

THE CITY OF CALGARY

BICYCLE PROGRAM

2013 YEARBOOK



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Onward! Providing more travel choices helps to improve overall mobility in Calgary's transportation system





7 Street S.W. cycle track
at 4 Avenue S.W.

FOREWARD



One of my goals as Mayor is to make sure that we have transportation infrastructure that makes it easier to move around the city, regardless of whether we choose to drive, walk, bike, or take public transit. Over the past few years, we have seen how thoughtful planning and smart investments are leading to improvements in these areas.

I am encouraged by how we have begun to implement the Cycling Strategy that City Council adopted in 2011. This inaugural Bicycle Program Yearbook is the starting point for monitoring our progress as we continue to improve Calgary's cycling network.

Better cycling infrastructure is beneficial to everyone; cycle tracks and bike lanes make cycling a safer and more attractive choice for Calgarians, and they also improve safety for motorists and pedestrians. Through thoughtful planning, we are developing a network of safe on-street bike routes to complement our extensive pathways. The new 7 Street S.W. cycle track is an excellent example of how this process can be implemented successfully with community support.

My hope is that in five years we can look back at this first Bicycle Program Yearbook and marvel just how far we've come in making Calgary a city with even better transportation.

Sincerely,

A handwritten signature in black ink that reads "Naheed".

Naheed K. Nenshi
Mayor

AT-A-GLANCE



In the past four years, cycling was listed as the top **"Best New Trend"** by *Fast Forward Weekly*.

More than **2,000** bike parking spots have been installed by The City since 2002.

Bicycle trips in and out of downtown have increased **26 per cent** from 2006 to 2013.

86 per cent of Calgarians support the construction of *Complete Streets* that promote all modes of transportation (walking, cycling, transit and driving).

(Investing in Mobility – Engagement Summary, 2012)

Bicycle lanes and cycle tracks encourage predictable behaviour and movements between people cycling and driving and reduce the amount of sidewalk riding. **Sidewalk riding is down to less than one per cent** on 7 Street S.W.

BICYCLE PROGRAM



As part of the Cycling Strategy and the Calgary Transportation Plan to provide Calgarians better transportation choices, the Bicycle Program was formally established in 2012 to help make Calgary a bicycle-friendly community.

The Bicycle Program operates within the Transportation department and aims to:

- Plan, design and build on-street bikeways.
- Identify and remove barriers to cycling.
- Educate and encourage cycling.
- Increase the supply of bicycle parking.
- Coordinate with other City departments and community organizations to improve cycling.

What is the Bicycle Program Yearbook

This yearbook monitors The City's progress towards improving conditions for cycling. Please follow The City of Calgary Bicycle Program on Facebook for ongoing updates.

CONTENTS



3
By the numbers

7
Improving infrastructure

13
Safety and access

19
Education and encouragement

23
Pathways and the 2013 flood

25
Bicycle parking

27
Glossary



12 Street N.W. near
5 Avenue N.W.

BY THE NUMBERS



Downtown bicycle trips

The City conducts an annual count of all pedestrians, cyclists, transit passengers and vehicle passengers entering and leaving the downtown area. The total number of bicycle trips increased 26 per cent between 2006 to 2013.



Source: 2013 – The City of Calgary Downtown Cordon Count. The total number of bicycles entering and exiting the downtown were counted from 6 a.m. to 10 p.m. on a weekday in May.

Top downtown locations for cycling

- 1 3,280 Bow River pathway west of 11 Street S.W.
- 2 1,970 Peace Bridge over the Bow River
- 3 1,170 9 Avenue S.E. Bridge over the Elbow River
- 4 1,110 Prince's Island Bridge over the Bow River
- 5 1,160 Bow River pathway near Centre Street S.
- 6 1,100 7 Street S.W. cycle track between 3 Avenue and 4 Avenue S.W.
- 7 1,070 2 Street S.W. in the Beltline
- 8 1,020 3 Avenue S.W. east of 8 Street S.W.
- 9 1,020 11 Street S.W. south of 5 Avenue S.W.
- 10 940 Langevin Bridge over the Bow River (4 Street N.E.)
- 11 820 8 Street S.W. railway underpass
- 12 850 Louise Bridge over the Bow River

These are 16 hour (6 a.m. to 10 p.m.) totals collected on a weekday from 2007 to 2013.

Annual city-wide bicycle counts

To improve city-wide data collection and monitoring the Bicycle Program is collecting data at more than 50 locations to:

- Help count bicycle trips city-wide.
- Collect demographic information such as age and gender.

Counts will be collected annually for trend analysis. The counts are collected by data collectors on weekdays in May, July and September, between 6:30 and 9:30 a.m. and 3:30 and 6:30 p.m.

