



# HOW WE GO

## Niagara Region Transportation Master Plan Operating Policies Review Technical Paper



IBI Group in association with  
Parsons and Brook McIlroy

NIAGARA  
2041

Fostering an environment for Economic Prosperity



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# 1. Policy Review

## 1.1 Existing Operating Policies

As part of the Niagara Region Multi-Modal Transportation Master Plan Study, a review of the Region's existing Operating Policies was required. For the initiation of this exercise, the Region provided fifty (50) existing Operating Policies to be reviewed.

## 1.2 Existing Policies Review

To review the existing Operating Policies, a table was developed to organize the policies and to review them for name of policy, summary of policy contents, commentary on status, and update and action plan for each policy.

Once the existing Operating Policies were reviewed, they were then organized as per their focus. As shown in Exhibit 1 below, these categories were:

- Emergency Response (5 policies)
- Regular Maintenance (12 policies)
- Administration (5 policies)
- Signs and Signals (5 policies)
- Property (6 policies)
- Standards and Guidelines (4 policies)
- Capital (11 policies)

Once the review of the existing Operating Policies was completed, it was agreed with Regional staff that four (4) new Operating Policies were required. These were:

- Moving Towards Complete Streets
- Access Management on Regional Roads
- Roundabouts on Regional Roads
- Illumination on Regional Roads

The following sections document these new Operating Policies.

**Exhibit 1: Existing Policies Review**

| ID #                       | Existing Operations Policy              | Date               | Summary   | Commentary  | Best Practices | Update/New Policy    | Action Plan | Timelines | Responsibility |
|----------------------------|---|--------------------|---|---|----------------|----------------------|-------------|-----------|----------------|
| <b>EMERGENCY RESPONSE</b>  |   |                    |   |   |                |                      |             |           |                |
|                            | CALL OUT PROCEDURES                     | January 2, 2014    | Regional PW staff are required to respond safely to problems and complaints. Covers when to be called out, who determines call out, and how staff should respond for signals and signs.                       | Recently updated. Covers Region for liability issues. |                | Update not required. | No action.  |           | Public Works   |
|                            | EMERGENCY RESCUE                        | October 27, 2015   | Policy to respond to a co-worker whom is injured or unresponsive. Includes both whom to contact and how to engage with aerial rescue.   | Recently updated. Covers Region for liability issues. |                | Update not required. | No action.  |           | Public Works   |
|                            | EMERGENCY SERVICE SIGNALS               | September 24, 2015 | Emergency and after hours call out procedures for repair of Traffic Signals.  | Recently updated. Covers Region for liability issues. |                | Update not required. | No action.  |           | Public Works   |
|                            | EMERGENCY SERVICE SIGNS                 | August 8, 2014     | Emergency and after hours call out procedures for repair of Traffic Signs.  | Recently updated. Covers Region for liability issues. |                | Update not required. | No action.  |           | Public Works   |
|                            | SPILL CONTINGENCY PLAN                  | October 12, 2011   | During painting operations for pavement marking, if a spill occurs, this procedure covers actions to be taken to ensure worker safety, how to contain the spill, and notification requirements such as M.O.E. | Covers Region for liability issues and worker safety. |                | Update not required. | No action.  |           | Public Works   |
|                            | STRAY VOLTAGE DETECTION AND RESOLUTION  | April 10, 2015     | Procedures to check traffic signal poles for stray voltage annually. Covers criteria to be used to determine stray voltage levels in a safe manner. Also covers whom to notify if stray voltage discovered.   | Covers Region for liability issues and worker safety. |                | Update not required. | No action.  |           | Public Works   |
| <b>REGULAR MAINTENANCE</b> |   |                    |   |   |                |                      |             |           |                |
|                            | TRAFFIC SIGNAL PREVENTATIVE MAINTENANCE | September 23, 2015 | Semi-annual inspection of traffic signal controllers to ensure proper operation of signal and more specifically the Malfunction Management Unit.  | Recently written.                                     |                | Update not required. | No action.  |           | Public Works.  |

