







## This plan outlines how York Region is supporting this direction

It explains:

- > How transit, cycling, walking and carpooling are all more sustainable travel options when compared to single-occupant vehicle trips
- > How a shift to these options contributes to healthier people and communities while making the road network less congested
- > How relatively small investments in programs and infrastructure to expand these options result in benefits for communities and residents

To coordinate its efforts, the Region has created a dedicated sustainable mobility team within the Public Works department. This team is responsible for promoting walking, cycling, transit, carpooling, micromobility and any other travel option that is not a single-occupant vehicle.

## Why people are choosing different ways to travel

Across North America, especially in large cities, people are looking for more sustainable ways to get to work, school, stores, social gatherings and other destinations.

The reasons people are seeking alternatives to a single-occupancy vehicle are diverse and include increasing road congestion, growing concerns about climate change and air pollution, the cost of a single-occupant vehicle trip and interest in more active ways of travelling.

Instead of driving alone, they are:

- > Choosing active transportation, which includes human-powered travel such as walking, cycling, rolling or using a micromobility device (e-bike or e-scooter), for some or all of their journey
- > Choosing transit, sometimes combined with another mode of travel
- > Carpooling and ridesharing

York Region's residents are also shifting to these alternatives. Survey results cited in the 2022 Transportation Master Plan (TMP) showed residents were choosing other travel options over their personal vehicle more often now than in the past, especially for destinations close to home.



▲ ABOVE: Students walking to school.

## York Region is encouraging more travel options

To respond to residents' feedback and increase road network efficiency, the 2022 Transportation Master Plan has included reducing car travel, especially during rush hours as one of its goals. To achieve this, the plan recommends offering other options for travel on the Regional road network. Important objectives associated with this goal include planning bike routes off roadways. For example by using boulevards along roads or leveraging unused rail or hydro corridors, making active transportation options available to everyone and encouraging a shift to sustainable transportation.

This plan, prepared by the sustainable mobility team, brings together and explains the ways the Region supports and encourages healthier and more sustainable travel, including:

- > Ongoing programs and education encouraging people to make better use of transit and active transportation
- Investments in active transportation infrastructure, such as multi-use paths/trails for walking, cycling and other eco-friendly travel options

Many communities have succeeded in making transportation more sustainable by integrating programs and education with infrastructure.

Combining the two approaches is more effective than offering just one. Experience also shows that some of the quickest wins come from small investments in both – for example, matching an expanded network for active transportation with a bike-sharing system and public education campaign.





▲ LEFT: Bike Day Event in the Town of Newmarket. RIGHT: Cyclist on multi-use path along Rutherford Road in the City of Vaughan.

03 |

Surveys conducted for the TMP also showed the top three priorities all related to investing in more sustainable travel options, including: Viva Rapid Transit, active transportation projects and conventional transit and Mobility On-Request.



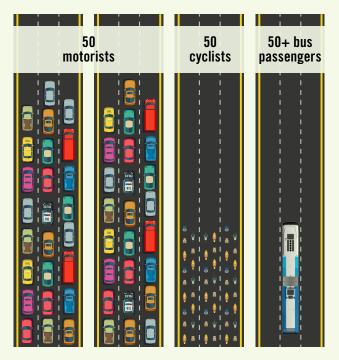




ABOVE LEFT: Customers enjoying the Viva Rapid Transit service. CENTRE: Multimodal boulevards for pedestrians and other path users. RIGHT: Mobility On-Request service.

## What is Transportation **Demand Management?**

Efforts to make a road network more efficient are often described collectively as "Transportation Demand Management." In York Region, this includes measures that reduce, remode, retime, and reroute traffic demands instead of continuously adding to the road supply by building more infrastructure which increases congestion. This will help shift the focus from the single-occupant vehicle to a mix of other travel modes and away from the busiest travel periods of the day. Managing demand contributes to shorter travel times, fewer traffic impacts and lower vehicle emissions for everyone and is central to the mandate of the sustainable mobility team.



▲ ABOVE: Visual comparison and representation of space for each travel mode on a roadway, from the most to least congested.

