

## Appendix 4: EVALUATION MATRIX OF ALTERNATIVE DESIGN CONCEPTS

Legend

★ = Best ✓ = Good ● = Poor x = Fail

Category	Group	Criteria	Measures	Option 1 Do Nothing	Option 2 Centre Transit	Option 4 Southside Transit: One-Way Operations	Option 5 Southside Transit: Two-Way Operations
A. Transportation	A.1. Pedestrians	A.1.1 Sidewalks	A.1.1.1 Increase in dedicated pedestrian space (percent of cross section)	● No change	★ 45%	★ 45%	★ 45%
			A.1.1.2 Sidewalk width - typical southside	● 2m	★ 4m	★ 6m	★ 6m
		A.1.2 Crossing Frequency	A.1.2.1 Number of north / south crossings (signalized/2-stage with refuge)	● 11/0	✓ 15/0	★ 17/4	★ 17/4
			A.1.3 Crossing Distance	A.1.3.1. Min / Max / Average north-south crossing distance (m)	● 19.8, 28.5, <b>24.5</b>	✓ 16.8, 28.8, <b>22.8</b>	★ 10, 23.8 <b>16.9</b>
		A.1.3.2. Number of traffic lanes to cross		● 4 - 5	✓ 3-4 (inc on-street bike lanes)	★ 2 - 3	★ 2 - 3
		A.2. Transit	A.2.1. Transit Speed	A.2.1.1. Travel speed between Spadina Avenue and Bay Street (km/h)	● WB: 12 to 14 EB: 12 to 14	★ WB: 20.6 to 21.0 EB: 17.2 to 21.3	★ WB: 16.0 to 21.0 EB: 14.3 to 21.3
	A.2.2. Stops Frequency			A.2.2.1. Number of / distance between transit stops (min/max/avg) Spadina Avenue to Bay Street	★ 4 / (215m / 445m / 325m)	★ 4 (215m / 445m / 325m)	★ 4 (195m / 445m / 320m)
	A.2.3. Transit Accommodation		A.2.3.1. Accommodates existing and future planned transit service	● No	★ Yes	★ Yes	★ Yes
			A.2.3.2. Accommodates current accessible platform requirements: Minimum Platform Widths	● No 1.5m	★ Yes 2.4m	★ Yes 2.4m	★ Yes 2.4m
	A.3. Cycling	A.3.1. Bicycle Friendly	A.3.1.1. Dedicated bike route?	● No	✓ On-street Bikelanes	★ Trail	★ Trail
			A.3.1.2. Bicycle lane widths	● None	✓ 2 x 1.8m	★ 4m	★ 4m
		A.3.2. Network Connections	A.3.2.1. Links to adjacent routes?	● No	★ Yes	★ Yes	★ Yes
		A.3.3. East-West connection	A.3.3.1. Completes Martin Goodman Trail?	x No	● No (Removes 1km existing trail)	★ Yes	★ Yes
	A.4. Automobiles	A.4.1. Corridor Measures Queens Quay	A.4.1.1. Throughput Level of Service (based on speed)	✓ E	✓ D to E	✓ D	✓ D
			A.4.1.2. Avg. travel time Spadina to Yonge AM/PM (minutes)	✓ 4.7 to 8.4	✓ 6.0 to 6.9	✓ 5.0 to 5.5	✓ 5.1 to 5.9
		A.4.2. Intersection Measures Queens Quay	A.4.2.1. Queuing - Intersections with approaches where queue lengths exceed demands for storage capacity (Spadina to Yonge)	✓ 8	✓ 8	★ 2	✓ 9
			Lower Spadina Avenue	● EBL,WBT,WBR,SBL	✓ WBT	✓ WBT, SBR	● EBL, WBT, WBR
			TTC Loop	✓ EBL, WBT	● EBL, WBR, SBL	★	✓ EBT
			EMS Access Road	/ Not signalized	✓ EBT	★	★
			Rees Street	✓ EBL, WBT	✓ EBL, EBT	★	✓ EBT
Robertson Crescent			/ Not signalized	/ Not signalized	/ Intersection removed	/ Intersection removed	
Lower Simcoe Street			✓ WBT	✓ WBT, SBL	★	✓ WBL	
Queens Quay Terminal Access			/ Not signalized	/ Not signalized	★	✓ EBT	
York Street			✓ WBT, SBL	✓ EBT, WBT	✓ SBL	✓ EBT	