| ID # | Existing Operations Policy             | Date             | Summary   | Commentary  | Best Practices | Update/New Policy  | Action Plan   | Timelines              | Responsibility |
|------|--|------------------|---|---|----------------|--|---|------------------------|----------------|
|      | ISLOATED FLASHER MAINTENANCE           | June 9, 2014     | Annual visual inspection of Isolated Flashers.  | Refers to worker safety requirements. Outlines visual inspection to be undertaken.  |                | Update on routine basis.   |   | As required.           | Public Works.  |
|      | LEVEL OF SERVICE FOR WINTER OPERATIONS | August 2003      | To meet or exceed Minimum Maintenance Standards for Municipal Highways.   | This policy ensures the Region maintains their roadways in accordance with legal requirements and best practices.   |                | Update on routine basis.   | Ongoing reviews.                                      | As required.           | Public Works.  |
|      | PEDESTIAN SIGNAL MAINTENANCE           | April 10, 2015   | Incandescent pedestrian traffic signals should be re-lamped and cleaned annually.   | Recently written.   |                | Update not required.   | No action.  |                        |                |
|      | ROAD MAINTENANCE QUALITY STANDARDS     | March 1999       | Addresses several activities related to Pavements, Street Cleaning, Shoulders, Grass, Litter, Trees, Ditches, Bridges, Culverts, Catch basins and Manholes, Curbs and Gutters, Pavement Markings, Signs, Signals, Guide Rails, Winter Operations, Snow Fencing, Summer Patrols. | This is a critical policy for the Region to adhere to. By following it, the Region reduces liability on a number of matters related to maintenance.   |                | As a critical policy, it should be reviewed and updated on a regular basis.                                | Ongoing reviews.                                      | Immediate and ongoing. | Public Works.  |
|      | ROADWAY LIGHTING MAINTENANCE           | June 9, 2014     | Annual visual inspection of roadway lighting systems.   | Refers to worker safety requirements. Outlines inspection and maintenance to be undertaken.   |                | Update on routine basis.   |   | As required.           | Public Works.  |
|      | SIGN RETROREFLECTIVITY                 | December 1, 2014 | Minimum Maintenance Standards require minimum retro reflectivity of signs.  | This policy refers to a specific supplier (3M) and their agreed upon replacement schedule (7 years). This may not be appropriate as the vendor could change and the requirement to resign change. |                | Revise to refer to any vendor/ supplier and update and replacement standards rather than vendor decisions. | Revise policy when convenient or when vendor changes. | As required.           | Public Works.  |
|      | TRAFFIC SIGNAL RELAMPING               | May 7, 2013      | Incandescent traffic signals should be re-lamped and cleaned annually.  | Refers to worker safety requirements. Outlines visual inspection to be undertaken.  |                | Update on routine basis.   |   | As required.           | Public Works.  |
|      | WARNING SIGNAL MAINTENANCE             | May 15, 2013     | Annual visual inspection of Warning Signal plants for failure.  | Refers to worker safety requirements. Outlines visual inspection to be undertaken.  |                | Update on routine basis.   |   | As required.           | Public Works.  |

| ID #                  | Existing Operations Policy                    | Date              | Summary   | Commentary   | Best Practices | Update/New Policy    | Action Plan | Timelines         | Responsibility |
|-----------------------|---|-------------------|---|--|----------------|----------------------|-------------|-------------------|----------------|
|                       | DISINFECTION OF VERMIN DEBRIS                 | June 6, 2014      | Vermin debris may occur in signal or street lighting electrical plant. Worker safety focus of this policy and how to handle completing this activity.   | Refers to worker safety and proper care for health reasons.        |                | Update not required. |             |                   | Public Works.  |
|                       | VISUAL INSPECTION                             | April 10, 2015    | Procedures to conduct visual inspections.   | Refers to worker safety and outlines visual inspection activities. |                | Update not required. |             |                   | Public Works.  |
|                       | TRAFFIC LOCKOUT TAG-OUT PROCEDURES            | September 3, 2013 | This policy describes necessary activities to ensure that electrical power supplies are managed properly during maintenance and construction activities.  | Primarily focused on ensuring worker safety.                       |                | Update not required. |             |                   | Public Works.  |
| <b>ADMINISTRATION</b> |   |                   |   |  |                |                      |             |                   |                |
|                       | TRAFFIC CONTROL PROTECTION PLAN AND CHECKLIST |                   |   |  |                |                      |             |                   |                |
|                       | SICK LEAVE REPORTING                          | November 25, 2013 | Covers required notifications for traffic staff.  | Operational requirements to ensure staff coverage is available.    |                | Update not required. | No action.  |                   | Public Works.  |
|                       | WORKING ALONE PROCEDURES                      | February 2012     | Health and Safety procedures and requirements to ensure worker safety.  | Regularly updated to ensure compliance with legislation.           |                | Update as required.  |             | Review regularly. | Public Works.  |
|                       | WORKING ALONE CHECKLIST                       | February 2012     | Checklist for working alone.  | Regularly updated to ensure compliance with legislation.           |                | Update as required.  |             | Review regularly. | Public Works.  |
| PW3.C03               | CONSULTING ENGINEERS - CONFLICTS OF INTEREST  | July 16, 1998     | The intent of this policy is to provide guidelines to ensure that consulting engineering firms do not have a deemed or potential conflict of interest related to any engineering agreement/assignment undertaken on behalf of the Region. |  |                |                      |             |                   | Public Works.  |

| ID #                     | Existing Operations Policy                          | Date          | Summary   | Commentary  | Best Practices | Update/New Policy  | Action Plan   | Timelines  | Responsibility |
|--------------------------|---|---------------|---|---|----------------|--|---|------------|----------------|
| <b>SIGNS AND SIGNALS</b> |   |               |   |   |                |  |   |            |                |
| PW3.R01.7                | SIGN ENCROACHMENTS ON REGIONAL ROAD ALLOWANCES      | April 2, 1998 | This policy provides clearly define procedures for the permitting of signs on untraveled portions of Regional Road Allowances; and ensures that the Regional Corporation is protected from liability.   | This policy defines who can post signs on untraveled portions primarily to ensure Region liability relief. It describes eligibility, application process, duration of agreement, and cost sharing implications.   |                | No update required.  | No update required.                                 |            | Public Works   |
| PW5.S01.1                | DIRECTIONAL SIGNING TO PRIVATELY-OWNED PARKING LOTS | June 1984     | The purpose of this policy is to establish uniform policies, procedures and standards related to the placement of directional signs to privately-owned public parking lots adjacent to Niagara roads.   | First an applicant must have local municipal approval. Eligible lots must be at least 500 spaces. Application process described, but designs and placement subject to Director of Engineering approval. Cost sharing for manufacture, installation, maintenance of signs defined. |                | This policy is still relevant for parking lots signing, but requires updates to approval processes and cost sharing. | Update required.                                    | Long term. | Public Works   |
| PW5.S01.2                | GUIDE SIGNING FOR MAJOR TOURIST ATTRACTIONS         | November 1974 | The erection of special guide signs directing traffic to specific establishments or places of business such as restaurants, motels, hotels, gasoline outlets or tourist attractions within urbanized areas, is generally prohibited under provincial and Region of Niagara signing policies. The philosophy underlying these policies is that facilities such as food, fuel and accommodation are normally to be found in or near any urban area and that once a motorist is within such an area, the placement of further guide signs is unnecessary. There is also the need to avoid over signing highways by ensuring that only essential signs are erected. | This policy is very old and should be deleted as it would seem to be superseded by the policy PW5.S01.4 as noted below.   |                |  | Delete this policy or merge contents with PW5.S01.4 | Immediate  | Public Works   |

