# The Regional Municipality of York

Committee of the Whole Transportation Services April 7, 2022

Report of the Commissioner of Transportation Services

# Transportation Services Capital Infrastructure Status Update

#### 1. Recommendation

The Regional Clerk circulate this report to the local municipalities.

#### 2. Summary

This annual report provides Council with a summary of 2021 accomplishments and projects that will be delivered in 2022 under the Transportation Services Capital Program to service the Region's growing communities.

Key Points:

- Council is investing \$3.5 billion through the Transportation Services Capital Growth and Asset Management Programs over the next 10 years
- The Region's Transportation Master Plan guides the Region's Capital Growth and Asset Management Programs, with the goal of ensuring the transportation network and services remain useful and affordable
- In 2021, work was advanced on many roads and transit infrastructure projects to improve the Regional Transportation network with a Council investment of over \$283 million
- In 2022, \$420 million will be invested in roads and transit infrastructure programs for growth and asset management

#### 3. Background

# To better serve the Region's growing communities, Council is investing \$3.5 billion over the next 10 years through the Transportation Services Capital Growth and Asset Management Programs

Transportation Services is responsible for delivering 36% of the Region's 10-Year Capital Plan. The 2022 10-Year Roads and Transit Capital Program (Program), with a budget of \$3.5 billion, is comprised of a Growth Program, to increase the capacity of the Regional road and

transit network and an Asset Management Program, to maximize the Region's investment and keep the Region's assets in a state of good repair.

This investment aligns with the Transportation Master Plan and reflects Council's support of building road and transit system improvements and maintaining transportation assets to provide an efficient transportation network and enhance the traveller experience for daily commuters, including those who use York Region's transit services.

# The Growth Program focuses on expanding the capacity of the Regional road and transit network to offer travellers a range of services and options

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

- Reconstructing and widening of roads and bridges
- Building new links in the Regional road network, including midblock crossings over provincial highways
- Upgrading intersections to improve traffic operations
- Installing active transportation facilities, such as sidewalks and cycling paths
- Building or expanding transit terminals and operations and maintenance facilities
- Expanding the transit bus fleet to meet ridership demands

The Growth Program also supports improvements to enhance the traveller experience, including:

- Streetscaping on key corridors, including items such as decorative sidewalk pavers and street furniture
- Installing green infrastructure, such as street tree and landscape plantings, irrigation systems and other supporting technologies
- Providing transit traveller amenities including shelters, electronic signs to provide realtime information, waste/recycling receptacles and bike racks
- Improving technology on buses to enhance traveller and pedestrian safety

# The Asset Management Program focuses on the rehabilitation and replacement of the Region's existing transportation assets

Transportation Services manages more than \$6.2 billion in roads and transit infrastructure, including Regional roads, cycling lanes, bridges, traffic signal-controlled intersections, transit terminals, fleet vehicles and maintenance facilities.

The Asset Management Program focuses on the rehabilitation and replacement of existing transportation assets, including:

- Pavement preservation, repair and rehabilitation
- Bridge and culvert rehabilitation or replacement

- Roadside safety device improvements
- Intersection improvements, including reconstruction of traffic control signals and upgrades to meet Accessibility for Ontarians with Disabilities Act (AODA) requirements
- Transit terminal, station and bus stop repair and rehabilitation
- Transit fleet midlife overhaul and fleet replacement

The Region's investment in the Asset Management Program is increasing significantly, with a planned investment of \$1.57 billion over the next 10 years. This reflects the Region's priority to keep assets in a state of good repair and maximize its investment by extending the life of Regionally-managed assets and reducing life-cycle costs.

#### 4. Analysis

# In 2021, work was advanced on many infrastructure projects to improve the Regional Transportation network

In 2021, various roads and transit projects provided improved access to work, home, schools and other destinations across the Region, including road widenings, intersection improvements, active transportation facilities, which includes cycling lanes and transit services, through an investment of \$283 million, based on preliminary actuals (unaudited). Roads related projects accounted for \$240 million, and transit related projects accounted for \$43 million. A list of 2021 accomplishments is included as Attachment 1.

#### In 2022, construction is planned at over 90 locations across the Region

In 2022, Transportation Services will continue to build and maintain infrastructure to ensure the Regional transportation network is safe, reliable and responsive to traveller needs. While there has been a noticeable shift in traffic patterns with volumes becoming more uniform throughout the day, traffic volumes have generally returned to pre-pandemic levels, reinforcing the ongoing need to connect travellers to the larger transportation network of freeways and transit systems.