Top cycling locations outside of downtown from 50 data collection sites in summer 2013 (6 hour counts)

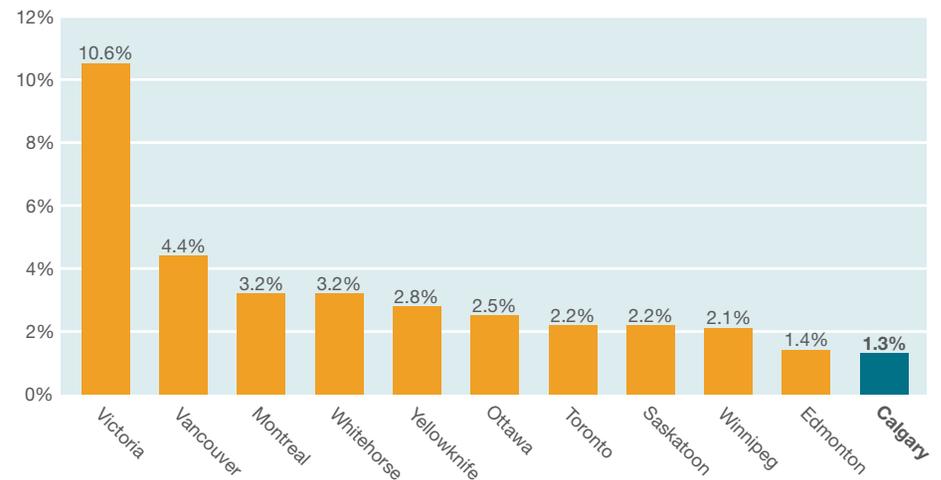
- 1 2,790 Bow River pathway at Crowchild Trail S.W.
- 2 870 Harry Boothman Bridge over Bow River (at Edworthy Park)
- 3 570 Elbow River pathway at 4 Street S.W.
- 4 520 Cedar Crescent S.W. (east of Spruce Drive S.W.) at pathway trailhead
- 5 420 Glenmore Reservoir pathway at Heritage Drive S.W.
- 6 410 Bridgeland LRT Bridge over Memorial Drive N.E.
- 7 390 University LRT Bridge over Crowchild Trail N.W.
- 8 380 Bridge over Bow Trail S.W. near 24 Street S.W.
- 9 370 10 Street N.W. at Confederation Park
- 10 350 Fox Hollow Bridge over Deerfoot Trail N.E.

Bicycle commuting across Canada

Commuting data for all transportation modes is collected every five years by Statistics Canada. In 2011, 1.3 per cent or 7,400 people in the workforce reported commuting by bicycle to work in Calgary.

Calgary's mode share for commuting by bicycle is equal to the national average of 1.3 per cent but lower than other major Canadian cities. The City's efforts to build more on-street bikeways will make cycling a more viable transportation option for more of the population.

Bicycle commuting mode share in major Canadian cities (2011)



Source: 2011 – statcan.gc.ca

Data collection highlights



Highest percentage of female cyclists

- 39% 29 Street N.W. at Foothills Hospital (perpendicular to 11 Avenue N.W.)
- 33% Bow River pathway at 12 Street S.E.
- 31% MacDonald Bridge at 7 Street S.E.



Highest percentage of male cyclists

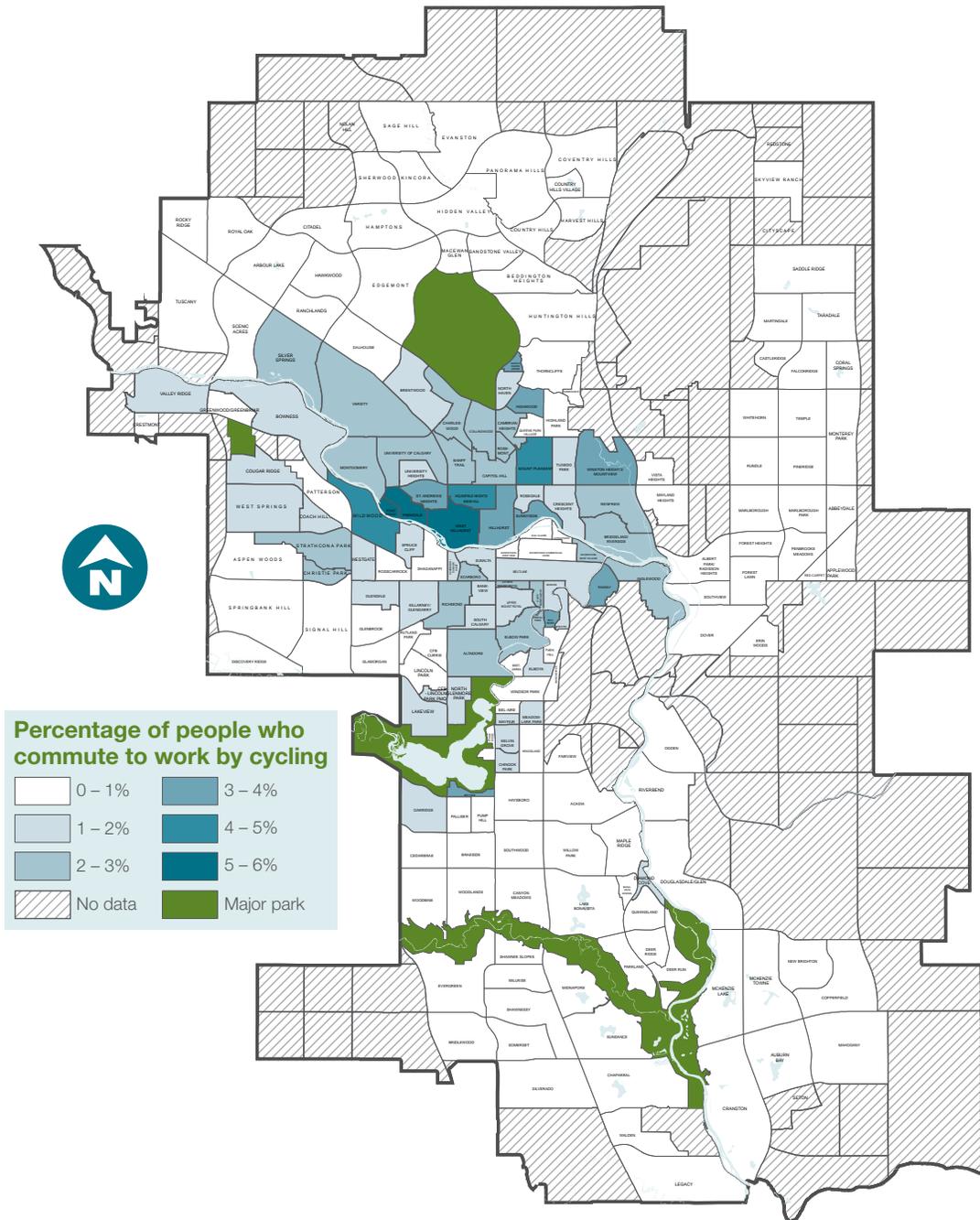
- 96% Western Irrigation District canal pathway at 52 Street S.E.
- 93% Brentwood LRT Bridge over Crowchild Trail N.W.
- 92% 24 Avenue at 2 Street N.W.



