

# 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:	2045 AM Reasearch Forest Drive and Grogans Mill Road	< 1200	1200 - 1399	1400 - 1599	≥ 1600
Date:	April 18, 2019	12	11	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>	/	/	/	/	/	/	/	/	1299	<u>0.81</u>	0.81	13
2	Conventional Shared RT LN	<a href="#">CSRL</a>	/	/	/	/	/	/	/	/	1489	<u>0.93</u>	0.93	14
3.1	Quadrant Roadway	<a href="#">S-W</a>	/	/	1031	<u>0.64</u>	/	/	980	<u>0.61</u>	1136	<u>0.71</u>	0.71	3
3.2		<a href="#">N-E</a>	1115	<u>0.70</u>	/	/	1169	<u>0.73</u>	/	/	1179	<u>0.74</u>	0.74	4
3.3		<a href="#">S-E</a>	/	/	1032	<u>0.64</u>	1032	<u>0.64</u>	/	/	1269	<u>0.79</u>	0.79	10
3.4		<a href="#">N-W</a>	960	<u>0.60</u>	/	/	/	/	921	<u>0.58</u>	1278	<u>0.80</u>	0.80	11
4.1	Partial Displaced Left Turn	<a href="#">N-S</a>	536	<u>0.33</u>	946	<u>0.59</u>	/	/	/	/	1283	<u>0.80</u>	0.80	12
4.2		<a href="#">E-W</a>	/	/	/	/	844	<u>0.53</u>	926	<u>0.58</u>	1194	<u>0.75</u>	0.75	5
5	Displaced Left Turn	<a href="#">FULL</a>	307	<u>0.19</u>	554	<u>0.35</u>	1094	<u>0.68</u>	926	<u>0.58</u>	886	<u>0.55</u>	0.68	2
6.1	Restricted Crossing U-Turn	<a href="#">N-S</a>	1727	<u>1.08</u>	1587	<u>0.99</u>	3283	<u>2.05</u>	2244	<u>1.40</u>	/	/	2.05	15
6.2		<a href="#">E-W</a>	1068	<u>0.67</u>	927	<u>0.58</u>	1202	<u>0.75</u>	1131	<u>0.71</u>	/	/	0.75	6
7.1	Median U-Turn	<a href="#">N-S</a>	805	<u>0.50</u>	752	<u>0.47</u>	/	/	/	/	921	<u>0.58</u>	0.58	1
7.2		<a href="#">E-W</a>	/	/	/	/	1188	<u>0.74</u>	1236	<u>0.77</u>	1066	<u>0.67</u>	0.77	9
8.1	Partial Median U-Turn	<a href="#">N-S</a>	508	<u>0.32</u>	480	<u>0.30</u>	/	/	/	/	1222	<u>0.76</u>	0.76	7
8.2		<a href="#">E-W</a>	/	/	/	/	997	<u>0.62</u>	1189	<u>0.74</u>	1222	<u>0.76</u>	0.76	7

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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			18.73			-0.75			11.24			18.73	7
9.2	<a href="#">75 ICD</a>	-0.45			13.03			-0.90			8.44			13.03	6
9.3	<a href="#">1 X 1</a>	7.27			5.59			5.03			4.90			7.27	5
9.4	<a href="#">1 X 2</a>	3.37			2.24	3.35		2.76			2.60	2.31		3.37	3
9.5	<a href="#">2 X 1</a>	2.63	4.64		4.32			2.78	2.25		3.90			4.64	4
9.6	<a href="#">2 X 2</a>	1.39	2.15		2.15	1.83		1.69	1.24		1.80	2.59		2.59	1
9.7	<a href="#">3 X 3</a>	0.47	2.08	3.02	0.24	1.85	2.53	1.02	1.75	1.73	0.47	1.98	1.83	3.02	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>					1120	0.70	1092	0.68					0.70	6
10.2		<a href="#">E-W</a>					984	0.62	1026	0.64					0.64	4
11.1	Partial Cloverleaf	<a href="#">N-S</a>					515	0.32	352	0.22					0.32	1
11.2		<a href="#">E-W</a>					1287	0.70	982	0.61					0.80	9
13.1	Displaced Left Turn	<a href="#">N-S</a>	797	0.50			933	0.58	610	0.38			1185	0.74	0.74	7
13.2		<a href="#">E-W</a>	958	0.60			775	0.48	756	0.47			1094	0.68	0.68	5
14.1	Double Crossover Diamond	<a href="#">N-S</a>	569	0.36	693	0.43	420	0.26	665	0.42	502	0.31	788	0.49	0.49	2
14.2		<a href="#">E-W</a>	989	0.62	1337	0.84	720	0.45	914	0.57	1346	0.84	859	0.54	0.84	10
15.1	Single Point	<a href="#">N-S</a>	837	0.52			813	0.51					835	0.52	0.52	3
15.2		<a href="#">E-W</a>	989	0.62			1257	0.79					859	0.54	0.79	8