

# TRANSPORTATION CAPITAL INFRASTRUCTURE PROGRAM

Presented to

**CITY OF MARKHAM**

Presented by

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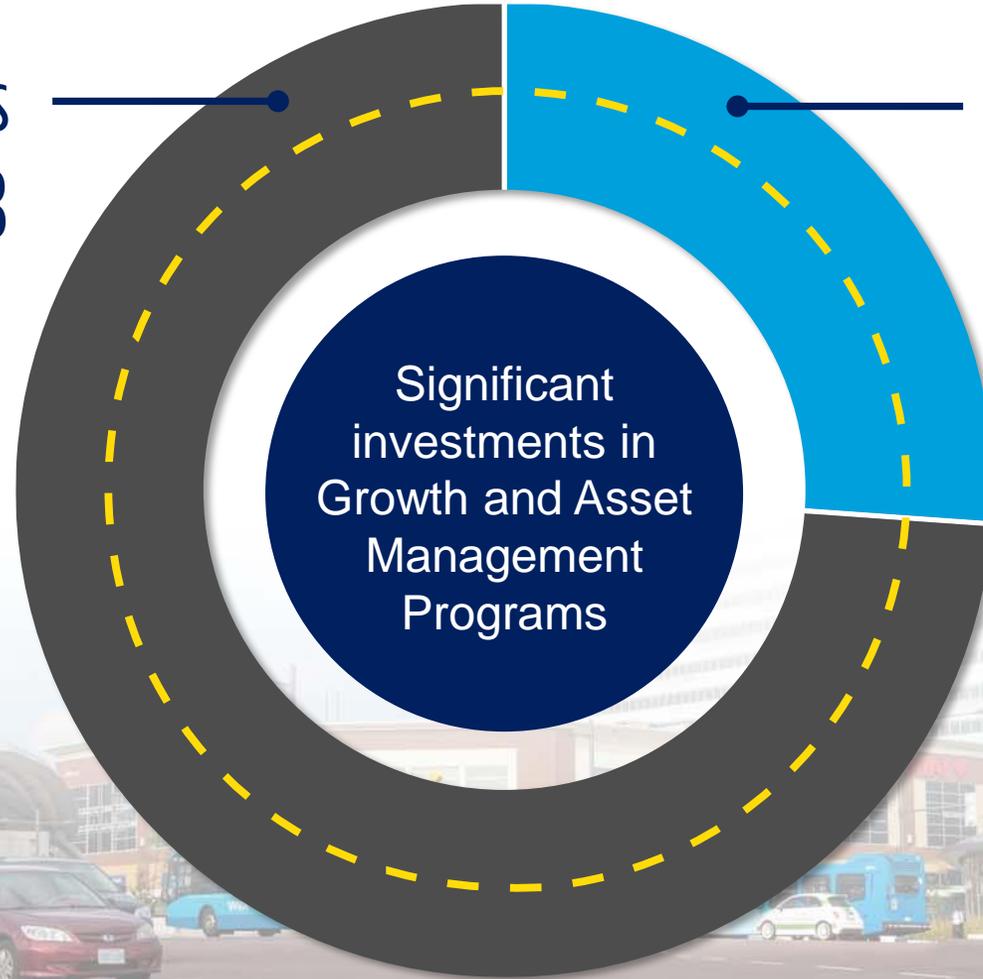
# PRESENTATION OBJECTIVES:

- Program Overview and Accomplishments
- 2022 New and Continuing Projects
- Future Projects

