

Clause 4 in Report No. 6 of Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on April 19, 2018.

4

## Transportation Services Capital Infrastructure Status 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 March 23, 2018 from the Commissioner of Transportation Services:
  1. The Regional Clerk circulate this report to the local municipalities.

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Report dated March 23, 2018 from the 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 Council with an update on 2017 accomplishments and projects that will be delivered in 2018 under the Transportation Services Roads and Transit Capital Program.

### 3. Background

Transportation Services is investing \$2.2B through the Growth and State of Good Repair Programs over the next 10 years

The 2018 10-Year Roads and Transit Capital Program (Program), with a budget of \$2.2B, is divided into a Growth Program, valued at approximately \$1.44B, and a State of Good Repair Program, valued at approximately \$728M.

Over \$328M is being invested by Transportation Services during 2018 for Growth and State of Good Repair projects located throughout the Region. This investment is in addition to the \$365M being invested in the rapid transit network in York Region through projects undertaken by the York Region Rapid Transit Corporation (YRRTC). These investments reflect Council's support of growing a Regional transit system, building road and transit system improvements and maintaining transportation assets to provide an efficient transportation network and enhance the traveller experience. Attachment 1 shows the locations of current projects, with the exception of some minor State of Good Repair projects. Projects to be undertaken in 2018 by Transportation Services (excluding YRRTC projects), under the Program, are summarized in Attachment 2.

The Growth Program focuses on expanding the Regional road and transit network

The Growth Program focuses on building system improvements to increase the capacity of the Region's road and transit network, including:

- Road reconstruction
- Road widening
- Building new links in the Regional road network
- Midblock crossings of Provincial highways
- Major bridge replacements and upgrades
- Intersection upgrades to improve traffic operations
- Streetscaping
- Green infrastructure, including street tree and landscape plantings, irrigation systems and other supporting technologies
- Fibre optic cables or conduits, where appropriate

## Transportation Services Capital Infrastructure Status Update

- Active transportation facilities
- Building new transit terminals and operations and maintenance facilities
- Expansion of transit fleet

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

The State of Good Repair Program focuses on rehabilitation and replacement of existing transportation assets, including:

- Pavement repair, preservation and rehabilitation
- Bridge and culvert rehabilitation or replacement
- Roadside safety device improvements
- Intersection improvements, including the reconstruction of traffic control signals and upgrades to meet Accessibility for Ontarians with Disabilities Act (AODA) requirements
- Transit terminal, station and bus stop repairs and improvements
- Transit fleet midlife overhaul
- Transit fleet retirement and replacement
- Operations, maintenance and storage facility rehabilitation program

The Municipal Streetscape Partnership Program provides funding to local municipalities on a cost-share basis to support streetscape design enhancements in the Region

Through the Municipal Streetscape Partnership Program, a component of the Roads Growth Program, the Region provides cost-share funding to local municipalities to support streetscape design enhancements on Regional roads. This includes elements such as street tree planters, decorative street lighting, banner poles, street furniture, gateway features, planting, coloured crosswalks and public art. Streetscape design supports a context sensitive approach to designing vibrant communities in an urbanizing Region. Living elements, such as street trees, support healthy communities by providing many co-benefits including, improved public health, energy savings and improved storm water management.

The operation, maintenance, and long-term rehabilitation of the enhanced streetscape features are the responsibility of the local municipality. The Municipal Streetscape Partnership Program has an annual budget of \$1M available for cost sharing, subject to annual capital budget approval by Council. Approved applications for funding and projects completed in 2017 under the program are summarized in Attachment 3.

The Pedestrian and Cycling Municipal Partnership Program provides funding to local municipalities on a cost-share basis for projects that support walking and cycling in the Region

The Pedestrian and Cycling Municipal Partnership Program, a component of the Roads Growth Program, assists with the implementation of local-led walking and cycling infrastructure that forms part of the Regional-scale network. This includes design and construction costs, but excludes property acquisition, new curbs, gutters or sidewalks, interlocking pavers, landscaping, and end of trip facilities. Ownership, operation, maintenance and long-term rehabilitation of the improvements are the responsibility of the local municipality.

The Pedestrian and Cycling Municipal Partnership Program has an annual budget of \$500,000 available for cost sharing, subject to annual capital budget approval by Council. Approved applications for funding and projects completed in 2017 under the program are summarized in Attachment 4.

#### 4. Analysis and Implications

2017 was a successful year with Transportation Services meeting most project delivery objectives

A list of 2017 accomplishments is provided in Attachment 5. The following is a summary of the key accomplishments:

- Completed major construction on four growth projects and opened to traffic
- Completed three environmental assessment studies
- Purchased 13 conventional buses and five Viva buses
- Completed rehabilitation of 19 lane kilometres of road and preservation of 44 lane kilometres of road
- Completed rehabilitation of four structures

## Transportation Services Capital Infrastructure Status Update

- Completed improvements at 16 intersections/locations
- Completed midlife overhaul of 31 conventional buses and 10 Viva buses
- Approved funding for five and completed construction on two Municipal Streetscape Partnership Program projects
- Approved funding for four and completed construction on five Pedestrian and Cycling Municipal Partnership Program projects
- Undertook work on 14 emergency repair projects

The Region continues to invest in building system improvements

There is a continued focus on the urbanization and widening of existing rural roads, reflecting the Region's growing urban population. Service reliability and delivering quality transit service continues to be a priority to support the Region's transportation and mobility needs. Several multi-year contracts were awarded in 2016 and 2017 and work on these will continue in 2018. Several new contracts will also be tendered in 2018.

Table 1 summarizes the programs and number of projects scheduled for 2018 that will continue to build system improvements in the Region (further detailed in Attachment 2).

**Table 1  
2018 Programs and Projects**

Description	No. of New Projects	No. of Continuing Projects	Total No. of Projects
<b>Growth Program</b>			
Roads			
• Construction	13	5	18
• Detailed Design	0	18	18
• Environmental Assessment Studies	0	11	11
• Municipal Streetscape Partnership Program	TBD*	4	4
• Pedestrian and Cycling Municipal Partnership Program	TBD*	3	3
Transit			
• Terminals and Facilities	1	4	5
• Fleet Procurement	0	2	2
<b>State of Good Repair</b>			
Roads			
• Rehabilitation and Preservation	16	0	16
• Bridge/Culvert Rehabilitation	8	0	8
• Intersection Improvements	18	0	18
Transit			
• Rehabilitation and Preventative Maintenance	6	0	6
<b>Total</b>	<b>62</b>	<b>48</b>	<b>110</b>

\*To be decided

Programs and projects planned for 2018 will support the Region's growing communities

Travellers in the Region's growing communities need safe, reliable and efficient services. This is a priority for Transportation Services and construction, taking place at over 60 locations in 2018, is being managed to proactively minimize disruptions to travellers while building and maintaining a world-class transportation network. This includes ensuring projects are scheduled so that parallel Regional roads are not under construction simultaneously, whenever possible.

The Region's Travel Smart Program provides informed travel options and improves travel reliability. The program includes initiatives to inform travellers of mobility options and real-time traffic conditions. A comprehensive program of public notifications and portable variable message signs also inform travellers of planning, design and construction projects.

Projects related to streetscaping, cycling and pedestrian facility improvements also enhance the traveller experience. They contribute to more liveable neighbourhoods and communities by creating public spaces that encourage social interaction, promote active transportation and healthy living, support the local economy, reflect the local character and elevate York Region's civic image.

Planning of projects is coordinated with other departments and agencies

Coordinating with Environmental Services and other agencies' infrastructure programs, including local municipalities, rail authorities, York Region Rapid Transit Corporation, YTN Telecom Network Inc. and the Ministry of Transportation of Ontario (MTO) is an important factor when planning construction projects within the Region.

Examples include:

- Coordinating construction on Major Mackenzie Drive, from Highway 50 to Canadian Pacific Railway, with MTO's proposed Highway 427 extension
- Coordinating the widening and grade separation of Rutherford Road with Metrolinx's expansion of the Rutherford GO station
- Coordinating construction on Major Mackenzie Drive, from Highway 400 to Jane Street, to coincide with the opening of the Mackenzie Vaughan Hospital
- Coordinating the proposed widening of 16<sup>th</sup> Avenue with MTO's Highway 404 widening project

## Transportation Services Capital Infrastructure Status Update

- Coordinating with Peel Region to improve Highway 50, from Highway 7 to Albion-Vaughan Road
- Coordinating the installation of water, wastewater and telecom infrastructure and planting street trees as part of road construction projects

Transportation Services continues to meet project delivery objectives due to a focus on increasing business effectiveness

In 2017, Transportation Services successfully delivered most committed project milestones on time or earlier than expected, due to a focus on increasing business effectiveness. The implementation of project management software has resulted in more efficient and transparent reporting, allowing teams to better monitor project performance and achieve schedule goals. Staff continues to seek opportunities to improve programs and project delivery processes through continuous improvement initiatives.

### 5. Financial Considerations

The 2018 10-Year Roads and Transit Capital Program has an approved budget of \$328M for 2018

The 2018 10-Year Roads and Transit Capital Program is on track to meet the 90 per cent delivery target of the 2018 budget. Meeting the budget target is an important indicator that project milestones are being achieved.

Resources are allocated appropriately to align with the vision and strategy previously approved by Council in the Transportation Master Plan. Policies and procedures are in place to minimize the Region's exposure to risk and to actively manage that exposure, while adhering to the highest standards of ethics, quality, transparency and accountability. All policies and procedures are reviewed regularly.



The 2017 actuals and 2018 capital budget for Roads and Transit are outlined in Table 2.

**Table 2**  
**Roads and Transit 2017 Actuals and 2018 Capital Budget**

Program	2017 Actuals* (\$M)	2018 Budget (\$M)
Roads	154.0	221.5
Transit	34.3	107.0
<b>Total</b>	<b>188.3</b>	<b>328.5</b>

\*2017 Actuals are preliminary

With an additional \$365M being invested in rapid transit infrastructure, a total of \$694M is being invested in the Region's transportation infrastructure

The planning, design and construction of the Region's rapid transit network and related infrastructure is led by York Region Rapid Transit Corporation.

The total investment being made in the Region's transportation infrastructure in 2017 and 2018 is outlined in Table 3.

**Table 3**  
**2017 Actuals and 2018 Capital Budget**

Program	2017 Actuals (\$M)	2018 Budget (\$M)
Transportation Services	188.3	328.5
YRRTC	403.4	365.3
<b>Total</b>	<b>591.7</b>	<b>693.8</b>

## 6. Local Municipal Impact

Staff continues to work closely with local municipal staff to ensure concerns are addressed and local municipal infrastructure needs such as watermains, sewers, streetlights, sidewalks, streetscape, and multi-use paths are included in Regional projects, where possible. In 2018, \$9.5M in local municipal infrastructure is included in Regional projects.

Ongoing transit growth and rehabilitation programs support the continued delivery of safe and reliable transit service and amenities to municipal travellers in the Region.

## 7. Conclusion

The Region continues to invest significant resources in the expansion and maintenance of Regional road and transit system improvements, with a number of large projects underway that will be delivered during 2018. The 2018 10-Year Roads and Transit Capital Program is on track to meet the delivery target of 90 per cent of the 2018 budget.

For more information on this report, please contact Salim Alibhai, Director, Capital Planning and Delivery at 1-877-464-9675 ext. 75229.

The Senior Management Group has reviewed this report.

March 23, 2018

Attachments (5)

#8324852

Accessible formats or communication supports are available upon request

# 2018 Growth and State of Good Repair Project Map

**Construction**

- Intersection Improvement
- 🏠 Facility
- 🟢 Road Reconstruction/Widening

**Detailed Design**

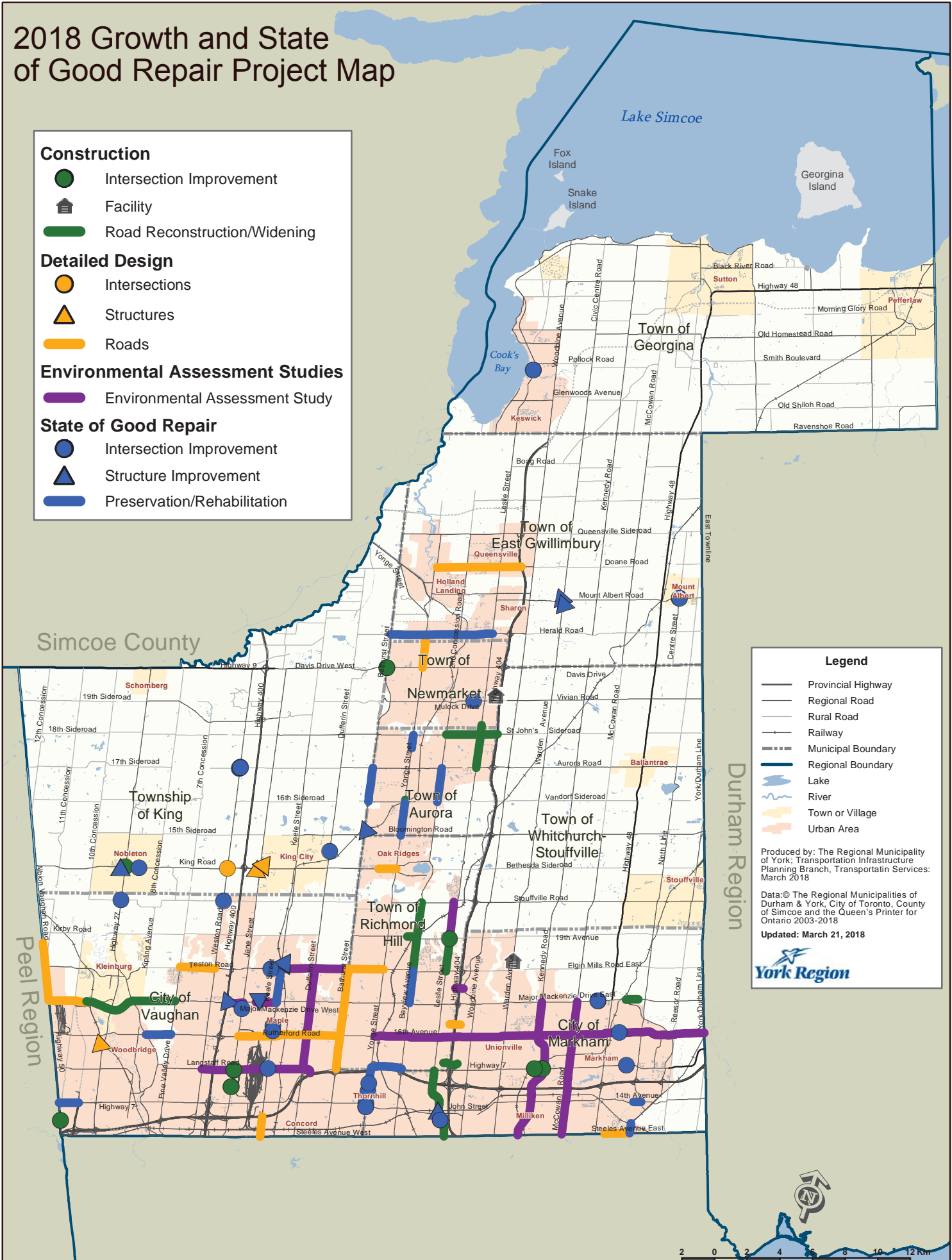
- Intersections
- ▲ Structures
- 🟡 Roads

**Environmental Assessment Studies**

- 🟣 Environmental Assessment Study

**State of Good Repair**

- Intersection Improvement
- ▲ Structure Improvement
- 🟠 Preservation/Rehabilitation



**Legend**

- Provincial Highway
- Regional Road
- Rural Road
- Railway
- - - Municipal Boundary
- Regional Boundary
- 🟦 Lake
- 🟩 River
- 🟡 Town or Village
- 🟠 Urban Area

Produced by: The Regional Municipality of York; Transportation Infrastructure Planning Branch, Transportation Services; March 2018

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Updated: March 21, 2018



Transportation Services Capital Infrastructure Status Update  
Summary of Current Projects

Committee of the Whole  
Transportation Services  
April 5, 2018

## GROWTH PROGRAM

**Roads - Major Capital – Construction - 18 Projects**

Project Location	Municipality	Total Project Cost	Construction Completion
<b>Continuing Construction – 5 Contracts</b>			
19th Avenue Widening, from Linda Margaret Crescent to Bayview Avenue	Town of Richmond Hill	\$41.4M	2018
Bayview Avenue Widening, from Elgin Mills Road to Stouffville Road			
Highway 404 Midblock Crossing, north of Highway 7 and northbound off-ramp extension	City of Markham/Town of Richmond Hill	\$43.8M	2018
Leslie Street Widening, from Don Hillcock Drive to Broughton Lane	Town of Aurora	\$24.3M	2019
St. John's Sideroad Widening, from Bayview Avenue to Woodbine Avenue	Town of Aurora/Town of Whitchurch-Stouffville	\$42.4M	2019
<b>New Construction – 13 Contracts</b>			
Bathurst Street and Davis Drive Intersection Improvements	Town of Newmarket/ Township of King	\$6.5M	2019
Highway 50 and Gore Road Intersection Improvements	City of Vaughan/ Region of Peel	\$1.3M	2018
Highway 7 Intersection Improvements, at Main Street (Unionville) and at Kennedy Road	City of Markham	\$2.1M	2018
Jane Street Intersection Improvements, at Pennsylvania Avenue/MacIntosh Boulevard and at Langstaff Road	City of Vaughan	\$1.8M	2018
King Road and Highway 27 Intersection Improvements	Township of King	\$6.3M	2019
Leslie Street, Lake-to-Lake Cycling Route, from Steeles Avenue to Highway 7	City of Markham	\$5.6M	2018
Leslie Street, from Elgin Mills Road to 19 <sup>th</sup> Avenue	Town of Richmond Hill	\$14.8M	2020
Leslie Street and 19 <sup>th</sup> Avenue Intersection Improvements	Town of Richmond Hill	\$7.0M	2019

Transportation Services Capital Infrastructure Status Update  
 Summary of Current Projects

<b>Project Location</b>	<b>Municipality</b>	<b>Total Project Cost</b>	<b>Construction Completion</b>
Major Mackenzie Drive, from Donald Cousens Parkway to Ninth Line	City of Markham	\$0.9M	2018
Major Mackenzie Drive Widening, from CPR Tracks to Islington Avenue	City of Vaughan	\$99.3M	2021
Major Mackenzie Drive Widening, from Islington Avenue to Pine Valley Drive	City of Vaughan	\$52.9M	2021
Central District Snow Management Facility, Harry Walker Parkway	Town of Newmarket	\$4.7M	2018
Southeast District Road Maintenance Facility, Warden Avenue (sheds and site works only)	City of Markham	\$1.6M	2018

**Transit – Construction – 4 Projects**

<b>Project Name</b>	<b>Municipality</b>	<b>Total Project Cost</b>	<b>Construction Completion</b>
<b>Continuing Construction – 4 Contracts</b>			
Expansion and Renovation of North Operations, Maintenance, and Storage Facility – 18110 Yonge St.	Town of Newmarket /Town of East Gwillimbury	\$17.3M	2019
Major Mackenzie and Highway 404 Park and Ride Facility	Town of Richmond Hill/City of Markham	\$1.5M	2018
Viva Purple Expansion – 4 new stations on Highway 7	City of Markham	\$0.7M	2018
Transit Shelter, Concrete Platform and Bus Stop Sign Expansion	Various	\$0.5M	2018
<b>New Design – 1 Project</b>			
Major Mackenzie West Terminal, opposite Mackenzie Vaughan Hospital	City of Vaughan	\$9.0M	2020

Transportation Services Capital Infrastructure Status Update  
 Summary of Current Projects

**Roads – Environmental Assessments – 11 Studies**

<b>Project Location</b>	<b>Municipality</b>
<b>Continuing Environmental Assessments – 11 Studies</b>	
16th Avenue, from Yonge Street to Woodbine Avenue	City of Markham/Town of Richmond Hill
16th Avenue, from Woodbine Avenue to York-Durham Line	City of Markham
Dufferin Street, from Langstaff Road to Teston Road	City of Vaughan
Highway 404 Midblock Crossing, north of Major Mackenzie Drive	City of Markham/Town of Richmond Hill
Kennedy Road, from Steeles Avenue to Major Mackenzie Drive	City of Markham
Langstaff Road, from Weston Road to Highway 7	City of Vaughan
Leslie Street, from 19th Avenue to Stouffville Road (Environmental Assessment Addendum)	Town of Richmond Hill
Major Mackenzie Drive, from Highway 400 to Jane Street	City of Vaughan
Major Mackenzie Drive, from McNaughton Road to Keele Street (Operational Improvements)	City of Vaughan
McCowan Road, from Steeles Avenue to Major Mackenzie Drive	City of Markham
Teston Road, from Keele Street to Bathurst Street (Individual Environmental Assessment)	City of Vaughan

**Roads – Detailed Design – 18 Projects**

<b>Project Location</b>	<b>Municipality</b>
<b>Continuing Detailed Design – 18 Projects</b>	
Bathurst Street, from north of Highway 7 to Elgin Mills Road	City of Vaughan/ Town of Richmond Hill
Doane Road, from Yonge Street to Highway 40	Town of East Gwillimbury
East Humber River Bridge, Jane Street north of King Road	Township of King
Elgin Mills Road, from Bathurst Street to Yonge Street	Town of Richmond Hill

Transportation Services Capital Infrastructure Status Update  
 Summary of Current Projects

<b>Project Location</b>	<b>Municipality</b>
Highway 27 Road Widening at the Canadian Pacific Railway Bridge	City of Vaughan
Highway 50, from Rutherford Road to Albion-Vaughan Road	City of Vaughan/Peel Region
Keele Street, from Steeles Avenue to Highway 407	City of Vaughan/City of Toronto
King Horne Bridge, King Road east of Highway 400	Township of King
King Road, from Bond Crescent to Yonge Street	Town of Richmond Hill
King Road at Weston Road Intersection Improvements	Township of King
Major Mackenzie Drive, from Highway 50 to Canadian Pacific Railway	City of Vaughan/Peel Region
Mid-Block Crossing, Highway 404 north of 16th Avenue	Town of Richmond Hill/ City of Markham
Rutherford Road, from Jane Street to Westburne Drive	City of Vaughan
Rutherford Road, from Westburne Drive to Peter Rupert Avenue	City of Vaughan
Rutherford Road, from Peter Rupert Ave to Bathurst St	City of Vaughan
Steeles Avenue, from Tapscott Road to Donald Cousens Parkway	City of Markham/City of Toronto
Teston Road, from Pine Valley Drive to Weston Road	City of Vaughan
Yonge Street, from Davis Drive to Green Lane	Town of Newmarket/ Town of East Gwillimbury

**Transit – Ongoing Fleet Procurement - 2**

<b>Project Name</b>	<b>Total Project Cost</b>
Procurement of 5 Conventional Buses	\$3.0M
Procurement of 1 Specialized Transit Vehicle (Purchase of one 8m Low Floor Transit Bus)	\$0.3M

Transportation Services Capital Infrastructure Status Update  
 Summary of Current Projects

