

Agenda

Transportation Master Plan Advisory Task Force

April 13, 2016

9:00 a.m.

Committee Room A

York Region Administrative Centre

17250 Yonge Street

Newmarket, Ontario

A. Disclosures of Interest

B. Opening Remarks

Daniel Kostopoulos, Commissioner of Transportation Services

C. Presentations

C.1 Overview of the TMP Phasing and Costs

Stephen Collins, Director, Infrastructure Management and PMO

C.2 Funding Principles

Kelly Strueby, Director, Office of the Budget

C.3 TMP Report Framework

Stephen Collins, Director, Infrastructure Management and PMO

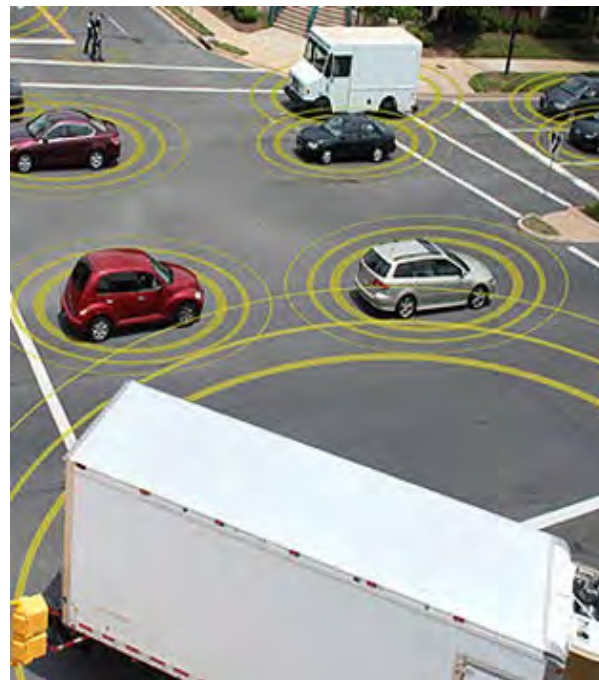
D. Next Steps

Daniel Kostopoulos, Commissioner of Transportation Services

Transportation Master Plan Advisory Task Force



Your community, your say.



Building an Inter-Connected System of Mobility

Daniel Kostopoulos

Wednesday, April 13, 2016

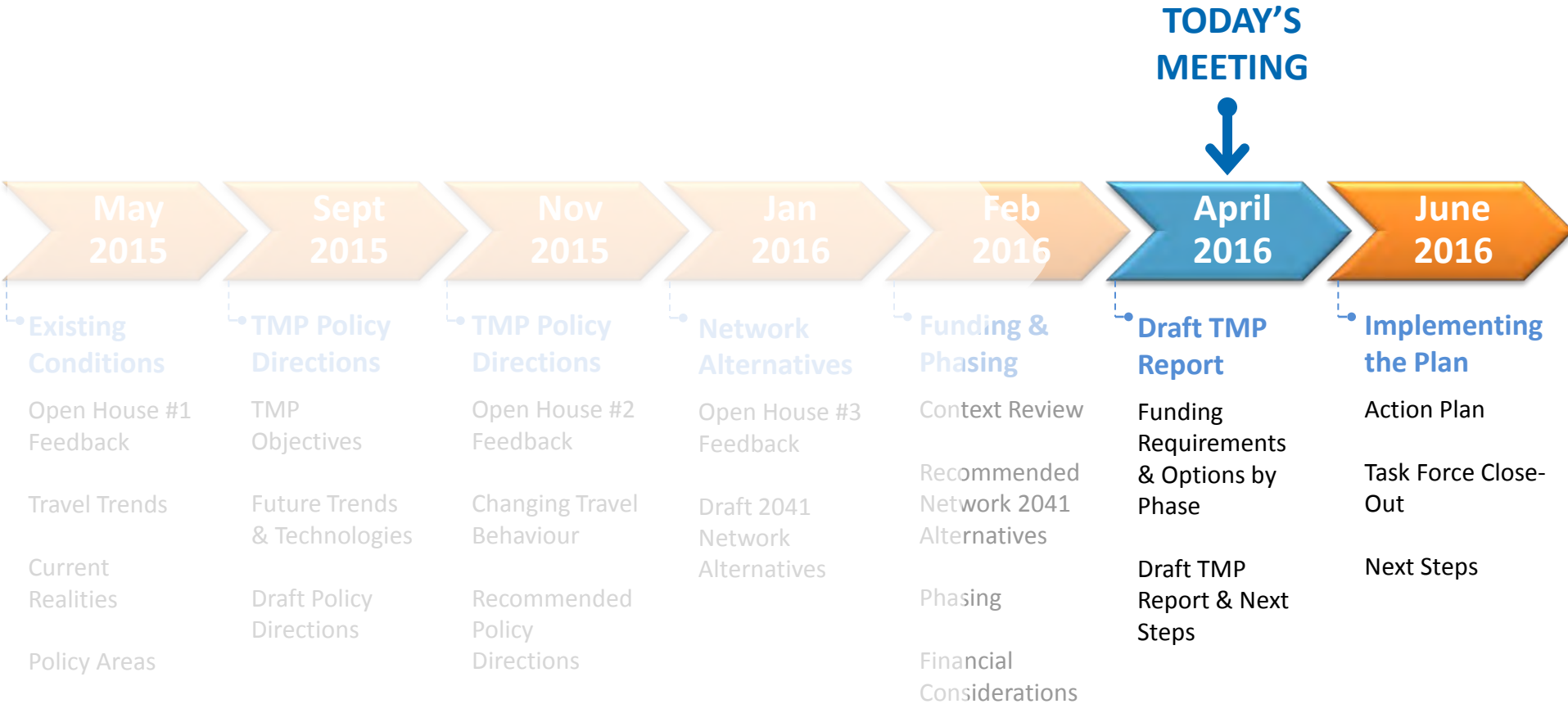


Meeting Overview

- What We've Heard
- Overview of Network Phasing and Costs
- Funding Principles
- Introduction to the Draft Transportation Master Plan



Meeting Purpose



Council Presentations

Municipality	Meeting	Comments Received via...
City of Vaughan	Feb 9	Staff Report to Council
Town of Aurora	Feb 23	
Town of Richmond Hill	Feb 29	
City of Markham	March 1	Staff Memo
Town of Whitchurch-Stouffville	March 1	
Township of King	March 7	
Town of Newmarket	April 4	Staff Report to Council
Town of East Gwillimbury	April 5	
Town of Georgina	April 6	

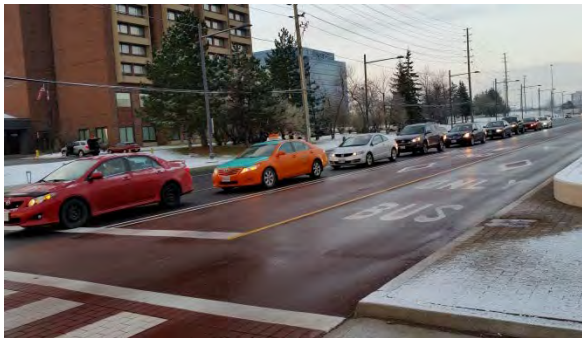
Received as of April 12th 2016

What We've Heard: Council Presentations



Finer Grid Network

- ✓ Regional funding in eliminating barriers in collector road network supported
- ✓ Mid-block crossings of 400-series highways and ramp extensions supported
- ✓ Grade separations and Langstaff missing link are priorities
- Left turn-restrictions avoid infiltration into stable communities



What We've Heard: Council Presentations

Corridor Evolution

- ✓ Widening to 6-lanes for higher order / HOV supported
- ✓ Principle of moving the most people within the network supported
- Consider traffic volumes and connectivity when planning HOV lanes
- Converting existing 4-lane roads to HOV may be challenged given existing congestion and capacity needs



What We've Heard: Council Presentations



Commuter Parking Management

- ✓ Commuter Parking Management Strategy supported
- ✓ On-street parking policy on Regional roads supported
- ✓ Transit and ride-sharing should service GO transit stations and commuter parking lots
- Clarify roles and responsibilities with new approach



What We've Heard: Council Presentations



Goods Movement

- ✓ Regional goods movement hierarchy and policy are supported
- ✓ Consider emerging and demand management approaches to goods movement (off-peak deliveries, etc.)



What We've Heard: Council Presentations



Boulevard Jurisdiction

- ✓ Regional assumption of responsibility for boulevard elements along Regional streets supported
- ✓ DC Fund to collect monies for boulevard elements is supported
- ✓ Separated bicycle lanes are supported
- ✓ A context sensitive approach is supported
- Maintaining a high level of service is important



What We've Heard: Environics Survey



52%

of residents identify transportation as the single most important issue, far outweighing all other factors, including taxes, housing and health care

Transportation has been an increasingly important local issue for



46% 

of residents support construction during evenings and weekends, even with incremental costs, in order to minimize traffic impacts



80%

Of residents consider a commute longer than 45 minutes unacceptable



 **58%**

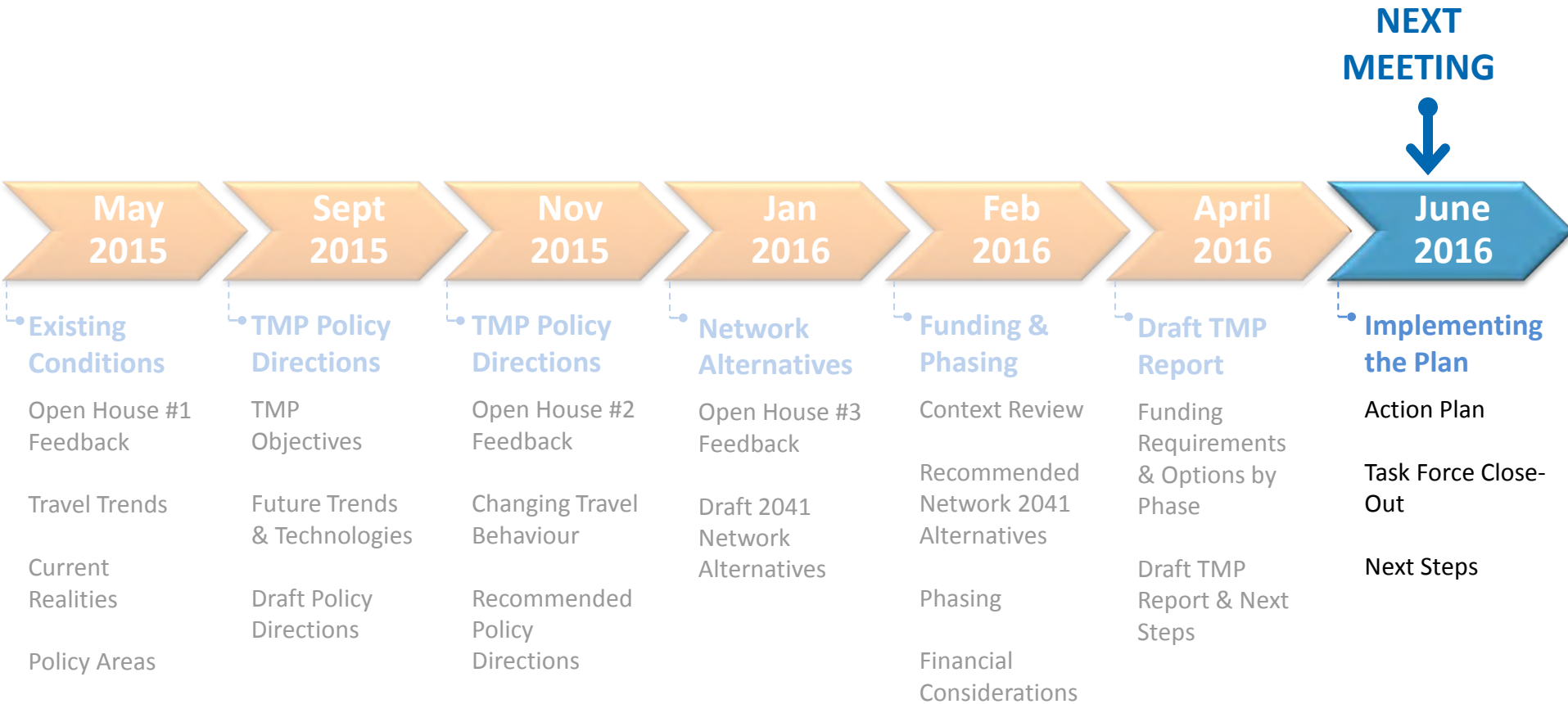
Of residents would use commuter parking lots and York Region express shuttles if it reduced travel time

60%

of residents would consider not driving if they were charged \$5 for parking



Upcoming TMP Task Force Meetings



Transportation Master Plan Advisory Task Force



Your community, your say.



Network Phasing and Costs

Stephen Collins

Wednesday, April 13, 2016



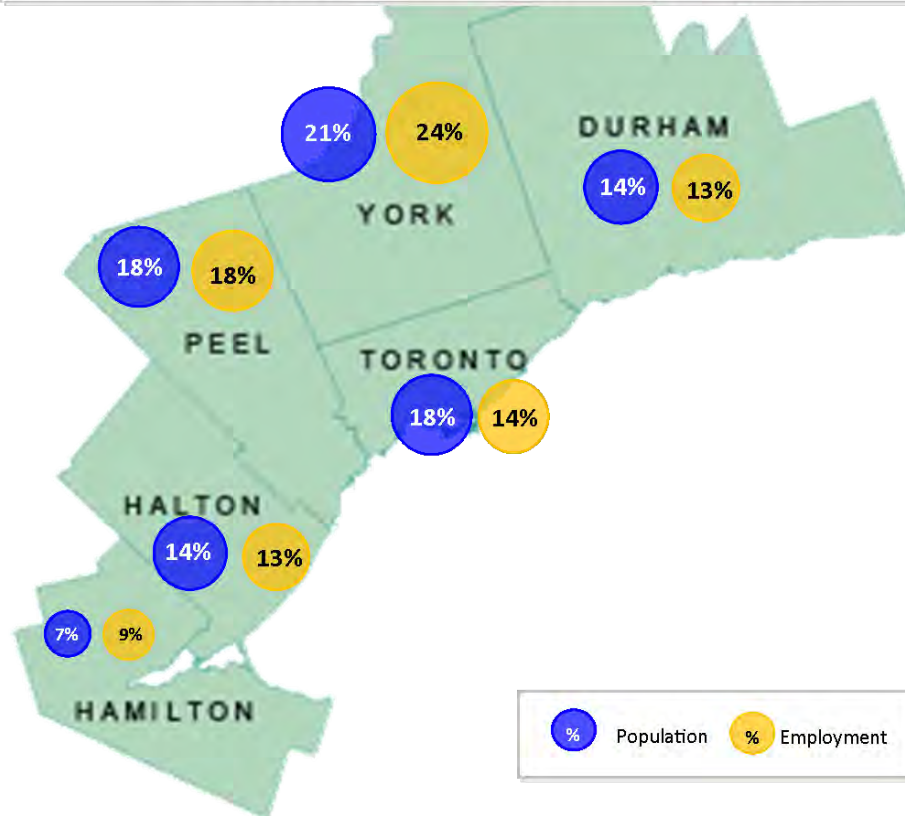
York Region is Growing Up...