# \$3.5B 2022 10-YEAR TRANSPORTATION CAPITAL BUDGET

- Roads
- Bridges
- Intersections
- Maintenance Facilities
- Technology

**ROADS**  
**\$2.55B**

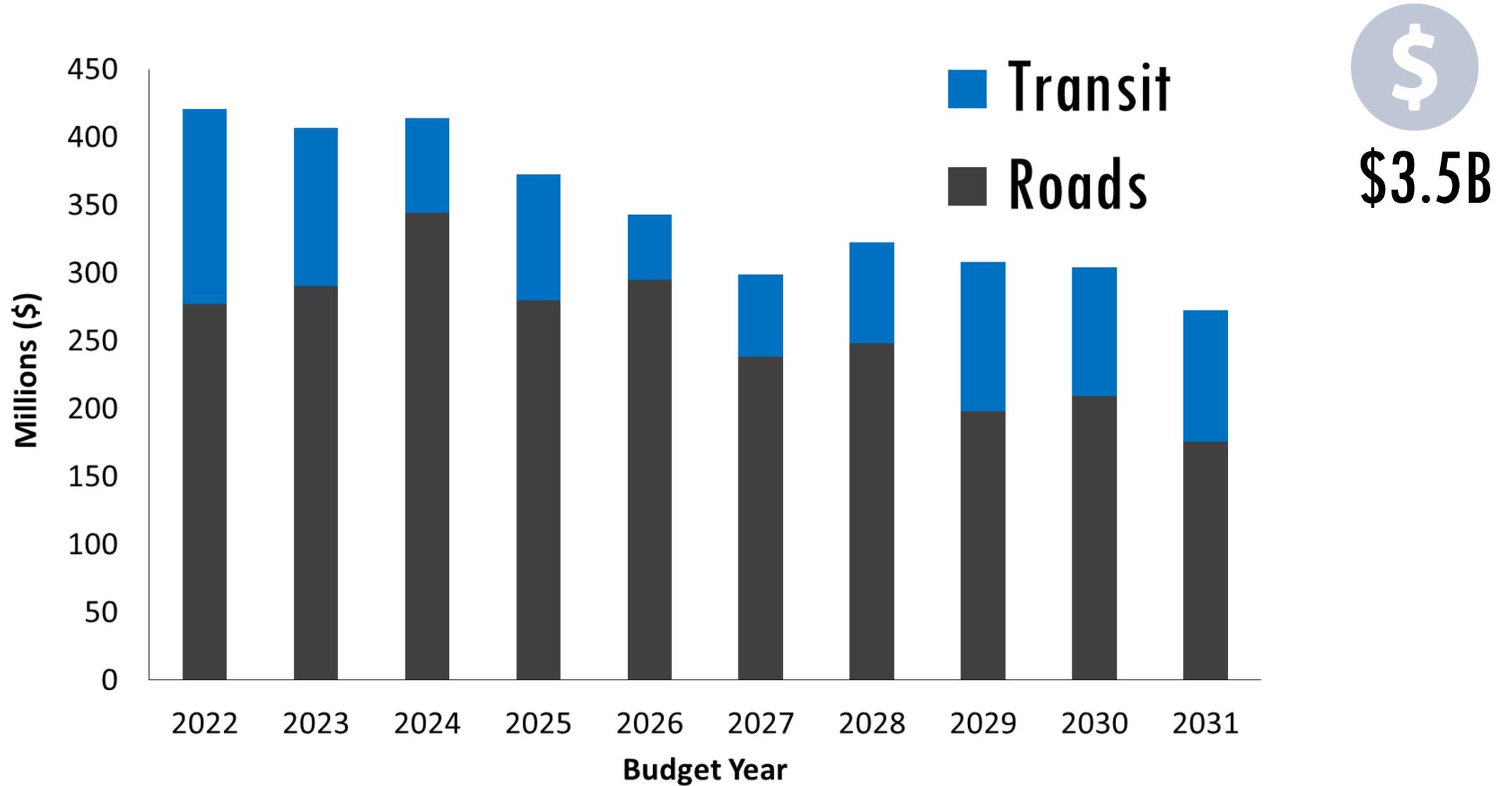


**TRANSIT**  
**\$0.91B**

- Fleet
- Garages
- Terminals
- Technology

Significant  
investments in  
Growth and Asset  
Management  
Programs

# 2022-2031 TRANSPORTATION CAPITAL BUDGET



# ACCOMPLISHMENTS

# 2021 ROAD REHABILITATION AND PRESERVATION

Rehabilitated **94** lane-kilometres and resurfaced **51** lane-kilometres



Paving on 16th Avenue

## Road rehabilitation at seven locations:

- 14th Avenue, Warden Avenue to McCowan Road
- 14th Avenue, Markham Road to Ninth Line
- 16th Avenue, Kennedy Road to Main Street
- Don Mills/Leslie Street, Steeles Avenue to Highway 407
- Elgin Mills Road, Highway 404 to Victoria Square
- Kennedy Road, Highway 7 to 16th Avenue
- Markham Road, at Denison Street

## Road preservation at four locations:

- 16th Avenue, Main Street to Donald Cousens Parkway
- Kennedy Road, Elgin Mills Road to Stouffville Road
- Woodbine Avenue, 19th Avenue to Stouffville Road
- Woodbine Avenue, Highway 7 to 16th Avenue

# INTERSECTION MODERNIZATION

Improved 24 intersections



Leslie Street and Summerdale Drive

## Intersection improvements at 24 locations:

- 14th Avenue and Reesor Road
- 14th Avenue, west of 11th Concession
- 16th Avenue, east of Little Rouge Creek bridge
- Major Mackenzie Drive, west of Reesor Road
- McCowan Road and 19th Avenue
- York Durham Line and Concession Road 8
- 14th Avenue at six locations  
(Crown Steel Drive / Gough Road, Birchmount Road, McDowell Gate, Beckenridge Drive / Brimley Road, Chatelaine Drive / Havelock Gate, Roxbury Street / Boxwood Crescent)
- 16th Avenue at five locations  
(William Berczy Boulevard / Longwater Chase, The Bridle Walk / Shorthill Drive, Stonebridge Drive / Saratoga Road, Roy Rainey Avenue / Cairns Drive, Mingay Avenue / Stone Mason Drive)
- Don Mills Road at Simonston Boulevard North
- Elgin Mills Road at two locations  
(Woodbine Avenue, Duke of York Street/ Prince Regent Street)
- Kennedy Road at four locations  
(Austin Drive, Carlton Road, The Bridle Trail, Birchview Lane)

# 2022 NEW AND CONTINUING PROJECTS

# 2022 TRANSPORTATION CAPITAL CONSTRUCTION PROGRAM



Growth Projects 2022 ■ Asset Management Projects 2022 ■ Municipal Boundary - - -

## 2022 Growth Projects

1. Road Improvements  
*Red Cedar/Cedar Avenue, extension from Langstaff Road to High Tech Road*
2. Road Improvements  
*16th Avenue, Highway 404 interchange (delivered by MTO)*

## 2022 Asset Management Projects

3. Culvert Rehabilitation  
*Woodbine Avenue, South of Denison Street*
4. Road Rehabilitation  
*Woodbine Avenue, Denison Street to Highway 407*
5. Intersection Improvement  
*Highway 7 and east of Montgomery Court*
6. Road Rehabilitation  
*Major Mackenzie Drive, Warden Avenue to McCowan Road*
7. Culvert Rehabilitation  
*McCowan Road, North of 16th Avenue*
8. Intersection Improvement  
*Highway 7 and Main Street*
9. Road Rehabilitation  
*Ninth Line, Highway 407 to 16th Avenue*