Harbour Square Access			✓ EBT	✓ EBT, WBT	/ Not signalized	/ Not signalized	
Bay Street			✓ EBL	● EBL,EBT,WBT	★	✓ EBL, SBL	
Yonge Street			✓ EBL	★	★	● EBL, EBT, WBT	
A.4.2.2. Summary Intersection Level of Service AM/PM	★-● A to F Range	★-● A to F Range	★-✓ A to D Range	★-✓ A to D Range			
Lower Spadina Avenue	●/✓ E / D	●/● E / E	✓/✓ C / D	✓/✓ D / C			
TTC Loop	★/✓ A / B	★/★ A / A	★/★ A / A	✓/✓ B / B			
EMS Access Drive	/ Not signalized	★/✓ A / B	★/★ A / A	✓/★ B / A			
Rees Street	✓/✓ B / C	✓/✓ C / C	✓/✓ B / C	✓/✓ C / B			
Robertson Crescent	/ Not signalized	/ Not signalized	/ Intersection Removed	/ Intersection Removed			
Lower Simcoe Street	✓/✓ C / B	✓/✓ D / C	✓/✓ B / B	✓/✓ C / B			
Queens Quay Terminal Access Drive	/ Not signalized	/ Not signalized	★/★ A / A	✓/✓ B / B			
York Street	✓/● C / F	●/✓ F / C	✓/✓ C / D	✓/✓ C / B			
Harbour Square Access Drive	✓/✓ C / D	✓/✓ D / D	/ Intersection Removed	/ Intersection Removed			
Bay Street	✓/✓ C / D	✓/✓ D / C	✓/✓ C / C	✓/✓ C / C			
Yonge Street	✓/✓ B / B	✓/✓ B / C	✓/✓ C / C	✓/✓ C / C			

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	A.4.3. Intersection Measures Lake Shore Blvd	A.4.3.1. Summary Intersection Level of Service AM/PM	Lower Spadina	✓/● B to F Range	✓/● B to F Range	✓/● B to F Range	✓/● B to F Range
			Rees	✓/✓ C / C	✓/✓ C / C	✓/● D / F	✓/✓ C / C
			Lower Simcoe	✓/● C / F	✓/● C / F	●/● F / F	●/● E / F
			Gardiner WB OnRamp/York	✓/✓ B / C	✓/✓ B / C	✓/● B / E	✓/✓ B / D
			York	✓/● C / E	✓/● D / E	✓/● C / E	✓/● D / E
			Bay South Side	●/✓ E / D	●/✓ E / D	✓/● C / E	✓/● C / E
			Bay North Side	✓/● D / E	✓/✓ C / D	✓/● B / D	✓/✓ C / D
			Yonge South Side	●/✓ F / D	●/✓ F / C	●/✓ F / C	●/✓ F / C
			Yonge North Side	✓/✓ C / B	✓/✓ B / B	✓/✓ B / B	✓/✓ B / B
					Yonge North Side	●/✓ F / D	●/✓ F / D
A.4.4. Site Access		A.4.4.1. Total number of access movements into sites from Queens Quay (through north-south, left turns, right turns)		✓ 39	✓ 50	✓ 49	✓ 49
			A.4.4.2. Number of access points with net reduction in inbound movements (through north-south, left turns, right turns)	★ 0	✓ 5 (Redpath Parking, Redpath Yard, Redpath Dock, LCBO East, Loblaws)	● 12 (John Quay, 77/90 Harbour Square, 55 Harbour Square, Redpath Yard, Dan Leakie Condo West, 390 Queens Quay, 270/260/250 Queens Quay West access, 230/228 Queens Quay East Access, 218/208 Queens Quay West Access, Waterpark Place West, Waterpark Place East)	✓ 5 (John Quay, 77/90 Harbour Square, 55 Harbour Square, Redpath Yard)
			A.4.4.3. Number of access points with net reduction in outbound movements (through north-south, left turns, right turns)	★ 0	✓ 5 (Redpath Parking, Redpath Yard, Redpath Dock, LCBO East, Loblaws)	✓ 10 (John Quay, 55 Harbour Square, Dan Leakie Condo West, 390 Queens Quay, 270/260/250 Queens Quay West access, 230/228 Queens Quay East Access, 218/208 Queens Quay West Access, Waterpark Place West, Waterpark Place East)	★ 2 (Nautical Centre/Admiral Hotel and Condominium/Police Station/Pier 4 East, 55 Harbour Square)
