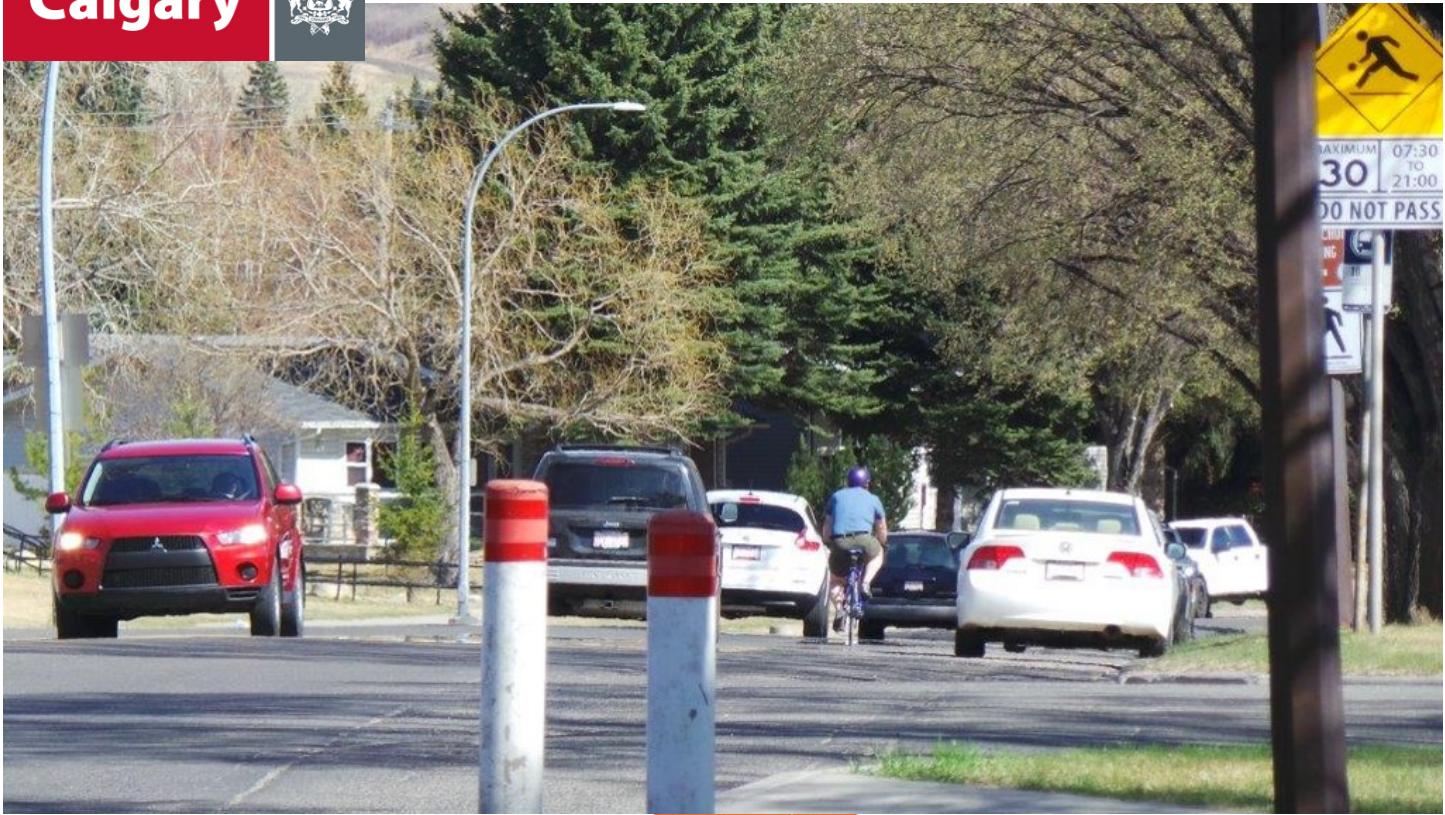


Calgary



City-wide Bikeways

Northmount Drive N.W.
Improvement Project
Information Booklet

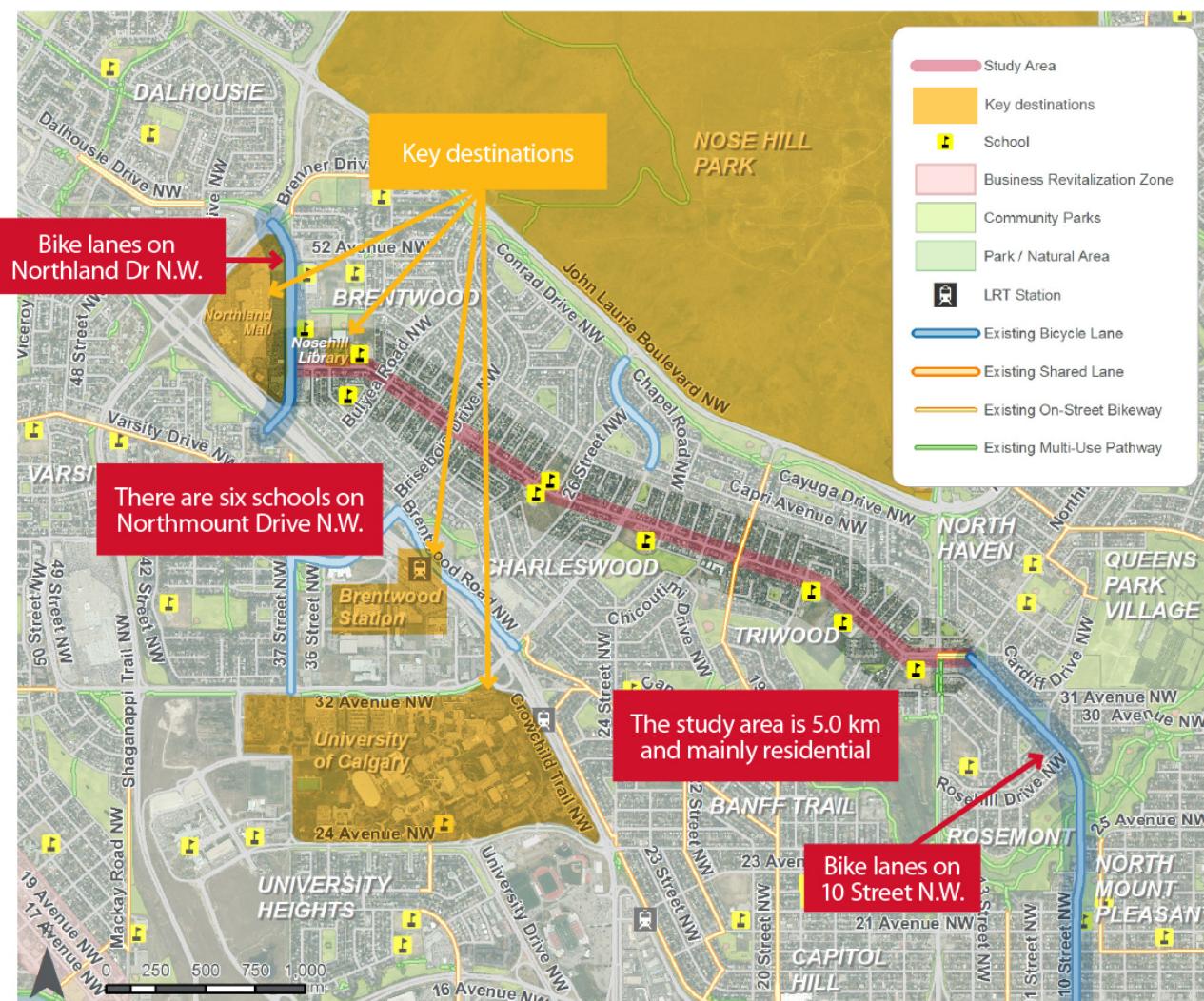
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Study area

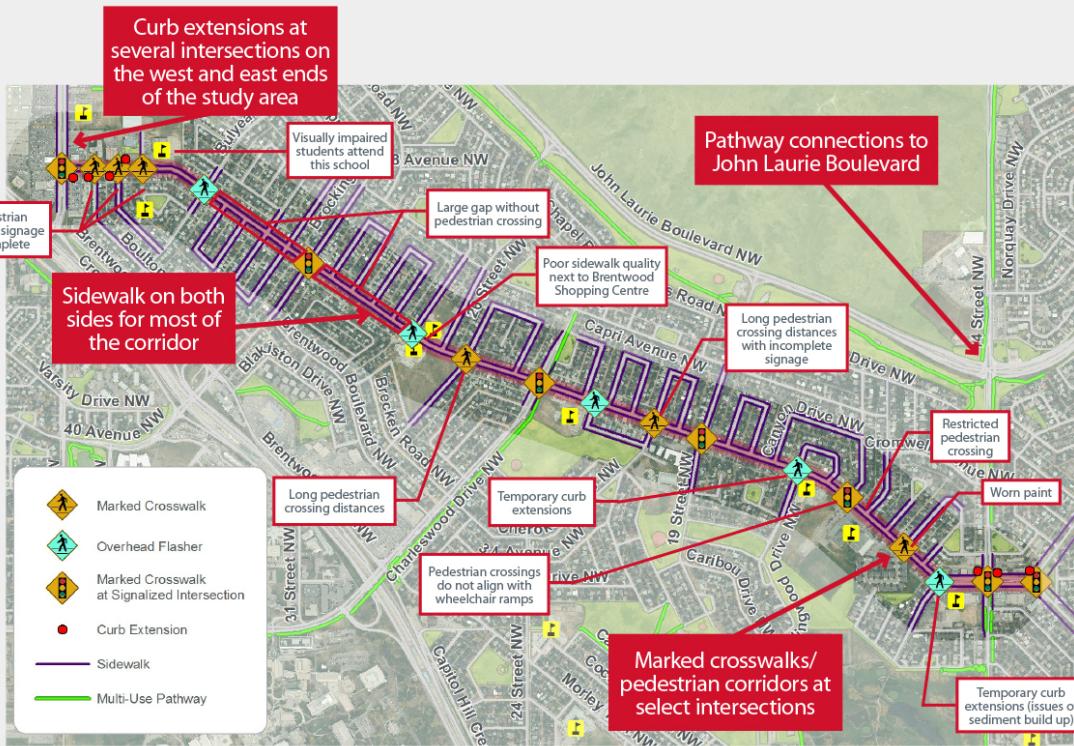
- 4.1 kilometres in length
- Northland Drive N.W. to Carol Drive N.W.
 - Collector road
 - 11.6m road width
 - One lane in each direction with on-street parking
 - Transit route
- Carol Drive N.W. to Cambrian Drive N.W.
 - Carol Drive N.W. to 14 Street N.W. is a collector road
 - 14 Street N.W. to Cambrian Drive N.W. is an arterial road
 - 28.0m road width
 - Two travel lanes in each direction with a centre median
 - Dedicated turn lanes/bus bays at intersections
 - No on-street parking
 - Transit route

Collector roads collect traffic from Arterial Streets and Primary Collectors (higher speed roads with large traffic volumes) and distribute it to other local streets. Typical daily traffic volumes range from 2,000 to 8,000 vehicles per day. Transit and direct access to adjacent properties is permitted.