Increased Urbanization, Intensification and Traffic Congestion

York Region is Growing Up

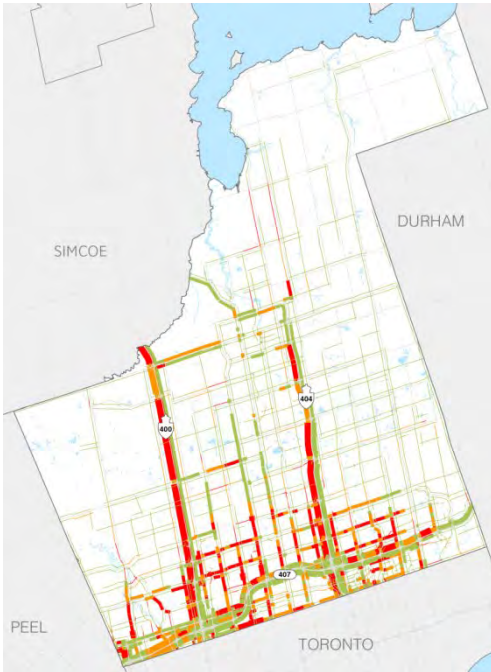
Proportion of Population and Employment Growth accommodated by GTHA Regions



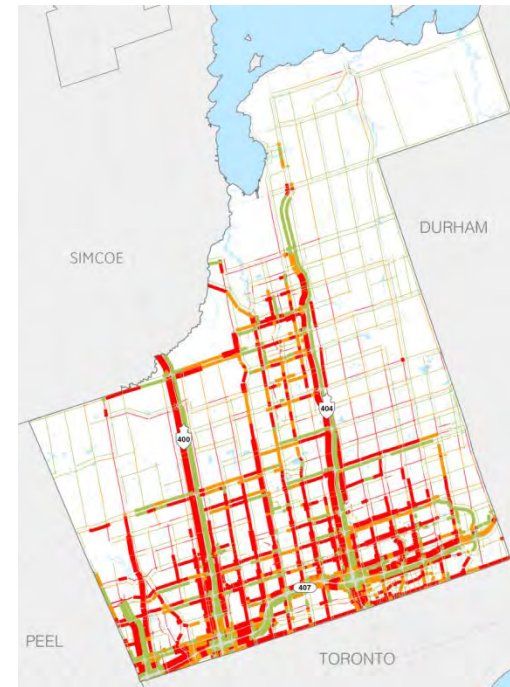
York Region will receive the greatest proportion of growth in the GTHA

Projected Congestion

Existing Situation 2011 AM Peak Hour



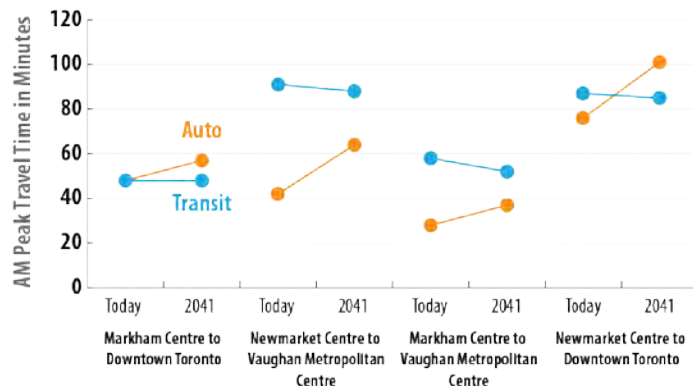
Future Base Case Scenario 2041 AM Peak Hour



Congestion is a reality now and under any future scenario

Focus on Transit

Despite expanding road capacity, travel times by car will worsen



Source: Google, York Region Travel Demand Model

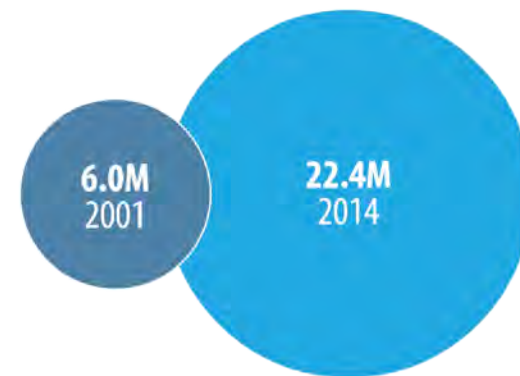
Auto travel times between major centres are projected to increase, even with planned roadway improvements.

Investment in transit, including rapidways and expanded GO Transit service, is projected to either **maintain or improve transit travel times in the future.**

Transit use is increasing

Transit is becoming a more attractive option for York Region residents with annual ridership on YRT/Viva outpacing population growth.

YRT/VIVA ANNUAL RIDERSHIP



Source: YRT/Viva

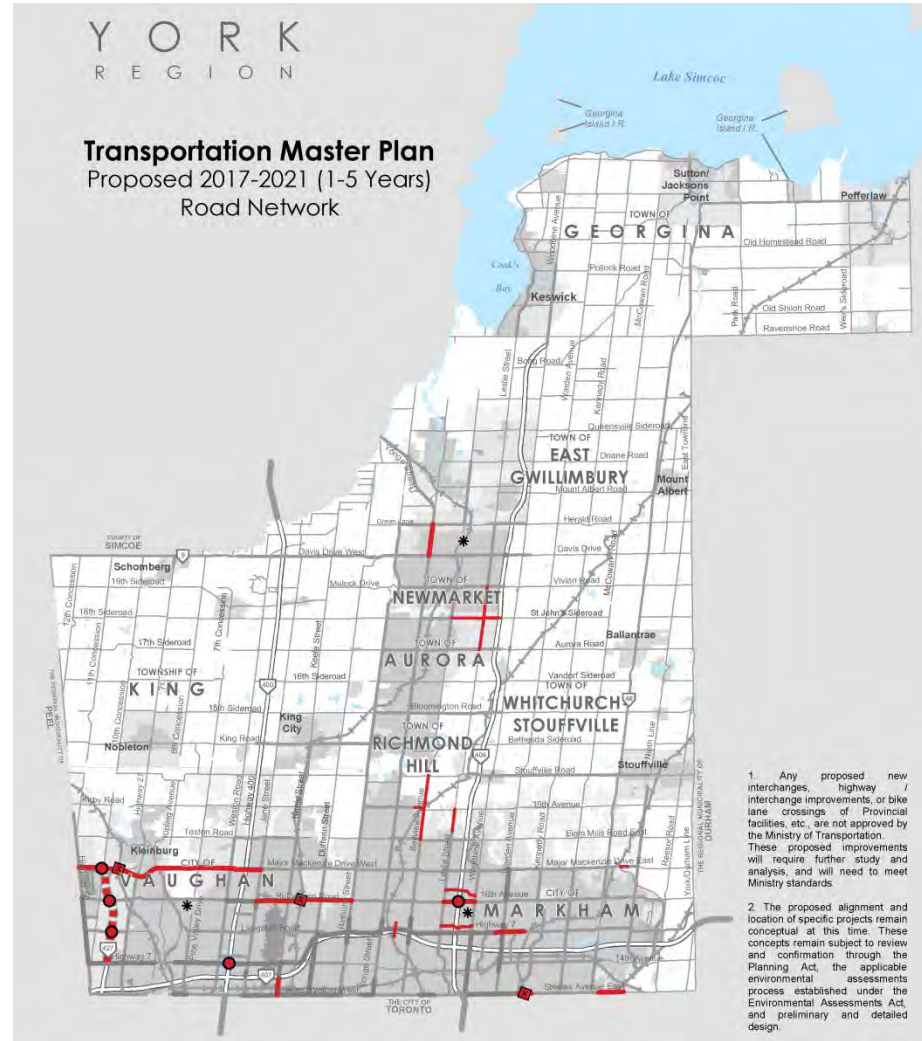
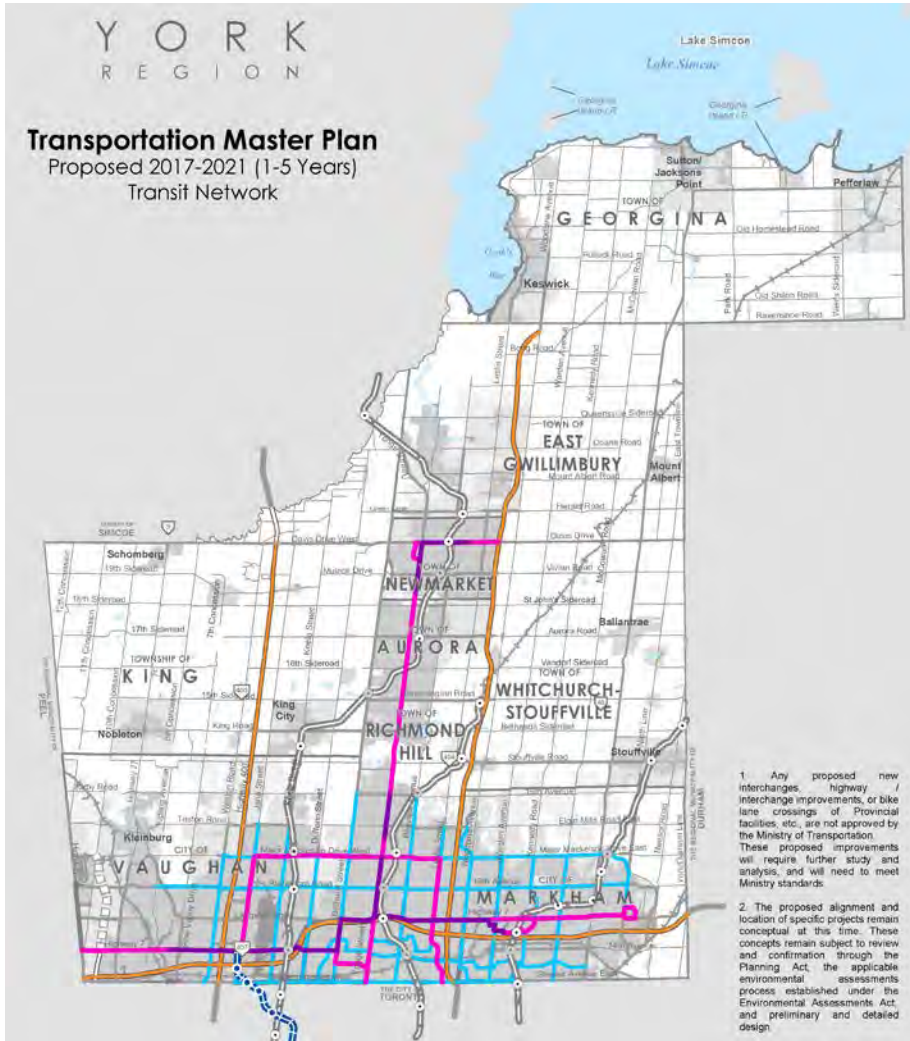
Changes in travel behaviour also needed in addition to expanding transportation capacity

TMP Objectives

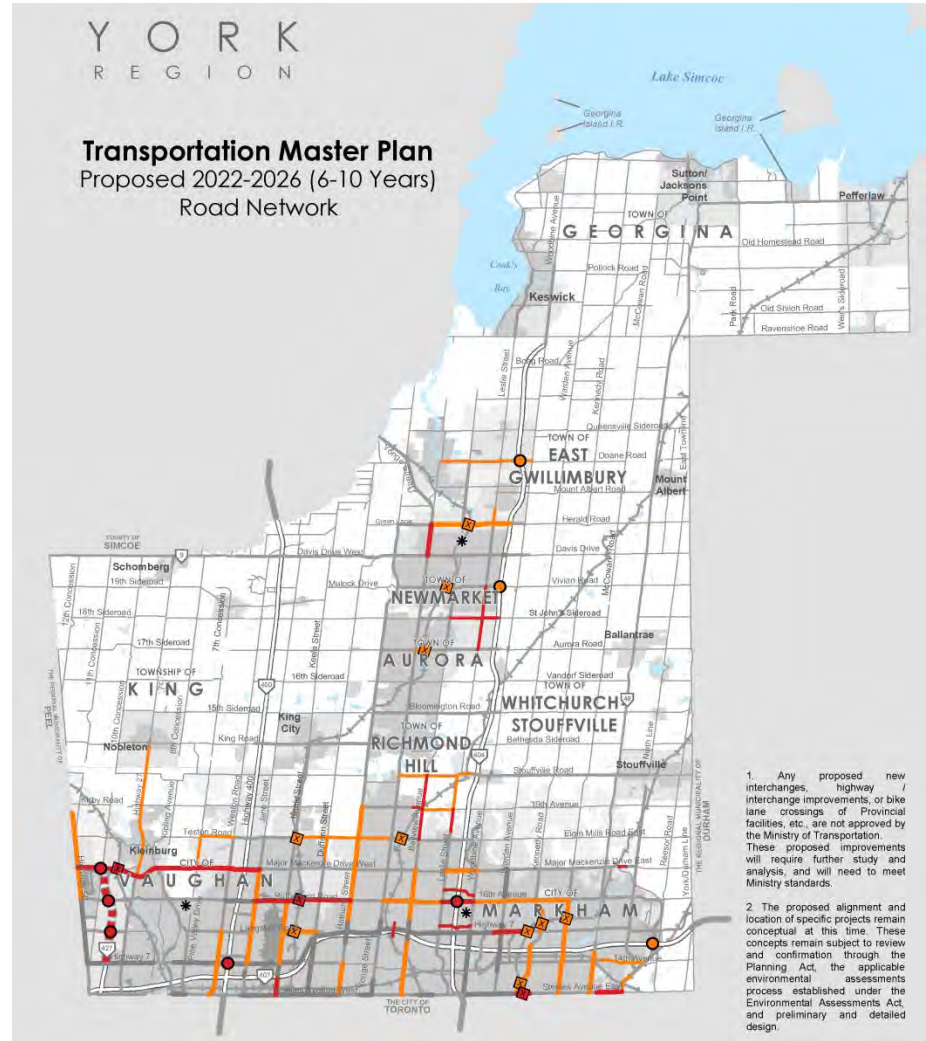
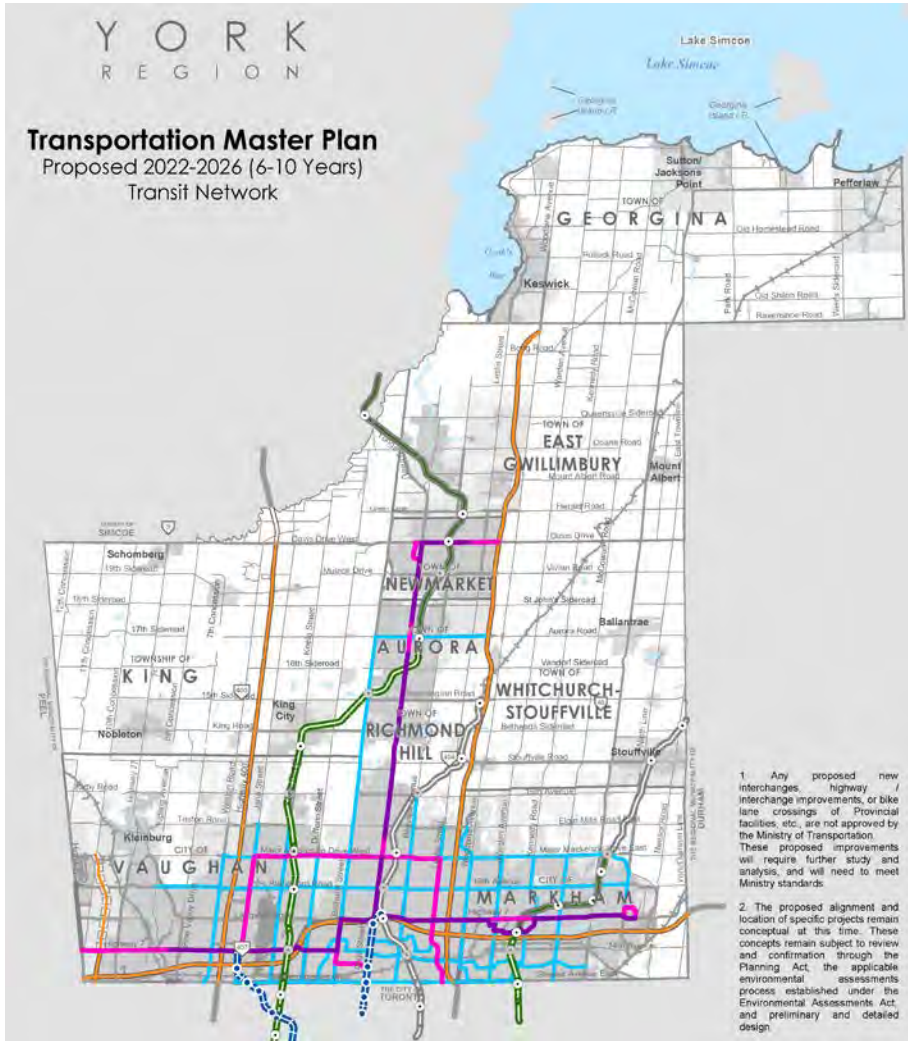
- ① Create a World Class Transit System
- ② Develop a Road Network fit for the Future
- ③ Integrate Active Transportation in Urban Areas
- ④ Maximize the potential of employment areas
- ⑤ Making the “Last Mile” work



