

# Roads



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Goal	KPI	Applicable Surface Type	Applicable Road Type	Breakdown 1	Breakdown 2	Units
A Reliable Road Network	Extent of Network Cleaned	Hardtop Surfaces	All Roads	Regular Cleaning		%
				Seasonal Leaf Collection Program		%
			Arterials & Collectors	Regular Cleaning		%
				Seasonal Leaf Collection Program		%
			Locals	Regular Cleaning		%
				Seasonal Leaf Collection Program		%
	Lane Closures	All Surfaces	All Roads	Planned		%
				Unplanned		%
	Signal Outages	All Surfaces	All Roads	Due to Power Outage		# / Total Number of Signalized Traffic Intersections
				Due to Signal Failure		# / Total Number of Signalized Traffic Intersections
	Winter Labour Hours	Hardtop Surfaces	All Roads	Ice Cutting		Hours / Total Lane-km
				Other		Hours / Total Lane-km
				Roadway Preparation		Hours / Total Lane-km
				Sanding / Salting		Hours / Total Lane-km
				Snow Removal (Loading)		Hours / Total Lane-km
				Snowplowing		Hours / Total Lane-km
				Sweeping (Spring Clean-Up)		Hours / Total Lane-km
				Winter Road Patrol		Hours / Total Lane-km
Manage Customer Expectations	Public Education / Engagement Costs	All Surfaces	All Roads	Public Education / Engagement Costs		\$ / Total Population
	Requests for Capital Construction	All Surfaces	All Roads	Requests for Capital Construction		# / Total Lane-km
	Requests for O&M (Non Winter Specific)	All Surfaces	All Roads	Other		# / Total Lane-km
				Potholes		# / Total Lane-km
				Roadway Flooding & Ponding		# / Total Lane-km
				Sweeping		# / Total Lane-km
	Requests for O&M (Winter Specific)	Hardtop Surfaces	All Roads	Other		# / Total Lane-km
				Sanding / Salting		# / Total Lane-km
				Snow Clearing		# / Total Lane-km
Optimize the Transportation System Condition	Avg. Road Roughness of Network	Asphalt Surfaces	Arterials & Collectors	Avg. Road Roughness of Network		Avg. IRI
			Locals	Avg. Road Roughness of Network		Avg. IRI
			Alleys	Avg. Road Roughness of Network		Avg. IRI
	Avg. Road Roughness when Reconstructed	Asphalt Surfaces	Arterials & Collectors	Avg. Road Roughness when Reconstructed		Avg. IRI
			Locals	Avg. Road Roughness when Reconstructed		Avg. IRI
			Alleys	Avg. Road Roughness when Reconstructed		Avg. IRI
	Avg. Road Roughness when Rehabilitated (Major)	Asphalt Surfaces	Arterials & Collectors	Avg. Road Roughness when Rehabilitated (Major)		Avg. IRI
			Locals	Avg. Road Roughness when Rehabilitated (Major)		Avg. IRI
			Alleys	Avg. Road Roughness when Rehabilitated (Major)		Avg. IRI
	Avg. Timing of Road Reconstruction	Asphalt Surfaces	Arterials & Collectors	Avg. Timing of Road Reconstruction		Avg. Years
			Locals	Avg. Timing of Road Reconstruction		Avg. Years
			Alleys	Avg. Timing of Road Reconstruction		Avg. Years
	Avg. Timing of Road Rehabilitation (Major)	Asphalt Surfaces	Arterials & Collectors	Avg. Timing of Road Rehabilitation (Major)		Avg. Years
			Locals	Avg. Timing of Road Rehabilitation (Major)		Avg. Years
			Alleys	Avg. Timing of Road Rehabilitation (Major)		Avg. Years
	Perceived Condition of Network	Asphalt Surfaces	All Roads	Fair		%
				Poor / Very Poor		%
				Very Good / Good		%
			Arterials & Collectors	Fair		%
				Poor / Very Poor		%
				Very Good / Good		%
			Locals	Fair		%
				Poor / Very Poor		%
				Very Good / Good		%
			Alleys	Fair		%
				Poor / Very Poor		%
				Very Good / Good		%
	Total Network Rehabilitated (Major) or Reconstructed	Asphalt Surfaces	All Roads	Cold In-Place Recycling		%
				Full-Depth Reclamation / Pulverizing		%
				Hot In-Place Recycling		%
				Mill & Overlay / Inlay		%
				Remove & Replace		%
			Arterials & Collectors	Total Reconstruction		%
				Cold In-Place Recycling		%
				Full-Depth Reclamation / Pulverizing		%
				Hot In-Place Recycling		%
				Mill & Overlay / Inlay		%
				Remove & Replace		%
			Locals	Total Reconstruction		%
				Cold In-Place Recycling		%
				Full-Depth Reclamation / Pulverizing		%
				Hot In-Place Recycling		%
				Mill & Overlay / Inlay		%
			Alleys	Remove & Replace		%
				Total Reconstruction		%
				Cold In-Place Recycling		%
				Full-Depth Reclamation / Pulverizing		%
				Hot In-Place Recycling		%
				Mill & Overlay / Inlay		%
				Remove & Replace		%
				Total Reconstruction		%



