

**Calgary**



# Northmount Drive NW Improvement Project May 2016 Workshops



1. Introductions
2. Purpose of Tonight
3. Project Overview & Public Engagement Process
4. What We've Heard
5. Workshop
6. Next Steps





## Purpose of Tonight's Workshop

- Share **what we have heard** so far
- Discuss some **possibilities** to address the issues you've identified
- **Listen** to residents and stakeholders



Senator Patrick Burns, April 8, 2016



# Congestion and Parking







## School Zones and Pedestrian Safety





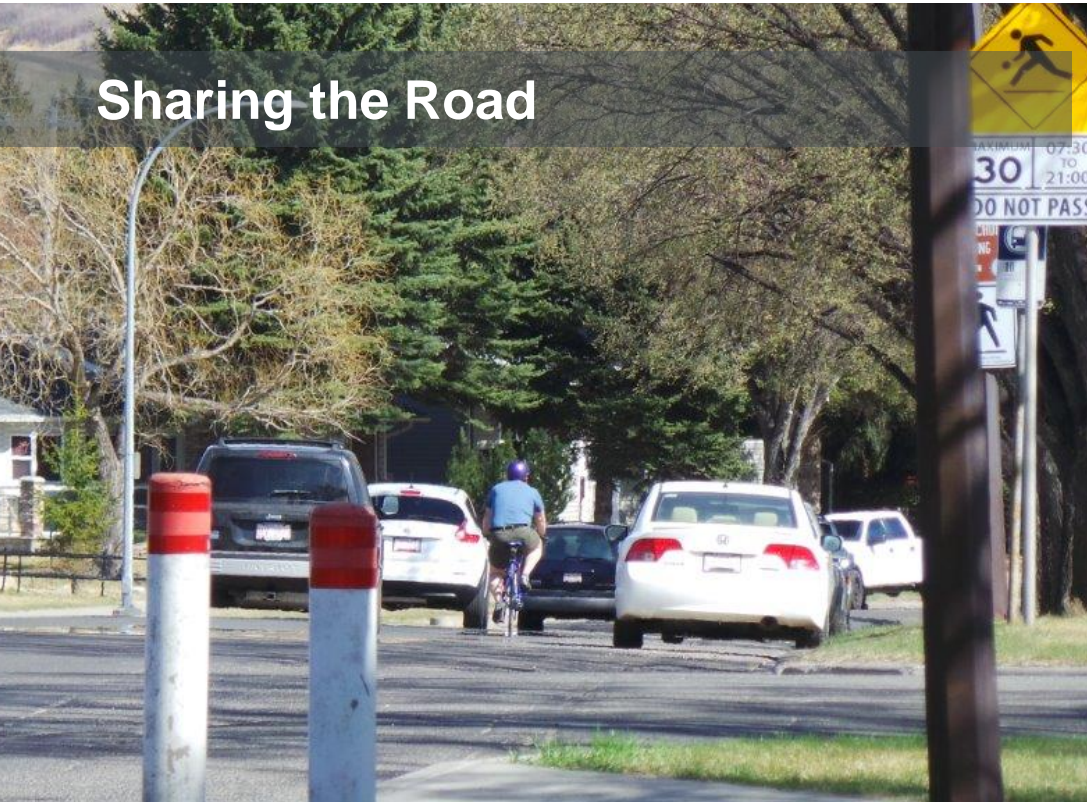
# School Zones and Pedestrian Safety







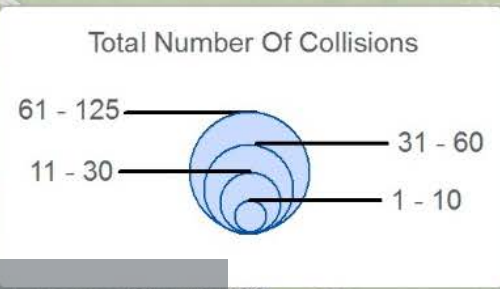
# Sharing the Road



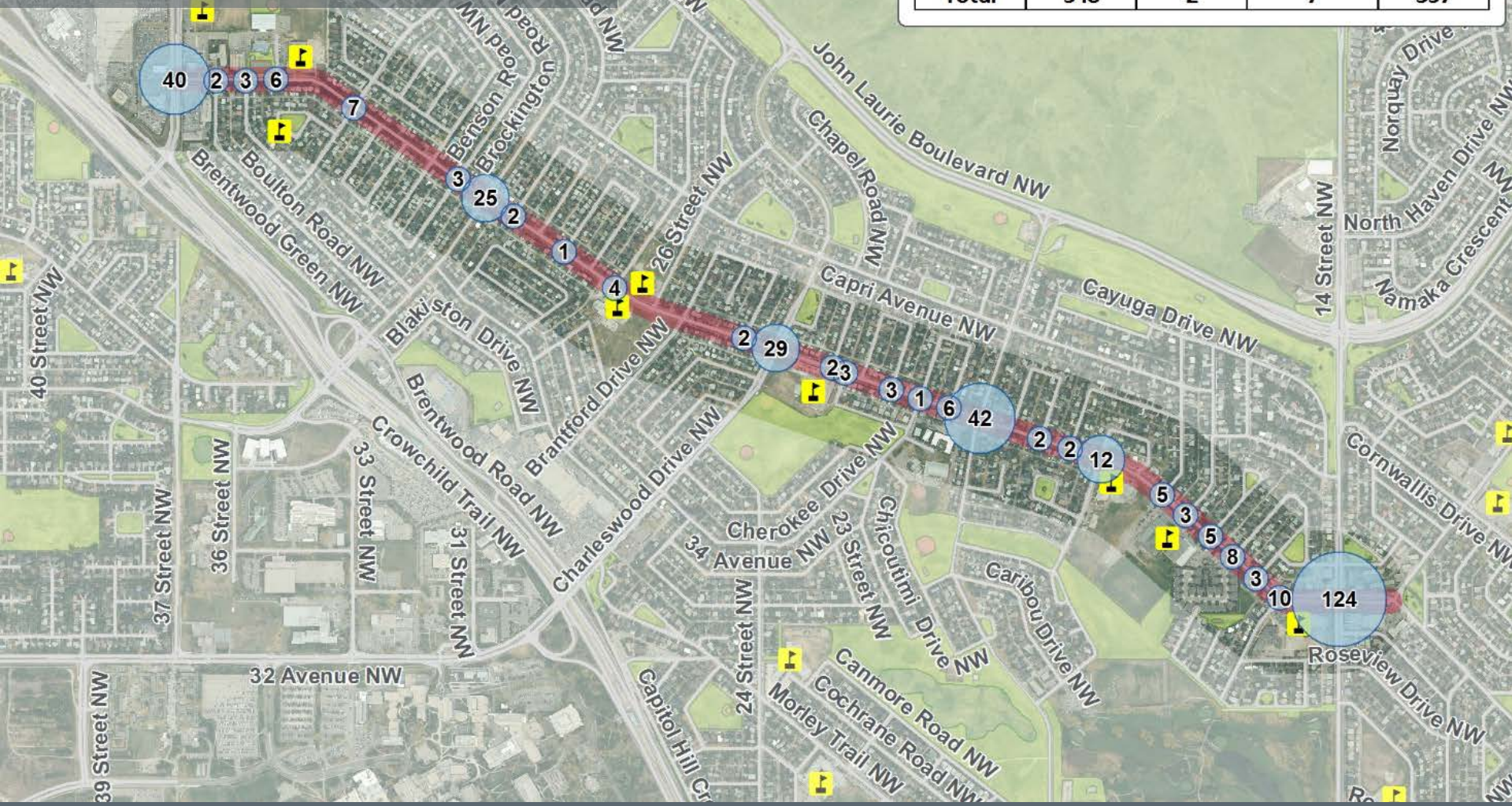


# Safety

-  School
-  Community Parks
-  Park / Natural Area



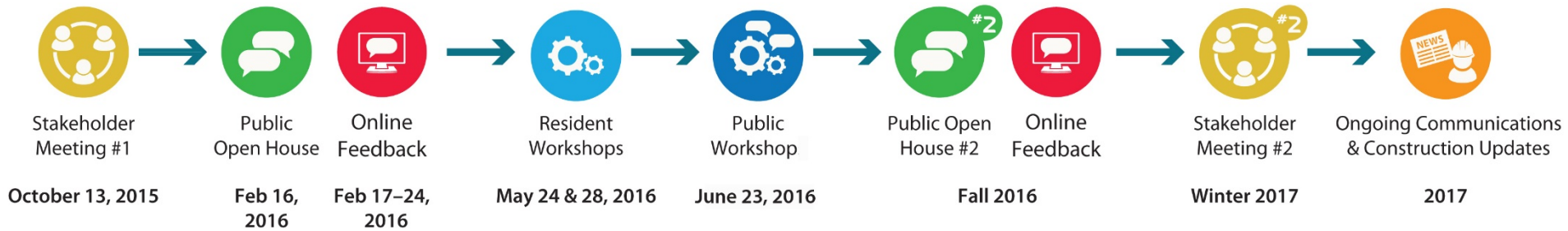
Year	Road User Involved Collisions			Total
	Motorists	Cyclists	Pedestrian	
2009	78	0	1	79
2010	84	1	1	86
2011	60	0	3	63
2012	53	0	0	53
2013	73	1	2	76
<b>Total</b>	<b>348</b>	<b>2</b>	<b>7</b>	<b>357</b>







