

Analysis Criteria and Indicators

Aquatic Environment	
Criteria	Indicator
Potential for disturbance to aquatic habitat.	Number, character and sensitivity of watercourses crossed.
	Likelihood of increased runoff effects on these watercourses.
	Potential for increased erosion and sediment loading to receiving streams during construction.
	Likelihood of water quality impacts to watercourses from runoff as a result of road improvements.
Potential for removal of aquatic habitat from road improvements (e.g. bridge or culvert extensions or replacements).	Number of watercourse culverts/structures that could require extension to accommodate road improvements.
	Magnitude of removal effects.
	Sensitivity of habitat affected
	Type of structure (bridge or culvert) being widened to accommodate road improvements.
Terrestrial Environment	
Criteria	Indicator
Potential for disturbance to natural habitat.	Number and character of sensitive habitats that the haul routes pass by. (Distances of designated features)
	Effects on vegetation from increased run-off from new road works, dust, emissions, etc.
Potential for removal of natural habitat from road improvements.	Area, character and sensitivity of vegetation to be removed due to required road improvements.
	Potential effects on wildlife as a result of habitat removal.
Potential for increased wildlife kills.	Presence of wildlife corridors that the routes pass through.
	Likelihood of increased wildlife kills as a result of increased truck traffic volumes.
	Likelihood of increased wildlife kills as a result of the reluctance of wildlife to use longer/wider bridge or culvert structures.
Land Uses	
Criteria	Indicator
Potential for disruptive effects to sensitive planned land uses.	Number, character of planned development areas.
	Sensitivity of planned development to increased truck traffic.
Potential for removal of planned land uses from road improvements.	Area and importance of planned land use eliminated by road improvements.
Conformity with applicable plans and polices.	Degree of conformity with Official Plans.
	Degree of conformity with the Greenbelt Plan.
	Degree of conformity with the Niagara Escarpment Plan.
Social and Community Impacts	
Criteria	Indicator
Potential for disruption to residents' use and enjoyment of property.	Number of residences fronting and/or backing directly onto a potential truck route.
	Associated truck exposure index
	Quantity of ingress and egress interference at residential driveways
	Associated truck exposure index.
	Number of defined neighbourhoods along a potential truck route.
	Associated truck exposure index.
	Ingress and egress interference at roadways used to access neighbourhoods along a potential truck route.
Associated truck exposure index.	
Potential for effects on community character	Qualitative assessment of likely changes to the unique or distinctive qualities of the communities potentially affected (i.e., physical, economic and/or socio-cultural features of the communities).
	Change in the existing character of the road (excluding Highway 6 since no impact).
Potential for effects on community cohesion	Qualitative assessment of likely changes to community cohesion due to disruption and/or displacement effects, potential for voluntary out-migration and creation of a barrier effects due to truck traffic.
Potential for disruption to users of operations at recreational and community features and/or institutions.	Number of recreational or community features and/or institutions located along a potential truck route.
	Associated truck exposure index.
	Number of sensitive / vulnerable recreational or community features and/or institutions.
	Associated truck exposure index.
	Ingress and egress interference at entrances to recreational or community features and/or institutions.
Associated truck exposure index.	
Potential for displacement/removal of residents & residential property from road improvements.	Number and area of residences/residential property required (partial removals).
	Number and area of residences/residential properties required (full displacement).
	Number of vulnerable residents/households displaced.
Potential for displacement/removal of recreational or community features and/or institutions.	Number and area of recreational or community features (including trails, bicycle routes, parks and open space) and/or institutional properties required (partial removals).
	Number and area of recreational or community features (including trails, bicycle routes, parks and open space) and/or institutional properties required (full displacement).
	Number of sensitive / vulnerable recreational or community features and institutions displaced.
Noise impacts on community	Number of residences expected to experience a 3, 5 and 10 dbA increase in noise levels over future baseline conditions for any given hour and a description of the magnitude of change.