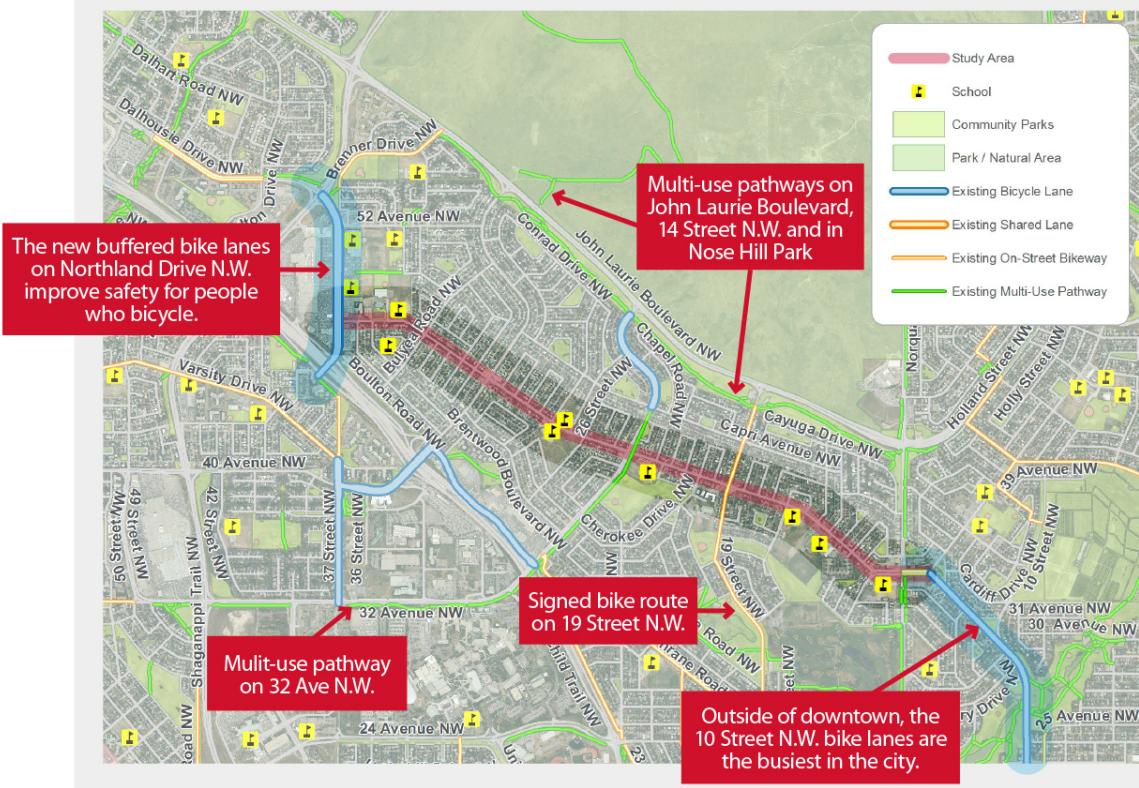


Existing conditions

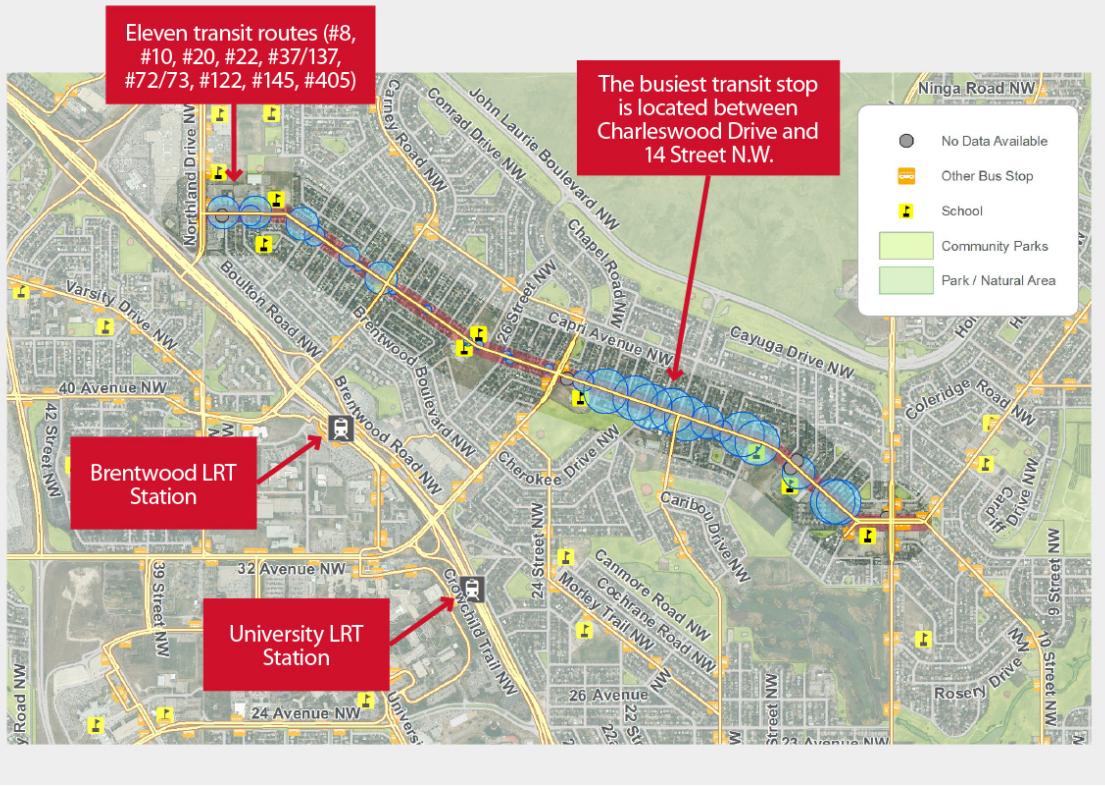
People who walk:



People who bike:



People who take transit:



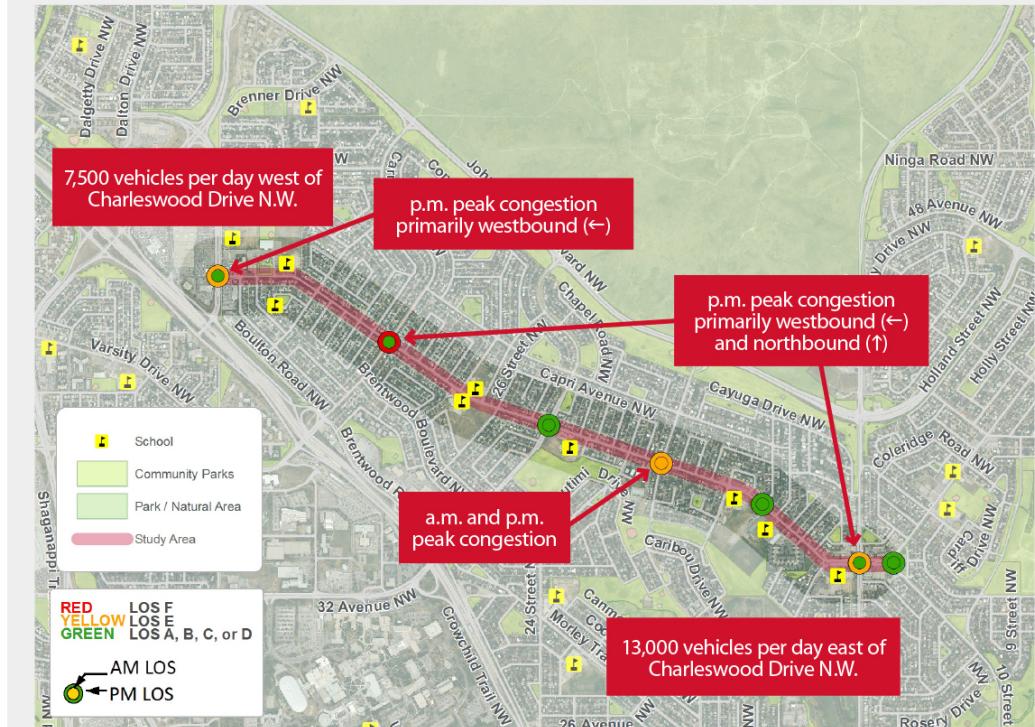
AVE. DAILY WEEKDAY TRAFFIC (ADWT)

YEAR	Northland Dr NW to Charleswood Dr NW	Charleswood Dr NW to 14 St NW
2013	7,500	13,000
2012	7,500	13,000
2011	7,500	16,500
2010	9,500	16,000
2009	9,500	16,000
2008	9,000	16,000
2007	10,000	25,000
2006	10,000	16,000
2005	11,000	23,000
2000	12,000	12,000

Level of Service (LOS) is an analysis used to measure vehicle congestion and delay at intersections. LOS is measured on a scale from A (no delay) to F (significant delay). In urban areas, a LOS of D or better is usually considered acceptable.

Most major intersections along Northmount Drive N.W. operate with an acceptable LOS today during the morning and afternoon peak period, with the exceptions noted on the map.

