
NOTE: This document is the draft update to the Regional Transportation Master Plan and subject to change. A final version of the Master Plan is planned to be brought forward for Regional Council approval in June 2022.

The Draft Transportation Master Plan refers to the Region’s Municipal Comprehensive Review and update to the Regional Official Plan and Water and Wastewater Master Plans. Both studies are underway and expected to be approved by Regional Council in 2022.

Coordination and alignment of recommendations and network maps between the draft Regional Official Plan and the Transportation Master Plan will be completed prior to the adoption of both plans. Any differences between the two plans will be addressed prior to finalizing the plans.

Contents

Executive Summary.....	4
1. Introduction	7
1.1. Setting a strategic direction for transportation	7
1.2. Building on past foundations	7
1.3. Understanding travel in York Region and how it is evolving	8
1.3.1. Many travel options within and beyond the Region	8
1.3.2. New technology is making travel safer and more efficient	9
1.3.3. The network is becoming more coordinated, connected and focused	9
1.3.4. Matching services to land use will be key as communities grow	10
1.3.5. Transportation landscape is changing — and quickly.....	11
1.4. Traveller feedback was vital to updating the plan.....	12
2. Context.....	14
2.1 Provincial guidance	15
2.1.1 Provincial Policy Statement	15
2.1.2 A Place to Grow: Growth Plan for the Greater Golden Horseshoe	15
2.1.3 <i>Accessibility for Ontarians with Disabilities Act (2005)</i>	16
2.1.4 2041 Regional Transportation Plan.....	16
2.1.5 Ministry of Transportation Greater Golden Horseshoe Transportation Plan.....	17
2.1.6 Provincial <i>Environmental Assessment Act</i>	17
2.2 York Region Vision, plans and priorities	17
2.2.1 Vision, Strategic Plan and Regional Fiscal Strategy.....	17
2.2.2 Regional Official Plan	18
2.2.3 Climate change actions	18
2.2.4 Protecting and enhancing the natural environment	19
2.2.5 Collaboration and partnerships	20
3 Framework and approach.....	20
3.1 Plan update followed recommended processes.....	20
3.2 Consultation and engagement were key	22
Discover: Envisioning the future	23
Explore: Looking at the options	23
Reveal: Unveiling the plan	24
3.3 Approach to planning has evolved	24
4 Listening and learning.....	25
4.1. Travel patterns are changing	25
4.1.1. Most want to continue working from home at least part of the time	27
4.1.2. Interest in other travel options is growing	27
4.1.3. A larger share of people both live and work in the Region	27
4.1.4. A shift to electric is underway among car owners.....	28
4.1.5. Respondents would invest half the budget in transit, walking and cycling options.....	29
4.1.6. Youngest and oldest age groups least likely to own/drive a car	29
4.1.7. Residents and stakeholders value fiscal prudence and innovative solutions.....	29
4.2. Foundations of the updated Transportation Master Plan	30

- 4.2.1. Purpose Statement 30
- 4.2.2. Guiding Principles..... 30
- 4.2.3. Objectives..... 31
- 4.3. Transportation Master Plan update reflects evolving attitudes and options..... 31
 - 4.3.1. Making life without a car an option..... 31
 - 4.3.2. Making transportation healthier..... 32
 - 4.3.3. Creating complete communities and complete streets..... 33
- 5. Mapping the Region’s transportation future..... 34
 - 5.1. How the proposed network was developed..... 34
 - 5.2. Testing options..... 35
 - 5.2.1. A larger, more integrated active transportation network 36
 - 5.2.2. More rapid transit corridors 38
 - 5.2.3. A more strategic approach to the road network 39
- 6. Strategic approach to change 42
 - 6.1 New and evolving areas of focus 42
 - 6.1.1. Safety for all travellers 42
 - 6.1.2. Transportation equity: options for all lifestyles, life stages and abilities 43
 - 6.1.3. Reduce car travel, especially during rush hours 44
 - 6.1.4. Fiscal and environmental sustainability..... 44
 - 6.1.5. Reviewing roles and functions in Regional corridors..... 45
 - 6.1.5.1. Ownership and use of boulevard..... 45
 - 6.1.5.2. Micromobility..... 46
 - 6.1.5.3. High-Occupancy Vehicle (HOV)/transit lanes 46
 - 6.1.5.4. Parking 47
 - 6.1.5.5. Movement of goods using large trucks..... 47
 - 6.2 Alignment of Focus Areas with Objectives 48
- 7. From plan to action..... 49
 - 7.1. Cost of the plan..... 49
 - 7.2. Funding the plan 50
 - 7.3. Balancing services with financial needs..... 50
- Glossary..... 55

Executive Summary

York Region's corporate vision of Strong, Caring and Safe Communities guides all Regional departments and staff to be accountable to the communities we serve. The **2022 Transportation Master Plan (TMP)** is the long-term vision for York Region's transportation network and aligns with both the corporate vision and the four priorities of the Region's Corporate Strategy: **Economic Vitality, Good Government, Healthy Communities** and **Sustainable Environmental**. The TMP considers the Region's transportation infrastructure needs over the next 30 years to support growth and the changing needs of travellers, while highlighting focus areas for further study.

By 2051, York Region's population is expected to grow to over two million residents and nearly one million jobs. To support this growth, the TMP is updated every five years to ensure the regional transportation network meets the needs of all motorists, pedestrians, cyclists and transit riders. The 2022 TMP builds upon the elements of the 2016 TMP and has been coordinated to align with the Regional Official Plan and the Water and Wastewater Master Plan update.

The purpose of the TMP is to guide staff in planning, building, operating and maintaining a connected transportation network that is safe, sustainable, efficient, reliable and ready for the future. It balances the needs of the unique communities across York Region and is further supported by the following objectives:

- **Make the best use of infrastructure and services:** Maximize the effectiveness of the existing road network
- **Encourage all types of travel:** Design regional roads to accommodate all ages, abilities and modes of travel, including active transportation, transit, passenger vehicles and goods movement
- **Provide a resilient and adaptable transportation network:** Adaptable to changing social, environmental, financial and technological landscapes
- **Enhance partnerships:** Recognize the importance of collaborating with the public and private and non-profit organizations to provide transportation infrastructure, programs and services
- **Actively engage and share information:** Learn from all residents and stakeholders
- **Align project costs:** Ensure project costs are consistent with the Region's fiscal strategy and the 10-Year Capital Plan and obtain Regional Council approval annually

The following was considered when updating the 2022 TMP:

- Updates made to the Regional Official Plan to accommodate population and job growth, in-line with new provincial forecasts
- Alignment with the Region's fiscal strategy
- Active and eco-friendly travel options, including walking, cycling, carpooling and transit
- Commitments from federal, provincial and regional governments to construct the Yonge North Subway Extension to the City of Richmond Hill
- New and extended provincial freeways with provisions for parallel corridors dedicated to rapid transit
- Public participation and feedback from York Region residents and stakeholders

- Implementing new technology to collect and use data to improve efficiency, enhance safety and save costs

York Region's priorities for investment in the 2022 TMP are based on comprehensive input from a wide range of transportation users and other interested parties, including residents, elected officials, municipal, provincial and federal governments and other community and agency partners.

The update also reflects long-term trends that have seen transit use grow faster than single-occupant vehicle travel and more reliance on cycling or walking instead of driving for shorter trips. Over the next five years, staff will monitor and take into consideration the impacts of COVID-19 on York Region's transportation network, including the potential new travel patterns of motorists and transit users.

In developing the 2022 TMP, staff drew on knowledge gained while implementing the 2016 TMP and the impacts of disruptive events like the pandemic. This led to a change in the way the Region now approaches planning:

- **Allow for flexibility:** Having the ability to change plans accordingly to reflect changing travel needs, global events, new technology, regulatory changes and emerging ideas and approaches
- **Advocate for big projects the Region needs:** The Region cannot independently fund several of the major projects outlined in the 2022 TMP; advocating the provincial and federal governments and other potential funders to share in these costs will be crucial
- **Consider fiscal and environmental bottom lines:** The TMP must align with the Region's ability to pay for the projects outlined, and calls for a prudent approach in planning growth-related capital investments and the impact on the environment
- **Seek and respond to opportunities:** Respond to federal, provincial and other partnership funding opportunities to build roads, transit infrastructure and operating funding
- **Engage more often and more broadly:** Use a variety of techniques/tools, such as online surveys, social media, virtual engagement and post-pandemic in-person opportunities, to ensure as many voices as possible continue to be heard

The draft 2022 TMP identifies five new focus areas that bring together several related priorities:

- Safety for all travellers
- Transportation equity and inclusion
- Reduced car travel, especially during rush hours
- Fiscal and environmental sustainability
- Role and function of Regional corridors

While many investments and actions within Transportation Services already reflect these priorities, further work and study on the part of the Region and its partners will identify opportunities for new and/or improved approaches. Proposed actions and initiatives will be brought forward to York Regional Council for review and endorsement over its next four-year term.

The draft 2022 TMP was completed following guidance provided by the Municipal Engineers Association. Projects within master plans are subject to provincial environmental legislation, typically under the municipal class environmental assessment process.

The update also aligns with other applicable provincial legislation and guidance, including the Provincial Policy Statement, other land-use considerations and Ministry of Transportation plans.

Progress on achieving the projects and priorities outlined in the 2022 TMP will be monitored through a comprehensive review every five years. In addition, annual status updates will inform York Regional Council and the public on all focus area initiatives and actions and planned and completed work. Developing progress indicators and a framework for reporting will be key initiatives of the first status update.

1. Introduction

1.1. Setting a strategic direction for transportation

As York Region grows and changes, the 2022 Transportation Master Plan will set the strategic direction for roads, transit and active transportation options like walking and cycling, allowing people and goods to travel safely and reliably through the Region in environmentally and financially sound ways.

Provincial forecasts, revised in 2020, predict the Region will be home to just over two million residents and almost one million jobs by 2051. The Regional Official Plan, which guides the Region's growth, was updated in 2022 to incorporate this substantial increase. Infrastructure plans, including the Transportation Master Plan, align with the updated Regional Official Plan.

To meet the transportation needs of a growing population, encouraging change in how and when people travel will be needed in addition to expanding Regional roads.

Traveller behaviour is constantly changing. The global COVID-19 pandemic has accelerated a move toward working from home and, while longer-term trends are still uncertain, a large majority of Canadian workers currently show a preference to continue working from home, at least part of the time. This is likely to affect how and when people travel.

The growing urgency to address climate change is also affecting how people travel. Recent international research indicates low-carbon transportation options like transit, walking and cycling would reduce global greenhouse gas emissions. The Region has set an aspirational goal of net-zero greenhouse gas emissions by 2051 through its [Energy Conservation Demand Management Plan](#) and has committed to shifting its corporate and transit fleets to electric vehicles, including electric buses, by that date. This move and the extension of the Yonge subway line to the City of Richmond Hill represents major steps in the right direction. The move to lower-carbon options will also contribute to healthier communities by encouraging more physical activity and reducing traffic-related pollution and noise.

This Transportation Master Plan update builds on a foundation of master plans going back to 2002 that recognized the need for new solutions. With the above factors accelerating the pace of change, this update also provides flexibility as conditions continue to change.

1.2. Building on past foundations

Transportation has been critical to York Region's growth since its establishment in 1971 and will continue to play a vital role as the Region continues to accommodate new growth.

The Region was home to 1.2 million people and almost 580,000 jobs in 54,000 business establishments in 2021. Stretching from Steeles Avenue in the south to Lake Simcoe in the north, it encompasses an area of 1,776 square kilometres. Its position directly north of the City of Toronto, as shown by Figure [XX], has helped to make it the fastest-growing large municipality in Ontario.

[INSERT MAP OF YORK REGION / GTHA]

The progressive approach taken in previous transportation master plans has dramatically changed the landscape for transportation in the Region over the past two decades:

- York Region Transit (YRT) operates 34 kilometres of dedicated bus rapidways (or Viva) on Highway 7, Davis Drive and Yonge Street
- YRT service also links to the Vaughan Metropolitan Centre, Metrolinx's GO services and other new stops in the Region along the extended western arm of the subway line (Spadina subway line), as well as to Finch station on the Yonge Street line
- Transit services have evolved to reflect new options and changing needs, with a focus on scheduled bus service in high-demand areas and options like on-request service elsewhere
- Numerous growth-related road projects have increased capacity and created connections to transit services and freeways
- Completed projects have filled in missing road links like Bathurst Street north of Green Lane and Bayview Avenue between Stouffville and Bloomington roads and have provided passage across barriers, allowing travellers to cross 400-series highways between interchanges
- The Region has also successfully advocated for the extension of Highway 404 in the towns of East Gwillimbury and Georgina as well as Highway 427 in the City of Vaughan to manage congestion and support planned growth
- Increasing use of intelligent transportation systems, discussed in Section 1.3.2, is making the network safer and more efficient
- Many road widening projects included the addition of multi-use pathways for bicycle and pedestrian traffic or dedicated cycle tracks in roadside boulevards to make active transportation easier and safer for all travellers
- More than 85% of the work on the York Region portion of a 121-kilometre walking and cycling route linking Lake Simcoe to Lake Ontario is complete
- Plans are moving forward for a more than 50-kilometre walking and cycling route (South York Greenway), parallel to Highway 407 to support active and eco-friendly ways of travelling. Details are available at york.ca/southyorkgreenway
- The Region continues to support, promote and encourage active and eco-friendly ways of travelling such as walking, cycling, scootering, hiking, carpooling and taking transit

These initiatives provide a strong foundation for continued growth and coordination and connection of transportation in and beyond York Region. Central to the next phase of growth is extending the Yonge subway line to the City of Richmond Hill. This landmark project, which has been a top transit priority for the Region for several years, is being led by the provincial government. Major construction is expected to start in 2023 and to be complete within the next decade.