Helmets

- 86% Average percentage of people cycling who wore helmets

Bicycle commuting by neighbourhood



Neighbourhood commuting data

Bicycle commuting is highest in neighbourhoods just outside of downtown and along the Bow River pathway.

The top ten neighbourhoods for cycling to work are:

- 1 5.8% Point McKay
- 2 5.1% West Hillhurst
- 3 5.0% Parkdale
- 4 4.7% Mount Pleasant
- 5 4.5% Wildwood
- 6 4.3% Hounsfield Heights/Briar Hill
- 7 3.9% North Haven Upper
- 8 3.6% Ramsay
- 9 3.5% Hillhurst
- 10 3.4% St. Andrews Heights

Source for map: 2011 City of Calgary Civic Census

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10 Street N.W. bike lane
near 20 Avenue N.W.

IMPROVING INFRASTRUCTURE



Planning, designing and building on-street bikeways

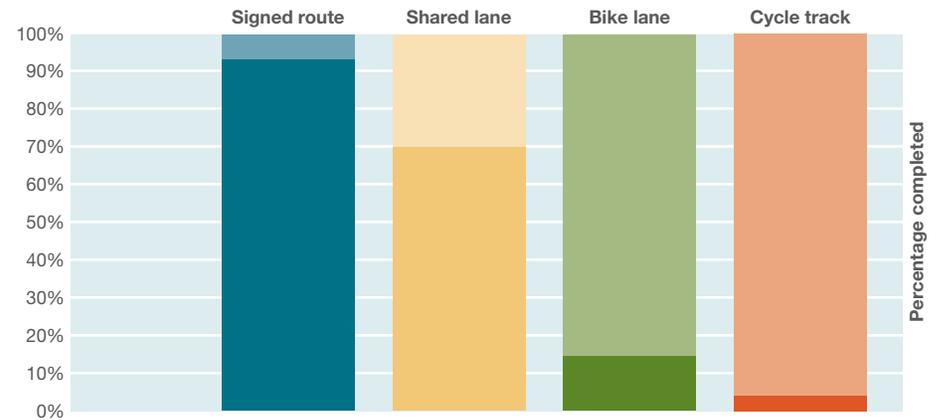
Calgary has 770 km of multi-use pathways and 385 km of on-street bikeways. Bikeways include signed routes, shared lanes, bike lanes and cycle tracks. See page 27 for a definition of each type of bikeway.

The Cycling Strategy provides Council set bikeway targets for 2020. Most of the remaining work involves installing more bike lanes and cycle tracks. To meet the targets, The City will need to install an average of 5 km of cycle tracks and 20 km of bike lanes every year.

Cycling infrastructure



On-street bikeway targets for 2020



	Signed route	Shared lane	Bike lane	Cycle track
Built	345 km	14 km	26 km	1.2 km
Target	370 km	20 km	180 km	30 km
Remaining	25 km	6 km	154 km	28.8 km



7 Street S.W. cycle track
at 5 Avenue S.W.

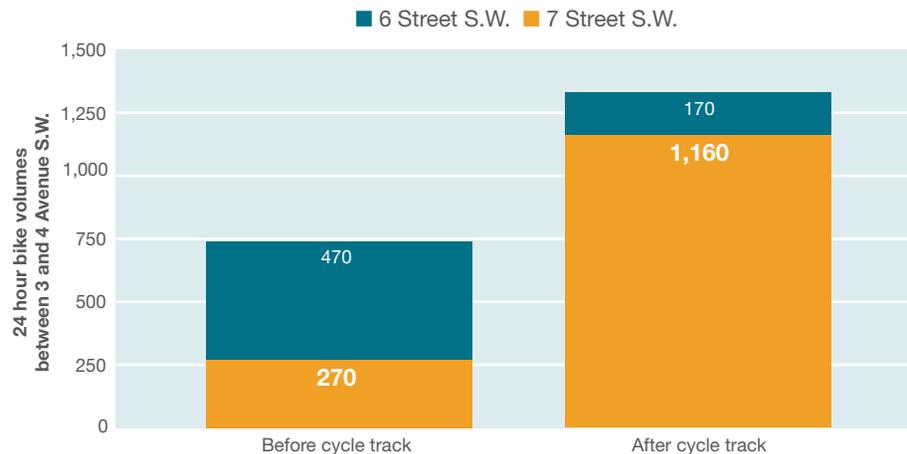
7 Street S.W. Cycle Track

Calgary opened its first downtown cycle track in July 2013 on 7 Street S.W. between 1 Avenue and 8 Avenue. This cycle track connects the many businesses, residences and office towers in west downtown to the popular Bow River pathway and Peace Bridge. The cycle track is being used by people cycling to work, across downtown to various destinations and even by children cycling with their parents.