STATE OF GOOD REPAIR PROGRAM

**Roads - Rehabilitation/Preservation - 16 Projects**

<b>Project Location</b>	<b>Municipality</b>	<b>Total Project Cost</b>
Crack Sealing	Various Locations	\$0.6M
Grind and Pave	Various Locations	\$2.5M
14 <sup>th</sup> Avenue, 40m west of Ninth Line to 295m east of Ninth Line - Rehabilitation	City of Markham	\$0.8M
Ninth Line, 30m north of Steeles Avenue to Donald Cousens Parkway - Rehabilitation	City of Markham	
Bathurst Street, 50m south of Henderson Drive to 50m north of Wellington Street – Preservation	Township of King/Town of Aurora	\$0.5M
Bayview Avenue, 50m north of Major Mackenzie Drive to 50m north of Elgin Mills Road - Rehabilitation	Town of Richmond Hill	\$2.0M
Bayview Avenue, Vandorf Sideroad to Wellington Street - Rehabilitation	Town of Aurora	\$1.2M
Green Lane, 550m east of Bathurst Street to 390m east of Leslie Street - Rehabilitation	Town of East Gwillimbury	\$2.0M
Highway 7, 40m east of Highway 50 to Highway 427 - Rehabilitation	City of Vaughan	\$0.6M
Highway 7, Yonge Street to Bayview Avenue – Preservation	City of Markham	\$0.7M
Keele Street, 15m north of Major Mackenzie Drive to 220m north of Teston Road – Preservation	City of Vaughan	\$0.5M
Rutherford Road, 230m east of Islington Avenue to 100m east of Pine Valley Drive - Rehabilitation	City of Vaughan	\$1.6M
Yonge Street, 95m south of John Street to 135m south of Langstaff Road - Rehabilitation	City of Vaughan/City of Markham	\$2.1M
Yonge Street, 370m north of Bloomington Road to 84m south of Industrial Parkway South – Preservation	Town of Aurora	\$0.5M
Yonge Street, 825m south of St John's Sideroad to 25m north of St John's Sideroad - Rehabilitation	Town of Aurora	\$1.0M
Yonge Street, north of Industrial Parkway	Town of Aurora	\$3.3M



Transportation Services Capital Infrastructure Status Update  
 Summary of Current Projects

**Roads - Structure Rehabilitation – 8 Projects**

<b>Project Location</b>	<b>Municipality</b>	<b>Total Project Cost</b>
Bathurst Street (Southbound Bridge), 380m north of Bloomington Road	Township of King/Town of Aurora	\$1.1M
Don Mills Road at CN Rail, 160m north of John Street	City of Markham	\$0.8M
Keele Street Bridge, 310m north of Teston Road	City of Vaughan	\$0.4M
King Road Culvert, 300m west of Highway 27	Township of King	\$0.1M
Major Mackenzie Drive Culvert, east of Highway 400	City of Vaughan/Ministry of Transportation	\$0.5M
Major Mackenzie Drive Culvert, at McNaughton Road	City of Vaughan	\$3.3M
Mount Albert Road Retaining Wall, at Warden Avenue	Town of East Gwillimbury	\$1.5M
Warden Avenue Bridge, 1.95km north of Harold Road	Town of East Gwillimbury	\$0.8M

**Roads - Intersection Improvements – 18 Projects**

<b>Project Location</b>	<b>Municipality</b>	<b>Total Project Cost</b>
16th Avenue and Williamson Road	City of Markham	\$165K
Don Mills Road and Simonston Boulevard	City of Markham	\$330K
Dufferin Street and Country Day School	Township of King	\$150K
Highway 27 and King-Vaughan Road	City of Vaughan	\$165K
Jane Street and Avro Road	City of Vaughan	\$165K
Keele Street and Cromwell Road/ Fieldgate Drive	City of Vaughan	\$165K
Keele Street and Dina Road	City of Vaughan	\$165K
Keele Street and Langstaff Road	City of Vaughan	\$330K
Highway 7 and Wootten Way	City of Markham	\$330K
King Road and Greenside Drive	Township of King	\$150K
Major Mackenzie Drive and Mingay Avenue	City of Markham	\$165K
Mount Albert Road and Centre Street	Town of East Gwillimbury	\$220K

Transportation Services Capital Infrastructure Status Update  
 Summary of Current Projects

<b>Project Location</b>	<b>Municipality</b>	<b>Total Project Cost</b>
Mulock Drive and Newmarket High School	Town of Newmarket	\$60K
Teston Road and St. Joan of Arc Avenue	City of Vaughan	\$120K
The Queensway South and Richmond Park Drive	Town of Georgina	\$190K
Weston Road and 17th Sideroad	Township of King	\$110K
Weston Road and King-Vaughan Road	City of Vaughan	\$110K
Yonge Street and Centre Street	City of Vaughan/City of Markham	\$330K
Yonge Street and John Street	City of Vaughan/City of Markham	\$330K
Yonge Street and Royal Orchard Boulevard	City of Vaughan/City of Markham	\$330K
Yonge Street and Uplands Avenue	City of Vaughan/City of Markham	\$330K

**Transit – Ongoing Rehabilitation and Preventative Maintenance - 6 Projects**

<b>Project Name</b>	<b>Total Project Cost</b>
Transit Fleet Mid-Life Overhaul – Asset Life Extension (Conventional)	\$6.1M
Fleet Retirement and Replacement – Purchase of 21 Conventional Buses and 6 Electric Buses	\$15.4M
Operations, Maintenance, and Storage Facility Rehabilitation – Various locations	\$0.3M
Bus Shelter, Concrete Platform, and Bus Stop Sign Replacement	\$1.0M
Bus Terminal Rehabilitation – Richmond Hill Centre and Bernard Terminal	\$0.2M
Fleet Retirement and Replacement – Procurement of 18 Specialized Transit Vehicles (11 8m Low Floor Transit Buses and 7 Mini Buses)	\$2.6M

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Transportation Services Capital Infrastructure Status Update  
Municipal Streetscape Partnership Program Summary

Committee of the Whole  
Transportation Services  
April 5, 2018

Funding Approved in 2017

In 2017, funding for the following projects was approved under the Municipal Streetscape Partnership Program:

Applicant	Project	Total Project Cost	Contribution Tier	Regional Contribution
Town of Newmarket	Bathurst Street and Davis Drive Crosswalks and Median	\$133K	50%	\$67K
Township of King	Bathurst Street and Davis Drive Crosswalks and Median	\$28K	50%	\$14K
Town of East Gwillimbury	Leslie Street and Mount Albert Intersection	\$205K	33%	\$59K
Township of King	Keele Street (King Road to Station Street)	\$681K	33%	\$225K

Construction Completed in 2017

In 2017, construction was completed on the following projects under the Municipal Streetscape Partnership Program:

Applicant	Project	Total Project Cost	Contribution Tier	Regional Contribution
City of Markham	Highway 7 (Town Centre Boulevard to Sciberras Road)	\$3.8M	50%	\$1.9M
City of Vaughan	Highway 7 (Keele Street to Bowes Road)	\$450K	50%	\$225K

Transportation Services Capital Infrastructure Status Update  
Pedestrian and Cycling Municipal Partnership Program Summary

Committee of the Whole  
Transportation Services  
April 5, 2018

#### Funding Approved in 2017

In 2017, funding for the following projects was approved under the Pedestrian and Cycling Municipal Partnership Program:

Applicant	Project	Total Project Cost	Contribution Tier	Regional Contribution
Town of Richmond Hill	Phase 2 – Lake to Lake multi-use path, Leslie Street (16 <sup>th</sup> Avenue to Major Mackenzie Drive)	\$1.35M	25%	\$343K
TRCA	Phase 2 – Nashville Conservation Reserve multi-use trail, Kirby Road	\$250K	50%	\$125K
Town of Whitchurch-Stouffville	Sidewalk system on Burkholder Street	\$28K	50%	\$14K
Town of East Gwillimbury	Parking lot upgrade for trailhead – Nokiidaa Trail Extension	\$90K	21%	\$18K

#### Construction Completed in 2017

In 2017, construction was completed on the following project under the Pedestrian and Cycling Municipal Partnership Program:

Applicant	Project	Total Project Cost	Contribution Tier	Regional Contribution
Town of East Gwillimbury	Nokiidaa Trail extension to Yonge Street and Mount Albert Road	\$194K	50%	\$97K
Town of East Gwillimbury	Nokiidaa Trail Extension - Parking lot upgrade for trailhead	\$90K	21%	\$18K
Town of Richmond Hill	Lake to Lake multi-use path, Leslie Street (Highway 7 to north of 16 <sup>th</sup> Avenue) *consisting of three approved applications for funding	\$1.7M	50%	\$800K*

Transportation Services Capital Infrastructure Status Update  
 Pedestrian and Cycling Municipal Partnership Program Summary

Applicant	Project	Total Project Cost	Contribution Tier	Regional Contribution
City of Markham	Phase 2 - Rouge Valley Trail, Areas 1 and 4 (Toogood Pond and Milne Dam Conservation Park)	\$1.1M	8%	\$85K
City of Vaughan	Signage on Bartley Smith Greenway multi-use path	\$80K	50%	\$39K

Transportation Services Capital Infrastructure Status Update  
Summary of 2017 Accomplishments

Committee of the Whole  
Transportation Services  
April 5, 2018

## GROWTH PROGRAM

**Roads - Major Capital – Construction - 4 Projects Completed**

Project	Municipality	Total Project Cost
2nd Concession Road Widening, from south of Green Lane to Doane Road	Town of East Gwillimbury/ Town of Newmarket	\$75.1M
Highway 7 Road Widening, from Town Centre Boulevard to Sciberras Road	City of Markham	\$41.5M
Leslie Street Widening, from Broughton Lane to Mulock Drive	Town of Newmarket	\$12.8M
Major Mackenzie Drive Widening, from Pine Valley Drive to Highway 400	City of Vaughan	\$33.6M

**Roads – Environmental Assessments – 3 Studies Completed**

Project Location	Municipality
Bayview Avenue, from Steeles Avenue to Elgin Mills Road	City of Markham/Town of Richmond Hill
Steeles Avenue, from Kennedy Road to Midland Avenue; including grade separation at GO Railway Line (City of Toronto led project)	City of Markham/City of Toronto
Stouffville Road, from Yonge Street to Highway 404	Town of Richmond Hill

**Transit – Growth and Procurement – 5 Projects Completed**

Project	Municipality	Total Project Cost
Conventional Bus Expansion – Purchased 13 conventional buses	N/A	\$5.6M
Viva Bus Expansion – Purchased 5 Viva buses	N/A	\$4.0M

Transportation Services Capital Infrastructure Status Update  
 Summary of 2017 Accomplishments

<b>Project</b>	<b>Municipality</b>	<b>Total Project Cost</b>
Richmond Hill Centre Terminal – Vendor and Customer Facilities	Town of Richmond Hill	\$2.6M
Viva Purple Expansion – 6 new stations on Highway 7	City of Markham	\$1.0M
Installed new concrete pads, shelters, bus stop signs and posts at various locations	Various	\$1.1M

STATE OF GOOD REPAIR PROGRAM

**Roads - Rehabilitation/Preservation - 10 Projects Completed**

<b>Project Location</b>	<b>Municipality</b>	<b>Total Project Cost</b>
Crack Sealing	Various	\$0.6M
Grind and Pave	Various	\$1.4M
Green Lane, Yonge Street to 2nd Concession and Green Lane/Leslie Street intersection – Road Rehabilitation and Intersection Improvements	Town of East Gwillimbury	\$3.3M
Jane Street, Highway 7 to Langstaff Road - Preservation	City of Vaughan	\$0.6M
Kennedy Road, 16th Avenue to Major Mackenzie Drive - Preservation	City of Markham	\$0.5M
Kennedy Road, Highway 407 to 400m north of Highway 407 - Preservation	City of Markham	\$0.2M
Rutherford Road/Islington Avenue intersection - Road Rehabilitation and AODA Intersection Improvements	City of Vaughan	\$1.0M
Warden Avenue, Steeles Avenue to 14th Avenue - Preservation	City of Markham	\$0.5M
Weston Road, Highway 7 to Langstaff Road - Preservation	City of Vaughan	\$0.6M
Woodbine Avenue, Highway 407 to Highway 7 - Preservation	City of Markham	\$0.3M

**Roads - Structure Rehabilitation – 4 Projects Completed**

<b>Project Location</b>	<b>Municipality</b>	<b>Total Project Cost</b>
Woodbine Avenue, at Vandorf Side Road – CNR Underpass Rehabilitation	Town of Whitchurch-Stouffville	\$40K

Transportation Services Capital Infrastructure Status Update  
 Summary of 2017 Accomplishments

<b>Project Location</b>	<b>Municipality</b>	<b>Total Project Cost</b>
Black River Road, 800m east of Dalton Road - Bridge Rehabilitation	Town of Georgina	\$1.0M
York/Durham Line, 10m south of Ravenshoe Road – Culvert Replacement	Town of East Gwillimbury	\$0.5M
McCowan Road, 850m north of Queensville Sideroad – Bridge Replacement	Town of East Gwillimbury	\$3.1M

**Roads - Intersection Improvements – 16 Projects Completed**

<b>Project Location</b>	<b>Municipality</b>	<b>Total Project Cost</b>
14th Avenue and McDowell Gate	City of Markham	\$360K
14th Avenue and Ninth Line	City of Markham	
14th Avenue and Riverwalk Drive (work ongoing)	City of Markham	
Aurora Road and Ninth Line	Town of Whitchurch-Stouffville	\$150K
Kennedy Road and Vivian Road	Town of Whitchurch-Stouffville	
Kennedy Road and Unionville Gate	City of Markham	
Bathurst Street and George Kirby Street	City of Vaughan	
Keele Street and Administration Road	City of Vaughan	
Bayview Avenue and Bayview Park Lane/Dariole Drive	Town of Richmond Hill	\$160K
Bloomington Road and William Avenue	Town of Whitchurch-Stouffville	\$210K
Highway 27 and King-Vaughan Road	City of Vaughan	\$125K
Rutherford Road and Huntington Road	City of Vaughan	
Highway 27 and Nashville Road	City of Vaughan	\$370K
Major Mackenzie Drive and Bathurst Street	City of Vaughan	\$140K
The Queensway South and Elm Avenue/Dovetail Drive	Town of Georgina	\$170K
Yonge Street and Bristol Road	Town of Newmarket	



Transportation Services Capital Infrastructure Status Update  
 Summary of 2017 Accomplishments

**Transit – Ongoing Rehabilitation and Preventative Maintenance - 4 Projects Completed**

<b>Project Location</b>	<b>Municipality</b>	<b>Total Project Cost</b>
Conventional Bus Major Mid-life Structural Refurbishing and Mechanical Overhaul – 31 buses and 18 Viva bus conversions	N/A	\$8.1M
Viva Bus Major Mid-life Structural Refurbishing and Mechanical Overhaul – 10 Viva buses	N/A	\$1.7M
Replaced concrete pads, shelters and bus stop signs and posts at various locations	Various	\$1.3M
Operations, Maintenance, and Storage Facilities Rehabilitation – Southwest Garage, 8300 Keele Street	N/A	\$0.3M

EMERGENCY REPAIRS

**Roads – Emergency Repair Work – 14 Projects Completed**

<b>Project</b>	<b>Municipality</b>	<b>Cost</b>
Carrville Road, east of Ayr Street - Retaining wall failure*	Town of Richmond Hill	\$250K*
Highway 7, east of Islington Avenue – Sink hole repair	City of Vaughan	\$10K
Jane Street, north of Teston Road - Culvert failure/sink hole repair	City of Vaughan	\$55K
King Road at 8th Concession - Retaining wall repair*	Township of King	\$0.9M*
Metro Road, east of Birch Road - Culvert Repair	Town of Georgina	\$15K
Ninth Line at Musselman Lake – Slope failure	Town of Whitchurch-Stouffville	\$25K
Park Road, north of Ravenshoe Road - Culvert replacement	Town of Georgina	\$135K
Ravenshoe Road, east of Thornlodge and Metro Road - Culvert blockage removal	Town of Georgina	\$45K
Warden Avenue, north of Pollock Road - Slope failure	Town of Georgina	\$80K
Warden Avenue, north of Queensville Sideroad - Slope failure*	Town of Georgina	\$150K*
Yonge Street at Holland Landing Road - Slope failure	Town of East Gwillimbury	\$55K
Yonge Street opposite Silverline Helicopters' Driveway - Slope failure*	Town of East Gwillimbury	\$400K*

Transportation Services Capital Infrastructure Status Update  
Summary of 2017 Accomplishments

<b>Project</b>	<b>Municipality</b>	<b>Cost</b>
Yonge Street, north of Industrial Parkway - Sink hole repair	Town of Aurora	\$10K
York-Durham Line at Elgin Mills Road - Slope failure*	City of Markham	\$5K*

\*Road re-opened and some work ongoing.

8121563

# CAPITAL INFRASTRUCTURE STATUS UPDATE

PRESENTATION TO COMMITTEE OF THE WHOLE

Salim Alibhai  
Transportation Services  
Capital Planning and Delivery  
April 5, 2018

