			24.9				15.0			11.5		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	17	37	849	334	10	108	836	28	303	6	69	24
Shared Lane Traffic (%)									49%			
Lane Group Flow (vph)	0	54	849	334	0	118	864	0	155	154	69	0
Turn Type	custom	D.P+P	NA	pm+ov	custom	D.P+P	NA		Split	NA	pm+ov	Perm
Protected Phases		5	2	4		1	6		4	4	1!	
Permitted Phases	5	6		2	1!	2					4	3
Detector Phase	5	5	2	4	1	1	6		4	4	1	3
Switch Phase												
Minimum Initial (s)	7.0	7.0	10.0	7.0	7.0	7.0	10.0		7.0	7.0	7.0	7.0
Minimum Split (s)	14.9	14.9	27.3	36.6	14.6	14.6	23.3		36.6	36.6	14.6	41.7
Total Split (s)	16.0	16.0	68.0	40.0	19.0	19.0	71.0		40.0	40.0	19.0	43.0
Total Split (%)	9.4%	9.4%	40.0%	23.5%	11.2%	11.2%	41.8%		23.5%	23.5%	11.2%	25.3%
Maximum Green (s)	9.0	9.0	61.0	33.0	12.0	12.0	64.0		33.0	33.0	12.0	36.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0	
Total Lost Time (s)		5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0	
Lead/Lag	Lead	Lead	Lead	Lead	Lag	Lag	Lag		Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	3.0	2.0	2.0	2.0	3.0		2.0	2.0	2.0	2.0
Recall Mode	None	None	C-Min	None	None	None	C-Min		None	None	None	None
Walk Time (s)			7.0	7.0			7.0		7.0	7.0		7.0
Flash Dont Walk (s)			13.0	21.0			9.0		21.0	21.0		26.0
Pedestrian Calls (#/hr)			0	0			0		0	0		0
Act Effct Green (s)		118.1	105.0	128.8		117.1	110.7		22.8	22.8	39.8	
Actuated g/C Ratio		0.69	0.62	0.76		0.69	0.65		0.13	0.13	0.23	
v/c Ratio		0.13	0.39	0.28		0.27	0.38		0.69	0.68	0.19	
Control Delay		14.1	22.6	4.6		8.5	11.2		85.2	84.7	50.8	
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	

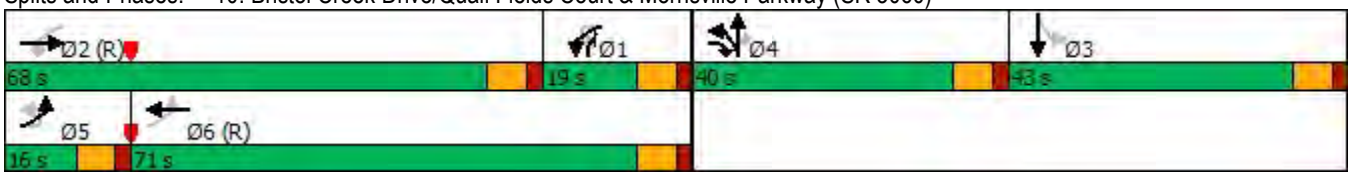
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	6	21
Future Volume (vph)	6	21
Ideal Flow (vphpl)	1900	1900
Grade (%)	0%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.942	
Flt Protected	0.978	
Satd. Flow (prot)	1716	0
Flt Permitted	0.781	
Satd. Flow (perm)	1370	0
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	30	
Link Distance (ft)	386	
Travel Time (s)	8.8	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	7	23
Shared Lane Traffic (%)		
Lane Group Flow (vph)	54	0
Turn Type	NA	
Protected Phases	3	
Permitted Phases		
Detector Phase	3	
Switch Phase		
Minimum Initial (s)	7.0	
Minimum Split (s)	41.7	
Total Split (s)	43.0	
Total Split (%)	25.3%	
Maximum Green (s)	36.0	
Yellow Time (s)	5.0	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	-2.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	2.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Dont Walk (s)	26.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	13.0	
Actuated g/C Ratio	0.08	
v/c Ratio	0.52	
Control Delay	92.1	
Queue Delay	0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Total Delay		14.1	22.6	4.6		8.5	11.2		85.2	84.7	50.8	
LOS		B	C	A		A	B		F	F	D	
Approach Delay			17.4				10.9			78.7		
Approach LOS			B				B			E		
Queue Length 50th (ft)		16	333	116		30	170		175	174	62	
Queue Length 95th (ft)		62	412	96		m40	m179		251	249	101	
Internal Link Dist (ft)			1199				690			424		
Turn Bay Length (ft)		250		150		150			150			
Base Capacity (vph)		446	2185	1275		468	2303		346	347	353	
Starvation Cap Reductn		0	0	0		0	0		0	0	0	
Spillback Cap Reductn		0	0	0		0	0		0	0	0	
Storage Cap Reductn		0	0	0		0	0		0	0	0	
Reduced v/c Ratio		0.12	0.39	0.26		0.25	0.38		0.45	0.44	0.20	

Intersection Summary

Area Type: Other
Cycle Length: 170
Actuated Cycle Length: 170
Offset: 96 (56%), Referenced to phase 2:EBWB and 6:EBWB, Start of Green
Natural Cycle: 125
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.69
Intersection Signal Delay: 25.3 Intersection LOS: C
Intersection Capacity Utilization 55.3% ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.
! Phase conflict between lane groups.

Splits and Phases: 10: Bristol Creek Drive/Quail Fields Court & Morrisville Parkway (SR 3060)



Lane Group	SBT	SBR
Total Delay	92.1	
LOS	F	
Approach Delay	92.1	
Approach LOS	F	
Queue Length 50th (ft)	59	
Queue Length 95th (ft)	108	
Internal Link Dist (ft)	306	
Turn Bay Length (ft)		
Base Capacity (vph)	306	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.18	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	58	796	0	1	0	823	85	0	0	0	41
Future Volume (vph)	3	58	796	0	1	0	823	85	0	0	0	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			2%				0%			0%		
Storage Length (ft)		0		0		100		0	0		0	0
Storage Lanes		0		0		1		0	0		0	0
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt							0.986					
Flt Protected			0.996			0.950						
Satd. Flow (prot)	0	0	3490	0	0	1770	3490	0	0	1863	0	0
Flt Permitted			0.996			0.950						
Satd. Flow (perm)	0	0	3490	0	0	1770	3490	0	0	1863	0	0
Link Speed (mph)			35				35			30		
Link Distance (ft)			770				560			287		
Travel Time (s)			15.0				10.9			6.5		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	3	64	884	0	1	0	914	94	0	0	0	46
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	951	0	0	1	1008	0	0	0	0	0
Sign Control			Free				Free			Stop		

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 65.0%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	57
Future Volume (vph)	0	57
Ideal Flow (vphpl)	1900	1900
Grade (%)	0%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.922	
Flt Protected	0.979	
Satd. Flow (prot)	1681	0
Flt Permitted	0.979	
Satd. Flow (perm)	1681	0
Link Speed (mph)	30	
Link Distance (ft)	315	
Travel Time (s)	7.2	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	0	63
Shared Lane Traffic (%)		
Lane Group Flow (vph)	109	0
Sign Control	Stop	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	6	774	57	13	32	860	1	39	0	81	6
Future Volume (vph)	1	6	774	57	13	32	860	1	39	0	81	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			2%				0%			0%		
Storage Length (ft)		0		150		150		0	0		0	0
Storage Lanes		0		1		1		0	0		0	0
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt				0.850						0.909		
Flt Protected						0.950				0.984		
Satd. Flow (prot)	0	0	3504	1567	0	1770	3539	0	0	1666	0	0
Flt Permitted						0.950				0.984		
Satd. Flow (perm)	0	0	3504	1567	0	1770	3539	0	0	1666	0	0
Link Speed (mph)			35				35			30		
Link Distance (ft)			560				571			242		
Travel Time (s)			10.9				11.1			5.5		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	7	860	63	14	36	956	1	43	0	90	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	868	63	0	50	957	0	0	133	0	0
Sign Control			Free				Free			Stop		

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 52.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	9
Future Volume (vph)	0	9
Ideal Flow (vphpl)	1900	1900
Grade (%)	0%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.921	
Flt Protected	0.980	
Satd. Flow (prot)	1681	0
Flt Permitted	0.980	
Satd. Flow (perm)	1681	0
Link Speed (mph)	30	
Link Distance (ft)	282	
Travel Time (s)	6.4	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	0	10
Shared Lane Traffic (%)		
Lane Group Flow (vph)	17	0
Sign Control	Stop	

Intersection Summary

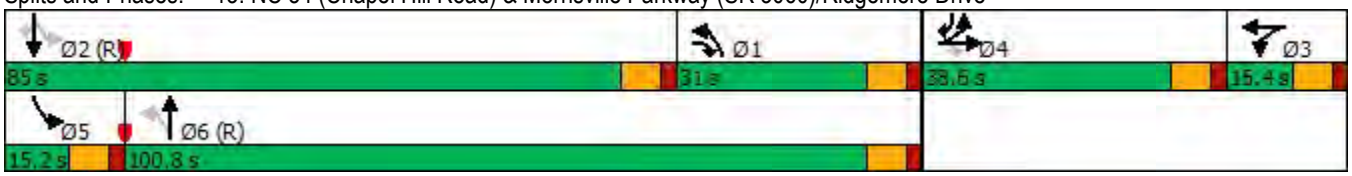
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	334	10	530	10	18	9	411	1307	17	19	2022	476
Future Volume (vph)	334	10	530	10	18	9	411	1307	17	19	2022	476
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			6%			-1%			2%	
Storage Length (ft)	475		0	100		0	650		0	150		150
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (ft)	0			100			100			100		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850		0.950			0.998				0.850
Flt Protected	0.950	0.955		0.950			0.950			0.950		
Satd. Flow (prot)	1664	1673	1567	1717	1717	0	1778	3550	0	1752	3504	1567
Flt Permitted	0.950	0.955		0.950			0.050			0.075		
Satd. Flow (perm)	1664	1673	1567	1717	1717	0	94	3550	0	138	3504	1567
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			15			45			45	
Link Distance (ft)		571			835			1436			1407	
Travel Time (s)		11.1			38.0			21.8			21.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	371	11	589	11	20	10	457	1452	19	21	2247	529
Shared Lane Traffic (%)	49%											
Lane Group Flow (vph)	189	193	589	11	30	0	457	1471	0	21	2247	529
Turn Type	Split	NA	pm+ov	Split	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	4	4	1	3	3		1	6		5	2	4
Permitted Phases			4				6			2		2
Detector Phase	4	4	1	3	3		1	6		5	2	4
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	12.0		7.0	12.0	7.0
Minimum Split (s)	38.6	38.6	15.3	15.4	15.4		15.3	34.0		15.2	37.0	38.6
Total Split (s)	38.6	38.6	31.0	15.4	15.4		31.0	100.8		15.2	85.0	38.6
Total Split (%)	22.7%	22.7%	18.2%	9.1%	9.1%		18.2%	59.3%		8.9%	50.0%	22.7%
Maximum Green (s)	31.6	31.6	24.0	8.4	8.4		24.0	93.8		8.2	78.0	31.6
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lead	Lag	Lag	Lag		Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	6.0		2.0	6.0	2.0
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	None
Walk Time (s)	7.0	7.0						7.0			7.0	7.0
Flash Dont Walk (s)	24.0	24.0						20.0			23.0	24.0
Pedestrian Calls (#/hr)	0	0						0			0	0
Act Effct Green (s)	26.8	26.8	57.8	9.7	9.7		112.9	112.9		90.3	90.3	118.1
Actuated g/C Ratio	0.16	0.16	0.34	0.06	0.06		0.66	0.66		0.53	0.53	0.69
v/c Ratio	0.72	0.73	1.11	0.11	0.31		1.43	0.62		0.13	1.21	0.49
Control Delay	64.7	65.5	108.7	78.4	85.2		254.2	20.8		24.5	134.2	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	64.7	65.5	108.7	78.4	85.2		254.2	20.8		24.5	134.2	9.0
LOS	E	E	F	E	F		F	C		C	F	A
Approach Delay		91.5			83.4			76.1			109.7	
Approach LOS		F			F			E			F	
Queue Length 50th (ft)	216	221	~740	12	33		~644	552		11	~1640	167
Queue Length 95th (ft)	210	216	#895	35	71		#886	701		30	#1845	221
Internal Link Dist (ft)		491			755			1356			1327	
Turn Bay Length (ft)	475			100			650			150		150
Base Capacity (vph)	328	330	533	106	106		320	2356		170	1860	1123
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	0
Reduced v/c Ratio	0.58	0.58	1.11	0.10	0.28		1.43	0.62		0.12	1.21	0.47

Intersection Summary

Area Type: Other
Cycle Length: 170
Actuated Cycle Length: 170
Offset: 150 (88%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.43
Intersection Signal Delay: 95.1 Intersection LOS: F
Intersection Capacity Utilization 107.3% ICU Level of Service G
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: NC 54 (Chapel Hill Road) & Morrisville Parkway (SR 3060)/Ridgemere Drive



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	177	549	58	78	264	287	76	1552	149	17	206	688
Future Volume (vph)	177	549	58	78	264	287	76	1552	149	17	206	688
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			4%			-3%				3%
Storage Length (ft)	0		0	200		300	325		350		850	
Storage Lanes	1		0	1		1	1		1		2	
Taper Length (ft)	100			100			100				100	
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.97	0.95
Ped Bike Factor		1.00		1.00			1.00					1.00
Frt		0.986				0.850			0.850			0.981
Flt Protected	0.950			0.950			0.950				0.950	
Satd. Flow (prot)	1770	3485	0	1734	3468	1552	1796	3592	1607	0	3382	3414
Flt Permitted	0.340			0.216			0.250				0.950	
Satd. Flow (perm)	633	3485	0	394	3468	1552	472	3592	1607	0	3382	3414
Right Turn on Red			No			No			No			
Satd. Flow (RTOR)												
Link Speed (mph)		30			35			45				45
Link Distance (ft)		1496			481			1971				1155
Travel Time (s)		34.0			9.4			29.9				17.5
Confl. Peds. (#/hr)			1	1			2					
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	197	610	64	87	293	319	84	1724	166	19	229	764
Shared Lane Traffic (%)												
Lane Group Flow (vph)	197	674	0	87	293	319	84	1724	166	0	248	874
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	Prot	Prot	NA
Protected Phases	7	4		3	8	1!	5	2	3	1!	1	6
Permitted Phases	4			8		8	2		2			
Detector Phase	7	4		3	8	1	5	2	3	1	1	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	12.0	7.0	7.0	7.0	12.0
Minimum Split (s)	15.3	14.8		15.4	14.8	15.3	15.3	38.0	15.4	15.3	15.3	37.0
Total Split (s)	21.2	28.4		15.4	22.6	15.4	15.3	60.8	15.4	15.4	15.4	60.9
Total Split (%)	17.7%	23.7%		12.8%	18.8%	12.8%	12.8%	50.7%	12.8%	12.8%	12.8%	50.8%
Maximum Green (s)	14.2	21.4		8.4	15.6	8.4	8.3	53.8	8.4	8.4	8.4	53.9
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0		2.0	2.0	1.0	1.0	6.0	2.0	1.0	1.0	6.0
Recall Mode	None	None		None	None	None	None	Min	None	None	None	Min
Walk Time (s)								7.0				7.0
Flash Dont Walk (s)								24.0				23.0
Pedestrian Calls (#/hr)								0				0
Act Effct Green (s)	37.7	23.4		28.4	18.5	33.9	65.0	55.8	70.7		10.4	59.9
Actuated g/C Ratio	0.32	0.20		0.24	0.15	0.28	0.54	0.47	0.59		0.09	0.50
v/c Ratio	0.58	0.99		0.42	0.55	0.73	0.23	1.03	0.17		0.84	0.51

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	99
Future Volume (vph)	99
Ideal Flow (vphpl)	1900
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.95
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Peak Hour Factor	0.90
Adj. Flow (vph)	110
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Control Delay	38.5	80.0		36.4	51.4	50.0	12.2	61.5	11.7		78.7	22.2
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	38.5	80.0		36.4	51.4	50.0	12.2	61.5	11.7		78.7	22.2
LOS	D	F		D	D	D	B	E	B		E	C
Approach Delay		70.6			48.9			55.2				34.7
Approach LOS		E			D			E				C
Queue Length 50th (ft)	116	276		48	112	226	26	~754	55		99	244
Queue Length 95th (ft)	182	#404		88	160	#343	49	#893	90		#170	309
Internal Link Dist (ft)		1416			401			1891				1075
Turn Bay Length (ft)				200		300	325		350		850	
Base Capacity (vph)	357	682		212	536	439	375	1677	957		294	1710
Starvation Cap Reductn	0	0		0	0	0	0	0	0		0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0		0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0		0	0
Reduced v/c Ratio	0.55	0.99		0.41	0.55	0.73	0.22	1.03	0.17		0.84	0.51

Intersection Summary

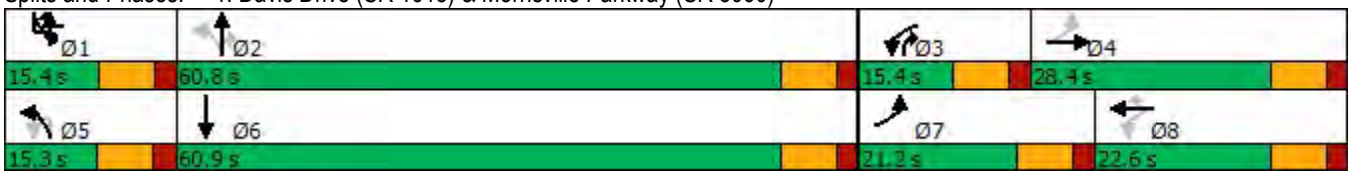
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 119.5
Natural Cycle: 125
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.03
Intersection Signal Delay: 52.2 Intersection LOS: D
Intersection Capacity Utilization 93.5% ICU Level of Service F
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

! Phase conflict between lane groups.

Splits and Phases: 1: Davis Drive (SR 1613) & Morrisville Parkway (SR 3060)



Lane Group	SBR
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	7	865	32	77	13	617	6	5	0	0	1	0
Future Volume (vph)	7	865	32	77	13	617	6	5	0	0	1	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%				4%			0%			0%
Storage Length (ft)	100		0		250		0	0		0	0	
Storage Lanes	1		0		1		0	0		0	0	
Taper Length (ft)	75				100			100			100	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Frt		0.991				0.998						0.880
Flt Protected	0.950				0.950				0.950			0.994
Satd. Flow (prot)	1770	3507	0	0	1734	3461	0	0	1770	0	0	1629
Flt Permitted	0.950				0.950				0.950			0.994
Satd. Flow (perm)	1770	3507	0	0	1734	3461	0	0	1770	0	0	1629
Link Speed (mph)		35				35			30			30
Link Distance (ft)		481				711			498			605
Travel Time (s)		9.4				13.9			11.3			13.8
Peak Hour Factor	0.90	0.90	0.50	0.90	0.50	0.90	0.90	0.50	0.50	0.50	0.90	0.90
Adj. Flow (vph)	8	961	64	86	26	686	7	10	0	0	1	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	1025	0	0	112	693	0	0	10	0	0	9
Sign Control		Free				Free			Stop			Stop

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 43.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	7
Future Volume (vph)	7
Ideal Flow (vphpl)	1900
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Adj. Flow (vph)	8
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Sign Control	

Intersection Summary

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	7	865	32	77	13	617	6	5	0	0	1	0	7
Future Vol, veh/h	7	865	32	77	13	617	6	5	0	0	1	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	-	250	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	4	-	-	0	-	-	0	-
Peak Hour Factor	90	90	50	90	50	90	90	50	50	50	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	961	64	86	26	686	7	10	0	0	1	0	8

Major/Minor	Major1			Major2				Minor1			Minor2		
Conflicting Flow All	693	0	0	1025	1025	0	0	1576	1926	513	1411	1955	347
Stage 1	-	-	-	-	-	-	-	1009	1009	-	914	914	-
Stage 2	-	-	-	-	-	-	-	567	917	-	497	1041	-
Critical Hdwy	4.14	-	-	6.44	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.52	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	898	-	-	320	673	-	-	74	66	506	98	63	649
Stage 1	-	-	-	-	-	-	-	257	316	-	294	350	-
Stage 2	-	-	-	-	-	-	-	476	349	-	523	305	-
Platoon blocked, %		-	-			-	-						
Mov Cap-1 Maneuver	898	-	-	365	365	-	-	55	45	506	74	43	649
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	55	45	-	74	43	-
Stage 1	-	-	-	-	-	-	-	255	313	-	291	243	-
Stage 2	-	-	-	-	-	-	-	326	242	-	518	302	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	2.7	84.5	16.2
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	55	898	-	-	365	-	-	329
HCM Lane V/C Ratio	0.182	0.009	-	-	0.306	-	-	0.027
HCM Control Delay (s)	84.5	9	-	-	19.2	-	-	16.2
HCM Lane LOS	F	A	-	-	C	-	-	C
HCM 95th %tile Q(veh)	0.6	0	-	-	1.3	-	-	0.1

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	6	828	108	27	19	695	16	7	0	86	7
Future Volume (vph)	1	6	828	108	27	19	695	16	7	0	86	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	16	12	12
Grade (%)			0%				4%			0%		
Storage Length (ft)		100		0		100		125	0		0	0
Storage Lanes		1		0		1		1	0		0	0
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00
Frt			0.971					0.850		0.875		
Flt Protected		0.950				0.950				0.996		
Satd. Flow (prot)	0	1770	3437	0	0	1734	3468	1552	0	1840	0	0
Flt Permitted		0.292				0.200				0.983		
Satd. Flow (perm)	0	544	3437	0	0	365	3468	1552	0	1816	0	0
Right Turn on Red				No				No			No	
Satd. Flow (RTOR)												
Link Speed (mph)			35				35			30		
Link Distance (ft)			711				611			253		
Travel Time (s)			13.9				11.9			5.8		
Peak Hour Factor	0.90	0.90	0.90	0.50	0.90	0.50	0.90	0.90	0.50	0.50	0.50	0.90
Adj. Flow (vph)	1	7	920	216	30	38	772	18	14	0	172	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	8	1136	0	0	68	772	18	0	186	0	0
Turn Type	Perm	Perm	NA		Perm	Perm	NA	Perm	Perm	NA		Perm
Protected Phases			6				2			8		
Permitted Phases	6	6			2	2		2	8			4
Detector Phase	6	6	6		2	2	2	2	8	8		4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0		5.0
Minimum Split (s)	25.0	25.0	25.0		25.0	25.0	25.0	25.0	25.0	25.0		25.0
Total Split (s)	25.0	25.0	25.0		25.0	25.0	25.0	25.0	25.0	25.0		25.0
Total Split (%)	50.0%	50.0%	50.0%		50.0%	50.0%	50.0%	50.0%	50.0%	50.0%		50.0%
Maximum Green (s)	18.0	18.0	18.0		18.0	18.0	18.0	18.0	18.0	18.0		18.0
Yellow Time (s)	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0		5.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0		2.0
Lost Time Adjust (s)		-2.0	-2.0			-2.0	-2.0	-2.0		-2.0		
Total Lost Time (s)		5.0	5.0			5.0	5.0	5.0		5.0		
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	C-Max	C-Max	C-Max	Max	Max		Max
Walk Time (s)	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0		7.0
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0		11.0
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0	0	0		0
Act Effct Green (s)		20.0	20.0			20.0	20.0	20.0		20.0		
Actuated g/C Ratio		0.40	0.40			0.40	0.40	0.40		0.40		
v/c Ratio		0.04	0.83			0.47	0.56	0.03		0.26		
Control Delay		10.6	21.2			24.9	13.5	9.4		11.2		

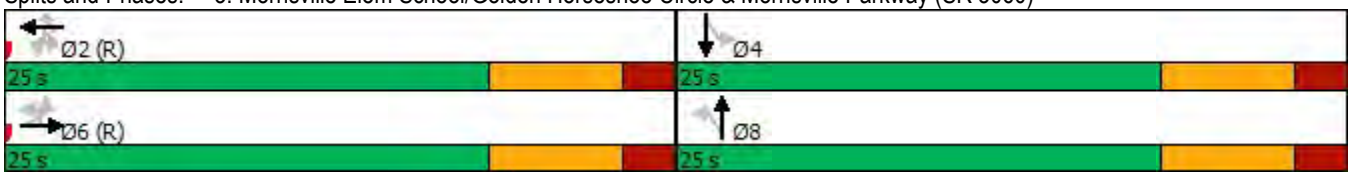
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	10
Future Volume (vph)	0	10
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.922	
Flt Protected	0.979	
Satd. Flow (prot)	1681	0
Flt Permitted	0.884	
Satd. Flow (perm)	1518	0
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	30	
Link Distance (ft)	462	
Travel Time (s)	10.5	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	0	11
Shared Lane Traffic (%)		
Lane Group Flow (vph)	19	0
Turn Type	NA	
Protected Phases	4	
Permitted Phases		
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	5.0	
Minimum Split (s)	25.0	
Total Split (s)	25.0	
Total Split (%)	50.0%	
Maximum Green (s)	18.0	
Yellow Time (s)	5.0	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	-2.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	Max	
Walk Time (s)	7.0	
Flash Dont Walk (s)	11.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	20.0	
Actuated g/C Ratio	0.40	
v/c Ratio	0.03	
Control Delay	9.4	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Queue Delay		0.0	0.0			0.0	0.0	0.0		0.0		
Total Delay		10.6	21.2			24.9	13.5	9.4		11.2		
LOS		B	C			C	B	A		B		
Approach Delay			21.1				14.3			11.2		
Approach LOS			C				B			B		
Queue Length 50th (ft)		1	154			14	86	3		35		
Queue Length 95th (ft)		m8	#257			21	131	12		35		
Internal Link Dist (ft)			631				531			173		
Turn Bay Length (ft)		100				100		125				
Base Capacity (vph)		217	1374			146	1387	620		726		
Starvation Cap Reductn		0	0			0	0	0		0		
Spillback Cap Reductn		0	0			0	0	0		0		
Storage Cap Reductn		0	0			0	0	0		0		
Reduced v/c Ratio		0.04	0.83			0.47	0.56	0.03		0.26		

Intersection Summary

Area Type: Other
Cycle Length: 50
Actuated Cycle Length: 50
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay: 17.5 Intersection LOS: B
Intersection Capacity Utilization 48.8% ICU Level of Service A
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Morrisville Elem School/Golden Horseshoe Circle & Morrisville Parkway (SR 3060)



Lane Group	SBT	SBR
Queue Delay	0.0	
Total Delay	9.4	
LOS	A	
Approach Delay	9.4	
Approach LOS	A	
Queue Length 50th (ft)	3	
Queue Length 95th (ft)	13	
Internal Link Dist (ft)	382	
Turn Bay Length (ft)		
Base Capacity (vph)	607	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.03	