Two months after the cycle track opened, 1,160 daily bicycle trips were recorded on 7 Street S.W., becoming Calgary's busiest on-street bikeway.

- More than 90 per cent of cyclists use the cycle track. Cyclists can ride outside the cycle track and are expected to when accessing a building or preparing for a right turn.
- Less than one per cent of cyclists ride on the sidewalk after the cycle track compared to 25 per cent before.

Daily bicycle trips on 6 Street and 7 Street S.W.



Before counts taken on June 28 and Aug. 8, 2012; after counts taken on August 28, 2013.
All data counts done between 3 Avenue and 4 Avenue.

"I love the new cycle tracks. I can't wait until more of the planned network is built for them to connect to."

"Love the addition of the bike signals and left turn advance that keep cyclists safe."

What Calgarians told us about the cycle track.

"I love the new 7 Street cycle track and use it every day to commute to work."

"Love love love it, took the path from Prince's Island/Peace Bridge and have never felt safer on city roads."

Source: Citizen comments provided to 311

New bikeways

8 Avenue N.

The City installed bike lanes and shared lanes along 8 Avenue N. between 2 Street N.W. and 19 Street N.E., as part of a traffic calming project.



9 Avenue S.E.

Bike lanes were installed from 4 Street S.E. to 7 Street S.E. connecting the downtown cycling network to the Bow and Elbow River pathways.



40 Avenue N.W.

The City installed bike lanes along 40 Avenue N.W., between Brentwood Road and 37 Street N.W., to improve access north of the University of Calgary.



Nose Hill Drive N.W. pathway

To fill a 2 km gap in the pathway and bikeway network, The City constructed a multi-use path on Nose Hill Drive N.W. The pathway connects to Crowfoot LRT station, a public library and the Crowfoot YMCA.



Samis Road N.E.

The City installed a bike and pedestrian signal to help people cross Centre Street and installed pavement markings for cyclists between Centre Street N. and 1 Street N.E.



West Light Rail Transit (LRT)

New bike lanes, shared lanes, signed bike routes and bicycle parking were installed as part of the West LRT project. A pedestrian and bicycle bridge was built to connect routes north and south of Bow Trail. The City improved bicycle access to help connect Calgarians to Westbrook, 45 Street and Shaganappi Point West LRT stations, and give citizens a place to lock up their bikes.



Improving existing bikeways

11 Street at 6 Avenue S.W.

The City widened the roadway to extend the 11 Street S.W. bike lane north of 6 Avenue and modified the existing two-stage left turn area to accommodate longer bicycles and bicycles with trailers. It also helps with snow removal in the winter.



10 Street N.W.

A report was completed by The City summarizing the 10 Street N.W. bike lanes pilot project. It recommended several improvements related to access and safety. Those improvements started in 2013 and will continue in 2014. The blue bike turn box at 5 Avenue N.W. was considered ineffective and removed in 2013. Plans to improve connectivity to the 9A Street N.W. bikeway are slated for 2014.



Bike ramps

The City has installed several bike ramps to improve access to and from pathways and bridges like this example near University LRT station.





10 Street N.W. bike lane
near 20 Avenue N.W.

SAFETY AND ACCESS



Bicycling in winter

To improve winter road safety and to encourage more winter cycling, roads with bike lanes and shared lanes are typically plowed within 24 to 48 hours after the snow stops depending on the priority level associated with the roadway. The 7 Street S.W. cycle track receives a high-level of snow clearance. All snow is removed from that bikeway to create a seamless transition from the Bow River pathway. This complements The City's efforts in clearing 300 km of pathway within 24 hours after the snow stops. The City is currently identifying opportunities to expand the high level snow clearance to other bikeways, concentrating on high use locations or where trouble spots have been noted.

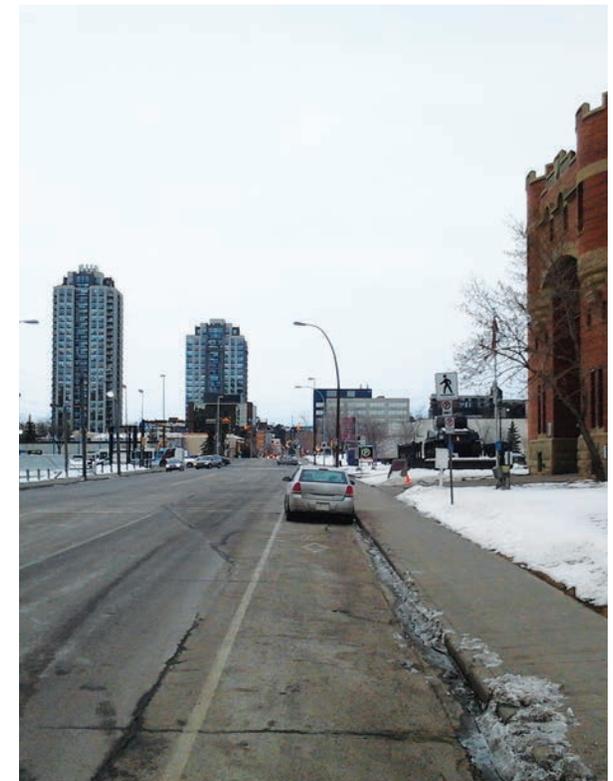


Snow is removed from the 7 Street S.W. cycle track after each snow event, in order make it accessible to people who cycle in winter.