| ID #            | Existing Operations Policy                                     | Date           | Summary  | Commentary   | Best Practices | Update/New Policy   | Action Plan         | Timelines  | Responsibility |
|-----------------|--|----------------|--|--|----------------|---|---------------------|------------|----------------|
| PW5S01-3        | SIGNING NIAGARA ROADS BY LOCAL NAME                            | September 1984 | Established Niagara policy stipulates that the basic system of identifying Niagara roads shall be by number. In accordance with this policy, trapezoidal black on white marker signs are erected at appropriate intervals along all Niagara roads. The erection of street name signs is the responsibility of the area municipalities, which may erect such signs on Niagara roadways subject to Niagara approval as to format and location. | This policy is relatively old. It is intention is to allow municipal road signing on Regional roads. Although information to the traveling public is desirable, signing clutter is not desirable. This policy has some design standards, but has no approval process described, nor cost sharing arrangements. | New OTM Books  | This policy should be updated for approvals processes and cost sharing. It should also be updated to reference new OTM Books. | Update required.    | Long term. | Public Works   |
| PW5.S01.4       | TOURISM ORIENTED DESTINATION SIGNAGE POLICY FOR REGIONAL ROADS | May 24, 2012   | The purpose of this policy is defining the use, design and installation criteria for signs, and to preserve the existing and future signage used for the safety, control and direction to the motorist.  | This policy covers eligible roads, eligible destinations, sign design policies, and design criteria. It also covers application processes, capital costs and maintenance costs fees. Region is responsible for both if fees are paid.  |                | This policy does not require update. However, it is a good example of cost sharing.   | No action required. |            | Public Works   |
| <b>PROPERTY</b> |  |                |  |  |                |   |                     |            |                |
| PW3.P01.0       | MANAGING REGIONAL PROPERTIES                                   | April 2, 1998  | All vacant lands will be reviewed by staff regarding income potential. If it is deemed feasible and if the corresponding department approves, staff will attempt to rent such lands out for purposes, which do not conflict with the Region's operations or local zoning by-laws. Any reasonable offer will be presented to the appropriate committee for consideration.   | This policy relates to disposal of property and management of buildings etc. It has little relevance to TMP or OP policies.  |                | No updates required.  | No action.          |            | Public Works   |

| ID #      | Existing Operations Policy  | Date             | Summary  | Commentary  | Best Practices | Update/New Policy    | Action Plan | Timelines | Responsibility |
|-----------|---|------------------|--|---|----------------|----------------------|-------------|-----------|----------------|
| PW3.P01.1 | ACQUIRING PROPERTY AND EASEMENTS                                      | November 2, 2002 | The intent of this policy is to outline the procedures to be followed by Property and Facilities Management Section staff of the Operational Support Services Division with respect to the acquiring of property and easements for the Regional Municipality of Niagara.   | Although this policy may have application related to the implementation of Complete Streets policies, it covers all the necessary items related to improvements that may be required. It is appropriate for property acquisition and need not change as a result. |                | Relevant as is.      | No action.  |           | Public Works   |
| PW3.P01.2 | DEDICATION OF LAND FOR ROAD WIDENING THROUGH DEVELOPMENT APPLICATIONS | 04-May-93        | It is the intent of this policy to delineate the conditions under which the Region will request a dedication of land for widening regional road allowances. This policy will be applied when considering development applications adjacent to regional roads for plans of subdivision, condominiums, severances, rezoning, site plans, variances and Niagara Escarpment Commission development applications.                             |   |                |                      |             |           |                |
| PW3.P01.5 | LEGAL SURVEYS AND PREPARATION OF PLANS                                | May 6, 1993      | Where an owner is required to dedicate land to the Region of Niagara for highway purposes as a condition of the granting of a severance, minor variance or Niagara Escarpment Commission development permit, or as required in a site plan agreement, or as stated in a zoning by-law amendment, the Region will assume the survey costs associated with the preparation of the plans necessary for the transfer of lands to the Region. | Legal surveys requirements.   |                | Not relevant to TMP. | No action.  |           |                |

