



Regional Roadway Maintenance and Service Levels

Outline

- ☐ **Regional Road Network**
- ☐ **O. Reg. 239/02 Minimum Maintenance Standards**
- ☐ **Region of Durham Service Levels**
- ☐ **Road Maintenance - Roles and Responsibilities**
- ☐ **Regional Right of Way Responsibilities by Others**
- ☐ **Innovation and Continuous Improvement**

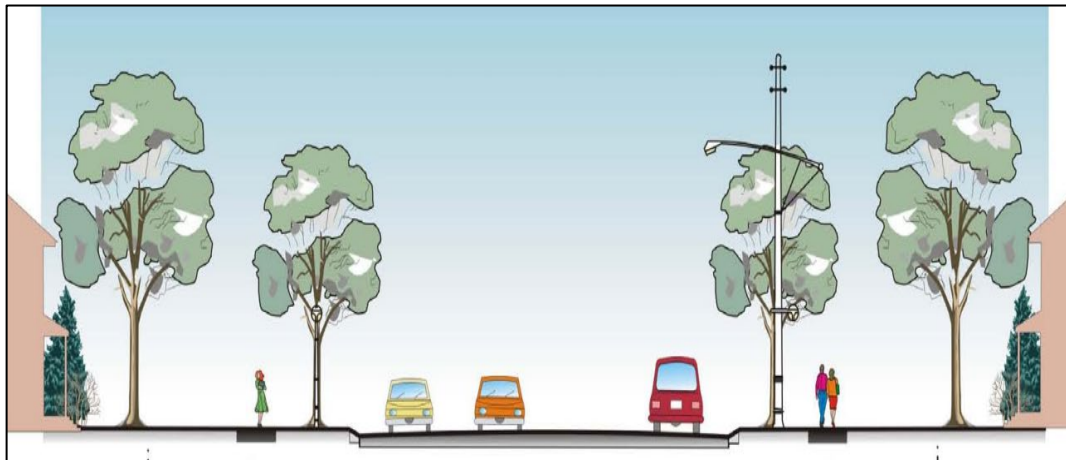
Regional Road Network

- About 840 Center line (2,400 lane) kilometers of roadway

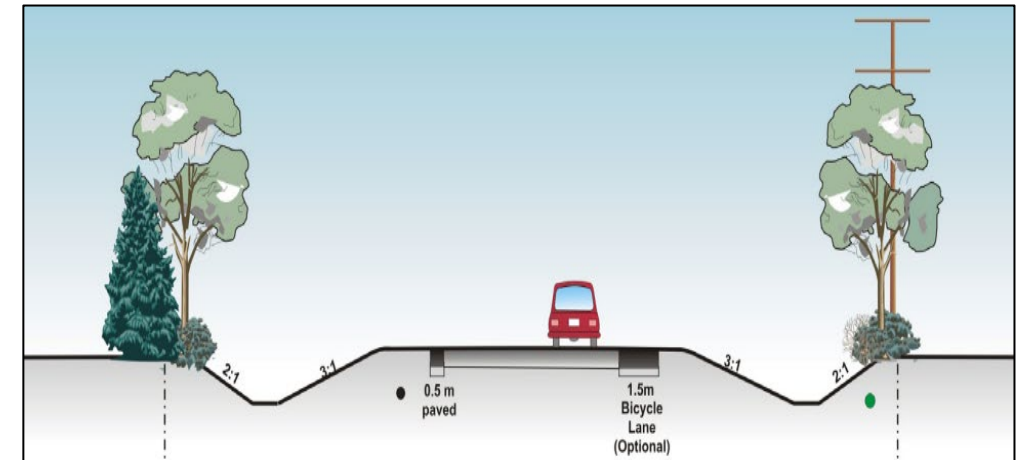
Ajax	43 Km	Clarington	145 Km	Pickering	108 Km	Uxbridge	131 Km
Brock	96 Km	Oshawa	122 Km	Scugog	111 Km	Whitby	86 Km