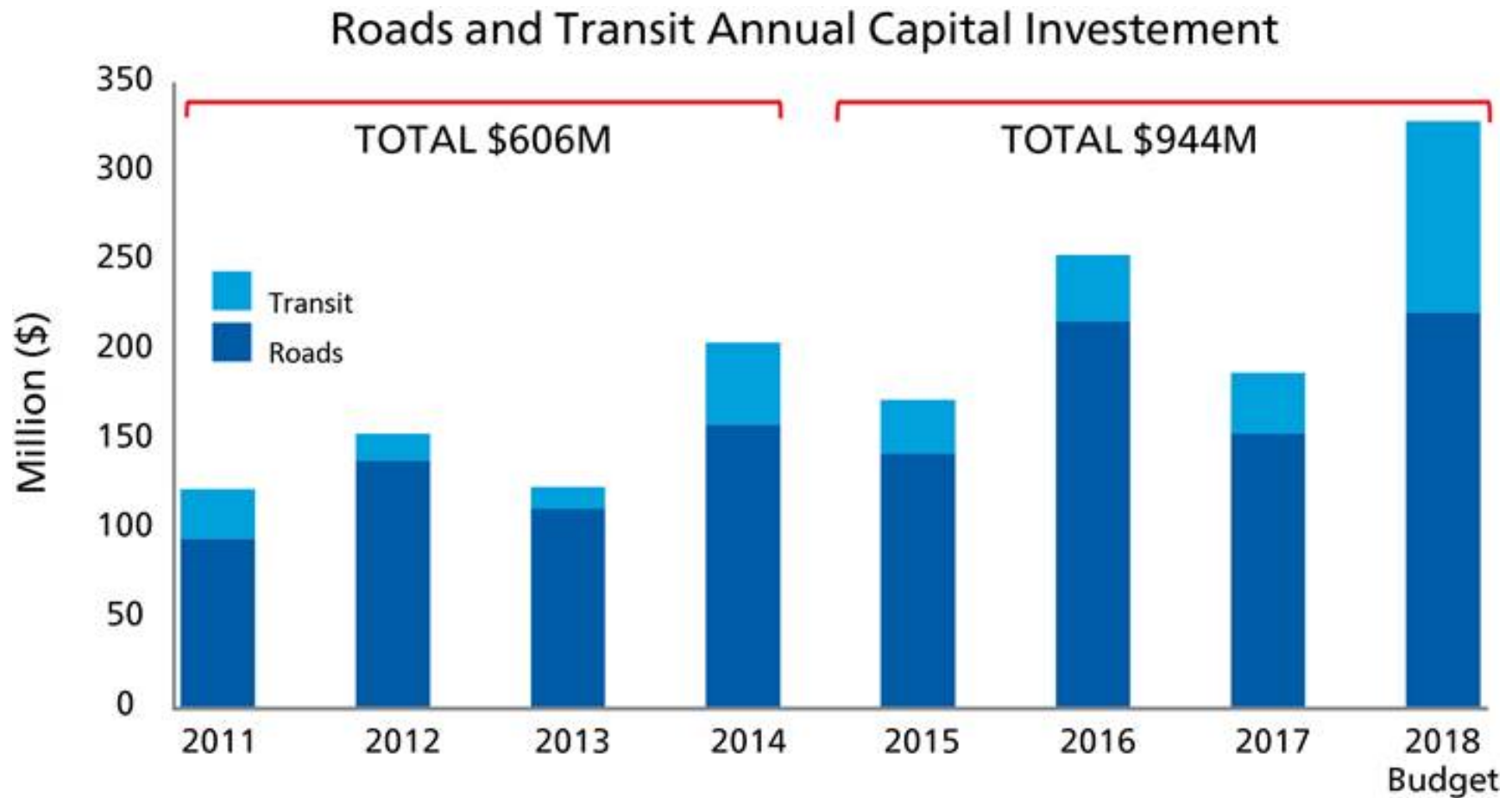


# \$2.2B\* 10-YEAR TRANSPORTATION CAPITAL BUDGET

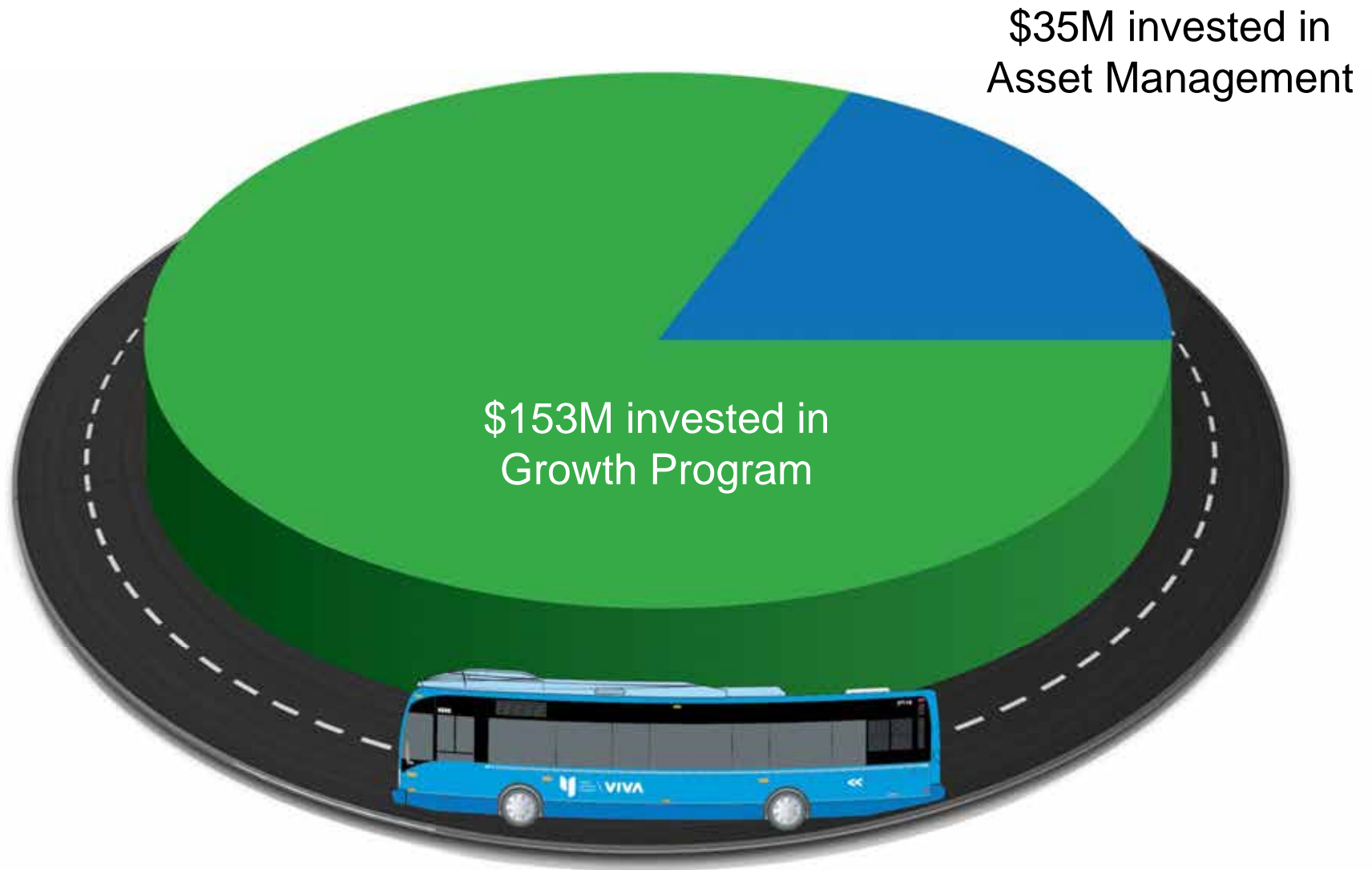


\*Excludes investments in YRRTC program

# Increased Funding in Roads and Transit Programs



# 2017 ACCOMPLISHMENTS



# 2017 ACCOMPLISHMENTS

**Construction**

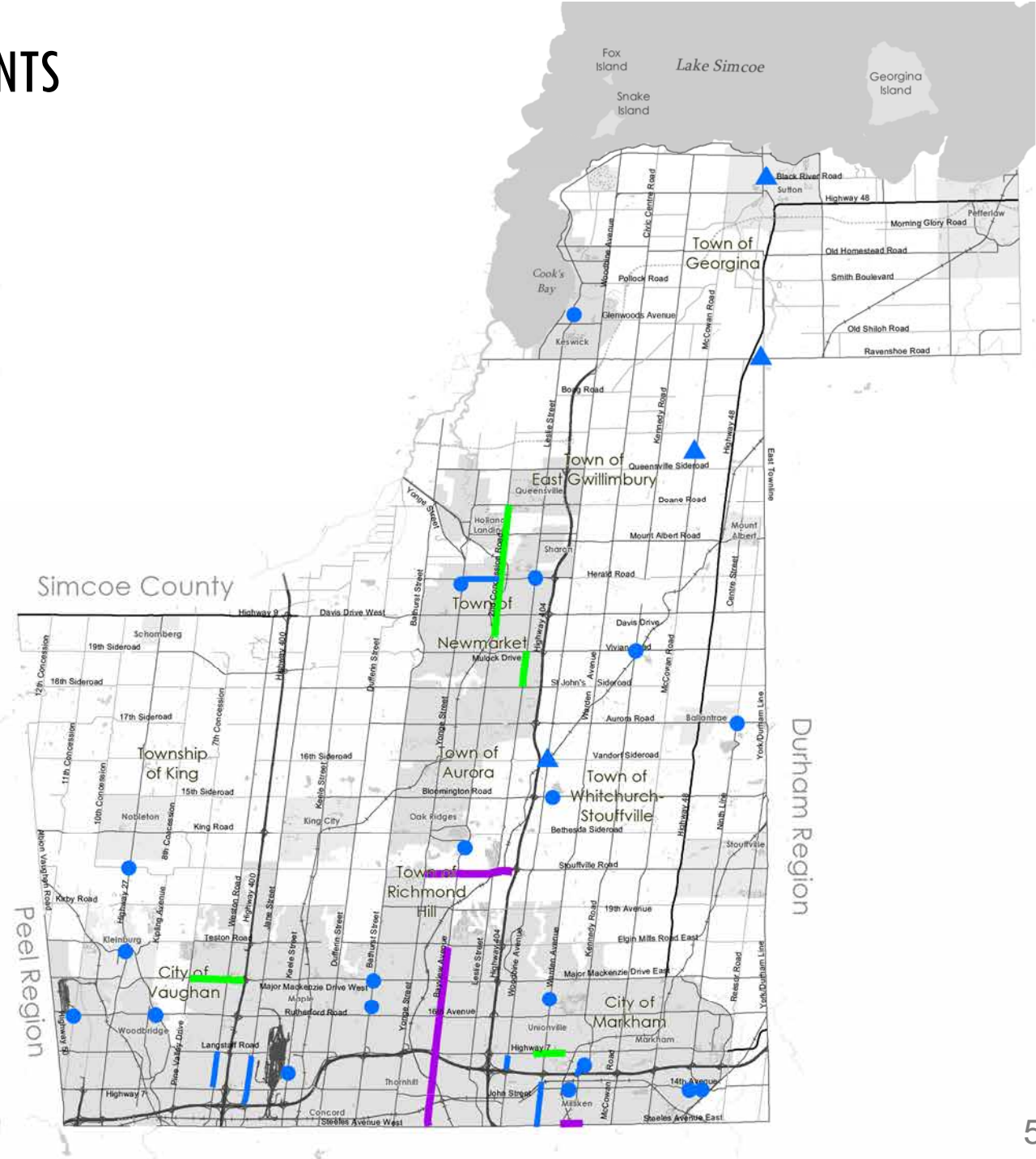
- Intersection Improvements
- Road Reconstruction / Widening

**Environmental Assessment Studies**

- Environmental Assessment Study

**Asset Management**

- Intersection Improvement
- ▲ Structure Improvement
- Rehabilitation / Resurfacing



# 2017 ENVIRONMENTAL ASSESSMENT

Complete

Bayview Avenue  
Steeles Avenue to Elgin Mills Road





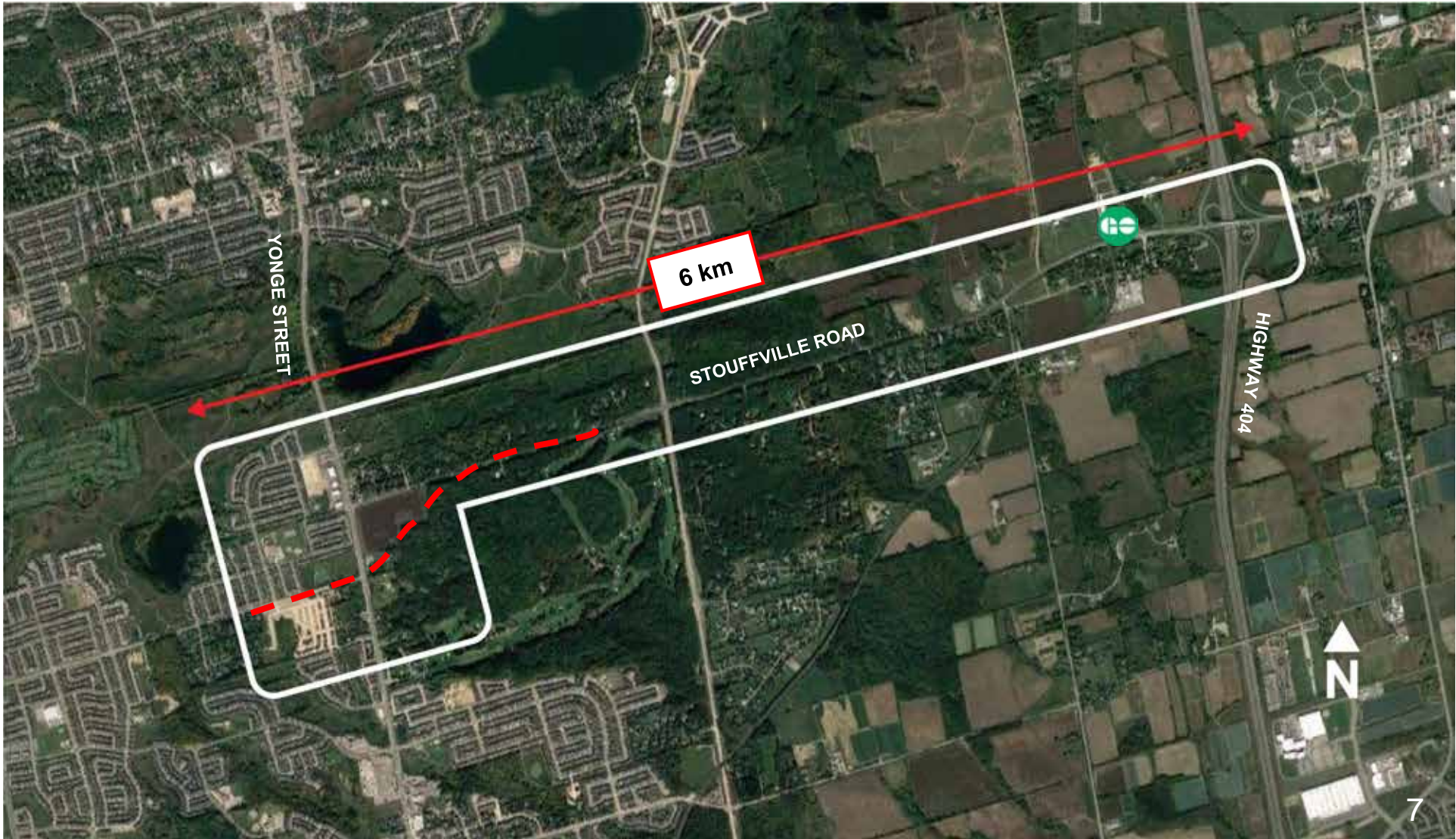
# 2017 ENVIRONMENTAL ASSESSMENT

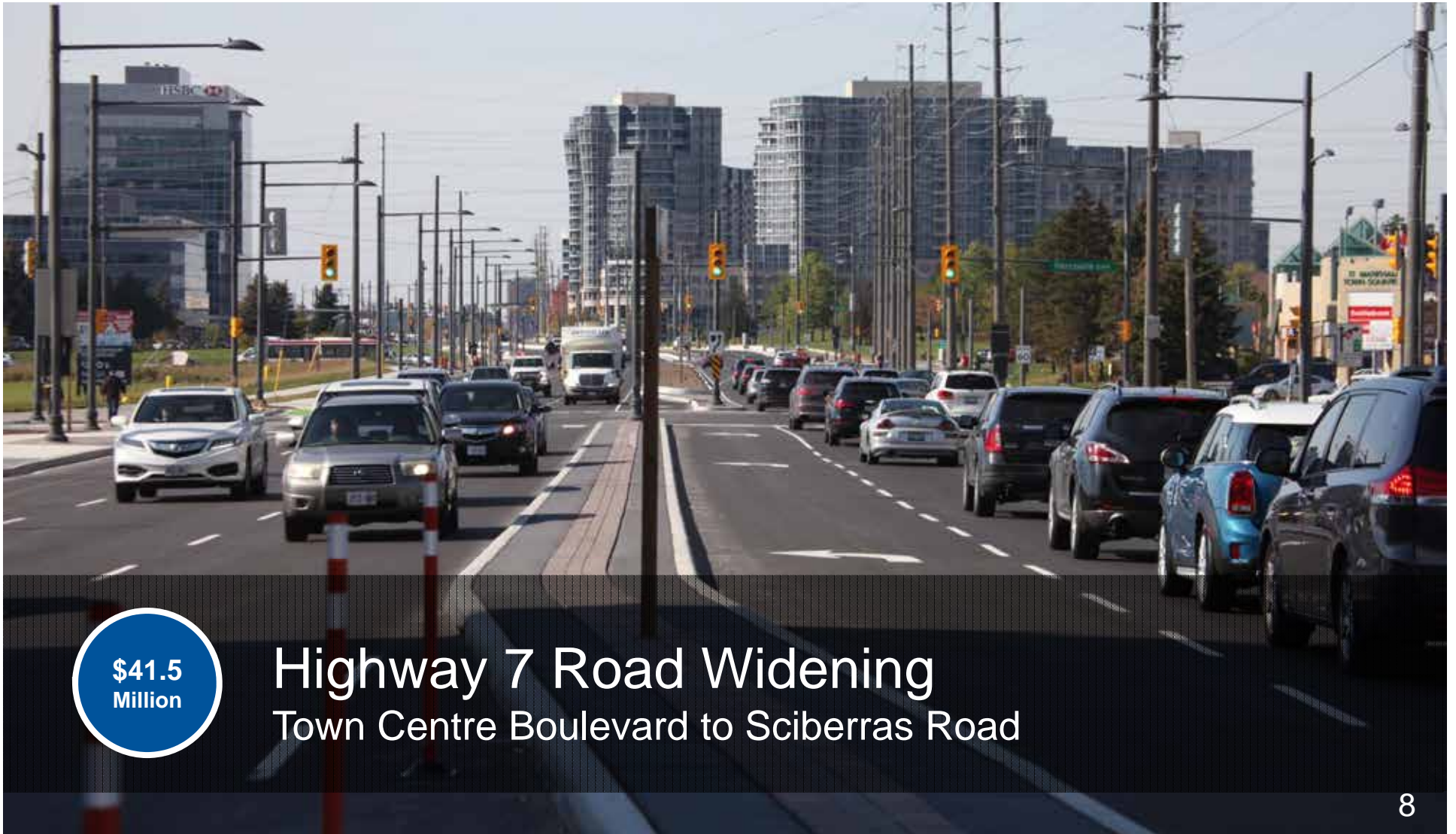
Complete

## Stouffville Road Yonge Street to Highway 404



--- = new alignment





\$41.5  
Million

## Highway 7 Road Widening Town Centre Boulevard to Sciberras Road



# 2017 CONSTRUCTION

Complete



\$75.1  
Million

## 2<sup>nd</sup> Concession Road Widening Bristol Road to Queensville Sideroad





\$12.8  
Million

## Leslie Street Road Widening Broughton Lane to Mulock Drive





\$33.6  
Million

## Major Mackenzie Drive Road Widening Pine Valley Drive to Highway 400





# 2017 BUS FLEET EXPANSION

Complete



\$9.6  
Million

18 Buses Purchased  
(13 Conventional and 5 Viva)

# 2017 TRANSIT FACILITY EXPANSION

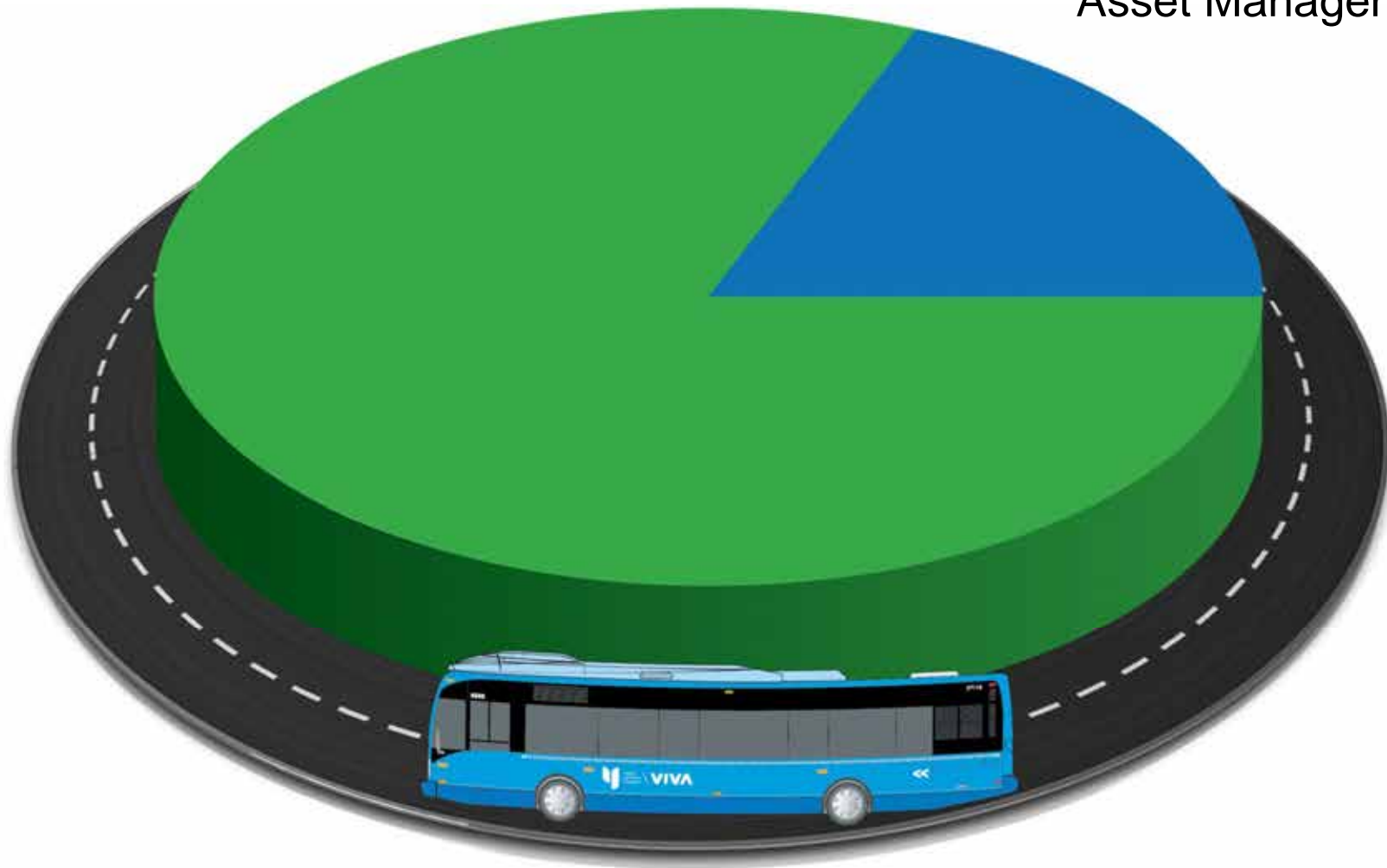


\$2.6  
Million

Richmond Hill Centre Terminal  
Vendor and Customer Facilities

# 2017 ACCOMPLISHMENTS

\$35M invested in  
Asset Management



# 2017 ROAD REHABILITATION AND RESURFACING

Complete



\$10.2  
Million

Completed rehabilitation on 19 lane kms  
and resurfacing of 44 lane kms

# 2017 STRUCTURE REPLACEMENT / REHABILITATION

Complete



Gibney Bridge



York/Durham Line Culvert

\$5.0 Million

Completed replacement/rehabilitation of four structures

# 2017 INTERSECTION IMPROVEMENTS

Complete



The Queensway at Glenwoods Avenue

\$5.1  
Million

Completed improvements at 16 locations

# 2017 ADDITIONAL WORK

Complete



Carville Road retaining wall failure

King Road slope failure

\$2.1 Million

Completed work at a number of locations to repair infrastructure



# PARTNERSHIP PROGRAMS



**\$0.5**  
Million

Pedestrian and Cycling  
Municipal Partnership Program –  
Nashville Conservation Reserve,  
Kirby Road, City of Vaughan