			A.4.4.4. Number of access points with net increase in inbound movements (through north-south, left turns, right turns)	● 0	✓ 4 (EMS, Harbourfront Centre, 55 Harbour Square, 350 Queens Quay)	✓ 4 (Portland Slip Parking, EMS, Harbourfront Centre, Queens Quay Terminal)	★ 7 (EMS, Harbourfront Centre, 350 Queens Quay, 270/260/250 Queens Quay, 230/228 Queens Quay, 218/208 Queens Quay, Waterpark Place East)
			A.4.4.5. Number of access points with net increase in outbound movements (through north-south, left turns, right turns)	● 0	✓ 4 (EMS, Harbourfront Centre, 55 Harbour Square, 350 Queens Quay)	✓ 3 (Portland Slip Parking, EMS, Harbourfront Centre)	★ 8 (EMS, Harbourfront Centre, Queens Quay Terminal, 350 Queens Quay, 270/260/250 Queens Quay, 230/228 Queens Quay, 218/208 Queens Quay, Waterpark Place East)
A.4.5 On-street Parking	A.4.5.1. Number of on-street parking spaces	● 0	✓ 32	★ 86	✓ 40		
A.5. School bus and motor coach operations	A.5.1. Pick-up/drop-off facilities	A.5.1.1. Number of dedicated bus pick-up/drop-off spaces on Queens Quay	● 1 (at 1 location)	★ 21	★ 21	★ 21	
A.6. Movement of goods / servicing demands	A.6.1. Access to commercial shipping/loading entrances (delivery trucks)	A.6.1. 1. Off-street loading / unloading	✓ No change	✓ No change	✓ Access provided via Queens Quay or north-south street. Eastbound movement relies on Lake Shore Boulevard.	✓ Access provided via Queens Quay or north-south street	
		A.6.2. Access to residential servicing areas (garbage trucks, repair trucks, postal trucks)	A.6.2.1. Off-street servicing	✓ No change	✓ No change	✓ Access provided via Queens Quay or north-south street. Eastbound movement relies on Lake Shore Boulevard.	✓ Access provided via Queens Quay or north-south street

OVERALL RATING - Transportation	●	✓	★	★
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Category	Group	Criteria	Measures	Option 1 Do Nothing	Option 2 Centre Transit	Option 4 Southside Transit: One-Way Operations	Option 5 Southside Transit: Two-Way Operations	
<b>B. Safety and Emergency Response</b>	B.1. Emergency response	B.1.1. Fire services	B.1.1.1. Compatible with Fire practices/requirements					
			<i>Transit</i>	★ Yes	★ Yes	✓ May require use of TTC ROW for eastbound access.	★ Yes	
			<i>Vehicles</i>	★ Yes	★ Yes	✓ No eastbound street access. Must use TTC ROW	★ Yes	
			<i>Cyclists</i>	★ Yes	★ Yes	★ Yes	★ Yes	
		<i>Pedestrians</i>	★ Yes	★ Yes	★ Yes	★ Yes		
		B.1.2. Police services	B.1.2.1. Compatible with Police practices/requirements					
			<i>Transit</i>	★ Yes	★ Yes	✓ May require use of TTC ROW for eastbound access.	★ Yes	
			<i>Vehicles</i>	★ Yes	★ Yes	✓ No eastbound street access. Must use TTC ROW	★ Yes	
			<i>Cyclists</i>	★ Yes	★ Yes	★ Yes	★ Yes	
		<i>Pedestrians</i>	★ Yes	★ Yes	★ Yes	★ Yes		
		B.1.3. EMS services	B.1.3.1. Compatible with EMS practices/requirements					