#### Making room to move

Increasingly, it is becoming understood by travellers that widening a road on its own does not reduce congestion. Research has shown that while widening appears to increase capacity immediately, it is not long before that extra room on the road attracts more drivers. New capacity is quickly used up in a phenomenon known as "induced demand." Travel times are reduced by introducing High Occupancy Vehicle (HOV) and transit lanes, signal priority measures, etc.

Road widening also disrupts existing traffic, takes a long time to complete and is very costly. This is why the 2022 Transportation Master Plan gives greater priority to encouraging the use of transit, active, eco-friendly transportation, carpooling and other measures that reduce the number of single-occupant vehicles on the network. These are recognized as the fastest and most cost-effective ways to allow for more capacity to help offset increasing congestion, contributing to an investment in an optimized network.

# Want to make the shift to more sustainable travel options?

Smart Commute is a Greater Toronto and Hamilton Area initiative to encourage more sustainable ways of working and travelling, including transit, ridesharing, active transportation and working from home. The program offers advice and tips on reducing single-occupant commutes, including the SmartCommute.ca app that matches together potential carpoolers. York Region uses a community-based model for Smart Commute that incorporates travel to schools and other community destinations as well as the traditional workplace commute. The program is supported by York Region and the cities of Markham, Richmond Hill and Vaughan as well as the Town of Newmarket.

**MyTrip** is a Regional program that helps residents make informed travel choices. A key activity has been targeting new residential developments where transit is easily accessed, offering residents

a personalized trip planning experience and a transit pass as an incentive to explore the option. Experience to date shows that combined with education and outreach on all sustainable options, building awareness of these options is a highly effective means of reducing single-occupant trips. Almost two-thirds of participants in a follow-up survey said taking part in the program would change their travel behaviour in the long term.

**MyRide Travel Training** is for residents of all ages and abilities who need additional knowledge and skills to use York Region Transit independently. Learn more at <a href="yrt.ca/MyRide">yrt.ca/MyRide</a>

**Active School Travel** encourages students and families to use more active forms of transportation when travelling to and from school daily. York Region has partnered in a pilot program with the York Region District School Board, York Catholic District School Board and local municipalities to promote and encourage participation in active school travel through resources and coordination.



#### Healthier people, healthier communities

Getting single-occupant vehicles off the road is not just about making the road system more efficient. It is also about improving physical health, mental health and quality of life.

A key priority is to make sustainable travel options available to more residents of all ages and abilities. In York Region, a set of data from the COVID-19 Community Mobility Report showed a significant interest in people visiting parks peaking at 212% during the pandemic. This could demonstrate a high potential for active transportation as part of individual daily recreational activities.

People who use sustainable transportation – whether public transit, walking, cycling, or a combination – have lowered risk of cardiovascular.

disease, cancer, respiratory disease, mental health concerns when compared to those who rely completely on a personal vehicle.

A daily roundtrip of as little as 30 kilometres in a car has been linked to greater likelihood of being overweight, not getting enough physical activity and feeling stressed. There are also emerging concerns of a higher risk of dementia linked to both inactivity and exposure to traffic-related air pollution from long commutes.

Reducing traffic and getting more people participating in physical activity as part of daily routines supports community health. Air and noise pollution both decline, which benefits all residents' mental and physical health. The risk of collisions and conflicts with other road users decreases as roadways become less crowded and having more people out walking or cycling makes neighbourhoods feel safer.







▲ ABOVE: Easy access/convenience, safety/comfort and ambience/scenery were the top influencing factors based on the 2022 TMP Survey results.

Streetscaping and street trees can support a safer and well-designed environment to encourage more active transportation use. Tree covering can provide shade for pedestrian and cyclist comfort as well as health benefits.

A key priority that arose from the Transportation Master Plan is to make sustainable travel options available to more residents. When asked what would encourage them to use active transportation more often, people surveyed most often cited "safe and comfortable" facilities. Residents across all age groups expressed this preference, which means protected bike lanes and multi-use paths/trails and cycle tracks should be built with users of different ages, expertise, income levels and abilities in mind. Ideally, these facilities should be separated from vehicle traffic wherever feasible, a direction supported by the 2022 Transportation Master Plan.

## How more sustainable travel is being built into the transportation network

Designing communities and streets with different travel options, in addition to the car, is a critical aspect of ensuring as many residents as possible can enjoy the benefits of sustainable travel. As York Region continues to grow, planners are looking at how to create more compact and complete communities where shopping, schools, workplaces and other destinations are nearby.



