

Central Parkway East: Assessment of Alternative Design Options

<div>Alternatives Existing</div>	<div>Alternative 1 On-road Bike Lanes (both sides)</div>	<div>Alternative 2 MUT (west side)</div>	<div>Alternative 3 Two-way Cycle Track (west side)</div>	<div>Alternative 4 One-way Cycle Tracks (existing lane widths)</div>	<div>Alternative 5 One-way Cycle Tracks (narrower lane widths)</div>
Central Parkway East between Hurontario Street to Burnhamthorpe Road	<ul style="list-style-type: none">• Maintain 4 travel lanes.• Curbs adjusted for narrower travel lanes.• 1.8m on-road bike lanes (with 1m protected buffer).• 2.1m sidewalks (both sides).	<ul style="list-style-type: none">• Maintain 4 travel lanes.• Curbs adjusted for narrower travel lanes.• 3.5m in-boulevard bi-directional MUT (west side).• 2.1 sidewalk (south side).	<ul style="list-style-type: none">• Maintain 4 travel lanes.• Curbs adjusted for narrower travel lanes.• 3.5m in-boulevard two-way cycle track (west side).• 2.1 sidewalk (south side).	<ul style="list-style-type: none">• Maintain 4 travel lanes.• Curbs maintained as travel lanes are unchanged.• 2m in-boulevard one-way cycle track (both sides).• 2.1 sidewalks (both sides).	<ul style="list-style-type: none">• Maintain 4 travel lanes.• Curbs adjusted for narrower travel lanes.• 2m in-boulevard one-way cycle track (both sides).• 2.1 sidewalks (both sides).
Criteria					
Natural Environment					
Impact to trees and vegetation	<div>Acceptable</div> <ul style="list-style-type: none">• Low impact to existing trees.• Trees will be maintained within the boulevards.• Trees will be maintained within the medians with the exemption of new roundabout locations.• Trees are to be impacted at Cliff Road Roundabout and Bloor Street the new roundabout locations (Mississauga Valley Boulevard (southwest and northwest), Cliff Road North and Bloor Street.• Trees are to be impacted at the new bus stop/shelter locations.• Additional tree planting opportunities within the corridor.	<div>Acceptable</div> <ul style="list-style-type: none">• Low impact to existing trees.• Trees will be maintained within the boulevards.• Trees will be maintained within the medians with the exemption of new roundabout locations.• Trees are to be impacted at Cliff Road Roundabout and Bloor Street the new roundabout locations (Mississauga Valley Boulevard (southwest and northwest), Cliff Road North and Bloor Street.• Trees are to be impacted at the new bus stop/shelter locations.• Additional tree planting opportunities within the corridor.	<div>Acceptable</div> <ul style="list-style-type: none">• Low impact to existing trees.• Trees will be maintained within the boulevards.• Trees will be maintained within the medians with the exemption of new roundabout locations.• Trees are to be impacted at Cliff Road Roundabout and Bloor Street the new roundabout locations (Mississauga Valley Boulevard (southwest and northwest), Cliff Road North and Bloor Street.• Trees are to be impacted at the new bus stop/shelter locations.• Additional tree planting opportunities within the corridor.	<div>Acceptable</div> <ul style="list-style-type: none">• Low impact to existing trees.• Trees will be maintained within the boulevards.• Trees will be maintained within the medians with the exemption of new roundabout locations.• Trees are to be impacted at Cliff Road Roundabout and Bloor Street the new roundabout locations (Mississauga Valley Boulevard (southwest and northwest), Cliff Road North and Bloor Street.• Trees are to be impacted at the new bus stop/shelter locations.• Additional tree planting opportunities within the corridor.	<div>Acceptable</div> <ul style="list-style-type: none">• Low impact to existing trees.• Trees will be maintained within the boulevards.• Trees will be maintained within the medians with the exemption of new roundabout locations.• Trees are to be impacted at Cliff Road Roundabout and Bloor Street the new roundabout locations (Mississauga Valley Boulevard (southwest and northwest), Cliff Road North and Bloor Street.• Trees are to be impacted at the new bus stop/shelter locations.• Additional tree planting opportunities within the corridor.
