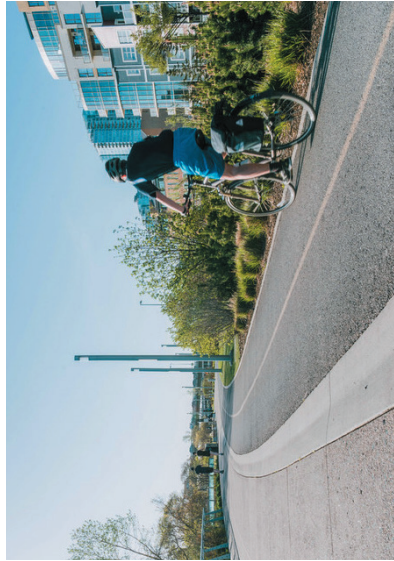


5A Network Guiding Principles
Always Available for All Ages & Abilities



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

- Phase 1 of Engagement



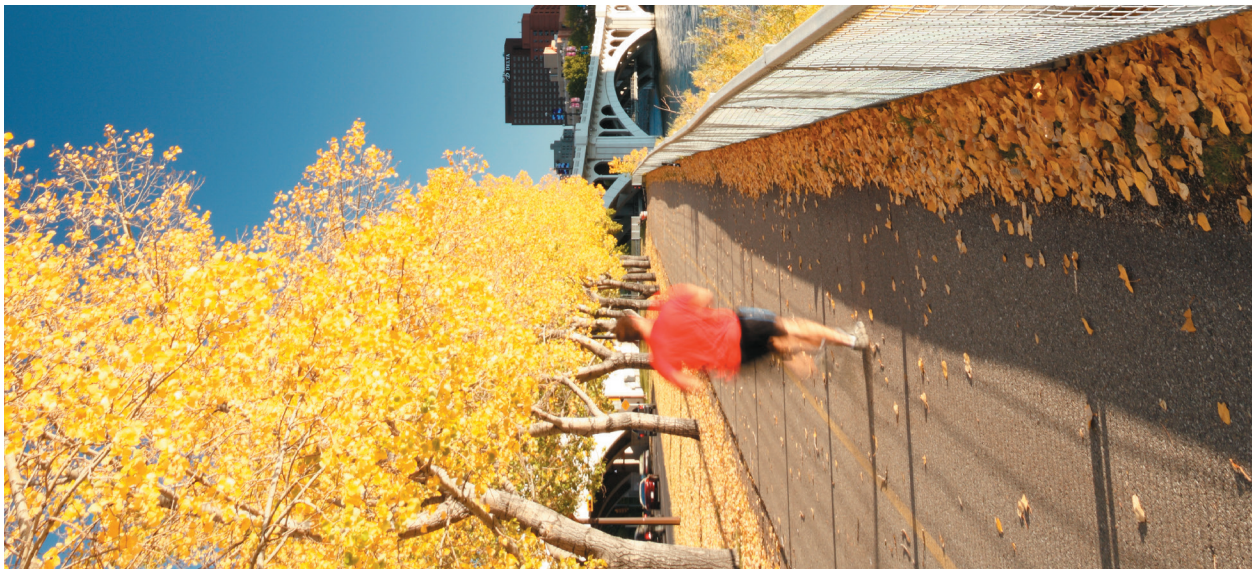
Council's primary concern is for all transportation options to be safe and attractive choices for Calgarians.

- 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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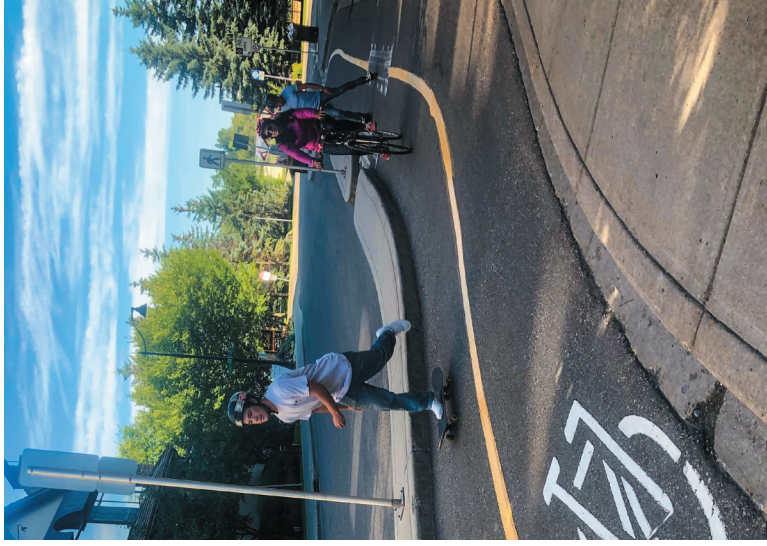
What is the 5A Network?

