# York Region CYCLING YEARBOOK 2016 State of Cycling



### **INTRODUCTION**

York Region is proud to introduce the first edition of the York Region Cycling Yearbook. Not only does it serve as a benchmarking report for the current state of cycling, it speaks of a vision and commitment to a more bike-friendly future.

When people cycle, they improve their health and save money. However, more people cycling benefits everyone, not just cyclists. Cycling provides savings to our healthcare system, strengthens the economy, increases tourism opportunities, manages congestion, generates safer streets and provides a cleaner environment. This is why continued investment in cycling is important.

Cycling in York Region includes on-road bike lanes and paved shoulders, signed cycling routes and multi-use trails in the boulevard of a road's right-of-way or through green space. The Regional cycling network connects local municipalities and major trail systems, links urban and rural centres as well as key attractions in the Region.

#### Some recent York Cycling accomplishments:

- Led innovation in active transportation by installing bike boxes at 11 intersections
- Added over 45 km of cycling lane facilities on Regional Roads from 2011 to 2015
- Partnered in the launch of the 475 kilometre Greenbelt Route
- Continued to be a local supporter of Bike Month
- Updated cycling map created a and new cycling handbook
- Continued with safe cycling campaign partnerships
- Integrated pedestrian and cycling into the Transportation Master Plan

York Region is one of the fastest-growing municipalities in Canada. It has a population of almost 1.2 million, which is projected to grow to 1.8 million by 2041. With this growth comes opportunity. We are building new downtown centres in the City of Markham, Town of Richmond Hill, City of Vaughan and Town of Newmarket and great regional streets that connect them. Cycling is an important part of the transportation system and providing comfortable and convenient cycling routes will help to improve overall mobility in York Region.

Enjoy your next ride!

Stephen Collins Director of Infrastructure Management and Project Management Office - Transportation Services

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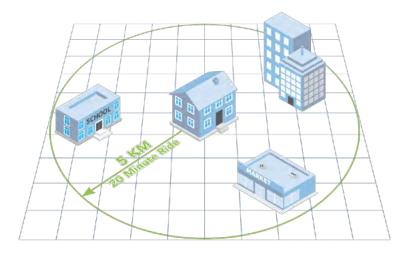




## **BICYCLE TRAFFIC DATA**

### **CYCLING FOR TRANSPORTATION**

In York Region, 0.3 per cent of trips are made by bike. For comparison, the City of Toronto's bicycle mode share is 1.7 per cent, and in cycling cities like Amsterdam and Copenhagen, it is more than 30 per cent. Those cities have been investing in cycling for decades so York Region has some ground to make up. Cycling is on the rise. There was a 233% increase in the number of cycling trips in York Region between 2001 and 2011. Plans by York Region and local municipalities to build a network of bikeways will make cycling a more viable transportation option for residents and visitors.



47 per cent of all trips in York Region are less than 5 kilometres which is usually ridable in about 20 minutes

#### How are Short Trips\* (Under 5 kilometres) Being Made?

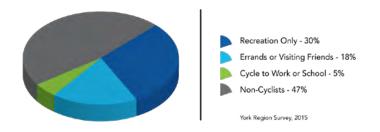


\*Trips by York Region residents all day, all trip purposes. Source: Transportation Tomorrow Survey, 2011

At all levels of government, there is a desire for a modal shift to increase the proportion of trips made using sustainable transportation. Metrolinx has identified a mode share target for active transportation (walking and cycling) of 20 per cent for all trips in the Greater Toronto and Hamilton Area by the year 2041.

### Who Cycles?

Cycling is a popular activity in York Region with 53 per cent of residents surveyed stating they ride a bicycle.



Reasons for cycling and cycling rates vary across the nine area municipalities. For example, cycling to work or school is more common in the Town of Newmarket. In York Region, the majority of cycling trips are made by those under 25 years old. While many do not have access to a personal vehicle and rely on cycling for mobility, an increasing number of young people are choosing a car-free lifestyle and cycling is part of that choice.