# Community Engagement Process







## Process

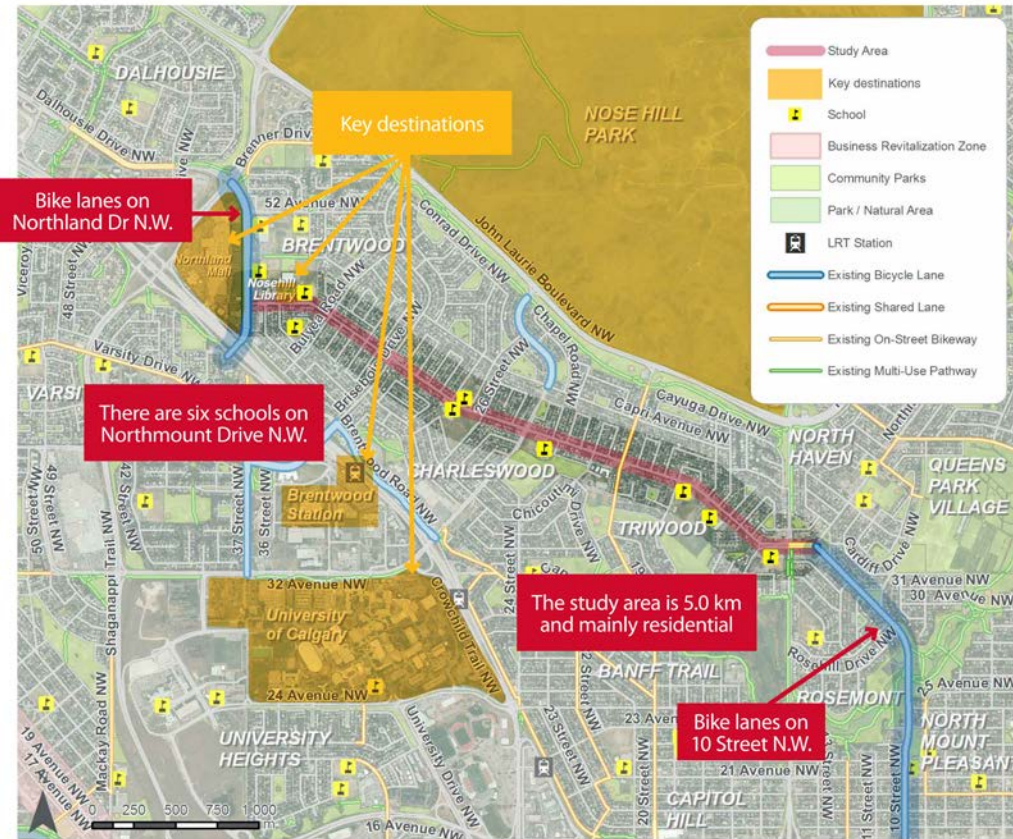






## Why are we doing this project









- Improve **safety and mobility** for EVERYONE on Northmount Drive N.W.
- Complete a **gap in the bicycle network** between Northland Drive N.W. and 10 Street N.W.
- Follows a strong **desire line** currently used by people on bicycles
- To take advantage of the planned **road resurfacing**
- Council policies (Complete Streets and Pathway and Bikeway Implementation Plan)
- Identify opportunities to improve **cycling connections** to key destinations





# Why not Capri Ave or John Laurie Blvd?

Northmount Drive: 3.8km  
Capri Ave: 4.3km / 4.6km  
John Laurie: 4.7km

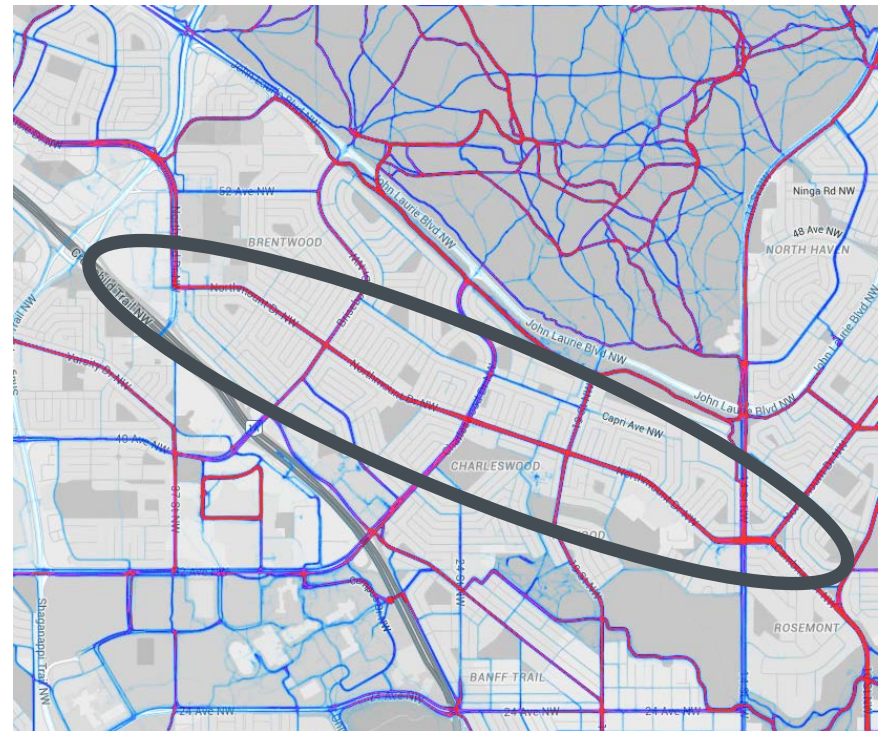
-  School
-  Community Parks
-  Park / Natural Area
-  LRT Station
-  Existing Bicycle Lane
-  Existing Shared Lane
-  Existing On-Street Bikeway
-  Existing Multi-Use Pathway





## Strava data

- Cyclists already use Northmount Drive N.W.
- *Heat map showing cyclist usage based on Strava data. The red lines indicate high cyclist activity (darker lines mean more users) and the blue lines represent few to no people who bicycle. This image is from [strava.com](http://strava.com).*





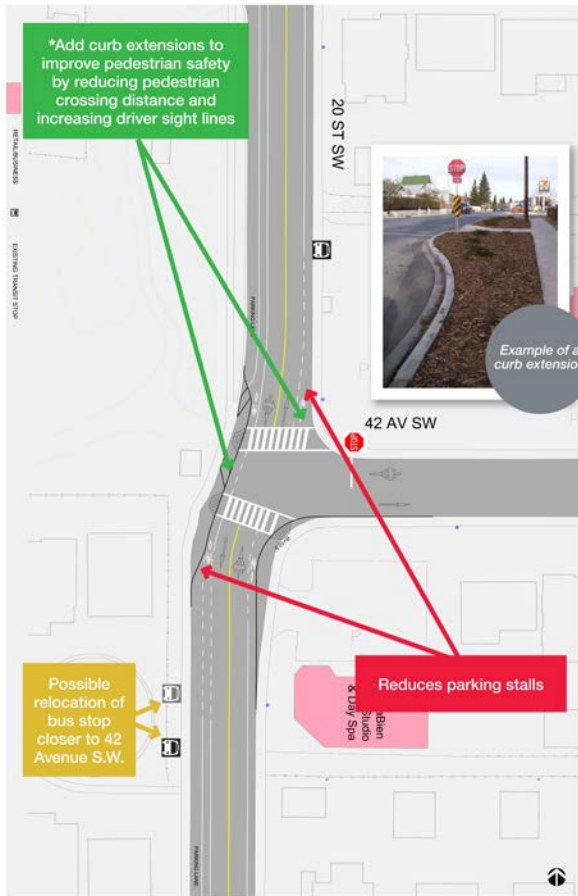
## Similar projects across the city - 20 Street SW

- Widen road/add turn lanes to help traffic flow
- Improve signal timing
- Improve pedestrian crossings
- Add traffic calming in select locations



