



TRANSPORTATION CAPITAL INFRASTRUCTURE STATUS UPDATE

Presented to
COMMITTEE OF THE WHOLE

Presented by
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Presented on
MAY 9, 2024



Presentation Objectives

- 2024 10-Year Capital Transportation Program Overview
- Accomplishments
- Ongoing and Future Projects
 - Growth Infrastructure
 - Asset Management
 - Market Landscape and Construction Mitigation

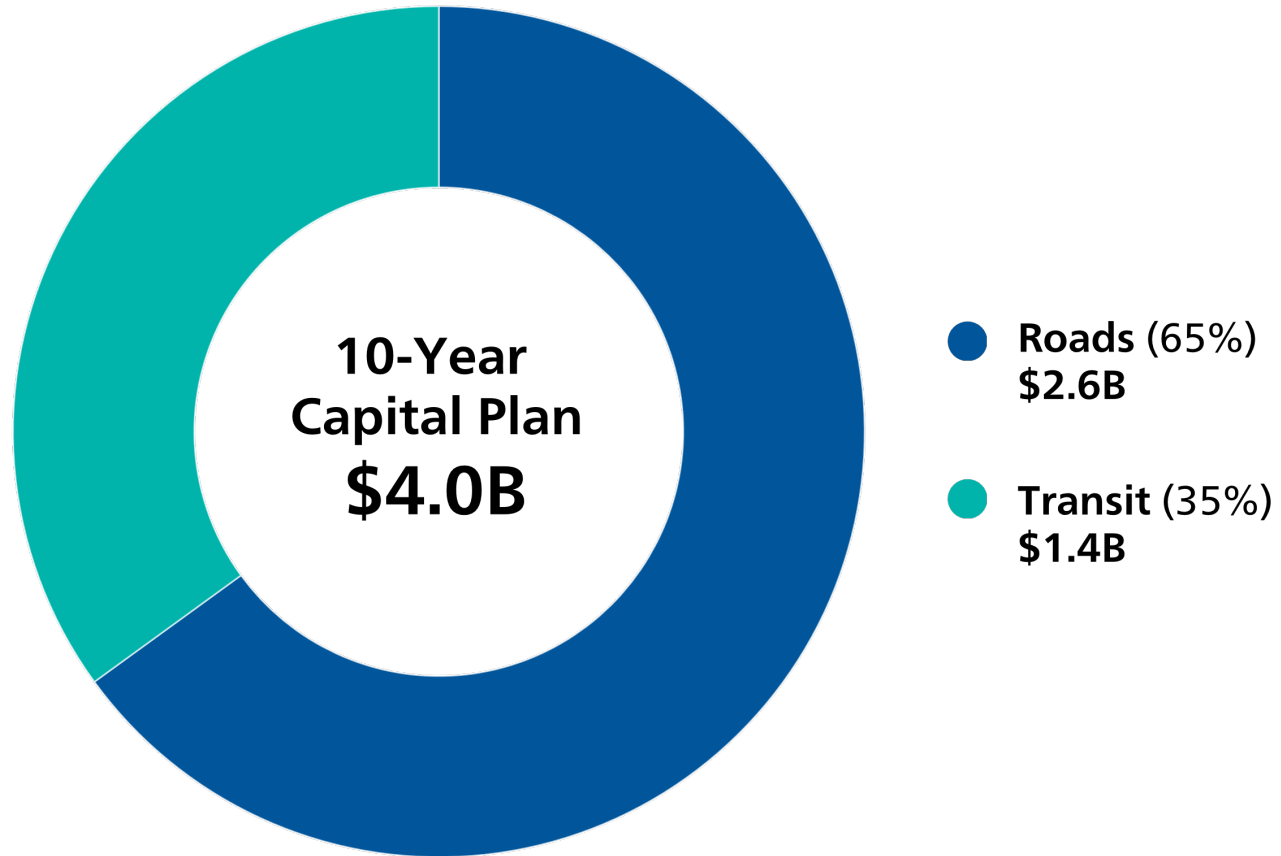


Rutherford Road, west of Greenock Drive, City of Vaughan

TRANSPORTATION

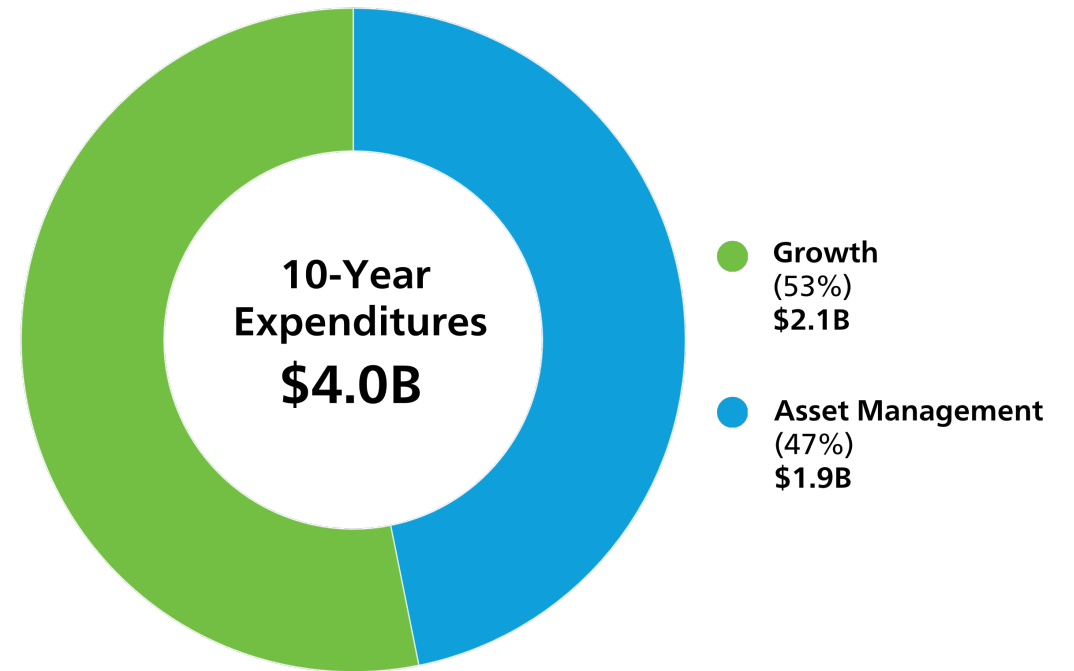
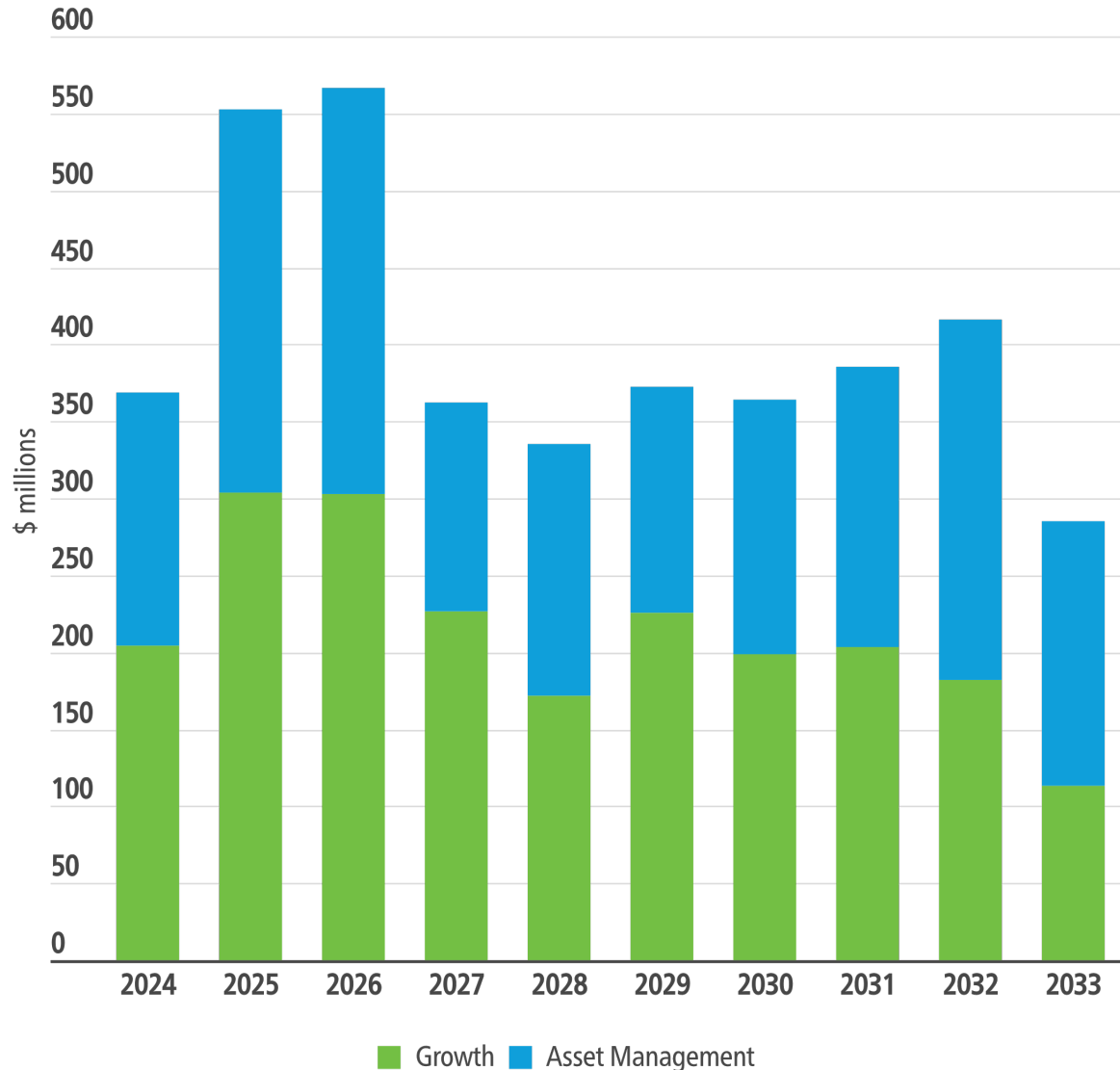
2024 10-YEAR CAPITAL PROGRAM OVERVIEW

