

# **Eastern Ontario Highway Infrastructure Update**

**National Capital Heavy  
Construction Association  
Ottawa**

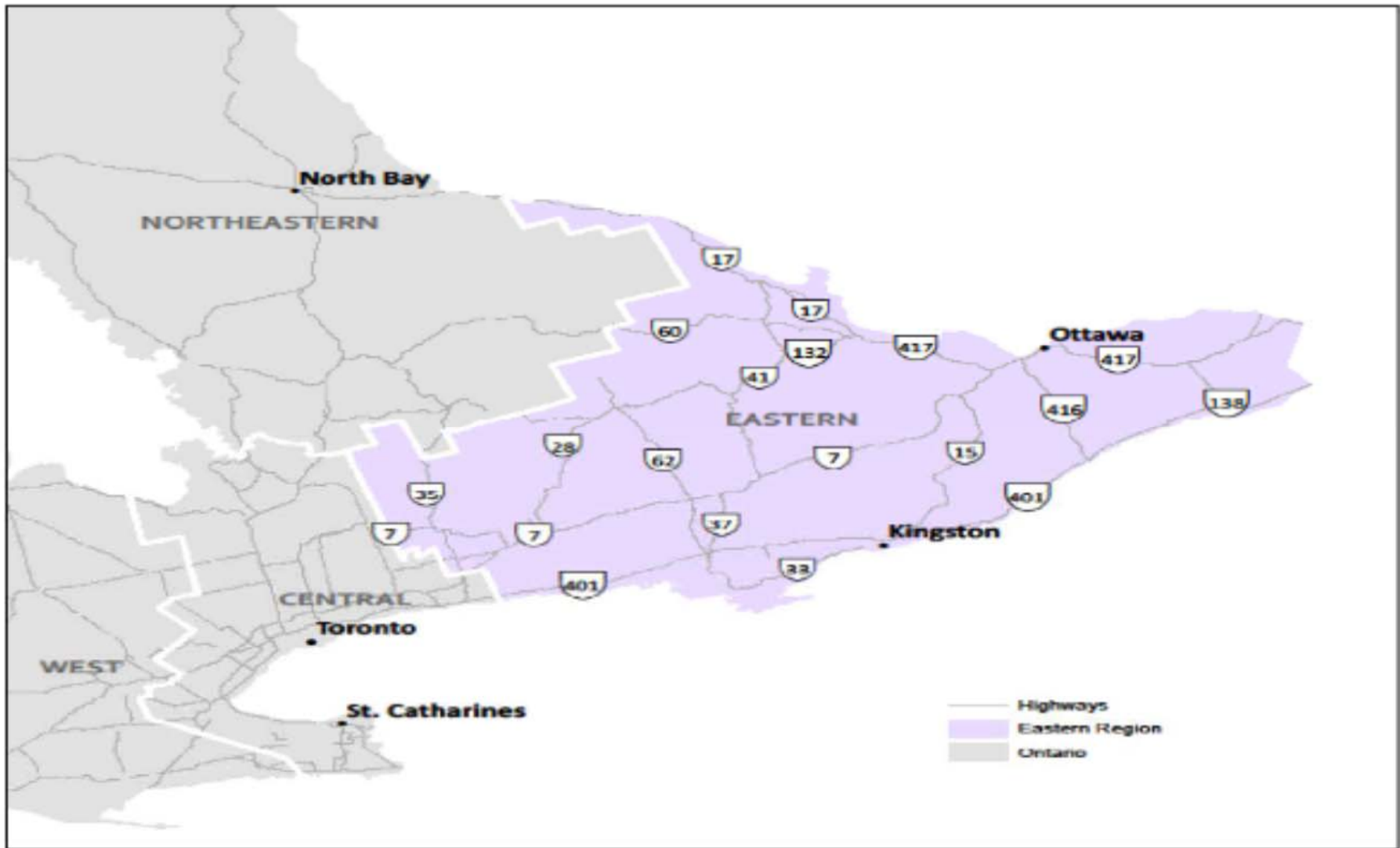
**January 15, 2018**

# Outline

- Major Tenders Profile
- Capital Budget Expenditures
- Eastern Region Accomplishments
- Expansion ~ Ottawa Area
- 2018-2021 Expansion & Rehab Program
- Cycling
- Delivery Models
- The Road Ahead



