














































































Environmental Study Report

Wycroft Road Improvements from Bronte Road to Kerr Street






























































Appendix K: Detailed Evaluation Tables for Planning Alternatives

Submitted to Town of Oakville
by IBI Group
January 2020
















































West Segment

West Segment: Bronte Road to Fourteen Mile Creek		Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Legend
		Do Nothing	Traffic Diversion to Alternate Routes	Transportation Demand Management	Transportation Systems Management	Infrastructure Improvements for AT	Transit Priority Measures and AT	Infrastructure Improvements for All Modes	Least preferred      Most preferred
Criteria	Metrics	Score (1-5)	Score	Score	Score	Score	Score	Score	Notes
Transportation									
Traffic capacity	Provides appropriate capacity to move people and goods (all modes)								Option 7 improves capacity for all modes.
Traffic network	Improves access to major roads								Option 7 improves access for all modes. Option 6 improves access for AT users and transit users. Options 1-4 do not improve access.
Transit service	Improves the quality, reliability and integration of transit with other modes								Options 2-4 may relieve some congestion and improve transit reliability. Option 5 would improve integration of transit with AT. Option 6 would improve all three metrics. Option 7 would improve connections with AT and provide additional opportunities for transit infrastructure to improve the quality and reliability of transit.
Transit Network	Improves the quality, reliability and service of Oakville Transit								No improvements are made through Options 1 and 5. Options 2-4 would result in a slight reduction of through traffic and/or reduced congestion. Option 6 includes improvements specific to transit. Option 7 improves capacity and improvements specific to transit.
Active transportation	Supports active mobility choices such as walking and cycling that is universally accessible, direct, comfortable and convenient								Options 5-7 provide infrastructure improvements to support active transportation. Options 1-4 do not improve pedestrian or cycling facilities.
Emergency management response	Improves access for emergency responders within the corridor								Options 2-6 would result in a slight reduction of through traffic and/or reduced congestion. Options 5 and 6 do not improve response time for emergency responders. Option 7 includes capacity improvements, which would improve response time for emergency responders.
Roadway safety	Improves safety at intersections and crossing locations								Option 4 would improve safety by improving signal timing, which is beneficial for pedestrians and cyclists. Options 5, 6 and 7 would improve intersections and crossings for AT, transit and vehicle users.
	Maintains sightlines between modes								Option 5 would slightly improve sightlines and awareness by adding infrastructure for active transportation. Option 6 slightly more than Option 5. Option 7 would provide opportunity to address horizontal alignment constraints for all road users. Options 1-4 do not provide improvements over the existing condition.
	Easy-to-understand configuration to users "self-explaining roads"								Option 5, 6 and 7 would provide an easy-to-understand configuration, with space for active transportation and transit priority, and appropriate capacity for vehicles. Options 1-4 do not provide improvements over the existing condition.
Summary									

West Segment: Bronte Road to Fourteen Mile Creek		Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Legend	
		Do Nothing	Traffic Diversion to Alternate Routes	Transportation Demand Management	Transportation Systems Management	Infrastructure Improvements for AT	Transit Priority Measures and AT	Infrastructure Improvements for All Modes		
Social Environment										
Supports appropriate intensification	Supports land use									The corridor, while largely industrial in nature, includes a Major Transit Station Area (MTSA). Options 6 and 7 best suit the goals of a MTSA, which includes encouraging commuters to use alternative modes of transportation to reach the transit station, and support future land use and density. Option 5 does not include corridor improvements for transit, but improves the corridor for AT users. Options 2-4 would make small reduction in congestion, but not support future land use.
	Improves business access (post construction)									Options 1-2 do not improve business access. Options 3-5 provide slight improvement to business access for employees and customers. Options 6-7 provide most improvement to all modes.
Community building	Improves community cohesiveness									People generally interact with others more when taking transit or choosing AT modes of transportation than when driving. In this sense, Options 6 and 7 would encourage users to take these modes, which would improve community cohesiveness. Option 5 improves AT, which would encourage more users, providing more connection opportunities. While Option 3 does not improve AT or transit, a large component of TDM is carpooling and encouraging individuals to take alternative modes of transportation, which improves community cohesiveness. Options 1-2 do not improve community cohesiveness.
	Improves quality of life and health and safety									Option 6 would improve both AT and transit on the corridor, making both modes more attractive choices which improves the quality of life and health of residents. Option 5 improves AT, which improves the quality of life and health of residents. Option 7 would improve facilities for all modes, but widening the road would increase the cross-section, which makes the environment less conducive to AT and less safe due to the larger crossing distances. While Option 3 does not improve AT or transit, when implemented it is environmentally friendly, as it reduces congestion and encourages individuals to take alternative modes of transportation. Options 1-2 do not improve quality of life and health and safety.
	Improves corridor aesthetics									Corridor aesthetics would only be improved in Options 5-7, as construction is required. No construction is required for Options 1-4.
	Reduces impact of heavy truck traffic									












































































