

Clause 3 in Report No. 14 of Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on October 20, 2016.

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2016 10-Year Roads Capital Construction Program Update

Committee of the Whole recommends:

1. Receipt of the presentation by Salim Alibhai, Director, Capital Planning and Delivery, Transportation Services.
2. Adoption of the following recommendation contained in the report dated September 23, 2016 from the Acting Commissioner of Transportation Services:
 1. The Regional Clerk circulate this report to the local municipalities.

Report dated September 23, 2016 from the Acting Commissioner of Transportation Services now follows:

1. Recommendation

It is recommended that:

1. The Regional Clerk circulate this report to the local municipalities.

2. Purpose

This report provides an update on the status of projects under the Transportation Services Roads Capital Construction Program, presented in April 2016.

3. Background

The Region plans to invest \$1.5B in the expansion and rehabilitation of Regional road network over the next 10 years

The 2016 10-Year Roads Capital Construction Program (Program), with a budget of \$1.5B, is divided into a Growth Program, valued at approximately \$1.2B, and a State of Good Repair Program, valued at approximately \$315M.

During 2016, approximately \$143.3M will be invested for Growth and State of Good Repair projects located throughout the Region. Attachment 1 shows the locations of current projects, with the exception of some minor State of Good Repair projects. All projects undertaken in 2016, under the Program, are summarized in Attachment 2.

The Growth Program focuses on expanding the Regional road network

The Growth Program, to increase capacity of the Region's road network and help manage congestion, includes:

- Road reconstruction
- Road widening
- Building new links in the road network
- Midblock crossings of provincial freeways
- Bridge and culvert replacements and upgrades
- Intersection upgrades to improve traffic operation

The Growth Program budget has increased from \$475M to over \$635M, from the 2011 – 2015 term of Council to the 2015 – 2018 term of Council. This is a 34 per cent increase, or an average increase of \$40M per year.

The State of Good Repair Program focuses on rehabilitation and replacement of existing infrastructure

The State of Good Repair Program, for rehabilitation and replacement of existing infrastructure, includes:

- Pavement repair, preservation and rehabilitation

- Bridge and culvert rehabilitations or replacements
- Roadside safety device improvements
- Intersection improvements:
 - Installation or modification of traffic control signals
 - Adding zebra markings at crosswalks
 - Upgrades to intersections to bring them into compliance with Accessibility for Ontarians with Disabilities Act (AODA) requirements

4. Analysis and Implications

2016 weather proved favourable for construction and enabled the completion of more work than planned on many projects

Project milestones under the Program have been successfully delivered on time or earlier than scheduled.

Table 1 summarizes the programs and number of projects being worked on in 2016:

Table 1
2016 Programs and Projects

Description	Projects
Growth Program	
Construction	10
<ul style="list-style-type: none"> • Opened 3 projects for public use and continue 7 projects 	
Environmental Assessments	14
<ul style="list-style-type: none"> • Completed 4 studies and continue work on 10 studies 	
Detailed Design and Property Acquisition	28
<ul style="list-style-type: none"> • Continue work on 28 projects 	
State of Good Repair Program	
Road Rehabilitation and Preservation	18
<ul style="list-style-type: none"> • Completed 8 rehabilitation and 10 preservation projects 	
Structure Rehabilitation	10
<ul style="list-style-type: none"> • Substantially completed 3 construction projects • Continue work on 7 detailed design projects 	
Intersection Improvements	31
<ul style="list-style-type: none"> • Completed 31 intersection improvements 	
Facilities	
Work continues for planning and design of 2 road maintenance facilities and 1 snow management centre	3
Total	114

The Department is on track to open three growth projects, 2nd Concession reconstruction (from Green Lane to Mount Albert Road), Bathurst Street improvements (from Green Lane to Holland Landing), and the Keele Street and Lloydtown-Aurora Road roundabout.

2nd Concession, Green Lane to Mount Albert Road from a two-lane road to a four-lane "Great Street"

2nd Concession is being transformed from a two-lane rural road to a four-lane "Great Street". This requires the replacement of two major structures through environmentally sensitive areas (Rogers Reservoir and the Holland River) and overtops a key transportation link (GO railway tracks) without disrupting services.