**\$1.0**  
Million

Municipal Streetscape  
Partnership Program –  
Highway 7, City of Vaughan

# 2017 BUS STOPS, TRANSIT SHELTERS, CONCRETE PLATFORMS

Complete



**\$2.1  
Million**

powered shelters and 6 Viva stations were installed under the expansion program

**\$1.3  
Million**

solar powered shelters were installed under the renewal program

# 2017 TRANSIT FLEET MIDLIFE OVERHAUL

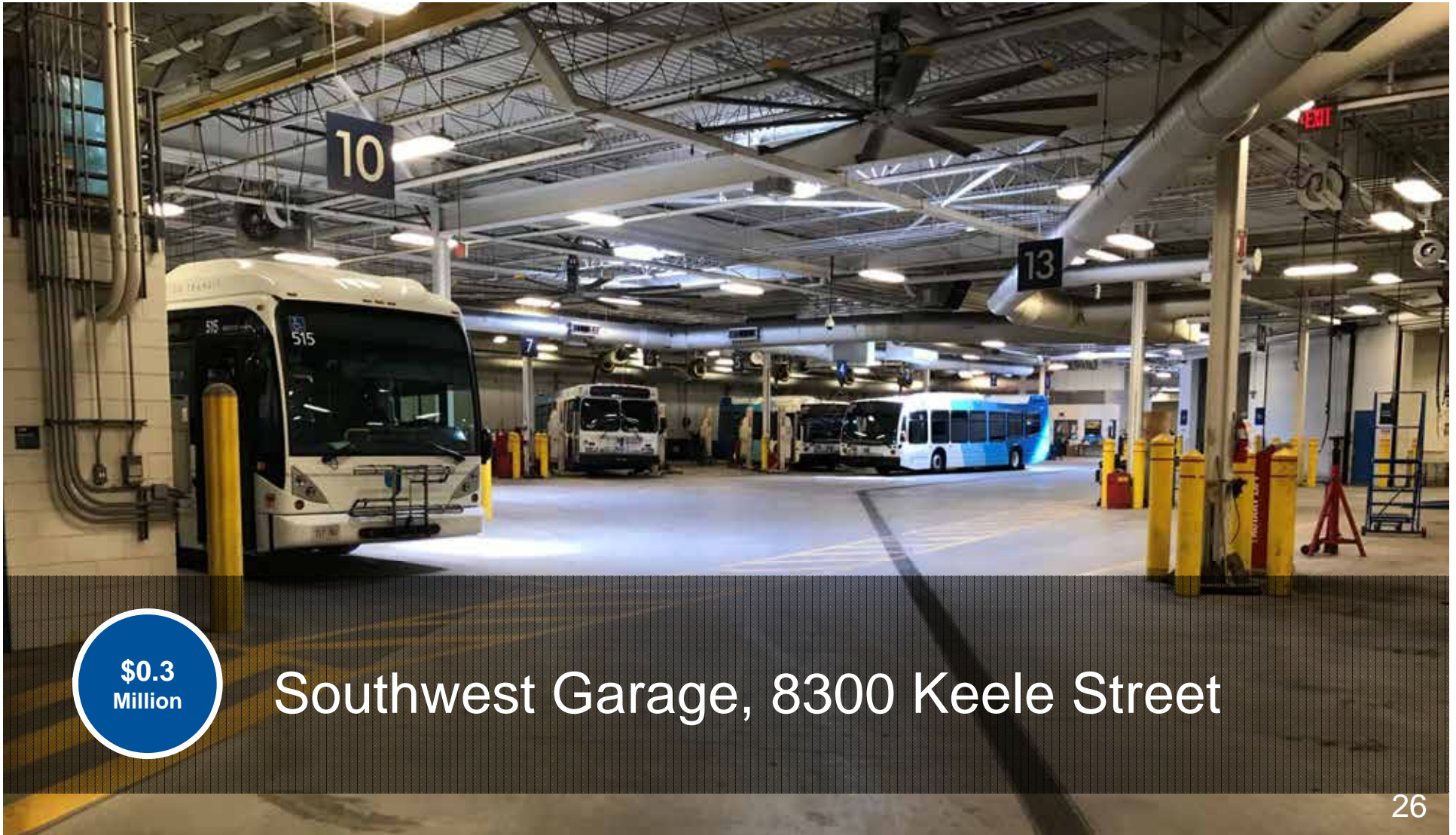
Complete



Complete overhaul on 31  
buses, 10 Viva buses and  
10 bus conversions

# 2017 TRANSIT FACILITY REHABILITATION

Complete

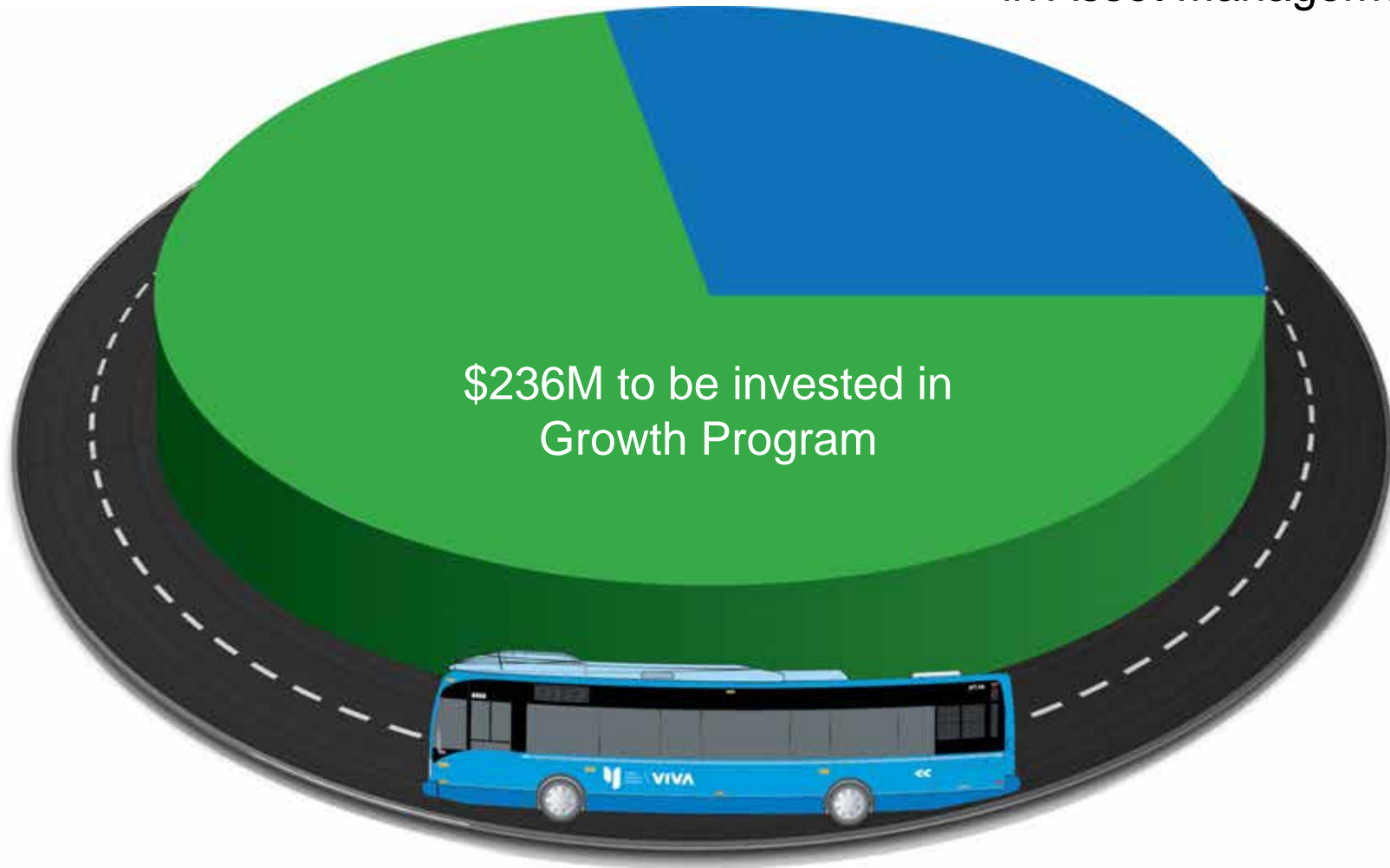


\$0.3  
Million

Southwest Garage, 8300 Keele Street

# 2018 PROGRAM

\$92M to be invested  
in Asset Management



# 2018 GROWTH PROGRAM

Planning

Environmental  
Assessment

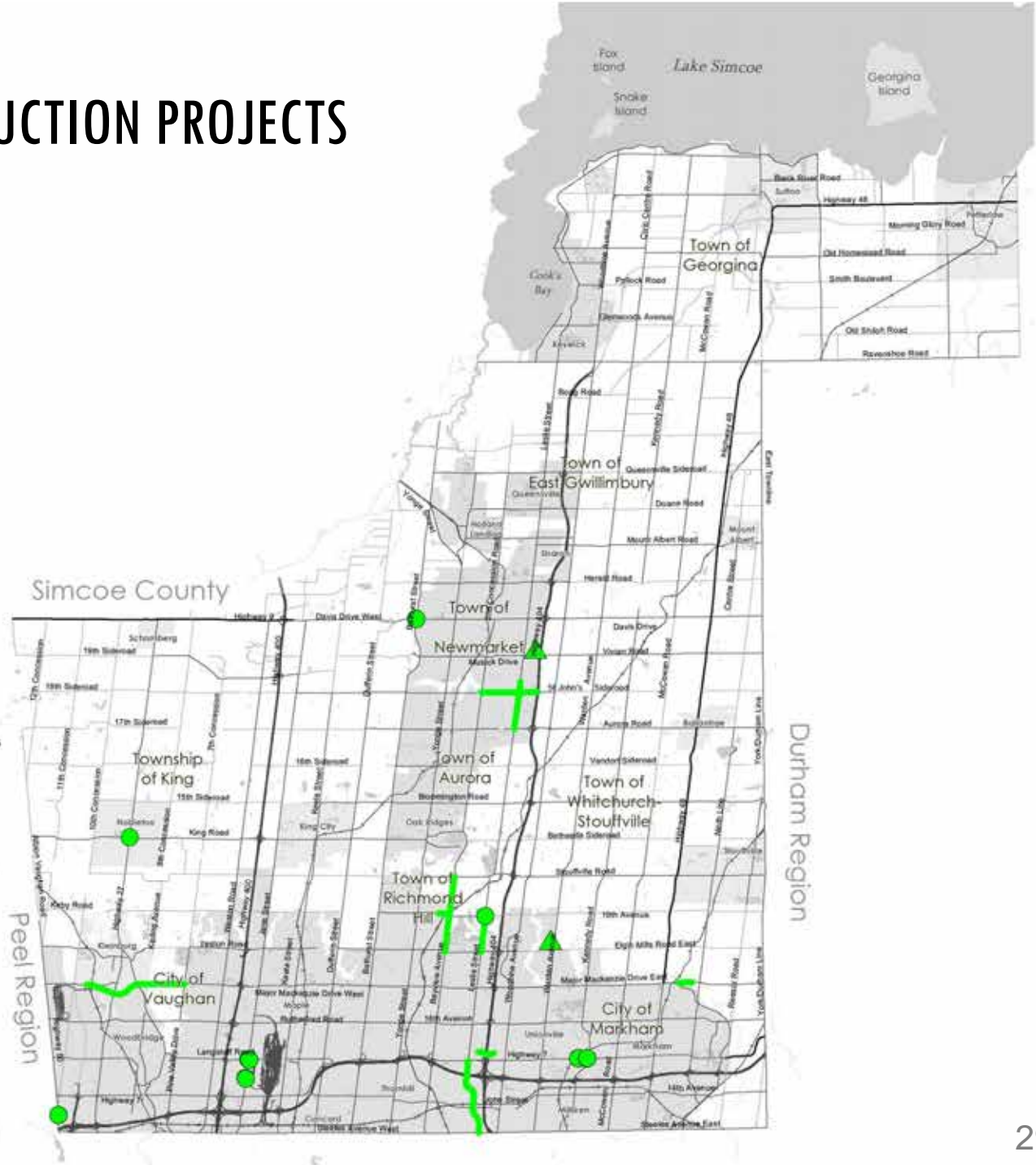
Detailed  
Design

Construction



# 20 GROWTH CONSTRUCTION PROJECTS UNDERWAY IN 2018

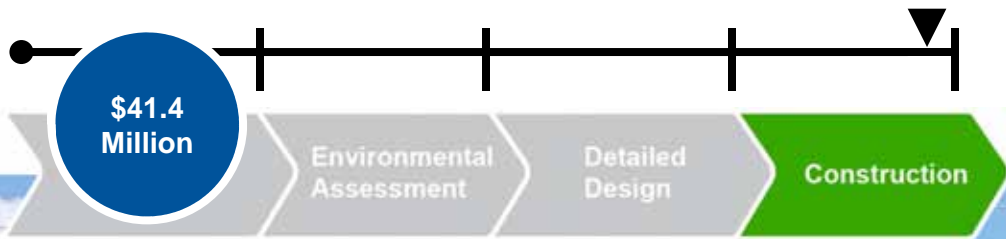
- Construction - Growth Projects**
- Intersection Improvements = 8 locations
  - ▲ Facility = 2 locations
  - Road Reconstruction / Widening = 10 locations



# BAYVIEW AVENUE / 19<sup>TH</sup> AVENUE

Underway

Elgin Mills Road to Stouffville Road  
Linda Margaret Crescent to Bayview Avenue



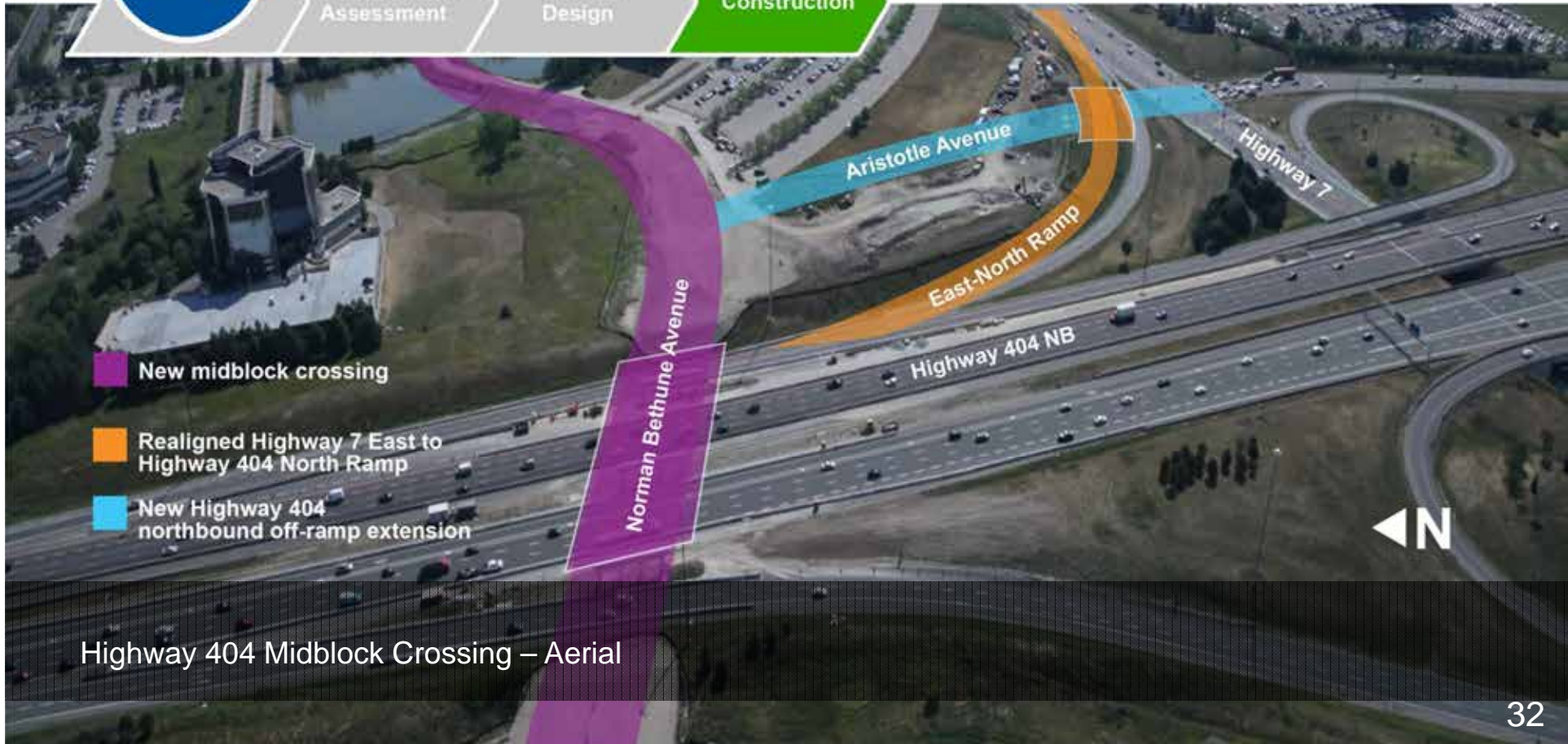
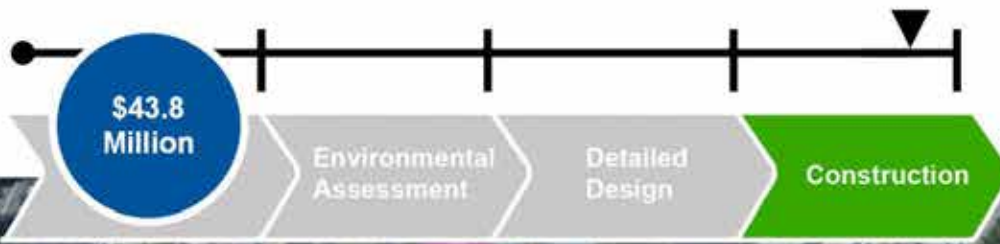




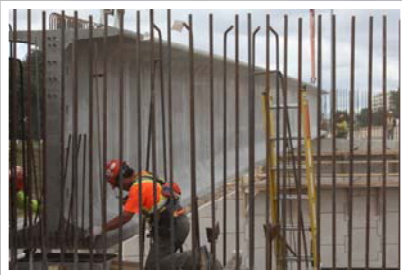
# HIGHWAY 404 MIDBLOCK CROSSING

Underway

North of Highway 7 and Highway 404  
Northbound Ramp Extension



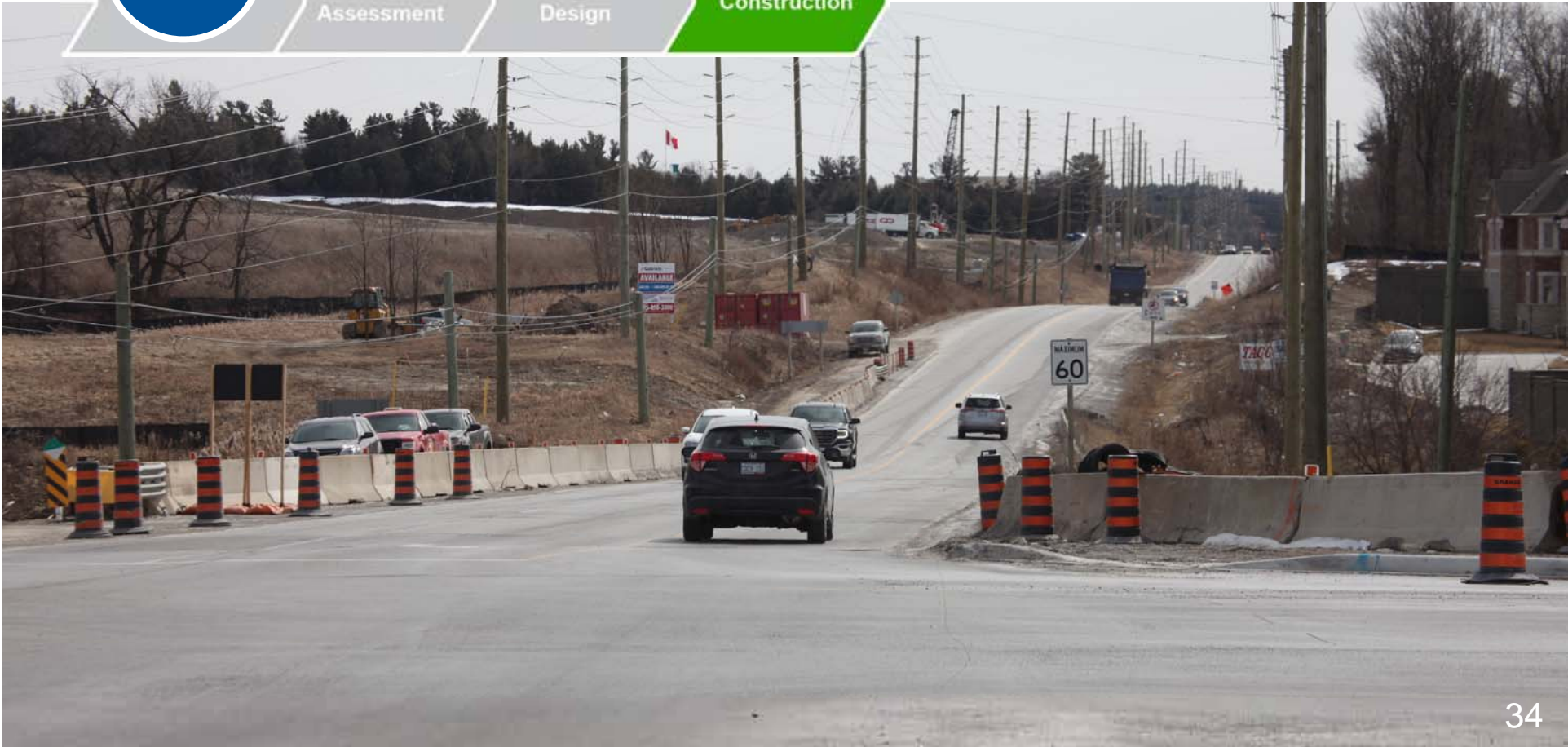
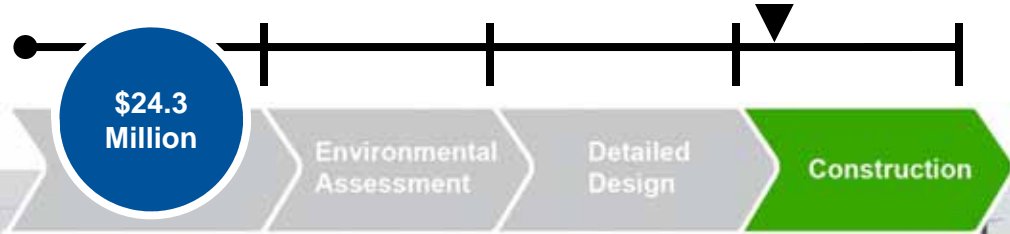
Highway 404 Midblock Crossing – Aerial



# LESLIE STREET

Underway

## Don Hillock Drive to Broughton Lane

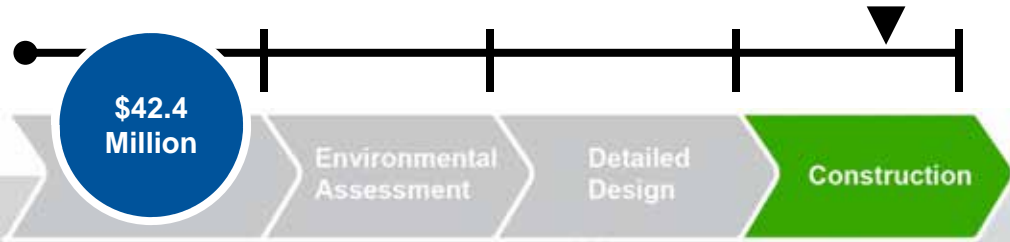




# ST. JOHN'S SIDEROAD

Underway

Bayview Avenue to Woodbine Avenue

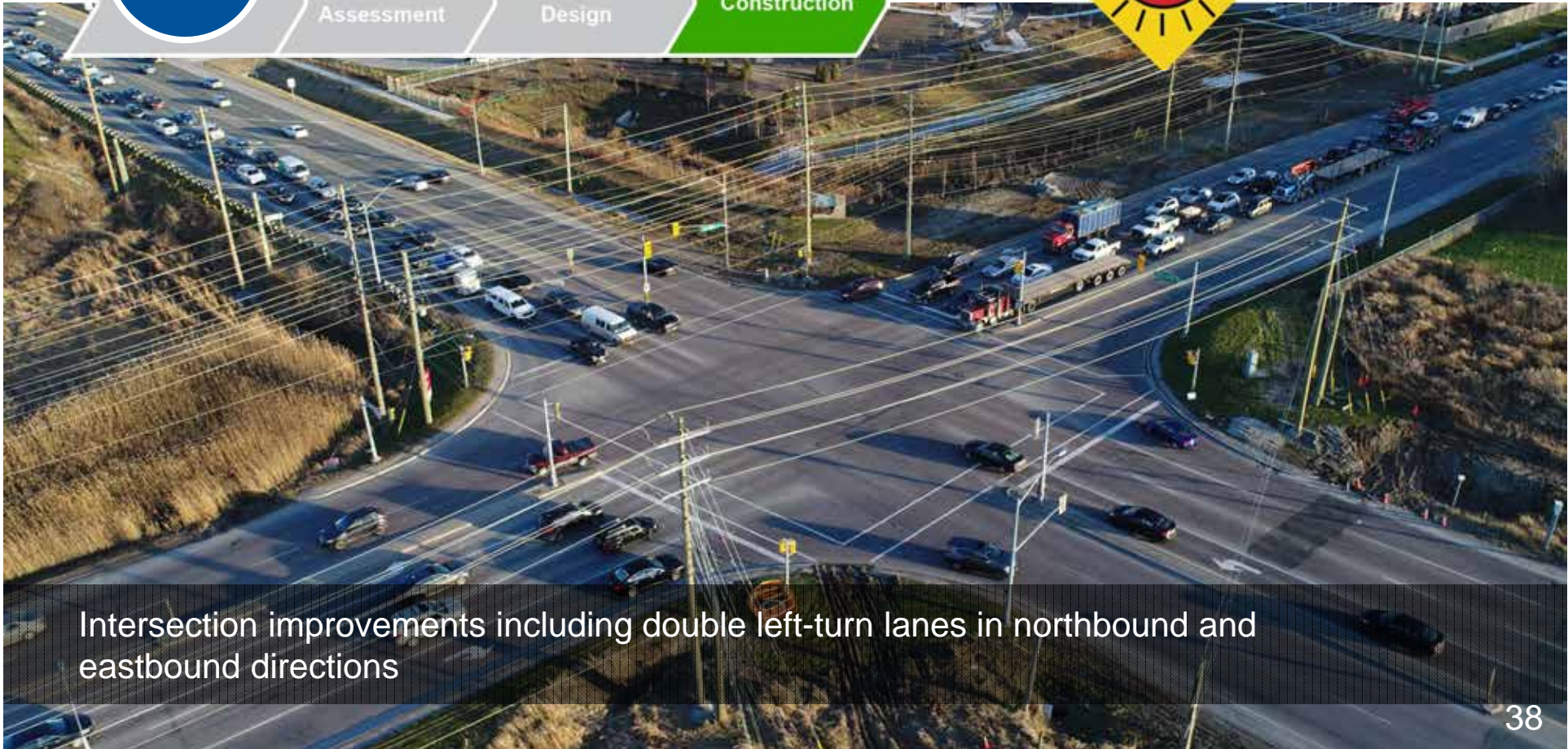
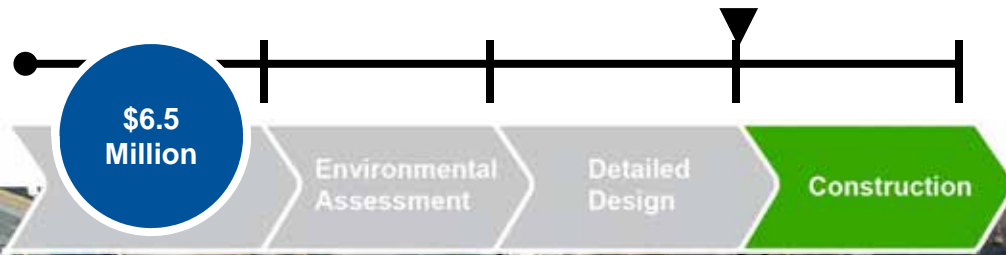