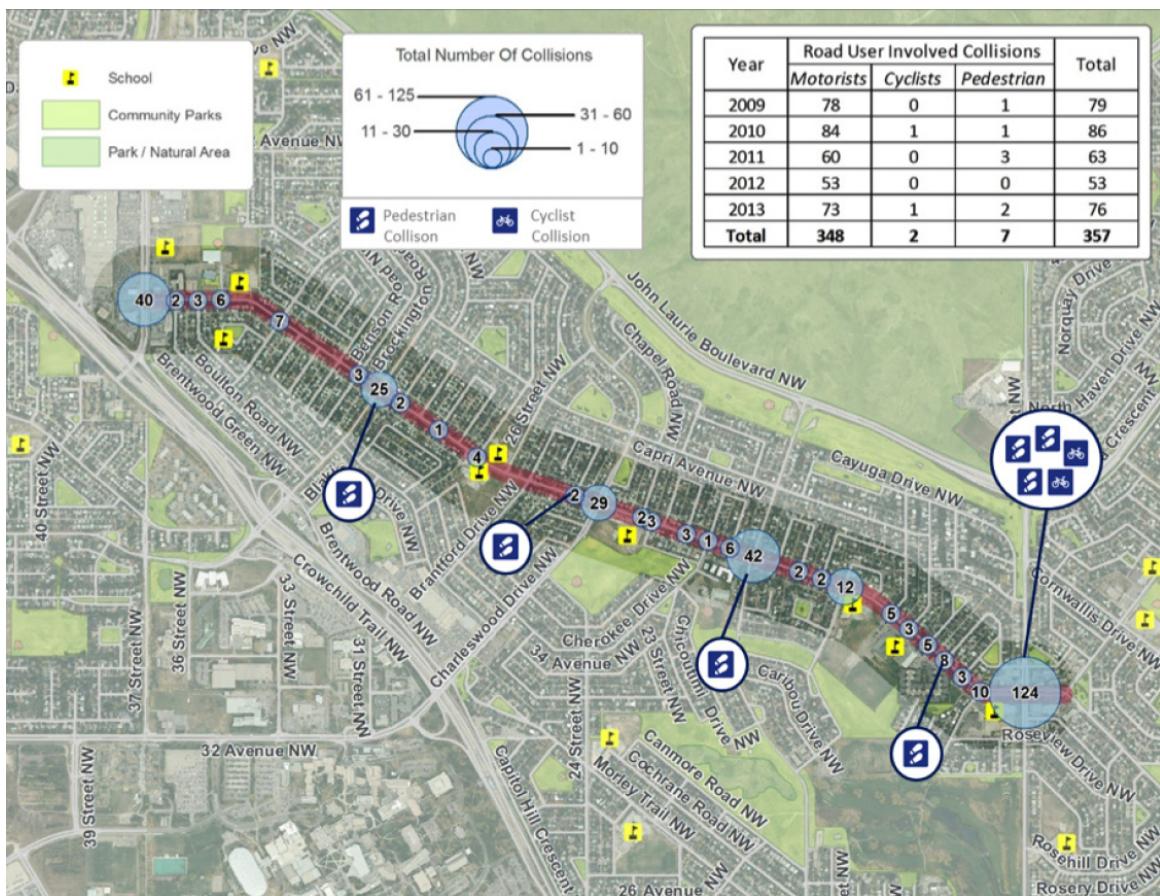
People who drive:



Safety

The project aims to improve safety for all road users.

- There were 357 reported collisions along the corridor between 2009 and 2013 (average of 71 per year)
- People who walk and bicycle are vulnerable road users
- There were seven reported collisions involving people walking and two involving biking between 2009 and 2013
- Highest collision locations are at:
 - 14 Street N.W.
 - 19 Street N.W.
 - Northland Drive N.W.



Complete Streets

What are they?

- A street design that considers the needs of all road users, including age, physical ability and income level

How do they benefit all road users?

- Provide need-based transportation options for all road users
- Create liveable neighbourhood streets that encourage people to travel by walking, cycling and taking transit

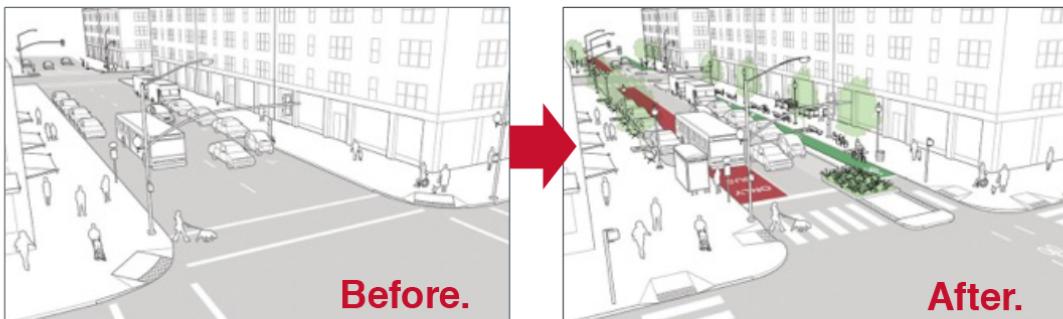
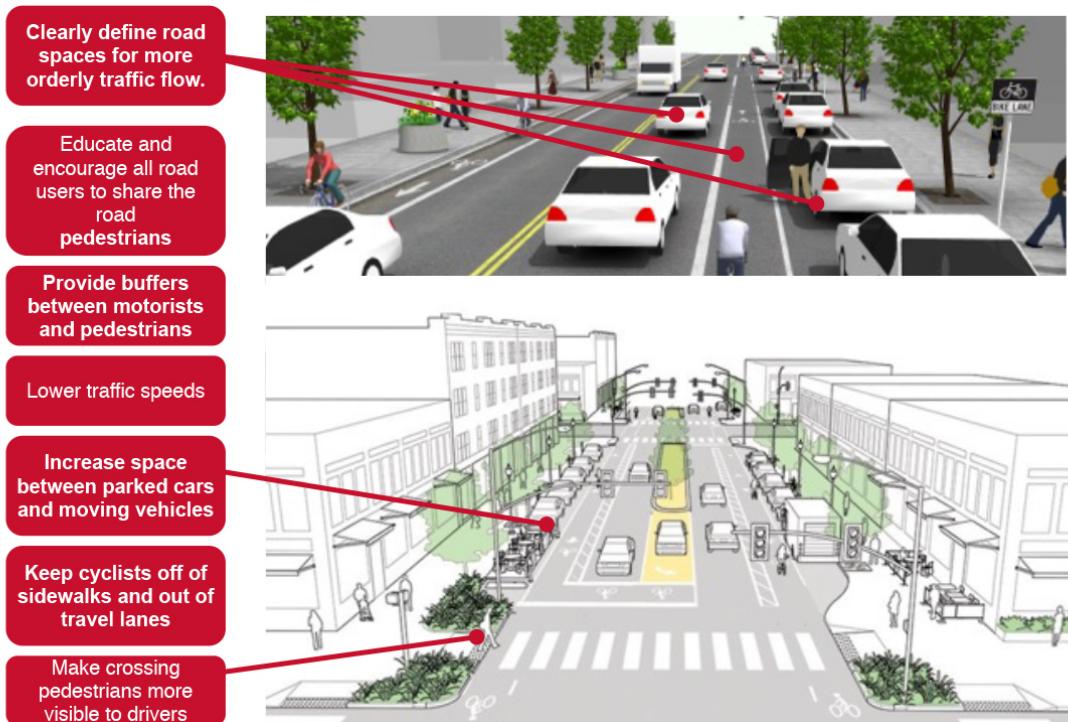