\$4.0 billion 10-Year Transportation Capital Budget



Transportation is 47% of Public Works' capital spending

\$2.1 billion in Growth and \$1.9 billion in Asset Management



2024 Proposed 10-Year Capital Plan Deliverables



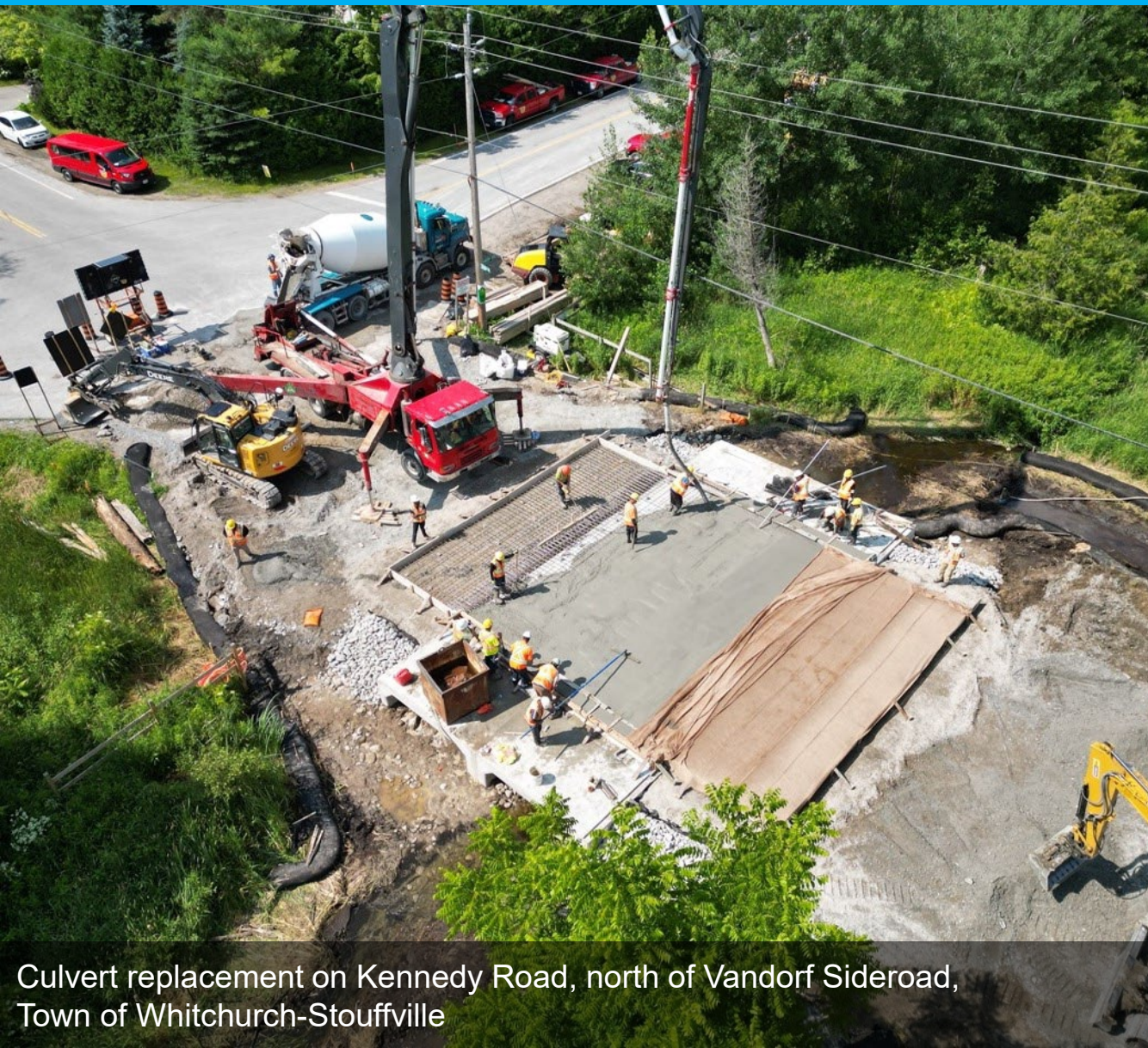
Intersection of Dufferin Street and Rutherford Road, City of Vaughan



Growth

- 92** new lane kms
- 1** new grade separation
- 2** new mid-block crossings
- 130** intersection improvements
- 231** buses
- 208** electric charging stations
- 4** transit garage expansion projects
- 6** roads facilities projects

2024 Proposed 10-Year Capital Plan Deliverables



Asset Management

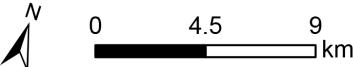
- 3,580** lane kms to be rehabilitated
- 100** structures to be rehabilitated
- 454** bus replacements
- 433** bus rehabilitations and refreshes

Culvert replacement on Kennedy Road, north of Vandorf Sideroad,
Town of Whitchurch-Stouffville

2024 10-Year Roads Growth Construction Program and 5-Year Asset Management Program

Program Type

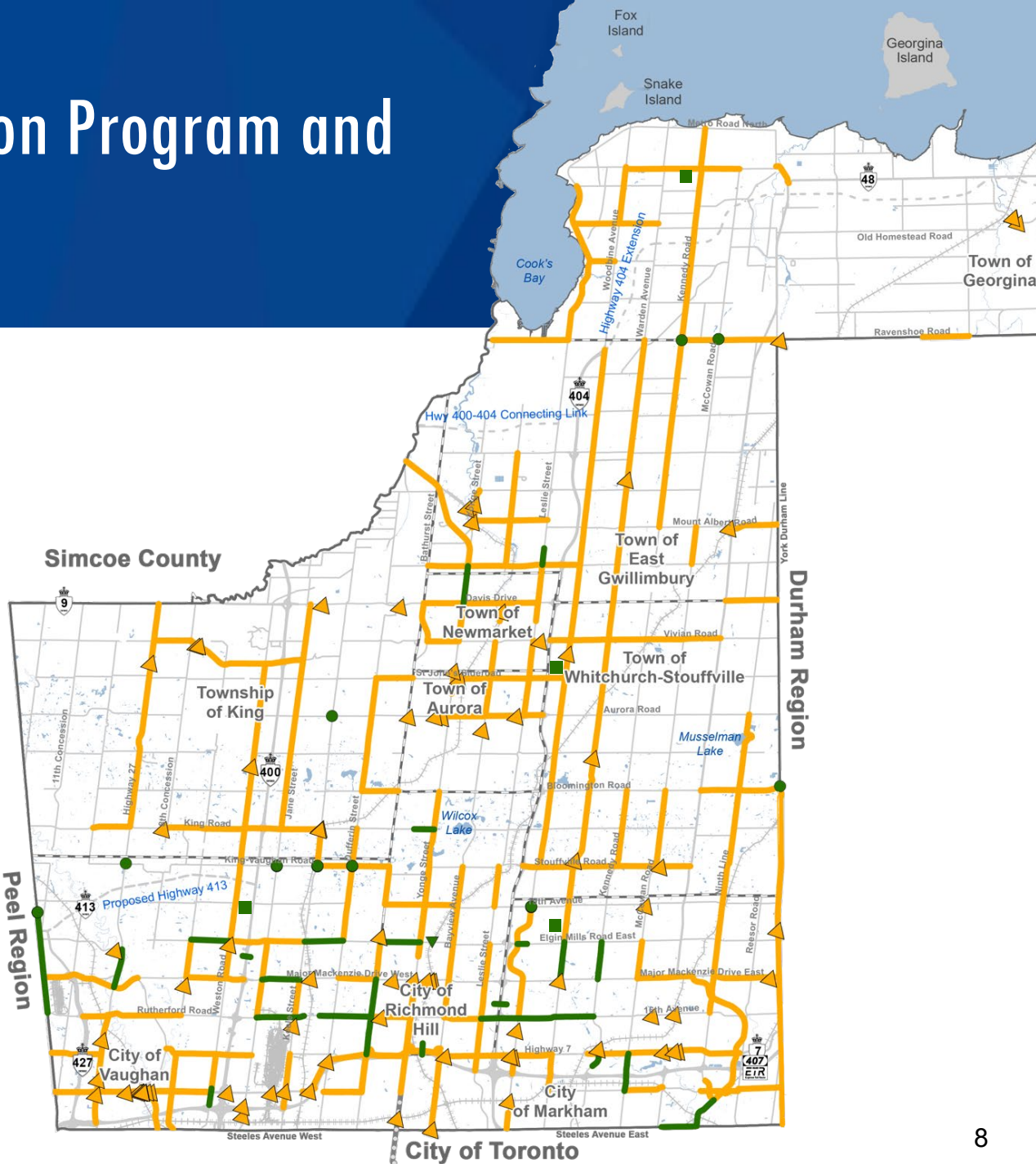
- Growth Capital Program (2024-2033)
- Asset Management (2024-2028)