Construction on seven major capital infrastructure projects continues and work will begin on nine new projects, including:

- Road widenings, such as the widening of Yonge Street from Davis Drive to Green Lane and Rutherford Road from Jane Street through to Bathurst Street
- Major intersection improvements to add lanes or eliminate jogs, such as the improvements planned for Teston Road from Pine Valley Drive to Weston Road
- Rail bridge replacements on Highway 27 at the Canadian Pacific rail tracks and Keele Street at the CN rail tracks

 Transit facilities, including a new bus terminal opposite the Cortellucci Vaughan Hospital, and expansion of bus operations, maintenance and the storage facility at 55 Orlando Avenue

Construction is planned at more than 75 locations throughout the Region to keep road and transit assets in a state of good repair including:

- Rehabilitation or preservation of 243 lane kilometres of roads, such as Major Mackenzie Drive from Warden Avenue to McCowan Road in the City of Markham, and Bathurst Street from Henderson Drive to Mulock Drive in the Town of Aurora, Town of Newmarket and Township of King
- Rehabilitation or replacement of eight large structures, such as the Lloydtown-Aurora Road culvert replacement, east of Jane Street, in the Township of King and the Woodbine Avenue culvert rehabilitation, south of Denison Street, in the City of Markham
- Improvements at 44 intersections, such as new traffic signals at Vivian Road and Kennedy Road in the Town of Whitchurch-Stouffville and rebuild aging traffic signals at three locations on Major Mackenzie Drive East in the City of Richmond Hill
- The purchase of 87 buses, including two electric buses under the Fleet Retirement and Replacement Program

Under the Asset Management Program, \$191 million will be invested in roads and transit infrastructure and fleet. The locations of current road projects are shown on a map in Attachment 2. Projects to be undertaken in 2022 are listed in Attachment 3.

Due to decreased ridership and the uncertainties resulting from the COVID-19 pandemic, procurement of 51 buses planned for 2021 was deferred, re-assessed and included in the 2022 approved capital budget.

The purchase of two electric buses is in line with the Region's transit and corporate fleet electrification plans approved by Council in December 2020, to move toward full electrification of the transit fleet by 2051. This plan includes a phased approach to electrification with a mix of electric and diesel buses being purchased between 2021 and 2029 and transitioning to exclusive purchase of electric buses by 2030. The Region is currently pursuing funding opportunities in support of accelerating fleet electrification, including through the federal government's Zero Emission Bus Fund.

#### Pre-construction activities are underway to prepare projects for future years

On average, it takes eight to ten years to deliver a major capital infrastructure project. Before construction can commence, environmental assessment studies are undertaken, the project designed, permits and approvals/agreements from regulatory authorities obtained, property acquired, and utilities relocated. Staff are working on pre-construction activities for numerous projects in preparation for construction in future years. The pre-construction work being undertaken in 2022 on 22 growth projects is also listed in Attachment 3 and locations are shown on a map in Attachment 4.

#### The COVID-19 pandemic has impacted project delivery and Transit services

In 2021, several projects under construction were subject to resource constraints due to the COVID-19 pandemic, including external labour shortages, material shortages and shipping delays. These challenges have continued in early 2022. While there are ongoing delays to some projects, staff continue to work closely with contractors and external partners to minimize impacts.

Recognizing travel patterns and behaviour have changed in response to public health measures implemented due to the COVID-19 pandemic, staff are actively monitoring and assessing these trends to understand the impacts of the pandemic on delivering transportation services. The findings will be incorporated into the planning of the future transportation network and the Region's Transportation Master Plan.

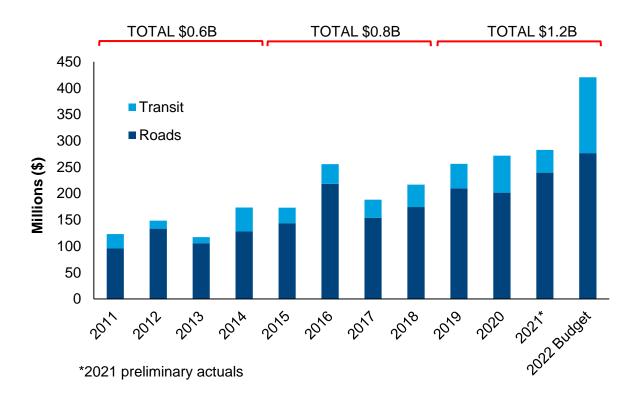
While the COVID-19 pandemic brought about major changes, some of which may have longlasting impacts, transit remains a cornerstone of sustainable growth. Rehabilitation programs support continued delivery of safe and reliable transit service and amenities to travellers in the Region. Service levels will continue to be adjusted to meet demand and operate efficiently, including the ongoing assessment of transit fleet procurements included in the capital program.

#### 5. Financial

# Over the current term of Council, \$1.2 billion has been invested in transportation infrastructure and assets

Council has been focused on increasing investments in transportation infrastructure and assets to ensure the Regional road and transit networks are meeting the needs of the Region's growing communities. The investment made in the current Council term is approximately 50% higher than the 2015 to 2018 term, and approximately 100% higher than the 2011 to 2014 term. The capital investment in Roads and Transit over these terms is illustrated in Figure 1.