1.3. Understanding travel in York Region and how it is evolving

1.3.1. Many travel options within and beyond the Region

The transportation system in York Region includes roads, active transportation, transit and rail lines.

[FUTURE INFOGRAPHIC]

The Region's direct responsibilities within this network include:

York Region Transit: Operating in all nine local municipalities, YRT offers a range of accessible services, including rapid transit, conventional bus and Mobility On-Request. It connects travellers to transit services in the City of Toronto, Peel Region, Durham Region and the provincial GO Transit rail and highway bus systems. Strategically located “park and ride” lots encourage drivers to connect to transit for trips into urban areas and key destinations such as Toronto Pearson International Airport. YRT also supports active transportation, with bike racks on the front of buses and bike parking racks at many of its bus terminals.

Active transportation and micromobility: Regional road corridors include high-quality facilities such as sidewalks, bike lanes, multi-use pathways and bike parking at bus stops and terminals, encouraging travellers to switch to more eco-friendly options. Active transportation includes walking, hiking and cycling, among others. Micromobility, which relies on smaller, electric-powered vehicles like e-bikes and e-scooters, is also emerging as a lower-carbon alternative to gas-powered travel.

Regional roads: The Region is responsible for arterial roads, most of which are typically laid out in a 2-by-2-kilometre grid. These roads are designed to accommodate all types of traffic, including passenger vehicles, trucks for the movement of goods, transit vehicles and bicycles. As the links between local municipal streets and provincial highways, they are critical in moving people and goods.

1.3.2. New technology is making travel safer and more efficient

York Region is a leader in adopting intelligent transportation system technologies that collect and use data to improve efficiency, enhance safety, and save costs:

- Over 400 Bluetooth sensors installed across the Region allow staff to monitor travel in real time on the road network, identify and respond to bottlenecks and provide alternate route information in response to incidents and adverse weather. This data helps traffic operations staff access the impacts of traffic signal timing changes to alleviate traffic delays and is also used to improve road safety
- YRT has implemented a driver support system to improve ride quality for transit passengers and extend the life of buses and is also piloting a pedestrian warning and collision avoidance system designed to improve the safety of pedestrians and cyclists on increasingly busy streets
- YRT is using a vehicle health monitoring system on electric and diesel transit vehicles to monitor components in real time and identify potential problems early to reduce vehicle breakdowns and maintenance costs
- The Region has also launched a two-year automated speed enforcement pilot to increase safety in school areas

1.3.3. The network is becoming more coordinated, connected and focused

A key aspect of York Region's work is collaborating with other levels of government and the private sector to create an integrated transportation network — one where travellers move not just from street

to road to highway in their cars, but where they can travel using several transportation options and transfer easily from one to another.

This is important because travellers are now more likely to use multiple modes of transportation: in addition to or instead of a private vehicle, they are cycling, walking, taking a bus, train or subway and using on-request transit more than travellers in the past. This means the Region and its partners need to include all modes of transportation in the network, including the movement of goods, so they connect, just as Regional roads connect with local streets and provincial highways. The Region and its partners are considering how best to expand this network and add new options, which is discussed further in Chapter 5.

Transportation services and related infrastructure, such as roads, sidewalks, walking and cycling paths, terminals and more, are also evolving to recognize that different population and employment densities call for different transportation options like carpooling, cycling, walking and other human-powered ways of getting around, as well as low-carbon options like e-scooters and e-bikes. These are referred to as “active and eco-friendly options” throughout this document.

For example:

- Supporting investments in bus rapid transit and subway expansion through comprehensive planning and integration with local and Regional Official Plans and Water and Wastewater Master Plan to align high-density growth, such as in Major Transit Station Areas and Regional Centres, to ensure the efficient movement of people and goods.
- Areas of medium density support conventional scheduled bus service
- High- and medium-density areas are also favourable for active and eco-friendly options for trips to school, shopping, work or connecting to public transit
- In low-density areas, communities with the least population, on-request transit services are the most suitable. Cycle tracks and trails are more oriented to recreational use and travel by car for longer trips is more frequently used

The Region’s transportation planning is becoming more focused on providing the right services in the right areas at the right time. This supports travel needs effectively while helping to ensure the transportation network and services stay within the Region’s financial means.

1.3.4. Matching services to land use will be key as communities grow

With roughly 800,000 more people and 345,000 more jobs expected by 2051, York Region will accommodate the largest share of growth of any municipality in the provincial Growth Plan for the Greater Golden Horseshoe Area. This growth (see Figure [X]) reflects provincial forecasts.



The updated Regional Official Plan allocates the expected distribution of population and jobs by local municipality, which in turn affects infrastructure needs. It is projected the cities of Vaughan, Markham and Richmond Hill, on the Region's southern border, will account for roughly three-quarters of the Region's population by 2051, similar to the current share.

In the north, the forecast for the Town of East Gwillimbury is to see its population and employment essentially quadruple by 2051. The Town of Georgina's population increase is projected to be less than the Regional average, the number of jobs is forecast to more than double.

The Region must plan now for future transportation needs in these growing communities due to the time it requires to complete major projects like road widening and rapid transit. Anticipating this growth will help to avoid service lags and congestion.

Transportation planning must also integrate with land use planning, including the type of use and expected intensity of development. Growth to 2051 will continue to be focused mainly along two Regional corridors: north-south along Yonge Street and east-west along Highway 7. This is the underlying framework for the Region's Centres and Corridors approach to achieving higher densities, as required under the provincial growth plan for the Greater Golden Horseshoe. The provincial government has recently required upper-tier municipalities, like York Region, to delineate boundaries and set minimum density targets for Major Transit Station Areas around subway, bus rapid transit and GO rail stations..

Sidebar: The Region's urban system is composed of Regional centres and Regional corridors and the major transit station areas within and supporting them, local centres and corridors, community areas and employment areas and several towns and villages. All these areas play a part in accommodating forecast growth while maintaining their character. It is intended that most new growth for both residents and jobs will be accommodated within these areas.

1.3.5. Transportation landscape is changing – and quickly

As new technologies emerge and people choose different ways to travel, transportation needs change, and more planning is required to meet those needs. For example, if more travellers are expected to choose to walk or cycle to their destinations in the future, more walking and cycling paths will be required. The impact of electric vehicle, e-scooter and e-bike uptake, as well as the continuation of working from home and online shopping trends, are not yet fully understood. The Region will continue to monitor these trends and adjust transportation planning as needed.

As the Region continues to grow, options like ridesharing, bike sharing and e-scooter rentals are likely to become more widely available in urban areas in the future, which could change the idea of needing to own a vehicle. These options, which can help manage traffic congestion significantly, are increasingly supported by market-supplied apps that bring data and services together to show travellers the fastest way to get to a destination and allow for easy payment along the way.

There has been much discussion of the future role of autonomous vehicles. Current evidence suggests that, in the short to medium term, the most likely use will be for specific purposes, such as short-local transit trips, with dedicated infrastructure such as fiber optic cable and sensor networks (networks that allow information to be sent to and received from objects and devices), facilities for secure public Wi-Fi and faster mobile networks. Pilot projects around the world are helping to determine how autonomous vehicles might be incorporated safely and more broadly into transportation networks.

York Region has been working with various stakeholders, including the [Canadian Urban Transit Research & Innovation Consortium \(CUTRIC\)](#) to identify potential routes to pilot autonomous transit shuttles. To date, multiple routes have been identified for further evaluation in 2022 to determine suitability for a pilot project.

1.4. Traveller feedback was vital to updating the plan

The transportation solutions recommended in this updated Transportation Master Plan are estimated to cost \$19.1 billion over the next 30 years. Where and how York Region should prioritize investments is based on comprehensive input from a wide range of transportation users and other interested parties, including:

- Residents, neighbourhood associations and community groups
- Businesses and industry, including the development community
- Local municipal councils and staff
- York Regional Council and staff
- Conservation authorities
- School boards
- Emergency services, including York Regional Police
- Neighbouring municipalities
- Indigenous communities
- The provincial government, including the Ministry of Transportation and its transit agency, Metrolinx
- The federal government

Chapter 3 discusses input received regarding the plan in more detail.

Despite different needs across the Region, all residents rely on the transportation network to connect them to homes, workplaces, local businesses, schools and other important destinations.

The Region's economy also depends on a well-designed transportation network. Businesses operate in a global economy that relies on moving people, goods and resources quickly and efficiently. Roads with robust highway, rail and air connections strengthen supply chains and get goods to market faster, while convenient public transit allows employees to get to and from workplaces.

Talking with and listening to a wide range of interested parties helped build a greater understanding of how roads and transit are currently used and, more critically, how the network needs to evolve in the future to continue meeting traveller needs. Ongoing engagement is needed to identify priorities for its transportation investments.

2. Context

The Transportation Master Plan is shaped by provincial direction and York Region’s policies, plans and strategies. Over the next 30 years, these will continue to evolve, requiring transportation planning to be flexible.

Figure [XX] provides an overview of the master planning context.

Province of Ontario	Regional Municipality of York	Others
<ul style="list-style-type: none"> • Provincial Policy Statement • A Place to Grow: Growth plan for the Greater Golden Horseshoe • <i>Accessibility for Ontarians with Disabilities Act, 2005</i> • Metrolinx 2041 Regional Transportation Plan • Ministry of Transportation Greater Golden Horseshoe Transportation Plan 	<ul style="list-style-type: none"> • Vision 2051 • Regional Official Plan • Strategic Plan • Infrastructure master plans (Transportation, Water and Wastewater) • Transportation Services 10-year capital plan • Energy Conservation and Demand Management Plan 	<ul style="list-style-type: none"> • Local municipal transportation master plans and studies • Secondary plans • Neighbouring municipal transit plans and transportation master plans and studies



2.1 Provincial guidance

The provincial government sets a framework for growth and development in Ontario that municipalities must follow.

This section outlines provincial requirements and plans relevant to the Transportation Master Plan.

2.1.1 Provincial Policy Statement

Ontario's [Provincial Policy Statement](#), last updated in 2020, provides policy direction on matters of provincial interest related to land use planning and development, including transportation facilities. The provincial [Planning Act](#) requires that all planning decisions be consistent with this statement.

The statement supports financial and environmental sustainability, encouraging, and in some cases requiring, municipalities to coordinate infrastructure projects with land use planning, make the best use of existing assets before developing new ones, incorporate green infrastructure where possible and consider climate change impacts.

The statement sets out policies to promote safe and energy-efficient transportation, including multiple modes of transportation (multimodal), such as transit, active transportation and private vehicle travel. Municipalities are expected to support this direction with compact development (an urban layout encouraging active transportation, low energy consumption and reduced pollution), mixed land uses and measures to promote a shift to transit, active transportation and other more eco-friendly transportation options.

2.1.2 A Place to Grow: Growth Plan for the Greater Golden Horseshoe

The provincial [Places to Grow Act, 2005](#) and [A Place to Grow: Growth Plan for the Greater Golden Horseshoe](#) gives the Ontario government the power to designate growth areas throughout the province and provides population and employment forecasts to 2051. York Region is part of the Greater Golden Horseshoe, an area of some 10,000 square kilometres in south-central Ontario, one of the fastest-growing areas in North America.

The provincial government requires municipalities to identify and plan for infrastructure, such as roads, transit and multi-use pathways, needed to support these growth forecasts. York Region and other regional municipalities, in coordination with local municipal planners, identify where the growth can be accommodated and should be focused locally.

The provincial growth plan's policies encourage coordinated transportation planning, interconnectedness, safety, sustainability and diverse transportation options to reduce reliance on cars.

It focuses heavily on directing growth to areas that are already built up and making intensification a priority. Strategic areas for growth in the plan include urban growth centres and major transit station areas.

2.1.3 Accessibility for Ontarians with Disabilities Act (2005)

The [Accessibility for Ontarians with Disabilities Act, 2005](#) sets mandatory standards for private, public and non-profit sectors to remove barriers and ensure equitable access for all individuals with disabilities by 2025. This includes, under Regulation 191/11, standards for planning, designing and building transportation facilities. The Region's transportation projects comply with the relevant requirements of the Act and regulation.

2.1.4 2041 Regional Transportation Plan

Developed in partnership with municipalities and other stakeholders, Metrolinx adopted the [2041 Regional Transportation Plan](#) in 2018. This plan is the successor to The Big Move, released in 2008, which was the first Regional transportation plan for the Greater Toronto and Hamilton Area, also incorporating the Regional Municipality of Waterloo.

The 2041 Regional Transportation Plan sets out a blueprint for a system that puts traveller needs first, reduces traffic congestion, improves air quality and supports economic viability through three goals: strong connections, complete travel experiences and sustainable and healthy communities. To support these goals, it outlines five strategies:

1. Complete the delivery of current Regional transit projects.
2. Connect more of the plan area with frequent rapid transit.
3. Optimize the transportation system.
4. Integrate transportation and land use.
5. Prepare for an uncertain future.

The 2041 Regional Transportation Plan includes projects that would directly benefit travel in the Region:

- Extending the Yonge subway north from Finch Station (currently underway)
- Filling gaps in the rapid bus transit network along Highway 7 and Yonge Street
- Providing rapid transit on Jane Street, Major Mackenzie Drive and Leslie Street and, in partnership with the City of Toronto, on Steeles Avenue from the Spadina subway line to Milliken GO station
- Providing frequent Regional express bus service on highways 407, 400, 404 and 427
- Improving GO rail service to offer more frequent all-day service
- Enhancing bus service on sections of Major Mackenzie Drive, Yonge Street and Green Lane

The Transportation Master Plan update considers the plan's timing, priorities and improvements in its infrastructure models and technical analysis. It also looks at where additional improvements will be

needed to support growth in the Region, advocating for these improvements to be included in future updates to the provincial plan.