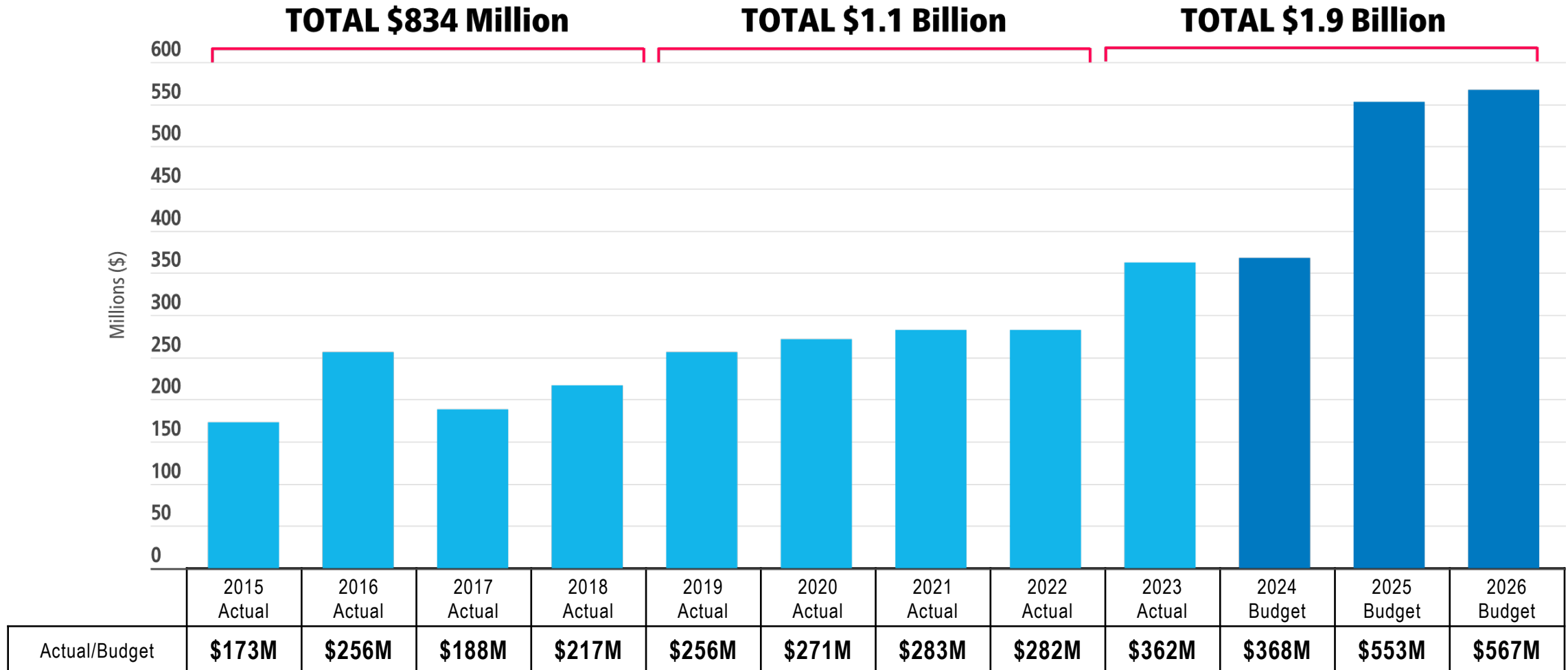
Produced by: Transportation and Infrastructure Planning,
Public Works - November 2023
Base map data: King's Printer for Ontario 2003-2023

BASE MAP INFORMATION

- Bridge Replacement/Improvement
- Regional Road
- Interchange/Intersection Improvement
- Railway
- Road Facility Growth
- Chippewas of Georgina Island First Nation
- Water Bodies
- Yonge Street North Subway Extension (YNSE)
- Provincial Freeway
- Provincial Highway



Record Investment In Roads And Transit Programs



ACCOMPLISHMENTS

Major Mackenzie Drive



STATUS
COMPLETE



PROJECT COST
16.8M

Jane Street to Keele Street



New centre-turn lane on Major Mackenzie Drive, looking east toward Keele Street, City of Vaughan

Dufferin Street



STATUS
COMPLETE



PROJECT COST
11.8M

Apple Blossom Drive to Marc Santi Boulevard



Road widening from four to six lanes, including installing a multi-use path, sidewalk, illumination and streetscaping, City of Vaughan



Reconstructed intersection of Dufferin Street and Marc Santi Boulevard, City of Vaughan

Major Mackenzie Drive West Terminal



STATUS
COMPLETE



PROJECT COST
18.7M

Opposite Cortellucci Vaughan Hospital



New bus terminal located between Cortellucci Vaughan Hospital and Canada's Wonderland, City of Vaughan