| ID #                            | Existing Operations Policy  | Date             | Summary  | Commentary   | Best Practices              | Update/New Policy                   | Action Plan              | Timelines | Responsibility |
|---------------------------------|---|------------------|--|--|-----------------------------|-------------------------------------|--------------------------|-----------|----------------|
| PW3.P01.6                       | SURPLUS PROPERTY OF OTHER MUNICIPALITIES, GOVERNMENT AGENCIES, BOARDS OF EDUCATION AND PUBLIC UTILITIES | 06-May-93        | The Regional Municipality of Niagara receives notice from other municipalities, government agencies, public utilities and boards of education regarding surplus property. This policy outlines the procedure to be followed when such notice is received.  |  |                             |                                     |                          |           |                |
| PW3.R01.4                       | PUBLIC NOTICES FOR STOPPING UP AND CLOSING REGIONAL ROADS   | April 2, 1998    | The Regional Municipality of Niagara, from time to time, has the opportunity to stop up, close, and convey parts of Regional Roads as a result of reconstruction or realignment of roads. The intent of this policy is to provide procedures to be followed by Public Works Department staff when the Region is considering the stopping up and closing of portions of Regional Roads. |  |                             |                                     |                          |           |                |
| <b>STANDARDS AND GUIDELINES</b> |   |                  |  |  |                             |                                     |                          |           |                |
| PW5.NO1.0                       | REGIONAL ROAD+J51+B51:G53+B51:I54 +B51:H+B51:H54  | November 9, 2006 | This Noise Control Policy intends to provide a guide for achieving abatement of noise radiating from traffic on Regional Roads in three separate applications: Retrofit on existing Regional Roads, New developments along existing Regional Roads, and New Regional Roads or widenings of existing Regional Roads adjacent to existing residential developments.                      | Utilizes the Provincial Noise Guidelines as well as municipal best practices. Has a cost sharing component where the costs of noise mitigation measures at 50 - 50 with land owners. | Follows best practices now. | Update only if legislation changes. | Review on regular basis. |           | Public Works   |

| ID #      | Existing Operations Policy                     | Date              | Summary   | Commentary  | Best Practices                       | Update/New Policy   | Action Plan              | Timelines | Responsibility |
|-----------|--|-------------------|---|---|--------------------------------------|---|--------------------------|-----------|----------------|
| PW5.RO1.3 | ROAD CROSS SECTION                             | December 15, 2005 | This policy provides guidance regarding cross-section elements. These elements consist of the travelled way, shoulders, curb and gutter, drainage features, roadway structure, side and back slopes, and utility locations. They include provisions for pedestrians, cyclists, and parking. These elements are designed with consideration of design speed and traffic volumes and the rural or urban character of the roadway to create a safe, efficient, and economical transportation system. | This policy refers to accepted standards for elements to be included in the right-of-way. In appropriately refers to them and adapts them for Region application. This covers Regional roads and ensures elements comply with accepted standards. Any Complete Streets policies should not affect this policy as it ensures reduced Regional liability. | References to MTO and TAC Standards. | Still valid.  | Review on regular basis. |           | Public Works   |
| PW5.R01.5 | SPEED LIMIT POLICY                             | December 15, 2005 | On a regular basis, Transportation Services staff receives requests for speed limit adjustments on the Regional Road System. This policy provides procedures to follow to determine a posted speed limit based on a scientific fact that is technically defensible and quantifiable in their outcomes, to the greatest degree possible.   | Ensures proper scientific fact and not emotion when setting speed limits! Covers urban areas and school areas. Also, includes a policy on how to manage speed limit revision requests.  |                                      | Still valid.  | No action.               |           | Public Works   |
| PW5R01-0  | UNIFORM REGIONAL TRAFFIC POLICY AND PROCEDURES | November 1974     | It is the purpose of this policy to promote uniformity in the application of traffic control methods and services throughout Niagara's road system in order to provide for the greatest possible efficiency and safety in the movement of persons and goods on the system.  | These are generic policies regarding a broad range of traffic activities including: parking, traffic bylaws, traffic control devices, truck routes and deliveries, private entranceways, construction and public utilities maintenance, school crossing guards, speed limits, municipal traffic bylaws.   |                                      | This policy should be reviewed as it is very old but as a generic policy, it is still applicable. | Update required.         | Immediate | Public Works.  |

| ID #           | Existing Operations Policy  | Date               | Summary   | Commentary   | Best Practices | Update/New Policy  | Action Plan                             | Timelines    | Responsibility |
|----------------|---|--------------------|---|--|----------------|--|---|--------------|----------------|
| <b>CAPITAL</b> |   |                    |   |  |                |  |   |              |                |
| PW3.C01        | REQUESTS FROM AREA MUNICIPALITIES FOR JOINT FUNDING TO ADVANCE CONSTRUCTION OF FUTURE REGIONAL SEWAGE AND WATER SUPPLY PROJECTS | May 6, 1993        | This policy is intended to provide an alternate procedure to advance the construction of future regional sewer and water supply projects through joint funding with area municipalities and/or land owner(s).   | This is a good example of how joint projects can be completed with financial support from both the Region and the local municipalities. It describes how a project qualifies, the criteria and standards to be met, how cost sharing is developed, how installation can occur, and control of facility is determined. Ultimately it is by mutual agreement, written by the Region.       |                | Does not require update but is a good example for joint projects between the Region and municipalities.  | Use as a template for complete streets? |              |                |
| PW3.C02        | CAPITAL PROJECTS - NOTIFICATION REQUIREMENTS WHEN REGIONAL PROJECTS CROSS BODIES OF WATER                                       | September 26, 1995 | It is the intent of this policy to delineate the conditions under which the Legal Surveys Supervisor will become involved in capital works projects where bodies of water are crossed. This is necessary due to the Ministry of Natural Resources requirement that the Region deal directly with the Ministry and not allow the Region's consultants or contractors to make applications on behalf of the Region. The Region made a commitment to do this in May of 1989 due to problems encountered previously and in an effort to provide credibility on upcoming projects. | This policy is to bring inherited structures, and future improvements to existing structures, into line with provincial regulations. It relates to navigable waters and ensures the Region and their project contractors are in compliance with regulations. As this policy has not been updated since 1995, it may need a review to determine if regulations noted are still in effect. |                | Policy only needs updating if Region organization has changed or if provincial regulations have changed. | Review and update on routine basis.     | As required. | Public Works.  |
| PW3.C04        | CONSTRUCTION CONTRACT HOLDBACKS   | July 16, 1998      | This policy describes the requirements for contract holdbacks in accordance with the Construction Lien Act, R.S.O. 1990, and in conjunction with the Ontario Provincial Standard Specifications and Niagara Peninsula Standard Contract Document for Roads and Municipal Services.  | Refers to the Niagara Peninsula Standard Contract Documents and the Construction Lien Act. As such, it can stand as a valid policy for some time as these referenced documents get updated on their own merit.   |                | Policy still relevant.   | Review and update on routine basis.     | As required. | Public Works.  |