This project also includes the addition of separated cycling lanes on both sides of 2nd Concession to enhance cyclist comfort and safety.

Enhancements to the Nokiidaa Trail connection include creating a new crossing under 2nd Concession, to eliminate the need to cross a busy roadway. The public space is improved through architectural designs, such as curved retaining walls, terraced planting beds and a wooden boardwalk with railings.

New underground municipal services, including watermains and sewers, will increase capacity of the infrastructure to service the area as it continues to develop and grow.

Bathurst Street, connected between Green Lane and Holland Landing

Bathurst Street requires reconnection and enhancement to accommodate growth in travel demand resulting from development. When opened, this section of Bathurst Street will serve as a vital north-south alternative to Yonge Street/Highway 11.

The discovery of 14th century Huron village site required the project to be divided into two contracts. The first consisted of significant improvements to the Bathurst Street and Highway 11 intersection completed in 2015. The second contract, currently on track for completion this year, consists of the reconnection of Bathurst Street, including the construction of a truck-climbing lane, construction of three major culverts and wildlife crossings.

Roundabout at Keele Street and Lloydtown-Aurora Road

The success of the Region's first roundabout at York-Durham Line and Durham Road 5 initiated the implementation of a second roundabout on a Regional road; the intersection of Keele Street and Lloydtown-Aurora Road. Roundabouts are circular intersections that allow traffic to flow freely to improve efficiency. While eliminating collisions is impossible, roundabouts decrease the severity of collisions by eliminating the most dangerous types: head-on and T-bone collisions.

Transportation Services will continue to consider roundabouts when reviewing intersection improvement opportunities.

5. Financial Implications

The 2016 10-Year Roads Capital Construction Program is on track to exceed the corporate delivery target of 90 per cent

The Department was able to advance work on some projects, primarily due to favourable weather conditions in 2016. As a result, the 2016 Program is on track to exceed the 90 per cent delivery target of the budget, as shown in Table 2.

Table 2
2016 Budget and Forecast

Program	2016 Budget (\$M)	2016 Forecast (\$M)
Growth Program	107.6	151.2
State of Good Repair		
• Roads	18.5	22.6
• Structures	3.7	3.0
• Intersection Improvements	5.4	4.6
Facilities	4.1	1.4
Developer Credit*	4.0	4.0
Total	143.3	186.8**

* Infrastructure built by a developer and paid for by the Region following commissioning

** \$43.5M variance to advance work on projects was approved by Council in September 2016.

6. Local Municipal Impact

Regional staff continues to work closely with local municipal staff to ensure concerns are addressed and local municipal infrastructure needs such as watermains, sewers, street lights, sidewalks, and multi-use paths are included in Regional projects, where possible. In 2016 and 2017, \$38M in local municipal infrastructure will be included in Regional projects.

7. Conclusion

The 2016 10-Year Roads Capital Construction Program is on track to exceed the delivery target for 2016. This is primarily a result of favourable weather conditions, which has allowed the Department to advance work on a number of projects.

For more information on this report, please contact Salim Alibhai, Director, Capital Planning and Delivery at ext. 75229.

The Senior Management Group has reviewed this report.

September 23, 2016

Attachments (2)

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Accessible formats or communication supports are available upon request

