Pedestrian Level of Service: Segments

Sidewalk	Boulevard	Motor Vehicle Traffic	Presence of On- street Parking		Segmer	nt PLOS		
Width (m)	Width (m)	Volume		Operating Speed (km/h)				
	(AADT)		≤30	>30 or 50	>50 or 60	>60 1		
		≤ 3000	N/A	Α	Α	Α	В	
	> 2	> 3000	Yes	Α	В	В	N/A	
			No	Α	В	С	D	
		≤3000	N/A	Α	Α	Α	В	
2.0 or more	0.5 to 2	> 3000	Yes	Α	В	С	N/A	
		7 0000	No	Α	С	D	Е	
		≤3000	NA	Α	В	С	D	
	0	> 3000	Yes	В	В	D	N/A	
		7 3000	No	В	С	E	F	
		≤3000	N/A	Α	Α	Α	В	
	> 2	> 3000	Yes	Α	В	С	N/A	
		7 3000	No	Α	С	D	E	
		≤ 3000	N/A	Α	В	В	D	
1.8	0.5 to 2	> 3000	Yes	Α	С	С	N/A	
			No	В	С	E	E	
		≤ 3000	N/A	Α	В	С	D	
	0	> 3000	Yes	В	С	D	N/A	
			No	С	D	F	F	
			≤3000	N/A	С	С	С	С
	> 2	> 3000	Yes	С	С	D	N/A	
			No	С	D	Е	Е	
1.5		≤ 3000	N/A	С	С	С	D	
	0.5 to 2	> 3000	Yes	С	С	D	N/A	
			No	D	Е	Е	Е	
	0 N/A		D	Е	F 2	F 2		
<1.5	<1.5 N/A		F 3	F ₃	F 3	F 3		
No sidewalk	N/A		C 4	F 3	F 3	F 3		

Pedestrian Level of Service: Intersections

The level of service for pedestrians is determined through a points system. The total number of points from tables 5.1 to 5.4 determine the level of service of the intersection for the pedestrians.

5.1 Crossing Distance & Conditions				
Total travel lanes crossed	No median	With Median (>2.4m)		
2	120	120		
3	105	105		
4	88	90		
5	72	75		
6	55	60		
7	39	45		
8	23	30		
9	6	15		
10	-10	0		
Island Refuge	Points			
No	-4			
Yes	0			

5.2 Signal Phasing & Timing Features		
Left turn conflict	Points	
Permissive	-8	
Protected/permissive	-8	
Protected	0	
No left turn/prohibited	0	
Right turn conflict ("Right_turns")	Points	
Permissive or yield control	-5	
Protected/permissive	-5	
Protected	0	
No right turn	0	
Right turns on red ("RTOR")	Points	
RTOR allowed	-3	
RTOR prohibited at certain time(s)	-2	
RTOR prohibited	0	
Leading ped interval? ("LPI")	Points	
No	-2	
Yes	0	

2

5.3 Corner Radius	
Corner radius	Points
Greater than 25m	-9
> 15m to 25m	-8
> 10m to 15m	-6
> 5m to 10m	-5
> 3m to 5m	-4
Less than/equal to 3m	-3
No right turn	0
Right turn channel with	-3
receiving	
Right turn "smart channel"	2

5.4 Crosswalk Treatment		
Crosswalk treatment	Points	
Standard transverse markings	-7	
Textured/coloured pavement	-4	
Zebra stripe hi-vis markings	-4	
Raised crosswalk	0	

Pedestrian Exposure to Traffic LOS	
Points threshold	LOS
≥90	Α
≥75	В
≥60	С
≥45	D
≥30	Е
<30	F