			<i>Transit</i>	★ Yes	★ Yes	✓ May require use of TTC ROW for eastbound access.	★ Yes	
	<i>Vehicles</i>		★ Yes	★ Yes	✓ No eastbound street access. Must use TTC ROW	★ Yes		
	<i>Cyclists</i>		★ Yes	★ Yes	★ Yes	★ Yes		
	<i>Pedestrians</i>	★ Yes	★ Yes	★ Yes	★ Yes			
	B.2. Safety	B.2.1. Vehicular conflict reduction	B.2.1.1. Number of transit-automobile conflict points - signalized 4-leg intersection	✓ 6 (WBL, EBL, SBL, SBT, NBL, NBT)	✓ 6 (WBL, EBL, SBL, SBT, NBL, NBT)	★ 4 (EBL, SBT, NBL, NBT)	✓ 6 (WBR, EBL, SBT, NBL, NBT, NBR)	
			B.2.1.2. Number of transit-automobile conflict points - midblock access on south side	★ 2 (WBL*, NBL*) * requires u-turn	★ 2 (WBL*, NBL*) * requires u-turn	★ 2 (EBL, NBL)	✓ 4 (WBL, EBR, NBL, NBR)	
			B.2.1.3. Number of transit-automobile conflict points - midblock access on north side	✓ 2 (EBL*, SBL*) * requires u-turn	✓ 2 (EBL*, SBL*) * requires u-turn	★ 0	★ 0	
			B.2.1.4. Measures to reduce auto-auto conflicts	● No change	★ Reduced lanes and alignment serves as traffic calming.  Controlled curbside activity reduces conflicts	★ Controlled curbside activity reduces conflicts  Reduced number of conflict points at intersections.	★ Reduced lanes and alignment serves as traffic calming.  Controlled curbside activity reduces conflicts	
		B.2.2. Bicycle safety	B.2.2.1. Measures to improve separation from autos	● No dedicated bicycle facilities available.	✓ Meets bicycle standards for on-street bike lanes	★ Meets bicycle standards for off-road bike trail. Off-road trail minimizes conflict with other modes.	★ Meets bicycle standards for off-road bike trail. Off-road trail minimizes conflict with other modes.	
B.2.2.2. Measures to improve separation from pedestrians			● None	✓ Grade separation: roadway, curb, sidewalk	✓ Combination of row of trees, surface treatments, bollards	✓ Combination of row of trees, surface treatments, bollards		
B.2.3. School bus safety		B.2.3.1. Measures to improve loading/unloading	★ No change (dedicated bus loading area provided)	★ No change (dedicated bus loading area provided)	★ No change (dedicated bus loading area provided)	★ No change (dedicated bus loading area provided)		
		B.2.3.2. Measures to provide off-street loading/unloading	● None	★ Harbourfront Centre will accommodate buses destined to their facilities on-site	★ Harbourfront Centre will accommodate buses destined to their facilities on-site	★ Harbourfront Centre will accommodate buses destined to their facilities on-site		
B.2.4. Pedestrian safety	B.2.4.1. Measures to minimize pedestrian conflicts	● No change	✓ No change in crossing distances (see A.1.1). Additional signalized crossings (see A.1.1).	★ Pedestrian crossing distances reduced (see A.1.1). Additional signalized crossings (see A.1.1).	★ Pedestrian crossing distances reduced (see A.1.1). Additional signalized crossings (see A.1.1).			