# 20 Street SW Example

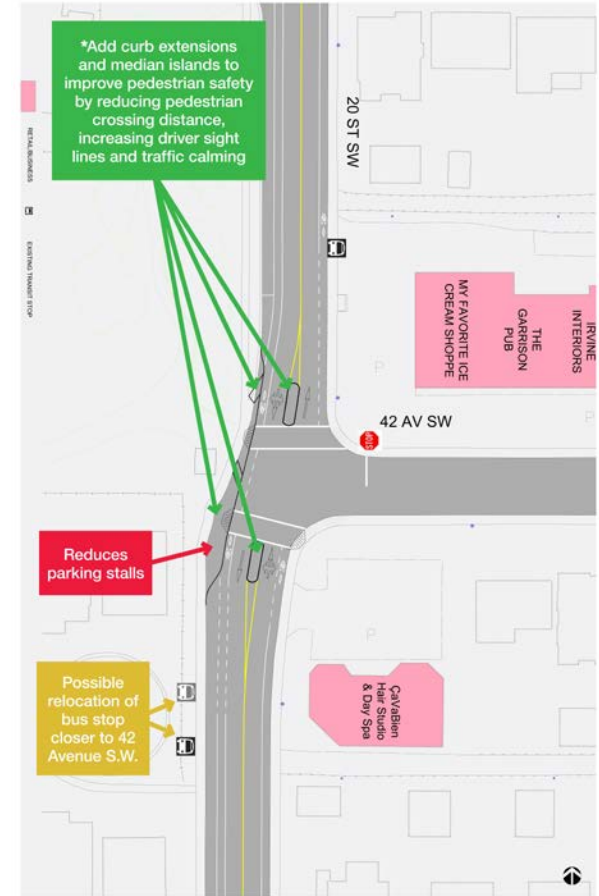
OPTION 1: Curb Extensions



OPTION 2: Curb Extensions and Traffic Circle



OPTION 3: Curb Extensions and Median Islands



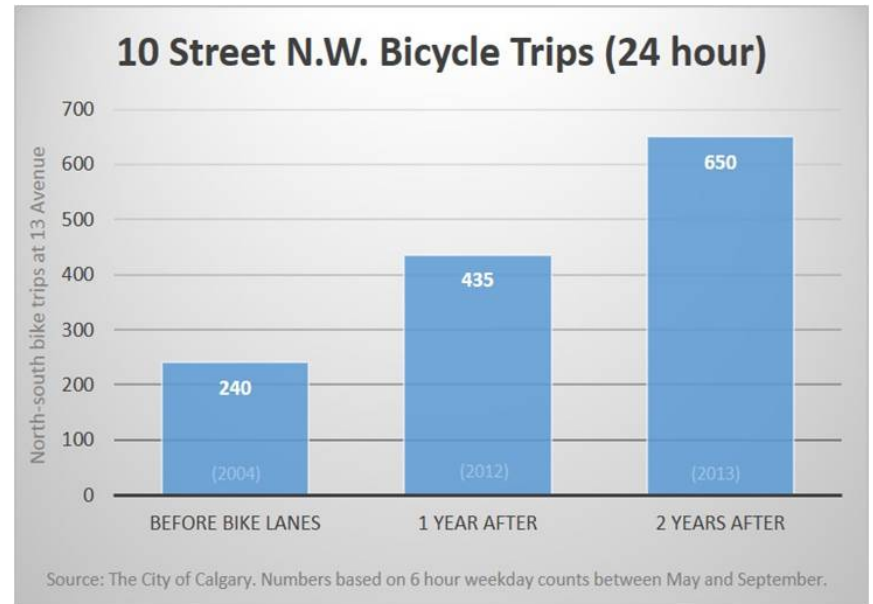




# Completing the Network

Connect to **10 Street N.W.** bicycle lane

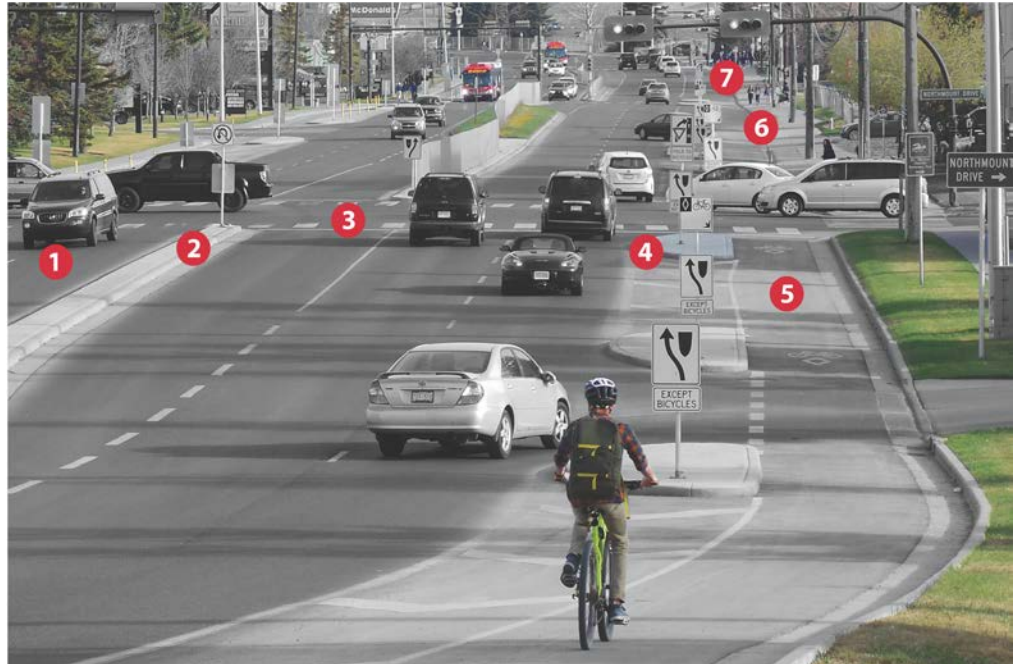
- Bicycle volume increases between 81% and 95% in the first year, and 170% in the second year
- In the first week of May 2016 there was an average of over 800 bike trips a day, making it the busiest bicycle lane outside of downtown
- 80% decrease of people riding bicycles on sidewalks.
- More winter cyclists now with the bike lane than in the summer before the bicycle lane was installed.





## Completing the Network

- Connect to **Northland Drive N.W.** bicycle lane
- Bicycle volumes have more than doubled
- 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:







# What Are Complete Streets?

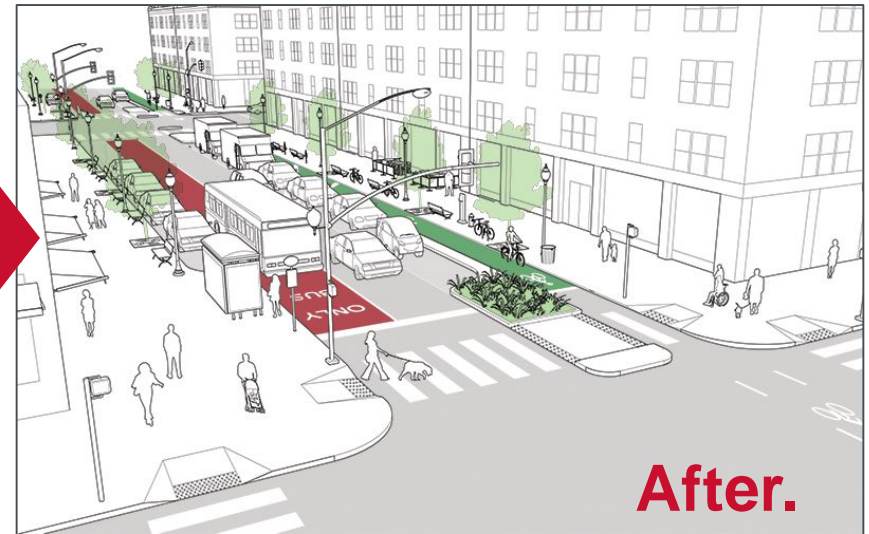
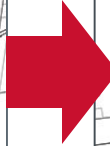
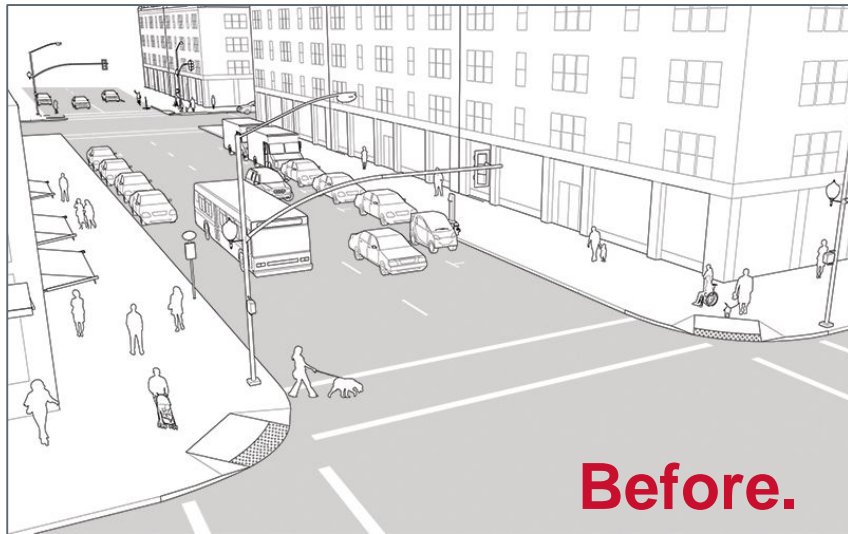
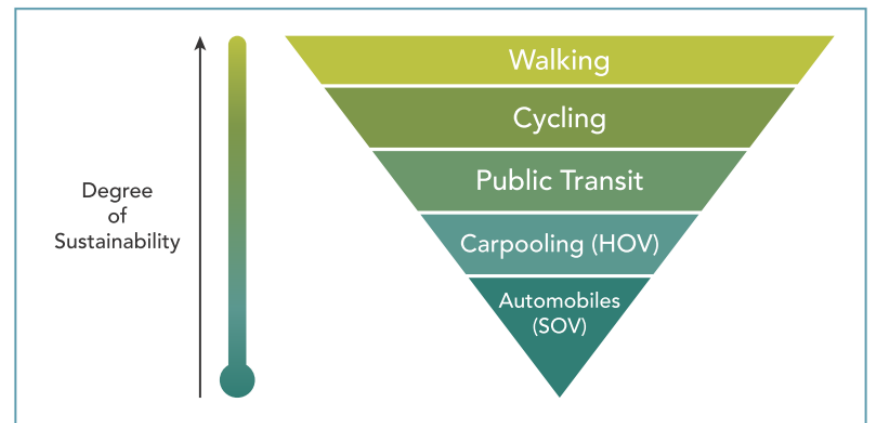


