

# Welcome!

## Public Open House for Winnipeg's Pedestrian and Cycling Strategies!

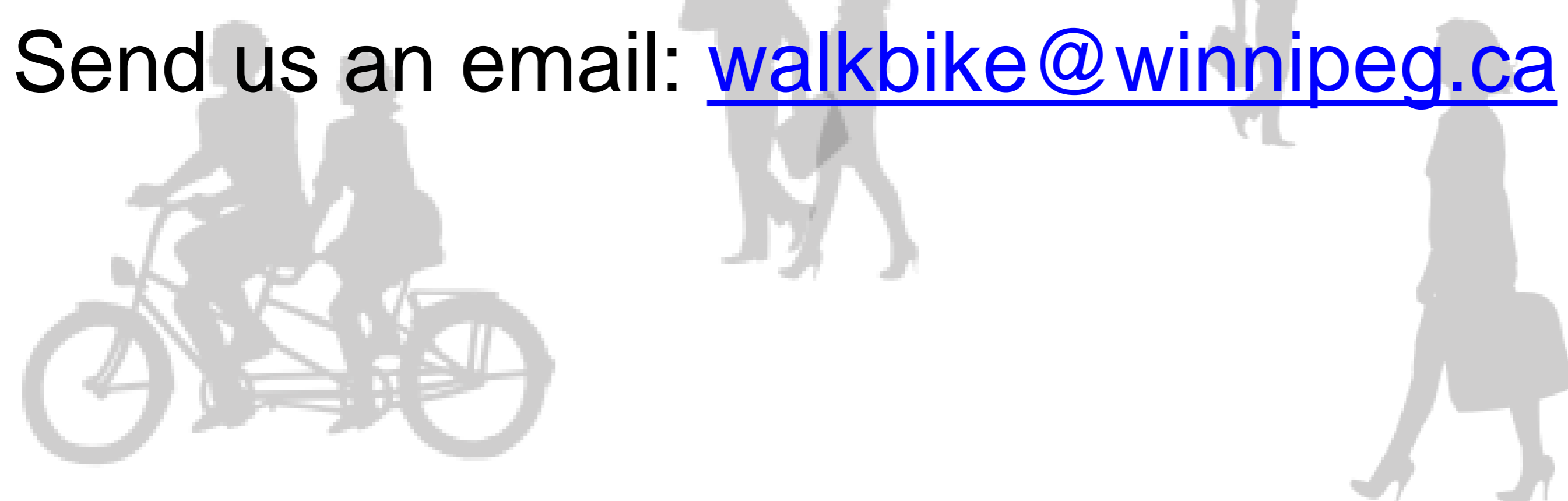


Please let us know what you think:

- Talk with City staff and consulting team members
- Complete the questionnaire before you leave

For more information about the Pedestrian and Cycling Strategies

- Check out the website: [walkbike.winnipeg.ca](http://walkbike.winnipeg.ca)
- Send us an email: [walkbike@winnipeg.ca](mailto:walkbike@winnipeg.ca)





## Study Purpose

- To produce comprehensive Pedestrian & Cycling Strategies for the City of Winnipeg

## Intent of the Strategies

- To confirm and expand the community's vision for increasing the accessibility, use, comfort, and safety of walking and cycling over time.
- To establish detailed directions on policy, infrastructure, and programming for implementing that vision.

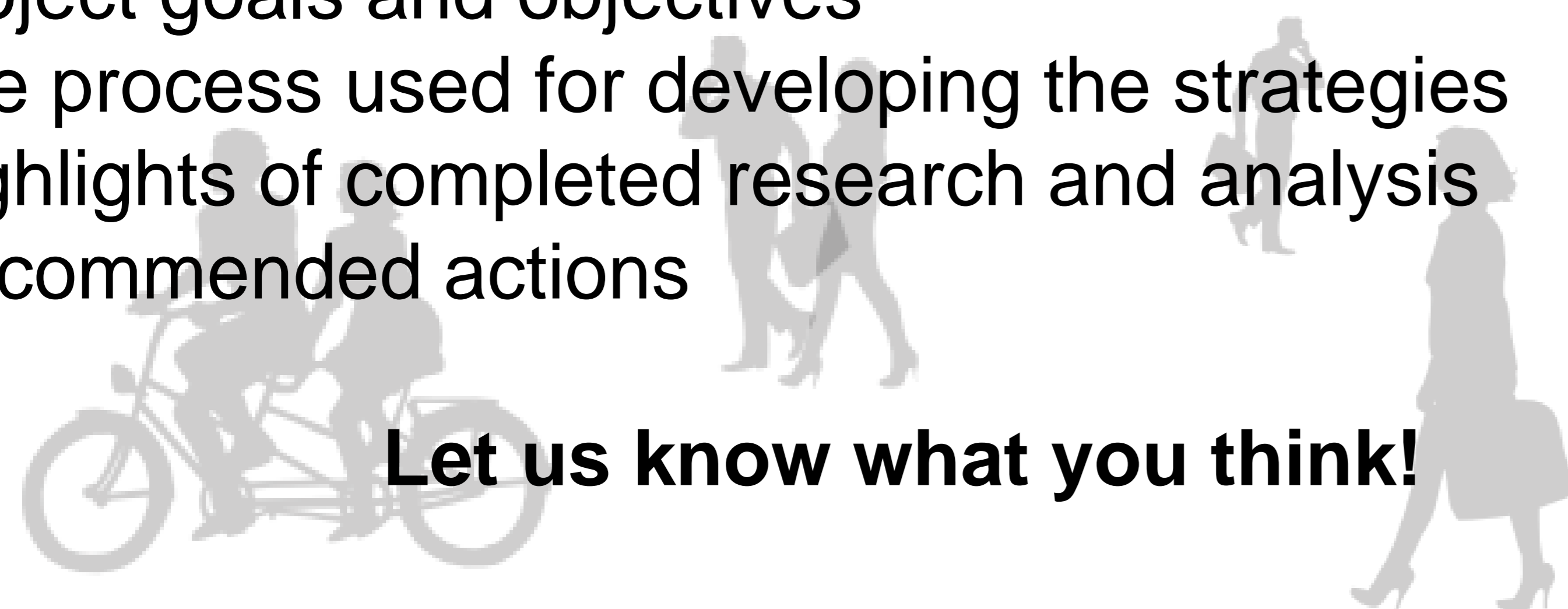
## Intent of this Open House

- The City of Winnipeg is looking for community feedback on the draft directions that have been developed for the strategies.

## The following displays present an overview of

- Project goals and objectives
- The process used for developing the strategies
- Highlights of completed research and analysis
- Recommended actions

**Let us know what you think!**





The Pedestrian & Cycling Strategies are being developed over a four phase process described below:

## Phase 1: Launching *Winter / Spring 2013*

- Gathered information about:
  - Relevant existing policies
  - State of current infrastructure
  - Range of existing programs
  - Trends in local pedestrian and cycling travel behaviour
  - Best practices in pedestrian and bicycle planning
- Identified key stakeholder groups to support the development of strategies through participation in a Stakeholder Advisory Committee.

## Phase 2: Create the Vision *Fall 2013*

- Consulted with the community at large about needs, values, and priorities
- Formulated a vision, goals, and strategic directions.



## Phase 3: Develop the Draft Strategies *Winter 2013 / 2014*

Based on the analysis of information gathered and articulated vision, goals, and objectives, recommendations have been prepared for possible actions related to:

- Walking and cycling networks
- Policies
- Standards
- Programs
- Partnerships

## Phase 4: Final Strategies *Spring 2014*

With input gathered at these Open Houses, this current phase involves:

- Fine tuning the recommendations presented here
- Preparation of a final document for Council endorsement, which presents the final recommended actions, along with an affordable, practical and prioritized implementation plan.



Winnipeg's Transportation Master Plan, approved by Council in November 2011, calls for the development of Pedestrian and Cycling Strategies. Fundamental policies that guide the development of these Strategies include the following:

## OurWinnipeg & Complete Communities Direction Strategy

Together, these two documents:

- Provide the highest level policy context for land use and development in Winnipeg
- Emphasize the importance of increased densities and mixing of land uses – in ways that are sensitive to area context for achieving Complete Communities
- Aim within Complete Communities to provide daily destinations within reach of one's home, and mobility options for people of all ages and abilities to access these daily destinations
- Recognize the importance of an integrated approach to land use, transportation, and infrastructure planning.

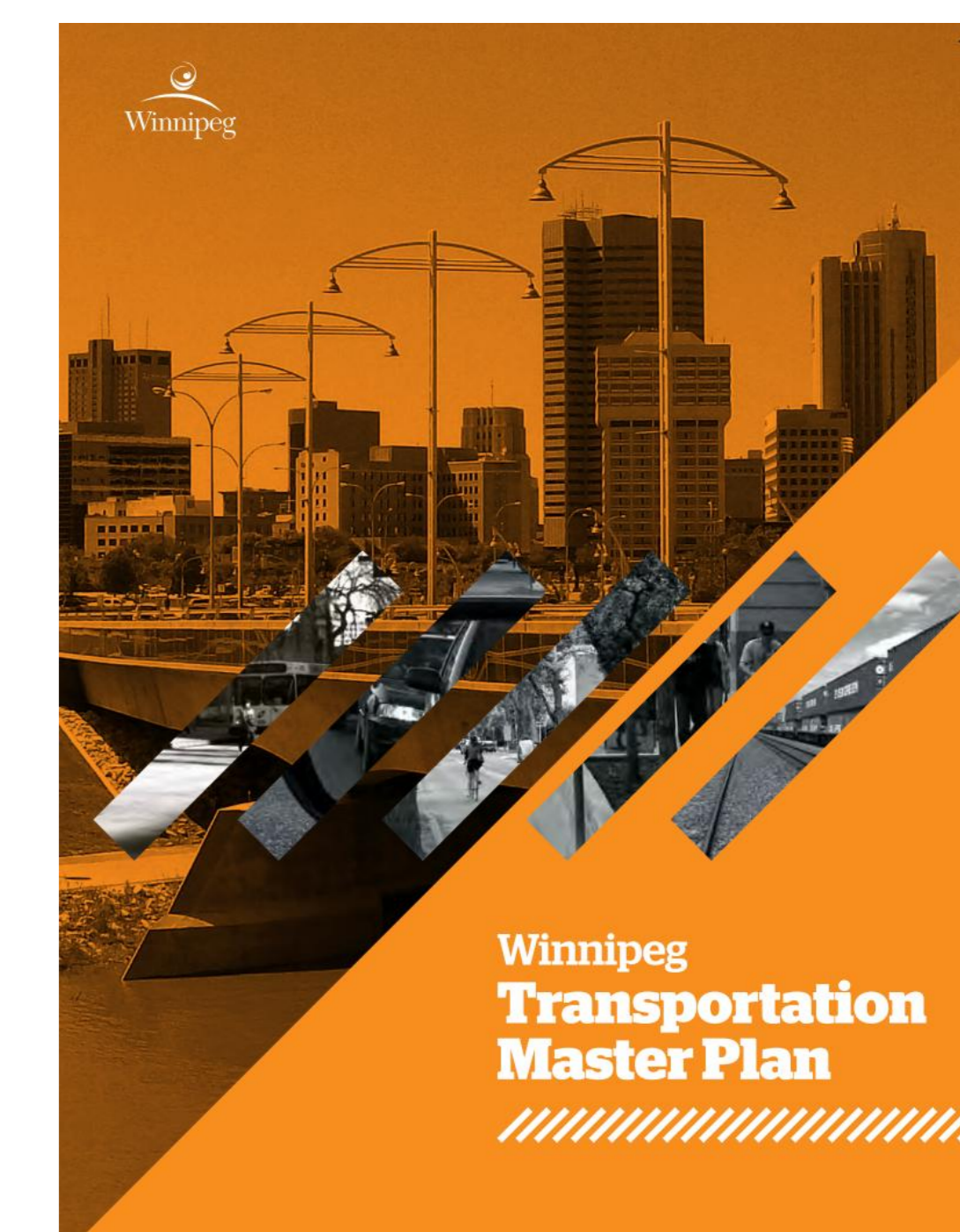
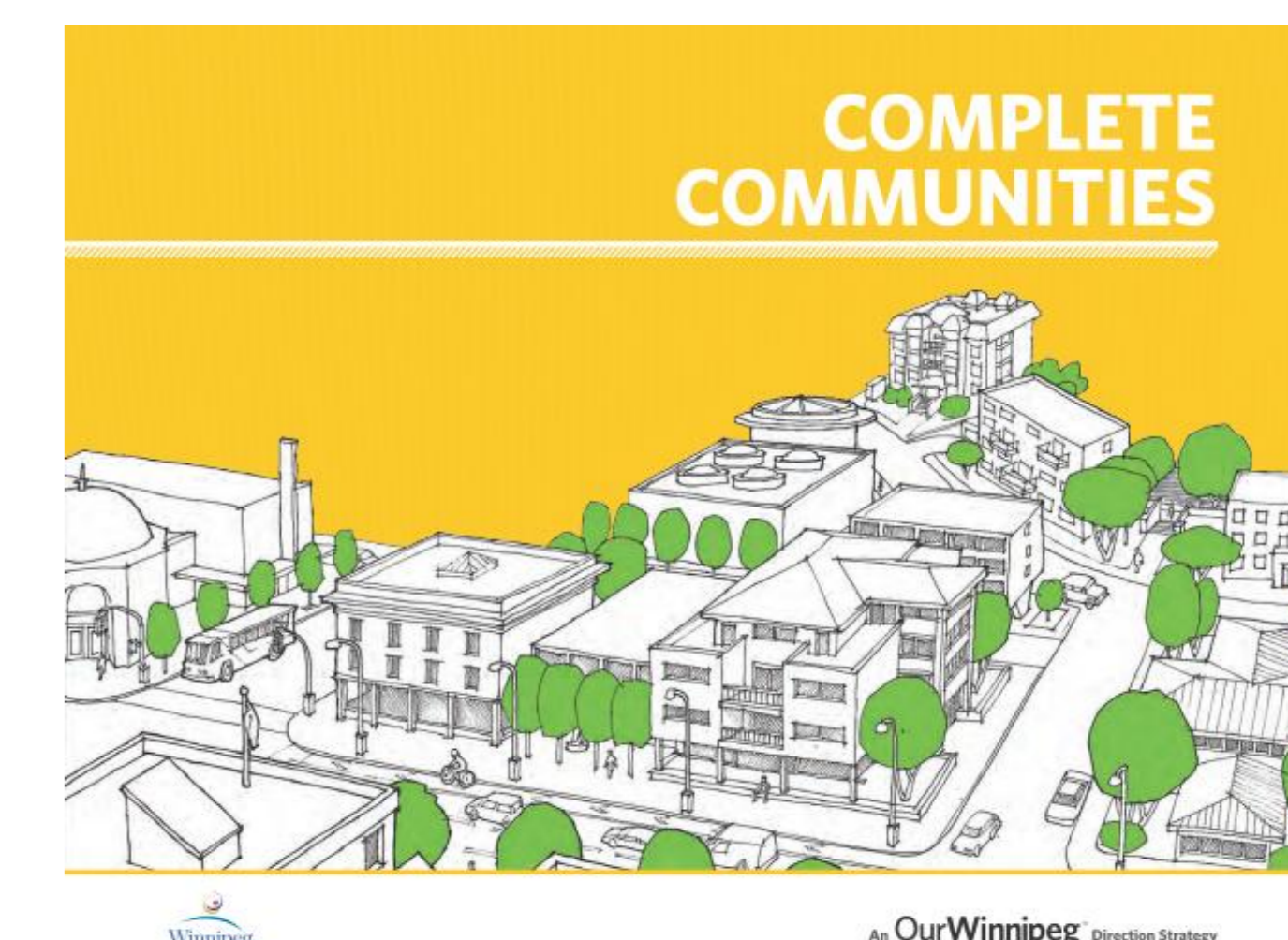
## Transportation Master Plan

This plan supports OurWinnipeg and the Complete Communities Direction Strategy in the following ways:

- Recognizes the importance of integrated planning in reducing "travel demand" (fewer and shorter trips)
- Emphasizes the importance of providing meaningful mode options for travel

## Universal Design Policy

This policy guides new construction and major renovations to buildings, exterior environments, as well as purchases and new developments in services, products, or systems that are funded in whole or part by the City of Winnipeg to follow universal Design Criteria.