Through monitoring the 10 Street N.W. bike lanes, we learned that **30 per cent of summertime cyclists continue riding on a winter day** with temperatures below zero degrees and some snow present.

Changes to municipal bylaws

In 2013, Calgary City Council revised the Municipal Traffic Bylaws to make it illegal to park in a bike lane. Cars parked in a bike lane can force a bicyclist to suddenly merge with traffic. Council also made it legal for pedestrians to cross a cycle track if they need to access a parked car beside the cycle track.

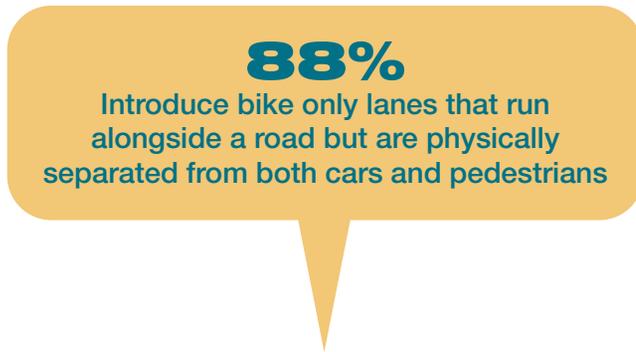


11 Street S.W. bike lane near 8 Avenue S.W.

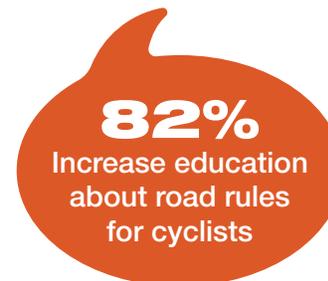
Bicycle safety

Calgarians' perceptions of safety and quality of bikeways

Most Calgarians (59 per cent) would like to cycle more often but barriers like personal safety are of great concern¹. The City is building more bike lanes and cycle tracks to improve safety and encourage more people to ride. Bike lanes and cycle tracks encourage predictable behaviour and movements between people cycling and driving and help reduce the amount of sidewalk riding.



What improvements would encourage more Calgarians to cycle?*



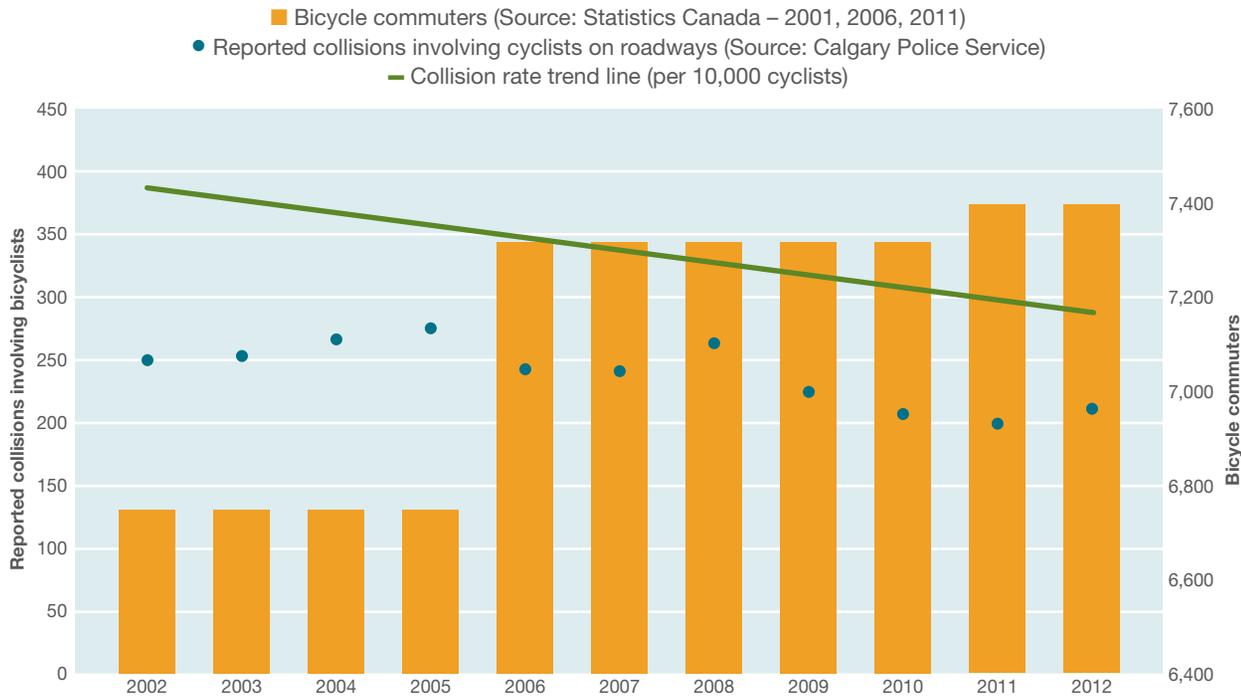
*Strongly agree or somewhat agree answers

¹ Cycling Strategy Research – Telephone Survey, 2011

Bicycle and motor vehicle collision data

Transportation staff work in partnership with Calgary Police Service to collect and monitor cycling collision data. The collision rate over the last decade has decreased, while the number of cyclists has increased. Total bicycle commuters are reported through Statistics Canada data every five years (2001, 2006, 2011).