| ID #      | Existing Operations Policy                                | Date           | Summary   | Commentary   | Best Practices | Update/New Policy   | Action Plan                         | Timelines | Responsibility |
|-----------|---|----------------|---|--|----------------|---|-------------------------------------|-----------|----------------|
| PW3.C05   | INCORPORATING LOCAL WORKS INTO REGIONAL NIAGARA CONTRACTS | July 16, 1998  | This policy details procedures to be followed when considering requests from area municipalities for incorporation of local works in Regional Niagara contracts.  | This is a key policy for considering complete streets projects initiated by the local municipality. It does not discuss jurisdiction, but lays out a process for the local municipality and the Region to work together on capital projects and ultimately receive reduced project costs. It does not address ongoing maintenance issues, only capital.  |                | This policy does not require update. However, it is a good example of cost sharing.   | No action.                          |           |                |
| PW3.D01   | STORM DRAINAGE SYSTEMS - COST SHARING                     | July 16, 1998  | The intent of this policy is to delineate the procedures for the processing of storm sewer cost sharing applications received from area municipalities.   | This policy is related to Policy PW3.C05. It outlines not only policy on how projects are co-funded, but procedures to receive approvals. It does not speak of jurisdiction, but speaks to an overarching Regional plan for storm sewer improvements. It requires at least a one year advanced notice of upcoming projects before the Region can entertain cost sharing. A good reference policy, with procedures. |                | This policy does not require update. However, it is a good example of cost sharing.   | No action.                          |           |                |
| PW3.E01.0 | ENTRANCEWAYS  | March 18. 1976 | No work shall be commenced on the construction of an entrance which opens upon or is within the limits of the right of way of a Regional road or highway without an entrance permit being obtained from the Regional Municipality of Niagara. | Although this policy is dated, its reference to specific requirements for various classes of entranceways seems to be valid and has been the standard for the Region approvals to entranceways for many years. Modifying any standards now may cause several concerns with existing entranceways.  |                | A review of this policy for organizational changes at the Region may be appropriate, but not required for entranceway design and subsequent approval. | Review and update on routine basis. |           | Public Works.  |

| ID #      | Existing Operations Policy   | Date          | Summary   | Commentary   | Best Practices | Update/New Policy  | Action Plan                                    | Timelines | Responsibility    |
|-----------|--|---------------|---|--|----------------|--|--|-----------|-------------------|
| PW3.E01.2 | ENTRANCEWAYS AFFECTED BY NIAGARA CONSTRUCTION PROJECTS, RESTORATION OF | July 16, 1998 | Entranceways affected by Niagara construction projects shall be restored, at Niagara's expense, to match their existing construction i.e. concrete for concrete driveway, asphalt for asphalt paved driveway, and granular for gravel driveway. | Simply states that the Region is responsible for restoring entranceways damaged by their projects.   |                | Not required.  | No action.                                     |           |                   |
| PW3.R01.1 | RELOCATION OF WATER SHUT-OFFS ON REGIONAL ROAD ALLOWANCES              | July 16, 1998 | This policy provides procedures for the placement and relocation of water service shutoffs on Regional Road Allowances.   | An operational and design guideline.   |                | Not required.  | No action.                                     |           |                   |
| PW5R01-2  | ROADWAY LIGHTING POLICY  | January 1982  | The purpose of the document is to outline the adopted policy and also to establish policies and procedures respecting the future installation of illumination by Niagara and/or area municipalities.  | The local municipalities upon approval, can install and maintain lighting on a Niagara roadway. Must meet Regional lighting standards. This policy does not address the Region installing lighting of any sort on local municipal roadways. It only addresses the need for lighting based on operational requirements. |                | A policy should be developed that addresses lighting installations on all roadways within Niagara, either regional or local, that may be candidates for complete streets considerations. This should include procedures for approvals, designs, standards, and cost sharing. | New policy based on complete streets required. | Immediate | TMP?/Public Works |