Intersection Summary

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1015	0	609
Future Volume (vph)	0	0	0	1015	0	609
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	2%			0%	0%	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	0	0	5085	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	0	5085	0	2787
Link Speed (mph)	30			35	30	
Link Distance (ft)	78			296	274	
Travel Time (s)	1.8			5.8	6.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	1128	0	677
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1128	0	677
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 24.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	18	1	853	47	50	640	1	40	0	95	3	0
Future Volume (vph)	18	1	853	47	50	640	1	40	0	95	3	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		50		0	150		0	0		0	0	
Storage Lanes		1		0	1		0	0		0	0	
Taper Length (ft)		100			100			100			100	
Lane Util. Factor	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Frt			0.992						0.905			0.910
Flt Protected		0.950			0.950				0.986			0.984
Satd. Flow (prot)	0	1770	3511	0	1770	3539	0	0	1662	0	0	1668
Flt Permitted		0.374			0.257				0.898			0.882
Satd. Flow (perm)	0	697	3511	0	479	3539	0	0	1514	0	0	1495
Right Turn on Red				No			No			No		
Satd. Flow (RTOR)												
Link Speed (mph)			30			30			30			25
Link Distance (ft)			217			767			527			550
Travel Time (s)			4.9			17.4			12.0			15.0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	20	1	948	52	56	711	1	44	0	106	3	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	21	1000	0	56	712	0	0	150	0	0	9
Turn Type	Perm	Perm	NA		Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			6			8			4
Permitted Phases	2	2			6			8			4	
Detector Phase	2	2	2		6	6		8	8		4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Minimum Split (s)	25.0	25.0	25.0		25.0	25.0		25.0	25.0		25.0	25.0
Total Split (s)	34.0	34.0	34.0		34.0	34.0		26.0	26.0		26.0	26.0
Total Split (%)	56.7%	56.7%	56.7%		56.7%	56.7%		43.3%	43.3%		43.3%	43.3%
Maximum Green (s)	27.0	27.0	27.0		27.0	27.0		19.0	19.0		19.0	19.0
Yellow Time (s)	5.0	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		-2.0	-2.0		-2.0	-2.0			-2.0			-2.0
Total Lost Time (s)		5.0	5.0		5.0	5.0			5.0			5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)	7.0	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)	0	0	0		0	0		0	0		0	0
Act Effct Green (s)		40.6	40.6		40.6	40.6			13.1			12.9
Actuated g/C Ratio		0.68	0.68		0.68	0.68			0.22			0.22
v/c Ratio		0.04	0.42		0.17	0.30			0.45			0.03
Control Delay		6.3	7.0		8.1	6.2			24.0			16.5
Queue Delay		0.0	0.0		0.0	0.0			0.0			0.0
Total Delay		6.3	7.0		8.1	6.2			24.0			16.5

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	5
Future Volume (vph)	5
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Adj. Flow (vph)	6
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
LOS		A	A		A	A			C			B
Approach Delay			7.0			6.3			24.0			16.5
Approach LOS			A			A			C			B
Queue Length 50th (ft)		3	87		8	55			47			3
Queue Length 95th (ft)		12	155		29	102			85			11
Internal Link Dist (ft)			137			687			447			470
Turn Bay Length (ft)		50			150							
Base Capacity (vph)		471	2377		324	2396			529			523
Starvation Cap Reductn		0	0		0	0			0			0
Spillback Cap Reductn		0	0		0	0			0			0
Storage Cap Reductn		0	0		0	0			0			0
Reduced v/c Ratio		0.04	0.42		0.17	0.30			0.28			0.02

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 50
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.45
Intersection Signal Delay: 8.1 Intersection LOS: A
Intersection Capacity Utilization 51.5% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 5: Creek Park Drive/Black Ridge Street & Morrisville Parkway (SR 3060)

Lane Group	SBR
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	14	937	666	3	5	25
Future Volume (vph)	14	937	666	3	5	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	100				100	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.999		0.889	
Flt Protected	0.950				0.991	
Satd. Flow (prot)	1770	3539	3536	0	1641	0
Flt Permitted	0.950				0.991	
Satd. Flow (perm)	1770	3539	3536	0	1641	0
Link Speed (mph)		30	35		30	
Link Distance (ft)		767	765		518	
Travel Time (s)		17.4	14.9		11.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	16	1041	740	3	6	28
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	1041	743	0	34	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 35.9%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	937	666	3	5	25
Future Vol, veh/h	14	937	666	3	5	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	1041	740	3	6	28

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	743	0	-	0	1295	372
Stage 1	-	-	-	-	742	-
Stage 2	-	-	-	-	553	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	860	-	-	-	154	625
Stage 1	-	-	-	-	432	-
Stage 2	-	-	-	-	540	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	860	-	-	-	151	625
Mov Cap-2 Maneuver	-	-	-	-	151	-
Stage 1	-	-	-	-	424	-
Stage 2	-	-	-	-	540	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	14.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	860	-	-	-	410
HCM Lane V/C Ratio	0.018	-	-	-	0.081
HCM Control Delay (s)	9.3	-	-	-	14.6
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	1	940	1	1	666	2	2
Future Volume (vph)	1	940	1	1	666	2	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	1.00	1.00
Frt						0.932	
Flt Protected						0.976	
Satd. Flow (prot)	0	3539	0	0	3539	1694	0
Flt Permitted						0.976	
Satd. Flow (perm)	0	3539	0	0	3539	1694	0
Link Speed (mph)		35			35	30	
Link Distance (ft)		765			840	435	
Travel Time (s)		14.9			16.4	9.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	1044	1	1	740	2	2
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1046	0	0	741	4	0
Sign Control		Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 36.7%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	0.1

Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Vol, veh/h	1	940	1	1	666	2	2
Future Vol, veh/h	1	940	1	1	666	2	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
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	90
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	1	1044	1	1	740	2	2

Major/Minor	Major1			Major2		Minor1	
Conflicting Flow All	740	0	0	1045	0	1419	523
Stage 1	-	-	-	-	-	1047	-
Stage 2	-	-	-	-	-	372	-
Critical Hdwy	6.44	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	-	5.84	-
Follow-up Hdwy	2.52	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	487	-	-	661	-	128	499
Stage 1	-	-	-	-	-	299	-
Stage 2	-	-	-	-	-	667	-
Platoon blocked, %		-	-		-		
Mov Cap-1 Maneuver	487	-	-	661	-	127	499
Mov Cap-2 Maneuver	-	-	-	-	-	127	-
Stage 1	-	-	-	-	-	298	-
Stage 2	-	-	-	-	-	665	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	23.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	202	-	-	661	-
HCM Lane V/C Ratio	0.022	-	-	0.002	-
HCM Control Delay (s)	23.2	-	-	10.5	0
HCM Lane LOS	C	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	3	937	0	34	0	653	7	3	0	3	9
Future Volume (vph)	2	3	937	0	34	0	653	7	3	0	3	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		0		125		0	0		0	0
Storage Lanes		0		0		1		0	0		0	0
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt							0.998			0.932		
Flt Protected						0.950				0.976		
Satd. Flow (prot)	0	0	3539	0	0	1770	3532	0	0	1694	0	0
Flt Permitted						0.950				0.976		
Satd. Flow (perm)	0	0	3539	0	0	1770	3532	0	0	1694	0	0
Link Speed (mph)			35				35			30		
Link Distance (ft)			840				1394			303		
Travel Time (s)			16.4				27.2			6.9		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	2	3	1041	0	38	0	726	8	3	0	3	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	1046	0	0	38	734	0	0	6	0	0
Sign Control			Free				Free			Stop		

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 39.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	9
Future Volume (vph)	0	9
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.932	
Flt Protected	0.976	
Satd. Flow (prot)	1694	0
Flt Permitted	0.976	
Satd. Flow (perm)	1694	0
Link Speed (mph)	30	
Link Distance (ft)	445	
Travel Time (s)	10.1	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	0	10
Shared Lane Traffic (%)		
Lane Group Flow (vph)	20	0
Sign Control	Stop	

Intersection Summary

Intersection	
Int Delay, s/veh	0.9

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Vol, veh/h	2	3	937	0	34	0	653	7	3	0	3	9	0	9
Future Vol, veh/h	2	3	937	0	34	0	653	7	3	0	3	9	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	125	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	3	1041	0	38	0	726	8	3	0	3	10	0	10

Major/Minor	Major1				Major2				Minor1			Minor2		
Conflicting Flow All	733	734	0	-	1041	1041	0	0	1490	1861	521	1337	1857	367
Stage 1	-	-	-	-	-	-	-	-	1051	1051	-	806	806	-
Stage 2	-	-	-	-	-	-	-	-	439	810	-	531	1051	-
Critical Hdwy	6.44	4.14	-	-	6.44	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.52	2.22	-	-	2.52	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	492	867	-	0	312	664	-	-	86	72	500	111	73	630
Stage 1	-	-	-	0	-	-	-	-	243	302	-	342	393	-
Stage 2	-	-	-	0	-	-	-	-	567	391	-	500	302	-
Platoon blocked, %			-				-	-						
Mov Cap-1 Maneuver	659	659	-	-	310	310	-	-	75	62	500	98	63	630
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	75	62	-	98	63	-
Stage 1	-	-	-	-	-	-	-	-	238	295	-	334	345	-
Stage 2	-	-	-	-	-	-	-	-	490	343	-	486	295	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.9	34.2	29
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	130	659	-	310	-	-	170
HCM Lane V/C Ratio	0.051	0.005	-	0.122	-	-	0.118
HCM Control Delay (s)	34.2	10.5	-	18.2	-	-	29
HCM Lane LOS	D	B	-	C	-	-	D
HCM 95th %tile Q(veh)	0.2	0	-	0.4	-	-	0.4

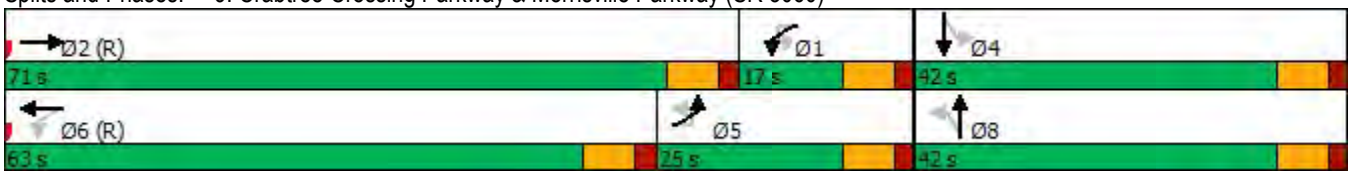
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	13	21	916	33	1	19	603	21	38	1	41	54
Future Volume (vph)	13	21	916	33	1	19	603	21	38	1	41	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			5%				-1%			3%		
Storage Length (ft)		75		0		200		0	100		0	100
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.995				0.995			0.853		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1725	3433	0	0	1778	3539	0	1743	1565	0	1787
Flt Permitted		0.388				0.243			0.724			0.726
Satd. Flow (perm)	0	705	3433	0	0	455	3539	0	1328	1565	0	1366
Right Turn on Red				No				No			No	
Satd. Flow (RTOR)												
Link Speed (mph)			35				35			25		
Link Distance (ft)			1394				1279			1392		
Travel Time (s)			27.2				24.9			38.0		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	14	23	1018	37	1	21	670	23	42	1	46	60
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	37	1055	0	0	22	693	0	42	47	0	60
Turn Type	custom	Prot	NA		custom	pm+pt	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			8		
Permitted Phases	5				1	6			8			4
Detector Phase	5	5	2		1	1	6		8	8		4
Switch Phase												
Minimum Initial (s)	7.0	7.0	10.0		7.0	7.0	10.0		7.0	7.0		7.0
Minimum Split (s)	15.2	15.2	42.6		15.4	15.4	37.6		41.2	41.2		37.2
Total Split (s)	25.0	25.0	71.0		17.0	17.0	63.0		42.0	42.0		42.0
Total Split (%)	19.2%	19.2%	54.6%		13.1%	13.1%	48.5%		32.3%	32.3%		32.3%
Maximum Green (s)	18.0	18.0	64.0		10.0	10.0	56.0		35.0	35.0		35.0
Yellow Time (s)	5.0	5.0	5.0		5.0	5.0	5.0		5.0	5.0		5.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0	2.0		2.0	2.0		2.0
Lost Time Adjust (s)		-2.0	-2.0			-2.0	-2.0		-2.0	-2.0		-2.0
Total Lost Time (s)		5.0	5.0			5.0	5.0		5.0	5.0		5.0
Lead/Lag	Lag	Lag	Lead		Lag	Lag	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	2.0	2.0	3.0		2.0	2.0	3.0		2.0	2.0		2.0
Recall Mode	None	None	C-Min		None	None	C-Min		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Dont Walk (s)			28.0				23.0		26.0	26.0		22.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		14.2	102.6			104.5	98.0		12.5	12.5		12.5
Actuated g/C Ratio		0.11	0.79			0.80	0.75		0.10	0.10		0.10
v/c Ratio		0.49	0.39			0.05	0.26		0.33	0.31		0.46
Control Delay		73.4	6.5			9.0	17.0		60.7	59.1		66.0
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	6	40
Future Volume (vph)	6	40
Ideal Flow (vphpl)	1900	1900
Grade (%)	-2%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.871	
Flt Protected		
Satd. Flow (prot)	1639	0
Flt Permitted		
Satd. Flow (perm)	1639	0
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	35	
Link Distance (ft)	1120	
Travel Time (s)	21.8	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	7	44
Shared Lane Traffic (%)		
Lane Group Flow (vph)	51	0
Turn Type	NA	
Protected Phases	4	
Permitted Phases		
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	7.0	
Minimum Split (s)	37.2	
Total Split (s)	42.0	
Total Split (%)	32.3%	
Maximum Green (s)	35.0	
Yellow Time (s)	5.0	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	-2.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	2.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Dont Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	12.5	
Actuated g/C Ratio	0.10	
v/c Ratio	0.32	
Control Delay	59.3	
Queue Delay	0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Total Delay		73.4	6.5			9.0	17.0		60.7	59.1		66.0
LOS		E	A			A	B		E	E		E
Approach Delay			8.8				16.7			59.9		
Approach LOS			A				B			E		
Queue Length 50th (ft)		30	160			6	288		34	38		49
Queue Length 95th (ft)		67	237			20	342		70	75		92
Internal Link Dist (ft)			1314				1199			1312		
Turn Bay Length (ft)		75				200			100			100
Base Capacity (vph)		108	2710			495	2666		377	445		388
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		0.34	0.39			0.04	0.26		0.11	0.11		0.15

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 58 (45%), Referenced to phase 2:EBT and 6:WBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.49	
Intersection Signal Delay: 16.9	Intersection LOS: B
Intersection Capacity Utilization 46.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 9: Crabtree Crossing Parkway & Morrisville Parkway (SR 3060)



Lane Group	SBT	SBR
Total Delay	59.3	
LOS	E	
Approach Delay	62.9	
Approach LOS	E	
Queue Length 50th (ft)	41	
Queue Length 95th (ft)	81	
Internal Link Dist (ft)	1040	
Turn Bay Length (ft)		
Base Capacity (vph)	466	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.11	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	11	915	85	17	49	515	5	107	0	56	11
Future Volume (vph)	1	11	915	85	17	49	515	5	107	0	56	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		150		150		0	150		0	0
Storage Lanes		1		1		1		0	1		1	0
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	1.00	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	1.00	1.00
Frt				0.850			0.998				0.850	
Flt Protected		0.950				0.950			0.950	0.950		
Satd. Flow (prot)	0	1770	3539	1583	0	1770	3532	0	1681	1681	1583	0
Flt Permitted		0.079				0.138			0.950	0.950		
Satd. Flow (perm)	0	147	3539	1583	0	257	3532	0	1681	1681	1583	0
Right Turn on Red				No				No			No	
Satd. Flow (RTOR)												
Link Speed (mph)			35				30			30		
Link Distance (ft)			1279				272			504		
Travel Time (s)			24.9				6.2			11.5		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	12	1017	94	19	54	572	6	119	0	62	12
Shared Lane Traffic (%)									50%			
Lane Group Flow (vph)	0	13	1017	94	0	73	578	0	59	60	62	0
Turn Type	custom	custom	NA	custom	Perm	Perm	NA		Split	NA	Perm	Perm
Protected Phases		5	4!	4			8!		4!	4!		
Permitted Phases	5	6		2	8	8!					4	3!
Detector Phase	5	5	4	4	8	8	8		4	4	4	3
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	5.0	5.0	5.0		7.0	7.0	7.0	7.0
Minimum Split (s)	14.9	14.9	36.6	36.6	25.0	25.0	25.0		36.6	36.6	36.6	41.7
Total Split (s)	14.9	14.9	50.0	50.0	91.7	91.7	91.7		50.0	50.0	50.0	41.7
Total Split (%)	11.5%	11.5%	38.5%	38.5%	70.5%	70.5%	70.5%		38.5%	38.5%	38.5%	32.1%
Maximum Green (s)	7.9	7.9	43.0	43.0	84.7	84.7	84.7		43.0	43.0	43.0	34.7
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0	
Total Lost Time (s)		5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lead	Lead					Lead	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes					Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	3.0	3.0	3.0		2.0	2.0	2.0	2.0
Recall Mode	None	None	None	None	None	None	None		None	None	None	None
Walk Time (s)			7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	7.0
Flash Dont Walk (s)			21.0	21.0	11.0	11.0	11.0		21.0	21.0	21.0	26.0
Pedestrian Calls (#/hr)			0	0	0	0	0		0	0	0	0
Act Effct Green (s)		64.9	46.0	113.6		58.5	58.5		46.0	46.0	46.0	
Actuated g/C Ratio		0.50	0.35	0.87		0.45	0.45		0.35	0.35	0.35	
v/c Ratio		0.07	0.81	0.07		0.63	0.36		0.10	0.10	0.11	
Control Delay		21.8	46.4	1.0		50.2	23.3		26.7	26.8	27.0	
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	
Total Delay		21.8	46.4	1.0		50.2	23.3		26.7	26.8	27.0	

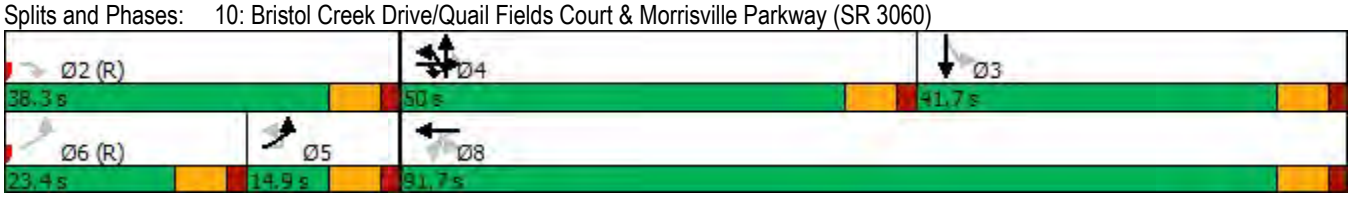
Lane Group	SBT	SBR	Ø2	Ø6
Lane Configurations				
Traffic Volume (vph)	2	21		
Future Volume (vph)	2	21		
Ideal Flow (vphpl)	1900	1900		
Storage Length (ft)		0		
Storage Lanes		0		
Taper Length (ft)				
Lane Util. Factor	1.00	1.00		
Frt	0.916			
Flt Protected	0.984			
Satd. Flow (prot)	1679	0		
Flt Permitted	0.867			
Satd. Flow (perm)	1479	0		
Right Turn on Red		No		
Satd. Flow (RTOR)				
Link Speed (mph)	30			
Link Distance (ft)	386			
Travel Time (s)	8.8			
Peak Hour Factor	0.90	0.90		
Adj. Flow (vph)	2	23		
Shared Lane Traffic (%)				
Lane Group Flow (vph)	37	0		
Turn Type	NA			
Protected Phases	3!		2	6
Permitted Phases				
Detector Phase	3			
Switch Phase				
Minimum Initial (s)	7.0		10.0	10.0
Minimum Split (s)	41.7		27.3	23.3
Total Split (s)	41.7		38.3	23.4
Total Split (%)	32.1%		29%	18%
Maximum Green (s)	34.7		31.3	16.4
Yellow Time (s)	5.0		5.0	5.0
All-Red Time (s)	2.0		2.0	2.0
Lost Time Adjust (s)	-2.0			
Total Lost Time (s)	5.0			
Lead/Lag	Lag			Lead
Lead-Lag Optimize?	Yes			Yes
Vehicle Extension (s)	2.0		3.0	3.0
Recall Mode	None		C-Min	C-Min
Walk Time (s)	7.0		7.0	7.0
Flash Dont Walk (s)	26.0		13.0	9.0
Pedestrian Calls (#/hr)	0		0	0
Act Effct Green (s)	10.2			
Actuated g/C Ratio	0.08			
v/c Ratio	0.32			
Control Delay	63.5			
Queue Delay	0.0			
Total Delay	63.5			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
LOS		C	D	A		D	C		C	C	C	
Approach Delay			42.4				26.3			26.8		
Approach LOS			D				C			C		
Queue Length 50th (ft)		3	430	0		45	158		34	35	35	
Queue Length 95th (ft)		m13	530	12		102	174		63	64	63	
Internal Link Dist (ft)			1199				192			424		
Turn Bay Length (ft)		250		150		150			150			
Base Capacity (vph)		198	1305	1388		171	2355		620	620	583	
Starvation Cap Reductn		0	0	0		0	0		0	0	0	
Spillback Cap Reductn		0	0	0		0	0		0	0	0	
Storage Cap Reductn		0	0	0		0	0		0	0	0	
Reduced v/c Ratio		0.07	0.78	0.07		0.43	0.25		0.10	0.10	0.11	

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 51.4 (40%), Referenced to phase 2:EBR and 6:EBL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.81
Intersection Signal Delay: 36.1 Intersection LOS: D
Intersection Capacity Utilization 57.8% ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.
! Phase conflict between lane groups.

Splits and Phases: 10: Bristol Creek Drive/Quail Fields Court & Morrisville Parkway (SR 3060)



Lane Group	SBT	SBR	Ø2	Ø6
LOS	E			
Approach Delay	63.5			
Approach LOS	E			
Queue Length 50th (ft)	30			
Queue Length 95th (ft)	66			
Internal Link Dist (ft)	306			
Turn Bay Length (ft)				
Base Capacity (vph)	417			
Starvation Cap Reductn	0			
Spillback Cap Reductn	0			
Storage Cap Reductn	0			
Reduced v/c Ratio	0.09			

Intersection Summary

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	999	0	586	0	0
Future Volume (vph)	0	999	0	586	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	2%			0%	0%	
Lane Util. Factor	1.00	0.88	1.00	0.95	1.00	1.00
Frt		0.850				
Flt Protected						
Satd. Flow (prot)	0	2759	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	2759	0	3539	0	0
Link Speed (mph)	35			35	30	
Link Distance (ft)	272			495	218	
Travel Time (s)	5.3			9.6	5.0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1110	0	651	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1110	0	651	0	0
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.3%		ICU Level of Service A	
Analysis Period (min) 15			

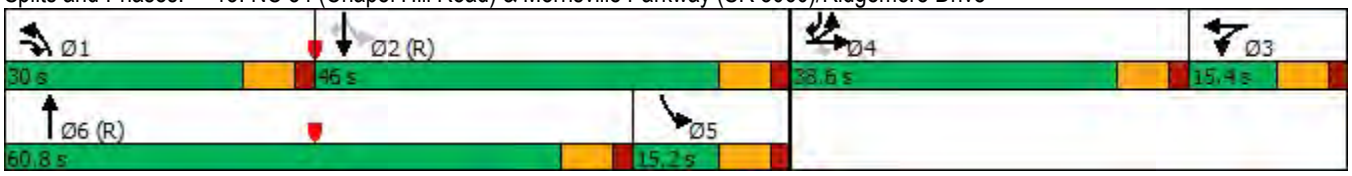
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	526	7	483	5	14	30	407	1213	9	2	1005	188
Future Volume (vph)	526	7	483	5	14	30	407	1213	9	2	1005	188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			6%			-1%			2%	
Storage Length (ft)	0		0	100		0	650		0	150		150
Storage Lanes	1		1	1		0	2		0	1		1
Taper Length (ft)	0			100			100			100		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95	0.95	1.00	0.91	1.00
Frt			0.850		0.899			0.999				0.850
Flt Protected	0.950	0.954		0.950			0.950			0.950		
Satd. Flow (prot)	1664	1671	1567	1717	1624	0	3450	3553	0	1752	5034	1567
Flt Permitted	0.950	0.954		0.950			0.950			0.167		
Satd. Flow (perm)	1664	1671	1567	1717	1624	0	3450	3553	0	308	5034	1567
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			15			45			45	
Link Distance (ft)		274			835			1436			1407	
Travel Time (s)		5.3			38.0			21.8			21.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	584	8	537	6	16	33	452	1348	10	2	1117	209
Shared Lane Traffic (%)	49%											
Lane Group Flow (vph)	298	294	537	6	49	0	452	1358	0	2	1117	209
Turn Type	Split	NA	pm+ov	Split	NA		Prot	NA		pm+pt	NA	pm+ov
Protected Phases	4	4	1	3	3		1	6		5	2	4
Permitted Phases			4							2		2
Detector Phase	4	4	1	3	3		1	6		5	2	4
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	12.0		7.0	12.0	7.0
Minimum Split (s)	38.6	38.6	15.3	15.4	15.4		15.3	34.0		15.2	37.0	38.6
Total Split (s)	38.6	38.6	30.0	15.4	15.4		30.0	60.8		15.2	46.0	38.6
Total Split (%)	29.7%	29.7%	23.1%	11.8%	11.8%		23.1%	46.8%		11.7%	35.4%	29.7%
Maximum Green (s)	31.6	31.6	23.0	8.4	8.4		23.0	53.8		8.2	39.0	31.6
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag		Lead	Lead		Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	6.0		2.0	6.0	2.0
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	None
Walk Time (s)	7.0	7.0						7.0			7.0	7.0
Flash Dont Walk (s)	24.0	24.0						20.0			23.0	24.0
Pedestrian Calls (#/hr)	0	0						0			0	0
Act Effct Green (s)	29.0	29.0	52.5	9.8	9.8		22.5	75.9		51.5	51.5	85.5
Actuated g/C Ratio	0.22	0.22	0.40	0.08	0.08		0.17	0.58		0.40	0.40	0.66
v/c Ratio	0.80	0.79	0.85	0.05	0.40		0.76	0.65		0.01	0.56	0.20
Control Delay	64.0	62.7	37.4	56.2	67.2		59.8	23.1		31.0	34.2	10.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	64.0	62.7	37.4	56.2	67.2		59.8	23.1		31.0	34.2	10.6
LOS	E	E	D	E	E		E	C		C	C	B
Approach Delay		51.0			66.0			32.3			30.5	
Approach LOS		D			E			C			C	
Queue Length 50th (ft)	248	244	284	5	40		187	399		1	284	71
Queue Length 95th (ft)	350	345	360	19	83		242	653		8	356	115
Internal Link Dist (ft)		194			755			1356			1327	
Turn Bay Length (ft)				100			650			150		150
Base Capacity (vph)	430	431	663	137	129		663	2074		235	1993	1085
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	0
Reduced v/c Ratio	0.69	0.68	0.81	0.04	0.38		0.68	0.65		0.01	0.56	0.19

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 16 (12%), Referenced to phase 2:SBTL and 6:NBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 37.0 Intersection LOS: D
Intersection Capacity Utilization 73.6% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 13: NC 54 (Chapel Hill Road) & Morrisville Parkway (SR 3060)/Ridgemere Drive



Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	16	593	0	0
Future Volume (vph)	0	0	16	593	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	2%			0%	0%	
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			100		100	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	226			78	222	
Travel Time (s)	5.1			1.8	5.0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	18	659	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	18	659	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 19.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	948	0	0	0	757
Future Volume (vph)	0	948	0	0	0	757
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	2787
Link Speed (mph)		35	35		35	
Link Distance (ft)		611	623		958	
Travel Time (s)		11.9	12.1		18.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1053	0	0	0	841
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1053	0	0	0	841
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 29.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	50	898	0	0	0	0
Future Volume (vph)	50	898	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected		0.997				
Satd. Flow (prot)	0	3529	0	0	0	0
Flt Permitted		0.997				
Satd. Flow (perm)	0	3529	0	0	0	0
Link Speed (mph)		35	35		25	
Link Distance (ft)		623	297		309	
Travel Time (s)		12.1	5.8		8.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	56	998	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1054	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 29.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	11	987	0	0	0	0
Future Volume (vph)	11	987	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	100				100	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		35	30		30	
Link Distance (ft)		218	294		285	
Travel Time (s)		4.2	6.7		6.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	12	1097	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	12	1097	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 30.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	677	5	35	15	0	0	0	45
Future Volume (vph)	0	0	0	0	677	5	35	15	0	0	0	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.999							0.865
Flt Protected								0.966				
Satd. Flow (prot)	0	0	0	0	3536	0	0	1799	0	0	0	1611
Flt Permitted								0.966				
Satd. Flow (perm)	0	0	0	0	3536	0	0	1799	0	0	0	1611
Link Speed (mph)		35			35			30			25	
Link Distance (ft)		958			191			309			468	
Travel Time (s)		18.7			3.7			7.0			12.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	752	6	39	17	0	0	0	50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	758	0	0	56	0	0	0	50
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 35.5%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	677	5	35	15	0	0	0	45
Future Vol, veh/h	0	0	0	0	677	5	35	15	0	0	0	45
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	752	6	39	17	0	0	0	50

Major/Minor	Major2			Minor1			Minor2		
Conflicting Flow All	-	-	0	376	758	-	-	-	379
Stage 1	-	-	-	0	0	-	-	-	-
Stage 2	-	-	-	376	758	-	-	-	-
Critical Hdwy	-	-	-	7.54	6.54	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	-	-	-	3.52	4.02	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	556	335	0	0	0	619
Stage 1	0	-	-	-	-	0	0	0	-
Stage 2	0	-	-	617	413	0	0	0	-
Platoon blocked, %		-	-						
Mov Cap-1 Maneuver	-	-	-	511	335	-	-	-	619
Mov Cap-2 Maneuver	-	-	-	511	335	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	567	413	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	14.3	11.3
HCM LOS		B	B

Minor Lane/Major Mvmt	NBLn1	WBT	WBR	SBLn1
Capacity (veh/h)	441	-	-	619
HCM Lane V/C Ratio	0.126	-	-	0.081
HCM Control Delay (s)	14.3	-	-	11.3
HCM Lane LOS	B	-	-	B
HCM 95th %tile Q(veh)	0.4	-	-	0.3

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	898	0	0	21	0
Future Volume (vph)	0	898	0	0	21	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		35	35		25	
Link Distance (ft)		297	354		194	
Travel Time (s)		5.8	6.9		5.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	998	0	0	23	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	998	0	0	23	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 51.0%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↰	
Traffic Vol, veh/h	0	898	0	0	21	0
Future Vol, veh/h	0	898	0	0	21	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	998	0	0	23	0

Major/Minor	Major1		Minor2	
Conflicting Flow All	-	0	499	-
Stage 1	-	-	0	-
Stage 2	-	-	499	-
Critical Hdwy	-	-	6.84	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	5.84	-
Follow-up Hdwy	-	-	3.52	-
Pot Cap-1 Maneuver	0	-	501	0
Stage 1	0	-	-	0
Stage 2	0	-	575	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	501	-
Mov Cap-2 Maneuver	-	-	501	-
Stage 1	-	-	-	-
Stage 2	-	-	575	-

Approach	EB	SB
HCM Control Delay, s	0	12.5
HCM LOS		B

Minor Lane/Major Mvmt	EBT	SBLn1
Capacity (veh/h)	-	501
HCM Lane V/C Ratio	-	0.047
HCM Control Delay (s)	-	12.5
HCM Lane LOS	-	B
HCM 95th %tile Q(veh)	-	0.1

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	21	682	0	0
Future Volume (vph)	0	0	21	682	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected				0.999		
Satd. Flow (prot)	0	0	0	3536	0	0
Flt Permitted				0.999		
Satd. Flow (perm)	0	0	0	3536	0	0
Link Speed (mph)	35			35	25	
Link Distance (ft)	191			167	194	
Travel Time (s)	3.7			3.3	5.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	23	758	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	781	0	0
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 51.0%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	6	1005	0	0	0	0
Future Volume (vph)	6	1005	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	100				100	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		333	221		213	
Travel Time (s)		6.5	4.3		4.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	7	1117	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	1117	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 31.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	919	0	703	0	0
Future Volume (vph)	0	919	0	703	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	0.88	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	3539	0	2787	0	0
Flt Permitted						
Satd. Flow (perm)	0	3539	0	2787	0	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		354	217		167	
Travel Time (s)		6.9	4.2		3.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1021	0	781	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1021	0	781	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 34.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	563	16	0	11	0	0	0	23
Future Volume (vph)	0	0	0	0	563	16	0	11	0	0	0	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			0%			0%			0%	
Storage Length (ft)	150		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.996						0.865	0.865
Flt Protected												
Satd. Flow (prot)	0	0	0	0	3525	0	0	1863	0	0	0	1611
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	3525	0	0	1863	0	0	0	1611
Link Speed (mph)		35			35			15			30	
Link Distance (ft)		495			227			285			315	
Travel Time (s)		9.6			4.4			13.0			7.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	626	18	0	12	0	0	0	26
Shared Lane Traffic (%)												10%
Lane Group Flow (vph)	0	0	0	0	644	0	0	12	0	0	3	23
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 30.6%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	563	16	0	11	0	0	0	23
Future Vol, veh/h	0	0	0	0	563	16	0	11	0	0	0	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	626	18	0	12	0	0	0	26

Major/Minor	Major2			Minor1			Minor2		
Conflicting Flow All	-	-	0	313	644	-	-	-	322
Stage 1	-	-	-	0	0	-	-	-	-
Stage 2	-	-	-	313	644	-	-	-	-
Critical Hdwy	-	-	-	7.54	6.54	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	-	-	-	3.52	4.02	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	616	390	0	0	0	674
Stage 1	0	-	-	-	-	0	0	0	-
Stage 2	0	-	-	672	466	0	0	0	-
Platoon blocked, %		-	-				-		
Mov Cap-1 Maneuver	-	-	-	593	390	-	-	-	674
Mov Cap-2 Maneuver	-	-	-	593	390	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	647	466	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	14.5	10.6
HCM LOS		B	B

Minor Lane/Major Mvmt	NBLn1	WBT	WBR	SBLn1
Capacity (veh/h)	390	-	-	674
HCM Lane V/C Ratio	0.031	-	-	0.038
HCM Control Delay (s)	14.5	-	-	10.6
HCM Lane LOS	B	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	984	3	0	0	0	0	0	20	7	7	0
Future Volume (vph)	0	984	3	0	0	0	0	0	20	7	7	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt									0.865			
Flt Protected											0.976	
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	1611	0	1818	0
Flt Permitted											0.976	
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	1611	0	1818	0
Link Speed (mph)		35			30			30			15	
Link Distance (ft)		294			333			156			216	
Travel Time (s)		5.7			7.6			3.5			9.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1093	3	0	0	0	0	0	22	8	8	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1096	0	0	0	0	0	0	22	0	16	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 44.0%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	984	3	0	0	0	0	0	20	7	7	0
Future Vol, veh/h	0	984	3	0	0	0	0	0	20	7	7	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1093	3	0	0	0	0	0	22	8	8	0

Major/Minor	Major1			Minor1		Minor2			
Conflicting Flow All	-	0	0	-	-	548	547	1096	-
Stage 1	-	-	-	-	-	-	0	0	-
Stage 2	-	-	-	-	-	-	547	1096	-
Critical Hdwy	-	-	-	-	-	6.94	7.54	6.54	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	-	-	3.32	3.52	4.02	-
Pot Cap-1 Maneuver	0	-	-	0	0	480	420	212	0
Stage 1	0	-	-	0	0	-	-	-	0
Stage 2	0	-	-	0	0	-	489	287	0
Platoon blocked, %		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	480	401	212	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	401	212	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	466	287	-

Approach	EB	NB	SB
HCM Control Delay, s	0	12.9	18.8
HCM LOS		B	C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	SBLn1
Capacity (veh/h)	480	-	-	277
HCM Lane V/C Ratio	0.046	-	-	0.056
HCM Control Delay (s)	12.9	-	-	18.8
HCM Lane LOS	B	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	585	8	3	3	0	0	0	5
Future Volume (vph)	0	0	0	0	585	8	3	3	0	0	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			2%			0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.998							0.865
Flt Protected								0.976				
Satd. Flow (prot)	0	0	0	0	3532	0	0	1800	0	0	0	1611
Flt Permitted								0.976				
Satd. Flow (perm)	0	0	0	0	3532	0	0	1800	0	0	0	1611
Link Speed (mph)		30			35			15			30	
Link Distance (ft)		326			226			213			282	
Travel Time (s)		7.4			4.4			9.7			6.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	650	9	3	3	0	0	0	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	659	0	0	6	0	0	0	6
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 33.1%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	585	8	3	3	0	0	0	5
Future Vol, veh/h	0	0	0	0	585	8	3	3	0	0	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	2	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	650	9	3	3	0	0	0	6

Major/Minor	Major2			Minor1			Minor2		
Conflicting Flow All	-	-	0	325	659	-	-	-	330
Stage 1	-	-	-	0	0	-	-	-	-
Stage 2	-	-	-	325	659	-	-	-	-
Critical Hdwy	-	-	-	7.94	6.94	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.94	5.94	-	-	-	-
Follow-up Hdwy	-	-	-	3.52	4.02	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	583	355	0	0	0	666
Stage 1	0	-	-	-	-	0	0	0	-
Stage 2	0	-	-	638	426	0	0	0	-
Platoon blocked, %		-	-						
Mov Cap-1 Maneuver	-	-	-	578	355	-	-	-	666
Mov Cap-2 Maneuver	-	-	-	578	355	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	633	426	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	13.3	10.5
HCM LOS		B	B

Minor Lane/Major Mvmt	NBLn1	WBT	WBR	SBLn1
Capacity (veh/h)	440	-	-	666
HCM Lane V/C Ratio	0.015	-	-	0.008
HCM Control Delay (s)	13.3	-	-	10.5
HCM Lane LOS	B	-	-	B
HCM 95th %tile Q(veh)	0	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	990	15	0	0	0	0	0	23	2	14	0
Future Volume (vph)	0	990	15	0	0	0	0	0	23	2	14	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.865			
Flt Protected											0.994	
Satd. Flow (prot)	0	3539	1583	0	0	0	0	0	1611	0	1852	0
Flt Permitted											0.994	
Satd. Flow (perm)	0	3539	1583	0	0	0	0	0	1611	0	1852	0
Link Speed (mph)		35			30			30			15	
Link Distance (ft)		221			296			244			222	
Travel Time (s)		4.3			6.7			5.5			10.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1100	17	0	0	0	0	0	26	2	16	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1100	17	0	0	0	0	0	26	0	18	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 44.0%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱						↱		↰	
Traffic Vol, veh/h	0	990	15	0	0	0	0	0	23	2	14	0
Future Vol, veh/h	0	990	15	0	0	0	0	0	23	2	14	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1100	17	0	0	0	0	0	26	2	16	0

Major/Minor	Major1			Minor1		Minor2			
Conflicting Flow All	-	0	0	-	-	550	550	1117	-
Stage 1	-	-	-	-	-	-	0	0	-
Stage 2	-	-	-	-	-	-	550	1117	-
Critical Hdwy	-	-	-	-	-	6.94	7.54	6.54	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	-	-	3.32	3.52	4.02	-
Pot Cap-1 Maneuver	0	-	-	0	0	479	418	206	0
Stage 1	0	-	-	0	0	-	-	-	0
Stage 2	0	-	-	0	0	-	487	281	0
Platoon blocked, %		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	479	396	206	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	396	206	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	461	281	-

Approach	EB	NB	SB
HCM Control Delay, s	0	12.9	22.9
HCM LOS		B	C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	SBLn1
Capacity (veh/h)	479	-	-	219
HCM Lane V/C Ratio	0.053	-	-	0.081
HCM Control Delay (s)	12.9	-	-	22.9
HCM Lane LOS	B	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	0.3

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	14	579	0	0
Future Volume (vph)	0	0	14	579	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	2%			0%	0%	
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			100		100	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	30			35	30	
Link Distance (ft)	227			326	216	
Travel Time (s)	5.2			6.4	4.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	16	643	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	16	643	0	0
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 19.3%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	139	470	78	122	507	291	5	83	1127	226	9	519
Future Volume (vph)	139	470	78	122	507	291	5	83	1127	226	9	519
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			4%				-3%			
Storage Length (ft)	0		0	200		300		325		350		850
Storage Lanes	1		0	1		1		1		1		2
Taper Length (ft)	100			100				100				100
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95	0.97
Ped Bike Factor		1.00		1.00				1.00				
Frt		0.979				0.850				0.850		
Flt Protected	0.950			0.950				0.950				0.950
Satd. Flow (prot)	1770	3458	0	1734	3468	1552	0	1796	3592	1607	0	3382
Flt Permitted	0.950			0.174				0.950				0.950
Satd. Flow (perm)	1770	3458	0	318	3468	1552	0	1796	3592	1607	0	3382
Right Turn on Red			No			No				No		
Satd. Flow (RTOR)												
Link Speed (mph)		30			35				45			
Link Distance (ft)		1496			481				1971			
Travel Time (s)		34.0			9.4				29.9			
Confl. Peds. (#/hr)			1	1				2				
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	154	522	87	136	563	323	6	92	1252	251	10	577
Shared Lane Traffic (%)												
Lane Group Flow (vph)	154	609	0	136	563	323	0	98	1252	251	0	587
Turn Type	Prot	NA		pm+pt	NA	pm+ov	Prot	Prot	NA	pm+ov	Prot	Prot
Protected Phases	7	4		3	8	1!	5	5	2	3	1!	1
Permitted Phases				8		8				2		
Detector Phase	7	4		3	8	1	5	5	2	3	1	1
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	12.0	7.0	7.0	7.0
Minimum Split (s)	15.3	14.8		15.4	14.8	15.3	15.3	15.3	38.0	15.4	15.3	15.3
Total Split (s)	18.0	30.5		15.5	28.0	35.2	15.3	15.3	68.8	15.5	35.2	35.2
Total Split (%)	12.0%	20.3%		10.3%	18.7%	23.5%	10.2%	10.2%	45.9%	10.3%	23.5%	23.5%
Maximum Green (s)	11.0	23.5		8.5	21.0	28.2	8.3	8.3	61.8	8.5	28.2	28.2
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0	-2.0		-2.0	-2.0	-2.0		-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0		2.0	2.0	1.0	1.0	1.0	6.0	2.0	1.0	1.0
Recall Mode	None	None		None	None	None	None	None	Min	None	None	None
Walk Time (s)									7.0			
Flash Dont Walk (s)									24.0			
Pedestrian Calls (#/hr)									0			
Act Effct Green (s)	13.0	25.5		33.5	23.0	53.7		10.1	63.1	73.6		30.7
Actuated g/C Ratio	0.09	0.17		0.22	0.15	0.36		0.07	0.42	0.49		0.20
v/c Ratio	1.01	1.04		0.80	1.06	0.58		0.81	0.83	0.32		0.85

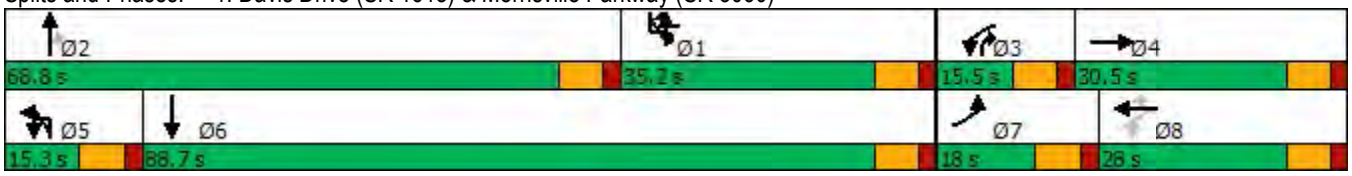
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	1708	159
Future Volume (vph)	1708	159
Ideal Flow (vphpl)	1900	1900
Grade (%)	3%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.95	0.95
Ped Bike Factor	1.00	
Frt	0.987	
Flt Protected		
Satd. Flow (prot)	3436	0
Flt Permitted		
Satd. Flow (perm)	3436	0
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	45	
Link Distance (ft)	1155	
Travel Time (s)	17.5	
Confl. Peds. (#/hr)		2
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	1898	177
Shared Lane Traffic (%)		
Lane Group Flow (vph)	2075	0
Turn Type	NA	
Protected Phases	6	
Permitted Phases		
Detector Phase	6	
Switch Phase		
Minimum Initial (s)	12.0	
Minimum Split (s)	37.0	
Total Split (s)	88.7	
Total Split (%)	59.1%	
Maximum Green (s)	81.7	
Yellow Time (s)	5.0	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	-2.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	6.0	
Recall Mode	Min	
Walk Time (s)	7.0	
Flash Dont Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	83.7	
Actuated g/C Ratio	0.56	
v/c Ratio	1.08	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Control Delay	140.4	106.0		76.4	114.7	29.8		110.5	44.2	12.9		70.0
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0
Total Delay	140.4	106.0		76.4	114.7	29.8		110.5	44.2	12.9		70.0
LOS	F	F		E	F	C		F	D	B		E
Approach Delay		112.9			82.8				43.3			
Approach LOS		F			F				D			
Queue Length 50th (ft)	~154	~336		106	~317	192		96	563	71		289
Queue Length 95th (ft)	#309	#462		#197	#441	272		#200	659	103		#379
Internal Link Dist (ft)		1416			401				1891			
Turn Bay Length (ft)				200		300		325		350		850
Base Capacity (vph)	153	588		170	532	556		123	1529	790		692
Starvation Cap Reductn	0	0		0	0	0		0	0	0		0
Spillback Cap Reductn	0	0		0	0	0		0	0	0		0
Storage Cap Reductn	0	0		0	0	0		0	0	0		0
Reduced v/c Ratio	1.01	1.04		0.80	1.06	0.58		0.80	0.82	0.32		0.85

Intersection Summary	
Area Type: Other	
Cycle Length: 150	
Actuated Cycle Length: 149.8	
Natural Cycle: 145	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 73.5	Intersection LOS: E
Intersection Capacity Utilization 97.0%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
! Phase conflict between lane groups.

Splits and Phases: 1: Davis Drive (SR 1613) & Morrisville Parkway (SR 3060)



Lane Group	SBT	SBR
Control Delay	78.7	
Queue Delay	0.0	
Total Delay	78.7	
LOS	E	
Approach Delay	76.8	
Approach LOS	E	
Queue Length 50th (ft)	~1192	
Queue Length 95th (ft)	#1323	
Internal Link Dist (ft)	1075	
Turn Bay Length (ft)		
Base Capacity (vph)	1919	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	1.08	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	22	1189	3	8	0	911	15	5	0	3	2
Future Volume (vph)	1	22	1189	3	8	0	911	15	5	0	3	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%				4%			0%		
Storage Length (ft)		100		0		250		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		75				100			100			100
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt							0.998			0.955		
Flt Protected		0.950				0.950				0.968		
Satd. Flow (prot)	0	1770	3539	0	0	1734	3461	0	0	1722	0	0
Flt Permitted		0.950				0.950				0.968		
Satd. Flow (perm)	0	1770	3539	0	0	1734	3461	0	0	1722	0	0
Link Speed (mph)			35				35			30		
Link Distance (ft)			481				711			498		
Travel Time (s)			9.4				13.9			11.3		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	24	1321	3	9	0	1012	17	6	0	3	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	25	1324	0	0	9	1029	0	0	9	0	0
Sign Control			Free				Free			Stop		

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 43.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	3
Future Volume (vph)	0	3
Ideal Flow (vphpl)	1900	1900
Grade (%)	0%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.919	
Flt Protected	0.980	
Satd. Flow (prot)	1678	0
Flt Permitted	0.980	
Satd. Flow (perm)	1678	0
Link Speed (mph)	30	
Link Distance (ft)	605	
Travel Time (s)	13.8	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	0	3
Shared Lane Traffic (%)		
Lane Group Flow (vph)	5	0
Sign Control	Stop	

Intersection Summary

Intersection	
Int Delay, s/veh	0.6

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Vol, veh/h	1	22	1189	3	8	0	911	15	5	0	3	2	0	3
Future Vol, veh/h	1	22	1189	3	8	0	911	15	5	0	3	2	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	-	100	-	-	-	250	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	-	4	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	24	1321	3	9	0	1012	17	6	0	3	2	0	3

Major/Minor	Major1				Major2				Minor1			Minor2		
Conflicting Flow All	1029	1029	0	0	1324	1324	0	0	1897	2420	662	1750	2413	515
Stage 1	-	-	-	-	-	-	-	-	1373	1373	-	1039	1039	-
Stage 2	-	-	-	-	-	-	-	-	524	1047	-	711	1374	-
Critical Hdwy	6.44	4.14	-	-	6.44	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.52	2.22	-	-	2.52	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	318	671	-	-	205	518	-	-	42	32	404	55	32	505
Stage 1	-	-	-	-	-	-	-	-	153	212	-	247	306	-
Stage 2	-	-	-	-	-	-	-	-	504	303	-	390	211	-
Platoon blocked, %			-	-			-	-						
Mov Cap-1 Maneuver	640	640	-	-	203	203	-	-	39	29	404	51	29	505
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	39	29	-	51	29	-
Stage 1	-	-	-	-	-	-	-	-	147	203	-	237	293	-
Stage 2	-	-	-	-	-	-	-	-	478	290	-	371	202	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	76.6	39.1
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	59	640	-	-	203	-	-	111
HCM Lane V/C Ratio	0.151	0.04	-	-	0.044	-	-	0.05
HCM Control Delay (s)	76.6	10.9	-	-	23.5	-	-	39.1
HCM Lane LOS	F	B	-	-	C	-	-	E
HCM 95th %tile Q(veh)	0.5	0.1	-	-	0.1	-	-	0.2

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	16	30	1097	59	18	7	890	18	13	0	29	6
Future Volume (vph)	16	30	1097	59	18	7	890	18	13	0	29	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	16	12	12
Grade (%)			0%				4%			0%		
Storage Length (ft)		100		0		100		125	0		0	0
Storage Lanes		1		0		1		1	0		0	0
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00
Frt			0.992					0.850		0.906		
Flt Protected		0.950				0.950				0.985		
Satd. Flow (prot)	0	1770	3511	0	0	1734	3468	1552	0	1884	0	0
Flt Permitted		0.220				0.133				0.932		
Satd. Flow (perm)	0	410	3511	0	0	243	3468	1552	0	1783	0	0
Right Turn on Red				No				No			No	
Satd. Flow (RTOR)												
Link Speed (mph)			35				35			30		
Link Distance (ft)			711				611			253		
Travel Time (s)			13.9				11.9			5.8		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	18	33	1219	66	20	8	989	20	14	0	32	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	51	1285	0	0	28	989	20	0	46	0	0
Turn Type	Perm	Perm	NA		D.Pm	Perm	NA	Perm	Perm	NA		Perm
Protected Phases			2				6			8		
Permitted Phases	2	2			2	6		6	8			4
Detector Phase	2	2	2		2	6	6	6	8	8		4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0		5.0
Minimum Split (s)	25.0	25.0	25.0		25.0	25.0	25.0	25.0	25.0	25.0		25.0
Total Split (s)	35.0	35.0	35.0		35.0	35.0	35.0	35.0	25.0	25.0		25.0
Total Split (%)	58.3%	58.3%	58.3%		58.3%	58.3%	58.3%	58.3%	41.7%	41.7%		41.7%
Maximum Green (s)	28.0	28.0	28.0		28.0	28.0	28.0	28.0	18.0	18.0		18.0
Yellow Time (s)	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0		5.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0		2.0
Lost Time Adjust (s)		-2.0	-2.0			-2.0	-2.0	-2.0		-2.0		
Total Lost Time (s)		5.0	5.0			5.0	5.0	5.0		5.0		
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	Max	Max	Max	Max	Max		Max
Walk Time (s)	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0		7.0
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0		11.0
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0	0	0		0
Act Effct Green (s)		30.0	30.0			30.0	30.0	30.0		20.0		
Actuated g/C Ratio		0.50	0.50			0.50	0.50	0.50		0.33		
v/c Ratio		0.25	0.73			0.23	0.57	0.03		0.08		
Control Delay		12.5	15.0			7.8	5.0	3.8		14.2		

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	15
Future Volume (vph)	0	15
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.904	
Flt Protected	0.986	
Satd. Flow (prot)	1660	0
Flt Permitted	0.939	
Satd. Flow (perm)	1581	0
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	30	
Link Distance (ft)	462	
Travel Time (s)	10.5	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	0	17
Shared Lane Traffic (%)		
Lane Group Flow (vph)	24	0
Turn Type	NA	
Protected Phases	4	
Permitted Phases		
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	5.0	
Minimum Split (s)	25.0	
Total Split (s)	25.0	
Total Split (%)	41.7%	
Maximum Green (s)	18.0	
Yellow Time (s)	5.0	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	-2.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	Max	
Walk Time (s)	7.0	
Flash Dont Walk (s)	11.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	20.0	
Actuated g/C Ratio	0.33	
v/c Ratio	0.05	
Control Delay	14.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Queue Delay		0.0	0.0			0.0	0.0	0.0		0.0		
Total Delay		12.5	15.0			7.8	5.0	3.8		14.2		
LOS		B	B			A	A	A		B		
Approach Delay			14.9				5.0			14.2		
Approach LOS			B				A			B		
Queue Length 50th (ft)		10	178			2	33	1		11		
Queue Length 95th (ft)		31	248			m3	42	m3		30		
Internal Link Dist (ft)			631				531			173		
Turn Bay Length (ft)		100				100		125				
Base Capacity (vph)		205	1755			121	1734	776		594		
Starvation Cap Reductn		0	0			0	0	0		0		
Spillback Cap Reductn		0	0			0	0	0		0		
Storage Cap Reductn		0	0			0	0	0		0		
Reduced v/c Ratio		0.25	0.73			0.23	0.57	0.03		0.08		

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.73
Intersection Signal Delay: 10.7 Intersection LOS: B
Intersection Capacity Utilization 50.7% ICU Level of Service A
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Morrisville Elem School/Golden Horseshoe Circle & Morrisville Parkway (SR 3060)

Lane Group	SBT	SBR
Queue Delay	0.0	
Total Delay	14.0	
LOS	B	
Approach Delay	14.0	
Approach LOS	B	
Queue Length 50th (ft)	6	
Queue Length 95th (ft)	19	
Internal Link Dist (ft)	382	
Turn Bay Length (ft)		
Base Capacity (vph)	527	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.05	