Figure 1 Roads and Transit Annual Capital Investment



#### In 2022, \$420 million will be invested in roads and transit programs

Council has approved a Regional investment of more than \$420 million in 2022 for transportation growth and asset management projects. Roads-related projects account for \$276.6 million of this investment, with the remaining \$143.9 million allocated to transit-related projects. The Growth Program is primarily funded from development charges, while the Asset Management Program primarily through the tax levy-funded, asset management reserve.

As the Region makes increased capital investments in the Growth Program, there will be a corresponding need to increase the operating budget to include regular routine maintenance for this infrastructure.

### 6. Local Impact

Staff continue to work closely with local municipal staff to ensure concerns are addressed and local municipal infrastructure requirements, such as watermains, sewers, streetlights, sidewalks, streetscaping and active transportation facilities are included in Regional projects where possible. This work is funded by the local municipalities and incorporated into Regional projects to coordinate infrastructure delivery, increase efficiency, provide local municipalities with cost and time savings and reduce overall impact to travellers.

Travellers in the Region's growing communities need safe, reliable and efficient services. This continues to be a priority for the Region and construction is being managed to proactively minimize disruptions to travellers while building and maintaining the transportation network. The Region has comprehensive communication plans to keep residents, businesses, local municipalities and other stakeholders informed.

### 7. Conclusion

The Region continues to make significant investments in the expansion and maintenance of the Regional road and transit system, with several large projects underway that will be advanced or delivered during 2022.

The shift in travel patterns due to the COVID-19 pandemic is being monitored. Potential longer-term trends will be a key consideration as Transportation Services continues to enhance travel options and maximize road network capacity, while ensuring the Region's assets are properly maintained and financially sustainable.

For more information on this report, please contact Salim Alibhai, Director, Capital Planning and Delivery at 1-877-464-9675 ext. 75229. Accessible formats or communication supports are available upon request.

Recommended by:

Ann-Marie Carroll Acting Commissioner of Transportation Services

Approved for Submission:

Bruce Macgregor Chief Administrative Officer

March 18, 2022 Attachments (4) 13555100

# Transportation Services Capital Infrastructure Status Update Summary of 2021 Accomplishments

Committee of the Whole Transportation Services April 7, 2022

#### **GROWTH PROGRAM**

#### Roads - Construction - 6 Projects Completed

Project Location	Municipality	Total Project Cost*
Bathurst Street Sidewalk, Gamble Road to Shaftsbury Avenue	City of Richmond Hill	\$0.9M
Central District Snow Management Facility	Town of Newmarket	\$10.2M
King Road at Weston Road Intersection Improvements	Township of King	\$8.8M
Leslie Street Widening, Elgin Mills Road to 19th Avenue	City of Richmond Hill	\$20.9M
Major Mackenzie Drive Widening, CP Rail to Islington Avenue	City of Vaughan	\$116.9M
Major Mackenzie Drive Widening, Islington Avenue to Pine Valley Drive	City of Vaughan	\$53.3M

\*includes multi-year costs for projects which spanned more than one year

#### Roads — Environmental Assessments — 1 Study Completed

Project Location	Municipality	
Langstaff Road, Weston Road to Highway 7	City of Vaughan	

#### Transit – Construction – 2 Projects Completed

Project Name	Municipality	Total Project Cost*
Expansion and Renovation of North Operations, Maintenance and Storage Facility – 18110 Yonge St.	Town of Newmarket/ Town of East Gwillimbury	\$25.6M
Transit Shelter, Concrete Platform and Bus Stop Sign Expansion	Various	\$0.7M

\*includes multi-year costs for projects which spanned more than one year

# ASSET MANAGEMENT PROGRAM

Project Location	Municipality	Total Project Cost
Crack Sealing	Various Locations	\$280K
Grind and Pave	Various Locations	\$1.8M
Road Rehabilitation — 175 lane kilometres		
14 <sup>th</sup> Avenue, Warden Avenue to McCowan Road	City of Markham	
14 <sup>th</sup> Avenue, Markham Road to Ninth Line	City of Markham	-
16 <sup>th</sup> Avenue, Kennedy Road to Main Street	City of Markham	
18 <sup>th</sup> Sideroad, West of Bathurst Street	Township of King	-
Bathurst Street, Bloomington Road to Henderson Drive* Don Mills/Leslie Street, Steeles Avenue to Highway 407	Town of Aurora / Township of King City of Markham	
Elgin Mills Road, Yonge Street to Victoria Square	City of Richmond Hill / City of Markham	-
Kennedy Road, Highway 7 to 16th Avenue	City of Markham	\$44.3M
King Road, Dufferin Street to Bathurst Street*	Township of King	
Leslie Street, at Leslie Valley Drive	Town of Newmarket	
Markham Road, at Denison Street	City of Markham	
Prospect Street, Mulock Drive to Gorham Street	Town of Newmarket	
Rutherford Road, Pine Valley Drive to Highway 400	City of Vaughan	-
Wellington Street, Dufferin Street to Bathurst Street*	Township of King	
Weston Road, Steeles Avenue to Highway 407*	City of Vaughan	
Road Preservation — 82 lane kilometres		
16th Avenue, Main Street to Donald Cousens Parkway	City of Markham	
Aurora Road, Highway 404 to Kennedy Road	Town of Whitchurch- Stouffville	
Bathurst Street, Green Lane to Holland Landing Road	Township of King	\$4.7M
Keele Street, at 17 <sup>th</sup> Sideroad	Township of King	
Kennedy Road, Elgin Mills Road to Stouffville Road	City of Markham / Town of Whitchurch- Stouffville	

