



AGENDA

SPC ON TRANSPORTATION AND TRANSIT

December 18, 2019, 1:00 PM
IN THE COUNCIL CHAMBER
Members

Councillor J. Davison, Chair
Councillor S. Chu, Vice-Chair
Councillor G. Chahal
Councillor J. Farkas
Councillor J. Gondek
Councillor S. Keating
Councillor J. Magliocca
Mayor N. Nenshi, Ex-Officio

1. CALL TO ORDER
2. OPENING REMARKS
3. CONFIRMATION OF AGENDA
4. CONFIRMATION OF MINUTES
 - 4.1 Minutes of the Regular Meeting of the Standing Policy Committee on Transportation and Transit, 2019 October 23
 - 4.2 Minutes of the Regular Meeting of the Standing Policy Committee on Transportation and Transit, 2019 October 28
5. CONSENT AGENDA
 - 5.1 DEFERRALS AND PROCEDURAL REQUESTS
 - 5.1.1 Deferral of the planned Complete Streets Policy and Residential Street Design Policy Implementation Update in Q4, 2019, TT2019-1380
 - 5.1.2 Deferral of the RouteAhead Project Prioritization Report to no later than the end of Q3 2020, TT2019-1590

- 5.1.3 Deferral of the Parking Management Zone Change - Britannia until no later December 2020, TT2019-1578

5.2 BRIEFINGS

- 5.2.1 Status of Outstanding Motions, TT2019-1582

6. POSTPONED REPORTS
(including related/supplemental reports)

None

7. ITEMS FROM OFFICERS, ADMINISTRATION AND COMMITTEES

- 7.1 Shared e-Bike and e-Scooter Mid-Pilot Report, TT2019-1374
- 7.2 Calgary Pathway and Bikeway Plan Update, TT2019-1431
- 7.3 Safer Mobility Plan Annual Report 2019, TT2019-1549
- 7.4 Parking Requirements Review – Scoping Report, TT2019-1554

8. ITEMS DIRECTLY TO COMMITTEE

- 8.1 REFERRED REPORTS
None

- 8.2 NOTICE(S) OF MOTION
None

9. URGENT BUSINESS

10. CONFIDENTIAL ITEMS

- 10.1 ITEMS FROM OFFICERS, ADMINISTRATION AND COMMITTEES
None

- 10.2 URGENT BUSINESS

11. ADJOURNMENT

Members of Council may participate remotely, if required.



MINUTES

SPC ON TRANSPORTATION AND TRANSIT

**October 23, 2019, 9:30 AM
IN THE COUNCIL CHAMBER**

PRESENT: Councillor S. Keating, Chair
Councillor J. Davison, Vice-Chair
Councillor G. Chahal
Councillor S. Chu
Councillor J. Farkas
Councillor J. Magliocca
Councillor G-C. Carra
Councillor P. Demong
Councillor D. Farrell

ABSENT
ALSO PRESENT: Councillor E. Woolley (Personal)
A/ General Manager D. Morgan
Acting City Clerk T. Mowrey
Legislative Advisor D. Williams
Legislative Advisor A. de Groot

1. CALL TO ORDER

Councillor Keating called the Meeting to order at 9:30 a.m.

2. OPENING REMARKS

Councillor Keating provided opening remarks.

3. CONFIRMATION OF AGENDA

Moved by Councillor Davison

That the Agenda for the 2019 October 23 Regular Meeting of the Standing Policy Committee on Transportation and Transit be confirmed.

MOTION CARRIED

4. CONFIRMATION OF MINUTES

4.1 Minutes of the Regular Meeting of the Standing Policy Committee on Transportation and Transit, 2019 September 18

Moved by Councillor Farkas

That the Minutes of the 2019 September 18 Regular Meeting of the Standing Policy Committee on Transportation and Transit be confirmed.

MOTION CARRIED

5. CONSENT AGENDA

5.1 DEFERRALS AND PROCEDURAL REQUESTS

None

5.2 BRIEFINGS

None

6. POSTPONED REPORTS

None

7. ITEMS FROM OFFICERS, ADMINISTRATION AND COMMITTEES

7.1 Street Safety and Neighbourhood Speed Limits Update, TT2019-1300

Distribution with respect to Report TT2019-1300:

- A presentation entitled "Neighbourhood Speed Limits Update Report", dated 2019 October 23.

Councillor Keating introduced a group of students from the Summit West Independent School in Ward 13 along with their teacher Moneka Eddie.

The following speakers addressed Committee with respect to Report TT2019-1300:

1. Larry Heather
2. Keith Simmons
3. Maurice Williams Demers

Moved by Councillor Farkas

That the Administration Recommendation be amended by adding the words "or maintaining" following the words "Direct Administration to engage with Calgarians and business stakeholders on the subject of reducing".

ROLL CALL VOTE

For: (5): Councillor Davison, Councillor Chahal, Councillor Chu, Councillor Farkas, and Councillor Magliocca

Against: (3): Councillor Keating, Councillor Carra, and Councillor Farrell

MOTION CARRIED

Moved by Councillor Davison

That the Recommendation be amended by adding a Recommendation 2 as follows:

That the Standing Policy Committee on Transportation and Transit Recommend that Council direct Administration:

"2. To Explore scenario 4 (Residential street 40 km/h – Collector Road 50 km/h) and scenario 5 (Residential street 30 km/h – Collector Road 40 km/h) for consideration during public engagement."

ROLL CALL VOTE

For: (2): Councillor Keating, and Councillor Davison

Against: (6): Councillor Chahal, Councillor Chu, Councillor Farkas, Councillor Magliocca, Councillor Carra, and Councillor Farrell

MOTION DEFEATED

Moved by Councillor Davison

That the Recommendation be amended by adding a Recommendation 3 as follows:

That the Standing Policy Committee on Transportation and Transit recommend that Council direct Administration:

"3. To further develop the Neighbourhood Speed Limits business case to include all costs related to the program, including but not limited to cost of engagement, cost of City operations due to collisions, cost of temporary vs. permanent measures for each scenario."

Against: Councillor Carra and Councillor Farrell

MOTION CARRIED

Moved by Councillor Farrell

That with respect to Report TT2019-1300, the following be approved, **as amended**:

That the Standing Policy Committee on Transportation and Transit recommend that Council direct Administration:

1. To engage with Calgarians and business stakeholders on the subject of reducing **or maintaining** neighbourhood speed limits and report the findings and a recommendation to Council through the SPC on Transportation and Transit no later than **June 2020**.
2. **To further develop the Neighbourhood Speed Limits business case to include all costs related to the program, including but not limited to**

cost of engagement, cost of City operations due to collisions, cost of temporary vs. permanent measures for each scenario.

For: (5): Councillor Keating, Councillor Davison, Councillor Chahal, Councillor Carra, and Councillor Farrell

Against: (3): Councillor Chu, Councillor Farkas, and Councillor Magliocca

MOTION CARRIED

That pursuant to Section 134(a) of Procedure Bylaw 35M2017, as amended Councillor Davison requested that the lost motion be forwarded to Council for information.

Committee recessed at 11:55 a.m. and reconvened at 12:59 p.m. with Councillor Davison in the Chair.

7.2 Sliding Scale Low Income Transit Pass – Long-Term Funding Options, TT2019-1004

A presentation entitled "Sliding Scale Low Income Transit Pass - Long-Term Funding Options", dated 2019 October 23, was distributed with respect to Report TT2019-1004.

The following speakers addressed Committee with respect to Report TT2019-1004:

1. Anna Greenwood-Lee
2. Hilary Chapple
3. Brad Robertson
4. Amber Cannon
5. Larry Heather
6. Bonnie Pacaud
7. Colleen Huston
8. Krista Jensen
9. Hagir Sajj

Councillor Keating assumed the Chair at 2:01 p.m. and Councillor Davison returned to his regular seat at Committee.

10. Glenn Crow Chief
11. Rhonda Rowan
12. Maurice Demers
13. Diane Gauthier

Moved by Councillor Chahal

That with respect to Report TT2019-1004, the following be approved:

That the Standing Policy Committee on Transportation and Transit recommend that Council:

1. Direct Administration to continue advocacy with the Government of Alberta for permanent funding for the sliding scale Low Income Transit Pass program; and
2. Direct Administration to address the sliding scale Low Income Transit Pass program funding gap at the 2019 November budget adjustments with a sliding scale fare structure and budget request submission that reflects the recommended options in this report (Scenario B, Option 3), based on the outcome of Provincial funding decisions.
3. Receive for information Options 3 and 4 under Scenario C, as Administration's submission for sub-service review of the sliding scale Low Income Transit Pass program.

MOTION CARRIED

8. ITEMS DIRECTLY TO COMMITTEE

8.1 REFERRED REPORTS

None

8.2 NOTICE(S) OF MOTION

None

9. URGENT BUSINESS

None

10. CONFIDENTIAL ITEMS

10.1 ITEMS FROM OFFICERS, ADMINISTRATION AND COMMITTEES

None

10.2 URGENT BUSINESS

None

11. ADJOURNMENT

Moved by Councillor Davison

That this meeting adjourn at 2:39 p.m.

MOTION CARRIED

The following items have been forwarded to the 2019 November 18 Combined Meeting of Council:

CONSENT:

Street Safety and Neighbourhood Speed Limits Update

Sliding Scale Low Income Transit Pass- Long-Term Funding Options

The next Regular Meeting of the Standing Policy Committee on Transportation and Transit has been scheduled for 2019 November 20 at 1:00 p.m..

CONFIRMED BY COMMITTEE ON

CHAIR

ACTING CITY CLERK

UNCONFIRMED



MINUTES

SPC ON TRANSPORTATION AND TRANSIT

**October 28, 2019, Immediately upon the adjournment of the SPC on Planning and Urban Development
IN THE COUNCIL CHAMBER**

PRESENT: Councillor J. Davison, Chair
Councillor S. Chu, Vice-Chair
Councillor G. Chahal
Councillor J. Farkas
Councillor J. Gondek
Councillor S. Keating
Councillor J. Magliocca

ALSO PRESENT: City Clerk L. Kennedy
Deputy City Clerk T. Mowrey
Legislative Coordinator S. Muscoby
Acting Coordinator J. Dubetz
Recorder G. Chaudhary

1. CALL TO ORDER

The City Clerk called the meeting of the Standing Policy Committee on Transportation and Transit to order at 9:58 a.m.

2. ELECTION OF CHAIR

Following nomination procedures, Councillor Davison was elected Chair of the Standing Policy Committee on Transportation and Transit, by acclamation.

3. ELECTION OF VICE-CHAIR

Following nomination procedures, Councillor Chu was elected Vice-Chair of the Standing Policy Committee on Transportation and Transit, by secret ballot.

4. ELECTION OF COMMITTEE DESIGNATE TO GREEN LINE COMMITTEE

Following nomination procedures, Councillor Davison was elected Designate to Green Line Committee, by acclamation.

Moved by Councillor Magliocca

That Committee authorize the destruction of all confidential ballots following the conclusion of this meeting.

MOTION CARRIED

5. ADJOURNMENT

Moved by Councillor Chu

That this meeting adjourn at 10:03 a.m.

MOTION CARRIED

The next Regular Meeting of the Standing Policy Committee on Transportation and Transit has been scheduled to be held on 2018 November 20 at 1:00 p.m.

CONFIRMED BY COMMITTEE ON

CHAIR

CITY CLERK

UNCONFIRMED

Transportation Report to
SPC on Transportation and Transit
2019 December 18

ISC: UNRESTRICTED
TT2019-1582

Status of Outstanding Motions

EXECUTIVE SUMMARY

Outstanding motions for the SPC on Transportation and Transit.

ADMINISTRATION RECOMMENDATION:

That the Standing Policy Committee on Transportation and Transit receives this Report for the Corporate Record.

PREVIOUS COUNCIL DIRECTION / POLICY

On 2007 February 06, Personnel and Accountability Committee approved PAC2007-05 Status of Outstanding Motions and Directions, directing Administration to bring forward as an item of business to each SPC a list of tabled and referred motions and reports for each committee; such lists to be reviewed by each Standing Policy Committee to be dealt with on a quarterly basis.

BACKGROUND

This report and attachment provides a summary of outstanding motions and directions for the SPC on Transportation and Transit as of 2018 June 7.

INVESTIGATION: ALTERNATIVES AND ANALYSIS

Not applicable.

Stakeholder Engagement, Research and Communication

Not applicable.

Strategic Alignment

Not applicable.

Social, Environmental, Economic (External)

Not applicable.

Financial Capacity

Current and Future Operating Budget:

Not applicable.

Current and Future Capital Budget:

Not applicable.

Transportation Report to
SPC on Transportation and Transit
2019 December 18

ISC: UNRESTRICTED
TT2019-1582

Status of Outstanding Motions

Risk Assessment

Not applicable.

REASON(S) FOR RECOMMENDATION(S):

This is a report for information, to assist the committee in tracking its initiatives over time.

ATTACHMENT(S)

Attachment – Status of Outstanding Motions as of 18 December 2019.

STATUS OF OUTSTANDING MOTIONS AS OF 2019 DECEMBER 18

ITEM	ANTICIPATED T&T MEETING DATE	OWNER	PAGE
OUTSTANDING REPORTS	JUN-SEPT 2019	GM TRANS	1
PARKING RATIOS SCOPING REPORT	Q4 2019	TP	
PATHWAY AND BIKEWAY PLAN	Q4 2019	TP	
SHARED E-BIKE AND E-SCOOTER MID-PILOT REPORT	Q4 2019	TP	
SAFER MOBILITY PLAN ANNUAL REPORT	Q4 2019	RDS	
RESIDENTIAL PARKING PERMIT REVIEW	Q1 2020		
CARSHARE PARKING POLICY UPDATE	Q1 2020	TP	
ROUTE AHEAD PRIORITIZATION FRAMEWORK	Q1 2020	CT	
NEIGHBOURHOOD SPEED LIMITS	Q2 2020	RDS/TP	
PARKING ZONE MANAGEMENT CHANGES	Q4 2020	TP	
CALGARY GOODS MOVEMENT STRATEGY	Q2 2021	TP	
COMPLETE STREETS AND RESIDENTIAL STREETS UPDATE	Q4 2021	TP	

ITEM	DATE OF REQUEST	SOURCE	SUBJECT	ANTICIPATED MEETING DATE
OUTSTANDING REPORTS	2007 JUNE	COUNCIL	At its meeting of 2007 June 20, the Personnel and Accountability Committee approved the following (PAC2007-05), That Administration, on a quarterly basis, bring forward as an item of business to each Standing Policy Committee a list of tabled and referred motions and reports for each committee; such lists to be reviewed by each Standing Policy Committee to be dealt with on a quarterly basis.	MAR JUN SEP DEC T&T
PARKING RATIOS SCOPING REPORT	2019 MARCH	COUNCIL	On 2019 March 18, Council adopted a Motion Arising with respect to Report CPC2019-0070. The Motion Arising directed Administration to undertake a scoping report of parking ratios, particularly on visitor parking ratios and the effects of Transportation Network Companies and Ridesharing companies, and report back to the SPC on Transportation and Transit no later than Q4 2019.	Q4 2019
PATHWAY AND BIKEWAY PLAN	2018 FEB	TT2018-0060	At the 2014 March 10 Council Meeting, Notice of Motion 2014-07, Council adopted the following recommendations: 1. Direct Administration to develop a project charter for creating a city-wide network plan (excluding the Centre City), which will address: a) principles for network design and route selection	Q4 2019 T&T

			<p>that considers both on and off-street solutions;</p> <p>b) approaches to data, research and analysis related to route and network planning;</p> <p>c) approaches to public engagement; and</p> <p>d) timeline to complete a city-wide network plan.</p> <p>At the 2017 December 18 Council Meeting, Report TT2017-1239, Council adopted the following recommendations:</p> <p>1. Direct administration to return to SPC on Transportation and Transit with the Cycling Strategy Annual Report, Calgary Pathways and Bikeways Plan Update and the Pedestrian Strategy Update no later than Q1 2018</p>	
<p>SHARED E-SCOOTER AND E-BIKE MID-PILOT REPORT</p>	<p>2018 JULY</p>	<p>C2018-0934</p>	<p>Moved by Councillor Woolley, Seconded by Councillor Farrell NOW THEREFORE BE IT RESOLVED, that Council direct administration to initiate a two-year pilot for bike share by September 2018 that will include:</p> <ul style="list-style-type: none"> ◦An intake process for interested operators to participate ◦Data sharing requirements with permitted operators ◦A pilot consisting of up to 10,000 bicycles, scooters or other personal mobility devices ◦A performance-based system for permitted operators to gradually increase their fleet size, within set pilot limits ◦A permit and fee structure that covers administrative costs to regulate and manage the pilot program ◦Any other permit conditions to be imposed on bike 	<p>Q4 2019 T&T</p>

			<p>share operators to ensure that the safety and convenience of roadway and sidewalk users is not unduly impacted</p> <p>And report back to Council through Transportation and Transit Committee with an update on the pilot in Q4 2019 and a final report with potential further recommendations no later than Q4 2020.</p> <p>AND FURTHER BE IT RESOLVED that Council direct Administration to review the existing bylaw rules governing mobility devices such as scooters, skateboards, roller skates and personal mobility devices with electric motors and to bring forward any necessary bylaw amendments to facilitate the use of such devices no later than Q1 2019.</p> <p>MOTION CARRIED</p>	
SAFER MOBILITY PLAN ANNUAL REPORT	2018 DEC	TT2018-1315	<p>That the SPC on Transportation and Transit recommends that Council:</p> <ol style="list-style-type: none"> 1. Receive this report for information; and 2. Direct Administration to report back to the SPC on Transportation and Transit on the Safer Mobility Annual Report by Q4 2019. 	Q4 2019 T&T
RESIDENTIAL PARKING PERMIT REVIEW	2014 DEC	TT2014-0935	<p>That the SPC on Transportation & Transit recommend that Council:</p> <ol style="list-style-type: none"> 1. Endorse Administration's proposed Parking Policy 2015-2018 Work Plan (Attachment 1). 2. Direct Administration to bring forward a budget adjustment and potential funding sources in 2015 November to: 	Q4 2019 T&T

			<p>a. provide a one-year limited term FTE for PDA (at \$150,000) to lead bylaw amendments for the Integrated Downtown-TOD Parking Strategy.</p> <p>b. provide \$300,000 for consulting and field testing of green infrastructure options for parking facilities.</p>	
CARSHARE PARKING POLICY UPDATE	2018 JAN	COUNCIL	<p>On 2015 March 30, Council approved report TT2015-0121: Carshare Parking Policy. This included the recommendations:</p> <ol style="list-style-type: none"> 1. Approve amending A Parking Policy Framework for Calgary (TP017) by adding the following as per Attachment 1: <ol style="list-style-type: none"> a. Additional definitions in Section 5.1. b. New text and Policy 37.a in Section 5.1.2 c. New Section 5.1.6 (Carshare Parking Policies). 2. Direct Administration and the Calgary Parking Authority to revise existing contracts with carshare organizations, as necessary, to align with the new carshare parking policies. 3. Direct Administration to report back to the SPC on Transportation & Transit no later than 2016 September with an update report on the implementation of the carshare parking policies. <p>On 2016 June 20, and subsequently on 2017 February 13, Council approved a deferral request on the update report to no later than 2018 January.</p>	Q1 2020 T&T
ROUTE AHEAD UPDATE – PRIORITIZATION FRAMEWORK	2018 JUNE	TT2018-0617	<p>That Council:</p> <ol style="list-style-type: none"> 2. 'RouteAhead Update to prioritize major transit 	Q1 2020 T&T

			growth projects' to no later than 2019 Q3.	
Neighborhood Speed Limits	2016 MAY	TT2016-2050	NOW THEREFORE BE IT RESOLVED that City Council directs City Administration to endorse a reduced unposted speed limit for neighbourhood streets, reporting with an implementation plan, as well as affected roadways map and definitions, through the Standing Policy Committee on Transportation and Transit no later than Q4 2019; AND FURTHER BE IT RESOLVED that City Council directs City Administration to provide a recommendation on whether the reduced speed limit should be 30 km/h and/or 40 km/h, as well as to what extent Collector classification streets should receive reduced limits, as part of an interim report as well as an engagement plan through the Standing Policy Committee on Transportation and Transit no later than Q2 2019;	Q2 2020
PARKING ZONE MANAGEMENT CHANGES	2019 SEPT	COUNCIL	Parking Management Zone considerations for Britannia using existing Council Policy.	Q4 2020 T&T
CALGARY GOODS MOVEMENT STRATEGY	2018 NOV	TT2018-1289	5. Direct Administration to report back with an update on the Goods Movement Strategy implementation to Council through the SPC on Transportation and Transit no later than Q2 2021.	Q2 2021

Transportation Report to
SPC on Transportation and Transit
2019 December 18

ISC: UNRESTRICTED
TT2019-1374

Shared e-Bike and e-Scooter Mid-Pilot Report

EXECUTIVE SUMMARY

The shared e-Bike and e-Scooter pilot has been popular among Calgarians and tourists with over 915,000 trips being recorded by over 150,000 unique users since the program started in October 2018. The pilot has attracted two companies to operate in Calgary.

While the pilot has been popular, there have also been concerns and complaints predominately surrounding where the devices are ridden, how they are parked, the behaviour of some riders and injuries involving the devices.

Administration has been able to collect location data regarding where the devices are being ridden and parked, and Calgarians' opinions on the pilot via 311s and surveys. The City has also collaborated with the University of Calgary's Cumming School of Medicine through the Urban Alliance to conduct one of Canada's first injury studies on shared e-Scooters.

From this data analysis, Administration is making a number of changes to the shared e-Scooter and e-Bike program including:

- Implementing low speed zones in high pedestrian areas
- Implementing designated parking zones in high demand parking areas
- Adopting bylaws to allow for better enforcement and address operational concerns
- Additional enforcement of rules and bylaws at strategic locations
- Offering education at key locations

All activities are funded through the fees collected from the shared mobility companies.

As directed in C2018-0934, Administration will report back in Q4 2020 with a final report on the pilot and further recommendations.

ADMINISTRATION RECOMMENDATION:

That the Standing Policy Committee on Transportation and Transit recommend that Council give three readings to the proposed bylaw to amend the Calgary Traffic Bylaw 26M96 (Attachment 3)

PREVIOUS COUNCIL DIRECTION / POLICY

See Attachment 1.

BACKGROUND

The shared e-Bike and e-Scooter pilot started in October 2018 with the company Lime deploying 500 e-Bikes in Calgary. There have been 165,000-recorded e-Bike trips from October 2018 to October 2019. In July 2019, shared e-Scooters were introduced to Calgary with the company Lime deploying 1,000 and the company Bird deploying 500. There have been 750,000-recorded e-Scooter trips from July 2019 to October 2019.

The pilot is a private sector venture and its operation is cost recovered via fees collected from the private shared mobility companies. Administration issues the permit for companies operating shared e-Bikes and e-Scooters in Calgary and can set a number of conditions to make the program better for all Calgarians. The following rules are currently in place for the pilot:

Shared e-Bike and e-Scooter Mid-Pilot Report

Where the devices are allowed to operate:

- e-Bikes follow current provincial operating conditions. Under the Traffic Safety Act, they are allowed to operate on roadways and in bike lanes. Under the Parks and Pathways Bylaw, they are allowed to operate on pathways.
- Lime and Bird were given an exemption by The Province of Alberta under the Alberta Traffic Safety Act, and are allowed to operate e-Scooters where The City designates. Shared e-Scooters from permitted companies can operate on sidewalks, bike lanes and on pathways. Personal e-Scooters can operate on pathways and private property.
- The City has not regulated the operational area of any of the devices. Any changes to a company's operating area has been solely the decision of the shared mobility company.

How fast the devices can go: The e-Scooters have a governor that controls the speed. They also have a geolocation tool that can change the speed of the device given its location. For example, a vehicle can slow down to 15 km/h if entering a busy pedestrian zone. e-Scooters are currently governed at a top speed of 20 km/h and e-Bikes are governed at a top speed of 23 km/h.

Where the devices can be parked: e-Bikes and e-Scooters may be parked in a secure, upright position in areas such as furniture zones of sidewalks, public bike racks and marked parking zones. On sidewalks without furniture zones, users are asked to give at least two metres of clearance for accessibility.

How many devices can be operated: Under the Notice of Motion, 10,000 devices may operate in Calgary. An operator may only provide up to 1,000 e-Scooters and 1,500 e-Bikes. In the summer of 2019, there were 500 shared e-Bikes and 1,500 shared e-Scooters approved to operate in Calgary.

INVESTIGATION: ALTERNATIVES AND ANALYSIS

Using a variety of data sources along with information from other jurisdictions, Administration conducted a data-led decision-making process to address concerns about the pilot. The data from the pilot can be found in Attachment 2.

Public Engagement Survey: The City conducted a shared e-Scooter and e-Bike survey from September 23rd to October 6th, 2019 to understand what citizens thought about the e-Bike and e-Scooter pilot. More than 9,200 Calgarians submitted their opinions on the pilot.

311 Calls: There were 281 311s logged regarding shared e-Scooters and e-Bikes from July 2019 to October 2019. The most common 311 concerns were:

- Sidewalk Riding (109) - 39%
- Bad/Inconsiderate Behavior (77) - 28%
- Parking concern (60) – 21%
- Other (35) – 12%

e-Scooter Injuries: Using the fees collected from the shared mobility companies, The City commissioned a study by the University of Calgary's Cumming School of Medicine looking at e-Scooter injuries that required an ambulance. The e-Scooter injuries arriving by ambulance group was studied because it provided a more detailed look into how, why, when and where people were being injured, as opposed to people self-reporting at the emergency department. The data

Shared e-Bike and e-Scooter Mid-Pilot Report

shows that there were 33 e-Scooter injuries that required ambulances during the period of July 8th to October 1st, 2019.

Further information can be found in Attachment 2.