2.1.5 Ministry of Transportation Greater Golden Horseshoe Transportation Plan

The provincial Ministry of Transportation is developing a [Greater Golden Horseshoe Transportation Plan](#) to help set priorities up to 2051, direct spending towards an optimal transportation system and prepare for new technology like automated vehicles. The goals are to support continued prosperity and quality of life while meeting environmental and social needs.

The Greater Golden Horseshoe Transportation Plan is intended to provide direction to municipalities, transportation agencies and service providers. It was still under development as the Region's Transportation Master Plan was updated. However, the Transportation Master Plan reflects new directions, technical analysis and recommendations expected to appear in the Greater Golden Horseshoe Transportation Plan.

2.1.6 Provincial *Environmental Assessment Act*

The Transportation Master Plan update describes the future transportation network at a high level and will be implemented through specific projects and initiatives. These may be subject to different requirements under the provincial [Environmental Assessment Act](#), depending on the nature and scope, as the Region continues to follow approved direction for infrastructure planning. Chapter 3 provides more details.

2.2 York Region Vision, plans and priorities

2.2.1 Vision, Strategic Plan and Regional Fiscal Strategy

Vision is the blueprint for York Region's future and helps to guide York Regional Council and staff decisions to achieve the quality of life residents want now and in the future. Approved by Council in November 2021, it carries forward the previous vision statement of "Strong, Caring and Safe Communities."

Vision describes a York Region that, among others, has interconnected transportation systems for mobility and promotes living sustainably. The Transportation Master Plan is designed to help inform and implement infrastructure needs, such as roads, transit terminals and pedestrian and cycling pathways to achieve Vision's goals and objectives.

York Region's Strategic Plan, updated every four years, is a roadmap emphasizing priorities over each term of York Regional Council that align with the long-term vision. In 2019, Council adopted the 2019-2023 Strategic Plan. Specific goals and objectives influencing the Transportation Master Plan include:

- Increasing economic prosperity
- Building sustainable communities and protecting the environment

- Supporting community health, safety and well-being
- Delivering trusted and efficient services

The Regional Fiscal Strategy helps to achieve long-term financial sustainability by carefully managing the Region's capital plan, reserves and debt. The strategy also influences the Region's annual budget, which includes a 10-year capital plan. Chapter 7 provides more information on estimated costs of the Transportation Master Plan and expected funding sources.

This Regional direction is reflected in the Transportation Master Plan through a proposed network that is safe and reliable, provides convenient travel options, promotes economic growth, manages congestion, minimizes impacts on the environment and is financially sustainable.

2.2.2 Regional Official Plan

The Regional Official Plan outlines the plans to accommodate future growth and development while meeting the needs of existing residents and businesses in the Region. Prepared with community input, it provides direction and policies guiding economic, environmental and community planning decisions. The official plans of each of the nine local municipalities must conform to the Regional Official Plan.

The Region's infrastructure plans, including the Transportation Master Plan and the Water and Wastewater Master Plan, are consistent with the Regional Official Plan. The infrastructure plans reflect the Regional Official Plan outlook for growth in population and employment. The Regional Official Plan is in turn informed by provincial growth plan forecasts.

Updates to infrastructure master plans are coordinated with updates to the Regional Official Plan in a process known as a Municipal Comprehensive Review. The Ministry of Municipal Affairs and Housing requires this process through the growth plan. Coordination helps to ensure consistent communication with interested parties and better integration of all plans to manage costs.

This updated Transportation Master Plan reflects the revised land use planning projections included in the Regional Official Plan updated in 2022 through the most recent Municipal Comprehensive Review.

2.2.3 Climate change actions

In the face of higher-than-average temperatures and more extreme weather events, both of which can cause damage to infrastructure, communities and ecosystems, York Region recognizes the growing need to address climate change. This involves mitigation, which refers to reducing greenhouse gas (GHG) emissions and adapting to reduce climate change risk and damage.

To help ease climate change, this Transportation Master Plan aims to increase the use of more active and eco-friendly modes of transportation that help to manage the demand put on the road network by single-occupant vehicles. It also supports the adoption of electric and low-emission vehicles by residents and businesses.

The Region's [Energy Conservation and Demand Management Plan](#) identifies ways to reduce GHG emissions through Regional energy use. Transit buses, corporate cars and SUVs (sport utility vehicle), trucks and other work vehicles typically account for about three-quarters of the Region's corporate GHG emissions.

In [December 2020](#), York Regional Council endorsed plans to phase out fossil-fuel-powered vehicles by 2051 in both transit and corporate fleets. By the end of 2021, the Region had bought and deployed 12 electric buses. Since 2013, the corporate fleet of almost 400 vehicles has added hybrid and fully electric sedans and SUVs. The expectation is that electric versions of other vehicle types, like snowplows, will become available in the future.

Fleet electrification builds on other measures taken to reduce GHG emissions since the Region's Energy Conservation Plan was launched in 2016, such as changing operator behaviour and introducing in-vehicle technology to reduce idling and other emission sources, right-sizing vehicles and optimizing services through Mobility On-Request.

While Regional actions are important, individual residents and businesses will also need to act to achieve net-zero GHG emissions. York Region's draft Climate Change Action Plan identifies actions that can be taken across a range of priority areas to help address climate change. Some actions are aimed at reducing impacts, others at adapting to changes and some are designed to do both. These actions are both corporate-specific and at the community level.

The Climate Change Action Plan:

- Outlines the projected impacts of climate change on York Region
- Describes and prioritizes actions needed in three priority areas: resilient communities and infrastructure, low-carbon living and supporting an equitable transition
- Identifies the role York Region will play in implementing actions
- Provides a framework for all levels of government, businesses and communities to work together

In addition to the measures described above, key actions associated with transportation include:

- Adopting emission reduction targets and guidelines for low-carbon construction practices
- Undertaking climate change vulnerability and risk assessments on all Region-owned infrastructure, systems and assets using a common methodology
- Prioritizing infrastructure and asset repairs in climate-vulnerable areas using the asset management framework

2.2.4 [Protecting and enhancing the natural environment](#)

York Region has created a Greening Strategy with the goal of fostering strong and sustainable communities with healthy natural environments. One of its objectives is to blend and connect active transportation in urban areas. This update to the Transportation Master Plan is on target with that objective.

Another element of the Greening Strategy is to create natural heritage trail links to help extend the active transportation network of pathways and trails. The Region owns and manages the 2,500 hectares made up of 24 forest tracts, which offer more than 150 kilometres of public trails. The Region is working in partnership with local municipalities and other stakeholders to create links among all natural trails, also a goal of this update.

In evaluating potential road and transit projects, the Region takes into consideration natural heritage features, such as the Oak Ridges Moraine, the Greenbelt and numerous lakes, watercourses, wetlands, woodlots and woodlands, agriculture and source water areas. Enhancement of natural features is completed where possible. For example, projects often involve improving watercourses like streams and rivers, planting trees and other landscaping along boulevards.

2.2.5 Collaboration and partnerships

York Region works with internal partners, such as Public Health and York Regional Police, local municipalities, school boards and other external partners to support a Regional transportation system that is safe, accessible and equitable.

Important goals of these partnerships include better health for people and communities, promoting active transportation to schools, making roads safer and encouraging cycling, carpooling and other eco-friendly travel options. Section 4.3.3 outlines how the Transportation Master Plan supports these goals.

3 Framework and approach

3.1 Plan update followed recommended processes

The provincial *Environmental Assessment Act* provides a streamlined approval process, called the municipal class environmental assessment, for projects that are similar in nature, are carried out routinely, have a predictable range of environmental effects and respond to mitigating measures. For roads and transit projects, this is governed by the municipal class environmental assessment. The Region's transportation projects are typically completed under this framework.

The Municipal Engineers Association provides a manual to guide the municipal class environmental assessment process. The guidance defines master plans for infrastructure as "long range plans which integrate infrastructure requirements for existing and future land use with environmental assessment planning principles." Master plans are often updated in conjunction with other plans, as discussed in Chapter [2].

The Transportation Master Plan:

- Assesses needs at a strategic, system-wide level, allowing the Region to look at the transportation system as a whole and make recommendations for improvements
- Considers the broad land use and environmental context
- Looks at infrastructure geographically and/or by function

- Can be implemented through individual projects

The outcome is a high-level plan identifying and justifying the need for future individual projects.

The municipal class environmental assessment process consists of five phases, and a master plan must address phases 1 and 2 at a minimum.

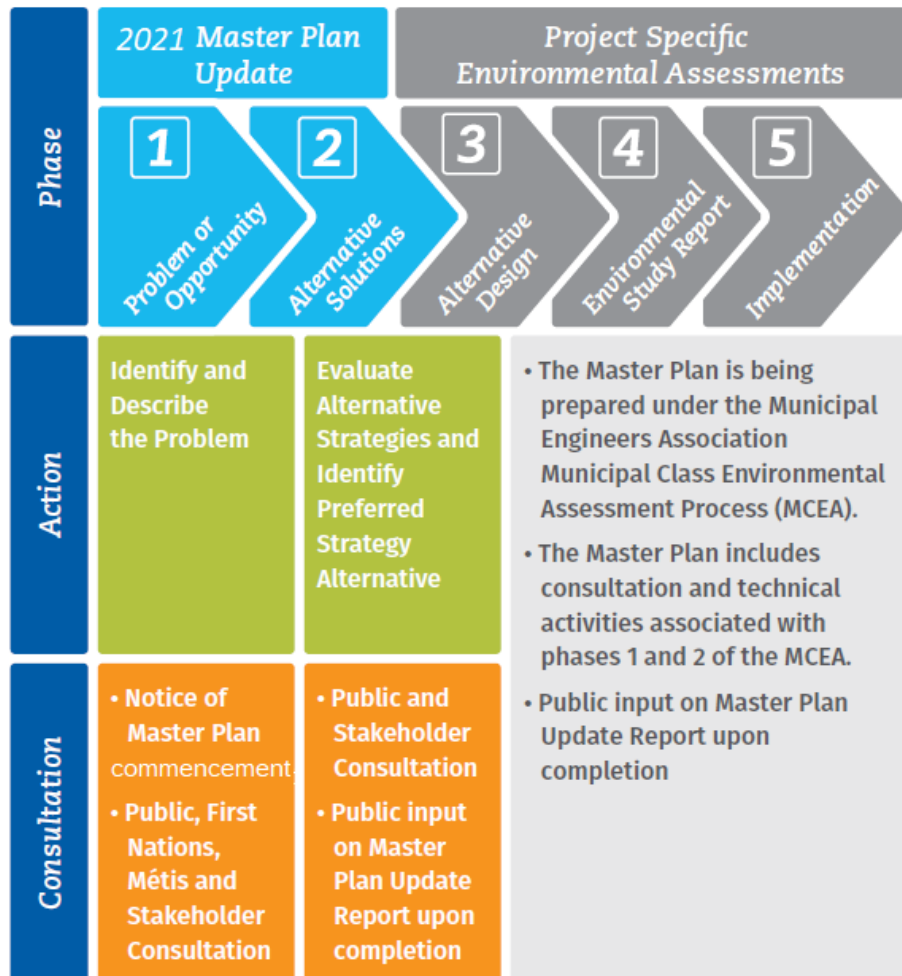


Figure # - Municipal Class EA Process

The Region followed Approach 1 for master plans set out in Appendix 4 of the Municipal Engineers Association Municipal Class Environmental Assessment document. This document fulfills the requirement in Approach 1 that decisions be documented at the end of Phase 2.

Approach 1 involves looking at the current road, transit and active transportation networks and expected needs to make recommendations on future projects. The foundation for understanding

current conditions is the Transportation Tomorrow Survey, which is normally carried out every five years as a co-operative effort by local and provincial government agencies. Major trends are highlighted in Chapter 4. Chapter 5 then presents a high-level discussion of projects to meet expected needs.

The municipal class environmental assessment process requires more detailed investigation of each project as the plan is implemented, as outlined in phases 3 through 5 in the diagram [above].

3.2 Consultation and engagement were key

The Region engaged with a diverse and inclusive range of travellers, residents, community partners and other interested parties in updating the Transportation Master Plan. Engagement sessions were completed through virtual meetings, public information centres, interviews and surveys, as well as social media and email. (In-person events were not possible due to restrictions related to the COVID-19 pandemic.)

A market research firm was hired to conduct a randomized telephone and online Transportation and Community Values survey with residents and business owners in the Region.

The survey goal was to gather feedback on what is important to these stakeholders from a transportation perspective and to collect information on travel patterns, behaviours and transportation preferences today and how they may change in the future. The telephone survey sampled approximately 1,000 people across the Region's nine local municipalities and was designed to provide statistically valid results. Almost 300 responses were also received through an online survey posted on york.ca. Chapter 4 provides highlights of these findings.

Those identified as having an interest in the Transportation Master Plan update were notified of opportunities to give feedback at each milestone. More information on the consultation approach and those identified as having an interest can be found in the plan's supporting documentation, which can be accessed at york.ca/TMP. The documentation also provides a sample of the methods used to communicate the plan update and detailed feedback gathered through three virtual open houses, as well as (background studies, etc.) [Note – Document will be available following completion of the TMP]

The consultation and plan update process was also designed to ensure feedback was taken into consideration when updating the Transportation Master Plan, as discussed in chapters 5 and 6.

3.2.0 Discover, Explore, Reveal

Engagement focused on three elements: discover, explore and reveal, as shown in Figure [XX]



Figure ##: Consultation and Engagement Milestones

Discover: Envisioning the future

This element of engagement focused on developing the foundations of the Transportation Master Plan update:

- Purpose statement, which serves as the vision for the update with all recommendations in the plan aiming to help achieve this vision
- Objectives, which support the purpose statement in the short to medium term as projects are delivered
- Guiding principles, which reflect the Region’s values and guide how to realistically achieve the purpose statement

Chapter 4 provides more detail on each of these elements.