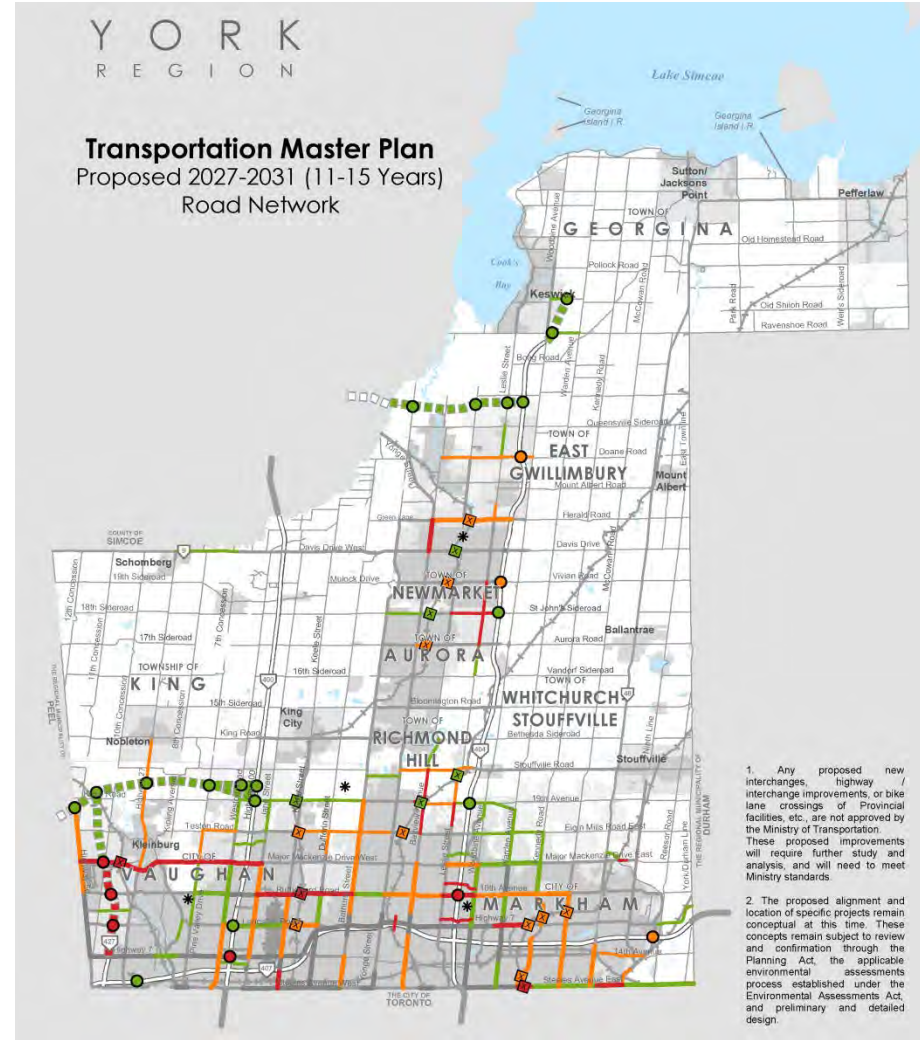
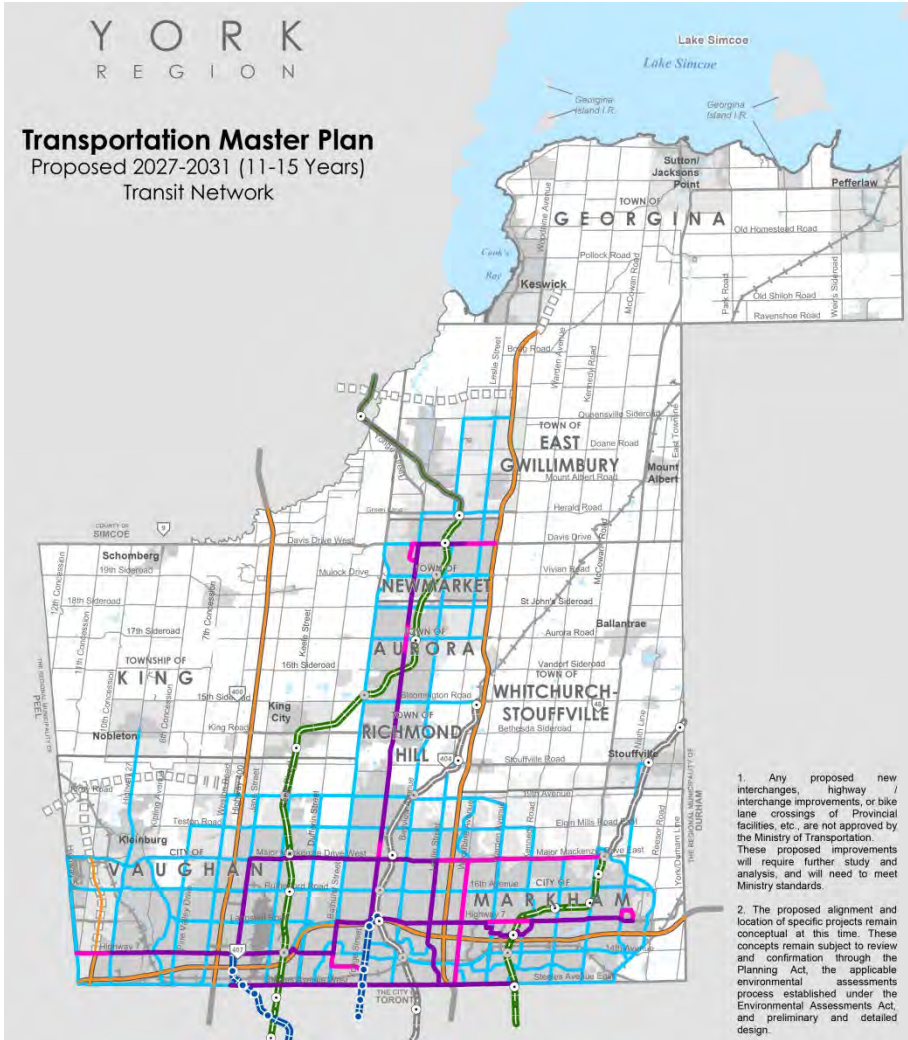
Phasing the Plan: To 2021



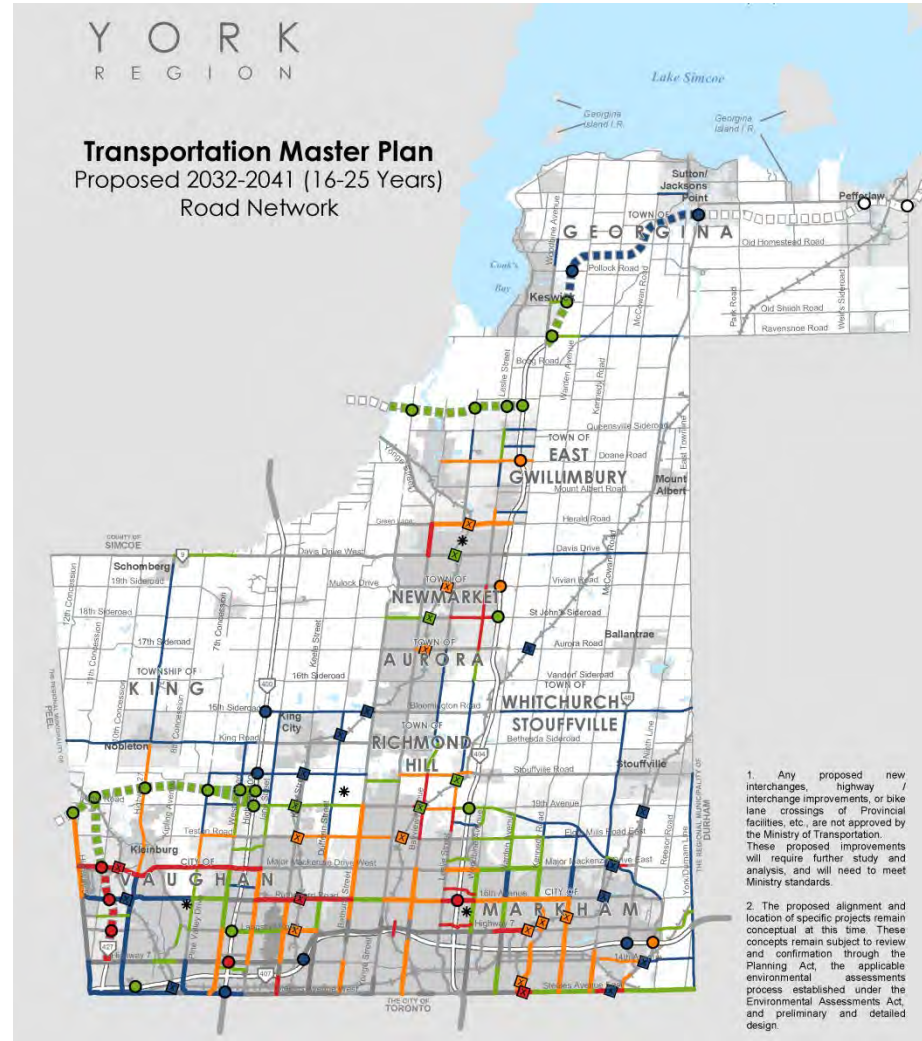
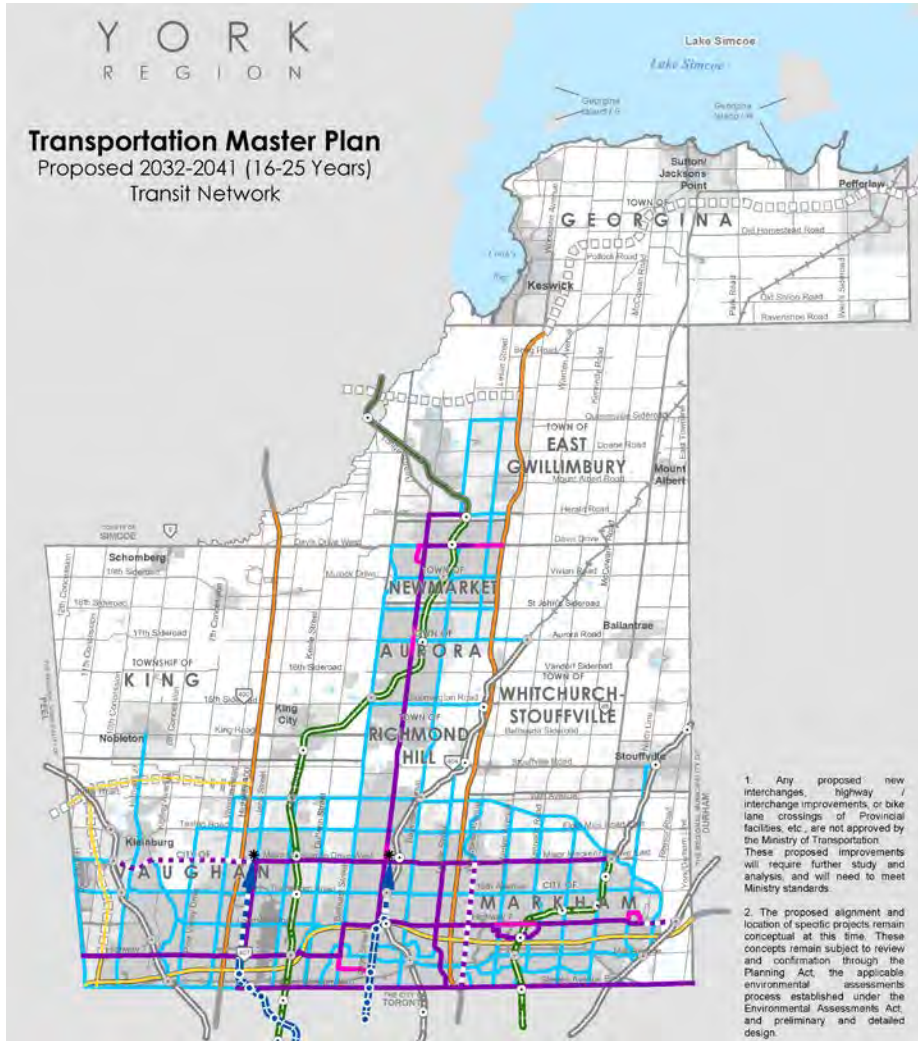
Phasing the Plan: 2022 to 2026



Phasing the Plan: 2027 to 2031



Phasing the Plan: 2032 to 2041



Total Capital Costs by Phase

\$M	To 2021	2022 to 2026	2027 to 2031	2032 to 2041	Total	York Region
CAPITAL COSTS						
Transit	379	4,203	2,588	1,719	8,888	823
Rapid Transit	205	4,048	2,423	1,389	8,065	-
Conventional	174	155	165	329	823	823
Roads	898	1,901	2,213	2,572	7,585	7,112
TOTAL	\$1,277	\$6,105	\$4,801	\$4,291	\$16,474	\$7,935
STATE OF GOOD REPAIR						
Transit					1,154	1,154
Rapid Transit					735	-
Roads					3,750	3,750
TOTAL STATE OF GOOD REPAIR					\$5,639	\$4,904
TOTAL MASTER PLAN COSTS					\$22,113	\$12,839



Financial Implications of the Draft Transportation Master Plan

Kelly Strueby and Ed Hankins

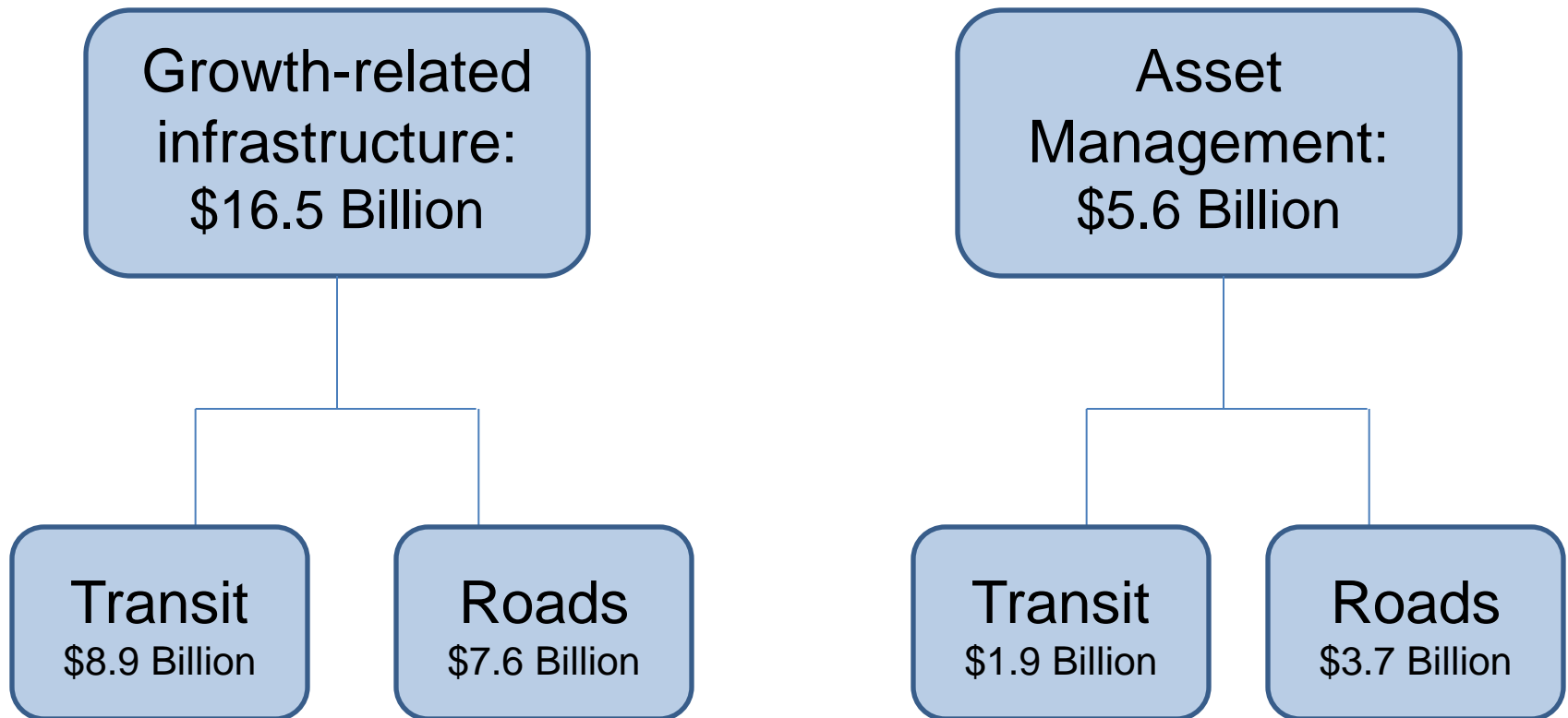
April 13, 2016

Outline

- Introduction
- The Capital Plan and the Transportation Master Plan
- Funding Transportation Asset Management
- Funding Growth-Related Transportation Investment
- Debt
- Conclusion and Path Forward

Introduction

The draft Transportation Master Plan has an estimated total cost of \$22.1 billion over 25 years



Fiscal Considerations

Capital Plan

- Overall size
 - Priority setting: transportation vs. other infrastructure and within transportation
-

Development Charges

- Future development charge revenue
-

Debt

- Total outstanding debt
 - Cost of debt servicing
 - Credit rating
-

Tax Levy

- Implications for pay-as-you-go capital
 - Tax-levy impact of non-DC-able growth-related infrastructure
 - Operating impact of new assets
-