Actions to mitigate issues

To address concerns, predominately related to the operation of shared e-Scooters, Administration is taking the following steps for the next phase (Spring 2020 –Fall 2020) of the pilot:

1. Implementing low speed zones in high pedestrian areas

Some areas see higher levels of e-Scooter volumes and 311s than others. These areas are primarily along busy retail corridors such as 4 Street SW in Mission and 17 Ave SW in the Beltline. Administration is working with the Business Improvement Areas (BIA's) and Business Revitalization Zones (BRZs) in those areas to establish lower speed zones in the corridors. The speeds will initially be dropped from 20 km/h to 15 km/h, with the ability to drop the speed of the device further if concerns persist. The zones will be implemented prior to the spring 2020 deployment of the e-Scooters.

2. Implementing designated parking zones in high demand parking areas

Some areas have more 311 complaints and a higher demand for parking. To help encourage better parking behaviors, Administration will be implementing designated parking areas in specific locations. Administration is working with the BIAs and BRZs on the exact locations of the designated parking areas and will have the zones installed prior to the deployment of e-Scooters in spring 2020. The designated zones will be funded by the fees collected from the shared mobility companies. Designated parking areas will be marked on the sidewalk or in former curbside micro-stalls.

3. Adopting Bylaws to allow for better enforcement and address operational concerns

There is a lack of clarity when it comes to the enforcement e-Scooters. Since they are a new transportation technology, current laws and bylaws do not expressly identify and define e-Scooters and how to enforce them. In addition, a number of operational items within Calgary's Traffic Bylaw need to be addressed for e-Scooter operations to take place legally. The amendments to the Traffic Bylaw are in Attachment 3.

4. Enforcing rules and laws at key locations

Some locations had higher 311 volumes regarding inappropriate e-Scooter behaviour. Bad behaviours included going too fast for the environment, swerving between pedestrians, and near misses of pedestrians. Administration will look to strategically enforce rules and laws at these locations.

5. Offering education at key locations

From field visits and 311 data, Administration has identified a number of locations where educating e-Scooter users could be beneficial for safety and comfort of users and non-users. All signage and education efforts will be funded by the e-Scooter fees collected from the shared mobility companies.

Transportation Report to
SPC on Transportation and Transit
2019 December 18

ISC: UNRESTRICTED
TT2019-1374

Shared e-Bike and e-Scooter Mid-Pilot Report

Addressing sidewalk riding concerns

While users and non-users prefer not to have e-scooters on the sidewalks or the roadway, the pathway network and cycling infrastructure is not robust enough to connect people to their destinations. Either roadways or sidewalks are required to make that connection. Given the greater weight and speed differential between e-Scooters and cars, compared with e-Scooters and pedestrians, and the speed and design of the roadways in the main areas of use (i.e. the downtown) it was preferred to have e-Scooters remain on sidewalks. The lowering of e-Scooter speeds, education and enforcement at strategic areas are meant to help mitigate pedestrian, e-Scooter conflicts.

Stakeholder Engagement, Research and Communication

Stakeholder engagement was taken prior and throughout the pilot.

- The Government of Alberta was engaged in order to develop a process in which e-Scooters could be permitted on city infrastructure.
- Shared Mobility Companies were engaged to develop a successful pilot that worked for Calgarians and the companies.
- BIAs and BRZs were engaged to understand the issues and opportunities their areas saw with e-Bikes and e-Scooters.
- Researchers at the University of Calgary's Cumming School of Medicine were engaged to understand how, why, when and where e-Scooter injuries were occurring.
- Citizens of Calgary were engaged via survey to understand what they thought about the e-Scooter and e-Bike pilot, and how the users of the pilot were using the devices.
- Bylaw Services, Law and Calgary Police Services were engaged to understand the issues they are seeing and the actions required for better enforcement and education.
- City of Montreal and City of Edmonton were engaged to understand their e-Scooter programs and how people in their cities were responding.
- Administration presented and consulted with the Advisory Committee on Accessibility to understand the issues with the e-scooter and e-bikes as they relate to accessibility.

Strategic Alignment

The e-Bike and e-Scooter pilot helps support the Council priorities of "A city that moves" and "A healthy and green city" by providing more mobility options for Calgarians and tourists, along with reducing the amount of car trips and tailpipe emissions. It also supports the Municipal Development Plan (MDP) - Key Direction #5: Increase mobility choices by creating a multi-modal transportation system and by increasing mobility choices for citizens.

Social, Environmental, Economic (External)

Social: Increased transportation options expand citizens' ability to take part in a variety of economic and social activities. Shared mobility options allow both citizens and tourists in Calgary to sightsee, socialize with family and friends, and visit many local businesses and attractions.

Environment: The survey results show that 1/3 of e-Scooter trips were replacing a car trip. e-Scooters and e-Bikes are electrically powered and do not have tail pipe emissions.

Transportation Report to
SPC on Transportation and Transit
2019 December 18

ISC: UNRESTRICTED
TT2019-1374

Shared e-Bike and e-Scooter Mid-Pilot Report

Economic: Over 50% of e-Scooter and e-Bike trips ended in a BIA or BRZ, showing that people are using the devices to largely access local business, which supports the local economy. The shared mobility companies hire full time, part time and contracted local staff to support their operations in Calgary.

Financial Capacity

Current and Future Operating Budget:

The operating cost for the shared mobility pilot is fully funded by each permitted operator. No additional funding is being requested with this update report.

Current and Future Capital Budget:

The capital cost for the shared mobility pilot is recovered by permit fees paid by each permitted operator. As permitted operators expand fleets or new operators apply for a permit, The City will collect new fees to fund additional capital expenditures as it relates to the pilot, such as the designated parking zones. No additional funding is associated with this update report.

Risk Assessment

Data from Alberta Health Services (AHS) shows that there has been a number of injuries associated with e-Scooter usage. The AHS data shows that serious e-Scooter injuries almost always occur to the rider and occur at a rate of 1 patient admitted to hospital per 100,000 rides. However, there are many more non-admitted e-Scooter injuries, at a rate of 1 per 1,500 rides. The City will continue to work with the U of C Cumming School of Medicine to monitor injury rates.

With Calgary having high e-Scooter ridership, it is expected that more e-Scooter companies will be attracted to Calgary and will deploy more e-Scooters in a similar geographic area. This increase in the number of e-Scooters could lead to an increase in the physical and visual clutter caused by the devices. The implementation of the designated parking zones should help mitigate some of the clutter. Administration has the ability to restrict how many devices are in a defined geographic area and can work with the shared mobility companies on strategically deploying the devices as to reduce their concentration.

REASON(S) FOR RECOMMENDATION(S): e-Scooters and e-Bikes provide mobility options for Calgarians. However, a number of safety and comfort concerns need to be addressed for those both using the devices, and for the other users in their environment. Using data and working with the mobility companies, Administration is able to make strategic decisions to address the issues that arose in the first half of the pilot. Administration will monitor the next half of the pilot to see what difference the changes made, and then make a recommendation for the future of shared mobility in Q4 2020.

ATTACHMENT(S)

1. Attachment 1 – Previous Council Direction / Policy
2. Attachment 2 - Shared e-Bike and e-Scooter Data
3. Attachment 3 – Proposed Text of a Bylaw to amend Bylaw 26M96, the Calgary Traffic Bylaw

Previous Council Direction / Policy

ADOPT, Moved by Councillor Woolley, Seconded by Councillor Farrell, that Councillor Woolley's Motion, C2018-0934 be adopted as follows:

NOW THEREFORE BE IT RESOLVED, that Council direct Administration to initiate a two-year pilot for bike share by September 2018 that will include:

- An intake process for interested operators to participate
- Data sharing requirements with permitted operators
- A pilot consisting of up to 10,000 bicycles, scooters or other personal mobility devices
- A performance-based system for permitted operators to gradually increase their fleet size, within set pilot limits
- A permit and fee structure that covers administrative costs to regulate and manage the pilot program
- Any other permit conditions to be imposed on bike share operators to ensure that the safety and convenience of roadway and sidewalk users is not unduly impacted

And report back to Council through the Transportation and Transit Committee with an update on the pilot in Q4 2019 and a final report with potential further recommendations no later than Q4 2020.

AND FURTHER BE IT RESOLVED that Council direct Administration to review the existing bylaw rules governing mobility devices such as scooters, skateboards, roller skates and personal mobility devices with electric motors and to bring forward any necessary bylaw amendments to facilitate the use of such devices no later than Q1 2019.

Shared e-Bike and e-Scooter Mid-Pilot Report

Contents

Page	Topic	Content	Data source
2	Ridership	How many people are using e-Scooters and e-Bikes	Mobility Data Specification (MDS)
3	Destinations	Where are people going	Mobility Data Specification (MDS)
5	Routes	How are people getting to their destinations	Mobility Data Specification (MDS)
7	311 Calls and Correspondence with Citizens	What are the concerns	311s and Citizen Correspondence
9	Public Engagement Survey	Why and how people are using the devices, and opinions on the devices	Citizen Survey
12	e-Scooter Injuries	How many, why and when are people being injured on e-scooters	Alberta Health Services Data

Ridership

Information was collected from the shared mobility companies in the mobility data specification (MDS) format. The data provides information on where and when a trip starts, ends and the route it took to get there. From this data set, The City can answer questions relating to how many people are using the devices, where are they going and how are they getting there. Figure 1 the ridership and usage of the shared e-bikes and e-scooters during the pilot period.

Vehicle	Start Date	End Date (end of ridership count)	Fleet	Trips	Users	Distance Travelled (km)
e-Bike (Lime)	Oct. 31, 2018	Oct 31, 2019	Lime 500	168,000	40,000	210,000
e-Scooter (Lime and Bird)	July 12, 2019 (Lime)	Oct 31, 2019	Lime 1,000	750,000	166,000	1,390,000
	July 26, 2019 (Bird)		Bird 500			
Total			2,000	918,000	206,000	1,600,000

Figure 1: e-bike and e-scooter ridership

Figure 2 shows the most common times for people to use an e-scooter or e-bike by day and time. The most common times to use the devices were between 4 p.m. and 7 p.m. on weekdays and between 1 p.m. and 7 p.m. on weekends.

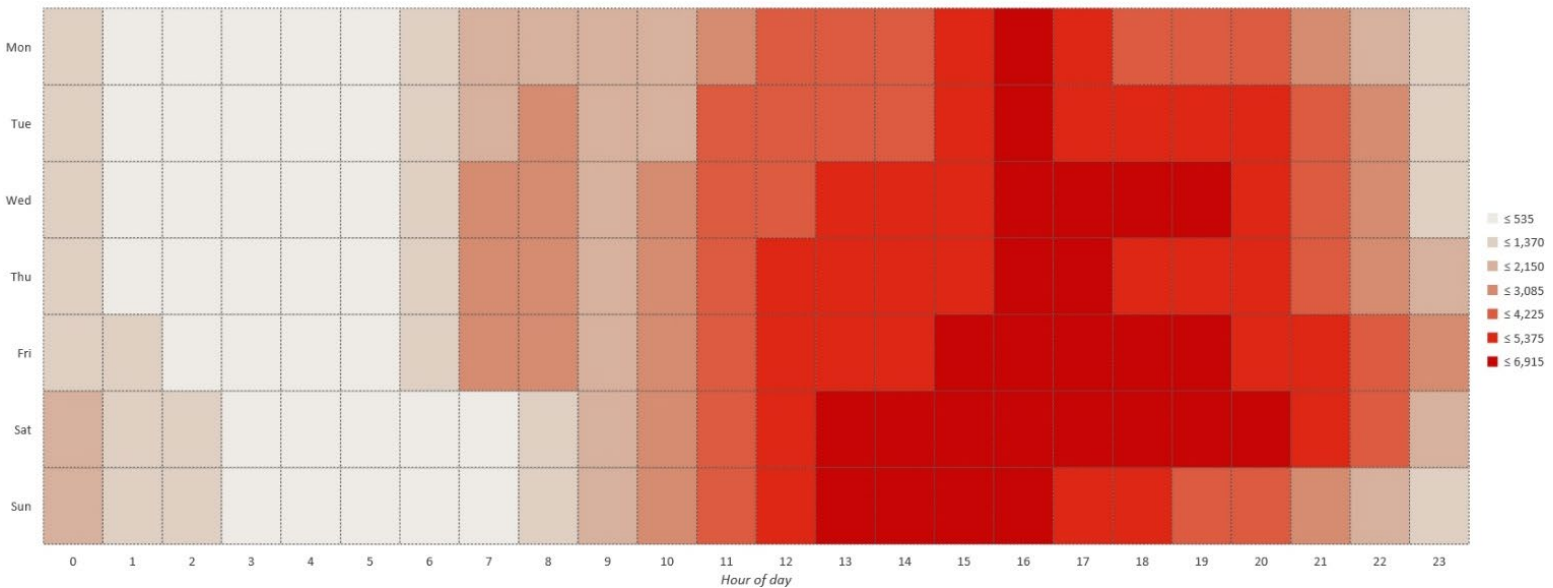


Figure 2: Days of the week and times of day people use e-bikes and e-scooters

Destinations

People are using e-scooters and e-bikes to travel to a variety of destinations in the inner city. The *E-Bicycle + E-Scooter, Trip End Locations map* on the next page displays these destinations. The most popular destinations include:

- Stephen Avenue
- Eau Claire
- Kensington
- East Village
- 17th Avenue SW
- 4th Street SW

Over 50% of shared e-scooter and e-bike destinations are within a BIA or BRZ.

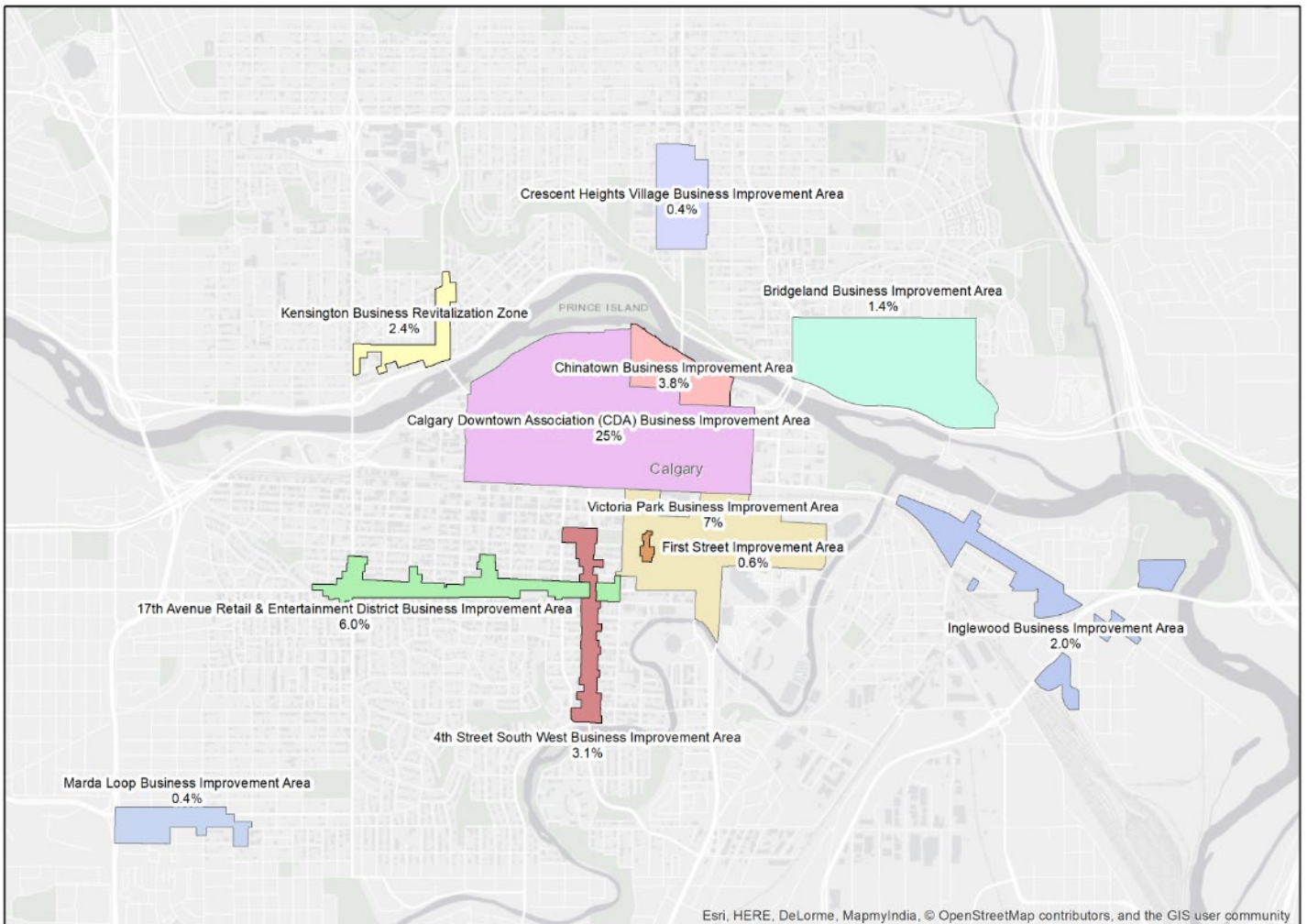
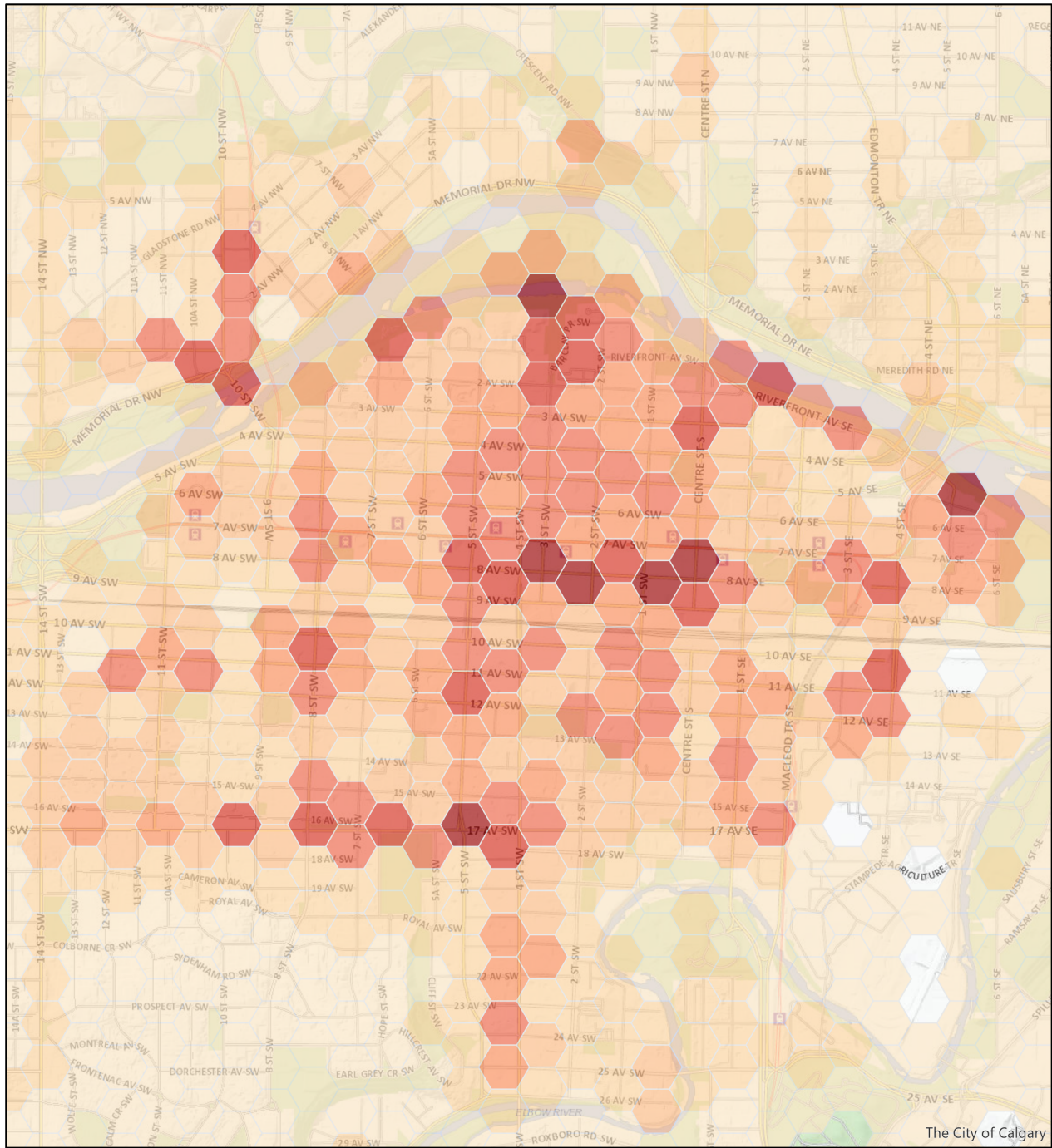


Figure 3: Percent of overall trip destinations in the city that end in a BIA or BRZ



Trip End Count

- 1-125
- 126-475
- 476-970
- 971-1500
- 1501-2200
- 2201-3455
- 3456-5635

E-Bicycle + E-Scooter Trip End Locations
July, August, September 2019

0 0.5 1

Kilometres
Scale: 1:17,500

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Routes

People are taking a variety of routes to get to their destinations. Approximately 60% of e-scooters and e-bikes are using the pathway network (30%) or cycling infrastructure (30%) to get to their destination. The rest of the volume of the trips (40%) is on sidewalks and or roadways with no cycling infrastructure. The most popular routes in the city are:

- The Bow River Pathway north of the downtown
- 8th Avenue SW between 7th Street SW and Macleod Trail SE
- 12th Avenue SW between 10th Street SW and 3rd Street SE
- 17th Avenue SW between 9th Street SW and 1st Street SW
- 5th Street SW between 17th Avenue and 9th Avenue SW

Figure 4 displays how the volume of e-Scooter and e-Bike east-west travel is distributed in the downtown and Beltline avenues. Avenues were measured between 11 Street SW and 2nd Street SE (Macleod Trail).

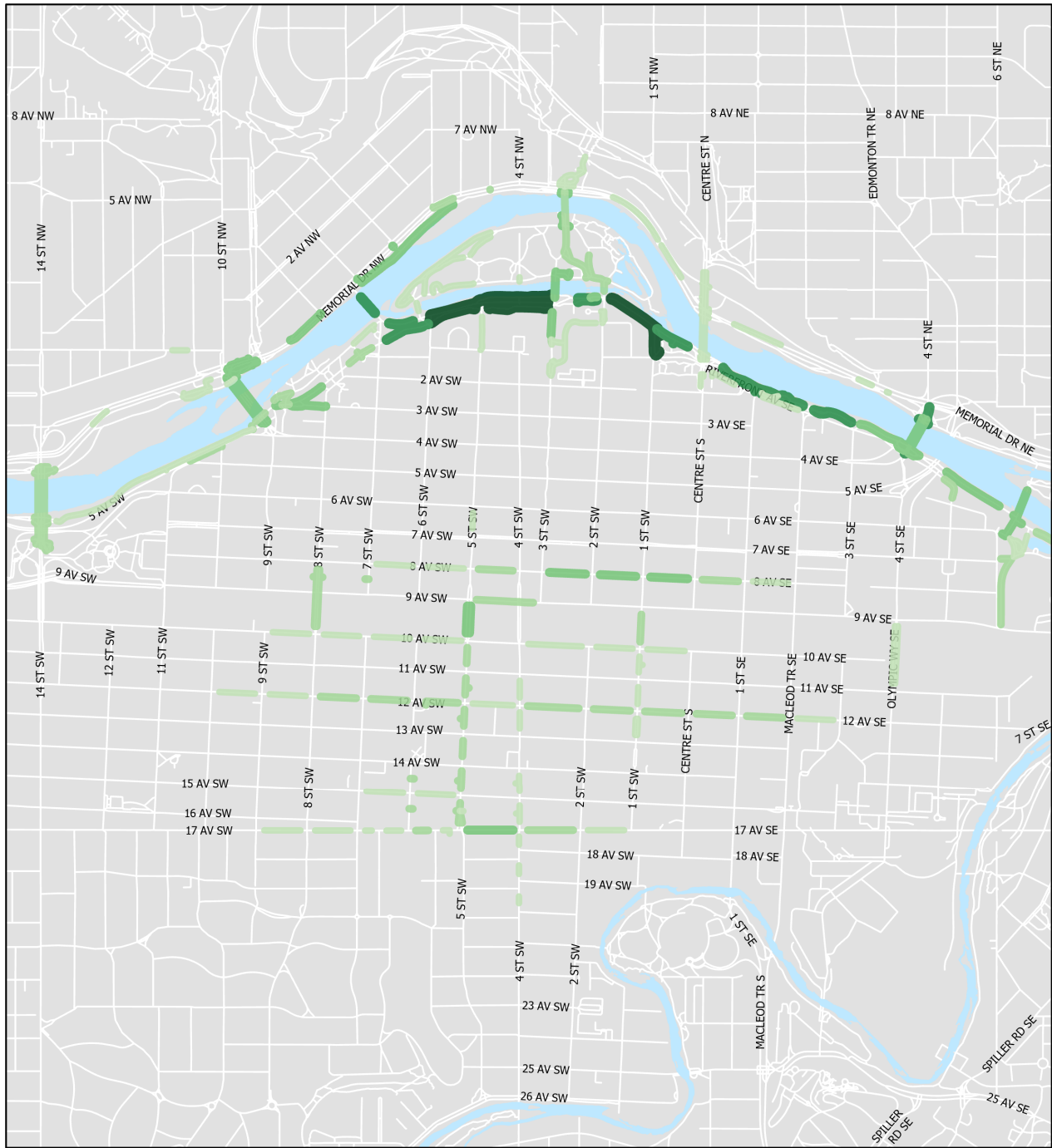
Avenue	Volume distribution of e-scooters and e-bikes on avenues
3 Ave S	5%
4 Ave S	3%
5 Ave S	4%
6 Ave S	5%
7 Ave S	4%
8 Ave S	14%
9 Ave S	5%
10 Ave S	9%
11 Ave S	6%
12 Ave S	15%
13 Ave S	4%
14 Ave S	6%
15 Ave S	8%
17 Ave S	13%
Total	100%

Figure 4: Volume distribution of e-scooters and e-bikes on east west avenues in the downtown and beltline

Figure 5 displays how the volume of e-Scooter and e-Bike north south travel is distributed in the downtown and Beltline streets. Streets were measured between 17 Avenue S and 3rd Avenue S. Only the streets that have a crossing between 9th and 10th Avenue S are compared.