2016 Growth and State of Good Repair Project Map

Legend

Construction

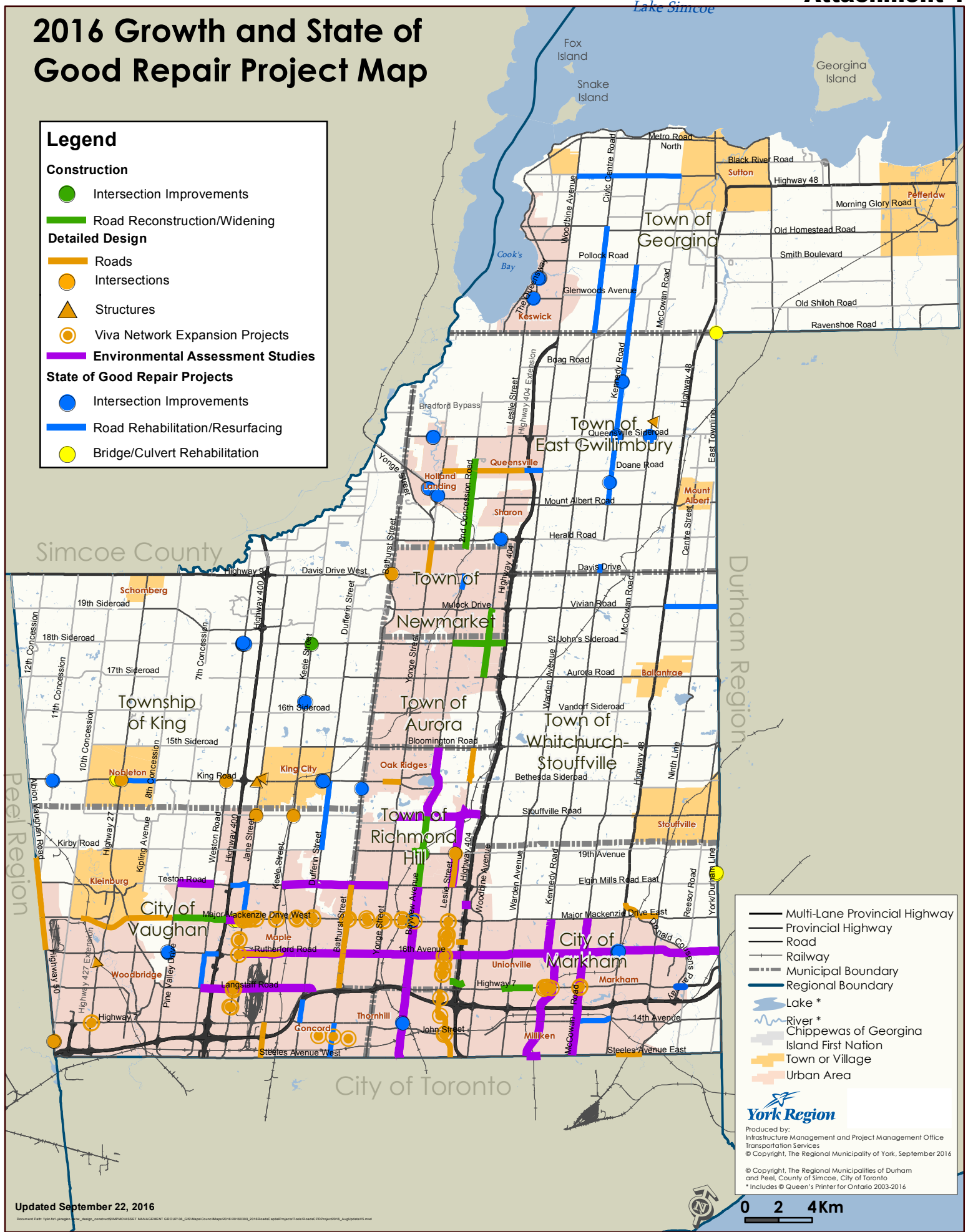
- Intersection Improvements
- ▬ Road Reconstruction/Widening

Detailed Design

- ▬ Roads
- Intersections
- ▲ Structures
- Viva Network Expansion Projects
- ▬ Environmental Assessment Studies

State of Good Repair Projects

- Intersection Improvements
- ▬ Road Rehabilitation/Resurfacing
- Bridge/Culvert Rehabilitation



- ▬ Multi-Lane Provincial Highway
- ▬ Provincial Highway
- ▬ Road
- ▬ Railway
- ▬ Municipal Boundary
- ▬ Regional Boundary
- Lake *
- ▬ River *
- ▬ Chippewas of Georgina Island First Nation
- ▬ Town or Village
- ▬ Urban Area

York Region

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Transportation Services

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2016 10-Year Roads Capital Construction Program Update
Current Projects Summary