West Segment: Bronte Road to Fourteen Mile Creek		Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Legend
		Do Nothing	Traffic Diversion to Alternate Routes	Transportation Demand Management	Transportation Systems Management	Infrastructure Improvements for AT	Transit Priority Measures and AT	Infrastructure Improvements for All Modes	Least preferred      Most preferred
Construction phase impacts	Minimal duration of construction								No construction required for Options 1-4.
	Minimizes property requirements								No construction required for Options 1-4.
Noise and vibration impacts	Reduces noise (post construction)								Option 1 does not address increasing traffic demand, increasing congestion will increase noise levels. Options 2-5 will result in some reduction in traffic demand and operational improvements. Noise levels unlikely to be reduced. Option 6 results in a greater reduction in traffic demand and more operational improvements. Opportunity for more noise mitigation measures. Option 7 results in wider roads, which places noise closer to receptors. Potential for noise mitigation measures if required.
	Reduces vibrations (post construction)								Option 1 does not address increasing traffic demand, increasing congestion will increase vibration levels. Options 2-5 will result in some reduction in traffic demand and operational improvements. Vibration levels unlikely to be reduced. Option 6 results in a greater reduction in traffic demand and more operational improvements. Opportunity for more vibration mitigation measures. Option 7 results in wider roads, which places vibrations closer to receptors. Potential for vibration mitigation measures if required.
Travel time	Reduces travel time for all modes								Option 7 improves infrastructure for all modes, therefore travel time should decrease for all modes. Option 6 reduces travel time for AT and transit. Option 5 would reduce travel times for AT. Option 4 would reduce travel times associated with intersections within the corridor. Options 2 and 3 would result in minimal time savings.
Cultural heritage impacts	Maintains existing built cultural heritage features and avoids impacts to archaeological resources								No construction required for Options 1-4. Options 5-7 require construction, and therefore there is the potential for disturbance to the area of potential archaeological resources west of Bronte Road. There are no cultural heritage features in the study area.
Emergency access	Maintains emergency access (post construction)								Options 1-5 have no anticipated difference in emergency access. Option 6 provides intersection or corridor widening which may improve emergency access at intersections. Option 7 includes widening for capacity which would improve emergency access throughout the segment.
Summary									

























































West Segment: Bronte Road to Fourteen Mile Creek		Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Legend
		Do Nothing	Traffic Diversion to Alternate Routes	Transportation Demand Management	Transportation Systems Management	Infrastructure Improvements for AT	Transit Priority Measures and AT	Infrastructure Improvements for All Modes	
Natural Environment									
Environmentally Sensitive Areas	Minimizes disturbances to ESA	-	-	-	-	-	-	-	No ESAs within this corridor segment.
ANSIs	Minimizes disturbances to areas of natural and scientific interest	-	-	-	-	-	-	-	No ANSIs within this corridor segment.
Woodlands	Improves integrity of woodlands and woodland function	-	-	-	-	-	-	-	There are no woodlands within this corridor segment.
Treescape	Improves treescape	○	○	○	○	◐	◐	◑	There would be no construction with Options 1-4, therefore the treescape would be the same as today. Options 5-7 require construction, therefore there would be opportunities to improve the treescape, however with more widening there may be less right-of-way available for trees.
Creeks	Minimizes impacts to creeks, surface and groundwater features and their hydrological functions	●	●	●	●	◐	◐	◑	Options 1-4 do not require widening, therefore no impact to Fourteen Mile Creek. Also no opportunity to address existing crossing. Options 5, 6 and 7 requires some widening, therefore there would be some impact to Fourteen Mile Creek.
Wetlands	Minimizes impacts to provincially and locally designated wetlands	●	●	●	●	◐	◐	◑	There are potential impacts to the locally significant wetland at Fourteen Mile Creek with Options 5, 6 and 7, along with potential opportunities to mitigate impacts. There are no provincially significant wetlands within this corridor segment.
Wildlife and birds	Minimizes impacts to wildlife habitat, fish habitat, the habitat of endangered and threatened species, and significant wildlife habitat	●	●	●	●	◐	◐	◑	There is limited habitat in this segment. Options 1-4 do not require widening, therefore there would be no additional disruptions to wildlife and wildlife habitat than what exists today. Options 5 and 6 requires some widening, therefore there would be some impact to wildlife and wildlife habitat and Option 7 would require the most widening.
Vegetation	Minimizes impacts to vegetation	●	●	●	●	◐	◐	◑	Options 1-4 do not require widening, therefore no vegetation would be removed. Options 5 and 6 require some widening, therefore there would be some impact to vegetation and Option 7 would require the most widening.
Floodplains	Avoids encroachment into the floodplain	●	●	●	●	◐	◐	◑	Regional floodplain around Fourteen Mile Creek. Options 1-4 do not require widening, therefore there would be no further encroachment into the floodplains within the corridor. Options 5, 6 and 7 could have increasing potential to encroach on the flood plain both the northwest and northeast quadrants of the Wycroft Road and Third Line intersection.
Resilience	Minimizes potential impacts to and risk from natural hazards (flooding, erosion, and unstable bedrock/soils)	○	○	○	○	◐	◐	◑	Options 1-4 do not provide opportunity to increase resiliency of infrastructure to natural hazards. Options 5-7 would allow for infrastructure improvements to increase resiliency.
Summary		●	●	●	●	◐	◐	◑	
















