# Eastern Region



# 2017 Major Tenders Profile

January 1 to December 31, 2017 tenders

	Major Head Office Tenders	Major Regional Tenders***	Total Tenders*
Jan-Mar	63	25	88
Apr-June	34	32	66
July-Sep	16 <i>(15 – 20 planned in Aug/17)</i>	9 <i>(15 – 20 planned in Aug/17)</i>	25 <i>(30 - 40 planned in Aug/17)</i>
Oct-Dec (Planned)	20-25	10-15	30-40
<b>Total*</b>	<b>133-138</b> <i>(119 in 2016)</i>	<b>76-81</b> <i>(44 in 2016)</i>	<b>209-219</b> <i>(214 – 234 planned in Aug/17)</i> <i>(163 in 2016)</i>
<b>Value**</b>	<b>\$1,400M - \$1660M</b> <i>(\$1,163M in 2016)</i>	<b>\$100M to \$140M</b> <i>(\$113M in 2016)</i>	<b>\$1,500 to \$1,800M</b> <i>(\$1,276M in 2016)</i>

\* Tenders advertised

\*\* includes Contract Administration and sundry costs.

\*\*\* includes all regional tenders greater than \$100K

# January 1, 2018 – March 31, 2018

- **70-80** early tenders are planned to be advertised from January 1<sup>st</sup> to March 31<sup>st</sup> 2018
- Estimated total value of **\$600** million

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## Early Tenders (Jan to Mar) – Major Head Office and Regional

	<b>Total</b>
<b>2012/13</b>	<b>47</b>
<b>2013/14</b>	<b>43</b>
<b>2014/15</b>	<b>62</b>
<b>2015/16</b>	<b>78</b>
<b>2016/17</b>	<b>88</b>
<b>2017/18 (Planned)</b>	<b>70-80</b>

## Construction Budget/Expenditure - Comparison

<i>ACTUALS</i>	<i>\$millions</i>	Rehab	Expansion Traditional	Expansion AFP	Total
<b>2014/15 Budget</b>		1,131	406	941	2,478
Expenditures* (% of Budget)		1,086 96%	410 101%	813 86%	2,309 93%
<b>Over/(Under) Spending</b>		<b>(45)</b>	<b>4</b>	<b>(128)</b>	<b>(169)</b>

<i>ACTUALS</i>	<i>\$millions</i>	Rehab	Expansion Traditional	Expansion AFP	Total
<b>2015/16 Budget</b>		1,173	588	685	2446
Expenditures (% of Budget)		1,289 110%	361 61%	697 102%	2347 96%
<b>Over/(Under) Spending</b>		<b>116</b>	<b>(227)</b>	<b>12</b>	<b>(99)</b>



## Construction Budget/Expenditure - Comparison

<i>ACTUALS</i>	<i>\$millions</i>	Rehab	Expansion Traditional	Expansion AFP	Total
<b>2016/17 Budget</b>		1,251	406	460	2,117
Expenditures (% of Budget)		1,355 108%	315 78%	348 76%	2,018 95%
<b>Over/(Under) Spending</b>		<b>104</b>	<b>(91)</b>	<b>(112)</b>	<b>(99)</b>

<i>ACTUALS</i>	<i>\$millions</i>	Rehab	Expansion Traditional	Expansion AFP	Total
<b>2017/18 Budget</b>		1,461	562	505	2,528
Expenditures (% of Budget)		TBD	TBD	TBD	TBD
<b>Over/(Under) Spending</b>		<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>

## 2017 Eastern Region (ER) Highway Construction Expenditures

<b>Expansion</b>	<b>\$ 23 M</b>
<b>Rehabilitation &amp; Preventative Treatments</b>	<b>\$ 203M</b>
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<b>Total</b>	<b>\$226 M</b>