#### Transportation Tomorrow Survey, 2011

In York Region, 80 per cent of cycling trips are made by males and 20 per cent are by females. York Region wants to make cycling an option for everyone. Dedicated cycling infrastructure, particularly with physical separation on busy roads, helps to make cyclists feel more comfortable and appeals to a wider range of the population.



Transportation Tomorrow Survey. 201



### **RECREATIONAL CYCLING**

York Region is a popular destination for recreational cycling, particularly by residents who ride north on weekends seeking the quiet roads and scenic vistas of the Oak Ridges Moraine and Lake Simcoe shoreline.

Data captured from cyclists using the Strava mobile app has been compiled into a heatmap demonstrating popular routes. View the interactive map at labs.strava.com/heatmap

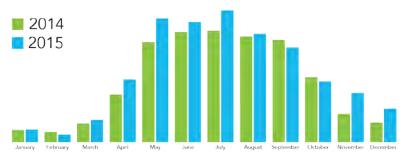
### **BICYCLE COUNT PROGRAM**

York Region installed its first six permanent bicycle counting stations in 2014. These stations are important for monitoring seasonal variations in cycling, understanding impacts of investments, planning maintenance priorities and tracking cycling rates over time.

### Dufferin Street, City of Vaughan

The number of people using the Dufferin Street bike lanes at Glen Shields Avenue in the City of Vaughan increased by 13 per cent from 2014 to 2015.

#### Seasonal Daily Average: 79 cyclists/day (2015)



#### Dufferin Street Monthly Comparison

### Highway 7, Town of Richmond Hill

The counter on Highway 7 near Valleymede Drive in the Town of Richmond Hill counted an average of 67 cyclists per day in the westbound direction in summer 2014. About two-thirds of cyclists used the bike lane and one-third used the sidewalk.

### Seasonal Daily Average: 134 cyclists/day (2014)

#### Tom Taylor Trail, Town of Newmarket

There is a counter across the multi-use path on the Tom Taylor Trail south of Queen Street in the Town of Newmarket. A total of 82,215 cyclists were counted here in 2014. The peak day was May 25 with 1,037 cyclists. Weekend totals are about twice as high as weekdays. The Tom Taylor Trail is a paved path with excellent yearround maintenance, lighting and connections within the community. It is part of the future Lake to Lake Cycling Route and Walking Trail.

Seasonal Daily Average: 399 cyclists/day (2014)

### Short Duration Temporary Counts

York Region also started a short duration bicycle count program to supplement the permanent count data. From May to October of each year, a series of one-week bicycle counts are conducted using rubber tubes across the road, bike lanes, path or sidewalk, designed to detect cyclists.

In 2014, a total of 7,952 cyclists were counted at twelve sites, with an average of 95 cyclists per day at each location.



### **CYCLING PATTERNS**

Another type of traffic monitoring conducted by York Region is the Cordon Count Program. The program monitors the amount and type of traffic crossing into and out of the Region and between defined areas within the Region.

This map shows the number of cyclists that were counted crossing municipal boundaries in a typical day. It demonstrates that cycling demand in the Region is heavily oriented towards north-south travel, particularly to and from Toronto.

29

36

93

### **BIKES AND TRANSIT**

Connecting to transit by bicycle helps to overcome first and last mile barriers, such as a long walk to a transit stop.

It is now easier than ever to combine biking and transit.



THERE ARE 718 BICYCLE PARKING SPOTS AVAILABLE At go transit stations with a peak monthly utilization rate of 42 per cent

#### Bike Parking at GO Stations in York Region

Description	Number of Bike Spaces (2016)	Highest Month's Utilization (%)	
Aurora GO Station - West Lot	16	50	
Aurora Station East Lot	80	25	
Centennial GO Station	56	23	
East Gwillimbury GO Station	32	9	
King City GO Station	16	44	
Langstaff GO Station - North Lot	32	38	
Langstaff GO Station - South Lot	16	13	
Lincolnville Station	32	No data	
Maple GO Station	24	71	
Markham GO Station	32	53	
Mount Joy GO Station	96	29	
Newmarket Bus Terminal	32	34	
Newmarket GO Station	54	39	
Richmond Hill GO Station	48	65	
Rutherford GO Station	32	150	
Stouffville GO Station - East Lot	40	85	
Unionville GO Station	80	24	



## **CYCLING INFRASTRUCTURE**



### **EXISTING CYCLING NETWORK**

Cycling facilities in York Region, including bike lanes, multi-use trails, paved shoulders, in-boulevard multi-use paths and signed routes on shared roadways total nearly 1,000 kilometres with more being added each year.