SIDEBAR TEXT: The Transportation Master Plan purpose statement “Plan, build, operate and maintain a connected transportation network for all travellers that is safe, reliable, future-ready, sustainable and balances the needs of the unique communities we serve.”

Explore: Looking at the options

This element focused on encouraging residents and interested parties to explore transportation network options through an interactive mapping tool and a virtual idea wall. This input helped shape the proposed active transportation, rapid transit and road networks described in Chapter 5 and areas of focus discussed in Chapter 6.

Reveal: Unveiling the plan

The third and last step was to reveal the outcomes of engagement, studies, planning and other work that went into drafting the updated Transportation Master Plan, including:

- The purpose, strategic objectives and guiding principles
- Recommended transportation networks
- Areas of focus for further study and action
- Approaches to funding and implementing the transportation plan

Through the engagement process, staff learned residents and stakeholders see connected communities and safe, sustainable and convenient travel options as high priorities. While most residents now travel mainly by car, many are interested in using other options.

3.3 Approach to planning has evolved

Transportation Services gained valuable insights since the 2016 Transportation Master Plan and relied on those learnings when developing an approach to this Transportation Master Plan update.

External factors with long-term impacts, including climate change, disruptive new technologies and the COVID-19 pandemic, served as a reminder that all plans are subject to uncertainty. In addition, the Region's fiscal capacity did not allow some proposed projects to move forward.

This update is therefore based on the following principles:

- **Be more flexible and agile.** Adapt to factors like changing travel behaviour and patterns, global events, technological innovation, shifting provincial priorities and regulatory changes as the plan is put into action. Also be ready for the future and able to change direction when entirely new ideas or approaches emerge
- **Advocate for the big projects the Region needs.** This plan identifies all projects needed to serve future growth, while at the same time, it must be financially sustainable. The Region cannot independently fund several major projects discussed in this plan, including Regional interchanges with new, expanded or upgraded 400-series highways, the remaining portion of the bus rapid transit network, further subway extensions and complex projects to close gaps on Teston and Langstaff roads. These projects benefit not just the Region, but the economy of Ontario as a whole. Advocating for the provincial and federal governments and other potential funders to share in those costs will be crucial going forward
- **Watch the fiscal and environmental bottom lines.** As previously mentioned, the Transportation Master Plan must align with the Region's ability to pay for it. Through its fiscal strategy, the Region reduced its reliance on borrowing funds and, as a result, saw its debt levels peak in 2017. Since then, however, the need to fund its share of the subway extension to the City of Richmond Hill means it will face a new and higher debt peak in 2028. This calls for prudence in planning

growth-related capital investments. Planning also needs to reflect the environmental impacts, both of constructing the network and how it will be used. This is discussed in more detail in Chapter 7

- **Seek out and respond to opportunities.** Respond to federal and provincial funding opportunities and explore public-private partnership opportunities. Potential public-private partnership opportunities include transit-oriented development around major transit hubs and new developments
- **Engage more often and more broadly.** Use a variety of techniques/tools, such as online surveys, social media and virtual and post-pandemic in-person opportunities, to ensure as many voices as possible continue to be heard

4 Listening and learning

Transportation is changing dramatically around the world and within York Region due to increasing urbanization, new technologies and climate risks. The pace of change makes it more important than ever to listen to users of the transportation network and learn from their ideas and expectations while updating the Transportation Master Plan.

4.1. Travel patterns are changing

The engagement described in Chapter 3 made it clear residents understand the connection between how transportation is provided and how welcoming and livable a community is. While residents want to be able to easily get to transit hubs, schools and stores in their communities and even to further destinations using options other than their car, they want to feel safe and supported while doing so.

These themes are not new, as they have been raised in previous Transportation Master Plan updates. What is new, however, is the extent to which residents are not just talking about these changes — they are adopting them:

- People are walking or cycling more, especially for shorter and non-work-related trips:
 - Trips by walking and cycling grew by 30% between 2011 and 2016, after being near flat in the previous five years.
 - The number of car trips of less than 2 kilometres fell by 21.6% from 2011 to 2016, reaching a level slightly below that in 2006.
 - Car use decreased from 86% to 83% of total non-work trips between 2011 and 2016.

Possible factors behind this major shift could include increasing traffic congestion, higher-density growth putting more destinations within easy reach, the availability of more transit options and more accessible sidewalk and cycling infrastructure.

Another notable trend is total trips by all modes not growing as fast as the population over the same period. This may be related to retirement: in the 2021 telephone survey carried out for the Transportation Master Plan update, just over one in five residents said they were retired, with the highest proportion in the City of Richmond Hill at 28%. Another factor is that even before the COVID-19

pandemic, more people were working from home some or all of the time and doing more shopping online.

Over the longer term, there has been a trend towards greater use of transit. Data from the 2016 Transportation Tomorrow Survey show that transit mode shares have increased since 2001, while auto driver shares decreased. This means transit trips are increasing at a faster pace than car trips.

Recent ridership figures and traffic counters show:

- YRT ridership grew to 22.9 million in 2019
- Ridership increased in 2021, to 10.1 million, but continues to remain low compared to pre-pandemic ridership
- During the second half of 2021, YRT ridership increased approximately 40% compared to the same time in 2020 and is expected to continue growing gradually
- The TTC Line 1 Subway extension opened in December 2017 and provided 4.5 million passenger trips in 2019
- The Highway 7 East and Davis Drive rapidways have proven to be a positive investment with ridership increasing approximately 23% and 55% respectively, along the rapidway corridors
- The Highway 7 West, Yonge Street North and Yonge Street South rapidways opened in November 2019, January 2020 and December 2020, respectively, but did not realize potential ridership gains due to the COVID-19 pandemic
- At the onset of the pandemic, YRT ridership was approximately 80% of pre-pandemic ridership. By 2021 year-end, YRT ridership was approximately 58% of pre-pandemic ridership and by 2021 year-end, GO Transit ridership in York Region remained low at 0.6 million boardings, representing an approximate 95% decline compared to pre-pandemic
- Ridership declined on routes operating along rapid construction corridors due to increased travel time resulting from traffic delays. In 2019, ridership on routes operating along rapidway construction corridors decreased by about 1.1 million or 9%, compared to 2015
- GO Transit ridership remained low through the pandemic, seeing about 95% decline compared to pre-pandemic ridership A Metrolinx survey in 2021 found that users expected their main transit use in the future would not be commuting to work but instead taking personal/pleasure trips
- Traffic on the road network also fell in early 2020, although recovery was quicker: by 2021, volumes were back near pre-pandemic levels. The pattern, however, had changed, with a flattening of the historic morning and evening peaks.
- Workplace closures and a shift to working from home sparked major interest in active transportation. Studies in 2020 estimated that for the Greater Toronto and Hamilton Area as a whole, walking and cycling trips during the morning rush hour increased by 83% from 2016. Visits to york.ca for cycling and trail information more than doubled between 2019 and 2020.

Recent trends and survey data considered while updating the Master Plan are summarized in the following sections.

4.1.1. Most want to continue working from home at least part of the time

The longer-term impacts of the move to working from home are not yet clear, but [Statistics Canada surveys](#) show that most employees want to continue working from home at least some of the time after the pandemic. A survey by the Workforce Planning Board of York Region indicated that many employers also support working from home in industries where this is feasible.

At the time of the Transportation Master Plan telephone survey, more than half of those in the workforce were working from home, with 70% indicating they were both working from home and at a worksite (hybrid). Three in ten workers across the Region were working on-site only, the highest proportion being in the northern six communities. Overall, about 80% of those who travelled to a worksite used a private vehicle.

Before the COVID-19 pandemic, travelling to a worksite was by far residents' main use of the transportation system and, as such, contributed to increased rush-hour congestion. A permanent shift to working from home for some business sectors would have profound impacts on the transportation system within and beyond the Region. For example, the Region's network of Bluetooth sensors showed travellers on the road system in the morning rush hour were able to travel 15% faster than before the pandemic, averaging 46 kilometres per hour. This reflects a flattening of the morning peak volume, with evening peak showing a similar decline.

4.1.2. Interest in other travel options is growing

The telephone survey also carried out for this update found that 36% of respondents would like to travel to work or school by some means other than a private vehicle. Prior to the COVID-19 pandemic, upwards of 90% of trips to work or school were by private vehicle. Barriers identified in the survey to using other modes include the convenience of a car for making multiple stops and carrying groceries or sporting equipment, the extra time required to use another mode of transportation and a lack of cycling, walking and transit infrastructure.

Across the Region, the preference for options other than private vehicle travel was highest in the City of Richmond Hill, at 47%, with transit taking a 24% share against 18% for the rest of the Region. Cycling and walking were also more favoured in the City of Richmond Hill than in the Region as a whole.

Travelling to work or school by options other than private vehicle was favoured by more than half of the almost 300 individuals who completed a similar survey online. Their ideal travel choices were transit, cycling and walking in that order, and the major barriers to using these were trip time and lack of infrastructure. These responses reflect an average younger age among online survey participants.

4.1.3. A larger share of people both live and work in the Region

The percentage of people who both live and work in York Region has been gradually increasing for many years, reaching 56% in 2016. This trend may help explain the growth in morning peak car trips, despite strong ridership gains for the GO Transit system, which is oriented towards Toronto-bound commuters.

4.1.4. A shift to electric is underway among car owners

Despite more walking and cycling for trips under 2 kilometres, car ownership is still considered high in the Region, with 88% of telephone survey respondents reporting they were car owners. This compares to roughly 72% across the City of Toronto, with ownership rates in its suburbs similar to the Region's but under 50% in some downtown areas. In York Region, however, there is no clear correlation between population density and car ownership.

Increasingly, the Region's cars are powered by electricity instead of fossil fuels. Electric vehicles are powered by electricity alone and plug-in hybrid vehicles power with electricity first, with an internal combustion engine used only when electricity is not available for power. Just under 10% of York Region car owners reported owning an electric or hybrid vehicle in the 2021 surveys carried out for the Transportation Master Plan update, which is higher than the Canadian average.

While comparable Regional data from earlier years is not available, the adoption of hybrid and electric vehicles is growing rapidly in Canada. Hybrid, battery electric and plug-in hybrid vehicles accounted for 9.5% of total new registrations in the first half of 2021, up from 5.5% a year earlier, according to Statistics Canada.

The trend away from fossil fuel vehicles is likely to continue as the Government of Canada has set a mandatory target for all new light-duty cars and passenger trucks to be zero-emission by 2035, accelerating Canada's previous goal of 100% sales by 2040. Among survey respondents who do not already own an electric or hybrid vehicle, 43% of those surveyed by telephone and 58% of those surveyed online said it was somewhat or extremely likely they would choose an electric or hybrid option for their next vehicle. The likelihood rose with income level. To support the transition to electric vehicles, by the end of 2022, York Region will have 64 publicly accessible electric vehicle chargers across 12 locations.

There are concerns that electric vehicles, while beneficial to the environment, could have negative impacts on the transportation system. If drivers of electric vehicles follow the same travel patterns as in the past, traffic congestion could continue to be a problem. The UK-based Centre for Research into Energy Demand Solutions suggests a switch to electric vehicles might worsen congestion because operating costs are low, meaning there is the potential for more vehicles on the roads taking more trips.

Electrification could both help the environment and manage congestion if e-scooters and other micromobility options are used. The Ontario Ministry of Transportation regulates the use of e-bikes under the Ontario *Highway Traffic Act*. They are permitted on roads and highways where conventional bikes are permitted, unless specifically prohibited by a local restriction. Beginning January 1, 2020, the ministry launched a five-year pilot framework to permit e-scooters.

York Regional Council approved a bylaw change in 2020 to allow e-scooters and e-bikes in Regionally designated bike lanes and high-occupancy vehicle (HOV) lanes in line with provincial guidance. This demonstrates the Region's commitment to allowing and encouraging more sustainable transportation options that get people out of their cars, especially during peak travel periods.

Chapter 6 discusses the consideration to extend their use to multi-use paths and trails.

4.1.5. Respondents would invest half the budget in transit, walking and cycling options

Survey participants were asked how they would spend \$100 on transportation options. Investments in transit, pedestrian, cycling and multi-use pathways options were given a total of \$52 by telephone respondents and more by online respondents.

Improving road infrastructure was given \$30 on average by the telephone respondents, with the remaining \$18 going to technological improvements and safety measures.

These allocations were consistent with respondents from across the Region and were also comparable to survey results in 2016.

4.1.6. Youngest and oldest age groups least likely to own/drive a car

Mirroring a widespread trend, young people in York Region are now less likely to get a driver's licence soon after turning 16. In 1991, 82% of those aged 18 to 24 had a licence, but this figure had dropped to 69% by 2016. The telephone survey found that 58% of those aged 18-24 own a vehicle, significantly less than older respondents.

The current pattern, however, is that driving increases once people get their first job and form their own families. Survey results from 2016 show that among those aged 25 to 64, some 83% are drivers — the highest share of any age group. Driving then declines, falling to 76% in the 65-74 age group and 65% for those 75 and older.

The cost of purchasing a car has also increased due to a supply challenge caused by the COVID-19 pandemic, which may also contribute to fewer people owning cars.

These results have different implications for the transportation network. Walking, cycling and transit are modes of transportation that most young people readily use instead of driving. The question is whether these will remain viable choices as they are employed and form their own households.

For older individuals who have driven their entire lives, giving up driving can feel like a major loss of freedom and the survey data suggests they are resistant to other options like transit, walking and cycling.

4.1.7. Residents and stakeholders value fiscal prudence and innovative solutions

Feedback from the engagement process also stressed the importance of staying within the Region's budget by taking a "common sense" approach to spending. In addition, it was suggested the Region should work closely with its partners and explore opportunities for innovation in programs and infrastructure.