Approximate Centre Line KM's of Regional Road Network within each Local Area Municipality

40% urban cross-section



60% rural cross-section



O. Reg. 239/02 - Minimum Maintenance Standards

Purpose:

- Clarify the scope of the statutory defence available to municipalities
- Establishes standards of a described outcome not to define the materials and equipment to be used

Winter Maintenance

Winter Patrol, Weather Monitoring, Snow Accumulation and Ice Formation on Roadways, Bicycle lanes and Sidewalks

Road Repairs & Maintenance

Road and Sidewalk Patrol, Weather Monitoring, Pot Holes, Road and Sidewalk Discontinuities, Shoulder Drop Offs, Cracks, Debris, Bridge Deck Spalls

Traffic Signs, Signals and Illumination

Traffic control signal systems, Signs, Luminaires

Emergencies

Significant Events, Closure of Highways

Region of Durham Service Levels

Routine/Planned Maintenance

Road Patrol (Winter and Summer)
Weather Monitoring
Catch Basin Cleaning
Ditch Maintenance
Snow Fence
Spring Clean-up / Street Sweeping
Primed Shoulder Maintenance
Machine Mowing (Urban and Rural)

Non-Service Level Defined Activities

Graffiti Removal
Weed Removal in Medians
Roadside Memorial Removal
Illegal Sign Removal

Deficiency/Complaint Maintenance

Pothole Repair
Utility Cut Repair
Litter Pickup
Culvert Maintenance
Curb and Gutter Maintenance
Weed, Brush and Tree Control
Primed Shoulder Maintenance
Gravel Shoulders Maintenance
Base Repairs (roadway)
Maintenance Hole Repairs
Catch Basin Repairs
Winter Operations (Storm Response)
Debris Removal / Cleanup
Bituminous (asphalt) Surface Maintenance
Noxious Weed Removal
Machine Mowing for Sightline (Urban and Rural)

Road Maintenance - Roles and Responsibilities

Routine/Planned Program	Region of Durham	Region of Durham Contractor(s)	Local Municipality on behalf of the Region of Durham	Local Municipality Contractor(s) on behalf of the Region of Durham
Road Patrol	✓			
Ditch Maintenance	✓			
Litter Pickup	✓		✓ (Oshawa Downtown Core)	
Spring Clean-up / Street Sweeping	✓	✓	✓ (Oshawa Downtown Core)	
Shoulder Grading / Maintenance	✓	✓		
Machine Mowing (Rural)	✓			
Machine Mowing (Urban)		✓ (Pickering)	✓	✓

Regional Right of Way Responsibilities by Others

Sidewalks

Multi-Use Paths

Entrance Aprons

Street Lighting

Property-Line Fences

Non-Regional Utility Infrastructure

Landscaping Enhancements

Machine Mowing for Commercial property frontages

Machine Mowing for vacant residential frontages

Utility and Contractor projects and restoration



Innovation & Continuous Improvement

CITYROVER - Artificial Intelligence Road Patrol



Automated Data Collection

- GPS Coordinates
- High resolution image
- Direction of Travel
- Street and number (or range)
- Detection Time
- Association with GIS Road Segment Ownership (allowing to separate Regional Roads from Local Roads)
- Association with GIS Road Segment Road Class

2022 Award Recipient:



Innovation & Continuous Improvement

Enterprise Maintenance Management System – Maximo

- Implementation of Enterprise work order management system across the Works Department

Roadway Event Management System

- Reporting unplanned work activities for increased public and cross department awareness

Remote Weather Information System

- Expanding network of Remote Weather Information Systems within Durham Region

Weed Control

- Researching and exploring pilot projects to control weeds within median islands and boulevards

Road Patrol

- Expanding training and activities completed during road patrol to increase attention to “aesthetics”

Significant Events

- Policy development for declaring significant weather events



Thank You!



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Questions?

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