Socio-Economic Environment					
Provides improved connectivity and continuous pedestrian and cycling facilities	<div>Less Preferred</div> <ul style="list-style-type: none">• On-road bike lanes (1.8m) with 1.0m painted buffer on both sides.• Widened sidewalks (2.1m) on both sides.• Multi-use trail (3.5m) on both sides.• Multi-use trail (3.3m) at the Bridge on both sides.• Cross-rides are to be provided at all intersections as per OTM Book 18.	<div>Less Preferred</div> <ul style="list-style-type: none">• Shared Multi-Use trail (3.5m) on the west side and widened sidewalk (2.1m) on the west side.• Widened sidewalk (2.1m) on the east side.• Multi-use trail (3.4m) at the Bridge on the west side.• Cross-rides are to be provided at all intersections as per OTM Book 18.	<div>Less Preferred</div> <ul style="list-style-type: none">• Two-way cycle track (3.5m) on the west side.• Widened sidewalks (2.1m) on both sides.• Multi-use trail at the Bridge (3.4m) and along the Bloor roundabout on the west side (4.0m).• Cross-rides are to be provided at all intersections as per OTM Book 18.• Poor cyclist connection to trails on the south/east sides of the road and existing facilities on side streets. No cycling facilities along the east side.	<div>More Preferred</div> <ul style="list-style-type: none">• One-way cycle track (2.0m) and widened sidewalk (2.1m) on both sides.• Multi-use trail (2.7m) at the Bridge on both sides.• Cross-rides are to be provided at all intersections as per OTM Book 18.• Provides connection to trails along the corridor for both cyclists and pedestrians.• Separated boulevard cycling facilities are the safest way of travel for cyclists and eliminate possible incidents with vehicles and pedestrians.	<div>More Preferred</div> <ul style="list-style-type: none">• One-way cycle track (2.0m) and widened sidewalk (2.1m) on both sides.• Multi-use trail (3.4m) at the Bridge on both sides.• Cross-rides are to be provided at all intersections as per OTM Book 18.• Provides connection to trails along the corridor for both cyclists and pedestrians.• Separated boulevard cycling facilities are the safest way of travel for cyclists and eliminate possible incidents with vehicles and pedestrians.

Provides separate active transportation infrastructure	Acceptable <ul style="list-style-type: none"> Separate space is provided for pedestrians and cyclists. On-road bike lanes provide less comfort for the majority of cyclists. Sidewalk provides pedestrians with a high level of comfort. 	Less Preferred <ul style="list-style-type: none"> Bi-directional MUT does not provide separate space for pedestrians and cyclists. MUT provides less comfort for pedestrians and cyclists. Only pedestrian facilities are provided on the south side. 	Acceptable <ul style="list-style-type: none"> Separate space is provided for pedestrians and cyclists. Two-way cycle track provides comfort for the majority of cyclists. Sidewalk provides pedestrians with a high level of comfort. Two-way cycle track on the west side does not provide any cycling facilities on the south side. 	More Preferred <ul style="list-style-type: none"> Separate space is provided for pedestrians and cyclists. One-way cycle track provides a high degree of comfort for the majority of cyclists. Sidewalk provides pedestrians with a high level of comfort. 	More Preferred <ul style="list-style-type: none"> Separate space is provided for pedestrians and cyclists. One-way cycle track provides a high degree of comfort for the majority of cyclists. Sidewalk provides pedestrians with a high level of comfort.