Active transportation is convenient and comfortable and transit is readily available for longer trips.

Complementing this direction, the Region has developed guidance on better designed streets for active transportation:

The Transportation Master Plan brings together a wide range of best practices and suggests how to apply them in various contexts across the Region.

The Region's Pedestrian and Cycling Planning & Design Guidelines provides a concise and easy-to-use manual for planning and design of active transportation facilities (cycling, walking and rolling). These guidelines directly support the work of York Region's Designing Great Streets context-sensitive design manual and policy directions outlined in the Transportation Master Plan.

Major projects in the Transportation Master Plan are implemented through the Region's 10-year capital plan. When a Regional road is to be widened through the capital plan, it is now standard practice to include new or improved infrastructure for sustainable travel options, including transit and active transportation. For example, a multi-use path / trail alongside the road is included wherever possible because it can be used by pedestrians, cyclists, skateboarders and others for direct, two-way travel that is separate from the roadway. Trails provide another route for active transportation. They are often designed and built in collaboration with other partners, as discussed in the next section.

A major goal of the sustainable mobility team is to identify and fill gaps in the active transportation network, especially along major routes, that fall outside the capital plan because they are not part of a road widening project.

Pedestrian and Cycling Planning & Design Guidelines.



# Multi-use paths/trails are included wherever possible for cyclists, pedestrians, skateboarders and others for off-road, two-way travel.

There are many stand-alone opportunities, and because the needs are greater than the available budget, a framework is used to set priorities to ensure the greatest benefits. It involves the following three steps:

- > Collection and analysis of data about potential infrastructure locations, including resident/stakeholder interest and known pedestrian and cyclist safety issues
- > **Evaluation** of how each location could benefit travel by active transportation, considering whether the new infrastructure would connect with major transit stops, bus rapid transit networks, mobility hubs, key Regional trails and existing active transportation networks and other factors
- > Implementation of selected projects include their addition to the Region's infrastructure plan and completing three stages: feasibility, detailed design and construction

The Region also reviews and comments on development applications to ensure new developments support active transportation. To make options more convenient, the Region ensures private developments, such as condominiums, have pedestrian and cycling connections to the Regional road and transit network as well as linking neighbourhoods. Where opportunity exists, the Region will leverage development to fill gaps in connections on the network, such as a trail.

Complete communities can reduce chronic diseases by creating conditions and opportunities that support and encourage an increase in physical activity in carrying out daily activities by walking, cycling and using public transit. Extensive research on the health benefits associated with community design shows denser, walkable neighbourhoods with services and amenities nearby make it easier for people to incorporate physical activity into daily activities.

### Working together to offer more sustainable travel

Many stakeholders work with the team on making sustainable travel a viable option in the Region:







▲ TOP: Cyclist in bike lane in the City of Markham.

MIDDLE: Bike on bus rack.

BOTTOM: Group of students walking to school.

- > Bike lanes, trails and multi-use paths, as well as active transportation plans and programs, are delivered by both local municipalities and Regional government. Neighbouring jurisdictions, other levels of government and conservation authorities also get involved when multi-use trails, like the Lake to Lake Cycling Route and Walking Trail or the future South York Greenway, cross boundaries and weave through provincially or federally protected lands
- > The Region is responsible for York Region Transit (YRT) and works closely with GO Transit, Toronto Transit Commission (TTC) and transit operators in neighbouring municipalities to provide a seamless and coordinated system for local users and commuters. The Region and federal government are also key partners in the province's project to extend the TTC subway north on Yonge Street to Richmond Hill
- > York Region Transit (YRT) encourages cycling to facilities with a <u>Bike 'n' Bus program</u>, bicycle parking and bicycle repair stations, as well MyRide Travel Training to educate new riders about transit options
- School boards are a critical partner because getting to school using physical activity is key to building the health and well-being of our next generations and their safety
- > The sustainable mobility team works with several internal partners, including York Regional Police, Forestry, YRT and Roads and Transportation Operations within Public Works, Planning and Economic Development, as well as the Public Health branch in Community and Health Services

The sustainable mobility team takes an integrated approach to encouraging sustainable travel, combining programs and education with new infrastructure for pedestrians, cyclists and micromobility users.