# BATHURST STREET AND DAVIS DRIVE

Commence

## Intersection Improvements



Intersection improvements including double left-turn lanes in northbound and eastbound directions

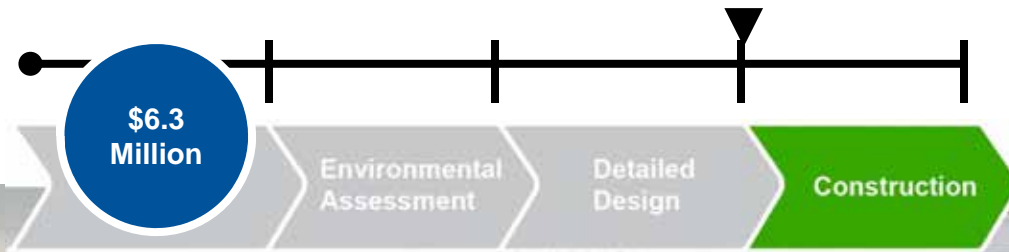


# KING ROAD AND HIGHWAY 27

Commence



## Intersection Improvements

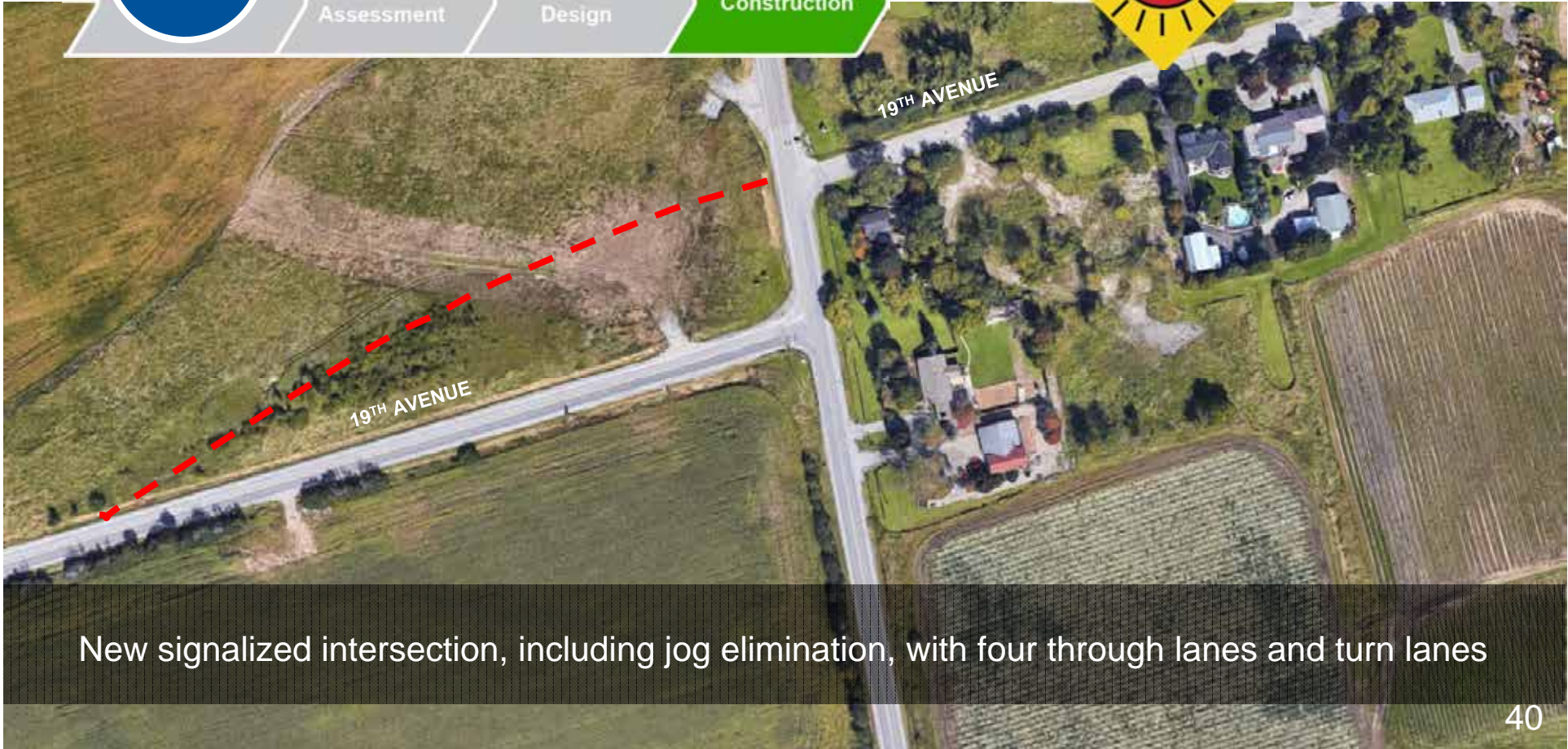
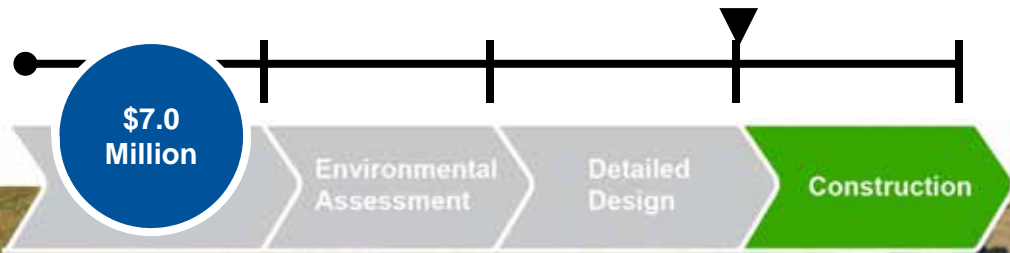


Intersection improvements including left-turn lanes in northbound and southbound directions

# LESLIE STREET AND 19<sup>TH</sup> AVENUE

Commence

## Intersection Improvements

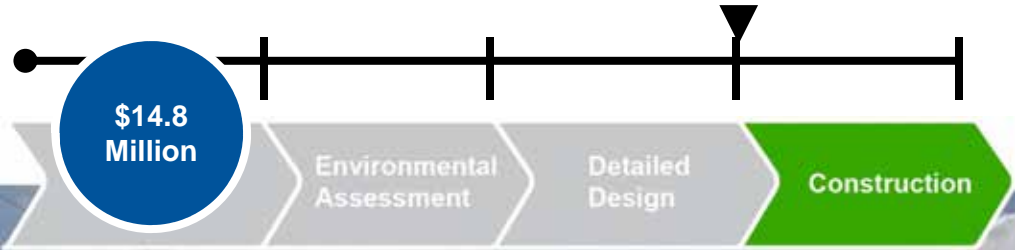


New signalized intersection, including jog elimination, with four through lanes and turn lanes

# LESLIE STREET

Commence

Elgin Mills Road to 19<sup>th</sup> Avenue

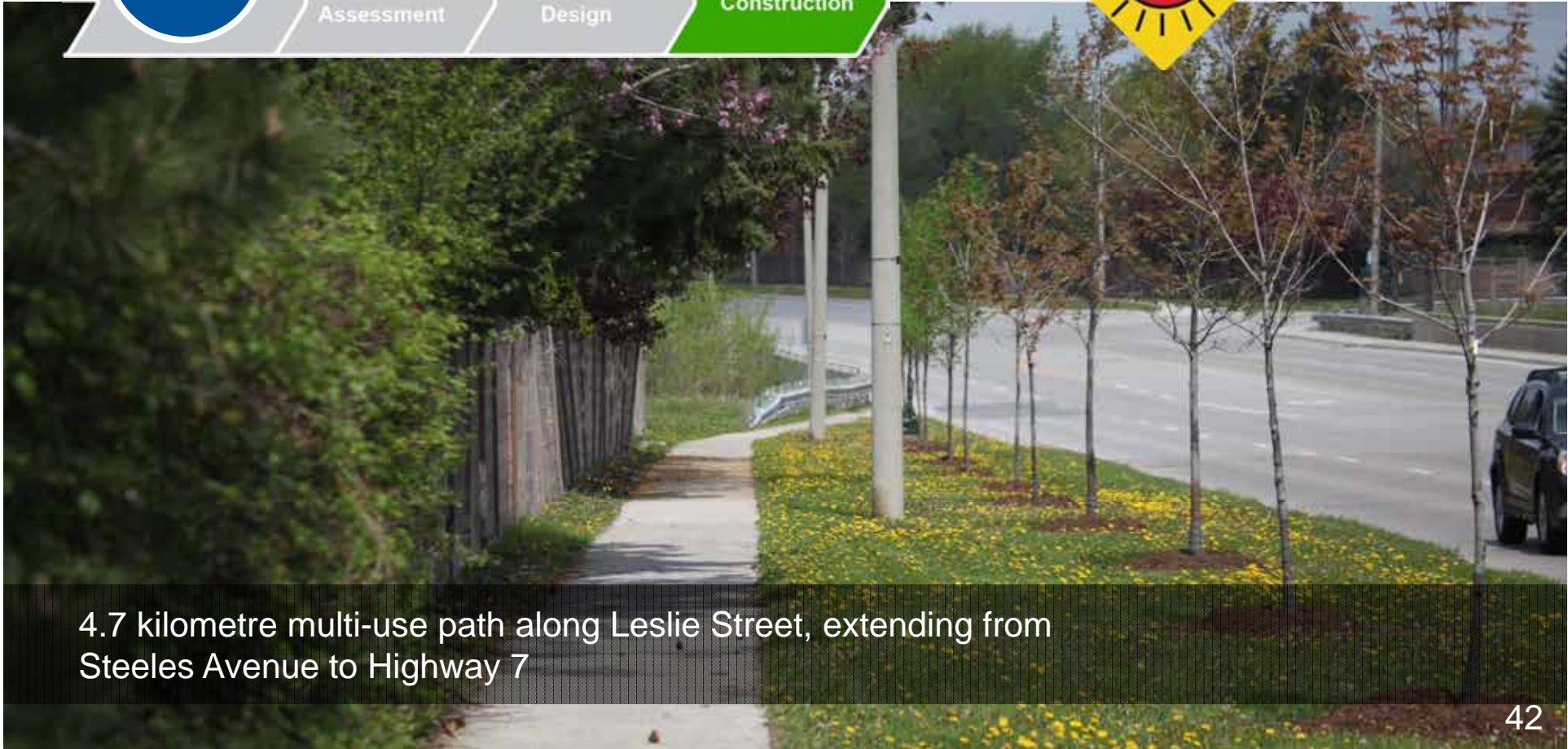
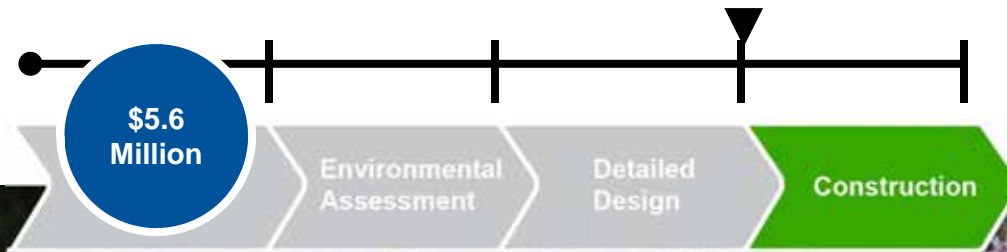


Reconstruction and widening from two lane rural road to four lane urban road, including geometric improvements, multi-use path, sidewalk and illumination

# LAKE TO LAKE BIKE ROUTE

Commence

## Steeles Avenue to Highway 7

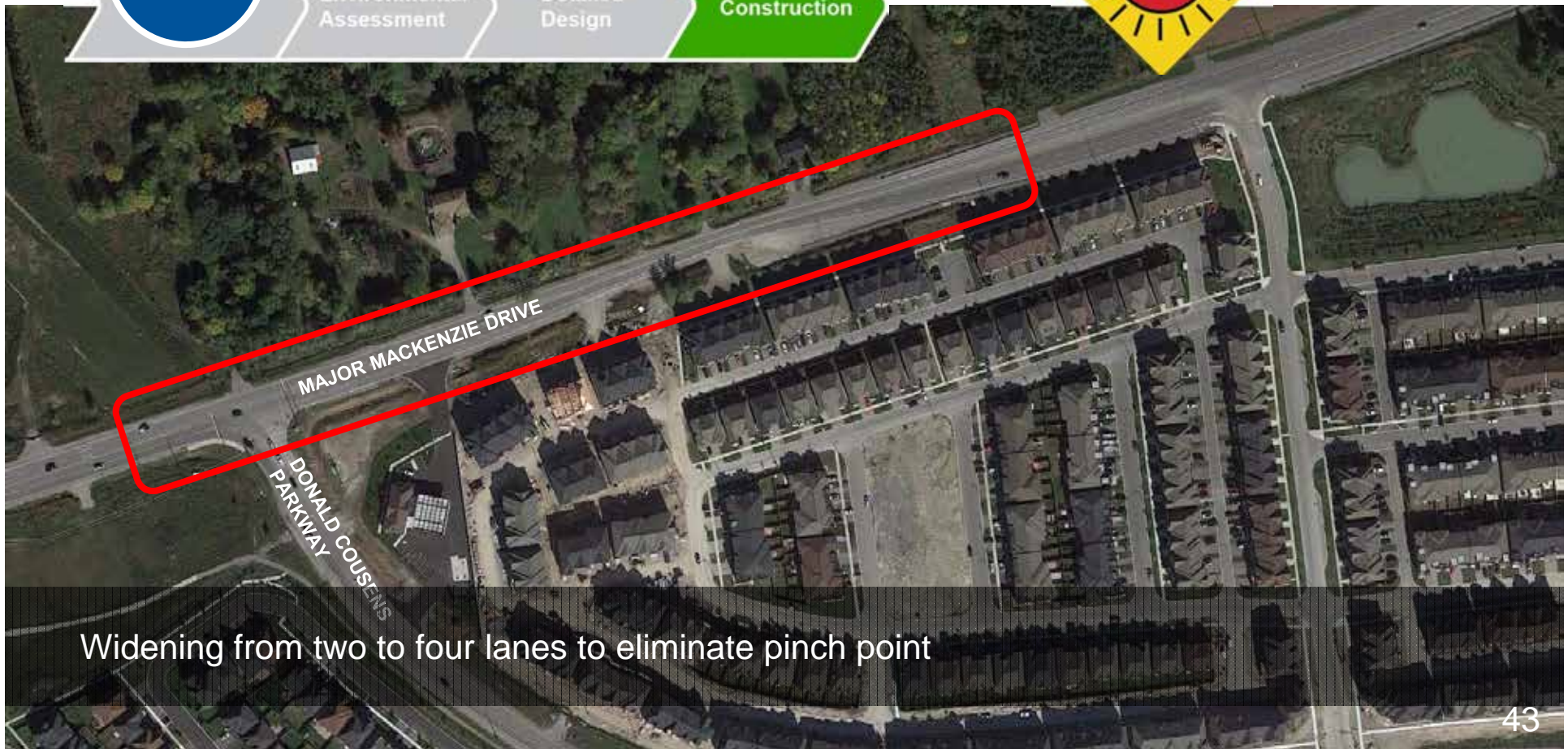
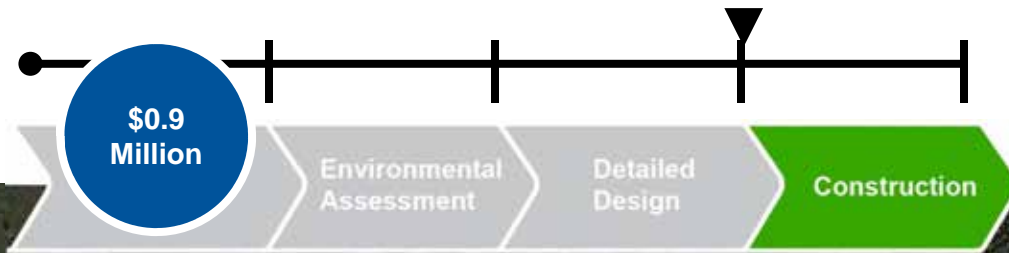


4.7 kilometre multi-use path along Leslie Street, extending from Steeles Avenue to Highway 7

# MAJOR MACKENZIE DRIVE

Commence

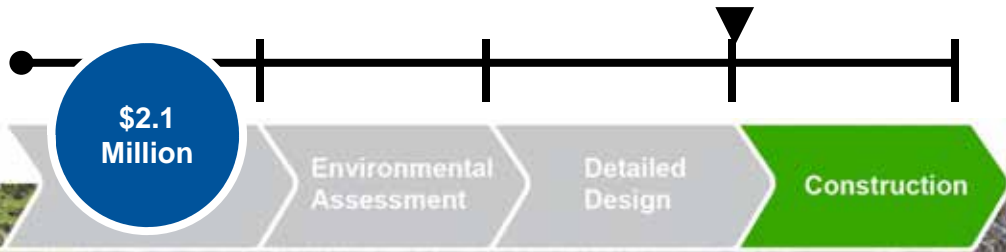
## Donald Cousens Parkway to Ninth Line



# HIGHWAY 7

Commence

## Intersection Improvements at Main Street and at Kennedy Road

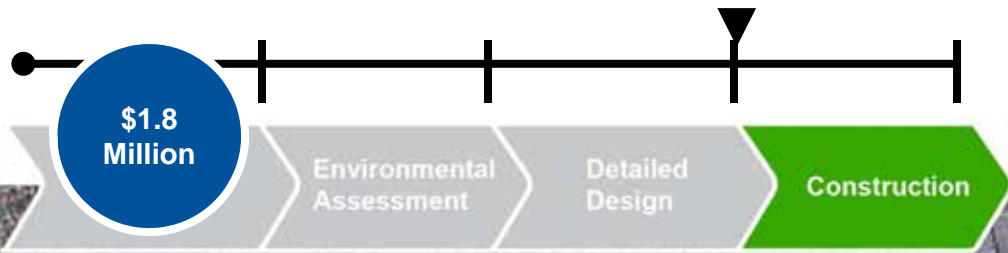


Improvements at 2 intersections to install queue jump lanes

# JANE STREET

Commence

## Intersection Improvements at Pennsylvania Avenue/MacIntosh Boulevard and at Langstaff Road



Improvements at 2 intersections to install queue jump lanes

# MAJOR MACKENZIE DRIVE

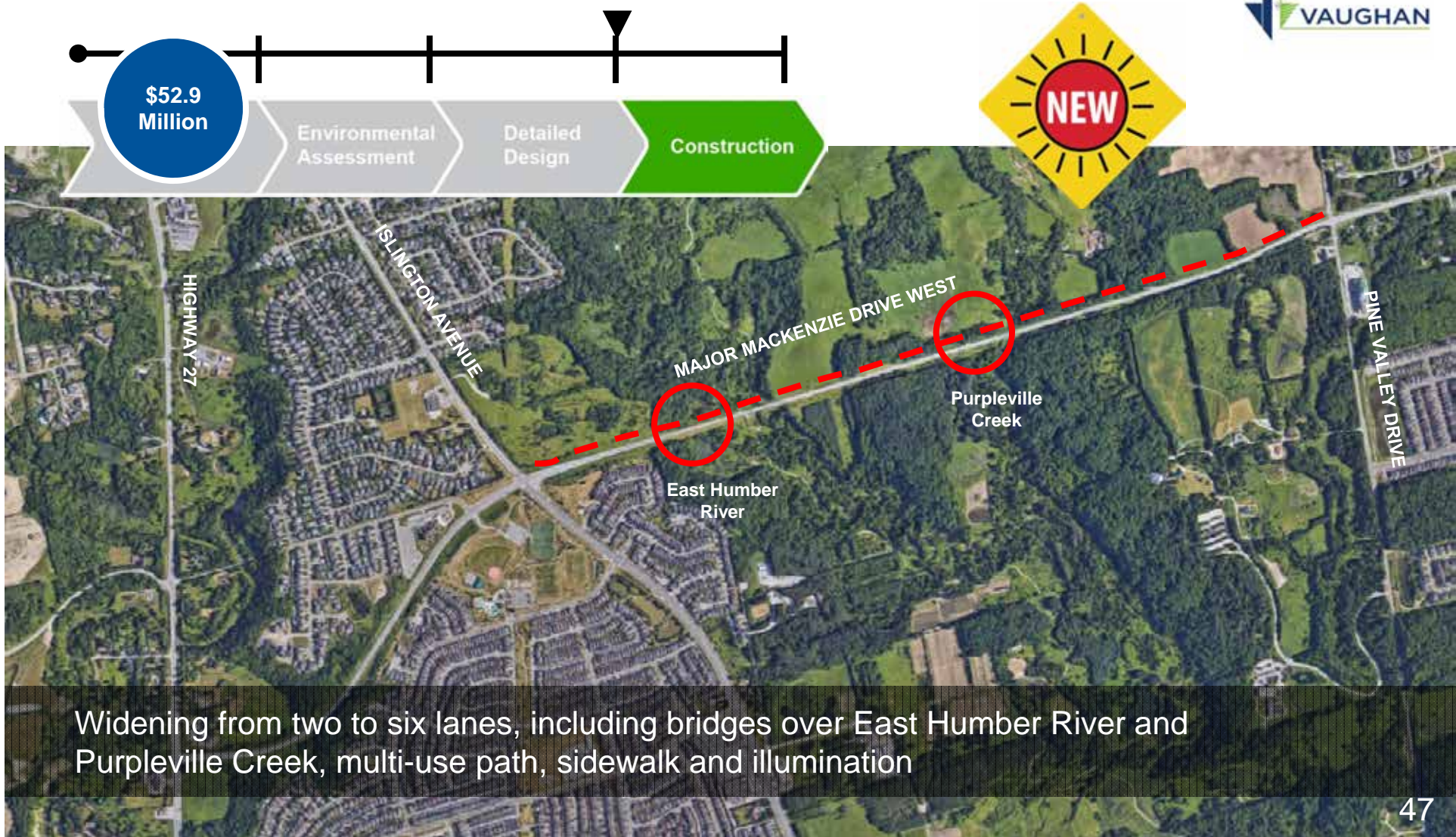




# MAJOR MACKENZIE DRIVE

Commence

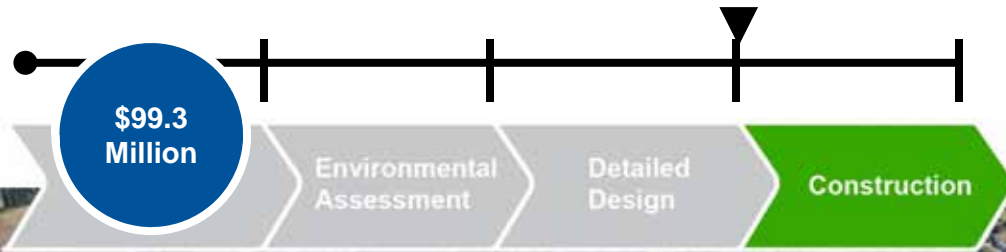
## Islington Avenue to Pine Valley Drive