Street	Volume distribution of e-scooters and e-bikes on streets
8 Street SW	17%
5 Street SW	32%
4 Street SW	15%
1 Street SW	14%
1 Street SE	8%
Macleod Trail (2 Street SE)	6%
Olympic Way / 4 Street SE	7%
Total	100%

Figure 5: Volume distribution of e-scooters and e-bikes on north south streets in the downtown and beltline



Route Use Count	Popular E-Bicycle + E-Scooter Routes
5000-7090	July, August, September 2019
7091-10740	
10741-16640	
16641-23330	
23331-34245	

Kilometres
Scale: 1:17,500

Calgary

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 Date Generated: November 22, 2019

311 Calls and Correspondence with Citizens

Since the e-scooter pilot launched in July 2019, there have been 70 direct emails and 281 service requests through 311 relating to shared e-scooters. In comparison, since the launch of the e-bikes there were 14, 311 calls between Oct 2018 and July 2019 regarding e-Bikes.

Four main themes emerged in the 311 data:

- **Parking** - improperly parked scooters, scooters on private property, abandoned scooters
- **Undesirable behavior** - double riding, unsafe practices, passing too close
- **Sidewalk riding** - complaints/dislike for sidewalk riding, not yielding to pedestrians
- **Other** - general inquiries, feedback about the pilot, rule clarification, enforcement

Theme	Parking	Undesirable Behaviour	Sidewalk Riding	Other	Total
Total Number of 311's	60 (21%)	77 (27%)	109 (39%)	35 (12%)	281 (100%)

Figure 6: Number of 311 calls relating to e-Scooters (July to October 2019)

Figure 7 depicts a week by week representation of feedback via 311 and direct email. Numbers indicate how many instances of 311 and/or direct email feedback were received in that week.

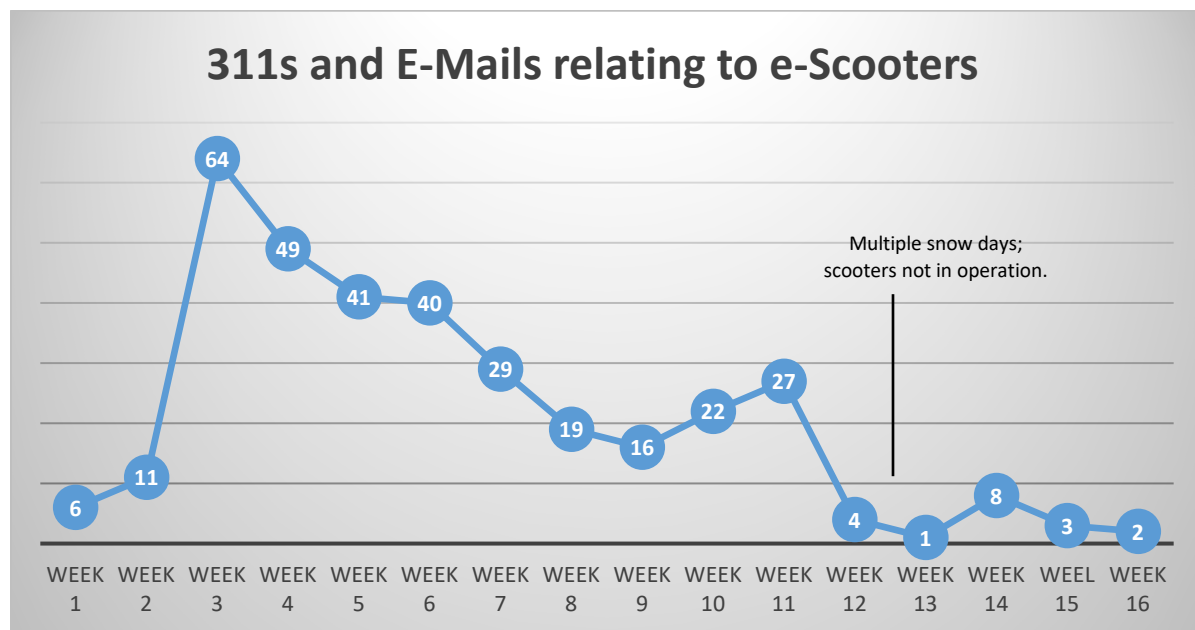
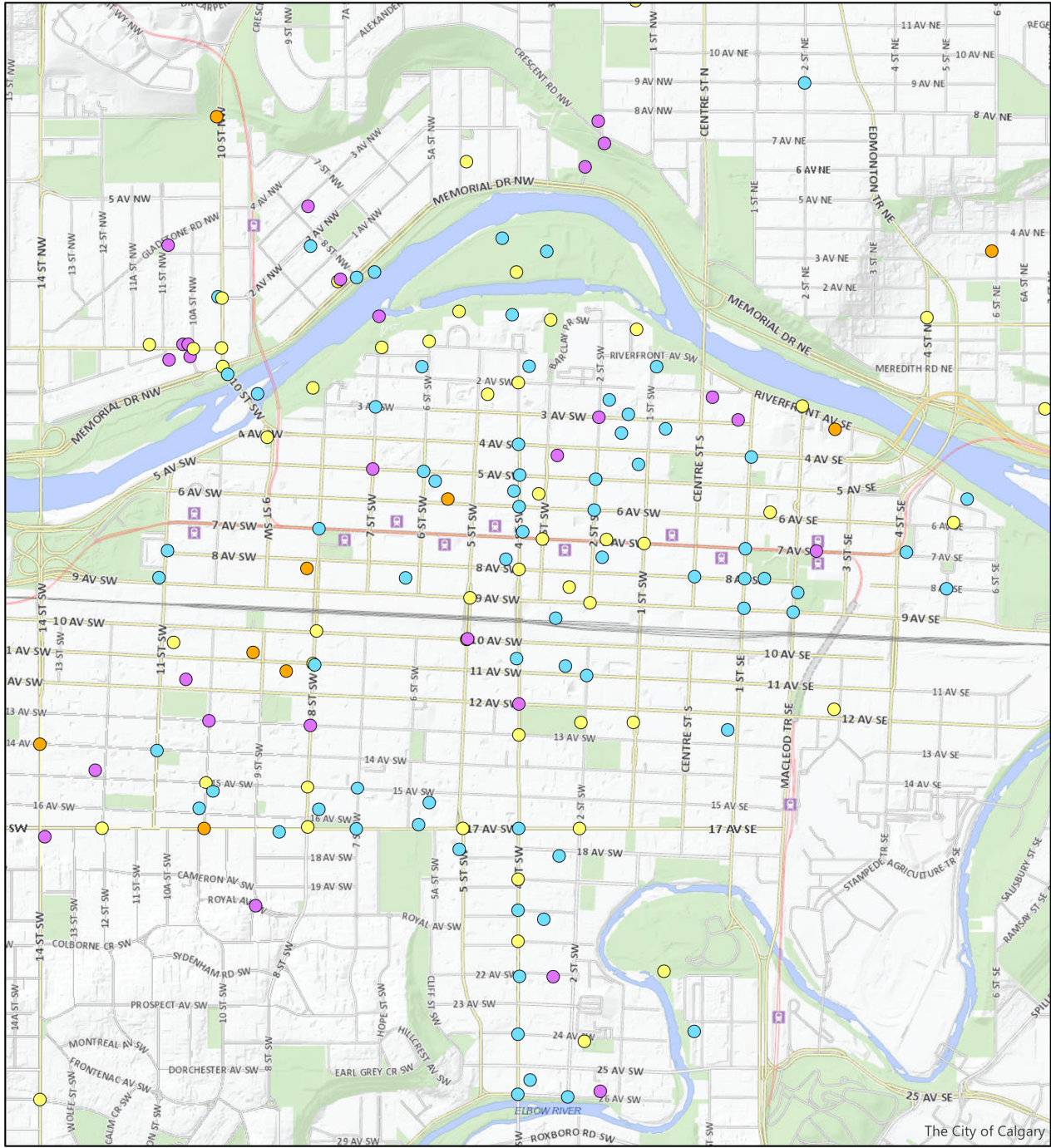


Figure 7: 311s and Emails relating to e-Scooters (July to October 2019)

Of the 281 311 inquiries, 214 were location specific. The location specific 311s are mapped on page 8. The *311 Calls Concerning e-Scooters* map indicates that concerns over sidewalk riding trend towards areas of higher pedestrian traffic, with narrower sidewalks that are lacking in dedicated infrastructure such as 4 Street SW and 17 Avenue SW. Bad behavior concerns are also found in areas with high pedestrian traffic, such as along the Bow River Pathway.



311 Call Reason		311 Calls Concerning E-Scooters	
●	Sidewalk Riding - 96		
●	Bad Behaviour - 62		
●	Parking - 35		
●	Other - 21		

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Public Engagement Survey

The City conducted a shared e-Scooter and e-Bike survey from September 23rd to October 6th, 2019 to understand what citizens thought about the e-Bike and e-Scooter pilot. Over 9,000 people responded to the survey. The full Stakeholder Report can be found *online*.

About two thirds of the survey participants have tried the e-Scooters. Those who have used it have tended to use it for five to fifteen trips. 86% of people using a shared device preferred to use e-Scooters over e-Bikes; the main reason people had this preference was that e-Scooters were “more fun”

4. Have you used a shared scooter that is a part of Calgary's Shared Electric Scooter pilot? (n=9,935)

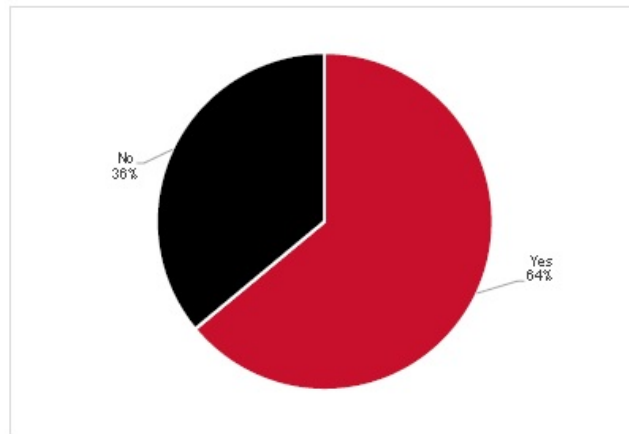


Figure 8: Number of survey participants who have used the e-Scooters

Of those e-Scooter users, 90% feel comfortable operating on a pathway; 81% feel comfortable operating on a bike lane or cycle track; 56% feel comfortable operating on a sidewalk; and 20% feel comfortable operating on a roadway.

7. From 1 to 5, 1 being the least comfortable and 5 being the most comfortable place to ride a scooter, please rate your comfort with the following:

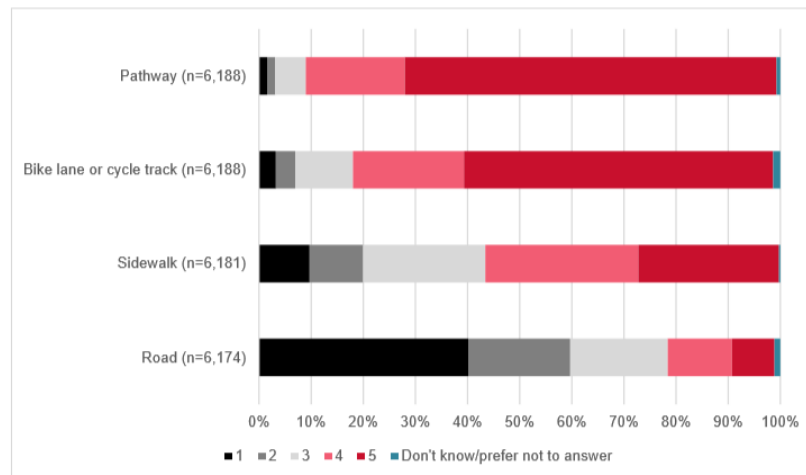


Figure 9: Where users feel most and least comfortable operating e-Scooters

Shared e-Bike and e-Scooter Data

The MDS data shows where people are going, but not why they are going there. The survey shows why users were making e-Scooter trips. The most common trip purpose was for running errands, to get to appointments, getting to and from work, dining or shopping trips, and exercise/recreation.

6. For what purpose do you usually use a shared scooter? (NOTE: "Other" responses have not yet been analysed so these results may change slightly) (n=6,185)

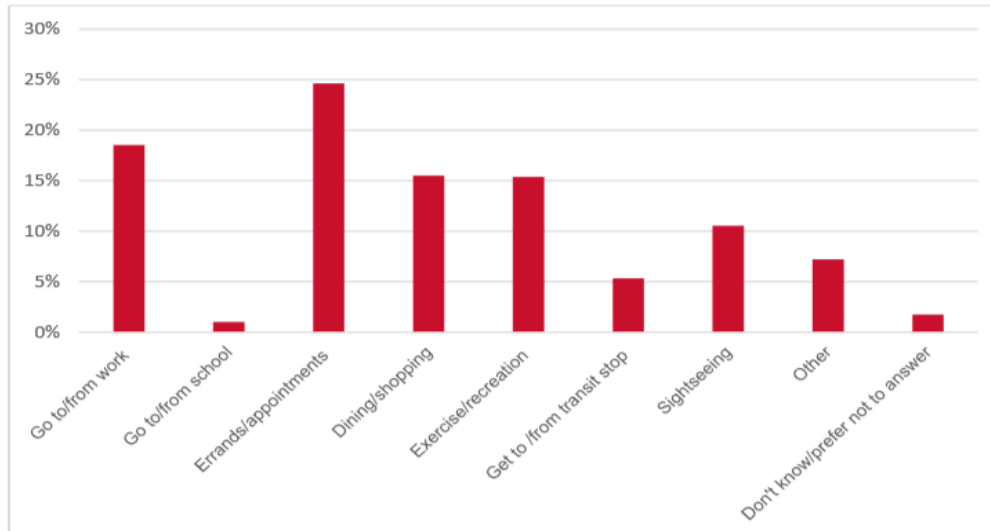


Figure 10: Survey results for trip purpose

Users identified which transportation method they would have used, had e-Scooters not been available. Approximately fifty-five percent of e-Scooter trips would have been made by walking and one third would have been made by driving.

2. Thinking about your most recent shared scooter trip, if you hadn't used a shared scooter, how would you have traveled instead? (NOTE: "Other" responses have not yet been analysed so these results may change slightly) (n=6,285)

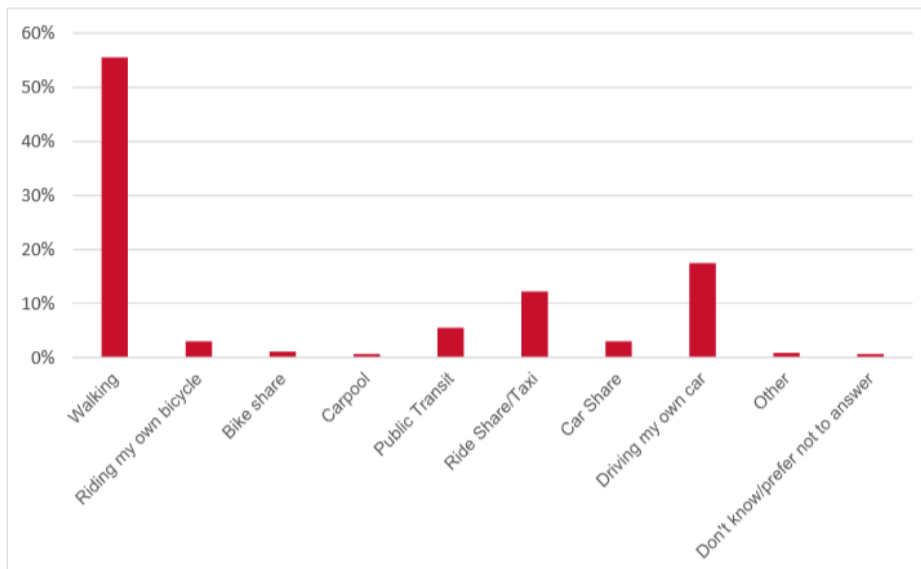


Figure 11: Types of trips e-Scooters are replacing

e-Scooter users reported they could find an e-Scooter most of the time (46%), almost always (28%) or half of the time (20%). Less than 1% could never find an e-Scooter.

8. How often could you find a shared scooter when you wanted one? (n=6,136)

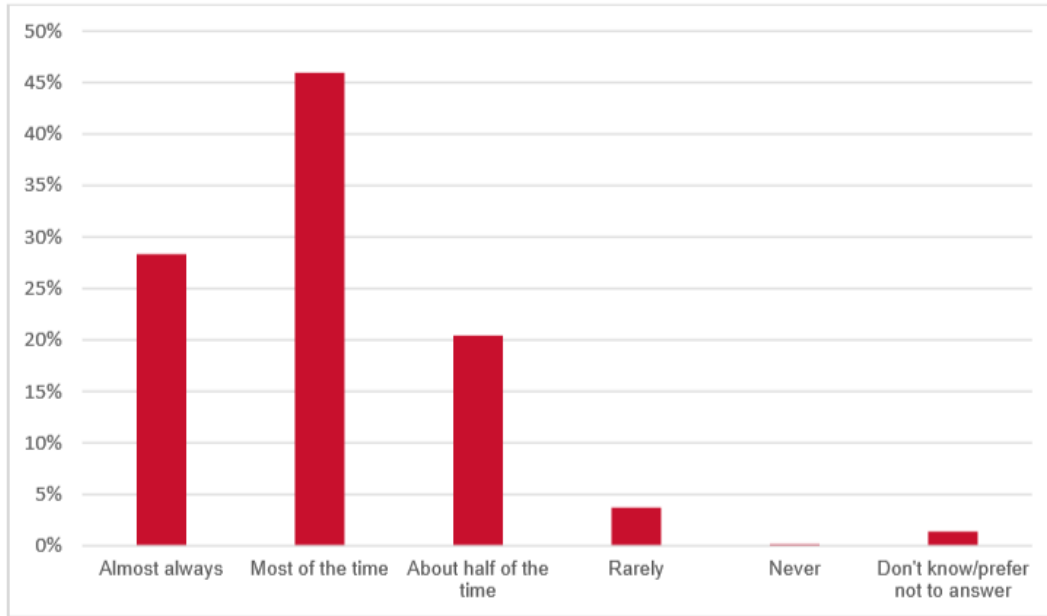


Figure 12: How often e-Scooter users could find an e-Scooter when they wanted one.

Qualitative Data

Participants were asked if there was other information they would like to convey to the project team. The most common themes from this general question were:

- Like the idea/option of having the scooters available
- Scooters shouldn't be allowed on the sidewalk
- Have seen people breaking the rules
- Scooters are useful/it's good to have alternative ways to get around
- Users are inconsiderate
- Scooters aren't parked in a considerate way/littered all over the place

e-Scooter Injuries

The City of Calgary commissioned an e-Scooter injury study with University of Calgary, Cumming School of Medicine using funds collected from the shared mobility companies. The study reviewed e-Scooter injuries that required ambulances in July, August and September 2019. There were a total of e-Scooter 33 injuries requiring an ambulance during this time period. The chart below indicates the time of day when these accidents occurred.

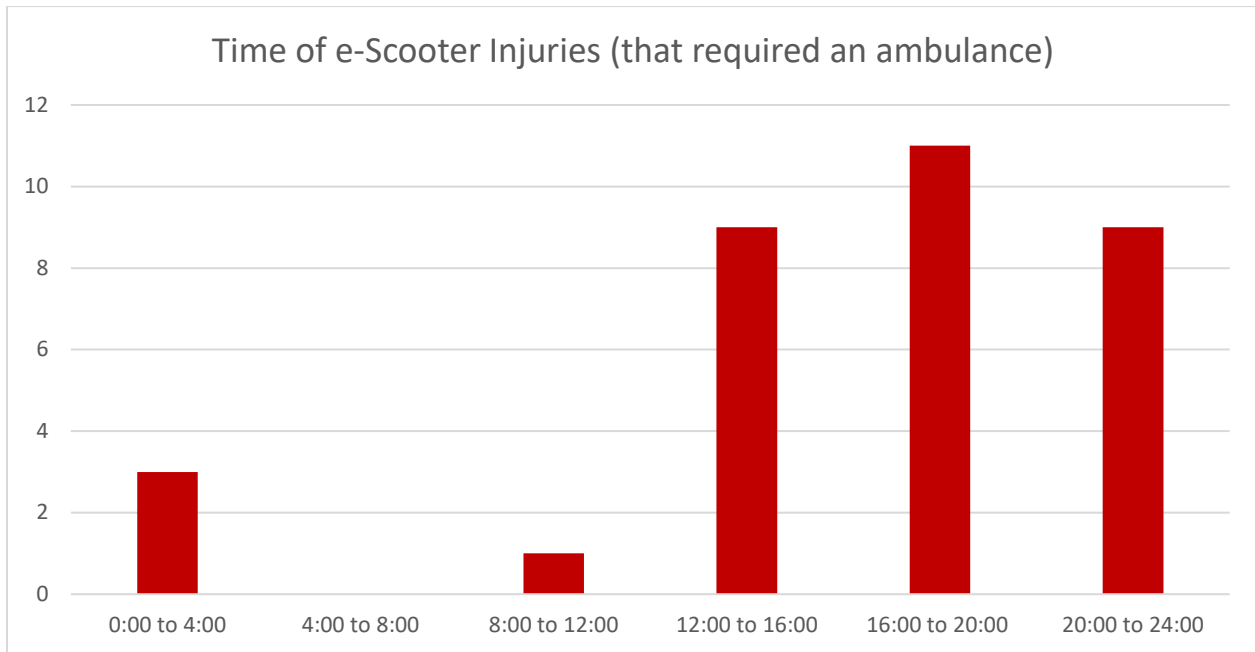


Figure 13: Time of Day when e-Scooter injuries occurred (July to September 2019)

The City commissioned the study to understand who, how, when and why people were being injured on e-Scooters. The key findings from the study were:

- 32 out of the 33 injured were riding on the e-Scooter, one incident involved a pedestrian
- Speed, losing control, hitting a pothole or stationary object (e.g. a pole) were the most common cause of injury.
- Ethanol level was measured in nine patients. Eight out of nine patients tested positive for alcohol in their system.
- 17 of those injured were females and 16 were males
- The average age of the injured person was 34
- Two incidents involved a motor vehicle
- One out of 33 users was wearing a helmet
- Seven of the 33 were admitted to hospital – all seven were riding an e-Scooter
- Nine of the incidents occurred on the sidewalk, seven on the road, five on a pathway, one in a bicycle lane, two occurred at other locations, nine were unknown locations.
- Five out of 33 were double riding
- Most injuries occurred between the hours of 6 p.m. and 10 p.m.
- Most injuries (19) occurred in August
- Mondays and Saturdays were the most common days for injuries

Comparative Analysis

A comparative analysis looked at injuries requiring an ambulance that involved bicycles and/or motor vehicles. It is important to note that these numbers do not factor in the rate of travel by mode. There are more bicycle trips and driving trips than there are e-Scooter trips. However, it is difficult to compare rates of injury directly as the number of e-Scooter trips can be estimated more precisely using the MDS data, while trip rates from other modes have to be estimated using different methods.

Transportation Injuries Requiring an Ambulance between July 8 and Oct. 1, 2019								
E-Scooters			Bicycles			Motor Vehicles		
Emergency	ICU	Fatality	Emergency	ICU	Fatality	Emergency	ICU	Fatality
33	0	0	197	4	1	463	10	1

Figure 14: AHS data on number of transportation injuries requiring an ambulance

It is estimated that the injury rate for e-Scooters in Calgary is:

- 1: 1,500 e-scooter trips results in an emergency room visit.
- 1: 100,000 e-scooter trips requires hospitalization (staying overnight at the hospital)

Medical studies in the USA

While the City of Calgary / University of Calgary study is the first Canadian municipal study to be undertaken on e-scooters, there have been a number of studies conducted in the United States. A 2018 study from the Austin Public Health Department and the Centres for Disease Control and Prevention (CDC) found that of the patients surveyed, 30% of total injuries occurred on a person's first ride.

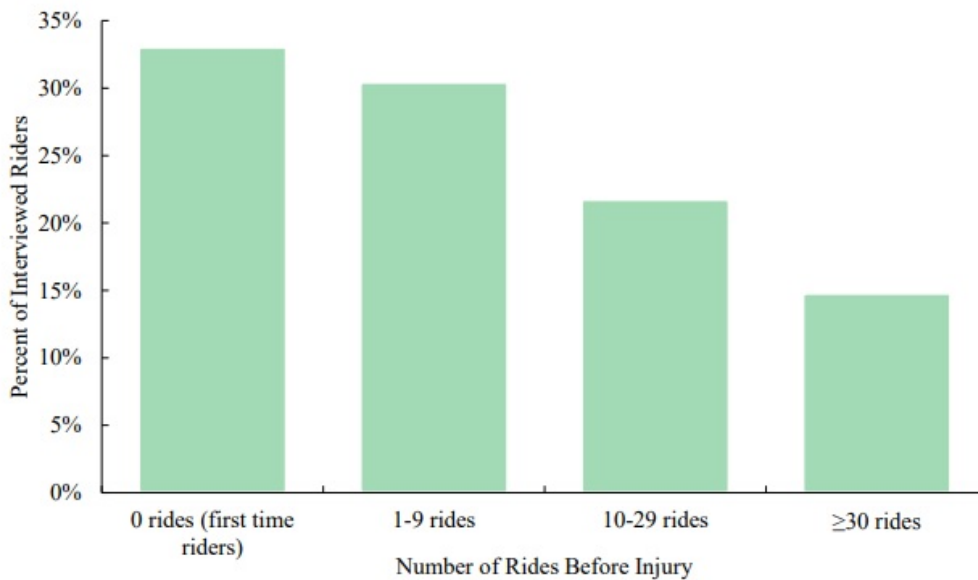


Figure 15: Percent of Interviewed Riders by Number of Scooter Rides before Injury (Dockless Electric Scooter-Related Injuries Study, 2018)

Proposed Text of a Bylaw to amend Bylaw 26M96, the Calgary Traffic Bylaw

1. Bylaw 26M96, the Calgary Traffic Bylaw, as amended, is hereby further amended.

2. In section 2:

(a) the following is added after subsection 2(1)(o.1) as subsection 2(1)(o.2):

“(o.2) “e-scooter” means an electric-powered vehicle:

- (i) that has been authorized or granted a permit to operate on the *street* by the Province of Alberta;
- (ii) consisting of a footboard mounted on two or three wheels and a long steering handle;
- (iii) is designed to be operated from a standing position; and
- (iv) while capable of being propelled by muscular power, may be propelled by one or more electric motors;”

(b) subsection 2(1)(ak.2) is deleted and replaced with the following:

“(ak.2) “scooter” means a vehicle:

- (i) consisting of a footboard mounted on two or three wheels and a long steering handle;
- (ii) propelled by resting one foot on the footboard and pushing the other against the ground; and
- (iii) is designed to operate from a standing position;”

3. In section 29:

(a) the following is added after subsection 29(5) as subsection 29(6):

“(6) A person must not park a vehicle on a sidewalk or boulevard except for bicycles or e-scooters.”