Image credits: NACTO



Parking

Parking is currently permitted on both sides of Northmount Drive N.W. for the majority of the study area except in front of schools.

Potential to park over 450 cars on Northmount Drive N.W.:

- 190 north side
- 270 south side

Potential to park over 2000 cars on side streets intersecting Northmount Drive N.W.



The City conducted two parking studies

- November 2014 from 5:30 a.m. until 6 p.m. (weekday)
- April 2016 from 8:30 a.m. until 11:30 a.m. and 3:30 p.m. to 6:00 p.m. (weekend)

The studies found:

- Most on-street parking is used less than 50 per cent of the time.
- Parking on the majority of side streets is under-used.
- This data will help inform if and how parking could be adjusted.
- At least **two-thirds** of on-street parking stalls on Northmount Drive can be preserved.



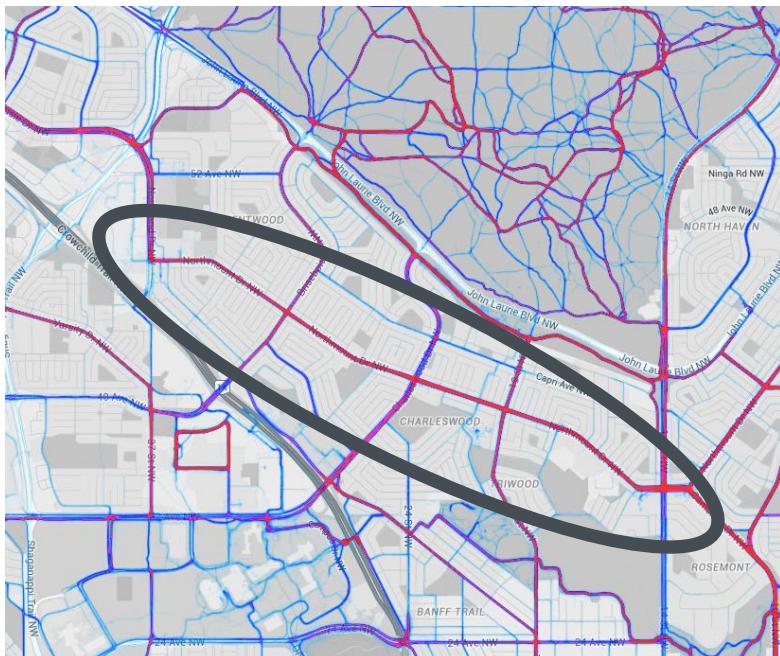
Frequently Asked Questions

How many people are cycling on Northmount Drive N.W. today?

We know that Northmount Drive N.W. is the clear desire line, and that people are already using the road even though it's not comfortable (illustrated by the Strava map and bicycle counts). We want to provide a safe option for people of all ages and abilities no matter how many users. It's really about providing the choice, the travel option, a public good.

Bicycle counts in June 2014 (24 hour factored bike volume)

- Northmount Drive N.W. at 19 Street N.W. – 130
- Northmount Drive N.W. at Carol Drive N.W. – 212 (This location shows similar “before” numbers as 10 Street and 13 Avenue N.W. We expect to see a similar increase in ridership.)



Heat map showing cyclist usage based on Strava data. The red line indicates high cyclist activity (darker lines mean more users) and the blue line represents few to no people who bicycle. This image is from strava.com.

Why are you spending tax payer dollars on the minority of users?

- Cycling represents a very small portion (about 3%) of the Transportation budget, but provides significant benefits for all citizens, like reducing congestion in the long-term, reducing health care costs, reducing emissions, contributing to less crime by having a more vibrant community (more eyes on the street).
- Economics and cost are important factors, but there are benefits to consider also such as social and environmental factors.
- Traditional transportation planning has resulted in the high vehicle mode share that North America has today, but this has had negative impacts on communities in terms of health, function, place and environment. Most communities are actively working to reverse this trend.
- The investment in maintenance and construction of active modes facilities is lower per trip than building new roads.
- According to a 2013 [survey](#) commissioned by the Canadian Automobile Association, “Yearly ownership costs for an average compact car are about \$9,500, while the average Canadian spends \$5,400 on groceries a year (figure provided by Statistics Canada).”

Calgary is a winter city and these lanes will only be used a few months per year.

Based on data counts from 10 Street N.W. and the Centre City Cycle Track Network, approximately 30% of riders continue cycling in the winter.

For about 86 days, or one-quarter of the year, Calgary has at least a centimetre of snow on the ground. In mid-winter the snowpack averages around three cm deep. Calgary typically has 194 days a year with a minimum temperature of 0°C or below, about 71 days a year below -10°C, and about 22 days per year below -20°C.

Why aren't people cycling licensed like people driving?