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.

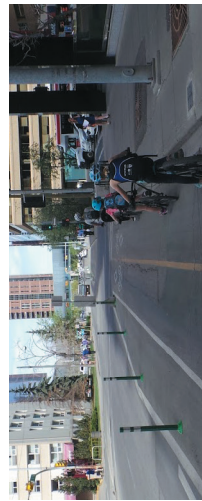


What the 5A Network will look like

More facilities separated from traffic



Bike paths



Protected bike lanes



**Bike boulevards /
Neighbourhood greenways**

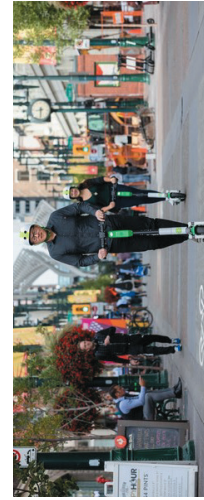
Slower speeds and lower vehicle volumes



Multi-use pathways



Twinned pathways



Shared spaces

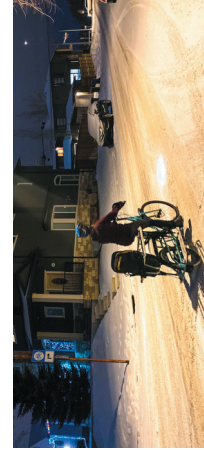
Fewer places where people walking and wheeling mix with traffic



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.

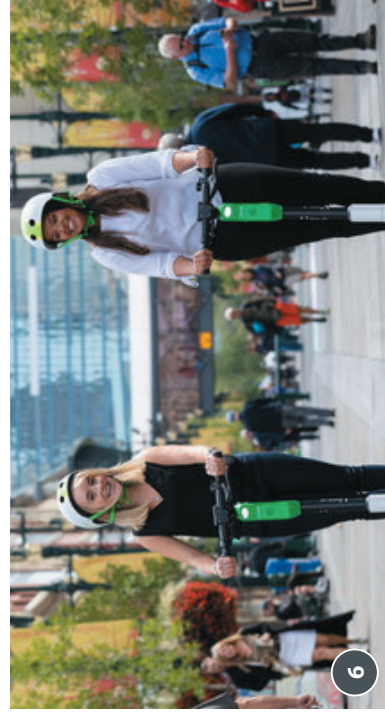
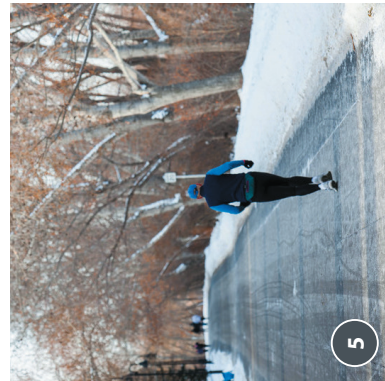
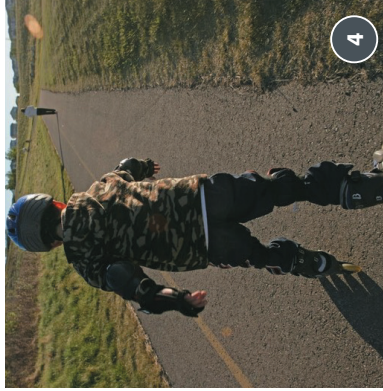
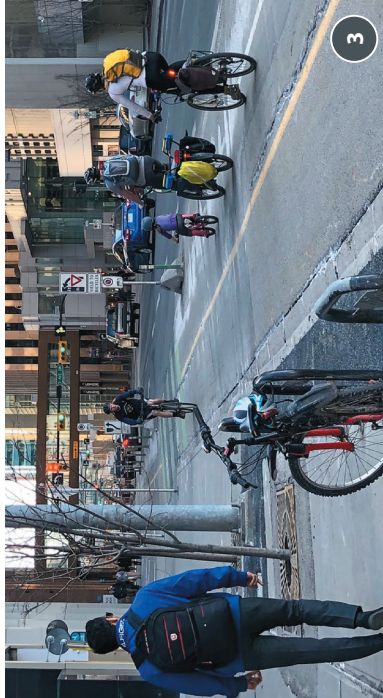
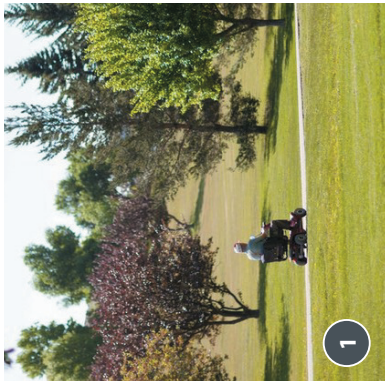
Improving pathway and bikeway connections to transit stations and parking can encourage people to walk or wheel for part of their trip.