# Roads — Rehabilitation/Preservation — 25 Locations Completed

Project Location	Municipality	Total Project Cost
Ravenshoe Road, Park Road to Concession 5	Town of Georgina	
Woodbine Avenue, 19th Avenue to Stouffville Road	City of Markham / Town of Whitchurch- Stouffville	
Woodbine Avenue, Highway 7 to 16th Avenue	City of Markham	

\*Outstanding work, including permanent pavement markings and/or site restoration to be completed in 2022

#### Roads — Structure Rehabilitation/Replacement — 7 Locations Completed

Project Location	Municipality	Total Project Cost
Bathurst Street Culvert, north of Wellington Street	Town of Aurora	
Glenwoods Avenue Culvert, east of The Queensway	Town of Georgina	
King Horne Bridge, King Road east of Highway 400	Township of King	
King Road Culvert, east of 8 <sup>th</sup> Concession	Township of King	\$8.6M
McCowan Road Culvert, north of Stouffville Road	Town of Whitchurch- Stouffville	
The Queensway Culvert, north of Glenwoods Avenue	Town of Georgina	
Wellington Street Retaining Wall, east of Bathurst Street	Town of Aurora	

#### Roads — Intersection Improvements and Modernization — 54 Locations Completed

Project Location	Municipality	Total Project Cost
14th Avenue and Reesor Road	City of Markham	
14th Avenue, west of 11th Concession	City of Markham	
16th Avenue, east of Little Rouge Creek bridge	City of Markham	
Bloomington Road and Worthington/Steeplechase Avenue	City of Richmond Hill	\$4.6M
Davis Drive and Dufferin Street	Township of King	
Glenwoods Avenue and Our Lady of the Lake School	Town of Georgina	
High Street and Middle Street	Town of Georgina	

Project Location	Municipality	Total Project Cost
Highway 7 and Millway Avenue	City of Vaughan	
Keele Street and 17th Sideroad	Township of King	
Major Mackenzie Drive, west of Reesor Road	City of Markham	
McCowan Road and 19th Avenue	City of Markham	
Mulock Drive and College Manor/Fernbank Road	Town of Newmarket	
The Queensway South & Richmond Park Drive	Town of Georgina	
Yonge Street and Holland Landing Community Centre	Town of East Gwillimbury	
Yonge Street and Jefferson Sideroad	City of Richmond Hill	
York Durham Line and Concession Road 8	City of Markham	
Illumination at Various Locations	Various Locations	
Major Mackenzie Drive, at Vaughan City Hall	City of Vaughan	\$2.3M
Traffic Signal Modernization in conjunction with Road Rehab	ilitation Projects	
14th Avenue at Crown Steel Drive / Gough Road	City of Markham	
14th Avenue at Birchmount Road		
14th Avenue at McDowell Gate		
14th Avenue at Beckenridge Drive / Brimley Road		
14th Avenue at Chatelaine Drive / Havelock Gate		
14th Avenue at Roxbury Street / Boxwood Crescent		
16th Avenue at William Berczy Boulevard / Longwater Chase	City of Markham	Included in Cost of Road
16th Avenue at The Bridle Walk / Shorthill Drive		Rehabilitation
16th Avenue at Stonebridge Drive / Saratoga Road		
16th Avenue at Roy Rainey Avenue / Cairns Drive		
16th Avenue at Mingay Avenue / Stone Mason Drive		
Bathurst Street at Bloomington Road	Town of Aurora/Township of King/City of Richmond Hill	
Bathurst Street at Henderson Drive	Town of Aurora/Township of King	