Growth-related road projects undertaken in 2016

Table 1
Major Construction Projects Opened for Public Use in 2016

Project	Location	Municipality	Cost (\$M)
2nd Concession Road Widening	South of Green Lane to Doane Road	Town of East Gwillimbury and Town of Newmarket	80.6
Bathurst Street Reconstruction	Green Lane to north of Graham Side Road	Town of East Gwillimbury and Township of King	32.7
Keele Street and Lloydtown-Aurora Road Roundabout		Township of King	5.1
Total Cost			118.4

Table 2
Major Construction Projects Continuing Beyond 2016

Project	Municipality	Estimated Completion	Cost (\$M)
19th Avenue Widening, from Linda Margaret Crescent to Bayview Avenue Bayview Avenue Widening, from Elgin Mills Road to Stouffville Road	Town of Richmond Hill	2017	37.0
Highway 7 Road Widening, from Town Centre Boulevard to Sciberras Road	City of Markham	2017	40.9
Highway 404 Midblock Crossing, north of Highway 7 and Northbound Off-Ramp Extension	City of Markham and Town of Richmond Hill	2018	50.9

Project	Municipality	Estimated Completion	Cost (\$M)
Leslie Street Widening, from Broughton Lane to Mulock Drive	Town of Newmarket	2017	13.0
Major Mackenzie Drive Widening, from Pine Valley Drive to Highway 400	City of Vaughan	2017	31.4
St. John Sideroad Widening, from Bayview Avenue to Highway 404	Town of Aurora	2017	34.3
Total Cost			207.5

**Table 3
Environmental Assessments Completed in 2016**

Project Description	Municipality
Bayview Avenue, from Stouffville Road to Bloomington Road	Town of Richmond Hill
Elgin Mills Road, from Bathurst Street to Yonge Street	Town of Richmond Hill
Rutherford Road/Carville Road, from Jane Street to Yonge Street	City of Vaughan and Town of Richmond Hill
Teston Road, from Pine Valley Drive to Weston Road	City of Vaughan

**Table 4
Environmental Assessments Continuing Beyond 2016**

Project Description	Municipality	Estimated Completion
16th Avenue, from Yonge Street to Woodbine Avenue	City of Markham and Town of Richmond Hill	2019
16th Avenue, from Woodbine Avenue to York-Durham Line	City of Markham	2019
Bayview Avenue, from Steeles Avenue to Elgin Mills Road	Town of Richmond Hill and City of Markham	2018
Highway 404 Midblock Crossing north of Major Mackenzie Drive	City of Markham and Town of Richmond Hill	2018

Project Description	Municipality	Estimated Completion
Langstaff Road, from Weston Road to Highway 7	City of Vaughan	2020
Leslie Street, from Elgin Mills Road to Stouffville Road (EA Addendum)	Town of Richmond Hill	2017
Major Mackenzie Drive West, from Highway 400 to Jane Street	City of Vaughan	2022
Steeles Avenue, from Kennedy Road to Midland Avenue; including grade separation at GO Railway Line	City of Markham and City of Toronto*	2017*
Stouffville Road, from Yonge Street to Highway 404	Town of Richmond Hill	2017
Teston Road, from Keele Street to Bathurst Street (Individual Class EA)	City of Vaughan	2022

* Study is being undertaken by the City of Toronto

**Table 5
Detailed Design Projects Continuing Beyond 2016**

Project	Municipality	Estimated Construction Cost (\$M)
Bathurst Street and Davis Drive Intersection Improvements	Township of King and Town of Newmarket	4.3
Bathurst Street, from Highway 7 to Elgin Mills Road	City of Vaughan and Town of Richmond Hill	53.1
Doane Road Widening, from Yonge Street to Highway 404	Town of East Gwillimbury	62.1
Donald Cousens Parkway Extension, from Major Mackenzie Drive to Highway 48	City of Markham	19.5
East Humber River Bridge Rehabilitation, Jane Street north of King Road	Township of King	1.2
Gibney Bridge Replacement, McCowan Road north of Queensville Sideroad	Town of East Gwillimbury	2.0