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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.

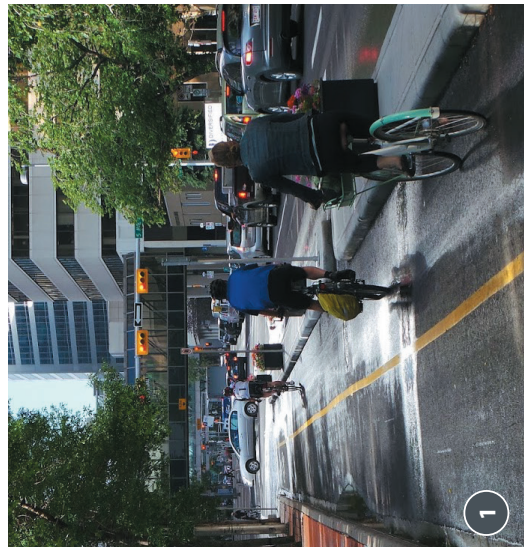




5A Network Principles

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.

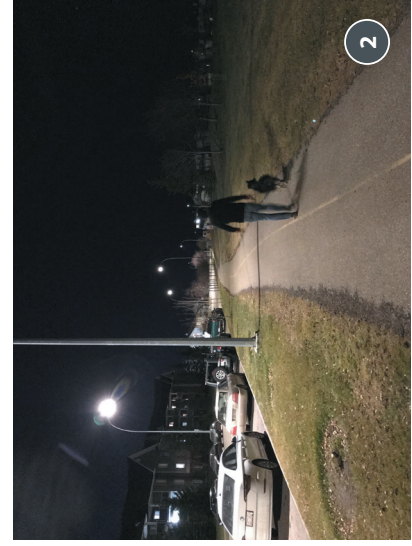
Throughout the year daylight hours change with the seasons. This can be challenging in the winter as there is less daylight during times when people are travelling to and from work or social activities. Providing lighting that can be turned on at varying hours throughout the year will improve the safety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

Principles:

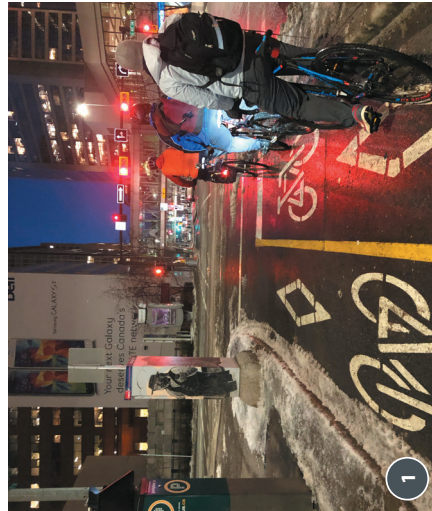
- To improve visibility, use lighting: at decision and conflict points like intersections, driveways and alleys, along routes that feel isolated, and in busy areas like schools, recreation and shopping centres.
- Enhance navigation, hazard identification, transition areas and walking and wheeling facilities 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