# Consultation Process

We have heard from over 2,200 Winnipeggers so far. Consultation to date has included the following:

## Stakeholder Advisory Committee

Collaborated with project consultants and City staff to:

- Identify needs and interests
- Identify priority walking and cycling network improvements
- Develop vision and goals

The Committee represents the following community perspectives:

- Cyclists
- Environment
- Health Promotion
- Inner City Communities
- Land Development
- Local Business
- New Canadians
- Trails Groups
- Persons with Disabilities
- Post-Secondary Students
- Road Safety
- School Aged Children and Youth
- Senior Active Living
- Suburban Communities
- Tourism & Economic Development

## Stakeholder Workshop

- Held on November 30<sup>th</sup>, 2013 with 90 stakeholder participants
- Identified issues and opportunities related to walking and cycling
- Identified priority issues for strategies to address

## Telephone Survey

- Randomly sampled 600 Winnipeggers through a survey that was statistically representative of Winnipeg's total population
- Findings related to:
  - Current walking and cycling habits
  - Types of pedestrians and cyclists
  - Obstacles to walking and cycling
  - Suggested improvements that would increase walking and cycling

## On-line survey

- Survey of 1,600 self-selected respondents
- Provides findings on similar issues to the representative telephone survey
- Captured a more limited demographic than the telephone survey, focusing on currently active pedestrians and cyclists

## Website, Social Media & Email

- Project website, with an established brand and image
- Project logo provided as a link to the project website from the City of Winnipeg homepage, SpeakUp Winnipeg, Facebook and Twitter

## Today's Open House

- Gather community feedback on the draft directions that have been developed for the strategies at this series of three open houses





After hearing directly from over 2,200 Winnipeggers, we received many valuable ideas and insights about walking and cycling in Winnipeg today. Participants identified existing barriers to walking and cycling and noted many opportunities to improve conditions and encourage more people to walk and pedal.

We learned many Winnipeg residents already walk or cycle, including in winter months, and a significant portion of Winnipeggers – including nearly half of all telephone survey respondents - would like to walk and cycle more.

Understanding the main barriers and reasons why people don't walk or cycle as much as they would like was a key part of the process, and helped to develop strategies and actions to get more people walking and cycling.

## The Market for Cycling in Winnipeg

**10%** of telephone respondents surveyed said cycling is their main form of transportation.

**46%** said they would like to cycle more often.

**36%** said they are interested in cycling more, but are concerned about safety and cycling on busy roads next to traffic.

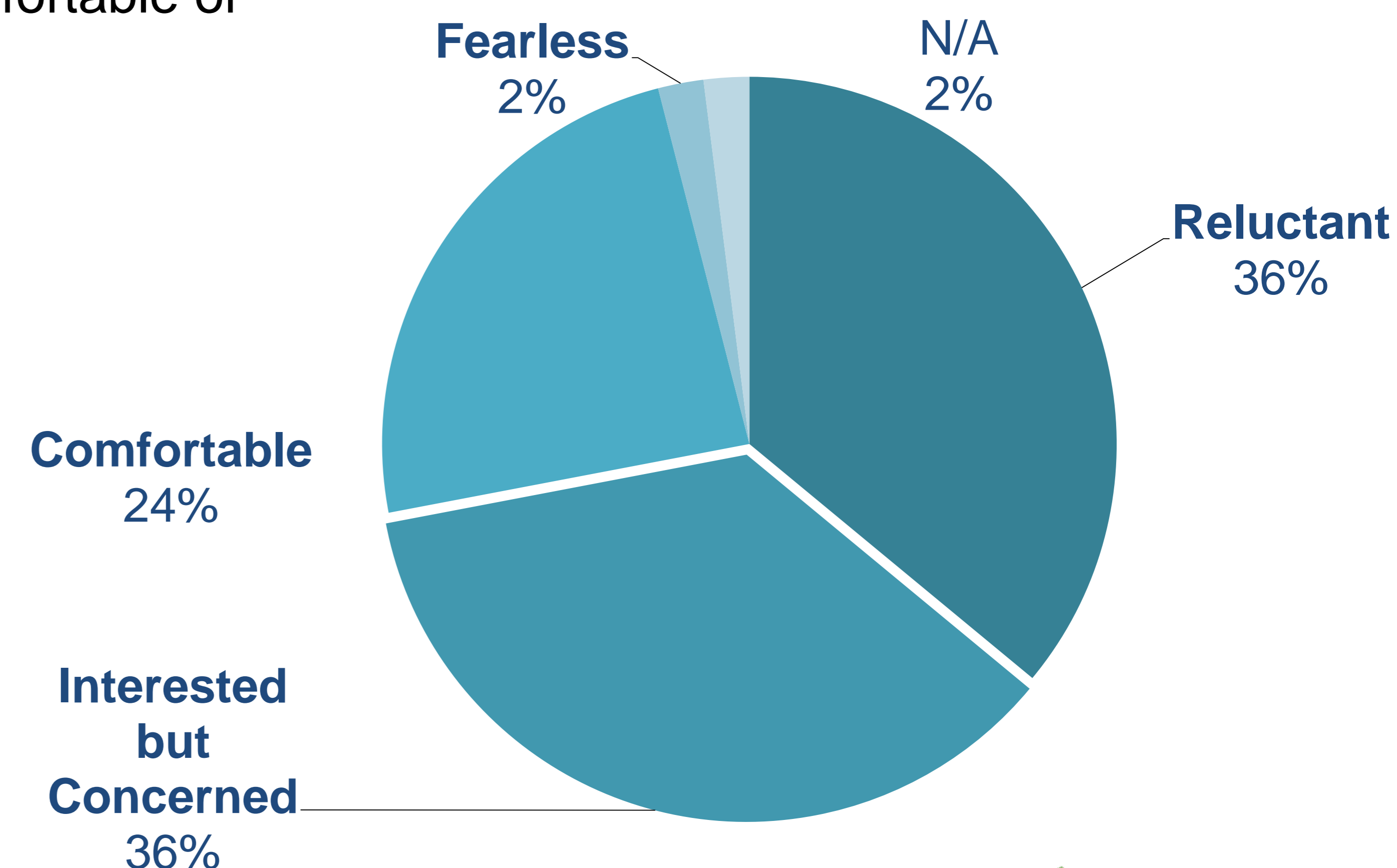
**26%** said they are either comfortable or fearless cyclists.

## The Market for Walking in Winnipeg

**7%** of telephone survey respondents said walking is their main form of transportation.





**49%** said they would like to walk more often.

### Types of Cyclists in Winnipeg



#### Types of Cyclists

Research out of Portland, Oregon has established a now commonly-used categorization for types of cyclists

-  **Reluctant cyclists** are not very interested in cycling at all
-  **Interested but Concerned cyclists** are curious about cycling, but have concerns, such as safety and traffic, that deter them
-  **Comfortable cyclists** are attracted to cycling through investments in bicycle networks and infrastructure
-  **Strong and Fearless cyclists** cycle regardless of road conditions

Source: City of Winnipeg, Pedestrian & Cycling Strategies Telephone Survey





Winnipeggers are very active pedestrians and cyclists. In non-snow months, 93% Winnipeggers walk and 45% cycle at least once a month to get to work, school, neighbourhood destinations, or for exercise or pleasure.

## Trips for Exercise or Pleasure

Walking and cycling are not just for getting from A to B. These modes form an important part of Winnipeggers' recreation and leisure activities. In fact, **the most comment reason Winnipeggers choose to walk and cycle is for exercise or pleasure.** The telephone survey found that, in non-snow months, more than 8 out of 10 Winnipeggers walk for exercise at least once a month, and 4 out of 10 Winnipeggers cycle for exercise at least once a month.

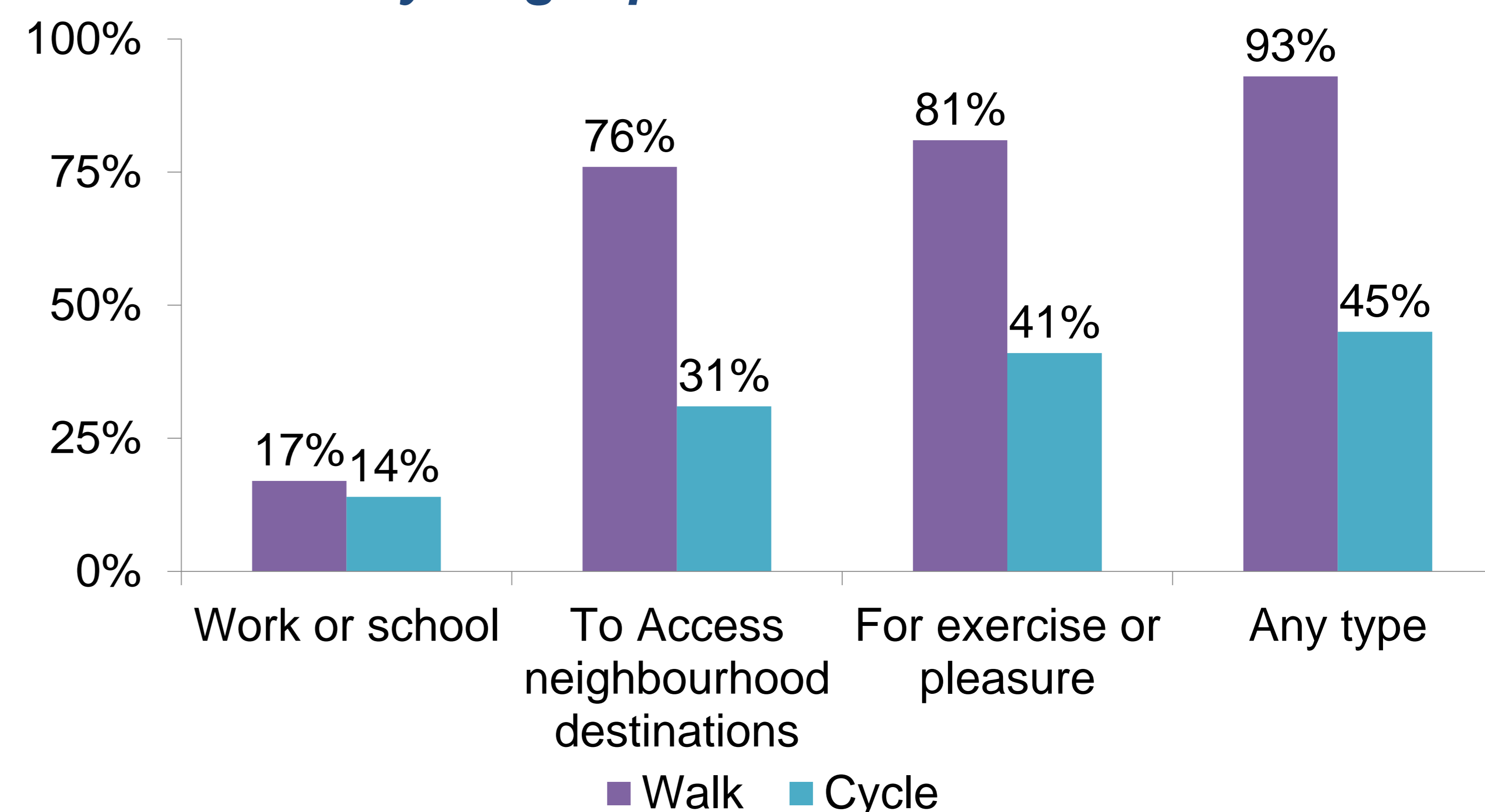
## Trips to Access Local Destinations

Many people are walking or pedalling to neighbourhood destinations. The telephone survey found **grocery stores** are the most common destination for active transportation trips, followed closely by **restaurants, parks, playgrounds, and community centres.** Most walking and cycling trips are primarily short distance, locally based trips.

## Trips to Commute to Work or School

Many Winnipeggers also commute to work by walking or cycling in non-snow months.

### What is the main purpose of your walking and cycling trips in non-snow months?



## Winter Walking and Cycling

Much of the input we received showed active transportation habits are relatively high year round – even in winter months!

- **6%** of respondents say they cycle to work or school at least once a month in the winter.
- **17%** of respondents say they walk to work or school at least once a month in the winter.





# What We Heard – Current Barriers & Suggestions

## Cycling

### Barriers

Many participants note they are most uncomfortable on busy streets without bike lanes, and say that the lack of dedicated bicycle infrastructure is one of the biggest barriers to cycling.



### Suggestions

Clear themes and priorities emerged from residents and stakeholders about how to support cycling in Winnipeg:

- Develop a more complete and connected bicycle network
- Provide separated bicycle lanes on major streets
- Offer more secure bicycle parking
- Create more painted bicycle lanes
- Set aside more bicycle boulevards on residential streets



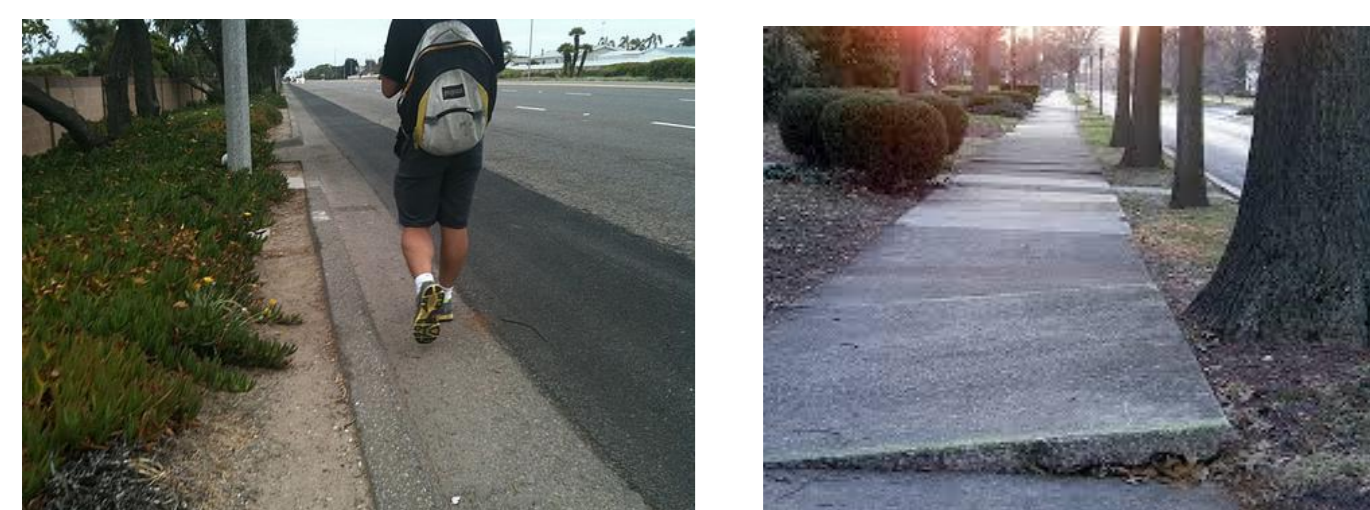
One key theme that emerged from public input involved resolving current **barriers to walking and cycling** to encourage people to walk and cycle more often.

Many people agree long distances, personal abilities, and time limitations can be deterrents to walking and cycling – but say **the absence of dedicated or well-connected facilities** are primarily what discourages Winnipeggers from walking and cycling more.

## Walking

### Barriers

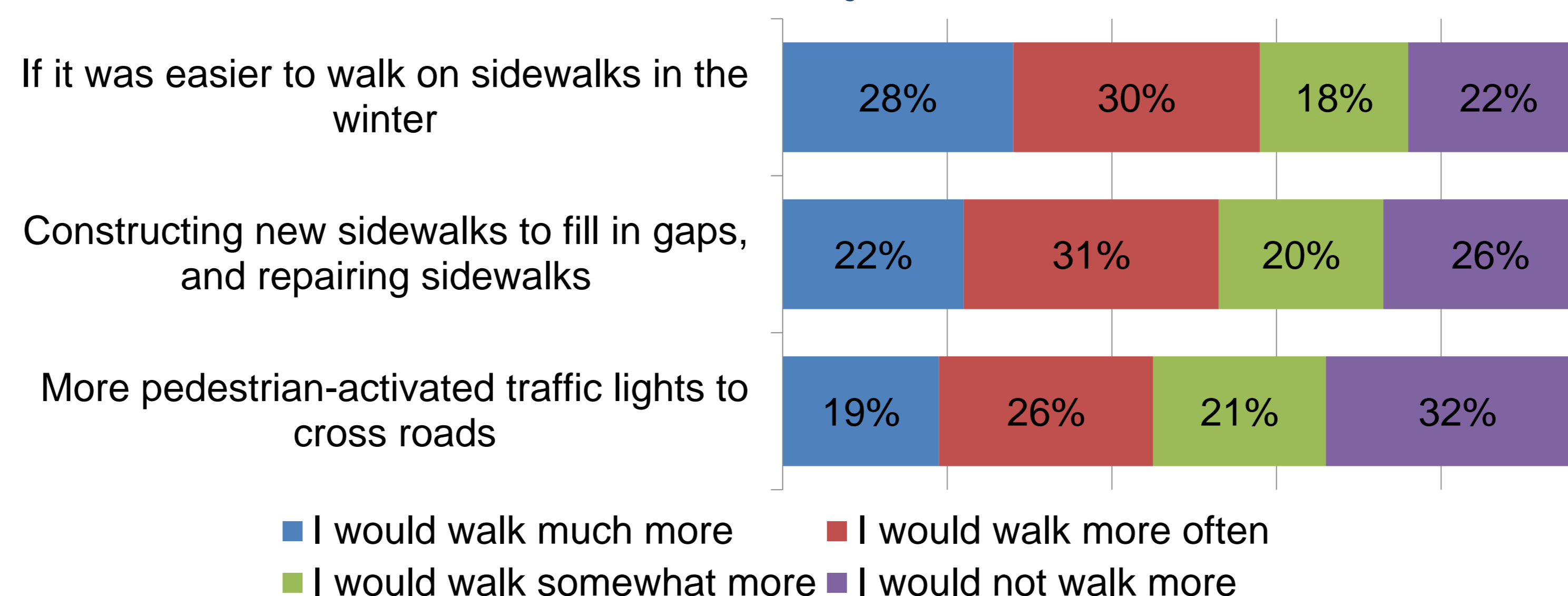
Participants in the surveys and workshop pointed out lack of sidewalks or sidewalks in poor condition, walking in the snow, as well as safety and security concerns as key current barriers to walking. The top priority identified among workshop and survey participants was more snow removal to allow for clear sidewalks in the winter.