**OVERALL RATING - Safety and Emergency Response** ✓ ★ ✓ ★

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C. Urban Design / Quality of Place	C.1 Public Realm Character	C.1.1 Signature Identity	C.1.1.1. Accommodates consistent street elements	● Limited consistency in existing street elements	★ Consistent: - Single row of trees both sides of street - on-street bike lanes - paving opportunities - tramway material opportunities	★ Consistent: - Double row of trees south/Single row north - off-street bike lanes - paving opportunities - limited tramway material opportunities	★ Consistent: - Double row of trees south/Single row north - off-street bike lanes - paving opportunities - limited tramway material opportunities	
			C.1.1.2. Accommodates unique civic experience	x No. Existing street does not stand out as the City's waterfront street.	● No. Configuration's non-auto space limits opportunity.	★ Yes. Additional non-auto space provides greatest opportunity.	★ Yes. Additional non-auto space provides greatest opportunity.	
			C.1.1.3. Accommodates accessible and interesting street side experience	● No. Configuration's non-auto space limits opportunity.	✓ No. Configuration's non-auto space limits opportunity.	★ Yes. Additional non-auto space provides greatest opportunity.	★ Yes. Additional non-auto space provides greatest opportunity.	
			C.1.1.4. Accommodates a grand yet comfortably scaled public realm	● No. Existing non-auto space is disproportionate to pedestrian volumes	● No. Non-auto space is disproportionate to pedestrian volumes	★ Yes. Public realm is rebalanced to better serve all users	★ Yes. Public realm is rebalanced to better serve all users	
			C.1.1.5. Accommodates context specific street design	● No. Existing street design is not specific to the waterfront.	✓ Yes. Available non-auto space limits opportunities.	★ Yes. Additional non-auto space provides greatest opportunity.	★ Yes. Additional non-auto space provides greatest opportunity.	
		C.1.2 Microclimate	C.1.2.1. Measures to improve wind amelioration	● No measures available.	✓ Increased tree canopy	★ Greatest increase in tree canopy	★ Greatest increase in tree canopy	
			C.1.2.2. Measures to improve summer shade	● No measures available.	✓ Increased tree canopy	★ Greatest increase in tree canopy	★ Greatest increase in tree canopy	
		C.1.3 Visual Connectivity	C.1.3.1. Connectivity along waterfront and between attractions	C.1.3.1. Connectivity along waterfront and between attractions	● Low. Connections limited by available non-auto space.	✓ Medium - increased non-auto space.	★ High. Additional non-auto space provides greatest opportunity for landscaping (visual connections) and to connect the waterfront for all modes.	★ High. Additional non-auto space provides greatest opportunity for landscaping (visual connections) and to connect the waterfront for all modes.
				C.2. Useability	C.2.1. Accommodates special events	C.2.1.1. Capacity to accommodate special events/mimimizes impact of traffic operations	● Low. No space available for tents and kiosks without affecting roadway operations. Other special events such as parades and runs--cannot be accommodated without affecting roadway operations.	✓ Medium - increased space for tents and kiosks due to widened southside pedestrian boulevard. Other special events such as parades and runs--cannot be accommodated without affecting roadway operations.
			C.2.2. Accommodates variety of activities (passive/active)		● Insufficient space to accommodate wide range of recreation activities.	✓ Strolling, jogging (on sidewalk), biking (on-street)	★ Strolling, jogging and biking off-street, separated from pedestrian boulevard	★ Strolling, jogging and biking off-street, separated from pedestrian boulevard

<b>OVERALL RATING - Urban Design / Quality of Place</b>	●	✓	★	★
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Category	Group	Criteria	Measures	Option 1 Do Nothing	Option 2 Centre Transit	Option 4 Southside Transit: One-Way Operations	Option 5 Southside Transit: Two-Way Operations	
D. Socio-Economic Conditions	D.1. Retail activity	D.1.1. Accessibility	D.1.1.1. Accessibility of sites by patrons and workers coming by automobile	✓ All properties accessible from east and west via Queens Quay. All properties within 450 m of a north-south street connecting to Lake Shore Blvd. or beyond.	★ All properties accessible from east and west via Queens Quay. All properties within 380 m of a north-south street connecting to Lake Shore Blvd. or beyond.	● Eastbound access to properties between Bathurst and York not available on Queens Quay; relies on Lake Shore Blvd. All properties within 380 m of a north-south street connecting to Lake Shore Blvd. or beyond.	★ All properties accessible from east and west via Queens Quay. All properties within 380 m of a north-south street connecting to Lake Shore Blvd. or beyond.	