Noise impacts	Acceptable <ul style="list-style-type: none"> No significant increase in noise levels. A Noise wall is recommended around intersection of Central Parkway and Bloor Street, based on current noise impacts. 	Acceptable <ul style="list-style-type: none"> No significant increase in noise levels A Noise wall is recommended around intersection of Central Parkway and Bloor Street, based on current noise impacts. 	Acceptable <ul style="list-style-type: none"> No significant increase in noise levels A Noise wall is recommended around intersection of Central Parkway and Bloor Street, based on current noise impacts. 	Acceptable <ul style="list-style-type: none"> No significant increase in noise levels A Noise wall is recommended around intersection of Central Parkway and Bloor Street, based on current noise impacts. 	Acceptable <ul style="list-style-type: none"> No significant increase in noise levels A Noise wall is recommended around intersection of Central Parkway and Bloor Street, based on current noise impacts.
Technical Environment					
Traffic and Transit Operations	Less Preferred <ul style="list-style-type: none"> Bus platform to be 2x15m as per MiWay Memo and site walk comments. Locations in the boulevard are to be adjusted due to bike lanes on the road. Buses will need to pull into the bike lane when loading passengers. 	More Preferred <ul style="list-style-type: none"> Bus platform to be 2x15m as per MiWay Memo and site walk comments. Sufficient boulevard space for MUT to be behind the proposed bus platform. 	More Preferred <ul style="list-style-type: none"> Bus platform to be 2x15m as per MiWay Memo and site walk comments. Sufficient boulevard space to provide a bi-directional cycle track on the west side behind the proposed bus platform. 	More Preferred <ul style="list-style-type: none"> Bus platform to be 2x15m as per MiWay Memo and site walk comments. Sufficient boulevard space to provide a cycle track behind the proposed bus platform. 	More Preferred <p>Bus platform to be 2x15m as per MiWay Memo and site walk comments. Sufficient boulevard space to provide a cycle track behind the proposed bus platform.</p>
Ability to accommodate emergency vehicles	All five alternatives have the same ability to accommodate emergency vehicles				
Curb impacts	Less Preferred <ul style="list-style-type: none"> Widening road platform to accommodate bike lanes. Outside curbs to be impacted. 	Less Preferred <ul style="list-style-type: none"> Narrowing travel lanes per Complete Streets Guidelines. Outside curbs to be impacted. 	Less Preferred <ul style="list-style-type: none"> Narrowing travel lanes per Complete Streets Guidelines. Outside curbs to be impacted. 	More Preferred <ul style="list-style-type: none"> Travel lane widths are maintained as existing. All existing curbs will not be impacted. 	More Preferred <ul style="list-style-type: none"> Narrowing travel lanes per Complete Streets Guidelines. Outside curbs to be impacted.
Ability to achieve reduced vehicular speeds	More Preferred <ul style="list-style-type: none"> Narrower travel lanes and the presence of roundabouts will inherently decrease the speed of vehicles. Presence of on-road bike lanes may result in the highest level of driver awareness and caution. Narrow road lanes: <ul style="list-style-type: none"> Increase driver attention, Heighten perception of risk, Reduce comfort, Traffic calming effect, Visual narrowing and less tolerance for error, Proximity to other vehicles requires more careful maneuvering. 	Acceptable <ul style="list-style-type: none"> Narrower travel lanes and the presence of roundabouts will inherently decrease the speed of vehicles. Active transportation facility is set furthest from the roadway, no impact on driver behaviour is anticipated. Narrow road lanes: <ul style="list-style-type: none"> Increase driver attention, Heighten perception of risk, Reduce comfort, Traffic calming effect, Visual narrowing and less tolerance for error, Proximity to other vehicles requires more careful maneuvering. 	Acceptable <ul style="list-style-type: none"> Narrower travel lanes and the presence of roundabouts will inherently decrease the speed of vehicles. The presence of an active transportation facility behind the west curb may increase driver awareness and behaviour. Narrow road lanes: <ul style="list-style-type: none"> Increase driver attention, Heighten perception of risk, Reduce comfort, Traffic calming effect, Visual narrowing and less tolerance for error, Proximity to other vehicles requires more careful maneuvering. 	Less Preferred <ul style="list-style-type: none"> Presence of roundabouts will inherently decrease the speed of vehicles. Wider road width may increase speeding due to perceived safety and behavioural adaptation. 	More Preferred <ul style="list-style-type: none"> Narrower travel lanes and the presence of roundabouts will inherently decrease the speed of vehicles. Presence of an active transportation facility behind curbs may increase driver awareness and behaviour. Narrow road lanes: <ul style="list-style-type: none"> Increase driver attention, Heighten perception of risk, Reduce comfort, Traffic calming effect, Visual narrowing and less tolerance for error, Proximity to other vehicles requires more careful maneuvering.