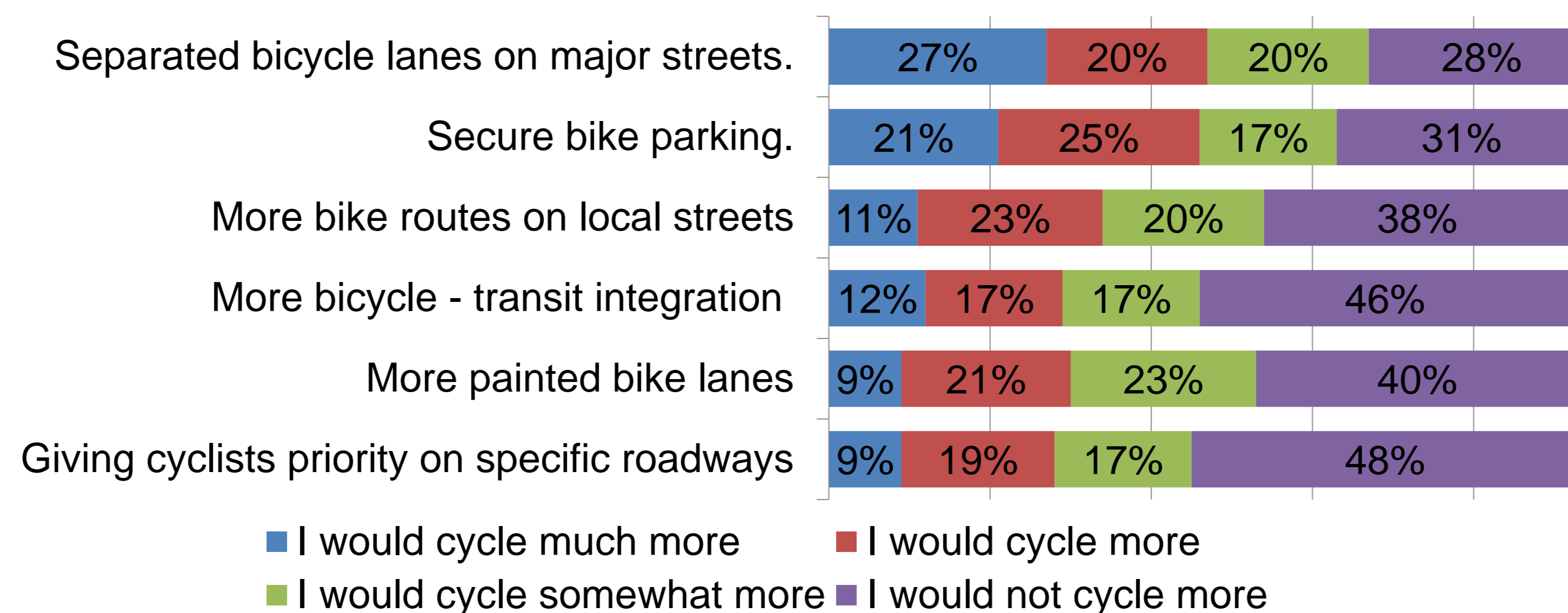
### Suggestions

Filling in gaps in the sidewalk network and improved sidewalk maintenance were also identified as critical to encourage more people to walk more often. Safer crossings were also highlighted as needed to get more Winnipeggers to walk.

### What would make you walk more?



### What would make you cycle more?





Walking and cycling contribute to a more balanced, cost-effective, and efficient transportation system, while supporting more healthy, livable, and vibrant communities. Benefits of promoting walking and cycling include:

## Health Benefits

***Walking and cycling result in several health benefits, including:***

- Reduced chance of obesity
- Reduced risk of cardiovascular disease, Type 2 Diabetes and metabolic syndrome, and some cancers
- Improved strength and bone density, leading to an enhanced ability to do daily activities and avoid falls
- Improved mental health and mood
- Increased chance of living longer

***Streets that support high levels of walking and cycling are slower and safer.***

Walkable and bikeable environments contribute to a safer transportation system by making walking and cycling more visible and viable modes of travel, resulting in reduced risk of collision. Streets that are designed for slower vehicle speeds feel safer for both pedestrians and cyclists.

When walking and cycling rates increase, rates of collisions with motor vehicles decrease. This is known as the “safety-in-numbers” principle.

Places with the highest levels of pedestrians and cyclists are also the safest places to walk and cycle.

***For more information:***

- World Health Organization, 2010. Global Recommendations on Physical Activity for Health. Geneva, WHO Press.
- Garrard, Rissel and Bauman, 2013. Health Benefits of Cycling. In Pucher and Buehler, City Cycling. MIT Press, Cambridge, MA.
- Active Living Research, 2010. The Economic Benefits of Open Spaces, Recreational Facilities and Walkable Community Design. [www.activelivingresearch.org](http://www.activelivingresearch.org).
- Ontario Trail Council, 2013. The Importance of Trails. [www.ontariotrails.on.ca](http://www.ontariotrails.on.ca)
- Alliance for Biking and Walking. Protected Bike Lanes Means Business. [www.peoplepoweredmovement.org](http://www.peoplepoweredmovement.org)
- City of Copenhagen. Economic Evaluation of Cycle Projects – methodology and unit prices. [www.fietsberaad.nl](http://www.fietsberaad.nl)

## Economic Benefits

***Walking and cycling are good for the local economy.***

Investing in walking and cycling infrastructure and programs can stimulate the local economy by generating tourism revenue and supporting local business. Better opportunities for walking and cycling may allow residents to spend less on transportation costs, leaving them with more disposable income for purchasing other goods and services – which in turn can stimulate the local economy. In addition, properties near desirable active transportation facilities (i.e. trail networks, bicycle routes) may benefit from increased property values.

***Walking and cycling infrastructure is affordable for cities to build and maintain, and for individuals to use.***

Building walking and cycling facilities is typically less expensive per kilometre than constructing roadways and maintaining them is also less expensive due to less wear and tear. The result is beneficial for municipal budgets. For individuals, walking and cycling are much less expensive than either driving or transit.

***Walking and cycling facilities are efficient uses of space.***

Pedestrians and cyclists need less space than motor vehicles; more walking and cycling means less congestion and better overall transportation system performance. Parking becomes more efficient – ten bicycles can be stored in a single motor vehicle parking space.

(Pedestrians, of course, need no parking space at all.) Each of these efficiencies helps maximize the value

Winnipeg gets from its transportation system.





## Social Benefits

### Safe travel options for women

The amount of women cycling is often identified as an indication of how safe local conditions are for cycling. Well-designed bicycle facilities can lead to an increase in female participation in cycling, which signals that a city is becoming more bike-friendly.

### Active neighbourhoods for the young and old

Building safe and comfortable bicycle and pedestrian facilities for all ages and abilities opens up additional affordable and accessible transportation choices for all residents.

- Youth and seniors may not have access to cars and rely more on walking, cycling, and transit.
- Improving conditions for walking and cycling can empower seniors to 'age in place' in their neighbourhoods and encourage children to walk or bike to school.

### Conserving funds in hard times

Other groups can benefit from improved access to active transportation. Low income families can significantly reduce operating costs associated with active travel. As the table below shows, walking and cycling have fewer 'operating costs' per year than driving a vehicle.

What does it cost (annually) to use different types of transportation?

Walking	\$0-70
Bicycle	\$100-350
Transit	\$993.60
Motor Vehicle	\$8,762

Information Sources:

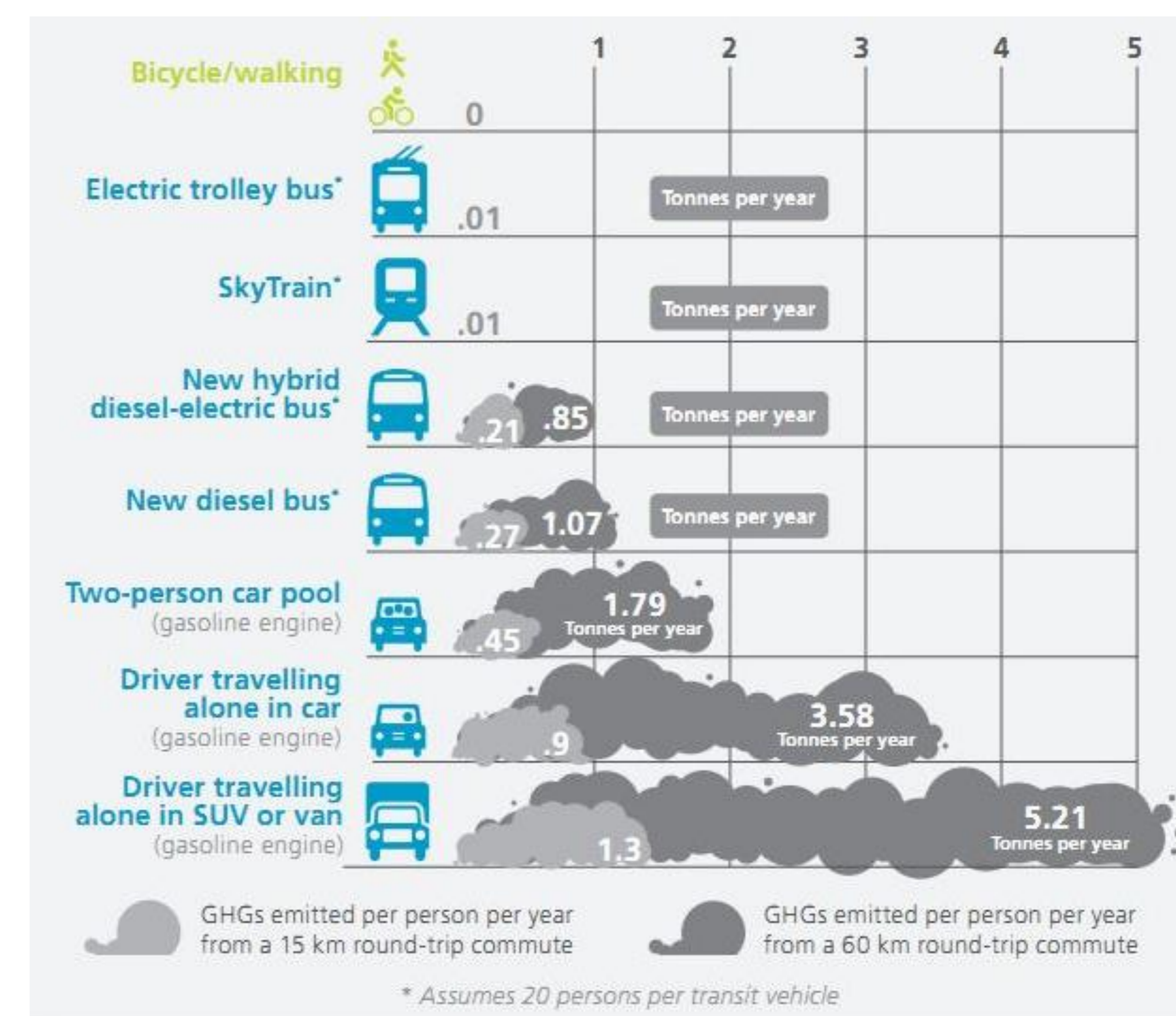
- Motor Vehicle Costs: Canadian Automobile Association, 2008. Driving Costs.
- Transit Costs: Winnipeg Transit, 2013 (Avg annual cost of a monthly transit pass.)
- Bicycle and Walking costs: Estimated based on the price of shoes, clothing and routine bicycle maintenance.

## Environmental Benefits

### Walking and cycling have low environmental impact

Walking and cycling have relatively low environmental impacts, because they:

- Generate no greenhouse gas emissions.
- Create no air or water pollution.
- Cause minimal noise and/or light pollution.
- Reduce the demand for streets and parking lots by making more efficient use of existing road space.



#### For more information:

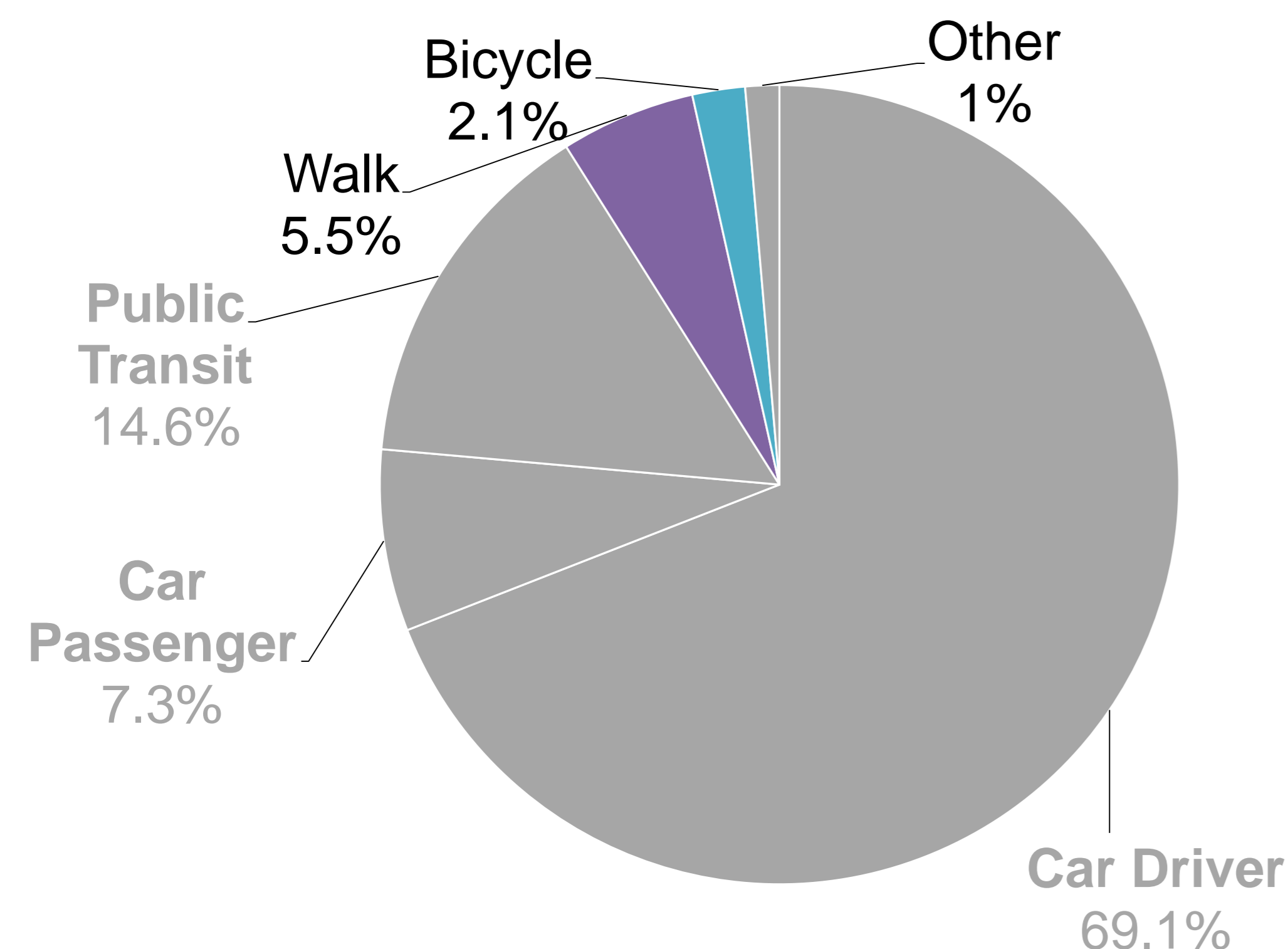
- World Health Organization, 2010. Global Recommendations on Physical Activity for Health. Geneva, WHO Press.
- Garrard, Rissel and Bauman, 2013. Health Benefits of Cycling. In Pucher and Buehler, City Cycling. MIT Press, Cambridge, MA.