The York Region Cycling Map was created as a resource to help residents, visitors and cyclists of York Region plan their cycling trips. The 2015/16 York Region Cycling Map is available as an online interactive map, pdf download and in print. Free printed copies are available at local municipal offices, libraries, Chambers of Commerce, community centers and bike shops.



The Geographic Information System data used to create the map is now available as open data at york.ca/opendata

### **NEW PROJECTS - PROTECTED BIKE LANES**

Protected bike lanes, also called cycle tracks, are next-generation bikeways being built in Canada and around the world. They use physical barriers, such as curbs, bollards or planters, to separate bike lanes from cars and sidewalks, creating safe, inviting spaces for people to cycle.

#### Where are they located in York Region?

There are currently two projects which are scheduled to open by Summer 2017:

**2nd Concession** from Green Lane to Queensville Sideroad in the Town of East Gwillimbury



**Highway 7** from Town Centre Boulevard to Scibberras Road in the City of Markham



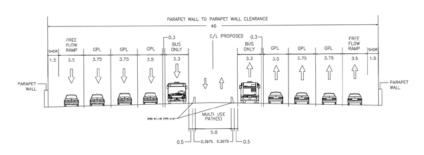
There are six more protected bike lane projects planned for completion by the end of 2020.

- Yonge Street Savage Road to Davis Drive (Town of Newmarket)
- Yonge Street Elgin Mills to 19th Avenue/Gamble Road (Town of Richmond Hill)
- Highway 7 Highway 400 to Pine Valley Drive (City of Vaughan)
- Centre Street Highway 7 to Bathurst Street (City of Vaughan)
- Bathurst Street Centre Street to Highway 407 (City of Vaughan)
- Rutherford Road Jane Street to Dufferin Street (City of Vaughan)
- Yonge Street Davis Drive to Green Lane (Town of Newmarket, Town of East Gwillimbury)

### **NEW PROJECTS - INNOVATIONS**

#### Centre Median Multi-Use Path

The area around Highway 400 and Highway 7 is undergoing a dramatic transformation from a suburban highway interchange to a vibrant downtown community. To make this area friendlier for pedestrians and cyclists, a physically protected centre median and multi-use path has been proposed to provide a safe, comfortable and convenient way to get across the interchange, bypassing the highway on-ramps. Completion is expected in 2020.





### Left-Turn Bike Boxes

A left turn bike box, also known as a "Copenhagen left" offers bicyclists a better way to cross multi-lane signalized intersections from a right side bike lane. Cyclists proceed straight through the intersection in the right or bike lane and wait in the specially designed queuing area for the signal to change. Once the traffic light is green, they cross the intersection again and rejoin the flow of traffic in the right or bike lane.



### New Design Approaches

Since the York Region Pedestrian and Cycling Master Plan was created in 2008, there is a better understanding of what types of cycling facilities should be implemented based on traffic speeds, volumes and other characteristics to improve the safety, comfort and convenience for cyclists. York Region is currently updating design standards to reflect these changes and innovations and provide an updated designer toolbox, customized to York Region's needs, to assist in the implementation of the active transportation network.

### **HIGHWAY 7 EAST**

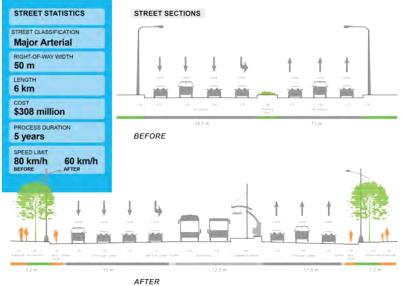
Formerly a highway oriented to motor vehicles, a complete redesign has brought bus rapid transit, bike lanes and pedestrian improvements.