Improve safety for all modes of travel	Less Preferred <ul style="list-style-type: none"> Narrow lanes reduce the speed of vehicles. 	Less Preferred <ul style="list-style-type: none"> Narrow lanes reduce the speed of vehicles. 	Less Preferred <ul style="list-style-type: none"> Narrow lanes reduce the speed of vehicles. 	Acceptable <ul style="list-style-type: none"> No improvement to travel lane widths. Cycle tracks separated from pedestrians. 	More Preferred <ul style="list-style-type: none"> Narrow lanes reduce the speed of vehicles.

	<ul style="list-style-type: none"> Bike lanes with separation from general vehicle traffic provide dedicated space for cyclists, separated from pedestrians. Buffers provided for cyclists. Wide AODA-compliant sidewalks. 	<ul style="list-style-type: none"> Bi-directional MUT improves safety for cyclists but does not provide separate spaces for pedestrians and cyclists. Buffers provided for cyclists. Wide AODA-compliant sidewalk on the east side. Improvement to current conditions 	<ul style="list-style-type: none"> Two-way cycle track separated from pedestrians. Buffers provided for cyclists. Wide AODA-compliant sidewalks. Improvement to current conditions 	<ul style="list-style-type: none"> Buffers provided for cyclists. Wide AODA-compliant sidewalks. Improvement to current conditions 	<ul style="list-style-type: none"> Cycle tracks separated from pedestrians. Buffers provided for cyclists. Wide AODA-compliant sidewalks. Improvement to current conditions
Utility impacts	Less Preferred <ul style="list-style-type: none"> Relocation of illumination throughout the corridor will be required, including at the new roundabout locations. No hydro poles within the project scope. Fire hydrants will be affected on the east side. SUE investigation QL-A to confirm underground utility clearances for gas, hydro and telecommunication, and water main. 	Acceptable <ul style="list-style-type: none"> Relocation of illumination will be required at new roundabout locations. No hydro poles within the project scope. SUE investigation QL-A to confirm underground utility clearances for gas, hydro and telecommunication, and water main. 	Acceptable <ul style="list-style-type: none"> Relocation of illumination throughout the corridor will be required on the west side to accommodate the two-way cycle track, including at the new roundabout locations. No hydro poles within the project scope. SUE investigation QL-A to confirm underground utility clearances for gas, hydro and telecommunication, and water main. 	Less Preferred <ul style="list-style-type: none"> Relocation of illumination throughout the corridor will be required to accommodate the cycle track, including at the new roundabout locations. Cycle track will affect more illumination poles due to the wider road platform. No hydro poles within the project scope. Fire hydrants will be affected on the east side. SUE investigation QL-A to confirm underground utility clearances for gas, hydro and telecommunication, and water main. 	Acceptable <ul style="list-style-type: none"> Relocation of illumination throughout the corridor will be required to accommodate the cycle track, including at the new roundabout locations. Fire hydrants will be affected on the east side. No hydro poles within the project scope. SUE investigation QL-A to confirm underground utility clearances for gas, hydro and telecommunication, and water main.
