

# 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 PM Reasearch Forest Drive and Grogans Mill Road	< 1200	1200 - 1399	1400 - 1599	≥ 1600
Date	April 18, 2019	7	11	5	9

## 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>	/	/	/	/	/	/	/	/	1430	<u>0.89</u>	0.89	10
2	Conventional Shared RT LN	<a href="#">CSRL</a>	/	/	/	/	/	/	/	/	1600	<u>1.00</u>	1.00	14
3.1	Quadrant Roadway	<a href="#">S-W</a>	/	/	1289	<u>0.81</u>	/	/	1122	<u>0.70</u>	1100	<u>0.69</u>	0.81	6
3.2		<a href="#">N-E</a>	1128	<u>0.70</u>	/	/	1057	<u>0.66</u>	/	/	1385	<u>0.87</u>	0.87	8
3.3		<a href="#">S-E</a>	/	/	1459	<u>0.91</u>	1459	<u>0.91</u>	/	/	1254	<u>0.78</u>	0.91	11
3.4		<a href="#">N-W</a>	1084	<u>0.68</u>	/	/	/	/	1257	<u>0.79</u>	1198	<u>0.75</u>	0.79	4
4.1	Partial Displaced Left Turn	<a href="#">N-S</a>	554	<u>0.35</u>	901	<u>0.56</u>	/	/	/	/	1212	<u>0.76</u>	0.76	2
4.2		<a href="#">E-W</a>	/	/	/	/	698	<u>0.44</u>	1059	<u>0.66</u>	1260	<u>0.79</u>	0.79	5
5	Displaced Left Turn	<a href="#">FULL</a>	325	<u>0.20</u>	659	<u>0.41</u>	821	<u>0.51</u>	1059	<u>0.66</u>	1009	<u>0.63</u>	0.66	1
6.1	Restricted Crossing U-Turn	<a href="#">N-S</a>	1595	<u>1.00</u>	1855	<u>1.16</u>	3213	<u>2.01</u>	2136	<u>1.33</u>	/	/	2.01	15
6.2		<a href="#">E-W</a>	1256	<u>0.79</u>	1134	<u>0.71</u>	1391	<u>0.87</u>	973	<u>0.61</u>	/	/	0.87	9
7.1	Median U-Turn	<a href="#">N-S</a>	982	<u>0.61</u>	1067	<u>0.67</u>	/	/	/	/	1257	<u>0.79</u>	0.79	3
7.2		<a href="#">E-W</a>	/	/	/	/	1346	<u>0.84</u>	962	<u>0.60</u>	1351	<u>0.84</u>	0.84	7
8.1	Partial Median U-Turn	<a href="#">N-S</a>	836	<u>0.52</u>	826	<u>0.52</u>	/	/	/	/	1485	<u>0.93</u>	0.93	12
8.2		<a href="#">E-W</a>	/	/	/	/	850	<u>0.53</u>	905	<u>0.57</u>	1485	<u>0.93</u>	0.93	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>	-0.37			5.28			-1.51			-7.96			5.28	5
9.2	<a href="#">75 ICD</a>	-0.42			4.84			-1.83			-13.80			4.84	4
9.3	<a href="#">1 X 1</a>	9.91			3.58			8.60			6.77			9.91	7
9.4	<a href="#">1 X 2</a>	4.28			1.59	1.99		4.83			3.46	3.30		4.83	3
9.5	<a href="#">2 X 1</a>	3.15	6.76		3.01			5.59	3.01		4.65			6.76	5
9.6	<a href="#">2 X 2</a>	1.56	2.92		2.53	2.27		3.46	1.69		1.38	1.68		3.46	1
9.7	<a href="#">3 X 3</a>	0.74	2.30	4.01	0.15	1.35	1.64	2.43	3.13	2.34	0.39	2.75	2.34	4.01	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>					1121	0.70	828	0.52					0.70	5
10.2		<a href="#">E-W</a>					1196	0.75	1074	0.67					0.75	6
11.1	Partial Cloverleaf	<a href="#">N-S</a>					1006	0.63	625	0.39					0.63	4
11.2		<a href="#">E-W</a>					984	0.70	872	0.55					0.61	3
13.1	Displaced Left Turn	<a href="#">N-S</a>	649	0.41			691	0.43	610	0.38			714	0.45	0.45	1
13.2		<a href="#">E-W</a>	1213	0.76			951	0.59	1009	0.63			961	0.60	0.76	7
14.1	Double Crossover Diamond	<a href="#">N-S</a>	420	0.26	416	0.26	400	0.25	771	0.48	732	0.46	478	0.30	0.48	2
14.2		<a href="#">E-W</a>	1254	0.78	1465	0.92	705	0.44	1086	0.68	1245	0.78	1006	0.63	0.92	10
15.1	Single Point	<a href="#">N-S</a>	671	0.42			1303	0.81					506	0.32	0.81	9
15.2		<a href="#">E-W</a>	1254	0.78			1254	0.78					1006	0.63	0.78	8