# MAJOR MACKENZIE DRIVE

Commence

## CPR Tracks to Islington Avenue

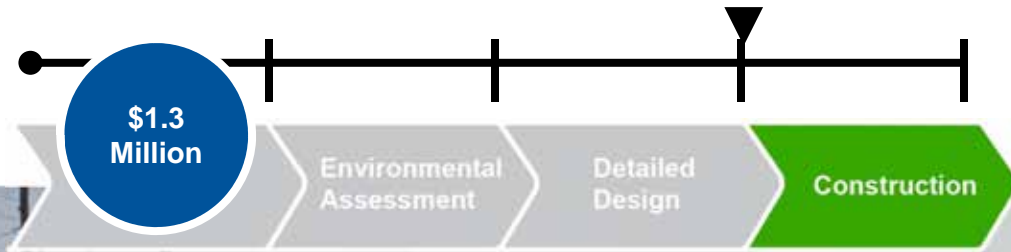


Widening from two to six lanes, including eliminating the jog at Highway 27 and building bridges over the Canadian Pacific Railway tracks and the Humber River

# HIGHWAY 50 AT GORE ROAD

Commence

## Intersection Improvements

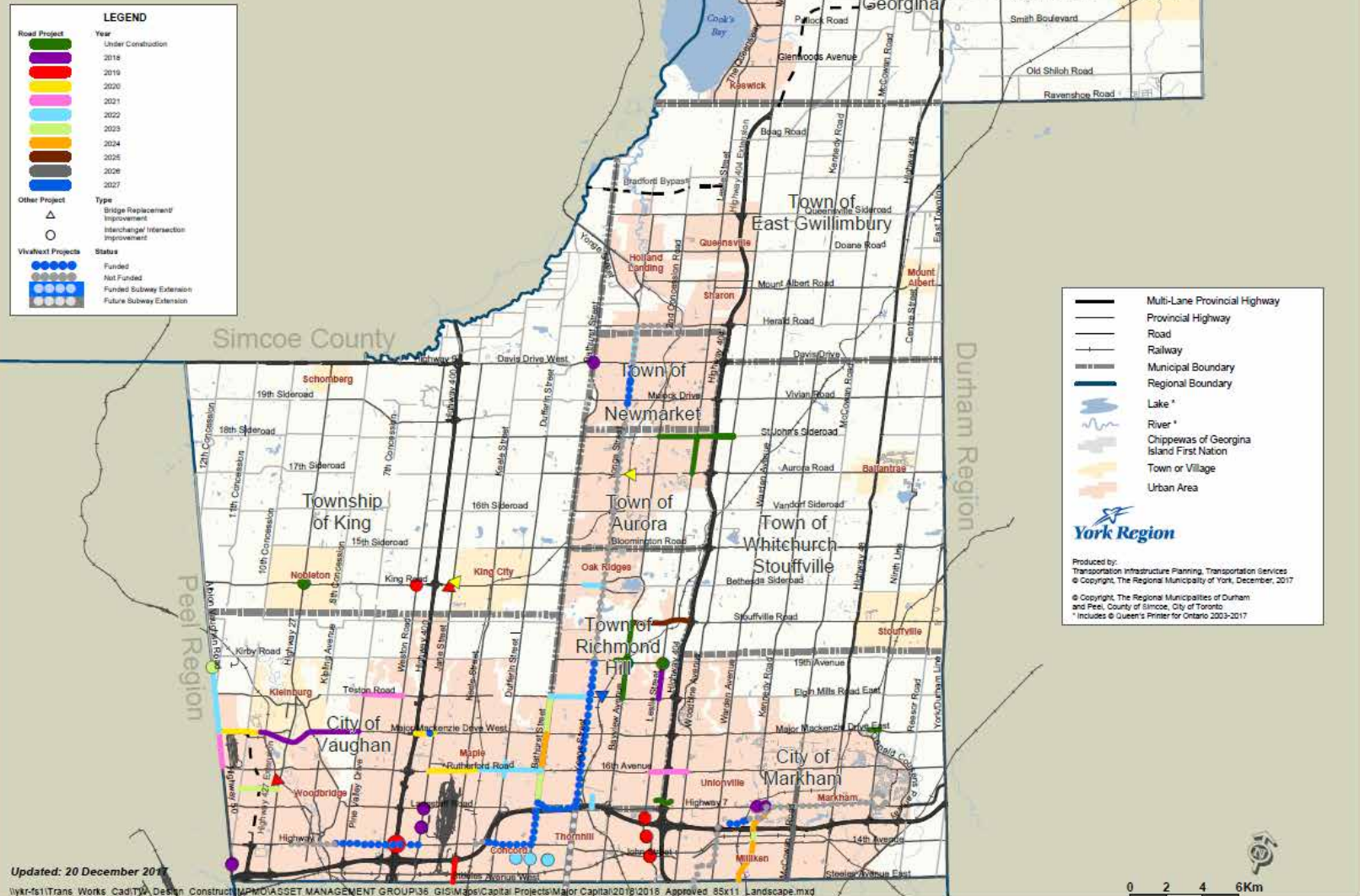


Intersection improvements including northbound double left-turn lanes

# PLANNING FOR THE FUTURE

## 2018 10-YEAR ROADS AND TRANSIT CAPITAL CONSTRUCTION PROGRAM

APPROVED BY COUNCIL DECEMBER 14, 2017

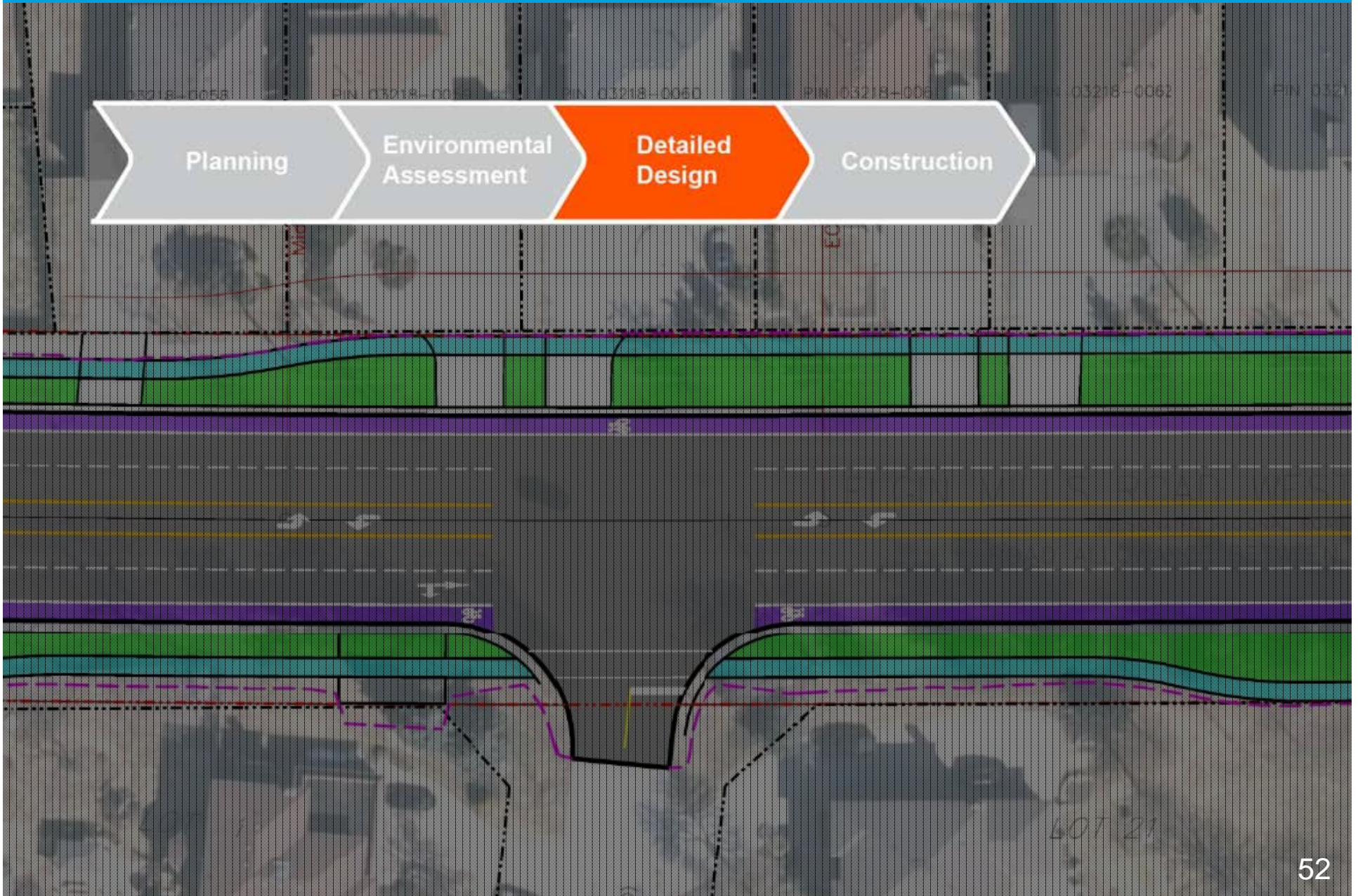


# GROWTH PHASES AND TIMELINES




**Growth projects take 8 to 10 years from start to finish**

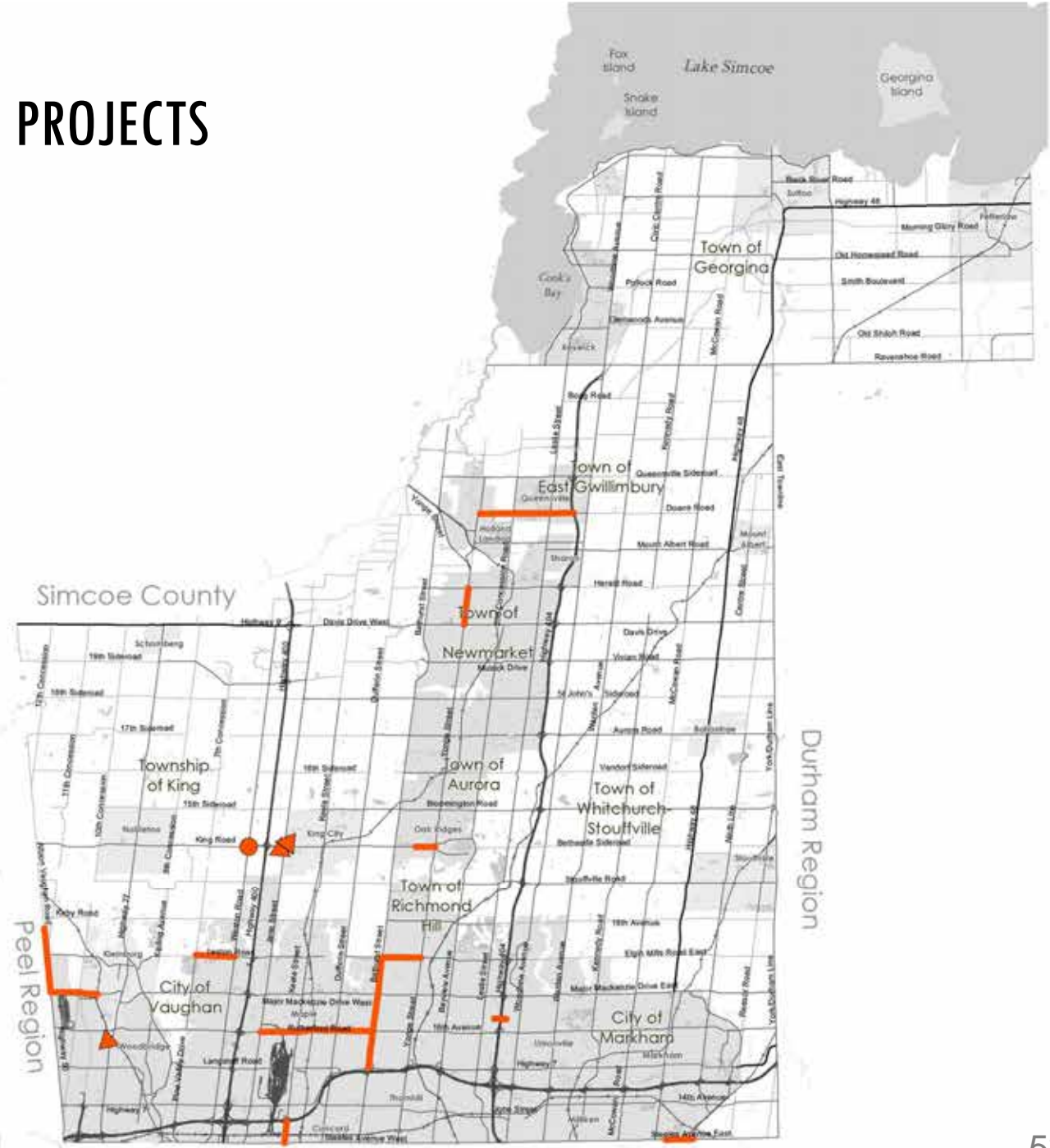


# 2018 GROWTH PROGRAM



# 18 DETAILED DESIGN PROJECTS UNDERWAY IN 2018

- Detailed Design**
-  Intersection = 1 location
  -  Structures = 3 locations
  -  Roads = 14 locations

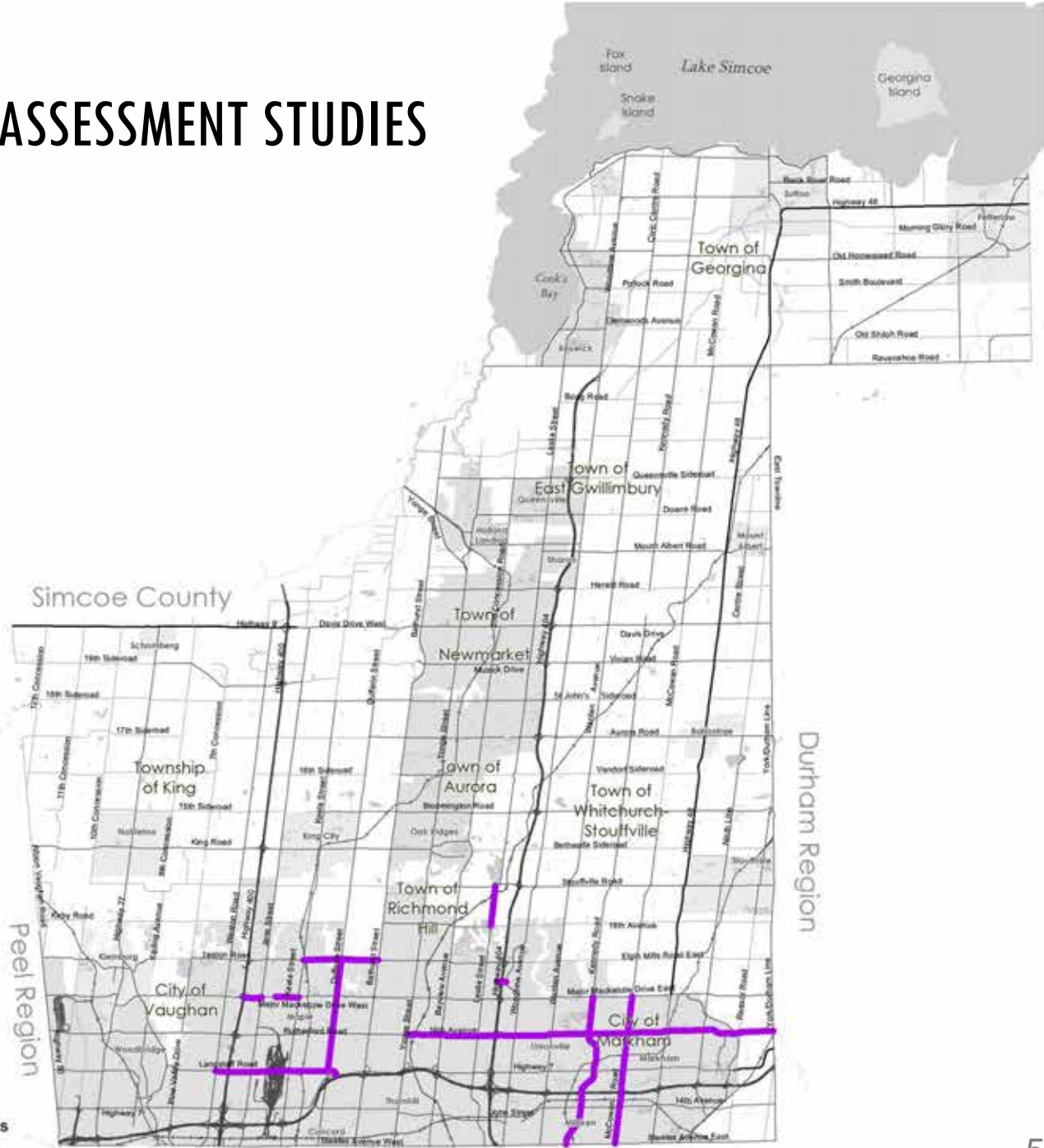


# 2018 GROWTH PROGRAM





# 11 ENVIRONMENTAL ASSESSMENT STUDIES UNDERWAY IN 2018



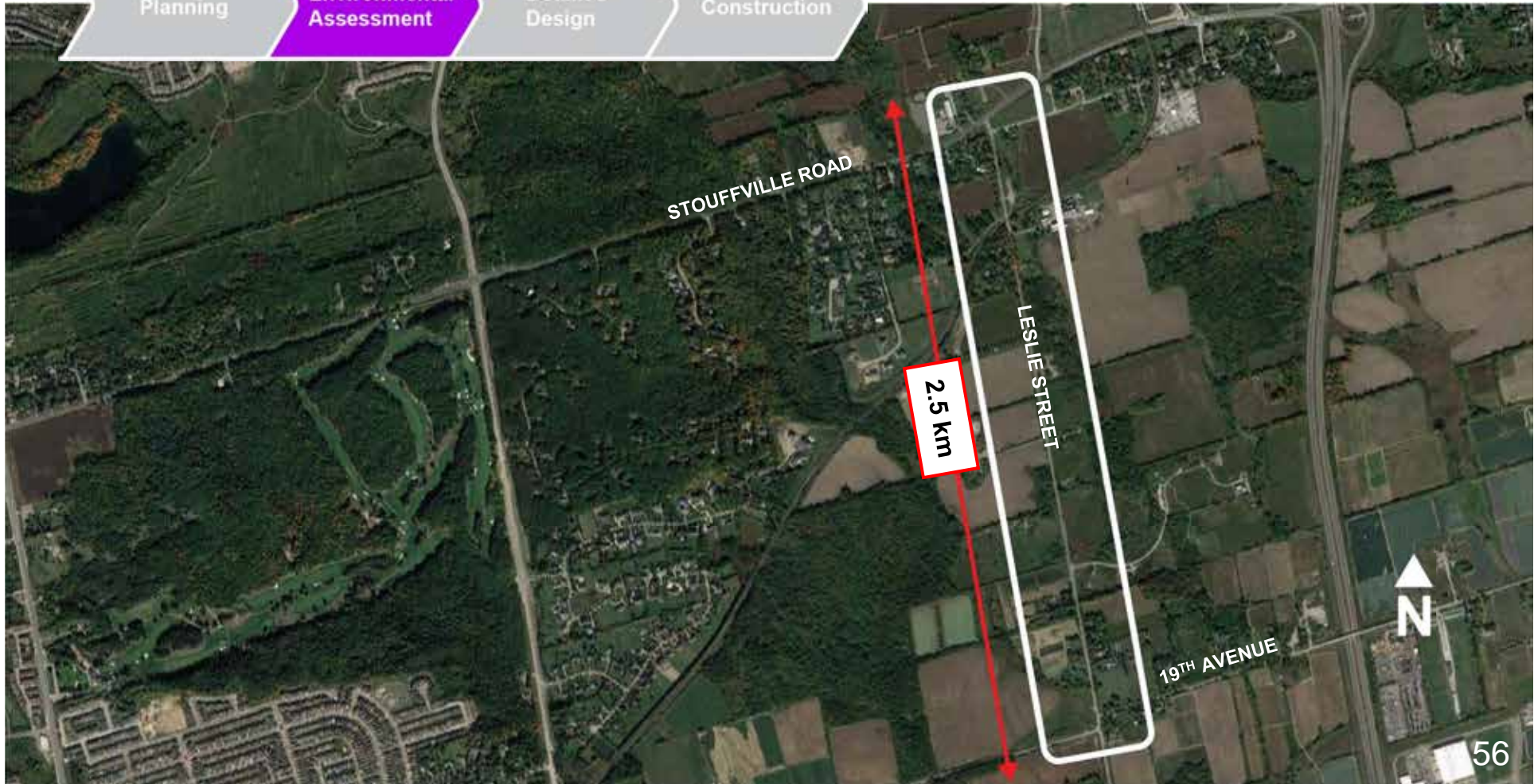
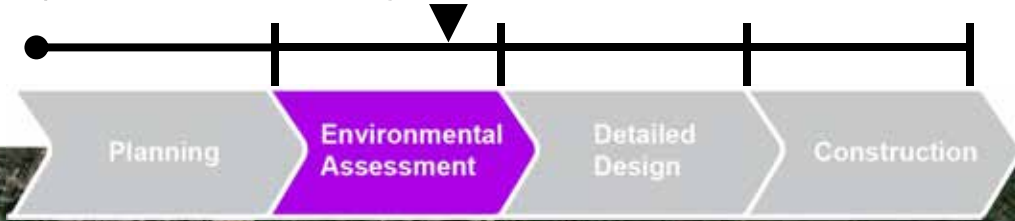
**Environmental Assessment Studies**

— Environmental Assessment Study = 11 locations

# LESLIE STREET

Underway

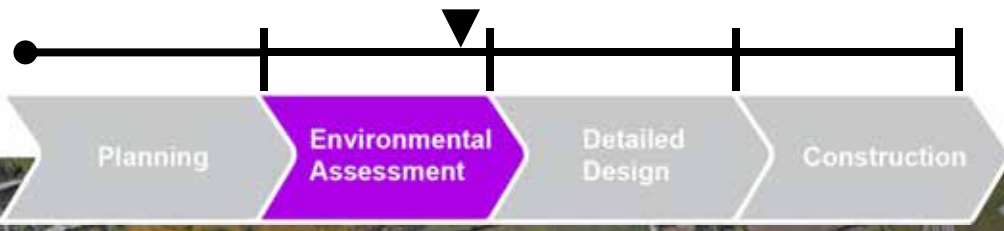
19th Avenue to Stouffville Road  
(EA Addendum)