Road Rehabilitation and Resurfacing

Rehabilitated and resurfaced **285** lane-kilometres of roads throughout the Region



STATUS
COMPLETE



PROGRAM COST
56.0M



Paving on Bloomington Road, Town of Whitchurch-Stouffville

Structure Rehabilitation and Replacement

Rehabilitated 2 and replaced 6 structures throughout the Region



STATUS
COMPLETE



PROGRAM COST
24.0M



Pouring concrete bridge deck on Kennedy Road, north of Mount Albert Road, Town of East Gwillimbury

Intersection Modernization

Improved 40 locations throughout the Region



STATUS
COMPLETE



PROGRAM COST
5.0M*

* Does not include the cost of 28 intersections improved in conjunction with road rehabilitation projects



Intersection improvements completed at Major Mackenzie Drive and Newkirk Road / Essex Avenue, City of Richmond Hill

Transit Terminal, Shelters, Concrete Platforms and Bus Stops

Installed 63 concrete pads, 15 conventional shelters and rehabilitated transit terminals throughout the Region



STATUS
COMPLETE



PROGRAM COST
4.5M



Bus shelter on Davis Drive, Town of Newmarket

ONGOING AND FUTURE PROJECTS

2024 Transportation Construction Map

Project Type

- △ Bridge/Culvert/Retaining Wall
- Interchange/Intersection*
- Transit Facility

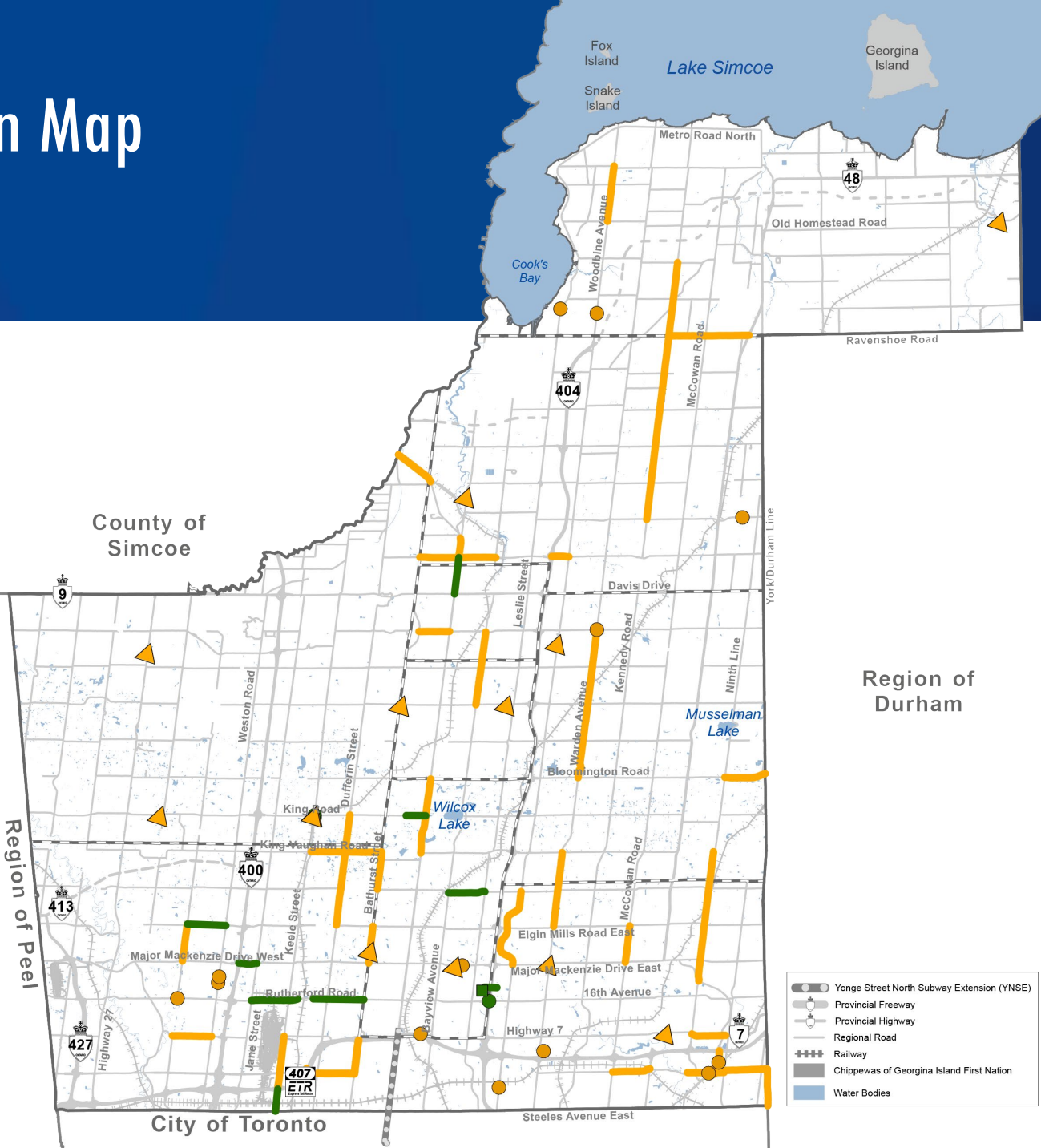
Program Type

- Construction (Growth)
- Construction (Asset Management)

* Intersection improvements completed in conjunction with road rehabilitation are not shown

\$368 million investment in 2024

- 82% in Roads (\$303M)
- 18% in Transit (\$65M)



- Yonge Street North Subway Extension (YNSE)
- Provincial Freeway
- Provincial Highway
- Regional Road
- Railway
- Chippewas of Georgina Island First Nation
- Water Bodies

GROWTH INFRASTRUCTURE

Highway 404 Road Crossing



STATUS
CONSTRUCTION



PROJECT COST
117.3M



COMPLETION
2027

North of 16th Avenue



Construction of a new road over Highway 404 to link Orlando Avenue with Markland Street



Preparation underway for roadway and bridge construction, looking west toward Orlando Avenue, Cities of Markham and Richmond Hill