Examples of infrastructure for sustainable travel include:



#### **Protected bike lanes**

A portion of the boulevard or roadway which has been designated by pavement markings and / or signage with physical

separation for the exclusive use by cyclists. These appear as raised bike lanes, in-boulevard cycle tracks or within the roadway separated by bollards (seasonal).



#### Off-road multi-use trail

A shared cycling facility located outside the roadway for the use of cyclists, pedestrians and other sustainable forms

of transportation. These trails often serve as neighbourhood links, go through parks or along rivers.



## Shared pathway (in boulevard)

Also known as a multi-use path are physically separated from the roadway within the boulevard

by grass or hard surface strip. These are intended for cycling, walking, and other sustainable forms of transportation and typically located in place of, or adjacent to, a sidewalk.



#### **Bike lanes**

A portion of the roadway designated for the exclusive use by cyclists indicated by signage and pavement markings. They typically

operate in the general direction of travel on the right side of the roadway.



#### Paved shoulder

Part of the roadway that functions to support the pavement structure of the adjacent roadway, prevent erosion, and to accommodate

stopped and emergency vehicles. An added benefit of paved shoulders is they provide extra space for pedestrians and cyclists if there are no other active transportation facilities present.



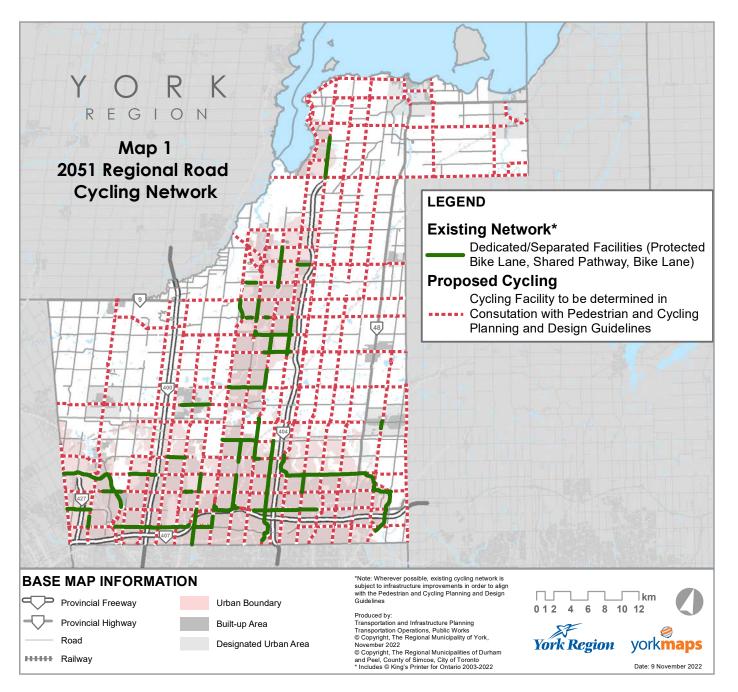
#### **Shared roadway**

A road where both motorists and cyclists share the same travel lane and may be signed as a designated bike route.