Intersection Summary

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	883	0	934
Future Volume (vph)	0	0	0	883	0	934
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	2%			0%	0%	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	0	0	5085	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	0	5085	0	2787
Link Speed (mph)	35			35	35	
Link Distance (ft)	78			296	274	
Travel Time (s)	1.5			5.8	5.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	981	0	1038
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	981	0	1038
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.0%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	26	11	1052	37	111	880	5	13	0	89	1	1
Future Volume (vph)	26	11	1052	37	111	880	5	13	0	89	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		50		0	150		0	0		0	0	
Storage Lanes		1		0	1		0	0		0	0	
Taper Length (ft)		100			100			100			100	
Lane Util. Factor	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Frt			0.995			0.999			0.882			0.895
Flt Protected		0.950			0.950				0.994			0.994
Satd. Flow (prot)	0	1770	3522	0	1770	3536	0	0	1633	0	0	1657
Flt Permitted		0.218			0.139				0.972			0.977
Satd. Flow (perm)	0	406	3522	0	259	3536	0	0	1597	0	0	1629
Right Turn on Red				No			No			No		
Satd. Flow (RTOR)												
Link Speed (mph)			30			30			30			25
Link Distance (ft)			217			767			527			550
Travel Time (s)			4.9			17.4			12.0			15.0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	29	12	1169	41	123	978	6	14	0	99	1	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	41	1210	0	123	984	0	0	113	0	0	9
Turn Type	Perm	Perm	NA		Perm	NA		Perm	NA		Perm	NA
Protected Phases			4			8			2			6
Permitted Phases	4	4			8			2			6	
Detector Phase	4	4	4		8	8		2	2		6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Minimum Split (s)	25.0	25.0	25.0		25.0	25.0		25.0	25.0		25.0	25.0
Total Split (s)	35.0	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0
Total Split (%)	58.3%	58.3%	58.3%		58.3%	58.3%		41.7%	41.7%		41.7%	41.7%
Maximum Green (s)	28.0	28.0	28.0		28.0	28.0		18.0	18.0		18.0	18.0
Yellow Time (s)	5.0	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		-2.0	-2.0		-2.0	-2.0			-2.0			-2.0
Total Lost Time (s)		5.0	5.0		5.0	5.0			5.0			5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode	None	None	None		None	None		C-Max	C-Max		C-Max	C-Max
Walk Time (s)	7.0	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)	0	0	0		0	0		0	0		0	0
Act Effct Green (s)		29.4	29.4		29.4	29.4			20.6			20.6
Actuated g/C Ratio		0.49	0.49		0.49	0.49			0.34			0.34
v/c Ratio		0.21	0.70		0.98	0.57			0.21			0.02
Control Delay		14.6	14.9		97.8	12.3			15.6			13.6
Queue Delay		0.0	0.0		0.0	0.0			0.0			0.0
Total Delay		14.6	14.9		97.8	12.3			15.6			13.6

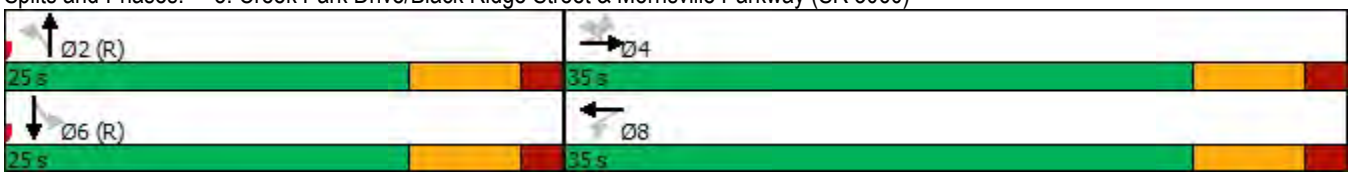
Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	6
Future Volume (vph)	6
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Adj. Flow (vph)	7
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
LOS		B	B		F	B			B			B
Approach Delay			14.9			21.8			15.6			13.6
Approach LOS			B			C			B			B
Queue Length 50th (ft)		8	120		39	119			29			2
Queue Length 95th (ft)		m14	186		#135	168			61			10
Internal Link Dist (ft)			137			687			447			470
Turn Bay Length (ft)		50			150							
Base Capacity (vph)		203	1761		129	1768			548			560
Starvation Cap Reductn		0	0		0	0			0			0
Spillback Cap Reductn		0	0		0	0			0			0
Storage Cap Reductn		0	0		0	0			0			0
Reduced v/c Ratio		0.20	0.69		0.95	0.56			0.21			0.02

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.98
Intersection Signal Delay: 18.0 Intersection LOS: B
Intersection Capacity Utilization 57.2% ICU Level of Service B
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Creek Park Drive/Black Ridge Street & Morrisville Parkway (SR 3060)



Lane Group	SBR
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	3	17	1122	982	5	6	11
Future Volume (vph)	3	17	1122	982	5	6	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		100			0	0	0
Storage Lanes		1			0	1	0
Taper Length (ft)		100				100	
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	1.00
Frt				0.999		0.915	
Flt Protected		0.950				0.982	
Satd. Flow (prot)	0	1770	3539	3536	0	1674	0
Flt Permitted		0.950				0.982	
Satd. Flow (perm)	0	1770	3539	3536	0	1674	0
Link Speed (mph)			30	35		30	
Link Distance (ft)			767	765		518	
Travel Time (s)			17.4	14.9		11.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	3	19	1247	1091	6	7	12
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	22	1247	1097	0	19	0
Sign Control			Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 41.0%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	0.2

Movement	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Vol, veh/h	3	17	1122	982	5	6	11
Future Vol, veh/h	3	17	1122	982	5	6	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	None	-	None
Storage Length	-	100	-	-	-	0	-
Veh in Median Storage, #	-	-	0	0	-	1	-
Grade, %	-	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	3	19	1247	1091	6	7	12

Major/Minor	Major1			Major2		Minor2	
Conflicting Flow All	1097	1097	0	-	0	1762	549
Stage 1	-	-	-	-	-	1094	-
Stage 2	-	-	-	-	-	668	-
Critical Hdwy	6.44	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	-	5.84	-
Follow-up Hdwy	2.52	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	288	632	-	-	-	75	480
Stage 1	-	-	-	-	-	282	-
Stage 2	-	-	-	-	-	471	-
Platoon blocked, %			-	-	-		
Mov Cap-1 Maneuver	532	532	-	-	-	72	480
Mov Cap-2 Maneuver	-	-	-	-	-	187	-
Stage 1	-	-	-	-	-	270	-
Stage 2	-	-	-	-	-	471	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	17.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	532	-	-	-	309
HCM Lane V/C Ratio	0.042	-	-	-	0.061
HCM Control Delay (s)	12.1	-	-	-	17.4
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1122	6	0	985	2	2
Future Volume (vph)	1122	6	0	985	2	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.999				0.932	
Flt Protected					0.976	
Satd. Flow (prot)	3536	0	0	3539	1694	0
Flt Permitted					0.976	
Satd. Flow (perm)	3536	0	0	3539	1694	0
Link Speed (mph)	35			35	30	
Link Distance (ft)	765			840	435	
Travel Time (s)	14.9			16.4	9.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1247	7	0	1094	2	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1254	0	0	1094	4	0
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1122	6	0	985	2	2
Future Vol, veh/h	1122	6	0	985	2	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
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, %	2	2	2	2	2	2
Mvmt Flow	1247	7	0	1094	2	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1254	0	1798	627
Stage 1	-	-	-	-	1251	-
Stage 2	-	-	-	-	547	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	551	-	71	426
Stage 1	-	-	-	-	233	-
Stage 2	-	-	-	-	544	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	551	-	71	426
Mov Cap-2 Maneuver	-	-	-	-	71	-
Stage 1	-	-	-	-	233	-
Stage 2	-	-	-	-	544	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	35.6
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	122	-	-	551	-
HCM Lane V/C Ratio	0.036	-	-	-	-
HCM Control Delay (s)	35.6	-	-	0	-
HCM Lane LOS	E	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	1120	1	34	2	983	10	0	0	5	3	0
Future Volume (vph)	3	1120	1	34	2	983	10	0	0	5	3	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0		125		0	0		0	0	
Storage Lanes	0		0		1		0	0		0	0	
Taper Length (ft)	100				100			100			100	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Frt						0.999			0.865			0.946
Flt Protected					0.950							0.971
Satd. Flow (prot)	0	3539	0	0	1770	3536	0	0	1611	0	0	1711
Flt Permitted					0.950							0.971
Satd. Flow (perm)	0	3539	0	0	1770	3536	0	0	1611	0	0	1711
Link Speed (mph)		35				35			30			30
Link Distance (ft)		840				1394			303			445
Travel Time (s)		16.4				27.2			6.9			10.1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	3	1244	1	38	2	1092	11	0	0	6	3	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1248	0	0	40	1103	0	0	6	0	0	5
Sign Control		Free				Free			Stop			Stop

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 43.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	2
Future Volume (vph)	2
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Adj. Flow (vph)	2
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Sign Control	

Intersection Summary

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	3	1120	1	34	2	983	10	0	0	5	3	0	2
Future Vol, veh/h	3	1120	1	34	2	983	10	0	0	5	3	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	125	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	1244	1	38	2	1092	11	0	0	6	3	0	2

Major/Minor	Major1			Major2				Minor1			Minor2		
Conflicting Flow All	1103	0	0	1246	1245	0	0	1877	2434	623	1806	2429	552
Stage 1	-	-	-	-	-	-	-	1251	1251	-	1178	1178	-
Stage 2	-	-	-	-	-	-	-	626	1183	-	628	1251	-
Critical Hdwy	4.14	-	-	6.44	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.52	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	629	-	-	230	555	-	-	44	31	429	50	32	477
Stage 1	-	-	-	-	-	-	-	183	242	-	203	263	-
Stage 2	-	-	-	-	-	-	-	439	261	-	437	242	-
Platoon blocked, %		-	-			-	-						
Mov Cap-1 Maneuver	629	-	-	235	235	-	-	38	25	429	42	26	477
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	38	25	-	42	26	-
Stage 1	-	-	-	-	-	-	-	180	238	-	200	218	-
Stage 2	-	-	-	-	-	-	-	362	217	-	425	238	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.8	13.5	64.5
HCM LOS			B	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	429	629	-	-	235	-	-	66
HCM Lane V/C Ratio	0.013	0.005	-	-	0.17	-	-	0.084
HCM Control Delay (s)	13.5	10.8	-	-	23.5	-	-	64.5
HCM Lane LOS	B	B	-	-	C	-	-	F
HCM 95th %tile Q(veh)	0	0	-	-	0.6	-	-	0.3

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	27	45	1045	45	7	46	932	82	43	10	31	46
Future Volume (vph)	27	45	1045	45	7	46	932	82	43	10	31	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			5%				-1%			3%		
Storage Length (ft)		75		0		200		0	100		0	100
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.994				0.988			0.887		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1725	3430	0	0	1778	3514	0	1743	1627	0	1787
Flt Permitted		0.253				0.140			0.731			0.728
Satd. Flow (perm)	0	459	3430	0	0	262	3514	0	1341	1627	0	1370
Right Turn on Red				No				No			No	
Satd. Flow (RTOR)												
Link Speed (mph)			35				35			25		
Link Distance (ft)			1394				1279			1392		
Travel Time (s)			27.2				24.9			38.0		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	30	50	1161	50	8	51	1036	91	48	11	34	51
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	80	1211	0	0	59	1127	0	48	45	0	51
Turn Type	custom	Prot	NA		custom	pm+pt	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			8		
Permitted Phases	5				1	6			8			4
Detector Phase	5	5	2		1	1	6		8	8		4
Switch Phase												
Minimum Initial (s)	7.0	7.0	10.0		7.0	7.0	10.0		7.0	7.0		7.0
Minimum Split (s)	15.2	15.2	42.6		15.4	15.4	37.6		41.2	41.2		37.2
Total Split (s)	19.4	19.4	43.4		15.4	15.4	39.4		41.2	41.2		41.2
Total Split (%)	19.4%	19.4%	43.4%		15.4%	15.4%	39.4%		41.2%	41.2%		41.2%
Maximum Green (s)	12.4	12.4	36.4		8.4	8.4	32.4		34.2	34.2		34.2
Yellow Time (s)	5.0	5.0	5.0		5.0	5.0	5.0		5.0	5.0		5.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0	2.0		2.0	2.0		2.0
Lost Time Adjust (s)		-2.0	-2.0			-2.0	-2.0		-2.0	-2.0		-2.0
Total Lost Time (s)		5.0	5.0			5.0	5.0		5.0	5.0		5.0
Lead/Lag	Lag	Lag	Lag		Lead	Lead	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	2.0	2.0	3.0		2.0	2.0	3.0		2.0	2.0		2.0
Recall Mode	None	None	Min		None	None	Min		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Dont Walk (s)			28.0				23.0		26.0	26.0		22.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		14.5	47.3			34.7	34.7		9.9	9.9		9.9
Actuated g/C Ratio		0.20	0.67			0.49	0.49		0.14	0.14		0.14
v/c Ratio		0.86	0.53			0.18	0.66		0.26	0.20		0.27
Control Delay		97.6	11.2			12.7	17.0		32.2	30.4		32.3
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0

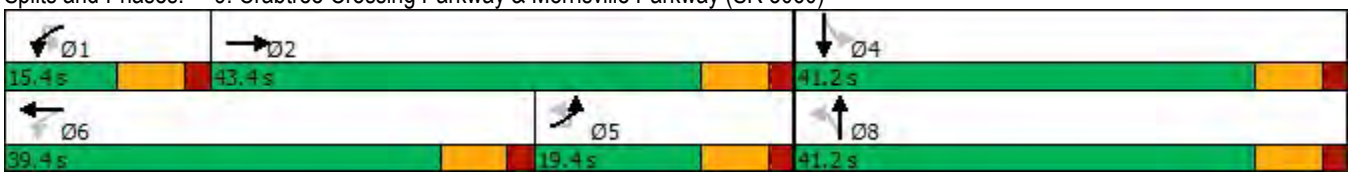
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	9	27
Future Volume (vph)	9	27
Ideal Flow (vphpl)	1900	1900
Grade (%)	-2%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.887	
Flt Protected		
Satd. Flow (prot)	1669	0
Flt Permitted		
Satd. Flow (perm)	1669	0
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	35	
Link Distance (ft)	1120	
Travel Time (s)	21.8	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	10	30
Shared Lane Traffic (%)		
Lane Group Flow (vph)	40	0
Turn Type	NA	
Protected Phases	4	
Permitted Phases		
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	7.0	
Minimum Split (s)	37.2	
Total Split (s)	41.2	
Total Split (%)	41.2%	
Maximum Green (s)	34.2	
Yellow Time (s)	5.0	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	-2.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	2.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Dont Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.9	
Actuated g/C Ratio	0.14	
v/c Ratio	0.17	
Control Delay	29.9	
Queue Delay	0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Total Delay		97.6	11.2			12.7	17.0		32.2	30.4		32.3
LOS		F	B			B	B		C	C		C
Approach Delay			16.5				16.8			31.3		
Approach LOS			B				B			C		
Queue Length 50th (ft)		36	191			14	196		20	19		21
Queue Length 95th (ft)		m#121	284			35	287		50	47		52
Internal Link Dist (ft)			1314				1199			1312		
Turn Bay Length (ft)		75				200			100			100
Base Capacity (vph)		93	2284			351	1746		687	833		702
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		0.86	0.53			0.17	0.65		0.07	0.05		0.07

Intersection Summary	
Area Type: Other	
Cycle Length: 100	
Actuated Cycle Length: 71	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 17.7	Intersection LOS: B
Intersection Capacity Utilization 57.9%	ICU Level of Service B
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Crabtree Crossing Parkway & Morrisville Parkway (SR 3060)



Lane Group	SBT	SBR
Total Delay	29.9	
LOS	C	
Approach Delay	31.3	
Approach LOS	C	
Queue Length 50th (ft)	16	
Queue Length 95th (ft)	43	
Internal Link Dist (ft)	1040	
Turn Bay Length (ft)		
Base Capacity (vph)	855	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.05	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	15	33	780	301	50	97	706	25	325	5	62	22
Future Volume (vph)	15	33	780	301	50	97	706	25	325	5	62	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		150		150		0	150		0	0
Storage Lanes		1		1		1		0	1		1	0
Taper Length (ft)		100				100			100			100
Lane Util. Factor	0.95	1.00	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	1.00	1.00
Frt				0.850			0.995				0.850	
Flt Protected		0.950				0.950			0.950	0.954		
Satd. Flow (prot)	0	1770	3539	1583	0	1770	3522	0	1681	1688	1583	0
Flt Permitted		0.294				0.241			0.950	0.954		
Satd. Flow (perm)	0	548	3539	1583	0	449	3522	0	1681	1688	1583	0
Right Turn on Red				No				No			No	
Satd. Flow (RTOR)												
Link Speed (mph)			35				30			30		
Link Distance (ft)			1279				272			504		
Travel Time (s)			24.9				6.2			11.5		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	17	37	867	334	56	108	784	28	361	6	69	24
Shared Lane Traffic (%)									49%			
Lane Group Flow (vph)	0	54	867	334	0	164	812	0	184	183	69	0
Turn Type	custom	custom	NA	custom	Perm	Perm	NA		Split	NA	Perm	Perm
Protected Phases		5	4!	4			8!		4!	4!		
Permitted Phases	5	6		2	8	8!					4	3!
Detector Phase	5	5	4	4	8	8	8		4	4	4	3
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	5.0	5.0	5.0		7.0	7.0	7.0	7.0
Minimum Split (s)	14.9	14.9	36.6	36.6	25.0	25.0	25.0		36.6	36.6	36.6	41.7
Total Split (s)	14.9	14.9	36.6	36.6	78.3	78.3	78.3		36.6	36.6	36.6	41.7
Total Split (%)	13.0%	13.0%	31.8%	31.8%	68.1%	68.1%	68.1%		31.8%	31.8%	31.8%	36.3%
Maximum Green (s)	7.9	7.9	29.6	29.6	71.3	71.3	71.3		29.6	29.6	29.6	34.7
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0	
Total Lost Time (s)		5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0	
Lead/Lag	Lead	Lead	Lead	Lead					Lead	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes					Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	3.0	3.0	3.0		2.0	2.0	2.0	2.0
Recall Mode	None	None	None	None	None	None	None		None	None	None	None
Walk Time (s)			7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	7.0
Flash Dont Walk (s)			21.0	21.0	11.0	11.0	11.0		21.0	21.0	21.0	26.0
Pedestrian Calls (#/hr)			0	0	0	0	0		0	0	0	0
Act Effct Green (s)		18.4	30.1	60.1		41.8	41.8		30.1	30.1	30.1	
Actuated g/C Ratio		0.25	0.41	0.81		0.56	0.56		0.41	0.41	0.41	
v/c Ratio		0.17	0.61	0.26		0.65	0.41		0.27	0.27	0.11	
Control Delay		27.4	24.6	6.6		24.9	9.3		22.9	22.9	22.2	
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	
Total Delay		27.4	24.6	6.6		24.9	9.3		22.9	22.9	22.2	

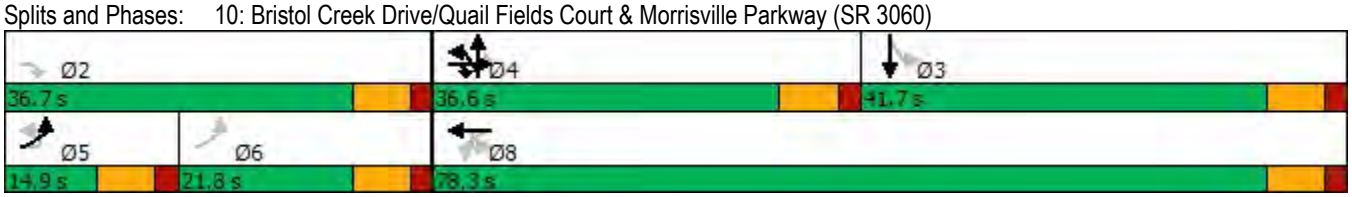
Lane Group	SBT	SBR	Ø2	Ø6
Lane Configurations				
Traffic Volume (vph)	6	21		
Future Volume (vph)	6	21		
Ideal Flow (vphpl)	1900	1900		
Storage Length (ft)		0		
Storage Lanes		0		
Taper Length (ft)				
Lane Util. Factor	1.00	1.00		
Frt	0.942			
Flt Protected	0.978			
Satd. Flow (prot)	1716	0		
Flt Permitted	0.767			
Satd. Flow (perm)	1346	0		
Right Turn on Red		No		
Satd. Flow (RTOR)				
Link Speed (mph)	30			
Link Distance (ft)	386			
Travel Time (s)	8.8			
Peak Hour Factor	0.90	0.90		
Adj. Flow (vph)	7	23		
Shared Lane Traffic (%)				
Lane Group Flow (vph)	54	0		
Turn Type	NA			
Protected Phases	3!		2	6
Permitted Phases				
Detector Phase	3			
Switch Phase				
Minimum Initial (s)	7.0		10.0	10.0
Minimum Split (s)	41.7		27.3	23.3
Total Split (s)	41.7		36.7	21.8
Total Split (%)	36.3%		32%	19%
Maximum Green (s)	34.7		29.7	14.8
Yellow Time (s)	5.0		5.0	5.0
All-Red Time (s)	2.0		2.0	2.0
Lost Time Adjust (s)	-2.0			
Total Lost Time (s)	5.0			
Lead/Lag	Lag			Lag
Lead-Lag Optimize?	Yes			Yes
Vehicle Extension (s)	2.0		3.0	3.0
Recall Mode	None		Min	Min
Walk Time (s)	7.0		7.0	7.0
Flash Dont Walk (s)	26.0		13.0	9.0
Pedestrian Calls (#/hr)	0		0	0
Act Effct Green (s)	15.4			
Actuated g/C Ratio	0.21			
v/c Ratio	0.19			
Control Delay	30.4			
Queue Delay	0.0			
Total Delay	30.4			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
LOS		C	C	A		C	A		C	C	C	
Approach Delay			19.9				11.9			22.8		
Approach LOS			B				B			C		
Queue Length 50th (ft)		19	186	39		54	115		67	66	22	
Queue Length 95th (ft)		64	#394	181		128	151		178	176	73	
Internal Link Dist (ft)			1199				192			424		
Turn Bay Length (ft)		250		150		150			150			
Base Capacity (vph)		326	1743	1265		393	3086		828	831	779	
Starvation Cap Reductn		0	0	0		0	0		0	0	0	
Spillback Cap Reductn		0	0	0		0	0		0	0	0	
Storage Cap Reductn		0	0	0		0	0		0	0	0	
Reduced v/c Ratio		0.17	0.50	0.26		0.42	0.26		0.22	0.22	0.09	

Intersection Summary

Area Type: Other
Cycle Length: 115
Actuated Cycle Length: 74.2
Natural Cycle: 120
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.65
Intersection Signal Delay: 17.7 Intersection LOS: B
Intersection Capacity Utilization 58.0% ICU Level of Service B
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
! Phase conflict between lane groups.

Splits and Phases: 10: Bristol Creek Drive/Quail Fields Court & Morrisville Parkway (SR 3060)



Lane Group	SBT	SBR	Ø2	Ø6
LOS	C			
Approach Delay	30.4			
Approach LOS	C			
Queue Length 50th (ft)	26			
Queue Length 95th (ft)	57			
Internal Link Dist (ft)	306			
Turn Bay Length (ft)				
Base Capacity (vph)	770			
Starvation Cap Reductn	0			
Spillback Cap Reductn	0			
Storage Cap Reductn	0			
Reduced v/c Ratio	0.07			

Intersection Summary

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	914	0	878	0	0
Future Volume (vph)	0	914	0	878	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	2%			0%	0%	
Lane Util. Factor	1.00	0.88	1.00	0.95	1.00	1.00
Frt		0.850				
Flt Protected						
Satd. Flow (prot)	0	2759	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	2759	0	3539	0	0
Link Speed (mph)	35			35	30	
Link Distance (ft)	272			495	218	
Travel Time (s)	5.3			9.6	5.0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1016	0	976	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1016	0	976	0	0
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.3%		ICU Level of Service A	
Analysis Period (min) 15			

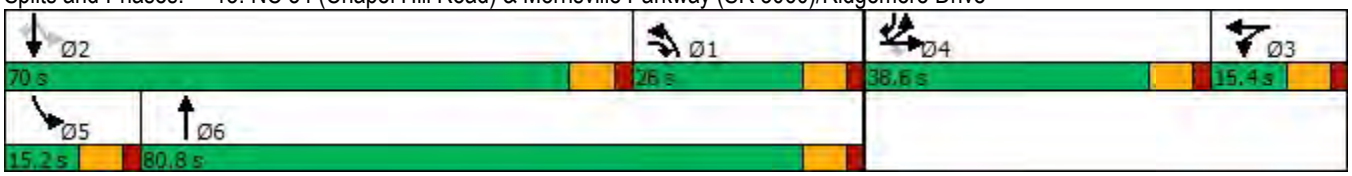
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	341	10	534	10	18	9	421	1307	17	19	2022	494
Future Volume (vph)	341	10	534	10	18	9	421	1307	17	19	2022	494
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			6%			-1%			2%	
Storage Length (ft)	0		0	100		0	650		0	150		150
Storage Lanes	1		1	1		0	2		0	1		1
Taper Length (ft)	0			100			100			100		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95	0.95	1.00	0.91	1.00
Frt			0.850		0.950			0.998				0.850
Flt Protected	0.950	0.955		0.950			0.950			0.950		
Satd. Flow (prot)	1664	1673	1567	1717	1717	0	3450	3550	0	1752	5034	1567
Flt Permitted	0.950	0.955		0.950			0.950			0.067		
Satd. Flow (perm)	1664	1673	1567	1717	1717	0	3450	3550	0	124	5034	1567
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			15			45			45	
Link Distance (ft)		274			835			1436			1407	
Travel Time (s)		5.3			38.0			21.8			21.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	379	11	593	11	20	10	468	1452	19	21	2247	549
Shared Lane Traffic (%)	49%											
Lane Group Flow (vph)	193	197	593	11	30	0	468	1471	0	21	2247	549
Turn Type	Split	NA	pm+ov	Split	NA		Prot	NA		pm+pt	NA	pm+ov
Protected Phases	4	4	1	3	3		1	6		5	2	4
Permitted Phases			4							2		2
Detector Phase	4	4	1	3	3		1	6		5	2	4
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	12.0		7.0	12.0	7.0
Minimum Split (s)	38.6	38.6	15.3	15.4	15.4		15.3	34.0		15.2	37.0	38.6
Total Split (s)	38.6	38.6	26.0	15.4	15.4		26.0	80.8		15.2	70.0	38.6
Total Split (%)	25.7%	25.7%	17.3%	10.3%	10.3%		17.3%	53.9%		10.1%	46.7%	25.7%
Maximum Green (s)	31.6	31.6	19.0	8.4	8.4		19.0	73.8		8.2	63.0	31.6
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lead	Lag	Lag	Lag		Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	6.0		2.0	6.0	2.0
Recall Mode	None	None	None	None	None		None	Min		None	Min	None
Walk Time (s)	7.0	7.0						7.0			7.0	7.0
Flash Dont Walk (s)	24.0	24.0						20.0			23.0	24.0
Pedestrian Calls (#/hr)	0	0						0			0	0
Act Effct Green (s)	24.8	24.8	51.1	9.5	9.5		21.2	84.0		65.6	65.6	92.6
Actuated g/C Ratio	0.18	0.18	0.38	0.07	0.07		0.16	0.62		0.49	0.49	0.69
v/c Ratio	0.63	0.64	1.00	0.09	0.25		0.87	0.67		0.12	0.92	0.51
Control Delay	61.4	61.8	79.7	65.5	69.0		73.4	22.6		23.9	40.8	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	61.4	61.8	79.7	65.5	69.0		73.4	22.6		23.9	40.8	8.8
LOS	E	E	E	E	E		E	C		C	D	A
Approach Delay		72.5			68.1			34.8			34.5	
Approach LOS		E			E			C			C	
Queue Length 50th (ft)	173	177	~581	10	27		219	525		10	714	147
Queue Length 95th (ft)	266	270	#809	32	65		#352	715		29	#947	200
Internal Link Dist (ft)		194			755			1356			1327	
Turn Bay Length (ft)				100			650			150		150
Base Capacity (vph)	417	419	592	133	133		541	2207		184	2444	1105
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	0
Reduced v/c Ratio	0.46	0.47	1.00	0.08	0.23		0.87	0.67		0.11	0.92	0.50

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 135
Natural Cycle: 150
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.00
Intersection Signal Delay: 41.3 Intersection LOS: D
Intersection Capacity Utilization 90.5% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: NC 54 (Chapel Hill Road) & Morrisville Parkway (SR 3060)/Ridgemere Drive



Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	65	869	0	0
Future Volume (vph)	0	0	65	869	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	2%			0%	0%	
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			100		100	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	35			35	35	
Link Distance (ft)	226			78	222	
Travel Time (s)	4.4			1.5	4.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	72	966	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	72	966	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.4%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1150	0	0	0	933
Future Volume (vph)	0	1150	0	0	0	933
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	2787
Link Speed (mph)		35	35		35	
Link Distance (ft)		611	623		958	
Travel Time (s)		11.9	12.1		18.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1278	0	0	0	1037
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1278	0	0	0	1037
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 36.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	35	1115	0	0	0	0
Future Volume (vph)	35	1115	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected		0.998				
Satd. Flow (prot)	0	3532	0	0	0	0
Flt Permitted		0.998				
Satd. Flow (perm)	0	3532	0	0	0	0
Link Speed (mph)		35	35		25	
Link Distance (ft)		623	297		309	
Travel Time (s)		12.1	5.8		8.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	39	1239	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1278	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 35.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	61	850	0	0	0	0
Future Volume (vph)	61	850	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	100				100	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		35	30		30	
Link Distance (ft)		218	294		285	
Travel Time (s)		4.2	6.7		6.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	68	944	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	68	944	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 26.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	888	26	17	18	0	0	0	28
Future Volume (vph)	0	0	0	0	888	26	17	18	0	0	0	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.996							0.865
Flt Protected								0.976				
Satd. Flow (prot)	0	0	0	0	3525	0	0	1818	0	0	0	1611
Flt Permitted								0.976				
Satd. Flow (perm)	0	0	0	0	3525	0	0	1818	0	0	0	1611
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		958			191			309			468	
Travel Time (s)		18.7			3.7			8.4			12.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	987	29	19	20	0	0	0	31
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1016	0	0	39	0	0	0	31
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 42.0%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	888	26	17	18	0	0	0	28
Future Vol, veh/h	0	0	0	0	888	26	17	18	0	0	0	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	987	29	19	20	0	0	0	31

Major/Minor	Major2			Minor1			Minor2		
Conflicting Flow All	-	-	0	494	1016	-	-	-	508
Stage 1	-	-	-	0	0	-	-	-	-
Stage 2	-	-	-	494	1016	-	-	-	-
Critical Hdwy	-	-	-	7.54	6.54	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	-	-	-	3.52	4.02	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	458	236	0	0	0	510
Stage 1	0	-	-	-	-	0	0	0	-
Stage 2	0	-	-	526	314	0	0	0	-
Platoon blocked, %		-	-						
Mov Cap-1 Maneuver	-	-	-	430	236	-	-	-	510
Mov Cap-2 Maneuver	-	-	-	430	236	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	494	314	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	18.7	12.5
HCM LOS		C	B

Minor Lane/Major Mvmt	NBLn1	WBT	WBR	SBLn1
Capacity (veh/h)	302	-	-	510
HCM Lane V/C Ratio	0.129	-	-	0.061
HCM Control Delay (s)	18.7	-	-	12.5
HCM Lane LOS	C	-	-	B
HCM 95th %tile Q(veh)	0.4	-	-	0.2

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1115	0	0	11	0
Future Volume (vph)	0	1115	0	0	11	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		35	35		25	
Link Distance (ft)		297	354		194	
Travel Time (s)		5.8	6.9		5.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1239	0	0	12	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1239	0	0	12	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 63.1%	ICU Level of Service B
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↰	
Traffic Vol, veh/h	0	1115	0	0	11	0
Future Vol, veh/h	0	1115	0	0	11	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1239	0	0	12	0

Major/Minor	Major1		Minor2	
Conflicting Flow All	-	0	620	-
Stage 1	-	-	0	-
Stage 2	-	-	620	-
Critical Hdwy	-	-	6.84	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	5.84	-
Follow-up Hdwy	-	-	3.52	-
Pot Cap-1 Maneuver	0	-	420	0
Stage 1	0	-	-	0
Stage 2	0	-	499	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	420	-
Mov Cap-2 Maneuver	-	-	420	-
Stage 1	-	-	-	-
Stage 2	-	-	499	-

Approach	EB	SB
HCM Control Delay, s	0	13.8
HCM LOS		B

Minor Lane/Major Mvmt	EBT	SBLn1
Capacity (veh/h)	-	420
HCM Lane V/C Ratio	-	0.029
HCM Control Delay (s)	-	13.8
HCM Lane LOS	-	B
HCM 95th %tile Q(veh)	-	0.1

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	11	914	0	0
Future Volume (vph)	0	0	11	914	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected				0.999		
Satd. Flow (prot)	0	0	0	3536	0	0
Flt Permitted				0.999		
Satd. Flow (perm)	0	0	0	3536	0	0
Link Speed (mph)	30			30	25	
Link Distance (ft)	191			167	194	
Travel Time (s)	4.3			3.8	5.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	12	1016	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1028	0	0
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 63.1%		ICU Level of Service B	
Analysis Period (min) 15			

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	7	849	0	0	0	0
Future Volume (vph)	7	849	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	100				100	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		333	221		213	
Travel Time (s)		6.5	4.3		4.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	8	943	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	8	943	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 26.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1126	0	925	0	0
Future Volume (vph)	0	1126	0	925	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	0.88	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	3539	0	2787	0	0
Flt Permitted						
Satd. Flow (perm)	0	3539	0	2787	0	0
Link Speed (mph)		30	35		30	
Link Distance (ft)		354	217		167	
Travel Time (s)		8.0	4.2		3.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1251	0	1028	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1251	0	1028	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 40.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	777	85	3	58	0	0	0	98
Future Volume (vph)	0	0	0	0	777	85	3	58	0	0	0	98
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			0%			0%			0%	
Storage Length (ft)	150		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.985						0.865	0.865
Flt Protected								0.998				
Satd. Flow (prot)	0	0	0	0	3486	0	0	1859	0	0	0	1611
Flt Permitted								0.998				
Satd. Flow (perm)	0	0	0	0	3486	0	0	1859	0	0	0	1611
Link Speed (mph)		35			35			15			30	
Link Distance (ft)		495			227			285			315	
Travel Time (s)		9.6			4.4			13.0			7.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	863	94	3	64	0	0	0	109
Shared Lane Traffic (%)												10%
Lane Group Flow (vph)	0	0	0	0	957	0	0	67	0	0	11	98
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 43.6%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	777	85	3	58	0	0	0	98
Future Vol, veh/h	0	0	0	0	777	85	3	58	0	0	0	98
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	863	94	3	64	0	0	0	109

Major/Minor	Major2			Minor1			Minor2		
Conflicting Flow All	-	-	0	432	957	-	-	-	479
Stage 1	-	-	-	0	0	-	-	-	-
Stage 2	-	-	-	432	957	-	-	-	-
Critical Hdwy	-	-	-	7.54	6.54	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	-	-	-	3.52	4.02	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	507	256	0	0	0	533
Stage 1	0	-	-	-	-	0	0	0	-
Stage 2	0	-	-	572	334	0	0	0	-
Platoon blocked, %		-	-				-		
Mov Cap-1 Maneuver	-	-	-	404	256	-	-	-	533
Mov Cap-2 Maneuver	-	-	-	404	256	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	455	334	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	23.6	13.5
HCM LOS		C	B

Minor Lane/Major Mvmt	NBLn1	WBT	WBR	SBLn1
Capacity (veh/h)	261	-	-	533
HCM Lane V/C Ratio	0.26	-	-	0.204
HCM Control Delay (s)	23.6	-	-	13.5
HCM Lane LOS	C	-	-	B
HCM 95th %tile Q(veh)	1	-	-	0.8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	842	8	0	0	0	0	0	7	7	18	0
Future Volume (vph)	0	842	8	0	0	0	0	0	7	7	18	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999							0.865			
Flt Protected											0.986	
Satd. Flow (prot)	0	3536	0	0	0	0	0	0	1611	0	1837	0
Flt Permitted											0.986	
Satd. Flow (perm)	0	3536	0	0	0	0	0	0	1611	0	1837	0
Link Speed (mph)		35			30			30			15	
Link Distance (ft)		294			333			156			216	
Travel Time (s)		5.7			7.6			3.5			9.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	936	9	0	0	0	0	0	8	8	20	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	945	0	0	0	0	0	0	8	0	28	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 40.2%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	842	8	0	0	0	0	0	7	7	18	0
Future Vol, veh/h	0	842	8	0	0	0	0	0	7	7	18	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	936	9	0	0	0	0	0	8	8	20	0

Major/Minor	Major1			Minor1		Minor2			
Conflicting Flow All	-	0	0	-	-	473	468	945	-
Stage 1	-	-	-	-	-	-	0	0	-
Stage 2	-	-	-	-	-	-	468	945	-
Critical Hdwy	-	-	-	-	-	6.94	7.54	6.54	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	-	-	3.32	3.52	4.02	-
Pot Cap-1 Maneuver	0	-	-	0	0	538	478	260	0
Stage 1	0	-	-	0	0	-	-	-	0
Stage 2	0	-	-	0	0	-	545	339	0
Platoon blocked, %		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	538	471	260	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	471	260	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	537	339	-

Approach	EB	NB	SB
HCM Control Delay, s	0	11.8	18.4
HCM LOS		B	C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	SBLn1
Capacity (veh/h)	538	-	-	297
HCM Lane V/C Ratio	0.014	-	-	0.094
HCM Control Delay (s)	11.8	-	-	18.4
HCM Lane LOS	B	-	-	C
HCM 95th %tile Q(veh)	0	-	-	0.3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	868	1	1	6	0	0	0	15
Future Volume (vph)	0	0	0	0	868	1	1	6	0	0	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			2%			0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt												0.865
Flt Protected								0.994				
Satd. Flow (prot)	0	0	0	0	3539	0	0	1833	0	0	0	1611
Flt Permitted								0.994				
Satd. Flow (perm)	0	0	0	0	3539	0	0	1833	0	0	0	1611
Link Speed (mph)		30			35			15			30	
Link Distance (ft)		326			226			213			282	
Travel Time (s)		7.4			4.4			9.7			6.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	964	1	1	7	0	0	0	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	965	0	0	8	0	0	0	17
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 40.7%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	868	1	1	6	0	0	0	15
Future Vol, veh/h	0	0	0	0	868	1	1	6	0	0	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	2	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	964	1	1	7	0	0	0	17

Major/Minor	Major2			Minor1			Minor2		
Conflicting Flow All	-	-	0	482	965	-	-	-	483
Stage 1	-	-	-	0	0	-	-	-	-
Stage 2	-	-	-	482	965	-	-	-	-
Critical Hdwy	-	-	-	7.94	6.94	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.94	5.94	-	-	-	-
Follow-up Hdwy	-	-	-	3.52	4.02	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	443	228	0	0	0	530
Stage 1	0	-	-	-	-	0	0	0	-
Stage 2	0	-	-	506	298	0	0	0	-
Platoon blocked, %		-	-						
Mov Cap-1 Maneuver	-	-	-	429	228	-	-	-	530
Mov Cap-2 Maneuver	-	-	-	429	228	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	490	298	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	20.2	12
HCM LOS		C	B

Minor Lane/Major Mvmt	NBLn1	WBT	WBR	SBLn1
Capacity (veh/h)	244	-	-	530
HCM Lane V/C Ratio	0.032	-	-	0.031
HCM Control Delay (s)	20.2	-	-	12
HCM Lane LOS	C	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	781	68	0	0	0	0	0	89	13	52	0
Future Volume (vph)	0	781	68	0	0	0	0	0	89	13	52	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.865			
Flt Protected											0.990	
Satd. Flow (prot)	0	3539	1583	0	0	0	0	0	1611	0	1844	0
Flt Permitted											0.990	
Satd. Flow (perm)	0	3539	1583	0	0	0	0	0	1611	0	1844	0
Link Speed (mph)		35			35			30			15	
Link Distance (ft)		221			296			244			222	
Travel Time (s)		4.3			5.8			5.5			10.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	868	76	0	0	0	0	0	99	14	58	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	868	76	0	0	0	0	0	99	0	72	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 40.6%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱						↱		↰	
Traffic Vol, veh/h	0	781	68	0	0	0	0	0	89	13	52	0
Future Vol, veh/h	0	781	68	0	0	0	0	0	89	13	52	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	868	76	0	0	0	0	0	99	14	58	0

Major/Minor	Major1			Minor1		Minor2			
Conflicting Flow All	-	0	0	-	-	434	434	944	-
Stage 1	-	-	-	-	-	-	0	0	-
Stage 2	-	-	-	-	-	-	434	944	-
Critical Hdwy	-	-	-	-	-	6.94	7.54	6.54	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	-	-	3.32	3.52	4.02	-
Pot Cap-1 Maneuver	0	-	-	0	0	570	506	261	0
Stage 1	0	-	-	0	0	-	-	-	0
Stage 2	0	-	-	0	0	-	570	339	0
Platoon blocked, %		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	570	418	261	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	418	261	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	471	339	-

Approach	EB	NB	SB
HCM Control Delay, s	0	12.6	22.1
HCM LOS		B	C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	SBLn1
Capacity (veh/h)	570	-	-	282
HCM Lane V/C Ratio	0.173	-	-	0.256
HCM Control Delay (s)	12.6	-	-	22.1
HCM Lane LOS	B	-	-	C
HCM 95th %tile Q(veh)	0.6	-	-	1

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	25	862	0	0
Future Volume (vph)	0	0	25	862	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	2%			0%	0%	
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			100		100	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	35			35	30	
Link Distance (ft)	227			326	216	
Travel Time (s)	4.4			6.4	4.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	28	958	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	28	958	0	0
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.2%		ICU Level of Service A	
Analysis Period (min) 15			

APPENDIX D:

Crash Data

North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report

Study Criteria Summary

County: WAKE **City:** All and Rural
Date: 05/01/2018 **to** 04/30/2023 **Study:** 41000071119
Location: SR 3060 (Morrisville Pkwy) from NC 54 (Chapel Hill Rd) to SR 1613 (Davis Dr)

Report Details

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	Injuries A	Injuries B	Injuries C	Condition R	Condition L	Condition W	Road Ch	Road Ci	Trfc Ctl Dv	Trfc Ctl Op
1	**105467986**	0.000	05/04/2018 08:42	ANGLE	$ 4000	0	0	0	0	1	1	1	1	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 5	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**											
2	**105487763**	0.000	05/19/2018 12:33	ANGLE	$ 2000	0	0	0	0	2	1	3	1	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** NE	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**											
3	**105534840**	0.000	07/01/2018 15:24	ANGLE	$ 8000	0	0	0	1	1	1	1	1	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**											
Unit 3 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 7	**Obj Strk:**											
4	**105587653**	0.000	08/30/2018 10:43	ANGLE	$ 8000	0	0	0	0	1	1	1	1	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
5	**105589073**	0.000	08/31/2018 07:15	ANGLE	$ 35000	0	0	0	1	1	1	1	1	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 9	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
6	**105595941**	0.000	09/04/2018 10:30	SIDESWIPE, OPPOSITE DIRECTION	$ 300	0	0	0	0	1	1	1	1	0	3	1
Unit 1 : 2	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 4	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**											
7	**105668429**	0.000	11/10/2018 15:35	ANGLE	$ 1500	0	0	0	0	1	1	1	1	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 20 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 5	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**											

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North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
8	**105677639**	0.000	11/18/2018 00:48	LEFT TURN, SAME ROADWAY	$ 10000	0	0	0	0	1	4	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** SE	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
9	**105683460**	0.000	11/22/2018 11:39	REAR END, SLOW OR STOP	$ 1500	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
10	**105742972**	0.000	01/15/2019 13:40	ANGLE	$ 7500	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
11	**105808470**	0.000	03/21/2019 14:54	LEFT TURN, DIFFERENT ROADWAYS	$ 12000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
12	**105821107**	0.000	04/03/2019 08:27	ANGLE	$ 6500	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 3	**Alchl/Drgs:**	0	**Speed:** 40 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
13	**105823630**	0.000	04/04/2019 17:31	OVERTURN/ROLLOVER	$ 8000	0	0	0	2	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				7			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
14	**105823631**	0.000	04/05/2019 19:25	LEFT TURN, SAME ROADWAY	$ 3000	0	0	0	0	2	1	3	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 40 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
15	**105899096**	0.000	06/17/2019 09:29	REAR END, SLOW OR STOP	$ 300	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 2 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				7			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
16	**105947031**	0.000	07/14/2019 17:52	LEFT TURN, DIFFERENT ROADWAYS	$ 9500	0	0	0	2	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**3 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			

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North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
17	**105935813**	0.000	07/21/2019 13:11	REAR END, TURN	$ 1500	0	0	0	0	1	1	1	1	0		
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				7			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				7			**Obj Strk:**			
18	**105955148**	0.000	08/09/2019 19:20	LEFT TURN, SAME ROADWAY	$ 11500	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 5	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**3 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
19	**106058161**	0.000	11/07/2019 17:20	ANGLE	$ 10000	0	0	1	0	1	4	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 40 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
20	**106058005**	0.000	11/12/2019 08:21	LEFT TURN, SAME ROADWAY	$ 3000	0	0	0	0	2	1	3	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**3 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
21	**106059729**	0.000	11/12/2019 21:26	SIDESWIPE, SAME DIRECTION	$ 5500	0	0	0	0	1	4	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				7			**Obj Strk:**			
22	**106077585**	0.000	11/26/2019 20:58	LEFT TURN, DIFFERENT ROADWAYS	$ 5000	0	0	0	0	1	4	1	2	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
23	**106097415**	0.000	12/16/2019 09:49	ANGLE	$ 3000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
24	**106110584**	0.000	12/26/2019 19:13	ANGLE	$ 21000	0	0	0	0	1	4	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		64	
Unit	**2 :** 5	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
25	**106151914**	0.000	02/07/2020 09:12	REAR END, SLOW OR STOP	$ 20000	0	0	0	1	1	1	2	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			

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Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
26	**106163167**	0.000	02/21/2020 13:04	LEFT TURN, DIFFERENT ROADWAYS	$ 13500	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
27	**106166477**	0.000	02/24/2020 15:25	SIDESWIPE, SAME DIRECTION	$ 9500	0	0	0	0	2	1	3	1	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
28	**106327154**	0.000	08/26/2020 16:41	SIDESWIPE, OPPOSITE DIRECTION	$ 7000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
29	**106403454**	0.000	11/13/2020 18:22	LEFT TURN, SAME ROADWAY	$ 3000	0	0	0	0	1	3	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				9			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
30	**106440399**	0.000	12/15/2020 14:25	ANGLE	$ 13000	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
31	**106442859**	0.000	12/21/2020 01:32	REAR END, SLOW OR STOP	$ 7000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
32	**106484105**	0.000	02/08/2021 14:19	LEFT TURN, SAME ROADWAY	$ 25000	0	0	0	2	1	1	1	3	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** SE	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
33	**106602816**	0.000	06/10/2021 19:20	ANGLE	$ 23000	0	0	0	2	2	1	3	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 50 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		55	
34	**106640515**	0.000	07/23/2021 12:33	LEFT TURN, SAME ROADWAY	$ 18000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
35	**106646202**	0.000	07/31/2021 13:05	LEFT TURN, DIFFERENT ROADWAYS	$ 5000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** NE	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
36	**106648695**	0.000	08/02/2021 14:49	REAR END, SLOW OR STOP	$ 1800	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** NE	**Veh Mnvr/Ped Actn:**				7			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** NE	**Veh Mnvr/Ped Actn:**				7			**Obj Strk:**			
37	**106689732**	0.000	09/01/2021 12:25	ANGLE	$ 9000	0	0	0	0	1	1	2	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
38	**106761282**	0.000	11/03/2021 07:28	RIGHT TURN, SAME ROADWAY	$ 1600	0	0	0	0	1	3	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				7			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
39	**106765825**	0.000	11/13/2021 17:48	LEFT TURN, SAME ROADWAY	$ 2000	0	0	0	0	1	2	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
40	**106818766**	0.000	01/01/2022 08:26	SIDESWIPE, OPPOSITE DIRECTION	$ 26000	0	0	1	0	1	1	2	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 20	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
41	**106846587**	0.000	01/20/2022 07:56	REAR END, SLOW OR STOP	$ 1600	0	0	0	0	1	1	1	3	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 8 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
42	**106928415**	0.000	04/18/2022 03:06	ANGLE	$ 23000	0	0	0	1	1	4	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	1	**Speed:** 15 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
43	**106979883**	0.000	06/06/2022 11:46	LEFT TURN, SAME ROADWAY	$ 12500	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			

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44	**107116644**	0.000	10/17/2022 14:36	LEFT TURN, SAME ROADWAY	$ 1400	0	0	0	0	1	1	1	1	0	3	1

Unit 1 : 1 **Alchl/Drgs:** 0 **Speed:** 25 MPH **Dir:** S **Veh Mnvr/Ped Actn:** 4 **Obj Strk:**
Unit 2 : 1 **Alchl/Drgs:** 0 **Speed:** 20 MPH **Dir:** NW **Veh Mnvr/Ped Actn:** 8 **Obj Strk:**

| 45 | **107122521** | 0.000 | 10/22/2022 14:54 | LEFT TURN, SAME ROADWAY | $ 36000 | 0 | 0 | 0 | 2 | 1 | 1 | 1 | 1 | 0 | 3 | 1 |

Unit 1 : 4 **Alchl/Drgs:** 0 **Speed:** 25 MPH **Dir:** NW **Veh Mnvr/Ped Actn:** 8 **Obj Strk:**
Unit 2 : 4 **Alchl/Drgs:** 0 **Speed:** 45 MPH **Dir:** S **Veh Mnvr/Ped Actn:** 4 **Obj Strk:**
Unit 3 : 1 **Alchl/Drgs:** 0 **Speed:** 0 MPH **Dir:** E **Veh Mnvr/Ped Actn:** 1 **Obj Strk:**

| 46 | **107190414** | 0.000 | 12/16/2022 18:24 | REAR END, SLOW OR STOP | $ 1300 | 0 | 0 | 0 | 0 | 1 | 4 | 1 | 3 | 0 | 3 | 1 |

Unit 1 : 4 **Alchl/Drgs:** 0 **Speed:** 10 MPH **Dir:** E **Veh Mnvr/Ped Actn:** 4 **Obj Strk:**
Unit 2 : 1 **Alchl/Drgs:** 0 **Speed:** 0 MPH **Dir:** E **Veh Mnvr/Ped Actn:** 11 **Obj Strk:**

| 47 | **107227107** | 0.000 | 01/29/2023 22:54 | ANGLE | $ 7000 | 0 | 0 | 0 | 0 | 2 | 4 | 3 | 1 | 0 | 3 | 1 |

Unit 1 : 1 **Alchl/Drgs:** 0 **Speed:** 45 MPH **Dir:** S **Veh Mnvr/Ped Actn:** 4 **Obj Strk:**
Unit 2 : 1 **Alchl/Drgs:** 0 **Speed:** 15 MPH **Dir:** E **Veh Mnvr/Ped Actn:** 4 **Obj Strk:**

| 48 | **107273566** | 0.000 | 03/11/2023 19:38 | LEFT TURN, DIFFERENT ROADWAYS | $ 40000 | 0 | 0 | 0 | 2 | 1 | 4 | 1 | 1 | 0 | 3 | 1 |

Unit 1 : 1 **Alchl/Drgs:** 0 **Speed:** 45 MPH **Dir:** N **Veh Mnvr/Ped Actn:** 8 **Obj Strk:**
Unit 2 : 1 **Alchl/Drgs:** 0 **Speed:** 45 MPH **Dir:** S **Veh Mnvr/Ped Actn:** 4 **Obj Strk:**

| 49 | **107292980** | 0.000 | 04/01/2023 22:16 | LEFT TURN, DIFFERENT ROADWAYS | $ 11500 | 0 | 0 | 1 | 0 | 1 | 4 | 1 | 1 | 0 | 3 | 1 |

Unit 1 : 5 **Alchl/Drgs:** 0 **Speed:** 40 MPH **Dir:** S **Veh Mnvr/Ped Actn:** 4 **Obj Strk:**
Unit 2 : 1 **Alchl/Drgs:** 0 **Speed:** 5 MPH **Dir:** E **Veh Mnvr/Ped Actn:** 8 **Obj Strk:**

| 50 | **107293919** | 0.000 | 04/03/2023 15:27 | LEFT TURN, DIFFERENT ROADWAYS | $ 4000 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 0 | 3 | 1 |

Unit 1 : 2 **Alchl/Drgs:** 0 **Speed:** 15 MPH **Dir:** N **Veh Mnvr/Ped Actn:** 8 **Obj Strk:**
Unit 2 : 4 **Alchl/Drgs:** 0 **Speed:** 15 MPH **Dir:** E **Veh Mnvr/Ped Actn:** 4 **Obj Strk:**

| 51 | **106715559** | 0.001 | 09/26/2021 19:25 | REAR END, SLOW OR STOP | $ 3000 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 1 | 0 | 3 | 1 |

Unit 1 : 1 **Alchl/Drgs:** 0 **Speed:** 5 MPH **Dir:** E **Veh Mnvr/Ped Actn:** 4 **Obj Strk:**
Unit 2 : 1 **Alchl/Drgs:** 0 **Speed:** 0 MPH **Dir:** E **Veh Mnvr/Ped Actn:** 4 **Obj Strk:**

| 52 | **106100668** | 0.009 | 12/19/2019 21:18 | REAR END, SLOW OR STOP | $ 505 | 0 | 0 | 0 | 0 | 1 | 4 | 1 | 1 | 0 | 3 | 1 |

Unit 1 : 1 **Alchl/Drgs:** 0 **Speed:** 15 MPH **Dir:** E **Veh Mnvr/Ped Actn:** 11 **Obj Strk:**
Unit 2 : 1 **Alchl/Drgs:** 0 **Speed:** 0 MPH **Dir:** E **Veh Mnvr/Ped Actn:** 1 **Obj Strk:**

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53	**106514674**	0.010	01/30/2021 19:30	REAR END, SLOW OR STOP	$ 2500	0	0	0	0	1	4	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
54	**106369767**	0.019	10/16/2020 21:04	SIDESWIPE, SAME DIRECTION	$ 2000	0	0	0	0	1	3	1	1	0	0	
Unit	**1 :** 5	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				5			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
55	**107181495**	0.028	12/15/2022 08:53	REAR END, SLOW OR STOP	$ 2700	0	0	0	0	2	1	3	1	1	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
56	**106788293**	0.038	11/27/2021 17:37	SIDESWIPE, SAME DIRECTION	$ 1000	0	0	0	0	1	2	1	1	0	0	
Unit	**1 :** 10	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				5			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
57	**106172723**	0.092	02/15/2020 13:01	REAR END, SLOW OR STOP	$ 2000	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	7	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
58	**106038194**	0.100	10/26/2019 11:43	ANGLE	$ 9400	0	0	0	1	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**3 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
59	**107088444**	0.100	09/23/2022 10:45	LEFT TURN, DIFFERENT ROADWAYS	$ 10000	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
60	**106482347**	0.161	02/08/2021 07:55	RAN OFF ROAD - LEFT	$ 9500	0	0	0	0	4	1	1	1	1	0	
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 40 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		33	
61	**105478042**	0.212	05/10/2018 16:11	REAR END, SLOW OR STOP	$ 5000	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			