### A Safer Street for All

Highway 7 East has dramatically improved safety for all users of the street. Collisions were previously between 250 and 350 per year. After partial completion of the project, collision rates were reduced to 214 in 2014. In 2015, the first full year since the transformation was fully implemented, the number of collisions had reduced to 104. This reduction in collisions included those between motor vehicles, but also between motor vehicles and pedestrians and people on bikes.

### More Sustainable Transportation

In 2015, pedestrian counts at certain points along Highway 7 East were up 61 per cent compared to six years prior. Other bicycle and pedestrian count data shows that Highway 7 East at Valleymede - counting just on the north side of the street - saw 16,000 bicycle trips and 126,290 pedestrian trips in 2014. There was no data collected for these locations prior to the pedestrian and cycling improvements. Since the completion of this segment of the Bus Rapid Transit (BRT) route, transit ridership increased by 10 per cent in one calendar year.



Source: Toronto Centre for Active Transportation (TCAT)



### **MUNICIPAL PARTNERSHIP PROGRAM**

York Region has an annual fund of \$500,000 to help local municipalities build new pedestrian and cycling infrastructure. They can apply for funding and may receive up to 50 per cent of the total project costs from the Region. The goal is to create an active transportation network across York Region. Since its launch in 2007, 33 projects have been approved with a funding commitment totalling \$5 million.

### Rouge Valley Trail, City of Markham

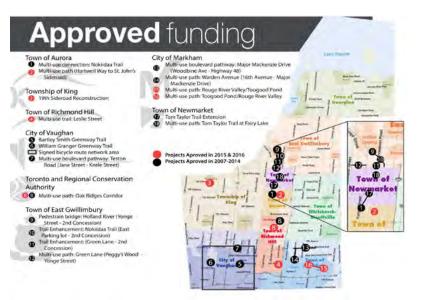


### Mulock Underpass, Town of Newmarket



#### Nokiidaa Trail, Town of Aurora





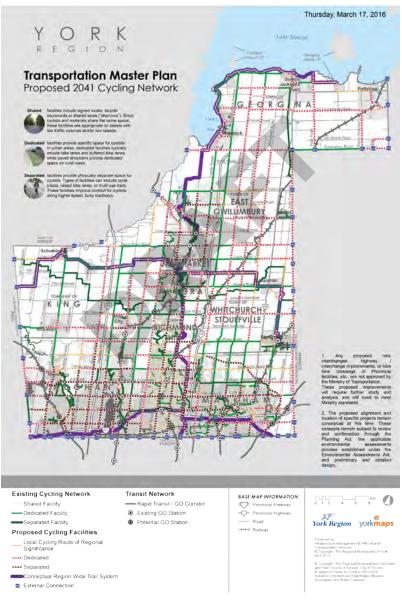
### **VISION FOR THE FUTURE**

The Transportation Master Plan (TMP) is the long-term plan that is used by York Region when planning and executing new transportation projects. Walking and cycling are fundamental to healthy and sustainable communities and one goal of the TMP is to make active transportation more comfortable and convenient, helping residents frequently meet their daily travel needs in a more sustainable way.

The TMP integrates key elements of York Region's Pedestrian and Cycling Master Plan and strengthens the Region's role in providing on-road and off-road facilities for walking and cycling. It focuses on building regional networks, improving connections within centres and to/from major destinations, improving access to public transit services and encouraging consistency among local area municipalities. The strategic network will support making cycling a viable mobility choice.

For more information, visit york.ca/tmp





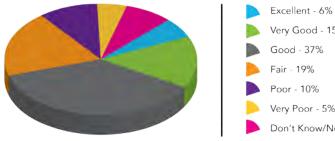


## **CYCLING EXPERIENCE**

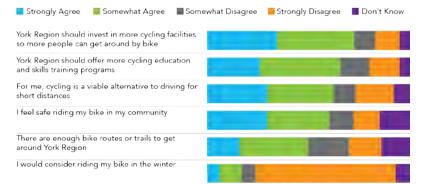
### WHAT RESIDENTS THINK

Fifty-eight per cent of York Region residents have a positive view (excellent, very good, good) of cycling in their community.