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

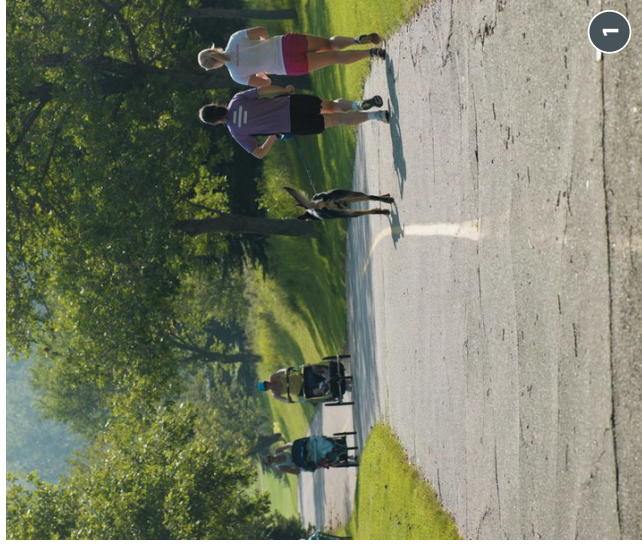
#4 Be accessible for everyone

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 Calgaryans 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.

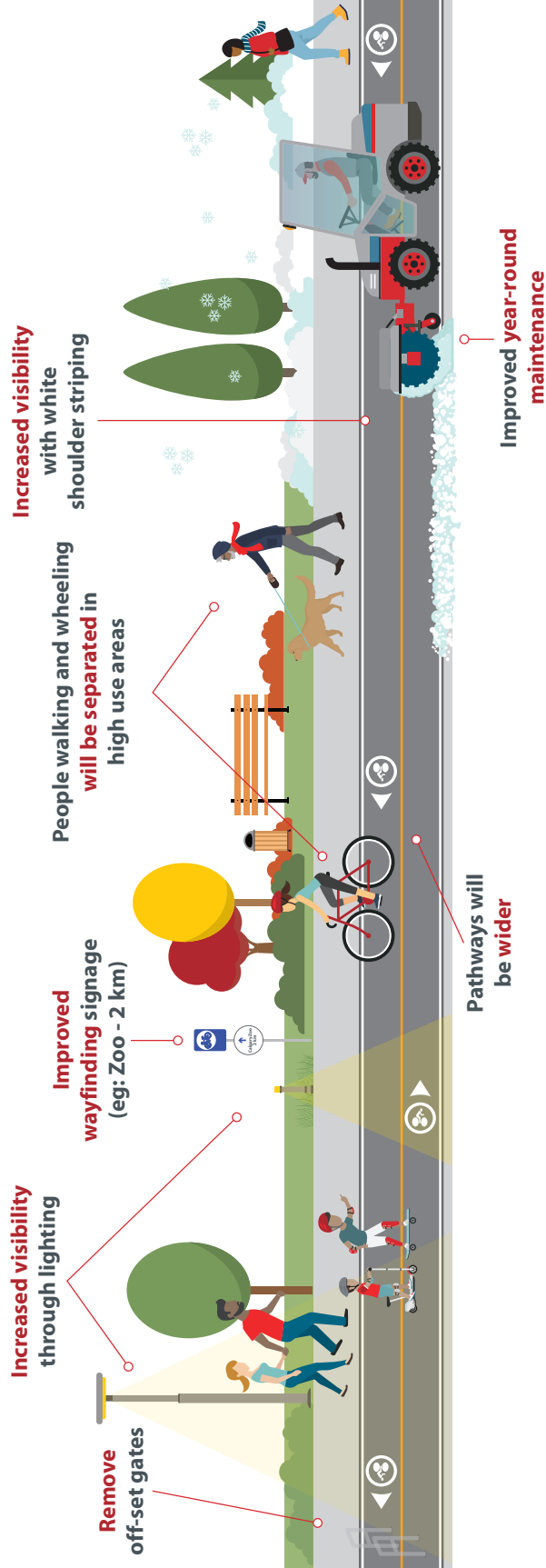


1. Rotary Mattamy Greenway wayfinding signage
2. Example of bikeway pavement markings
3. Example of pathway pavement markings

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.