Goal	KPI	Applicable Surface Type	Applicable Road Type	Breakdown 1	Breakdown 2	Units
Protect the Environment	Electricity Consumed from Charging Stations	All Surfaces	All Roads	Electricity Consumed from Charging Stations		kWh / Total Number of Stations
	Network with Permeable Pavement	All Surfaces	All Roads	Network with Permeable Pavement		%
	Number of Electric Charging Stations	All Surfaces	All Roads	Number of Electric Charging Stations		# / 1,000 Population
	Quantity of Bike Shares	All Surfaces	All Roads	Quantity of Bike Shares		# of Bikes / 1,000 Population
	Quantity of Car Shares	All Surfaces	All Roads	Quantity of Car Shares		# of Cars / 1,000 Population
	Registered Vehicles	All Surfaces	All Roads	Conventional Vehicles		# / Total Population
				Zero-Emission Vehicles		# / Total Population
	Use of Non-Chloride Anti-Icing Products	Hardtop Surfaces	All Roads	Use of Non-Chloride Anti-Icing Products		Volume (m3) / Total Lane-km
	Use of Recycled Content	Asphalt Surfaces	All Roads	Use of Recycled Content		Tonnes (metric) / Total Lane-km Paved
Provide a Financially Sustainable Transportation System	Use of Salt / Sand	Hardtop Surfaces	All Roads	Anti/De-Icing Products		Volume (m3) / Total Lane-km
				Salt		Volume (m3) / Total Lane-km
				Sand		Volume (m3) / Total Lane-km
	Capital Investment Work Contracted	Hardtop Surfaces	All Roads	Capital Investment Work Contracted		%
	Capital Investments (Expansion) relative to Centreline-kms	Hardtop Surfaces	All Roads	Developer Paid		\$ / Total Centreline-km
				Municipal Paid		\$ / Total Centreline-km
			Arterials & Collectors	Developer Paid		\$ / Total Centreline-km
				Municipal Paid		\$ / Total Centreline-km
			Locals	Developer Paid		\$ / Total Centreline-km
				Municipal Paid		\$ / Total Centreline-km
			Alleys	Developer Paid		\$ / Total Centreline-km
				Municipal Paid		\$ / Total Centreline-km
	Capital Investments (Expansion) relative to Lane-kms	Hardtop Surfaces	All Roads	Developer Paid		\$ / Total Lane-km
				Municipal Paid		\$ / Total Lane-km
			Arterials & Collectors	Developer Paid		\$ / Total Lane-km
				Municipal Paid		\$ / Total Lane-km
			Locals	Developer Paid		\$ / Total Lane-km
				Municipal Paid		\$ / Total Lane-km
			Alleys	Developer Paid		\$ / Total Lane-km
				Municipal Paid		\$ / Total Lane-km
	Capital Reinvestment Work Contracted	Hardtop Surfaces	All Roads	Capital Reinvestment Work Contracted		%
	Capital Reinvestments	Hardtop Surfaces	All Roads	Reconstruction		\$ / Total Lane-km
				Rehabilitation		\$ / Total Lane-km
			Arterials & Collectors	Reconstruction		\$ / Total Lane-km
				Rehabilitation		\$ / Total Lane-km
			Locals	Reconstruction		\$ / Total Lane-km
				Rehabilitation		\$ / Total Lane-km
			Alleys	Reconstruction		\$ / Total Lane-km
				Rehabilitation		\$ / Total Lane-km
	Cost Allocation (Excl. Winter Related)	All Surfaces	All Roads	Capital Reinvestment		%
				O&M		%
	Cost Allocation (Incl. Winter Related)	All Surfaces	All Roads	Capital Reinvestment		%
				O&M		%
	Funding Source Breakdown	All Surfaces	All Roads	External	Grants	%
					Loans from Gov. Orgs.	%
					Loans from Private Orgs.	%
					Other	%
				Internal	User Fees	%
					Development Charges	%
					General Revenue	%
					Interdivisional Transfer	%
					Other	%
	Non Winter O&M Work Contracted	All Surfaces	All Roads	O&M Work Contracted		%
	O&M Expenditures (Non Winter Related)	All Surfaces	All Roads	O&M Expenditures (Non Winter Related)		\$ / Total Lane-km
	O&M Expenditures (Winter Related)	Hardtop Surfaces	All Roads	Ice Cutting		\$ / Total Lane-km
				Other		\$ / Total Lane-km
				Roadway Preparation		\$ / Total Lane-km
				Sanding / Salting		\$ / Total Lane-km
				Snow Removal (Loading)		\$ / Total Lane-km
				Snowplowing		\$ / Total Lane-km
				Sweeping (Spring Clean-Up)		\$ / Total Lane-km
				Winter Road Patrol		\$ / Total Lane-km
	Winter O&M Work Contracted	Hardtop Surfaces	All Roads	Winter O&M Work Contracted		%
Provide a Mobile and Accessible Transportation System	Breakdown of Pedestrian Signals / Crossings	All Surfaces	All Roads	Intersection Pedestrian Signals (IPS)	Intersection Pedestrian Signals (IPS)	%
				Mid-Block Pedestrian Signals (MPS)	Mid-Block Pedestrian Signals (MPS)	%
				Pedestrian Crossovers (PXO)	Level 1 Type A (Ontario Only)	%
					Level 2 Type B (Ontario Only)	%
	Network with Bike Infrastructure	Hardtop Surfaces	All Roads	Painted Lane		%
				Protected Lane		%
				Shared Lane		%
			Arterials & Collectors	Painted Lane		%
				Protected Lane		%
				Shared Lane		%
			Locals	Painted Lane		%
				Protected Lane		%
				Shared Lane		%
	Network with Sidewalks	Hardtop Surfaces	All Roads	Both Sides		%
				One Side		%
			Arterials & Collectors	Both Sides		%
				One Side		%
	Percent of Intersection Legs Compliant with AODA (Ontario Only)	All Surfaces	All Roads	Both Sides		%
				One Side		%
	Signalized Intersections with Pedestrian Activated Signals	All Surfaces	All Roads	Percent of Intersection Legs Compliant with AODA (Ontario Only)		%
				Audible		%
				Non-Audible		%
	Signalized Intersections with Bike Signals	All Surfaces	All Roads	Intersections with Bike Activated Signals		%