Centre pier for new bridge over Highway 404 constructed by MTO on behalf of the Region, Cities of Markham and Richmond Hill

Keele Street



STATUS
CONSTRUCTION



PROJECT COST
43.0M



COMPLETION
2024

Steeles Avenue to Snidercroft Road/Great Gulf Drive (south of Highway 407 ETR)



Reconstructing and widening to six lanes, including a new, wider bridge over CN Rail tracks, City of Vaughan



New and widened CN Rail bridge on Keele Street, City of Vaughan

King Road



STATUS
CONSTRUCTION



PROJECT COST
22.7M



COMPLETION
2025

Bathurst Street to Yonge Street



Reconstruction of existing four-lane road, replacing and adding sidewalks, watermain and culvert replacement, City of Richmond Hill



Discovery of wooden corduroy road constructed in 1918 below existing asphalt on King Road, City of Richmond Hill



Watermain installation on King Road, City of Richmond Hill

Major Mackenzie Drive



STATUS
CONSTRUCTION



PROJECT COST
40.1M

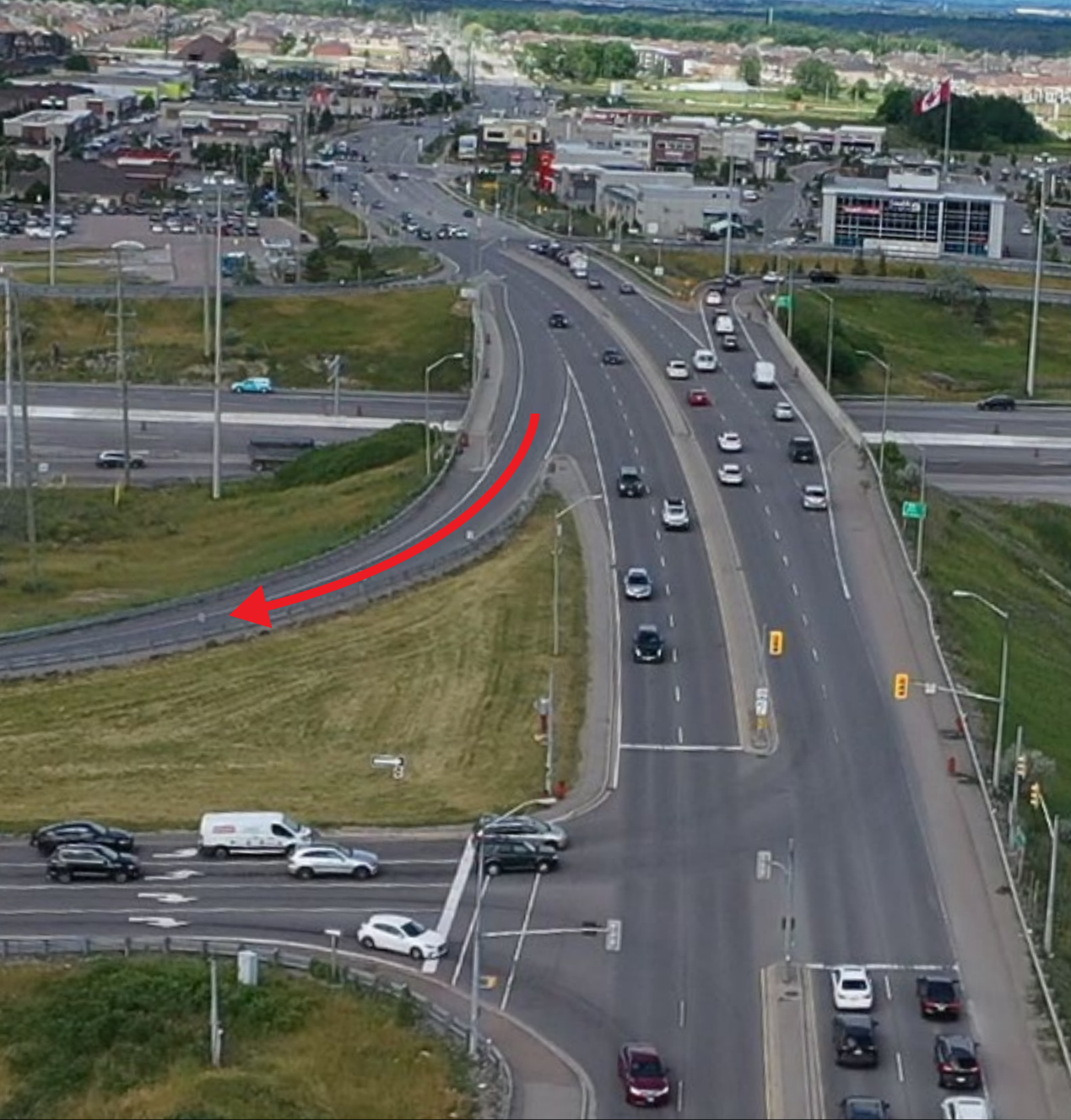


COMPLETION
2024

Highway 400 to Jane Street



Road widening from four to six lanes, reconfiguring Highway 400 interchange, including adjusting and reconfiguring the on/off ramps and installing a new multi-use path, City of Vaughan