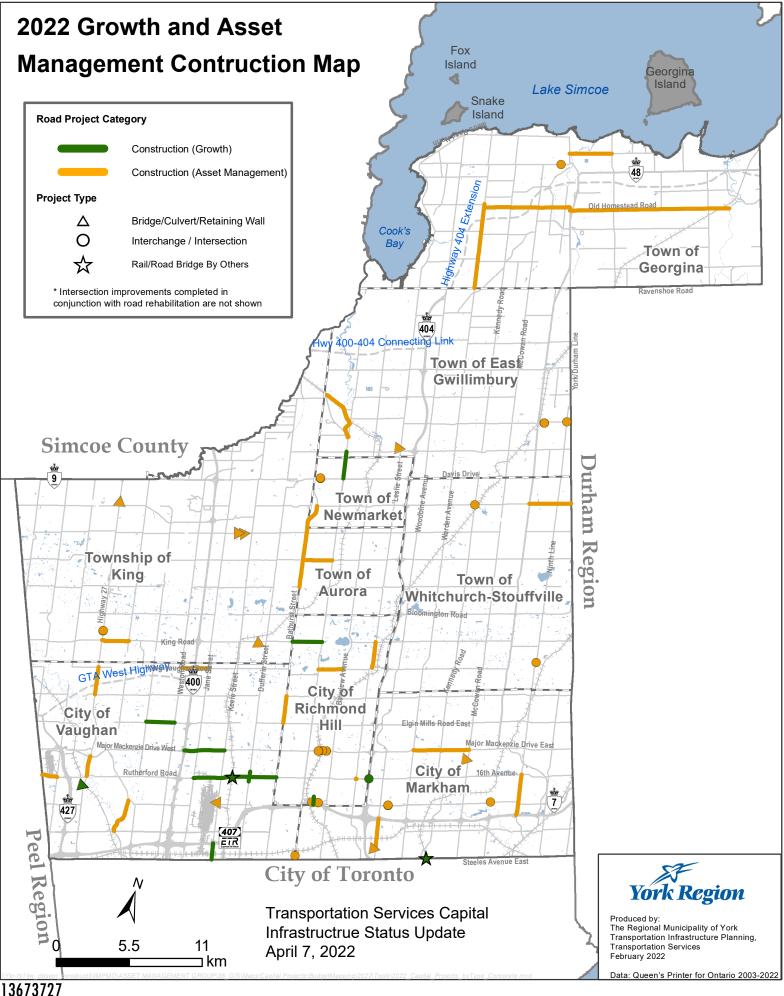
Project Location	Municipality	Total Project Cost
Bayview Avenue at Mulock Drive	Town of Newmarket	
Don Mills Road at Simonston Boulevard North	City of Markham	
Elgin Mills Road at Blue Grass Boulevard	City of Richmond Hill/City	
Elgin Mills Road at Edward Avenue	<ul> <li>of Markham</li> </ul>	
Elgin Mills Road at Rose Branch Drive/ Neal Drive		
Elgin Mills Road at Bayview Avenue	_	
Elgin Mills Road at Shirley Drive		
Elgin Mills Road at Redstone Road		
Elgin Mills Road at John Birchall Road		
Elgin Mills Road at Woodbine Avenue		
Elgin Mills Road at Duke of York Street/ Prince Regent Street		
Kennedy Road at Austin Drive	City of Markham	
Kennedy Road at Carlton Road		
Kennedy Road at The Bridle Trail		
Kennedy Road at Birchview Lane		
King Road at Bathurst Street	Township of King/City of Richmond Hill	
Rutherford Road at Via Campanile/ Babak Boulevard	City of Vaughan	
Rutherford Road at St Clare Boulevard/ Velmar Drive		
Rutherford Road at Fossil Hill Road		
Rutherford Road at Weston Road		
Rutherford Road at Vellore Woods Boulevard		
Wellington Street West at Dufferin Street	Township of King	]
Weston Road at Aviva Park Drive/ Century Place	City of Vaughan	

Project Name	Total Project Cost*
Transit Terminal Rehabilitation and Bus Shelter, Concrete Platform, and Bus Stop Sign Replacement	\$1.1M
Bus Operations, Maintenance and Storage Facility Rehabilitation – Various locations	\$1.6M
Transit Conventional Bus Major Structural Refurbishment & Mechanical Overhaul – Asset Life Extension (34 conventional diesel buses)	\$7.0M
Transit Fleet Retirement and Replacement – Purchase of 6 conventional electric buses	\$7.8M

\*includes multi-year costs for projects which spanned more than one year

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# Transportation Services Capital Infrastructure Status Update Summary of Current Projects