**\* 2016 Total Expenditure \$243M**



## Eastern Region Accomplishments

Accomplishment	2017	2016	2015	2014	2013	2012
Additional Highway widening ( Lane Km)	19	12	19	41	-	22
Pavement Rehabilitated (Lane km)	300	415	401	467	543	587
New Bridges	-	3	-	-	-	2
Bridges Rehabilitated/Replaced	28	15	26	30	21	17
Structural Culverts Rehabilitated/Replaced	18	5	7	7	3	2

## Ongoing Eastern Region Expansion

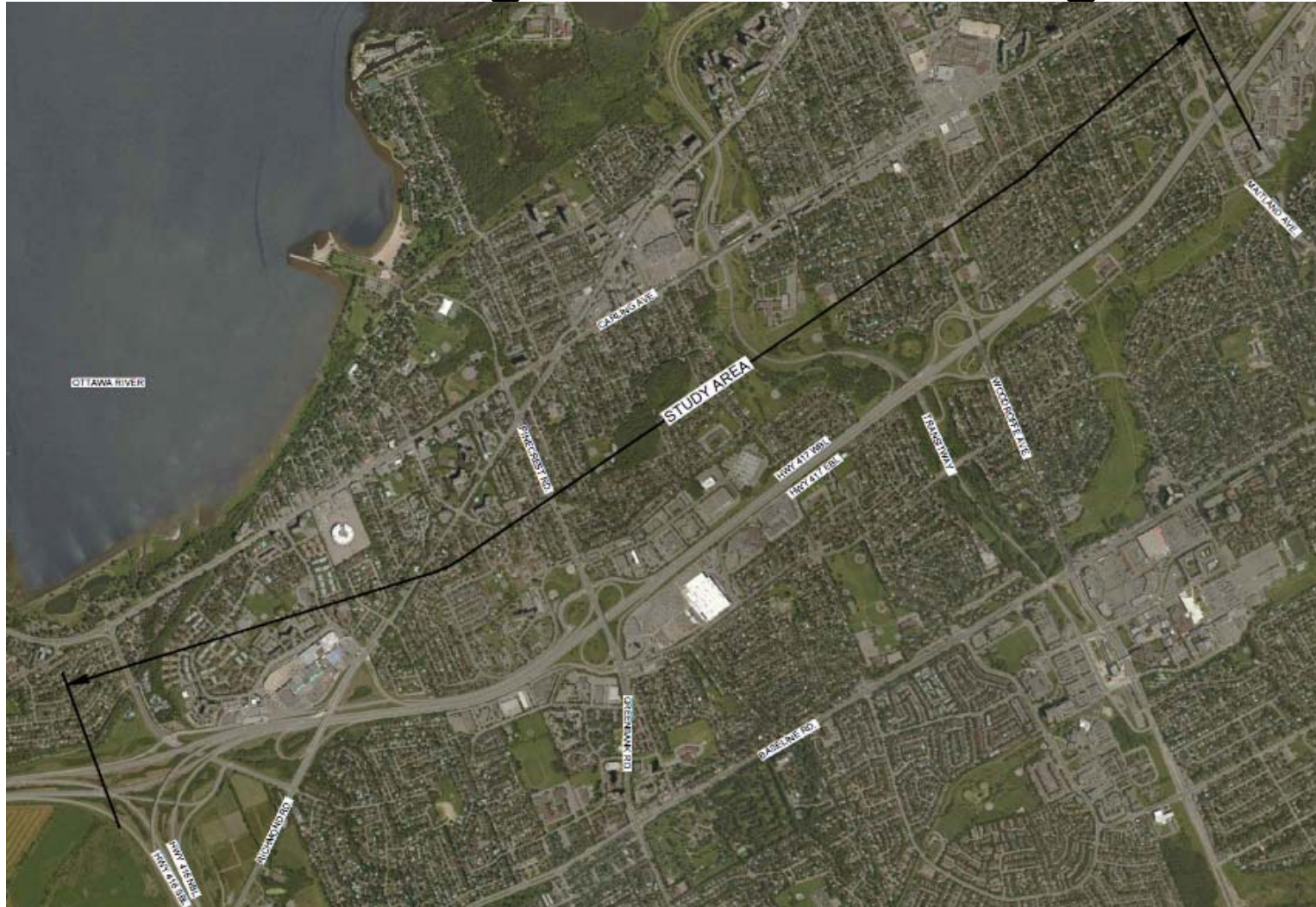
- Highway 417 Maitland Ave. to Island Park Dr. 6 to 8 Lane Widening (Underway)
- Highway 401, Burnham St. to East of Nagle Rd. 4 to 6 Lane Widening (Complete)

