



Appendix B: Bicycle Level of Service Results





Bicycle Level of Service – Segments

Type of Bikeway		LOS
Physically Separated Bikeway (cycle tracks, protected bike lanes and multi-use paths). Physical separation refers to, but is not limited to, curbs, raised medians, bollards and parking lanes (adjacent to the bike lane along the travelled way i.e. not curbside).		A
Bike Lanes Not Adjacent Parking Lane - Select Worst Scoring Criteria		
No. of Travel Lanes	1 travel lane in each direction	A
	2 travel lanes in each direction separated by a raised median	B
	2 travel lanes in each direction without a separating median	C
	More than 2 travel lanes in each direction	D
Bike Lane Width	> 1.8 m wide bike lane (includes marked buffer and paved gutter width)	A
	≥ 1.5 m to < 1.8 m wide bike lane (includes marked buffer and paved gutter width)	B
	≥ 1.2 m to < 1.5 m wide bike lane (includes marked buffer and paved gutter width)	C
Operating Speed	≤ 50 km/h operating speed	A
	60 km/h operating speed	C
	> 70 km/h operating speed	E
Bike lane blockage (commercial areas)	Rare	A
	Frequent	C
Bike Lanes Adjacent to curbside Parking Lane - Select Worst Scoring Criteria		
No. of Travel Lanes	1 travel lane in each direction	A
	2 or more travel lanes in each direction	C
Bike Lane and Parking Lane Width	4.5 m wide bike lane plus parking lane (includes marked buffer and paved gutter width)	A
	4.25 m wide bike lane plus parking lane (includes marked buffer and paved gutter width)	B
	≤ 4.0 m wide bike lane plus parking lane (includes marked buffer and paved gutter width)	C
Operating Speed	< 40 km/h operating speed	A
	50 km/h operating speed	B
	60 km/h operating speed	D
	> 70 km/h operating speed	F
Bike lane blockage (commercial areas)	Rare	A
	Frequent	C
Mixed Traffic		
No. of Travel Lanes and Operating Speed	2 travel lanes; ≤ 40 km/h; no marked centerline or classified as residential	A
	2 to 3 travel lanes; ≤ 40 km/h	B
	2 travel lanes; 50 km/h; no marked centerline or classified as residential	B
	2 to 3 travel lanes; 50 km/h	D
	4 to 5 travel lanes; ≤ 40 km/h	D
	4 to 5 travel lanes; ≥ 50 km/h	E
	6 or more travel lanes; ≤ 40 km/h	E
	≥ 60 km/h	F
Unsignalized Crossing along Route: no median refuge		
No. of Travel Lanes on Side Street and Operating Speed	3 or less lanes being crossed; ≤ 40 km/h	A
	4 to 5 lanes being crossed; ≤ 40 km/h	B
	3 or less lanes being crossed; 50 km/h	B
	4 to 5 lanes being crossed; 50 km/h	C
	3 or less lanes being crossed; 60 km/h	C
	4 to 5 lanes being crossed; 60 km/h	D
	6 or more lanes being crossed; ≤ 40 km/h	E
	3 or less lanes being crossed; ≥ 65 km/h	E
	6 or more lanes being crossed; ≥ 50 km/h	F
	4 to 5 lanes being crossed; ≥ 65 km/h	F





Unsignalized Crossing along Route: with median refuge (> 1.8 m wide)		
No. of Travel Lanes on Side Street and Operating Speed	5 or less lanes being crossed; ≤ 40 km/h	A
	3 or less lanes being crossed; 50 km/h	A
	6 or more lanes being crossed; ≤ 40 km/h	B
	4 to 5 lanes being crossed; 50 km/h	B
	3 or less lanes being crossed; 60 km/h	B
	6 or more lanes being crossed; 50 km/h	C
	4 to 5 lanes being crossed; 60 km/h	C
	3 or less lanes being crossed; ≥ 65 km/h	D
	6 or more lanes being crossed; 60 km/h	E
	4 to 5 lanes being crossed; ≥ 65 km/h	E
	6 or more lanes being crossed; ≥ 65 km/h	F