Residents are interested in safer cycling experiences and more bike routes or trails to get around York Region. There is also a desire for more cycling education and skills training.







York Region Survey, 2015









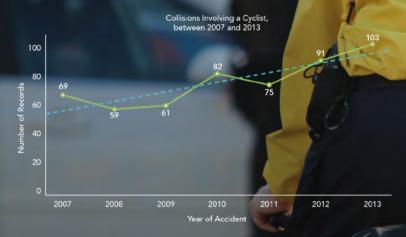
### **REPORTED COLLISIONS**

Between 2012 and 2014, there was an average of about 100 reported collisions per year involving cyclists on Regional Roads in York Region, compared with 160 involving pedestrians and over 9,000 motor vehicle collisions. Reported Collisions on Regional Roads (2007 to 2013)

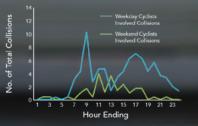
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Three out of four of the collisions involving cyclists occurred in the southern three municipalities (Vaughan, Richmond Hill and Markham). More than half occurred at intersections. There was 1 fatal collision involving a cyclist between 2007 and 2013.



Collisions Involving a Cyclist by Time-of-Day, three-year average between 2012 and 2014



Source: York Regional Police

of Total Collis

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Collisions Involving a Vulnerable Road User by Month, three-year average between 2012 and 2014

Feb Mar Apr May Jun Jul Aug Sep Oct Nor

Month

Number of Records

1000

0

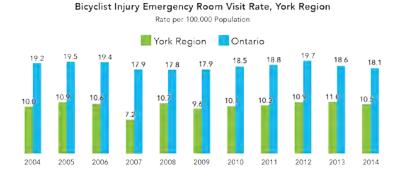
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### **INJURIES**

### **Bicyclist Injury Emergency Department Visit Rate**

- There were 118 bicyclist injury emergency department visits among York Region residents in 2014
- In 2014, the average bicyclist injury emergency department visit rate for York Region was 10.5 visits per 100,000 population
- The bicyclist injury emergency department visit rate for York Region has been consistently lower than that of Ontario



### **Bicyclist Injury Hospitalization Rate**

- There were 12 bicyclist injury hospitalizations among York Region residents in 2014
- In 2014, the average bicyclist injury hospitalization rate for York Region was 1.0 hospitalization per 100,000 population
- The bicyclist injury hospitalization rate for York Region has been consistently lower than that of Ontario





### THEFTS

The average annual number of bicycle thefts reported to York Regional Police (2009 to 2015) was 275, but there is a decreasing trend. July is the most likely month for a bike to be stolen (average of 52 stolen bicycles) and February is the least likely month (average of three stolen bicycles).

### **Register Your Bike with YRP**

The Online Bicycle Registration is a program created by York Regional Police in an effort to safeguard the bicycles owned by all York Region residents. This program will greatly increase the chances of having your bicycle returned to you if it is lost or stolen. There are currently 2,380 bicycles registered in the database. Visit **onlinereporting.yrp.ca/BikeRegistration.html** to register your bike.





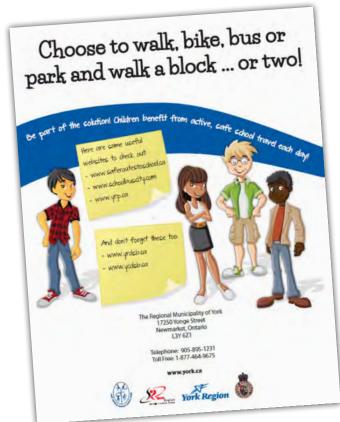


## **SPECIAL TOPICS**

### **CHILDREN AND YOUTH**

#### Active and Safe Routes to Schools

Active and Safe Routes to School is an initiative that encourages families to choose active transportation (walk, cycle, skate) or bus for the trip to and from school. A school travel action plan is developed in a collaborative approach that involves school administrators, students, teachers, parents, school board staff, York Region Public Health Nurses, as well as municipal and regional staff. For more information, visit **schoolbuscity.com/routes** 

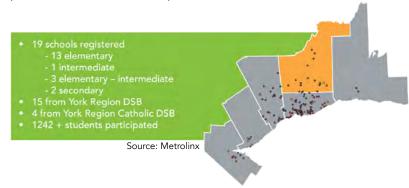


An example of this is Unionville Public School in The City of Markham. Parents support school travel planning by creating communication tools, undertaking traffic observations, planning events, meeting regularly with community partners, collaborating on new opportunities and providing positive opportunities to engage other parents.