4. In section 36.2:

(a) subsection 36.2(3)(c) is deleted and replaced with the following:

“(c) a scooter or e-scooter;”

Proposed Text of a Bylaw to amend
Bylaw 26M96, the Calgary Traffic Bylaw

(b) subsection 36.2(4.1) is deleted and replaced with the following:

“(4.1) A person operating a motor vehicle on a roadway must yield the right of way to a person riding or using a bicycle, skateboard, scooter, e-scooter, in-line skates or roller skates within an exclusive bicycle lane.”

5. In section 41.1:

(a) subsection 41.1(1) is deleted and replaced with the following:

“(1) The Traffic Engineer may designate crosswalks upon which a person may ride or operate a bicycle, skateboard, scooter, e-scooter, in-line skates or roller skates to cross the roadway.”

(b) subsection 41.1(3)(ii) is deleted and replaced with the following:

“(ii) a person riding or using a bicycle, skateboard, scooter, e-scooter, in-line skates or roller skates;”

(c) subsections 41.1(4)(ii) is deleted and replaced with the following:

“(ii) a person riding or using a bicycle, skateboard, scooter, e-scooter, in-line skates or roller skates.”

6. In section 42:

(a) subsections 42(6), (6.1) and (6.2) are deleted and replaced with the following:

“(6) Despite subsection (1), a person may use in-line skates, roller skates, a scooter, e-scooter, or a skateboard on a sidewalk.

(6.1) Despite subsection (6), a person must not use in-line skates, roller skates, a scooter, e-scooter, or a skateboard on a sidewalk if the Traffic Engineer has posted a traffic control device indicating that skateboarding, scooters, e-scooters, in-line skates or roller skates are not allowed on the sidewalk of the block in which the traffic control device is posted.

(6.2) A person using in-line skates, roller skates, a scooter, e-scooter, or a skateboard on a sidewalk must not use the in-line skates, roller skates, a scooter, e-scooter, or a skateboard that interferes with another user of the sidewalk.”

(b) the following is added after subsection 42(6.2) as subsections 42(6.3), (6.4), (6.5) and (6.6):

“(6.3) A person using in-line skates, roller skates, a scooter, e-scooter, or a skateboard on a sidewalk shall operate the vehicle as near as practicable to the edge of the roadway unless that person is in the process of crossing to an intersecting roadway, pathway or sidewalk.

Proposed Text of a Bylaw to amend
Bylaw 26M96, the Calgary Traffic Bylaw

- (6.4) A person who is operating an e-scooter must not carry any passengers on the e-scooter.
- (6.5) A person who is operating an e-scooter must ensure that they do so in a manner to avoid collision with another user of the sidewalk or street.
- (6.6) A person must not operate an e-scooter in a reckless manner, having regard to the circumstances.”

(c) the following is added after subsection 42(7) as subsection 42(8):

- “(8) A person driving a vehicle that is about to enter:
 - (a) onto a roadway from an alley or driveway; or
 - (b) into an alley or driveway;shall yield the right of way to an e-scooter on the sidewalk or pathway.”

7. In section 44:

(a) subsection 44(3) is deleted and replaced with the following:

- “(3) Subject to subsection 36.2(3), a person must not operate or use a skateboard, scooter, e-scooter, in-line skates or roller skates on a roadway, except:
 - (a) while crossing such roadway on a crosswalk or multi-use crossing; or
 - (b) while crossing an intersection between exclusive bike lanes.”

(b) the following is added after subsection 44(3) as subsections 44(4) and (5):

- “(4) To cross a roadway at a crosswalk, a person using an e-scooter must either dismount and cross the roadway as a pedestrian, or must:
 - (a) stop and yield to any vehicle or pedestrian on the roadway or crosswalk before beginning to cross, and
 - (b) begin to cross where there is a pedestrian traffic control signal that shows the word or symbol indicating “WALK”, or
 - (c) begin to cross where there is no pedestrian traffic control signal and where there is a traffic control signal showing a green light alone.
- (5) A person riding an e-scooter that is about to enter onto a roadway from a pathway or a sidewalk must, unless otherwise indicated by a traffic control device, yield to any vehicle or pedestrian on the roadway.”

Proposed Text of a Bylaw to amend
Bylaw 26M96, the Calgary Traffic Bylaw

8. In section 59:

(a) the following is added after section 59.2 as section 59.3:

“59.3 (1) In regards to an e-scooter, “owner” includes any person or corporation who has been issued a permit pursuant to this bylaw for e-scooter share operations.

(2) If an e-scooter is involved in an offence under the bylaw, the owner of that e-scooter, is guilty of that offence.

(3) Notwithstanding subsection (2), the operator of the e-scooter may be liable for any offences involving the operation of that e-scooter.

(4) Subsection (2) does not apply if the owner of the e-scooter satisfies the Court that the owner was not operating the e-scooter at the time of the offence, and that the person who was operating the e-scooter at the time of the offence did so without the owner’s express or implied consent.”

9. In Schedule “A”, under the headings indicated, the following is deleted:

SECTION	OFFENCE	EARLY PAYMENT AMOUNT 1 (if paid within 10 days after the date of the offence)	EARLY PAYMENT AMOUNT 2 (if paid 10 to 30 days after the date of the offence)	SPECIFIED PENALTY
“42(6.1)	Use skates, scooter or skateboard on sidewalk where prohibited			\$75.00
42(6.2)	Use skates, scooter or skateboard on sidewalk in a manner that interferes with a pedestrian			\$150.00”

and replaced with:

Proposed Text of a Bylaw to amend
Bylaw 26M96, the Calgary Traffic Bylaw

SECTION	OFFENCE	EARLY PAYMENT AMOUNT 1 (if paid within 10 days after the date of the offence)	EARLY PAYMENT AMOUNT 2 (if paid 10 to 30 days after the date of the offence)	SPECIFIED PENALTY
42(6.1)	Use skates, scooter, e-scooter or skateboard on sidewalk where prohibited			\$75.00
42(6.2)	Use skates, scooter, e-scooter or skateboard on sidewalk in a manner that interferes with another user of the sidewalk			\$150.00
42(6.4)	Carrying passenger on an e-scooter			\$75.00
42(6.5)	Colliding with another user of the sidewalk or street			\$400.00
42(6.6)	Operating in a reckless manner, having regard to the circumstances			\$400.00"

10. This Bylaw comes into force on [date].

Transportation Report to
SPC on Transportation and Transit
2019 December 18

ISC: UNRESTRICTED
TT2019-1431

Calgary Pathway and Bikeway Plan Update

EXECUTIVE SUMMARY

This report presents an update to the *Calgary Pathway and Bikeway Plan*, which was approved by Council in 2001.

The update includes the development of Always Available for All Ages & Abilities (5A) Network principles, for people of all ages and abilities to walk and wheel around Calgary communities. It supports travel for all purposes including to work, school, social, recreational or commercial activities.

The 5A Network provides long-term direction for the active transportation network in Calgary, consisting of off-street pathways and on-street bikeways. A set of network principles provide the framework to build safe, accessible, affordable, year-round options for transportation and recreation for Calgarians. Administration plans to bring forward the 5A Network map to replace the Primary Cycling Network in the update to the Calgary Transportation Plan in 2020.

ADMINISTRATION RECOMMENDATION:

That the Standing Policy Committee on Transportation and Transit recommends that Council:

1. Approve the 'Always Available for All Ages & Abilities' (5A) Network Guiding Principles for prioritized walking and wheeling infrastructure in Calgary.

PREVIOUS COUNCIL DIRECTION / POLICY

At the 2018 February 26 Council Meeting, Report TT2018-0060, Council adopted the following recommendations:

1. Receive the status update of the Calgary and Area Pathway and Bikeway Plan for information.
2. Appoint a City of Calgary Ward Councillor to the Pathways and Bikeways Project Steering Committee.

See Attachment 1 for Previous Council Direction from 2014-2017.

BACKGROUND

In 2000 and 2001, Calgary City Council adopted the *Calgary Pathway and Bikeway Plan*. The plan provided a map of built and approved pathways and bikeways, as well as guiding principles related to the planning, design and management of the network. It also outlined an implementation strategy.

Since the *Calgary Pathway and Bikeway Plan's* adoption, there have been numerous changes to policy framework at The City. For a comprehensive list of updated plans and policies, see Attachment 1.

Over time, Calgary has grown and the needs of Calgarians have changed. Many of the connections identified in the original *Calgary Pathway and Bikeway Plan* and in the Primary Cycling Network (CTP, 2009) have been constructed and changes to communities have

Calgary Pathway and Bikeway Plan Update

rendered some planned routes obsolete. Additionally, the Cycling Strategy (2011) included updating the *Calgary Pathway and Bikeway Plan* as an action item (6.1.1, C1).

INVESTIGATION: ALTERNATIVES AND ANALYSIS

The project framework was developed and approved by Council in November 2014. An internal review process was established to guide the development of the updated plan. The process included the formation of two internal groups: a Steering Committee and a Technical Working Group. Both groups provided input on the direction of the plan and support to the project team.

Figure 1 summarizes the framework identified for the four phases of the project.

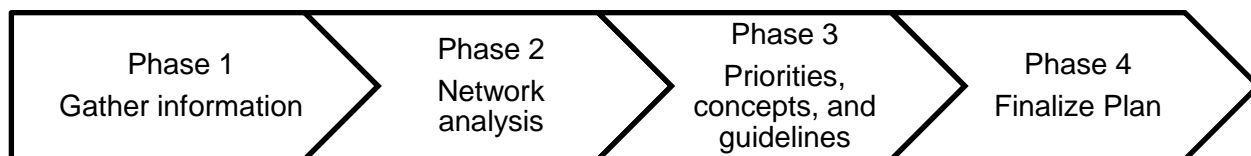


Figure 1

To learn more about Phases 1-3, which were the subjects of previous reports to Council, refer to Attachment 1.

Phase 4: Finalize Plan

Engagement with Calgarians, network analysis, data from previous cycling projects, Council's priorities from One Calgary, academic research and an environmental scan from other municipalities confirmed the need for an Always Available for All Ages and Abilities (5A) Network in Calgary as part of the update to the *Calgary Pathway and Bikeway Plan*.

The design of the 5A Network will support the following five principles, based on feedback from Calgarians, to:

- Separate people by their speed
Providing separation between people travelling at different speeds improves safety, predictability and comfort. Where appropriate, people will be separated to improve their experience travelling on the 5A Network.
- Improve visibility
Lighting, signage and pavement markings encourage people to use public spaces and provides visibility on roadways, pathways and in parks. They help make people visible to each other, help identify hazards like water, ice, cracks and other debris along routes.
- Make it reliable
Well-maintained pathways and bikeways will encourage more people to use them throughout the year, regardless of the weather conditions.
- Be accessible for everyone
An accessible city benefits everyone. Accessible pathways and bikeways enable people of all abilities to travel around Calgary. Accessibility is improved by the removal of barriers that currently exist across the network. Barriers can be off-set gates, major roadways,

Calgary Pathway and Bikeway Plan Update

waterways, steep hills and uneven surfaces. Reducing or removing these barriers improves accessibility.

- Make it easy to use
Signs and pavement markings help people make decisions about their route and confirm they are heading in the right direction. Improved signage and wayfinding will help Calgarians get to community destinations.

The 5A Network Guiding Principles are described in detail in Attachment 2, Always Available for All Ages & Abilities (5A) Guiding Principles Report. The principles outline how to update existing and build new pathways and bikeways to improve user experience.

If the 5A Network principles are approved, Administration will identify and update existing policies and guidelines to incorporate the principles. Administration will continue to work with developers and City of Calgary staff to educate stakeholders about the network principles.

Administration plans to bring forward the 5A Network Map to replace the Primary Cycling Network in the update to the Calgary Transportation Plan in Q2 2020.

Stakeholder Engagement, Research and Communication

Over 6,500 Calgarians from 180 communities and 14 wards participated in the two phases of engagement. Engagement events sought to capture input from a broad audience of Calgarians including seniors and families, youth and children, vulnerable populations, Calgarians who do not identify as cyclists, and members of the public.

The goals of public engagement were to gather input about how Calgarians currently use the pathway and bikeway network, what barriers they encounter when using the network, how to prioritize the build-out of the network, and to select the types of pathways and bikeways they would be most likely to use.

A summary of public input is included in Attachment 3, 'What We Did' Report. The 'What We Heard' reports from both phases of engagement can be found online at engage.calgary.ca/pathwaybikeway.

Some stakeholders have provided letters of support for the 5A Network Principles. Please see Attachment 4.

Strategic Alignment

Pathways and bikeways connect our communities, providing Calgarians of all ages and abilities with safe and accessible year-round opportunities to walk, run, ride, and use mobility devices throughout the city. The 5A Network principles support travel for any reason, including to work, school, social, recreational or commercial activities and provides connectivity to other transportation services like public transit and parking.

The 5A Network principles support all five Citizen Priorities identified in One Calgary and align with the goals outlined in the Municipal Development Plan and the Calgary Transportation Plan. Refer to Attachment 1 for the complete list of supporting plans, policies and strategies.

Calgary Pathway and Bikeway Plan Update

Social, Environmental, Economic (External)

Social: Calgarians of all ages and abilities want walkable communities, with convenient and attractive connections to neighbours, shopping, services, cultural experiences, natural spaces, workplaces, public transit and educational opportunities. Pathways and bikeways provide the ability to connect with these destinations, support healthy lifestyles, and reduce and prevent social isolation.

Environment: Creating a city where Calgarians have safe and accessible places to walk and wheel will result in improved water and air quality and decrease greenhouse gas emissions associated with vehicle use. More Calgarians walking and wheeling supports long-term strategies for reducing Calgary's per capita ecological footprint. A resilient and adaptive transportation network for people walking and wheeling assists in moving goods and services during times of severe weather events.

Economic: Providing safe, low-cost, active transportation and recreation options to Calgarians can help attract and retain employees which can help attract, retain and nurture business in Calgary. This supports Calgary as a city where people want to live, visit, and invest, and keeps Calgary a competitive international city. The 5A Network provides all Calgarians, regardless of income, age or ability, affordable and healthy options for transportation and recreation.

Financial Capacity

Current and Future Operating Budget:

Administration will work within approved operating budgets to best achieve the 5A principles for the broadest possible range of the identified network.

Additional budget requests are not part of the recommendations presented in this report.

Current and Future Capital Budget:

Administration will work within approved capital budgets to best achieve the 5A principles for the broadest possible range of the identified network.

Future capital investment will be required to build out the 5A Network over time.

Additional budget requests are not part of the recommendations presented in this report.

Risk Assessment

The potential risks of not implementing the principles of the 5A Network include:

- Reduced ability to provide safe, accessible, connected and affordable year-round transportation and recreation options for Calgarians
- Increased risk of not meeting MDP & CTP goals related to providing safe, accessible and affordable travel options for Calgarians
- Increased risk of not meeting Climate Mitigation Actions from the Climate Resilience Strategy
- Reduced ability to deliver consistent rationale related to user experience for decision making for sidewalks, pathways and streets projects.

Transportation Report to
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Calgary Pathway and Bikeway Plan Update

The potential risks of implementing the principles of the 5A Network include:

- Maintaining service level expectations along a growing network with constrained budgets

REASON(S) FOR RECOMMENDATION(S):

Direction from Council to invest in the safety and mobility of Calgarians by providing 'Always Available for All Ages & Abilities (5A) network principles for prioritized walking and wheeling infrastructure in Calgary to support safe, accessible, and affordable year-round transportation and recreation options.

ATTACHMENT(S)

1. Attachment 1 – Project Background
2. Attachment 2 – Always Available for All Ages & Abilities (5A) Network Guiding Principles Report
3. Attachment 3 – 'What We Did' Engagement Report
4. Attachment 4 – Letters of Support

Previous Council Direction/Policy

At the 2014 March 10 Council Meeting, Notice of Motion 2014-07, Council adopted the following recommendations:

1. Direct Administration to develop a project charter for creating a city-wide network plan (excluding the Centre City), which will address:
 - a) Principles for network design and route selection that considers both on and off-street solutions;
 - b) Approaches to data, research and analysis related to route and network planning;
 - c) Approaches to public engagement; and
 - d) Timeline to complete a city-wide network plan.
2. Direct Administration to bring the charter to the SPC on Transportation and Transit no later than 2014 October.

At the 2014 November 03 Council Meeting, Report TT2014-0686, Council adopted the following recommendations:

1. Adopt the Pathway and Bikeway Plan Framework; and
2. Request that the City Clerk circulate Members of Council as to their interest in serving on the Steering Committee, to return to Council with the results as soon as possible.
3. Appoint Councillors Pincott and Woolley to the Calgary Pathway and Bikeway Steering Committee (C2014-0923).

At the 2016 July 4 Council Meeting, Report TT2016-0444, Council adopted the following recommendation:

1. Direct Administration to report back through the SPC on Transportation and Transit with a status update of the Pathways and Bikeways Plan in December 2017.

At the 2017 December 18 Council Meeting, Report TT2017-1239, Council adopted the following recommendation:

1. Direct Administration to report back through the SPC on Transportation and Transit with the Cycling Strategy Annual Report, Calgary Pathways and Bikeways Plan Update and the Pedestrian Strategy Update no later than Q1 2018.

Changes in Policy Framework at The City of Calgary

In 2000 and 2001, City Council adopted the *Calgary Pathway and Bikeway Plan*. The plan provided a map of built and approved pathways and bikeways, as well as guiding principles related to the planning, design and management of the network. It also outlined an implementation strategy.

Since the *Calgary Pathway and Bikeway Plan's* adoption, there have been numerous changes to policy framework at The City.

Project Background

The Calgary Transportation Plan (CTP) and the Cycling Strategy provided additional vision and direction to update the *Calgary Pathway and Bikeway Plan*. Other plans, policies and strategies have changed how Administration provides services for Calgarians and influence how pathways and bikeways in the city are planned, designed, constructed and maintained.

- Parks Open Space Plan (2003)
- Centre City Plan (2007)
- Calgary Transportation Plan (CTP)/Municipal Development Plan (MDP) (2009)
- 2020 Sustainability Direction (2010)
- Cycling Strategy (2011)
- Pathway Safety Review Report (2011)
- Complete Streets Policy/Guide (2011)
- Rocky View County / City of Calgary Inter-municipal Pathways and Trails Study (2014)
- Step Forward: Pedestrian Strategy (2016)
- Seniors Age Friendly Strategy (2017)
- Climate Resilience Strategy (2018)
- Social Well-being Policy (2019)
- Gender Equity, Diversity and Inclusion Strategy (2019)
- Area Structure Plans and Outline Plans (approved after 2001)

Project Methodology: Phase 1-4

The project framework was developed and approved by Council in November 2014. An internal review process was established to guide the development of the updated plan. The process included the formation of two internal groups: a Steering Committee and a Technical Working Group. Both groups provided input on the direction of the plan and support to the project team.

Figure 1 summarizes the framework identified for the four phases of the project.

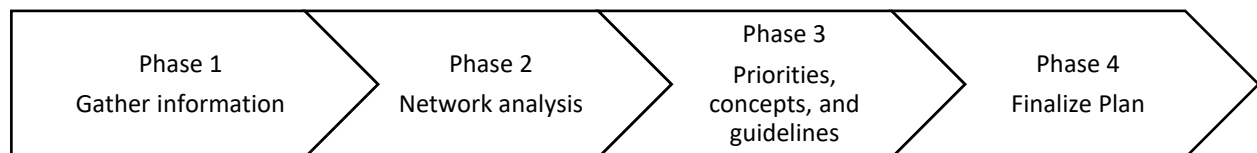


Figure 1

Phase 1: Gather Information

A wide variety of data sets were collected from City records, census information and data from third-party suppliers. Specific data sets included, but not limited to:

Project Background

- existing pathway and bikeway routes
- collision data
- speed limits
- road classification
- proposed pathways and bikeways approved by Council
- transit routes
- existing and proposed road network
- topography
- origin and destination information
- population and employment locations
- locations of recreational facilities, schools, retail centres

Phase 1 included engagement with Calgarians. The project team asked Calgarians:

- How they currently use the pathway and bikeway network
- How often they use it
- Whether the network is accessible from where they start their trips
- How long they are willing to travel on the pathway and bikeway network in ideal and adverse weather conditions

Participants were also asked to rank their priorities for using the pathway and bikeway network based on whether they were using it for transportation or recreation. The priorities they were asked to rank included:

- directness
- comfort level
- protection from traffic
- pathway availability

Phase 2: Network Analysis

The network analysis incorporated geospatial data of the existing pathway and bikeway network, previously approved routes, along with other technical analysis and input from engagement with Calgarians.

Phase 3: Priorities, Concepts and Guidelines

After vetting by the project team, an updated network map was developed. To ensure that the build-out of routes are prioritized in a way that Calgarians support, the project team asked for assistance in the second phase of engagement. Calgarians were provided four criteria to choose from to support the prioritization of the build-out of pathways and bikeways.

Routes or future projects will be weighted using these criteria, along with technical assessments. This will support which proposed pathways and bikeways are designed and built.

- Routes where there are safety concerns and where collisions have occurred
- Where we'll get the most people walking and cycling
- Social equity: improve areas where people are less likely to own or operate their own vehicle

Project Background

- Spread evenly throughout the city

A detailed summary of public input is included in the “What We Did” Report (Attachment 3)

Phase 4: Finalize Plan

Engagement with Calgarians and network analysis, along with data from previous cycling projects, Council’s priorities from One Calgary, academic research and an environmental scan from other municipalities, confirmed the need for an Always Available for All Ages and Abilities (5A) Network in Calgary as part of the update to the *Calgary Pathway and Bikeway Plan*.

The design of the 5A Network will support the following five principles, based on feedback from Calgarians, to:

- Separate people by their speed
 - Improve visibility
 - Make it reliable
 - Be accessible for everyone
 - Make it easy to use
- } 5A Network Principles

The 5A Network Principles are described in detail in Attachment 2, Always Available for All Ages & Abilities (5A) Guiding Principles Report. The principles outline how to upgrade existing and build new pathways and bikeways to improve user experience.

If the 5A Network principles are approved, Administration will identify and update existing policies and guidelines to incorporate the principles. Administration will continue to work with developers and City of Calgary staff to educate stakeholders about the network principles. Administration plans to bring forward the 5A Network Map to replace the Primary Cycling Network in the update to the Calgary Transportation Plan in Q2 2020.

How the 5A Network supports One Calgary

Pathways and bikeways connect our communities, providing Calgarians with safe and accessible year-round opportunities to walk, run, ride, and use mobility devices throughout the city. The 5A Network principles support travel for any reason, including to work, school, social, recreational or commercial activities and provides connectivity to other transportation services like public transit and parking.

Council’s primary concern is for all transportation options to be safe and attractive choices for Calgarians (M1 & M2).