| ID #       | Existing Operations Policy                            | Date          | Summary   | Commentary   | Best Practices | Update/New Policy  | Action Plan | Timelines | Responsibility |
|------------|---|---------------|---|--|----------------|--|-------------|-----------|----------------|
| PW5.T01.1  | TREE PLANTING ALONG REGIONAL ROADS                    | March 4, 1993 | This policy has been developed in recognition of the beneficial effects of planting trees along regional roads.   | Provides a good overview of benefits and objectives of adding trees along Regional roads. It's a good justification for budgeting for non-essential or social improvements. It discusses types of trees and locations of trees. In addition, it also addresses the need to have the Region maintain trees. |                | This policy is a good example of how a policy can be written to ensure social benefits are recognized from investment in aesthetics. It should be a referenced policy in any future complete streets policies. |             |           |                |
| PW5.T01.2  | TREE REMOVAL AND TRIMMING ON REGIONAL ROAD ALLOWANCES | March 4, 1993 | This policy has been developed to provide guidelines for the trimming and removal of trees on Regional road allowances.   | Policy discusses the need to prune or remove trees and the justification for such.   |                | No update required.  | No action.  |           |                |
| <b>NEW</b> |   |               |   |  |                |  |             |           |                |
|            | ROUNDABOUTS   | April, 2017   | Following TAC Design Guide, establish guidelines for roundabouts considerations.  | High level considerations with reference to TAC Design Standards.  |                | Drafted.   |             |           |                |
|            | COMPLETE STREETS POLICIES                             | April, 2017   | Policy to be overarching and capture Traffic Calming measures related to reduced travel lane widths. Policy to reflect Regional Road Complete Streets Guidelines for Downtown/BIA Main Streets. | Jurisdictional issues need to be established and consulted with local municipalities. Cost implications need to be addressed.  |                | Drafted.   |             |           |                |
|            | ILLUMINATION POLICIES                                 | April, 2017   | Illumination is a Regional responsibility and the Region is in process of reviewing existing system and prioritization program for illumination updates.  | Roadway Lighting Guidelines to be referred to.   |                | Drafted.   |             |           |                |
|            | ACCESS MANAGEMENT                                     | April, 2017   | The goal of the Region is to maintain effective traffic flow by minimizing entrances where reasonable.  | Refer to other existing access management policies.  |                | Drafted.   |             |           |                |

## 2. New Policy – Moving Towards Complete Streets

### 2.1 Policy Statement

Niagara Region has a growing interest in aligning its roadways with the movement towards Complete Streets. The emphasis is on enhanced walking, cycling and public transit while accommodating automobiles and goods movement. This contributes to successful community-building and high-quality urban design.

The intent of this Complete Streets policy is to inform the decision-making process for every future Regional road investment, regardless of the scale of improvement. This policy applies to Regional roads and to local municipal Downtown/BIA Main Streets within the Region of Niagara. From a Regional perspective, this policy indicates the importance of considering the broad range of streets that make up the Region's roadways and that planning for these roadways requires flexibility and co-operation.

A Complete Streets approach can enable Niagara to realize a fuller potential for the Region's roadways by way of increasing usability and relevance to land use while building a stronger and more prosperous Niagara. By investing in Complete Streets, the Region will play a leadership role in galvanizing public and private investment across the twelve municipalities, helping to attract residents and contributing to economic growth.

### 2.2 Policy

The Region has developed its Design Guidelines for Complete Streets. The typologies included in those guidelines attempt to represent the differences in settlement areas that make up the Region. These design guidelines include the following typologies:

- Main Streets
- General Urban (Narrow)
- General Urban (Wide)
- Transitioning
- Hamlets
- Rural

In Niagara, the Regional roadway network has a complex mix of jurisdictional responsibilities. Within this policy, primary responsibility for Complete Streets on Regional roads will lie with the Region of Niagara. The Region will be responsible for the design and construction of all Complete Streets on its road network. The planning of any Complete Streets projects will commence with a planning workshop which will be held with the local municipality and other stakeholders to determine which typologies apply and which elements of those typologies should be included in the project.

The consideration of traffic calming measures on Regional roads falls within the policy, context and procedures applicable to Complete Streets. On occasion, traffic calming and/or rural-to-urban transition zone improvements may be requested as part of a

Complete Streets scheme. The Region will not entertain any physical changes to their roadways that could be considered vertical traffic calming measures (e.g. humps, bumps, or raised crosswalks). The only traffic calming measures that the Region would entertain, in concert with a Complete Streets project, is the narrowing of lane widths within prescribed limits, while maintaining physical curb-to-curb widths which facilitate maintenance of the travelled way (e.g. winter control).

Similarly, rural-to-urban transition zones cannot include any vertical deflection of the roadway. Transition zones may include bump-outs, pinch-points, and/or strips of colored or stamped concrete, placed perpendicular to the direction of travel, within the travelled portion, as requested by an EA Study or by the local Council. The Region will not allow the use of pavers for any aspect of Complete Streets schemes within the rights-of-way of Regional roads.