# RED CEDAR/CEDAR AVENUE

\$8.2M



TENDER  
TBD

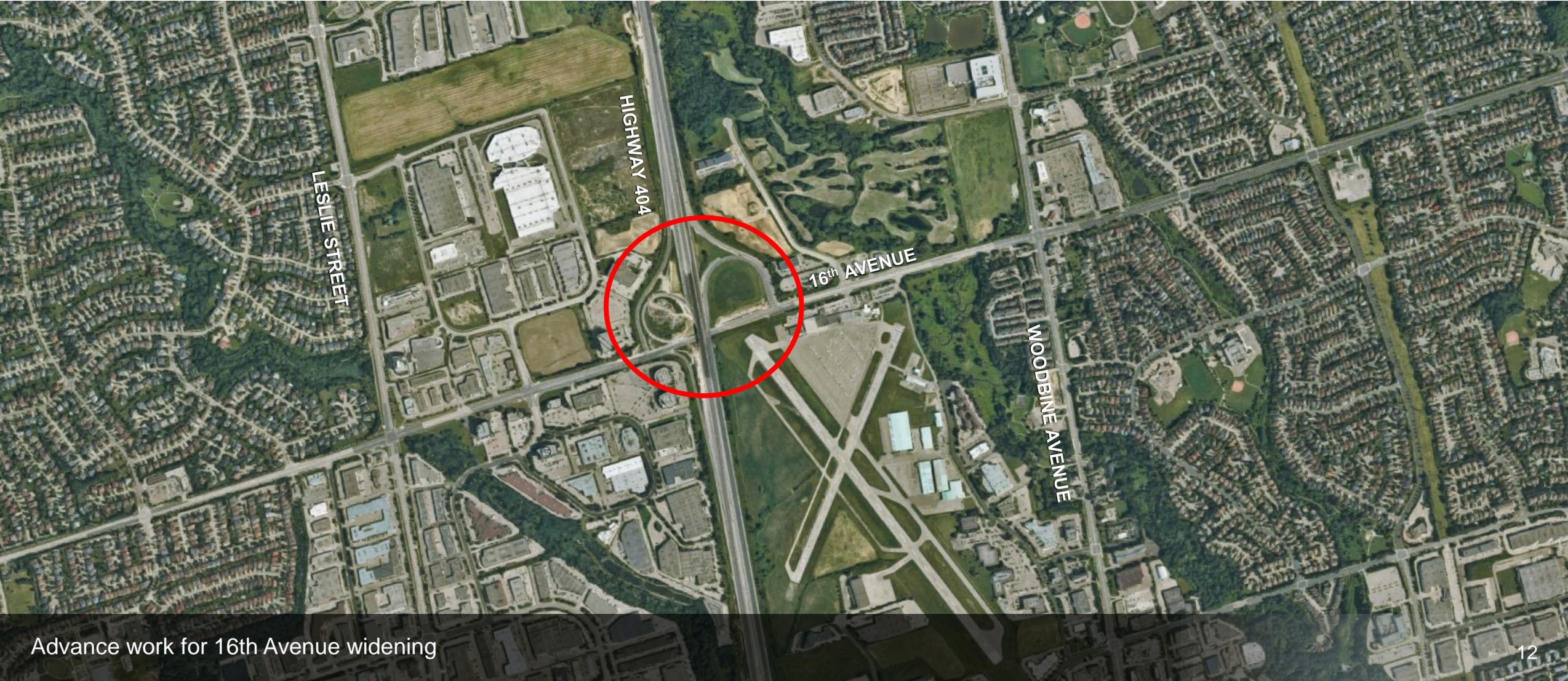
Langstaff Road to High Tech Road



Constructing a new three-lane road with a centre left-turn lane

# HIGHWAY 404 / 16TH AVENUE

Interchange and bridge construction by MTO



Advance work for 16th Avenue widening



New Highway 404 bridge over 16th Avenue



Future westbound lanes of widened 16th Avenue

# ROAD REHABILITATION

Rehabilitate **57** lane-kilometres



## Road rehabilitation at three locations:

- Major Mackenzie Drive, Warden Avenue to McCowan Road
- Ninth Line, Highway 407 to 16th Avenue
- Woodbine Avenue, Denison Street to Highway 407

Paving on Warden Avenue, City of Markham

# STRUCTURE REHABILITATION

Rehabilitate 2 structures



Woodbine Avenue culvert – sagged section

**Culvert rehabilitation at two locations:**

- McCowan Road, north of 16th Avenue
- Woodbine Avenue, south of Denison Street



# INTERSECTION MODERNIZATION

Improve 19 intersections

STREET LIGHTS

TRAFFIC CAMERA



CROSSRIDES PAVEMENT MARKINGS FOR CYCLISTS



OPTICOM



TRAFFIC CONTROL SIGNALS



MAST ARM STREET NAME SIGN



PEDESTRIAN PUSH BUTTON



POWER SUPPLY



LADDER CROSSWALK MARKINGS



PEDESTRIAN SIGNAL



MEDIAN AND LEFT-TURN LANE



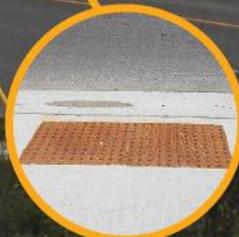
VEHICLE DETECTOR LOOPS (NOT VISIBLE)



CONTROLLER CABINET



TACTILE PLATES



# INTERSECTION MODERNIZATION

Improve **19** intersections



Ninth Line and Tiers Gate

## Intersection improvements at 19 locations:

- Highway 7 and east of Montgomery Court
- Highway 7 and Main Street
- Major Mackenzie Drive and Angus Glen Arena
- Major Mackenzie Drive and Angus Glen Boulevard
- Major Mackenzie Drive and Kennedy Road
- 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
- Ninth Line and Highway 7
- Ninth Line and Rose Way
- Ninth Line and Church Street
- Ninth Line and Cornell Park Avenue
- Ninth Line and 16th Avenue
- Woodbine Avenue and Denison Street
- Woodbine Avenue and Riviera Drive
- Woodbine Avenue and 14th Avenue
- Woodbine Avenue and Shields Court
- Woodbine and Burncrest Road / Miller Avenue

