

# 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 AM Lake Woodlands Drive and Grogans Mill Road	< 1200	1200 - 1399	1400 - 1599	≥ 1600
Date:	April 17, 2019	14	7	1	10

## 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>	/	/	/	/	/	/	/	/	1223	0.76	0.76	7
2	Conventional Shared RT LN	<a href="#">CSRL</a>	/	/	/	/	/	/	/	/	1681	1.05	1.05	13
3.1	Quadrant Roadway	<a href="#">S-W</a>	/	/	698	0.44	/	/	848	0.53	1128	0.70	0.70	3
3.2		<a href="#">N-E</a>	1075	0.67	/	/	862	0.54	/	/	1448	0.90	0.90	12
3.3		<a href="#">S-E</a>	/	/	712	0.45	712	0.45	/	/	1248	0.78	0.78	9
3.4		<a href="#">N-W</a>	747	0.47	/	/	/	/	877	0.55	1327	0.83	0.83	11
4.1	Partial Displaced Left Turn	<a href="#">N-S</a>	583	0.36	599	0.37	/	/	/	/	1126	0.70	0.70	2
4.2		<a href="#">E-W</a>	/	/	/	/	520	0.33	892	0.56	1135	0.71	0.71	4
5	Displaced Left Turn	<a href="#">FULL</a>	583	0.36	599	0.37	603	0.38	892	0.56	1049	0.66	0.66	1
6.1	Restricted Crossing U-Turn	<a href="#">N-S</a>	1254	0.78	1277	0.80	1910	1.19	2006	1.25	/	/	1.25	15
6.2		<a href="#">E-W</a>	1117	0.70	1216	0.76	1721	1.08	1098	0.69	/	/	1.08	14
7.1	Median U-Turn	<a href="#">N-S</a>	734	0.46	865	0.54	/	/	/	/	1248	0.78	0.78	9
7.2		<a href="#">E-W</a>	/	/	/	/	1225	0.77	810	0.51	1128	0.70	0.77	8
8.1	Partial Median U-Turn	<a href="#">N-S</a>	635	0.40	885	0.55	/	/	/	/	1214	0.76	0.76	5
8.2		<a href="#">E-W</a>	/	/	/	/	1022	0.64	842	0.53	1214	0.76	0.76	5

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## Input Worksheet

### 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>	<u>-0.94</u>			<u>10.40</u>			<u>25.65</u>			<u>-5.08</u>			25.65	7
9.2	<a href="#">75 ICD</a>	<u>-1.15</u>			<u>6.87</u>			<u>10.59</u>			<u>-7.67</u>			10.59	6
9.3	<a href="#">1 X 1</a>	<u>4.08</u>			<u>2.76</u>			<u>3.43</u>			<u>6.28</u>			6.28	5
9.4	<a href="#">1 X 2</a>	<u>2.39</u>			<u>0.98</u>	<u>1.78</u>		<u>2.58</u>			<u>2.61</u>	<u>3.67</u>		3.67	3
9.5	<a href="#">2 X 1</a>	<u>2.20</u>	<u>1.88</u>		<u>2.12</u>			<u>1.90</u>	<u>1.53</u>		<u>4.20</u>			4.20	4
9.6	<a href="#">2 X 2</a>	<u>1.41</u>	<u>1.10</u>		<u>1.87</u>	<u>2.46</u>		<u>1.50</u>	<u>1.15</u>		<u>0.79</u>	<u>1.36</u>		2.46	1
9.7	<a href="#">3 X 3</a>	<u>0.30</u>	<u>1.82</u>	<u>1.46</u>	<u>0.08</u>	<u>0.86</u>	<u>1.41</u>	<u>0.45</u>	<u>1.39</u>	<u>1.30</u>	<u>0.28</u>	<u>2.21</u>	<u>2.79</u>	2.79	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>					847	<u>0.53</u>	613	<u>0.38</u>					0.53	4
10.2		<a href="#">E-W</a>					751	<u>0.47</u>	1093	<u>0.68</u>					0.68	10
11.1	Partial Cloverleaf	<a href="#">N-S</a>					783	<u>0.49</u>	746	<u>0.47</u>					0.49	2
11.2		<a href="#">E-W</a>					624	<u>0.67</u>	772	<u>0.48</u>					0.48	1
13.1	Displaced Left Turn	<a href="#">N-S</a>	966	<u>0.60</u>			629	<u>0.39</u>	508	<u>0.32</u>			859	<u>0.54</u>	0.60	8
13.2		<a href="#">E-W</a>	892	<u>0.56</u>			871	<u>0.54</u>	825	<u>0.52</u>			686	<u>0.43</u>	0.56	5
14.1	Double Crossover Diamond	<a href="#">N-S</a>	809	<u>0.51</u>	529	<u>0.33</u>	677	<u>0.42</u>	811	<u>0.51</u>	500	<u>0.31</u>	624	<u>0.39</u>	0.51	3
14.2		<a href="#">E-W</a>	597	<u>0.37</u>	964	<u>0.60</u>	533	<u>0.33</u>	673	<u>0.42</u>	900	<u>0.56</u>	716	<u>0.45</u>	0.60	7
15.1	Single Point	<a href="#">N-S</a>	1025	<u>0.64</u>			727	<u>0.45</u>					651	<u>0.41</u>	0.64	9
15.2		<a href="#">E-W</a>	869	<u>0.54</u>			908	<u>0.57</u>					716	<u>0.45</u>	0.57	6