West Segment: Bronte Road to Fourteen Mile Creek		Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Legend
		Do Nothing	Traffic Diversion to Alternate Routes	Transportation Demand Management	Transportation Systems Management	Infrastructure Improvements for AT	Transit Priority Measures and AT	Infrastructure Improvements for All Modes	Least preferred      Most preferred
Technical									
Stormwater management	Improves stormwater quality and reduces stormwater quantity								Options 5-7 require construction, providing the opportunity to improve existing facilities, however a wider cross-section also has detrimental impacts on stormwater quality and quantity.
Utilities	Minimizes the number of utility relocations required								Options 1-4 do not require widening, therefore no relocations would be required. Option 5 requires adding AT facilities, therefore there may be some impacts to existing utilities, Options 6 would require more widening at intersections than Option 5, and Option 7 would require the most widening and utility relocations.
Structures	Provides opportunity to improve or rehabilitate existing structures								Existing structures need to be improved/rehabilitated. Options 6-7 provide opportunity to address this need. Option 5 provides potential opportunity. Options 1-4 provide no opportunity to address existing structures.
Illumination	Minimizes illumination requirements								Options 1-4 do not require widening therefore there are no additional illumination requirements. Option 5 would require additional illumination for AT facilities. Option 6 requires additional illumination for AT facilities and wider intersections. Option 7 has the largest cross-section, which would have the greatest illumination requirements.
Policy framework	Supports existing municipal and provincial policy framework								Provincial and local policies support encouraging the use of AT and transit. In this sense, Option 6 improves both modes, which supports the policies more than Option 5, which only improves AT. Option 7 would improve facilities for all modes, but widening the road would increase the cross-section, which makes the environment less conducive to AT. Option 3 is encouraged by municipal and provincial policies (PPS, GGH, OP, TMP, ATMP), while it does not improve AT or transit, when implemented it is environmentally friendly, as it reduces congestion.
Summary									























































West Segment: Bronte Road to Fourteen Mile Creek		Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Legend
		Do Nothing	Traffic Diversion to Alternate Routes	Transportation Demand Management	Transportation Systems Management	Infrastructure Improvements for AT	Transit Priority Measures and AT	Infrastructure Improvements for All Modes	
Cost									
Capital costs	Lower capital costs including infrastructure and construction								<p>Option 1 requires no construction or infrastructure. Options 2-4 require infrastructure to operate. Options 5 and 6 require construction and infrastructure. Option 7 requires construction and infrastructure, which has been planned in the Town's capital budget.</p> <p>Options 1 - 4 would require on-going labour and maintenance. Options 5 and 6 would require maintenance costs to maintain the AT/transit facilities. Option 7 has the widest cross-section, raising costs associated with maintaining the roadway.</p> <p>Options 1-4 do not provide opportunity for infrastructure renewal of structures. Deferring capital cost is likely to result in future costs as this infrastructure reaches the end of its service life. Option 5 provides some opportunity for infrastructure renewal. Options 6 and 7 provide the most opportunity for infrastructure renewal, but less opportunity than the rest of the corridor due to the lack of structures within the segment.</p>
Operating and life-cycle costs	Lower operating costs based on the required labour, energy, and maintenance costs								
	Infrastructure renewal and ability to reduce long-term costs								
Summary									