Reserves

- Adequacy of capital asset replacement contributions (relates to tax levy)
-

Other Revenue Sources

- Funding from other levels of government
- Potential for new revenue sources

Preliminary funding analysis

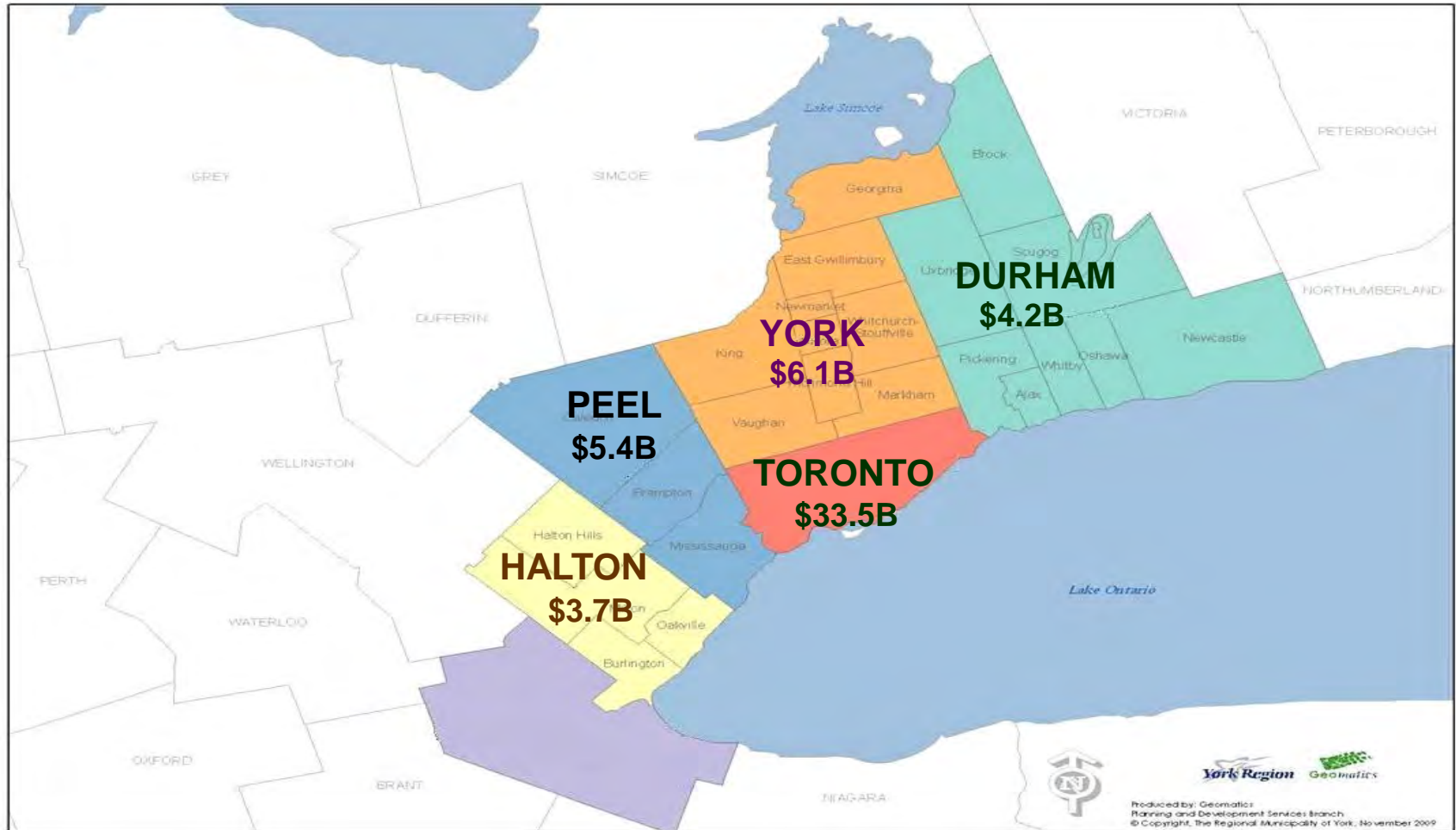
- ❑ The financial analysis should be treated as early estimates that will be revised based on:
 - ❑ Full use of Finance's forecasting models, which was not possible in the time frame
 - ❑ Factoring in the impact of the Environmental Services Master Plan and other long-term capital needs
 - ❑ Revised development charge rates and collection forecasts
 - ❑ The fiscal impact analysis associated with the Municipal Comprehensive Review
- ❑ The financial analysis is expected to be further developed by Fall 2016

Preliminary findings

- ❑ Implementation of the draft Transportation Master Plan would require:
 - ❑ Large financial commitments from other levels of government
 - ❑ An increase in development charge rates
 - ❑ Property tax increases
 - ❑ Entirely new revenue sources
- ❑ Implications of draft Master Plan for debt:
 - ❑ Peak outstanding debt would continue to increase until at least 2030
 - ❑ Tax levy debt would have to be issued

The Capital Plan and the Transportation Master Plan

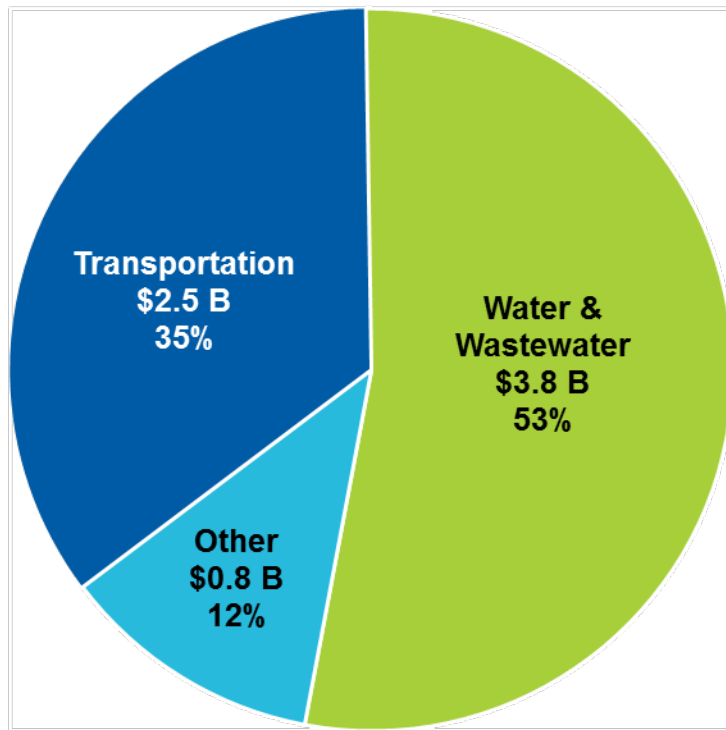
York's current ten-year capital plan is the largest in the 905



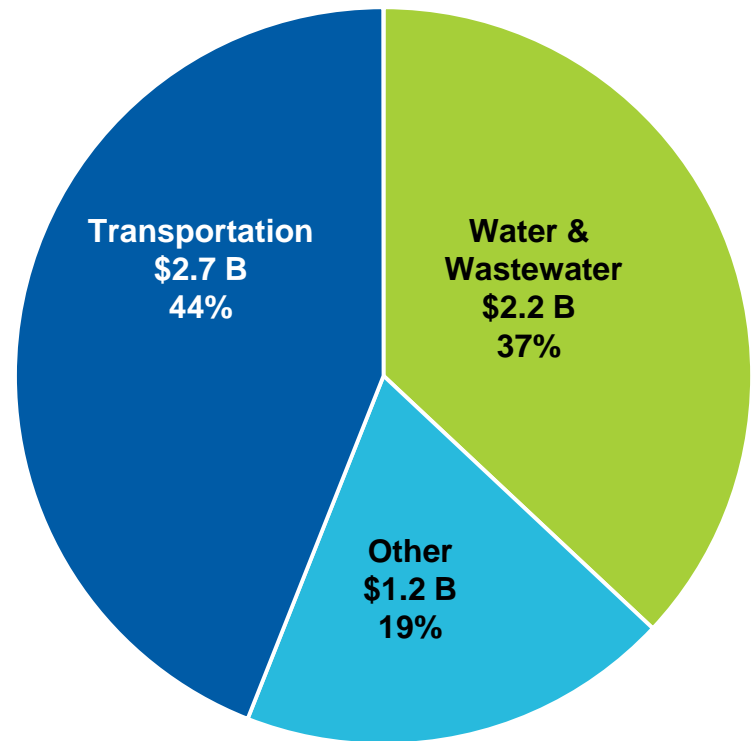
Figures reflect Ten-Year Capital Plans approved in 2016.

Increasing emphasis on transportation investment in the capital plan

Capital Expenditure
2006-2015 - \$7.1 Billion



Ten-Year Capital Plan
2016-2025 - \$6.1 Billion



Key assumptions on cost-sharing for this analysis

Infrastructure	Region's Contribution (%)	Description
Yonge subway	0	
VivaNext rapidways	0	
Grade separations	15 to 85	4 are assumed to be funded by Metrolinx at 85% with the remaining likely to be funded by York at 85%
Transit facilities and fleet expansion	45	
Road widening/new roads	99	
Steeles Avenue	50	Widening and future rapid transit

- Remaining infrastructure, which includes new interchanges, mid-block crossings and intersections are assumed to be 100% funded by the Region
- Cost-sharing assumptions will be revised as more information becomes available

Draft Transportation Master Plan would require major spending increases

- The Region's annual transportation capital spending would need to almost double compared to the last ten years

Transportation Capital	Average Annual Spending (\$M)	
	2006-2015	Regionally-funded portion of TMP
Average Annual Spend	250	494

Funding Asset Management in the Transportation Master Plan

Budgeting for asset management

Asset Management

```
graph TD; AM[Asset Management] --- P[Pay-as-you-go capital]; AM --- R[Reserves (non-DC)]; P --- P1[Repairs and routine rehabilitation (not maintenance)]; P --- P2[Growth capital not covered by DCs]; R --- R1[Major life-cycle rehabilitation]; R --- R2[Asset replacement];
```

Pay-as-you-go capital

- Repairs and routine rehabilitation (not maintenance)
- Growth capital not covered by DCs

Reserves (non-DC)

- Major life-cycle rehabilitation
- Asset replacement

Asset management plan for transportation is under development

- ❑ Transportation Services is working on an asset management plan, expected to be completed by the end of 2016
- ❑ Excluding rapidways, the draft Transportation Master Plan estimates \$4.9 billion over 25 years, which is approximately 3.1 times the current annual spend

Average Annual Spending
Transportation Asset Management
(\$ millions)

Ten-year Capital Plan	63.8
Draft Master Plan	196.2

Approach to pay-as-you-go capital

- ❑ The level of pay-as-you-go capital funding for roads will be re-assessed:
 - ❑ The appropriate amount of pay-as-you-go capital will be determined through the asset management planning process and associated financial analysis
 - ❑ An increase could be included in the 2019-2022 multi-year budget for Council's consideration

Approach to asset replacement funding

- ❑ Asset replacement reserve contributions are rising in line with Council's approved policy
- ❑ Approximately half is intended for transportation
- ❑ The adequacy of the contributions will be evaluated when the asset management plans are developed

Asset Replacement Reserve Contributions
All Sectors (\$ millions)

2015	2016	2017	2018
75	92	112	117

Key messages

- ❑ Higher levels of investment in pay-as-you-go capital are likely needed
- ❑ Additional contributions to asset replacement reserves may also be needed
- ❑ A request for additional tax-levy funding could be included in the next multi-year budget process (2019)

Funding Growth-Related Infrastructure

Timing and amount of growth-related infrastructure contingent on factors beyond Regional Control

Regionally
Funded

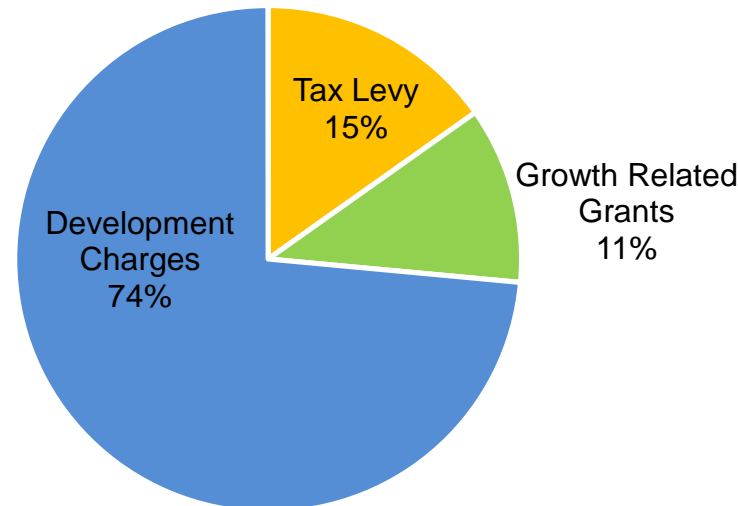
Other
Levels of
Government

New
Revenue
Sources

DCs are the key for Regionally-funded growth-related infrastructure

- In York Region, transportation DCs cover significantly less than the full cost of growth

**Draft Transportation Master Plan Funding Sources,
Regionally Funded Projects
(2016 - 2041)**

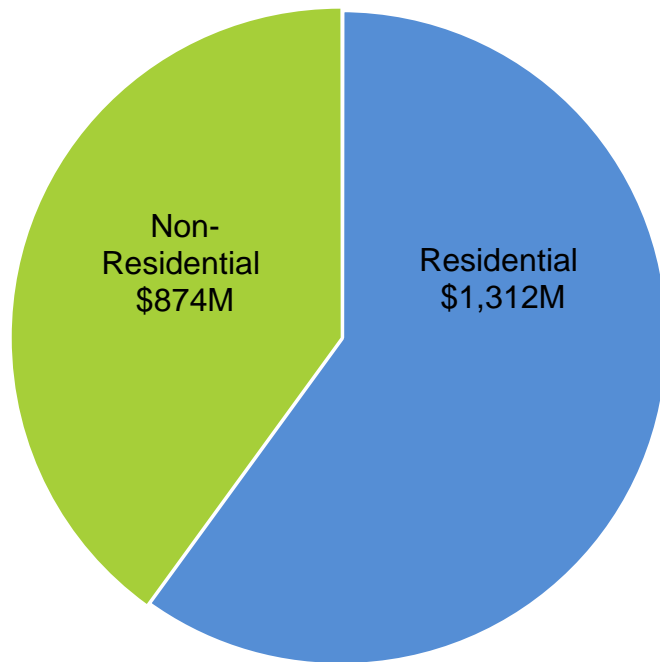


Note:

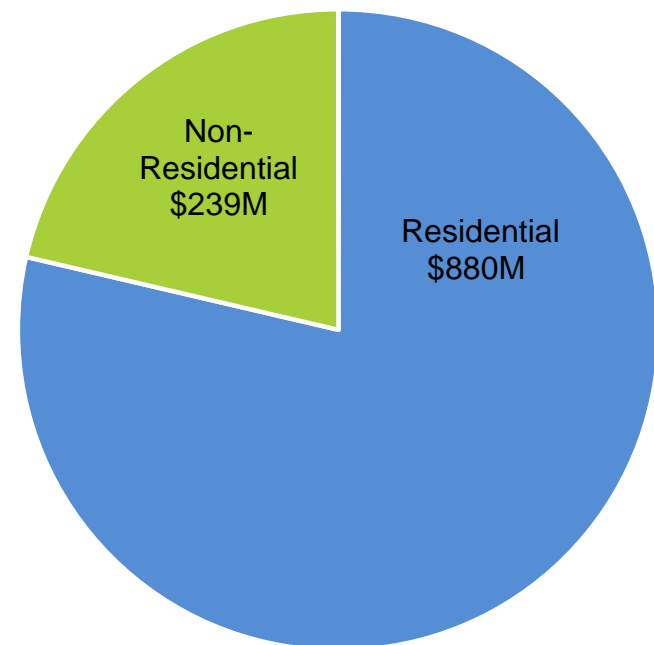
- Tax levy funding could be partially replaced by new revenue sources, if available
- Figures exclude Yonge North Subway and Rapidways since they are assumed to be fully funded by other levels of government.