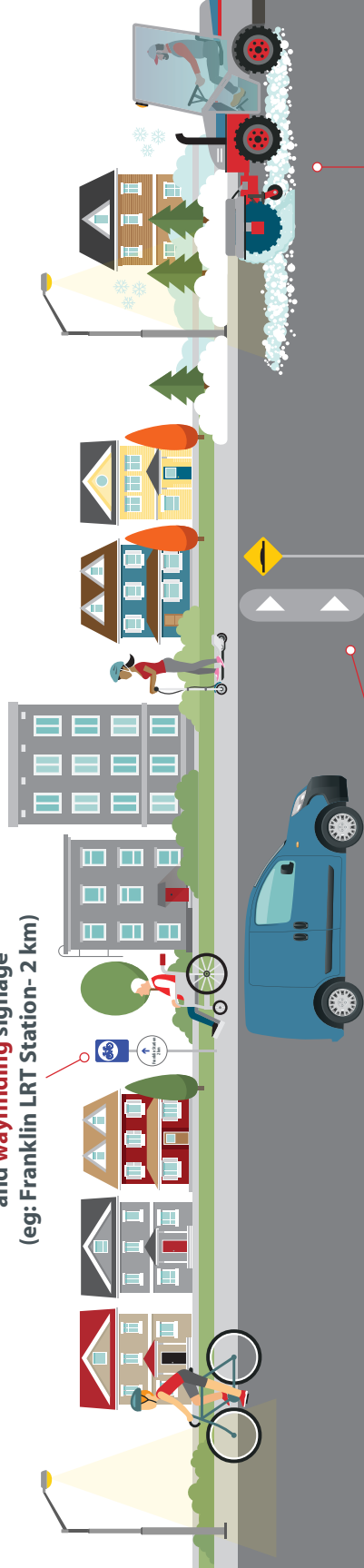
What 5A pathways will look like:



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)

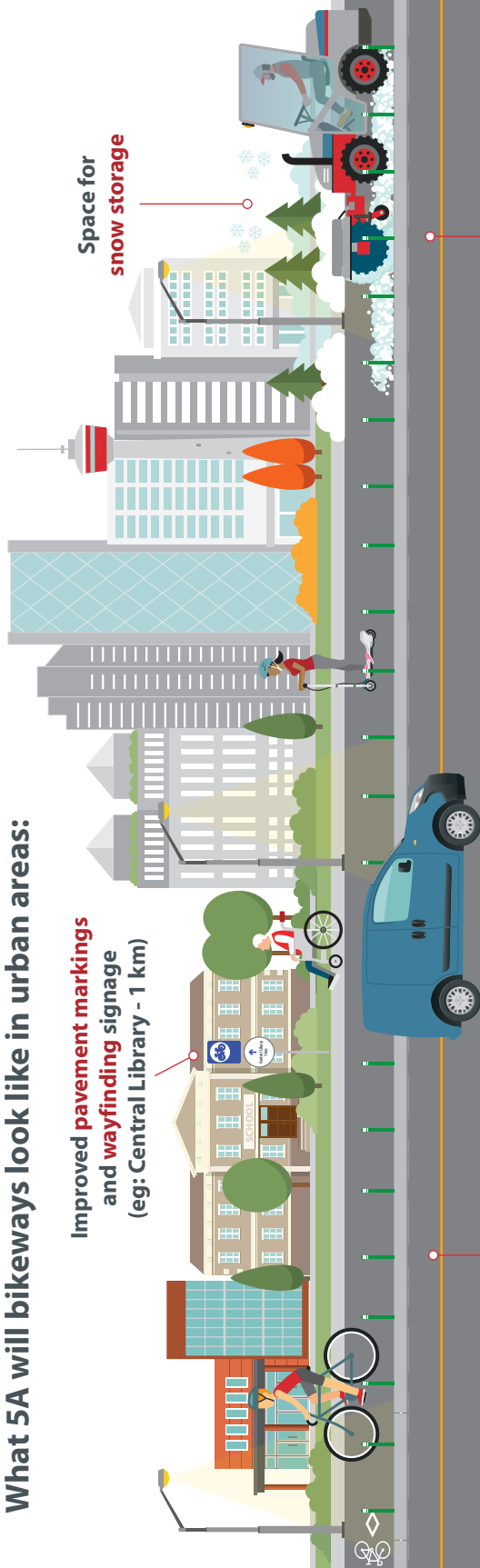


**Lower vehicle volumes and slower vehicle speeds supported by
traffic calming measures on residential streets**

**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



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Visit calgary.ca/pathwaybikeway for more information.