			D.1.1.2. Accessibility of sites by patrons and workers coming by transit	x No service improvements to existing lines. No service expansion to East Bayfront.	★ Service improvement to existing lines. Service expansion to East Bayfront	★ Service improvement to existing lines. Service expansion to East Bayfront	★ Service improvement to existing lines. Service expansion to East Bayfront	
			D.1.1.3. Accommodates high volume foot traffic	x Sidewalk area not consistent with pedestrian volumes	✓ Provides increase in sidewalk area.	★ Provides largest increase in sidewalk area.	★ Provides largest increase in sidewalk area.	
			D.1.1.4. "Front door" parking potential	x No on-street parking provided	✓ Provides 32 additional spaces. See A.4.5	★ Provides 86 additional spaces. See A.4.5	✓ Provides 40 additional spaces. See A.4.5	
		D.1.2. "Main Street" environment	D.1.2.1. Window shopping-friendly (Yes/No)	● No. No change to retail environment	✓ Yes. Non-auto space limits opportunities.	★ Additional non-auto space provides greatest opportunity.	★ Yes. Additional non-auto space provides greatest opportunity.	
			D.1.2.2. Outdoor dining opportunities	● Existing configuration is limited in non-auto space	✓ Yes. Configuration is limited in non-auto space	★ Additional non-auto space provides greatest opportunity.	★ Additional non-auto space provides greatest opportunity.	
			D.1.3. Retail business continuation	D.1.3.1. Number of retail businesses displaced	★ 0	★ 0	★ 0	★ 0
		D.2. Tourism impacts	D.2.1. Tourism competitiveness	D.2.1.1. Sightseeing potential	● Water view only. No improvements.	✓ Water view and improved public realm	★ Water view with improved public realm, making destination street	★ Water view with improved public realm, making destination street
				D.2.1.2. Accessibility for visitors	● East Bayfront not accessible by LRT	★ Accessible by all modes	✓ Accessible by all modes. Auto access relies on Lake Shore Boulevard for East bound movements	★ Accessible by all modes
			D.2.2. Tourism business continuation	D.2.2.1. Number of tourism-related businesses displaced	★ 0	★ 0	★ 0	★ 0
	D.3. Employment competitiveness		D.3.1. Desirable place to work	D.3.1.1. Convenient to commute to	See D.1.1	See D.1.1	See D.1.1	See D.1.1
		D.3.1.2. Recognized location		● Limited opportunity to improve recognition with no change to public realm.	★ Additional non-auto space provides opportunity to improve recognition.	★ Additional non-auto space provides greatest opportunity to improve recognition.	★ Additional non-auto space provides greatest opportunity to improve recognition.	
	D.4. Residential impacts	D.3.2. Employment continuation	D.3.2.1. Number of employment based land uses displaced	★ 0	★ 0	★ 0	★ 0	
			D.4.1. Living environment	D.4.1.1. Improves use and enjoyment	● Limited with no change to public realm.	★ Additional non-auto space provides opportunity to improve recognition.	★ Additional non-auto space provides greatest opportunity.	★ Additional non-auto space provides greatest opportunity.
				D.4.1.2. Noise levels	★ Lowest overall levels, with no improvements to the East Bayfront	✓ Options 2, 4 and 5 yield similar results.	✓ Options 2, 4 and 5 yield similar results.	✓ Options 2, 4 and 5 yield similar results.
		D.4.1.3. Vibration levels		★ Lowest overall levels, with no improvements to the East Bayfront	✓ Options 2, 4 and 5 yield similar results.	✓ Options 2, 4 and 5 yield similar results.	✓ Options 2, 4 and 5 yield similar results.	