DC collections have been well below forecast

Forecasted DC Collections*:
2012 – 2015
\$2.2 Billion

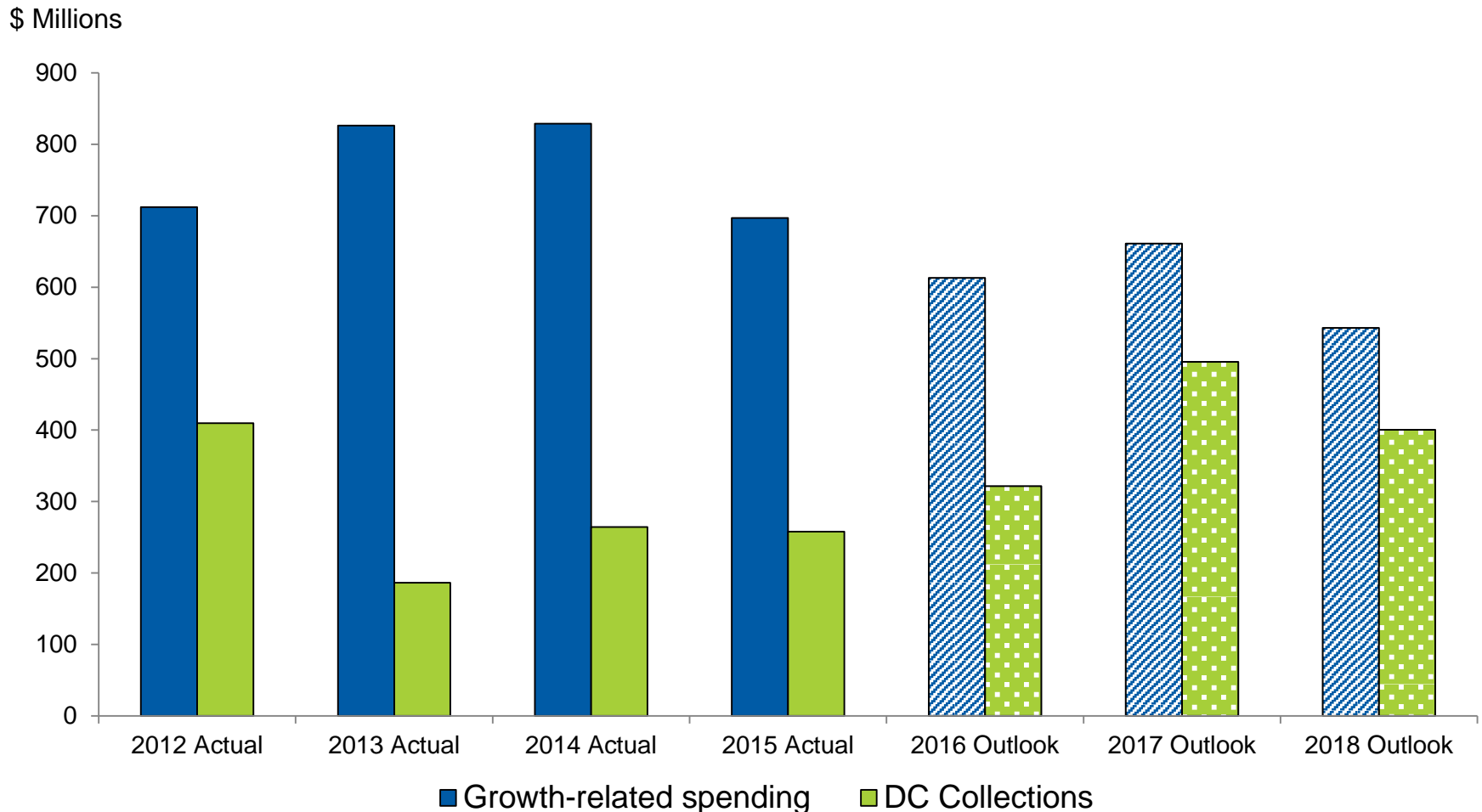


Actual DC Collections:
2012 - 2015
\$1.1 Billion



* Based on 2012 DC Background Study

DC collections need to rise to fund growth-related spending in the existing capital plan



Two potential scenarios for DC collections to be above budget forecast

- ❑ Higher than expected population and employment growth rates
- ❑ 2017 DC bylaw update increases DC rates above the assumptions used in the current forecast

Beyond Regional funding

- ❑ The analysis presented here assumes that other levels of government will provide \$9.0 billion in funding for the draft Transportation Master Plan:
 - ❑ Including full funding for the Yonge North Subway extension and vivaNext Rapidways
- ❑ In addition, new sources of revenue would be required to sustainably deliver the draft plan
- ❑ If the province provides new revenue sources to municipalities, the new revenue could be used for a variety of Regional priorities

Key messages

- ❑ Higher development charge revenues are needed just to pay for the existing approved ten-year capital plan
- ❑ Even higher development charge revenues would be needed to pay for the additional growth-related projects in the draft Master Plan
- ❑ Development charge revenues do not cover the full cost of growth
- ❑ The remainder must be covered through tax levy, subsidies or entirely new revenues
- ❑ The need to divert tax levy funding to pay for growth-related infrastructure potentially compromises funding for asset management

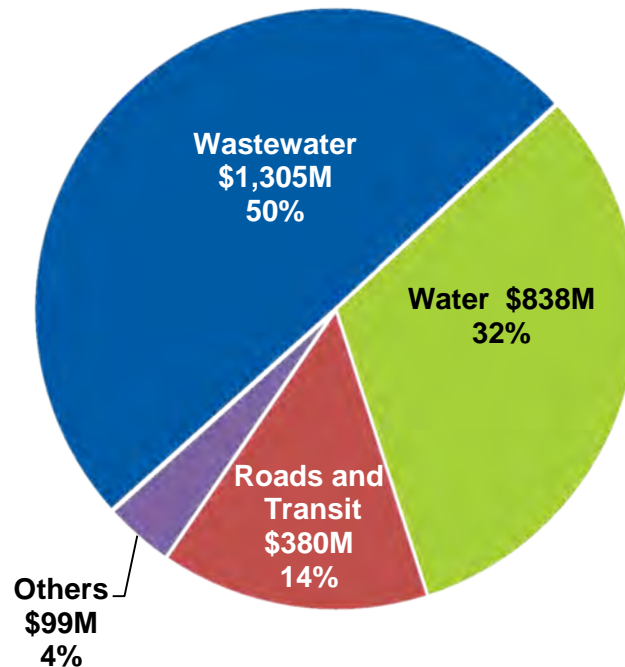
Debt

Debt is necessary when infrastructure has to be built ahead of growth

- ❑ Economies of scale and long lead times mean that major infrastructure is mostly constructed in advance of growth
- ❑ Debt is often required to finance growth-related infrastructure and this debt is repaid when DCs are collected
- ❑ This is especially true of water and wastewater infrastructure because growth simply cannot happen without it
- ❑ The price of delayed investment in transportation infrastructure is congestion and its related impacts

Debt has been used to finance past infrastructure projects

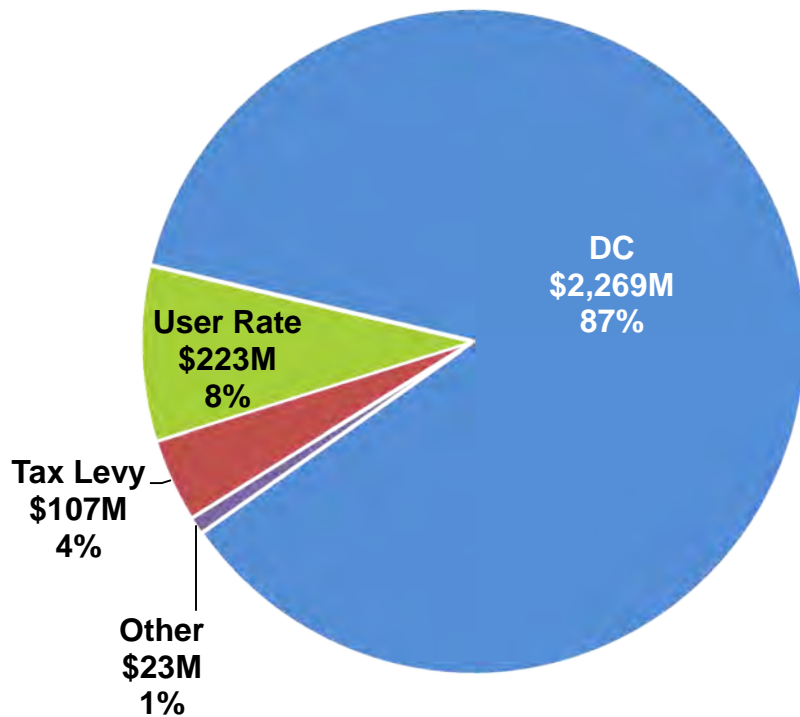
Debt outstanding as at December 31, 2015
\$2.6 Billion



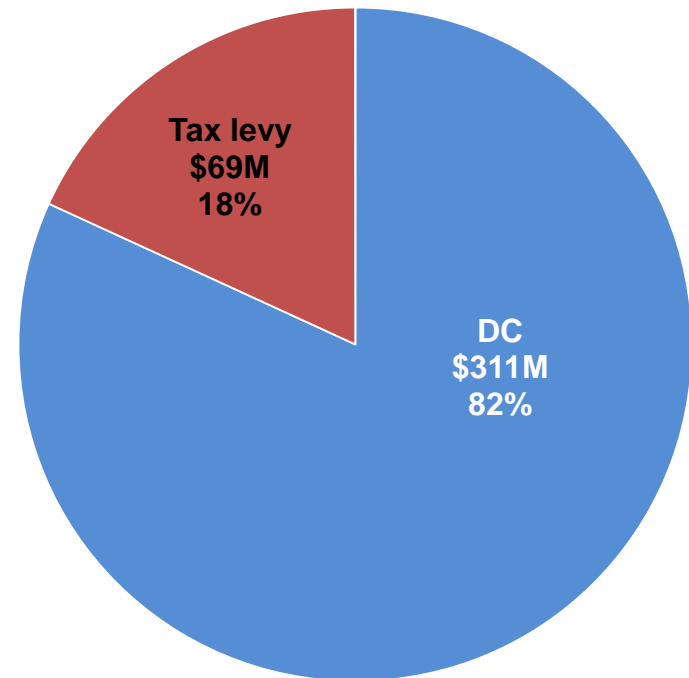
14% of the current debt is related to roads and transit projects

Most of the debt will be repaid with DCs

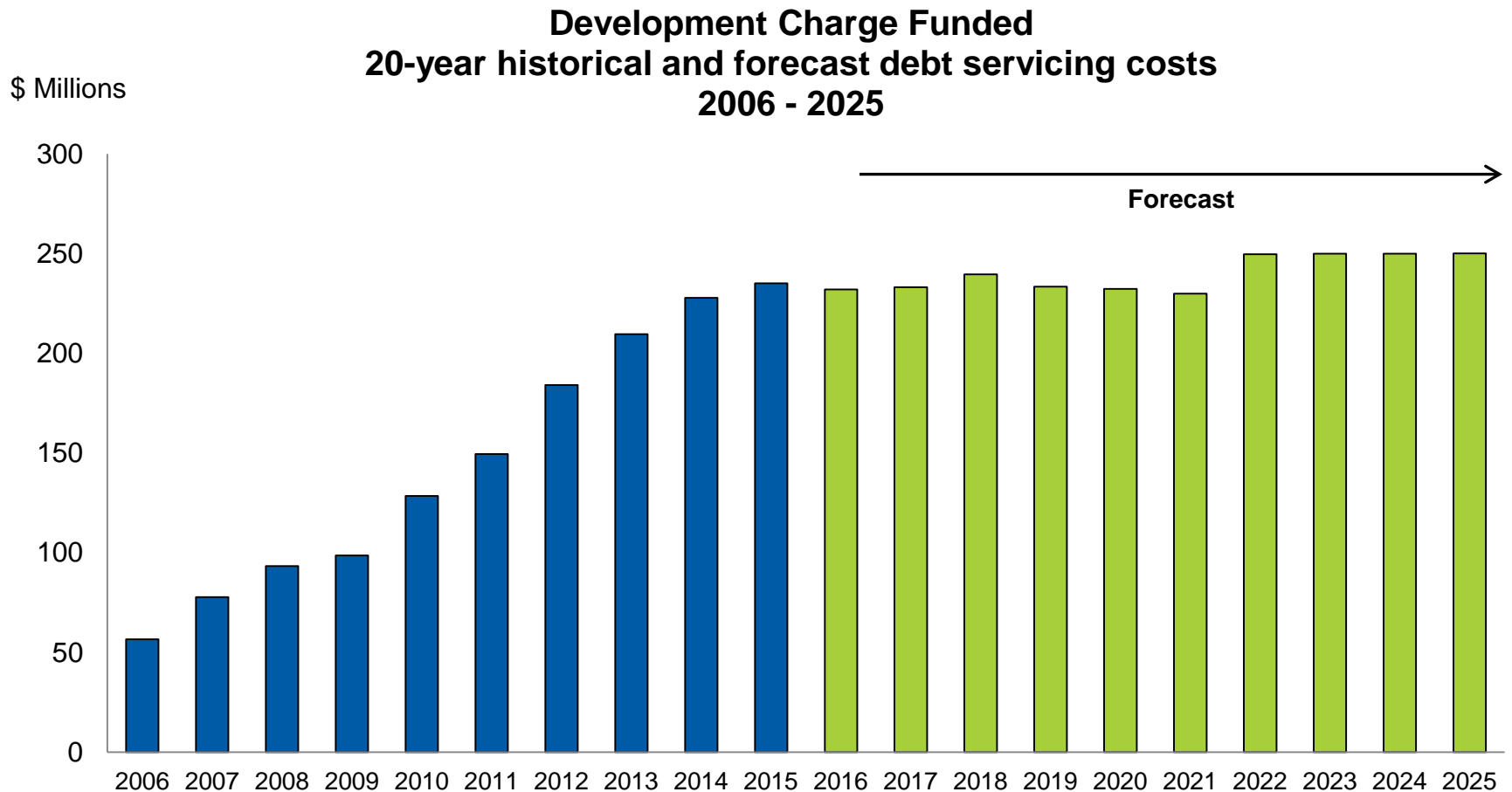
All debt – 2015
\$2.6 Billion



Transportation debt – 2015
\$380 Million

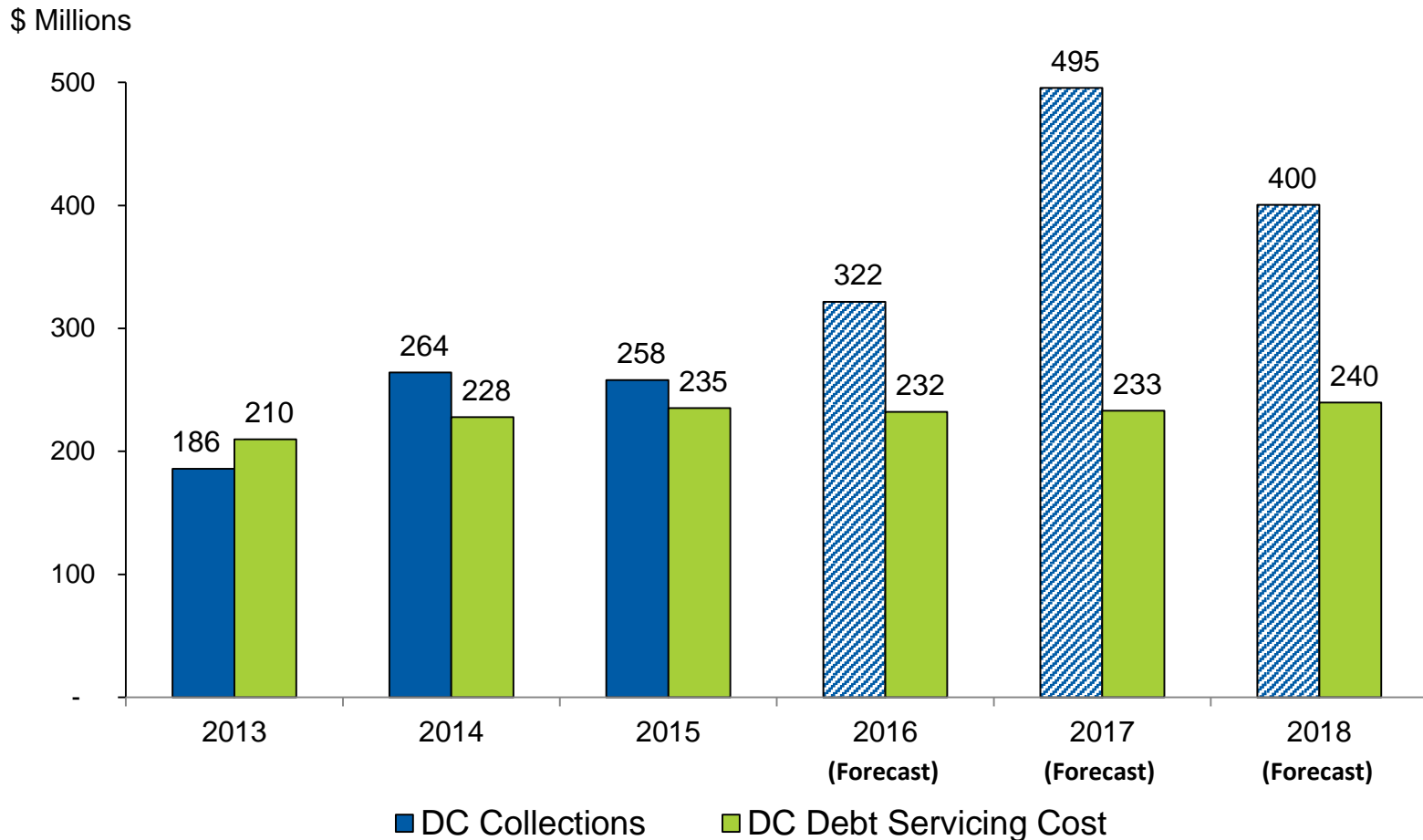


The Region has significant growth-related debt servicing costs



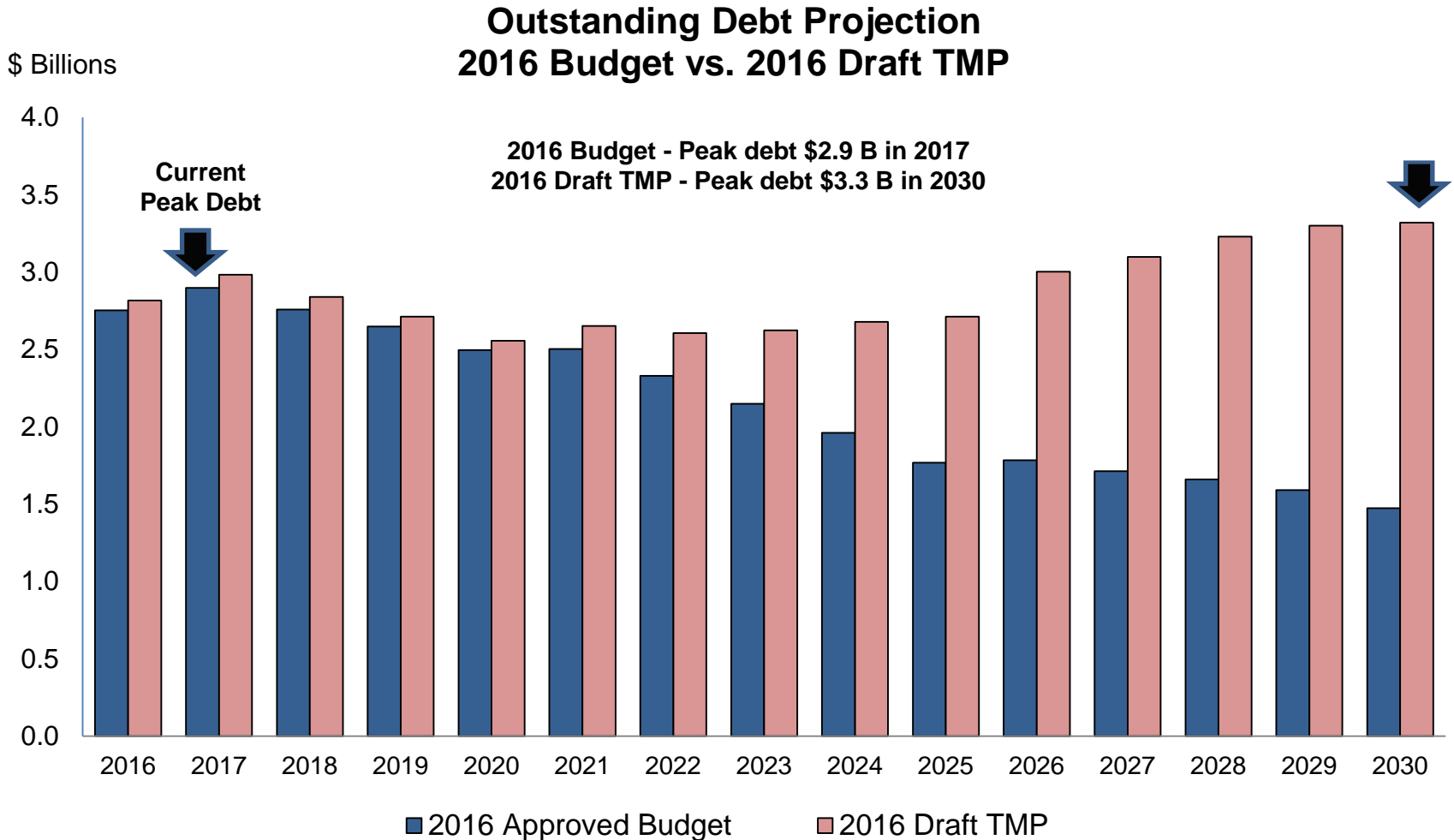
Note: Forecast based on 2016 ten-year capital plan

DC collections service existing debt and help avoid future growth-related debt



Note: Forecast based on 2016 budget

Fiscal strategy reduces debt levels



Estimated impact of draft Transportation Master Plan on debt over the next 15 years

Peak outstanding debt: \$3.3B in 2030

Total debt issuance Up \$2.3B to \$3.9B

New tax levy debt \$250M

Key messages

- ❑ Implementation of the draft Transportation Master Plan would result in rising debt until at least 2030
- ❑ Significant increases in development charge revenues are necessary to fund the existing ten-year capital plan
- ❑ Further increases would be needed for the level of investment in the Transportation Master Plan
- ❑ Tax increases or other new revenues would be required to fund the portion of growth-related infrastructure investment that cannot be recovered through development charges

Conclusion and Path Forward

Factors that will influence implementation of the draft Transportation Master Plan

- ❑ Development charge revenue:
 - ❑ Actual pace of growth will affect forecast of collections (up or down)
 - ❑ Increase in DC rates through the 2017 update
- ❑ Funding from other levels of government, especially for transit
- ❑ Legislative changes that would provide entirely new revenue streams
- ❑ Financial policy choices related to tax levels, debt levels, tax levy debt, and new revenue sources (if available)

Potential tax implications

- The draft Transportation Master Plan contains five potential sources of tax levy pressure:
 1. Need for higher contributions to pay-as-you-go capital and future asset replacement
 2. The cost of growth-related infrastructure that cannot be recovered from development charges
 3. The operating impact of new capital assets
 4. Operating impact of enhanced levels of transit service
 5. Policy changes, primarily the assumption of boulevard maintenance responsibilities from local municipalities
- These tax levy pressures could be offset if new revenue sources materialize

Implementing the Transportation Master Plan

- ❑ Implementation of the Transportation Master Plan will need to consider:
 1. The timing and feasibility of funding from other levels of government and access to new revenue sources
 2. Trade-offs in the capital plan between transportation and other priorities
- ❑ The extent to which the Master Plan can be funded will be determined through the budget process

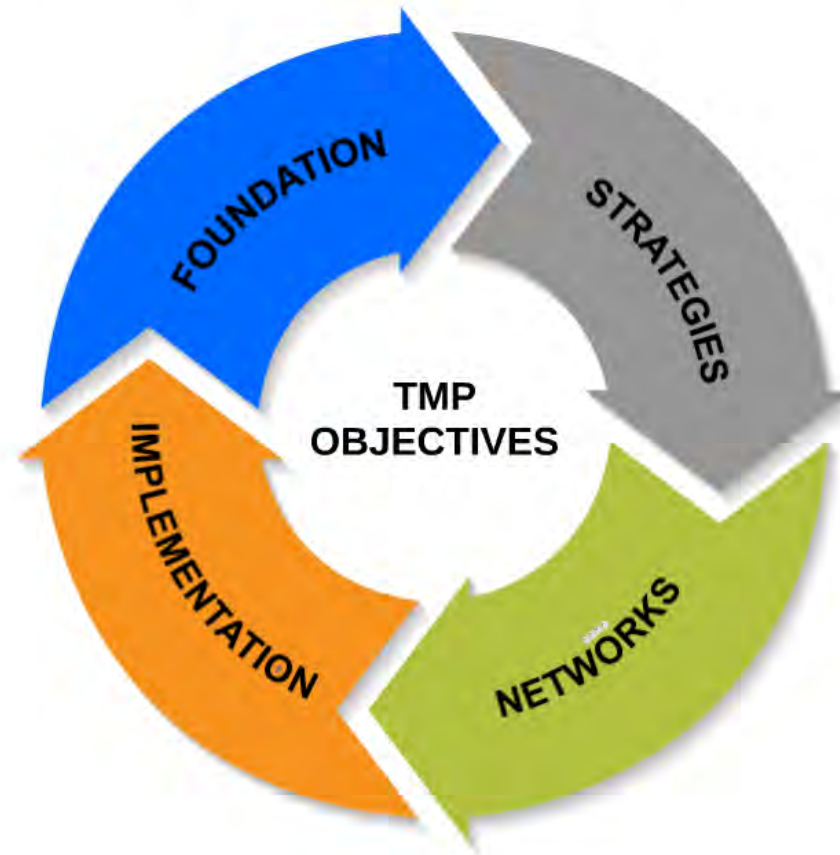
Next Steps

- ❑ A more developed financial analysis of the Master Plan will be available in the Fall
- ❑ Finance will revise the DC forecast in conjunction with the preparation of the Background Study for the 2017 bylaw update
- ❑ The financial approvals for the implementation of the Master Plan will take place as part of the 2018 budget process



Your community, your say.

2016 Transportation Master Plan



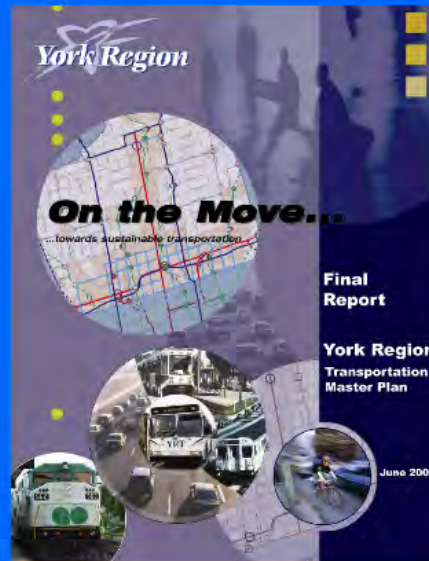


FOUNDATION

TMP

2002 Transportation Master Plan

- Transit Priority Network
- Dedicated Rapid Transit Corridors
- North-South Connections to Subway Extensions
- Walking/Cycling Supportive Policies and Programs



2009 Transportation Master Plan Update

- Built on “Pedestrian and Transit-First” Approach
- Spadina and Yonge Subway Extensions
- Extending Dedicated Rapid Transit Corridors
- Special Study Areas
- VivaNext Bus Rapid Transit Implementation

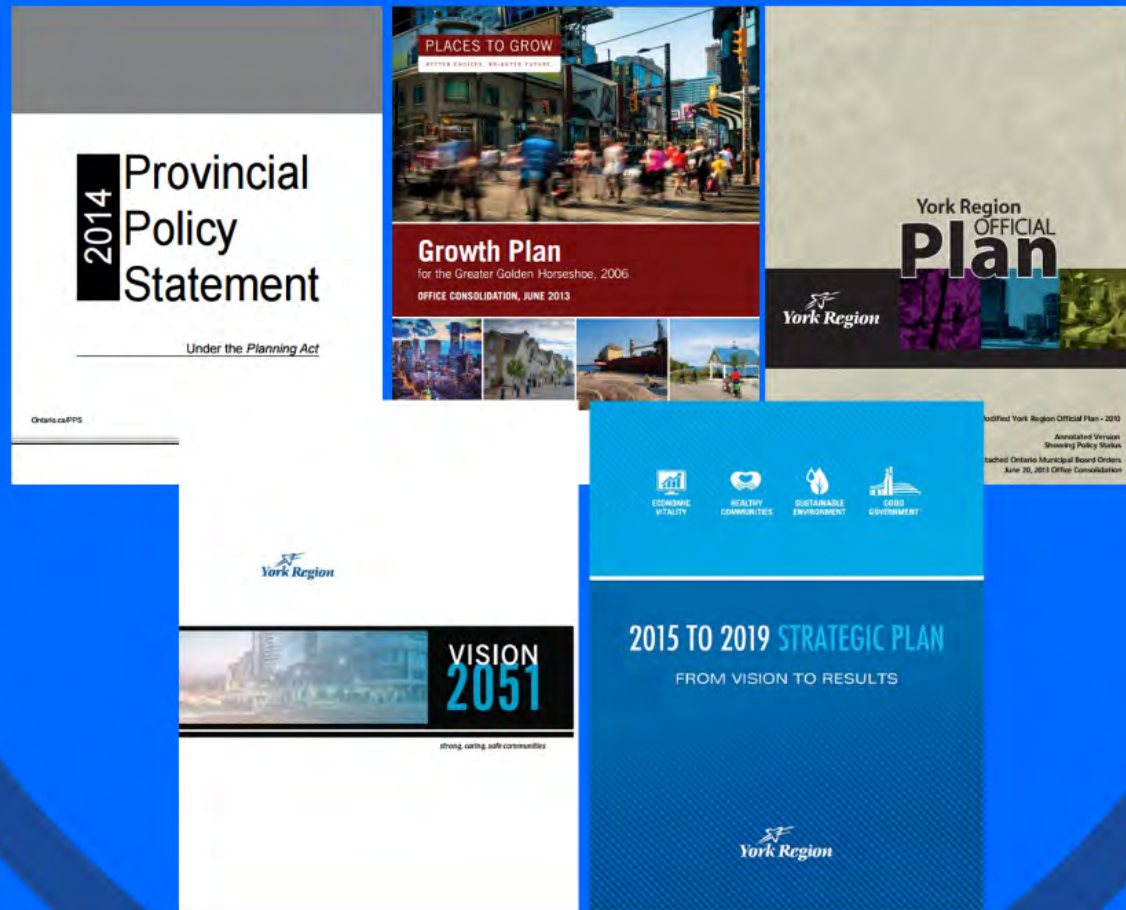


2008 Pedestrian and Cycling Master Plan

- Continuous network of sidewalks
- Region-wide cycling network
- Partnership Program and initiatives

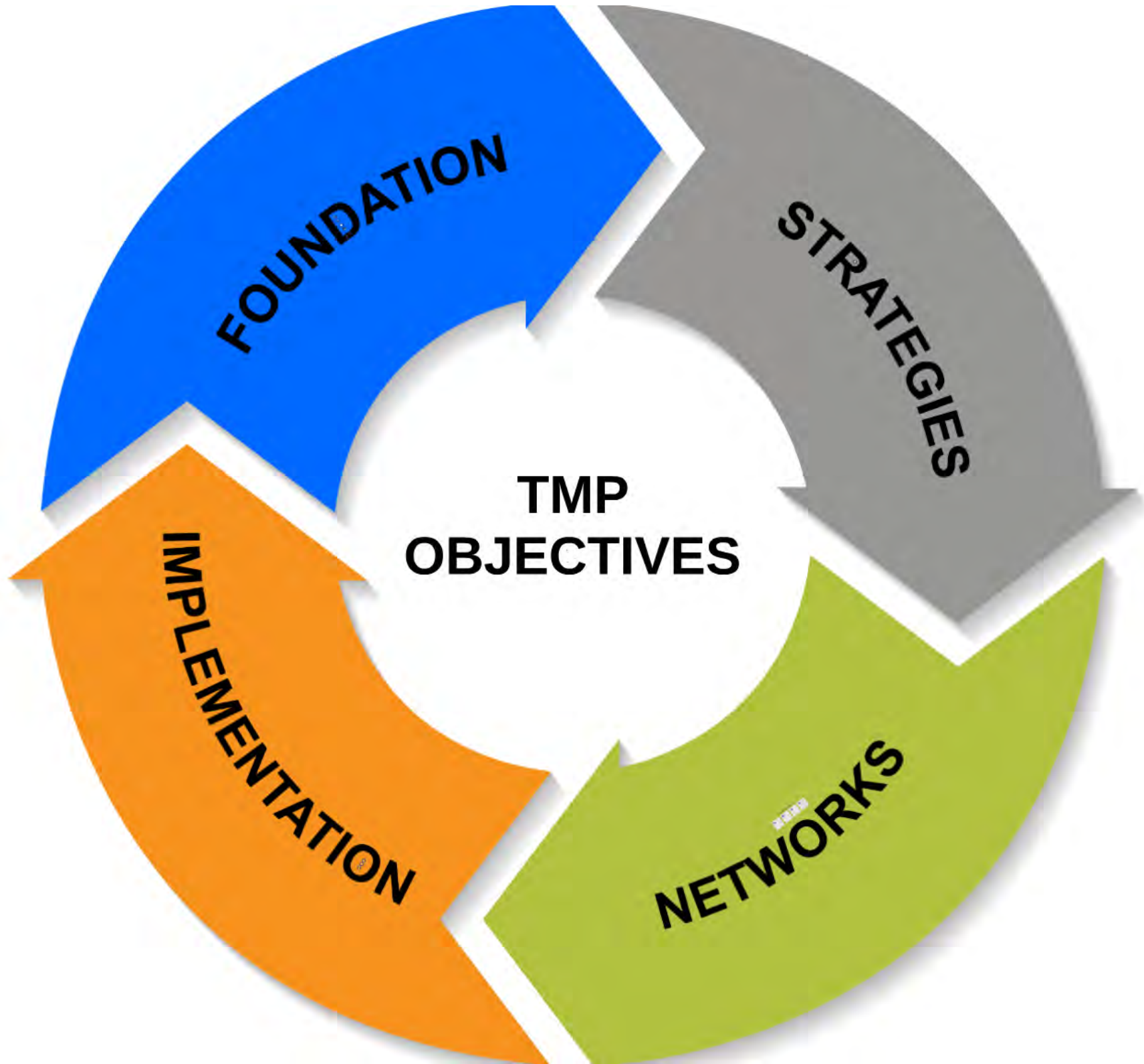


The Foundation...



The TMP will respond to this challenge...

To create an advanced interconnected system of mobility in the GTHA in order to give York Region residents and businesses a competitive advantage, making York Region an attractive place to live, work and play.



FOUNDATION

STRATEGIES

**TMP
OBJECTIVES**

NETWORKS

IMPLEMENTATION

TMP OBJECTIVES

**Create
a World
Class Transit
Network**

**Making
the
Last Mile
Work**

**Develop a
Road Network
Fit for The
Future**

**Maximize the
Potential of
Employment
Areas**

**Integrate Active
Transportation
in Urban
Areas**



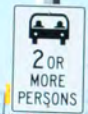
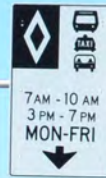
Create
a World
Class Transit
Network

VIVAVIVA >>




- WATCH YOUR STEP

Develop a
Road Network
Fit for The
Future



**Integrate Active
Transportation
in Urban
Areas**





**Maximize the
Potential of
Employment
Areas**

404 SOUTH
TORONTO

30
km/h

Making
the
Last Mile
Work

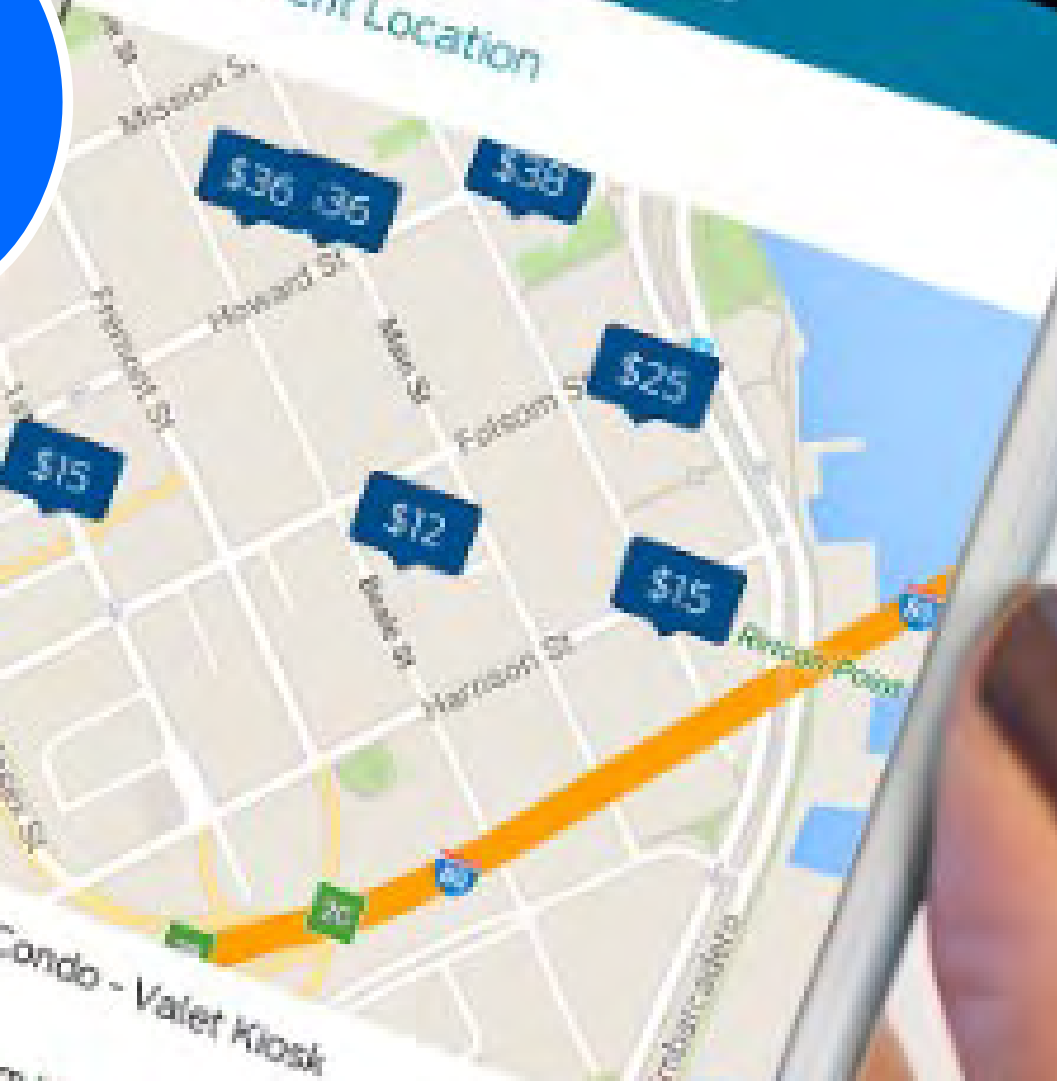
Cancel

5:57 PM

100%

Find Parking

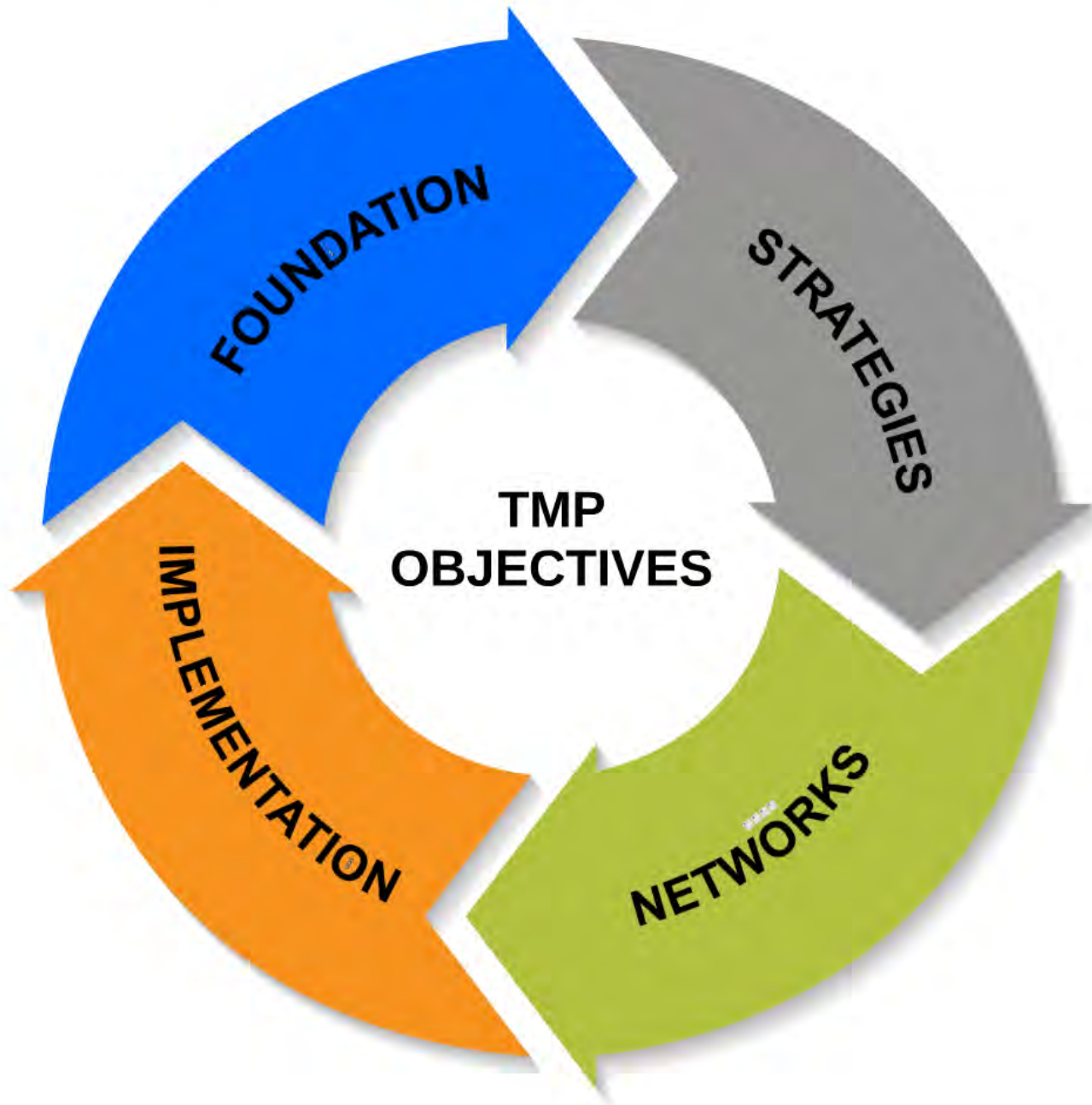
Current Location



Lumina SF Condo - Valet Kiosk
★★★★☆
8:00am - 6:00pm | 5 spots Available



2010 Transportation Master Plan



ON

STRATEGIES

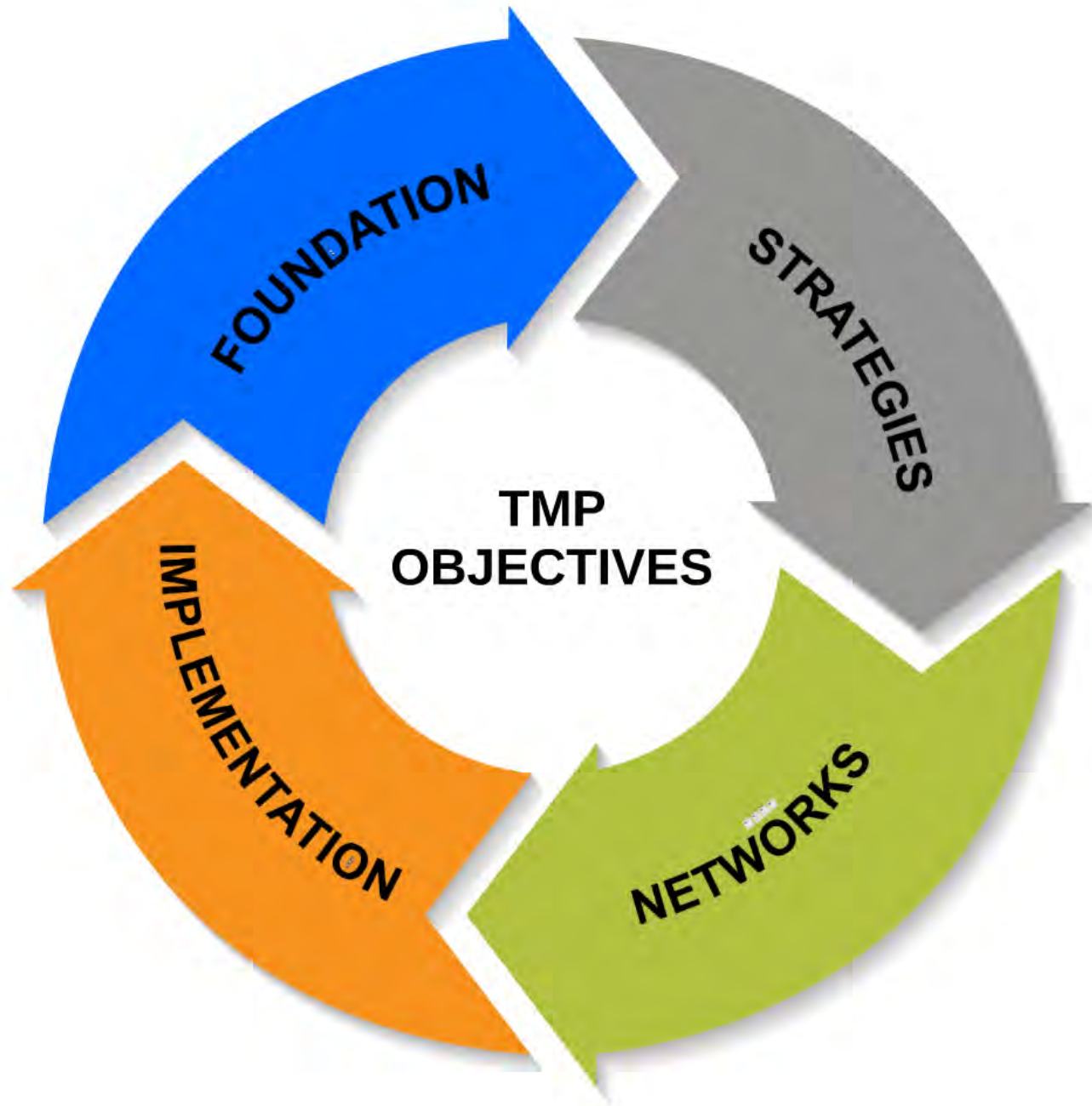
**TMP
OBJECTIVES**

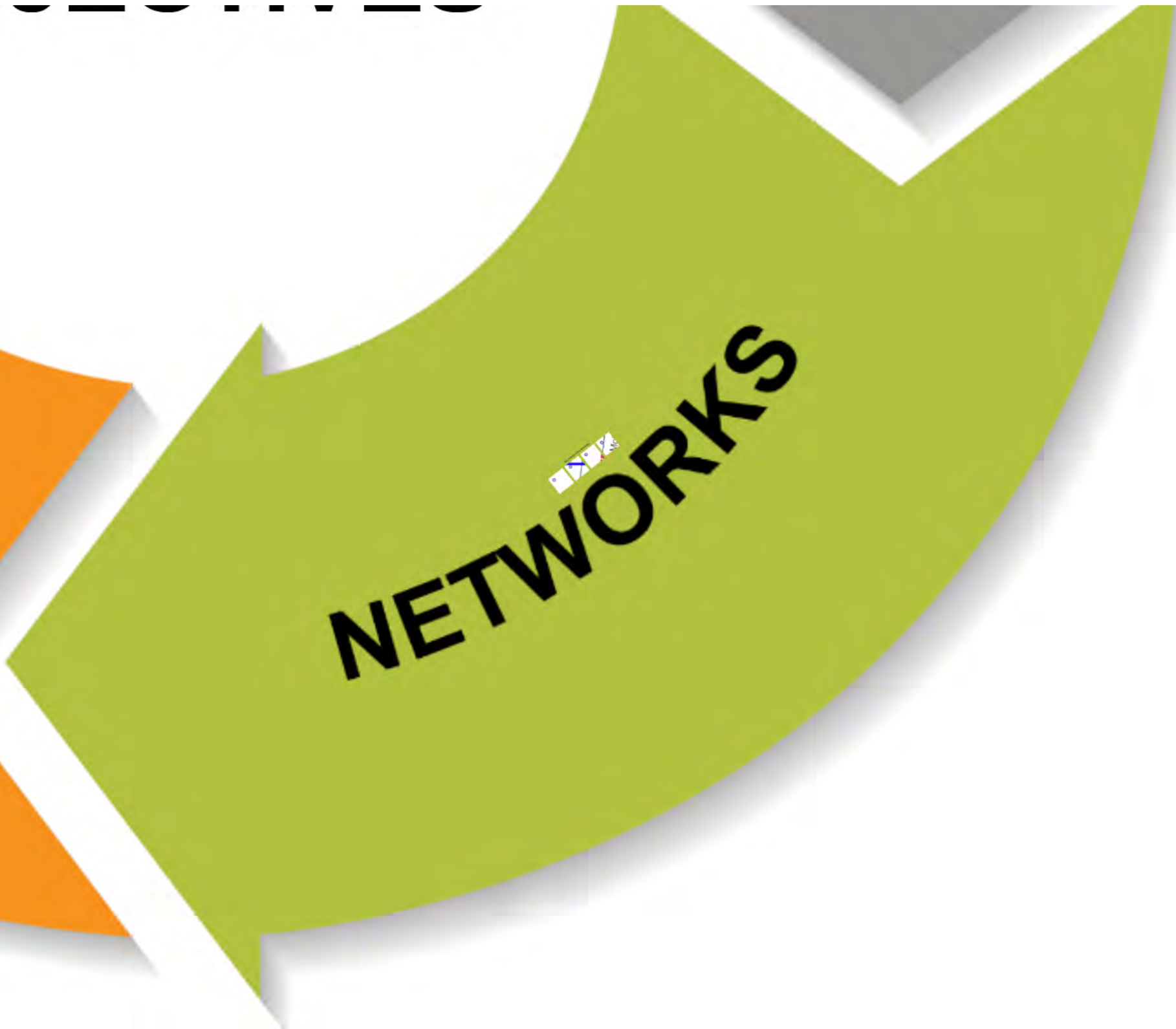
The Strategies

- Transit Growth Strategy
- Finer Grid Network
- Boulevard Jurisdiction
- Commuter Parking Strategy
- Technology
- Transportation Demand Management
- Transit On-Demand
- Goods Movement Corridors
- Traffic Management Plan
- Context Sensitive Solutions