Committee of the Whole Transportation Services April 7, 2022

#### **GROWTH PROGRAM – CONSTRUCTION**

#### **Roads – Construction – 12 Projects**

Project Location	Municipality	Total Project Cost*	Construction Completion
Continuing Construction — 6 Contracts			
16 <sup>th</sup> Avenue, Highway 404 Interchange (Delivered by MTO) **Total cost/completion of 16 <sup>th</sup> Avenue, Leslie Street to Woodbine Avenue project	City of Markham/City of Richmond Hill	\$52.4M**	2025**
CP Rail Bridge Replacement on Highway 27	City of Vaughan	\$31.6M	2022
Keele Street Widening, Steeles Avenue to Highway 407	City of Vaughan	\$42.4M	2024
Major Mackenzie Drive Widening, Highway 400 to Jane Street	City of Vaughan	\$39.2M	2023
Rutherford Road Widening, Highway 400 to Westburne Drive	City of Vaughan	\$66.6M	2024
Rutherford Road Grade Separation, Westburne Drive to Peter Rupert (Delivered by Metrolinx)***Region's budgeted portion	City of Vaughan	\$17.3M***	2022
New Construction — 6 Contracts			
Cedar/Red Cedar Avenue Extension, Langstaff Road to High Tech Road	City of Markham/City of Richmond Hill	\$8.2M	2024
King Road Reconstruction, Bathurst Street to Yonge Street	City of Richmond Hill	\$19.9M	2024
Major Mackenzie Drive Operational Improvements, Jane Street to Keele Street	City of Vaughan	\$12.5M	2023
Rutherford Road Widening, Peter Rupert Avenue to Bathurst Street and Dufferin Street Widening, Apple Blossom Drive to Marc Santi Boulevard	City of Vaughan	\$56.6M	2025

Project Location	Municipality	Total Project Cost*	Construction Completion
Teston Road Widening, Pine Valley Drive to Weston Road	City of Vaughan	\$46.9M	2025
Yonge Street Widening, Davis Drive to Green Lane	Town of Newmarket/ Town of East Gwillimbury	\$58.7M	2025

\*includes multi-year costs for projects which spanned more than one year

# Transit – Construction – 4 Projects

Project Name	Municipality	Total Project Cost*	Construction Completion
Continuing Construction — 1 Project			
Major Mackenzie Drive West Terminal, opposite Cortellucci Vaughan Hospital	City of Vaughan	\$16.7M	2022
New Construction — 3 Projects			
55 Orlando Avenue – Bus Operations, Maintenance and Storage Facility Expansion	City of Richmond Hill	\$66.8M	2023
Electric Bus Infrastructure	Various Locations	\$4.3M	2022
Transit Shelter, Concrete Platform and Bus Stop Sign Expansion	Various Locations	\$1.2M	2022

\*includes multi-year costs for projects which spanned more than one year

# **ASSET MANAGEMENT PROGRAM – CONSTRUCTION**

Project Location	Municipality	Total Project Cost
Crack Sealing	Various Locations	\$600K
Grind and Pave	Various Locations	\$2.5M
Road Rehabilitation — 145 lane kilometres		
16 <sup>th</sup> Avenue and Leslie Street (Intersection Only)	City of Richmond Hill	
Bathurst Street, Elgin Mills Road to 19th Avenue	City of Richmond Hill / City of Vaughan	
Bathurst Street, Henderson Drive to Mulock Drive	Town of Aurora/Town of Newmarket/Township of King	
Highway 27, Kirby Road to King-Vaughan Road	City of Vaughan	
Highway 27, Rutherford Road to Major Mackenzie Drive	City of Vaughan	
Holland Landing Road, Yonge Street to Bathurst Street	Town of East Gwillimbury	\$42.8M
Islington Avenue, Highway 7 to Langstaff Road	City of Vaughan	
King Vaughan Road, Weston Road to Jane Street	City of Vaughan	
Major Mackenzie Drive, Warden Avenue to McCowan Road	City of Markham	
Ninth Line, Highway 407 to 16 <sup>th</sup> Avenue	City of Markham	
Woodbine Avenue, Denison Street to Highway 407	City of Markham	
Yonge Street, Highway 11 to Holland Landing Road	Town of East Gwillimbury	
Road Preservation — 98 lane kilometres		
Black River Road, Dalton Road to Park Road	Town of Georgina	
King Road, Highway 27 to 8 <sup>th</sup> Concession	Township of King	
Leslie Street, Stouffville Road to Bethesda Side Road	City of Richmond Hill	
Old Homestead Road, Warden Avenue to Station Road	Town of Georgina	\$6.0M
Rutherford Road, Highway 50 to Huntington Road	City of Vaughan	
Stouffville Road, Yonge Street to Bayview Avenue	City of Richmond Hill	7

# Roads — Rehabilitation/Preservation — 23 Locations

Project Location	Municipality	Total Project Cost
Vivian Road, Highway 48 to York-Durham Line	Town of Whitchurch-Stouffville	
Warden Avenue, Ravenshoe Road to Old Homestead Road	Town of Georgina	
Wellington Street, Bathurst Street to Yonge Street	Town of Aurora	