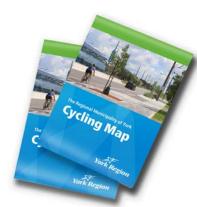
#### **Gathering the data**

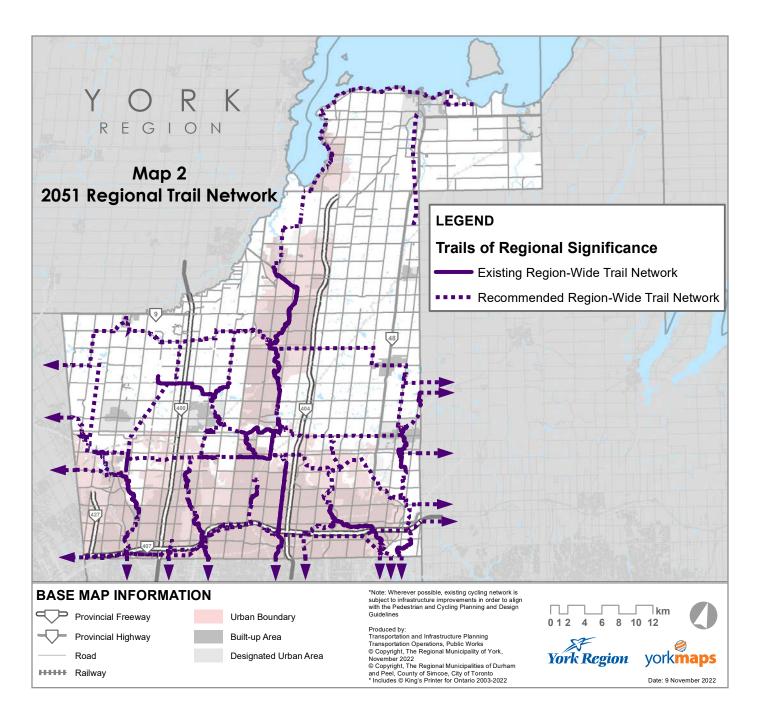
Having more data on how and when people use active transportation routes supports decision-making on investments and improvements to the network. The Region is exploring expanding the number and type of tools it uses to measure bicycle and pedestrian traffic, especially on the approach to busy transportation hubs including automated counters.



The maps on pages 11 and 12 are located within the Region's Transportation Master Plan and show the existing and planned active transportation network to 2051. To enhance and integrate the network, a capital cost-sharing partnership program in the annual budget allows the Region to assist with the cost of major cycling / pedestrian infrastructure built by a local municipality or Regional stakeholder.

The Cycling Map shows protected bike lanes, off road multi-use trail, shared pathway, bike lanes, paved shoulder, shared roadway and bicycle-friendly streets. Detailed maps are available for download at <a href="york.ca/cycling">york.ca/cycling</a>







York Region's extensive trail network often follows routes originally travelled by Indigenous communities. Trails are designed for both recreational and non-recreational uses, such as commuting or travelling to school by bicycle. They often run beside natural waterways or in less built-up areas, offering scenic views.

Detailed maps are available for download at <a href="york.ca/recreation/trails">york.ca/recreation/trails</a>



## Walk and wheel: more active ways to get to school

New programs are encouraging more young people to get to school under their own power, which could help tackle the growing problem of childhood inactivity.

While active transportation became more popular among adults starting in the 1970s, the opposite was the case for youth. In the 1960s, more than half of North American school children walked or biked to school. By the early 2000s, the share had dropped by more than half as more children rode a bus or were driven to school. Ironically, a major concern triggering parents to drive children to school is heavy traffic. This has led to a vicious cycle, with ever-increasing traffic convincing more parents to take to the car.

Research has found that when children walked or biked to school on a regular basis, they were in better physical and mental health and that children who get to school under their own power are far more likely to be active later in life than those who do not.

Active School Travel programs are working to reverse the trend. Pilot programs at more than 20 schools in the cities of Markham and Vaughan and the Town of Newmarket are providing support, encouragement and education for active transportation. These have taken several forms, such as:

- Outreach to parents, students and schools on the benefits of active transportation, which includes walking, cycling, roller-blading, scootering and skateboarding and how to take part
- > Weekly walking programs and group walks, as well as participation in events such as IWALK, Winter Walk Day and Bike to School Week
- Customized wayfinding signage and interactive sidewalk stencils to create a more enjoyable walk to school
- > Installing bike racks, traffic calming measures, zebra crossings, restricted on-street pick-up and drop-off activity, painted curb lines in restricted zones and school zone road stencils

▲ TOP LEFT: Two students at a sidewalk decal that is part of the Be Visible. Be Seen. safety campaign. TOP RIGHT: Walk and bike distance to school sign.

BOTTOM LEFT: Students cross Leslie Street in the Town of East Gwillimbury with assistance from a crossing guard. BOTTOM RIGHT: Students at bike racks at school.

13 I



The Region's Making Tracks education program, trained over 100 teachers to deliver skills and safety programming to their students. The program is geared towards elementary students and is focused on walking, cycling and scootering. It trains teachers to deliver skills and safety programming to their students in fun and informative ways. It also covers such topics as proper equipment, hands-on skills, route awareness, navigation and safety precautions.