Many other municipalities in Canada and the United States have researched this issue over the years, and the consensus has been that licensing cyclists would have little impact on increased compliance, identification or reducing bicycle theft. Cyclists are governed by Alberta's Traffic Safety Act regardless of whether or not they have a driver's license. If a cyclist does have a driver's license they can receive demerits for traffic infractions while cycling.

In the case of licensing for identification to report dangerous driving, similar to vehicle licensing, this rarely results in a ticket because of the subjectivity of the reporting and difficulty providing evidence.

Experience and research from other municipalities indicates that implementing a licensing system for cyclists would largely duplicate the existing driver's license system, wouldn't achieve the desired goals and wouldn't recover costs for operating the system.

Why was a pedestrian scramble not considered at Calendar Road N.W. (In front of Saint Francis School)?

A pedestrian scramble was considered to move students across Northmount Road N.W. at Calendar Road N.W., in front of Saint Francis High School. Because this infrastructure would be utilized for a short period of time each day (pick-up and drop-off times), the project team has decided to not pursue this option. A lengthened "walk" signal is being considered during the school arrival and dismissal periods.

Why not an alternate street, like Capri Avenue N.W.?

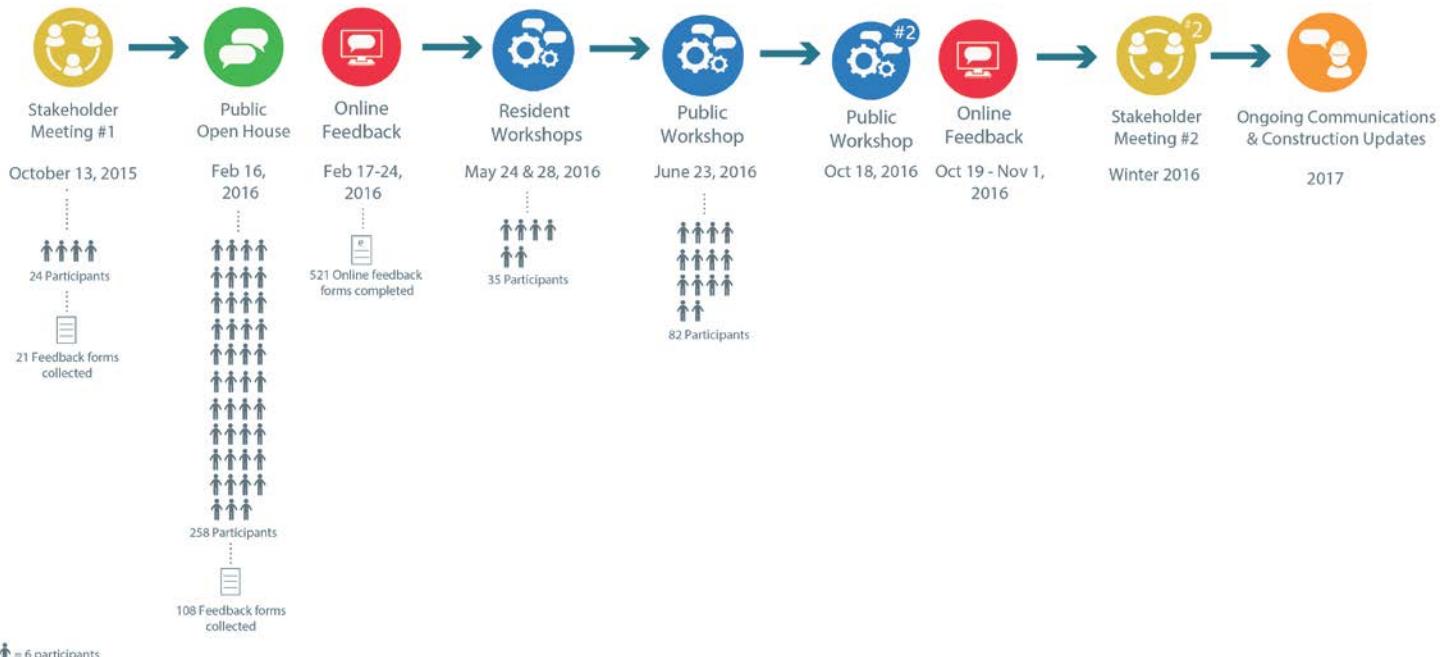
Alternate streets have been considered but did not provide the same benefits as Northmount Dr. N.W.:

- **This road already receives Priority 1 snow clearance.** All Priority 1 routes are completely plowed, sanded and salted by the end of the first 24-hours after the snow has stopped.
- Northmount Drive NW is the clear **desire line** – people are cycling on the road today.
- **Lack of traffic signals** to help cross major roads.
- **More elevation changes** on other corridors
- **Parking removal** would be required on other corridors as well

Alternate Corridor Analysis

	Northmount Drive N.W.	Capri Avenue N.W.	John Laurie Blvd N.W.
Length	3.8km	4.3 – 4.6km	4.7 km
Bicycle Travel Time (15 km/hr)	15.2 min	17.2 – 18.4 min <i>(13% - 21% increase)</i>	18.8 min <i>(24% increase)</i>
Number of Turning Movements Required	0	4	5
Elevation Change	22 metres	23 metres – 38 metres	61 metres
Destinations	Northland Village Mall Public Library Schools (x6) Brentwood Cambrian Village	Northland Village Mall Schools (x2)	Nose Hill Park Northland Village Mall Schools (x2)
Intersections	Signals at all major crossings	Signals required at 19 Street N.W., Brisebois Drive, Charleswood Drive N.W.	Signals required at 19 Street N.W., Brisebois Drive N.W., Charleswood Drive N.W.
On-Street Parking	One side of street removed	One side of street removed on Brisebois Drive N.W. and Northmount Drive / 52 Avenue N.W.	One side of street removed on Brisebois Drive N.W. and 52 Avenue N.W.
Access to Transit	Brentwood Station Designated Bus Route (10+ routes)	Designated Bus Route (5+ routes)	Designated Bus Route (3 routes)
Access to Schools	Captain John Palliser Brentwood St Luke; Senator P Burns Collingwood	Simon Fraser School Sir Winston Churchill	Simon Fraser School Sir Winston Churchill