According to the 2011 National Household Survey, almost 8% of all trips to work are made by walking and cycling. In fact, Winnipeg has the highest levels of walking and cycling commute trips among all Canadian prairie cities.

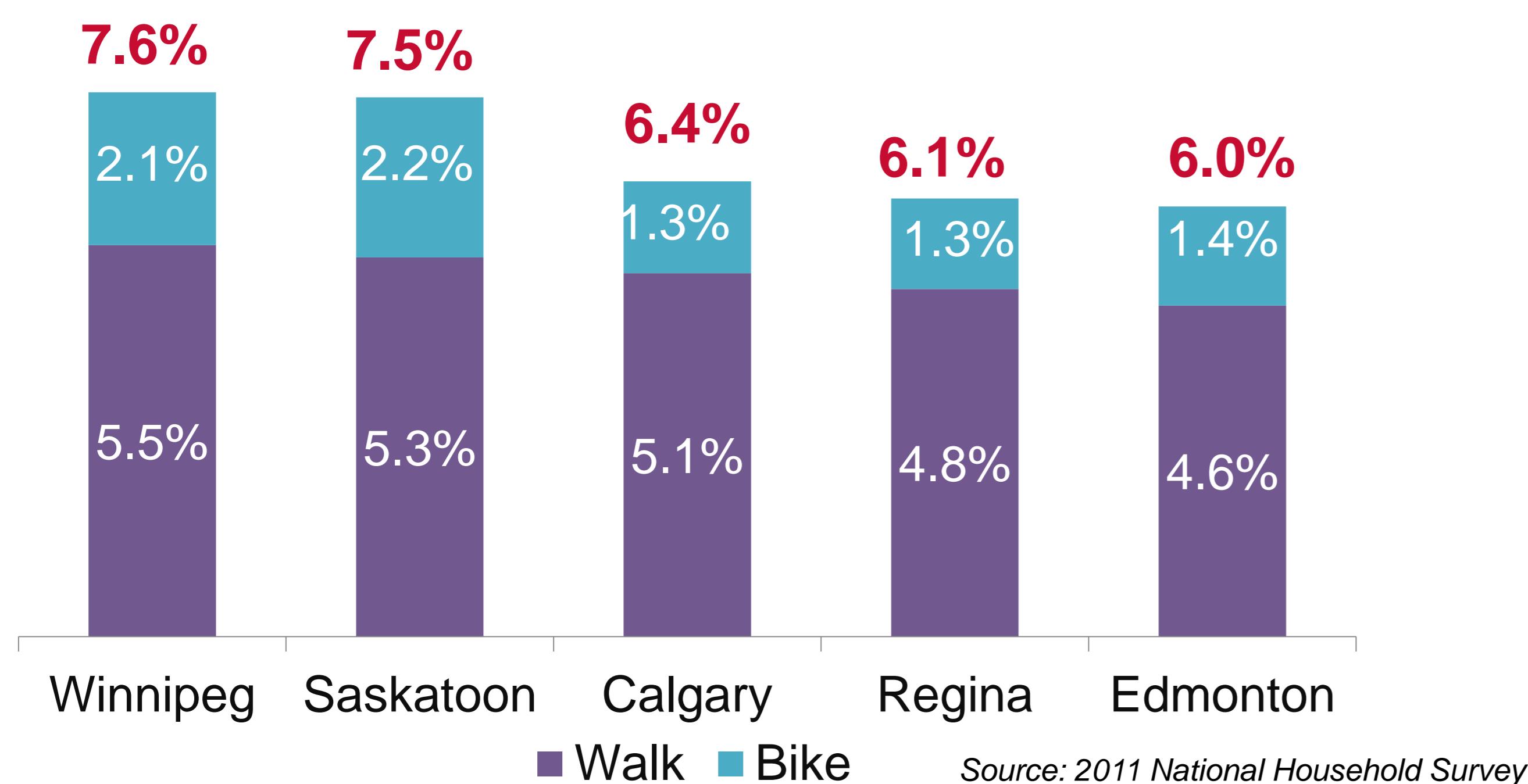
## Mode Share of Commute Trips in Winnipeg, 2011



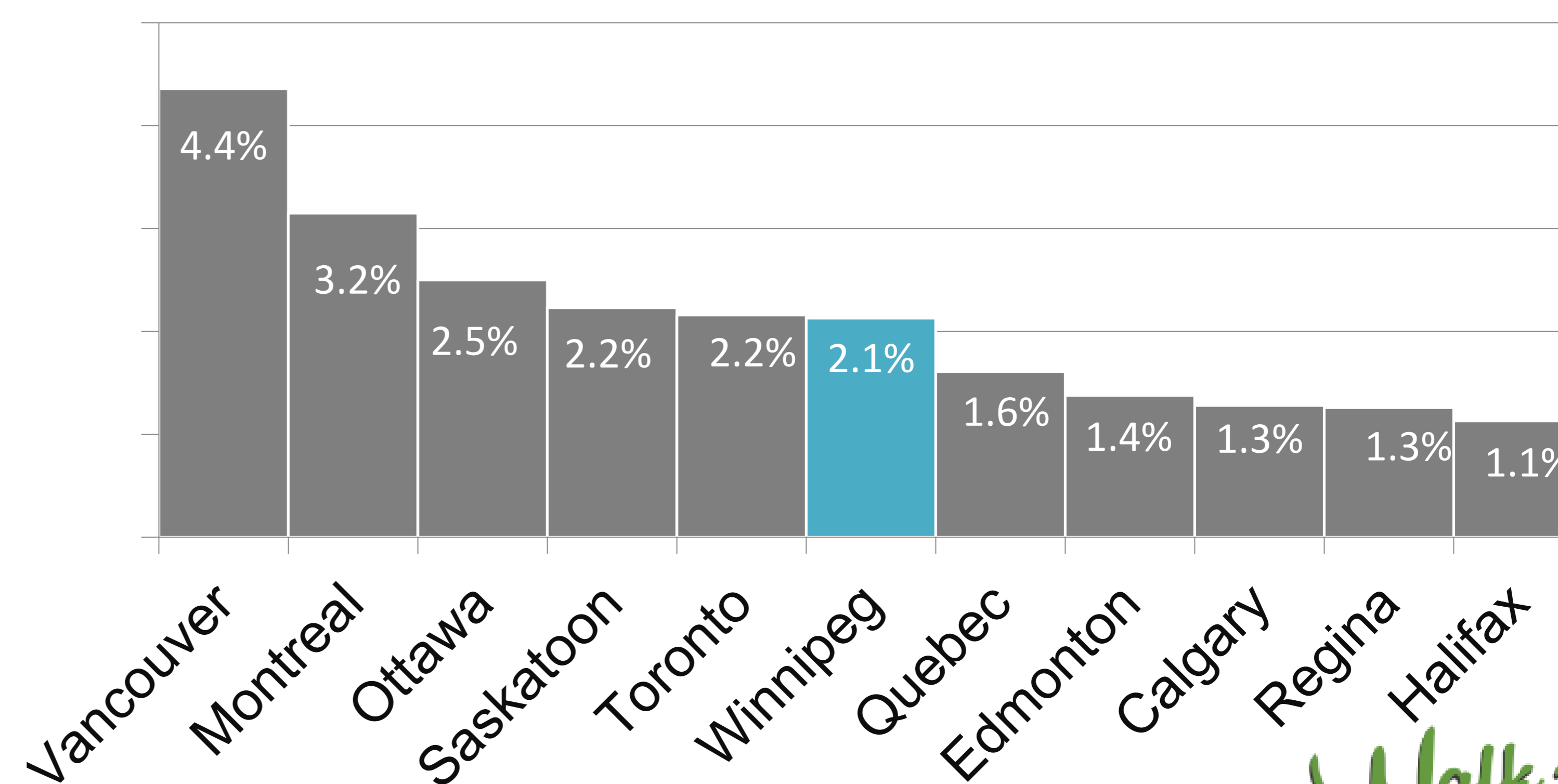
In particular, over 5% of trips to work are made on foot in Winnipeg. That's nearly 20,000 daily walks taken for commuting. Winnipeggers walk more than citizens of any other major Canadian prairie City. But walking in Winnipeg has remained relatively stable over the past decade, with a slight decline in recent years. With more infrastructure and programming, more people will walk more.

More than 2% of Winnipeggers get to and from work by bicycle. That's one of the highest percentages in Canada, and it's second only to Saskatoon among major prairie cities. In fact, cycling is the fastest growing mode of transportation in Winnipeg. In the past ten years, bicycle use has grown faster here than in any other major city in Canada, except Toronto. Most other prairie cities have seen bicycle use decline over the past decade.

## Walking and Cycling in Winnipeg Compared to Other Canadian Cities, 2011



## Bicycle Mode Share in Major Canadian Cities, 2011





While about 5% of Winnipeggers walk to work, many also walk for recreation, leisure, and other day-to-day trips.

Winnipeg currently has an extensive walking/cycling pathway network, with roughly 2,500 kilometres of sidewalks, pedestrian and bicycle-only bridges, pedestrian corridors, countdown timers, and accessible infrastructure at many major intersections.

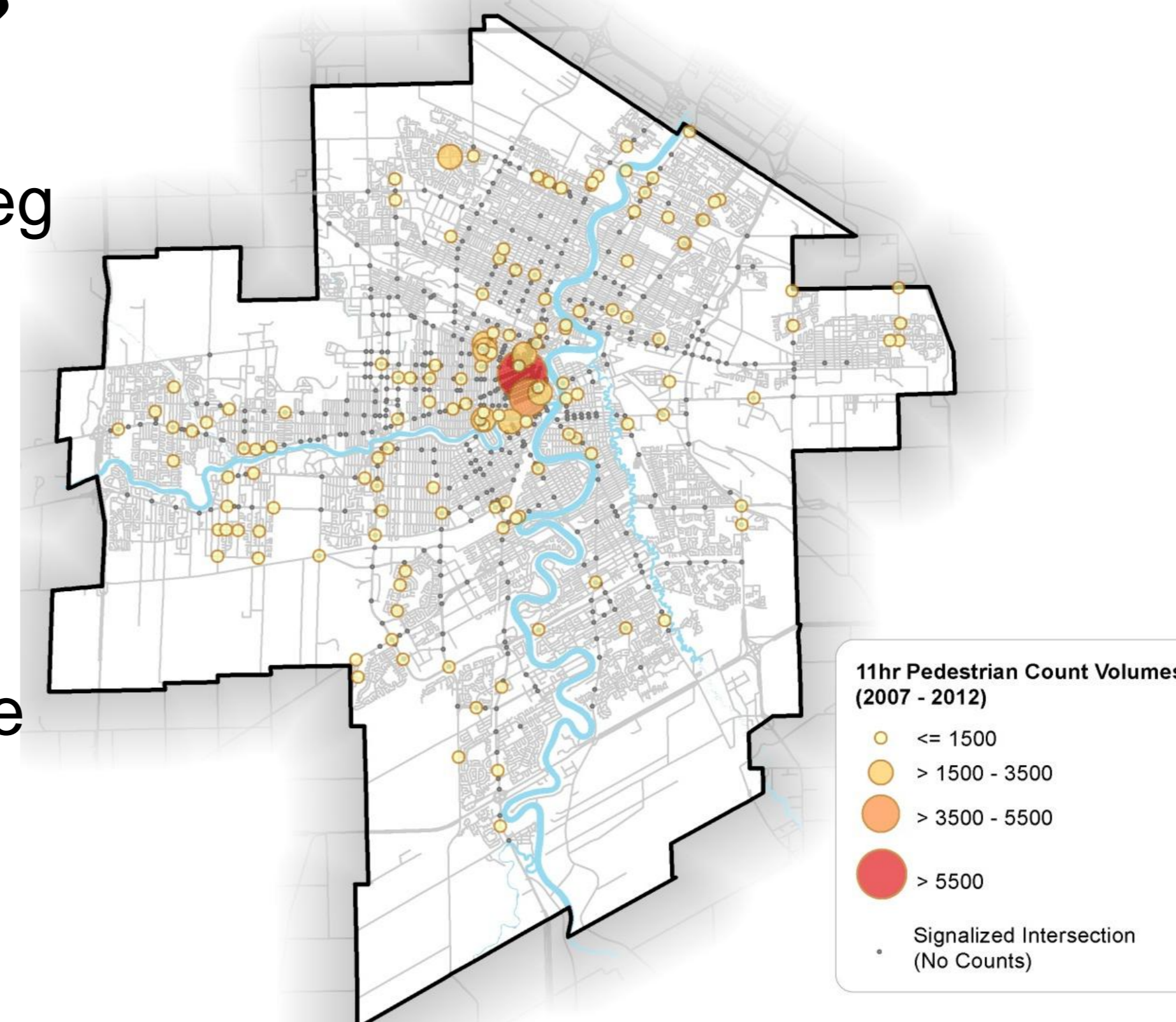
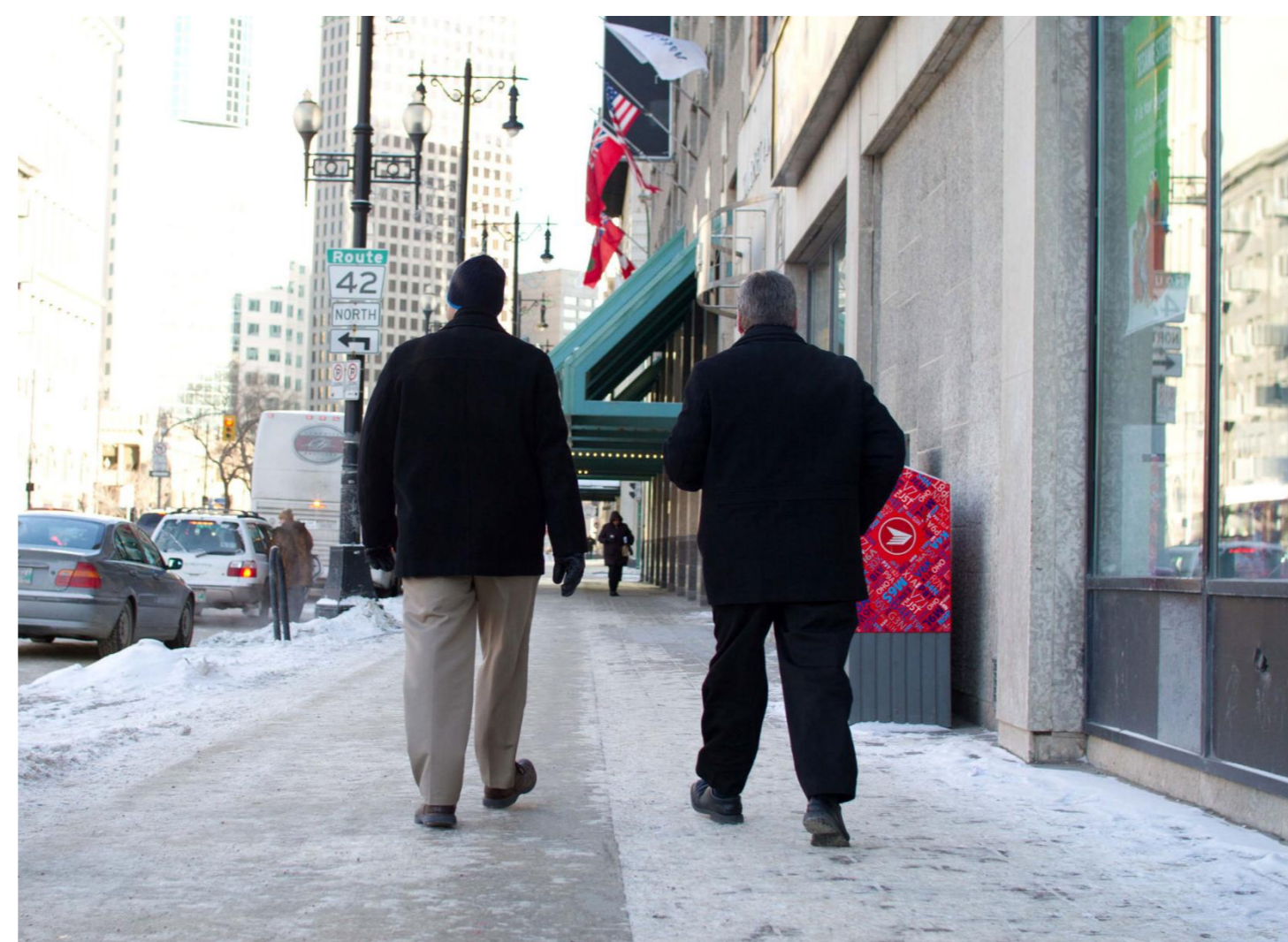


Walking is even higher in some neighbourhoods. For example, about 16% of trips to work in Downtown are done by walking. Osborne Village, St. Boniface, and the West-End Wolseley neighbourhoods also see high levels of walking.