Middle Segment


































Middle Segment: Fourteen Mile Creek to 1146 South Service Road		Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Legend Least preferred      Most preferred
		Do Nothing	Traffic Diversion to Alternate Routes	Transportation Demand Management	Transportation Systems Management	Infrastructure Improvements for AT	Transit Priority Measures and AT	Infrastructure Improvements for All Modes	
Criteria	Metrics	Score (1-5)	Score	Score	Score	Score	Score	Score	Notes
Transportation									
Traffic capacity	Provides appropriate capacity to move people and goods (all modes)								Option 7 improves capacity for all modes.
Traffic network	Improves access to major roads								Option 7 improves access for all modes. Option 6 improves access for AT users and transit users. Options 1-4 do not improve access.
Transit service	Improves the quality, reliability and integration of transit with other modes								Options 2-4 may relieve some congestion and improve transit reliability. Option 5 would improve integration of transit with AT. Option 6 would improve all three metrics. Option 7 would improve connections with AT and provide additional opportunities for transit infrastructure to improve the quality and reliability of transit.
Transit network	Improves the quality, reliability and service of Oakville Transit								No improvements are made through Options 1 and 5. Options 2-4 would result in a slight reduction of through traffic and/or reduced congestion. Option 6 includes improvements specific to transit. Option 7 improves capacity and improvements specific to transit.
Active transportation	Supports active mobility choices such as walking and cycling that is universally accessible, direct, comfortable and convenient								Option 5 best supports a range of AT users with dedicated infrastructure and fewer traffic lanes. Option 6 may include additional lanes at intersections, increasing crossing distances and making this option slightly less supportive. Option 7 includes additional traffic lanes making this option slightly less supportive. Options 1-4 do not improve pedestrian or cycling facilities.
Emergency management response	Improves access for emergency responders within the corridor								Options 2-4 would result in a slight reduction of through traffic and/or reduced congestion. Options 5 and 6 do not improve response time for emergency responders. Option 7 includes capacity improvements, which would improve response time for emergency responders.
Roadway safety	Improves safety at intersections and crossing locations								Option 4 would improve safety by improving signal timing, which is beneficial for pedestrians and cyclists. Options 5, 6 and 7 would improve intersections and crossings for AT, transit and vehicle users.
	Maintains sightlines between modes								Option 5 would slightly improve sightlines and awareness by adding infrastructure for active transportation. Option 6 slightly more than Option 5. Option 7 would provide opportunity to address horizontal alignment constraints for all road users. Options 1-4 do not provide improvements over the existing condition.
	Easy-to-understand configuration to users "self-explaining roads"								Option 5, 6 and 7 would provide an easy-to-understand configuration, with space for active transportation and transit priority, and appropriate capacity for vehicles. Options 1-4 do not provide improvements over the existing condition.
Summary									

Middle Segment: Fourteen Mile Creek to 1146 South Service Road		Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Legend
		Do Nothing	Traffic Diversion to Alternate Routes	Transportation Demand Management	Transportation Systems Management	Infrastructure Improvements for AT	Transit Priority Measures and AT	Infrastructure Improvements for All Modes	
Social Environment									
Supports appropriate intensification	Supports land use								The subject corridor segment is industrial in nature and includes businesses such as logistic firms and Oakville Fire Station 5. Option 7 best supports land uses within the segment by increasing the capacity for vehicles and trucks.
	Improves business access (post construction)								Options 1-2 do not improve business access. Options 3-5 provide slight improvement to business access for employees and customers. Options 6-7 provide most improvement to all modes.
Community building	Improves community cohesiveness								People generally interact with others more when taking transit or choosing AT modes of transportation than when driving. In this sense, Options 6 and 7 would encourage users to take these modes, which would improve community cohesiveness. Option 5 improves AT, which would encourage more users, providing more connection opportunities. While Option 3 does not improve AT or transit, a large component of TDM is carpooling and encouraging individuals to take alternative modes of transportation, which improves community cohesiveness. Options 1-2 do not improve community cohesiveness.
	Improves quality of life and health and safety								Option 6 would improve both AT and transit on the corridor, making both modes more attractive choices which improves the quality of life and health of residents. Option 5 improves AT, which improves the quality of life and health of residents. Option 7 would improve facilities for all modes, but widening the road would increase the cross-section, which makes the environment less conducive to AT and less safe due to the larger crossing distances. While Option 3 does not improve AT or transit, when implemented it is environmentally friendly, as it reduces congestion and encourages individuals to take alternative modes of transportation. Options 1-2 do not improve quality of life and health and safety.
	Improves corridor aesthetics								Corridor aesthetics would only be improved in Options 5-7, as construction is required. No construction is required for Options 1-4.
	Reduces impact of heavy truck traffic								Option 7 would provide opportunities to provide infrastructure to support heavy truck traffic. Options 5 and 6 provide some opportunities to balance other modes with truck traffic. Options 1-4 do not provide improvements over the existing condition.
Construction phase Impacts	Minimal duration of construction								No construction required for Options 1-4.
	Minimizes property requirements								No construction required for Options 1-4.


Middle Segment: Fourteen Mile Creek to 1146 South Service Road		Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Legend
		Do Nothing	Traffic Diversion to Alternate Routes	Transportation Demand Management	Transportation Systems Management	Infrastructure Improvements for AT	Transit Priority Measures and AT	Infrastructure Improvements for All Modes	Least preferred      Most preferred
Noise and vibration impacts	Reduces noise (post construction)								Option 1 does not address increasing traffic demand, increasing congestion will increase noise levels. Options 2-5 will result in some reduction in traffic demand and operational improvements. Noise levels unlikely to be reduced. Option 6 results in a greater reduction in traffic demand and more operational improvements. Opportunity for more noise mitigation measures. Option 7 results in wider roads, which places noise closer to receptors. Potential for noise mitigation measures if required.
	Reduces vibrations (post construction)								Option 1 does not address increasing traffic demand, increasing congestion will increase vibration levels. Options 2-5 will result in some reduction in traffic demand and operational improvements. Vibration levels unlikely to be reduced. Option 6 results in a greater reduction in traffic demand and more operational improvements. Opportunity for more vibration mitigation measures. Option 7 results in wider roads, which places vibrations closer to receptors. Potential for vibration mitigation measures if required.
Travel time	Reduces travel time for all modes								Option 7 improves infrastructure for all modes, therefore travel time should decrease for all modes. Option 6 reduces travel time for AT and transit. Option 5 would reduce travel times for AT. Option 4 would reduce travel times associated with intersections within the corridor, but the only signals within the corridor are at each end, so there would be minimal time savings. Options 2 and 3 would result in minimal time savings.
Cultural heritage impacts	Maintains existing built cultural heritage features and avoids impacts to archaeological resources								No construction required for Options 1-4. Options 5-7 require construction, and therefore there is the potential for disturbance to the area of potential archaeological resources east of the first curve on the South Service Road. There are no cultural heritage features in the study area.
Emergency access	Maintains emergency access (post construction)								Options 1-5 have no anticipated difference in emergency access. Option 6 provides intersection or corridor widening which may improve emergency access at intersections. Option 7 includes widening for capacity which would improve emergency access throughout the segment.
Summary									


























