Source: City of Ottawa's MMLOS Analysis Guidelines

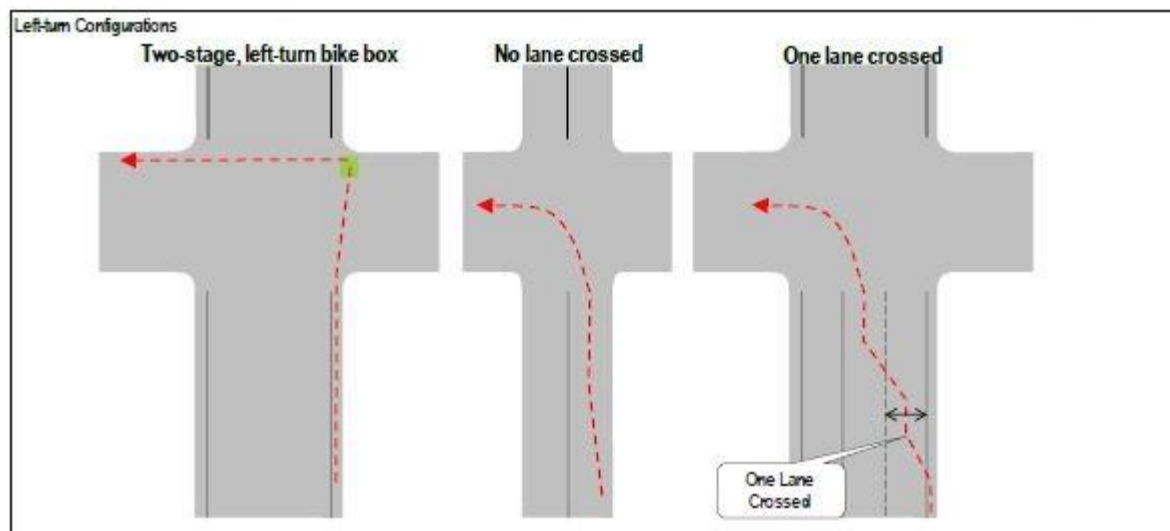




Bicycle Level of Service – Intersections

Bikeway and Intersection Type		LOS
Bike Lanes or higher order facility on a Signalized Intersection Approach		
Right-turn Lane and Turning Speed of Motorists	No impact on LTS (as long as cycling facility remains to the right of any turn lane - otherwise see pocket bike lanes below)	
Cyclist Making a Left-turn and Operating Speed of Motorists (refer to figure)	Two-stage, left-turn bike box; ≤ 50 km/h	A
	No lane crossed, ≤ 50 km/h	B
	1 lane crossed, ≤ 40 km/h	B
	No lane crossed, ≥ 60 km/h	C
	1 lane crossed, 50 km/h	C
	2 or more lanes crossed, ≤ 40 km/h	D
	1 lane crossed, ≥ 60 km/h	E
	2 or more lanes crossed, ≥ 50 km/h	F
	All other single left-turn lane configurations	F
	Dual left-turn lanes (shared or exclusive)	F
Pocket Bike Lanes on a Signalized Intersection Approach		
Right-turn Lane and Turning Speed of Motorists	Right-turn lane introduced to the right of the bike lane and ≤ 50 m long, turning speed ≤ 25 km/h (based on curb radii and angle of intersection)	B
	Right-turn lane introduced to the right of the bike lane and > 50 m long, turning speed ≤ 30 km/h (based on curb radii and angle of intersection)	D
	Bike lane shifts to the left of the right-turn lane, turning speed ≤ 25 km/h (based on curb radii and angle of intersection)	D
	Right-turn lane with any other configurations	F
	Dual right-turn lanes (shared or exclusive)	F
Cyclist Making a Left-turn and Operating Speed of Motorists (refer to figure)	Two-stage, left-turn bike box; ≤ 50 km/h	A
	No lane crossed, ≤ 50 km/h	B
	1 lane crossed, ≤ 40 km/h	B
	No lane crossed, ≥ 60 km/h	C
	1 lane crossed, 50 km/h	C
	2 or more lanes crossed, ≤ 40 km/h	D
	1 lane crossed, ≥ 60 km/h	E
	2 or more lanes crossed, ≥ 50 km/h	F
	All other single left-turn lane configurations	F
	Dual left-turn lanes (shared or exclusive)	F
Mixed Traffic on a Signalized Intersection Approach		
Right-turn Lane and Turning Speed of Motorists	Right-turn lane 25 to 50 m long, turning speed ≤ 25 km/h (based on curb radii and angle of intersection)	D
	Right-turn lane 25 to 50 m long, turning speed > 25 km/h (based on curb radii and angle of intersection)	E
	Right-turn lane longer than 50 m	F
	Dual right-turn lanes (shared or exclusive)	F
Cyclist Making a Left-turn and Operating Speed of Motorists (refer to figure)	Two-stage, left-turn bike box; ≤ 50 km/h	A
	No lane crossed, ≤ 50 km/h	B
	1 lane crossed, ≤ 40 km/h	B
	No lane crossed, ≥ 60 km/h	D
	1 lane crossed, 50 km/h	D
	2 or more lanes crossed, ≤ 40 km/h	D
	1 lane crossed, ≥ 60 km/h	F
	2 or more lanes crossed, ≥ 50 km/h	F
	All other single left-turn lane configurations	F
	Dual left-turn lanes (shared or exclusive)	F