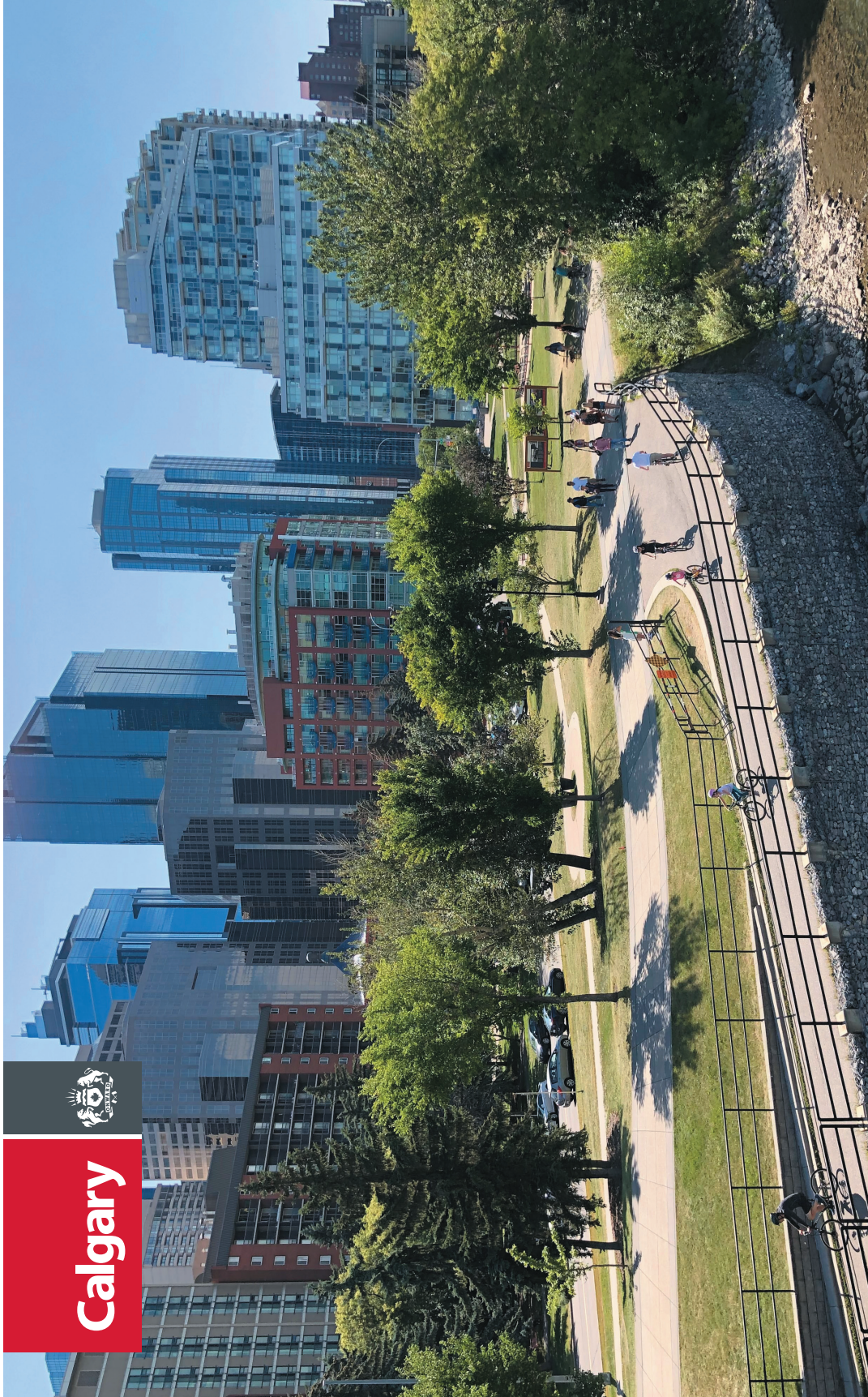
Council has directed Administration to develop strategies for communities that support healthy lifestyles and interaction among residents (walkability, pedestrian, cycling and public transit connections) to reduce and prevent social isolation (H4).

A connected, high-quality recreation and transportation network will support:

One Calgary	Council Directive
A prosperous city.	P2. Support travel and tourism and increase opportunities for citizens to participate in civic and community life P4. Support the implementation of Enough For All, Calgary’s Poverty Reduction Initiative by providing safe and affordable transportation options

Project Background

<p>A city of safe and inspiring neighbourhoods.</p>	<p>N1. Sidewalks and pathways should be safe, accessible, and inclusive for all Calgarians, including seniors and people who are disabled. N4. All communities are complete communities Community and economic growth are in alignment with the MDP and the CTP.</p>
<p>A city that moves.</p>	<p>M1. All modes of transportation must be safe M2. All options for mobility should be desirable M3. Innovative technology partnerships can help to build, fund and sustain a resilient transportation network M4. Develop and implement innovative and technological solutions with respect to existing and new transportation infrastructure that both enhances Calgarians' safety and reduce peak-hour traffic congestion</p>
<p>A healthy and green city.</p>	<p>H1. Support Climate Resilience Strategy and Action Plans H4. Create communities that support healthy lifestyles and interaction amongst residents (walking, wheeling, public transit connections) to reduce and prevent social isolation. H5. Continue to implement a range of accessible and affordable recreational programs and opportunities that encourage active daily living. Continuous investment in indoor and outdoor recreation facilities that address the changing needs of Calgarians will be important to support healthy lifestyles for all.</p>
<p>A well-run city.</p>	<p>W3. Validate rules and processes that support community engagement and activism while eliminate impediments to citizens who are trying to help make improvements in their communities.</p>

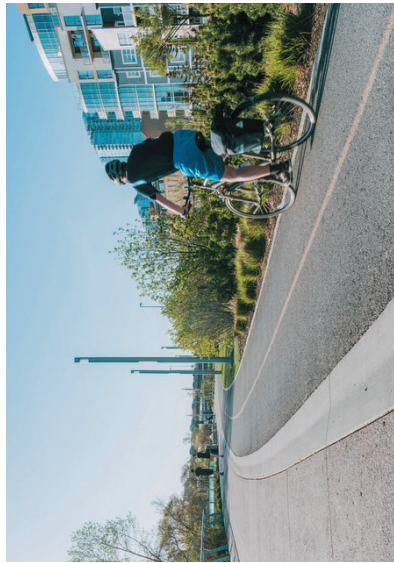


5A Network Guiding Principles
Always Available for All Ages & Abilities



Calgarians want to safely get around their communities and access local destinations.

- Phase 1 of Engagement



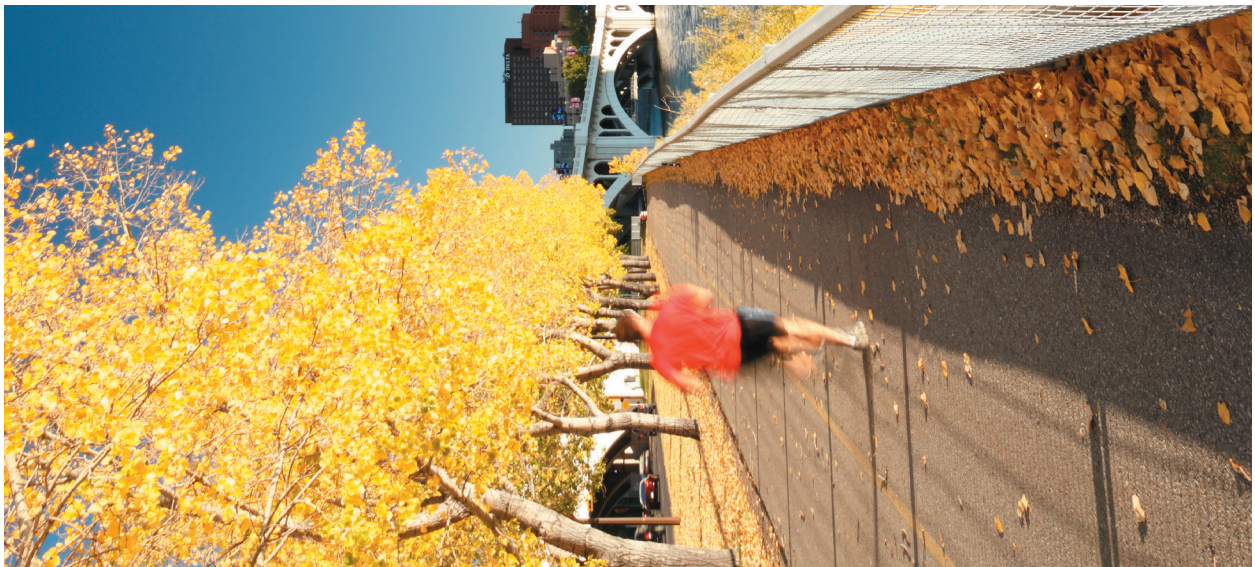
Council's primary concern is for all transportation options to be safe and attractive choices for Calgarians.

- One Calgary, A City That Moves



Calgarians want to enjoy the benefits of active living, regardless of their age or stage in life.

- Phase 1 of Engagement



Our Goal:
Calgarians will have
safe, accessible, affordable,
year-round options
for transportation
and recreation.

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What is the 5A Network?	02
Who is the 5A Network for?	05
5A Network Principles	07
Transitioning to 5A	13

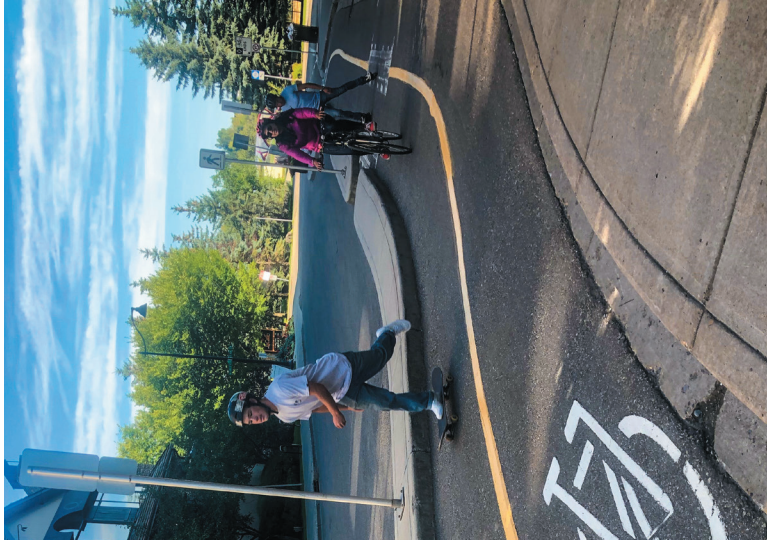
What is the 5A Network?

The way Calgarians get around is changing. More people are choosing to walk, scoot, skateboard, or cycle for their daily commute to work or school, for errands and for fun. We can get more value out of our transit and road networks by extending the reach of the services we already provide, through additional or improved pathway and bikeway connections to transit and parking. At the same time, Calgarians and visitors alike celebrate and enjoy our pathway and bikeway network as a great way to be active and see our city.

In updating old plans like the 2000/2001 Calgary and Area Pathway and Bikeway Plan, we heard from Calgarians that they are looking for something different for the network of the future.

The existing pathway and bikeway network creates a skeletal network across Calgary. It serves recreational users and confident and dedicated cyclists. The 5A Network principles shift the focus of the network to create more community connections and welcome a variety of users.

Calgarians want to connect to local destinations like schools, shops, recreation centres and workplaces. They want accessible pathways and bikeways that are well lit, easy to navigate and have few barriers.



Calgarians want safe and great spaces for walking and wheeling so they can enjoy the physical and mental health benefits of these activities.

**- One Calgary,
Sidewalks & Pathways**

Always Available for All Ages & Abilities (5A) Network Guiding Principles Report

The Always Available for All Ages & Abilities (5A) Network will be a city-wide mobility network.

It will consist of off-street pathways and on-street bikeways. The 5A Network principles are designed to support all Calgarians. It will provide accessible, affordable, year-round options for transportation and recreation.

5A Network pathways and bikeways will be accessible by people of all physical abilities due to:

- fewer barriers like off-set gates,
- smoother surface materials, and
- fewer routes on steep hills.

The 5A Network will improve safety by:

- separating people according to their speed where appropriate,
- improving visibility through lighting and paint striping, and
- providing a reliable experience through additional year-round maintenance.

The 5A Network will grow and evolve over time. Pathways and bikeways outside the 5A Network will continue to provide connections within and between communities. The City's focus will be to provide what Calgarians have asked for: an all ages and abilities option for more people to connect to the places they want to go.

Connecting walking and wheeling trips to transit service is also important. Connecting to transit service enables longer or cross-city trips. Taking transit helps people navigate challenging hills and busy roadways.

Improvements to transit connections include:

- safe and secure bike parking at transit stations,
- allowing bikes and other mobility devices on trains and buses,
- enabling bike and e-scooter share for first and last mile trips, and
- ensuring pathway and bikeway connections to transit stops and stations are provided.

As a long-term vision, and because Calgary and the needs of Calgarians will change over time, the 5A Network principles should be reviewed and updated periodically. A review should take place every five years to determine if the principles need to be updated.

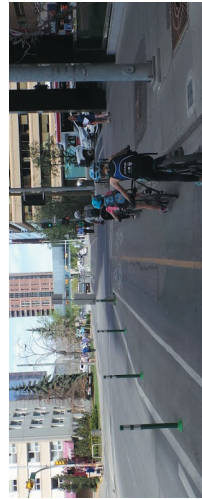


What the 5A Network will look like

More facilities separated from traffic



Bike paths



Protected bike lanes



**Bike boulevards /
Neighbourhood greenways**

Slower speeds and lower vehicle volumes



Multi-use pathways



Twinned pathways



Shared spaces

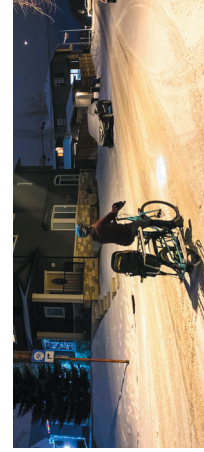
**Fewer places where people walking
and wheeling mix with traffic**



Painted bike lanes



Shared use lanes



Signed routes

Who is the 5A Network for?

The 5A Network is for everyone.

The 5A Network principles will improve safety and create a reliable experience for Calgarians. Children, seniors and people with mobility challenges will be able to walk and wheel on a safe, accessible and connected network. Low-income individuals and vulnerable populations will have affordable and reliable options for year-round transportation and recreation.

Pathways and bikeways provide Calgarians with options to travel to community destinations like schools, parks, recreation facilities and local businesses. New bridges over waterways and major roads will help people walking and wheeling connect to destinations in neighbouring communities. This helps reduce social isolation as people can interact with neighbours while out using pathways and bikeways and at their destination.

The Traffic Bylaw allows a variety of mobility devices on pathways and bikeways. Pathways have been inclusive of a variety of users for years. People using kick scooters, inline skates, skateboards and e-scooter share are now allowed to use dedicated bike lanes.

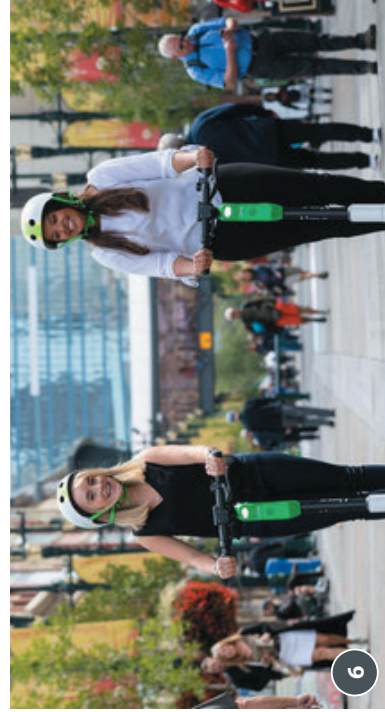
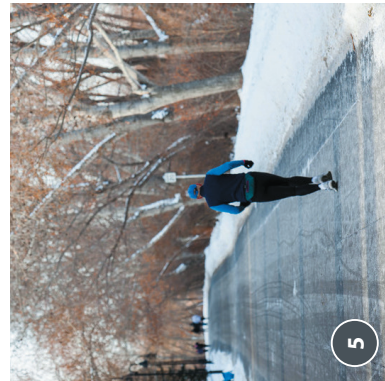
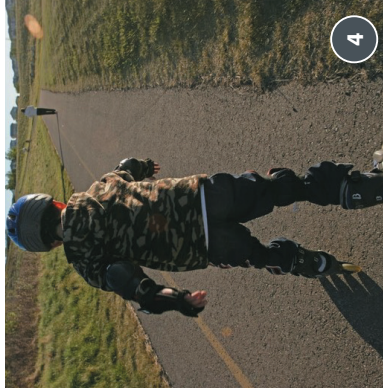
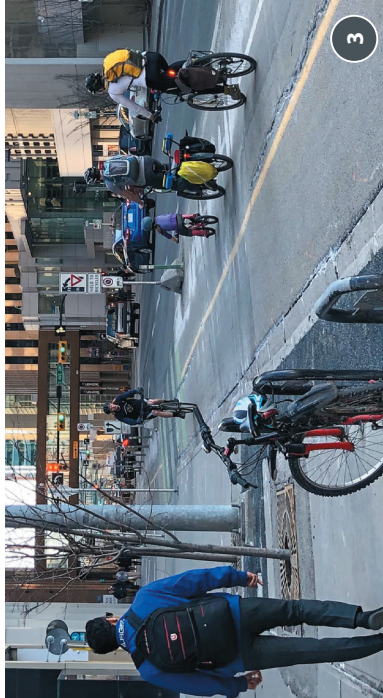
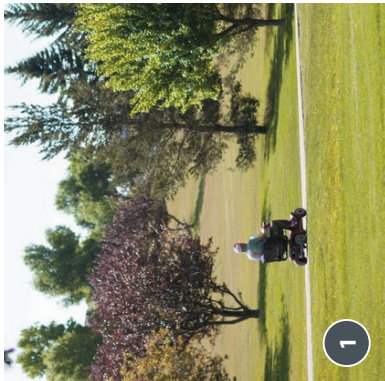
Improving pathway and bikeway connections to transit stations and parking can encourage people to walk or wheel for part of their trip.



Always Available for All Ages & Abilities (5A)
Network Guiding Principles Report

Examples of people who walk and wheel:

1. People using mobility devices to visit local parks.
2. Seniors connecting to transit.
3. Families traveling to school and work.
4. Children learning new skills.
5. People using the pathways for exercise.
6. Friends riding scooters to local shops and restaurants.

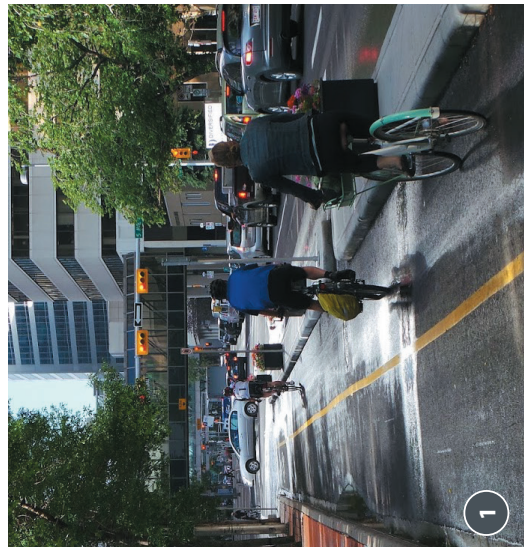




5A Network Principles

1. Separate people by their speed
2. Improve visibility
3. Make it reliable
4. Be accessible for everyone
5. Make it easy to use

#1 Separate people by their speed



Providing separation between people travelling at different speeds improves safety, predictability and comfort. Where appropriate, people will be separated to improve their experience travelling on the 5A Network.

Principles:

- Where vehicles travel fast and there are many of them: provide physical separation between people driving, wheeling and walking.
- Where vehicles travel slower and there are fewer of them: continue to support traffic calming and diversion elements and signalized or signed intersections to increase comfort for Calgarians.
- Where many people are walking and wheeling: twin pathways if possible when constructed or life-cycled.



1. Example of separation between people wheeling and driving
2. Example of separation between people walking and wheeling

CREDIT: ROY OOMS

#2 Improve visibility

Lighting, signage and pavement markings encourage people to use public spaces and provides visibility on roadways, pathways and in parks. They help make people visible to each other and prevent collisions. They also help people recognize hazards like water, ice, cracks or other debris along the route.

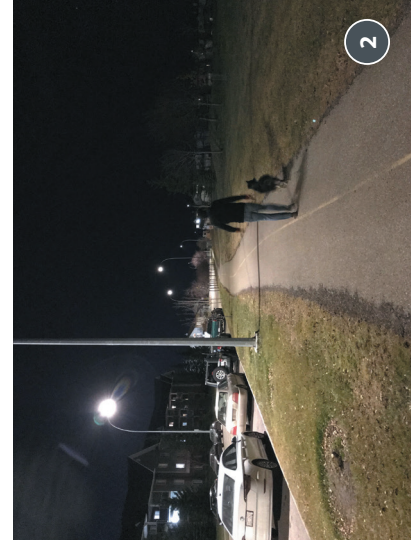
Throughout the year daylight hours change with the seasons. This can be challenging in the winter as there is less daylight during times when people are travelling to and from work or social activities. Providing lighting that can be turned on at varying hours throughout the year will improve the safety and visibility of people travelling on the 5A Network and encourage more people to use it.

Principles:

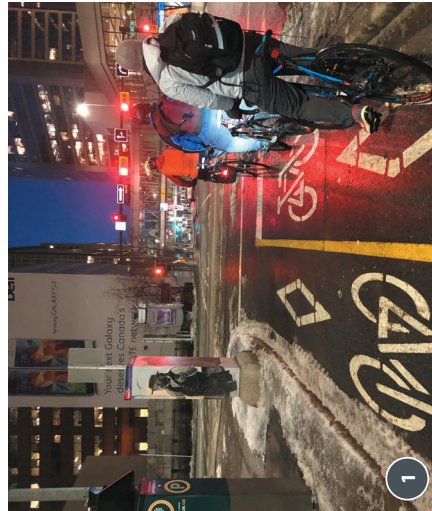
- To improve visibility, use lighting: at decision and conflict points like intersections, driveways and alleys, along routes that feel isolated, and in busy areas like schools, recreation and shopping centres.
- Enhance navigation, hazard identification, transition areas and walking and wheeling facilities by providing signage and pavement markings.
- Main Streets and other destination facilities may benefit from pedestrian scale lighting to encourage social activity.
- When lighting is needed in natural areas, ensure minimal impact on the ecology and visibility of the night sky in the area.
- When detours are in place select routes with adequate lighting for people travelling along them.

Adapted from the draft Alberta Bicycle Facility Design Guide

1. Examples of lighting on a bridge
2. Example of street lights lighting a pathway



#3 Make it reliable



1



2



3

Additional year-round maintenance will ensure walking and wheeling facilities continue to be safe and comfortable for all ages and abilities.

Well maintained pathways and bikeways will encourage more people to use them throughout the year, regardless of the weather conditions. Keeping routes clear of debris removes obstacles and creates a reliable and consistent experience for everyone.

Principles:

- Throughout the year, clean up debris and repair any damage due to seasonal changes.
- As part of the Seven-Day Snow Plan, prioritize clearing snow on the 5A Network to keep people walking and wheeling year-round.
- Focus on clearing snow from the most important sections, identified through network analysis, of the 5A Network with available funding.
- Continue monitoring the condition of sidewalks, pathways and roadways to forecast lifecycle maintenance needs for the 5A Network.
- Provide safe, accessible and connected detours where needed when repairing segments of the network.

Adapted from the draft **Alberta Bicycle Facility Design Guide**

1. Example of snow clearing on a bikeway
2. Example of snow clearing equipment
3. Example of snow clearing on a pathway

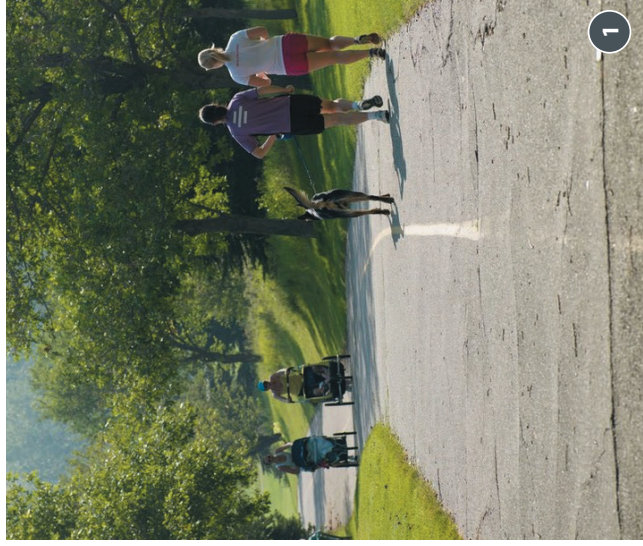
#4 Be accessible for everyone

An accessible city benefits everyone. Accessible pathways and bikeways enable people of all abilities to travel around our city.

Accessibility to the 5A Network is improved by the removal of barriers that currently exist along the network. Barriers can be off-set gates, major roadways, waterways or steep pathways. New bridges will help people cross roadways and waterways, connecting them to more places in their community and across the city. Building pathways that are not steep will increase the number of people who can use them. Where pathways cannot be made less steep, alternate routes, connections to transit and places to park provide people with other ways to get around steep sections of the network.

Principles:

- Ensure off-set gates and posts do not block entrances or exits to pathways to allow accessibility for more people, where appropriate.
- Provide ramps to accommodate safe transitions for people walking and wheeling.
- Maintain a smooth surface clear of potholes, depressions or bumps to reduce hazards.
- Ensure pathways and bikeways are not too steep for people to travel on.
Where hills are present, grades should not exceed 3% for distances longer than 200 metres.
- Reroute where grades exceed 8%, on-street and off-street.



#5 Make it easy to use



Signs and pavement markings help people make decisions about their route and confirm they are heading in the right direction. They help identify the facility type, allow or restrict certain types of vehicles and provide wayfinding. Improved signage and named routes will make it easier for Calgarians to get to community destinations on the 5A Network.

Principles:

- Use visual identifiers like route markers, signs and pavement markings.
- Use signage and pavement markings to support key decision-making points and show people how to transition between pathways, bikeways and roadways.
- Use destination signage to help people plan their trip and connect to popular places.