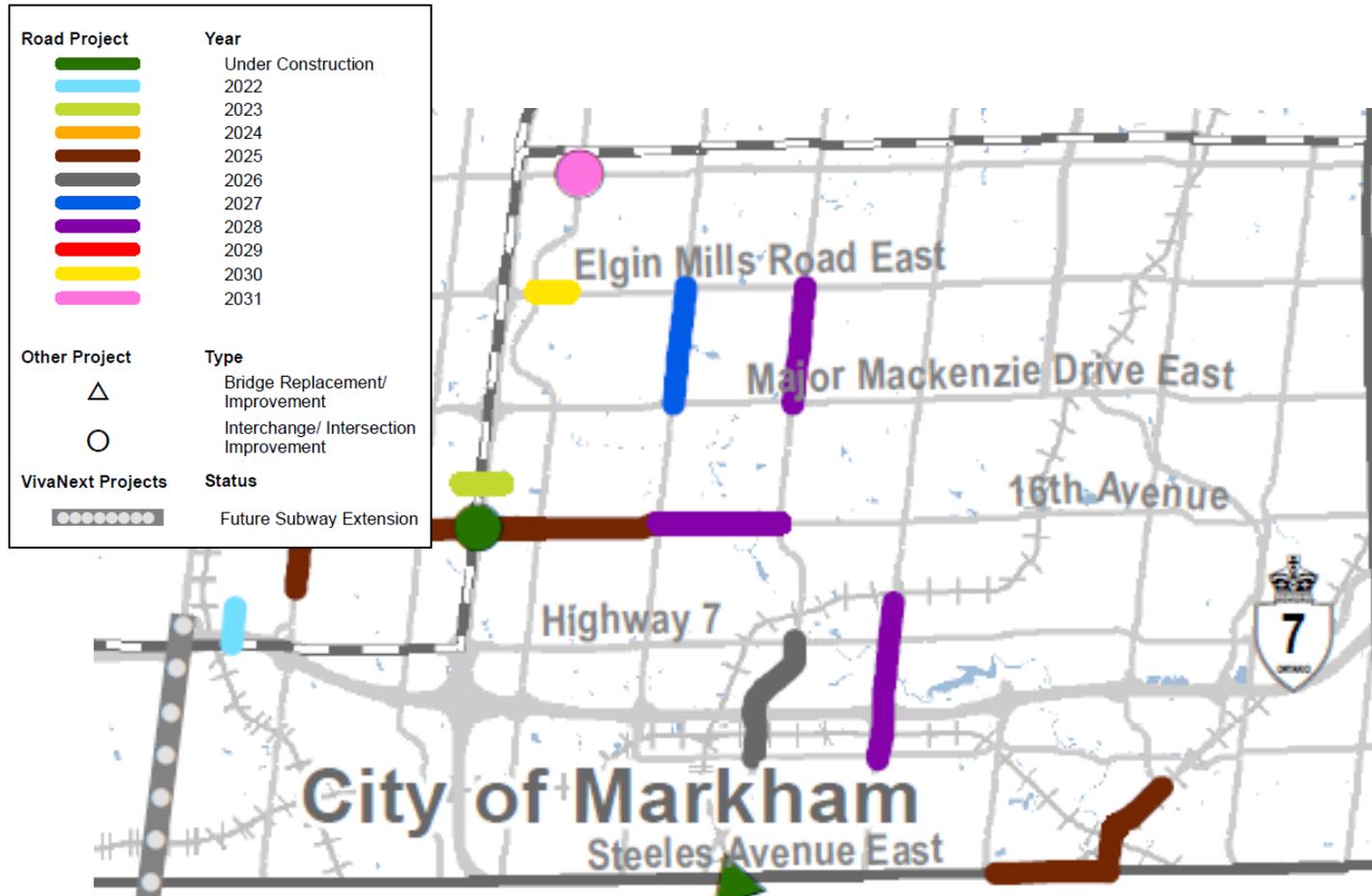
# FUTURE PROJECTS

# GROWTH PROJECT PHASES AND TIMELINES



Growth projects on average take 8 to 10 years from start to finish

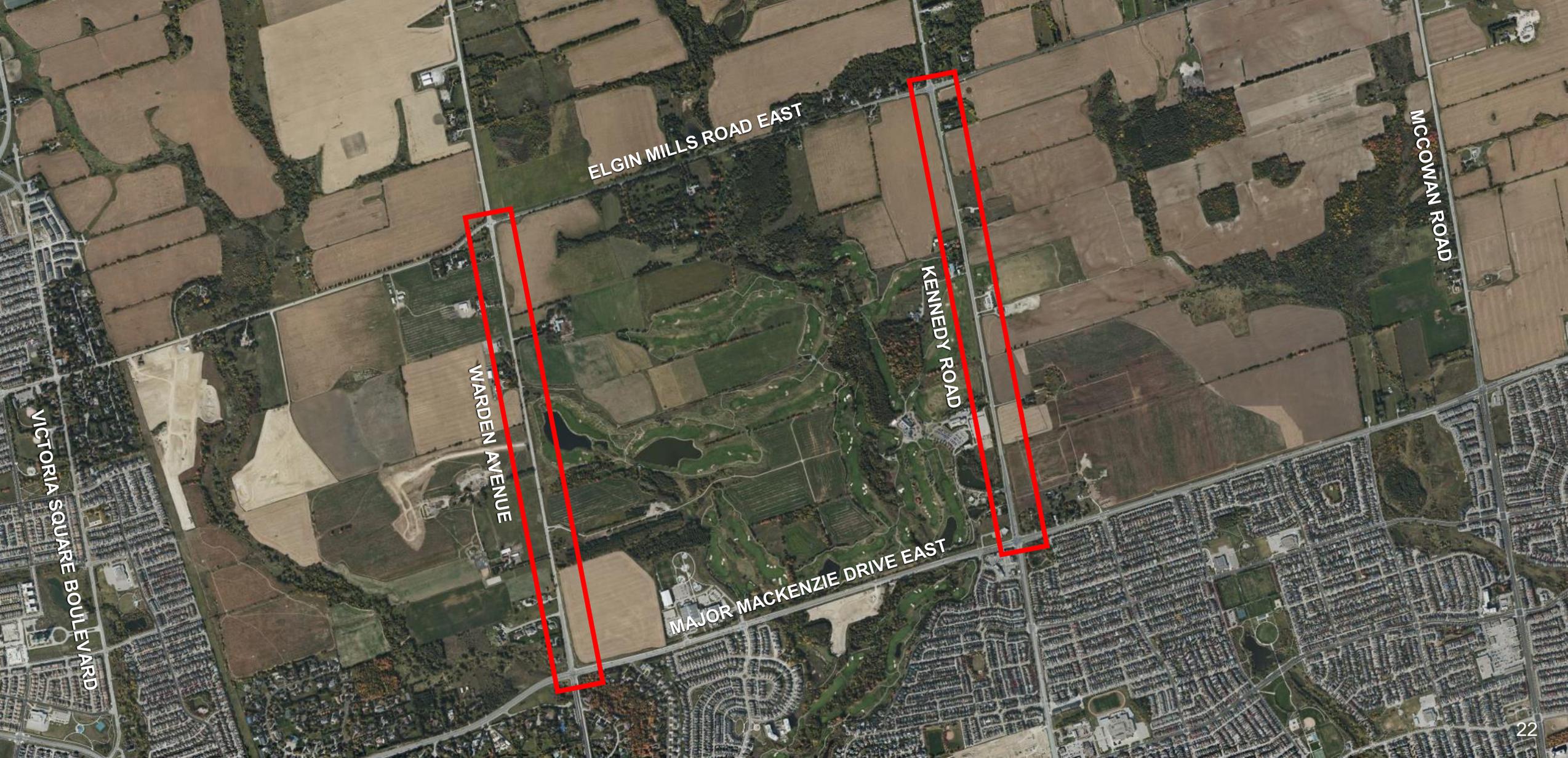
# 2022 10-YEAR ROADS CAPITAL CONSTRUCTION PROGRAM