## Where are people walking?





The top ten locations for pedestrian activity in Winnipeg are:

- 1) Portage & Smith
- 2) Donald & Broadway
- 3) McDermot & Olivia
- 4) Princess & William
- 5) Osborne Bridge & Osborne Street
- 6) Jefferson & Adsum
- 7) Sherbrook & Westminster
- 8) Notre Dame & Sherbrook
- 9) Main & Broadway
- 10) Logan & Main



## Types of Pedestrians

Pedestrians range in age, ability type, and purpose. There are:

-  Those who walk for recreation (i.e. walking or running for exercise, leisure, fresh air)
-  Those who walk for practical reasons (i.e. people walking to work or the local store)
-  Those who use mobility assistance (i.e. cane, walker, guide dog, or wheelchair)
-  Those who are parents of small children, and/or who use a stroller



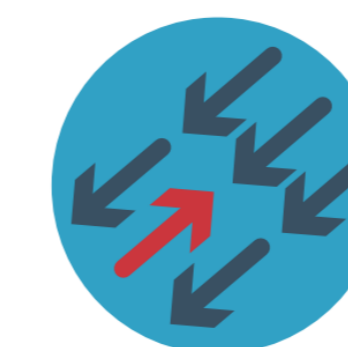
### Who is walking?

- Young people aged 15-24 years old make up the largest proportion of walking trips city-wide.



### How long are Winnipeggers' walks?

- The average walking trip length in Winnipeg is 1.1 km –about a 15-20 minute walk.



### Why do Winnipeggers walk?

- The most common walking purpose is to go to work; that accounts for over 40% of Winnipeg's daily walking activity. Walking trips to and from school and for recreation each account for 14% of daily walking trips.



### What about safety?

- About one quarter of all pedestrian collisions occur at signalized intersections, with the highest frequency in winter months

Source: Winnipeg Area Travel Survey 2007





About 2% of Winnipeggers cycle to work. Convenience and being low cost for shorter trips makes cycling a good transportation option for many. The city's relatively flat terrain makes the city well-suited to cycling. In recent years, cycling has grown in popularity in Winnipeg – having steadily increased from 1996 to today.

Currently in Winnipeg:

- **8%** of Winnipeg streets have bicycle facilities
- There are **400 km** of bicycle facilities and routes
- There are dedicated pedestrian and bicycle **bridges**, bicycle **pushbuttons**, and bicycle **parking**

	% of Network
Multi-Use Path (paved)	47 %
Bicycle Boulevard	15 %
Multi-User Path (Unpaved)	11%
Bicycle Lane	10 %
Sharrow	9 %
Sunday Street Closure	4 %
Shoulder Bikeway	3 %
Cycle Track	1%



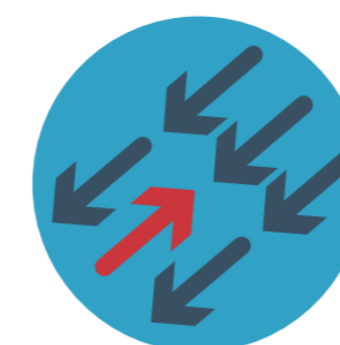
## Who cycles?

- 30% of Winnipeg cyclists are women, 70% are male
- The highest level of cycling activity is among those aged 15-24 years old



## How long is a Winnipeg bike trip?

- The average cycling trip length is about 2.5 km – 3.5 km in length, or roughly 10 to 15 minutes.



## Why do Winnipeggers cycle?

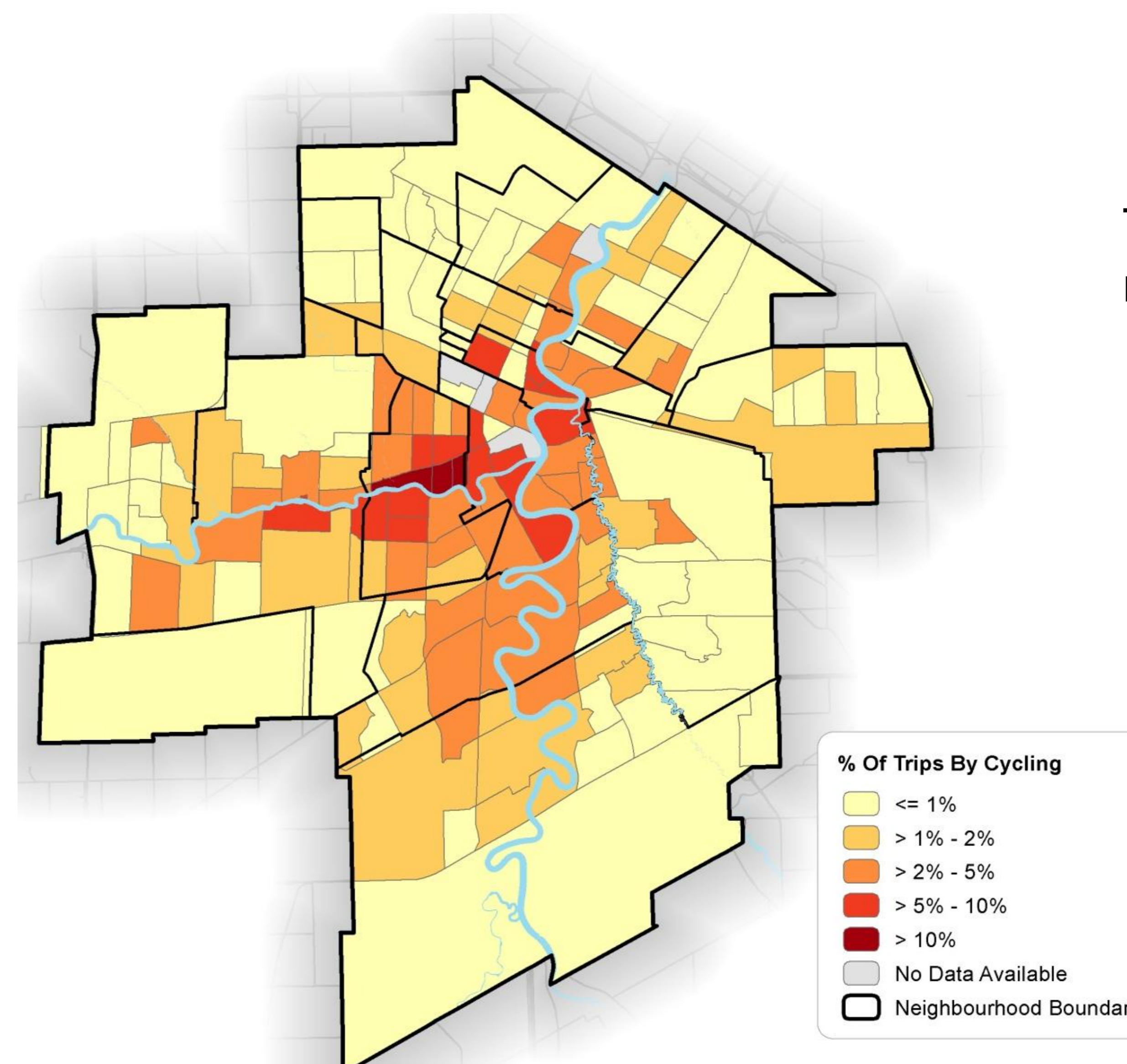
- About 70% of daily bicycle activity in Winnipeg is to go to work. Trips made for recreation account for 12%, and 9% are for biking to school.



## What about safety?

- On average, there were almost 200 reported collisions per year between cyclists and motor vehicles between 2006 and 2010. The vast majority (over 99%) resulted in property damage only or non-fatal injuries.

Source: Winnipeg Area Travel Survey 2007

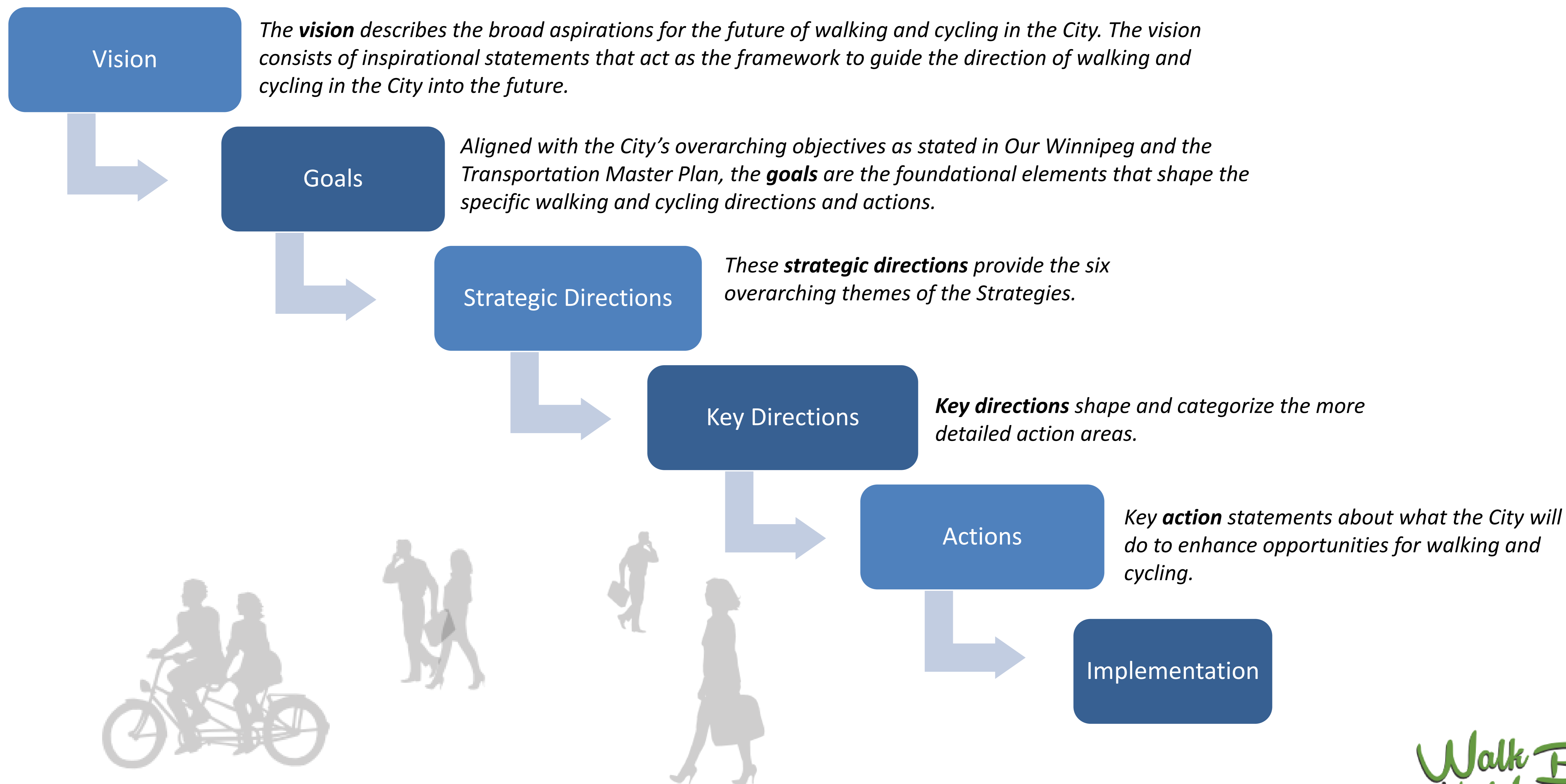


The highest bicycle mode share occurs in:

- **Wolseley**
- **River Heights**
- **Osborne Village**
- **West Broadway**
- **St. Boniface**



A Strategic Framework for the Pedestrian and Cycling Strategies has been developed that includes a long-term vision for walking and cycling in Winnipeg, shaping guiding principles, and a series of directions and action.





Looking towards the future, the **vision** for walking and cycling in Winnipeg is that:

- Walking and cycling are **safe, convenient, practical, and attractive** transportation choices for people of all ages and abilities.
- **Equitable access** to walking and cycling provides greater transportation choices for residents and visitors in neighbourhoods across Winnipeg. This will **improve personal mobility, promote healthy living, and reduce greenhouse gas emissions**, thus contributing to quality of life and community well-being.
- The community is engaged in **transparent processes** to invest in and prioritize cost-effective, progressive, and innovative infrastructure, support programs, and policies.
- Walking and cycling facilities are **strategically integrated with land use** to foster walkable and bicycle-friendly communities in existing and new neighbourhoods.
- Walking and cycling infrastructure will be **maintained in good repair, operational in all seasons**, including establishment of priority networks for winter maintenance.
- Winnipeg is recognized as a **leading Winter City** in promoting walking and cycling throughout the year.





1

## Integrate With Land Use

Strategically develop accessible, well-connected networks of walking and cycling facilities, supporting the concept of complete communities.

2

## Active, Accessible & Healthy

Make daily walking and cycling convenient, accessible, active, healthy travel modes for people of all ages and abilities.

3

## Safe, Efficient & Equitable

Winnipeg's pedestrian and cycling networks will be designed, maintained and developed to ensure accessible, safe, and efficient use for all users, while balancing needs of different users and trip types sharing the networks.

7

## Transparent Process

Continuously engage with the community as part of a transparent process to develop the Pedestrian and Cycling Strategies, and to implement the initiatives identified within the Strategies.

4

## Design & Maintenance

Provide a high quality network of pedestrian and cycling facilities that are planned, designed, implemented, and maintained to address year-round access.

5

## Financially Sustainable

Plan and implement cost-effective, financially-sustainable walking and cycling facilities and networks, with due consideration for economic, health, and environmental cost benefits.

6

## Environmentally Sustainable

Invest in walking and cycling as environmentally-friendly modes of transportation as one way to help the City and Province meet and surpass climate change and emission reduction goals.



## Six Strategic Directions & Supporting Key Directions

1

### Improve Connectivity

- A. Expand and Enhance the Bicycle Network
- B. Expand and Enhance the Sidewalk Network
- C. Address Barriers

2

### Improve Safety & Accessibility

- A. Provide Accessible Infrastructure
- B. Improve Pedestrian and Cyclist Safety
- C. Provide Pedestrian and Cycling Crossing Treatments
- D. Provide Well Lit and Visible Pedestrian and Cycling Facilities
- E. Develop Safe Routes to School

3

### Improve Maintenance

- A. Maintain the Sidewalk Network
- B. Maintain the Bikeway Network

4

### Improve Vibrancy

- A. Enhance Streetscapes and the Public Realm
- B. Land Development and Site Design

5

### Improve Convenience

- A. Provide Bicycle Parking and End-of-Trip Facilities
- B. Increase and Improve Multi-Modal Connections

6

### Increase Awareness

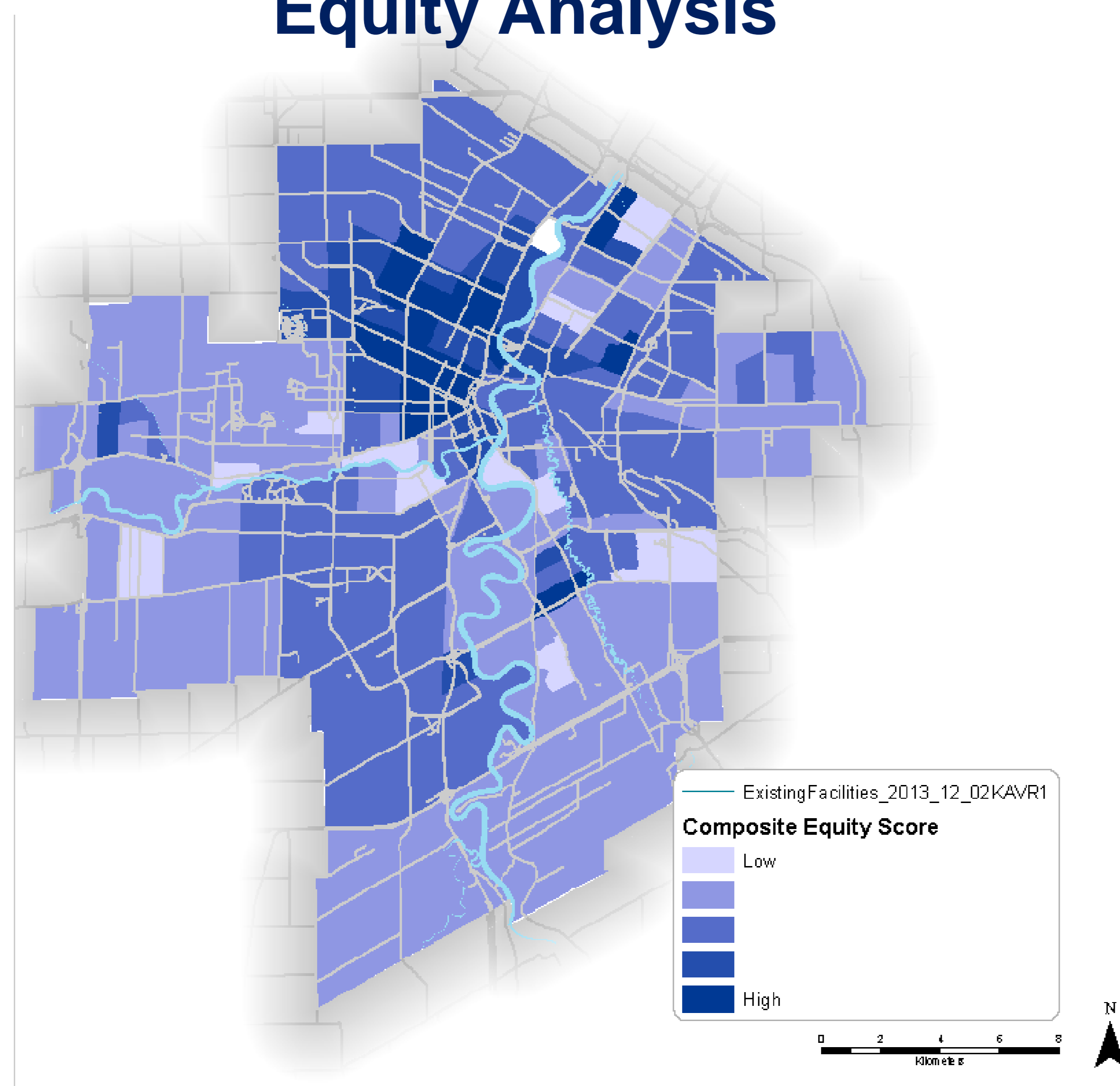
- A. Enhance Wayfinding, Signage, and Trip Planning
- B. Improve Education and Awareness
- C. Increase Marketing and Communication



# Where To Prioritize Investments?

The study included technical analysis to identify highest-potential walking and cycling areas, and areas with the highest proportion of vulnerable groups. The City can strategically focus investment on these areas and groups.