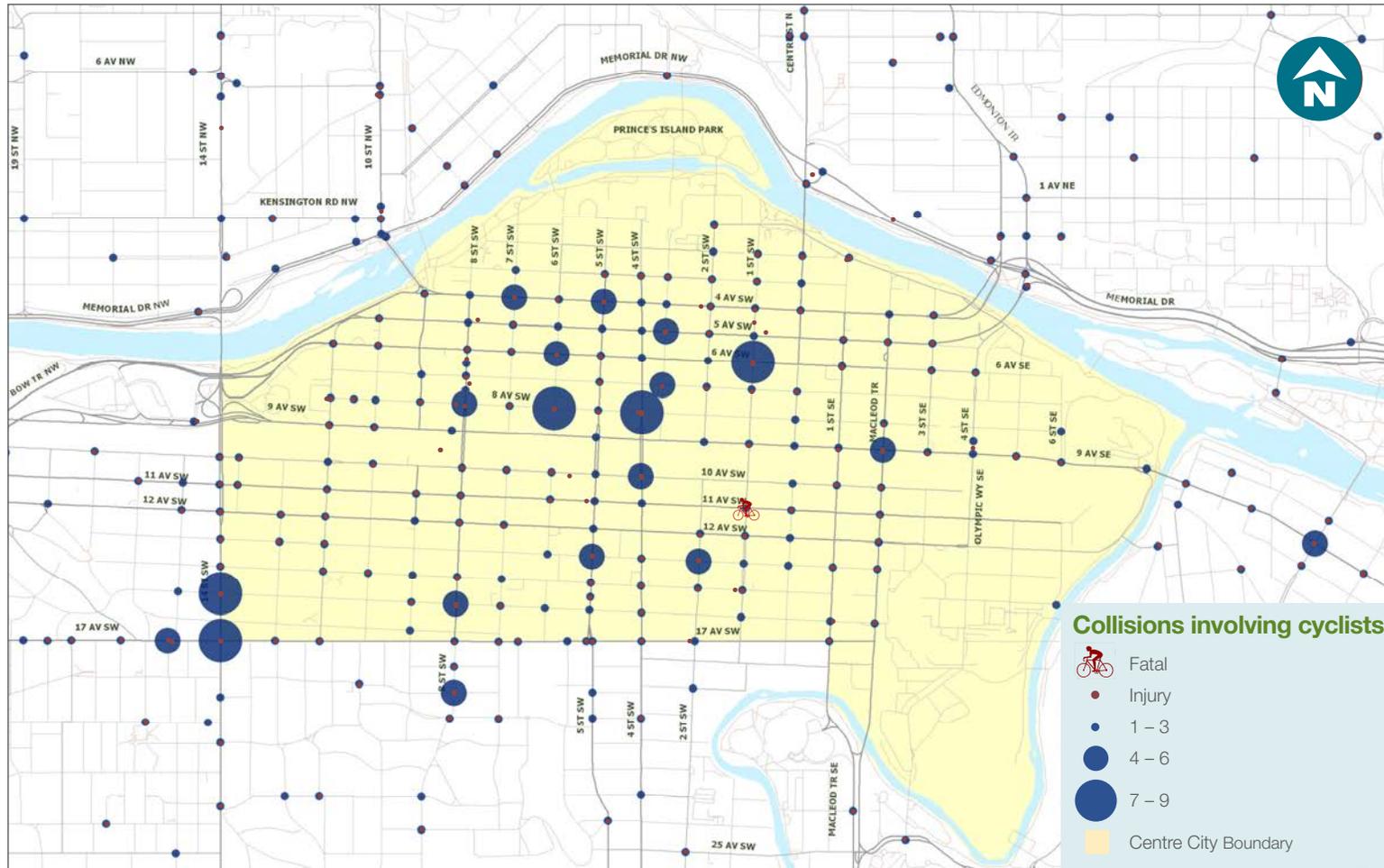
Collisions involving bicyclist on roadways in Calgary (2002 to 2012) and Indexed Collision Rate



Collision locations

The map below shows collision locations between bicycles and motor vehicles in downtown Calgary from 2006 to 2012. City-wide collisions are mapped on the following page for the same time period. The City is using this information to help plan improvements and develop education programs. Collisions typically happen at intersections with busy roadways where no bikeway is present.