## Future Projects:

- Kennedy Road, Major Mackenzie Drive to Elgin Mills Road – Environmental Assessment Underway
- Warden Avenue, Major Mackenzie Drive to Elgin Mills Road – Environmental Assessment Underway
- 16th Avenue, Leslie Street to Woodbine Avenue – Detailed Design Underway
- 16th Avenue, Woodbine Avenue to Warden Avenue – Detailed Design Underway
- 16th Avenue, Warden Avenue to Kennedy Road – Detailed Design Underway
- Kennedy Road, 14th Avenue to Highway 7 – Detailed Design Underway
- McCowan Road, 14th Avenue to Bullock Drive – Detailed Design Underway
- Mid-Block Crossing, Highway 404 north of 16th Avenue – Detailed Design Underway
- Ninth Line, Steeles Avenue to Box Grove By-Pass – Detailed Design Underway
- Elgin Mills Road, Woodbine Bypass to Woodbine Avenue
- Woodbine Avenue and 19th Avenue

# ENVIRONMENTAL ASSESSMENT STUDIES

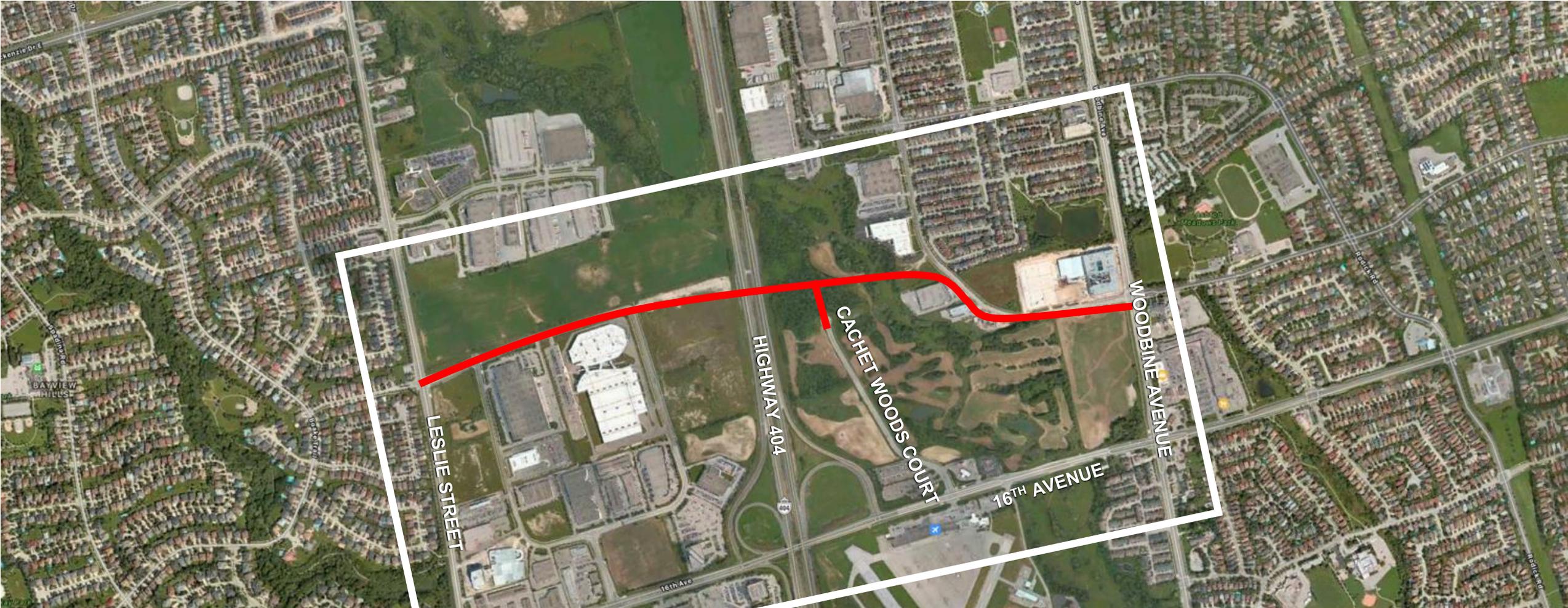


# HIGHWAY 404 ROAD CROSSING

\$94.9M

CONSTRUCTION  
2023

North of 16th Avenue



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

# 16TH AVENUE

\$82.0M / \$42.4M



CONSTRUCTION  
2025 / 2028

Leslie Street to Warden Avenue / Warden Avenue to Kennedy Road



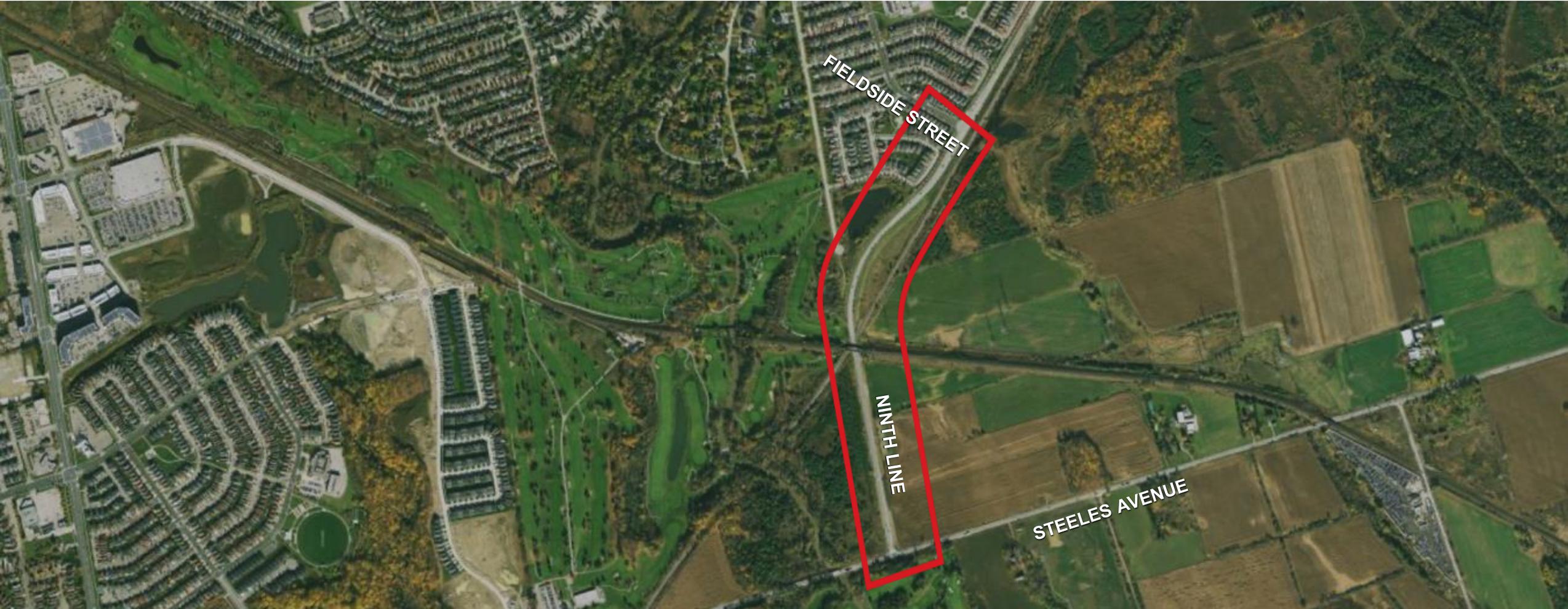
Road widening from four to six lanes, widening of the Highway 404 bridge, rehabilitation of Rouge River bridge, active transportation, sidewalk, illumination and streetscaping

# NINTH LINE

\$13.6M

CONSTRUCTION  
2025

Steeles Avenue to Fieldside Street



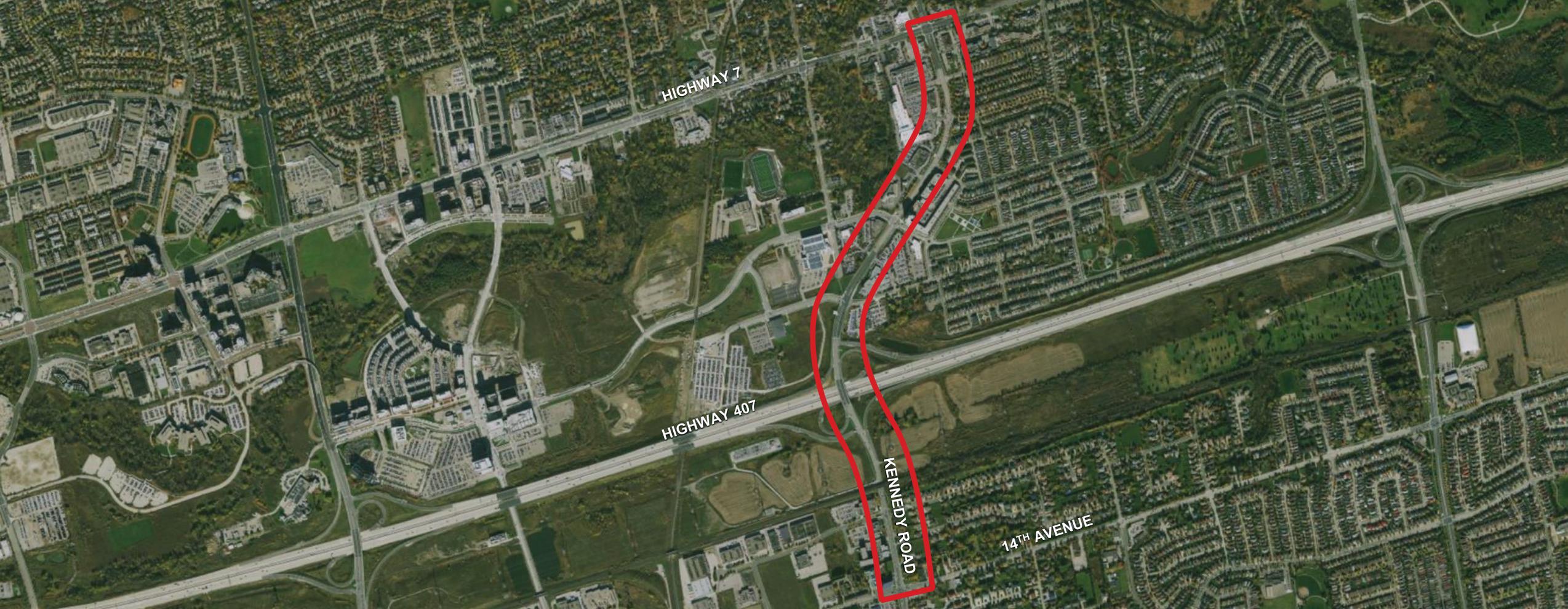
Widening from a rural two-lane road to an urban four-lane road, including sidewalk, active transportation, streetscaping and illumination