4.2. Foundations of the updated Transportation Master Plan

The engagement, research and data collection described in Section 4.1 helped in the development of the strategic direction of this Transportation Master Plan update by pinpointing what is important for the plan and why. The purpose statement, guiding principles and objectives below capture this direction.

These foundational elements in turn provide the basis for moving forward as outlined in Chapter 4.3, which sets out what the Region needs to do at a broad level, while Chapter 6 outlines focus areas for future work over the short term.

[FUTURE INFOGRAPHIC]

4.2.1. Purpose Statement

“Plan, build, operate and maintain a connected transportation network for all travellers that is safe, reliable, future-ready, sustainable and balances the needs of the unique communities we serve.”

The purpose statement serves as the vision for the update, and all recommendations in the plan aim to help achieve it. Feedback on the vision was positive, especially with the focus on safety, fiscal and environmental sustainability, connectivity, diversity and adaptability.

4.2.2. Guiding Principles

The guiding principles reflect York Region’s values and set the direction for realistically achieving the purpose statement. Future transportation initiatives should support one or more of the following principles:

- **Safety:** Measures that help reduce transportation-related fatalities and serious injuries with a focus on vulnerable road users
- **Inclusive and equitable:** Transportation infrastructure, programs and services that are available to all residents, regardless of location, personal abilities, age, gender, income, culture or faith
- **Protect the environment:** Addresses transportation needs with consideration for social and environmental impacts
- **Affordable today and tomorrow:** Balances the transportation costs and needs of the present without compromising the ability of future generations to meet their own needs
- **Balance the needs of communities and commuters:** Develop a transportation network that considers both the movement of people and goods and the importance of community building and neighbourhood placemaking, creating creative patterns of use, paying particular attention to the physical, cultural, and social identities that define a place and support its ongoing evolution
- **Future-ready:** Transportation solutions and initiatives that are flexible and can be adapted to address changing needs, processes and technologies

The feedback from consultation and engagement through the Transportation Master Plan showed general agreement with the principles and approval of a focus on people (not just drivers) living and travelling safely in sustainable, complete communities. Complete communities are described in more detail in Section 4.3.3.

4.2.3. Objectives

The objectives are intended to support the purpose statement in the short to medium term as projects are delivered.

- **Make the best use of infrastructure and services:** Maximize the effectiveness of the existing road network
- **Encourage all types of travel:** Design regional roads to accommodate all ages, abilities and modes of travel, including active transportation, transit, passenger vehicles and goods movement
- **Provide a resilient and adaptable transportation network:** Adaptable to changing social, environmental, financial and technological landscapes
- **Enhance partnerships:** Recognize the importance of collaborating with the public and private and non-profit organizations to provide transportation infrastructure, programs and services
- **Actively engage and share information:** Learn from all residents and stakeholders
- **Align project costs:** Ensure project costs are consistent with the Region's fiscal strategy and the 10-Year Capital Plan and obtain Regional Council approval annually

The draft objectives were well received by stakeholders and comments indicated approval of focusing on resiliency, connectivity, a range of travel options and partnerships.

4.3. Transportation Master Plan update reflects evolving attitudes and options

The engagement and surveys discussed in this chapter show travel patterns across the Region have been changing for some time and will continue to do so, especially where active and eco-friendly options are concerned. At the same time, new transportation options and ideas, like micromobility, are emerging.

The update process brought these streams together and used the principles and objectives outlined above to develop a Transportation Master Plan supporting progress towards the system the Region will need over the next 30 years. This section outlines key themes, and Chapter 6 provides more details on future work that will continue to inform the Region's plans.

4.3.1. Making life without a car an option

Not all residents can afford a car, or are willing or able to drive, as the telephone survey results showed:

- Those earning less than \$60,000 were significantly less likely to own a vehicle than higher-income earners.

- Younger residents are less likely to drive compared to those aged 25-64 and are comfortable with other transportation options.
- Older drivers might be at risk of losing their independence once driving is no longer an option.

For those living on a low income, finding an affordable place to live in the Region can also be a challenge. From 2008 to 2020, average home resale prices increased by 155%, while household incomes rose by only 20%. In addition, York Region has the lowest share of rental units across the Greater Toronto and Hamilton Area. The survey done for this update found that among those considering a move out of the Region, the cost of living and housing affordability were the top reasons.

The link between housing affordability and access to more travel options is a key factor in planning communities. If the only low-cost housing is far from workplaces and is poorly served by transit or other options, low-income residents may need to have one or more cars, which cuts further into their income.

The Region is helping to address this issue in its planning for urban centres and major transit station areas. The York Region Official Plan requires that 35% of new housing in these areas be affordable, while 25% of new housing be affordable outside these specified areas. The goal is to increase the percentage of affordable housing and give residents with the greatest need better access to work, school and other important destinations.

For many young people, the Region may not be the place where they will live long term: the survey found almost half of respondents aged 18 to 24 expect to leave. The most frequent reasons cited were the distance from school or work and the high cost of living, including housing. Keeping more young people in the Region may depend on creating communities where owning a car (a major expense) isn't necessary even after getting a job and forming a household.

The telephone survey also found that, compared to younger respondents, a far smaller number of those over 65 would consider a switch to transit, cycling or walking instead of driving. As they age, many residents are less inclined or able to drive. Without access to another way to travel, this severely limits their ability to get around and increases their risk of social isolation, both of which might make it hard for them to continue living independently. This is another instance where creating communities in which car ownership isn't needed is important.

4.3.2. Making transportation healthier

York Region's transportation system has an important role to play in improving residents' health. Chronic diseases such as diabetes, hypertension and heart disease are the main cause of illness and death in the developed world, including York Region, and physical inactivity is a major contributor.

Walking at the beginning or end of a trip taken by public transit is an excellent way to increase physical activity. Shifting away from vehicle use towards active transportation and public transit is also linked to less air pollution and a lower risk of traffic-related injuries.

Moving to an electrified transit and corporate fleet will also improve air quality and reduce noise pollution in communities, which will provide further health benefits.

As the survey results show, many residents would like to walk, cycle or take transit more but have concerns about how convenient it is, how much time it takes, if it's safe and whether the related infrastructure is in place.

4.3.3. Creating complete communities and complete streets

In York Region's vision, a complete community offers housing options at a range of price points, jobs, local services, clean water and air, green spaces and great recreation, all accessible by active and eco-friendly transportation. The benefits include helping residents be more physically active and protecting the environment by making it easy to reach destinations like shopping, schools and workplaces by walking, cycling and/or taking transit. The policies in the Regional Official Plan will help co-ordinate and set the stage for more detailed planning by the Region and local municipalities to create healthy, liveable places. These include human services and capital infrastructure, such as roads, transit and water/wastewater systems.

Built environments that support complete communities contain a variety of safe, accessible and connected transportation options that can be used in most weather conditions. This requires coordinating land use with investments in those options. Partnerships are also needed to ensure that other initiatives, including public health programs, the Region's Seniors Strategy and streetscaping, all factor into the creation of complete communities.

A recent example of how transportation can support complete communities is a pilot program started in 2021 in partnership with the Town of Newmarket and local school boards to encourage students and their parents to walk or cycle to school. The pilot, involving six schools, combines education, outreach and infrastructure and uses wayfinding, including markings on pavement and new curb markings, to better control traffic in active school transportation areas, along with fun touches like hopscotch grids painted on sidewalks. The hope is that, in addition to giving children more opportunities to be active, the project will help manage traffic congestion and make school zones safer. If successful, the Region hopes to broaden and extend the initiative across its nine local municipalities.

Designing complete streets allows the Region to support complete communities. In 2017, Ontario adopted a policy requiring that streets be designed for all users. The Region subsequently developed two complementary documents, its Pedestrian and Cycling Planning & Design and Designing Great Streets guidelines. Together, these shift the focus of road design from planning for vehicle capacity to planning streets everyone can use to better connect to the community. An important element when designing streets is including boulevards that run alongside them to provide safer cycling options.

5. Mapping the Region's transportation future

5.1. How the proposed network was developed

The update to the Transportation Master Plan responds to the need for a transportation network that offers travellers more options, protects the environment and fits within the Region's budget. It aims to achieve this by:

- Supporting a critical shift towards active and eco-friendly travel by making those options readily available to more residents
- Continuing to help make the entire transportation network safer for all users
- Focusing on the transportation needs of all road users, including drivers, passengers, transit riders, pedestrians and cyclists
- Using assets like boulevards along roads and underused public lands for active and eco-friendly travel

This chapter focuses on capital investments aimed at giving communities complete and connected transportation networks for all modes of travel, providing reliable and easy access to destinations and balancing the needs of various communities and travellers. It includes maps showing proposed cycling, rapid transit and road networks to provide a look at how all modes of travel are expected to evolve to support the Region's growth over the next 30 years.

The next chapter, "Strategic approach to change," discusses areas of focus that may help develop future transportation programs and initiatives, in line with the plan's purpose statement, principles and objectives.

As a long-term infrastructure plan, the Transportation Master Plan is made up of three main elements:

Active transportation. Travellers are walking, cycling and using other human-powered options to get to work or school, run errands or simply enjoy being outdoors more often. The plan supports a well-integrated network of bike lanes, trails and multi-use pathways to make these options easier and safer for all users. **(Maps 1 and 2)**

Rapid transit. Identifying and protecting corridors for rapid transit infrastructure, such as dedicated bus lanes, is critical as the Region grows. Recognizing changes since the release of Metrolinx's 2041 Regional Transportation Plan in 2018, this update recommends additional rapid transit corridors to address the Region's growth to 2051 and beyond. In addition, the updated Regional Official Plan identifies new major transit station areas that need to be supported with transportation infrastructure, such as new and improved bus rapid transit corridors, GO Transit rail stations and conventional transit service. **(Map 3)**

Optimized road network. Investments in this Transportation Master Plan will generally target managing traffic flow in the Region's most congested areas, improving roads in new development areas and enabling better access to freeways, Regional Centres, rapid transit and key links to major employment

areas. The proposed road network focuses on what is needed to make the best use of the existing assets, such as roads, lanes and intersections, as well as on investing in new projects. This process of making the best use of the existing road network, also called optimizing the network, includes adjusting signal timing and making road or intersection upgrades to resolve bottlenecks and pinch points wherever possible, instead of undertaking major construction like road widenings. This approach goes hand in hand with other steps taken to manage demand by single-occupant vehicles on the road network by making options like active transportation more readily available. **(Map 4)**

A shift to active transportation and sustainable transit makes the road network more efficient by managing the number of single-occupant cars it must accommodate as the Region grows. This results in financial benefits by reducing wear and tear on roads and reducing the need for widenings and other costly road projects.

5.2. Testing options

Decisions about transportation investments reflect the feedback and factors outlined in the previous chapter, forecasts for growth and employment to 2051, current capacity of the transportation network, how various factors might change and what the impacts will be.

The Region uses an activity-based model to analyze travel demand and forecast the impacts of growth on the network. Reflecting data gathered in the 2016 Transportation Tomorrow Survey and Cordon Count Program, it simulates the daily travel patterns of drivers, carpoolers, pedestrians, cyclists and users of transit, including GO Transit bus and rail, in York Region and the rest of the Greater Golden Horseshoe Area.

The model considers key factors that determine trip-making patterns, such as changes in household makeup over time, availability of cars to household members, how and where employment will grow, how people organize their trips in sequence and the extent to which traffic congestion will cause drivers to shift to other modes of transportation such as transit, walking or cycling.

For the Region, population and employment forecasts are key considerations included in the updated Regional Official Plan and help determine which transportation projects should be invested in and when. chapters 1 and 2 provide more detail.

A 2051 base network model was developed reflecting current Regional and provincial plans, including the Ministry of Transportation's [Southern Highways Program](#). Most of the existing 400-series highways serving the Region, including highways 400, 404, 407 and 427, will be extended and/or expanded. Plans for new roads include Highway 413 (Greater Toronto Area West corridor), which would cross the City of Vaughan from Peel Region to Highway 400, and a bypass that would connect Highway 404 to Highway 400 (commonly referred to as the Bradford Bypass) in the north. The impacts of these projects on the Regional road network were considered during the planning process.

The model then tested how the network would perform given the location and population and employment projected for 2051.

Assumptions could be changed to create a range of scenarios to find a better fit between capacity, costs and transportation options. Six scenarios were tested for this plan update. The first three scenarios would involve policy and/or funding from the Region and its partners or would have financial impacts on residents. These scenarios were:

1. Providing more frequent YRT bus service
2. Eliminating transit fares
3. Charging for parking in high-demand areas where transit is available as an alternative

Scenarios 1 to 3 resulted in the reduction of traffic congestion; however, the financial impacts on the Region would vary for each.

The further three scenarios would depend on changes in resident behaviour and would involve little or no policy changes or funding from the Region:

4. Half of trips taken under 5 kilometres would be completed by walking or cycling.
5. 25% of the labour force would continue to work from home and daily shopping trips would fall by 15% due to online shopping.
6. Travellers would avoid morning and evening traffic peaks and spread trips out over the day.

Scenarios 4 to 6 would reduce traffic congestion with minimal impacts on the Region's infrastructure investments. Of the three, scenario 4 -- more active transportation like walking or cycling for short trips - is the most feasible, based on current information. The Transportation Tomorrow Survey data show a growing interest in active transportation among York Region residents, and this trend is expected to continue over the next 30 years. The Region's roles in helping to make it happen include adding active transportation infrastructure and planning complete communities, which will also support residents' health and protect the environment.

5.2.1. A larger, more integrated active transportation network

A well-planned active transportation network lets people move within and beyond the Region in ways that are convenient and safe for everyone and connects off-road trails to lanes and paths on or beside roads.

The active transportation network should provide direct connections to workplaces, schools, libraries, shopping, recreation and other destinations, as well as link to transit for longer trips. Enabling more travellers to reach major transit stations and hubs as well as local transit stops by walking, cycling or micromobility means is an important part of managing traffic congestion in urban areas.