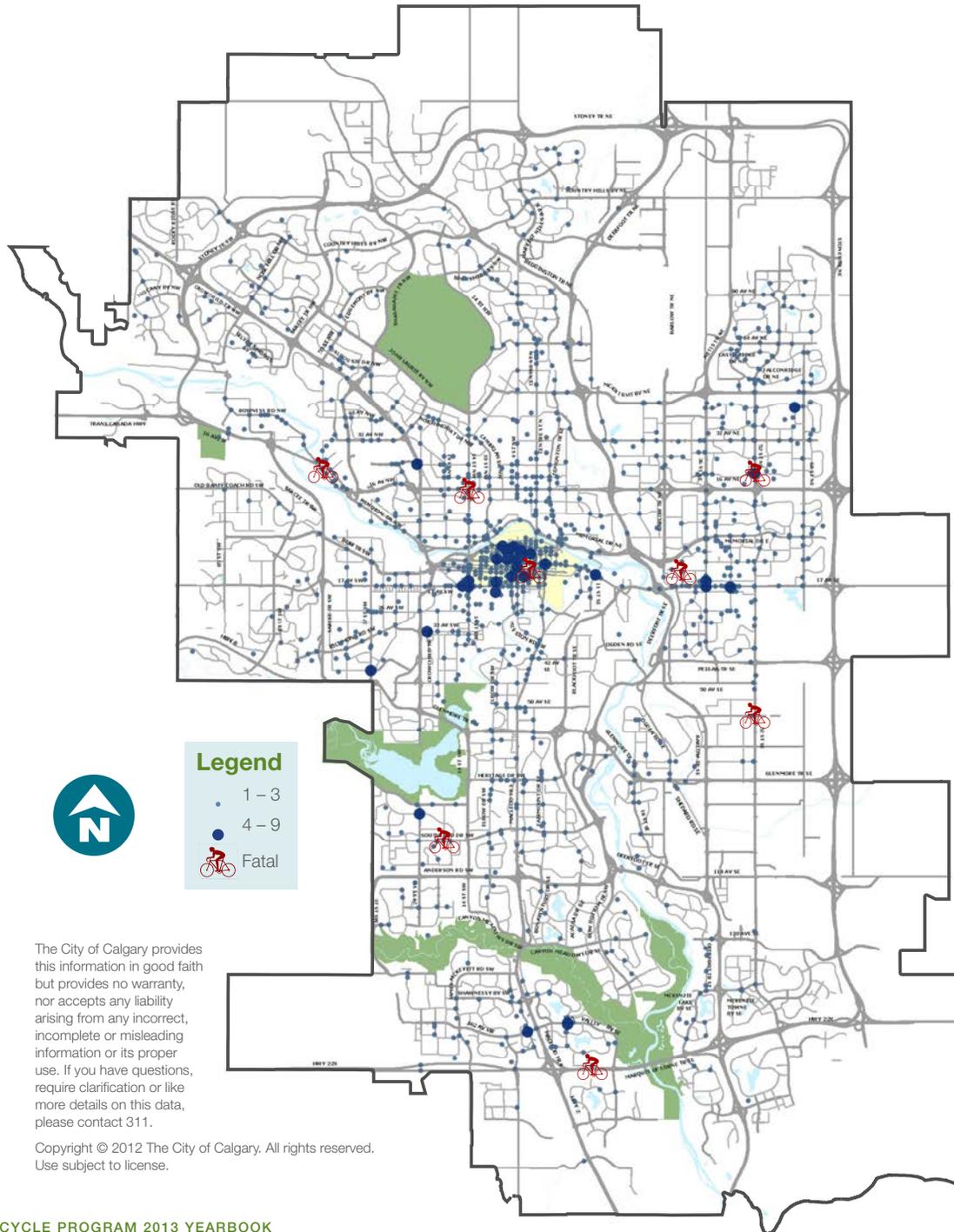
Collision map involving bicycles in downtown (2006 – 2012)



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Collisions involving bicycles on Calgary roadways (2006 – 2012)



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4 Street S.W. near
21 Avenue S.W.



7 Street S.W. cycle track
at 3 Avenue S.W.

EDUCATION AND ENCOURAGEMENT



Cycle track education campaign

With opening Calgary's first downtown cycle track came the challenge of educating people driving, cycling and walking on how the new bikeway works. City staff developed a comprehensive approach that included the creation and distribution of a how-to-guide and two education days where staff and volunteers from Calgary Downtown Association were on-hand to answer questions and interact with Calgarians about the new bikeway.

Calgary Police Service also provided hands-on education by interacting with people cycling and driving during the opening months of the new cycle track. Officers pulled over dozens of people cycling and driving who were seen breaking traffic laws and reminded them of the rules of the road. Calgary Police's presence helped with the public's understanding of the project and a successful implementation of the 7 Street S.W. cycle track.

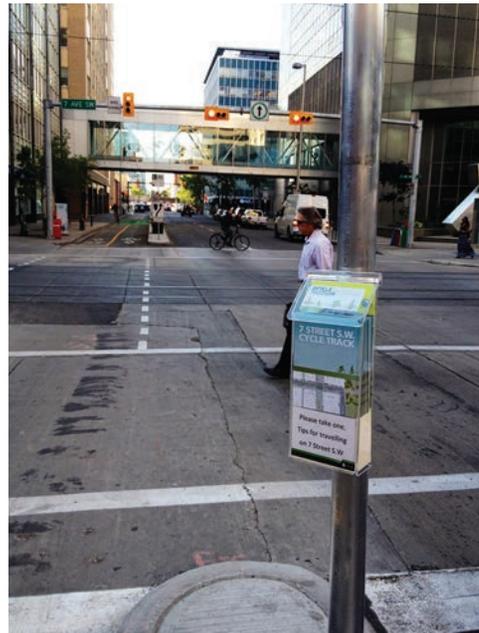
Highlights of education campaign:



Temporary signage campaign and police presence to improve stop sign compliance at a busy intersection.