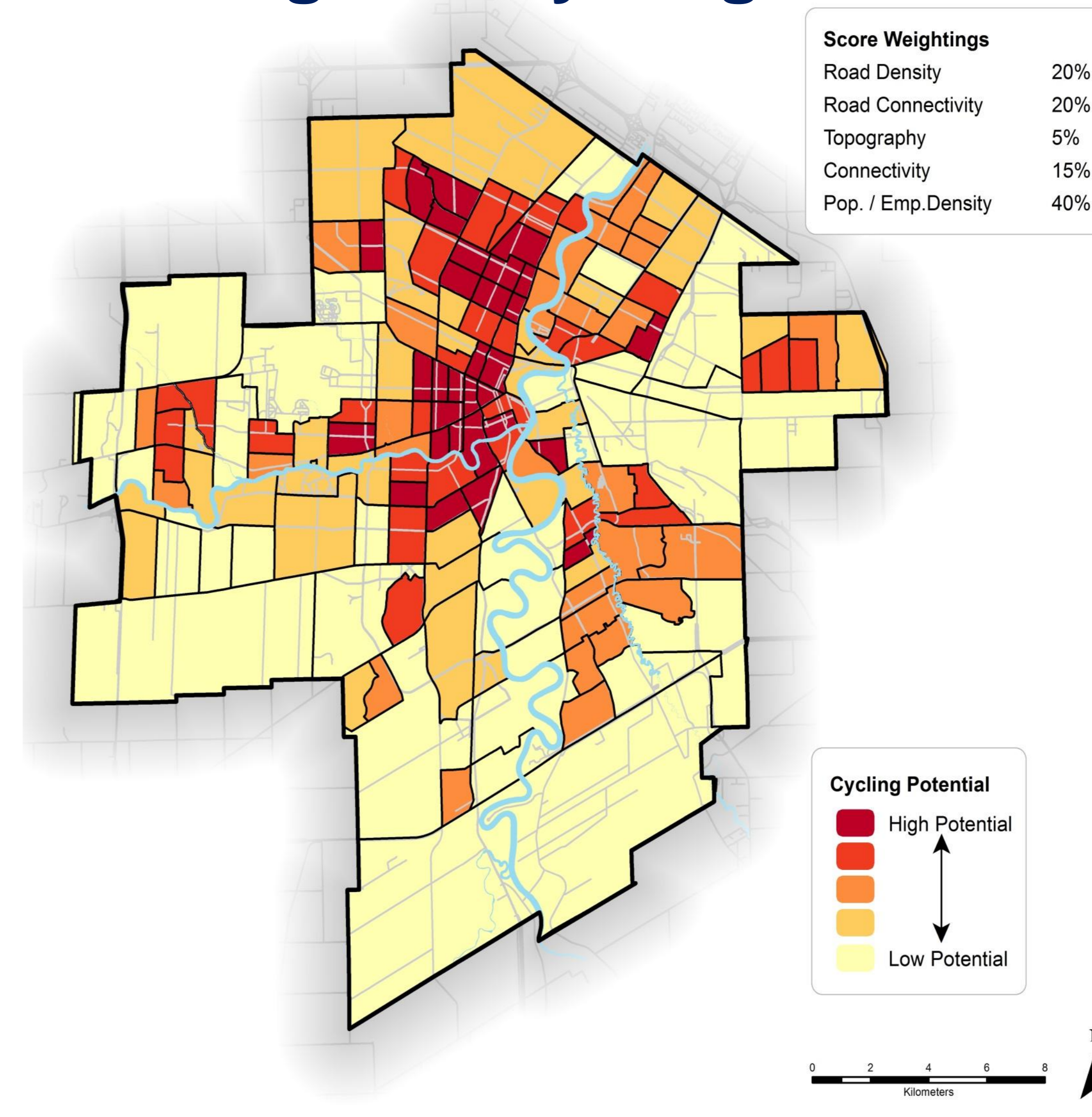
## Equity Analysis



Identifies areas with concentrations of historically under-served vulnerable groups, including: youth, seniors, immigrants, aboriginals, and low income groups.

This analysis helps identify areas where limited access to walking and cycling facilities is compounded by socio-economic challenges.

## Walking and Cycling Potential



Identifies highest-potential areas for more walking and cycling, based on land use and transportation patterns including: road network, population density, employment density, topography, and barriers. High-density, well-connected areas with dense road networks and few barriers have the highest potential.



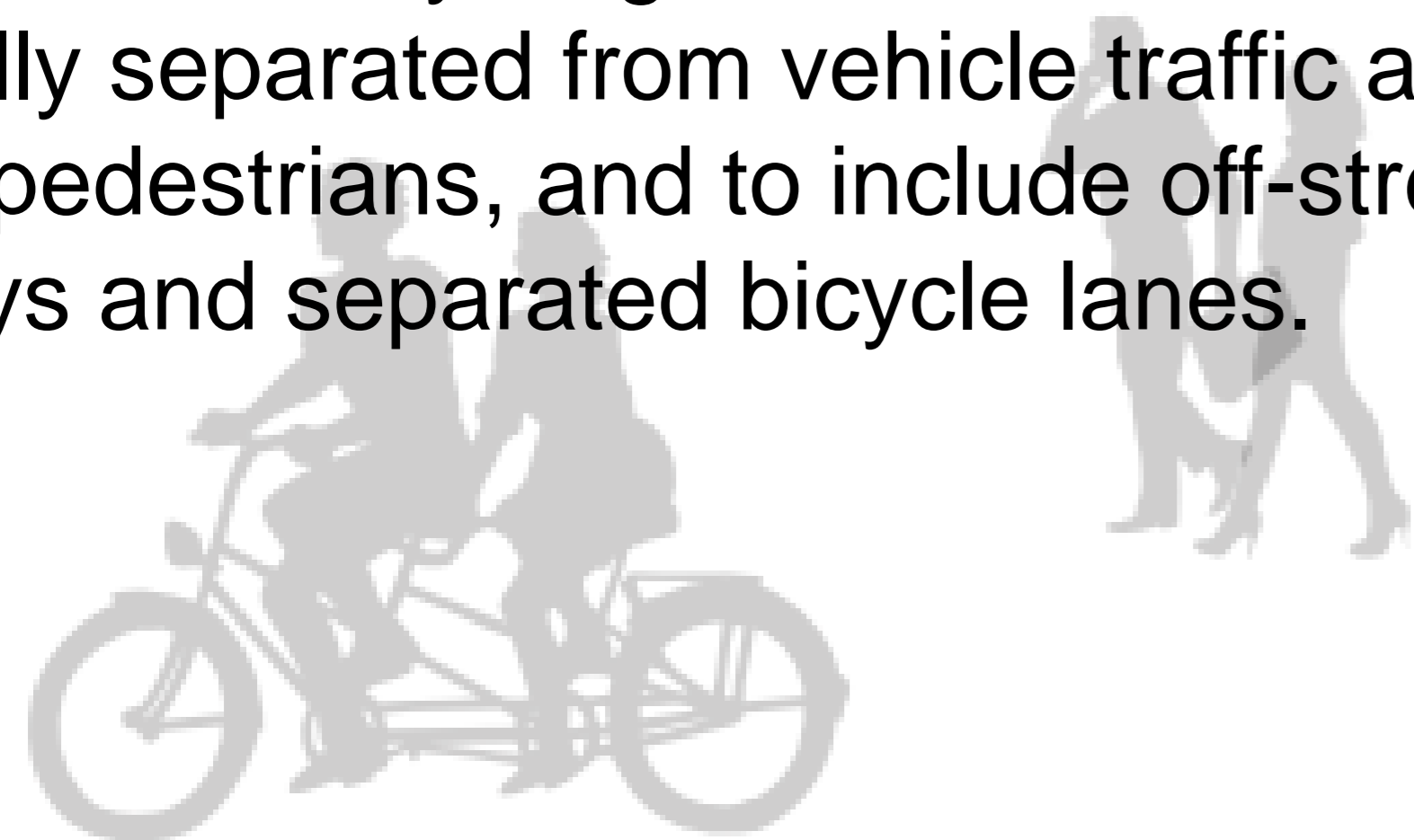


## Background

Expansion and improvement of bicycle networks has emerged in recent years as a key strategy among North American cities seeking to increase levels of cycling. Providing a complete and connected network of bicycle facilities throughout the City is critical to encourage cycling. The City can expand upon its extensive existing network of on-street and off-street bicycle facilities to develop a long-term bicycle network placing all residents close to bicycle routes.

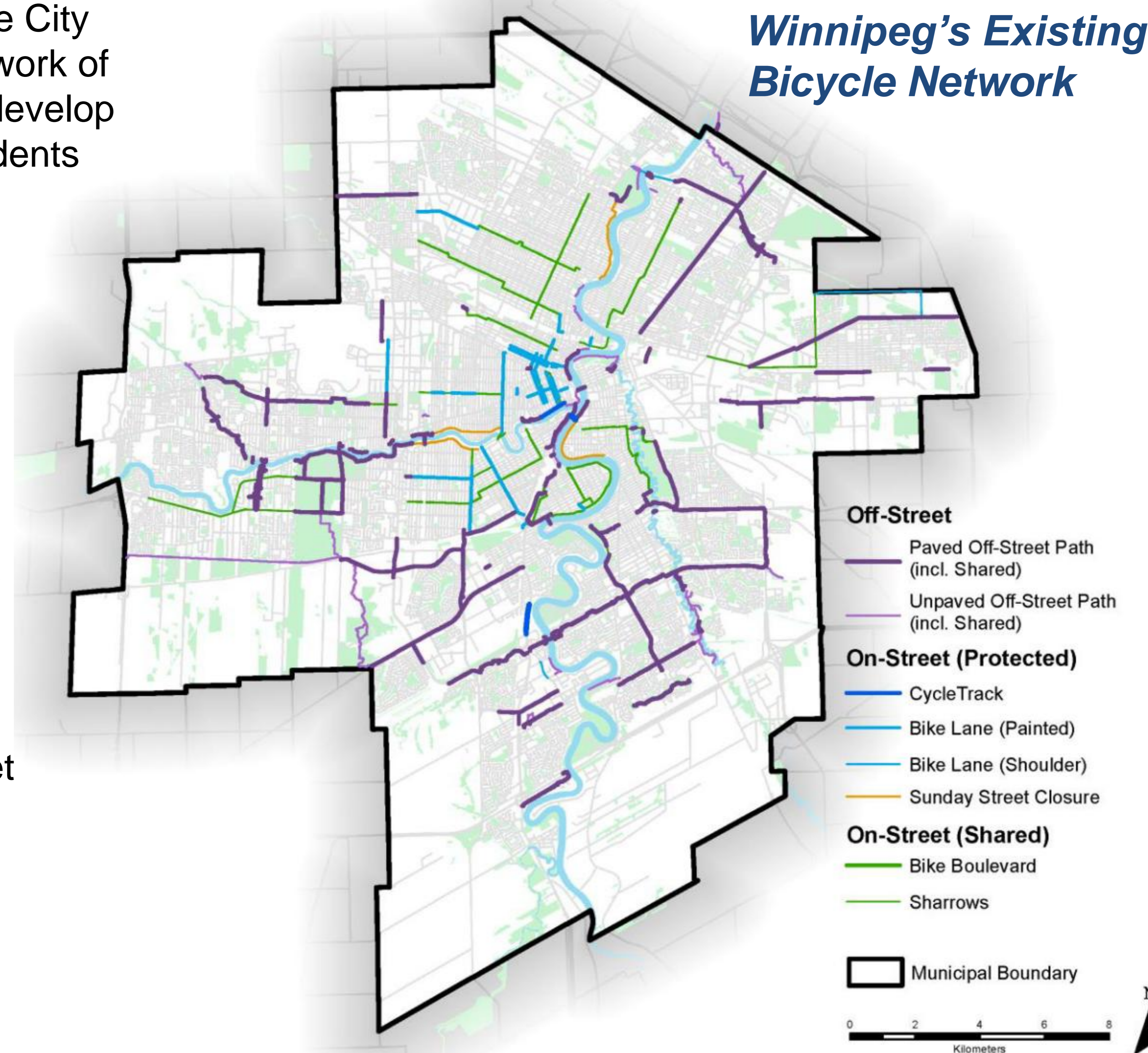
## What We Heard

Enhancing the bicycle network was identified through public consultation as a key theme. Improving cycling infrastructure and connectivity of the bicycle network was overwhelmingly identified as the top priority to promote cycling. Stakeholders and the public also want cycling facilities to be physically separated from vehicle traffic as well as pedestrians, and to include off-street pathways and separated bicycle lanes.



## What is Winnipeg Doing

The City's bicycle network encompasses nearly 400 km of bicycle facilities-- equal to roughly 8% of Winnipeg's 3,100 km of streets and roads. The network comprises off-street paths (largely shared with pedestrians), bike lanes, bike boulevards, and innovative facilities like cycle tracks. This path-oriented network has much in common with networks in Calgary, Saskatoon, and Minneapolis.



**Off-Street Pathways** are separated from the roadway and are generally intended to be shared among multiple users.

**Cycle tracks** are bike lanes which are physically separated from vehicle lanes through a buffer or barrier, and located within the road-right of way. (i.e. Assiniboine Avenue cycle track)

**Painted bicycle lanes** are separate travel lanes designated for bicycles, located beside vehicle lanes.

**Bicycle boulevards** are located on local streets with lower traffic volumes and speeds, where cyclists and vehicles share the road.

**Sharrows** (or shared lane markings) are pavement stencils placed in the middle of a vehicle lane to indicate a cyclist may use the lane.