# HIGHWAY 404 MIDBLOCK CROSSING

Underway

North of Major Mackenzie Drive



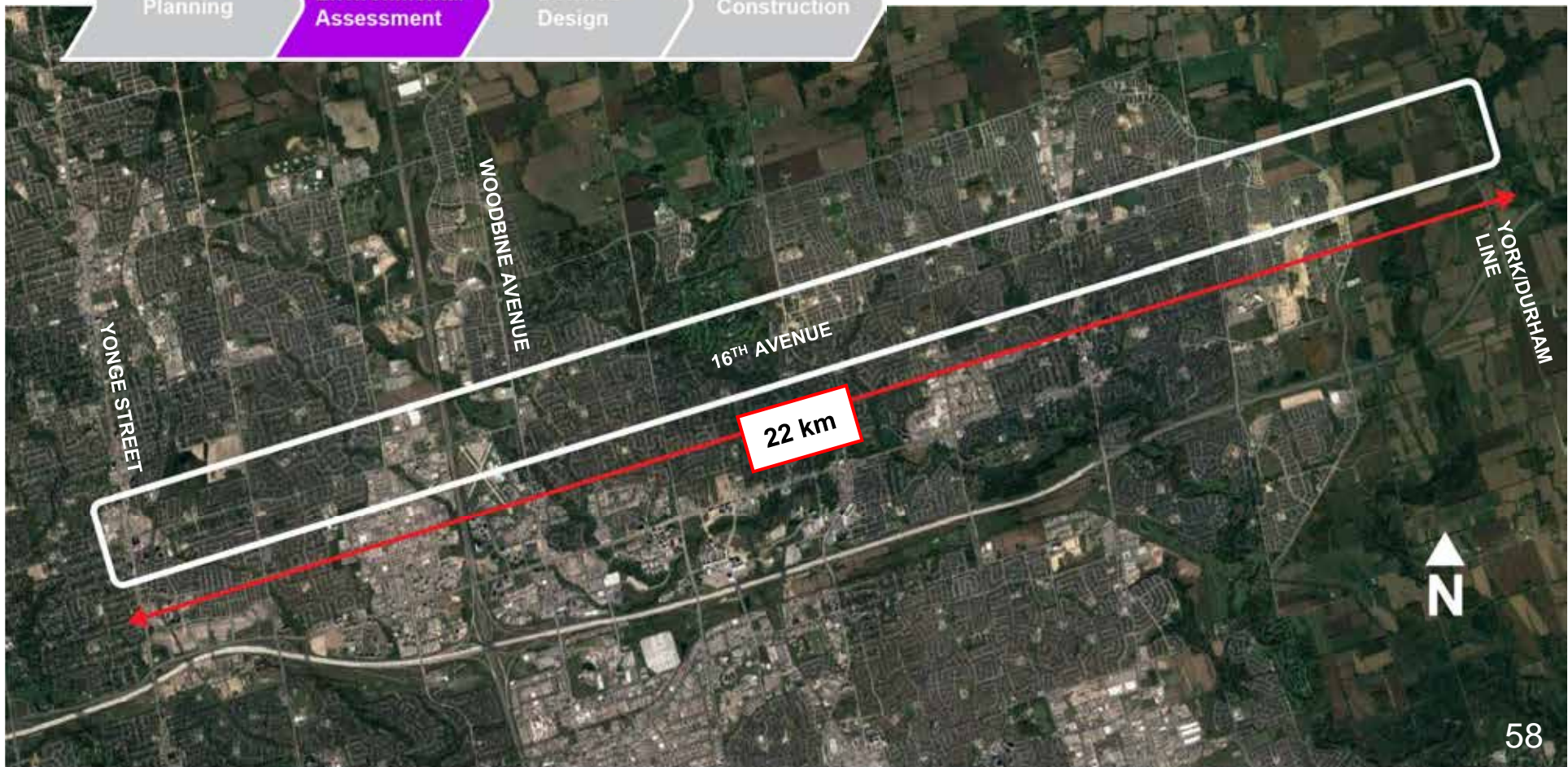
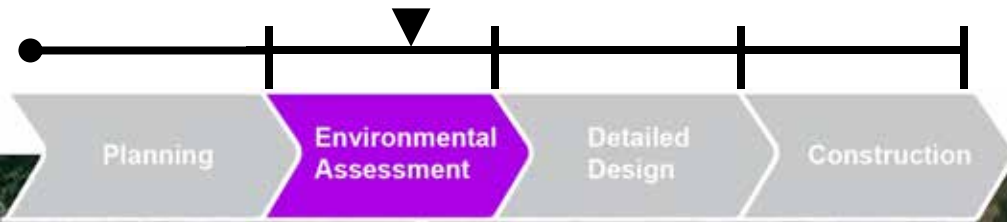
--- proposed new alignment



# 16<sup>TH</sup> AVENUE

Underway

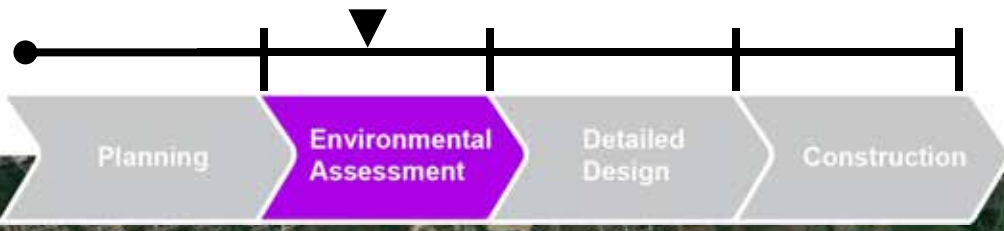
Yonge Street to Woodbine Avenue  
Woodbine Avenue to York/Durham Line



# KENNEDY ROAD

Underway

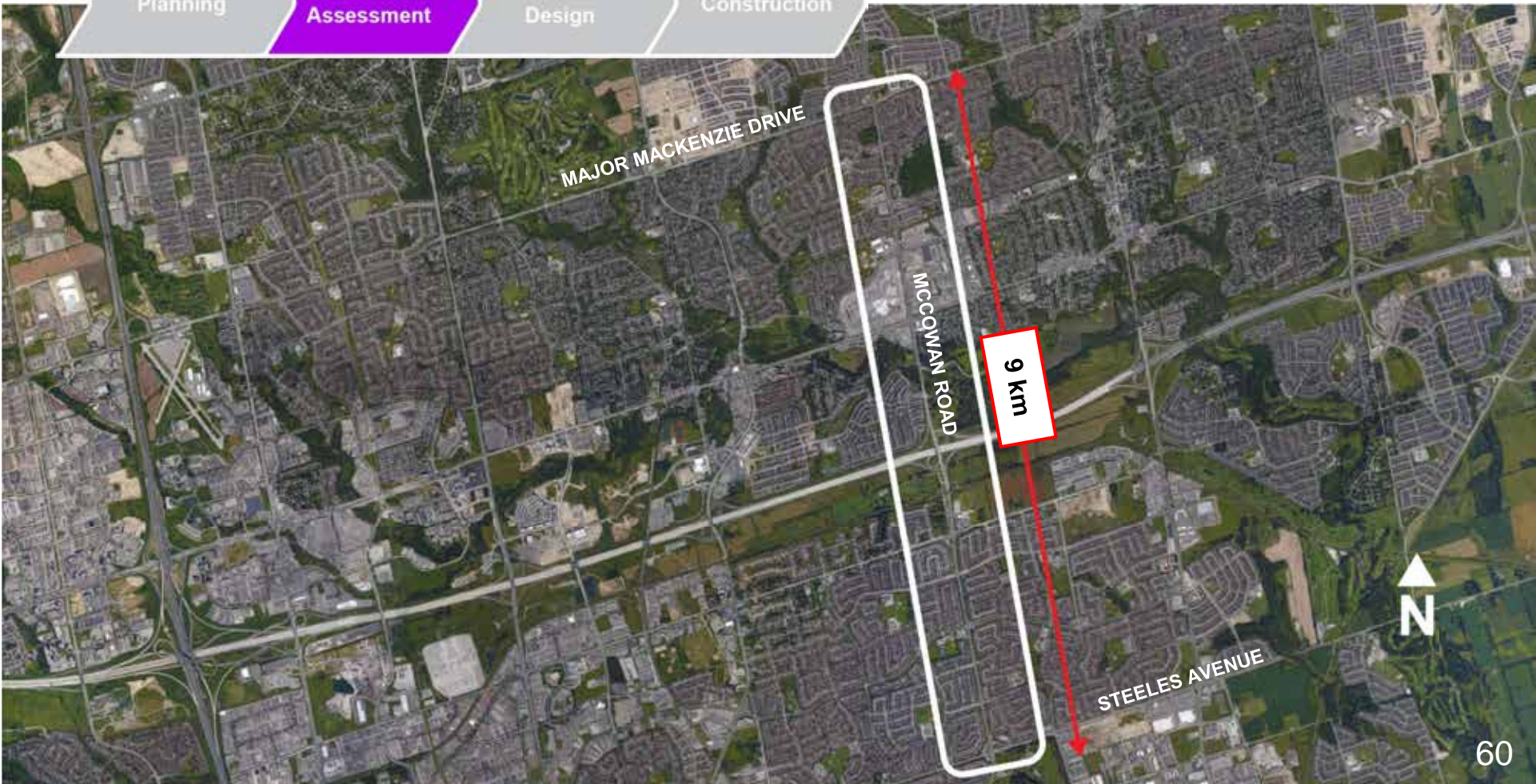
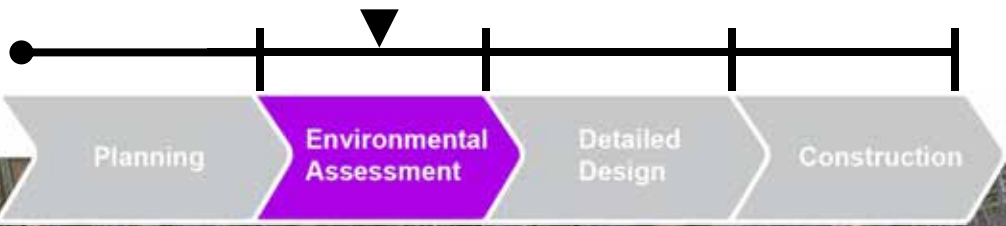
Steeles Avenue to Major Mackenzie Drive



# McCOWAN ROAD

Underway

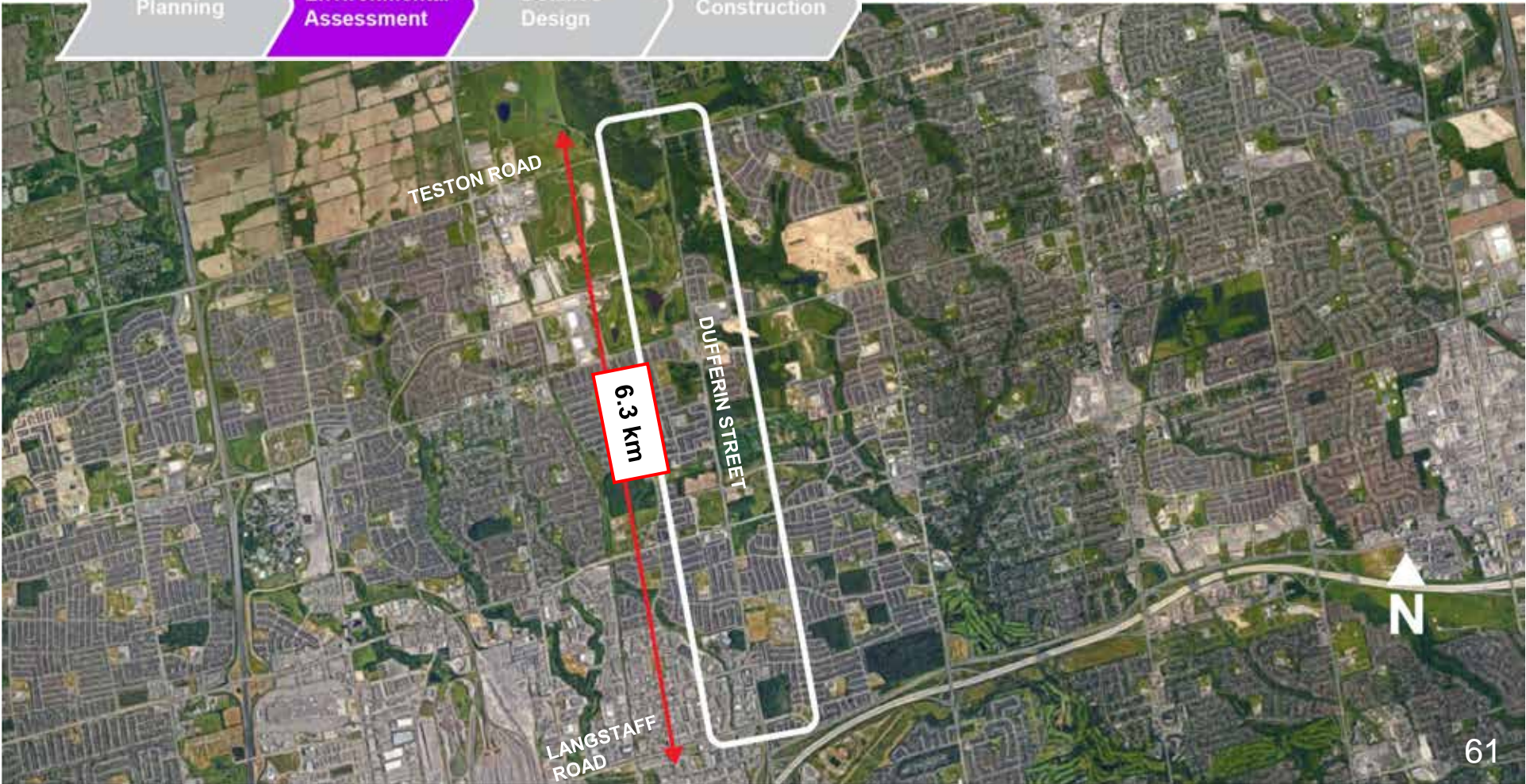
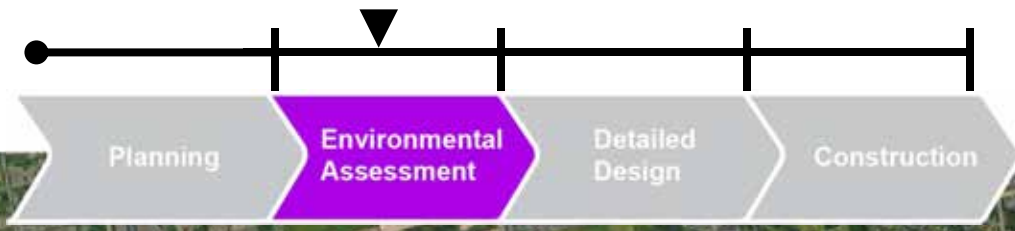
## Steeles Avenue to Major Mackenzie Drive



# DUFFERIN STREET

Underway

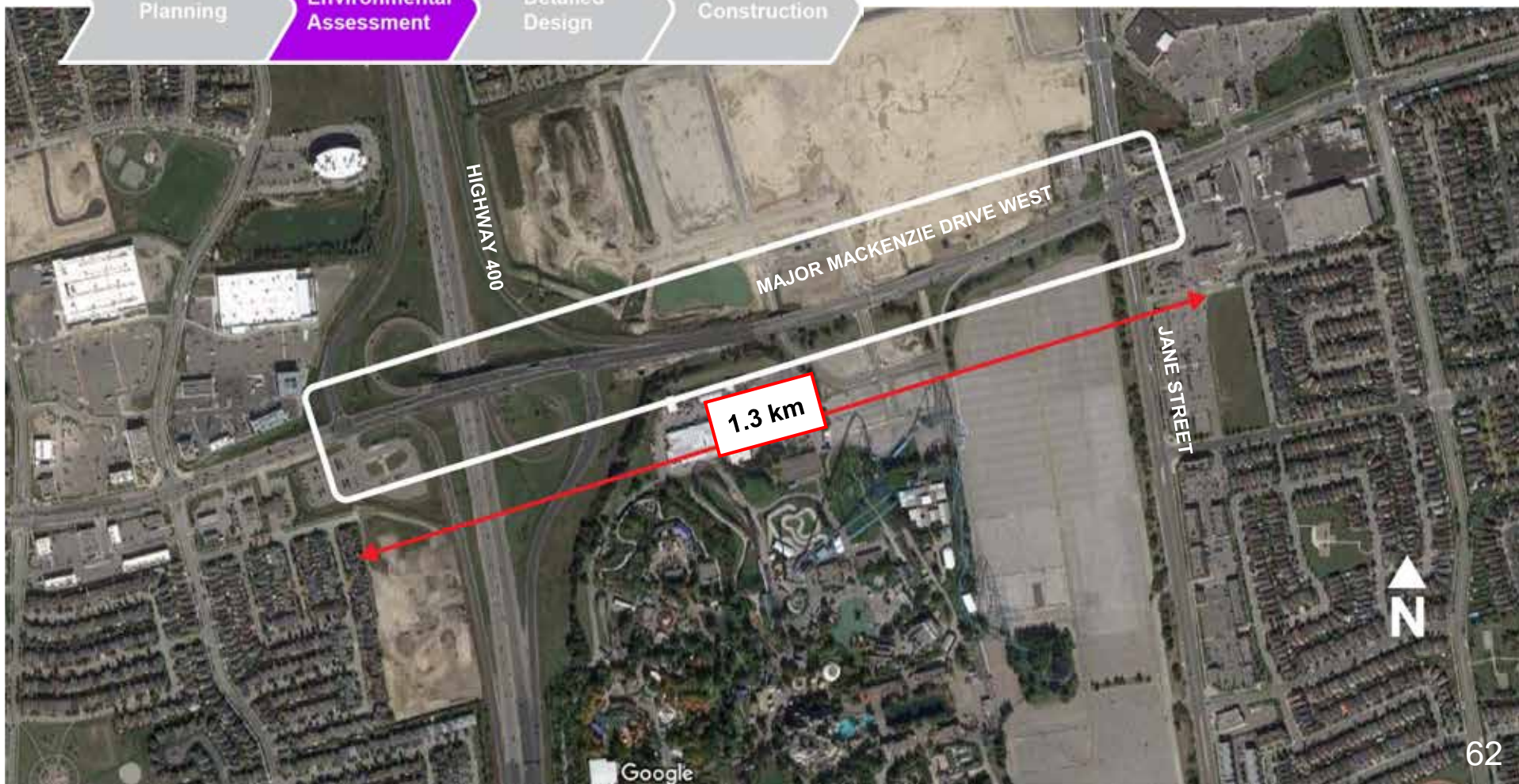
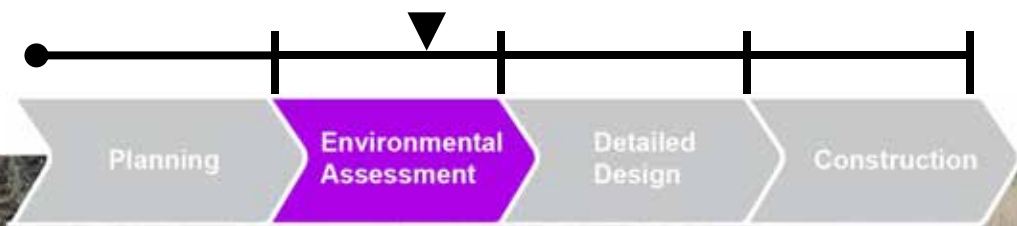
Langstaff Road to Teston Road



# MAJOR MACKENZIE DRIVE WEST

Underway

Highway 400 to Jane Street

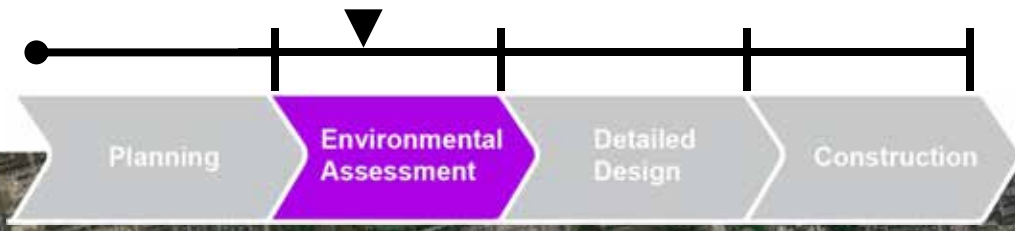




# LANGSTAFF ROAD

Underway

## Weston Road to Highway 7



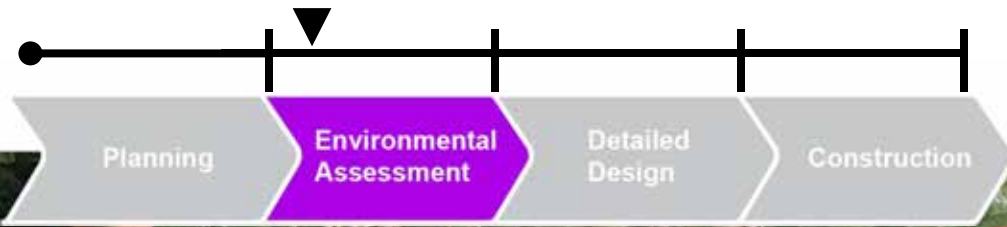
--- = missing link in road network



# TESTON ROAD

Underway

## Keele Street to Bathurst Street

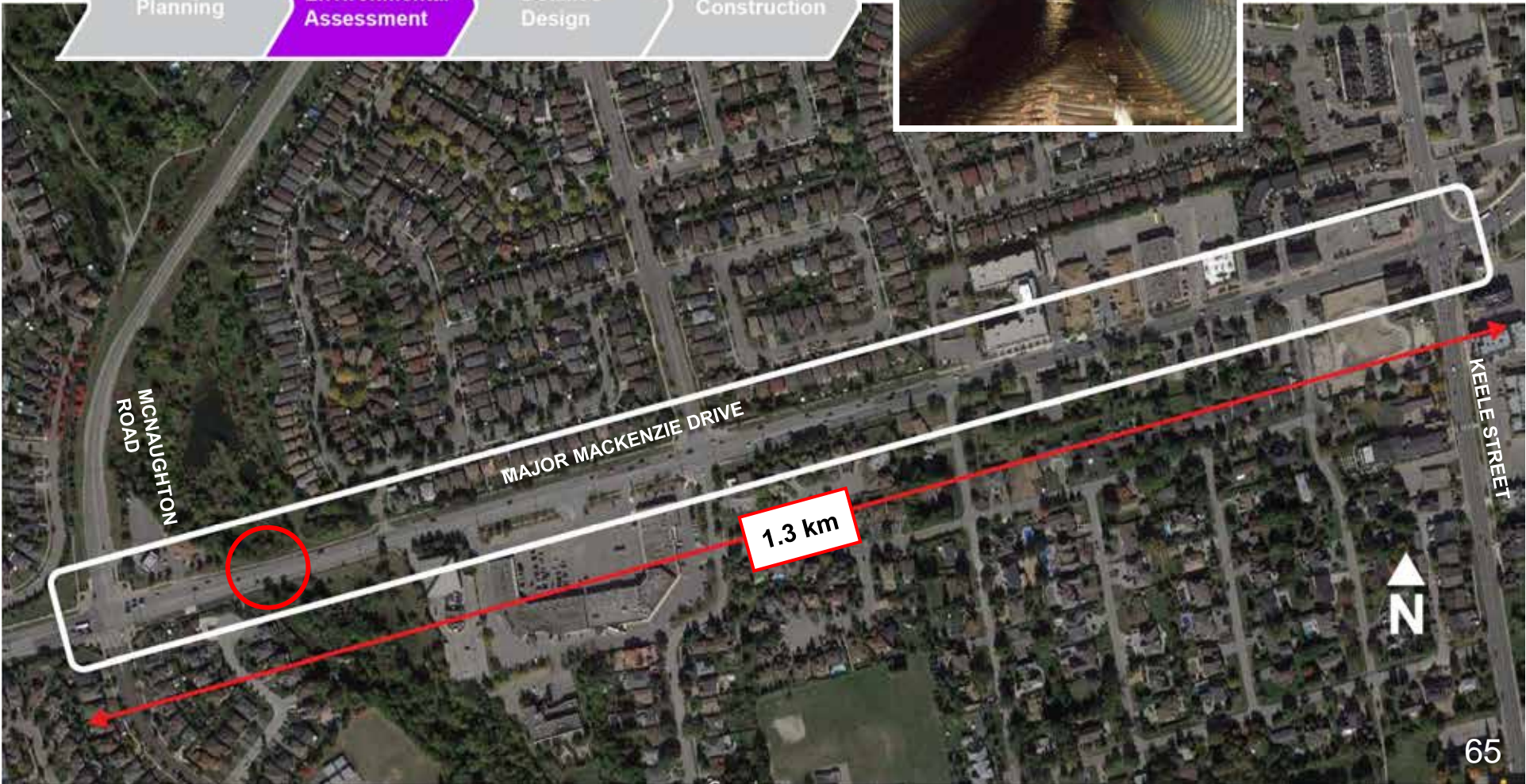
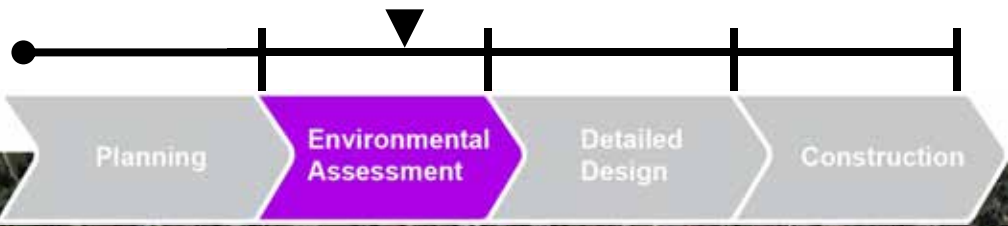