Middle Segment: Fourteen Mile Creek to 1146 South Service Road		Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Legend Least preferred      Most preferred
		Do Nothing	Traffic Diversion to Alternate Routes	Transportation Demand Management	Transportation Systems Management	Infrastructure Improvements for AT	Transit Priority Measures and AT	Infrastructure Improvements for All Modes	
Natural Environment									
Environmentally Sensitive Areas	Minimizes disturbances to ESA	-	-	-	-	-	-	-	No ESAs within this corridor segment.
ANSIs	Minimizes disturbances to areas of natural and scientific interest	-	-	-	-	-	-	-	No ANSIs within this corridor segment.
Woodlands	Improves integrity of woodland and woodland function	-	-	-	-	-	-	-	There are no woodlands within this corridor segment.
Treescape	Improves treescape								There would be no construction with Options 1-4, therefore the treescape would be the same as today. Options 5-7 require construction, therefore there would be opportunities to improve the treescape, however with more widening there may be less right-of-way available for trees.
Creeks	Minimizes impacts to creeks, surface and groundwater features and their hydrological functions								Options 1-4 do not require widening, therefore creeks and their ecological function would not be disrupted. Option 5 requires some widening, therefore there would be some impact to creeks, Option 6 would require more widening at intersections than Option 5, though creeks are generally located mid-block so creek impacts are similar. Option 7 would require the most mid-block widening but impacts to Upper McCraney Creek can be mitigated.
Wetlands	Minimizes impacts to provincially and locally designated wetlands	-	-	-	-	-	-	-	There are no provincially or locally significant wetlands within this corridor segment.
Wildlife and birds	Minimizes impacts to wildlife habitat, fish habitat, the habitat of endangered and threatened species, and significant wildlife habitat								There is limited habitat in this segment. Options 1-4 do not require widening, therefore there would be no additional disruptions to wildlife and wildlife habitat than what exists today. Options 5 and 6 requires some widening, therefore there would be some impact to wildlife and wildlife habitat and Option 7 would require the most widening.
Vegetation	Minimizes impacts to vegetation								Options 1-4 do not require widening, therefore no vegetation would be removed. Options 5 and 6 require some widening, therefore there would be some impact to vegetation and Option 7 would require the most widening.
Floodplains	Avoids encroachment into the floodplain								Options 1-4 do not require widening, therefore there would be no further encroachment into the floodplains within the corridor. Options 5, 6 and 7 could have increasing potential to encroach on the flood plain located around Upper McCraney Creek.
Resilience	Minimizes potential impacts to and risk from natural hazards (flooding, erosion, and unstable bedrock/soils)								Options 1-4 do not require widening, therefore there would be no impacts to/risks of natural hazards. Options 5 - 7 require some widening, therefore there would be some impacts, however they would also provide some opportunities to address existing flooding concerns. Existing flooding concerns @ McCraney Creek.
Summary									









































Middle Segment: Fourteen Mile Creek to 1146 South Service Road		Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Legend
		Do Nothing	Traffic Diversion to Alternate Routes	Transportation Demand Management	Transportation Systems Management	Infrastructure Improvements for AT	Transit Priority Measures and AT	Infrastructure Improvements for All Modes	
Technical									
Stormwater management	Improves stormwater quality and reduces stormwater quantity								Options 5-7 require construction, providing the opportunity to improve existing facilities, however a wider cross-section also has detrimental impacts on stormwater quality and quantity.
Utilities	Minimizes the number of utility relocations required								Options 1-4 do not require widening, therefore no relocations would be required. Option 5 requires adding AT facilities, therefore there may be some impacts to existing utilities, Option 6 would require more widening at intersections than Option 5, and Option 7 would require the most widening and utility relocations.
Structures	Provides opportunity to improve or rehabilitate existing structures								Existing structures need to be improved/rehabilitated. Options 6-7 provide opportunity to address this need. Option 5 provides potential opportunity. Options 1-4 provide no opportunity to address existing structures.
Illumination	Minimizes illumination requirements								Options 1-4 do not require widening therefore there are no additional illumination requirements. Option 5 would require additional illumination for AT facilities. Option 6 requires additional illumination for AT facilities and wider intersections. Option 7 has the largest cross-section, which would have the greatest illumination requirements.
Policy framework	Supports existing municipal and provincial policy framework								Provincial and local policies support encouraging the use of AT and transit. In this sense, Option 6 improves both modes, which supports the policies more than Option 5, which only improves AT. Option 7 would improve facilities for all modes, but widening the road would increase the cross-section, which makes the environment less conducive to AT. Option 3 is encouraged by municipal and provincial policies (PPS, GGH, OP, TMP, ATMP), while it does not improve AT or transit, when implemented it is environmentally friendly, as it reduces congestion.
Summary									






























