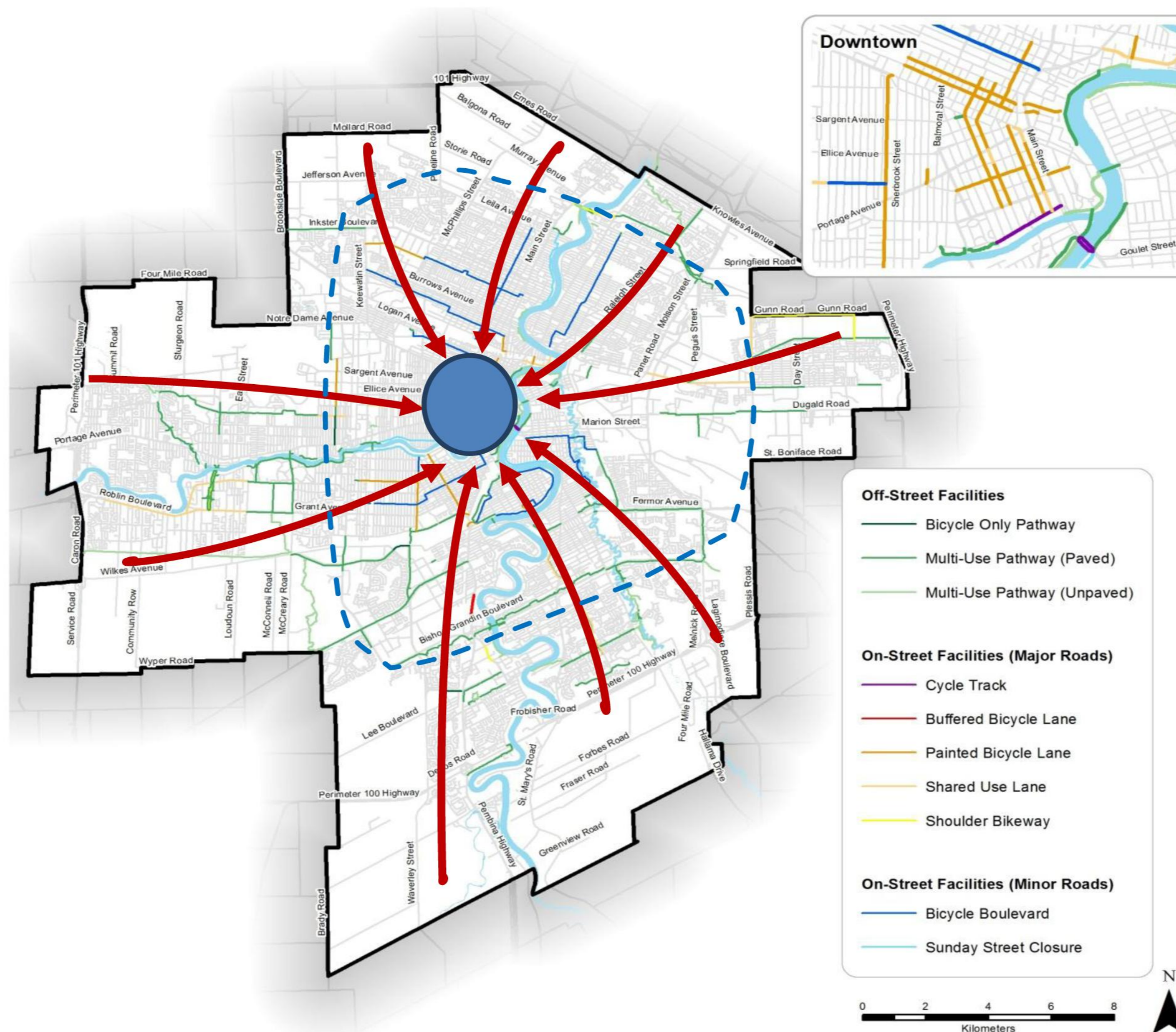


## Network Concept

The proposed bicycle network is based on a “hub and spoke” concept:

- Network of high-quality routes downtown
- Bicycle arterials along key corridors that connect downtown with all neighbourhoods
- A cycle ring to provide inter-neighbourhood connectivity

The concept *expands and improves* the bicycle network throughout Winnipeg. Special care would enhance service to areas identified in the Equity, Cycling Potential, and Gap Analyses that show great promise for cycling, or that need improved access.



## Guiding Principles

### 1. Address **EQUITY**

- Project serves historically-under-served populations, including low income households, people under 19, aboriginal populations, people over 65, or immigrant populations.

### 2. Target areas of potential **HIGH CYCLING DEMAND**

- Project serves an area with high population and employment.
- Project provides a bicycle connection to clusters of bicycle-friendly destinations, as defined in the Bicycle Master Plan.

### 3. Provide **GEOGRAPHIC EQUITY**

- Project distributes high quality facilities across the city so residents can reach all destinations.

### 4. Be **COST EFFICIENT**

- Project provides significant potential benefit for project cost.

### 5. Enhance **CONNECTIVITY**

- Project makes connections that will extend or connect portions of the bicycle network.





## Gap Analysis

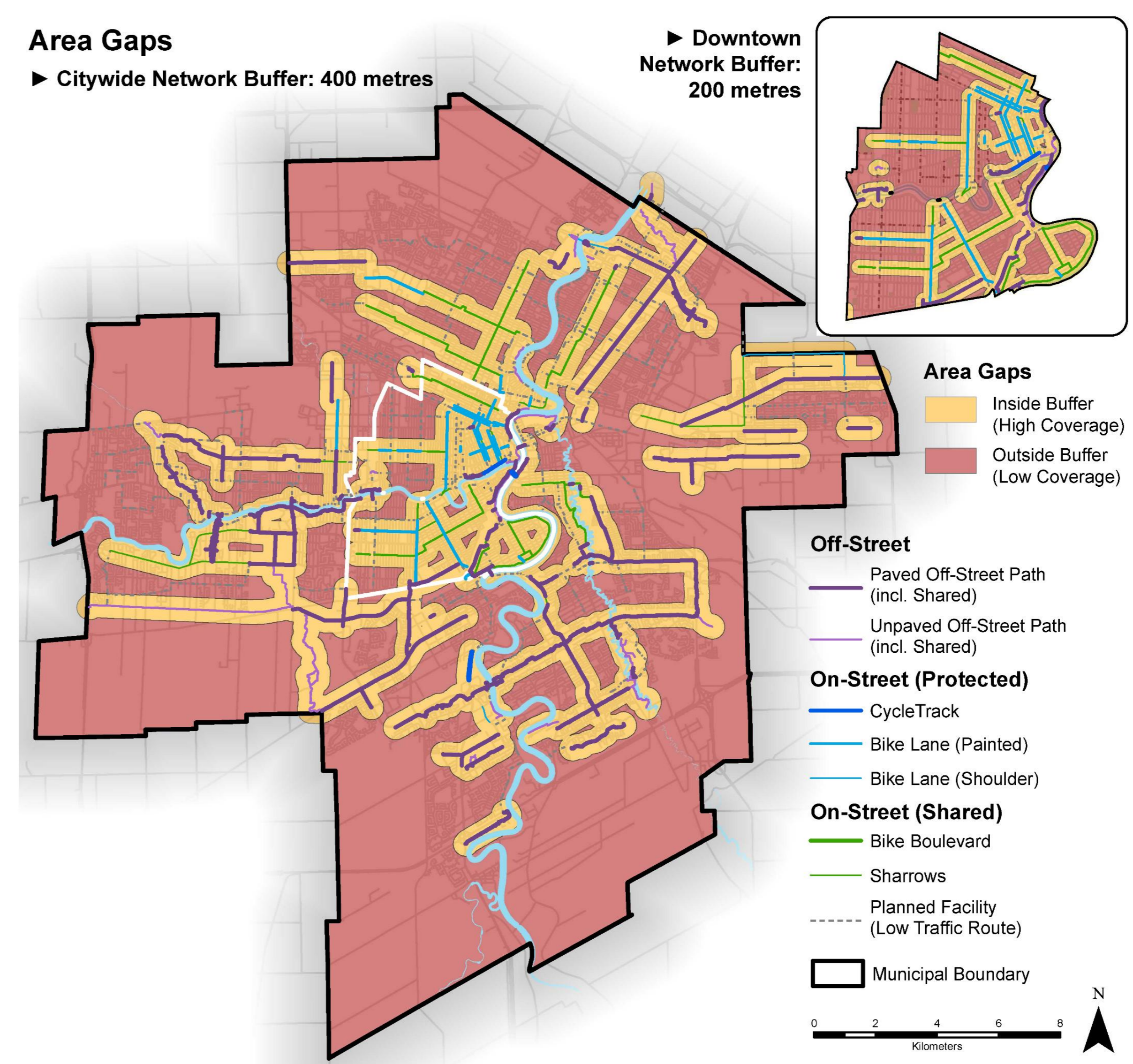
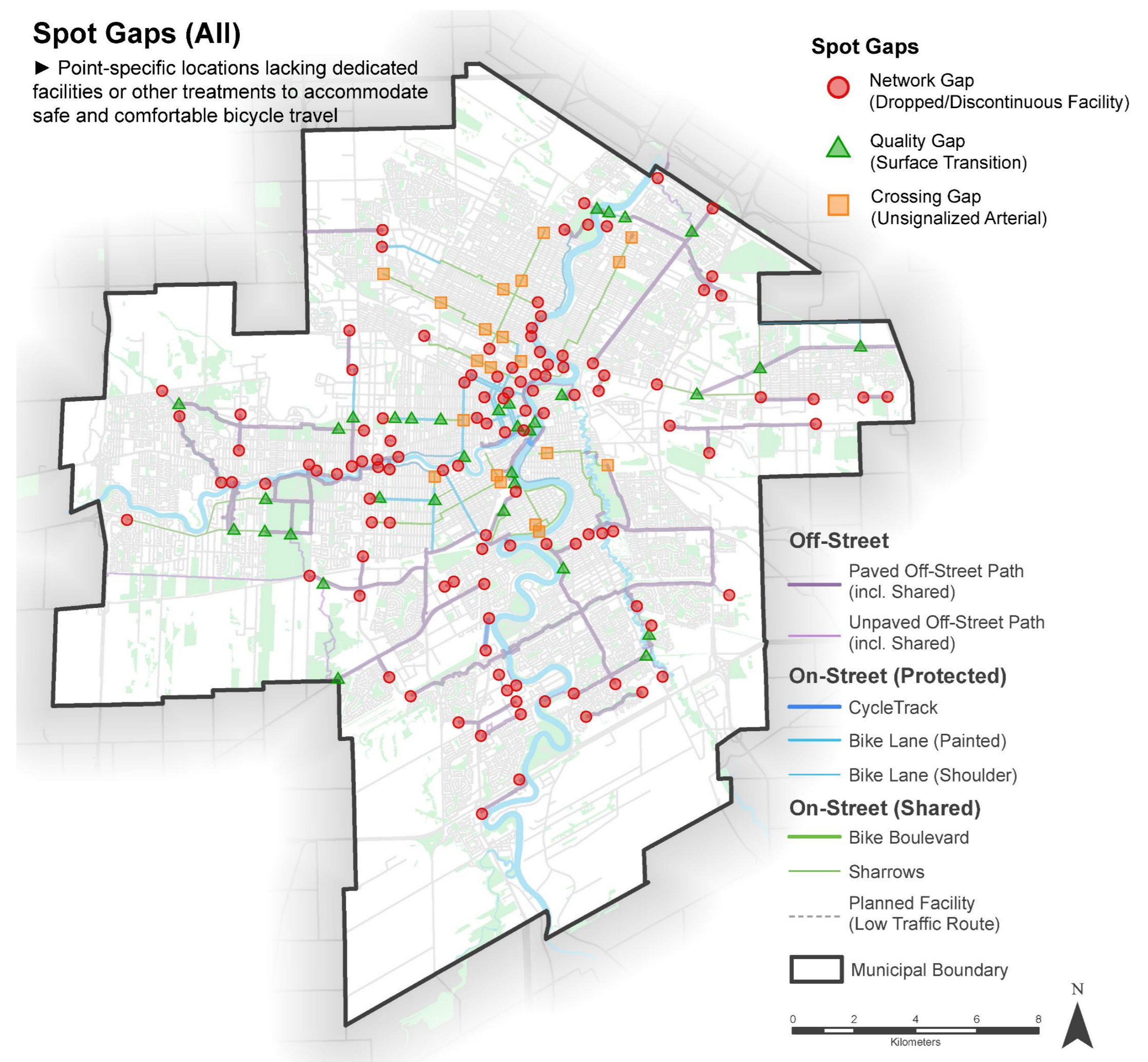
To help inform the improvements to Winnipeg's bicycle network, a number of analyses were conducted. Together, they help answer these questions:

- *Where does the current network fall short?*
- *Where should future network improvements be targeted?*

A gap analysis on the existing bicycle network identified deficiencies and gaps in the City's bicycle network, and identified improvement opportunities.

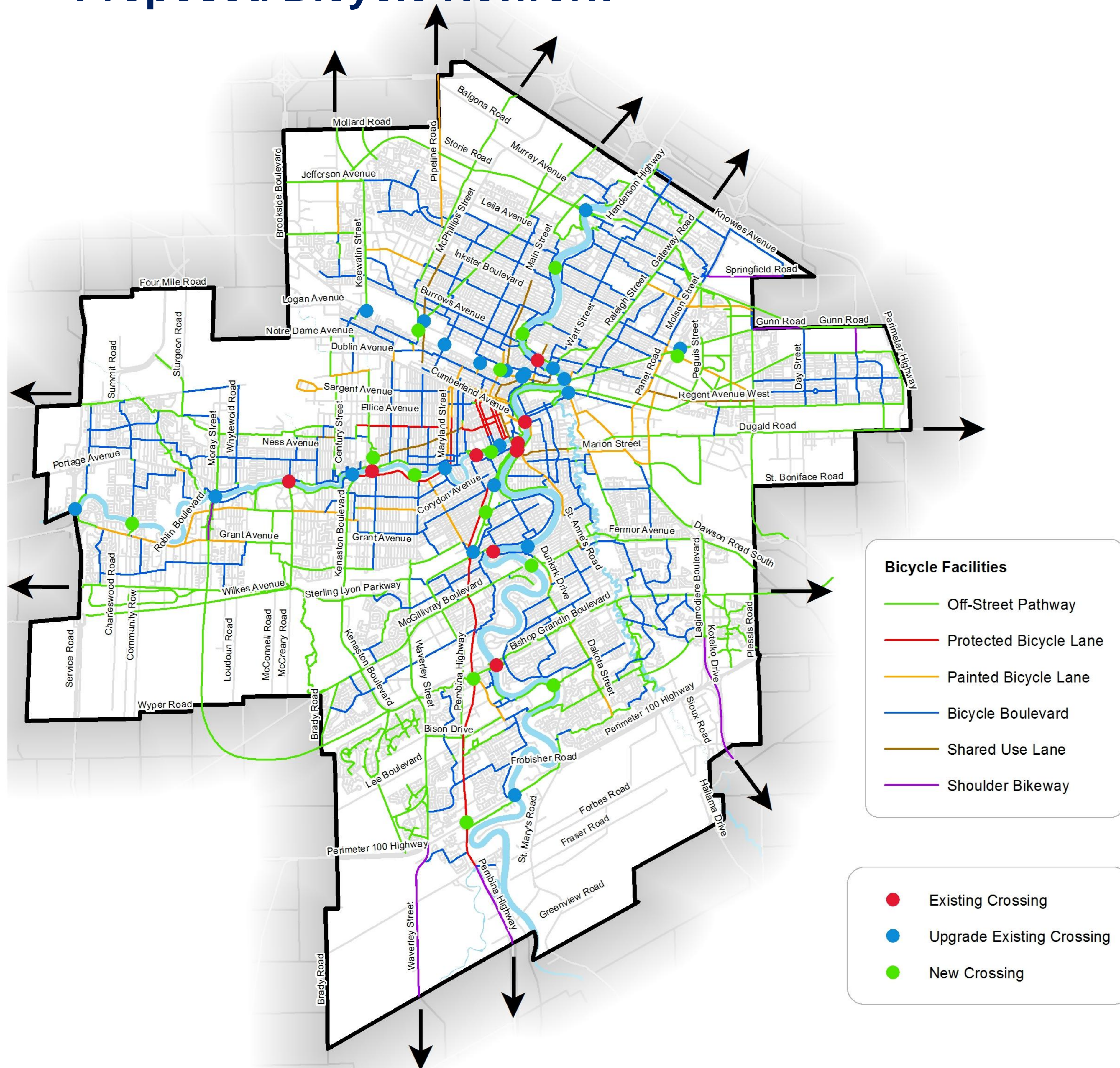
## Gap Types

Gap Type	Description
Area Gap	Where no bicycle facility is present in a given area, based on an analysis of network coverage using buffers
Spot Gap (Network)	Where a bicycle facility is discontinuous ("dropped")
Spot Gap (Crossing)	Where a bike boulevard meets a major road without a signalized crossing
Spot Gap (Quality)	Where a bikeway transitions to a lower-order facility (i.e. reduction in surface quality, grade separation and/or comfort)





## Proposed Bicycle Network



## 1. Improve Connectivity - Cycling Summary of Proposed Actions

- Develop a complete, connected, dense bicycle network throughout the City, including a Downtown separated bicycle lane network and a spine network to connect to Downtown
- Identify gaps within the bicycle network and prioritize resolving them
- Support extension of the City's bicycle network to surrounding communities
- Develop and implement bicycle facility design guidelines that include a bicycle facility selection tool based on traffic speed and volumes
- Ensure that bicycle requirements be addressed on all new and upgraded roads
- Pursue bicycle network improvements that establish access to major destinations throughout the City, including regional, community and neighbourhood mixed-use centres and corridors, schools, libraries, and parks
- Where suitable and where opportunities exist, continue to provide bicycle infrastructure in conjunction with transit infrastructure
- Design new neighbourhoods to include bicycle routes that are well-integrated with the existing bicycle network.
- Develop a process to identify priorities for bicycle network implementation based on cycling potential, equity, connectivity, comfort and cost.



# Strategic Direction 1: *Improve Connectivity - Walking*

## Background

Sidewalks and pathways are the backbone of the City's walking network. The strategies and actions to improve walking connectivity include expanding and enhancing the City's sidewalk network, and addressing barriers to walking.

## What We Heard

Public consultation advised improving the sidewalk and pathway network. Over half (53%) of telephone survey respondents said they would walk more, or much more often, if more sidewalks were available.