More than 140 hours of face-to-face between staff, Calgary Police Service, volunteers and the public.



More than 2,300 how-to-guides distributed in-person and from brochure holders along the route.



Temporary signage educated people who cycle and drive about new green pavement at alleys and intersections.

Other education initiatives

Calgary Traffic Safety Tips

The Transportation department updated the Traffic Safety Tips guide to include more detailed information on sharing the road for people cycling and driving.



Bike skills courses

To increase awareness of the many community bicycle skills classes and camps offered in Calgary, The City published a calendar of courses.



Encouragement initiatives

Bike Month

June 2013 was proclaimed as Bike Month by the Mayor for the second year in a row.

The goal of Bike Month is to create awareness of how Calgarians can use bicycles for transportation in their daily lives. To achieve this goal, resources such as community bike-skills course calendars and route-planning tools were displayed along with bicycle themed books at Calgary Public Library branches.



Calgary Public Library display with books about bicycles and Bike Month information.

The Bicycle Program had a booth at MEC Bikefest which had more than 3,000 attendees. Staff helped Calgarians choose a bicycle route to their every day destinations and provided them with a complimentary City Bikeway and Pathway Map and other resource materials.



City of Calgary staff mapping a bike route at Bikefest.

Bike to Work Day

May 3, 2013 was the seventh annual Bike to Work Day event which is sponsored by Balbi and Company Legal Centre. More than 3,100 cyclists took part in riding and enjoying the many pit stops, including a pancake breakfast in Eau Claire Market.



City of Calgary staff participate in Bike to Work Day.

Community bike rides

Community bike rides continued to grow in 2013. In addition to classic recreation rides and charity rides, Calgarians attended a Tweed Ride, a Plaid Ride and evening Full Moon rides. The third annual Cyclepalooza festival also had 10-days of themed rides and bicycle activities.



More than a hundred Calgarians donned their finest tweed blazers, shawls, skirts and pants for an annual ride around Calgary.



Pathway flood damage
at Sue Higgins Park

PATHWAYS AND THE 2013 FLOOD



Pathways

The City of Calgary has over 770 km of multi-use pathways that Calgarians count on for transportation and recreation purposes.

Many of the pathways and several bridges along the Bow and Elbow Rivers were affected by the 2013 Flood, which occurred in June. As a result, The City has been working diligently to repair 93 km of damaged pathways. By September, 57 km have been restored. The remaining 36 km will require more time to rehabilitate. This event has reminded us of the need for a comprehensive on-street bike network should an important pathway ever need to be closed.

Park n' Bike

During the aftermath of the June Flood, The City of Calgary opened temporary Park and Bike sites at 13 locations to reduce the amount of driving Calgarians had to do during the emergency and to get them to locations where they could ride into downtown by bike. Despite the damage to the pathway network, bicycles were one of the most reliable transportation vehicles to navigate around the hardest hit parts of the city.



Pathway damage in Edworthy Park



The City of Calgary bicycle racks along 11 Street S.W.

BICYCLE PARKING



The City of Calgary bicycle parking program

The City of Calgary's bicycle parking program receives hundreds of requests to install racks each year. Since 2002, 1,800 bike parking spaces were added on City property.

Calgary Parking Authority

Calgary Parking Authority added 150 more bicycle parking spaces in parkades in 2013, for a total of 235 spaces around downtown.

BICYCLE PARKING

The Calgary Parking Authority has expanded its bicycle parking inventory. The following parkades will have secure end of trip facilities.

Rental cost: \$10 per month plus GST
Deposit: A \$25 refundable key deposit charge is required.

To be added to the waitlist, email improvservice@calgaryparking.com or call 403-537-7000.

CALGARY PARKING AUTHORITY
calgaryparking.com

Private sector bicycle parking

In addition to parking provided on City property, there are thousands of bike parking spaces on private property.



The Bow features two underground key-access bicycle parking areas and more spots outside.



Fifth Avenue Place's bicycle parking outdoor plaza is packed on a September afternoon.



Central Memorial Park

GLOSSARY



Bike lane

An on-street travel lane designated for the exclusive use of bicycles. Identified by a painted line, bicycle and diamond shaped pavement markings and signs.



Cycle track

A cycle track is an enhanced bike lane that is separated by a physical barrier from moving cars and parked cars and it is distinct from the sidewalk.



Multi-use pathway

An off-street pathway shared by pedestrians, cyclists, skateboarders and in-line skaters.



Neighbourhood greenway (bicycle boulevard)

Residential streets with low volumes of vehicle traffic and low speeds where people cycling and walking are given priority. Neighbourhood greenways feature pavement markings, signs, favourable stop sign orientation, traffic calming and intersections that accommodate cyclists and pedestrians at busy streets.



Shared lane – single file

A travel lane on a street that is shared by motor vehicles and bicycles traveling single file. A marked shared lane is identified by pavement markings and signs.



Shared lane – side by side

A travel lane on a street that is wide enough to accommodate motorists and cyclists side-by-side. A marked shared lane is identified by pavement markings and signs.



Signed bicycle route

A street identified as a bicycle route by blue and white route signage. Signed bicycle routes may be found on streets with low or high volumes of vehicle traffic. Some low volume signed routes can be upgraded into neighbourhood greenways.





2014-0226

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Onward/ Providing more travel choices helps to improve overall mobility in Calgary's transportation system