Goal	KPI	Applicable Surface Type	Applicable Road Type	Breakdown 1	Breakdown 2	Units
Provide a Safe Transportation System	Municipality Responsible Claim Volume	All Surfaces	All Roads	Escalated	Injury	# / 1,000 Lane-km
					Motor Vehicle Damage	# / 1,000 Lane-km
					Real Property Damage	# / 1,000 Lane-km
				Rejected	Injury	# / 1,000 Lane-km
					Motor Vehicle Damage	# / 1,000 Lane-km
					Real Property Damage	# / 1,000 Lane-km
	Number of Accidents	All Surfaces	All Roads	May-Oct		# / Total Lane-km
				Nov-April		# / Total Lane-km
	Number of Fatalities and Injuries	All Surfaces	All Roads	Motor Vehicle Fatalities		#
				Motor Vehicle Injuries		#
				Pedestrian / Cyclist Fatalities		#
				Pedestrian / Cyclist Injuries		#
Provide a Safe Workplace and a Productive and Skilled Workforce	Distribution of Workforce by Age	All Surfaces	All Roads	<= 30 yrs.		%
				> 60 yrs.		%
				31-40 yrs.		%
				41-50 yrs.		%
				51-60 yrs.		%
	Lost Time due to Worker Accidents	All Surfaces	All Roads	Lost Time due to Worker Accidents		Hours / 1,000 Field Hours Paid
	Number of Worker Accidents	All Surfaces	All Roads	Number of Worker Accidents		# / 1,000 Field Hours Paid
	Staff Resources by Population	All Surfaces	All Roads	Administrative / Clerical		FTEs / 1,000 Population
				Field Staff		FTEs / 1,000 Population
				Supervisor / Management		FTEs / 1,000 Population
				Technical / Engineering		FTEs / 1,000 Population
	Staff Resources by Road Network Size	All Surfaces	All Roads	Administrative / Clerical		FTEs / Total Lane-km
				Field Staff		FTEs / Total Lane-km
				Supervisor / Management		FTEs / Total Lane-km
				Technical / Engineering		FTEs / Total Lane-km
	Training Hours	All Surfaces	All Roads	Training Hours		Hours / Total Field Hours Paid
	Unavailability of Field Labour	All Surfaces	All Roads	Hours Expended from Banked Time		%
				Long Term Leave Hours		%
				Other		%
				Other Training		%
				Parental Leave		%
				Safety Training		%
				Sick Hours		%
				Union Paid Hours		%
				Vacation Hours		%
						%

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