# KENNEDY ROAD

\$81.7M

CONSTRUCTION  
2026

14<sup>th</sup> Avenue to Highway 7



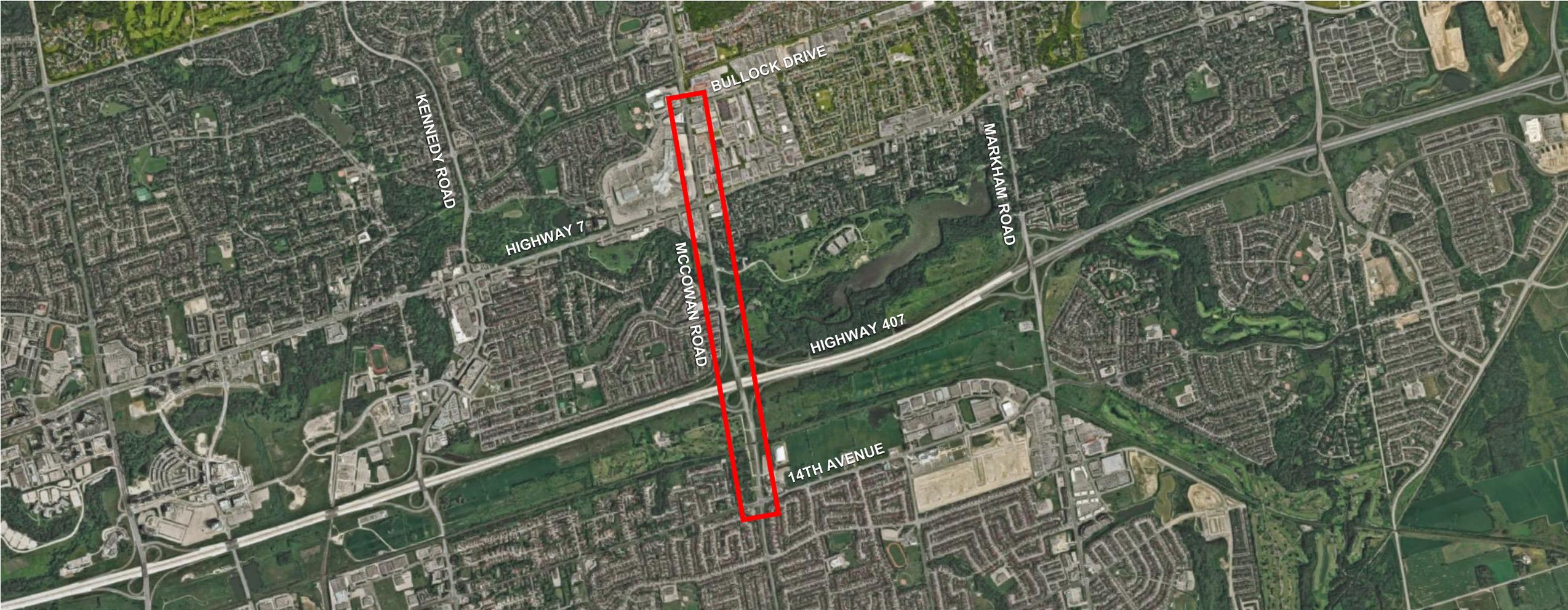
Reconstruction and widening of urban roadway from four-lane to six-lane, including replacement of the CN bridge, Transit/HOV lanes, active transportation, sidewalk and illumination

# MCCOWAN ROAD

\$37.4M

CONSTRUCTION  
2028

14th Avenue to Bullock Drive



Reconstruction and widening of urban roadway from four-lane to six-lane, including Transit/HOV lanes, active transportation, sidewalk and illumination

