

# Capacity Analysis for Planning of Junctions

## Input Worksheet

Project Name:	Research Forest and Lake Woodlands	<b>Critical Lane Volume Sum</b>			
Project Number:	4609.001	<b>Acceptable Configurations</b>			
Location	2030 PM Reasearch Forest Drive and Grogans Mill Road	< 1200	1200 - 1399	1400 - 1599	≥ 1600
Date	April 17, 2019	14	9	1	8

## Results for Intersections

#	TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Ranking
			CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C		
1	Conventional	<a href="#">FULL</a>	/	/	/	/	/	/	/	/	1316	<u>0.82</u>	0.82	11
2	Conventional Shared RT LN	<a href="#">CSRL</a>	/	/	/	/	/	/	/	/	1416	<u>0.88</u>	0.88	14
3.1	Quadrant Roadway	<a href="#">S-W</a>	/	/	1134	<u>0.71</u>	/	/	999	<u>0.62</u>	980	<u>0.61</u>	0.71	5
3.2		<a href="#">N-E</a>	996	<u>0.62</u>	/	/	943	<u>0.59</u>	/	/	1226	<u>0.77</u>	0.77	7
3.3		<a href="#">S-E</a>	/	/	1289	<u>0.81</u>	1289	<u>0.81</u>	/	/	1116	<u>0.70</u>	0.81	10
3.4		<a href="#">N-W</a>	956	<u>0.60</u>	/	/	/	/	1119	<u>0.70</u>	1061	<u>0.66</u>	0.70	4
4.1	Partial Displaced Left Turn	<a href="#">N-S</a>	478	<u>0.30</u>	791	<u>0.49</u>	/	/	/	/	1080	<u>0.67</u>	0.67	1
4.2		<a href="#">E-W</a>	/	/	/	/	625	<u>0.39</u>	945	<u>0.59</u>	1117	<u>0.70</u>	0.70	2
5	Displaced Left Turn	<a href="#">FULL</a>	282	<u>0.18</u>	948	<u>0.59</u>	734	<u>0.46</u>	945	<u>0.59</u>	1268	<u>0.79</u>	0.79	9
6.1	Restricted Crossing U-Turn	<a href="#">N-S</a>	1424	<u>0.89</u>	1648	<u>1.03</u>	2878	<u>1.80</u>	1912	<u>1.20</u>	/	/	1.80	15
6.2		<a href="#">E-W</a>	1116	<u>0.70</u>	1005	<u>0.63</u>	1230	<u>0.77</u>	865	<u>0.54</u>	/	/	0.77	8
7.1	Median U-Turn	<a href="#">N-S</a>	865	<u>0.54</u>	938	<u>0.59</u>	/	/	/	/	1119	<u>0.70</u>	0.70	3
7.2		<a href="#">E-W</a>	/	/	/	/	1198	<u>0.75</u>	858	<u>0.54</u>	1202	<u>0.75</u>	0.75	6
8.1	Partial Median U-Turn	<a href="#">N-S</a>	736	<u>0.46</u>	724	<u>0.45</u>	/	/	/	/	1320	<u>0.83</u>	0.83	12
8.2		<a href="#">E-W</a>	/	/	/	/	760	<u>0.48</u>	808	<u>0.50</u>	1320	<u>0.83</u>	0.83	12

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### Results for Roundabouts

#	TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Ranking
		Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3		
9.1	<a href="#">50 ICD</a>	-0.39			4.04			-1.69			-17.31			4.04	5
9.2	<a href="#">75 ICD</a>	-0.45			3.78			-2.11			#####			3.78	4
9.3	<a href="#">1 X 1</a>	6.44			2.98			6.17			5.17			6.44	7
9.4	<a href="#">1 X 2</a>	3.04			1.33	1.66		3.68			2.65	2.53		3.68	3
9.5	<a href="#">2 X 1</a>	2.04	4.39		2.57			4.02	2.15		3.73			4.39	5
9.6	<a href="#">2 X 2</a>	1.09	2.08		2.01	1.82		2.61	1.28		1.17	1.42		2.61	1
9.7	<a href="#">3 X 3</a>	0.48	1.49	2.70	0.12	1.13	1.38	1.75	2.23	1.70	0.29	2.13	1.85	2.70	2

### Results for Interchanges

#	TYPE OF INTERCHANGE	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Ranking
			CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C		
10.1	Diamond	<a href="#">N-S</a>					978	0.61	726	0.45					0.61	5
10.2		<a href="#">E-W</a>					1065	0.67	958	0.60					0.67	6
11.1	Partial Cloverleaf	<a href="#">N-S</a>					886	0.55	546	0.34					0.55	4
11.2		<a href="#">E-W</a>					878	0.62	780	0.49					0.55	3
13.1	Displaced Left Turn	<a href="#">N-S</a>	561	0.35			599	0.37	539	0.34			628	0.39	0.39	1
13.2		<a href="#">E-W</a>	1079	0.67			850	0.53	900	0.56			857	0.54	0.67	7
14.1	Double Crossover Diamond	<a href="#">N-S</a>	365	0.23	366	0.23	346	0.22	673	0.42	641	0.40	420	0.26	0.42	2
14.2		<a href="#">E-W</a>	1116	0.70	1312	0.82	632	0.40	968	0.61	1117	0.70	897	0.56	0.82	10
15.1	Single Point	<a href="#">N-S</a>	581	0.36			1176	0.73					656	0.41	0.73	9
15.2		<a href="#">E-W</a>	1116	0.70			1117	0.70					897	0.56	0.70	8