		D.4.2. Residential continuation	D.4.2.1. Number of residential units displaced	★ 0	★ 0	★ 0	★ 0	
		<b>OVERALL RATING - Socio-Economic Environment</b>				<b>x</b>	<b>✓</b>	<b>★</b>

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E. Natural Environment	E.1. Terrestrial habitat	E.1.1. Vegetation	E.1.1.1. Number of Trees (approximately)	● 90, but in highly stressed conditions/various levels of health. Not likely to reach maturity.	✓ 200	★ 300	★ 300	
			E.1.1.2. Growing conditions / soil volume	● Does not meet City guidelines of 30 cubic metres per tree (existing approx. 1 to 4 cubic metres).	✓ Improved growing environment meeting City guidelines of min. 30 cubic metres per tree. Restricted to one row of trees on south side.	★ Improved growing environment meeting City guidelines of min. 30 cubic metres per tree. Continuous root zone between two rows of trees on south side.	★ Improved growing environment meeting City guidelines of min. 30 cubic metres per tree. Continuous root zone between two rows of trees on south side.	
	E.2. Air Quality	E.2.1. Impact on Air Quality	E.1.2. Habitat	E.1.2.1. Density of Tree Canopy	● 10 percent coverage	✓ 25 percent coverage	★ 35 percent coverage	★ 35 percent coverage
			E.2.1.1. Promote Alternative modes of travel	● No change	✓ Improves pedestrian facilities, transit service and cycling facilities	★ Greatest improvements to pedestrian facilities, transit service and cycling facilities	★ Greatest improvements to pedestrian facilities, transit service and cycling facilities	
	E.3. Water Quality	E.3.1. Stormwater management	E.2.1.2. Increase in CO2 and Particulates	E.2.1.2. Increase in CO2 and Particulates	● No change	✓ Good opportunity to increase non-auto trips and improve tree canopy will reduce CO2 and particulates	★ Greatest opportunity to increase non-auto trips and improve tree canopy will best reduce CO2 and particulates	★ Greatest opportunity to increase non-auto trips and improve tree canopy will best reduce CO2 and particulates
				E.3.1.1. Collection and treatment	● none	✓ minimum soil volume for treatment	★ maximum soil volume for treatment	★ maximum soil volume for treatment
	E.4. Soils	E.4.1. Hazardous materials	E.4.1.1. Contaminant exposure	Alternatives yield similar results	Alternatives yield similar results	Alternatives yield similar results	Alternatives yield similar results	
	<b>OVERALL RATING - Natural Environment</b>				●	✓	★	★
F. Cultural Environment	F.1. Built Heritage Features	F.1.2. Preservation of/celebration of built heritage features	F.1.2.1. Number of Built Heritage Features directly impacted	Alternatives yield similar results	Alternatives yield similar results	Alternatives yield similar results	Alternatives yield similar results	
			F.1.2.2. Opportunities to enhance Heritage features	Alternatives yield similar results	Alternatives yield similar results	Alternatives yield similar results	Alternatives yield similar results	
	F.2. Cultural Landscapes	F.2.1. Cultural landscapes affected	F.2.1.1. Preservation of cultural landscapes within the study area	Alternatives yield similar results	Alternatives yield similar results	Alternatives yield similar results	Alternatives yield similar results	
			F.2.2. Opportunities to enhance cultural landscapes	F.2.2.1. Opportunities to enhance cultural landscape	● No change	✓ Good but not unique cultural landscape	★ Unique cultural landscape	★ Unique cultural landscape
	F.3. Archaeological Features	F.3.1. Archaeological features affected	F.3.1.1. Effect on potential archaeological features	Alternatives yield similar results	Alternatives yield similar results	Alternatives yield similar results	Alternatives yield similar results	
	F.4. First Nations Peoples and Activities	F.4.1. Adverse effects to land and resources used for traditional purposes	F.4.1.1. Hectares of land used for traditional purposes affected	0	0	0	0	
<b>OVERALL RATING - Cultural Environment</b>				●	✓	★	★	
G. Cost	G.1. Capital Costs	G.1.1. Minimizes construction costs	G.1.1.1. Cost	★ Typical life-cycle cost replacement costs	★ Alternatives yield similar results	★ Alternatives yield similar results	★ Alternatives yield similar results	
<b>OVERALL RATING - Cost</b>				★	✓	✓	✓	

### Appendix 4: EVALUATION MATRIX OF ALTERNATIVE DESIGN CONCEPTS

Legend

★ = Best ✓ = Good ● = Poor ✕ = Fail

Category	Group	Criteria	Measures	Option 1 Do Nothing	Option 2 Centre Transit	Option 4 Southside Transit: One-Way Operations	Option 5 Southside Transit: Two-Way Operations		
<b>H. Land Use Plans and Policies</b>	H.1. Adheres to City Policies and By-Laws	H.1.1. Waterfront Secondary Plan	H.1.1.1. Improved connections	● Existing condition poorly satisfies Policy	✓ North south/east west conditions improved. Satisfies Policy.	★ Greater improvement of north south/east west connections. Best satisfies Policy.	★ Greater improvement of north south/east west connections. Best satisfies Policy.		