### **BIKE TO SCHOOL WEEK**

In planning for Bike Month 2015, a school campaign called "Bike to School Week" was created. York Region collaborated with Metrolinx and other organizations to plan and lead local implementation.



### Forest Run Public School, The City of Vaughan

One week prior to Bike to School Week, 11 bikes and one scooter were counted. By the end of Bike to School Week, 130 students were biking and rolling to school. Forest Run Public School attributes this tremendous growth to positive reinforcement, inclusivity and encouraging lifelong healthy habits. Parents and school staff play an influential role and the more they celebrate fun and healthy activities, the more likely students are to adopt these habits for life.



#### **Travel Methods to School Survey**

In 2014, York Region administered a survey to 800 parents of elementary school aged children between the ages of 6 and 14 across York Region. The survey was designed to develop an understanding of school travel behaviors and reasons behind these behaviors.

#### **Travel Methods to School**

About 46 per cent of families allow their child to walk and/or bicycle to school, 27 per cent drove their child to school and 27 per cent of children were bused.



### Changes that may encourage walking/biking

The most common changes that could encourage families in York Region to allow their children to walk or bike to school were safety issues, such as reducing traffic hazards, increased safety education and partnering with someone else their child can walk with.

### **Physical Activity**

About 30 per cent of families reported their child was physically active for at least 60 minutes every day in the last seven days. The trip to and from school can be part of this.



### **CYCLING TOURISM**

### **Greenbelt Route**

The Greenbelt Route is a 470 kilometre provincial cycling route from Northumberland County to Niagara Region, including 65 kilometres in York Region. The launch of the Greenbelt Route in Summer 2015 included an organized bike tour with 200 participants from across North America, bringing in \$176,000 for the local economy. Eighty-four per cent of participants agreed that the Greenbelt Route provides a great cycling experience. The signed Greenbelt Route connects local Greenbelt communities and businesses to the growing cycle tourism market. For more information including detailed maps, visit **greenbelt.ca/route-regions-york** 

### York Region Cycling Tour Map

The York Region Cycling Tour Map highlights the best of what York Region has to offer cyclists. It features ten self-guided cycle tours that span all nine local municipalities, with different skill levels and a variety of scenic, cultural and natural points of interest. Many routes connect to the Greenbelt Route. The map also includes family cycling, mountain biking and BMX options. Detailed information, including GPS maps for mobile devices, can be found at **york.ca/cycling** 

### LAKE TO LAKE CYCLING ROUTE AND WALKING TRAIL

The Lake to Lake Cycling Route and Walking Trail is a vision to inspire active participation for health, transportation and tourism, allowing people to experience the beauty of York Region and the City of Toronto. Stretching from the shores of Lake Simcoe to Lake Ontario for a total length of 121 kilometres, the Route consists of mainly off-road, multi-use trails and on-road facilities on low-speed roads.

The Route will form the north-south spine of the Regional walking and cycling network serving as a connector route to trails such as the Greenbelt Route, East Don Valley River Trail, Finch Hydro Corridor Trail, Toronto Pan Am Path and the Waterfront Traill.

YORK

LAKE

More than half of the Route already exists, and York Region and its partners are making progress on completing the gaps and improvements.

Visit york.ca/cycling for more details.



### **EDUCATION AND ENCOURAGEMENT**

#### York Region Safe Cycling Campaign

York Region developed an educational campaign in partnership with York Regional Police and the Canadian Automobile Association to promote cycling safety and respect for all road users. The Safe Cycling Campaign was launched on May 14, 2015 with a media event at Highway 7 and Leslie Street in the Town of Richmond Hill. On Tuesday, June 2, 2015, the Province passed the Making Ontario's Roads Safer Act, which includes increased fines for offenses like dooring a cyclist and introduces a one metre safe passing law. The campaign serves as a reminder that we all have a part to play in making our roads safer by riding and driving with care.