Before: Highway 400 interchange with free flow on-ramp



After: Highway 400 on-ramp relocated to signalized intersection

Rutherford Road

Highway 400 to Bathurst Street



Rutherford Road



STATUS
CONSTRUCTION



PROJECT COST
79.5M



COMPLETION
2025

Jane Street to Westburne Drive



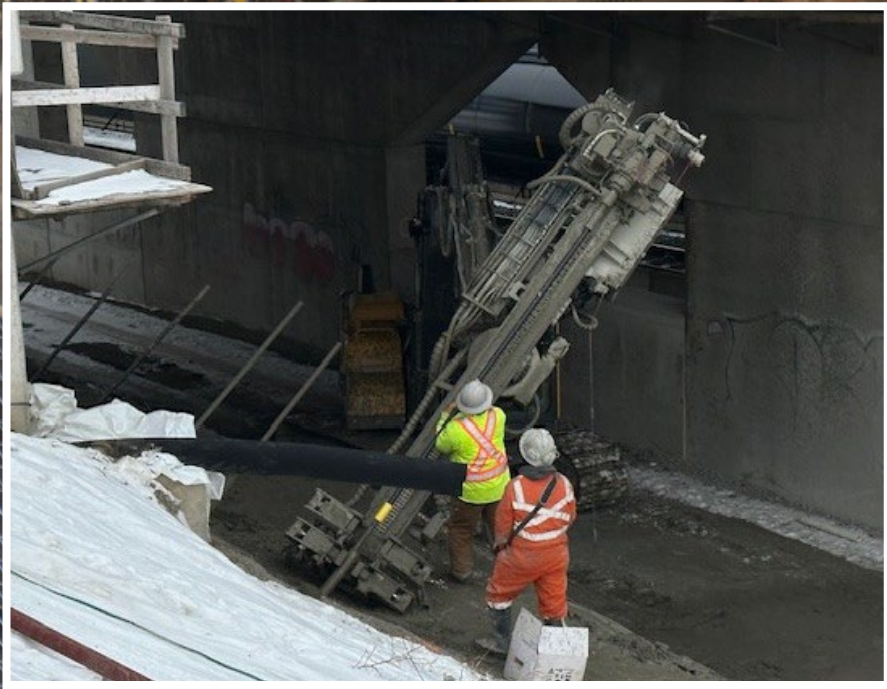
Road rehabilitation, reconstruction and widening from four to six lanes, including a new, wider bridge over CN Rail tracks, City of Vaughan



Pouring concrete for south wingwall footing on Rutherford Road, west of Greenock Drive, City of Vaughan



Aerial view of work to widen the CN Rail bridge on Rutherford Road, east of Melville Avenue/ Creditstone Road, City of Vaughan



Slope soil nailing and shotcreting under CN Rail bridge on Rutherford Road, City of Vaughan



Rescued snapping turtle being released to wetlands surrounding Rutherford Road, City of Vaughan

Rutherford Road

STATUS
CONSTRUCTION

PROJECT COST
50.5M

COMPLETION
2025

Peter Rupert Avenue to Bathurst Street



Road widening from four to six lanes, including installing a multi-use path, sidewalk, illumination and streetscaping, City of Vaughan



Preparation for installation of culvert extension on Rutherford Road, City of Vaughan

Teston Road



STATUS
CONSTRUCTION



PROJECT COST
47.9M



COMPLETION
2025

Pine Valley Drive to Weston Road



Installation of bridge girders on Teston Road, east of Pine Valley Drive, City of Vaughan



New bridge on Teston Road at Purpleville Creek, east of Pine Valley Drive, City of Vaughan

Yonge Street



STATUS
CONSTRUCTION



PROJECT COST
106.7M



COMPLETION
2028

Davis Drive to Green Lane



Rendering of Yonge Street at Aspenwood Drive/Bristol Road, Town of Newmarket



Installation of concrete hydro poles, ranging in height from 75 to 110 feet, on Yonge Street, Town of Newmarket



New retaining wall along Yonge Street, Town of East Gwillimbury



Watermain relocation on Yonge Street, Town of Newmarket 44

16th Avenue, Highway 404 Interchange



STATUS
CONSTRUCTION



COMPLETION
2024

Phase 1: Delivered in partnership with the Ministry of Transportation (MTO)



New, widened Highway 404 bridges over 16th Avenue, Cities of Markham and Richmond Hill

16th Avenue



STATUS
DESIGN



PROJECT COST
104.6M
(Phase 2)



TENDER DATE
2025
(Phase 2)

Phase 1: Highway 404 Interchange

Phase 2: Leslie Street to Warden Avenue

Phase 3: Warden Avenue to Kennedy Road



19th Avenue



STATUS
TENDERING



PROJECT COST
37.6M



TENDER DATE
Q2 2024

Bayview Avenue to Leslie Street



Reconstruction and widening from a rural two-lane road to an urban four-lane road, including culvert replacements, new storm sewers, sidewalk and multi-use path, new signalized intersections, illumination and streetscaping, City of Richmond Hill

Bathurst Street



STATUS
DESIGN



PROJECT COST
114.7M



TENDER DATE
2025

North of Highway 7 to Major Mackenzie Drive



Reconstruction and widening of urban roadway from four to six lanes, including Transit/HOV lanes, active transportation, sidewalk, illumination, noise barrier and watermain replacement, Cities of Richmond Hill and Vaughan

Planning For All Modes of Travel



Before: Sidewalk on Major Mackenzie Drive, City of Vaughan



After: New, wider concrete multi-use path with unit paver banding

55 Orlando Avenue



STATUS
CONSTRUCTION



PROJECT COST
63.9M



COMPLETION
2024

Bus Operations, Maintenance and Storage Facility Expansion



Expansion of facility to accommodate an additional 130 buses, City of Richmond Hill

Electric Bus Infrastructure



STATUS
ONGOING



PROGRAM COST
10.0M



Zero Emission Transit Fund

Canada



Infrastructure
Canada

CIB  BIC

ASSET MANAGEMENT

Road Rehabilitation And Resurfacing

Rehabilitate and resurface **415** lane-kilometres throughout the Region



STATUS
CONSTRUCTION



PROGRAM COST
59.5M



Paving on Lloydtown-Aurora Road, Township of King

Structure Rehabilitation And Replacement

Rehabilitate 7 structures and replace 6 structures throughout the Region



STATUS
CONSTRUCTION



PROGRAM COST
22.6M



Culvert replacement on Kennedy Road, north of Vandorf Sideroad, Town of Whitchurch-Stouffville

Intersection Modernization

* Does not include the cost of 29 intersections improved in conjunction with road rehabilitation projects