Source: City of Ottawa's MMLOS Analysis Guidelines





Existing (2020) Segment BLOS Results for East – West Corridors

Corridor	Segment	Eastbound PLOS	Westbound PLOS
Portage Pkwy	Applewood Cres and Edgeley Blvd	E	E
Portage Pkwy	Edgeley Blvd and Buttermill Ave	D	D
Portage Pkwy	Buttermill Ave and Millway Ave	D	D
Portage Pkwy	Millway Ave and Jane St	D	D
Apple Mill Rd	Applewood Cres and Commerce St	A	A
Apple Mill Rd	Commerce St and Edgeley Blvd	A	A
Apple Mill Rd	Edgeley Blvd and Transit Square	A	A
Apple Mill Rd	Transit Square and Millway Ave	A	A
Apple Mill Rd	Millway Ave and Jane St	A	A
New Park Pl	Edgeley Blvd and TTC Plaza	D	D
New Park Pl	TTC Plaza and Millway Ave	B	B
Barnes Court	West of Creditstone Road	B	B
McCleary Court	East of Creditstone Road	B	B
McCleary Court	West of Creditstone Road	B	B
Highway 7	Colossus Dr and Applewood Cres	A	A
Highway 7	Applewood Cres and Commerce St	A	A
Highway 7	Commerce St and Edgeley Blvd	D	D
Highway 7	Edgeley Blvd and Millway Ave	D	D
Highway 7	Millway Ave and Jane St	D	D
Highway 7	Jane St and Maplecrete Rd	D	D
Highway 7	Maplecrete Rd and Creditstone Rd	D	D
Commerce St	Commerce St and Interchange Way (North)	D	D
Commerce St	Commerce St and Interchange Way (South)	D	D
Doughton Rd	Jane St and Maplecrete Rd	D	D
Doughton Rd	Maplecrete Rd and Creditstone Rd	D	D
Doughton Rd	East of Creditstone Road	D	D
Freshway Dr	East of Creditstone Road	B	B



Corridor	Segment	Eastbound PLOS	Westbound PLOS
Interchange Way	Commerce St and Interchange Way	D	D
Interchange Way	Interchange Way and Exchange Ave	D	D
Interchange Way	Exchange Ave and Jane St	D	D
Exchange Ave	West of Peelar Rd	D	D
Peelar Rd	Peelar Rd and Maplecrete Rd	B	B
Peelar Rd	Maplecrete Rd and Creditstone Rd	B	B