#### Roads - Structure Rehabilitation - 8 Locations

Project Location	Municipality	Total Project Cost
Highway 27 Culvert Rehabilitation, North of Lloydtown-Aurora Road	Township of King	
Keele Street Culvert Replacement, North of Langstaff Road	City of Vaughan	
King Road Culvert Rehabilitation, East of Keele Street	Township of King	
Leslie Street Culvert Replacement, North of Green Lane	Town of East Gwillimbury	¢10.4M
Lloydtown-Aurora Road Culvert Replacements, East of Jane Street	Township of King	\$10.4M
McCowan Road Culvert Rehabilitation, North of 16th Avenue	City of Markham	
Woodbine Avenue Culvert Rehabilitation, South of Denison Street	City of Markham	
Yonge Street Culvert, north of Eagle Street (continued from 2021)	Town of Newmarket	

# Roads — Intersection Improvements — 44 Locations

Project Location	Municipality	Total Project Cost
Baseline Road, 640 metres west of Dalton Road	Town of Georgina	
Baseline Road, from Dalton Road to west of school	Town of Georgina	¢4.0M
Davis Drive and McGregor Farm Trail	Town of Newmarket	\$4.9M
Highway 7 and Bowes Road	City of Vaughan	

Project Location	Municipality	Total Project Cost
Highway 7 and east of Montgomery Court	City of Markham	
Highway 7 and Main Street	City of Markham	
Highway 7 and Red Maple Road	City of Richmond Hill	
Highway 7 and Silver Linden Drive	City of Richmond Hill	
Highway 27 and Sheardown Drive	Township of King	
Major Mackenzie Drive E. and Sussex Avenue	City of Richmond Hill	-
Major Mackenzie Drive E. and Newkirk Road / Essex Avenue	City of Richmond Hill	
Major Mackenzie Drive E. and Cedar Avenue	City of Richmond Hill	
Mount Albert Road and Ninth Line	Town of East Gwillimbury	
Mount Albert Road and Don Rose Blvd	Town of East Gwillimbury	
Ninth Line and Elm Road	Town of Whitchurch-Stouffville	-
Vivian Road and Kennedy Road	Town of Whitchurch-Stouffville	
Yonge Street and Crestwood Road	City of Vaughan	
Illumination at Various Locations	Various Locations	-
Traffic Signal Modernization in conjunction with Road	Rehabilitation Projects	
Bathurst Street and Kennedy Street	Township of King / Town of	
Bathurst Street and Wellington Street	Aurora / Town of Newmarket	
Bathurst Street and St. John's Sideroad		
Bathurst Street and Mulock Drive		
Bathurst Street and Woodland Acres Crescent / Shaftsbury Avenue	City of Richmond Hill/City of Vaughan	Included in Cost of Road
Islington Avenue and Woodbridge Avenue	City of Vaughan	Rehabilitation
Islington Avenue and Thistlewood Avenue		
Islington Avenue and Davidson Drive / Willis Road		
Islington Avenue and Hayhoe Lane		
Major Mackenzie Drive and Angus Glen Arena	City of Markham	
Major Mackenzie Drive and Angus Glen Boulevard	1	

Project Location	Municipality	Total Project Cost
Major Mackenzie Drive and Kennedy Road	City of Markham	
Major Mackenzie Drive and William Berczy Boulevard		
Major Mackenzie Drive and Ridgecrest Road		
Major Mackenzie Drive and McCowan Road		
Ninth Line and Delmark Boulevard / Kenilworth Gate	City of Markham	
Ninth Line and Highway 7		
Ninth Line and Rose Way		Included in Cost of Road Rehabilitation
Ninth Line and Church Street		Renabilitation
Ninth Line and Cornell Park Avenue		
Ninth Line and 16 <sup>th</sup> Avenue		
Woodbine Avenue and Denison Street	City of Markham	
Woodbine Avenue and Riviera Drive		
Woodbine Avenue and 14 <sup>th</sup> Avenue		
Woodbine Avenue and Shields Court		
Woodbine and Burncrest Road / Miller Avenue		

\*includes multi-year costs for projects which spanned more than one year

# Transit – Ongoing Rehabilitation and Replacement

Project Name	Total Project Cost*
Transit Terminal Rehabilitation and Bus Shelter, Concrete Platform, and Bus Stop Sign Replacement	\$2.1M
Bus Operations, Maintenance and Storage Facility Rehabilitation – Various locations	\$3.0M
Transit Conventional Bus Major Structural Refurbishment & Mechanical Overhaul – Asset Life Extension (34 conventional diesel buses)	\$5.0M
Transit Fleet Retirement and Replacement – Purchase of 85 diesel buses and 2 electric buses	\$84.5M