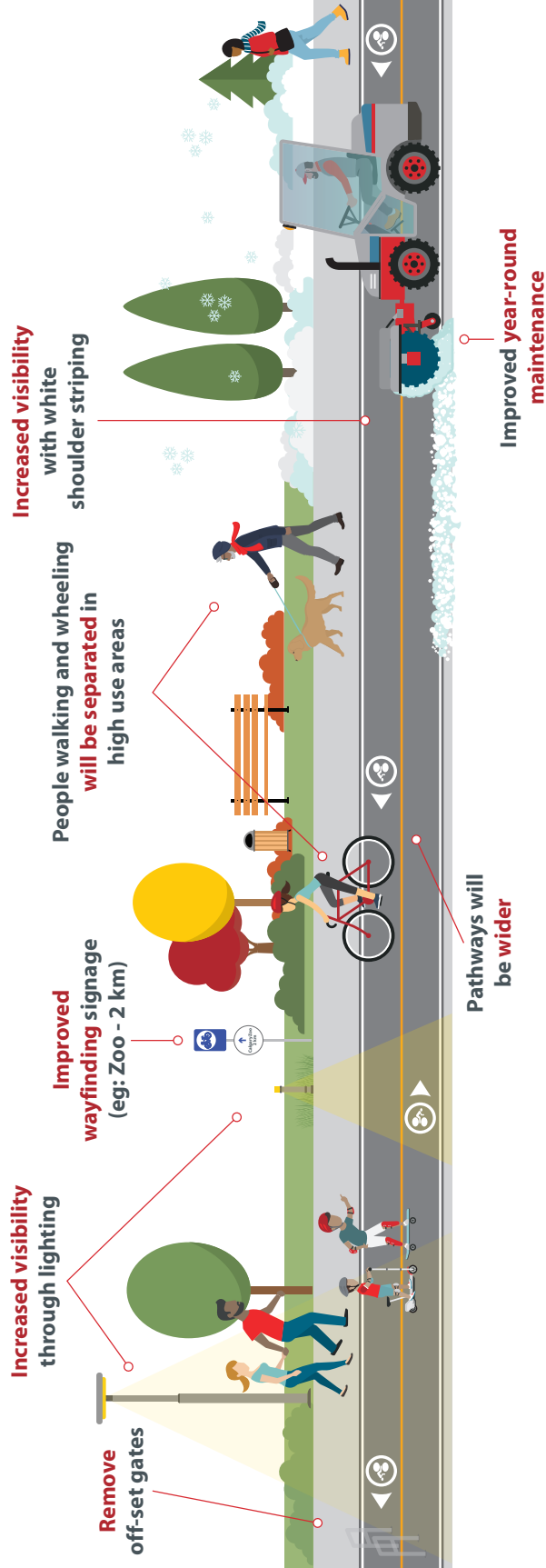


1. Rotary Mattamy Greenway wayfinding signage
2. Example of bikeway pavement markings
3. Example of pathway pavement markings

Transitioning to 5A

Improving existing and building new pathways and bikeways will take time. Improvements to the 5A Network will be phased in as budget allows.

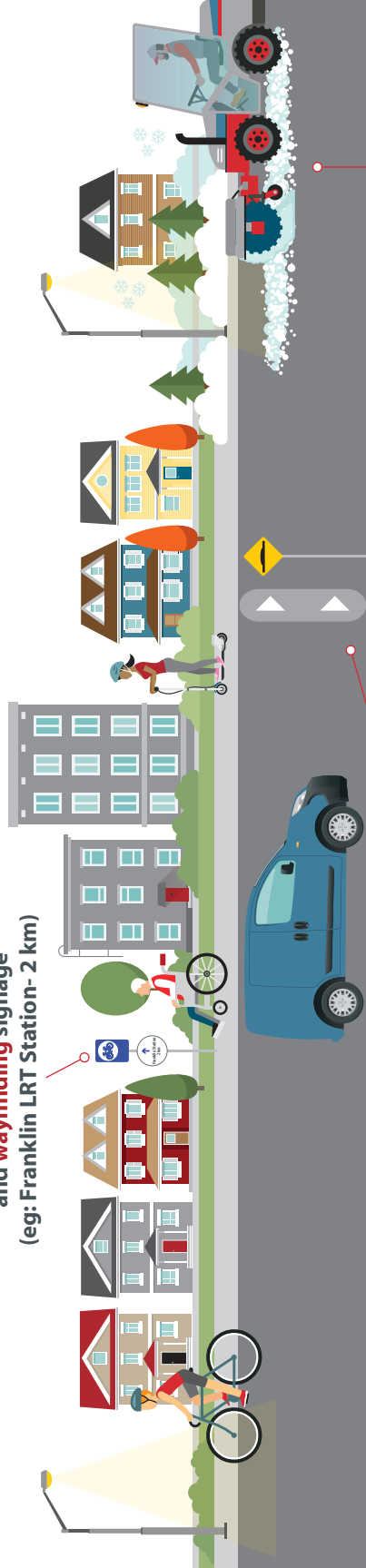
What 5A pathways will look like:



On pathways, explore opportunities to improve lighting and provide separate spaces for people walking and wheeling in busy areas.

What 5A bikeways will look like in residential areas:

**Improved pavement markings
and wayfinding signage**
(eg: Franklin LRT Station- 2 km)

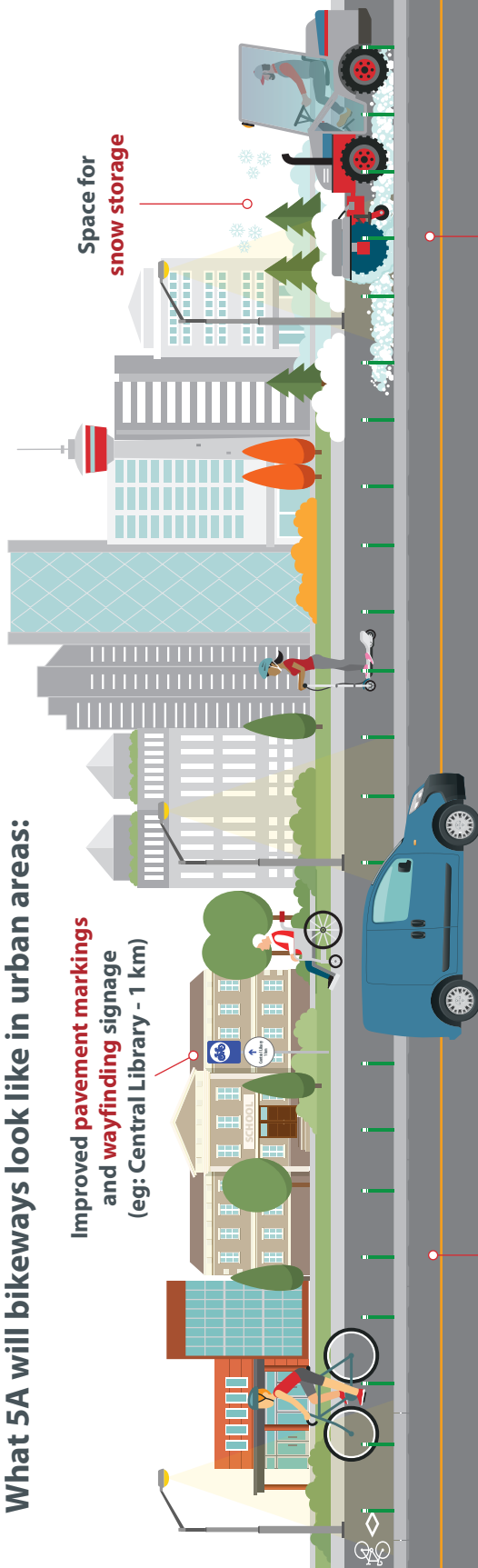


**Lower vehicle volumes and slower vehicle speeds supported by
traffic calming measures on residential streets**

**Improved year-round
maintenance**

In residential areas, traffic calming will support friendly neighbourhood streets for people walking and wheeling.

What 5A will bikeways look like in urban areas:



In urban areas, separating people by their travel speed will increase everyone's comfort and safety.

Always Available for All Ages & Abilities (5A)
Network Guiding Principles Report



19-00000488

Visit calgary.ca/pathwaybikeway for more information.



Calgary and Area Pathway and Bikeway Implementation Plan

What We Did
December 10, 2019

The Calgary and Area Pathway and Bikeway Implementation Plan

In 2000, Council approved the original Calgary Pathway and Bikeway Plan. It included a comprehensive set of guiding principles related to the planning, design and management of Calgary's pathway and bikeway network. It also included an implementation map, which showed existing and proposed pathways, bikeways and bridges.

Since then, new communities, pathways and bikeways were built, and new policies and guidelines have been approved. Despite these changes, the Calgary Pathway and Bikeway Plan remained the same.

When the Cycling Strategy was approved in 2011, it was identified that the Calgary Pathway and Bikeway Plan needed to be updated. In 2017, we began the process of updating the original plan. The updated plan includes the Always Available for All Ages and Abilities (5A) Network guiding principles and draft map.

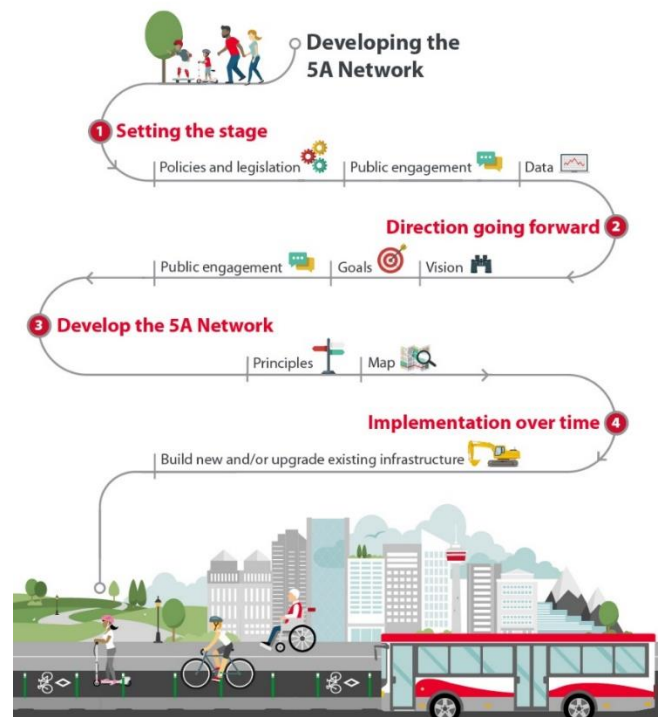
How we updated the plan

Updating the plan was a complex process. Technical work, a policy review and engagement with Calgarians contributed to the development of the updated network principles and draft map.

The technical work began with digitizing the original implementation map. This helped us identify what pathways and bikeways were already built, which ones were obsolete and which ones are still recommended routes.

We then analyzed various pieces of data. This included usage data for our existing pathways and bikeways, demographic information about Calgarians, information about our existing road network and feedback from public engagement.

The first phase of engagement helped us lay the groundwork for developing the updated 5A Network principles and map. It also helped us identify what routes are needed to connect Calgarians to the destinations they want to visit.



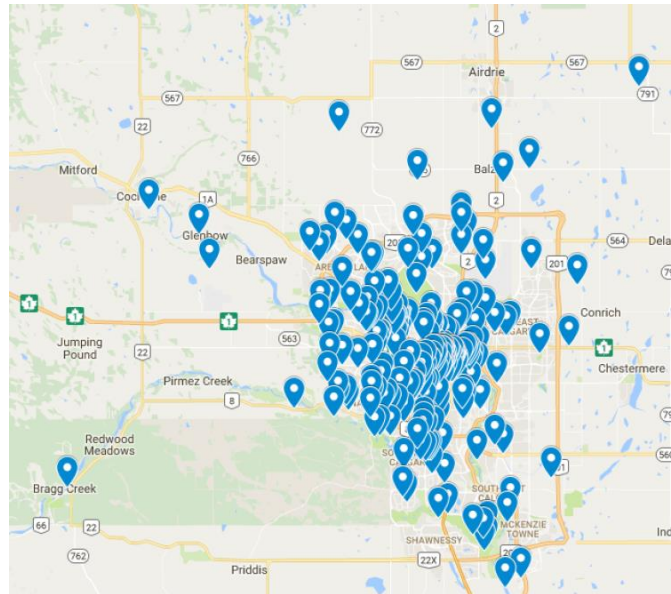


Calgary and Area Pathway and Bikeway Implementation Plan

What We Did
December 10, 2019

During the first phase of engagement we asked Calgarians about how they use our existing pathway and bikeway network, the challenges and difficulties they experience with our existing pathway and bikeway network, and destinations they like to visit using the existing network. A summary of feedback received in Phase 1 can be found below, detailed feedback is within the Phase 1 [What We Heard Report](#).

To help us identify challenges and difficulties with the existing network, Calgarians pinned locations on a digital map. We used that data to create a map of hot spots with potential issues to address.



The comments associated with the pinned locations helped us better understand the issues that people were experiencing when using our network. These issues were grouped into the following themes: comfort, connectivity, safety and directness of route.

Participants also used a digital map to pin the common destinations they use the existing network to travel to. Many people identified their home, place of work, schools, parks and recreation facilities as the places they travel to most often. This information was used to help us identify the origin and destination of trips using our pathway and bikeway network. As this information was digitized, we overlaid it on our existing network to determine where to recommend new infrastructure to connect destinations that people are traveling to.

For the development of the 5A Network principles, we used feedback from people who participated in both phases of engagement. People told us how they use our existing network, how accessible it is from their starting destination, what weather conditions they are likely to use it in and how they would prioritize building out the network. This information helped us determine what principles will improve comfort, connectivity and safety when upgrading existing or building new pathways and bikeways.

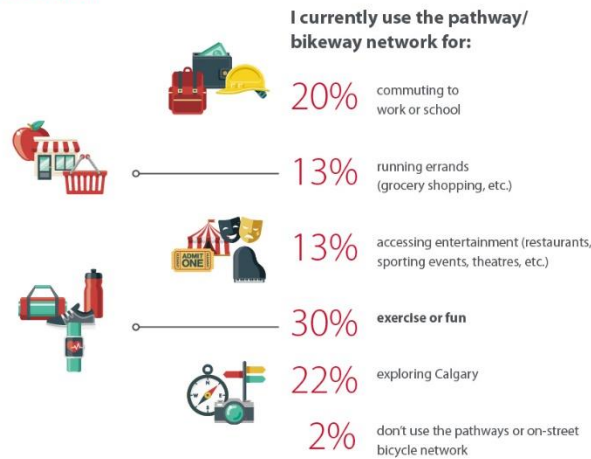


Calgary and Area Pathway and Bikeway Implementation Plan

What We Did
December 10, 2019

What Calgarians told us about how they use the existing network.

During Phase 1 of engagement Calgarians were asked about how they use the pathway and bikeway network. This is a summary of what we heard.



How often do you use the pathway/bikeway network?



Is the pathway network and/or bikeway network easily accessible from where you start your trip?



If you are using the pathway and bikeway network to get to a destination, how many minutes are you willing to travel in ideal weather conditions?



If you are using the pathway and bikeway network to get to a destination, how many minutes are you willing to travel in adverse weather conditions (cold/wet)?





Calgary and Area Pathway and Bikeway Implementation Plan

What We Did
December 10, 2019

Prioritizing building out the network

During the second phase of the project, technical experts developed an updated network map, using data and public feedback gathered during the first phase. New routes were proposed in all quadrants of the city, including new connections over or under major roads and waterways.

The build-out of routes will be prioritized over more than 10 years. To ensure that routes are prioritized in a way that Calgarians support, we asked for assistance with this task during the [second phase of engagement](#). We provided Calgarians with four criteria to choose from. They prioritized the build-out of pathways and bikeways as follows:

- Routes where there are safety concerns and have been collisions in the past
- Where we'll get the most people walking and biking
- Social equity (improve areas where people are less likely to own or operate their own vehicle)
- Spread evenly around the city



Once all the proposed routes are finalized, they will be weighted using these criteria, along with technical requirements. This will help us determine which proposed pathways and bikeways will be built first.

The Always Available for All Ages and Abilities (5A) Network

During the first phase of engagement, we heard that the barriers experienced by people using our existing pathway and bikeway network are: comfort, connectivity, safety and directness of the route. They also indicated that direct connections, pathways and safer on-street connections will encourage them to use the network more. This feedback, provided using online maps and text responses, and research from previous cycling projects confirmed the need for an Always Available for All Ages and Abilities (5A) Network in Calgary.

The 5A Network will help Calgarians get to the destinations they want to visit within their communities and across the city, whether they are walking or wheeling. People of all ages and physical abilities will be able to use the network, at all hours of the day in varying weather conditions. This will be done through upgrading existing and building new pathways and bikeways that align with the 5A Network principles.



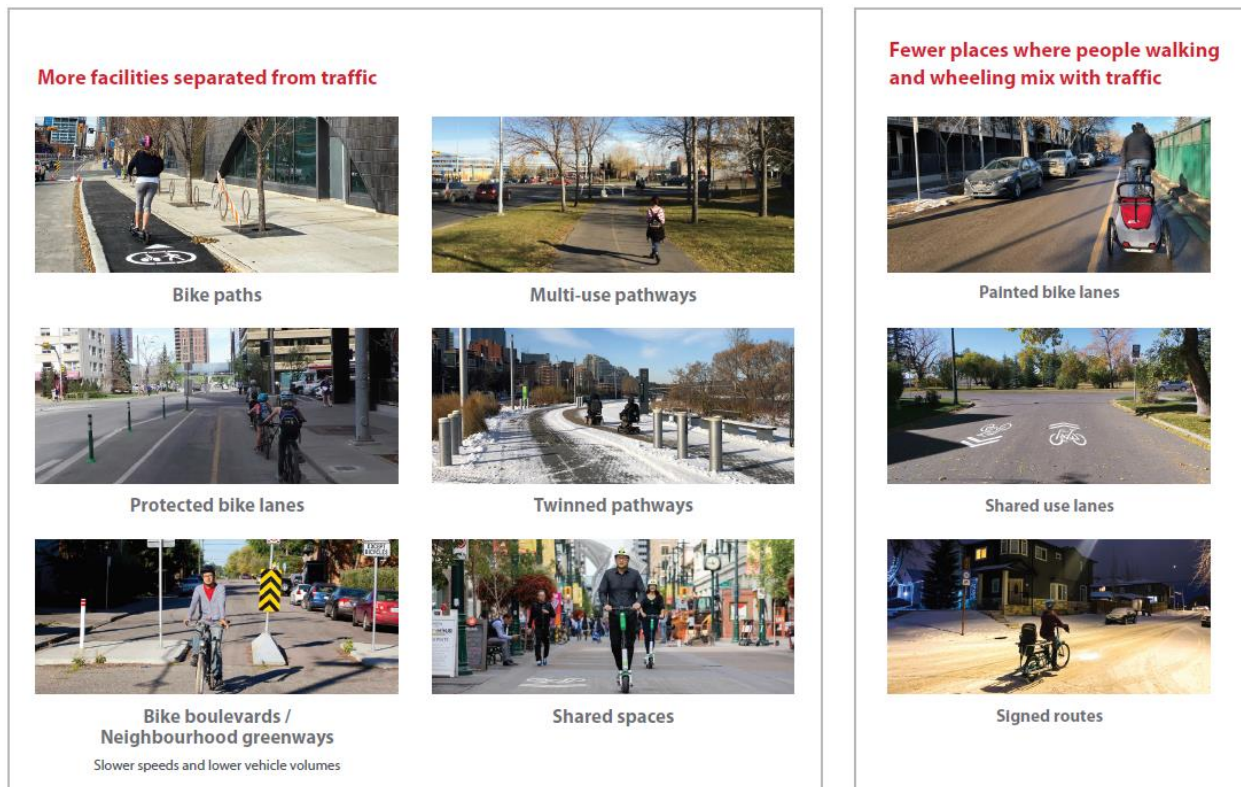
Calgary and Area Pathway and Bikeway Implementation Plan

What We Did
December 10, 2019

The 5A Network principles are:

- Separate people by their speed
- Improve visibility
- Make it reliable
- Be accessible for everyone
- Make it easy to use

During the second phase of engagement, participants told us what types of pathways and bikeways they are most likely to use. When walking, participants indicated they would be more likely to walk on a separated pathway with separate spaces for walking and biking, rather than a multi-use pathway. When biking, participants indicated they would be most likely to ride a bike on a pathway with separate spaces for walking and biking, along with separated on-street bike lanes. Understanding that having designated spaces for people walking and cycling is important, the 5A Network will have more facilities that are separated from traffic, and fewer places where people walking and wheeling mix with traffic. Examples of these facilities are shared below.



Please refer to the draft Alberta Bicycle Design Guide for detailed descriptions of each facility type.



Calgary and Area Pathway and Bikeway Implementation Plan

What We Did
December 10, 2019

To build the 5A Network, we will need to retrofit existing pathways and bikeways, as well as build new infrastructure. If the 5A Network is approved, existing pathways and bikeways will be retrofitted when they are life-cycled and new infrastructure will be built as funding comes available. It will take multiple years to retrofit and build the 5A Network.

Community connections and active living

Enabling Calgarians to live active and healthy lifestyles is important to The City. Investments in active transportation infrastructure, which includes our pathways and bikeways, provides Calgarians with active ways to travel through and around our city and helps reduce and prevent social isolation.

During the first phase of engagement Calgarians were asked to pin the common destinations that they travel to regularly using our existing network. This information helped us identify what types of places people are travelling to, so that our technical experts could plan new pathways and/or bikeways to these locations across the city. The destinations that people told us they travel to most often are destinations within their community, such as workplaces, schools, shopping centres and recreation sites like regional parks.

As well, Calgarians told us about the various challenges and barriers they face while using our existing pathways and bikeways. They identified issues like off-set gates and posts that block the entrances to pathways, poor directional signage, poor maintenance and missing connections to name a few. For a full summary of challenges and barriers faced by users please see the [What We Heard Report](#) from the first phase of engagement.

To improve community connections, promote active living and make pathways and bikeways more accessible for everyone, the 5A Network principles support:

- removing barriers like off-set gates where appropriate,
- smoother surface materials,
- fewer routes on steep hills,
- separating people according to their speed where appropriate,
- improving visibility through lighting and pavement markings,
- providing a reliable experience through additional year-round maintenance, and
- improving connections to transit.

What's next

The project team is working on finalizing the updated 5A Network map. This map will show all the proposed pathways and bikeways to improve how Calgarians travel to the destinations they want to visit. It is anticipated that it will be finalized in 2020.

The 5A Network principles will be presented to Calgary City Council in Q4 2019 for review and approval.



Beltline Neighbourhoods Association
P.O. Box 82043, Connaught PO
Calgary, AB, T2R 0X1

December 1, 2019

City of Calgary
P.O. Box 2100, Stn M
Calgary, AB, T2P 2M5

Re: Letter of Support for Always Available for All Ages & Abilities (5A) Network Principles

Dear Mayor Nenshi and members of City Council:

The Calgary & Area Pathway and Bikeway Plan was approved by City Council in 2000/2001. Since then, the needs of Calgarians have evolved.

The Beltline Neighbourhoods Association believes that all Calgarians should be able to get around Calgary safely, regardless of their transportation choice. This is why we support a network of pathways and bikeways for people of all ages, abilities, and incomes.

Pathways and bikeways allow Calgarians and visitors to explore and travel safely through the city. It connects us to our homes, our schools, our places of work, shops, recreation, and cultural venues.

It is important that this critical mobility infrastructure be built safely for all users. Safety can be achieved by separating vulnerable road users from faster-moving and heavier travel modes, by improved lighting and markings to make mobility corridors easier to see, and with the help of year-round maintenance to give users a predictable end-to-end experience.

Healthy and active places to travel, work, and play is part of what makes the Beltline, and Calgary as a whole, a terrific place to live and grow. We support an optimized pathway and bikeway network that serves more Calgarians more often.

Thank you for your attention and consideration.

Sincerely,

Kevin Schlauch
Director of Transportation
BNA



Letters of Support



Springbank Trails and Pathways Association
24271 Westbluff Drive
Calgary, AB T3Z 3N9

springbankpathways@gmail.com

November 26, 2019

Mayor Nenshi and Members of City Council
City of Calgary, The Office of the Mayor
West Administration Building
2nd Floor, 313 -7th Avenue SE
Calgary, AB T2G 0J1

Dear Mayor Nenshi and Members of City Council:

The Springbank Trails and Pathways Association (STAPA) appreciated the opportunity to meet with Kimberly Fisher (Livable Streets, Transportation Planning) and Julie Radke (Manager, Ring Road Integration & Special Projects at The City of Calgary) to discuss the City of Calgary's pathway system in respect to the Calgary West and Southwest Ring Road.

Our association was established to provide a safe and accessible, regionally integrated trail and pathway system connecting generations of residents in the Springbank community west of the City of Calgary. As you know Calgary and area has some of the finest landscapes in Canada for outdoor paths, trail training, cycling, or walking with the family. In Springbank, the exponential increase in the number of cyclists, runners, and families out on our roads and highways - from both our communities and increasingly the City of Calgary - unfortunately creates potential safety concerns. We support pathway planning that safely moves people through and across our communities.

The West and Southwest Ring Road not only provides a crucial transportation corridor for vehicles, it also provides the opportunity for a critical link for pathway systems. This connection goes from Highway 1 (Rotary/Mattamy Greenway, Bow River Pathway System) to Highway 8 (Griffith Woods Park, Clearwater Park) and eventually east to the Tsuu T'ina/Weaselhead/Glenmore Reservoir and west to the Bragg Creek pathway systems (via the Alberta Transportation identified pathway corridor along Highway 8). The opportunity to provide a safe and proper multi-use pathway within the Calgary West and Southwest Ring Road TUC alignment is one of our key goals. We were very excited to share this common goal with the City of Calgary at our recent meeting.

We support the City of Calgary with their planning initiative as follows:

- We support a network of pathways and bikeways that is designed for people of all ages and abilities.
 - Regardless of the trip purpose, children and seniors will be able to navigate the network.

Page 1 | 2

Letters of Support



- Low-income individuals and vulnerable populations can use the network to get around.
- Pathways will be inclusive of people with mobility challenges who will also be able to access pathways and travel safely
- That pathways and bikeways are essential for people to move safely without cars and to easily connect across neighbourhoods linking to residential areas, schools, workplaces, shops, and recreation and cultural venues.
- Pathways need to strategically integrate across neighbouring City sectors and other jurisdictions to enhance connectivity and provide access to adjacent pathways and extended natural/recreational areas
- We agree that building for all ages and abilities improves safety because:
 - of separation of active transportation users from faster moving travel modes,
 - lighting and paint striping will improve visibility for all, and
 - year-round maintenance will provide a predictable and reliable experience.
- A network for all ages and abilities across neighbourhoods and jurisdictions:
 - Provides resilient, adaptable and affordable transportation and important extensions to recreation options.
 - Creates connected communities across the City and jurisdictional neighbours where residents (and people visiting Calgary) can provide alternative and sustainable choices to meet their day-to-day needs within their neighbourhoods, and enjoy recreational opportunities in adjacent jurisdictions.
 - Encourages healthy, active and sustainable lifestyles integrating outdoor spaces to live, work, and play.
 - Supports and builds a long-term sustainable system with more choices.
 - Works to improve and optimize existing infrastructure to serve more people, more often.