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62	**105904114**	0.212	06/20/2019 10:51	SIDESWIPE, SAME DIRECTION	$ 4000	0	0	0	0	1	1	2	1	0	0	
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
63	**105979912**	0.212	09/02/2019 17:28	REAR END, SLOW OR STOP	$ 4001	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
64	**106113254**	0.212	01/02/2020 13:58	REAR END, TURN	$ 1100	0	0	0	0	1	1	2	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				7			**Obj Strk:**			
65	**106613998**	0.212	07/02/2021 08:45	ANGLE	$ 11000	0	0	0	0	2	1	3	1	0	1	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
66	**106918976**	0.212	04/12/2022 19:52	LEFT TURN, DIFFERENT ROADWAYS	$ 6000	0	0	0	0	1	4	1	1	0	1	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
67	**107210597**	0.212	01/11/2023 20:07	LEFT TURN, DIFFERENT ROADWAYS	$ 2200	0	0	0	0	1	4	1	3	0	1	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 12 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
68	**107218446**	0.330	01/06/2023 06:09	REAR END, SLOW OR STOP	$ 4000	0	0	0	0	1	4	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
69	**105674308**	0.358	11/14/2018 14:00	REAR END, SLOW OR STOP	$ 3500	0	0	0	0	2	1	2	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
70	**105757400**	0.358	01/27/2019 19:41	SIDESWIPE, SAME DIRECTION	$ 2500	0	0	0	0	1	4	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			

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Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
71	**105815928**	0.358	03/26/2019 09:22	LEFT TURN, DIFFERENT ROADWAYS	$ 16000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
72	**105951942**	0.358	05/31/2019 18:43	LEFT TURN, DIFFERENT ROADWAYS	$ 4200	0	0	0	0	2	1	3	2	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 8 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
73	**106047055**	0.358	11/03/2019 14:29	ANGLE	$ 3000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
74	**106086099**	0.358	12/02/2019 10:23	ANGLE	$ 7000	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				7			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
75	**106191746**	0.358	03/04/2020 10:03	REAR END, SLOW OR STOP	$ 16000	0	0	0	0	1	4	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				7			**Obj Strk:**			
76	**106369769**	0.358	10/17/2020 20:05	ANGLE	$ 9000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
77	**106393346**	0.358	11/05/2020 07:26	LEFT TURN, DIFFERENT ROADWAYS	$ 2000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
78	**106426644**	0.358	12/05/2020 18:39	LEFT TURN, SAME ROADWAY	$ 13000	0	0	0	0	1	4	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
79	**106557127**	0.358	04/23/2021 20:47	ANGLE	$ 10000	0	0	0	0	1	4	1	2	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		64	
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			

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Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
80	**106571364**	0.358	05/08/2021 14:45	LEFT TURN, SAME ROADWAY	$ 3000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
81	**106788296**	0.358	12/01/2021 19:39	LEFT TURN, SAME ROADWAY	$ 8000	0	0	0	0	1	4	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** SW	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
82	**106788295**	0.358	12/01/2021 19:47	LEFT TURN, DIFFERENT ROADWAYS	$ 7000	0	0	0	0	1	4	1	7	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** NE	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 40 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
83	**106913627**	0.358	04/07/2022 20:20	LEFT TURN, SAME ROADWAY	$ 16000	0	0	0	0	1	4	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** NE	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
84	**107082391**	0.358	09/16/2022 18:54	LEFT TURN, SAME ROADWAY	$ 4000	0	0	0	0	1	1	1	2	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**3 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
85	**107260292**	0.358	03/03/2023 12:46	ANGLE	$ 11500	0	0	0	1	1	1	2	1	0	3	1
Unit	**1 :** 10	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
86	**107290558**	0.358	03/30/2023 20:32	SIDESWIPE, SAME DIRECTION	$ 3000	0	0	0	0	1	4	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
87	**107301428**	0.358	04/11/2023 19:04	LEFT TURN, SAME ROADWAY	$ 5500	0	0	0	0	1	1	1	3	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
88	**107307081**	0.358	04/12/2023 19:10	SIDESWIPE, SAME DIRECTION	$ 3500	0	0	0	0	1	1	1	3	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**				5			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			

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89	**107312244**	0.358	04/20/2023 22:26	LEFT TURN, SAME ROADWAY	$ 29000	0	0	2	1	1	4	1	6	0	3	1

Unit 1 : 4 **Alchl/Drgs:** 0 **Speed:** 40 MPH **Dir:** SE **Veh Mnvr/Ped Actn:** 8 **Obj Strk:**
Unit 2 : 1 **Alchl/Drgs:** 0 **Speed:** 35 MPH **Dir:** NW **Veh Mnvr/Ped Actn:** 4 **Obj Strk:**

| 90 | **107316140** | 0.358 | 04/27/2023 19:06 | SIDESWIPE, SAME DIRECTION | $ 3500 | 0 | 0 | 0 | 0 | 2 | 1 | 2 | 1 | 0 | 3 | 1 |

Unit 1 : 5 **Alchl/Drgs:** 0 **Speed:** 20 MPH **Dir:** E **Veh Mnvr/Ped Actn:** 5 **Obj Strk:**
Unit 2 : 2 **Alchl/Drgs:** 0 **Speed:** 20 MPH **Dir:** E **Veh Mnvr/Ped Actn:** 4 **Obj Strk:**
Unit 3 : 1 **Alchl/Drgs:** 0 **Speed:** 0 MPH **Dir:** E **Veh Mnvr/Ped Actn:** 1 **Obj Strk:**

| 91 | **106768054** | 0.360 | 11/01/2021 20:13 | SIDESWIPE, SAME DIRECTION | $ 1200 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 3 | 0 | 0 | |

Unit 1 : 4 **Alchl/Drgs:** 0 **Speed:** 15 MPH **Dir:** SE **Veh Mnvr/Ped Actn:** 4 **Obj Strk:**
Unit 2 : 32 **Alchl/Drgs:** 7 **Speed:** 15 MPH **Dir:** SE **Veh Mnvr/Ped Actn:** 4 **Obj Strk:**

| 92 | **106793297** | 0.360 | 12/01/2021 19:47 | BACKING UP | $ 3000 | 0 | 0 | 0 | 0 | 1 | 4 | 1 | 1 | 0 | 0 | |

Unit 1 : 1 **Alchl/Drgs:** 0 **Speed:** 5 MPH **Dir:** E **Veh Mnvr/Ped Actn:** 10 **Obj Strk:**
Unit 2 : 4 **Alchl/Drgs:** 0 **Speed:** 0 MPH **Dir:** E **Veh Mnvr/Ped Actn:** 1 **Obj Strk:**

| 93 | **107315447** | 0.360 | 04/26/2023 17:03 | SIDESWIPE, SAME DIRECTION | $ 2500 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 3 | 1 |

Unit 1 : 1 **Alchl/Drgs:** 0 **Speed:** 25 MPH **Dir:** E **Veh Mnvr/Ped Actn:** 5 **Obj Strk:**
Unit 2 : 4 **Alchl/Drgs:** 0 **Speed:** 35 MPH **Dir:** E **Veh Mnvr/Ped Actn:** 4 **Obj Strk:**

| 94 | **107129915** | 0.364 | 10/28/2022 19:34 | SIDESWIPE, SAME DIRECTION | $ 2500 | 0 | 0 | 0 | 0 | 1 | 4 | 1 | 2 | 0 | 3 | 1 |

Unit 1 : 1 **Alchl/Drgs:** 0 **Speed:** 20 MPH **Dir:** W **Veh Mnvr/Ped Actn:** 5 **Obj Strk:**
Unit 2 : 1 **Alchl/Drgs:** 0 **Speed:** 25 MPH **Dir:** W **Veh Mnvr/Ped Actn:** 4 **Obj Strk:**

| 95 | **107210593** | 0.367 | 01/10/2023 08:28 | REAR END, SLOW OR STOP | $ 23000 | 0 | 0 | 1 | 0 | 1 | 3 | 1 | 3 | 0 | 3 | 1 |

Unit 1 : 1 **Alchl/Drgs:** 0 **Speed:** 35 MPH **Dir:** E **Veh Mnvr/Ped Actn:** 1 **Obj Strk:**
Unit 2 : 4 **Alchl/Drgs:** 0 **Speed:** 0 MPH **Dir:** E **Veh Mnvr/Ped Actn:** 1 **Obj Strk:**

| 96 | **107210594** | 0.369 | 01/10/2023 08:42 | REAR END, SLOW OR STOP | $ 6000 | 0 | 0 | 1 | 0 | 1 | 3 | 1 | 3 | 0 | 3 | 1 |

Unit 1 : 4 **Alchl/Drgs:** 0 **Speed:** 30 MPH **Dir:** E **Veh Mnvr/Ped Actn:** 4 **Obj Strk:**
Unit 2 : 1 **Alchl/Drgs:** 0 **Speed:** 0 MPH **Dir:** E **Veh Mnvr/Ped Actn:** 1 **Obj Strk:**

| 97 | **106818767** | 0.372 | 12/28/2021 17:52 | REAR END, SLOW OR STOP | $ 1000 | 0 | 0 | 0 | 0 | 1 | 4 | 1 | 1 | 0 | 3 | 1 |

Unit 1 : 2 **Alchl/Drgs:** 0 **Speed:** 10 MPH **Dir:** E **Veh Mnvr/Ped Actn:** 4 **Obj Strk:**
Unit 2 : 4 **Alchl/Drgs:** 0 **Speed:** 5 MPH **Dir:** E **Veh Mnvr/Ped Actn:** 4 **Obj Strk:**

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98	**107122355**	0.373	10/17/2022 17:40	SIDESWIPE, SAME DIRECTION	$ 3000	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**				5			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
99	**105716375**	0.405	12/11/2018 09:57	SIDESWIPE, SAME DIRECTION	$ 1200	0	0	0	0	6	1	9	2	0	0	
Unit	**1 :** 5	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				5			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
100	**107146890**	0.558	10/27/2022 14:56	REAR END, SLOW OR STOP	$ 10000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
101	**106325857**	0.603	08/19/2020 21:40	REAR END, SLOW OR STOP	$ 18000	0	0	0	0	1	4	1	1	12	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
102	**106627074**	0.603	07/10/2021 19:19	PEDESTRIAN	$ 3000	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**				12			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
103	**106520232**	0.605	03/20/2021 20:14	LEFT TURN, SAME ROADWAY	$ 45000	0	0	1	0	1	4	2	3	0	3	1
Unit	**1 :** 3	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 40 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
104	**106588043**	0.605	05/29/2021 15:13	ANGLE	$ 20000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
105	**106705423**	0.605	09/23/2021 18:51	REAR END, SLOW OR STOP	$ 2500	0	0	0	0	1	2	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
106	**106823912**	0.605	01/04/2022 09:22	REAR END, SLOW OR STOP	$ 7500	0	0	0	0	1	1	1		0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			

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107	**106905988**	0.605	03/28/2022 16:20	REAR END, SLOW OR STOP	$ 1500	0	0	0	0	1	1	1	3	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
108	**106964338**	0.605	05/21/2022 15:00	REAR END, SLOW OR STOP	$ 1000	0	0	0	0	1	1	2	3	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 2 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 2 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
109	**105641859**	0.610	10/19/2018 17:13	REAR END, SLOW OR STOP	$ 200	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
110	**106189908**	0.616	03/11/2020 09:04	REAR END, SLOW OR STOP	$ 10000	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
111	**105788956**	0.643	02/26/2019 09:31	REAR END, SLOW OR STOP	$ 2000	0	0	0	1	10	1	1	1	0	0	
Unit	**1 :** 5	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
112	**107142049**	0.684	11/04/2022 15:25	REAR END, SLOW OR STOP	$ 3100	0	0	0	0	1	1	1	3	0	3	1
Unit	**1 :** 5	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
113	**107119166**	0.747	10/23/2022 10:44	REAR END, SLOW OR STOP	$ 4000	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
114	**106747445**	0.748	10/29/2021 13:08	ANGLE	$ 5000	0	0	1	0	1	1	1	1	0	0	
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 40 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 26	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:**	**Veh Mnvr/Ped Actn:**							**Obj Strk:**			
115	**106168004**	0.757	02/26/2020 08:35	RAN OFF ROAD - LEFT	$ 16000	0	0	0	0	2	1	2	1	1	0	
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			

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Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
116	**105594445**	0.823	09/06/2018 18:37	REAR END, SLOW OR STOP	$ 2200	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
117	**106707874**	0.823	09/24/2021 13:38	REAR END, SLOW OR STOP	$ 1500	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 3	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
118	**106975626**	0.823	05/23/2022 18:32	REAR END, SLOW OR STOP	$ 3500	0	0	0	1	2	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				7			**Obj Strk:**			
119	**106050419**	0.828	11/05/2019 17:29	REAR END, SLOW OR STOP	$ 1500	0	0	0	0	1	8	1	1	0	0	
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
120	**105866834**	0.866	05/14/2019 15:40	REAR END, SLOW OR STOP	$ 4000	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
121	**107142050**	0.866	11/04/2022 16:07	REAR END, SLOW OR STOP	$ 2900	0	0	0	0	1	1	1	3	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
122	**105706562**	0.885	12/12/2018 08:18	RAN OFF ROAD - RIGHT	$ 2000	0	0	0	0	4	1	6	1	1	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		61	
123	**106250395**	0.904	06/02/2020 05:35	RAN OFF ROAD - LEFT	$ 4000	0	0	0	1	1	4	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		33	
124	**105546581**	1.025	07/20/2018 14:10	RAN OFF ROAD - LEFT	$ 800	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 10	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
125	**105789269**	1.139	03/01/2019 15:15	REAR END, SLOW OR STOP	$ 5500	0	0	0	0	2	1	3	1	0	14	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			

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Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
126	**106426040**	1.168	12/04/2020 17:55	MOVABLE OBJECT	$ 1000	0	0	0	0	2	4	3	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** SW	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		18	
127	**105642326**	1.317	10/20/2018 13:47	ANGLE	$ 8000	0	0	0	0	2	1	3	1	0	1	1
Unit	**1 :** 5	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
128	**105677641**	1.317	11/16/2018 17:39	LEFT TURN, SAME ROADWAY	$ 401	0	0	0	0	1	4	1	1	0	1	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 3 MPH	**Dir:** SW	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
129	**105816954**	1.317	03/30/2019 11:02	ANGLE	$ 13000	0	0	0	0	1	1	1	1	0	1	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
130	**106231932**	1.317	05/01/2020 15:29	PEDESTRIAN	$ 0	0	0	0	1	2	1	3	1	0	1	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				7			**Obj Strk:**		14	
Unit	**2 :** 24	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:**	**Veh Mnvr/Ped Actn:**							**Obj Strk:**		14	
131	**106369770**	1.317	10/16/2020 23:44	ANGLE	$ 10000	0	0	0	0	1	4	1	1	0	1	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		33	
132	**106433097**	1.317	12/11/2020 09:18	SIDESWIPE, SAME DIRECTION	$ 6000	0	0	0	0	1	1	1	1	4	1	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
133	**106574724**	1.317	05/15/2021 13:55	LEFT TURN, SAME ROADWAY	$ 4000	0	0	0	0	1	1	1	3	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**				9			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 40 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
134	**106617066**	1.317	06/30/2021 22:17	ANGLE	$ 79000	1	0	1	0	1	4	1	1	0	1	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 60 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		64	
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		64	

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135	**106640826**	1.317	07/25/2021 14:23	LEFT TURN, DIFFERENT ROADWAYS	$ 16000	0	0	0	0	1	1	1	1	0	1	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
136	**106709427**	1.365	09/22/2021 13:38	RAN OFF ROAD - LEFT	$ 3000	0	0	0	0	2	1	3	5	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
137	**106558177**	1.374	04/24/2021 01:25	RAN OFF ROAD - LEFT	$ 29000	0	0	3	0	1	4	1	7	0	0	
Unit	**1 :** 4	**Alchl/Drgs:**	1	**Speed:** 65 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		33	
138	**106803150**	1.408	09/28/2021 04:16	FIXED OBJECT	$ 6000	0	0	0	0	1	4	1	5	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 55 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**				15			**Obj Strk:**		55	
139	**105770743**	1.410	02/12/2019 10:45	RAN OFF ROAD - LEFT	$ 10000	0	0	0	0	2	1	3	5	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 50 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		55	
140	**106772498**	1.410	11/14/2021 01:11	RAN OFF ROAD - LEFT	$ 31123	1	0	4	0	1	4	1	5	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	1	**Speed:** 85 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		40	
141	**105603000**	1.429	09/16/2018 18:15	REAR END, SLOW OR STOP	$ 19000	0	0	0	2	2	2	3	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
142	**105708124**	1.429	12/12/2018 08:37	RAN OFF ROAD - LEFT	$ 500	0	0	0	0	4	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** NE	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		34	
143	**106901663**	1.429	03/26/2022 19:14	RAN OFF ROAD - RIGHT	$ 5300	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 50 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
144	**106958176**	1.429	05/16/2022 22:15	RAN OFF ROAD - LEFT	$ 3000	0	0	0	0	1	4	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 50 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
145	**107015413**	1.435	07/08/2022 16:50	OTHER NON-COLLISION	$ 3130	0	0	0	0	3	1	3	1	1	10	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		37	

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146	**106587332**	1.453	05/28/2021 16:52	SIDESWIPE, SAME DIRECTION	$ 2000	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				5			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
147	**106404950**	1.476	11/15/2020 20:31	RAN OFF ROAD - LEFT	$ 4000	0	0	0	0	1	4	1	6	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	1	**Speed:** 50 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		35	
148	**106906015**	1.486	03/31/2022 13:05	RAN OFF ROAD - LEFT	$ 12000	0	0	0	0	2	1	3	5	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		34	
149	**106004489**	1.506	09/28/2019 02:04	RAN OFF ROAD - LEFT	$ 11000	0	0	0	0	2	4	2	5	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	1	**Speed:** 30 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		33	
150	**106822238**	1.528	01/04/2022 09:08	REAR END, SLOW OR STOP	$ 3500	0	0	0	0	4	1	1	1	0	0	
Unit	**1 :** 3	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
151	**107190317**	1.596	12/13/2022 19:04	SIDESWIPE, SAME DIRECTION	$ 1400	0	0	0	0	1	4	1	3	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
152	**105729318**	1.604	12/11/2018 22:07	RAN OFF ROAD - LEFT	$ 1500	0	0	0	0	4	2	1	5	1	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		33	
153	**106837672**	1.615	01/16/2022 04:00	RAN OFF ROAD - LEFT	$ 53000	0	0	0	0	1	4	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 65 MPH	**Dir:** SE	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
154	**106919872**	1.623	04/11/2022 18:49	SIDESWIPE, SAME DIRECTION	$ 4500	0	0	0	0	1	1	1	1	0	1	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				7			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
155	**107154988**	1.623	11/21/2022 09:25	RAN OFF ROAD - RIGHT	$ 3200	0	0	0	0	1	1	1	5	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** SE	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** NE	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			

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156	**105925777**	1.672	06/03/2019 15:27	SIDESWIPE, SAME DIRECTION	$ 200	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				5			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
157	**106715093**	1.710	10/01/2021 14:03	LEFT TURN, DIFFERENT ROADWAYS	$ 3000	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
158	**105947027**	1.784	06/20/2019 11:55	REAR END, SLOW OR STOP	$ 3000	0	0	0	0	1	1	1	3	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				3			**Obj Strk:**			
159	**106065500**	1.784	11/18/2019 16:42	REAR END, SLOW OR STOP	$ 4000	0	0	0	0	2	1	3	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
160	**106919952**	1.784	04/06/2022 17:13	SIDESWIPE, SAME DIRECTION	$ 2000	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**				5			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
161	**105863527**	1.793	04/28/2019 18:58	SIDESWIPE, SAME DIRECTION	$ 1612	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** SE	**Veh Mnvr/Ped Actn:**				5			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
162	**106026527**	1.803	10/08/2019 08:15	REAR END, SLOW OR STOP	$ 1100	0	0	0	0	1	1	2	5	0	0	
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
163	**106835968**	1.812	01/18/2022 09:08	REAR END, SLOW OR STOP	$ 1100	0	0	0	0	1	1	1	1	0	9	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** SE	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** SE	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
164	**107184444**	1.834	12/18/2022 14:42	REAR END, SLOW OR STOP	$ 2000	0	0	0	0	1	1	1	2	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			

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Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
165	**105465892**	1.843	05/03/2018 09:51	RAN OFF ROAD - RIGHT	$ 1000	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 3	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		37	
166	**105546803**	1.849	07/22/2018 05:42	RAN OFF ROAD - LEFT	$ 8000	0	0	0	0	2	4	3	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	1	**Speed:** 40 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				7			**Obj Strk:**			
167	**106798102**	1.855	12/11/2021 15:27	RIGHT TURN, DIFFERENT ROADWAYS	$ 4000	0	0	0	0	1	1	2	5	0	0	
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** SW	**Veh Mnvr/Ped Actn:**				7			**Obj Strk:**			
Unit	**2 :** 5	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
168	**107090933**	1.855	09/09/2022 16:32	ANGLE	$ 6000	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				9			**Obj Strk:**			
169	**107090988**	1.855	09/26/2022 08:48	SIDESWIPE, SAME DIRECTION	$ 1400	0	0	0	1	1	1	1	1	0	0	
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				5			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
170	**107299138**	1.862	03/24/2023 16:55	OTHER COLLISION WITH VEHICLE	$ 10500	0	0	0	0	1	1	1	3	0	3	
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
171	**106822756**	1.906	11/30/2021 15:59	REAR END, SLOW OR STOP	$ 2500	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
172	**107142054**	1.915	11/09/2022 09:12	RIGHT TURN, DIFFERENT ROADWAYS	$ 4500	0	0	0	0	1	1	1	7	0	1	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** SW	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
173	**107089304**	1.916	09/24/2022 15:40	REAR END, SLOW OR STOP	$ 200	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
174	**106389461**	1.940	10/17/2020 14:30	REAR END, SLOW OR STOP	$ 3700	0	0	0	0	1	1	1	3	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			

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Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 8 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4		**Obj Strk:**				
175	**106495049**	1.940	01/11/2021 19:05	SIDESWIPE, SAME DIRECTION	$ 7000	0	0	0	0	2	1	3	1	0	0	
Unit	**1 :** 5	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				7		**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				8		**Obj Strk:**				
176	**105506994**	1.942	05/18/2018 21:03	REAR END, SLOW OR STOP	$ 3500	0	0	0	0	2	4	3	3	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 2 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4		**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				1		**Obj Strk:**				
177	**106158808**	1.942	12/31/2019 15:02	REAR END, SLOW OR STOP	$ 6000	0	0	0	0	1	1	1	3	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				12		**Obj Strk:**				
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				1		**Obj Strk:**				
178	**107043796**	1.942	07/27/2022 14:00	REAR END, SLOW OR STOP	$ 2000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				7		**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				7		**Obj Strk:**				
179	**105562790**	1.944	07/13/2018 11:48	LEFT TURN, SAME ROADWAY	$ 24000	0	0	0	2	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** SE	**Veh Mnvr/Ped Actn:**				8		**Obj Strk:**				
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 48 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4		**Obj Strk:**				
Unit	**3 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				1		**Obj Strk:**				
180	**105578522**	1.944	08/01/2018 11:23	LEFT TURN, SAME ROADWAY	$ 11500	0	0	0	2	1	1	2	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**				8		**Obj Strk:**				
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4		**Obj Strk:**				
181	**105613625**	1.944	08/26/2018 19:20	REAR END, SLOW OR STOP	$ 800	0	0	0	1	1	1	1	1	0	3	2
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				12		**Obj Strk:**				
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				11		**Obj Strk:**				
182	**105701127**	1.944	11/07/2018 18:09	LEFT TURN, SAME ROADWAY	$ 20000	0	0	0	0	1	4	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				8		**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4		**Obj Strk:**				
183	**105788385**	1.944	02/18/2019 20:16	LEFT TURN, SAME ROADWAY	$ 23300	0	0	1	0	1	4	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				8		**Obj Strk:**				

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Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		61	
184	**105788382**	1.944	02/22/2019 15:19	LEFT TURN, SAME ROADWAY	$ 30000	0	0	0	2	2	1	3	3	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
185	**105883945**	1.944	04/30/2019 09:00	RIGHT TURN, SAME ROADWAY	$ 4000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				7			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
186	**105887750**	1.944	05/20/2019 16:53	ANGLE	$ 8000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				9			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
187	**105991638**	1.944	08/29/2019 18:49	LEFT TURN, SAME ROADWAY	$ 27000	0	0	0	2	1	1	1	1	0	3	1
Unit	**1 :** 5	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** SE	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		34	
188	**106026367**	1.944	10/10/2019 19:02	LEFT TURN, DIFFERENT ROADWAYS	$ 3000	0	0	0	0	1	2	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**3 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
189	**106199945**	1.944	02/11/2020 06:57	RAN OFF ROAD - LEFT	$ 10200	0	0	0	1	2	3	3	3	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		38	
190	**106309458**	1.944	06/27/2020 21:26	LEFT TURN, SAME ROADWAY	$ 3000	0	0	0	0	1	4	1		0		
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 5	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
191	**106366438**	1.944	09/18/2020 21:48	ANGLE	$ 9000	0	0	0	2	1	4	1	1	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
192	**106461511**	1.944	12/20/2020 18:49	REAR END, SLOW OR STOP	$ 6000	0	0	0	0	2	4	2	3	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			

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Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
Unit	**3 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				1		**Obj Strk:**				
193	**106484406**	1.944	12/28/2020 17:49	LEFT TURN, SAME ROADWAY	$ 17000	0	0	0	0	1	4	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**				8		**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4		**Obj Strk:**				
194	**106529078**	1.944	02/14/2021 18:19	SIDESWIPE, SAME DIRECTION	$ 901	0	0	0	0	2	4	1		0		
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				5		**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4		**Obj Strk:**				
Unit	**3 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4		**Obj Strk:**				
195	**106623205**	1.944	05/02/2021 17:25	REAR END, SLOW OR STOP	$ 4500	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4		**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				11		**Obj Strk:**				
196	**106660778**	1.944	06/16/2021 12:38	LEFT TURN, SAME ROADWAY	$ 10500	0	0	0	0	1	1	1		0		
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				8		**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4		**Obj Strk:**				
197	**106721959**	1.944	10/05/2021 14:58	ANGLE	$ 19000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4		**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4		**Obj Strk:**				
Unit	**3 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				1		**Obj Strk:**				
198	**106737176**	1.944	10/22/2021 18:08	ANGLE	$ 55000	0	0	0	2	1	1	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				8		**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4		**Obj Strk:**				
199	**106859734**	1.944	11/22/2021 17:31	LEFT TURN, SAME ROADWAY	$ 19998	0	0	0	0	2	4	2		0		
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**				8		**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4		**Obj Strk:**				
200	**106955851**	1.944	03/22/2022 09:15	LEFT TURN, SAME ROADWAY	$ 1998	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4		**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** SE	**Veh Mnvr/Ped Actn:**				8		**Obj Strk:**				

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North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	Injuries A	Injuries B	Injuries C	Condition R	Condition L	Condition W	Road Ch	Road Ci	Trfc Ctl Dv	Trfc Ctl Op
201	**106958261**	1.944	04/09/2022 20:25	LEFT TURN, SAME ROADWAY	$ 1300	0	0	0	0	1	4	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** SW	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
202	**107092530**	1.944	08/31/2022 18:00	LEFT TURN, SAME ROADWAY	$ 10000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
203	**107196365**	1.944	11/21/2022 11:53	OTHER COLLISION WITH VEHICLE	$ 11000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** SE	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
204	**107230994**	1.944	01/09/2023 18:48	LEFT TURN, SAME ROADWAY	$ 55000	0	0	0	0	1	4	1	1	0	3	1
Unit	**1 :** 5	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 50 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
205	**107293839**	1.944	04/06/2023 18:06	REAR END, TURN	$ 2000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			

Legend for Report Details:

Acc No - Accident Number
Injuries: F - Fatal, A - Class A, B - Class B, C - Class C
Condition: R - Road Surface, L - Ambient Light, W - Weather
Rd Ch - Road Character
Rd Ci - Roadway Contributing Circumstances
Trfc Ctl - Traffic Control: Dv - Device, Op - Operating
Alchl/Drgs - Alcohol Drugs Suspected
Veh Mnvr/Ped Actn - Vehicle Maneuver/Pedestrian Action
Obj Strk - Object Struck

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Summary Statistics

High Level Crash Summary

Crash Type	Number of Crashes	Percent of Total
Total Crashes	205	100.00
Fatal Crashes	2	0.98
Non-Fatal Injury Crashes	41	20.00
Total Injury Crashes	43	20.98
Property Damage Only Crashes	162	79.02
Night Crashes	54	26.34
Wet Crashes	32	15.61
Alcohol/Drugs Involvement Crashes	6	2.93

Crash Severity Summary

Crash Type	Number of Crashes	Percent of Total
Total Crashes	205	100.00
Fatal Crashes	2	0.98
Class A Crashes	0	0.00
Class B Crashes	10	4.88
Class C Crashes	31	15.12
Property Damage Only Crashes	162	79.02

Vehicle Exposure Statistics

Annual ADT = 17700

Total Length = 1.944 (Miles) **3.129 (Kilometers)**

Total Vehicle Exposure = 62.83 (MVMT) **101.12 (MVKMT)**

Crash Rate	Crashes Per 100 Million Vehicle Miles	Crashes Per 100 Million Vehicle Kilometers
Total Crash Rate	326.27	202.74
Fatal Crash Rate	3.18	1.98
Non Fatal Crash Rate	65.25	40.55
Night Crash Rate	85.95	53.40
Wet Crash Rate	50.93	31.65
EPDO Rate	1050.45	652.72

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Miscellaneous Statistics

Severity Index =	3.22
EPDO Crash Index =	660.00
Estimated Property Damage Total = $	1790369.00

Accident Type Summary

Accident Type	Number of Crashes	Percent of Total
ANGLE	34	16.59
BACKING UP	1	0.49
FIXED OBJECT	1	0.49
LEFT TURN, DIFFERENT ROADWAYS	18	8.78
LEFT TURN, SAME ROADWAY	35	17.07
MOVABLE OBJECT	1	0.49
OTHER COLLISION WITH VEHICLE	2	0.98
OTHER NON-COLLISION	1	0.49
OVERTURN/ROLLOVER	1	0.49
PEDESTRIAN	2	0.98
RAN OFF ROAD - LEFT	17	8.29
RAN OFF ROAD - RIGHT	4	1.95
REAR END, SLOW OR STOP	54	26.34
REAR END, TURN	3	1.46
RIGHT TURN, DIFFERENT ROADWAYS	2	0.98
RIGHT TURN, SAME ROADWAY	2	0.98
SIDESWIPE, OPPOSITE DIRECTION	3	1.46
SIDESWIPE, SAME DIRECTION	24	11.71

Injury Summary

Injury Type	Number of Injuries	Percent of Total
Fatal Injuries	2	3.08
Class A Injuries	0	0.00
Class B Injuries	18	27.69
Class C Injuries	45	69.23
Total Non-Fatal Injuries	63	96.92
Total Injuries	65	100.00

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criteria provided by the report's creator. The onus is strictly upon the user of this report to exercise due diligence in in
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Monthly Summary

Month	Number of Crashes	Percent of Total
Jan	17	8.29
Feb	13	6.34
Mar	15	7.32
Apr	21	10.24
May	17	8.29
Jun	10	4.88
Jul	13	6.34
Aug	10	4.88
Sep	17	8.29
Oct	19	9.27
Nov	28	13.66
Dec	25	12.20

Daily Summary

Day	Number of Crashes	Percent of Total
Mon	30	14.63
Tue	31	15.12
Wed	26	12.68
Thu	27	13.17
Fri	40	19.51
Sat	30	14.63
Sun	21	10.24

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criteria provided by the report's creator. The onus is strictly upon the user of this report to exercise due diligence in in
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Hourly Summary

Hour	Number of Crashes	Percent of Total
0000-0059	1	0.49
0100-0159	3	1.46
0200-0259	1	0.49
0300-0359	1	0.49
0400-0459	2	0.98
0500-0559	2	0.98
0600-0659	2	0.98
0700-0759	5	2.44
0800-0859	13	6.34
0900-0959	16	7.80
1000-1059	8	3.90
1100-1159	8	3.90
1200-1259	5	2.44
1300-1359	12	5.85
1400-1459	17	8.29
1500-1559	16	7.80
1600-1659	10	4.88
1700-1759	17	8.29
1800-1859	19	9.27
1900-1959	22	10.73
2000-2059	11	5.37
2100-2159	7	3.41
2200-2259	6	2.93
2300-2359	1	0.49

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Light and Road Conditions Summary

Condition	Dry	Wet	Other	Total
Day	108	22	6	136
Dark	46	8	0	54
Other	12	2	1	15
Total	166	32	7	205

Object Struck Summary

Object Type	Times Struck	Percent of Total
COMMERCIAL SIGN	1	3.85
FENCE OR FENCE POST	2	7.69
LUMINAIRE POLE NON-BREAKAWAY	1	3.85
MOVABLE OBJECT	1	3.85
OFFICIAL HIGHWAY SIGN BREAKAWAY	1	3.85
OFFICIAL HIGHWAY SIGN NON-BREAKAWAY	2	7.69
OTHER FIXED OBJECT	4	15.38
PEDESTRIAN	2	7.69
TRAFFIC ISLAND CURB OR MEDIAN	3	11.54
TREE	6	23.08
UTILITY POLE	3	11.54

Vehicle Type Summary

Vehicle Type	Number Involved	Percent of Total
LIGHT TRUCK (MINI-VAN, PANEL)	5	1.24
MOTORCYCLE	1	0.25
OTHER	1	0.25
PASSENGER CAR	258	64.18
PEDESTRIAN	1	0.25
PICKUP	20	4.98
SINGLE UNIT TRUCK (2-AXLE, 6-TIRE)	3	0.75
SPORT UTILITY	96	23.88
UNKNOWN	1	0.25
VAN	16	3.98

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Yearly Totals Summary

Accident Totals

Year	Total Accidents	Fatal Accidents	Injury Accidents	Property Damage Only Accidents
2018	28	0	6	22
2019	43	0	10	33
2020	29	0	6	23
2021	44	2	6	36
2022	43	0	7	36
2023	18	0	6	12
Total	205	2	41	162

Injury Totals

Year	Fatal Injuries	Class A, B, or C Injuries
2018	0	9
2019	0	14
2020	0	7
2021	2	16
2022	0	8
2023	0	9
Total	2	63

Miscellaneous Totals

Year	Property Damage	EPDO Index
2018	$ 183401	72.40
2019	$ 316118	117.00
2020	$ 236000	73.40
2021	$ 519122	240.00
2022	$ 312028	94.80
2023	$ 223700	62.40
Total	$ 1790369	660.00

Type of Accident Totals

Year	Left Turn	Right Turn	Rear End	Run Off Road & Fixed Object	Angle	Side Swipe	Other
2018	5	0	8	6	7	2	0
2019	12	1	12	2	10	5	1

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criteria provided by the report's creator. The onus is strictly upon the user of this report to exercise due diligence in in
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North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report

Year	Left Turn	Right Turn	Rear End	Run Off Road & Fixed Object	Angle	Side Swipe	Other
2020	6	0	9	4	4	4	2
2021	13	2	8	5	9	5	2
2022	10	1	16	5	2	7	2
2023	7	0	4	0	2	4	1
Total	53	4	57	22	34	27	8

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criteria provided by the report's creator. The onus is strictly upon the user of this report to exercise due diligence in in
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Strip Diagram

Features	Milepost	Crash IDs
NC 54 | CHAPEL HILL | RIDGEMERE	0.00	105467986 | 105487763 | 105534840 | 105587653 |
		105589073 | 105595941 | 105668429 | 105677639 |
		105683460 | 105742972 | 105808470 | 105821107 |
		105823630 | 105823631 | 105899096 | 105947031 |
		105935813 | 105955148 | 106058161 | 106058005 |
		106059729 | 106077585 | 106097415 | 106110584 |
		106151914 | 106163167 | 106166477 | 106327154 |
		106403454 | 106440399 | 106442859 | 106484105 |
		106602816 | 106640515 | 106646202 | 106648695 |
		106689732 | 106761282 | 106765825 | 106818766 |
		106846587 | 106928415 | 106979883 | 107116644 |
		107122521 | 107190414 | 107227107 | 107273566 |
		107292980 | 107293919 | 106715559
	0.01	106100668 | 106514674
	0.02	106369767
	0.03	107181495
	0.04	106788293
	0.05	
	0.06	
	0.07	
	0.08	
	0.09	106172723
	0.10	106038194 | 107088444
	0.11	
	0.12	
	0.13	
	0.14	
	0.15	
	0.16	106482347
	0.17	
	0.18	
	0.19	
	0.20	
PHEASANT WOOD	0.21	105478042 | 105904114 | 105979912 | 106113254 |
		106613998 | 106918976 | 107210597
	0.22	
	0.23	
	0.24	
	0.25	
	0.26	
	0.27	

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criteria provided by the report's creator. The onus is strictly upon the user of this report to exercise due diligence in in
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Features	Milepost	Crash IDs
	0.28	
	0.29	
	0.30	
	0.31	
	0.32	
	0.33	107218446
	0.34	
	0.35	
BRISTOL CREEK | QUAIL FIELD	0.36	105674308 | 105757400 | 105815928 | 105951942 | 106047055 | 106086099 | 106191746 | 106369769 | 106393346 | 106426644 | 106557127 | 106571364 | 106788296 | 106788295 | 106913627 | 107082391 | 107260292 | 107290558 | 107301428 | 107307081 | 107312244 | 107316140 | 106768054 | 106793297 | 107315447 | 107129915
	0.37	107210593 | 107210594 | 106818767 | 107122355
	0.38	
	0.39	
	0.40	
	0.41	105716375
	0.42	
	0.43	
	0.44	
	0.45	
	0.46	
	0.47	
	0.48	
	0.49	
	0.50	
	0.51	
	0.52	
Railroad Crossing:904436A	0.53	
	0.54	
	0.55	
	0.56	107146890
	0.57	
	0.58	
	0.59	
	0.60	106325857 | 106627074
CRABTREE CROSSING	0.61	106520232 | 106588043 | 106705423 | 106823912 | 106905988 | 106964338 | 105641859
	0.62	106189908
	0.63	
	0.64	105788956

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Features	Milepost	Crash IDs
	0.65	
	0.66	
	0.67	
	0.68	107142049
	0.69	
	0.70	
	0.71	
	0.72	
Structure:911204	0.73	
	0.74	
	0.75	107119166 | 106747445
	0.76	106168004
	0.77	
	0.78	
	0.79	
	0.80	
	0.81	
DOUBLE EAGLE | FOUR MEADOWS	0.82	105594445 | 106707874 | 106975626
	0.83	106050419
	0.84	
	0.85	
	0.86	
FAIRWOOD | WALTONS CREEK	0.87	105866834 | 107142050
	0.88	105706562
	0.89	
	0.90	106250395
	0.91	
	0.92	
	0.93	
	0.94	
	0.95	
	0.96	
	0.97	
	0.98	
	0.99	
	1.00	
	1.01	
FAIRWOOD	1.02	105546581
	1.03	
	1.04	
	1.05	
	1.06	
	1.07	
	1.08	
	1.09	

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Features	Milepost	Crash IDs
	1.10	
	1.11	
	1.12	
	1.13	
	1.14	105789269
	1.15	
	1.16	
WALTONS CREEK	1.17	106426040
	1.18	
	1.19	
	1.20	
	1.21	
	1.22	
	1.23	
	1.24	
	1.25	
	1.26	
	1.27	
	1.28	
	1.29	
	1.30	
	1.31	
CREEK PARK | BLACK RIDGE	1.32	105642326 | 105677641 | 105816954 | 106231932 | 106369770 | 106433097 | 106574724 | 106617066 | 106640826
	1.33	
	1.34	
	1.35	
	1.36	
	1.37	106709427 | 106558177
	1.38	
	1.39	
	1.40	
	1.41	106803150 | 105770743 | 106772498
	1.42	
DUCK POND	1.43	105603000 | 105708124 | 106901663 | 106958176 | 107015413
	1.44	
	1.45	106587332
	1.46	
	1.47	
	1.48	106404950
	1.49	106906015
	1.50	

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Features	Milepost	Crash IDs
	1.51	106004489
	1.52	
	1.53	106822238
	1.54	
	1.55	
	1.56	
	1.57	
	1.58	
	1.59	
	1.60	107190317 | 105729318
	1.61	
SARAZEN MEADOW	1.62	106837672 | 106919872 | 107154988
	1.63	
	1.64	
	1.65	
	1.66	
	1.67	105925777
	1.68	
	1.69	
	1.70	
GOLDEN HORSESHOE	1.71	106715093
	1.72	
	1.73	
	1.74	
	1.75	
	1.76	
	1.77	
GOLDEN HORSESHOE	1.78	105947027 | 106065500 | 106919952
	1.79	105863527
	1.80	106026527
	1.81	106835968
HUNTINGTON PARK	1.82	
	1.83	107184444
	1.84	105465892
	1.85	105546803
CARRIAGE	1.86	106798102 | 107090933 | 107090988 | 107299138
	1.87	
	1.88	
	1.89	
	1.90	
	1.91	106822756 | 107142054
	1.92	107089304
ML-CARY | ML-MORRISVILLE	1.93	
SR 1613 | DAVIS	1.94	106389461 | 106495049 | 105506994 | 106158808 |

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criteria provided by the report's creator. The onus is strictly upon the user of this report to exercise due diligence in in
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Features	Milepost	Crash IDs
		107043796 | 105562790 | 105578522 | 105613625 |
		105701127 | 105788385 | 105788382 | 105883945 |
		105887750 | 105991638 | 106026367 | 106199945 |
		106309458 | 106366438 | 106461511 | 106484406 |
		106529078 | 106623205 | 106660778 | 106721959 |
		106737176 | 106859734 | 106955851 | 106958261 |
		107092530 | 107196365 | 107230994 | 107293839

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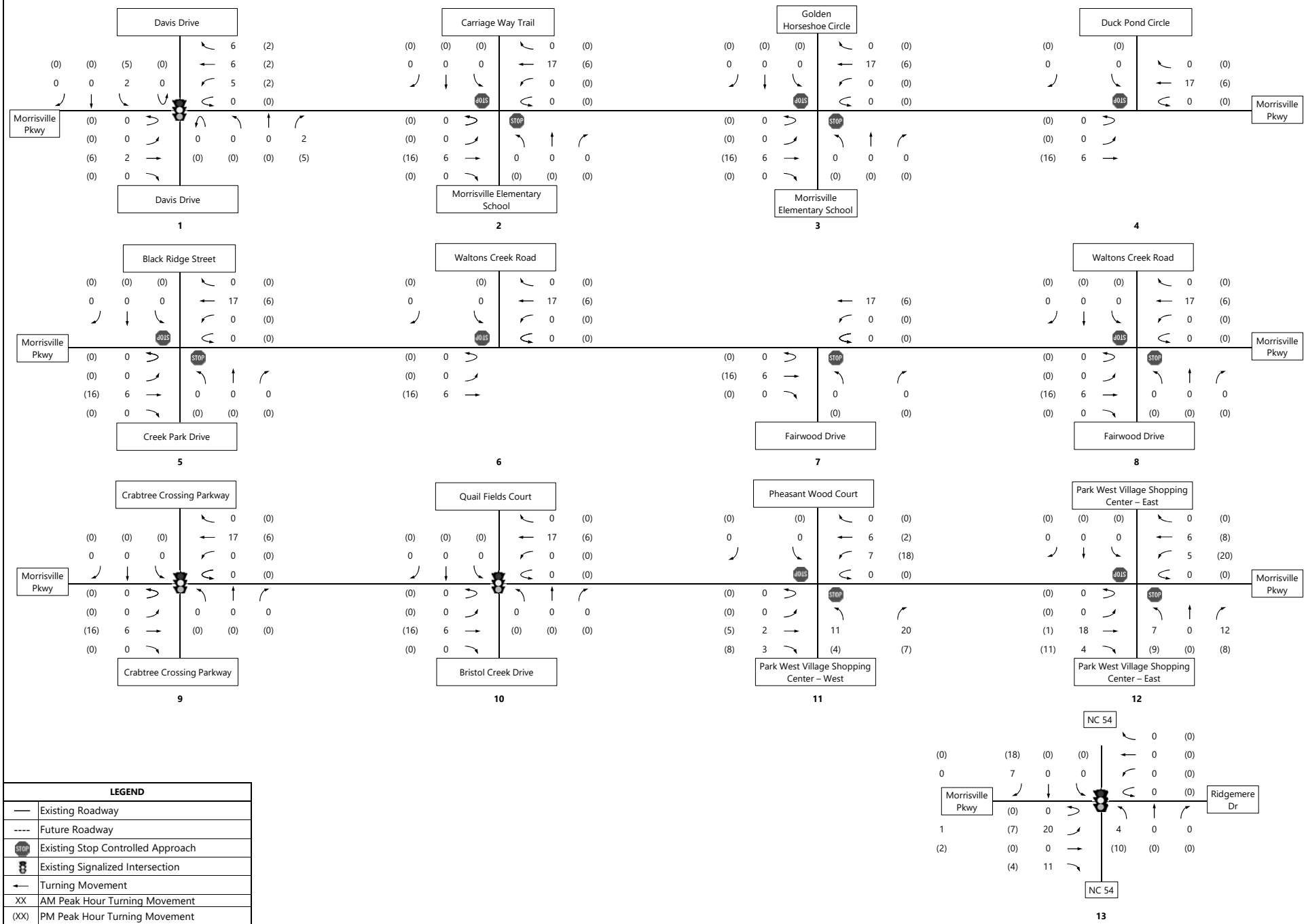
APPENDIX E:

Morrisville Mixed Use Development



LEGEND	
——	Existing Roadway
----	Future Roadway
STOP	Existing Stop Controlled Approach
	Existing Signalized Intersection
←—	Turning Movement
XX	AM Peak Hour Turning Movement
(XX)	PM Peak Hour Turning Movement

Morrisville Mixed Use Development
AM and PM Peak Hour Site Trips

Morrisville Parkway
Access Management Study

PAVEMENT LEGEND

- CONCRETE
- HEAVY DUTY CONCRETE
- HEAVY DUTY ASPHALT
- LIGHT DUTY ASPHALT

SPRINKLER DEMAND

Structure:	Flow
Building 1000	280 - gpm
Building 2000	280 - gpm
Building 3000	280 - gpm
Building 4000	280 - gpm
Building 5000	280 - gpm
Total	1,400 - gpm

DOMESTIC DEMAND

Structure:	# Units	Flow Rate	Flow
Building 1000	36	500 gpd/unit (0.33 gpm/ unit)	12 - gpm
Building 2000	29		10 - gpm
Building 3000	20		6 - gpm
Building 4000	10		5 - gpm
Building 5000	20		6 - gpm
		Total	39 - gpm

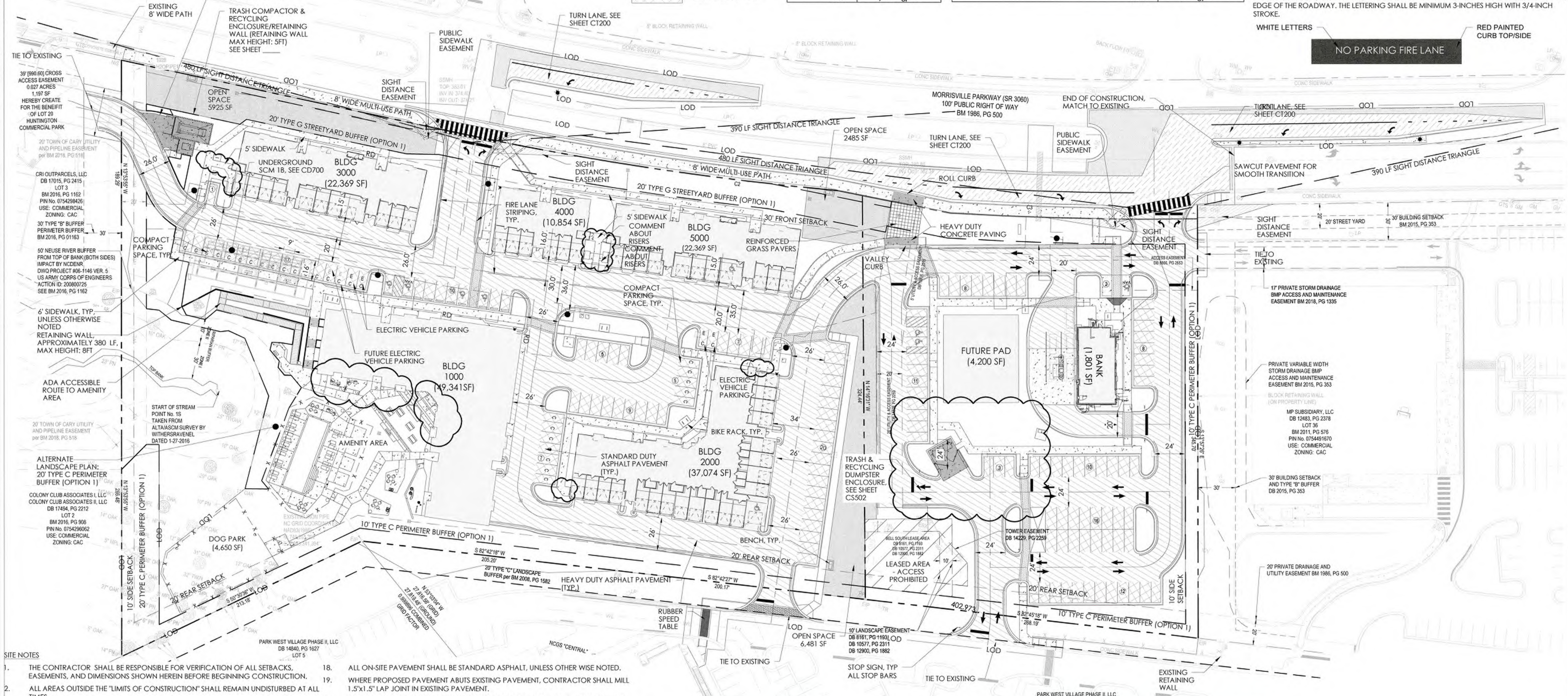
FIRE LANE NOTES:
OUTLINING OR PAINTING THE FIRE LANE AND HYDRANT ZONE ON THE ROADWAY SURFACES SHALL BE DONE AS FOLLOWS;

CURB TOP AND SIDE SHALL BE PAINTED RED, AND THE WORDS, "NO PARKING FIRE LANE" SHALL BE STENCILED ON IN REFLECTIVE WHITE ON THE TOP AND SIDE OF ALL RED CURBS AT A MAXIMUM INTERVAL OF 50 FEET. LETTERS SHALL BE MINIMUM THREE INCHES (3") IN HEIGHT WITH A MINIMUM 3/4-INCH IN STROKE.

ALTERNATIVELY, IF THE ROADWAY HAS NO CURBING, A 6-INCH (6") WIDE RED STRIPE WITH THE WORDS CURB TOP , "NO PARKING FIRE LANE" MAY BE PAINTED ALONG AND PARELLEL WITH THE EDGE OF THE ROADWAY. THE LETTERING SHALL BE MINIMUM 3-INCHES HIGH WITH 3/4-INCH STROKE.

WHITE LETTERS — RED PAINTED CURB TOP/SIDE

NO PARKING FIRE LANE



SITE NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS, EASEMENTS, AND DIMENSIONS SHOWN HEREIN BEFORE BEGINNING CONSTRUCTION.
2. ALL AREAS OUTSIDE THE "LIMITS OF CONSTRUCTION" SHALL REMAIN UNDISTURBED AT ALL TIMES.
3. TRAFFIC CONTROL IS THE RESPONSIBILITY OF THE CONTRACTOR. VEHICULAR ACCESS SHALL BE MAINTAINED AT ALL TIMES.
4. FIRE LANE MARKINGS SHALL CONFORM TO THE TOWN OF MORRISVILLE DESIGN DETAILS AND SPECIFICATIONS, TOWN OF MORRISVILLE FIRE MARSHAL, AND THE CURRENT NC FIRE CODE. IF THE CRITERIA IS CONFLICTING, THE MORE RESTRICTIVE DESIGN GUIDELINE SHALL BE FOLLOWED.
5. ALL INTERNAL PAVEMENT MARKINGS SHALL BE WHITE PAINT.
6. ALL PAVEMENT MARKINGS WITHIN A PUBLIC RIGHT-OF-WAY SHALL BE THERMOPLASTIC.
7. ALL PAVED PARKING FACILITIES SHALL BE STRIPED WITH FOUR INCH WHITE LINES.
8. ALL ADA RAMPING, STRIPING, AND PAVEMENT MARKINGS SHALL CONFORM TO THE CURRENT ADA REQUIREMENTS AND NORTH CAROLINA BUILDING CODE.
9. ACCESSIBLE PARKING SPACE DIMENSIONS, SLOPE AND SIGNAGE SHALL COMPLY WITH THE MOST RECENT VERSION OF ANSI/ICC A117.1.
10. HANDRAILS ARE REQUIRED AT THE TOP OF ALL CURB RAMPS IN ACCORDANCE WITH THE LATEST NC BUILDING CODE.
11. LANDINGS ARE REQUIRED AT THE TOP OF ALL CURB RAMPS IN ACCORDANCE WITH THE LATEST NC BUILDING CODE, MAXIMUM SLOPE SHALL NOT BE STEEPER THAN 1:48 IN ALL DIRECTIONS.
12. LANDINGS ARE REQUIRED AT THE TOP AND BOTTOM OF ALL STAIRS IN ACCORDANCE WITH THE LATEST NC BUILDING CODE.
13. ALL SIDEWALKS SHALL BE CONSTRUCTED OF CONCRETE.
14. ALL ACCESSIBLE ROUTES SHALL COMPLY WITH THE LATEST VERSION OF THE NC BUILDING CODE.
15. DOORS ARE INDICATED ON ALL BUILDINGS FOR WHICH ARCHITECTURAL DESIGN HAS OCCURRED.
16. TRAFFIC CONTROL ON PUBLIC STREETS IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE IN CONFORMANCE WITH THESE PLANS, THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", AND AS FURTHER DIRECTED BY THE TOWN OF MORRISVILLE AND NCDOT.
17. ALL RETAINING WALLS SHALL REQUIRE THE SUBMITTAL OF A STAND ALONE SET OF CONSTRUCTION DRAWINGS WITH CORRESPONDING DESIGN CALCULATIONS AND SPECIFICATIONS FOR THE RETAINING WALL SYSTEM, PREPARED, SIGNED AND SEALED BY A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN THE STATE OF NORTH CAROLINA.
18. ALL ON-SITE PAVEMENT SHALL BE STANDARD ASPHALT, UNLESS OTHER WISE NOTED.
19. WHERE PROPOSED PAVEMENT ABUTS EXISTING PAVEMENT, CONTRACTOR SHALL MILL 1.5"x1.5" LAP JOINT IN EXISTING PAVEMENT.
20. NO SIGHT OBSTRUCTING, OR PARTIALLY OBSTRUCTING WALL, FENCE, FOLIAGE, BERM, SIGN, PARKED VEHICLE, OR OTHER OBJECT BETWEEN THE HEIGHTS OF TWO (2) FEET AND EIGHT (8) FEET ABOVE THE CURB LINE ELEVATION (OR THE EDGE OF PAVEMENT IF NO CURB EXISTS) SHALL BE PLACED WITHIN A SIGHT TRIANGLE.
21. WHERE SIDEWALKS OR WALKWAYS ABUT PARKING SPACES, THEY ARE TO BE A MINIMUM OF SIX FEE (6.0') WIDE. THE MINIMUM DIMENSION SHALL BE MEASURED FROM THE BACK OF CURB TO BACK OF THE SIDEWALK. RAMPS SHALL BE PROVIDED AT INTERVALS TO ALLOW ADEQUATE ACCESS TO THE PARKING LOT.
22. FIRE LANE STRIPING TO CONFORM TO THE CURRENT TOWN OF MORRISVILLE FIRE DEPARTMENT REGULATIONS.
23. FIRE ACCESS ROADS SHALL BE CAPABLE OF SUPPORTING 85,000 LBS.
24. NO GEOGRID, DEADMENT, OR TIERBACKS ARE TO BE PLACED WITHIN ANY EASEMENT.
25. PAYMENT IN LIEU OF PROVIDING RECREATIONAL LAND FOR MULTI-FAMILY RESIDENTIAL DEVELOPMENT SHALL BE PAID PRIOR TO THE RELEASE OF THE CONSTRUCTION DRAWINGS.
26. THE MAXIMUM QUEUES EXPECTED AT EACH DRIVEWAY ARE 68'. THE AVERAGE QUEUE IS 25'.
27. ANY SITE APPROVAL DOES NOT ACTUALLY PERMIT THE INSTALLATION OF A GENERATOR. A SEPARATE BUILDING PERMIT IS REQUIRED FOR A GENERATOR.
28. ALL DIMENSIONS ARE TO THE BACK OF CURB UNLESS OTHERWISE SPECIFIED.
29. CONCRETE SIDEWALKS SHALL BE 6' WIDE UNLESS OTHERWISE NOTED.
30. ALL BACK OF CURB RADII NOT SHOWN ON THIS SHEET OR SHEET CS101 AND CS102 ARE 2.5' UNLESS OTHERWISE SPECIFIED. SEE SHEET CS101 AND CS102 FOR ENLARGED DETAILED AREAS.
31. PER UDO SECTION 5.7.5.B, THE WESTERN AND EASTERN PERIMETER BUFFERS SHALL BE 50% OF MINIMUM BUFFER WIDTH AND SCREENING REQUIRED OF SECTION 5.7.4.
32. SIGHT TRIANGLES CALCULATED USING CHAPTER 9, SECTION 9-3 OF THE NCDOT ROADWAY DESIGN MANUAL.
33. AERIAL ACCESS IS REQUIRED FOR THE BUILDINGS WITH A MINIMUM OF 15' AND A MAXIMUM OF 30' DISTANCE FROM THE FIRE ACCESS ROAD TO THE BUILDING.
34. CROSSWALKS SHALL BE TYPE 1 UNLESS OTHERWISE NOTED ON THE PLANS.
35.