Image credits: NACTO

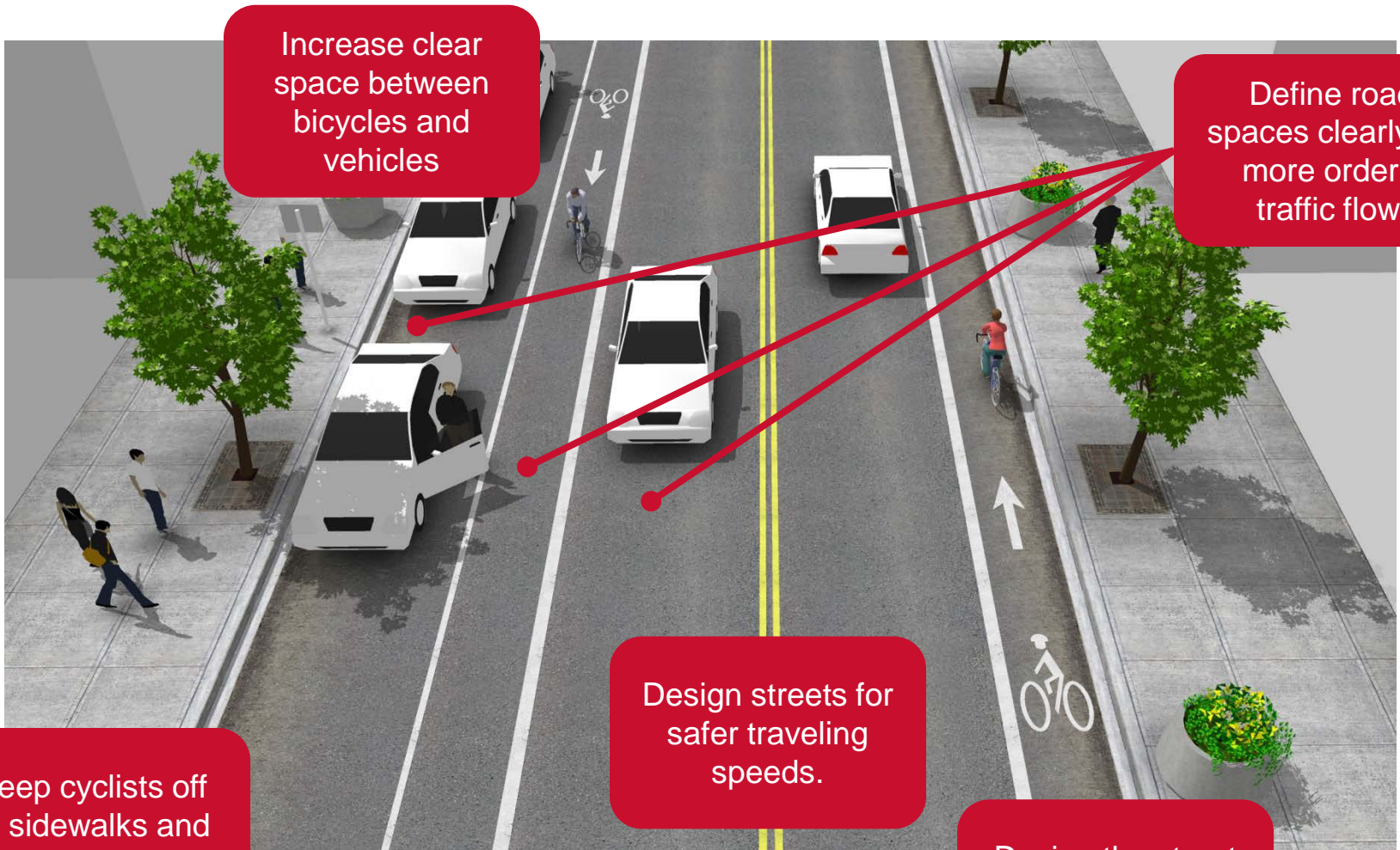
## Objective #7 of the Calgary Transportation Plan:

Complete Streets aim to increase the attractiveness, convenience and safety of all modes of transportation by creating a new selection of multi-modal streets that emphasize walking, cycling and transit, incorporate elements of green infrastructure and function in the context of surrounding land uses.





# Complete Streets Benefit Everyone



Increase clear space between bicycles and vehicles

Define road spaces clearly for more orderly traffic flow.

Design streets for safer traveling speeds.

Design the street for cyclists to obey the rules

Keep cyclists off of sidewalks and out of travel lanes

Image credit: NACTO





# What We Heard

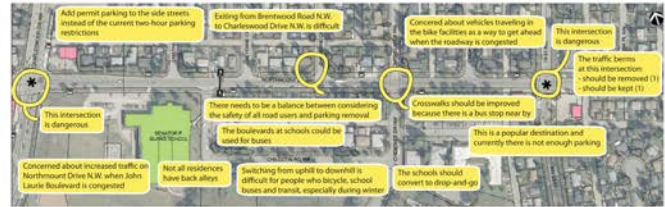
## Stakeholder Meeting #1

- October 13, 2015
- 24 Attendees, including:
  - Adjacent Residents
  - Community Associations
  - Bike Calgary
  - Calgary Board of Education
  - University of Calgary
  - Area Schools
  - Businesses
- Feedback form was sent to over 160 stakeholders

Bennett Crescent N.W. to Charleswood Drive N.W.



Charleswood Drive N.W. to Columbia Place N.W.



Columbia Place N.W. to Cawder Drive N.W.



Culver Road N.W. to Cambrian Drive N.W.



Northland Drive N.W. to Bulyea Road N.W.



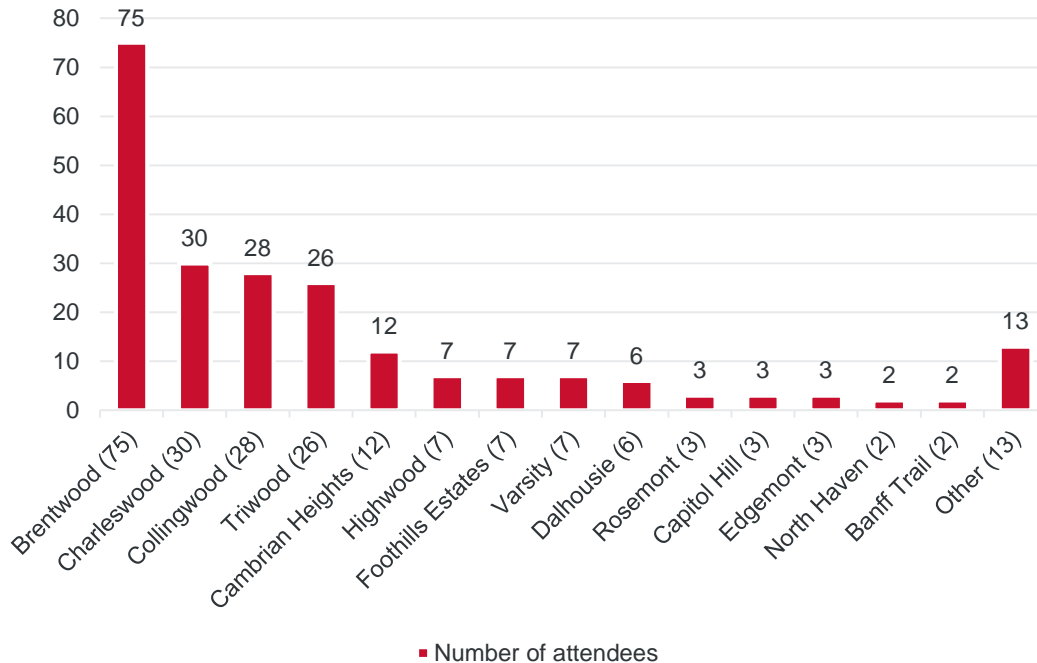
Bulyea Road N.W. to Bennett Crescent N.W.