Thank you for the opportunity to voice our concerns and support the City of Calgary on taking steps toward safe and accessible pathway systems, and supporting the legacy project which will serve future generations within multiple jurisdictions.

Sincerely,

A handwritten signature in black ink, appearing to read "R.R.", is positioned above the typed name.

Ronda Rankin, President
Springbank Trails and Pathways Association (STAPA)
403-519-6870



Cc: Julie Radke, The City of Calgary
Kimberly Fisher, The City of Calgary

Letters of Support



www.twowheelview.org

December 11, 2019

Dear Members of City Council and Mayor Nenshi,

I am writing to you on behalf of Two Wheel View, a Calgary-based non-profit organization, in support of the Always Available for All Ages & Abilities (5A) Network proposal.

Two Wheel View's largest and most well-known program is our Earn-a-Bike program. Youth all over the city attend 10 weeks of after school programming, building their social emotional skills as well as learning bike mechanics. Upon completion of the program, the youth earn a bicycle, lock and helmet of their very own. For many of our teenage participants, this is the first time they've ever owned a bicycle. Our partners and schools tell us that our youth are using their bikes to get to school, to access additional city resources and recreation as well as get to part time jobs that help support their families. These bikes provide our youth with opportunity, freedom and physical recreation. Most of our participants are new to Calgary and these newly earned bikes give them the opportunity to explore their new home and build community as they discover their city. Each year Two Wheel View graduates more than 300 youth from our Earn-a-Bike program with more than 600 yearly having their lives changed from the seat of a bike in some way. We also partner with more than 40 schools and fellow agencies to make sure that all youth have the opportunity to participate in our Earn-a-Bike program.

It is important to us that the youth who earn our bikes have safe infrastructure in which to use them. The 5A Network will create off-street pathways and on-street bikeways that will keep our youth participants safe and allow them greater connectivity to the resources they need and use most- school, recreation hubs, fellow youth serving agencies, part time jobs and their social networks. Our youth are vulnerable and already deal with a multitude of barriers related to income, language, race and more. They deserve a safe, accessible and connected network that provides them with affordable options for transportation, recreation, socialization and fun. The barriers that our youth face make life unpredictable and they need a reliable network that can help them go about the business of being students, workers, siblings and children. We believe that young people who can explore and engage with their city are the ones who are going to best steward it going forward.

Thank you for your time and consideration of the 5A Network proposal. We look forward to continuing to work together to make Calgary the best place in Canada to be a youth.

Sincerely,

A handwritten signature in black ink, appearing to read "Laura Istead", is written over a faint, circular watermark or stamp.

Laura Istead
Executive Director

CANADA #101, 1725 10th Ave SW Calgary, AB T2C 0K1 | (403) 744-5443 | Registered CDN Charity # 81336 9547 RR0001

Transportation Report to
SPC on Transportation and Transit
2019 December 18

ISC: UNRESTRICTED
TT2019-1549

Safer Mobility Plan Annual Report 2019

EXECUTIVE SUMMARY

This report provides an annual update on The City of Calgary's (The City) programs for safer mobility. The Safer Mobility Plan (SMP) Annual Report 2019 (Attachment 1) provides an update on the progress towards the major injury and fatality collision targets of Safer Mobility Plan 2019-2023 and reflects on the accomplishments in the first year of the plan. The proposed actions for 2020 are outlined in terms of strategies of the 2019-2023 Safer Mobility Plan. Additional collision data is presented in Attachment 2.

2018 saw an increase in traffic related fatalities compared to the previous year but remained below the five-year average. Major and minor injury and property damage collisions decreased. Collisions involving vulnerable road users were lower than previous years. Preliminary data for 2019 indicates that the downward trend continues. With better alignment between the plan and the capital investments through One Calgary, delivery of actions identified in the 2019-2023 Safer Mobility Plan and Safer Mobility Plan Annual Report 2019 will drive a significant and meaningful change.

2019 has been a year of focused implementation of high value measures, evaluations, and network screening, with emphasis on alignment with our ultimate goal of Vision Zero (mobility free of major injuries and fatalities). We have identified high priority locations for further study, made progress towards speed reduction strategies and continue to make meaningful changes to our transportation environment.

ADMINISTRATION RECOMMENDATION:

That the Standing Policy Committee on Transportation and Transit recommends that Council:

1. Direct Administration to report back to the Standing Policy Committee on Transportation and Transit on the Safer Mobility Annual Report 2020 by Q4 2020.

PREVIOUS COUNCIL DIRECTION / POLICY

On 2014 November 3, at the Combined Meeting of Council, Council approved "that Council receives this report [Pedestrian Traffic Safety Overview TT2014-0773] for information and that Administration provides annual Safer Mobility Plan updates and continues working on the initiatives outlined in this update".

BACKGROUND

The City and partners deliver projects and activities to improve road safety for all users and pilot new technologies as part of the Transportation Department's mission to provide a safe transportation system. Calgary's traffic safety management process is outlined in the 2019-2023 Safer Mobility Plan, with emphasis on the reduction of the most severe collisions through the five E's of traffic safety (Engagement, Engineering, Education, Enforcement, and Evaluation). Annual collision data reviews are completed to identify issues, trends and opportunities for safety improvements.

Safer Mobility Plan Annual Report 2019

INVESTIGATION: ALTERNATIVES AND ANALYSIS

The City of Calgary uses a multi-faceted and collaborative approach to enhance traffic safety. Data is collected and analyzed to identify problems and possible solutions, new approaches and technologies are tested, public education programs are developed and current processes are adjusted based on best practices. Many safety programs and collaborations with partners are on-going and new initiatives are continuously added.

The Transportation Department produces an annual summary of traffic collisions on the road network in Calgary (excluding collisions on private property). 2018 Traffic Collision Summary (Attachment 2) presents information about collision trends; this information and more detailed analysis of this dataset, are used to inform our traffic safety actions and initiatives.

In 2018, there were 16 fatal collisions, 2,496 injury collisions and 34,788 property damage only collisions on Calgary roads. Pedestrians were involved in eight fatal collisions and 308 injury collisions, while cyclists were involved in 106 injury collisions with one fatal cyclist collision. Preliminary collision data for 2019 indicates a decrease in fatal collisions compared to the previous year.

For comparison purposes, a selection of cities are shown in the table below, using the most recently available comparable data. While Calgary is continuing to perform well compared to other major Canadian cities with respect to all casualty collisions (minor/major injuries and fatalities combined), our performance from the perspective of more severe collisions (major injury and fatality focus for vision zero approach), however, illustrates that there is room for improvement. Nevertheless, outcomes have been gradually improving since 2015, with further details presented in Attachment 1 in the context of targets proposed as part of the 2019-2023 Safer Mobility Plan.

Summary of Traffic Injuries and Fatalities for Various Canadian Cities

City	Overall casualties (injuries + fatalities) per 100,000 population		Major injuries + fatalities per 100,000 population		Pedestrian major injuries + fatalities per 100,000 population	
	2017	2018	2017	2018	2017	2018
Calgary	215.7	205.9	44.6	44.3	9.5	10.4
Edmonton	397.9	340.2	39.4	34.6	7.4	7.1
Ottawa	214.6	199.6	17.5	17.2	-	-
Toronto	-	-	14.2	13.9	5.9	6.5

* Information in dashed cells is not publicly available from indicated jurisdictions

The Transportation Department has been taking actions based on the direction of existing policy documents to improve safety. These actions and achievements are described in Attachment 1.

The expanded application of Traffic Calming (TC) curbs has allowed quick responses to traffic safety and traffic calming concerns at a low cost and low impact to existing infrastructure. In September 2019, the Transportation Association of Canada *Road Safety Engineering Award* was presented to The City for the development and deployment of Traffic Calming curbs, which are now used in cities across Canada.

Transportation Report to
SPC on Transportation and Transit
2019 December 18

ISC: UNRESTRICTED
TT2019-1549

Safer Mobility Plan Annual Report 2019

Evaluations were completed for several Transportation projects ranging in scope and Project Sheets are included in Attachment 1, demonstrating significant safety improvements through reduced frequency and severity of collisions. Cross departmental collaboration and partnerships in the delivery of safety projects has been of focus by incorporating safety improvements as part of other work and merging objectives for optimal benefit, wherever possible. The ongoing Calgary Transportation Plan update in 2020 will incorporate principles of traffic safety in the long-term planning process.

Future opportunities

Establishing new non-traditional data sources for non-motorized modes will be investigated to improve our understanding of risk factors and monitoring. This may include sidewalk slips and falls, cyclist-pedestrian and single cyclist collisions, near-misses and others.

A key step toward a true Vision Zero approach is achieving operating speeds that reduce the likelihood of fatality or serious injury for all users by reducing impact energy. One tool is to reduce unposted speed limits on lower classification roadways. However, the discussion of safer speeds needs to be expanded so that the proven fatality risk is minimized for all impact types including pedestrian or cyclist collisions, as well as motor vehicle occupants involved in side impact collisions or frontal impact collisions.

Stakeholder Engagement, Research and Communication

Collaboration with stakeholders in the Transportation Department and with the Calgary Police Service is a critical part of improving traffic safety. Other key traffic safety partners include external stakeholders such as Alberta Transportation, school boards, the AMA, Safer Calgary, and citizens. Traffic safety initiatives are communicated through safety campaigns, publications, 311, message boards, participation in forums such as public open houses and web based information such as YouTube, Calgary.ca and social media.

The Student Safe Travel Advisory Group was created earlier this year with the aim to improve safety near schools. Led by the Calgary Board of Education, the group includes the Calgary Catholic School District, Alberta Transportation, Calgary Police Service, and the City of Calgary. The purpose of the group is to streamline the intake process for school related concerns, improve communication and coordination among all responsible organizations and to find educational and low-cost solutions covering the five E's.

Transportation contributes to the body of knowledge on transportation safety working closely with the Transportation Association of Canada (TAC) and post-secondary institutions. Recent projects with the University of Calgary Urban Alliance include app development to improve speed consistency along a corridor and enhancements to the bicycle signal operation method.

Transportation Report to
SPC on Transportation and Transit
2019 December 18

ISC: UNRESTRICTED
TT2019-1549

Safer Mobility Plan Annual Report 2019

Strategic Alignment

Improving traffic safety on Calgary's road network aligns with goals outlined in the Calgary Transportation Plan that are focused on mobility, encouraging active modes and improving public safety. Actions within the Safer Mobility Plan are directly aligned with the objectives of the Pedestrian Strategy and the Traffic Calming Policy and One Calgary for a City That Moves to ensure Calgary's transportation network offers a variety of convenient, affordable, accessible and efficient transportation choices.

Social, Environmental, Economic (External)

Enhanced safety of mobility supports the economy, social activities and personal health and welfare. Providing a safer environment for Calgarians who are walking or cycling helps encourage reduced automobile dependency and associated greenhouse gas emissions, as well as greater interaction between citizens in their communities. Reductions in collisions can reduce direct costs for the City and financial impacts to the economy associated with litigation, health care, property damage and lost productivity, as well as indirect costs such as reduction of quality of life and pain and suffering. The total impact is estimated to be \$1.14 billion in 2018. However, there are many social, environmental and economic factors that influence traffic safety outcomes that are beyond direct control of the City, which underscores the need to collaborate with other agencies as identified in the Safer Mobility Plan.

Financial Capacity

Current and Future Operating Budget:

The recommendations in this report are accommodated within current operating budgets for 2019-2022.

Current and Future Capital Budget:

The recommendations in this report are accommodated within the capital budgets for 2019-2022. Findings of the report and related actions help to inform the selection of future projects.

Risk Assessment

The continued development, piloting and implementation of traffic safety initiatives contributes to the reputation of Calgary as a city with an excellent quality of life. Effective and efficient traffic safety measures minimize the risks associated with a busy transportation network for all road users.

REASON(S) FOR RECOMMENDATION(S):

In receiving this report, Council is provided with updates on the progress towards the targets set out by the 2019-2023 Safer Mobility Plan and current and planned initiatives to improve safety for all users of Calgary's transportation network.

ATTACHMENT(S)

1. Attachment 1 – Safer Mobility Plan Annual Report 2019
2. Attachment 2 – 2018 Traffic Collision Data

Calgary Safer Mobility Plan
Annual Report 2019
Transportation Department
The City of Calgary
December 18, 2019



*...Mobility free of major injuries
and fatalities*

1. Introduction

The 2013-2017 Calgary Safer Mobility Plan (SMP) was the first step towards a formal, Calgary-specific, and evidence-driven transportation safety management process. The 2019-2023 Safer Mobility Plan update proposed to continue the course and build on the work accomplished previously. The Vision Zero approach and key performance indicators have been refocused on major injury and fatality collisions and a reduction target of 25%. This was made possible by the One Calgary budget increase resulting in increased resources for implementation of specific capital improvements to address safety issues reactively and proactively. This plan works in conjunction with the efforts of the Calgary Police Service and their Residential Traffic Safety Strategy.

With increased emphasis on Vision Zero, we have taken steps to align with the Vision Zero and focus on reducing the most severe collisions. Key steps toward a Vision Zero approach include:

- Eliminating situations where common driver errors lead to collisions with severe outcomes
- Mitigating roadside elements with increased risk of severe injuries
- Achieving operating speeds that reduce the likelihood of fatality or serious injury for all users by reducing impact energy

In its inaugural year, a significant amount of work was completed to begin implementation of cost-effective changes aimed at reducing collisions on our roads. These included infrastructure improvements at intersections, reducing operating speeds, traffic calming and evaluating speed limit modifications. The expanded application of Traffic Calming (TC) curbs has allowed quick responses to traffic safety concerns at a low cost and low impact to existing infrastructure. In September 2019, the Transportation Association of Canada *Road Safety Engineering Award* was presented to the City of Calgary for the development and deployment of Traffic Calming curbs, which are now used in cities across Canada.

We have made many upgrades to pedestrian crosswalks and continue to evaluate new and promising countermeasures by implementing them at locations with highest risk, based on network screening studies using collision data. In the upcoming years, the impact of these improvements will be reflected in our progress towards Vision Zero targets. In the meantime, this report presents 2018 collision statistics and progress towards the targets for actions and activities accomplished in 2017 and prior in Section 2. The actions accomplished in 2019 and planned for 2020 are outlined in Section 3 based on the 2019-2023 SMP Traffic Safety Strategy redefined in terms of five E's of transportation safety (Engagement, Engineering, Education, Enforcement and Evaluation / Innovation). Several project evaluation sheets have been developed and are included in Appendix B of this report.

Calgary Safer Mobility Plan Indicator Statistics

	2017	2018	Change	2015-2017 Average	Change vs 3 Year Average
Fatal Collisions	11	16	45%	21	- 24%
Major Injury Collisions	517	505	- 2%	531	- 5%
Pedestrian Involved Fatality+Major Injury Collisions	115	123	7%	121	2%
Bicyclist Involved Fatality+Major Injury Collisions	36	29	- 19%	42	- 30%
Motorcyclist Involved Fatality+Major Injury Collisions	27	24	- 11%	49	- 51%

2. Collision Statistics and Focus Area Targets

In 2018, there were 16 fatal collisions (11 in 2017), 2,496 injury collisions (2,646 in 2017) and 34,788 property damage only collisions (35,280 in 2017) on Calgary roads. The societal cost of these collisions was estimated to be \$1.14 billion in 2018.

In 2018, pedestrians were involved in eight fatal collisions (two in 2017) and 308 (352 in 2017) injury collisions, while cyclists were involved in 106 injury collisions (146 in 2017), with one fatal cyclist collision (zero in 2017). While injury collisions were lower, fatalities were higher than the previous year but in line with the 5-year average.

For comparison purposes, a selection of cities are shown in the table below, using the most recently available comparable data. While Calgary is continuing to perform well compared to other major Canadian cities with respect to all casualty collisions (minor/major injuries and fatalities combined), our performance from the perspective of more severe collisions (major injury and fatality focus of Vision Zero approach) leaves room for improvement with rates two to three times higher compared to other Canadian cities. Nevertheless, we may have turned the curve as the outcomes have been gradually improving since 2015/2016. Additional jurisdictional comparisons are provided in Appendix A.

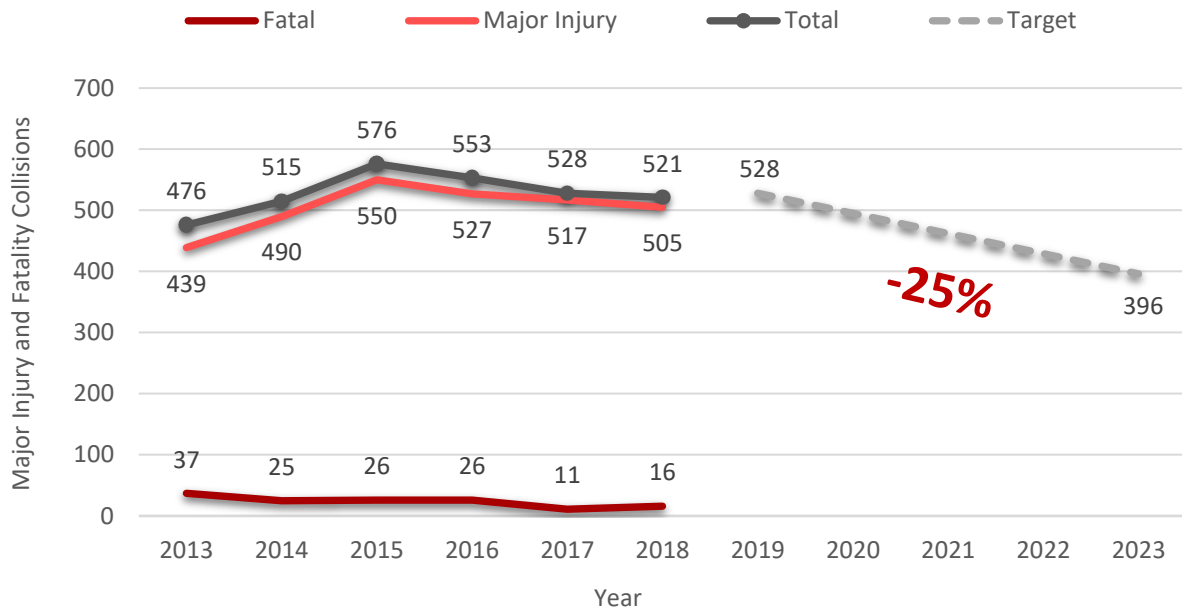
Summary of Traffic Injuries and Fatalities for Various Canadian Cities

City	Overall casualties (injuries + fatalities) per 100,000 population		Major injuries + fatalities per 100,000 population		Pedestrian major injuries + fatalities per 100,000 population	
	2017	2018	2017	2018	2017	2018
Calgary	215.7	205.9	44.6	44.3	9.5	10.4
Edmonton	397.9	340.2	39.4	34.6	7.4	7.1
Ottawa	214.6	199.6	17.5	17.2	-	-
Toronto	-	-	14.2	13.9	5.9	6.5

2.1 Target #1: Major Injury and Fatality Collision Target

Target: 25% reduction in major injury and fatality collisions

Baseline: 528 major injury and fatality collisions (2017)



Progress summary: In 2018, fatal collisions experienced an increase compared to the previous year but were below the 5-year average. Major injury collisions continued on the downward trend initiated in 2015. Overall, major injury and fatal collisions combined decreased by 1.3% compared to the previous year and by 9.5% since the peak in 2015.

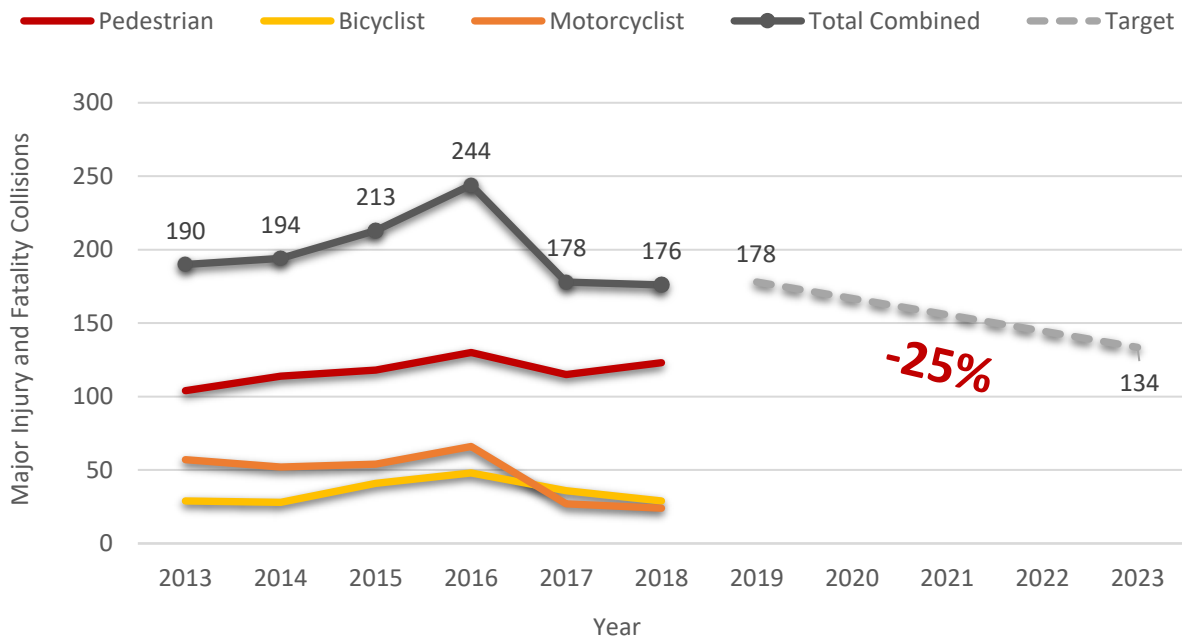
Key Actions:

- Implementation of network improvements
- Speed-related engagement and education and speed reductions, where appropriate
- Support of Calgary Police Service (CPS) targeted enforcement activities

2.2 Target #2: Vulnerable Road User Collision Target

Target: 25% reduction in major injury and fatality collisions

Baseline: 178 major injury and fatality collisions (2017)



Progress summary: Major injury and fatality collisions involving vulnerable road users decreased slightly in 2018 compared to 2017. This is mainly driven by a decrease within the bicyclist and motorcyclist categories and a slight increase in pedestrian collisions where continued effort is required.

Key Actions:

- Network screening and focused application of mitigation measures
- Video based conflict analysis to identify improvements
- Continued application of Traffic Calming Curbs to address collision issues
- Engagement and awareness activities related to speed
- Support of CPS targeted enforcement activities

3. Progress on SMP Strategies in 2019 and Planned Actions for 2020

The Traffic Safety Strategy in the 2019-2023 Safer Mobility Plan is centered on building momentum achieved in the previous version of the plan and focuses on the five E's of transportation safety. This section highlights a selection of actions that have been undertaken in 2019 by various groups. Some of these have been completed while others are ongoing. The planned actions for 2020 are also identified for each area of focus.

3.1 Engagement

The management of the SMP is primarily done through the collaborative teams of the SMP. One of the main actions is to report on the progress of the plan annually and to re-assess the SMP at the end of the 2019-2023 period, once data is available.

Actions initiated /completed in 2019

- Developed a process to engage/inform citizens of upcoming Temporary Traffic Calming treatments in their community
- Supported a community led initiative to pilot “Look” sidewalk markings along a route to school
- Resolved over 260, 311 Service Requests and developed specific information pages to address certain concerns at the time of initial call for enhanced customer service
- Engagement with Advisory Committee on Accessibility to identify and address navigation challenges at high entry angle right turns for the visually impaired
- Ongoing review and action on citizen feedback received at Ward Traffic Safety Meetings
- Coordination of six Community Speed Watch events, a volunteer-lead speed awareness program, with support from the Calgary Police Service
- Production of the 2019 Safer Mobility Plan Annual Report.



Photo Credit: Krystal Lamb

Planned actions for 2020

- Develop the strategy for the next round of Ward Traffic Safety Meetings/events
- Reestablish regular meetings and collaboration through various Safer Mobility Teams
- Monitor the traffic safety related results of the Roads Annual Survey to track trends in public perception and satisfaction
- Continue to respond to 311 enquiries from the public
- Monitor traffic safety and share findings through SMP Annual Report 2020

3.2 Engineering

With increased funding for traffic safety capital projects we were able to complete several engineering improvement projects that alter the road environment to reduce collisions. Projects with highest collision reduction potential for the investment and higher than expected risk of major injury or fatality were prioritized, including roadway geometry improvements, high entry angle right turns, and pedestrian safety improvements. Below are some highlights.

Actions initiated /completed in 2019

- Completion of *In-Service Road Safety Reviews* (ISRSR) at high collisions intersections and Video Based Conflict Analysis studies – nine locations
- Completion of over 60 Collision Reviews and Safety Assessments based on concerns raised by members of the public or Administration, resulting in:
 - Numerous sign and pavement marking improvements
 - Traffic Calming curb treatments – 32 locations
- Pedestrian crosswalk improvements:
 - RRFBs – 23 planned (16 completed)
 - Overhead flasher crosswalks – nine planned (one completed, eight in progress)
 - Side-mounted flashers at pedestrian corridors – 27 planned (24 completed)
 - Pedestrian median refuges (e.g. 3 Avenue & 34 Street NW)
 - New signalized crosswalks (e.g. Parkdale Blvd & Kensington Road NW)
 - Street lighting improvements
- LRT corridor pedestrian improvements (e.g. new signal controllers/cabinets, and timing changes along 36 Street NE)
- Coordination and implementation of targeted, cost effective measures identified through the ISRSR and Collision Review processes to improve safety under the Safety Improvements Capital Program and as part of other projects, for example:
 - Saddletowne Circle and 80 Avenue NE (east intersection)
 - Crowchild Trail and 50 Avenue SW (east intersection)
 - Anderson Road and Bonaventure Drive SE
 - Edmonton Trail and McKnight Blvd NE
 - Shaganappi Trail and Dalhousie Drive NW
- Signal phasing and timing improvements including:
 - Protected left turns – 8 locations
 - Preliminary Leading Pedestrian Interval (LPI) trial evaluated at two locations with positive impacts to reduce pedestrian collisions.
 - Targeted signal phasing changes to improve safety (Glenmore Trail and 5 Street SW, Glenmore Trail & Elbow Drive SW, Saddletowne Circle and Falconridge Blvd NE, etc.)