SITE DATA

PROPERTY OWNER	PBR Subsidary, LLC		
APPLICANT/OWNER REPRESENTATIVE	Casto Southeast Realty Services LLC		
APPLICANT/OWNER ADDRESS	215 East Chatham St. Suite 201, Cary, NC 27511		
SITE ADDRESS	1003, 1005, 1017 MORRISVILLE PKWY		
PIN	0754398520/ 0754396407/0754392368		
PARCEL ID	0157601/0128525/0157600		
LIMITS OF DISTURBANCE:	7.70	AC	
CURRENT PROJECT LOT AREA:	6.87	AC	
PROPOSED PROJECT LOT AREA:	6.81	AC	
EXISTING ZONING	Community Activity Center (CAC)		
WATERSHED	CRABTREE CREEK		
RIVER BASIN	NEUSE		
FLOODPLAIN	N/A PER FIRM 3720075400J		
WATERSHED OVERLAY DISTRICT	N/A		
CURRENT USE	Industrial - Office		
PROPOSED USE	Mixed-Use		
RESIDENTIAL LOT AREA	4.83	AC	
COMMERCIAL LOT AREA	1.98	AC	
PROPOSED NET DENSITY (DU/AC)	115 DU / (4.83 AC) = 23.80 DU/AC		
CURRENT IMPERVIOUS	3.24	AC	
PROPOSED IMPERVIOUS	4.26	AC	
	62.5	%	
	SIDEWALKS	0.56	AC
	BUILDINGS	1.19	AC
	PARKING/DRIVE AISLES	2.51	AC
	WATERBODY	0.01	AC
BUILDING SETBACKS			
FRONT SETBACK	30'		
SIDE SETBACK	10'		
REAR SETBACK	20'		
BUILDING SEPARATION	N/A		
LANDSCAPE BUFFER			
FRONT	20' TYPE 'C' BUFFER		
SIDE	10' TYPE 'C' BUFFER*		
REAR	10' TYPE C BUFFER*		
*10' TYPE 'C' LANDSCAPE BUFFER ALLOWABLE WHERE A 20' OR GREATER TYPE 'C' LANDSCAPE BUFFER IS RECORDED ON ADJACENT PARCEL			
OPEN SPACE REQUIREMENTS			
	Required	Provided	
OPEN SPACE (5% OF PROJECT LOT)	0.34 AC	0.35 AC	
LOT WIDTH AT ROAD FRONTAGE			
MULTI-FAMILY DWELLING	MORRISVILLE PKWY:	604 LF	
BANK/FUTURE PAD	MORRISVILLE PKWY:	258 LF	
BUILDING INFORMATION			
MULTI-FAMILY DWELLING	BLDG 1000	49,341	SF

SITE DATA CONT'D

DIMENSIONAL STANDARDS (UDO 3.4.4)			
	BLDG 2000	37,074	SF
	BLDG 3000	22,369	SF
	BLDG 4000	10,854	SF
	BLDG 5000	22,369	SF
FUTURE PAD		4,200	SF
BANK		1,801	SF
MAXIMUM STRUCTURE HEIGHT FOR OTHER USES (CAC DISTRICT)		70	FT
MAXIMUM STRUCTURE HEIGHT FOR MULTI-FAMILY DWELLINGS (CAC DISTRICT)		60	FT
MAXIMUM STRUCTURE HEIGHT FOR SINGLE-FAMILY ATTACHED DWELLINGS (CAC DISTRICT)		45	FT
TREE COVERAGE DATA			
EXISTING TREE COVERAGE	33.5%	± 2.30	AC
PRESERVED TREE COVERAGE REQUIRED	18%	± 0.41	AC
PRESERVED TREE COVERAGE PROVIDED	18%	± 0.41	AC
PARKING DIMENSION STANDARDS			
STANDARD: 90 DEGREE 9' X 18' MIN.		187 SPACES	
COMPACT: 90 DEGREE 8' X 16 MIN.		25 SPACES	
(COMPACT PARKING CAN NOT EXCEED 20% OF REQUIRED)		12.3% COMPACT SPACES	
PARKING LOT CONFIGURATION TYPE:	MUTLI-FAMIIY IN ACTIVITY CENTER (PER UDO 5.10.6.b.2a)		
PARKING REQUIREMENTS (UDO 5.10)			
	Required	Provided	
VEHICULAR PARKING			
MULTI-FAMILY DWELLING			
STUDIO: 1 PS/STUDIO * 13 UNITS	13	61 GARAGES 151 SURFACE SPACES (4 CURRENT EV SPACES, 2 FUTURE EV SPACES)	
1-BDRM: 1 PS/1 BDRM * 64 UNITS	64		
2-BDRM: 1.5 PS/2 BDRM * 38 UNITS	58		
SWIMMING POOL: 1PS/140 SF POOL SURFACE WATER AREA * 1145 SF	9		
MAIL-ROOM: (5PS/100 UNITS + 1PS/ADDITIONAL 50 UNITS) *115 UNITS	6		
HEALTHY EXERCISE FACILITY: 1PS/200 SF * 980 SF	5		
Future Pad Parking	42		
Bank Parking: (1PS/300 SF) *1801 SF	6		
TOTAL	**203**	**212**	
BICYCLE PARKING			
Residential (min. 2 per bldg)	10	10	
Swimming pool (max. 6 or 1/50 parking spaces)	6	6	
Future Pad	2	2	
Bank (2 per bldg)	2	2	
TOTAL	**20**	**20**	

SEPI

[A DIVISION OF TRANSYSTEMS]

RALEIGH | WILMINGTON
CHARLOTTE | ASHEVILLE

1 GLENWOOD AVE. | SUITE 600
RALEIGH, NC 27603
PHONE | 919.789.9977

transystems.com

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811 — 3 WORKING DAYS BEFORE YOU DIG FOR THE LOCATION OF UNDERGROUND FACILITIES. Know what's below. Call before you dig.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE:
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

Per N.C.G.S. [redacted]

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Morrisville Parkway Mixed Use

1003, 1005, 1017 Morrisville Pkwy
Morrisville, NC 27560

PREPARED FOR:
PBR SUBSIDIARY LLC
c/oCASTO Southeast Realty Services
215 E. Chatham St., Suite 201
Raleigh, NC 27511

MINOR MODIFICATION

Site Plan/Subdivision & Construction Plan
FOR APPROVED COMBO-21-0007

		DATE
PROJECT:	SE20.110.01	
ISSUE:	MINMOD-22-0132 APPROVAL	10.27.2022

REVISIONS:

PROJ. MGR: J. WAGONER
DRAWN BY: J.ADRIATICO
CHECKED BY: J. WAGONER

TOWN OF MORRISVILLE PROJECT # (MINMOD-22-0132)

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH TOWN OF MORRISVILLE, TOWN OF CARY, WAKE COUNTY & NCDOT STANDARDS AND SPECIFICATIONS

OVERALL SITE PLAN

CS100

X:\2020\SE20.110.01 Casto - Morrisville Site\LD\CAD\MnrSPModShts\07-CS100 OVERALL SITE PLAN.dwg, 10/6/2022 2:45:03 PM, dlavezzo, _DWG To PDF.pc3

APPENDIX F:

Funding Opportunities

Funding Opportunities

Federal

Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Discretionary Grant Program

RAISE discretionary grant funding program, previously known as TIGER grants and then later as BUILD grants, includes eligibility for a wide variety of transportation projects planning and implementation. RAISE grants are expected to help communities carry out projects with significant local or regional impact. A competitive grant application process is required. The minimum award amount for planning projects is $5 million ($1 million in rural areas), and the maximum amount differs between two funding streams ($25 million if funded through Bipartisan Infrastructure Bill (BIL) funding and $45 million if funded through the FY 2022 Appropriations Act funding). A 20% local match is generally required, with a few exceptions in the following cases:

- Rural communities
- Areas of Persistent Poverty
- Historically Disadvantaged Communities are eligible to apply for 100% federal funding

The Town of Chapel Hill recently received $1 million in federal RAISE grant funding to invest in feasibility studies and the expansion of the Town's greenway system.

Active Transportation Infrastructure Investment Program (ATIIP)

This is a new funding program in the Infrastructure Investment and Jobs Act (IIJA, also known as the Bipartisan Infrastructure Bill (BIL). Under the Active Transportation Infrastructure Investment Program, local, regional, state, and tribal governments can apply to receive funding for active transportation projects and planning grants that build upon a local, regional, or state network or key network corridors. The infrastructure projects and planning studies funded under this program must account for safety and facilitate more people walking or biking. A 20% match is required for this grant.

Surface Transportation Block Grant (STBG)

STBG provides a flexible funding source to best address State and local transportation needs and covers a wide variety of potential projects including highway, bridge, transit capital and bicycle and pedestrian projects. A minimum of 20% local match is required. The State of North Carolina receives an apportionment on an annual basis based on an established allocation formula. MPOs with over 200,000 in population including the CAMPO also receive pass-through funds as STBG-DA. NCDOT allocates STBG funding that is not designated for larger MPOs through the STI Prioritization process that informs the STIP development every two years.

Congestion Mitigation and Air Quality (CMAQ)

CMAQ funding supports surface transportation projects and other related efforts that contribute to air quality improvements and provide congestion relief. Funds may be used for a transportation project or

program that is likely to contribute to the attainment or maintenance of a national ambient air quality standard and is included in an MPO's current transportation plan and TIP (Transportation Improvement Program) or current STIP in areas without an MPO. Funding is apportioned to North Carolina based on the population in nonattainment and maintenance areas of the state and the severity of air quality problem. NC's allocation of CMAQ funding is divided between three funding categories:

- **Statewide CMAQ** funding category: those funds are administered by NCDOT and are awarded to prioritized NCDOT-driven CMAQ eligible projects either on a statewide tier facility or involving a system wide improvement within nonattainment and maintenance areas. This category accounts for 35% of the total North Carolina CMAQ apportionment and is not subject to regional or subregional allocations or the allocation formula.
- **Subregional CMAQ** funding category: those funds are locally-administered and awarded at the MPO/RPO level to projects within eligible counties. This CMAQ funding category would be most applicable to a bicycle and pedestrian or greenway project. The local project sponsor is responsible for providing the required match and meeting federal funding requirements. This category accounts for 60% of the total North Carolina CMAQ apportionment. See CAMPO Discretional Projects under Regional Funding for further discussion about the application process in Wake County.
- **Regional CMAQ** funding category: those funds are locally-administered and awarded to projects spanning more than one air quality region that cannot be considered subregional projects. Air quality regions are Catawba, Great Smoky Mountains National Park, Metrolina, Rocky Mount, Triad and Triangle. The local project sponsor is responsible for providing the required match. This category is less frequently used and accounts for 5% of the total North Carolina CMAQ apportionment.

A minimum of 20% local match is required for CMAQ funding application.

Carbon Reduction Program (CRP)

CRP was a new funding category established with the passage of the Bipartisan Infrastructure Law (BIL) in 2021. CRP provides funds for projects designed to reduce transportation emissions, defined as carbon dioxide (CO2) emissions from on-road highway sources.

Some of the eligible project types include, but are not limited to the following project categories:

- a transportation alternative including, but not limited to, the construction, planning, and design of on-road and off-road trail facilities for pedestrians, bicyclists, and other nonmotorized forms of transportation;
- a project to establish or operate a traffic monitoring, management, and control facility or program, including advanced truck stop electrification systems;
- a public transportation project;
- a project for advanced transportation and congestion management technologies;
- deployment of infrastructure-based intelligent transportation systems capital improvements and the installation of vehicle-to-infrastructure communications equipment;
- a project to replace street lighting and traffic control devices with energy-efficient alternatives;
- a project or strategy designed to support congestion pricing, shifting transportation demand to nonpeak hours or other transportation modes, increasing vehicle occupancy rates, or otherwise reducing demand for roads, including electronic toll collection, and travel demand management strategies and programs;

- efforts to reduce the environmental and community impacts of freight movement; and
- a project that supports deployment of alternative fuel vehicles.

Each State's apportionment of CRP funding is calculated based on a percentage specified in BIL; North Carolina further suballocates the CRP funds based on the following required percentages:

- 65% of a State's CRP apportionment is to be obligated in specific areas in proportion to their relative shares of the State's population:
    - Urbanized areas with an urbanized area population greater than 200,000:
    - Urbanized areas with an urbanized area population of at least 50,000 but no more than 200,000:
    - Urban areas with population at least 5,000 and no more than 49,999.
    - Areas with population of less than 5,000.
- The remaining 35% of the State's CRP apportionment can be obligated in any area of the State

States are required to divide the funding to urbanized areas with a population of at least 50,000 based on the relative population of the areas. CPR funds allocated to the CAMPO region are expected to be awarded to projects through the CAMPO Discretional Projects application process.

State

STI Prioritization and STIP

NCDOT manages the STI Prioritization process which results in an update to the STIP every two or four years. STIP identifies construction funding for transportation projects, funded through a combination of federal and state funding sources. The Town of Morrisville could submit a bicycle or pedestrian project through the Capital Area MPO (CAMPO) process to be considered for STI Prioritization and scoring and inclusion in the STIP. This opportunity is dependent on available funding allocated to NCDOT Division 5. Roadway projects that are candidates for STI Prioritization submittal in the CAMPO region have to be first identified in the Metropolitan Transportation Plan.[1] The Metropolitan Transportation Plan for the region is updated every four years, and the next MTP update for the CAMPO region is expected to be completed in early 2026.

NCDOT Highway Safety Improvement Program (HSIP) Hazard Elimination

Safety grant program utilizing federal and state funding to address safety and potential safety issues. Projects are selected based on a cost-benefit ratio with safety benefits being classified in terms of crashes reduced. The program is 90% federally funded and 10% state funded. The cost of these projects generally ranges from $400,000 to $1 million. A Safety Oversight Committee (SOC) reviews and submits projects to the Board of Transportation (BOT) for funding. Projects are prioritized on a cost-benefit basis, where selected projects will then make way into the STIP.

[1] https://www.campo-nc.us/funding/spot/prioritization-70-spot-7

Governor's Highway Safety Program Grant

Safety grant program specifically related to preventing crashes on North Carolina roads. (https://www.ncdot.gov/initiatives-policies/safety/ghsp/Pages/Grants.aspx)

Eat Smart, Move More NC

This program provides a variety of links and resources, including potential funding sources for public health initiatives. (https://www.eatsmartmovemorenc.com/)

Bicycle Amenities Program

The NC Division of Public Health (DPH) conducts a competitive grant program for funding bicycle racks and repair stations. Once awarded, communities must pick up the racks and fixit stations from the state's distribution facility and transport and install in their community. Contact the DPH Built Environment & Physical Activity Coordinator for more information and funding cycles.

Non-Infrastructure Transportation Alternatives Program

Provides periodic funding for programs and activities that aims to shift community behavior, attitudes, and social norms through education, encouragement, and enforcement strategies to increase the safety and convenience for children to walk and bicycle to school https://connect.ncdot.gov/projects/BikePed/Documents/SRTS%20Non-Infrastructure%20Grant%20Guidelines.pdf

NC Parks and Recreation Recreational Trails Grants

The North Carolina Division of Parks and Recreation manages grant funding under the Recreational Trails Program (RTP). The RTP is a $1.5-million federal grant program designated to help states provide and maintain trails for motorized and non-motorized recreational trail use; RTP funding is provided on a reimbursement basis where the funds must be spent and reimbursement requested upon completion of the project; a state, federal or local government or qualified nonprofit organization is an eligible entity. Additional information available is at https://trails.nc.gov/trail-grants.

Trust Fund PARTF Program

Since 1994, the North Carolina Parks and Recreation Trust Fund (PARTF) has been awarding matching grants to local governments for parks and recreational facilities. Counties, incorporated municipalities, and public authorities, as defined by G.S. 159-7, are eligible applicants. A local government can request a maximum of $500,000 with each application. The appraised value of land to be donated to the applicant can be used as part of the match. Additional information available at https://www.ncparks.gov/more-about-us/parks-recreation-trust-fund/applicants.

Community Development Block Grant Program

State Community Development Block Grant (CDBG) funds are provided by the U.S. Department of Housing and Urban Development (HUD) to the state of North Carolina; smaller communities may apply for assistance for community projects that benefit low to middle income households. Projects are intended to support decent housing and suitable living environments and expanding economic

opportunities. All North Carolina small cities are eligible to apply for funds except for 23 entitlement cities that receive funds directly from the U.S. Department of Housing and Urban Development (HUD) (Morrisville does not receive direct funds). Each year, CDBG provides funding to local governments for hundreds of critically-needed community improvement projects throughout the state. CDBG grants can fund infrastructure improvements including reconstruction of streets and sidewalks, drainage improvements, upgrade of water supply and distribution systems, and construction or repair of sewer lines, including infrastructure to housing projects; greenways are not called out as specifically eligible projects but a section of a shared use path along a street could be potentially eligible if there is a linkage to community housing or key community resources. Priority is given to the counties in the top 80 percent ranking based on economic distress. Wake County is currently a Tier 3 (least distressed) County, which makes CDBG grant funding applications from jurisdictions in Wake County less competitive. Additional information is available https://www.nccommerce.com/grants-incentives/public-infrastructure-funds/infrastructure-state-rural-grants.

Implementation as Part of Roadway Projects Implementation and Complete Streets Improvements

As part of roadway projects planning and implementation, NCDOT reviews roadway projects for multimodal elements based on the Complete Streets Policy. Pedestrian, bicycling, and transit stop improvements can be included as part of a roadway project, if recommendations for those improvements are reflected in a local or regionally adopted plan. (https://connect.ncdot.gov/projects/BikePed/Pages/Complete-Streets.aspx)

Bridge replacement is a special case when it would be particularly important to consider bicycle and pedestrian improvements that can be included. Similarly, overpasses over I-40 in and near Morrisville warrant a specific consideration for bicycle and pedestrian facilities that can be improved, to address the issue of I-40 serving as a barrier to multimodal transportation in and around Morrisville.

Implementation as Part of Maintenance Activities

Municipalities and NCDOT can implement some safety treatments as part of typical maintenance activities. For example, when repaving a secondary road, where sufficient width exists, NCDOT can add reflective shoulder striping as a low cost, high impact safety measure. NCDOT provides five-year plans that include resurfacing schedules. The following website includes a link to an interactive map of corridors scheduled for maintenance in over the current five-year cycle: https://connect.ncdot.gov/resources/Asset-Management/HMIP/Pages/default.aspx.

Clean Water Management Trust Fund

The Clean Water Management Trust Fund is available to any state agency, local government, or non-profit whose primary purpose is the conservation, preservation, and restoration of North Carolina's environmental and natural resources. Conservation projects have to address one or multiple of the following target areas:

- enhance or restore degraded waters;
- protect unpolluted waters, and/or contribute toward a network of riparian buffers and greenways for environmental, educational, and recreational benefits
- provide buffers around military bases to protect the military mission;

- acquire land that represents the ecological diversity of North Carolina; and
- acquire land that contributes to the development of a balanced State program of historic properties.

Additional information is available at nclwf.nc.gov/grants.

Regional

NC Capital Area MPO (CAMPO) Discretionary Call for Projects

CAMPO holds a competitive call for discretionary transportation projects funding on a regular basis. This overall funding category and selection process is referred to as Locally Administered Projects Program, or LAPP-this includes STBG-DA funds allocated to the region, Transportation Alternatives Program (TAP-DA) funds as well as Congestion Mitigation and Air Quality Improvement Program (CMAQ) funds and a portion of toll proceeds. Based on training presentation materials from 2023[2], CAMPO LAPP funding target investment mix included 65% allocation to roadway projects, 27% allocation to bicycle and pedestrian projects (for a total of $6.75 million) and 8% allocation to transit projects. A local match of at least 20 percent is required and local jurisdictions have to complete a LAPP training in order to be able to apply. For a greenway project to be eligible, it has to be recognized as a statewide, regional or local tier project on the MTP (and currently the Stirrup Iron Creek Greenway corridor is recognized as a bicycle and pedestrian project of local significance, not regional significance, in the regional plans). An annual application cycle is expected, with the application deadline of October 31, 2023, during the 2023 call for projects, targeting Fiscal Year 2025 funding.

Municipal/Local

Implementation as Part of Residential and Commercial Development

As required in the Town of Morrisville Unified Development Ordinance Section 5.8.8 (Pedestrian Access and Circulation)[3], most new development types except individual lot single-family residential developments or manufactured homes on an existing lot are required to incorporate greenway and sidepath improvements identified in the Comprehensive Plan. Construction of the greenway/sidepath, as well as providing an easement is expected. The Town of Morrisville would need to ensure that the preferred alignment of the Stirrup Iron Creek Greenway is included in the Comprehensive Plan, upon completion of the study.

Additional coordination with the Town of Cary would be required for the Town of Cary to consider integrating the preferred Stirrup Iron Creek Greenway alignment as part of the Town of Cary Greenways Master Plan, currently going through an update and expected to be finalized in the spring of 2024. An inclusion in the Town of Cary Greenways Master Plan would provide the opportunity to designate greenway easements as part of future redevelopment on the Town of Cary side, where the greenway corridor might switch back and forth between jurisdictions.

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[2] CAMPO. LAPP Application and Guidebook. https://www.campo-nc.us/funding/locally-administered-projects-program/policies administration

[3] https://user-cjghrlw.cld.bz/Morrisville-Unified-Development-Ordinance-Sept-2023-1/282/v

Municipal Property Tax

Municipal property tax proceeds are broadly eligible for transportation projects. Additional funds would require either raising the tax rate or re-allocating funding from other purposes.

Municipal Vehicle Tax for Transportation Improvements

NC statutes authorize the levy of an annual municipal vehicle tax upon vehicles registered in the town/municipality to be used to fund projects on public streets. Municipalities can designate a dedicated line item in the annual budget and Capital Improvement Program for neighborhood traffic calming, intersection and safety improvements. As an example, the Town of Waxhaw, North Carolina sets aside funding for "Small Transportation Project Fund" partially funded with municipal vehicle tax. (https://www.ncleg.gov/EnactedLegislation/Statutes/PDF/BySection/Chapter_20/GS_20-97.pdf)

Powell Bill Funds

North Carolina municipalities receive financial assistance from the State to help pay for the construction, maintenance, and repair of municipal streets, bikeways, and sidewalks. North Carolina levies motor fuel taxes under a formula that increases taxes when the wholesale price of motor fuels increases. The State appropriates a certain percentage of this revenue, plus an additional percentage of the North Carolina Highway Trust Fund's net proceeds, to eligible municipalities across the State. The legislation that first established this distribution is known as the Powell Bill. The available funds are distributed among eligible municipalities. Powell Bill funds can be used for street, sidewalk, and bikeway maintenance, improvements, and design, among other transportation uses. (https://connect.ncdot.gov/municipalities/State-Street-Aid/Pages/default.aspx)

General Obligation Bonds

Long-term bonds may be approved through voter referendum, to be repaid by property taxes. The purpose is established prior to the referendum vote. Transportation projects can be a specified purpose of a bond referendum package.

Municipal Service Districts (MSDs)

Municipalities can designate Municipal Service Districts, where additional property taxes may be assessed to fund projects and services within the districts. Downtown Municipal Service Districts are most common.

Private Foundation Grants

AARP Community Challenge Grants

The AARP Community Challenge grant funding cycle in 2021 awarded $3.2 million to support 244 quick-action projects across the U.S., funding a variety of improvements in urban, rural and suburban communities to support residents of all ages. Community Challenge grants help improve public spaces, transportation, housing, and civic engagement with an emphasis on the needs of people 50 or

older. Some of the transportation improvements funded recently included bikeway and pedestrian improvements. Typically, those grants are under $20,000 each.[4]

American Hiking Society's National Trails Fund Grant

This organization offers micro-grants ($500-$3,000) to active members of the alliance of hiking organizations to improve hiker access or hiker safety. Recipient organization must be a 501(c)(3) non-profit. (https://www.aarp.org/livable-communities/community-challenge/info-2023/2023-challenge.html)

Better Block Foundation Grants

The Better Block Foundation is a 501(c)3 nonprofit that educates, equips, and empowers communities and their leaders to reshape and reactivate built environments to promote the growth of healthy and vibrant neighborhoods. Its services support the reimagination of public spaces to include active transportation like walking and bicycling. (https://www.betterblock.org/)

National Association of Realtors Placemaking Grants

The Placemaking Grant funds the creation of new, outdoor public spaces and destinations in a community, and it is accessible through state and local REALTOR® Associations. Potential funded projects include demonstration projects like parklets, pop-up parks, pedestrian plazas, bike lanes, and amenities like street furniture, paint, signage, materials, landscaping, and murals. (https://www.nar.realtor/grants/placemaking-grant).

[4] AARP (July 28, 2021). AARP Community Challenge 2021 Grantees. https://www.aarp.org/livable-communities/community-challenge/info-2021/2021-grantees.html