Existing (2020) Segment BLOS Results for North-South Corridors

Corridor	Segment	Northbound PLOS	Southbound PLOS
Applewood Cres	Portage Pkwy and Apple Mill Rd	A	E
Applewood Cres	Apple Mill Rd and Highway 7	A	E
Commerce St	Apple Mill Rd and Highway 7	D	D
Commerce St	Highway 7 and Commerce St	D	D
Commerce St	Commerce St and Commerce St	D	D
Commerce St	Commerce St and Interchange Way	D	D
Edgeley Blvd	Portage Pkwy and Apple Mill Rd	E	E
Edgeley Blvd	Apple Mill Rd and New Park Pl	E	E
Edgeley Blvd	New Park Pl and Highway 7	E	E
Interchange Way	Highway 7 and Commerce St	E	E
Interchange Way	Commerce St and Commerce St	D	D
Interchange Way	Commerce St and Interchange Way	D	D
Exchange Ave	Interchange Way and Exchange Ave	D	D
Millway Ave	Portage Pkwy and Apple Mill Rd	C	A
Millway Ave	Apple Mill Rd and New Park Pl	C	C
Millway Ave	New Park Pl and Hwy 7	C	C
Jane St	Portage Pkwy and Apple Mill Rd	E	E



Corridor	Segment	Northbound PLOS	Southbound PLOS
Jane St	Apple Mill Rd and Highway 7	E	E
Jane St	Highway 7 and Doughton Rd	E	E
Jane St	Doughton Rd and Interchange Way	E	E
Jane St	Interchange Way and Hwy 407 WB Off-Ramp	E	E
Jane St	Hwy 407 WB and EB Off-Ramps	E	E
Peelar Rd	Interchange Way and Peelar Rd	D	D
Maplecrete Rd	North of Highway 7	D	D
Maplecrete Rd	Highway 7 and Doughton Rd	D	D
Maplecrete Rd	Doughton Rd and Peelar Rd	D	D
Creditstone Rd	North of Barnes Ct	D	D
Creditstone Rd	Barnes Ct and McCleary Ct	D	D
Creditstone Rd	McCleary Ct and Highway 7	E	E
Creditstone Rd	Highway 7 and Doughton Rd	D	D
Creditstone Rd	Doughton Rd and Freshway Dr	B	B
Creditstone Rd	Freshway Dr and Peelar Rd	B	B
Creditstone Rd	South of Peelar Road	B	B

Existing (2020) Intersection BLOS Results

Intersection	Approach	Bicycle LOS
Portage Parkway and Applewood Crescent	North	B
	South	B
	East	D
	West	D
Portage Parkway and Edgeley Blvd	North	D
	South	D
	East	D
	West	F





Intersection	Approach	Bicycle LOS
Portage Parkway and Millway Avenue	North	B
	South	D
	East	B
	West	B
Portage Parkway and Jane Street	North	F
	South	F
	East	D
	West	D
Apple Mill Road and Applewood Crescent	North	B
	South	B
	East	B
Apple Mill Road and Commerce Street	South	D
	East	A
	West	A
Apple Mill Road and Edgeley Boulevard	North	D
	South	D
	East	B
	West	B
Apple Mill Road and Millway Avenue	North	A
	South	A
	East	A
	West	A
Apple Mill Road and Jane Street	North	C
	South	F
	West	B
Creditstone Road and McCleary Court	North	D
	South	D
	East	B
	West	B
Highway 7 and Colossus Drive	North	F
	South	B
	East	B
	West	B





Intersection	Approach	Bicycle LOS
Highway 7 and Applewood Crescent	North	B
	South	F
	East	C
	West	C
Highway 7 and Commerce Street	North	F
	South	D
	East	A
	West	A
Highway 7 and Edgeley Blvd	North	F
	South	E
	East	A
	West	A
Highway 7 and Millway Ave	North	D
	South	D
	East	A
	West	A
Highway 7 and Jane Street	North	F
	South	F
	East	A
	West	D
Highway 7 and Maplecrete Road	North	D
	South	D
	East	A
	West	A
Highway 7 and Creditstone Road	North	F
	South	D
	East	A
	West	A
Interchange Way and Interchange Way	North	D
	East	D
	West	D
Jane Street and Doughton Road	North	F
	South	F





Intersection	Approach	Bicycle LOS
	East	D
Jane Street and Interchange Way	North	F
	South	F
	East	B
	West	D
Jane Street and Highway 407 WB Off-Ramp	North	C
	South	F
	East	F
Jane Street and Highway 407 EB Off-Ramp	North	C
	South	C
	West	F