Bicycle Level of Service: Segments

Type of Bikeway		LOS
Physically Separate separation refers to, to (adjacent to the bike)	d Bikeway (cycle tracks, protected bike lanes and multi-use paths). Physical out is not limited to, curbs, raised medians, bollards and parking lanes lane along the travelled way i.e. not curbside).	А
Bike Lanes Not Adjacent Parking Lane - Select Worst Scoring Criteria		
No. of Travel Lanes	1 travel lane in each direction	Α
	2 travel lanes in each direction separated by a raised median	В
No. of Travel Lanes	2 travel lanes in each direction without a separating median	С
	More than 2 travel lanes in each direction	F
	> 1.8 m wide bike lane (includes marked buffer and paved gutter width)	Α
Bike Lane Width	≥1.5 m to <1.8 m wide bike lane (includes marked buffer and paved gutter width)	В
	≥1.2 m to <1.5 m wide bike lane (includes marked buffer and paved gutter width)	С
	≤ 50 km/h operating speed	А
Operating Speed	60 km/h operating speed	С
	> 70 km/h operating speed	Е
Bike lane blockage	Rare	А
(commercial areas)	Frequent	С
Bike Lanes Adjacen	t to curbside Parking Lane - Select Worst Scoring Criteria	
No. of Travel Lanes	1 travel lane in each direction	А
No. of Travel Lanes	2 or more travel lanes in each direction	С
	4.5 m wide bike lane plus parking lane (includes marked buffer and paved gutter width)	А
Bike Lane Width	4.25 m wide bike lane plus parking lane (includes marked buffer and paved gutter width)	В
	≤ 4.0 m wide bike lane plus parking lane (includes marked buffer and paved gutter width)	С
	< 40 km/h operating speed	А
Operating Speed	50 km/h operating speed	В
Operating Speed	60 km/h operating speed	D
	> 70 km/h operating speed	F
Bike lane blockage	Rare	А
(commercial areas)	Frequent	С
Mixed Traffic		
	2 travel lanes; ≤ 40 km/h; no marked centerline or classified as residential	Α
	2 to 3 travel lanes; ≤ 40 km/h	В
No. of Travel Lanes	2 travel lanes; 50 km/h; no marked centerline or classified as residential	В
and Operating	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	Е

	6 or more travel lanes; ≤ 40 km/h	Е
	≥ 60 km/h	F
Unsignalized Crossing along Route: no median refuge		
	3 or less lanes being crossed; ≤ 40 km/h	А
	4 to 5 lanes being crossed; ≤ 40 km/h	В
	3 or less lanes being crossed; 50 km/h	В
	4 to 5 lanes being crossed; 50 km/h	С
No. of Travel Lanes	3 or less lanes being crossed; 60 km/h	С
on Side Street	4 to 5 lanes being crossed; 60 km/h	D
	6 or more lanes being crossed; ≤ 40 km/h	Е
	3 or less lanes being crossed; ≥ 65 km/h	Е
	6 or more lanes being crossed; ≥ 50 km/h	F
	4 to 5 lanes being crossed; ≥ 65 km/h	F
Unsignalized Cross	ing along Route: with median refuge (> 1.8 m wide)	
	5 or less lanes being crossed; ≤ 40 km/h	Α
	3 or less lanes being crossed; 50 km/h	Α
	6 or more lanes being crossed; ≤ 40 km/h	В
	4 to 5 lanes being crossed; 50 km/h	В
N 67 11	3 or less lanes being crossed; 60 km/h	В
No. of Travel Lanes on Side Street	6 or more lanes being crossed; 50 km/h	С
	4 to 5 lanes being crossed; 60 km/h	С
	3 or less lanes being crossed; ≥ 65 km/h	D
	6 or more lanes being crossed; 60 km/h	Е
	4 to 5 lanes being crossed; ≥ 65 km/h	Е
	6 or more lanes being crossed; ≥ 65 km/h	F

Bicycle Level of Service: Intersections

Bikeway and Intersecti	on Type	
Bike Lanes or higher	r 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)	А
	Two-stage, left-turn bike box; ≤ 50 km/h	А
	No lane crossed, ≤ 50 km/h	В
	1 lane crossed, ≤ 40 km/h	В
	No lane crossed, ≥ 60 km/h	С
Cyclist Making a Left-turn and	1 lane crossed, 50 km/h	С
Operating Speed of	2 or more lanes crossed, ≤ 40 km/h	D
Motorists (refer to figure)	1 lane crossed, ≥ 60 km/h	Е
	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 o	n a Signalized Intersection Approach	
	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)	В
	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
Right-turn Lane and Turning Speed of Motorists	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
	Two-stage, left-turn bike box; ≤ 50 km/h	А
	No lane crossed, ≤ 50 km/h	В
	1 lane crossed, ≤ 40 km/h	В
	No lane crossed, ≥ 60 km/h	С
Cyclist Making a Left-turn and	1 lane crossed, 50 km/h	С
Operating Speed of	2 or more lanes crossed, ≤ 40 km/h	D
Motorists (refer to figure)	1 lane crossed, ≥ 60 km/h	Е
	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 Si	gnalized Intersection Approach	
	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 and Turning	Right-turn lane 25 to 50 m long, turning speed > 25 km/h (based on curb radii and angle of intersection)	Е
Speed of Motorists	Right-turn lane longer than 50 m	F
	Dual right-turn lanes (shared or exclusive)	F

	Two-stage, left-turn bike box; ≤ 50 km/h	А
	No lane crossed, ≤ 50 km/h	В
	1 lane crossed, ≤ 40 km/h	В
	No lane crossed, ≥ 60 km/h	D
Cyclist Making a Left-turn and	1 lane crossed, 50 km/h	D
Operating Speed of	2 or more lanes crossed, ≤ 40 km/h	D
Motorists (refer to figure)	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