## Open House #1

- February 16, 2016
- 258 Attendees
- 629 Feedback Forms

Number of attendees by community

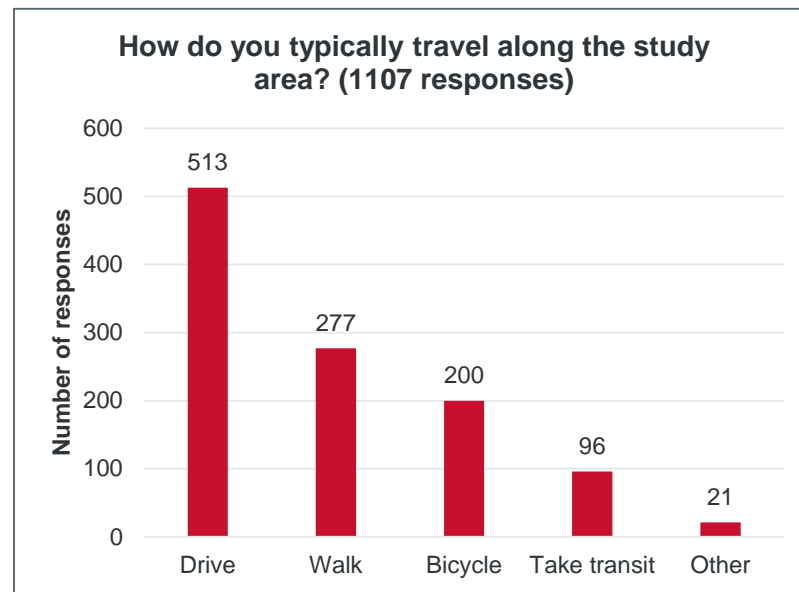
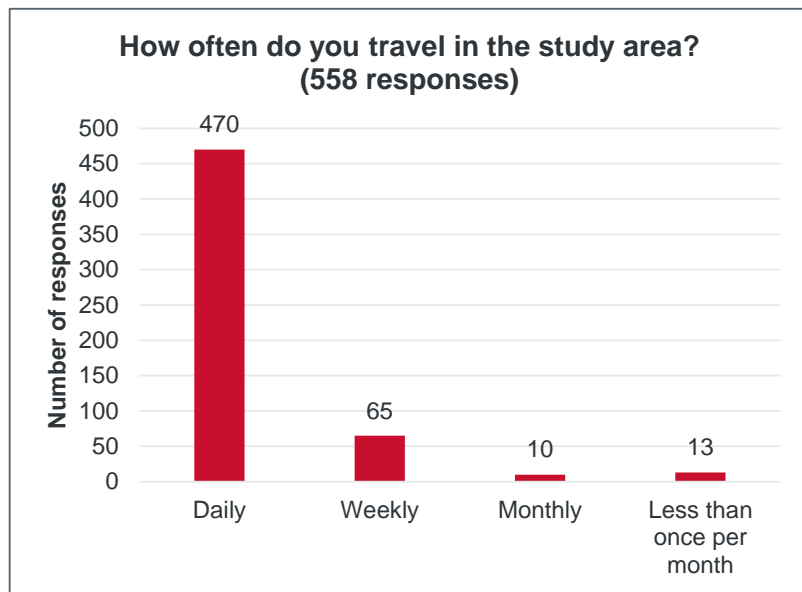






## Who We Heard From at Open House #1

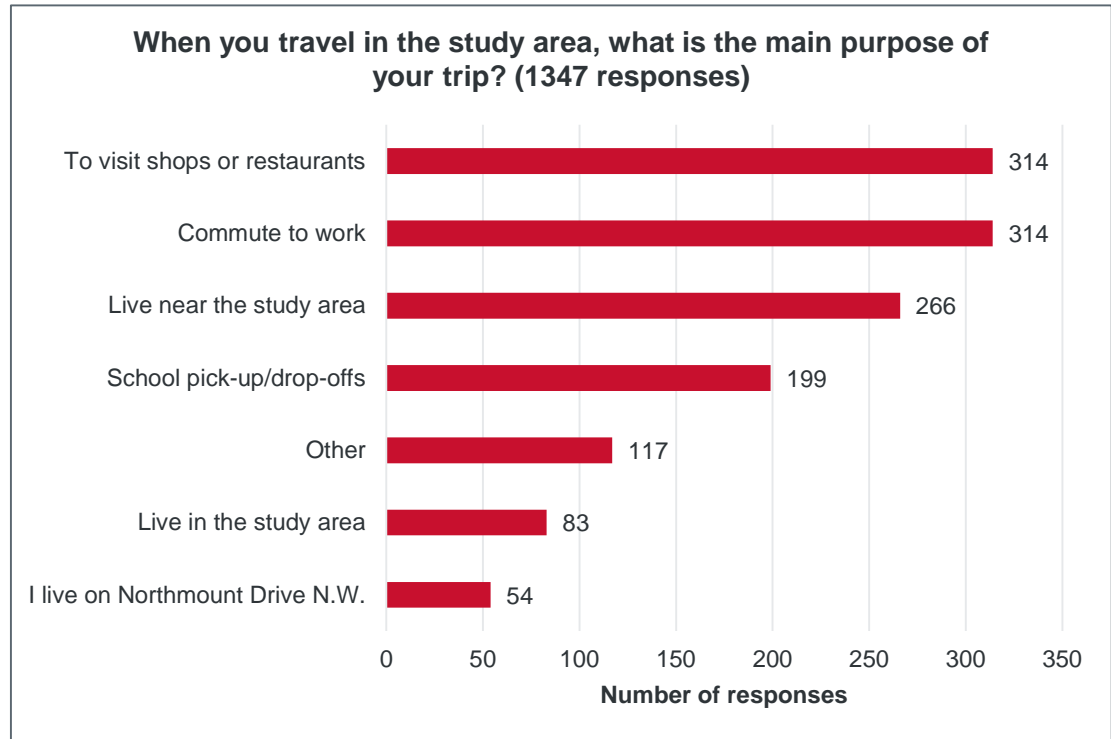
- Most respondents travel the corridor daily
- We heard from all road users, including:
  - **Nearly half** of respondents who typically **drive** the corridor,
  - **One fifth** of respondents who typically **cycle** the corridor





## Respondent Travel Patterns

- Most common **purpose** of trips (for all users):
  - Visit shops or restaurants
  - Commute to work
- Most common **destinations**:
  - Northland Mall
  - Northland Shopping Plaza
  - Cambrian Village Shopping Plaza
  - School



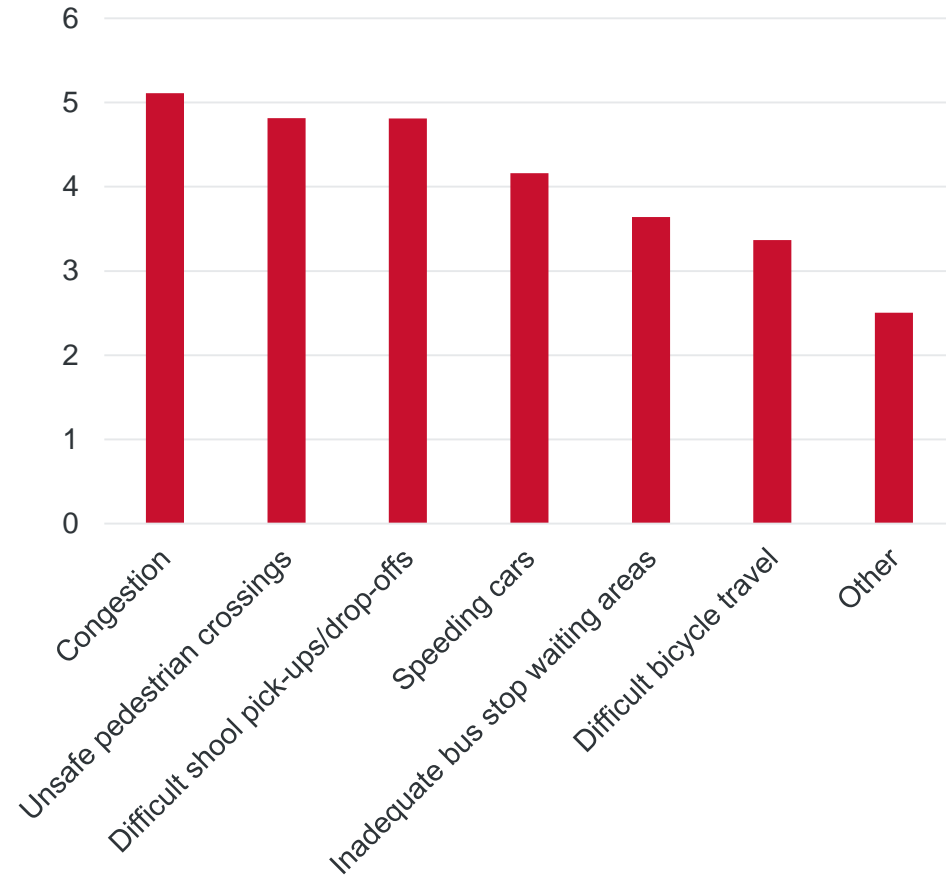




## Top Concerns

- Respondents asked to rank a list of concerns on a scale of 1 (low) to 7 (high)
- Top concerns:
  - Congestion
  - Unsafe pedestrian crossings
  - Difficult school pick-up / drop-offs
- Parking is also a significant concern