Middle Segment: Fourteen Mile Creek to 1146 South Service Road		Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Legend Least preferred      Most preferred
		Do Nothing	Traffic Diversion to Alternate Routes	Transportation Demand Management	Transportation Systems Management	Infrastructure Improvements for AT	Transit Priority Measures and AT	Infrastructure Improvements for All Modes	
Cost									
Capital costs	Lower capital costs including infrastructure and construction								Option 1 requires no construction or infrastructure. Options 2-4 require infrastructure to operate. Options 5 and 6 require construction and infrastructure. Option 7 requires construction and infrastructure, which has been planned in the Town's capital budget.
Operating and life-cycle costs	Lower operating costs based on the required labour, energy, and maintenance costs								Options 1 - 4 would require on-going labour and maintenance. Options 5 and 6 would require maintenance costs to maintain the AT/transit facilities. Option 7 has the widest cross-section, raising costs associated with maintaining the roadway.
	Infrastructure renewal and ability to reduce long-term costs								Options 1-4 do not provide opportunity for infrastructure renewal of structures. Deferring capital cost is likely to result in future costs as this infrastructure reaches the end of its service life. Option 5 provides some opportunity for infrastructure renewal. Options 6 and 7 provide the most opportunity for infrastructure renewal.
Summary									

East Segment



























East Segment: 1146 South Service Road to Kerr Street		Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Legend Least preferred  Most preferred
		Do Nothing	Traffic Diversion to Alternate Routes	Transportation Demand Management	Transportation Systems Management	Infrastructure Improvements for AT	Transit Priority Measures and AT	Infrastructure Improvements for All Modes	
Criteria	Metrics	Score (1-5)	Score	Score	Score	Score	Score	Score	Notes
Transportation									
Traffic capacity	Provides appropriate capacity to move people and goods (all modes)								Option 7 improves capacity for all modes.
Traffic network	Improves access to major roads								Option 7 improves access for all modes. Option 6 improves access for AT users and transit users. Options 1-4 do not improve access.
Transit service	Improves the quality, reliability and integration of transit with other modes								Options 2-4 may relieve some congestion and improve transit reliability. Option 5 would improve integration of transit with AT. Option 6 would improve all three metrics. Option 7 would improve connections with AT and provide additional opportunities for transit infrastructure to improve the quality and reliability of transit.
Transit network	Improves the quality, reliability and service of Oakville Transit								No improvements are made through Options 1 and 5. Options 2-4 would result in a slight reduction of through traffic and/or reduced congestion. Option 6 includes improvements specific to transit. Option 7 improves capacity and improvements specific to transit.
Active transportation	Supports active mobility choices such as walking and cycling that is universally accessible, direct, comfortable and convenient								Option 5 best supports a range of AT users with dedicated infrastructure and fewer traffic lanes. Option 6 may include additional lanes at intersections, increasing crossing distances and making this option slightly less supportive. Option 7 includes additional traffic lanes making this option slightly less supportive. Options 1-4 do not improve pedestrian or cycling facilities.
Emergency management response	Improves access for emergency responders within the corridor								Options 2-4 would result in a slight reduction of through traffic and/or reduced congestion. Options 5 and 6 do not improve response time for emergency responders. Option 7 includes capacity improvements, which would improve response time for emergency responders.
Roadway safety	Improves safety at intersections and crossing locations								Option 4 would improve safety by improving signal timing, which is beneficial for pedestrians and cyclists. Options 5, 6 and 7 would improve intersections and crossings for AT, transit and vehicle users.
	Maintains sightlines between modes								Option 5 would slightly improve sightlines and awareness by adding infrastructure for active transportation. Option 6 slightly more than Option 5. Option 7 would provide opportunity to address horizontal alignment constraints for all road users. Options 1-4 do not provide improvements over the existing condition.
	Easy-to-understand configuration to users "self-explaining roads"								Option 5, 6 and 7 would provide an easy-to-understand configuration, with space for active transportation and transit priority, and appropriate capacity for vehicles. Options 1-4 do not provide improvements over the existing condition.
Summary									