To reduce traffic around schools and help make active transportation arrivals and departures feel safer, some schools have piloted closures of Kiss and Ride loops in front of schools once a week or temporarily closing off school-adjacent streets at the times most students are arriving or leaving for home. Safe and dedicated spaces for York Region Transit services for students are also considered.

The Region is expanding a program to further increase safety in school zones using automated speed enforcement. Following a successful pilot, the program will be expanded to place cameras in school zones throughout the Region to improve driver behaviour. Research shows the program can be expected to reduce speed by 10 kilometres an hour and increase compliance with speed limits by about 25% on average. Both of these outcomes are important for greater pedestrian and cyclist safety. Automated speed enforcement and other measures are part of the Region's future Traveller Safety Plan, which aims to make the Region's streets safer for all users.



▲ ABOVE: Automated speed enforcement camera along Regional road.

#### Good for the wallet and the economy

Long commutes to work by car are expensive. A 70-kilometre round trip, for example, can cost as much as \$15,000 a year once gas, wear and tear on the vehicle and parking are taken into account. Even short trips to the mall or school quickly add up – using an SUV for two or three of those trips every weekday is estimated to cost about \$2,000 a year. Those estimates don't include the cost of buying and insuring a vehicle.

Taking transit, carpooling or vanpooling for longer trips are all viable alternatives to the long drive – and they cost much less. Getting to a transit hub or pickup point by an option other than the car cuts costs further. The Ride-to-GO program allows people to travel on York Region Transit for free when connecting to or from GO Transit (with conditions). The province announced in March 2023 that it will implement and fully fund fare integration between YRT and the TTC. The program is scheduled to commence in early 2024. A fare capping structure has been introduced and starting in 2024, monthly passes will be replaced with fare capping when using PRESTO for all fare categories. For short trips to stores or school, walking, cycling, micromobility and local transit are all great alternatives, especially in communities and on roads designed for many different types of travel.

Having fewer vehicles on a road means less wear to its surface and damage to other infrastructure, helping to manage the rising cost of maintenance and repairs. These costs have increased significantly in recent decades not just because of higher traffic volumes, but also because individual vehicles have become heavier as more drivers switched to SUVs and pickup trucks which puts higher stress on the road surface. The switch to electric vehicles now underway in Canada will add to that trend, as batteries make cars heavier than their gas-fuelled equivalents. There are concerns that because of their low operating cost, drivers will use them more, contributing to traffic congestion.







TOP: Customer tapping her PRESTO Card at Vaughan Metropolitan Centre. MIDDLE: Customers at bus stop. BOTTOM: Travellers carpooling to their destination.

Congestion contributes negatively to the economy. The estimated cost of congestion in the Greater Toronto Area is \$6 billion to \$11 billion a year. Getting more commuters onto public transit, into ridesharing or choosing active transportation would reduce this burden.

15 I

### Taking full advantage of the work-from-home shift

While longer-term trends have not yet fully emerged, many Canadians will choose to work from home at least part of the time following the COVID-19 pandemic.

One of the major reasons many employees favour working from home is better work-life balance. Some research, however, has shown that as the boundaries between work and life can become blurred, long hours spent in front of a computer can bring eye strain, muscle aches and pains and reduced fitness levels. It's suggested that several short activity breaks during the day – such as a quick walk or bicycle ride – can help prevent those issues.

This shift presents opportunity for more sustainable travel – and can help address concerns about the downsides of working from home.

Another finding is that home-based workers tend to make more car trips in a day than commuters do. One reason might be that when going to work by car, people "chain" several errands around their commute. It might also be tempting to run errands from home outside peak commuting periods, when traffic has traditionally been lighter. But those trips still produce greenhouse gases – and don't address the physical damage done by inactivity.

One way to reduce both risks is to use active transportation for nearby errands. This is a key goal of the Region's MyTrip program, discussed on page five. It recognizes many of the Region's residents, especially along key corridors like Yonge Street and Highway 7, already live within a 15-minute walk or short bike ride to stores, transit and similar destinations. MyTrip results show educating residents about those options can build long-term uptake. This will be helped by enlarging the Region's network of trails to make those trips even more convenient and attractive.



▲ E-scooter user in bike lane along Highway 7 in the City of Markham.