Existing Concerns



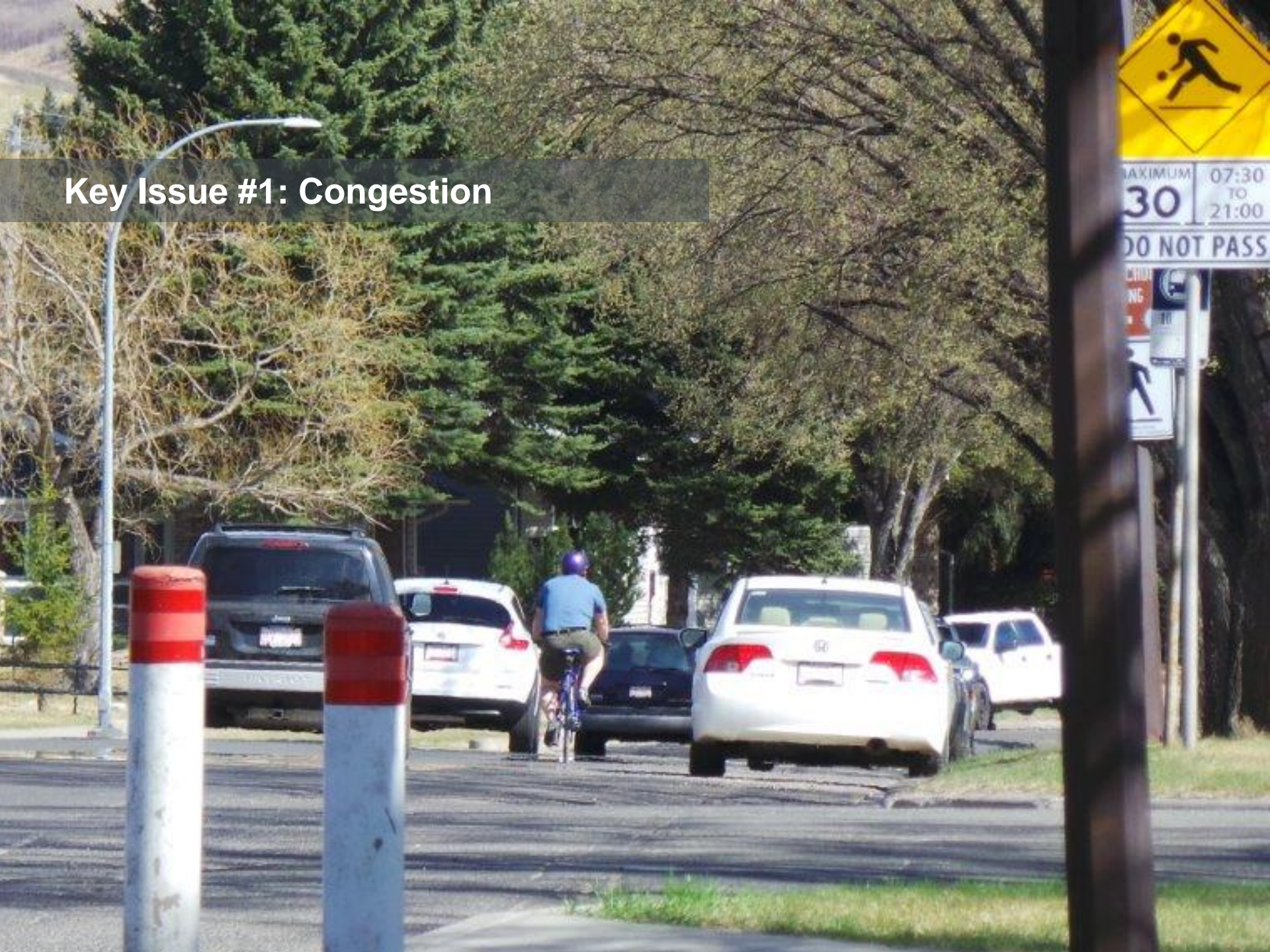
## Adjacent Resident Workshops

- **Tuesday May 20, 2016**
  - 6:30 – 8:00pm
  - Triwood Community Association
  - Approx. 21 attendees
  
- **Saturday May 28, 2016**
  - 9:30am – 12:00pm
  - Brentwood Sportsplex
  - Approx. 14 attendees





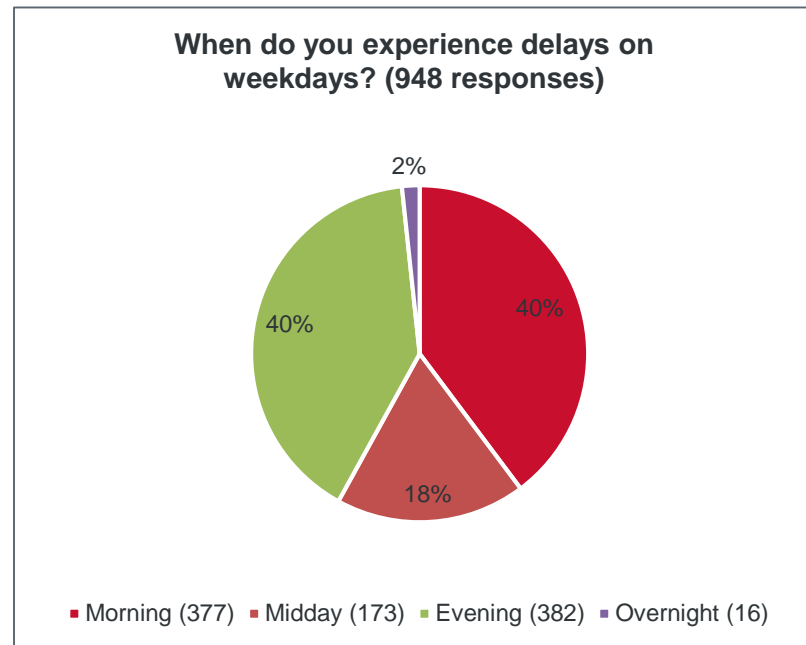
# Key Issue #1: Congestion





## What We Heard

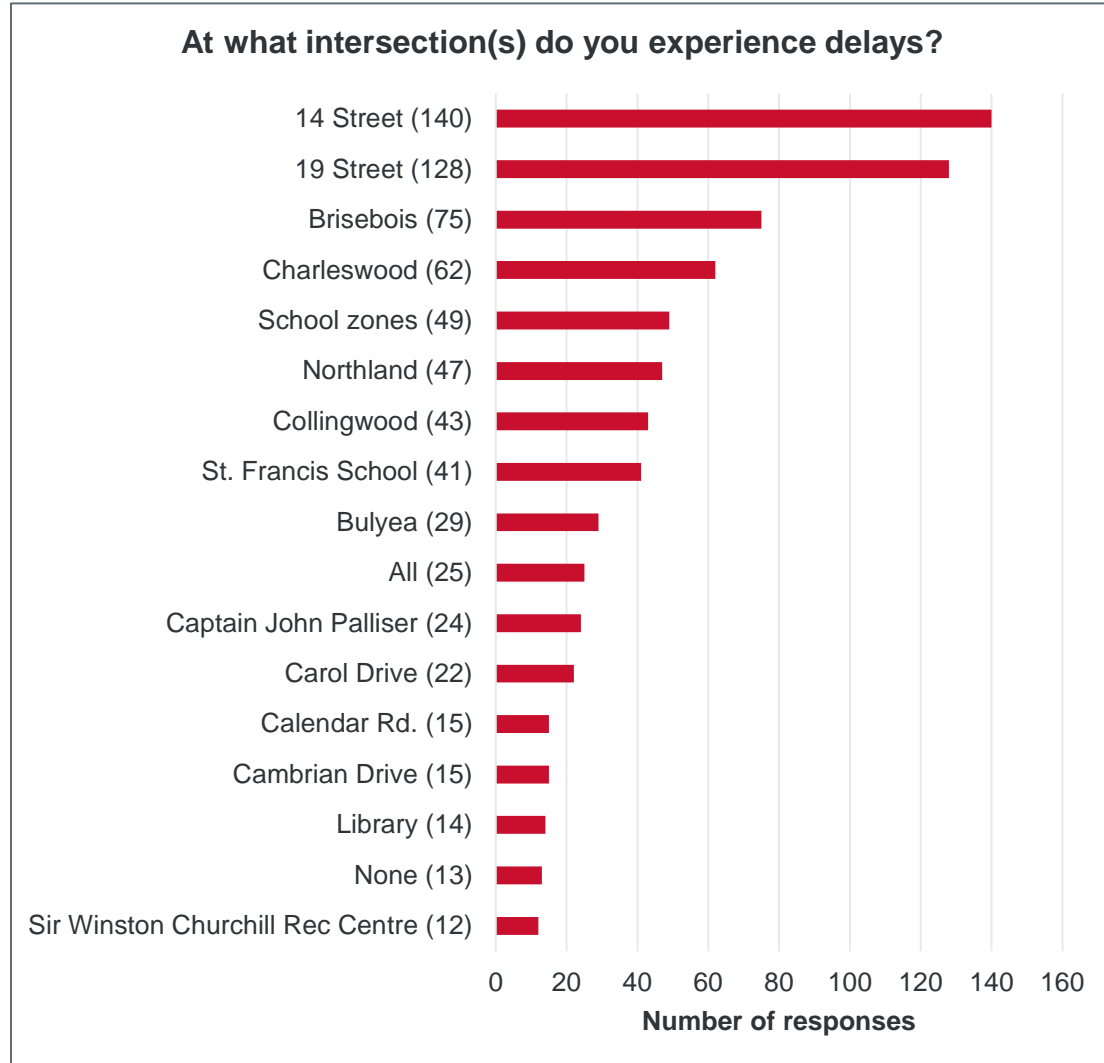
- Over a third of respondents experience congestion every day (39%)
- However, over a third of respondents (37%) rarely or never experience congestion
- 80% of respondents experience weekday congestion during the morning or evening rush hours
- On weekends, 50% of respondents experience congestion during the mid-day