## Future Expansion Projects-Ottawa Area

- Highway 417 Bronson Avenue Interchange Improvements (Planned)
- Highway 417 Island Park Dr. to Metcalfe St. Noise Barriers (Planned)
- Highway 417 , Hwy 416 to Maitland Avenue, 6 to 8 Lane widening (Planned)

Note: Project timing is subject to change based on funding, planning, design, environmental approval, property acquisition and construction requirements.

# Highway 417, Hwy 416 to Maitland Avenue Six to Eight Lane Widening

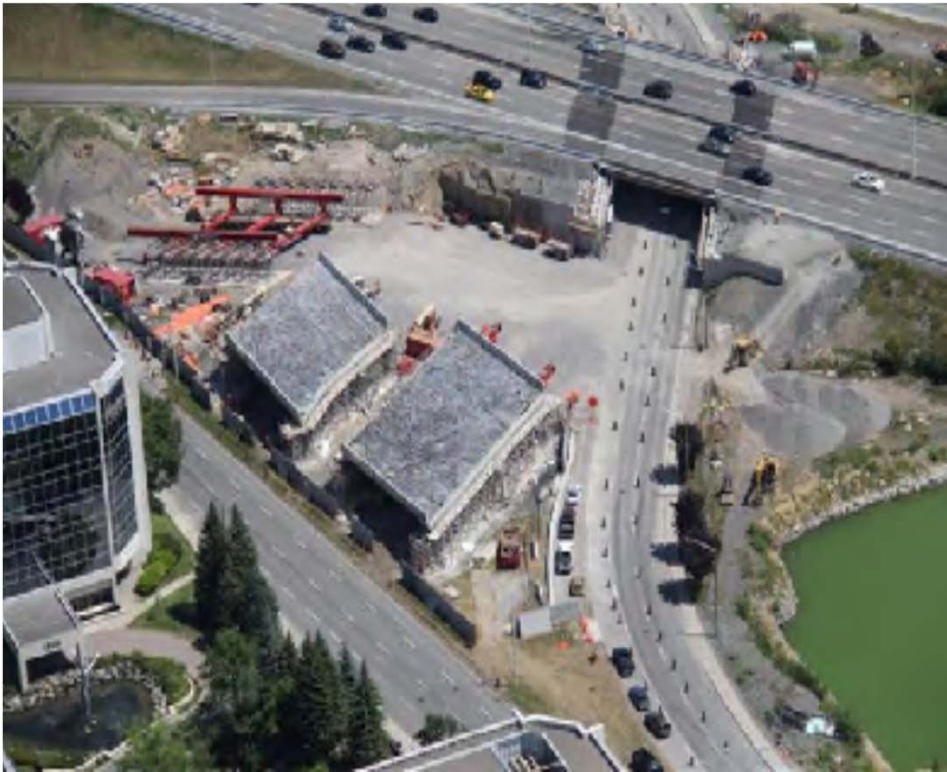


## Scope of Work - Expansion

- This project is being bundled with the City's Stage 2 OLRT extension project.
- Widening of Highway 417 to 4 lanes in each direction between Highway 416 and Maitland Avenue
- Replacement of Richmond Road, Pinecrest Road, Woodroffe Avenue and Maitland Avenue Underpasses
- Replacing sections of existing noise barriers within the project limits
- Construction of related works including retaining walls, replacement and upgrades to drainage, roadside protection, illumination, highway signage, Advanced Traffic Management System (ATMS) and landscaping
- Relocating utilities impacted by the highway widening



## Scope of Work – Bridge Rapid Replacements





# Pavement Rehabilitation Projects 2018

*~ 520 Lane kms*

*Highways 7, 17, 28, 33, 118, 132, 115, 401, 417*

*( Highway 417, Nicholas St to Ottawa Rd 174 and 6 km  
east to 6 km west of Hwy 34)*

*& non- structural culverts - various highways*

Note: actual timing of projects is subject to change based on funding, planning, design, environmental approval, property acquisition and construction requirements.