Study area  
- - - = missing link in road network



# MAJOR MACKENZIE DRIVE (OPERATIONAL IMPROVEMENTS)

Underway



# 2018 TRANSIT — FLEET PROCUREMENT

Underway



**\$3.3**  
Million

Purchase 5 conventional buses and 1 specialized transit vehicles under the expansion program

**\$18**  
Million

Purchase 21 conventional buses and 18 specialized transit vehicles under the renewal program

# NORTH OPERATIONS, MAINTENANCE AND STORAGE FACILITY

Underway



\$17.3  
Million

Expansion and Renovation  
18106 and 18110 Yonge Street

# MAJOR MACKENZIE DRIVE AND HIGHWAY 404

Underway



\$1.5 Million

## Park and Ride Facility

# 2018 TRANSIT SHELTERS, CONCRETE PLATFORMS AND BUS STOPS

Underway



**\$0.5  
Million**

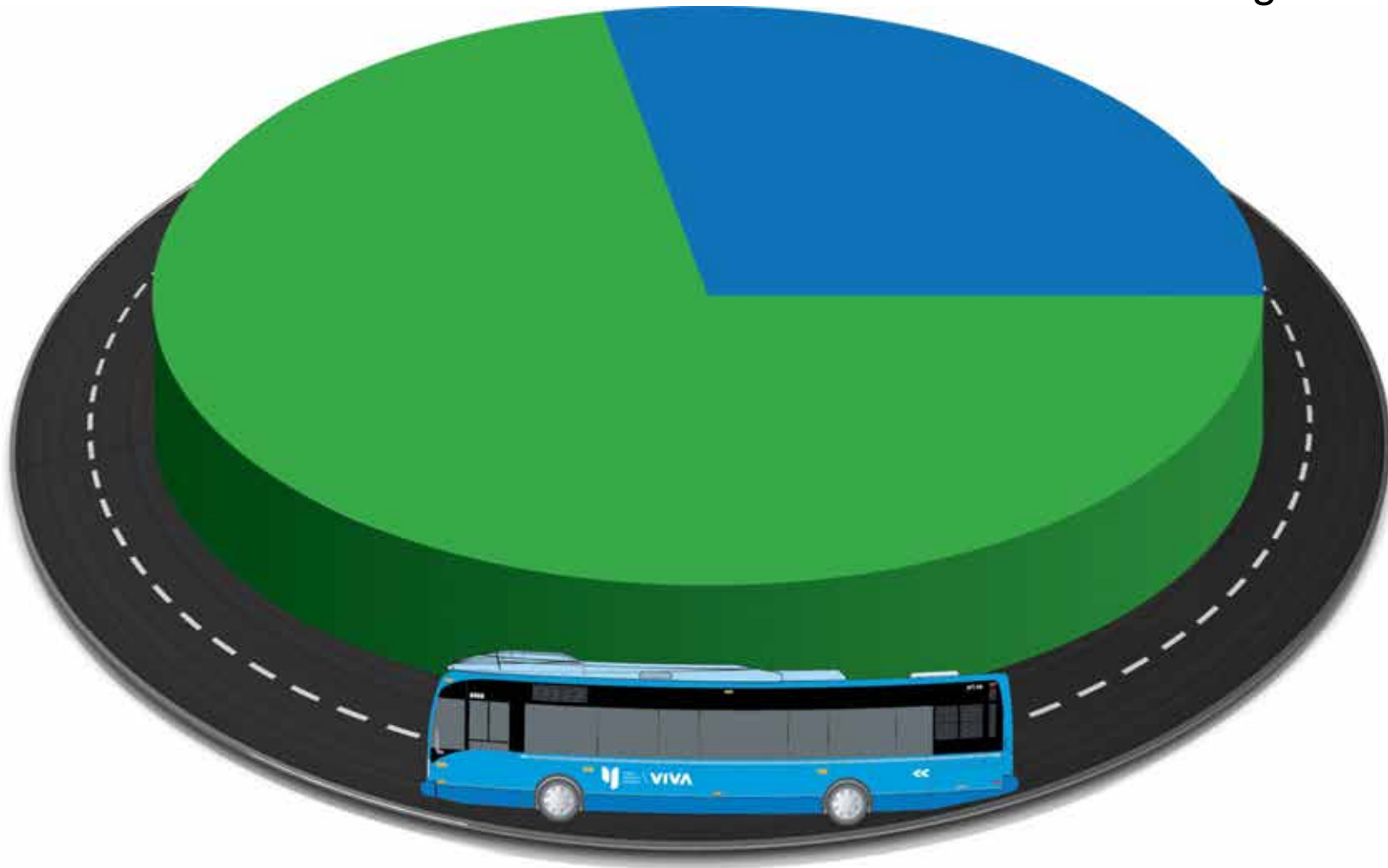
Install 50 concrete pads and 40 solar powered shelters under the expansion program

**\$1.0  
Million**

Install 100 concrete pads and 80 solar powered shelters under the renewal program

# 2018 PROGRAM

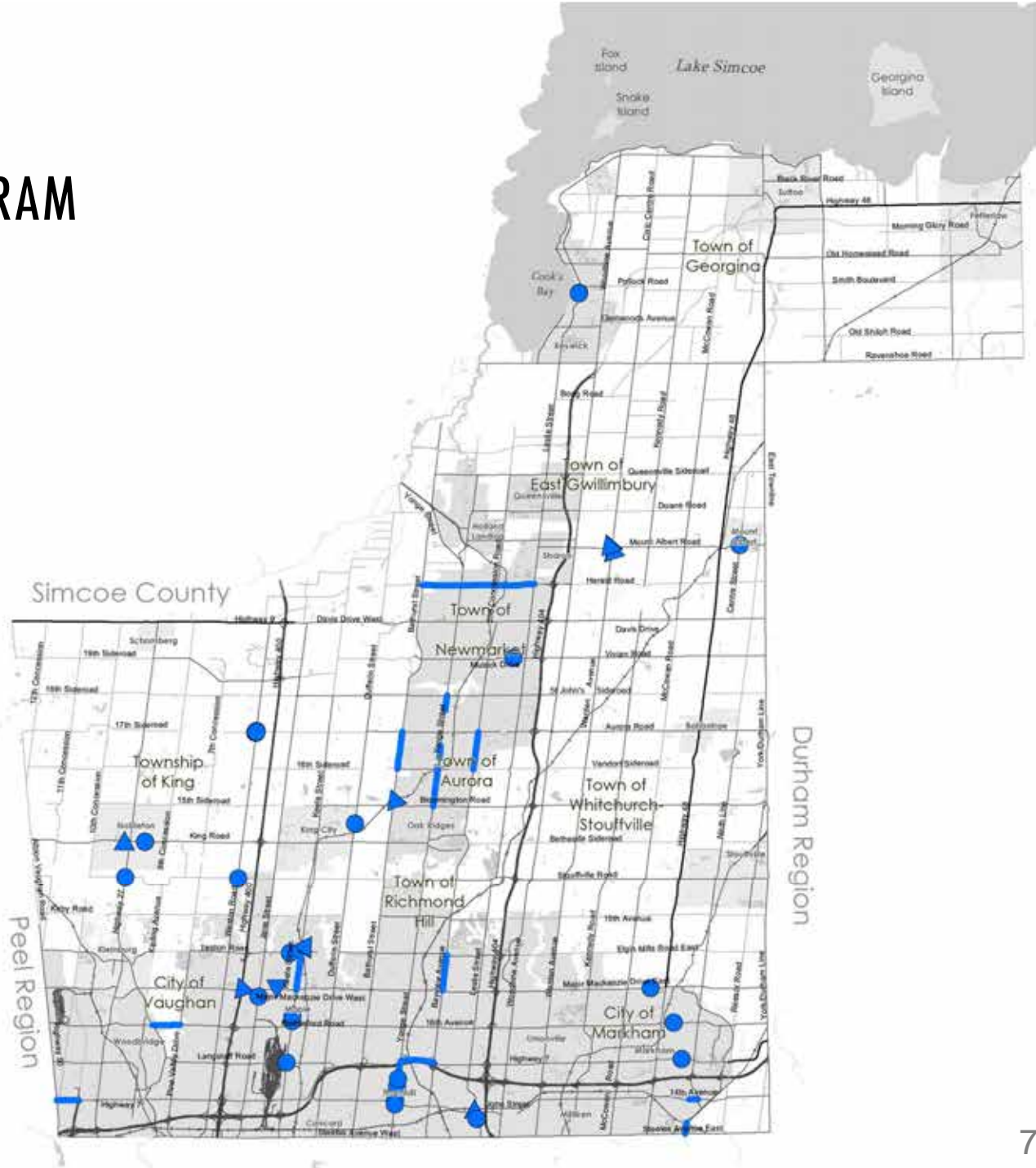
\$92M to be invested  
in Asset Management





# 2018 ROADS ASSET MANAGEMENT PROGRAM

- Asset Management**
- Intersection Improvement = 18 locations
  - ▲ Structure Improvement = 8 locations
  - Rehabilitation / Resurfacing = 14 locations



# 2018 ROAD REHABILITATION AND RESURFACING

Underway



\$21.4  
Million

Rehabilitate 68 lane kilometres  
Resurface 45 lane kilometres

# 2018 STRUCTURE REHABILITATION

Underway



\$7.0  
Million

Rehabilitate 8 structures

# 2018 INTERSECTION IMPROVEMENTS

Underway



\$6.1  
Million

Improve 18 Intersections

# 2018 TRANSIT FLEET MIDLIFE OVERHAUL

Underway

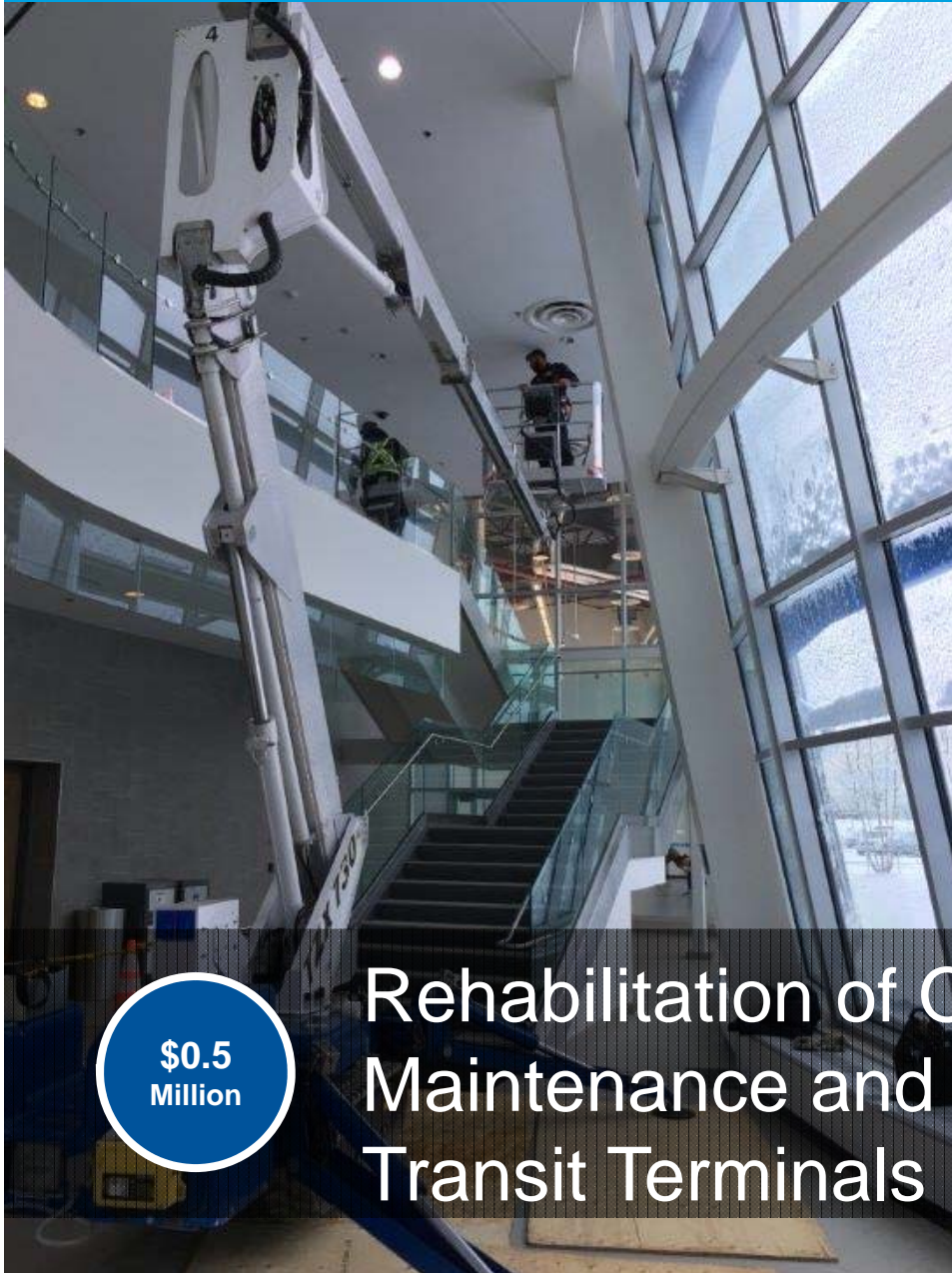


\$6.1  
Million

Refurbish 28 conventional buses

# TRANSIT FACILITY AND TERMINAL REHABILITATION

Underway



\$0.5  
Million

Rehabilitation of Operations,  
Maintenance and Storage Facilities and  
Transit Terminals

# 2018 ROADS PROGRAM MAP

89 Locations

## Construction - Growth Projects

- Intersection Improvements = 8 locations
- ▲ Facility = 2 locations
- Road Reconstruction / Widening = 10 locations

## Asset Management

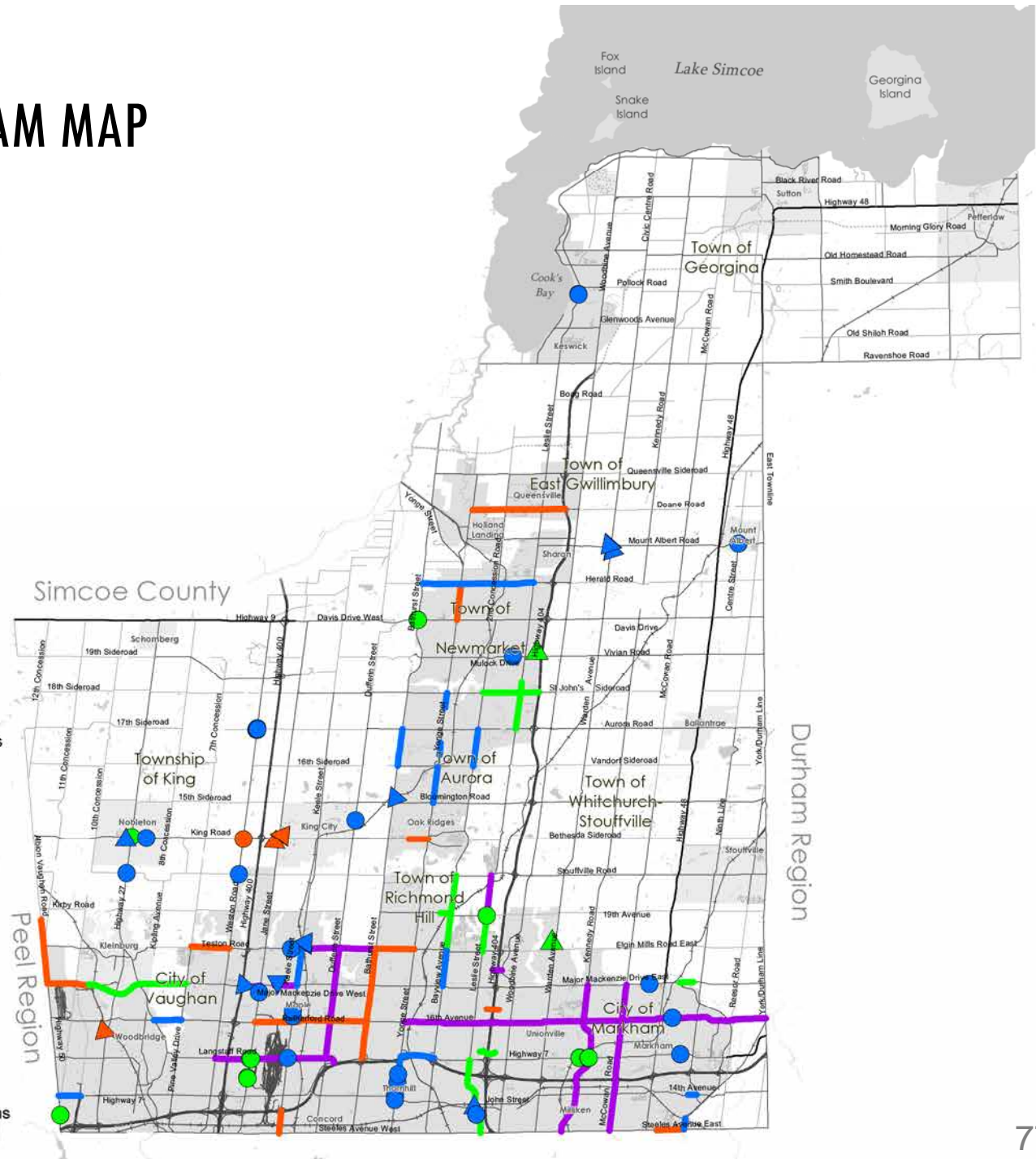
- Intersection Improvement = 18 locations
- ▲ Structure Improvement = 8 locations
- Rehabilitation / Resurfacing = 14 locations

## Detailed Design

- Intersection = 1 location
- ▲ Structures = 3 locations
- Roads = 14 locations

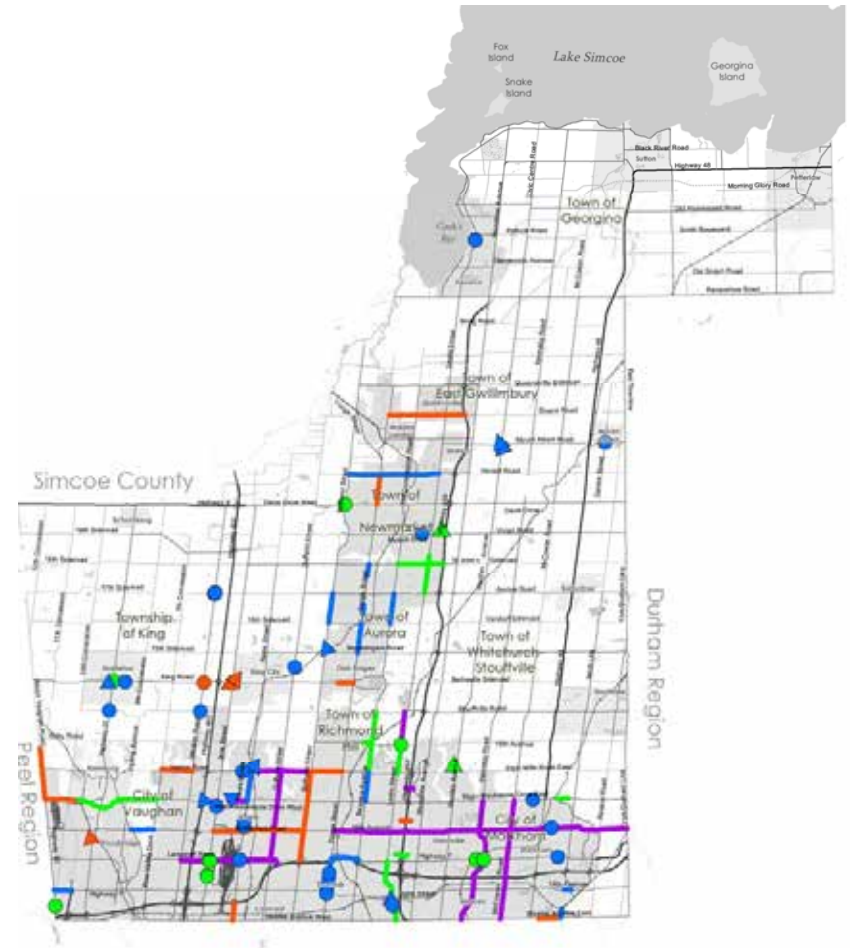
## Environmental Assessment Studies

- Environmental Assessment Study = 11 locations



# KEY MESSAGES

1. Record investment in transportation services during this term of Council
2. Council approved Capital Program that balances growth and asset management needs
3. Coordinating delivery of infrastructure through partnerships with the Province, local municipalities and agencies
4. Building a network to service the needs of York Region's 1.2 million residents and businesses





# QUESTIONS / DISCUSSION

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