Collaboration is essential in creating and expanding the network. York Region has formed important partnerships with local municipalities, neighbouring municipalities, the Toronto and Region Conservation Authority and the Lake Simcoe Region Conservation Authority, as well as with school boards, advocates and other interested parties.

Updating the active transportation network was guided by the following goals:

- Active travellers should feel safe throughout the network, including where there is a highway interchange on a Regional road
- All Regional roads should accommodate all modes of travel, including walking and cycling, and design should reflect the Region's Pedestrian and Cycling Planning & Design Guidelines
- Where possible, cycling lanes should be located off the road rather than on the road next to vehicle traffic
- The network should consider underused or unused land to expand, such as hydro corridors or old rail lines
- Travelling by human power (walking or cycling) should be an option for everyone
- Outreach to encourage the shift to active transportation should target areas where new cycling/walking features are available or planned, as well as to more general audiences

The active transportation networks are shown on two maps – the Regional road network (Map 1) and the Regional trail network (Map 2). While both maps are needed to provide the level of detail required for this plan, the Region views routes on the road network and on trails as one, forming a connected network for commuting and recreational use.

Some paths on Regional roads allow for multiple users, including pedestrians, and the trail network is open to walking, hiking and cycling. Sidewalks, which also form part of the active transportation network, are a local municipal responsibility and as such are not shown on the maps.

Regional road cycling network (Map 1)

This map shows the existing and proposed Regional road cycling network. Green indicates existing multi-use pathways and cycling tracks separated from the roadway and dedicated on-street bike lanes. The dotted red lines show where these new features might be in the future. The road-based cycling network will be expanded by Regional road projects, in partnership with stakeholders and through the review of new development applications. Where a lane or path within the Region will reach a border, the Region will work with neighbouring municipalities to identify logical connections so cyclists and pedestrians can continue their journey safely.

Trail network in York Region (Map 2)

Trails enable cyclists and others to connect to neighbouring municipalities as well as destinations within the Region. Arrows show connections to neighbouring municipalities that are expected to be in place by 2051. Solid lines show existing trails and dotted lines indicate trails that are under development, planned or being explored in partnership with local municipalities and conservation authorities.

Two trails of significance are:

- The Lake to Lake Cycling Route and Walking Trail, which will provide a 121-kilometre link from Lake Simcoe to Lake Ontario with connections to other major trails when complete. The portion of the route in York Region is more than 80% complete.

- The future South York Greenway cycling, pedestrian and micromobility corridor, which will parallel Highway 407, providing connections to subway stations, other major mobility hubs and existing and future communities. When complete, it will run more than 50 kilometres from the City of Vaughan to the eastern limits of the City of Markham.

These routes will provide a safe and largely separated travel network for potentially thousands of cyclists, pedestrians and micromobility users in the most heavily populated areas of the Region, which will help reduce automobile pressure on major arterial roadways.

Improvements to the active transportation network are made in partnership with local municipalities. When road projects do not include active transportation improvements, such as the construction of walking, cycling or multi-use paths, consideration is given to constructing these later when possible. These considerations may include moving utilities, placement of street trees and intersection modifications to ensure this infrastructure can be accommodated in the future.

5.2.2. More rapid transit corridors

The proposed 2051 rapid transit network, shown on Map 3, identifies and protects rapid transit corridors, to support York Region's planned growth needs. Transit infrastructure may include physically separated lanes for the exclusive use of buses or light-rail vehicles. In York Region these are also referred to as "rapidways."

Due to the Transportation Master Plan guiding long-term capital investment, the proposed rapid transit network focuses on rapid transit infrastructure needs, including bus rapidways and the Yonge North Subway Extension. The capital needs of other transit services, like conventional bus and Mobility On-Request, are adjusted in response to shorter-term demand and reflected in YRT's five-year plans and the 10-year capital plans in the Region's budget.

The proposed rapid transit network is consistent with the 2016 Transportation Master Plan, with some adjustment to reflect budgeting needs. Its foundation is a body of background knowledge, including environmental assessments, studies and reports that provides a solid rationale for the proposed network and the major projects it identifies.

While the rapid transit network plan generally aligns with Metrolinx's 2041 Regional Transportation Plan that was released in 2018, it also recognizes that long-term planning has since evolved:

- In the provincial Greater Golden Horseshoe Transportation Plan, which is now in development, the Ministry of Transportation is moving towards including parallel transitway corridors along new or extended 400-series highways.
- The provincial government has also signalled an interest in shifting from the current mode of focusing all rapid transit on Union Station to one that includes a loop to bypass Toronto's downtown core and connects new major transit hubs, including Richmond Hill Centre, with Toronto Pearson International Airport and other important destinations.

- Infrastructure investments also reflect new forecasts for population and employment growth in the updated Regional Official Plan that are based on 2020 provincial forecasts and the Region's designation of new major transit station areas.

The rapid transit network includes the following infrastructure elements that could be added to the network by 2051:

- **Subway.** The map reflects the Yonge North Subway Extension which connects the Richmond Hill/Langstaff urban growth centre with the existing TTC subway at Finch Station. The planning and construction of the alignment and stations are led by the Province through Metrolinx. As well, this line and the existing line that now ends at Vaughan Metropolitan Centre may be extended to Major Mackenzie Drive, subject to further study.
- **GO Transit.** In addition to improvements along the Barrie, Richmond Hill and Stouffville GO Transit lines, this map also includes the Bolton rail corridor in west Vaughan and Havelock rail corridor in east Markham. These were identified in the Metrolinx Regional Transportation Plan as potential projects beyond 2041.
- **Other rapid transit.** Building on the success of 34 kilometres of bus rapid transit (or Viva) completed to date, remaining segments totalling more than 100 kilometres are needed to complete the YRT Viva network of dedicated bus lanes, including 10 kilometres that are subject to further studies. This would include building out the rapid transit network westward along Highway 7 to connect to Peel Region bus rapid transit, making it easier to get to Toronto Pearson International Airport. Additional rapid transit could include parallel transitways on new and extended 400-series highways, including highways 427 and 407 and the proposed Highway 413. The proposed transitway on Highway 407 would be another option to link York Region to the Toronto Pearson International Airport. Metrolinx has also identified 37 kilometres of future planned rapid transit along Steeles Avenue.

The Region is also working with the provincial government to explore a potential rapid transit loop to bypass Toronto's downtown core (as discussed above). The forthcoming Ministry of Transportation plan for the Greater Golden Horseshoe and future updates to [Metrolinx's Regional Transportation Plan](#) will provide more details.

The proposed number of commuter parking lots to support YRT and/or GO Transit services has been reduced since 2016. This was based on focusing on parking lots that would directly enable a connection from a private vehicle to transit at a significant YRT or GO Transit bus stop, terminal or station.

The proposed rapid transit network was refined through discussions with internal partners, York Region Rapid Transit Corporation and consultation with the public.

5.2.3. A more strategic approach to the road network

The development of the 2051 road network (Map 4) included:

- Building on the extensive work done annually for the 10-year roads and transit capital construction program
- Recognizing financial constraints and better aligning with the Regional Fiscal Strategy
- Using data-driven decision making

Decisions about specific projects considered growth-related needs, expected impact, project costs and commitments of partners, such as local municipalities and the Ministry of Transportation. With respect to the ministry, York Region has also identified improvements needed on several roads under provincial jurisdiction, such as portions of highways 48, 9 and 7, and advocates for these to be priorities in updates to the Southern Highways Program. These projects are identified in purple on the 2051 roads network map.

Evaluating potential Regional road improvements

For improvements to Regional roads, staff examined the results of the Region's travel demand forecasting model discussed in Section 2 of this chapter.

Projects were then ranked using the Region's priority-setting model, a process endorsed by York Regional Council that determines the benefit scores of each project, looking at such aspects as how much the road capacity would be increased, what type and intensity of development is expected nearby, whether the road is close to important destinations or freeways and what uses — such as trucking, transit and car travel — the road will support.

The priority-setting model was valuable for initially ranking projects based on historical and forecasted traffic volumes, then refined qualitatively in consultation with subject-matter experts looking at factors such as supporting planned growth areas or constructing eco-friendly and active transportation infrastructure to support all modes.

Potential changes resulting from expanding GO Transit train service

The 2051 road network includes separations between Regional roads and rail lines used by Metrolinx's GO Transit commuter trains, as well as Canadian Pacific Railway and/or Canadian National Railway. These separations, also known as grade separations, support GO Transit's expansion plan for two-way service and for all GO Transit lines to carry more trains.

Recent experience in the Region and elsewhere in the Greater Toronto Area shows that a crossing typically costs more than \$100 million to build. Construction is disruptive for communities and, once built, crossings are very costly to maintain. The significant construction and operating costs might not justify the traffic benefits.

Grade separations included in the Region's 2016 Transportation Master Plan but not yet underway continue to be protected from development in this update. Since projects of this nature involve shared jurisdiction, the Region typically works with Metrolinx and other rail authorities to plan for and prioritize them. Negotiation will be needed to determine roles, responsibilities and cost contributions, the last of which will also be subject to assessing priorities in the Region's capital budget.

Recommended 2051 road network

As Map 4 shows, the proposed 2051 road network focuses on:

- Improving roads located near new development areas and in the most congested core urban areas
- Construction of a new section of Teston Road between Keele and Dufferin streets
- Building mid-block crossings (crossings over freeways between interchanges) and completing missing links in mature urban areas to offer more route options
- Continuing to advocate for interchanges required to support growth and considered by the Ministry of Transportation to be a Regional or local municipal responsibility, including three linking to Highway 404 (at 19th Avenue, St. John's Sideroad and Doane Road) and one to Highway 400 (at King-Vaughan Road), as well as improving the partial interchange at Mulock Drive and Highway 404
- Protecting the areas around planned grade separations between Regional roads and rail lines and completing four projects already underway: on Rutherford Road east of Keele Street and Wellington Street east of Yonge Street on the Barrie GO Transit line, Elgin Mills Road east of Yonge Street on the Richmond Hill GO Transit/CN line, and Steeles Avenue east of Kennedy Road on the Stouffville GO Transit line

The Region is undertaking an environmental assessment for the construction of new section of Langstaff Road to cross the Canadian National Railway MacMillan Yard. This is included on a contingency basis as it can proceed only if additional funding were available from third parties.

The Transportation Master Plan update identified the need for one interchange with Highway 400 north of Teston Road, which could be at either King-Vaughan Road or Kirby Road. The preferred option is subject to further study and consultation with local municipalities and the Ministry of Transportation, as either would be affected by options to connect Highway 400 to Highway 413.

The 2010 Regional Official Plan included a potential westward extension of Donald Cousens Parkway, which currently runs from Fieldside Street (north of Steeles Avenue) to Major Mackenzie Drive. A section of Ninth Line between Steeles Avenue and Fieldside Street is in the Region's program to be widened to four lanes in the near future, completing the southern end of the Don Cousens Parkway within the Region. The 2016 Transportation Master Plan provided more details of this potential four-lane arterial road that would connect to an interchange at Highway 404 at 19th Avenue. This update proposes that the capacity that would have been provided by the extension be provided by expanding the existing road network around its planned route instead.

6. Strategic approach to change

6.1 New and evolving areas of focus

The Transportation Master Plan update identified five focus areas, each of which brings together several related priorities:

- Safety for all travellers
- Transportation equity
- Reduce car travel, especially during rush hours
- Fiscal and environmental sustainability
- Role and function of Regional corridors

[FUTURE INFOGRAPHIC]

The focus areas replace the many transportation policies and actions included in the 2016 Transportation Master Plan, because the Regional Official Plan is the major policy document for managing growth and development. The Transportation Master Plan focuses on setting and maintaining direction for transportation in York Region through initiatives, guidelines and operating procedures that support the Regional Official Plan, as well as the Region's Vision and the Strategic Plan.

Each focus area will require further study on the part of the Region and its partners, as discussed in the balance of this chapter. Proposed actions and initiatives will be brought forward to York Regional Council for review and endorsement over its next four-year term.

6.1.1. Safety for all travellers

Safety is a long-standing priority of the Region. As the transportation network evolves and changes, there will be opportunities for the Region and its partners to help make it even safer for all travellers. This update outlines specific investments and commitments to increase safety. In addition, Transportation Services expects to propose a traveller safety strategy to York Regional Council by 2023.

Additional initiatives may include:

- Reviewing posted speed limits to ensure they are consistent with the goals of more active transportation and livable communities
- Using communication campaigns to share information with road users and build awareness of safe behaviour, such as the "[Be Visible. Be Seen.](#)" campaign that provides tips for drivers, pedestrians and cyclists to arrive at their destination safely
- Putting speed reduction and speed management measures, in place

- Using safety-oriented planning and design and providing safety enhancements for pedestrians and cyclists by using the Region’s Pedestrian and Cycling Planning & Design Guidelines, including:
 - Protected bike lanes, also called cycle tracks, with physical barriers to separate cyclists from both cars and sidewalks
 - Permanent two-stage left-turn queue bike boxes in boulevards at several intersections on Highway 7 to allow cyclists to complete a left turn across multiple lanes of traffic safely
 - Pedestrian crossings, like the pedestrian bridge over the Holland River and GO Barrie rail corridor, to eliminate the need for pedestrians and cyclists to cross at street level

6.1.2. Transportation equity: options for all lifestyles, life stages and abilities

The Region designs transportation options and assets to make it easier for people of all ages and abilities to use services. This aligns with York Region’s Inclusion Charter, which has the goals of making all people feel they belong and have access to the same opportunities and moving towards recognizing mobility as a right.

The MyRide Travel Training Program helps to make customers, including seniors, newcomers to the Region and people with disabilities, more comfortable using YRT on their own by providing additional knowledge and skills needed to use YRT independently.

YRT offers fare discounts for senior citizens, children and youth, and children under five years of age ride for free. The Region is also piloting a Transit Assistance Program to make transit more affordable for eligible adults.

Other initiatives to support greater transportation equity include:

- Expanding Mobility On-Request to provide transit services to more rural communities and new riders in areas without access to large-scale transportation systems or mobility hubs
- Accepting more payment methods so it’s easier to pay fares and use the system
- Collaborating with other agencies like Metrolinx on expanding transportation options available to residents and commuters
- Making transit more convenient by offering better fare and service integration with neighbouring systems and aligning transit options with traveller needs
- Ensuring intersections comply with provincial accessibility requirements
- Communicating in more ways to ensure messages reach as many people as possible

6.1.3. Reduce car travel, especially during rush hours

The road network, air quality and the environment would benefit from having fewer cars on the road, especially during rush hours, as the population and economic activity increases.

There are many ways to build on the growing interest in walking, cycling, transit, carpooling and other eco-friendlier options, including non-travel alternatives such as working from home. The Region will continue to work with and require developers to help fund and accelerate projects that serve residents of a new development on the transportation network where appropriate. For example, a developer may fund or construct a road improvement and would be repaid for the road work at a later date.

This update continues York Region's commitment to managing traffic congestion, including looking at new ideas and approaches.

A key element will be encouraging a shift to more active and eco-friendly options. Examples of how to achieve this include:

- Supporting transit ridership recovery from the COVID-19 pandemic with marketing efforts, enhanced cleaning programs and actions to address overcrowding in high ridership areas
- Adding more active transportation infrastructure (such as cycle tracks and multi-use pathways)
- Advancing the Lake to Lake Cycling Route and Walking Trail, South York Greenway project and building stronger links throughout the trails network
- Better understanding the opportunities for transportation over short distances via eco-friendly, single-person vehicles such as e-scooters and e-bikes and how to accommodate their use in the transportation network
- Creating a comprehensive transportation demand management strategy, building on such initiatives as Smart Commute, including the Smart Commute Website and App, carpooling, [Active School Travel pilot program](#), encouragement of walking, cycling and other eco-friendly options for the first/last kilometre of longer trips and providing access to major mobility hubs by transit or active transportation
- Implementing the MyTrip program for new residential communities to promote sustainable transportation through individualized trip planning and outreach

6.1.4. Fiscal and environmental sustainability

The updated Transportation Master Plan looks at natural heritage features as well as agricultural and rural lands to avoid any negative impacts where possible. Preserving the 70,000 trees planted on Regional roads and rights-of-way is also considered as part of the road project planning process and when trees must be removed, they are replaced.

Chapter [X] discusses York Region's commitment to meet net-zero targets by moving to full electrification of the transit and corporate vehicle fleets.

There are additional ways to lessen environmental impacts of the transportation network and support fiscal sustainability.

Examples of such initiatives include:

- Improving the way priorities for capital projects are set by updating the definition of a project's benefits, building in financial constraints, looking at benefit/cost ratios and assessing the ability to mitigate environmental impacts, for example by reducing GHG emissions
- Managing assets to minimize costs and environmental impacts over their service lives
- Coordinating the Region's transportation networks with those of local and adjacent municipalities to minimize infrastructure needs and enhance the natural environment

6.1.5. Reviewing roles and functions in Regional corridors

As the transportation network evolves, York Region needs to consider issues around ownership, new technologies for micromobility and measures to manage demand on the system. The following five subsections outline the key priorities around corridors. Many of these will involve collaboration with internal and external stakeholders.

6.1.5.1. Ownership and use of boulevard

Elements in boulevards (the strips of land located between the road curb and private property) include cycling paths, sidewalks, streetscaping and lighting. The *Municipal Act* does not explicitly define the respective responsibilities of York Region and its local municipalities for all boulevard elements. For example, along a Regional road, the local municipality is responsible for constructing and maintaining the sidewalks and the street lighting between intersections. However, responsibilities for other features, including cycling paths, are not defined. This creates uncertainty about ownership and maintenance, especially as the Region is moving to shift cycle tracks into the boulevard for greater safety.

- The Region and its partners will work to more clearly define boulevard roles and responsibilities, especially where the goal is providing safer and more comfortable options for active and eco-friendly transportation, reducing reliance on single-occupancy vehicles and making the road network more efficient.
- The Region will consider what needs to be included on boulevards and what could go onto the road to make more space available for trees and other features while creating an inclusive and safe environment.

6.1.5.2. Micromobility

New micromobility choices, such as e-bikes and e-scooters, are gaining in popularity among York Region's residents. As noted in Section [4.X], they offer convenience as well as benefits on both the environmental and the traffic congestion fronts. Users can cover longer distances compared to walking or cycling, they take up less space on the road than a car, and micromobility makes it easier to connect to mobility hubs or key destinations as parking is less of a concern.

Successful integration of these devices into Regional and local networks will require collaboration and communication. Particular attention is needed on how they would be safely integrated into sidewalks or trail systems that see high volumes of pedestrians. Going forward:

- The Region and its partners will work to define pedestrian, cyclist and micromobility infrastructure to support both safety for all travellers and the shift away from single-occupant car trips.
- Special consideration will need to be given to issues such as rentals, pick-up/drop-off locations, winter maintenance, charging facilities, speed limits in some settings, enforcement and legal/risk issues.

6.1.5.3. High-Occupancy Vehicle (HOV)/transit lanes

HOV lanes are reserved for public transit, emergency vehicles, taxis and private vehicles carrying more than one person. Their main purpose on Regional roads is to increase the total number of people moving through the corridor.

A Regional standard for six-lane roads requires the inclusion of two all-purpose travel lanes in each direction, an HOV lane and a dedicated 1.5-metre cycling lane, at a minimum.

The Regional Official Plan includes a policy to “require transit or high-occupancy vehicle lanes and cycling facilities within the rights-of-way of existing and future six-lane Regional roads based on established thresholds and criteria.” Consistent with that policy, this focus area will explore opportunities to redefine how HOV lanes are proposed and implemented across the Region's existing four- and six-lane and future six-lane roads.

Potential work in this area could include:

- Carpooling lane incentives
- Building additional bus-only lanes on major Regional corridors
- Reviewing Regional policy on six-lane roads

6.1.5.4. Parking

In York Region, local municipalities are largely responsible for managing on-street parking through official and secondary plans, zoning of new developments and parking bylaws. The Region, however, has two closely related functions:

- Its Official Plan directs growth largely to Regional Centres and Corridors.
- It is working on several fronts to make active and eco-friendly travel options more attractive.

These roles are linked. Effective parking policies and programs can help achieve transportation goals like encouraging people to walk, cycle and use micromobility, especially in high-density areas.

Parking on a Regional road is generally considered only when all

the following criteria are met:

- It would be located within or along the Region's designated Centres and Corridors or in a Major Transit Station Area.
- It would be part of an overall parking strategy for those locations, not a stand-alone provision.
- It would be safe and not impact pedestrian and cycling facilities, sightlines, streetscaping, access, intersection operations or the road's integrity.

Additional work may include:

- Looking at a broad-based policy and standards around parking on Regional roads to support the goals of this updated Transportation Master Plan
- Charging for on-street parking in some areas

6.1.5.5. Movement of goods using large trucks

Trucks of all sizes are allowed on all Regional roads, supporting the economy as well as moving people. A Ministry of Transportation of Ontario survey in 2012 found that 21% of weekly truck trips in Ontario originated from, were going to, or crossed through York Region. Approximately \$3.8 billion worth of goods are moved in the Region weekly.

Truck traffic in the City of Vaughan accounts for more than half of all truck travel to and from the Region. This is because two major rail freight hubs, Canadian National Railway MacMillan Yard and Canadian Pacific Railway Vaughan Intermodal Terminal and major distribution centres, are located here, as are several large distribution centres. Truck volumes are also higher around key employment areas along provincial highways, which are mainly in the City of Vaughan but also in the cities of Markham and Richmond Hill.

The Region has been working with the ministry and neighbouring municipalities to improve goods movement, manage congestion and reduce conflicts between road users through:

- Greater efficiency.** The Regional Official Plan recommends the Region work with the provincial government, local municipalities and nearby jurisdictions on an efficient, multimodal goods movement network that uses rail corridors, provincial highways and Regional roads to meet current and future needs. This is reflected in such projects as the proposed widening of Langstaff Road to six lanes between Weston Road and Dufferin Street. (Section 5.2.3 notes that a further project to take Langstaff across the MacMillan Yard is contingent on third-party funding.)
- Operational practices.** Section 4.3.3 discusses the Region’s Designing Great Streets Guidelines focused on road design for all users. One concern is ensuring the turn radius, also known as curb return radii, at intersections used by trucks is sized right to minimize conflicts with opposing traffic and pedestrians.

6.2 Alignment of Focus Areas with Objectives

The Transportation Master Plan’s objectives are identified in Section 4.2, “Foundations of the updated Transportation Master Plan.”

OBJECTIVES / RELATED FOCUS AREAS					
2022 TMP Objectives	Focus Areas				
	Safety for all travellers	Transportation equity: options for all lifestyles, life stages and abilities	Reduce car travel, especially during rush hours	Fiscal and environmental sustainability	Reviewing roles and functions in Regional corridors
Make the best use of infrastructure and services	✓		✓		✓
Encourage all types of travel		✓	✓		✓
Provide a resilient and adaptable transportation network	✓		✓	✓	✓
Enhance partnerships		✓			✓
Actively engage and share information	✓	✓		✓	✓
Align project costs				✓	✓

The following table shows the alignment between the focus areas and objectives. Each objective aligns with at least two related focus areas. This will help maximize the value of actions and initiatives related to the focus areas.

7. From plan to action

7.1. Cost of the plan

This Transportation Master Plan update identifies the need for specific and groups of projects and provides an estimate of all costs, not just the costs to York Region. The following section discusses funding sources for growth-related projects, including contributions from other levels of government.

The estimated costs of the networks and related programs recommended in this update are \$12.3 billion for transit (not including the cost of replacing the existing fleet with electric buses), \$410 million for active transportation and \$6.4 billion for roads.

The table below provides a more detailed breakdown of capital costs.

Component	Estimated Total Capital Cost
Transit	
Bus Rapid Transit corridors	\$5,445 million
Yonge North Subway Extension (total cost)	\$5,600 million
Transit facilities/fleet (expansion)	\$1,200 million
Subtotal	\$12,245 million
Active Transportation	
Subtotal	\$410 million
Roads	
Road improvements	\$2,748 million
New road Links	\$1,083 million
Mid-block crossings	\$475 million
Interchanges	\$221 million
Grade separations	\$1,298 million
Minor capital & miscellaneous	\$600 million
Subtotal	\$6,425 million
Total Cost	\$19,080 million

NOTE: Subject to change due to ongoing refinement of cost estimates based on network changes, discussions with local municipalities, and peer review against DC Bylaw update. Will be updated before Committee Report.

7.2. Funding the plan

Growth-related infrastructure is mainly funded by development charges. These fees are collected from developers to build water supply, wastewater and transportation-related infrastructure in advance to support new houses, apartments and commercial buildings. Typically, development charges cover 80% to 90% of the cost of a project.

For example, a new single-detached house being built in York Region collects \$66,000 in development charges. Of this total, \$59,000 would cover water, wastewater and roads, and the remaining \$7,000 would cover transit, subway, general services and GO Transit.

The [*Development Charges Act, 1997*](#) provides the legislative framework for development charges. As required by the Act, municipalities set out development charges in a bylaw that is updated at least every five years.

Master plans and the annual budget are considered in the development charge background study and bylaw. In combination with the Region's annual budgets, this process determines how individual projects are funded.

In addition to development charges, the Transportation Master Plan will also be funded by funds collected from residents through property taxes, grants, subsidies and cost-sharing opportunities with third parties, including other levels of government.

7.3. Balancing services with financial needs

York Region plans according to funds available, as it must remain financially self-sufficient while providing services to more people and jobs in the Region, especially in growing areas.

The Region's financial plan, also known as the Regional Fiscal Strategy, is designed to strike the right balance between the needs of the community and funds available by carefully managing when infrastructure is built, saving funds in reserves for future needs and limiting the borrowing of funds that come with additional expenses like interest, which is repaid from development charges when received.

Through the Municipal Comprehensive Review and updates to the master plans, two key goals were identified. The first is to direct growth to local municipalities that have existing infrastructure like roads, transit and sidewalks that can be further built upon to support an increasing population rather than to local municipalities where new infrastructure would need to be constructed. The second is to time new construction projects with actual growth rather than with forecasts. Based on the fiscal strategy, these goals are in line with principles endorsed by York Regional Council in June 2019 and are key to creating the funds needed for the next generation of infrastructure projects, including the Region's share of the Yonge North Subway Extension.

In updating the Regional Official Plan, the Region also strengthened policies on coordinating the timing of projects with growth to improve efficiency and phasing the construction needed for future communities to ensure costs stay within the Region's means. Policies throughout the Regional Official

Plan were updated to highlight the importance of integrated land use, infrastructure and financial planning.

- The Transportation Master Plan update follows this direction by addressing the transportation needs of travellers while managing the costs in ways that are responsible to both current and future residents by making cost-effective investments. While major road and rapid transit projects will be needed over the next 30 years, the plan also includes less costly ways of carrying more travellers, such as multi-use pathways and bike lanes.
- Watching for trends that support new, more eco-friendly directions. For example, the use of e-bikes and e-scooters, which help manage traffic congestion and reduce GHG emissions, is on the rise, and the Region will encourage these and similar trends, while also adding more electric vehicles to the YRT and corporate fleets.
- Monitoring road and traffic conditions, along with the pace and location of growth, to adjust 10-year capital plans as needed.