Engagement



Stakeholder meeting #1

- Tuesday, October 13, 2015 at the Triwood Community Association
- 24 attendees, including adjacent residents and representatives from local Community Associations, Bike Calgary, Calgary Board of Education, University of Calgary, area schools and businesses
- Meeting attendees heard a presentation and formed smaller groups to discuss the study area and identify concerns and possible solutions with the project team
- After the meeting, a link to the online feedback form was sent to more than 160 stakeholders. An additional five forms were completed online for a total of 21.
- A display board with that feedback is at this event and available online

Public Open House

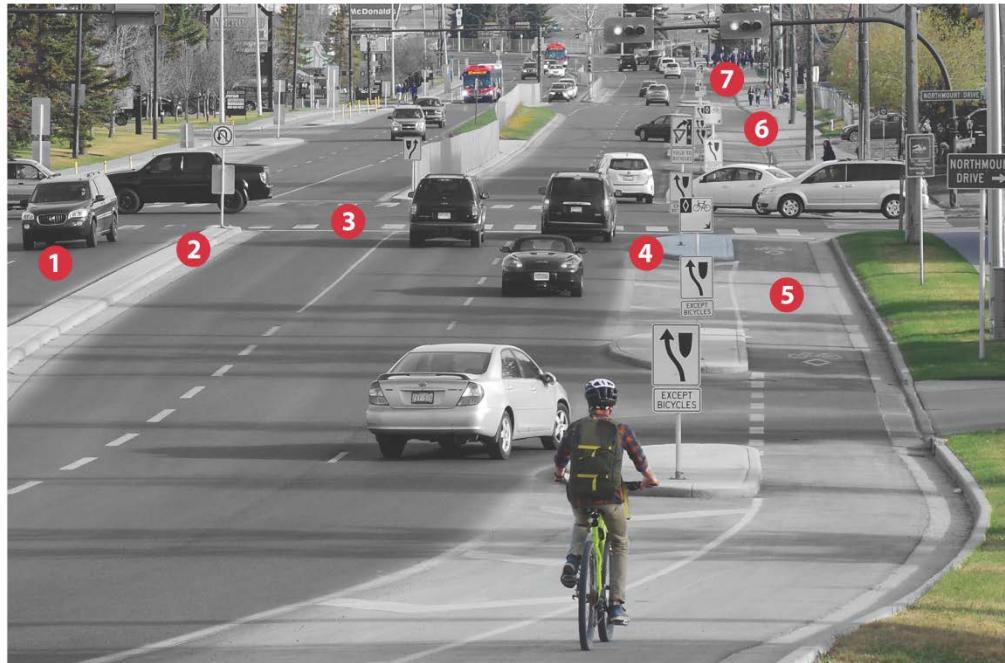
- Tuesday, February 16, 2016 at the Triwood Community Association
- More than 250 people attended
- More than 600 feedback forms were collected
- The input summary is available online

Adjacent Resident/Business and Public Workshops

- Adjacent Resident/Business Workshops
 - May 24, 2016 at the Triwood Community Association and May 28, 2016 at the Brentwood Sportsplex
 - 35 people attended in total
- Public workshop
 - June 23, 2016 at the Brentwood Sportsplex
 - 82 people attended
- Attendees heard a presentation about the project and what the project team has heard from the community to date. Each table was guided through four rounds of discussion (issue identification, parking, school zone and pedestrian safety, and congestion). Each table had maps with preliminary ideas for improving intersections, pedestrian crossings and possible parking changes. Facilitators took notes on flip charts and everyone was welcome to write on the table maps provided.
- The input summary and comments collected on maps are available online

Northland Drive N.W.

- Northland Drive N.W. is key connection in the bikeway network and serves to connect the mall to U of C and Brentwood Station, as well as connection to 10 Street N.W. bike lanes via Northmount Drive N.W.
- Northland Drive N.W. cost \$575k with half going towards widening pinch points on the road at the ends of the project so that traffic flows better and half narrowing the road to make the bike lanes safer
- Traffic volumes have decreased from 23k a day to only 13k over the past few years on Northland. Four lanes is adequate to move these volumes.
- Bicycle volumes have more than doubled since implanting the bikeway.
- 11% of people cycling are younger than 18 (higher than city-wide average of 2.5%).
- Vehicle speeds have not changed.



- ① Northland Drive N.W. has seen a 30% decrease in vehicle traffic over the last 10 years.
- ② Median narrowed to maintain good traffic flow.
- ③ High visibility crosswalks installed.
- ④ Reduced distance for people crossing the street from 28 m to 19 m. Islands serve as pedestrian refuges and protect people cycling.

- ⑤ Outside travel lanes converted to bike lanes.
- ⑥ Sidewalks are now buffered from faster moving traffic.
- ⑦ Bus bays for Calgary Transit and school bus loading.

Preliminary Results:

