

Clause 2 in Report No. 8 of Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on May 19, 2016.

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Transportation Master Plan Update – Draft Network Alternatives

Committee of the Whole recommends:

1. Receipt of the presentation by Stephen Collins, Director, Infrastructure Management and Project Management Office, Transportation Services and Brian Hollingworth, IBI Group.
2. Adoption of the following recommendations contained in the report dated April 25, 2016 from the Commissioner of Transportation Services, *as amended*:
 1. Council receive the Transportation Master Plan Update draft proposed networks outlined in this report.
 2. *That the draft Transportation Master Plan recommendations pertaining to the historic areas of the Town of Aurora and the Town of Richmond Hill be subject, in the final 2016 Transportation Master Plan, to further study.*
 3. The Regional Clerk circulate the *Transportation Master Plan Draft Network Alternatives (Attachment 2)* to the Clerks of the local municipalities, Metrolinx, Ontario Ministry of Transportation, City of Toronto, Regions of Peel and Durham, County of Simcoe, Toronto and Region Conservation Authority, Lake Simcoe Region Conservation Authority, *Parks Canada* and the Building Industry and Land Development Association.

Report dated April 25, 2016 from the Commissioner of Transportation Services now follows:

1. Recommendations

It is recommended that:

1. Council receive the Transportation Master Plan Update draft proposed networks outlined in this report.
2. The Regional Clerk circulate this report to Clerks of local municipalities, Metrolinx, Ontario Ministry of Transportation, City of Toronto, Regions of Peel and Durham, County of Simcoe, Toronto and Region Conservation Authority, Lake Simcoe Region Conservation Authority and the Building Industry and Land Development Association.

2. Purpose

This report provides Council with an overview of the proposed Transit, Roads, Active Transportation and Goods Movement networks (networks) for the Transportation Master Plan Update. The draft networks build on the policy principles and strategies presented to Council in February 2016, and will form an integral part of a complete draft of the Transportation Master Plan (TMP) Update which will be presented to Council in June 2016.

3. Background

Vision 2051 and the Regional Official Plan provide the foundation for the TMP Update

Vision 2051 is articulated through eight goal areas and corresponding action areas that move York Region towards realizing the vision. Many of Vision 2051 goals directly influence development of the TMP Update. The Regional Official Plan builds on Vision 2051 and includes detailed objectives and policies that guide development of the TMP Update.

The TMP Update continues to be integrated with the Municipal Comprehensive Review, the Water and Wastewater Master Plan and the Development Charges Bylaw Update.

TMP Update builds on 2002 and 2009 plans to maximize opportunities to benefit from new Provincial investments to accommodate growth to 2041

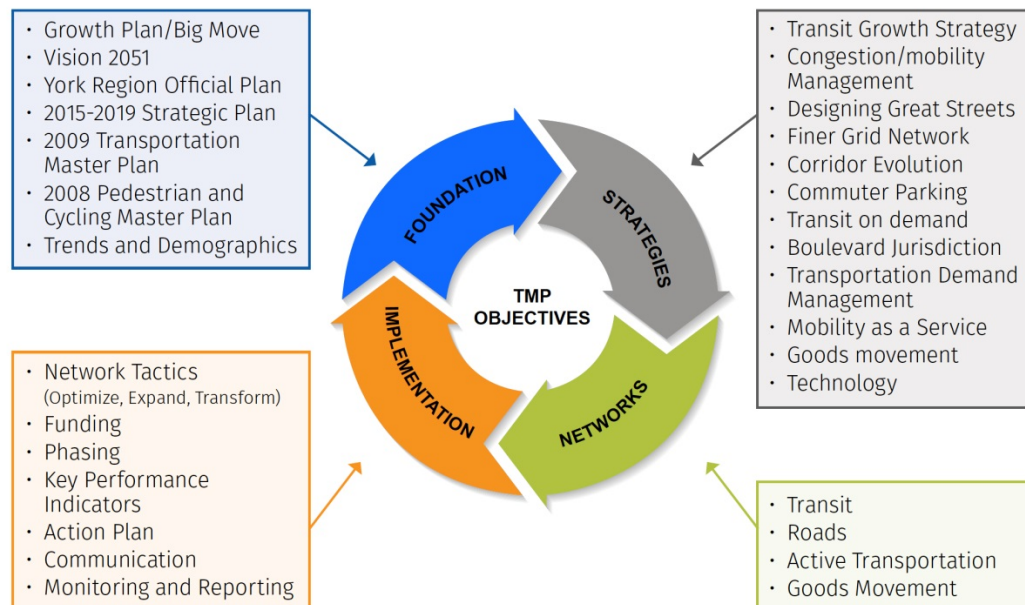
York Region continues to make significant progress in delivering transportation services to improve mobility for residents and businesses. This TMP Update builds upon the foundations set by previous TMPs. Those plans, completed in 2002 and 2009, took a progressive approach to integrating land use and transportation, with a primary focus on planning and building rapid transit corridors to connect the Region's four Urban Growth Centres. Previous plans also served to reinforce the importance of walking and cycling as being integral to healthy communities.

The Region also continues to benefit from Provincial investments in major rapid transit and freeway infrastructure to support transportation needs to 2041. In response to this investment, the Region is optimizing service delivery to support and capitalize on progress made towards delivery of previous master plan priorities, such as the Toronto-York Spadina Subway Extension, expansion of Viva Bus Rapid Transit and the extensions of Highway 404 and Highway 427.

2016 TMP Update is guided by objectives that inform development of the proposed networks

Figure 1 illustrates how key elements come together to create the TMP, starting with guiding documents that form the foundation, policy areas and strategies to respond to trends and emerging issues, development of networks, followed by implementation of the plan.

Figure 1
TMP Objectives Key Elements



With Vision 2051 and the York Region Official Plan as the foundation, the objectives of the TMP were developed in consultation with the public and stakeholders. These objectives include:

- I. **Create a world class transit system** by making transit more frequent, convenient and accessible, better supported by a more walkable network and availability of carpool parking facilities
- II. **Develop a road network fit for the future** through strategic road improvements that add capacity, address traffic bottlenecks, provide new links and optimize system performance
- III. **Integrate active transportation in urban areas** by providing increased pedestrian and cycling facilities and key connections to travel origins and destinations
- IV. **Maximize the potential of employment areas** with mobility choices for employees and integrating the needs of goods movement
- V. **Make the last mile work** by enabling integrated mobility systems, advancing innovation in technology and encouraging more sustainable travel choices

Staff reported to Council in February 2016 on draft policy principles and strategies for the TMP Update

Building upon the existing policy framework, the TMP Update introduces new policy areas that enable strategies to support integrated mobility systems, intelligent transportation systems, first and last mile connections for transit users and active healthy communities.

Council received the proposed draft policy principles and strategies presented in February 2016, requested that staff consult with each local municipality, and that local municipalities provide feedback by March 29, 2016.

Draft policy principles and strategies were presented to local municipalities between February and April 2016

Staff presented the draft policy principles and strategies to each local municipality. Attachment 1 summarizes the discussions and questions captured during the presentations and the written comments received following the presentations.

The presentations were well-received by local municipalities. There was general support for policy recommendations, with some specific comments related to local issues. All of the comments received will be considered in finalizing the TMP Update.

Draft TMP networks were also presented to local municipalities

Concurrent with the staff presentation to local municipalities on the draft policy principles and strategies, the Draft 2041 TMP networks were also presented. A summary of the feedback received on the draft networks is also included in Attachment 1.

The TMP Update is following the Municipal Class Environmental Assessment process

The Municipal Class Environmental Assessment process recognizes it is beneficial to begin the planning process for infrastructure by considering groups of related projects or overall systems before dealing with project specific issues. Master Plans provide for this system-wide approach to infrastructure planning and, at the same time, integrate Environmental Assessment (EA) principles.

4. Analysis and Options

Draft networks build on the objectives and form an integral part of a complete TMP Update to be presented in mid-2016

This report provides an overview of the proposed Roads, Transit, Active Transportation and Goods Movement networks for the TMP Update. This TMP Update and the networks developed are based on transportation needs to accommodate planned growth and align with the Region's Vision 2051, Official Plan and Strategic Plan. The Region recognizes that there will be funding challenges related to implementing the plan and that close collaboration and increased funding support will be needed from senior levels of government as well as the regulatory framework to enable York Region to secure alternate sources of funding.

Attachment 2 includes background information on existing travel trends and presents the network maps including:

- Proposed Transit Network for 2041
- Proposed Road Network for 2041
- Proposed 2041 Cycling Network
- Sidewalk Gaps on Regional Roads
- Proposed Strategic Goods Movement Network

Proposed networks will be incorporated into the complete final draft of the TMP Update that will be presented to Council in June 2016.

Managing traffic congestion requires a combination of transit, road and active transportation network improvements

Increased traffic congestion is a growing issue across the Region and the Greater Toronto and Hamilton Area (GTHA) due to dispersed travel patterns, established auto-dependent communities and inadequate infrastructure to support sustainable travel choices. Across the Region, transit and active modes are increasingly competing for road space.

The Region can best manage congestion by continuing to selectively build new or widened roads, with priority for sustainable travel choices, encouraging modal

shift to transit and active transportation, improving operations at intersections and completing 'missing links' in the existing Regional road network.

Objective: Create a World Class Transit System

Making transit more frequent, convenient and accessible, better supported by a more walkable network and availability of commuter parking facilities is integral to achieving this objective.

Key elements of the draft transit network are presented below. The proposed network builds on investment in the Toronto-York Spadina Subway Extension, the first wave of vivaNext rapidways, Regional Express Rail and YRT/Viva Frequent Transit Network service expansion.

The Yonge North Subway Extension remains a key transit priority in the Region and is critical to enable growth projected for the Richmond Hill/Langstaff Urban Growth Centre

The Yonge North Subway Extension is the critical missing link in the dedicated regional rapid transit system, a vital gap in creating a seamless transit network in the GTHA and remains a top priority. Servicing this section of Yonge Street presently requires approximately 2,500 bus trips per day travelling in mixed traffic to Finch Station.

The project extends 7.4 kilometres north from Finch Station to the Richmond Hill/Langstaff Gateway Urban Growth Centre at Highway 7 and includes five stations, two intermodal terminals and has an approved EA.

The Yonge North Subway Extension will serve a proposed 23,530 residential units and 24,990 jobs at the Richmond Hill/Langstaff Gateway Urban Growth Centre anchor hub, and the project would produce a lasting economic stimulus, especially during construction, creating up to 21,800 person-years of employment.

With a potential daily ridership of 165,000, the project services a demonstrated need and meets the Province's smart growth objectives related to the intensification and development planned for the Richmond Hill/Langstaff Urban Growth Centre. In this key mobility hub, the project will create a northern gateway hub by linking GO rail service, subway service, Viva rapidways and the future 407 Transitway and Steeles rapid transit.

In June 2015, Metrolinx confirmed that the Yonge North Subway Extension can be built now and the Yonge Subway will still be under capacity in 2031

Metrolinx's recently approved Yonge Relief Network Study analyzed options for crowding relief to the existing Yonge Subway by examining new local and regional travel opportunities and improving mobility across the GTHA.

Key findings from this study concluded that while population and employment growth will add new riders, significant relief to the Yonge Subway line will be achieved through already-committed transit improvements, including:

- TTC's automatic train control and new subway trains
- Toronto-York Spadina Subway Extension
- Regional Express Rail/SmartTrack

The 2015 Yonge Relief Network Study report was approved by the Metrolinx Board of Directors, recommending Metrolinx work with York Region, City of Toronto and the TTC to advance the project development of the Yonge North Subway Extension.

The Province has committed to deliver the initial phase of Metrolinx Regional Express Rail within 10 years

In 2015, Metrolinx confirmed a GO Transit Regional Express Rail (RER) service concept to be fully implemented within 10 years. The service concept for York Region includes 15 minute two-way all day service to Aurora on the Barrie Corridor and to Unionville on the Stouffville corridor. Delivering this level of service will require electrification of both corridors, which is currently being advanced by Metrolinx. The RER program also includes service improvements to the Barrie line north of Aurora and the Stouffville line to Lincolnville with 20-30 minute peak direction service and 60 minute two-way all-day service.

The Richmond Hill line will receive peak period service improvements to 15 minutes in the peak direction and will be extended northerly to Bloomington Road. The RER program also identifies additional new stations on all three GO rail lines. Based on the RER service concept, Metrolinx has committed that the above improvements will be implemented within 10 years (by 2025).

Additional rapid transit corridors are required to accommodate growth to 2041

Rapid transit corridors identified for the proposed 2041 Transit Network build on the original Viva rapidways (Yonge Street, Highway 7 and Davis Drive) to include the Viva Network Expansion Plan (Jane Street, Major Mackenzie Drive, Leslie Street/Don Mills Road and potentially Woodbine Avenue) and other future rapid transit corridors to accommodate growth to 2041. The TMP Update includes recommendations for introduction of Viva curbside service in rapid transit corridors as a precursor to implementation of dedicated rapidways as funding from senior levels of government becomes available.

A corridor evolution approach is recommended for the Yonge Street Rapid Transit Corridor segments through downtown Aurora and Richmond Hill

Given the importance of the Yonge rapid transit corridor, the constrained segments through downtown Aurora and downtown Richmond Hill need to be considered for further improvements to better integrate transit and enable quick operation through these areas.

The TMP Update is recommending dedicating the existing curb lanes for HOV/transit use initially, and for transit-only use in the future when ridership thresholds are met to maximize the person carrying capacity and travel benefit of the corridor. This will involve forming partnerships with the Towns of Aurora and Richmond Hill, cooperation of local businesses and expansion of off-street parking options to mitigate elimination of existing on-street parking.

Frequent Transit Network will offer better connectivity and frequent service in the Region's urban areas

Building on the concept introduced in the YRT/Viva 2016-2020 Strategic Plan (*Moving to 2020*), the TMP Update proposes an expanded transit network, identified as a Frequent Transit Network, in urban areas of York Region. Located on key corridors, these routes will offer reliable 15 minute or better service frequency all day. The route structure will consider current and future phases of the Viva network, as well as the need to connect to TTC subway stations and GO Transit's Regional Express Rail network. Frequent Transit Network routes would continue to be complemented by other YRT Local, Express, Shuttle and Community Bus services.

In addition, the TMP Update supports the delivery of freeway bus service in combination with commuter parking lots along Highways 400, 404, 407 and the future GTA West corridor to support longer-distance express bus travel.

Other GO Transit corridors are being protected for future needs

The Bolton rail corridor was identified as a potential new GO rail corridor in the Region's 2009 TMP, as well as the Metrolinx Regional Transportation Plan (Metrolinx Plan). As part of an update to the Metrolinx Plan in 2013, the GO Bolton line was moved from the 15-year plan to the 25-year plan.

Similar to the Bolton line, an easterly line along the Havelock Subdivision in east Markham was identified in a number of plans. The 2013 update to the Metrolinx Plan adjusted the timing of this line (Union to Locust Hill in Markham) from the 15-year plan to the 25-year plan.

Based on current Provincial and Regional plans, both the Bolton and Havelock lines continue to be protected for future GO service.

Objective: Develop a Road Network Fit for the Future

The focus of the proposed road network is on making strategic improvements that add capacity, address traffic bottlenecks, complete missing links and optimize system performance. Proposed road improvements will increase capacity and corridor evolution will enable the Region to provide more reliable transit service and prioritize multi-occupant modes to maximize the people-moving capacity of our system.

The network of four-lane roads is proposed to be extended to coincide with future development

As York Region's urban areas expand to accommodate growth to 2041, there is a need to improve the existing network of roads serving new communities. The expansion of the four-lane network in a phased manner to coincide with development will achieve a number of objectives including:

- Ensuring a continuous grid of multimodal streets within growing urban areas
- Facilitating active transportation improvements, as part of road construction, consistent with York Region's context sensitive solutions

- Expanding capacity in line with population and employment growth
- Improving connectivity and efficiency of roads that serve longer distance trips between communities and between adjacent municipalities

Expanding person-carrying capacity on the major arterial network is required to manage congestion

Maximizing person-carrying capacity on the arterial road network is essential to accommodate growth and manage congestion. In addition to providing rapid transit, approaches for maximizing person-carrying capacity include introducing transit priority measures and adding or converting existing general purpose lanes to HOV lanes.

The six-lane road network supports the proposed rapid transit network by expanding capacity in parallel corridors to provide for HOV and/or transit priority lanes.

The six-lane road network is based on the Region's existing policy of expanding capacity beyond four lanes only for the addition of HOV or transit-only lanes. Additional lanes would generally begin as HOV lanes and then could be converted to transit-only lanes where volumes/ridership justify the conversion.

For existing six-lane corridors, curb lanes could be converted to HOV or transit-only lanes if/when thresholds for combined transit and HOV volumes are met. This conversion supports mode shift from single occupant auto to transit and HOV usage in the corridor.

Connecting missing links will help complete the arterial grid network

The Regional arterial network is based on a two-kilometre grid structure. A number of missing links in the network are discontinuities that result in circuitous routing, increased congestion and air pollution in these areas. The TMP Update recommends completing the grid network with the addition of the following missing links:

- 15th Sideroad - Highway 400 to Keele Street
- Langstaff Road - Jane Street to Keele Street
- Teston Road - Keele Street to Dufferin Street

The TMP Update also identifies special study areas in the vicinity of the missing road links along Kirby Road from Dufferin Street to Bathurst Street, and along Pine Valley Drive from Langstaff Road to Rutherford Road. The feasibility of constructing these links will be assessed in detail as part of separate studies.

All of the missing road links are unique and challenging projects to deliver. Each will involve extensive consultation with local municipalities, agencies, landowners, other stakeholders and the public.

In addition to completing missing links in the Regional road network, the TMP Update proposes a policy direction for the Region to assume jurisdiction for the delivery of a series of midblock crossings of both Highway 400 and Highway 404. Completing missing links and implementing midblock crossings will provide alternate routes for vehicles, pedestrians, cyclists and transit to reach destinations more quickly and safely, and will better manage congestion by spreading traffic throughout the network.

Freeway expansion is critical to accommodate growth, support economic development and manage traffic congestion on Regional roads

Expansion of the Provincial freeway network is a critical element in facilitating goods movement, supporting employment areas and accommodating Provincially-mandated growth. Working with the Province towards completing the Highway 427 Extension, GTA West Corridor, the Highway 400-404 Link and further extension of Highway 404 through Georgina will enable the Region to better meet longer-distance travel demands of residents and businesses.

Construction is underway on Highway 427, which will be extended to Major Mackenzie Drive by 2019. The extension will be eight lanes between Highway 7 and Rutherford Road, narrowing to six lanes between Rutherford and Major Mackenzie Drive. This includes High-Occupancy Toll lanes.

The GTA West corridor extends from Highway 400 in York Region to Highway 401 in Halton Region. The GTA West corridor is an important project for York Region and would provide significant benefits in enabling access to employment areas in Vaughan, alleviating pressures on east-west Regional roads and providing an alternate route to the Highway 400/401 corridors.

The Highway 400-404 Link (formerly known as the Bradford By-pass) will provide a connection between Highway 400 and Highway 404 in East Gwillimbury. One of the key benefits of this project is that it would create a more resilient network by connecting the two major north-south freeways. The Highway 400-404 Link is

not identified in the current Provincial Growth Plan for the Greater Golden Horseshoe for 2031, but it does have an approved Environmental Assessment.

Further extension of Highway 404 to the York-Durham boundary is not identified in the Provincial Growth Plan for the Greater Golden Horseshoe, but is included in the Regional Official Plan. The TMP Update will continue to protect for this corridor for the long-term.

In addition to extending the Provincial freeway network, both Highway 400 and Highway 404 are planned for widening through York Region to support the delivery of HOV lanes. Consideration for freeway bus shoulder lanes is also requested.

The following link to the Ontario Ministry of Transportation Greater Golden Horseshoe Transportation Plan website is provided for additional information:
<http://www.mto.gov.on.ca/english/transit/greater-golden-horseshoe-transportation-plan.shtml#q9>

New interchanges are required to accommodate growth in inter-Regional travel demand

The TMP Update identifies the need for a number of new interchanges and interchange improvements on Highways 400, 404, 407 and 427. Proposed interchanges on existing freeways, interchanges on future freeways and improvements at existing interchanges are shown on the Proposed Road Network for 2041 included in Attachment 2.

Objective: Integrate Active Transportation in Urban Areas

The TMP Update integrates and updates the Pedestrian and Cycling Master Plan

The TMP Update integrates key elements of York Region's 2008 Pedestrian and Cycling Master Plan and strengthens the Region's role in providing facilities for walking and cycling. The focus is on building Regional networks, improving connections within Regional Centres and to major destinations, improving access to public transit and ensuring consistency across Regional road corridors.

The TMP Update recommends accelerating implementation of cycling facilities by developing a Strategic Cycling Network. The intent of the Strategic Cycling Network is to provide a short-term plan of 10-years to meet growing demands.

While the ultimate 2041 cycling network provides the overall vision for the Region, the Strategic Cycling Network will aim to provide a high-quality, connected network to support modal shift sooner.

Supporting active transportation is fundamental to the development of healthy and sustainable communities

The TMP Update aims to make active transportation more comfortable and convenient to help residents choose it more frequently to meet their daily travel needs. Currently, 90 per cent of trips less than five kilometres in the Region are by auto. The TMP Update puts forth recommendations to complete the Regional network of pedestrian and cycling facilities, making key connections to travel origins and destinations and improving access to transit.

The majority of Regional roads have a sidewalk on at least one side, with many new communities offering additional walking facilities such as sidewalks on local roads and trail connections. However, there are gaps along major arterial roads and at intersections where high traffic volumes and speeds contribute to low levels of perceived pedestrian comfort. Additional sidewalks and trails are needed to connect neighbourhoods to major destinations and provide access to transit.

Recognizing that arterial roads may offer the fastest route between two points, cyclists are often deterred from using them because of a lack of separation from high volumes of fast-moving traffic. A more continuous network of cycling facilities separated from traffic is needed to encourage more people to choose cycling as a mode of transportation, particularly in urbanizing areas with increasing densities.

Objective: Maximize the Potential of Employment Areas

Reliable, efficient goods movement can attract investment, foster economic growth and create jobs. York Region's role in supporting the movement of goods is increasingly important and the TMP Update identifies a comprehensive, integrated suite of supportive actions. The TMP recognizes that goods movement must be integrated with other aspects of Regional planning, including land use and economic development, and involves all levels of government as well as the private sector.

The proposed Strategic Goods Movement Network is intended to identify preferred haul routes and link major generators to destinations for truck traffic.

The proposed Strategic Goods Movement Network will help guide investments, inform updated design standards and support land use planning. It consists of highways, primary arterial goods movement corridors and new interchanges. Although all Regional roads are part of the goods movement network, some have more strategic importance.

The TMP Update recognizes that supporting mobility into and out of major employment areas is about more than goods movement. The road network in and around major employment areas experiences some of the highest levels of traffic congestion during peak commute times. Network improvements in these areas will be given added priority to address mobility needs, including road capacity improvements, improved transit service and active transportation linkages.

Objective: Make the Last Mile Work

Improving transit, road, walking and cycling infrastructure is only part of the Region's response to address transportation challenges. Influencing travel choices will also involve continuing to develop a more integrated approach to land use and transportation planning, as well as development of a commuter parking management strategy. Compact, complete communities with a mix of uses will make walking and cycling more attractive, provide for live/work opportunities, enable the delivery of efficient transit service, reduce trip lengths and help to ease congestion. The Region has many planning tools that can help to shape land use and continued collaboration with local municipalities will be critical to improving both access and mobility.

York Region also recognizes that changes to the built environment must be accompanied by travel demand management initiatives that build individuals' awareness and understanding of their travel options, shape their preferences and encourage people to try new ways of getting around. For this reason, the TMP Update integrates key elements of the Region's Travel Demand Management Implementation Strategy and calls for strengthening development approvals, public education and outreach to workplaces, schools and families.

Finally, continuous innovation at a global level means the "sharing economy" is now part of personal and public mobility. Conventional and peer-to-peer car sharing, dynamic ridesharing and car-hailing technologies and countless other new technologies and services will all play an increasing role in the future of mobility. The TMP Update proposes recommendations to monitor, assess and leverage the new options technology will offer to both individuals and businesses.

Link to key Council-approved plans

This report links to the following Council-approved plans and policies:

Regional Official Plan

- To create an active transportation system and programs that encourage walking, cycling and the use of transit
- To provide transit service that is convenient and accessible to all residents and workers of York Region
- To ensure streets support all modes of transportation including walking, cycling, transit, automobile use, and the efficient movement of goods
- To plan and protect future urban and rural streets to accommodate transportation demands
- To promote a linked and efficient network for goods movement that supports economic vitality

Vision 2051

- Interconnected Systems for Mobility
- Livable Cities and Complete Communities
- An Innovation Economy
- Living Sustainably

2015 to 2019 Strategic Plan

- Strengthen the Region's Economy
- Support Community Health and Well-being
- Manage Environmentally Sustainable Growth
- Provide Responsive and Efficient Public Service

Next Step

The draft TMP networks build on the policy principles and strategies presented to Council in February 2016, and will form an integral part of a complete draft of the TMP Update. The project team continues to consult with local municipalities and other stakeholders, leading to a completed draft of the TMP Update that will be presented to Council in June 2016.

The TMP Update continues to be coordinated with the Municipal Comprehensive Review, the Water and Wastewater Master Plan and the Region's Development Charges Bylaw Update.

5. Financial Implications

As part of the TMP Update, both capital and lifecycle costs have been estimated for recommended infrastructure. Preliminary costs have been completed to support the development of network options and are shown in Table 1.

Table 1
TMP Update - Total Capital Costs by Phase (\$M)

	to 2021	2022 to 2026	2027 to 2031	2032 to 2041	Total	York Region Estimated Share
Capital Costs						
Transit	174	155	165	329	823	823
Rapid Transit	205	4,048	2,423	1,389	8,065	-
Roads	898	1,901	2,213	2,572	7,585	7,112
Total Capital Costs	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

* Draft 2016 TMP costs exclude already funded first wave Viva rapidways (\$1.8B) and Spadina Subway Extension (\$1.1B)

Further analysis will be undertaken regarding financial impact of the Transportation Master Plan. A number of fiscal issues will require detailed review and analysis, including potential impact on the tax levy, debt levels and servicing costs, development charge revenues and adequacy of reserve contributions for asset replacement. The potential for other revenue sources will also be reviewed. This analysis will be carried out over the next several months and will inform annual updates of 10-year capital plans. This information will also inform the Development Charge Bylaw Update process.

The TMP Update identifies required infrastructure and programs needed to service growth to 2041, but the plan cannot be fully realized without strong financial support from senior levels of government and regulatory framework for York Region to secure additional new sustainable funding sources.

6. Local Municipal Impact

Extensive consultation with Local Municipal partners will continue throughout development of the TMP Update

Regional staff met with staff from local municipalities as part of the Municipal Liaison Committee as well as individually with respect to these proposed network plans. The project team will continue to consult and incorporate input into development of the complete draft TMP.

The project team also attended Committee and Council meetings at all local municipalities throughout February, March and April to present the Draft TMP Update and provide local municipal councils with an opportunity to provide additional input.

Many of the recommendations developed as part of the TMP Update are dependent on a strong partnership with local municipalities. Examples include integration of land use planning with transportation, new midblock crossings, finer grid street network, pedestrian and cycling network improvements and travel demand management initiatives.

7. Conclusion

The draft network plans presented in this report build on the direction provided in Vision 2051 and the York Region Official Plan. The proposed networks will be incorporated into a completed draft of the TMP Update to be presented to Council in June 2016.

Transportation Master Plan Update
Draft Network Alternatives

The TMP Update identifies required infrastructure and programs needed to service growth to 2041 in accordance with the Region's Official Plan and Vision. It is acknowledged that strong financial support from senior levels of government and securing sustainable new funding sources are both required to deliver and accommodate mandated growth. These specific actions will be pursued at all levels throughout the coming months and years.

For more information on this report, please contact Stephen Collins, Director Infrastructure Management and PMO, at ext. 75949.

The Senior Management Group has reviewed this report.

April 25, 2016

Attachments (2)

SM/RH/SC/sb

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Accessible formats or communication supports are available upon request

TMP Update Presentation to Local Municipalities Summary of Comments Received

Local Municipality	Comments Received
Aurora	<ul style="list-style-type: none"> • Grade separation should to be a priority. • Will York Region take on more responsibility for interchanges? St. John's interchange should be a higher priority. • Interest in proceeding with pilot project for left turn restriction at Yonge and Wellington. • Is there a goal to reducing commute times? Elaborate on alleviating congestion in Aurora. • Interest in a pilot project for GO Shuttle in Aurora. • Making the last mile – accessibility should be a part of this as well. • Should expand transit accessibility services for weekends and evening. • Finer grid policy area – would financial assistance be provided for widening Industrial Parkway?
East Gwillimbury	<ul style="list-style-type: none"> • When will Doane Road be completed? Traffic issues at Queensville Sideroad. • Clarify how boulevard jurisdiction would be implemented. • Support for implementation of the Bradford By-Pass. • Road conditions are poor (state of good repair work required) • Have truck-only lanes been considered? • There is a need to establish service levels for design and maintenance of sidewalk and lighting on Regional roads as well as for trails of regional importance. Issues such as frequency and quality/standard of benches and rest areas, use of decorative luminaries and winter/boulevard maintenance. • Sidewalks and boulevards should be designed and implemented to have consideration for connections with transit stops. • Recognize the importance of on-road cycling facilities and the principles of active transportation including having the Nokiidaa trail extension implemented in conjunction with the delivery of the Second Concession project in the fall of 2016 and the associated Lake-to-Lake trail connections. • The recommended policy principles and actions should be strengthened and less general to ensure more specific and targeted outcomes. • There is support for a Regional role to provide flyovers to cross 400-series highways, including one identified in the Queensville community plan. • A Regional role in facilitating and funding key North-South and East-West road capacity is supported. • There is a lack of East-West capacity in the road network and initiatives to improve East-West capacity are required, including among others advancing Doane Road reconstruction, the Hwy 400/404 link, widening and grade separation on Green Lane and widening of Queensville Side Road. • Widening of Regional roads (4 lanes and beyond) through village core areas should be reviewed in conjunction with alternate road capacity scenarios. • The TMP should take preliminary steps towards recognizing the potential for autonomous vehicles and making provisions for charging stations. • Transit improvements in addition to rapid transit and bussing should be considered for a long-term perspective, including the eventual extension of the subway northward.

	<ul style="list-style-type: none"> • Recognize the importance of safe and efficient railway crossings to facilitate increased GO train service frequency. • The Region is requested to provide written responses to the above comments.
Georgina	<ul style="list-style-type: none"> • What public consultation will be done before the plan is finalized? • Need to liaison with Georgina communications to inform the public about upcoming opportunities. • What transit vehicles will serve the 400 series highways? • Desire to have a transit connection from Keswick to the East Gwillimbury GO Station. • Agricultural vehicle needs should be considered in the TMP. • Have we looked at changing signalized intersections to other traffic controls? • Interest in developing ridesharing/carpooling programs • Desire to see better active transportation infrastructure and connections throughout Keswick. • What is the timeline for change of boulevard jurisdiction?
King	<ul style="list-style-type: none"> • Interest in the status of the Highway 400 to 404 Link and the GTA West • Is the Region proposing to take over all of the King Road boulevard jurisdictions? • When planning cycling routes with curbs in rural areas, this may impact movement of farm equipment. • Does the TMP assess impacts to climate change? • When will road improvements to 15th Sideroad be completed? Concerns related to impact on residents. • 15th Sideroad is needed in addition to GTA West corridor. • Inquired about mid-York east/west corridor study and short list of alternatives to be looked at in EA. • Consider utility corridors for transportation. • Will York Region partner with King and Bradford for traffic signals at Bridge St.? (safety concerns) • Support for more commuter parking lots. Should include public transit connection. • There are two proposed goods movement corridors. Would they be eliminated if the GTA West came into effect? • Support for corridor evolution to move the most people. • Support for walkability. How will the TMP lead to people getting out of their cars? • Concern with the cost of the TMP. • Concern with traffic congestion. • Interest in having parking on King Road and Keele Street.
Markham	<ul style="list-style-type: none"> • Road widening could be counterproductive for getting people out of cars. • Local councilors should be notified before removing any turning restrictions. • Need separated bike lanes. • What is the status of transit fare integration? • Will HOV be in place all day or just during peak periods? • Inquired on the status of the Bayview Avenue widening? • Why are we widening roads even if congestion will still exist? • Why expand parking at transit stations? Use Uber and local bus network to feed transit stations. • Integrate commuter parking lots with GO Station parking. • Inquiry regarding parking on Region roads. • Concerned about more freight rail traffic through Markham. • Inquiry regarding plans for Steeles Ave East. • Woodbine Ave – why not connect to SmartTrack?

	<ul style="list-style-type: none"> • Concerns with widening Bayview Avenue. • Inquiry regarding timing of various projects (Major Mackenzie, Steeles Avenue, 14th Ave East of Markham Road) • Concern with timing of road widening projects that were in the transportation analysis for ROPA 3. • RER should service the base (6am – 1am) and handle the peak (more transit service). • Feasibility/impacts of grade separation at Highway 7 and 16th Avenue (Stouffville GO Line) • Desire to continue collaboration with TTC to extend services further into York Region? • Inquiry regarding the status of the Yonge subway extension. • City staff is in agreement with the recommended policy principle that York Region be responsible for environmental assessments, design, construction, and operation of all future 400-series highway crossings. • If Markham is a funding partner, they must be fully involved in the planning, design and construction of infrastructure. • Desire for sufficient capacity of the Regional road and transit network to address congestion and reduce infiltration through local neighbourhoods. • Support for the Region to establish a development charge funded reserve for 400-series highway crossings and ramp extensions only. The City will establish their own development charges for roads and infrastructure under the City's jurisdiction. • City staff are in agreement with the recommended actions pertaining to the Goods Movement Network. • Concerned with providing commuter parking lots in Centre and Corridors. Support commuter lots along Highway 404. • Support for High Occupancy Vehicle (HOV)/Transit lanes. • Support for transfer of boulevard elements on Regional roads. Markham should be consulted in design of facilities.
Newmarket	<ul style="list-style-type: none"> • Town supports Commuter Parking Actions but would like to be part of the pilot projects study (including use of paid parking) to ensure equity and proper placement of these facilities. • No sidewalks at Green Lane at Taylor Trail. Need safe sidewalks westward on Green Lane. • Will the boulevard have broadband? • The work with Metrolinx and Region has to dovetail – when will the TMP and the Metrolinx work be coordinated? • Interest in a GO transit hub at Mulock. Interest in extending RER to Newmarket and a new station at Mulock. • Integrate all modes and development around the mobility hub – Eagle bus station. • Grade separations in Newmarket should be considered. • Has the province identified the number of grade separations required? • Regarding elimination of turning restrictions, it is important to consider infiltration through the stable residential communities. • Support for the Goods Movement Actions but would also like the TMP Update to consider emerging opportunities. • Support for recommended policy principles and actions regarding boulevard jurisdiction but caution that additional development charges may impact development potential. • Town staff wish to be part of the study that determines threshold levels for converting existing four-lane roads.
Richmond Hill	<ul style="list-style-type: none"> • More east-west connections are needed. Is York Region working with the province on mid-block highway crossings? • Concerned about public acceptance of Finer Grid Street network in established neighbourhoods. • What is the timeframe for extending the Yonge Subway (related: duplication with Yonge rapidway north of Hwy 7) • Are we looking at bicycle lanes separated from roads? • Inquiry regarding Steeles partnership with City of Toronto. • Are 4 to 6 lane road widening projects limited to transit/HOV only? • Any consideration given to reversible lanes?

	<ul style="list-style-type: none"> • How is York Region working to improve transit mode share? • When is BRT construction expected to be completed? • Has the TMP contemplated autonomous vehicles and services like Uber? • What is the plan for the commuter parking strategy? • Does York Region assume responsibility for electric vehicle charging stations? • In the interim (before the Yonge Subway Extension) how will we deal with the bottleneck from Finch to Highway 7? • What is the plan for 19th Ave improvements? • What about the Buttonville and 16th Ave interchange? • Elaborate on planning horizons
Vaughan	<ul style="list-style-type: none"> • Support for mid-block crossings and opening up collector roads. • Need to get the Langstaff Missing Link built and we need Federal support. Important for getting trucks out of VMC. • Concerns with some mid-block crossings due to community sensitivities. • Transfer of boulevard jurisdiction - what will be impact on current maintenance standards and levels of service. • Supportive of Region taking over boulevard jurisdiction on Regional roads. • Complaints about lack of parking at GO stations. • Need to build GO Transit hubs with enough parking and also served by buses. • The City supports in principle the Region's new policy direction related to Commuter Parking Management. • The City supports in principle the Region's new policy direction related to Goods Movement strategy. • With RER coming online, concerned that rail goods movement will be transferred to non-RER corridors. • Need a grade separation on Rutherford at Highway 27. Remove the no u-turns sign in the meantime. • Praise for the extensive engagement undertaken as part of the TMP. • Support for road widening on Highway 7 between Kipling and Islington. • The Teston Road missing link between Dufferin and Keele needs to be moved forward. • Desire to have the Rutherford-Carrville EA completed soon. (restricting development) • There is a pedestrian safety issue on Rutherford between Dufferin and Bathurst – no sidewalk. • Desire for a centre turn lane added to Major Mackenzie Drive in Maple • Desire for intersection improvements on Major Mackenzie Drive from Keele westward to McNaughton Road. • Not supportive of rapid transit going through Maple on Major Mackenzie Drive. • The City supports the Region assuming a larger role in the funding and delivery of mid-block collector roads of Hwy400 • The City requests York Region to prioritize the proposed road/rail grade separations in Vaughan
Whitchurch-Stouffville	<ul style="list-style-type: none"> • Requested more information on the funding and affordability of the plan. • Asked the TMP project team to return in the fall when more information is known about funding. • Concerned with how much this will cost Whitchurch-Stouffville taxpayers. • Desire for increased transit service in Stouffville.



Transportation Master Plan

Draft Network Alternatives | May 2016



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Purpose & Introduction

This Attachment provides Council with an overview of the proposed 2041 Transit, Roads, Active Transportation and Strategic Goods Movement Networks (networks) for the Transportation Master Plan (TMP) Update. The draft networks build on the policy principles and objectives presented to Council in February 2016.

This TMP Update builds upon the foundations set by previous TMPs. Those plans, completed in 2002 and 2009, took a progressive approach to integrating land use and transportation, with a primary focus on planning and building rapid transit corridors to connect the Region’s four Urban Growth Centres, primarily situated along Highway 7 and Yonge Street.

The draft networks included in the TMP Update aim to:

- Maximize opportunities to benefit from new Provincial investments to accommodate growth
- Capitalize on progress made towards delivery of previous Master Plan priorities, such as the Toronto-York Spadina Subway Extension, expansion of Viva Bus Rapid Transit and the extensions of Highway 404 and Highway 427
- Support active transportation and transit by completing missing links in the road network and active transportation network

Linking the TMP to Goals and Objectives of Key Council Approved Plans

The Transportation Master Plan (TMP) Update and the draft networks, aligns with the vision, goals and objectives of key Council approved plans, including Vision 2051, Regional Official Plan and the 2015 - 2019 Strategic Plan.

The **Regional Official Plan (2010)** has several progressive objectives and policies, specifically within Sections 5 and 7, that are further supported with the 2016 TMP Update, some of which are highlighted on the table on page 3.

The TMP Update falls within Departmental Plans within the Region’s hierarchy of planning and accountability framework, on the right.



Linking the TMP to Goals and Objectives of Key Council Approved Plans

TMP Update Objective	Vision 2051	Regional Official Plan, 2010 (Chapters 5 and 7)	2015 - 2019 Strategic Plan
<p>1</p> <p>Create a World Class Transit System</p>	<ul style="list-style-type: none"> • Livable cities and complete communities • Living Sustainably • Interconnected system for mobility 	<ul style="list-style-type: none"> • Ensure streets support all modes of transportation including walking, cycling, transit, automobile use, and the efficient movement of goods • Provide transit service that is convenient and accessible to all residents and workers of York Region 	<ul style="list-style-type: none"> • Manage Environmentally Sustainable Growth
<p>2</p> <p>Develop a Road Network Fit for the Future</p>	<ul style="list-style-type: none"> • An innovation economy • Interconnected system for mobility 	<ul style="list-style-type: none"> • Plan and protect future urban and rural streets to accommodate transportation demands 	<ul style="list-style-type: none"> • Manage Environmentally Sustainable Growth • Strengthen the Region's Economy
<p>3</p> <p>Integrate Active Transportation in Urban Areas</p>	<ul style="list-style-type: none"> • Interconnected system for mobility • Living Sustainably 	<ul style="list-style-type: none"> • Ensure streets support all modes of transportation including walking, cycling, transit, automobile use, and the efficient movement of goods • Create an active transportation system and programs that encourage walking, cycling and the use of public transit • Reduce automobile dependence by enhancing opportunities for residents and workers to walk, cycle, take transit and carpool 	<ul style="list-style-type: none"> • Support Community Health and Wellbeing
<p>4</p> <p>Maximize the Potential of Employment Areas</p>	<ul style="list-style-type: none"> • A place where everyone can thrive • An innovation economy 	<ul style="list-style-type: none"> • Promote a linked and efficient network for goods movement that supports economic vitality and minimizes conflicts with adjacent land uses • Ensure streets support all modes of transportation including walking, cycling, transit, automobile use, and the efficient movement of goods • Reduce automobile dependence by enhancing opportunities for residents and workers to walk, cycle, take transit and carpool 	<ul style="list-style-type: none"> • Strengthen the Region's Economy
<p>5</p> <p>Making the Last Mile Work</p>	<ul style="list-style-type: none"> • Interconnected system for mobility • Livable cities and complete communities 	<ul style="list-style-type: none"> • Create an active transportation system and programs that encourage walking, cycling and the use of public transit • Achieve attractive and vibrant urban Regional Corridors that link Regional Centres • Achieve complete, diverse, compact, vibrant, integrated and well-designed Regional Centres that serve as focal points for housing, employment, cultural and community facilities, and transit connections 	<ul style="list-style-type: none"> • Strengthen the Region's Economy • Manage Environmentally Sustainable Growth • Support Community Health and Wellbeing

Building on Policy Principles and Objectives

The Draft networks build on the TMP policy principles and objectives and form an integral part of a complete TMP Update. The Draft Network Maps included are as follows:

- Proposed 2041 Transit Network
- Proposed 2041 Road Network
- Proposed 2041 Cycling Network
- Sidewalk Gaps on Regional Roads
- Proposed Strategic Goods Movement Network

These networks are developed to manage traffic congestion, provide transportation choices, and address some of the travel and technological trends highlighted in the following sections.

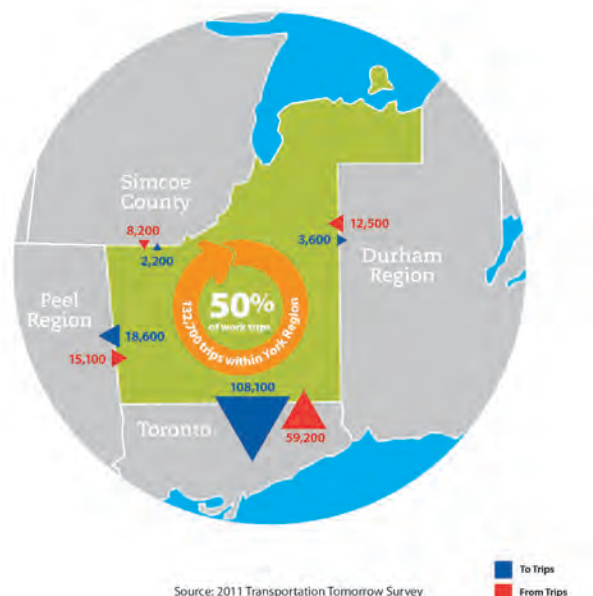
Current Travel Trends

The proportion of commutes beginning and ending in the Region has grown from 42 per cent to more than 50 per cent over the past 20 years and this trend is continuing. The development of large employment areas within the Region means more residents have the opportunity to live and work in the Region. This represents an opportunity to carry future commuters on transit.

A significant proportion of employment growth is planned to occur in four Regional Centres and Corridors, which offer high-quality rapid transit service and support other sustainable modes of travel.

For outbound commuters, the downtown core in the City of Toronto remains a primary destination. Many commuters are also coming from the City of Toronto to work in York Region. These two-way cross-boundary trips provide an opportunity for increasing transit ridership, benefitting from rapid transit investment, subway extensions and Regional Express Rail. The figure below represents the 2011 morning trips to work.

Intra-Regional Trips Across York Region during the Morning Peak Period



Shift Towards Transit

Current trends indicate that while auto use continues to be dominant in York Region, transit is becoming a more attractive travel option. Cars carried 83 per cent of all person-trips in the weekday morning peak period in both 2001 and 2011, with more than 100,000 new auto trips added over the same decade.

Public transit's overall share of morning peak period travel (i.e. YRT/Viva and GO Transit) increased from seven per cent to 10 per cent between 2001 and 2011. The YRT/Viva annual revenue ridership grew from 7.7 million in 2001 to 22.1 million in 2015, an average increase of more than 10 per cent annually.

An opportunity exists to increase the number of trips taken on transit internal within York Region. In 2011, transit carried just three per cent of morning peak period trips that both started and ended in York Region. To capitalize on this opportunity, new policies and services are being developed, such as commuter parking supported by express bus service to rapid transit lines, to encourage people to park and ride for part of their trip or to leave the car at home entirely.



Opportunities with Emerging Technologies

Emerging technologies enable new ways to provide travel choices and operate the Region's transportation system. In 2002, less than one-third of Canadians subscribed to mobile phone plans, true smartphones were years away and hybrid vehicles were just entering the market. Today, more than half of Canadians own a smartphone, most drivers have access to GPS navigation, transit arrival information is offered in real time and rides can be hailed, tracked and paid for using handheld devices. These trends are fundamentally changing the way we live, work and travel.

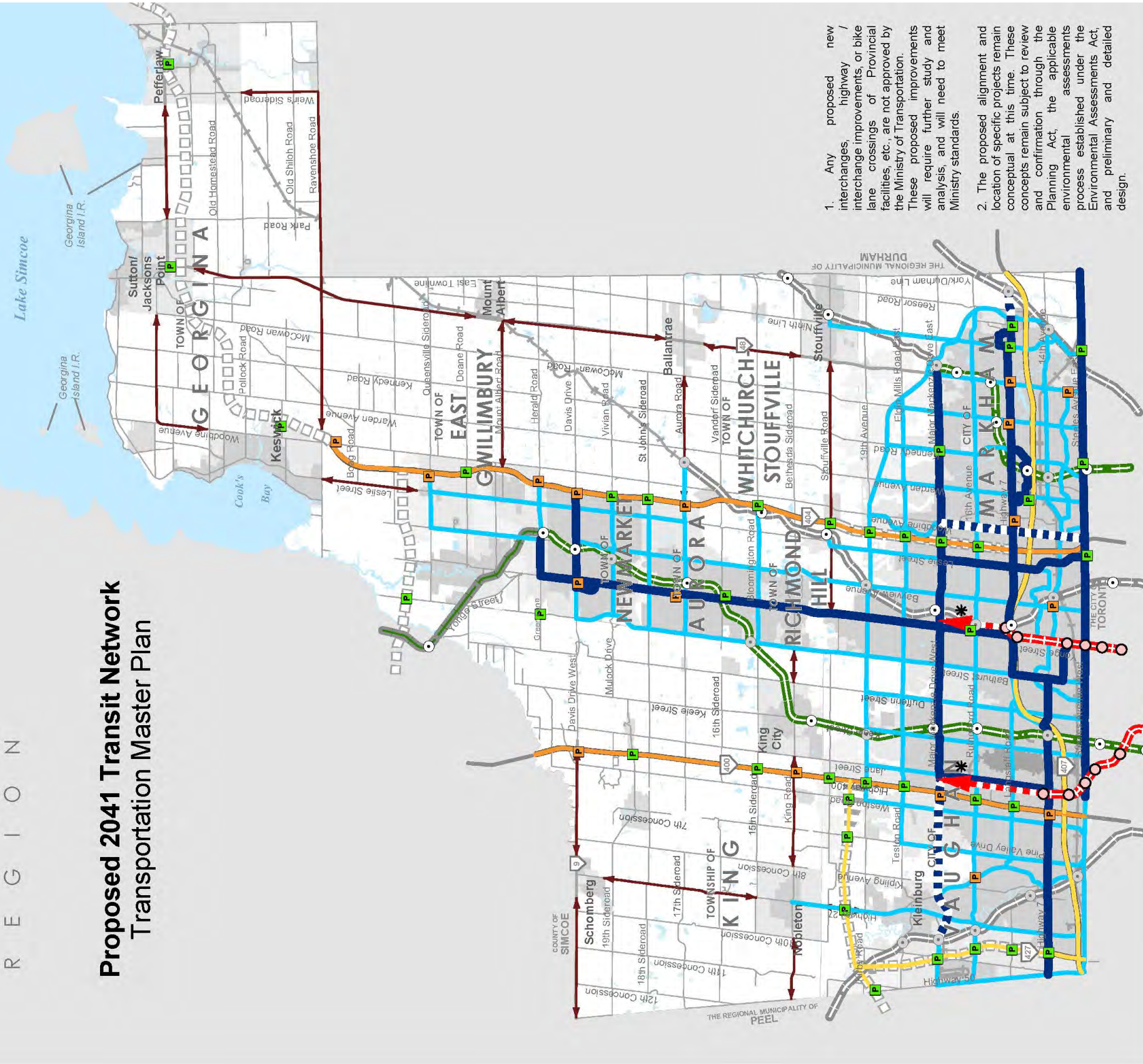
The TMP cannot predict future technological shifts, but will consider and provide ideas to work with recent and imminent advancements that may enable different ways of delivering services, encouraging sustainable travel modes and operating the transportation system more efficiently. App-based smartphone services, car/ride sharing and autonomous vehicles are among the most significant changes on the horizon.

1 Create a World Class Transit System

Monday, April 04, 2016

Y O R K
R E G I O N

Proposed 2041 Transit Network Transportation Master Plan

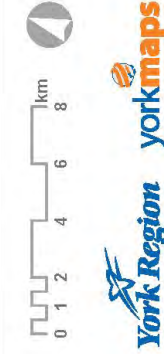


1. Any proposed new interchanges, highway interchange improvements, or bike lane crossings of Provincial facilities, etc., are not approved by the Ministry of Transportation. These proposed improvements will require further study and analysis, and will need to meet Ministry standards.
2. The proposed alignment and location of specific projects remain conceptual at this time. These concepts remain subject to review and confirmation through the Planning Act, the applicable environmental assessments process established under the Environmental Assessments Act, and preliminary and detailed design.

- Rapid Transit Corridor
- Rapid Transit Subject to Further Study
- Frequent Transit Network
- Highway Bus Service (YRT/Miva, GO) Transitway
- Rural Bus Connections
- Subway Extension
- Potential Subway Extension to be Determined by Future Study
- Future Subway Station
- GO Train, 15-min Two Way All Day Service
- GO Train, Two Way All Day Service
- GO Train, Rush Hour Service
- Existing GO Station
- Potential GO Station
- Proposed Commuter Lots
- Existing Commuter Lots

Note:
* Special Study

- BASE MAP INFORMATION**
- Provincial Freeway
 - Provincial Highway
 - Road
 - Railway
 - Future MTO Freeway



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Boundaries and Water Features

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The 2041 Transit Network: The Big Moves

- Implement the Frequent Transit Network
- Deliver the YRT/Viva 5-year Service Plan
- Extend Yonge Subway to Richmond Hill/Langstaff and study further subway expansion with partners
- Complete Viva Network (rapidways and new service corridors)
- Develop implementation plan for the expansion of Park and Ride facilities with transit connections to urban centres
- Integrate and connect with Regional Express Rail
- Support freeway bus network and future Provincial transitway corridors
- Improve service and fare integration with partner transit systems (e.g. GO, TTC, Durham, Brampton)



Value to the Community

The Proposed Transit Network and related policy directions respond to key objectives of the Regional Official Plan, Vision 2051, Strategic Plan and the TMP by:

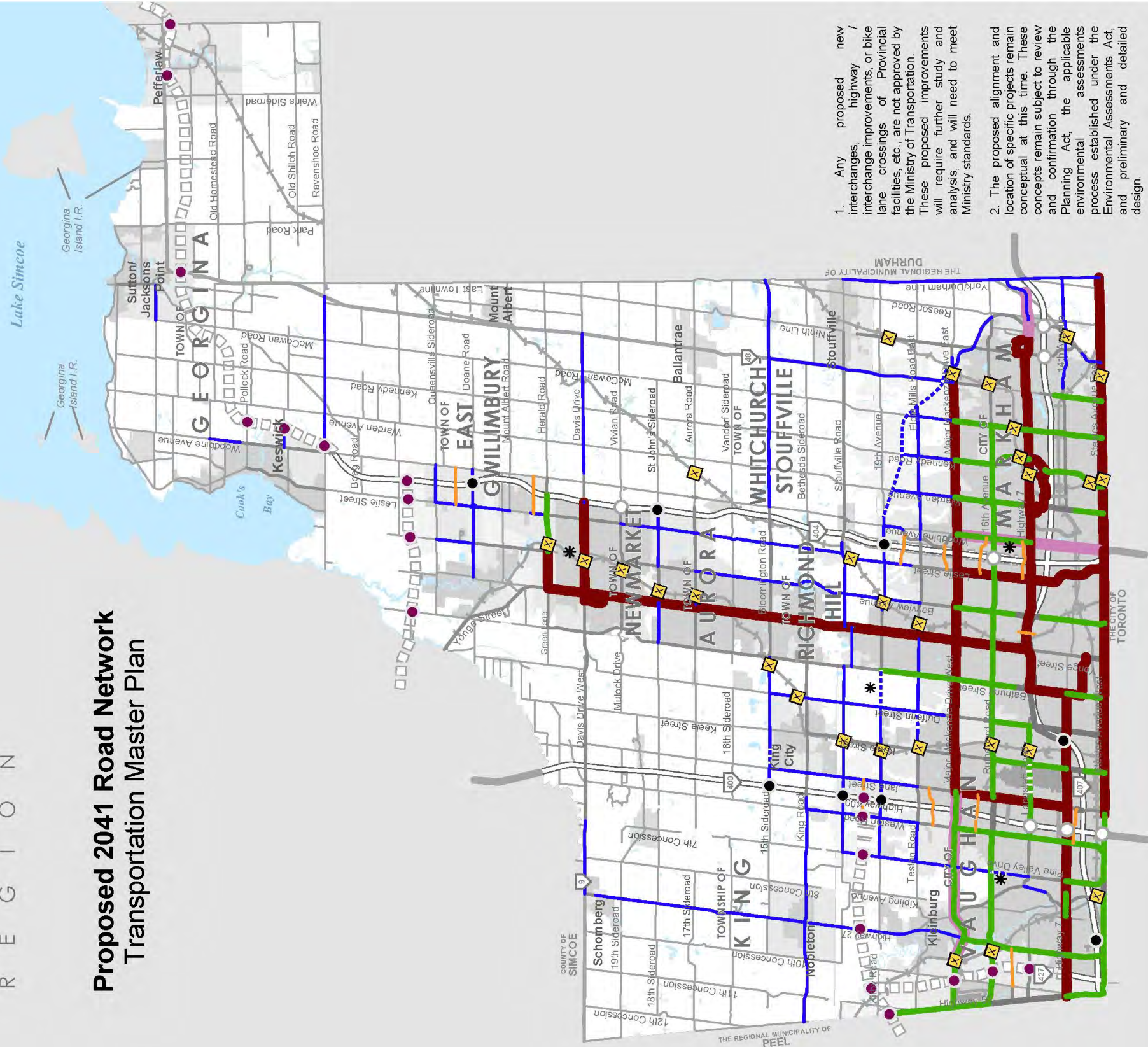
- Supporting connectivity in the Region by leveraging Provincial investment in Regional Express Rail
- Supporting intensification in Centres and Corridors by maximizing subway and rapidway initiatives
- Increasing transit ridership opportunities to help manage traffic congestion by connecting people to places, jobs and services via enhanced transit service
- Encouraging transit-oriented complete communities that support sustainable lifestyles by providing access to better transit
- Increasing service delivery providing an integrated transit system with Viva, York Region Transit, TTC, Metrolinx/GO and MTO
- Creating a seamless and convenient transit system through the provision of an integrated fare system
- Reducing greenhouse gas emissions by providing and supporting greater transit service
- Providing convenient commuter parking to make it easier to get out of our cars and into transit

2 Develop a Road Network Fit for the Future

Monday, April 04, 2016

Y O R K
R E G I O N

Proposed 2041 Road Network Transportation Master Plan



1. Any proposed new highway / interchange, improvements, or bike lane crossings of Provincial facilities, etc., are not approved by the Ministry of Transportation. These proposed improvements will require further study and analysis, and will need to meet Ministry standards.
2. The proposed alignment and location of specific projects remain conceptual at this time. These concepts remain subject to review and confirmation through the Planning Act, the applicable environmental assessments process established under the Environmental Assessments Act, and preliminary and detailed design.

4 Lane Network

- Proposed Future 4 Lane Widening
- Existing 4 Lane Road
- Proposed New 4 Lane Road

6 Lane Network

- Proposed Future 6 Lane Widening
- Existing 6 Lane Road
- Proposed New 6 Lane Road

Note:

- * Special Study Area

Interchange Improvements (to be confirmed by MTO)

- Future Interchange on Existing Freeway
- Future Interchange on Future Freeway
- Other Interchange Improvement

Other Improvements

- Rapid Transit
- Rapid Transit Subject to Further Study
- Midblock Crossing
- Proposed Grade Separation (Road Classification Study to identify grade separations on collector roads)

BASE MAP INFORMATION

- Provincial Freeway
- Provincial Highway
- Road
- Railway
- Future MTO Freeway

0 1 2 4 6 8 km

York Region yorkmaps

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The 2041 Road Network: The Big Moves

- Widen and urbanize roads in new growth areas
- Eliminate pinch points and bottlenecks
- Build missing links and new roads
- Expand high occupancy vehicle network
- Develop the finer grid road network
- Maximize person carrying capacity through corridor evolution
- Build context sensitive multi-modal corridors



Value to the Community

The Proposed Road Network and related policy directions respond to key objectives of the Regional Official Plan, Vision 2051, Strategic Plan and the TMP by:

- Maximizing the ability to move more people through the provision of HOV and transit priority lanes
- Providing the flexibility to adapt to technological changes in travel and accommodate future corridor needs
- Providing improved access to employment areas with better access to freeways and interchanges
- Supporting the efficient movement of goods and services through implementation of key corridors
- Supporting communities and managing congestion by providing new and expanded Regional roads
- Providing greater travel route choices with a finer-grid road network
- Connecting missing links in the road network by removing physical barriers and providing grade separations
- Managing congestion and optimizing the road network through intelligent transportation systems
- Designing urban streets as public spaces that contribute to achieving livable and vibrant communities

3 Integrate Active Transportation in Urban Areas

Thursday, March 17, 2016

Y O R K R E G I O N

Proposed 2041 Cycling Network Transportation Master Plan



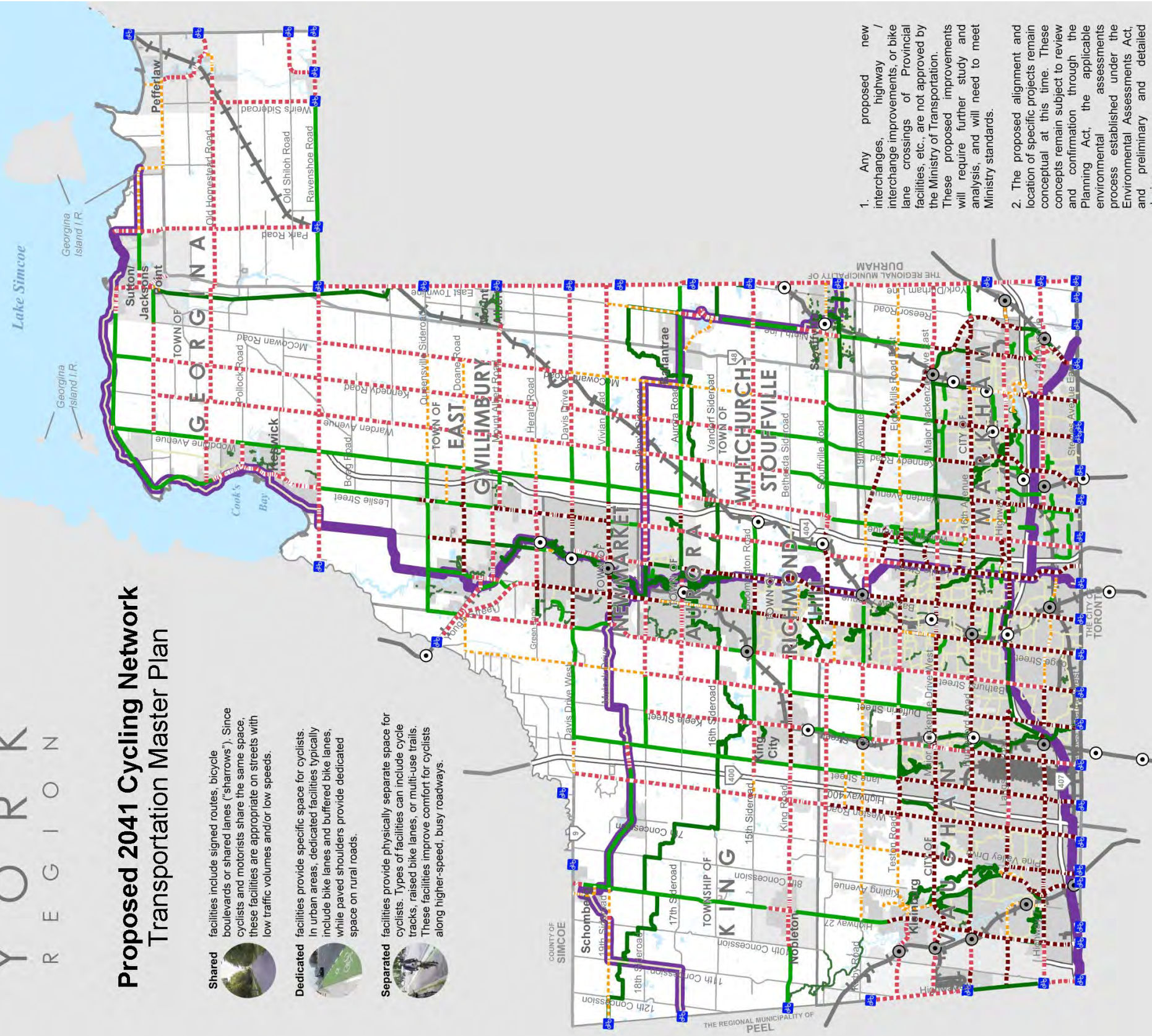
Shared facilities include signed routes, bicycle boulevards or shared lanes ("sharrows"). Since cyclists and motorists share the same space, these facilities are appropriate on streets with low traffic volumes and/or low speeds.



Dedicated facilities provide specific space for cyclists. In urban areas, dedicated facilities typically include bike lanes and buffered bike lanes, while paved shoulders provide dedicated space on rural roads.



Separated facilities provide physically separate space for cyclists. Types of facilities can include cycle tracks, raised bike lanes, or multi-use trails. These facilities improve comfort for cyclists along higher-speed, busy roadways.



1. Any proposed new highway interchanges, highway improvements, or bike lane crossings of Provincial facilities, etc., are not approved by the Ministry of Transportation. These proposed improvements will require further study and analysis, and will need to meet Ministry standards.
2. The proposed alignment and location of specific projects remain conceptual at this time. These concepts remain subject to review and confirmation through the Planning Act, the applicable environmental assessments process established under the Environmental Assessments Act, and preliminary and detailed design.

Existing Cycling Network

- Shared Facility
 - Dedicated Facility
 - Separated Facility
- #### Proposed Cycling Facilities
- Local Cycling Route of Regional Significance
 - Dedicated
 - Separated
 - Conceptual Region-Wide Trail System
 - External Connection

Transit Network

- Rapid Transit / GO Corridor
- Existing GO Station
- Potential GO Station

BASE MAP INFORMATION

- Provincial Freeway
- Provincial Highway
- Road
- Railway



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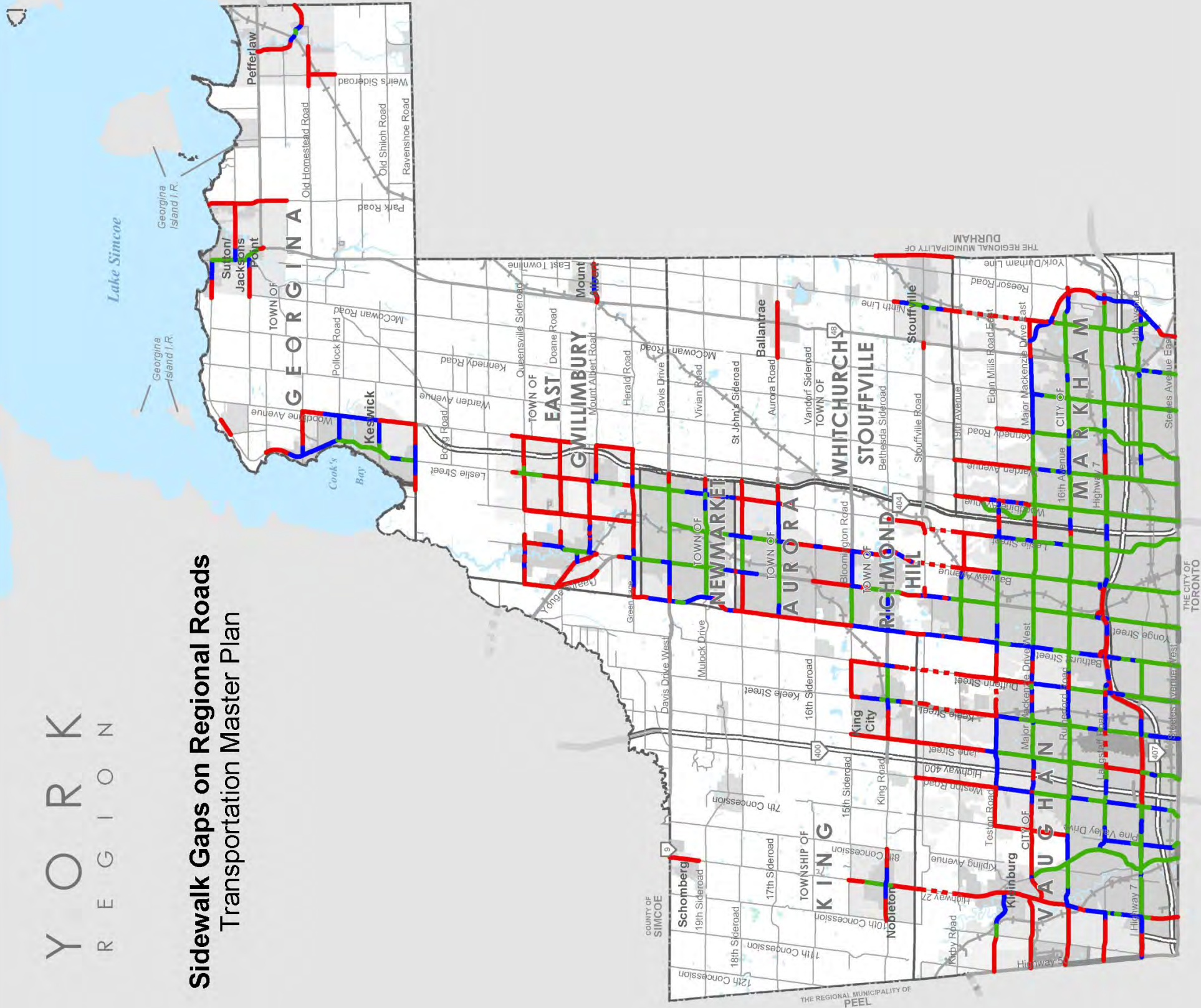
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Sidewalk Gaps on Regional Roads

Y O R K
R E G I O N

Sidewalk Gaps on Regional Roads Transportation Master Plan



Legend

- Sidewalk Location within Designated Urban Boundary**
- No Sidewalk
 - Sidewalk on One Side
 - Sidewalk on Both Sides
 - - - Potential Active Transportation

BASE MAP INFORMATION

- Provincial Freeway
- Provincial Highway
- Road
- Railway
- Municipal Boundary



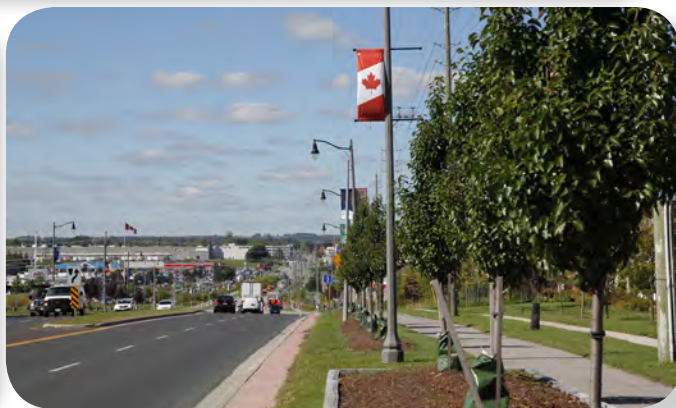
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The 2041 Cycling Network: The Big Moves

- Fill gaps in sidewalk network in urban areas
- Work with Ministry of Transportation to make highway interchanges walk and cycle friendly
- Work with neighbouring municipalities to create seamless cross-boundary connections Adopt a Strategic Ten Year Cycling Network Plan that prioritizes cycling projects that connect to transit spines and Regional centres and accelerates development of Regional trail spines
- Increase the use of separated cycling facilities such as cycle tracks, raised bike lanes and multi-use trails to improve comfort for cyclists
- Focus infrastructure in urban areas to improve connections to employment and institutional land uses



Value to the Community

The Proposed Cycling Network and related policy directions respond to key objectives of the Regional Official Plan, Vision 2051, Strategic Plan and the TMP by:

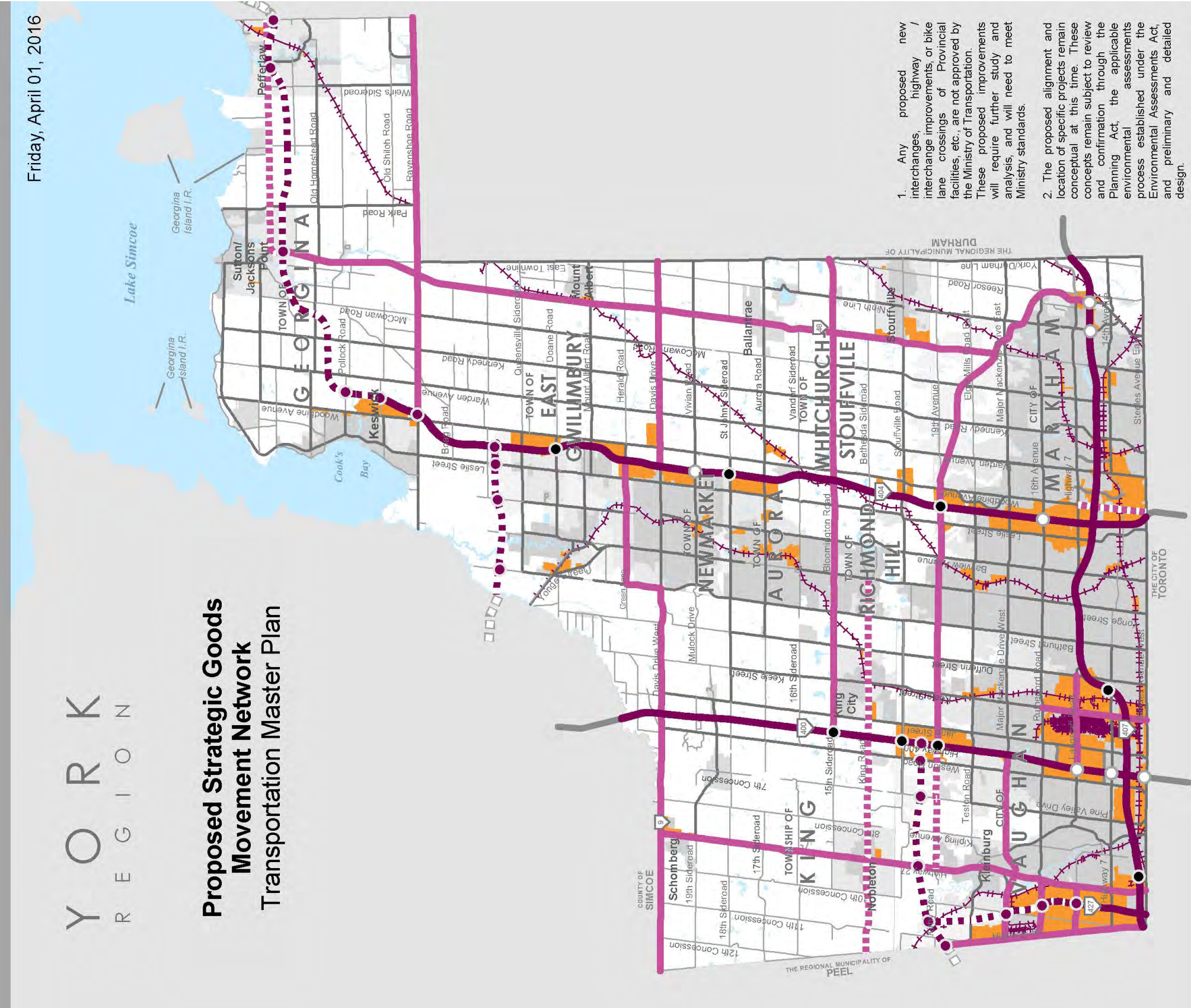
- Making sustainable travel choices more attractive and viable with a more connected cycling network
- Improving access to transit by completing missing links in the cycling and sidewalk network
- Promoting an active and healthy lifestyle by providing safer routes to schools and other key destinations
- Connecting key destinations and urban areas by prioritizing cycling links
- Supporting cycling tourism with greater connections to recreational trails
- Connecting local and adjacent trail systems with a comprehensive on- and off-road cycling network
- Improving coordination between local municipal and Regional cycling plans
- Addressing the needs of a greater range of cyclists by aligning facility types

4 Maximize the Potential in Employment Areas

Friday, April 01, 2016

Y O R K R E G I O N

Proposed Strategic Goods Movement Network Transportation Master Plan

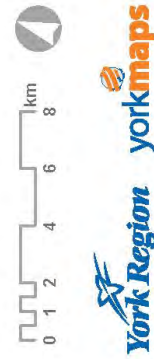


1. Any proposed new interchanges, highway interchange improvements, or bike lane crossings of Provincial facilities, etc., are not approved by the Ministry of Transportation. These proposed improvements will require further study and analysis, and will need to meet Ministry standards.
2. The proposed alignment and location of specific projects remain conceptual at this time. These concepts remain subject to review and confirmation through the Planning Act, the applicable environmental assessments process established under the Environmental Assessments Act, and preliminary and detailed design.

- Strategic Goods Movement Corridors**
- Tier 1**
 - Highway Goods Movement Corridor
 - Future Highway Goods Movement Corridor
 - Railway
 - Tier 2**
 - Interim Primary Arterial Goods Movement Corridor
 - Tier 3**
 - Primary Arterial Goods Movement Corridor
 - Secondary Goods Movement Corridor

- Interchange Improvements (to be confirmed by MTO)**
- Future Interchange on Existing Freeway
 - Future Interchange on Future Freeway
 - Other Interchange Improvement
 - Employment Areas

- BASE MAP INFORMATION**
- Provincial Freeway
 - Provincial Highway
 - Road
 - Future MTO Freeway



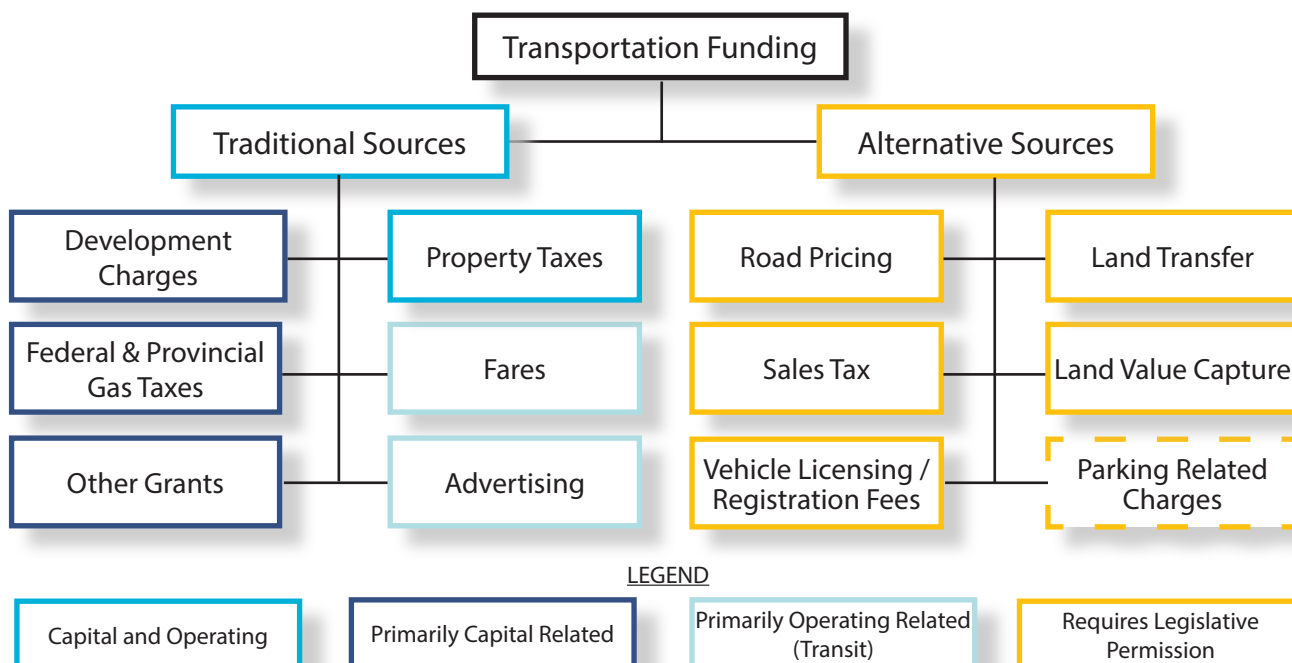
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Transportation Funding Options

York Region currently funds Roads and Transit capital costs with a combination of development charges, tax levy and funding from other levels of government including grants. Operating costs are funded through a combination of operating revenues and tax levy.

In order to meet the increased capital requirements of the proposed infrastructure, York Region will need to examine the impact on current funding sources and potential alternative funding from various sources within the context of long-term fiscal sustainability.



The following alternative sources of revenue are generally not available to York Region and would require Provincial legislative changes or change in authority:

- **Land Transfer Tax** – Event-based tax paid by property owners at the time of purchase. The Province currently charges a land transfer tax for all land purchased, with some exceptions. The City of Toronto is the only municipality to levy a separate and distinct rate from the Province (the *City of Toronto Act, 2006*).
- **Land Value Capture** – Capture of increased value of land and development generated by the improved accessibility of transportation. Improved access has value which is reflected in land and property values.
- **Road Pricing** – Blanket term that describes a variety of road related levies, including road tolls, cordon tolls (congestion charges), and emerging vehicle use fees.
- **Sales Taxes** – Additional fees levied on various goods and services, often done at the provincial and federal level.
- **Vehicle Licensing / Registration Fees** – Fees placed on owners of vehicles, straightforward and relatively easy to administer through the existing provincial system. This can include a Drivers Licence Tax and Vehicle Registration Fees.
- **Parking Related Charges** – Fees and / or taxes levied against parking and dedicated to transportation funding.



Transportation Master Plan



Your community, your say.



Stephen Collins Transportation Services
Brian Hollingworth IBI Group

May 5, 2016



Presentation Outline

This presentation accompanies Agenda Item D.2.1

1. Study Progress
2. Context and Foundations
3. 2041 Transit and Road Networks
4. Phasing Transit and Road Networks
5. Capital Costs
6. Next Steps

Study Progress

Transportation Master Plan (TMP) Study Stages



Current Reality

81% of AM peak work trips made by car

- 96% of trips less than 5 km are made by car

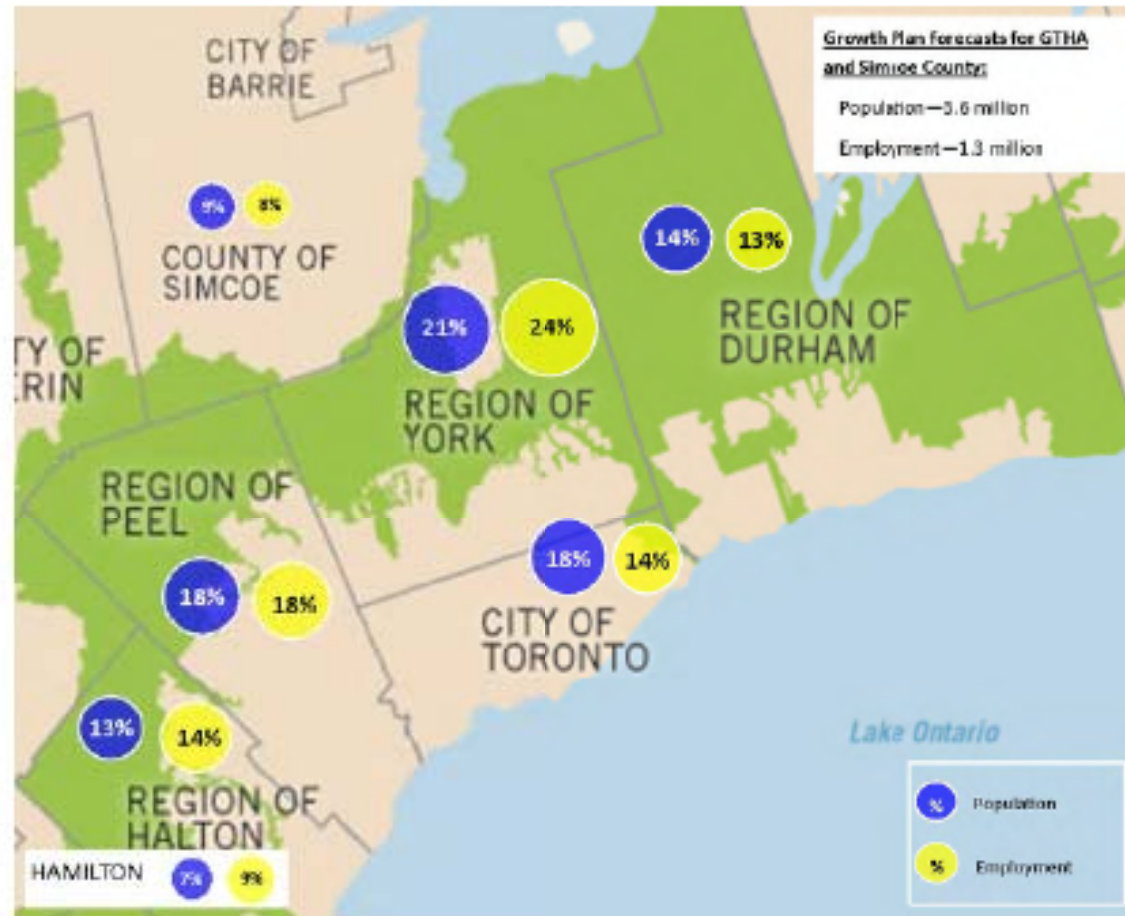
13% of AM peak work trips made by public transit

- <4 % of trips within York are made using transit
- few trips less than 15 km are made using GO Rail



Improve Mode Choice for Small Trips

Context: Growth Plan



York Region will accommodate the largest proportion of growth in the entire GTHA

Key Regional Plans: Vision 2051



Goal Areas

A Place where everyone can thrive

Livable Cities and Complete Communities

A resilient Natural Environment and Agricultural System

Appropriate Housing for all Ages and Stages

An Innovation Economy

Interconnected systems for Mobility

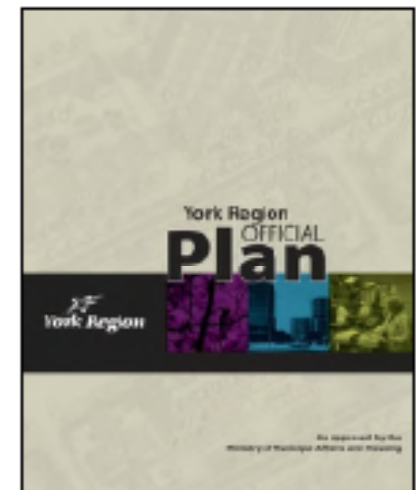
Living Sustainably

Open and Responsive Governance

Key Regional Plans: Official Plan 2010

Key Transportation Priority Areas

- Reduce automobile dependence by enhancing opportunities for residents and workers to walk, cycle, take transit and carpool
- Create an active transportation system and programs that encourage walking, cycling and transit use
- Provide transit service that is convenient and accessible to all residents and workers of the Region
- Ensure streets support all modes of transportation
- Promote a linked and efficient network for goods movement that minimizes conflict with sensitive land uses
- Plan and protect future urban and rural streets to accommodate transportation demands



Provides a strong policy foundation for the future transportation network

Key Regional Plans: TMP 2009



Key Sustainability Principles

- Integrate Transportation and Land Use
- Put Pedestrians and Transit First
- Protect and Enhance Natural Environment and Cultural Heritage
- Provide Access and Mobility For Everyone
- Conduct on-going Performance Monitoring
- Ensure Fiscal Sustainability and Equitable Funding
- Support our Economic Vitality
- Implement and Support Transportation Demand Initiatives

Focused on transit, sustainable transportation and new and expanded infrastructure

Moving Forward: 2016 TMP Update

- Identify needs and implement infrastructure to achieve policy objectives of Regional plans
- Fill gaps within the policy framework
- Better integrate transformative transit initiatives across the Region
- Respond to emerging and changing technologies
- Accommodate growth with multi-modal solutions

TMP Update builds on previous policies responding to growth and emerging issues

Objectives of the TMP

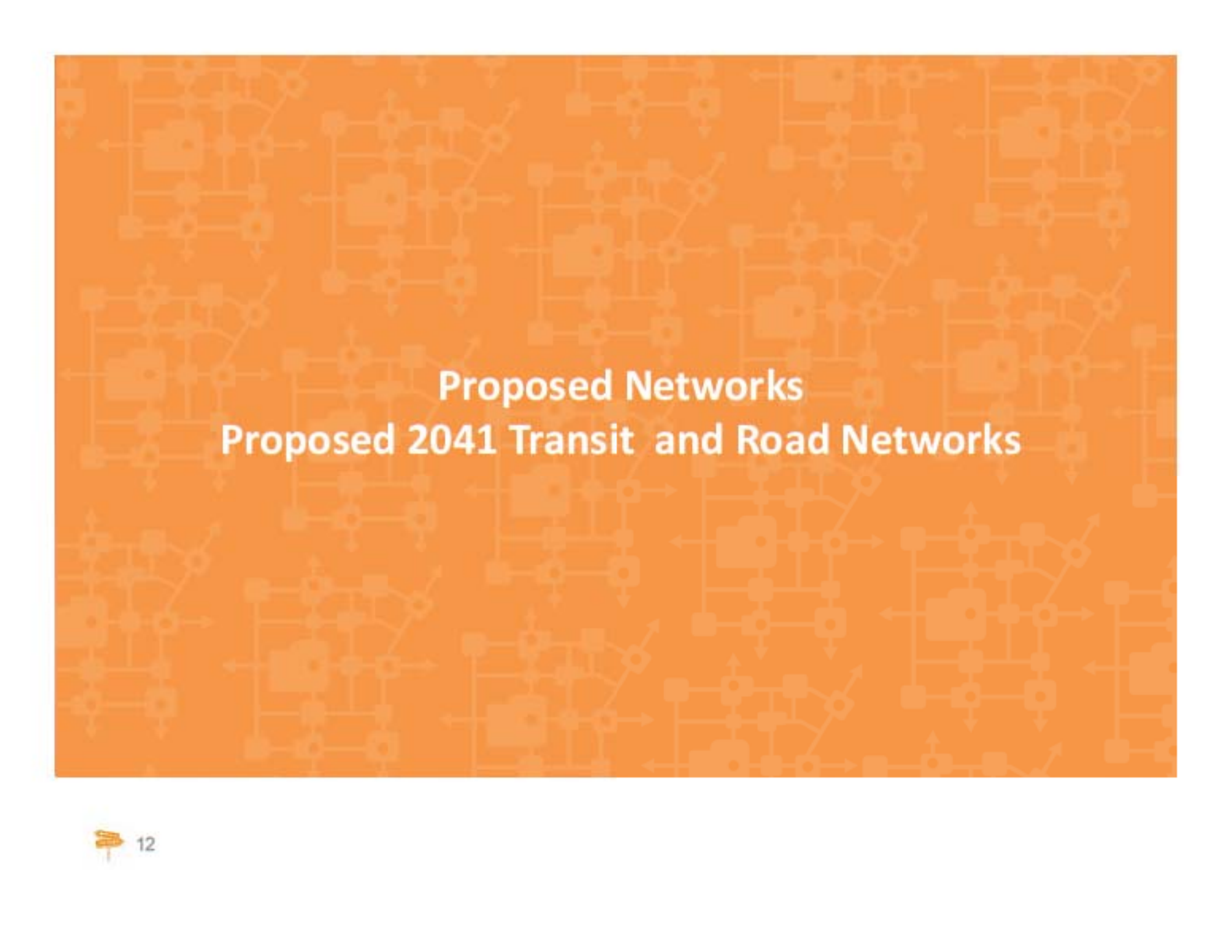
- ① Create a World Class Transit System
- ② Develop a Road Network fit for the Future
- ③ Integrate Active Transportation in Urban Areas
- ④ Maximize the potential of employment areas
- ⑤ Make the “Last Mile” work



Components of the TMP



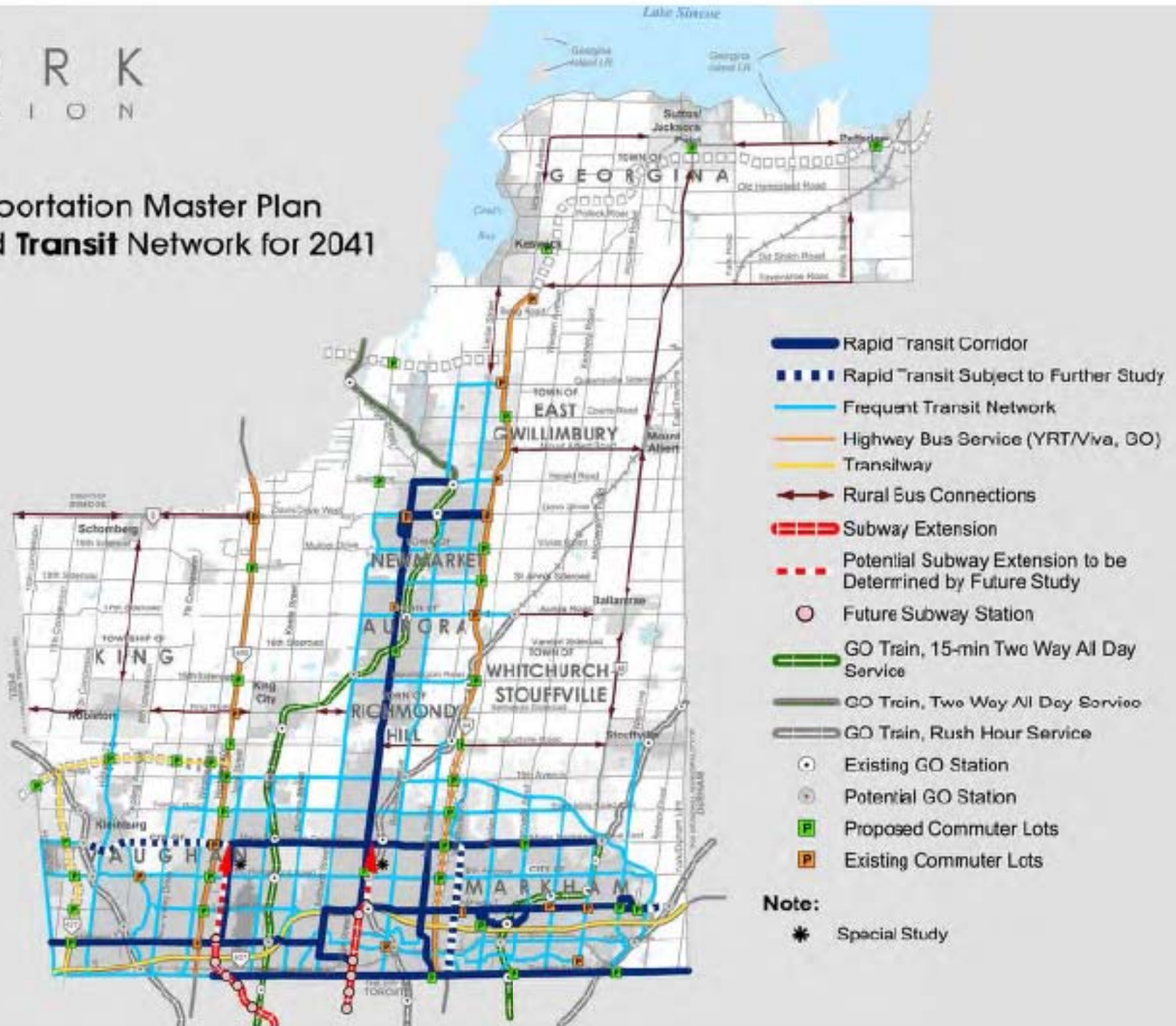
TMP Update builds on previous policies responding to growth and emerging issues



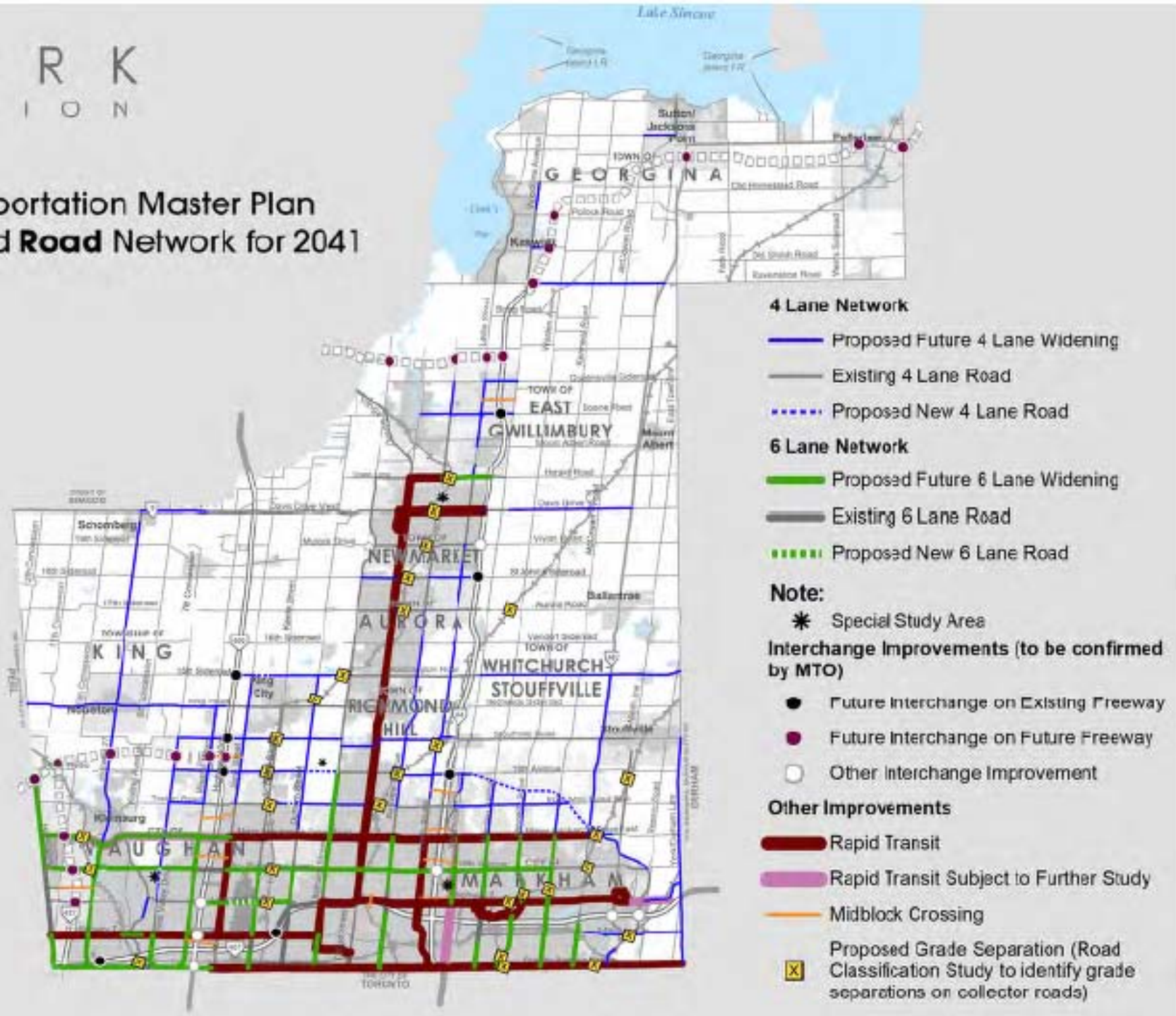
Proposed Networks

Proposed 2041 Transit and Road Networks

Transportation Master Plan
Proposed **Transit** Network for 2041



Transportation Master Plan
Proposed **Road** Network for 2041



Phasing of Networks: Key Assumptions

- 40% Land Use Intensification Scenario for Population and Employment Forecasts
- Regional Express Rail will be implemented in York Region within ten years on the Stouffville and Barrie GO Train lines
- Highway 427 extension to Major Mackenzie will be opened by 2021
- Existing projects that are committed and under construction are assumed complete

Metrolinx and MTO initiatives are key inputs

Phasing of Networks: Key Assumptions

The following criteria informed network phasing (for all projects on a 2 km by 2 km basis):

- Capacity – current and projected future V/C to 2041
- Development – current active, forecast population and employment growth
- Multi-modal traffic – bus, truck, connection to highways, connections to Centres and Corridors
- Population and Employment in the catchment areas of each project
- Project readiness

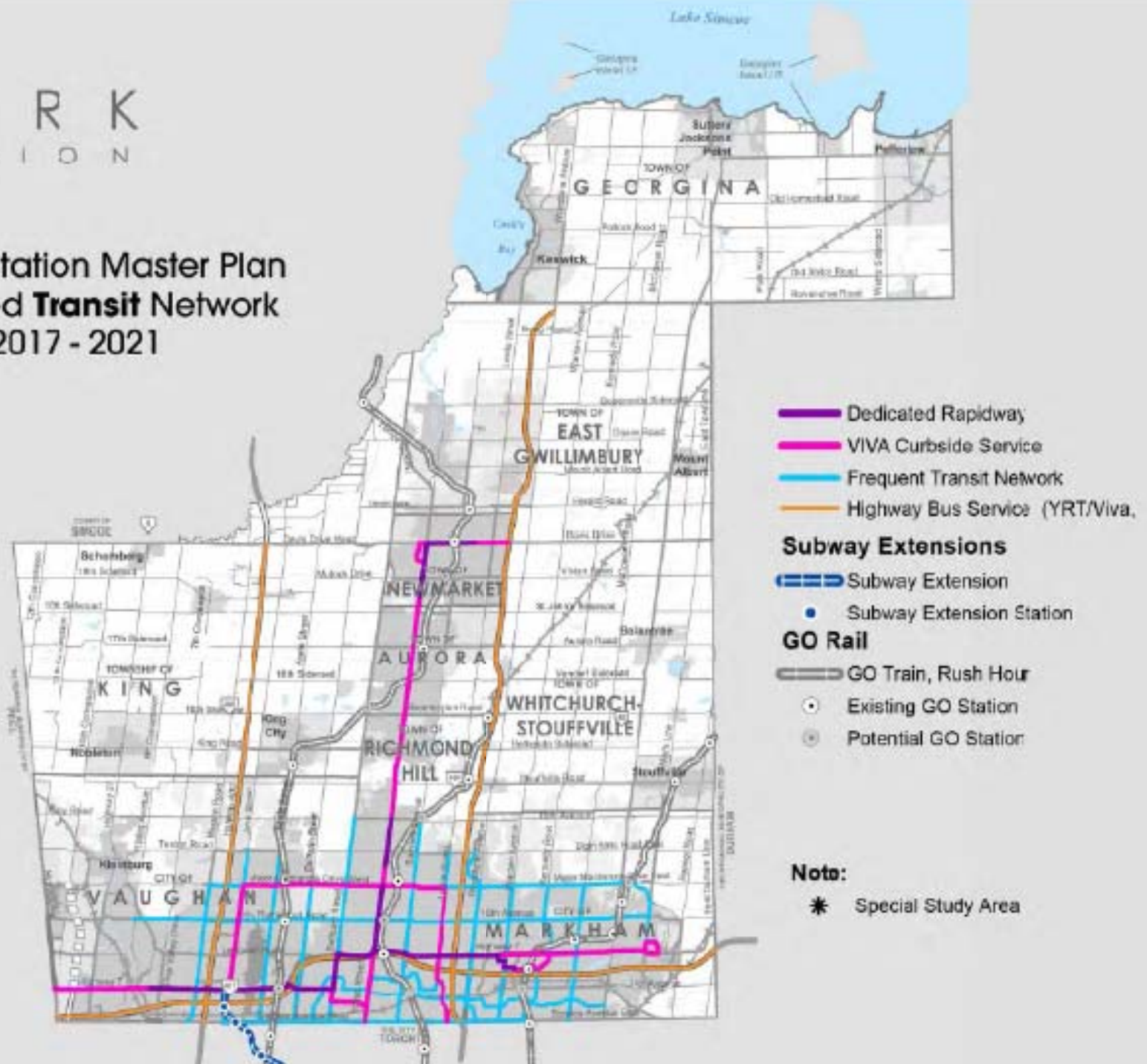
Evaluation of consistent criteria for Evidence-Based Prioritization



Phasing Networks Needs by 2021

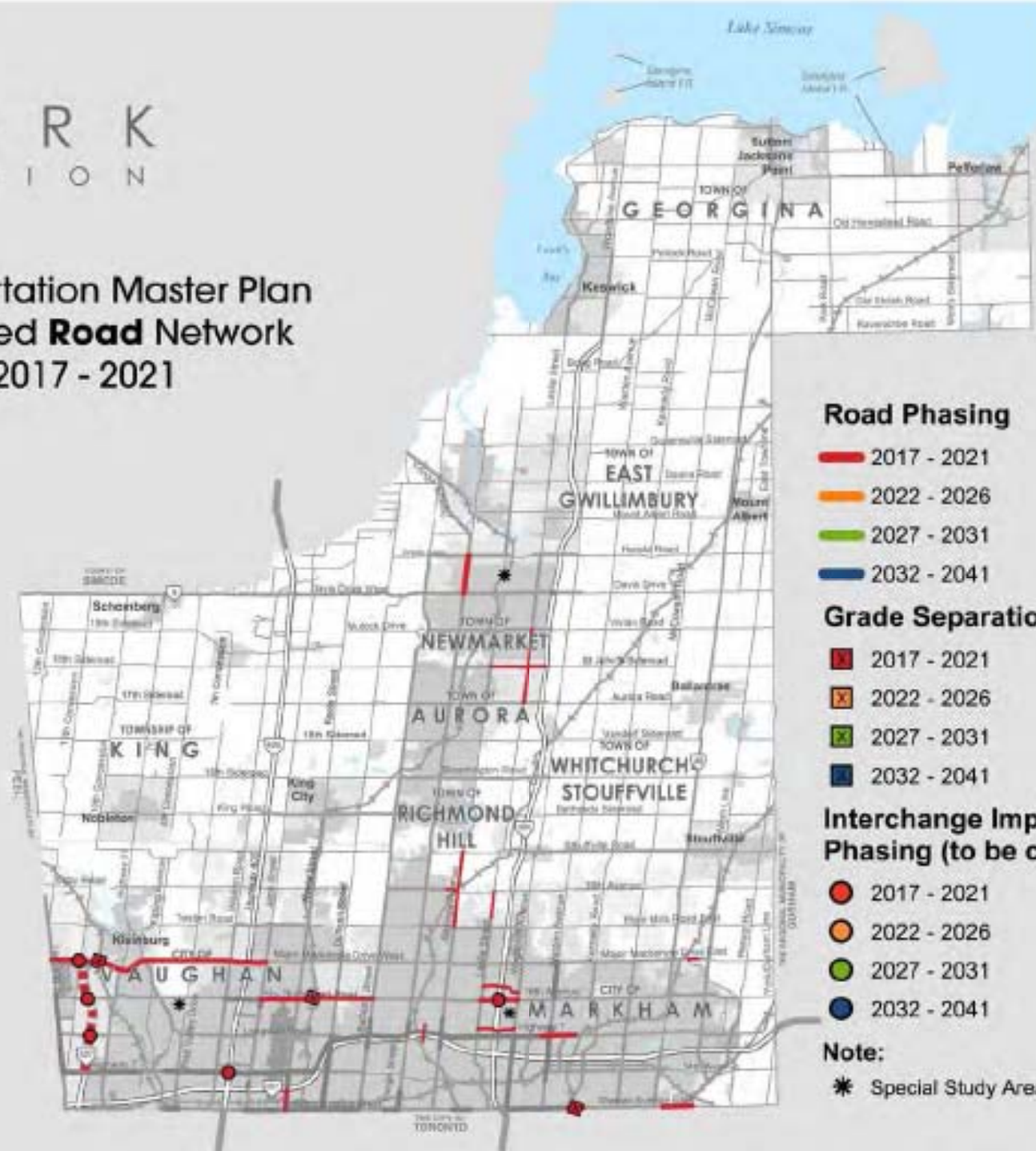
YORK REGION

Transportation Master Plan Proposed **Transit** Network 2017 - 2021



YORK REGION

Transportation Master Plan Proposed Road Network 2017 - 2021

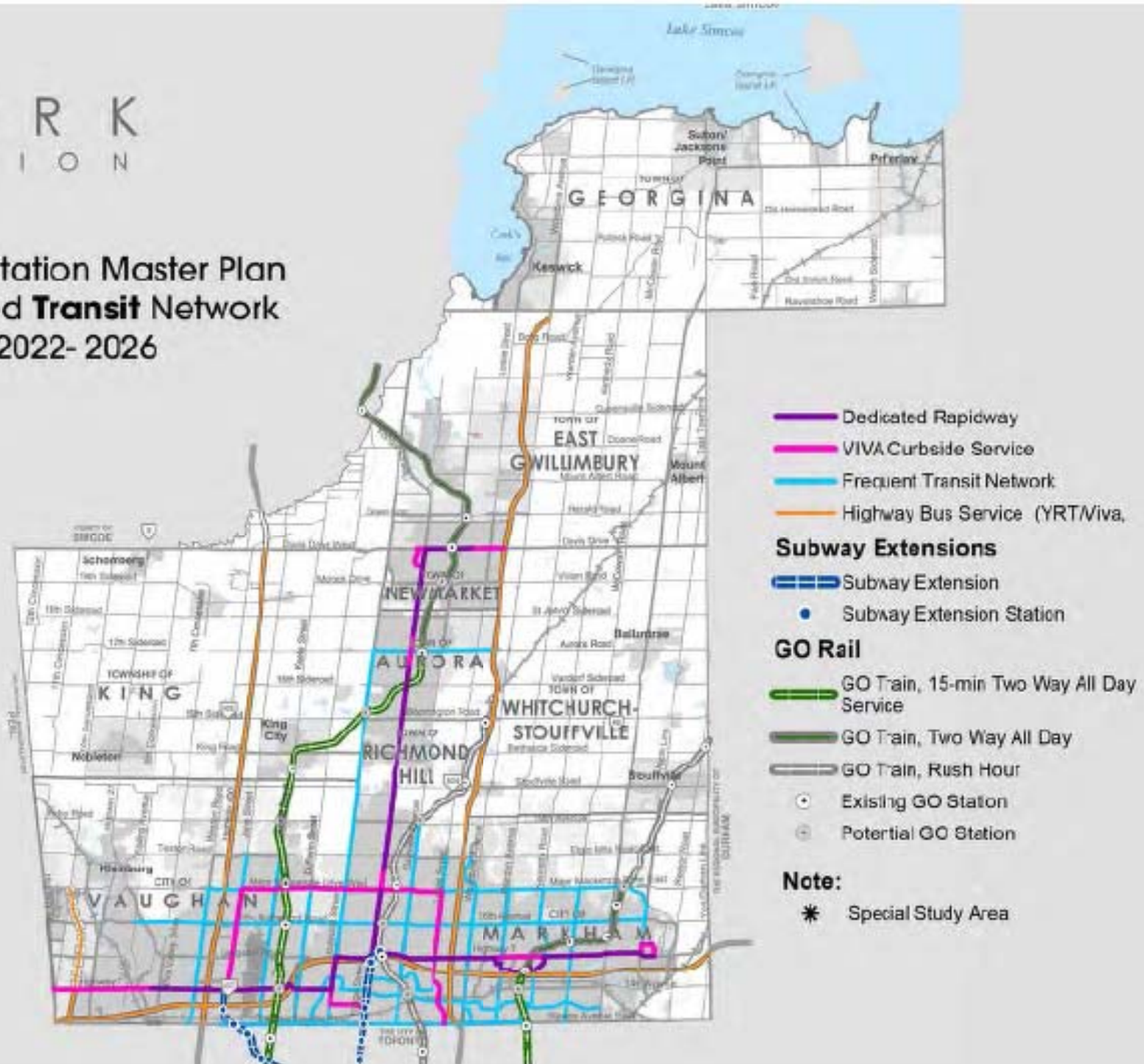




Phasing Networks Needs by 2026

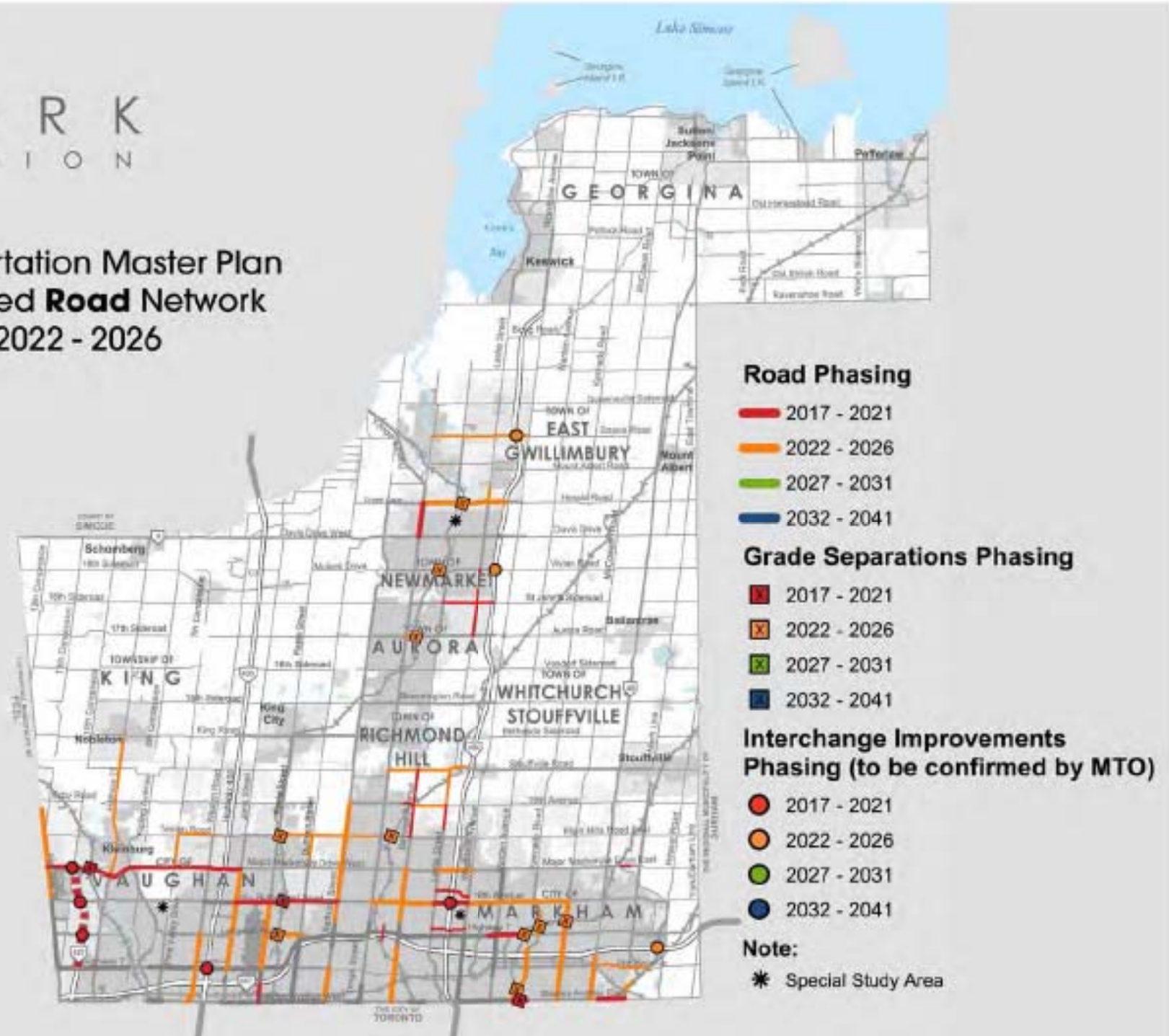
YORK REGION

Transportation Master Plan Proposed **Transit** Network 2022- 2026



YORK REGION

Transportation Master Plan Proposed Road Network 2022 - 2026

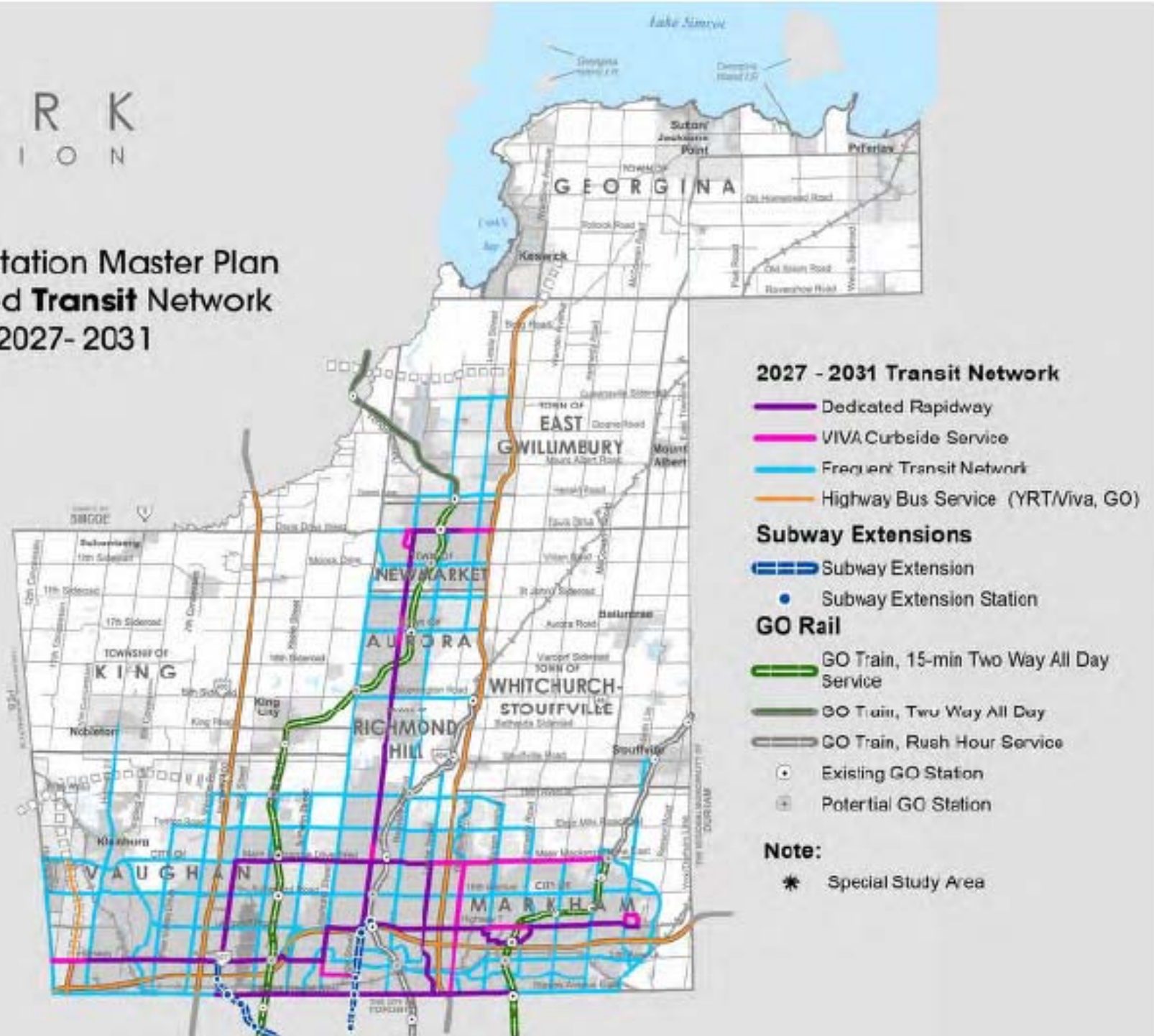




Phasing Networks Needs by 2031

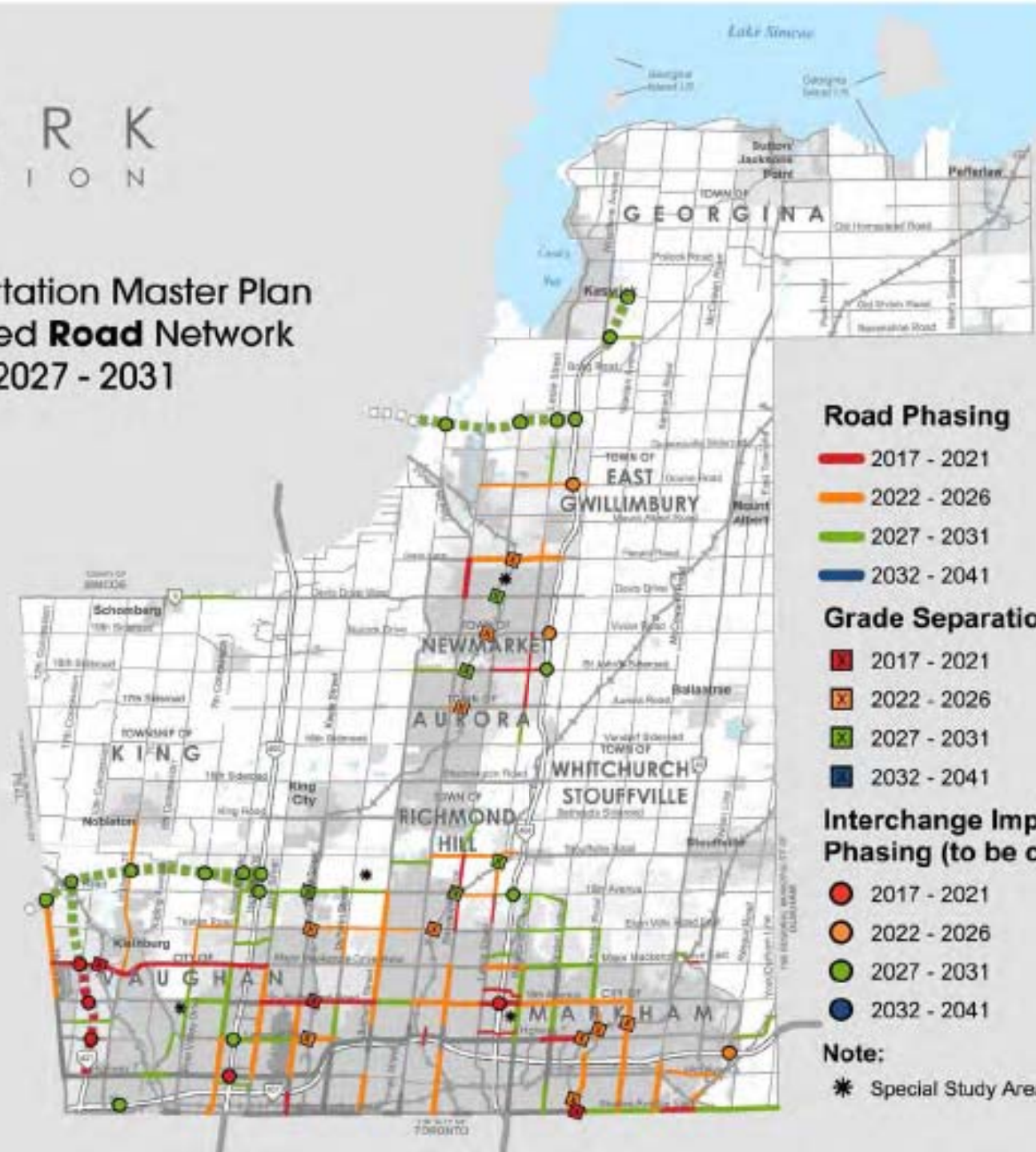
YORK REGION

Transportation Master Plan Proposed **Transit** Network 2027- 2031



YORK REGION

Transportation Master Plan Proposed Road Network 2027 - 2031



Road Phasing

- 2017 - 2021
- 2022 - 2026
- 2027 - 2031
- 2032 - 2041

Grade Separations Phasing

- 2017 - 2021
- 2022 - 2026
- 2027 - 2031
- 2032 - 2041

Interchange Improvements Phasing (to be confirmed by MTO)

- 2017 - 2021
- 2022 - 2026
- 2027 - 2031
- 2032 - 2041

Note:

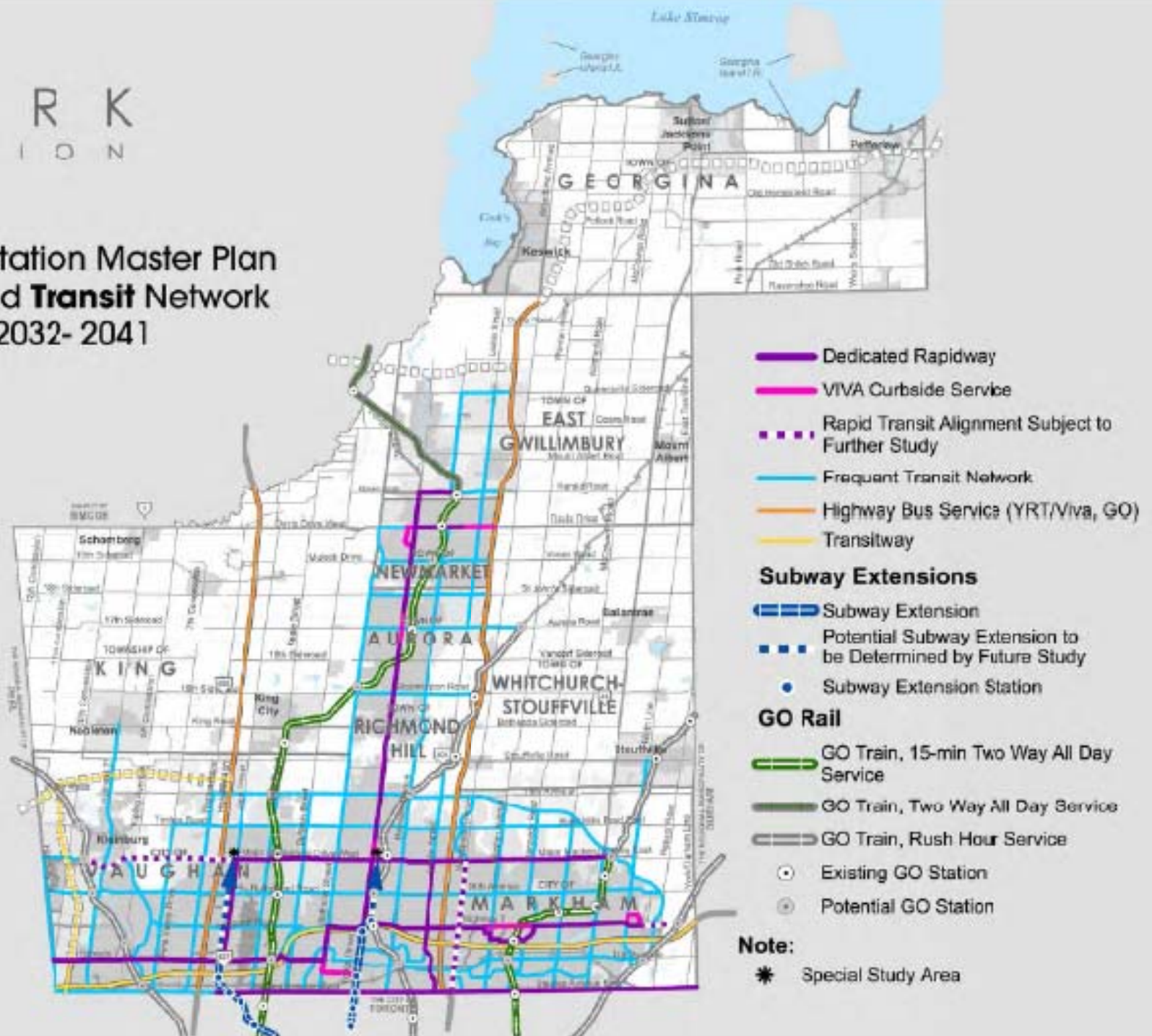
- * Special Study Area



Phasing Networks Needs by 2041

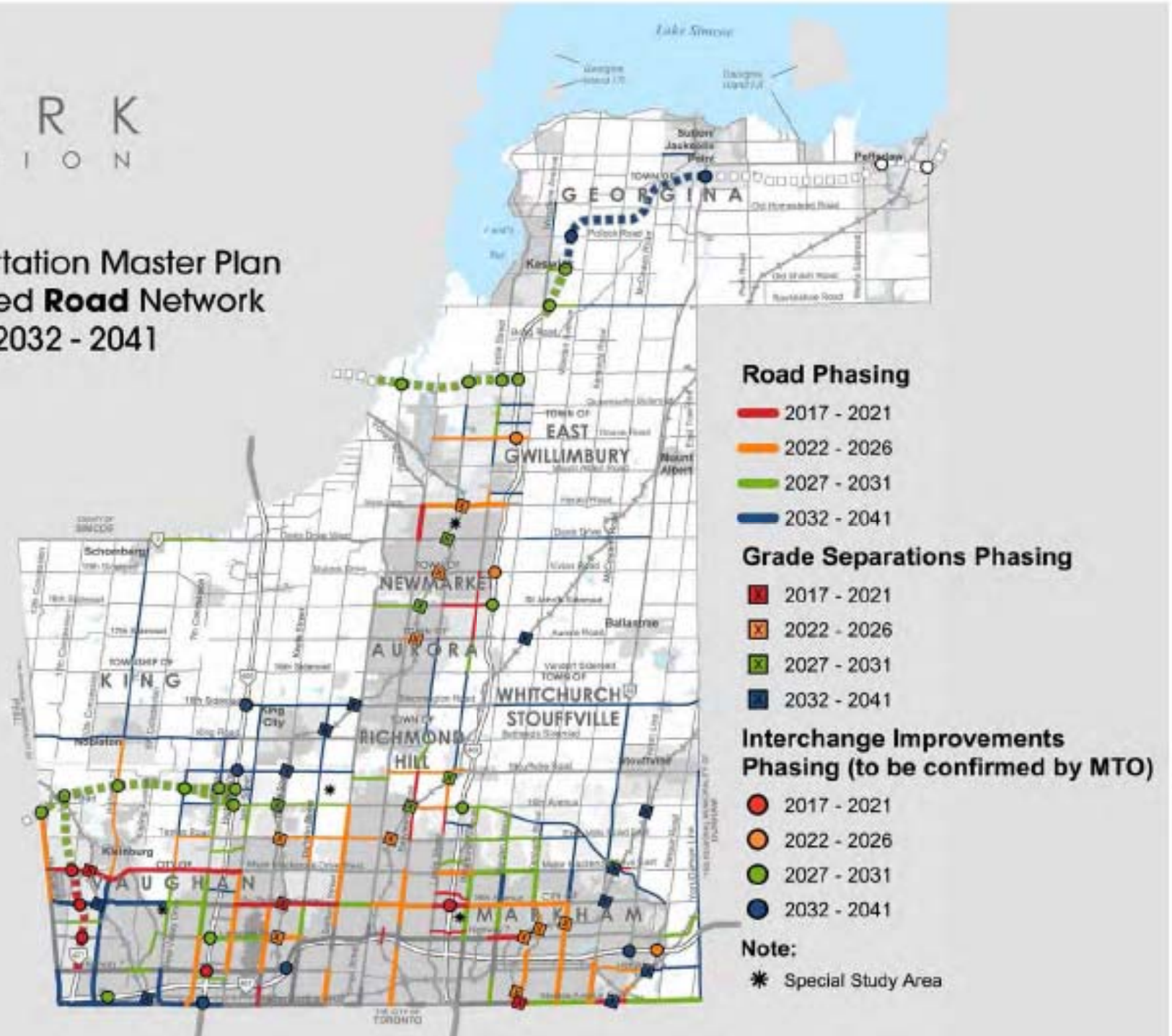
YORK REGION

Transportation Master Plan Proposed **Transit** Network 2032- 2041



YORK REGION

Transportation Master Plan Proposed Road Network 2032 - 2041



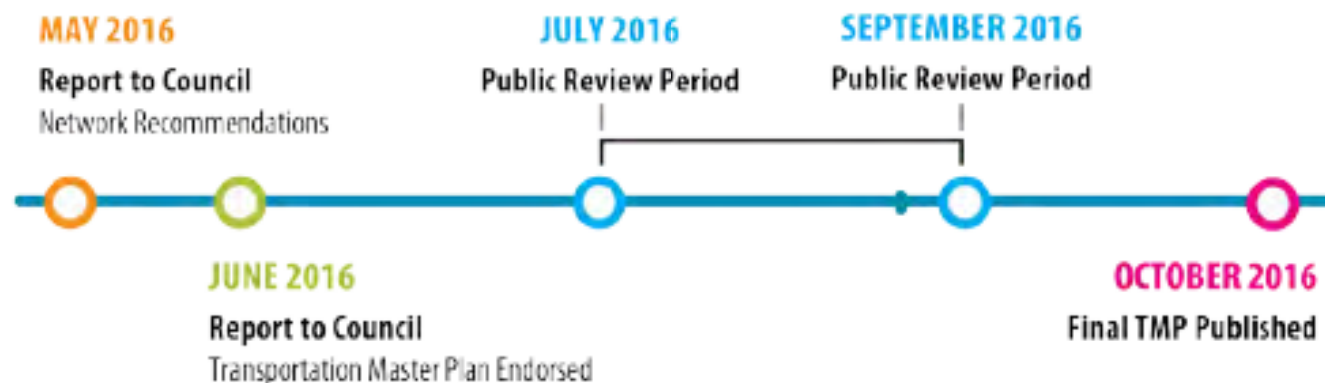
Total Capital Costs by Phase

\$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

Next Steps

Activities following Council endorsement of Transportation Master Plan in June 2016

- Publish Notice of Completion (summer 2016)
- Report on comments and actions (October 2016, if necessary)
- Provide input into the Regional Official Plan review and Development Charges Background Study (summer/fall 2016)
- Develop policies for Council approval (commencing fall 2016)
- Implement the plan through projects, programs and partnerships (commencing fall 2016)



Transportation Master Plan

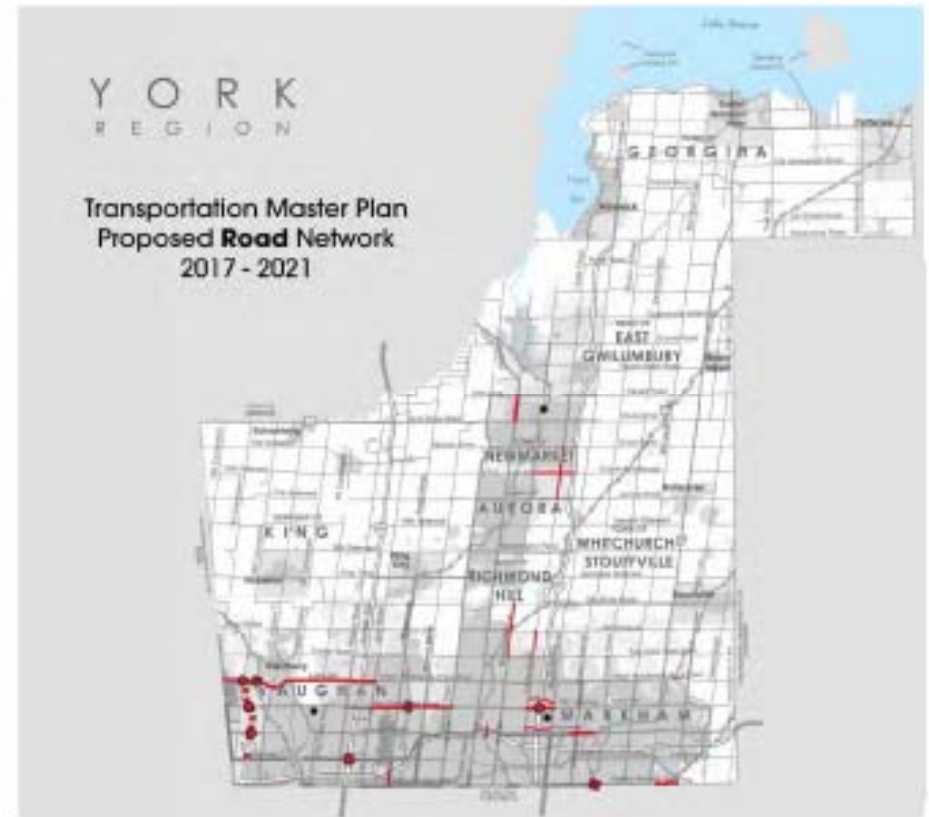
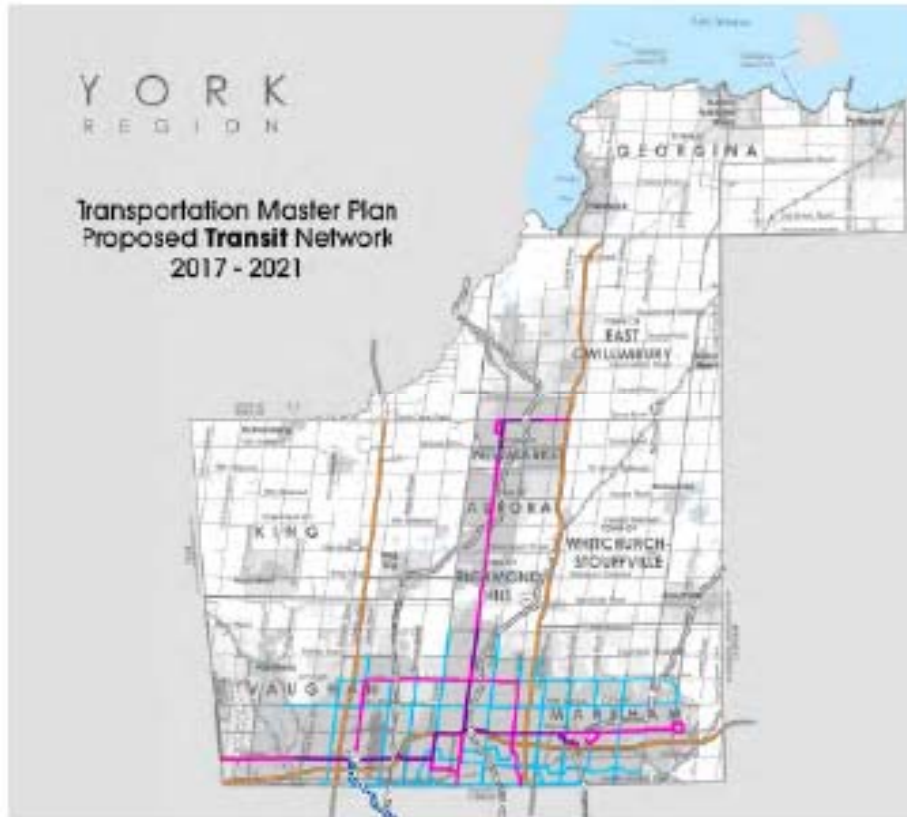


Your community, your say.

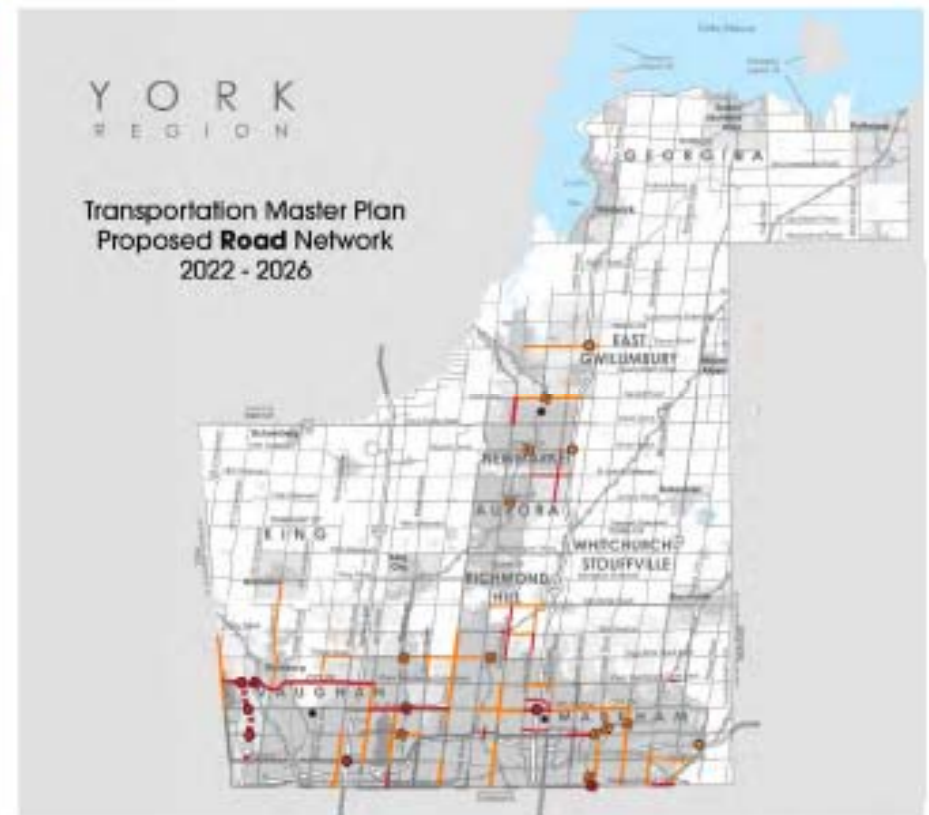
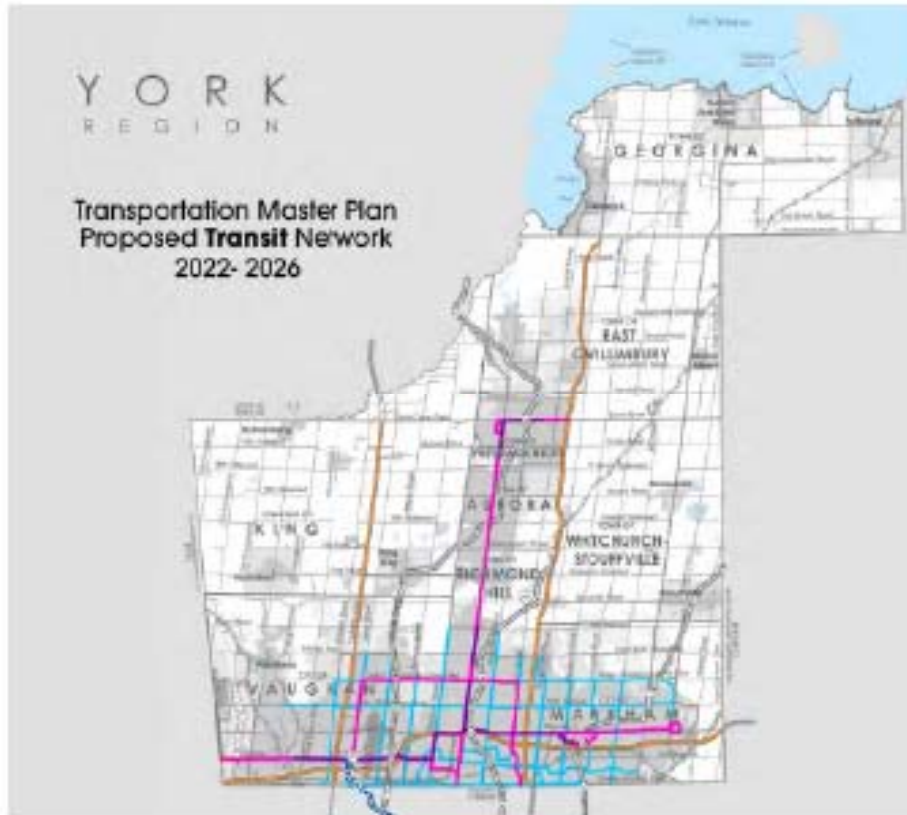
Report D.2.1 Recommendations

1. Council receive the Transportation Master Plan Update draft proposed networks outlined in this report.
2. The Regional Clerk circulate this report to Clerks of local municipalities, Metrolinx, Ontario Ministry of Transportation, City of Toronto, Regions of Peel and Durham, County of Simcoe, Toronto and Region Conservation Authority, Lake Simcoe Region Conservation Authority and the Building Industry and Land Development Association.

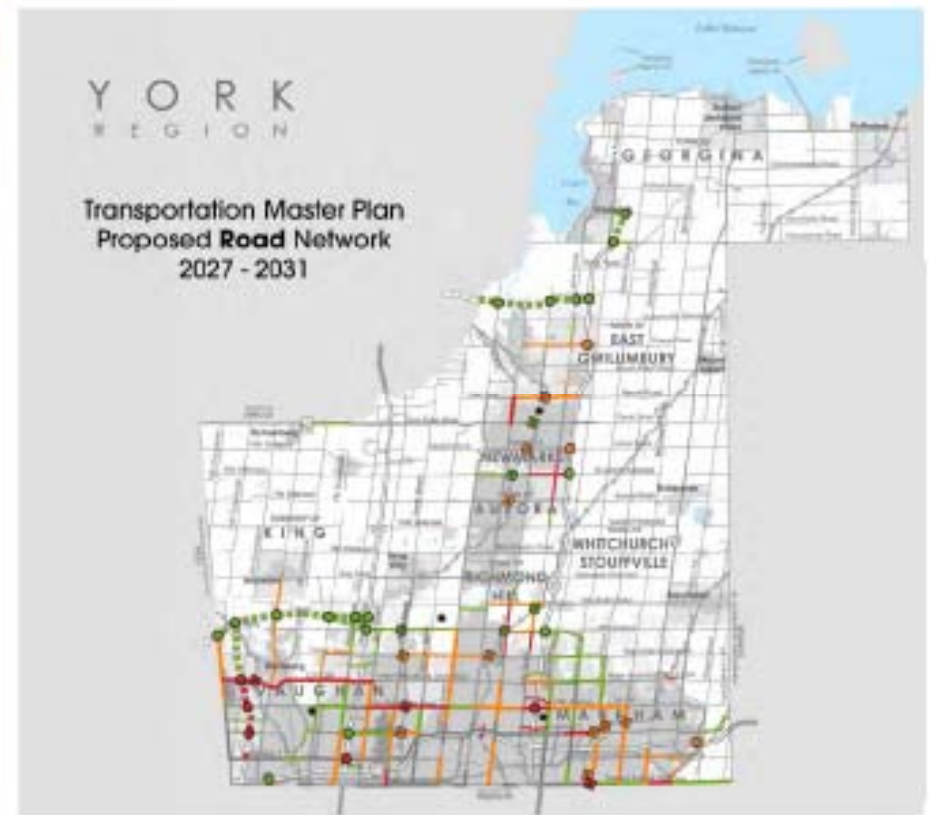
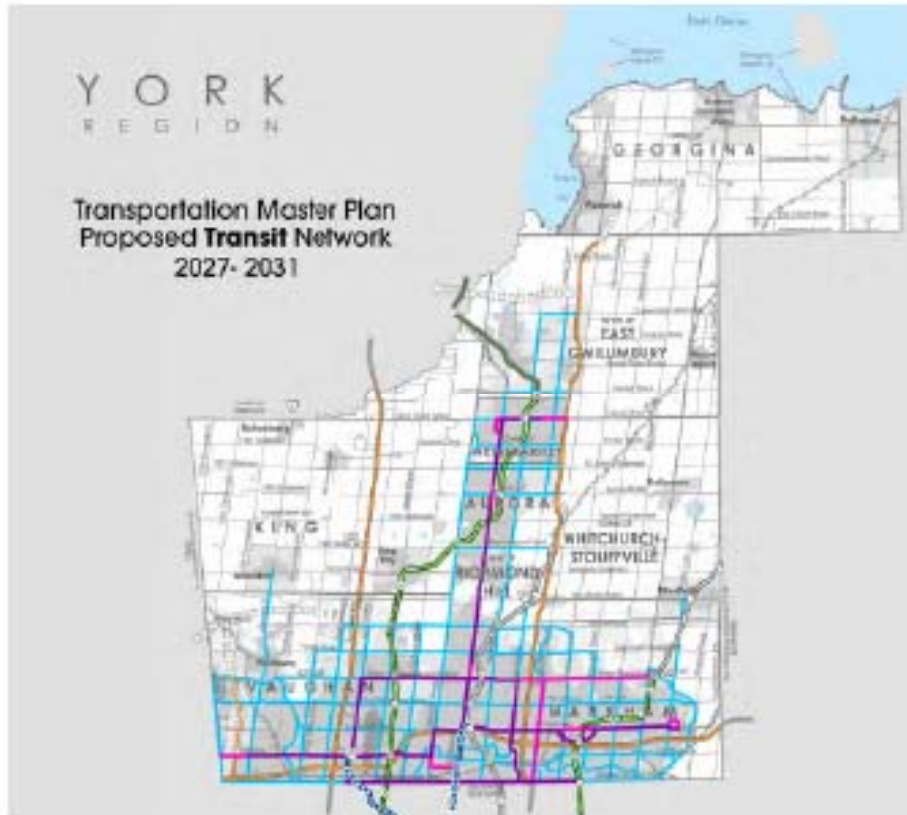
Proposed Phasing: 2017-2021



Proposed Phasing: 2022-2026



Proposed Phasing: 2027-2031



Proposed Phasing: 2032-2041