- Congestion and delay is the greatest issue at:
  - 14 Street NW
  - 19 Street NW
  - Brisebois Drive NW
  - Charleswood Drive NW
  - School Zones

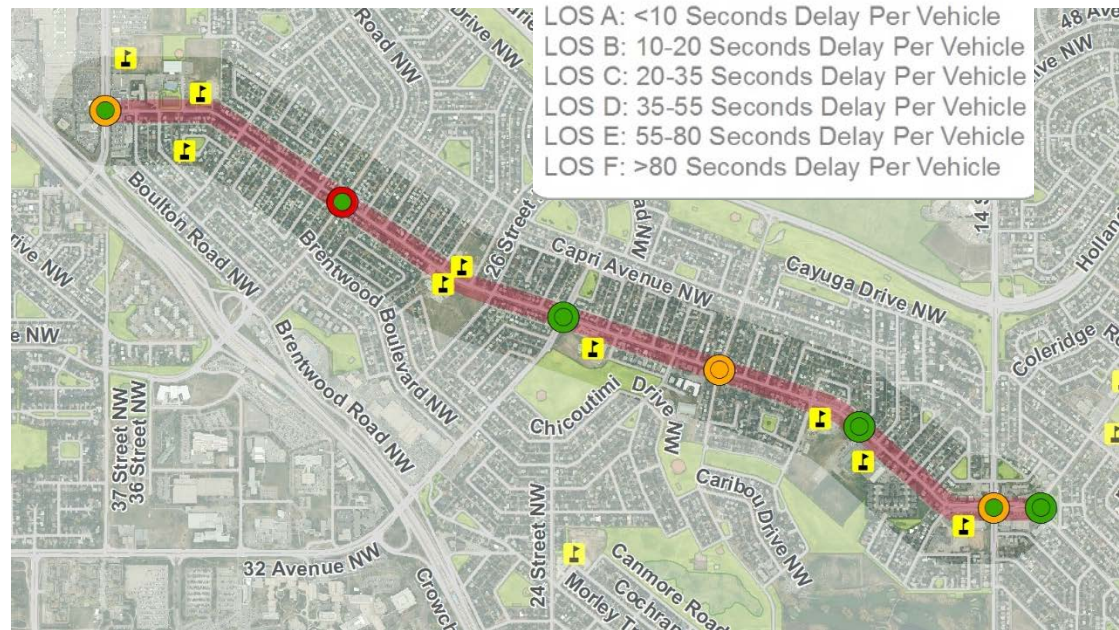
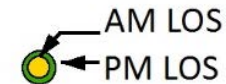


## Facts and Observations

- Technical analysis confirms public input
- Congestion and delay is the greatest issue at:
  - 14 Street NW
  - 19 Street NW
  - Brisebois Drive NW
  - Northland Drive
- Congestion and delay more significant during PM peak

### Intersection Level of Service (LOS)

RED LOS F  
YELLOW LOS E  
GREEN LOS A, B, C, or D







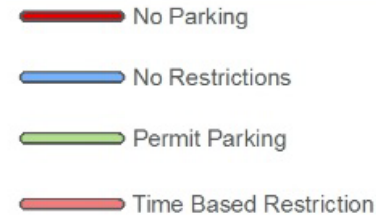
## Key Issue 2: Parking



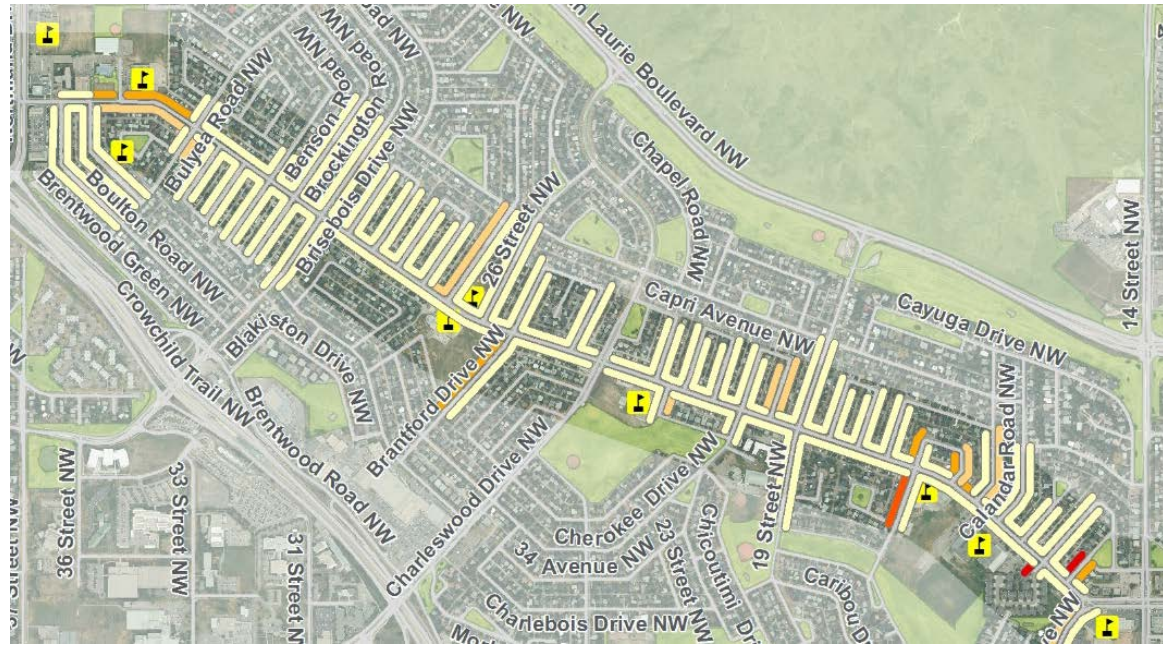


# Facts and Observations

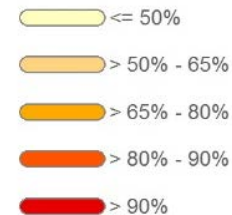
- Parking currently permitted on both sides of most Northmount Drive NW
- Potential to park over 450 cars on Northmount Drive NW:
  - 190 north side
  - 270 south side
- Potential to park over 2000 cars on side streets intersecting Northmount Drive NW



- Two parking studies were conducted to determine area residents' parking demand
- Parked vehicles observed and recorded every 30 minutes
- Weekday Parking Study
  - November 2014
  - 5:30am – 6:00pm
- Weekend Parking Study
  - April 2016
  - 8:30am – 11:30am
  - 3:30pm – 6:30pm
- Most on-street parking is under-used throughout much of the day (less than 50%)



**Maximum Occupancy**

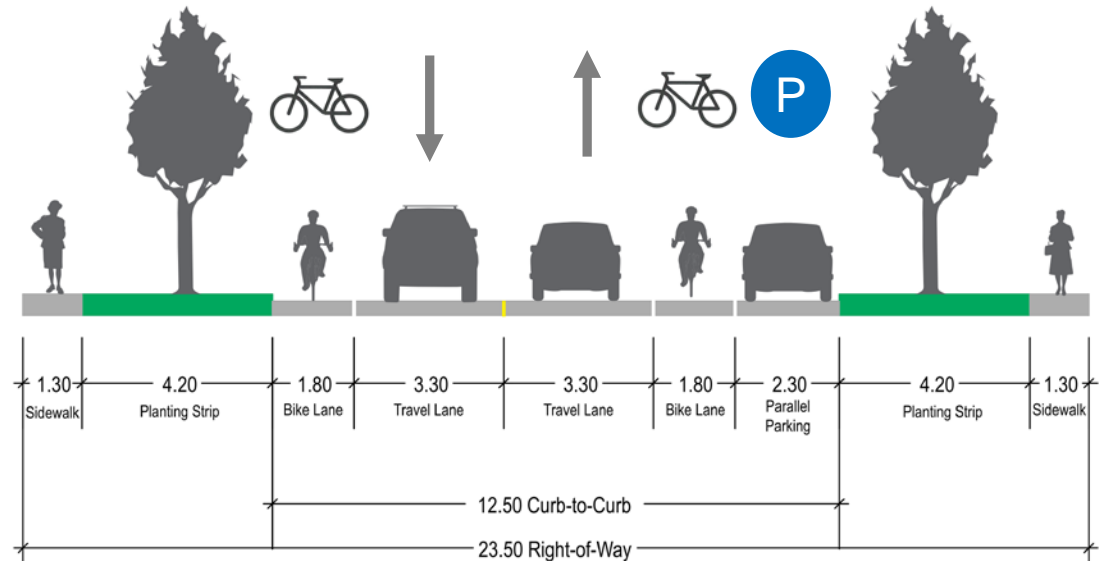
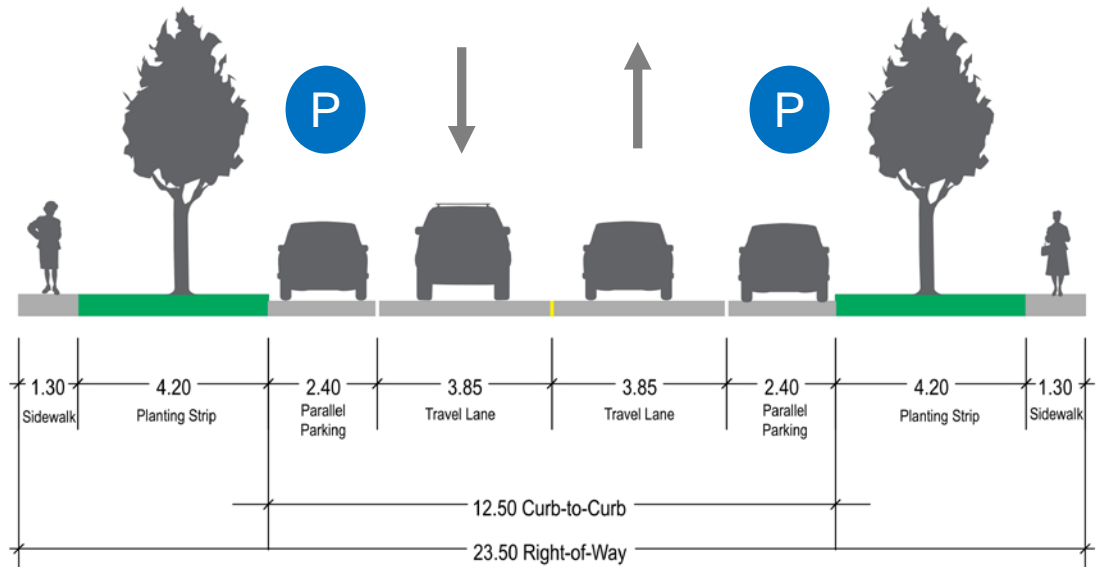