Although the Region intends to consult with the local municipalities on all Complete Streets projects on Regional roads, where Main Streets typologies apply, they are often influenced by the local municipality's plans for its Downtown, or the Main Street is located within an identified BIA area. In these cases, special jurisdictional considerations will apply such that:

- The Region will pay for Complete Streets improvements within the travelled road right-of-way.
- The Region will pay for enhanced or expanded sidewalks as part of a Complete Streets design but will not be responsible for the maintenance of said sidewalks. The municipality must enter into a Maintenance Agreement prior to installation.
- The Region will pay for decorative streets lights that meet a defined street light materials listing (see the Region's Designated Sources listing). The Region will also permit hanging basket attachments and BIA banner attachments to be added to lighting poles, but the Region will not be responsible for the installation or maintenance of said hanging baskets or banners.
- Where additional hydro outlets are requested, the Region will cover the capital costs to have these added to the light poles, but the Region will not be responsible for the associated additional hydro costs. Outlets will be placed on a separate, metered feed, billable to the municipality or BIA as stipulated under a Maintenance Agreement.
- The Region will not permit the planting of any form of vegetation within roadway medians. The Region will pay for the initial costs of approved Complete Streets vegetation plantings, including irrigation and drainage infrastructure, but will not be responsible for the care and maintenance of said plantings, including metered irrigation water. Local municipalities must enter into a Maintenance Agreement prior to the installation of these plantings.
- The Region will consider cost-sharing for the burying of utilities on a case by case basis.

## 2.3 Procedures

All capital projects planned for the Regional road network, shall include consideration of Complete Streets typologies and elements during the planning of the project, or prior to the construction of a project. The Region will now plan for Complete Streets as a forethought to a project rather than an afterthought.

The Region will consult with the local municipality and other stakeholders (e.g. BIA's) to develop an agreed upon Complete Streets plan prior to the installation of a project. All projects will be designed and constructed by the Region in accordance with their approved Roadway Design Guidelines and with due consideration to the Region's approved Design Guidelines for Complete Streets.

Where there is a request from a local municipality, a BIA, or a private landowner for an enhancement of the Complete Streets plan, as described earlier in the policy for Main Streets, such requests must be received by the Region prior to the design stage of any project. The requestor must also show that all local approvals and agreements have been received prior to the Region entertaining the request. The Region retains formal approval rights regarding such requests, and upon approval will be responsible for the design and construction of the enhanced project. Where it is agreed that the requestor will be responsible for ongoing care, costs, or maintenance of the enhance project requests, the requestor must enter into a Maintenance Agreement with the Region, prior to installation of the enhanced project.

## 3. New Policy – Access Management on Regional Roads

### 3.1 Policy Statement

The goal of the Region is to maintain effective traffic flow on its roadways. The key objective is to provide a safe access which is consistent with the function and operation of the public road system and access needs of adjacent land uses.

The Geometric Design Guide for Canadian Roads (Transportation Association of Canada – 1999) states that “access management provides a systematic means of balancing the access and mobility requirements of roads. Access management is the process that manages access to land development while simultaneously preserving the flow of traffic on the surrounding public road system in terms of safety, capacity, and speed.”

### 3.2 Policy

Direct access to/from Regional roads should be discouraged or denied except where no alternative exists. Access to a property should be obtained from the local road system where possible. When access must be provided from a Regional road, it should be proven to be safe without affecting the capacity of the roadway and balance the needs of all road users. Where possible, existing entranceways should be considered before new entranceways are introduced, and where possible consideration should be given to consolidating entranceways.

Sufficient sight distances for vehicles using the access is essential. A Transportation Impact Study that considers the impacts on all roads users may also be required prior to determining the location of an access, the type of access being considered, and the design of said access.

### 3.3 Procedures

The Region has the authority to regulate access through a number of legislative processes. Access can be controlled under the legislative authority of the Planning Act and the Municipal Act.

Site plan and subdivision plan processes use a set of drawings that illustrate the physical arrangements of property improvements, such as driveways, drainages, etc. Site plan and subdivision agreements regulate in detail items such as parking requirements, layout, access location, and access configuration. Approvals can involve items regarding access and access management for Regional roads.

The Municipal Act allows municipalities to control the construction of accesses onto a public roadway by issuance of permits. An entrance permit is a site-by-site permission for access and a tool to regulate the location of the access prior to construction. By

reviewing and approving plans before any work is done, the Region can ensure that the owner of an access complies with:

- The Official Plan which controls the function and uses of accesses.
- The Guidelines and Standards which set requirements for design and materials.
- Agreements through site plans or subdivision plans.

At present, there the Region of Niagara does not have its own access management guidelines and standards. There are many guidelines in existence that could be referred to. However, the guideline considered most relevant is the Region of Halton's Access Management Guideline – January 2015. It can be found at the following link:

<https://www.halton.ca/common/pages/UserFile.aspx?fileId=136320>

Any access requests should be compliant with these Guidelines prior to receiving approval. Any entranceway requests on Regional roads should follow Niagara Region Public Works Policy Manual for ENTRANCEWAYS (Policy CW3.E01.0).

## 4. New Policy – Roundabouts on Regional Roads

### 4.1 Policy Statement

The Region may consider the installation of a roundabout on a Regional Road as an alternative method of traffic control to traffic signals or stop or yield controlled signage. A roundabout is a type of circular intersection where vehicles travel counter-clockwise around a central island. Vehicles entering the roundabout must yield to circulating traffic.

A roundabout is distinct from other forms of circular intersections and should not be confused with traffic circles or rotaries.