Project	Municipality	Estimated Construction Cost (\$M)
Highway 27 CP Rail Bridge Replacement, south of Rutherford Road	City of Vaughan	16.6
Highway 50 Widening, from Highway 7 to Mayfield Road	City of Vaughan and Region of Peel	37.2
Highway 50 and Gore Road Intersection Improvements		
Highway 404 Midblock Crossing, north of 16th Avenue	City of Markham and Town of Richmond Hill	42.9
Keele Street Widening, from Steeles Avenue to Highway 407	City of Vaughan	27.2
King Horn Bridge Replacement, King Road east of Highway 400	Township of King	2.5
King Road and Highway 27 Intersection Improvements	Township of King	3.4
King Road and Weston Road Intersection Improvements	Township of King	3.8
King Road Reconstruction, from Yonge Street to Bond Crescent	Town of Richmond Hill	3.0
King-Vaughan Road and Keele Street Intersection Improvements	City of Vaughan	3.4
King-Vaughan Road and Jane Street Intersection Improvements	City of Vaughan	4.6
Leslie Street Reconstruction, from Bethesda Sideroad to Bloomington Road	Town of Richmond Hill	15.8
Leslie Street Reconstruction, from Elgin Mills Road to 19th Avenue; including intersection re-alignment at 19th Avenue	Town of Richmond Hill	16.9
Leslie Street, Lake-to-Lake Cycling Route, from Steeles Avenue to Highway 7	City of Markham	3.9

Project	Municipality	Estimated Construction Cost (\$M)
Major Mackenzie Drive Widening, from Highway 27 to Pine Valley Drive	City of Vaughan	42.1
Major Mackenzie Drive Widening, from CP Rail Tracks to Highway 27	City of Vaughan	19.1
Rutherford Road Widening, from Jane Street to Keele Street	City of Vaughan	19.0
Steeles Avenue Widening, from Donald Cousens Parkway to Morningside Drive	City of Markham and City of Toronto	30.0
vivaNext Silver Expansion Program <ul style="list-style-type: none"> Jane Street (from Highway 7 to Major Mackenzie Drive West) Major Mackenzie Drive West (from Jane Street to west of Yonge Street) 	City of Vaughan and Town of Richmond Hill	28.2
vivaNext Orange Expansion Program <ul style="list-style-type: none"> Bathurst Street (from Highway 7 to Clark Avenue) Clark Avenue (from Bathurst Street to Yonge Street) 	City of Vaughan and Town of Richmond Hill	
vivaNext Green Expansion Program <ul style="list-style-type: none"> Major Mackenzie Drive (from west of Yonge Street to Leslie Street) Leslie Street from Major Mackenzie Drive to south of Steeles Avenue) 	Town of Richmond Hill and City of Markham	
Yonge Street Widening from Davis Drive to Green Lane	Town of Newmarket and Town of East Gwillimbury	26.3

State of Good Repair Projects that will be completed in 2016

**Table 6
Road Repair Projects Completed in 2016**

Project	Location	Municipality	Cost (\$M)
14th Avenue	McCowan Road to Markham Road	City of Markham	0.9
Baseline Road	Woodbine Avenue to McCowan Road	Town of Georgina	4.5
Doane Road	Leslie Street to Woodbine Avenue	Town of East Gwillimbury	0.2
Dufferin Street	Kirby Road to King Road	City of Vaughan and Township of King	2.1
King Road	Highway 27 to 8th Concession	Township of King	0.9
Prospect Street	North of Gorham Street to Davis Drive	Town of Newmarket	0.6
Stouffville Road	Yonge Street to Leslie Street	Town of Richmond Hill	1.7
Warden Avenue	Ravenshoe Road to Old Homestead Road	Town of Georgina	3.3
Total Construction Cost			14.3

**Table 7
Road Preservation Projects Completed in 2016**

Project	Location	Municipality	Cost (\$M)
Bathurst Street	Steeles Avenue to Centre Street	City of Vaughan	2.7
Dufferin Street	Centre Street to Highway 407	City of Vaughan	
Highway 7	Donald Cousens Parkway Intersection	City of Markham	