- Development of the Vision Zero Safety Improvement Program targeting major injury and fatality collision reduction:
 - Network screening to identify locations of most concern, laying groundwork for detailed safety assessments, to reduce the severity using targeted, evidence-based improvements
 - Expand traffic safety intelligence with further analyses of clusters and risk factors

Planned actions for 2020

We will continue to prioritize the recommendations identified in previous studies (e.g. ISRSRs, Collision Reviews and Safety Assessments, Video Based Conflict Analysis, network screening studies, etc.) along with other improvements with high potential for reduction of high severity collisions. Additional ISRSRs and Road Safety Audits may be undertaken as required.

- Leading Pedestrian Interval trial expanded to 10 additional locations with an overrepresentation of pedestrian collisions
- City-wide prioritization of locations for countermeasures including Advanced Warning Flashers, high friction surface treatment, and more appropriate speeds
- Continued implementation of geometric improvements, traffic signal improvements, with focus on vulnerable road users
- Implementation of roadside improvements including median barriers and bridge pier protection
- Ongoing traffic safety support and coordination of programs.

3.3 Education

Actions initiated /completed in 2019

- Created online content to inform public of new countermeasures (e.g. Traffic Calming Curbs) and initiatives with answers to common questions.
- Expand the Residential Sandwich Board program with deployment of 23 additional signs to support concerned citizens
- Responded to requests for portable SLOWS speed trailer rotation with deployment to 167 locations in 88 communities
- Various awareness campaigns including *Look and Look Again* and *Stampede pedestrian safety, Residential Speed Limit Reduction*
- Ongoing support for “Report Impaired Driving” signage.

Did you know: Top five Communities for SLOWS trailer requests:

- South Calgary
- Cranston
- Lakeview
- Acadia
- Dalhousie



Planned actions for 2020

- Incorporating educational components into the next round of Ward Traffic Safety Meetings/events, focused on the release of 2019-2023 Safer Mobility Plan, Vision Zero, results of evaluations, and communicate results of evaluations on Calgary.ca/trafficsafety webpage
- Identify and create an educational campaign about blind spots/common errors that road users make and strategies to change the related habits
- Development of traffic safety factsheets, to disseminate traffic safety research and initiatives (including Vision Zero) to the public and Safer Mobility Teams
- Renewal of 'Take It Off the Road' campaign.

3.4 Enforcement

Actions initiated /completed in 2019

- Ongoing support of Calgary Police Service deployment of high-visibility targeted enforcement
- Participation in CPS Collision Reconstruction review meetings and sharing of collision data analysis
- Coordination of six Community Speed Watch events, a volunteer-lead speed awareness program, with support from the Calgary Police Service
- Continuous coordination and cooperation in the delivery of community improvements and initiatives.

Planned actions for 2020

- Coordinate deployment of SLOWs trailers with speed enforcement activities
- Deployment of traffic speed data collection devices to assist CPS in targeted speed enforcement
- Safer Mobility Operations Team meetings to facilitate knowledge sharing, collaboration, and coordination of activities.

3.5 Evaluation and Innovation

Actions initiated /completed in 2019

- Evaluated the effect of recently implemented countermeasures at select locations and developed Project Sheets summarizing the findings (Appendix B)
- The City of Calgary received the Transportation Association of Canada *Road Safety Engineering Award* for the development and deployment of Traffic Calming curbs, which are now used in cities across Canada.



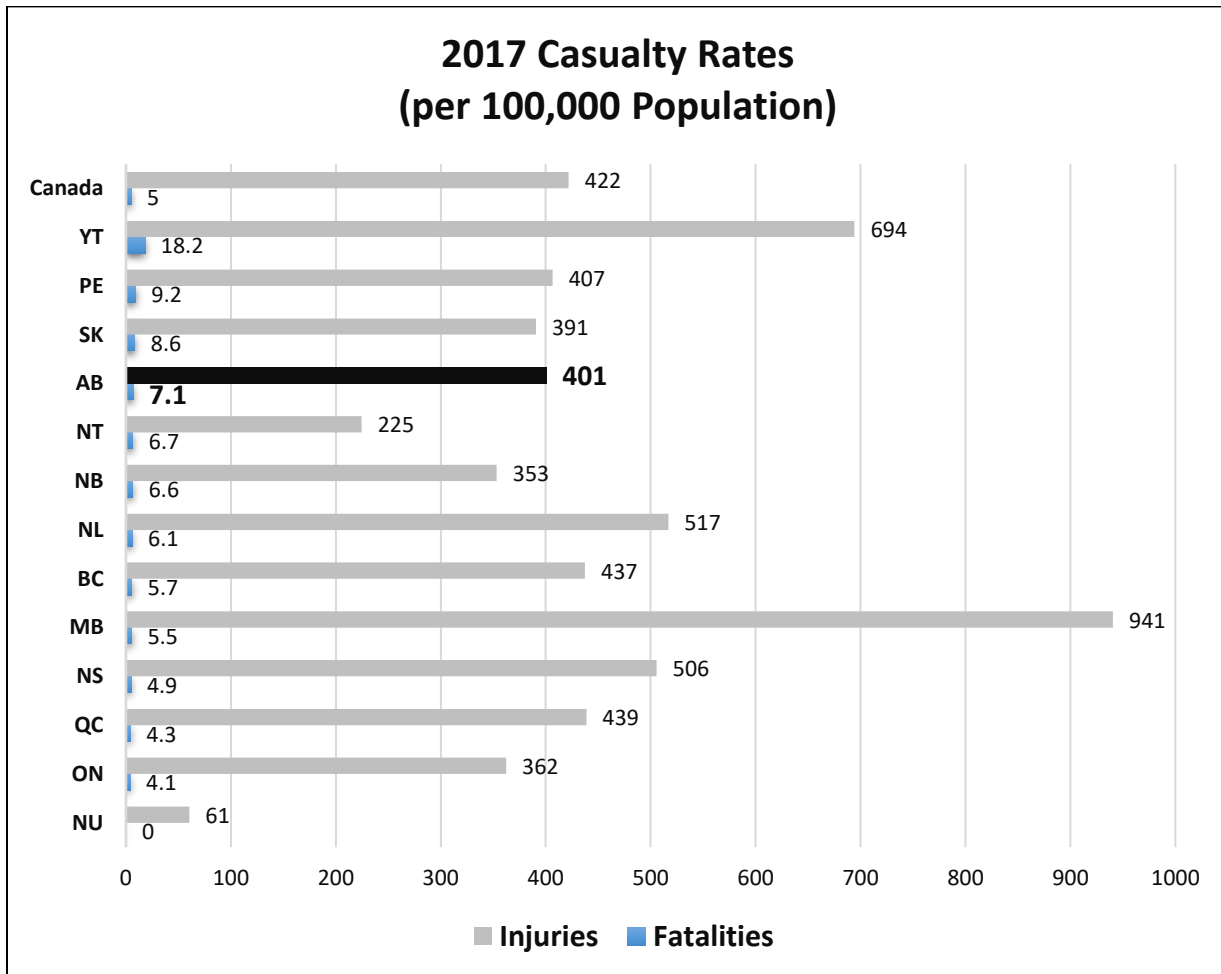
Actions initiated /completed in 2019

- Trials of innovative countermeasures such as Leading Pedestrian Interval at signalized intersections
- Investigation of speed reduction initiatives to develop a strategy for moving towards speeds more consistent with the Safer Systems Approach for all road users, and vulnerable road users in particular
- Active participation on TAC committees guiding projects to develop application guidance for the safety impacts of bicycle infrastructure and u-turn signals
- Application of video based conflict analysis for proactive evaluation of pedestrian related safety countermeasures
- Support the University of Calgary's research such as applications to encourage uniform speeds
- Traffic safety knowledge exchange with the City of Edmonton, Alberta Transportation and other jurisdictions
- Calgary hosted the 2019 Canadian Association of Road Safety Professionals (CARSP) Conference with a Vision Zero theme.

Planned actions for 2020

- Regular meetings of the Safer Mobility Research Team
- Evaluate the safety performance of advanced yield lines and other countermeasures
- Evaluate safety performance of Rectangular Rapid Flashing Beacons (RRFBs) as well as other mitigation measures and elements of the roadway environment to better understand their impact on safety
- Work with the Calgary Police Service and the Provincial Government to move toward an open data model for collision data which is currently not publicly available
- Broaden mobility safety data to include collisions not involving motor vehicles and near misses
- Establish use-based measures to monitor pedestrian, bicycle and motorcycle collisions.

Appendix A - Safety Data Comparisons



*Source: Transport Canada, most recent available

Appendix B - Project Evaluation Sheets

CITY OF CALGARY

TRAFFIC SAFETY IMPROVEMENTS

Project Details

Location: Crowchild TR NW & Kensington RD NW

Date: Summer 2018

Improvements: High Entry Angle Channelized Right Turn with Truck Apron (south west and north east corners)

ANNUAL RIGHT TURN COLLISIONS BEFORE AND AFTER IMPROVEMENTS

Category	Before	After
Total Collisions	32.5	3
Injury Collisions	1.5	0

94%

Reduction of Collision Cost to Society

91%

Reduction of Total Right Turn Collisions

100%

Reduction of Total Injury Right Turn Collisions

Before Improvements:



large curve radius, higher speeds, low entry angle

After Improvements:



small curve radius, lower speeds, high entry angle

Project Details

Location: 9 Avenue SW & 7 Street SW

Date: Fall 2017

Improvements: Leading Pedestrian Interval Signal Phasing



100%

Reduction of Left Turn
Pedestrian-Vehicle
Collisions (Preliminary)



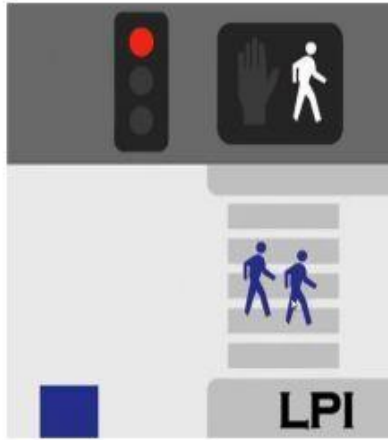
12%

Increase in Total
Intersection
Collisions



90%

Reduction of
Injury Collisions

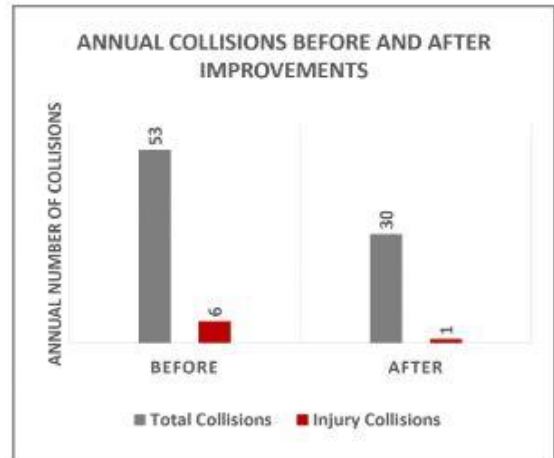


Project Details

Location: Macleod Trail SE & 162 Avenue SE

Date: 2017

Improvements: Diverging Diamond Interchange



Before Improvements



After Improvements



83%
Reduction of Injury Collisions



43%
Reduction of Total Collisions



68%
Reduction of Collision Cost to Society

Project Details

Location: Edenvold Drive NW & Edforth Way NW

Date: September 2018

Improvements: Temporary Traffic Calming Curbs



100%
Reduction in Incidents of Aggressive Driver Behaviour



7.0 km/hr
Reduction of Average Speed

Before Improvements



After Improvements



8.5%
Increase in Yielding Compliance



5.3%
Increase in Speed Compliance

Project Details

Location: 36 Street NE
(8 Avenue NE to 26 Avenue NE)

Date: 2017 - 2019

Improvements:

- Replacing Signal Controllers
- Signal Operation Improvements



100%

Reduction of Skipped
Pedestrian Phase



31%

Average reduction of
Pedestrian Violations
during AM and PM
Peak Periods



35%

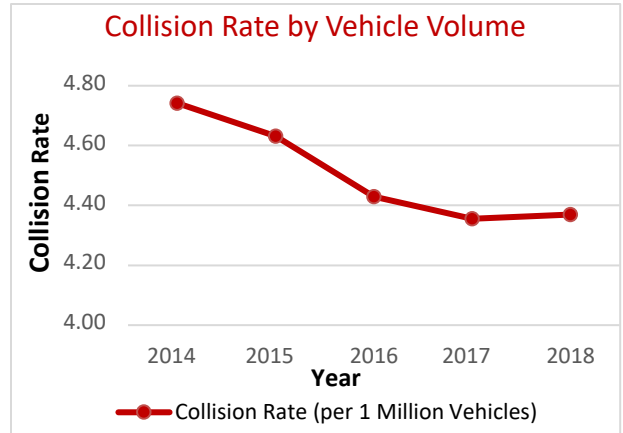
Reduction of Average
Pedestrian Expected
Waiting Time (s)



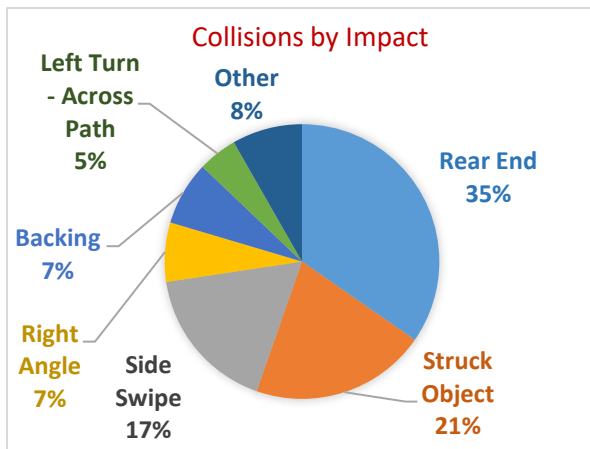
2018 Traffic Collision Summary

Transportation Data and Forecasting

The total number of collisions in Calgary increased by 6% in 2018 compared to 2017. While the number of property damage and injury collisions both show decreases, fatal collisions increased from 11 in 2017 to 16 in 2018. Collision rates per population and registered vehicles decreased, though rates by traffic volume remained the same when compared with 2017. The collision rate by vehicle volume dropped from a five year high of 4.7 in 2014 to 4.4 collisions per million vehicles in 2018.



The number of pedestrian collisions decreased by 6% in 2018 from 415 to 392. However, pedestrian fatal collisions increased from 2 in 2017 to 8 in 2018. Additionally, the number of bicyclist collisions dropped by 17% from 221 in 2017 to 184 in 2018. However, 2018 saw the first bicyclist fatal collision since 2012. The number of motorcyclist collisions decreased by 2% in 2018 and the motorcyclist collision rate per capita remained the same as 2017. Rear End, Struck Object and Side Swipe collisions accounted for nearly three quarters of all reported collisions in Calgary in 2018.



Disclaimer

Data used in the 2018 Annual Traffic Collision Summary was exported on May 3rd, 2019 from The City of Calgary's eCollisions Traffic Collision database.

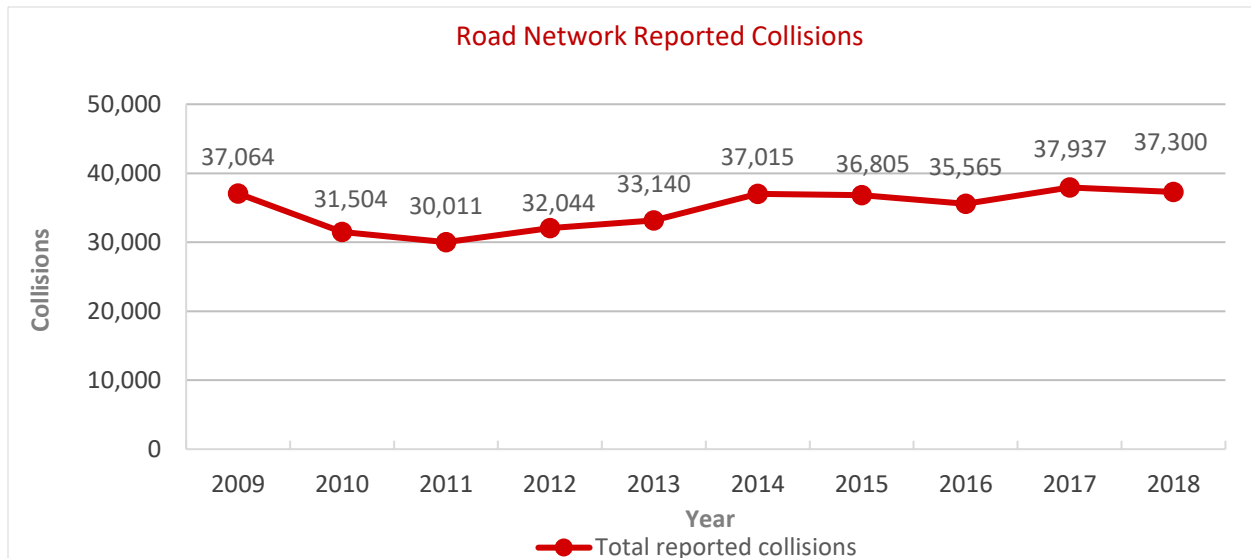
This database is supplied with collision records from the Calgary Police Service (CPS) via Alberta Transportation's eCollisions Traffic Collision Database. Data represented in this summary are accurate up to May 3rd, 2019. Collision reports are not included in eCollisions until active CPS investigations and records processing are complete.

The 2018 Annual Traffic Collision Summary consists of summary statistics associated with motor vehicle collisions within the city limits of Calgary. These summary statistics are used to perform road safety reviews, determine road safety audit locations, and monitor countermeasure and infrastructure performance. Collision data for non-engineering purposes can be acquired by contacting the Calgary Police Service.

Transportation Planning, and Transportation Data and Forecasting releases this annual summary in good faith, however, the City of Calgary provides no warranty, nor accepts any liability arising from any incorrect, incomplete, or misleading information or the improper use of this report.

Quick Statistics

Statistic	2017	2018	% Change
Total City-wide Collisions	46,021	48,592	6
Total Road Network Collisions	37,937	37,300	-2
Fatal Collisions	11	16	45
Injury Collisions	2,646	2,496	-6
Property Damage Only Collisions	35,280	34,788	-1
Motor Vehicle Collisions <i>per capita</i> (1,000 pop.)	30	29	-3
City Population	1,246,337	1,267,344	2
Motor Vehicle Collisions per 1,000 Registered Vehicles	38	37	-3
Registered Vehicles in Calgary	990,144	1,000,567	1
Motor Vehicle Collisions per Vehicle Volume (1m vehicles)	4.36	4.37	0
Intersection Collisions	22,501	22,218	-1
Non-Intersection Collisions	15,463	15,082	-2
Pedestrian Collisions	415	392	-6
Pedestrian Fatal Collisions	2	8	300
Pedestrian Injury Collisions	341	308	-10
Pedestrian Collision Rate <i>per capita</i> (100,000 pop.)	33	31	-6
Bicyclist Collisions	221	184	-17
Bicyclist Fatal Collision	0	1	+ from zero
Bicyclist Injury Collisions	146	106	-27
Bicyclist Collision Rate <i>per capita</i> (100,000 pop.)	18	15	-17
Motorcyclist Collisions	116	114	-2
Motorcyclist Fatal Collisions	2	2	0
Motorcyclist Injury Collisions	67	61	-9
Motorcyclist Collision Rate <i>per capita</i> (100,000 pop.)	9	9	0



Transportation Report to
SPC on Transportation and Transit
2019 December 18

ISC: UNRESTRICTED
TT2019-1554

Parking Requirements Review – Scoping Report

EXECUTIVE SUMMARY

In response to the Motion Arising related to parking requirements adopted by Council on 2019 March 18, Administration has determined the scope of work required to undertake a holistic review of parking requirements. This was based on direction from the Motion Arising, evolving best practices in other jurisdictions and Administration's research as outlined in 2017 The Future of Transportation in Calgary report. This will include analysis of visitor parking and the impact of Transportation Network Companies and Rideshare services. Once complete, the review findings could be implemented through several complementary projects that are currently underway, such as the proposed Renewed Land Use Bylaw and New Districts project.

ADMINISTRATION RECOMMENDATION:

That the Standing Policy Committee on Transportation and Transit recommend that Council:

1. Approve the scope of the parking requirements review as outlined in this report and direct Administration to commence work in alignment with the proposed Renewed Land Use Bylaw and New Districts Project, and Residential Parking Permit (RPP) project.

PREVIOUS COUNCIL DIRECTION / POLICY

On 2019 March 18, Council adopted a Motion Arising with respect to Report CPC2019-0070. The Motion Arising directed Administration to undertake a scoping report of parking ratios, particularly on visitor parking ratios and the effects of Transportation Network Companies and Ridesharing companies, and report back to the SPC on Transportation and Transit no later than Q4 2019.

BACKGROUND

The last comprehensive review of parking requirements occurred as part of the development of the 2007 Calgary Land Use Bylaw 1P2007. Since 2007, Administration has reviewed and updated key parking requirements and policies (such as the 'zero parking' multi-family policies, and the 2016 update to the Downtown Parking Strategy), and has applied industry best practices to development approval and parking relaxation decisions as outlined in the Calgary Parking Policies.

Direction from the 2019 March Motion Arising offers an opportunity for Administration to conduct a holistic review of current parking requirements in light of recent advances in transportation choices and technologies.

INVESTIGATION: ALTERNATIVES AND ANALYSIS

Administration will initiate a project to review parking requirements that are currently used by The City of Calgary, updating the parking requirements identified in the previous review conducted prior to 2007. The scope of the review will include additional considerations beyond the scope of the previous parking requirement review that contributed to the development of the Calgary Land Use Bylaw 1P2007, based on direction from the Motion Arising, evolving best practices in other jurisdictions and Administration's research as outlined in 2017 The Future of Transportation in Calgary report (TT2017-0382).

Transportation Report to
SPC on Transportation and Transit
2019 December 18

ISC: UNRESTRICTED
TT2019-1554

Parking Requirements Review - Scoping Report

The review will examine comparable cities and environments, reference trends and realities in Calgary, and comment on the impacts of Transportation Network Companies and Ridesharing companies such as Uber, Lime and Bird, and review of visitor and short-term parking requirements. The use of parking maximums, and elimination of minimum parking rates will also be explored. The impact of emerging transportation options, such as autonomous vehicles and newer business delivery models, on future parking requirements will be considered.

Components of this work, such as residential parking requirements, will be prioritized to align with timelines for Land Use Bylaw initiatives in early 2020, with the comprehensive review being completed by Q2 2020. Upon completion, the findings of the review will be implemented through several active and proposed projects. These include:

Proposed Renewed Land Use Bylaw and New Districts

Parking reform is one of five key elements identified as part of the Framework for a Renewed Land Use Bylaw & Outline for New Districts. Updates to current parking requirements can inform the parking reform process and will support the initial step of developing options for the proposed new Neighbourhood-Housing Limited Scale district (as proposed in report PUD2019-1200).

The parking requirements review will also support policy and bylaw adjustments to enable public parking within the existing commercial or community parking supply, which would further reduce the need for the construction of new parking supply, as identified in report TT2017-0042.

Residential Parking Program (RPP) Review

Administration is currently developing policy recommendations to modernize Calgary's residential parking practices. The parking requirement review will incorporate the recommended residential parking strategic direction that will be presented to Committee in Q1 2020. The findings of the review would in turn be considered in subsequent development of detailed residential parking policies.

Electric Vehicle Home & Workplace Readiness

The City of Calgary is currently partnering with the City of Edmonton to evaluate policy and bylaw approaches to increase access to home and workplace charging in new and existing buildings. The final report, due in early Q1 2020, can provide input to the parking requirement review, and sharing of information between the project teams will help ensure alignment between both studies.

Curbside Management Strategy

A holistic approach to curbside management has been identified by the Next 20 project as an area that requires further work to ensure that existing and emerging curbside needs are being properly addressed. The parking requirement review will support a broader analysis of the parking impacts of Transportation Network Companies and Rideshare services, along with other competing curbside demands such as traditional on-street parking, taxi stands, pop-up patios, electric vehicle charging and potential future impacts of autonomous vehicles.

Transportation Report to
SPC on Transportation and Transit
2019 December 18

ISC: UNRESTRICTED
TT2019-1554

Parking Requirements Review - Scoping Report

Stakeholder Engagement, Research and Communication

The review of Calgary's parking requirements will include engagement with key stakeholders, including the development industry, and internal City staff involved in development application approvals.

Strategic Alignment

Reviewing and updating The City's parking requirements, as needed, to reflect changes in transportation technologies and choices aligns with the Calgary Transportation Plan's direction to monitor the needs of emerging modes and plan for them as necessary.

Social, Environmental, Economic (External)

Updating The City's parking requirements to reflect changing transportation options may provide economic and social benefits. Situations where parking requirements are reduced will avoid unnecessary costs to construct excess parking, reducing costs to businesses and increasing housing affordability for citizens.

Financial Capacity

Current and Future Operating Budget:

There are no impacts to The City's current or future operating budgets. The required analysis can be completed within existing resources.

Current and Future Capital Budget:

There are no impacts to The City's current or future capital budgets.

Risk Assessment

No risks have been identified for undertaking this work.

REASON(S) FOR RECOMMENDATION(S):

The planned review of The City's parking requirements addresses direction from the Motion Arising, and will be implemented through a range of updates to City policies and bylaws over the next several years. This will ensure that Calgary's parking requirements are consistent with evolving trends in travel options and behaviours, and account for emerging technologies.