### 4.2 Policy

There are several factors to consider when assessing the suitability of installing a roundabout at an intersection. The advantages and disadvantages that should be considered are highlighted here:

#### *ADVANTAGES:*

- **Safety** – Roundabouts have been proven to reduce the frequency and severity of collisions when compared to stop or signal controlled intersections. Three main features contribute to these safety benefits: fewer conflict points; reduced entering and circulating speeds; and adequate deflection angle on entry.
- **Operational** – Roundabouts operate with lower delays and shorter queues than other forms of control. Lower speeds also facilitate improved gap acceptance resulting in improved capacities.
- **Traffic Management** – Roundabouts can be considered a neighbourhood management tool. The geometric design of a roundabout creates a change in driving environment.
- **Aesthetics** – Roundabouts can provide an opportunity to create an aesthetically pleasing focal point within or adjacent to a community.
- **Maintenance** – Roundabouts can require less maintenance than traffic control signals.

#### *DISADVANTAGES:*

- **Spatial Requirements** - Roundabouts may require more property beyond the limits of a typical road allowance.

- Construction Costs – Roundabouts may have a higher initial construction cost than other forms of intersection control. Costs tend to be higher for retrofit construction due to the greater complexity involved.
- Accessibility – Roundabouts may be more challenging for pedestrians with vision impairment or mobility challenges. Cyclist considerations may require off-road treatments further increasing construction costs.
- Public Education – Roundabouts are still not a familiar form of traffic control for many drivers, cyclists, and pedestrians. New roundabout installations may require public education and outreach prior to implementation.

The Region may consider the installation of a roundabout where they are deemed to either enhance the safety or capacity of an intersection, or have some other form of community benefit. According to the Canadian Roundabout Design Guide (Transportation Association of Canada – January 2017), roundabouts have proven to be an effective form of intersection treatment in Canada. The safety and operational attributes make them particularly suitable at intersections:

- With frequent collisions and/or a history of safety concerns.
- With a high number of head-on, right angle and left turn across path collisions.
- With high collision severity due to excessive speed.
- Experiencing U-turn movements on a regular basis.
- Experiencing significant delays, especially on the minor road approach.
- Where an increase in traffic volumes is anticipated.
- Where higher order traffic controls are not warranted (all-way stop, traffic signals) and would result in greater overall delay.
- With unusual or complex geometry (offset intersections, angled approaches).
- With limited storage capacity due to roadway geometry.
- Where transition from rural to an urban environment occurs.
- That form a community gateway.
- In commercial corridors where two-way centre left-turn lanes create operational and/or safety concerns.

### 4.3 Procedures

When a roundabout is being considered for installation on a Regional Road, a justification report must be prepared and submitted to the Commissioner of Public Works for approval. This justification report must cover the following major topics:

- Safety benefits
- Capacity and operational impacts

- Community benefits
- Pedestrian and cyclist considerations
- Design elements
- Property requirements
- Life cycle cost benefit comparisons to higher-order controls such as traffic signals
- Public education requirements

Once a roundabout has been approved for installation on a Regional road, the Region will be responsible for ensuring that the design complies with the design standards as presented in the Canadian Roundabout Design Guide (Transportation Association of Canada – January 2017) prior to implementation.

## 5. New Policy – Illumination on Regional Roads

### 5.1 Policy Statement

The Region of Niagara is responsible for the design, installation, and maintenance of roadway lighting on all roadways under the Region's jurisdiction.

The following shall be considered the objectives of a roadway lighting system design:

- The need for lighting is justified on the basis of road safety, operations, and/or road user security.
- The provision of adequate and uniform lighting levels for roadways, adjacent bikeways and pedestrian ways on Regional roads.
- The requirements of recognized lighting standards shall be achieved wherever economically and physically possible.
- Roadway lighting systems shall be energy efficient and cost effective.

### 5.2 Policy

The Region of Niagara has a variety of different types of roads in its jurisdiction and it is not the Region's objective to install roadway lighting on all these roads, or roadway elements.

New lighting systems are typically considered when roadway projects are undertaken. Although the Region does not have existing warrants for new lighting systems, the Region's Roadway Lighting Standard (January 2016) states that at the commencement of a project, Niagara Region engineering staff shall designate the areas of the project that will require roadway lighting. The areas of a project that will be considered for illumination includes:

- Roadway Mainlines
- Intersections and Roundabouts
- Entranceways (both residential and commercial)
- Structures and Underpasses
- Pedestrian Sidewalks
- On-road Cycling Facilities

Situations may occur where the roadway lighting is desired but not economically feasible; for example, if local electrical power is not readily available.

At present, the Region has inherited, or previously installed, a myriad of differing roadway lighting systems. Many of these existing roadway lighting systems perform

below the current Roadway Lighting Standard. Although the Region does not presently have a methodology for prioritizing its investments in roadway lighting, upgrading these sub-standard existing lighting systems should be considered a priority over new installations. Allowing sub-standard roadway lighting systems to continue to exist on Regional roads may be a source of liability to the Region, whereas the need to install new roadway lighting systems may be incorporated into other roadway expansion or rehabilitation capital projects.

### **5.3 Procedures**

The Region is responsible for the design, construction, and maintenance of lighting systems within the Region's roadway right-of-way. Lighting design standards will be compliant with the Region's Roadway Lighting Standard (January 2016). Only materials from Regionally-approved sources shall be used in the installation, replacement or maintenance of lighting systems.

In accordance with the Ontario Regulation 239/02 – Minimum Maintenance Standards for Municipal Highways, the Region has developed its own Methods and Procedures for Roadway Lighting Maintenance (Activity number 562 – Effective June 9, 2014).