

Appendix C
VJuST Screening Tool

VDOT Junction Screening Tool

Results Worksheet

General Information	
Project Title:	Broadview Corridor Evaluation
EW Facility:	Frost Ave/Waterloo St
NS Facility:	Broadview Ave/W Shirely Ave
Date:	May 8, 2018

Volumes (veh/hr)	U-Turn / Left	Through	Right
Eastbound	714	177	180
Westbound	30	99	86
Northbound	174	352	27
Southbound	82	338	367

General Instructions: All intersection and interchange configurations have a default assumption of one exclusive lane per movement. No results shall be interpreted until the user has verified the lane configurations on each worksheet.

Intersection Results

Type	Dir	Congestion			Pedestrian		Safety		Notes
		Maximum V/C	Accommodation Compared to Conventional	Weighted Total Conflict Points					
Conventional	-	0.62		48					
Partial Displaced Left Turn	-	0.46	-	44					
Partial Median U-Turn	-	0.79	+	28					
Restricted Crossing U-Turn	-	0.74		20					
Roundabout	-	1.01		8					

Information

Congestion	The maximum v/c ratio represents the worst v/c of all zones that make up an intersection.
Pedestrian	Compares the potential of each design to accommodate pedestrians based on safety, wayfinding, and delay. Potential is qualitatively defined as better (+), similar (blank cell), or worse (-) than a conventional intersection or traditional diamond interchange.
Safety	Weighted Total = (2 x Crossing Conflicts) + Merging Conflicts + Diverging Conflicts

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Date:	May 8, 2018

Volumes (veh/hr)	U-Turn / Left	Through	Right
Eastbound	548	117	76
Westbound	68	310	121
Northbound	337	585	19
Southbound	75	601	950

General Instructions: All intersection and interchange configurations have a default assumption of one exclusive lane per movement. No results shall be interpreted until the user has verified the lane configurations on each worksheet.

Intersection Results

		Congestion	Pedestrian	Safety	Notes
Type	Dir	Maximum V/C	Accommodation Compared to Conventional	Weighted Total Conflict Points	
Conventional	-	0.81	-	48	
Partial Displaced Left Turn	-	0.91	-	44	
Partial Median U-Turn	-	0.81	+	28	
Restricted Crossing U-Turn	-	1.21		20	
Roundabout	-	1.06		8	

Information

Congestion	The maximum v/c ratio represents the worst v/c of all zones that make up an intersection.
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General Information	
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Date:	May 8, 2018

Volumes (veh/hr)	U-Turn / Left	Through	Right
Eastbound	675	117	159
Westbound	41	140	161
Northbound	222	531	17
Southbound	137	528	983

General Instructions: All intersection and interchange configurations have a default assumption of one exclusive lane per movement. No results shall be interpreted until the user has verified the lane configurations on each worksheet.

Intersection Results

		Congestion	Pedestrian	Safety	Notes
Type	Dir	Maximum V/C	Accommodation Compared to Conventional	Weighted Total Conflict Points	
Conventional	-	0.68		48	
Partial Displaced Left Turn	-	0.84	-	44	
Partial Median U-Turn	-	0.86	+	28	
Restricted Crossing U-Turn	-	1.19		20	
Roundabout	-	1.12		8	

Information

Congestion	The maximum v/c ratio represents the worst v/c of all zones that make up an intersection.
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Safety	Weighted Total = (2 x Crossing Conflicts) + Merging Conflicts + Diverging Conflicts