East Segment: 1146 South Service Road to Kerr Street		Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Legend Least preferred  Most preferred
		Do Nothing	Traffic Diversion to Alternate Routes	Transportation Demand Management	Transportation Systems Management	Infrastructure Improvements for AT	Transit Priority Measures and AT	Infrastructure Improvements for All Modes	
Social Environment									
Supports appropriate intensification	Supports land use								This corridor segment is comprised of more commercial and employment land uses than the other corridor segments. The environment is generally autocentric and therefore Option 7 best supports existing land uses.
	Improves business access (post construction)								Options 1-2 do not improve business access. Options 3-5 provide slight improvement to business access for employees and customers. Options 6-7 provide most improvement to all modes.
Community building	Improves community cohesiveness								People generally interact with others more when taking transit or choosing AT modes of transportation than when driving. In this sense, Option 6 would encourage users to take these modes, which would improve community cohesiveness. Option 5 improves AT, which would encourage more users, providing more connection opportunities. Option 7 would improve facilities for all modes, but widening the road would increase the cross-section, which makes the environment less conducive to AT and lessen the benefits. While Option 3 does not improve AT or transit, a large component of TDM is carpooling and encouraging individuals to take alternative modes of transportation, which improves community cohesiveness. Options 1-2 do not improve community cohesiveness.
	Improves quality of life and health and safety								Option 6 would improve both AT and transit on the corridor, making both modes more attractive choices which improves the quality of life and health of residents. Option 5 improves AT, which improves the quality of life and health of residents. Option 7 would improve facilities for all modes, but widening the road would increase the cross-section, which makes the environment less conducive to AT and less safe due to the larger crossing distances. While Option 3 does not improve AT or transit, when implemented it is environmentally friendly, as it reduces congestion and encourages individuals to take alternative modes of transportation. Options 1-2 do not improve quality of life and health and safety.
	Improves corridor aesthetics								Corridor aesthetics would only be improved in Options 5-7, as construction is required. No construction is required for Options 1-4.
	Reduces impact of heavy truck traffic								Option 7 would provide opportunities to provide infrastructure to support heavy truck traffic. Options 5 and 6 provide some opportunities to balance other modes with truck traffic. Options 1-4 do not provide improvements over the existing condition.
Construction phase Impacts	Minimal duration of construction								No construction required for Options 1-4.
	Minimizes property requirements								No construction required for Options 1-4.

East Segment: 1146 South Service Road to Kerr Street		Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Legend Least preferred      Most preferred
		Do Nothing	Traffic Diversion to Alternate Routes	Transportation Demand Management	Transportation Systems Management	Infrastructure Improvements for AT	Transit Priority Measures and AT	Infrastructure Improvements for All Modes	
Noise and vibration impacts	Reduces noise (post construction)								Option 1 does not address increasing traffic demand, increasing congestion will increase noise levels. Options 2-5 will result in some reduction in traffic demand and operational improvements. Noise levels unlikely to be reduced. Option 6 results in a greater reduction in traffic demand and more operational improvements. Opportunity for more noise mitigation measures. Option 7 results in wider roads, which places noise closer to receptors. Potential for noise mitigation measures if required.
	Reduces vibrations (post construction)								Option 1 does not address increasing traffic demand, increasing congestion will increase vibration levels. Options 2-5 will result in some reduction in traffic demand and operational improvements. Vibration levels unlikely to be reduced. Option 6 results in a greater reduction in traffic demand and more operational improvements. Opportunity for more vibration mitigation measures. Option 7 results in wider roads, which places vibrations closer to receptors. Potential for vibration mitigation measures if required.
Travel time	Reduces travel time for all modes								Option 7 improves infrastructure for all modes, therefore travel time should reduce the most for all modes. Option 6 reduces travel time for AT and transit. Option 5 would reduce travel times for AT. Option 4 would reduce travel times associated with intersections within the corridor. Options 2 and 3 would result in minimal time savings. Option 1 would not reduce travel time.
Cultural heritage impacts	Maintains existing built cultural heritage features and avoids impacts to archaeological resources	-	-	-	-	-	-	-	There are no cultural heritage resources or known archaeological resources within this corridor segment.
Emergency access	Maintains emergency access (post construction)								Options 1-5 have no anticipated difference in emergency access. Option 6 provides intersection or corridor widening which may improve emergency access at intersections. Option 7 includes widening for capacity which would improve emergency access throughout the segment.
Summary									