# Bridge Rehabilitation/Replacement Projects 2018

*~ 30-35 Bridges*

*Highways 7, 17, 28, 33, 49, 62, 115, 401, 417*

*(Highway 417 ~ 5 Bridges, from Walkley Rd to Ramsayville Rd  
and Nicholas St. Bridge)*

*structural culverts - various highways*

Note: actual timing of projects is subject to change based on funding, planning, design, environmental approval, property acquisition and construction requirements.

# Pavement Rehabilitation Projects 2019 to 2021

*~ 300-350 Lane km per year*

*Highways 7, 17, 33, 35, 37, 41, 60, 62, 115, 148, 401  
and*

*(~ 85 Ln km Hwy 417 & ~ 90 Ln km Hwy 7, Ottawa Area )*

*& non- structural culverts - various highways*

Note: actual timing of projects is subject to change based on funding, planning, design, environmental approval, property acquisition and construction requirements.

# New Bridge Rehabilitation/Replacement Projects 2019- 2021

*20-25 Bridges per year*

*Highways, 7, 17, 28, 35, 62, 115, 401, 416, 417*

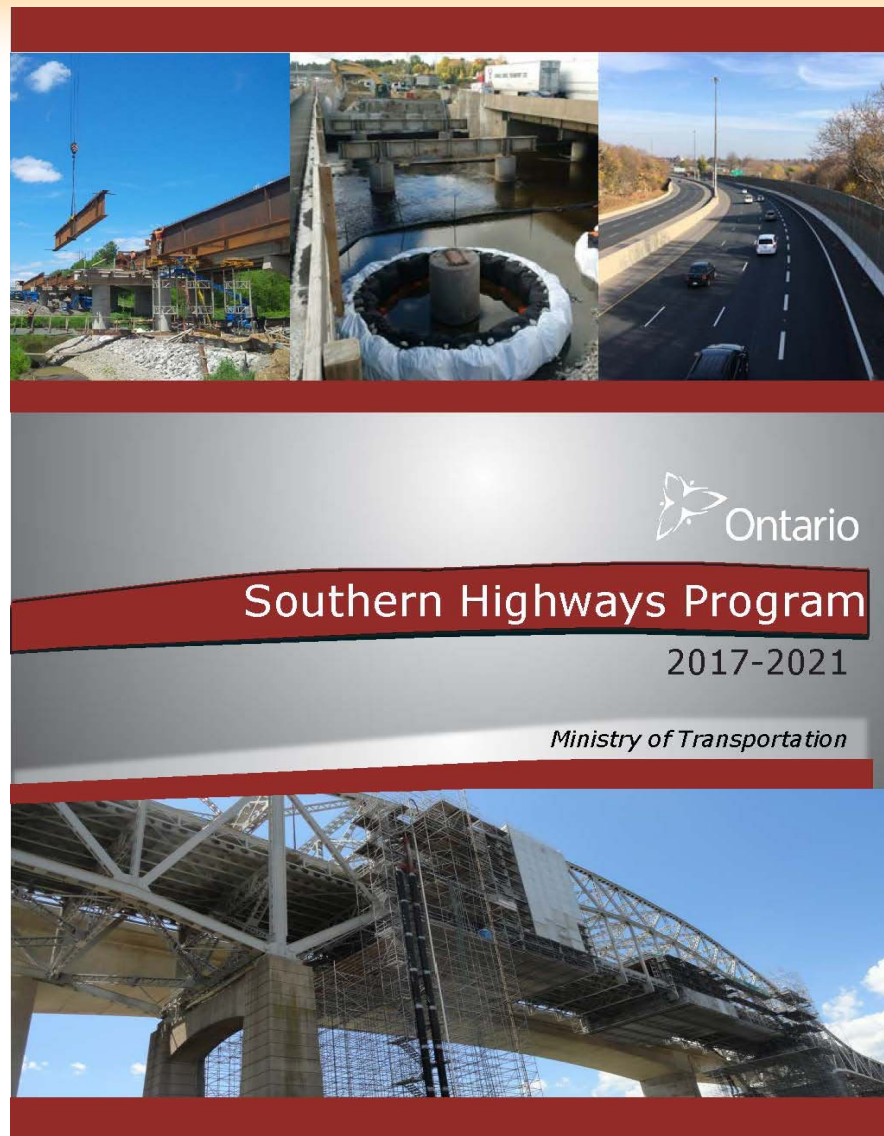
*( ~ 25 bridges Ottawa Area)*

*& structural culverts - various highways*

Note: actual timing of projects is subject to change based on funding, planning, design, environmental approval, property acquisition and construction requirements.

# Southern Highways Program 2017 - 2021

<http://www.mto.gov.on.ca/english/highway-bridges/southern-and-northern-highways-programs.shtml>



# Draft Province-wide Cycling Network

## Draft Network Summary

- Over 8,000km of routes identified, based on the online engagement and workshops
- About 70% under municipal jurisdiction and about 30% under provincial jurisdiction
- Approximately half on existing cycling infrastructure
- 45% on existing major trails and cycling routes in the province
- The draft province-wide cycling network was posted on the Environmental Registry for public comment from April 12 to May 26, 2017.

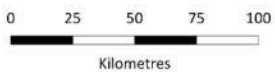




# DRAFT PROVINCE-WIDE CYCLING NETWORK ROUTE TYPES

MINISTRY OF TRANSPORTATION

-  Province-Wide Network On-Road Route
-  Province-Wide Network Off-Road Route



## Coming Up Soon

- **Early 2018**
  - Proposal for Action Plan 2.0 to be posted on the Environmental Registry for public comment.
  - Final report on identification of the province-wide cycling network to be released.
  - Work to begin on implementation plan for network.
  - #CycleON Action Plan 2.0 to be published.
- **Contact:** [CycleONStrategy@ontario.ca](mailto:CycleONStrategy@ontario.ca)

# Draft Province-wide Cycling Network

- Planning is underway to pave shoulders on province-wide cycling routes in Eastern Region within 5 year program.

Note: actual timing of projects is subject to change based on funding, planning, design, environmental approval, property acquisition and construction requirements.

# Eastern Region Delivery Models

- Design Bid Build (DBB)
- Design Build (DB)
- Construction Manager General Contractor (CMGC)

## CMGC Highway 417 CPR O-Train EB & WB Bridges

### Currently in Detail Design:

- First proposed use of Jack and Slide technology in Eastern Region
- Bridges will be reduced from 5 spans to a single span
- Demolition of the building on Young St under current bridge
- Will require full closure of Highway 417

## CMGC Highway 417 Preston Street to Percy Street

### Currently in Detail Design:

- Rapid Replacement of ten bridges/overpasses on Highway 417 at Preston Street, Rochester Street, Booth Street, Bronson Avenue and Percy Street utilizing heavy lift rapid bridge replacement technology.
- Operational improvements including: the re-alignment of the Bronson Avenue W-N/S ramp and Chamberlain Avenue, replacement of median concrete barrier with tall wall, new LED illumination, and replacement of the highway drainage system (storm sewers) from the CPR O-Train overpass to the Kent Street overpass.
- Replacement of existing noise barriers on Highway 417 (Ottawa Queensway) at various locations as well as installation of new noise barriers (retrofit) at various locations.



## The Road Ahead

- Continued focus on Pavements and Bridges
- Continued use of accelerated bridge construction
- Continued use of alternate delivery models

# Thank You