Financial Environment					
Capital costs	Acceptable <ul style="list-style-type: none"> Moderate capital costs: <ul style="list-style-type: none"> Curb impacts. MUT Widening sidewalk Illumination relocation Roundabouts 	Acceptable <ul style="list-style-type: none"> Moderate capital costs: <ul style="list-style-type: none"> Curb impacts. MUT Widening sidewalk Illumination relocation Roundabouts 	Acceptable <ul style="list-style-type: none"> Moderate capital costs <ul style="list-style-type: none"> Curb impacts. Two-way cycle track Widening sidewalks Illumination relocation Roundabouts 	More Preferred <ul style="list-style-type: none"> Low to moderate capital costs <ul style="list-style-type: none"> Cycle tracks Widening sidewalks Illumination relocation Roundabouts 	Acceptable <ul style="list-style-type: none"> Moderate to high capital costs <ul style="list-style-type: none"> Curb impacts. Cycle tracks Widening sidewalks Illumination relocation Roundabouts
Maintenance costs	More Preferred <ul style="list-style-type: none"> Similar maintenance cost to current operation and maintenance 	More Preferred <ul style="list-style-type: none"> Similar maintenance cost to current operation and maintenance 	Acceptable <ul style="list-style-type: none"> Additional maintenance costs related to addition of MUT 	Less Preferred <ul style="list-style-type: none"> Additional maintenance costs related to addition of cycle tracks 	Less Preferred <ul style="list-style-type: none"> Additional maintenance costs related to addition of cycle tracks

Legend	More Preferred	Acceptable	Less Preferred
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Recommendation	Not Recommended <ul style="list-style-type: none"> On-road bike lanes provide less comfort for the majority of cyclists. They can provide a false sense of safety for cyclists but there is no physical barrier between high-speed vehicles and cyclists. Significant illumination relocation is required. Bicycle lanes in front of bus stops will require a special design approach and will be complicated. 	Not Recommended <ul style="list-style-type: none"> Bi-directional Multi-Use Trail does not provide separation for pedestrians from cyclists. Multi-use paths may not always have enough width to comfortably accommodate all users, especially during peak times. Cyclists may want to travel at higher speeds, while pedestrians may prefer a slower pace. Separate pedestrian facilities are provided on the east side only. 	Not Recommended <ul style="list-style-type: none"> Two-way cycle tracks can create conflicts at intersections and driveways, as motorists may not expect cyclists approaching from both directions. This increases the risk of collisions between cyclists and turning vehicles. Visibility can be reduced at intersections and driveways if cyclists are traveling in both directions on one side of the road. 	Not Recommended <ul style="list-style-type: none"> Travel lane widths do not meet. Complete Streets Recommendations. AODA-compliant wide pedestrian sidewalks. Safety - Separate paths provide a dedicated space for cyclists, reducing the likelihood of collisions and injuries. Low impact to existing trees located in the boulevard. 	Recommended <ul style="list-style-type: none"> Travel lane widths are narrowed to meet complete street recommendations. AODA-compliant wide pedestrian sidewalks. Safety - Separate paths provide a dedicated space for cyclists, reducing the likelihood of collisions and injuries. Comfort - Cyclists often feel more comfortable and relaxed riding on paths that are exclusively for bikes.
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	<ul style="list-style-type: none">• Low impact to existing trees located in the boulevard.	<ul style="list-style-type: none">• No bicycle facilities on the east side.• Impact on existing illumination.• Low impact to existing trees located in the boulevard.	<ul style="list-style-type: none">• Managing and designing two-way cycle tracks can be more complex than one-way tracks.• Two-way cycle tracks may also increase conflicts between cyclists and pedestrians, especially at intersections and crossings.• Does not provide an easy transition to existing facilities on side streets.		<ul style="list-style-type: none">• Accessibility - Separate bike paths can make cycling more accessible to a wider range of people, including children, elderly individuals, and those with disabilities.• Low impact to existing trees located in the boulevard.
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