			H.1.1.2. Scenic waterfront drive	✕ No opportunity to satisfy Policy	✓ Improved street design will satisfy Policy	★ Unique street design will provide best opportunity to satisfy Policy	★ Unique street design will provide best opportunity to satisfy Policy		
			H.1.1.3. Martin Goodman Trail	✕ No opportunity to satisfy Policy	✕ No opportunity to satisfy Policy	★ Provides best opportunity to satisfy Policy.	★ Provides best opportunity to satisfy Policy.		
			H.1.1.4. Network of parks and open spaces	✕ No opportunity to satisfy Policy	Improved pedestrian environment will help connect parks and other public space improvements. Satisfies Policy.	★ Linear park street design will connect parks and public spaces improvements along corridor. Best satisfies Policy.	★ Linear park street design will connect parks and public spaces improvements along corridor. Best satisfies Policy.		
			H.1.1.5. Transit First	● Existing condition poorly satisfies Policy	★ Improved transit will satisfy Policy	★ Improved transit will satisfy Policy	★ Improved transit will satisfy Policy		
		H.1.3 Toronto Pedestrian Charter	H.1.3.1. Comfortable and convenient walkability	✕ No opportunity to satisfy Policy	✓ Improved pedestrian environment satisfies Policy	★ Much larger and greater improvement to pedestrian environment best satisfies Policy	★ Much larger and greater improvement to pedestrian environment best satisfies Policy		
		H.1.4. Toronto Bike Plan	H.1.4.1. Safe and friendly bike environment	✕ No opportunity to satisfy Policy	✓ On-Street Bike Lanes satisfies Policy	★ Martin Goodman Trail best satisfies Policy	★ Martin Goodman Trail best satisfies Policy		
		H.1.5. Our Common Grounds	H.1.5.1. Tree canopy coverage of 35%	✕ No opportunity to satisfy Policy	✕ No opportunity to satisfy Policy	★ Additional row of trees provides opportunity to satisfy Policy	★ Additional row of trees provides opportunity to satisfy Policy		
			H.1.5.2. Street-tree longevity	✕ No opportunity to satisfy Policy	✓ Improved growing environment increases opportunity to satisfy Policy	★ Improved growing environment vastly increases opportunity to satisfy Policy	★ Improved growing environment vastly increases opportunity to satisfy Policy		
		H.1.6. City of Toronto Official Plan	H.1.6.1. Zoning conformance		Alternatives yield similar results	Alternatives yield similar results	Alternatives yield similar results	Alternatives yield similar results	
			H.1.6.2. Land Use		Alternatives yield similar results	Alternatives yield similar results	Alternatives yield similar results	Alternatives yield similar results	
			H.1.6.3. Density		Alternatives yield similar results	Alternatives yield similar results	Alternatives yield similar results	Alternatives yield similar results	
		<b>OVERALL RATING - Land Use Plans and Policies</b>				<b>✕</b>	<b>✓</b>	<b>★</b>	<b>★</b>