# Possibilities

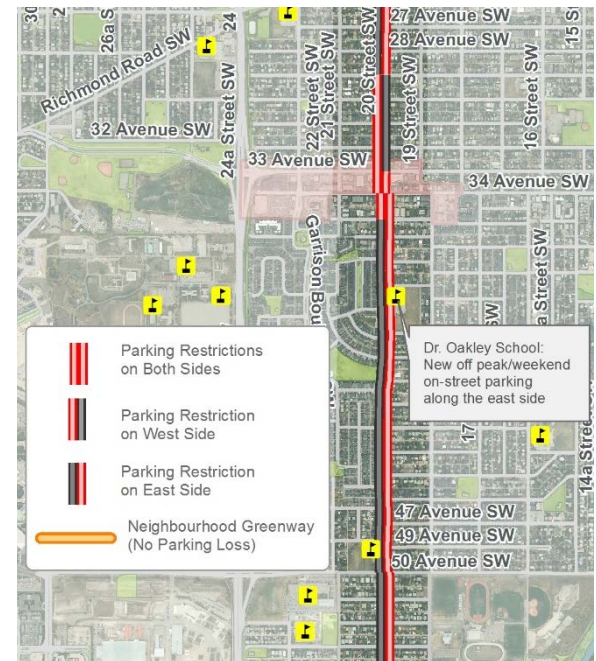
- Northmount Drive has a constrained width
- To accommodate bicycle lanes in each direction within curb width, parking needs to be consolidated to one side of the street in most sections





- Parking consolidated to one side of street in areas of lower demand
- Identify opportunities to minimize parking change
  - Fewest stalls impacted
  - Fewest fronting homes impacted
  - Lowest utilization
- Widening at select locations in higher demand areas
  - Higher cost
  - Utility impacts
  - Tree impacts
- Changes should ensure supply still satisfies demand

20 Street SW Example





## Key Issue 3: School Zones and Pedestrian Safety

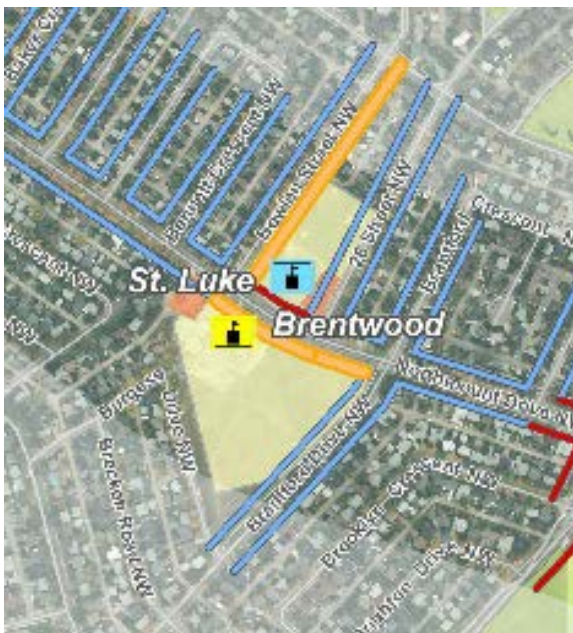






# Facts and Observations

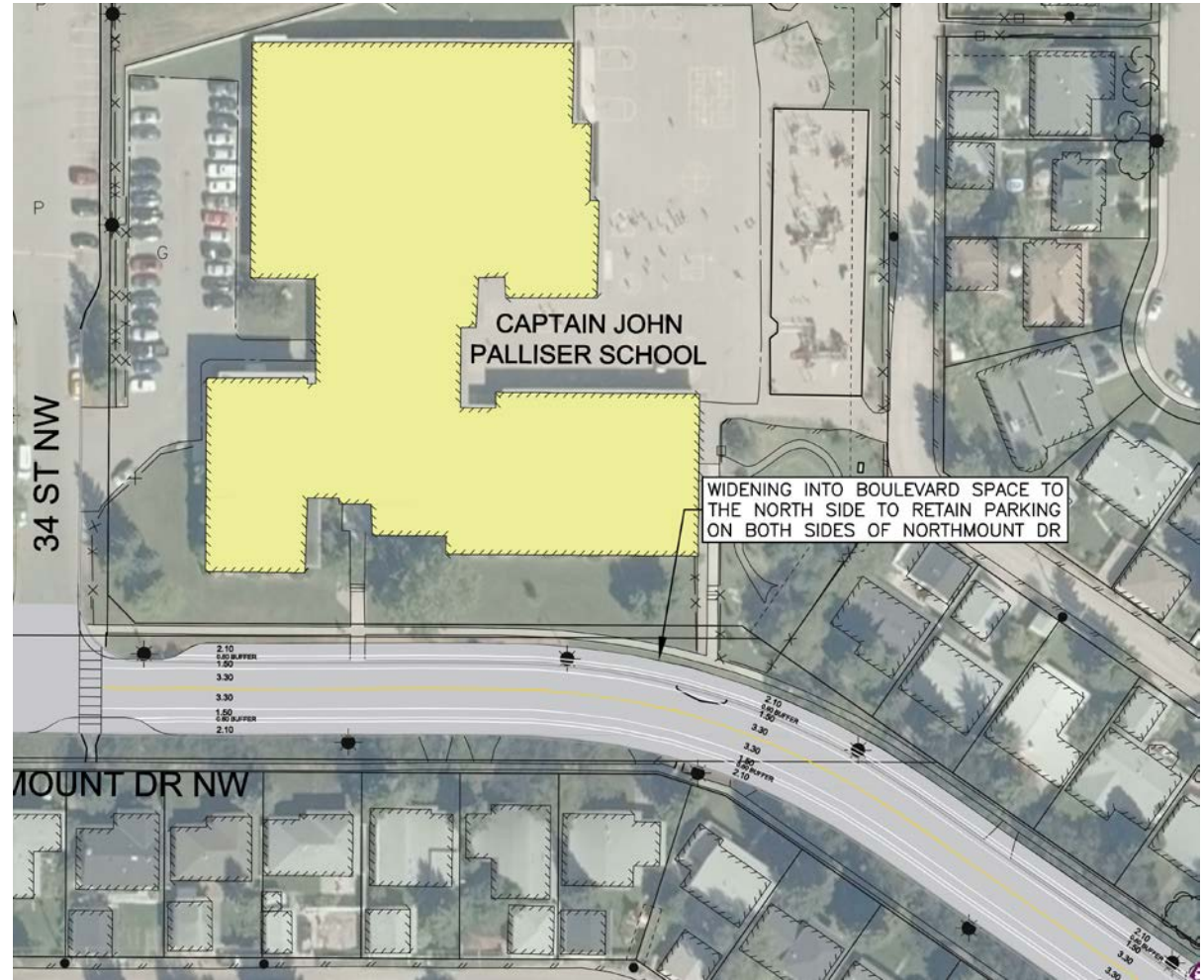
- 6 schools along corridor
- Many schools have large catchment areas, with students travelling long distances
- School bus pick and drop off areas



- CCSD School
- CBE School
- Other
- Designated Pickup/Dropoff Area
- No Stopping Except School Buses (On School Day)
- No Parking
- No Restrictions
- Permit Parking
- Time Based Restrictions
- School Parcel
- School Site Parking



- Ensure that all school sides have dedicated width to separate school buses from other users
- In some cases, this may mean widening the street





# Pedestrian Safety





## Pedestrian Safety



Refuge Islands



Curb Extensions



Rapid Flashing Beacons



New Crosswalks



Overhead Pedestrian Flashing Lights



## Workshop Discussion

Part 1: Issue Identification (20 min)

Part 2: Congestion (20 min)

Part 3: Parking (20 min)

Part 4: School Zones and Pedestrian Safety (20 min)

Report back (20 min)



Thank You!