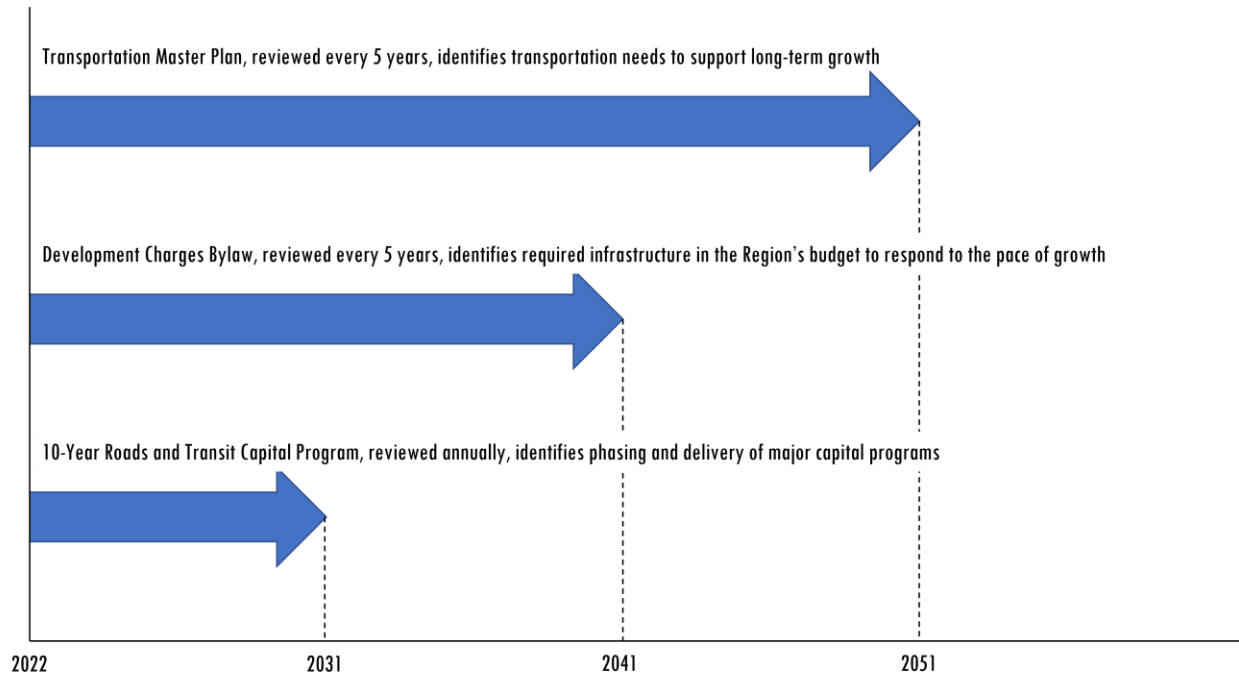
These activities will help provide the right service at the right time. To further ensure costs are managed responsibly, capital and operating plans will help to minimize the total costs of the transportation network now and as it grows to meet the needs of higher population and employment. The next section discusses this and other implementation challenges in more detail.

7.4 Approach to implementation

With the completion of the Transportation Master Plan update, 10-year programs for roads and transit capital investments provide more details regarding how and when these programs will move forward. These programs are directly linked with pace of growth and provide the infrastructure needed to support new development.

The programs also consider the time it takes to complete construction. On average, it takes eight to ten years to complete a major road improvement, like adding lanes to an existing road or dedicated bus lanes. Planning, environmental assessments, design and construction are all part of the process and take time to complete. For major projects like extending the subway line, which involves multiple levels of government, getting funding commitments and coordinating plans can add several more years.

The road and transit capital programs feed into the 10-year capital plan in York Region's annual budget. Through the budget process, the 10-year capital plan may be adjusted as needed to reflect available funds, regulatory or construction delays, growth that is different from the forecasts and other factors.



Changes made by third parties, especially the provincial government, can impact planning. For example, a Minister’s Zoning Order to change the allowed use of a specific piece of land from employment to residential would change travel patterns and needs of the area, and the Transportation Master Plan could have to be adjusted to address the change in service needs. In addition, reversing previous direction on expanding provincial highways extensions, like those discussed in Section 5.2, could also affect the Region’s plans for how land is used and serviced.

Individual projects may require environmental assessments, a provincially regulated planning and decision-making process used to promote environmentally responsible decision making and ensuring interested individuals have an opportunity to comment on projects that may affect them. This process also includes considerations and decisions about design. To reduce the total cost of a project and disruption to the public, Transportation Services also aims to combine growth with rehabilitation projects and to coordinate all work within a transportation corridor.

7.5. Total costs of the transportation network

York Region owns \$4.1 billion in road assets, such as pavement, bridges and traffic signals, and \$2.0 billion in transit assets, including bus garages, buses, transit stops and terminals. Each year, over \$260 million is needed to operate and maintain the Regional road network and an additional \$250 million is needed for the transit network. Examples of day-to-day operations include: clearing snow, cutting grass along boulevards, filling potholes, providing transit services and maintaining buses.

Assets also need larger rehabilitation work, like repaving a road, reconstructing a bridge or overhauling a bus, at less frequent intervals. However, major assets eventually need to be replaced. Together, rehabilitation and replacement are often referred to as renewal costs. Each year, on average, the Region spends an additional \$150 million on renewing transportation assets.

These figures demonstrate the importance of planning for the ongoing costs of new infrastructure. As soon as an asset goes into service, the Region draws up a plan to operate and maintain it and plans for its eventual replacement.

The road projects in this Transportation Master Plan will increase the department's operating budget by roughly \$6 million a year from 2022 to 2031, rising to \$13.6 million a year from 2032 to 2041 and \$21.2 million a year for the following decade. This reflects higher operations, maintenance, preservation and asset management costs over the current operating outlook and is in addition to up-front construction costs. The incremental cost of the 2051 rapid transit network is \$48.1 million a year.

[FUTURE INFOGRAPHIC]

The incremental cost figures include funds set aside in reserves for asset management. The Region follows two provincial regulations on maintaining assets in a state of good repair. One, under the *Infrastructure for Jobs and Prosperity Act*, guides how municipalities plan the management of all major assets. The other, under the *Municipal Act*, sets out maintenance standards for municipal highways. Asset management is important for maintaining service quality and keeping costs in line. It helps the Region ensure safe and reliable road and transit systems, extends the life of assets and reduces total costs over their life cycle. For instance, every dollar spent on pavement preservation, including resurfacing, results in spending five to ten times less in future rehabilitation or reconstruction costs. This also extends the life of a road before full replacement is needed and reduces the impact of construction in the short term.

As part of the Region's corporate asset management initiative, the Transportation Services Department maintains a 100-year forecast of the maintenance, rehabilitation and replacement needs of roads, bridges and transit assets. This helps determine how many dollars of the tax levy need to be placed in the asset management reserve.

7.6. Measuring and monitoring performance

It is important for York Regional Council, stakeholders, partners and the public to see progress being made towards the Transportation Master Plan's vision, goals and objectives.

Progress will be monitored through an annual Transportation Master Plan status update and a lengthier progress report every five years that help determine when the next update of the Transportation Master Plan is needed.

The annual update will show the status of all focus area initiatives and actions in the Transportation Master Plan. It will keep York Regional Council and the public informed about the work the Region has done and plans to do. The status update will also be used by staff in annual work planning and budgeting.

Developing progress indicators and a framework for reporting will be key initiatives of the first status update. The indicators are intended to be:

- **Meaningful:** Reflect the community priorities as set out in the Transportation Master Plan purpose statement and objectives
- **Timely:** Prioritize what can be delivered in the short term while keeping line of sight to the medium- and longer-term priorities based on the evolving environment for transportation
- **Achievable:** Ensure objectives are within the Region's ability to deliver, control or influence
- **Measurable:** Be based on readily available information and data

7.7. Updating the Transportation Master Plan

The Transportation Master Plan is reviewed every five years. Two other factors influence reviews:

- **Transportation Master Plan Progress Report:** The annual progress report described in the previous section will be used to gauge how the plan is performing and how extensive of a review or more comprehensive update to the Transportation Master Plan is needed
- **York Region Official Plan Review:** Provincial legislation requires a review and update of the Regional Official Plan at least every ten years. Major infrastructure plans, including the Transportation Master Plan, are typically updated at the same time to inform the Official Plan update

Glossary

Centres and Corridors, as defined in the Regional Official Plan, are the primary locations for the most intensive and greatest mix of development within the Region. Regional Centres expand on the urban growth centre and anchor hub concepts, as detailed in the provincial, A Place to Grow: Growth Plan for the Greater Golden Horseshoe and the Metrolinx Regional Transportation Plan: The Big Move.

Commuter parking lot refers to a parking facility which allows a commuter to park their own personal vehicle and then transfer to/from a different mode of travel (e.g., public transit) to complete their commute.

Cycling facility refers to pieces of infrastructure that are shared or specifically designated for use by bicycles or other designated forms of transportation. Examples can include (but are not limited to) bike lanes or multi-use pathways.

Dedicated/separated facilities refers to bike lanes or shared paths designed for use by cyclists and separated from motor vehicles by signage, markings and/or barriers.

Facilities refers to a place, amenity or piece of equipment provided for a particular purpose, e.g., bike lanes, bus rapid transit, road widenings, streetscaping, etc.

GO Transit rail corridor refers to a commuter rail service within a right-of-way, operated by Metrolinx.

GO Transit rail station is a regular stopping place on a GO train route, which includes platforms and often one or more buildings, operated by Metrolinx.

GO Transit rail station subject to further study is a future GO rail station identified for further review.

Grade separation refers to an underpass/tunnel or an overpass/bridge that allows a road or rail line to travel over or under the other, without the need for vehicles travelling on the road to stop.

Grade separation (capital program) refers to a grade separation between road and rail, identified as part of York Region's 10-year roads and transit capital construction program.

Grade separation (prioritized) refers to a grade separation identified as a priority, but not currently included in the 10-year capital construction program.

High-occupancy vehicle (HOV) lane refers to a reserved right-of-way or dedicated lane in a road for use by public transit vehicles and other vehicles such as emergency vehicles, taxis or multiple-person vehicles.

Interchange is a crossing of a Regional road over or under a provincial freeway with connecting ramps for traffic turning between the intersecting freeway and roadway.

Interchange (municipal initiative) is an interchange requested by a municipality and not within the Region's or provincial government's capital construction plan.

Major Transit Station Area refers to the area including and around selected existing or planned higher-order transit stations or stops (bus rapid transit stations, GO stations and subway stations) within a settlement area. Major transit station areas generally are defined as the area within an approximate 500- to 800-metre radius of a transit station or stop, representing about a 10-minute walk. A minimum density target and boundary delineation are assigned to all protected major transit station areas in the Regional Official Plan.

Micromobility is transportation over short distances provided by eco-friendly, usually single-person vehicles such as electric bicycles and scooters

Mid-block crossing is a road connection over or under a major highway without ramp access.

Mobility hub consists of major transit stations and the surrounding area. They serve a critical function in the Regional transportation system as the origin, destination, or transfer point for a significant portion of transit trips. They are places of connectivity where different modes of transportation – from walking to riding transit – come together seamlessly and where there is an intense concentration of working, living, shopping and/or playing.

New road link is a new road designed to provide continuous access across communities.

Neighbourhood placemaking refers to strengthening connections between residents and the places they share through better urban design, including designing roads and other transportation infrastructure to encourage physical activity, make people feel safer and widen travel options.

Official Plan comprises a municipality's policies on how land should be used. Prepared with community input, it helps ensure that future planning and development will meet the specific needs of the community and growth forecasts prescribed by the provincial government. The Official Plan prepared for York Region is typically referred to as the Regional Official Plan. Each of the nine local municipalities within the Region has its own Official Plan.

Provincial freeway refers to an express highway with controlled access, such as highways 400, 404 and 427, maintained by the provincial government, and Highway 407, maintained by ETR 407.

Provincial highway is a road connecting regions, counties and/or cities, maintained by the provincial government. Provincial highways in York Region include Highway 9 west of Highway 400 and Highway 48.

Rapid transit corridor refers to transit infrastructure where lanes are for the exclusive use of buses or light-rail vehicles and are physically separated from other modes of travel within its own section. In York Region, a rapid transit corridor may also be referred to as a "rapidway."

Rapid transit subject to further study refers to a future rapid transit corridor identified for further review.

Rapidway is a dedicated lane in the centre of the road for use by Viva vehicles (YRT's bus rapid transit service) and emergency services.

Regional Centres and Corridors See Centres and Corridors.

Regional Official Plan See Official Plan.

Regional trail network is a connected series of shared facilities typically located outside the roadway for use by cyclists, pedestrians and other forms of active transportation.

Road improvement refers to a change to a road and/or its elements, including widening, reconfiguring and/or adding new structures or facilities such as bike lanes, cycle paths, high-occupancy vehicle (HOV) or transit lanes to improve travel options and traveller experience.

Road improvements (provincial jurisdiction) refers to a change to the road and/or its elements, including widening, reducing, re-configuring and/or adding new structures on a provincial highway.

Transit hub See mobility hub.

Transitway on existing/proposed provincial highway refers to transit infrastructure that is either adjacent to or separated from parallel provincial 400-series highways and is exclusively dedicated for buses or light-rail vehicles to accommodate longer-distance (express) passenger needs.

Transportation Tomorrow Survey is a co-operative effort by local and provincial government agencies to collect information about urban travel in southern Ontario. The survey has been undertaken every five years since 1986 to collect household travel data about travel origins and destinations, travel mode, trip purpose and more. The data collected helps local and regional governments, as well as the provincial government and its agencies, make informed transportation decisions on future planning and investment for roads, public transit and other transportation facilities.

Urban area refers to an area identified for existing or future urban uses.

Urban boundary defines the limit for development within an urban area serviced with infrastructure like public transit, water and sewage pipes and recreation facilities to help control urban sprawl.