# 2022 TRANSPORTATION PRE-CONSTRUCTION MAP

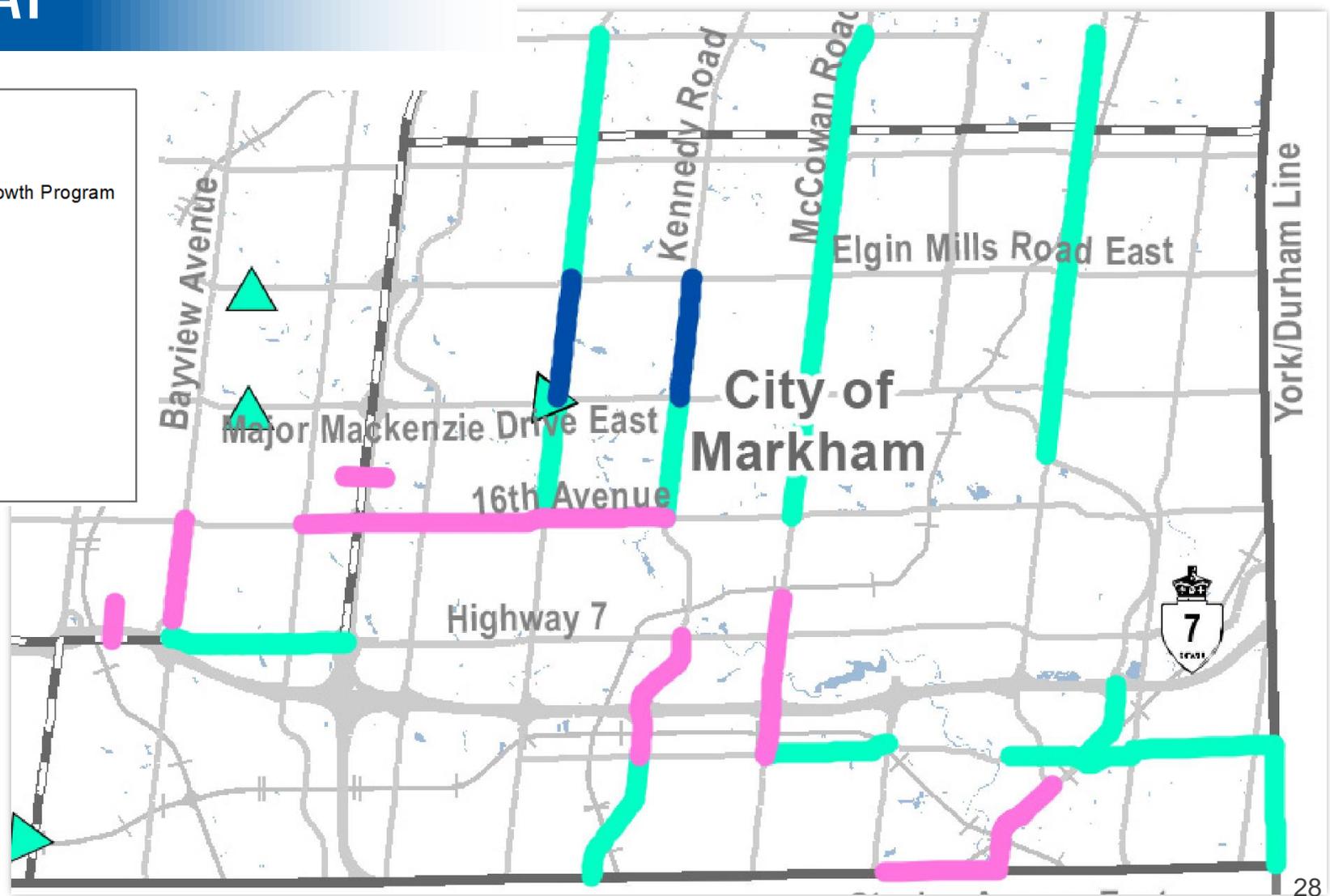
**Road Project Category**

- █ Detailed Design - Growth Program
- █ Environmental Assessment Study - Growth Program
- █ Detailed Design - Renewal Program

**Project Type**

- ▲ Bridge/Structure/Retaining Wall
- Interchange/Intersection\*
- ☆ Rail/Road Bridge By Others

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



# TRANSIT UPDATE

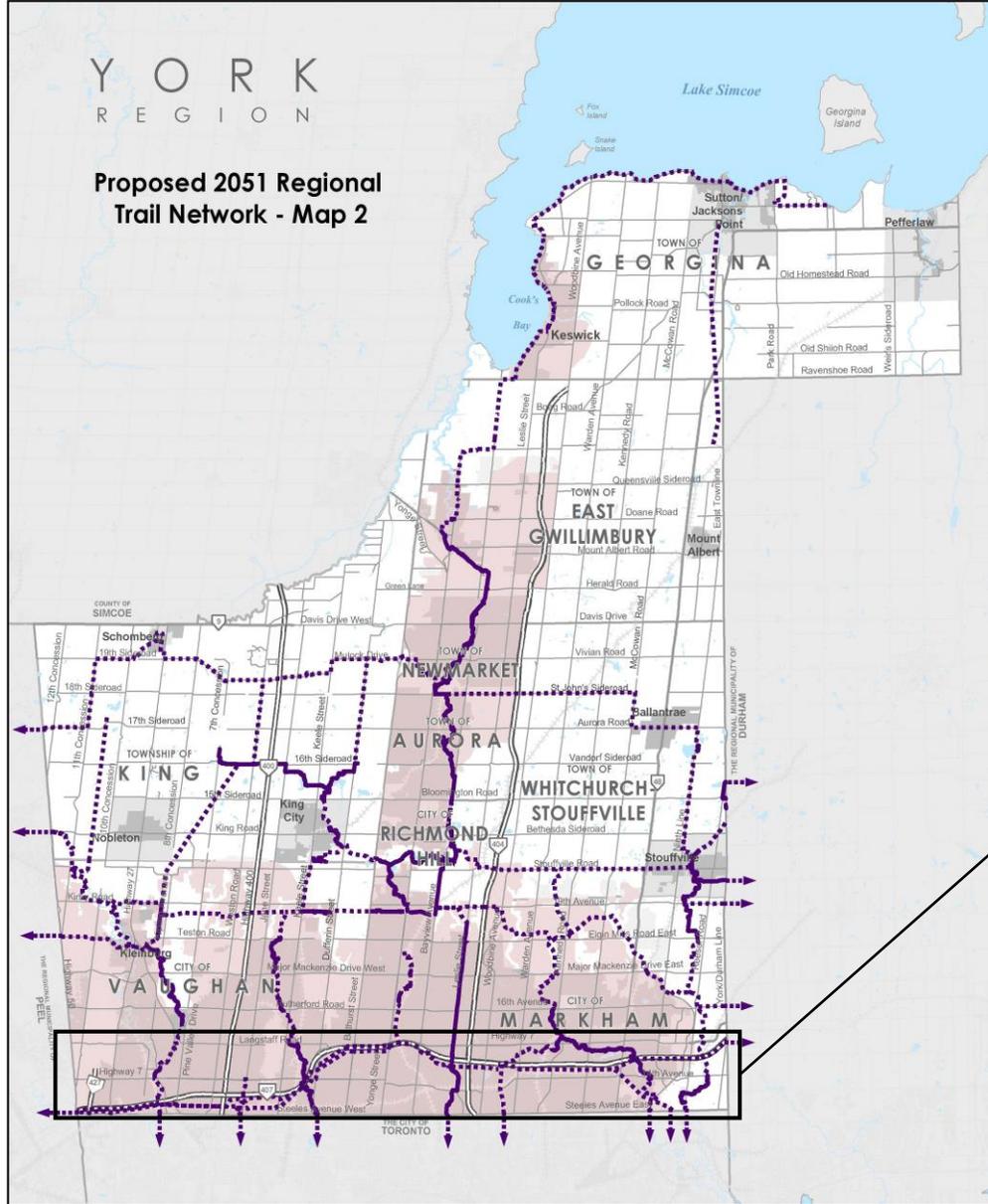


Cornell Bus Terminal, City of Markham

# PLANNING FOR ALL MODES OF TRAVEL



# ACTIVE TRANSPORTATION IN THE CITY OF MARKHAM



## South York Greenway Cycling, Pedestrian and Micromobility Route

- Feasibility study underway for 50km+ of active transportation infrastructure east-west across York Region connecting to the Cities of Markham, Richmond Hill and Vaughan



# KEY MESSAGES

- Council-approved Capital Program that balances growth and asset management needs
- Construction planned at 26 locations this year
- Actively preparing projects for future construction
- Utility relocation and advanced work underway for future growth projects



# QUESTIONS/DISCUSSION

## FOR MORE INFORMATION

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