\*includes multi-year costs for projects which spanned more than one year

# **GROWTH PROGRAM – PRE-CONSTRUCTION**

#### Roads — Environmental Assessments — 4 Studies

Project Location	Municipality	
Continuing Environmental Assessments — 4 Studies		
Elgin Mills Road, from Yonge Street to Bayview Avenue (Railway Grade Separation)	City of Richmond Hill	
Kennedy Road, Major Mackenzie Drive to Elgin Mills Road	City of Markham	
Warden Avenue, Major Mackenzie Drive to Elgin Mills Road	City of Markham	
Teston Road, Highway 400 to Bathurst Street (Individual Environmental Assessment)	City of Vaughan	

# Roads – Detailed Design – 17 Projects

Project Location	Municipality
Continuing Detailed Design — 17 Projects	
16 <sup>th</sup> Avenue, Leslie Street to Woodbine Avenue	City of Richmond Hill/City of Markham
16 <sup>th</sup> Avenue, Woodbine Avenue to Warden Avenue	City of Markham
16 <sup>th</sup> Avenue, Warden Avenue to Kennedy Road	City of Markham
19 <sup>th</sup> Avenue, Bayview Avenue to Leslie Street	City of Richmond Hill
Bathurst Street, Highway 7 to Major Mackenzie Drive	City of Vaughan/City of Richmond Hill
Bayview Avenue, Highway 7 to 16th Avenue	City of Richmond Hill
Dufferin Street, Major Mackenzie Drive to Teston Road	City of Vaughan
Elgin Mills Road, Bathurst Street to Yonge Street	City of Richmond Hill
Kennedy Road, 14th Avenue to Highway 7	City of Markham
Langstaff Road, Keele Street to Dufferin Street	City of Vaughan

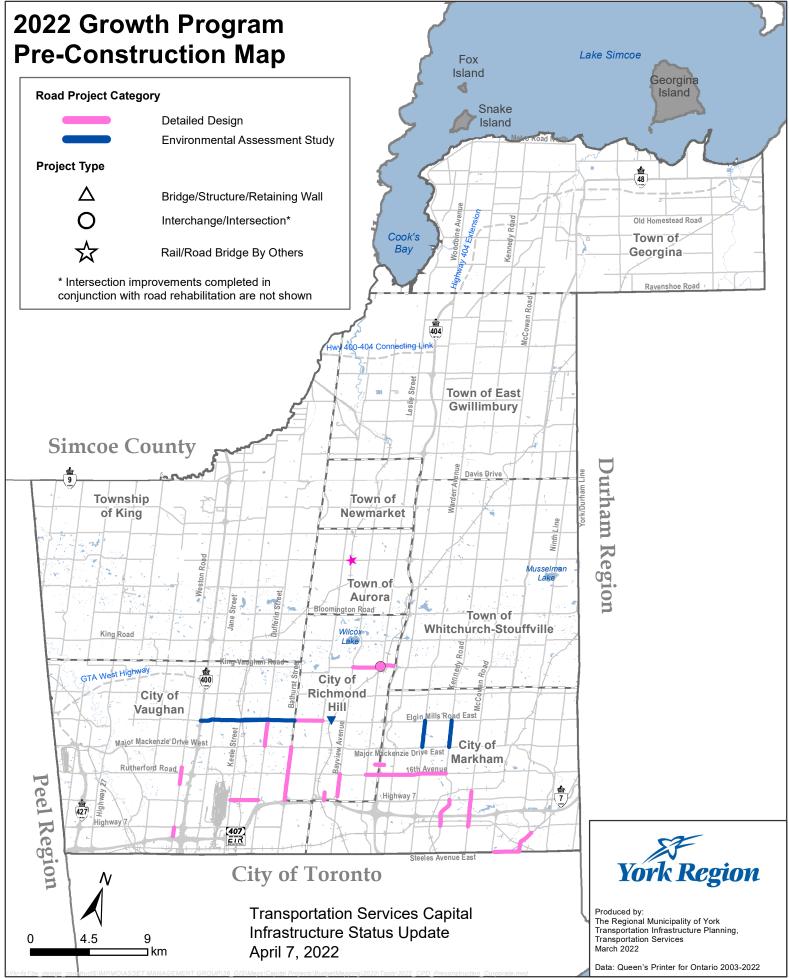
Project Location	Municipality
McCowan Road, 14th Avenue to Highway 7	City of Markham
Mid-Block Crossing, Highway 404 north of 16th Avenue	City of Richmond Hill/ City of Markham
Ninth Line, Steeles Avenue to Box Grove By-Pass	City of Markham
Stouffville Road, Bayview Avenue to Highway 404	City of Richmond Hill
Weston Road, Highway 407 to north of Highway 7	City of Vaughan
Weston Road, North and South of Rutherford Road	City of Vaughan
Yonge Street/Highway 11, Green Lane to Bradford Boundary	Town of East Gwillimbury / Township of King

# Transit – Design – 1 Project

Project Location	Municipality
8300 Keele St Bus Operations, Maintenance and Storage Facility Expansion	City of Vaughan

13600939

#### **ATTACHMENT** 4



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