East Segment: 1146 South Service Road to Kerr Street		Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Legend Least preferred      Most preferred
		Do Nothing	Traffic Diversion to Alternate Routes	Transportation Demand Management	Transportation Systems Management	Infrastructure Improvements for AT	Transit Priority Measures and AT	Infrastructure Improvements for All Modes	
Natural Environment									
Environmentally Sensitive Areas	Minimizes disturbances to ESA	-	-	-	-	-	-	-	No ESAs within this corridor segment.
ANSIs	Minimizes disturbances to areas of natural and scientific interest	-	-	-	-	-	-	-	No ANSIs within this corridor segment.
Woodlands	Improves integrity of woodland and woodland function								There are no woodlands within this segment.
Treescape	Improves treescape								There would be no construction with Options 1-4, therefore the treescape would be the same as today. Options 5-7 require construction, therefore there would be opportunities to improve the treescape, however with more widening there may be less right-of-way available for trees.
Creeks	Minimizes impacts to creeks, surface and groundwater features and their hydrological functions								Options 1-4 do not require widening, therefore no impact to Taplow and Glen Oak Creeks. Also no opportunity to address existing crossing. Options 5, 6 and 7 requires some widening, therefore there would be some impact to Taplow and Glen Oak Creeks
Wetlands	Minimizes impacts to provincially and locally designated wetlands	-	-	-	-	-	-	-	There are no provincially or locally significant wetlands within this corridor segment.
Wildlife and birds	Minimizes impacts to wildlife habitat, fish habitat, the habitat of endangered and threatened species, and significant wildlife habitat								There is limited habitat in this segment. Options 1-4 do not require widening, therefore there would be no additional disruptions to wildlife and wildlife habitat than what exists today. Options 5 and 6 requires some widening, therefore there would be some impact to wildlife and wildlife habitat and Option 7 would require the most widening.
Vegetation	Minimizes impacts to vegetation								Options 1-4 do not require widening, therefore no vegetation would be removed. Options 5 and 6 require some widening, therefore there would be some impact to vegetation and Option 7 would require the most widening.
Floodplains	Avoids encroachment into the floodplain								Options 1-4 do not require widening, therefore there would be no further encroachment into the floodplains within the corridor. Options 5, 6 and 7 could have increasing potential to encroach on the flood plain located around Taplow and Glen Oak Creeks.
Resilience	Minimizes potential impacts to and risk from natural hazards (flooding, erosion, and unstable bedrock/soils)								Options 1-4 do not require widening, therefore there would be no impacts to/risks of natural hazards. Options 5 - 7 require some widening, therefore there would be some impacts, however they would also provide some opportunities to address existing flooding concerns. Ditches are at capacity near Weller Court, resulting in localized ponding.
Summary									

East Segment: 1146 South Service Road to Kerr Street		Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Legend
		Do Nothing	Traffic Diversion to Alternate Routes	Transportation Demand Management	Transportation Systems Management	Infrastructure Improvements for AT	Transit Priority Measures and AT	Infrastructure Improvements for All Modes	
Technical									
Stormwater management	Improves stormwater quality and reduces stormwater quantity								Options 5-7 require construction, providing the opportunity to improve existing facilities, however a wider cross-section also has detrimental impacts on stormwater quality and quantity.
Utilities	Minimizes the number of utility relocations required								Options 1-4 do not require widening, therefore no relocations would be required. Option 5 requires adding AT facilities, therefore there may be some impacts to existing utilities, Option 6 would require more widening at intersections than Option 5, and Option 7 would require the most widening and utility relocations.
Structures	Provides opportunity to improve or rehabilitate existing structures								Existing structures need to be improved/rehabilitated. Options 6-7 provide opportunity to address this need. Option 5 provides potential opportunity. Options 1-4 provide no opportunity to address existing structures.
Illumination	Minimizes illumination requirements								Options 1-4 do not require widening therefore there are no additional illumination requirements. Option 5 would require additional illumination for AT facilities. Option 6 requires additional illumination for AT facilities and wider intersections. Option 7 has the largest cross-section, which would have the greatest illumination requirements.
Policy framework	Supports existing municipal and provincial policy framework								Provincial and local policies support encouraging the use of AT and transit. In this sense, Option 6 improves both modes, which supports the policies more than Option 5, which only improves AT. Option 7 would improve facilities for all modes, but widening the road would increase the cross-section, which makes the environment less conducive to AT. Option 3 is encouraged by municipal and provincial policies (PPS, GGH, OP, TMP, ATMP), while it does not improve AT or transit, when implemented it is environmentally friendly, as it reduces congestion.
Summary									

East Segment: 1146 South Service Road to Kerr Street		Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Legend Least preferred      Most preferred
		Do Nothing	Traffic Diversion to Alternate Routes	Transportation Demand Management	Transportation Systems Management	Infrastructure Improvements for AT	Transit Priority Measures and AT	Infrastructure Improvements for All Modes	
Cost									
Capital costs	Lower capital costs including infrastructure and construction								Option 1 requires no construction or infrastructure. Option 2-4 require infrastructure to operate. Option 5 and 6 requires construction and infrastructure. Option 7 requires construction and infrastructure, which has been planned in the Town's capital budget.
Operating and life-cycle costs	Lower operating costs based on the required labour, energy, and maintenance costs								Options 1 - 4 would require on-going labour and maintenance. Options 5 and 6 would require maintenance costs to maintain the AT/transit facilities. Option 7 has the widest cross-section, raising costs associated with maintaining the roadway.
	Infrastructure renewal and ability to reduce long-term costs								Options 1-4 do not provide opportunity for infrastructure renewal of structures. Deferring capital cost is likely to result in future costs as this infrastructure reaches the end of its service life. Options 5 and 6 provide some opportunity for infrastructure renewal. Option 7 provides the most opportunity for infrastructure renewal, as this segment contains the most culverts and structures out of the corridor.
Summary		