### BikeFest

The BikeFest School Cycling Education Program is hands-on training for elementary school students in York Region. The training is taught by certified CAN-BIKE Instructors and includes practical skills needed for safer cycling including bicycle maintenance, bicycle handling skills and correct helmet use. Since 2010, more than 2,000 youth have participated in the program.



### York Region Cycling Handbook

The York Region Cycling Handbook is a practical guide containing rules of the road and safety tips to minimize risks while riding and make cycling more enjoyable. The 2016 version of the York Region Cycling Handbook is now available at **york.ca/cycling** 



### Markham Cycling Day

On September 27, 2015, the first "Markham Cycling Day" took place at the newly constructed Markham Pan Am Centre. Markham Cycling Day included both the traditional Markham Giro Bike Race for young children ages 3 to 13, and the new Tour de Markham community ride. The first Markham Cycling Day was very successful, with an estimated total of 1,000 attendees, nine sponsors, 70 volunteers and 15 event exhibitors and vendors.



#### **Bike Month**

Bike Month, and annual event held in June, kicks off with Bike to Work Day events in York Region and is followed by a month of events celebrating cycling including festivals, workshops, community rides and races. York Region is a local supporter of Bike Month across the Greater Toronto and Hamilton Area. Visit **bikemonth.ca** to learn more.

### **WORD ON THE STREET**



I ride my bike 2-3 times per week between doing errands and commuting to work. I used to think that riding from Major Mac/Weston to work was too far away and dangerous. Over recent years I met people that rode to work all year round and learned that it wasn't as daunting as I had imagined. It just required some knowledge, skills, planning and the right equipment; but most importantly a strong personal reason for doing it.

Domenic Capolongo, Woodbridge



We have beautiful natural features in our City and Region. The Oak Ridges Moraine, Humber River Valley systems and Greenbelt areas are stunningly beautiful. Riding in these rural areas is wonderful.

Michael lacovelli, Kleinburg



I love being on my bike. It makes me feel like a kid again and brings me back to the day my father taught me how to ride. We shared a love of being on a bike, the feeling of the wind flying though your hair as you set out to reach your destination.

Cycling is very empowering for me as I am always moving forward when I'm riding. I use this time to think about my goals I want to achieve, and how life is a combination of uphill, downhill & flat road! My bike has great meaning for me and I am grateful to my father who took me on my first long ride - around 10 kilometres when I was very young girl. Sunny days, bike rides, ice cream....life doesn't get any sweeter than that!

Erminia Lombardi, Woodbridge



The exercise and fresh air that cycling provides is a large contributor to keeping up my cycling habit. Cycling maps are an awesome resource for exploring cycling options not only for workrelated commutes, but also for general errandrunning.

When cycling, the biggest weather-related obstacle for me is wet and heavy precipitation, which can occur regardless of season. To protect against that, I like to wear a good waterproof jacket and an extra layer of pants.

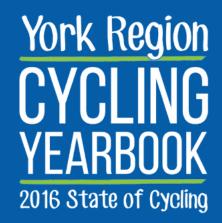
In the middle of winter, when it's dry, snow and ice are usually not an issue for me; I find that there's almost never so much snow or ice on the roads that would seriously impact cycling. As with any other outdoor activity, I simply bundle up more when it's cold.

#### David Zhu, Markham



Biking to work is by far my favourite mode of transportation. Driving takes about 15-20 minutes, public transit can range from 40-50 minutes door-to-door, and I can get to work by bike in just under 30 minutes! It takes a bit more physical strength, energy and time, but in the end it is worth it. It's like having all the conveniences of a car - you leave when you want to, you don't have to operate by a bus schedule and often times, can get to places quicker. The health and environmental benefits are obvious, but the financial benefits are astounding. The initial investment is purchasing a bike - and it's up to you how much you want to spend. A used bike can be as good as a new one. Get some lights, a good lock, a helmet and you're ready for the road.

Jessica Yau, Markham



york.ca/cycling 1-877-464-9675 ext. 75051 cycling@york.ca