2010 Transportation Master Plan





NETWORKS

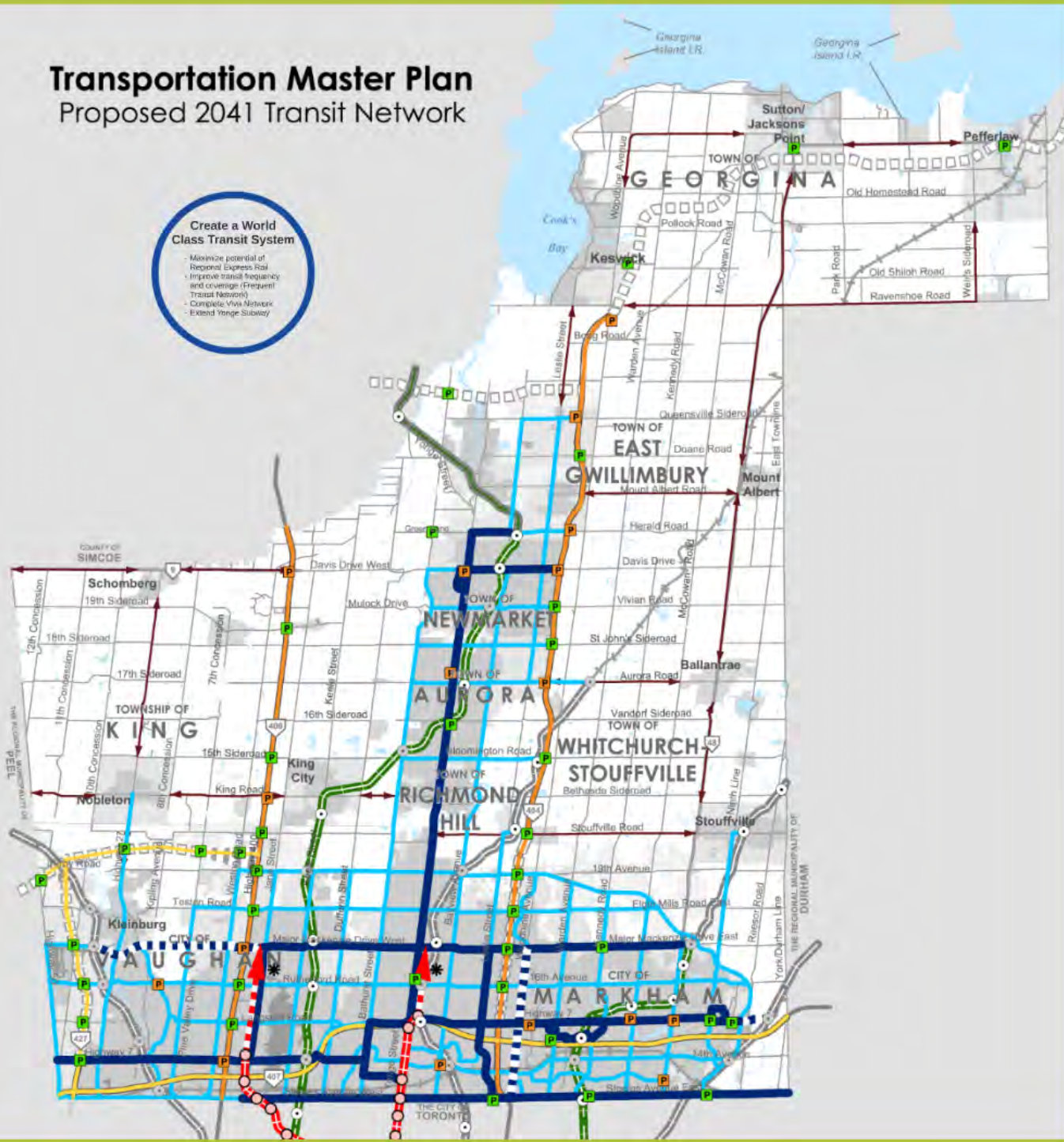


Transportation Master Plan

Proposed 2041 Transit Network

Create a World Class Transit System

- Maximize potential of Regional Express Rail
- Improve transit frequency and coverage (Frequent Transit Network)
- Complete Vix Network
- Extend Yonge Subway



Transit
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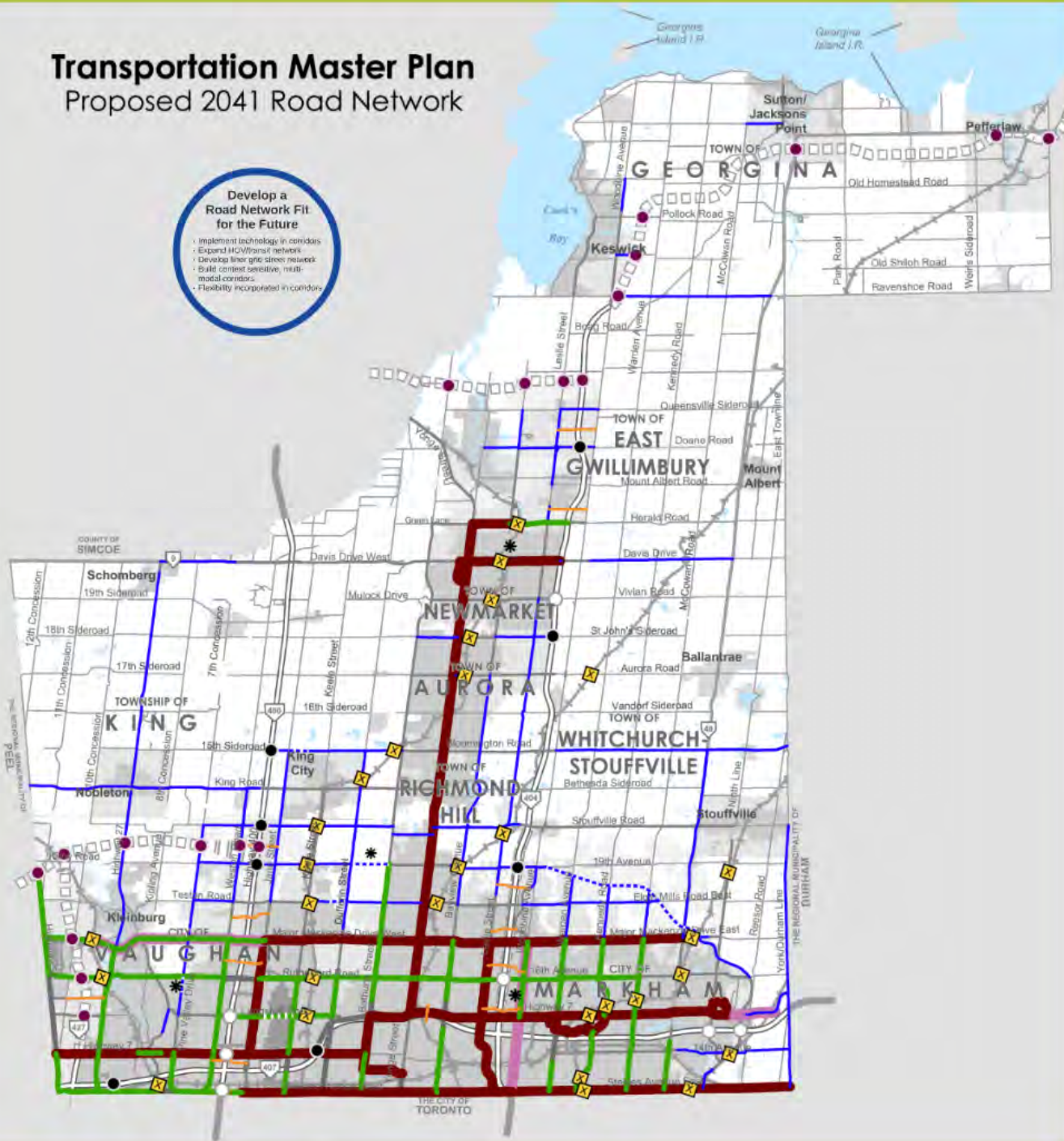
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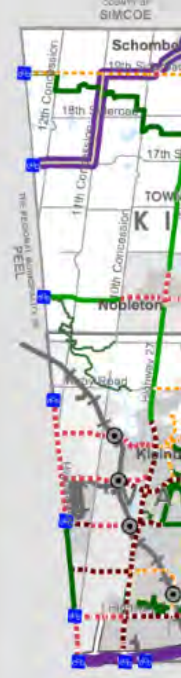
Transportation Master Plan Proposed 2041 Road Network

Develop a Road Network Fit for the Future

- Implement technology in corridors
- Expand HOV/transit network
- Develop linear grid street network
- Build context sensitive, multi-modal corridors
- Flexibility incorporated in corridors




Transp Propose



Develop a Road Network Fit for the Future

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Integrate Active Transportation in Urban Areas

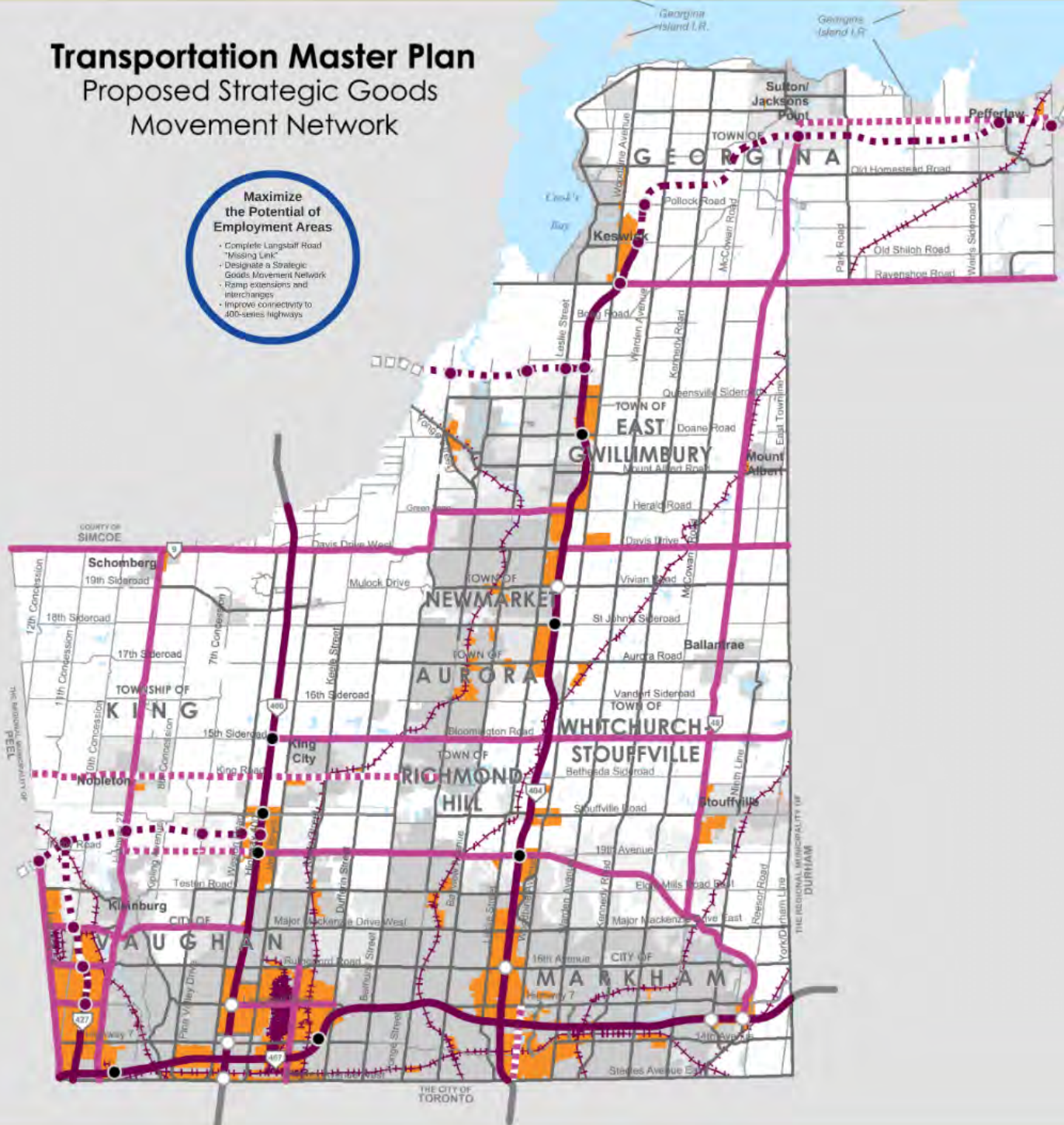
- Accelerate active transportation facilities that connect to transit spines and Regional Centres
- Support the last mile
- Complete gaps in sidewalks

Transportation Master Plan

Proposed Strategic Goods Movement Network

Maximize the Potential of Employment Areas

- Complete Langstaff Road "Missing Link"
- Designate a Strategic Goods Movement Network
- Ramp extensions and interchanges
- Improve connectivity to 400-series highways

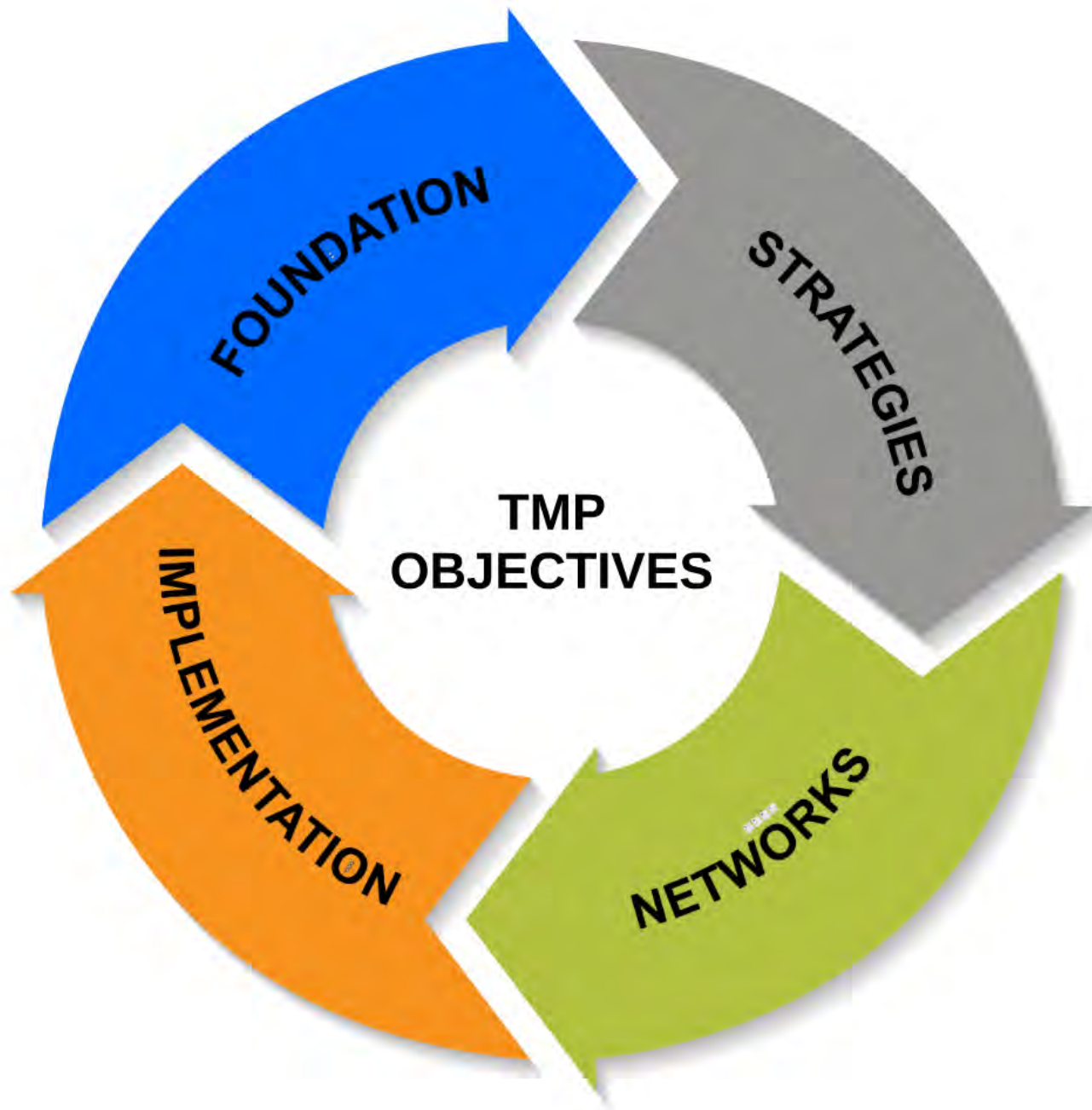




Maximize the Potential of Employment Areas

- Complete Langstaff Road "Missing Link"
- Designate a Strategic Goods Movement Network
- Ramp extensions and interchanges
- Improve connectivity to 400-series highways

2020 Transportation Master Plan



TMP OBJECTIVES

IMPLEMENTATION

NET

Implementation

- Phasing Strategy
- Action Plan
- Funding
- Monitoring and Reporting
- Communication Strategy

Key Performance Indicators (KPI's)

- Innovative KPI's to measure the progress and success of the TMP Update
- Foster partnerships for data collection and sharing
- Report on progress annually

Funding the Plan

- Cost of the Plan by Phase
- Recommended Funding Sources (Regional/other)

Total investment required to meet needs:

\$22.1B

to 2041