Improve **57** intersections throughout the Region

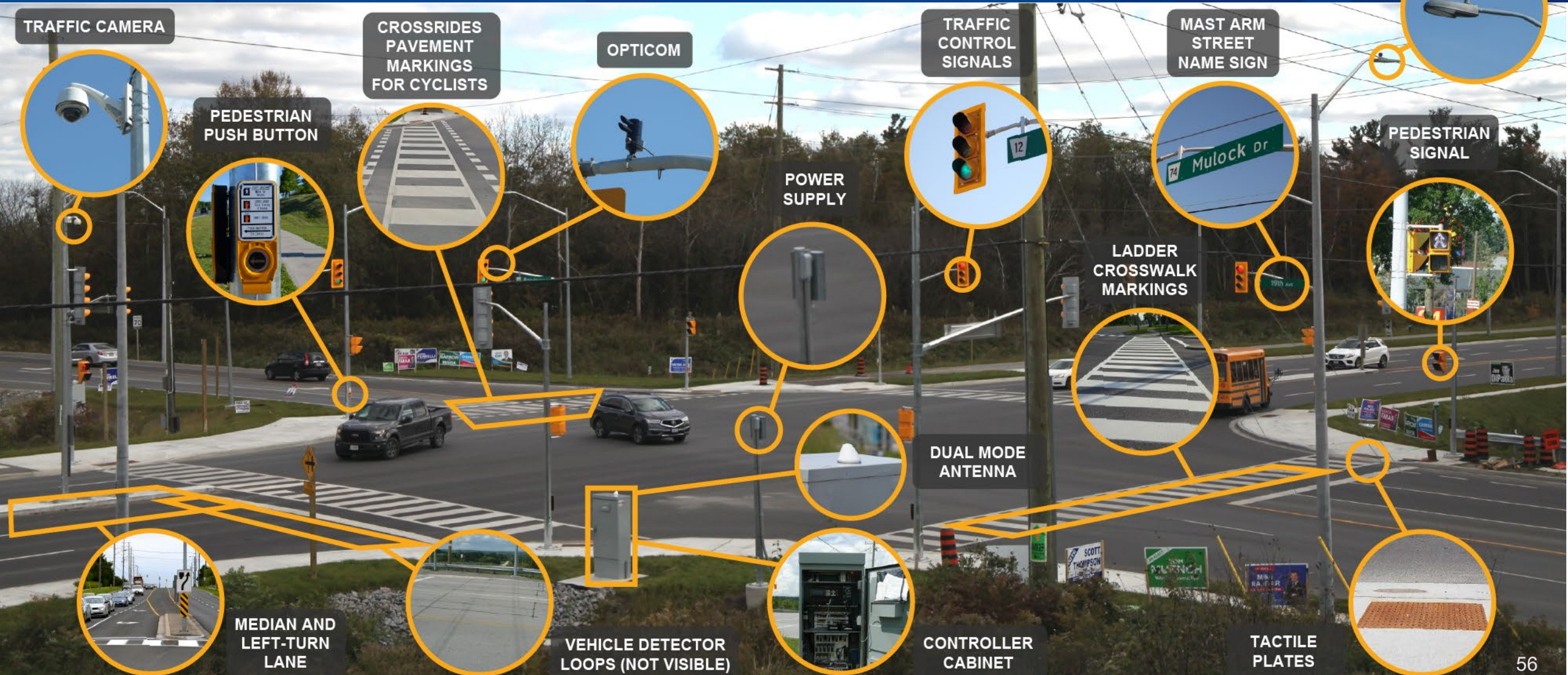


STATUS
CONSTRUCTION



PROGRAM COST
5.0M*

STREET LIGHTS



TRAFFIC CAMERA

PEDESTRIAN
PUSH BUTTON

CROSSRIDES
PAVEMENT
MARKINGS
FOR CYCLISTS

OPTICOM

POWER
SUPPLY

TRAFFIC
CONTROL
SIGNALS

MAST ARM
STREET
NAME SIGN

PEDESTRIAN
SIGNAL

LADDER
CROSSWALK
MARKINGS

DUAL MODE
ANTENNA

CONTROLLER
CABINET

TACTILE
PLATES

VEHICLE DETECTOR
LOOPS (NOT VISIBLE)

MEDIAN AND
LEFT-TURN
LANE

Transit Terminal, Shelters, Concrete Platforms And Bus Stops

Install **60** concrete pads, **26** conventional shelters throughout the Region and rehabilitate **2** YRT transit terminals



STATUS
CONSTRUCTION



PROGRAM COST
3.7M



Bus Shelter on Bathurst Street at Lebovic Campus Drive, City of Vaughan

Fleet Replacement And Asset Life Extension

Purchase of 50 buses and rehabilitate 75 buses to extend asset life through mechanical refreshes and midlife overhauls



STATUS
UNDERWAY



PROGRAM COST
40.6M



Examples of bus refurbishment and mechanical overhaul

MARKET LANDSCAPE AND CONSTRUCTION MITIGATION

Market Landscape

- Economic pressures/construction cost escalation
 - Strategic bundling of projects
 - Ensure competitive procurement process attracting multiple bidders
 - Seek new funding opportunities
- Reduced development charge collections
 - Review project timing
 - Seek funding from other levels of government
- Regulatory changes
 - Excess Soils
 - New Municipal Project Assessment Process (MPAP)
- Coordination of projects
 - Prioritize Region projects with partners
 - Incorporate work for others
- Continue all pre-construction activities in case of advancement or additional funding



Construction Mitigation

Mitigation strategies applicable to Transportation and Water/Wastewater capital projects:

- Provide advance notice of major changes to work staging
- Maintain existing number lanes
- Reduce lanes only during off-peak hours
- Close roads only when necessary
- Work at night on high volume corridors
- Maintain access to homes and businesses
- Monitor signal timing and adjust as needed
- Work with local municipal staff to address any concerns that arise



Key Messages

1. \$2.5 billion invested in Transportation infrastructure in the past 10 years
2. Record investment in Transportation Services during this term of Council
3. Building a network to service the needs of York Region's 1.2 million residents and businesses
4. Council-endorsed Capital Program that balances growth and asset management needs
5. Construction planned at over 120 locations this year and actively preparing projects for future construction



Keele Street, south of Highway 407, City of Vaughan

Thank you

For more information

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