Project	Location	Municipality	Cost (\$M)
Jane Street	Major Mackenzie Drive to Teston Road	City of Vaughan	
Teston Road	Highway 400 to Jane Street	City of Vaughan	
Vivian Road	Highway 48 to York-Durham Line	Town of Whitchurch-Stouffville	0.9
Kennedy Road	Davis Drive to 520m north of Davis Drive	Town of East Gwillimbury	
Kennedy Road	Mount Albert Road to Pollock Road	Town of East Gwillimbury and Town of Georgina	1.9
Crack Sealing	Various Locations		0.6
Road Patching	Various Locations		2.2
Total Construction Cost			8.0

**Table 8
Structural Rehabilitation Projects Completed in 2016**

Project	Location	Municipality	Cost (\$M)
Little Rouge Creek Bridge	14th Avenue, 870m east of Reesor Road	City of Markham	0.7
York-Durham Line Culvert	South of Ravenshoe Road	Town of Georgina	0.4
York-Durham Line Culvert	North of Elgin Mills Road	City of Markham	0.04
Total Construction Cost			1.14

**Table 9
Intersection Improvements Completed in 2016**

Project	Municipality	Cost (\$M)
AODA Modifications at 14th Avenue between McCowan Road and Markham Road	City of Markham	0.2
AODA Modifications at Prospect Street and Queen Street	Town of Newmarket	0.15
AODA Modifications at The Queensway and Glenwoods Avenue	Town of Georgina	0.2
AODA Modifications at The Queensway and Biscayne Boulevard	Town of Georgina	
Illumination Holland Landing Road and Spruce Avenue	Town of East Gwillimbury	0.35
Illumination at Kennedy Road and Queensville Sideroad	Town of East Gwillimbury	
Illumination at McCowan Road and Queensville Sideroad	Town of East Gwillimbury	
Traffic Control Signals at Bathurst Street and Augustine Avenue	Town of Richmond Hill	
Traffic Control Signals at Major Mackenzie Drive East and Colborne Avenue	Town of Richmond Hill	0.25
Illumination at Queensville Sideroad West and Sand Road	Town of East Gwillimbury	
Illumination at Yonge Street and School Street	Town of East Gwillimbury	
Traffic Control Signals at Pine Valley Drive and Rutherford Road	City of Vaughan	
Overhead Flasher at Keele Street and Cavell Avenue	Township of King	0.2
Traffic Control Signal at King Road and Spring Hill Drive/Stan Roots Street	Township of King	
Advanced Warning Flasher at Kennedy Road and Cole Road	Town of East Gwillimbury	0.06

Project	Municipality	Cost (\$M)
Illumination at Kennedy Road and Bridle Path	Town of East Gwillimbury	
Overhead flasher at Weston Road and 18 th Sideroad	Township of King	
Median Extension at 16th Avenue and Markham Road	City of Markham	0.06
Median Reconstruction at Dufferin Street and Royal Crest Academy Entrance	City of Vaughan	
Median Extension at Leslie Street north of Green Lane	Town of East Gwillimbury	
Sidewalk Modification at Bayview Avenue and Palmer Avenue	Town of Richmond Hill	
Pedestrian Curb Modification at Bayview Avenue and Green Lane	City of Markham	0.4
Turning Lane at King Road and 11th Concession	Township of King	
Zebra Markings at Dufferin Street at 18th Sideroad/Lloydtown	Township of King	0.25
Zebra Markings at Green Lane at Costco Entrance	Town of East Gwillimbury	
Zebra Markings at Leslie Street and Queensville Sideroad	Town of East Gwillimbury	
Zebra Markings at Kennedy Road at The Fairways/Castlemore Avenue	City of Markham	0.3
Zebra Markings at Keele Street at Station Road/Burton Grove	Township of King	
Zebra Markings at Ninth Line at Hoover Park Drive	Town of Whitchurch-Stouffville	
Zebra Markings at Leslie Street at Gorham Street	Town of Newmarket	0.2
Zebra Markings at Leslie Street at Stackhouse Road		
Total Construction Cost		2.6

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