Many Canadians will continue to work from home at least part of the time following the COVID-19 pandemic. This shift presents opportunity for more sustainable travel.

## North-to-south and east-to-west: building the Region's active transportation network

The Region and its partners are developing two Regional-scale routes that mix segments of multi-use paths with longer sections of trails.

The Lake to Lake Cycling Route and Walking Trail will provide a 121-kilometre link from Lake Simcoe to Lake Ontario with connections to other major trails, such as the Rouge Valley Trail and the Oak Ridges Moraine Trail. The portion of the Lake to Lake route within York Region is more than 85% complete and progress is made every year on advancing more segments. It includes long stretches of completely off-road trails passing through parks and conservation areas, as well as some segments of dedicated multi-use paths on Regional roads.

The future <u>South York Greenway</u> corridor for cycling, walking and micromobility will parallel the Highway 407 and hydro corridor, providing connections to subway stations, other major mobility hubs and trails and existing and future communities.



▲ Pedestrians along the Lake to Lake Route Multi-Use Path in the City of Markham.

When complete, it will run more than 50 kilometres from Highway 50 in the west, crossing the cities of Vaughan, Markham and Richmond Hill and reach the York Durham line in the east

Together, these routes will provide a largely separated travel network for current and future cyclists, pedestrians and micromobility users in the most heavily populated areas of the Region. This will create opportunities for healthy travel in quieter and calmer settings, whether for commuting, running errands, meeting up with friends or just relaxing.



Cyclist riding the Nokiidaa Trail north of Green Lane in the Town of East Gwillimbury.



#### Moving to the next level

York Region's efforts to move to a more sustainable transportation system are aligned with a shift in thinking about transportation, especially in cities. The focus is still on roads, but the emphasis is moving from the number of vehicles the road can accommodate to the number of people it can accommodate – whether by bus, bike, rideshare, micromobility device or on foot.

The focus is also broadening. While roads will always represent the core of the transportation network, an increased interest in active transportation and new technologies such as e-scooters and e-bikes are turning people's attention to trails, underused corridors and other public lands that those modes of transportation could use.

#### For example:

- > E-scooter Pilot Program allows e-scooters to use on-street bike lanes and cycle tracks along Regional road boulevards.
- > E-bikes under the *Highway Traffic Act* are allowed to be used wherever conventional bicycles are permitted.

Leveraging these new approaches to travel more sustainably and actively is clearly top-of-mind for many York Region residents, and the sustainable mobility team is looking forward to the most effective ways to help them achieve this goal.

Cyclist and pedestrian travel along Multi-Use Path in the City of Markham.

Future efforts will focus on four crucial areas:

- Continuing to integrate strategic investments in active and eco-friendly transportation into the Region's infrastructure plans, including the Transportation Master and 10-year capital spending plans, which will also support carbon reduction in the Climate Change Action Plan
  - A transportation network that prioritizes vulnerable road users and enhances safety and comfort through active transportation infrastructure
- Continuing to educate travellers and others about the benefits of sustainable transportation to reduce the reliance on single-occupant vehicles and make more efficient use of existing infrastructure
  - This can be achieved through the delivery of programs or pilots that expand travel options, such as promoting active school travel, bikesharing and / or micromobility sharing
- 3. Taking steps to make sustainable travel more convenient for more residents by supporting Regional-scale initiatives such as the Lake to Lake Route and South York Greenway and working to fill other gaps in the active transportation network
  - Prioritizing connections to transit stops, the bus rapid transit network, mobility hubs, existing and future active transportation projects and trails is essential to creating a continuous network

- Promote and encourage people to consider sustainable travel options to major destinations and integration with transit
- Measuring the impacts of all sustainable travel initiatives and assessing potential new ideas to help determine the most costeffective initiatives
  - Ongoing review of best practices and evaluating existing programs to best understand the next steps forward

Together, these measures will help the Region and its communities by increasing physical activity, and by reducing air pollution, road wear, traffic congestion and greenhouse gas emissions that contribute to climate change. Even more importantly, they will give residents the opportunity to travel more efficiently and more conveniently to more places – and save them money at the same time.



Bike lanes on Prospect Street in the Town of Newmarket.

19 I



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