Stakeholders and the public identified a need to:

- Fill in sidewalk network gaps
- Require sidewalks on new streets
- Provide more and wider sidewalks in high pedestrian activity areas (i.e. schools, bus stops)
- Separate pedestrians and vehicles more effectively
- Create better pedestrian connections between residential areas and key destinations

## What is Winnipeg Doing

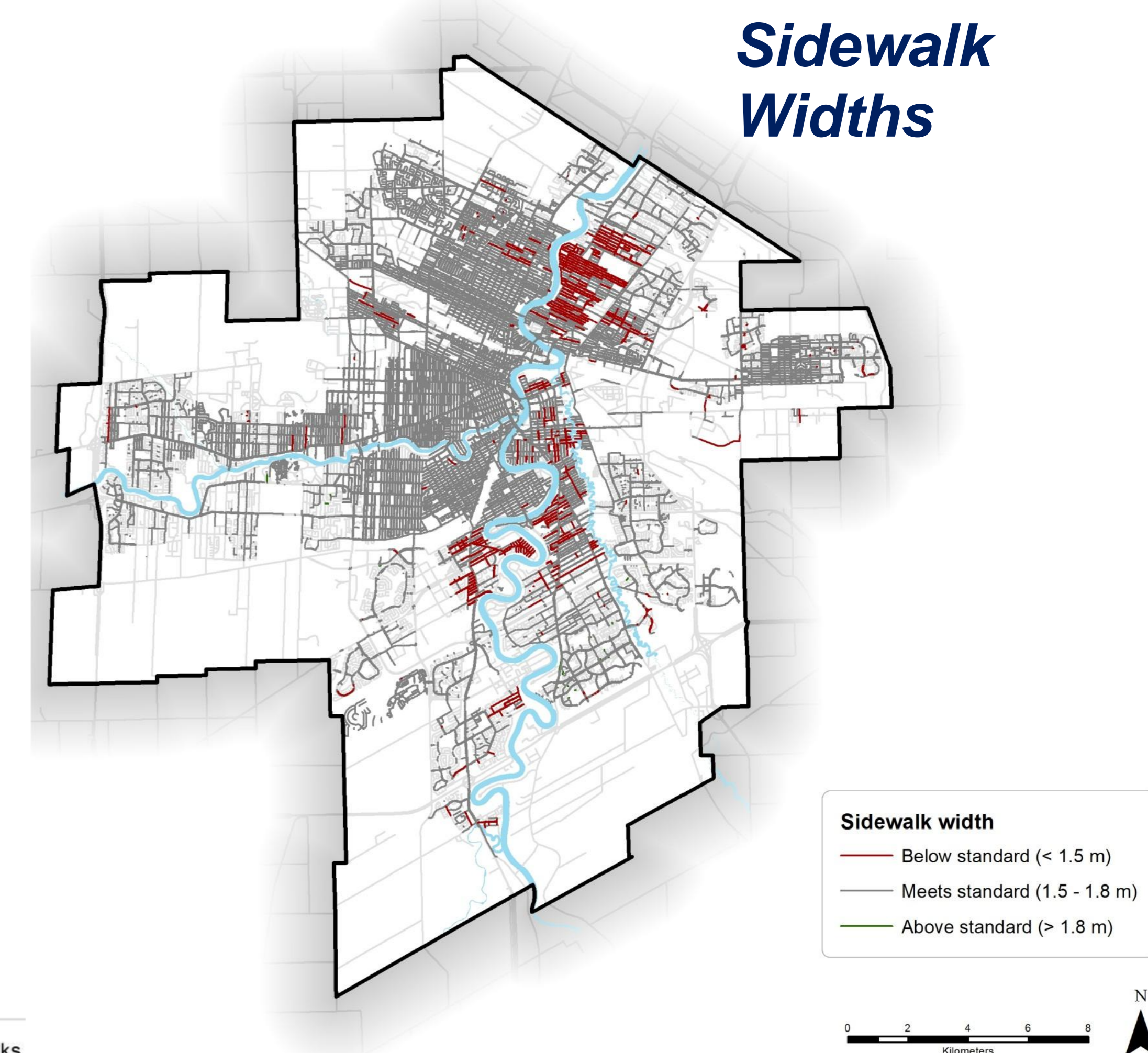
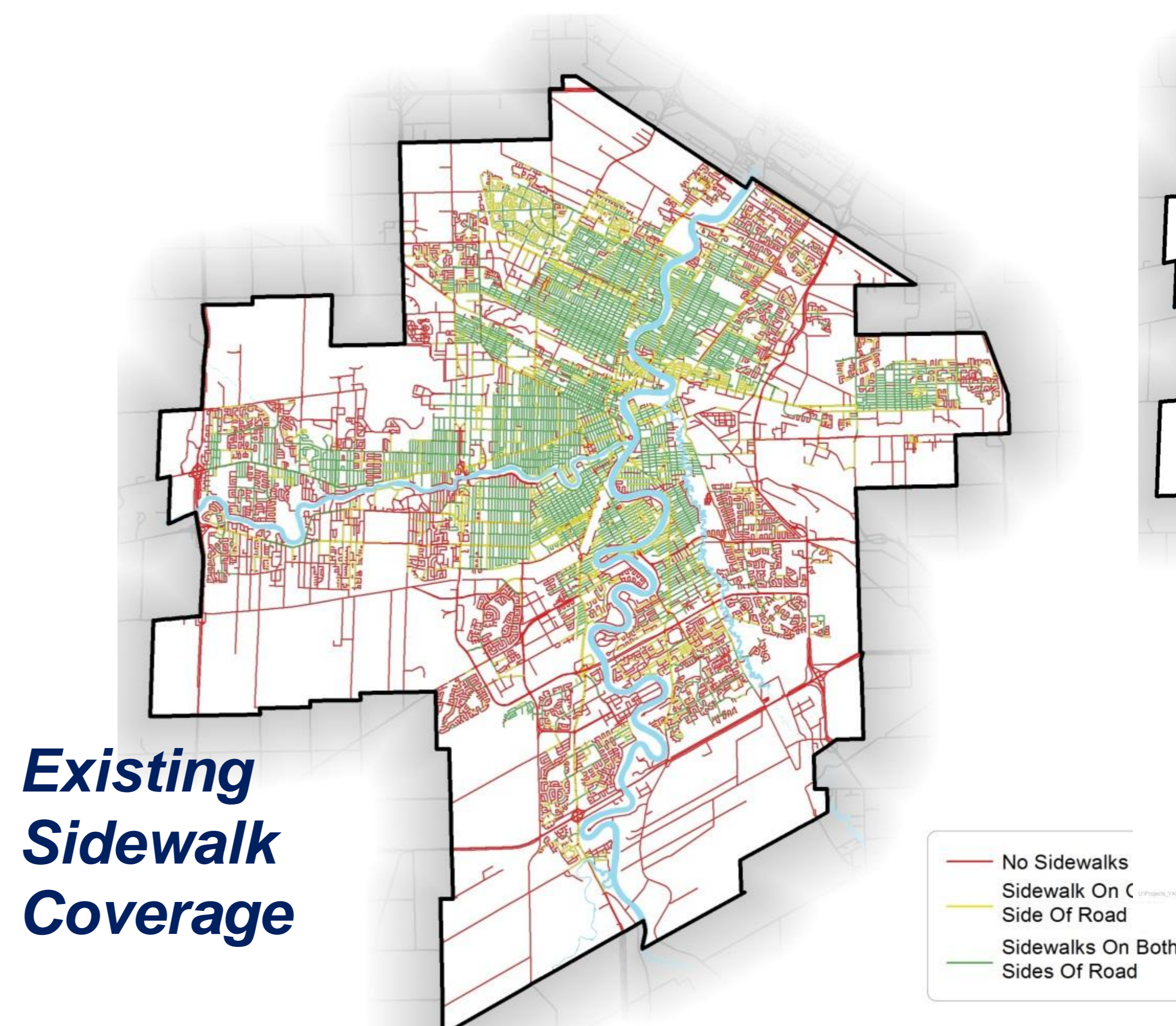
The City's *Transportation Standards Manual* sets out sidewalk requirements for new developments, based on land use and road class. In general, sidewalks are

- **Not required** on local streets
- **Are required** on both sides of residential collector and arterial roads
- **Are required** on at least one side for industrial and commercial collector roads

The majority of Downtown streets and inner city neighbourhoods have sidewalks on at least one side of the street, whereas many newer neighbourhoods do not have sidewalks on either side of the street.

The City's *Universal Design Standards* state that sidewalks should be a minimum width of **1.5 metres**.

Today, 93% of sidewalks in Winnipeg are at least 1.5 metres (or more) in width, however, approximately 7% of sidewalks (or 175 linear kilometres) are narrower than the 1.5 metre requirement. Most of these narrow sidewalks are located in Winnipeg's older neighbourhoods.





# Strategic Direction 1: *Improve Connectivity - Walking*

## Sidewalk Requirements across Canada

Road Class	City of Calgary	City of Regina	City of Edmonton	City of Saskatoon	City of Vancouver
<b>Arterial</b>	Both sides	Both sides	Both sides	One side	Aiming for 100% coverage
<b>Collector</b>	Both sides	Both sides	Both sides	Both sides	Aiming for 100% coverage
<b>Industrial</b>	At least one side	At least one side	One side (including bus stop connecting walks on opposite side)	Both sides	Aiming for 100% coverage
<b>Bus Route</b>	Both sides	Both sides	Both sides	Not specified	Aiming for 100% coverage
<b>Local</b>	Both sides (when adjacent to multi-family, commercial and school sites)	One side (roads >240m long)	Both sides unless otherwise approved	At least one side	Aiming for 100% coverage
	One side (Residential Streets)	None (roads <240m long)	Proposals of "Sidewalk on 1 side" must be able to demonstrate that mobility by all types of pedestrians is not compromised		
<b>Cul-de-sac</b>	One side with more than 20 dwelling units	Not required	Not specified	Not specified	Aiming for 100% coverage
<b>Minimum Sidewalk Widths</b>	1.1 m	Unknown	1.5 m	1.5 m - locals and collectors 2.5 m - arterials 3.0 m – expressway	1.8 m single-family and multifamily with no commercial 5.5 m in commercial areas

### 1. Improve Connectivity - Walking

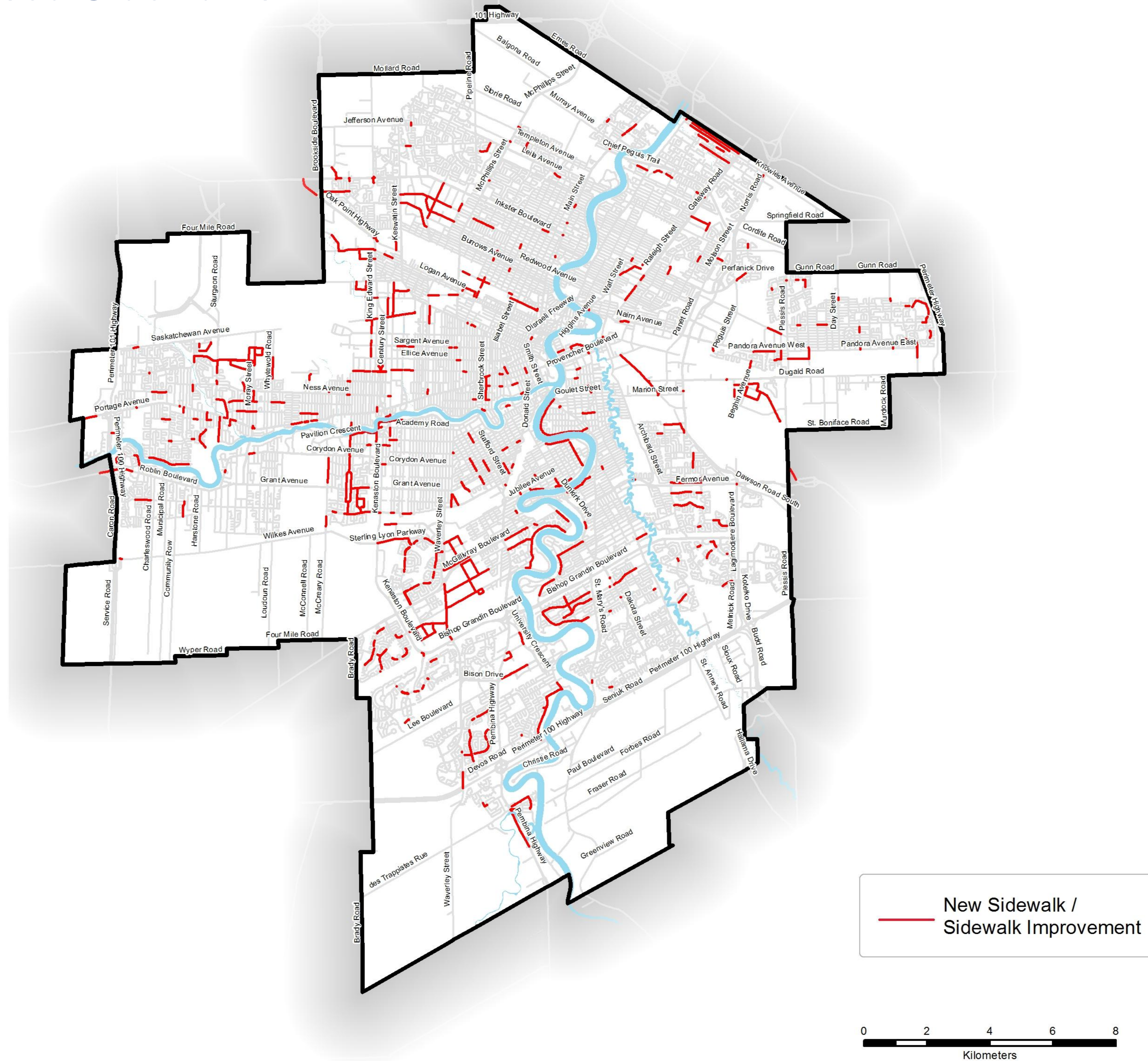
#### Summary of Proposed Actions:

- **Update the City's sidewalk requirements** for new developments in consultation with relevant stakeholders
- **Eliminate gaps in the sidewalk network** on major roads, including regional roads, arterial roads, commercial and industrial collector roads, bus routes and truck routes
- Develop a **sidewalk infill program** in the capital budget to provide more sidewalks around key destinations (i.e. schools, senior centres, hospitals)
- Develop a **sidewalk improvement program** to widen sidewalks that do not meet minimum standards
- Provide **wider sidewalks**, where feasible, in areas of high pedestrian activity
- Regularly **inventory sidewalks** and their condition
- Refine the process to **prioritize new sidewalk construction and maintenance**





## Proposed Sidewalks





# Strategic Direction 2: *Improve Safety & Accessibility*

## Background

Safety, both real and perceived, is an important factor influencing whether people choose to walk or cycle. Pedestrians and cyclists are considered to be ‘vulnerable road users’ as they are subject to higher risk than drivers and transit users. Walking and cycling facilities should be universally accessible and usable by all, including seniors, children, and people with disabilities.

## Key Directions

Improving safety & accessibility involves five key directions:

1. Provide **accessible infrastructure**
2. Improve **pedestrian and cyclist safety**
3. Provide pedestrian and cycling **crossing treatments**
4. Provide **well-lit and visible** pedestrian and cycling facilities
5. Promote **safe routes to school**

## What We Heard

Stakeholders and the public identified a need for:

- More accessible infrastructure treatments
- Safer pedestrian crossings
- Better lighting to improve pedestrian visibility
- Addressing potential safety conflicts between pedestrians and cyclists

## What is Winnipeg Doing

**Pedestrians** The City uses pedestrian countdown timers, tactile strips, audible signals, curb bump-outs, and curb ramps in several high traffic locations to address pedestrian safety and accessibility.

**Cyclists** To separate different road users and enhance safety, the City has in place some separated facilities for bicycles (i.e. Assiniboine Avenue and Pembina Highway cycle tracks) and bicycles are restricted from riding on sidewalks.

**Transit** Approximately 90% of the Winnipeg Transit fleet are Easy Access low-floor accessible buses with kneeling capability, electric ramps and priority accessible seating. The entire fleet is equipped with audible “next stop” announcers.

## 2. Improve Safety & Accessibility

### Summary of Proposed Actions

- Continue to provide **accessible infrastructure** (i.e. curb ramps, tactile surfaces, accessible signals)
- Upgrade all traffic signals with **pedestrian countdown timers** by 2023
- Increase connectivity to adjacent pedestrian infrastructure for **transit stops**
- Continue to **upgrade pedestrian infrastructure** to meet the City’s *Universal Design Standards*, striving for 100% accessibility
- Conduct **road safety audits** at strategic locations
- Identify additional locations for **pedestrian crossing controls**
- Provide more **bike boxes** and **bicycle pushbuttons**
- Improve visibility through more **lighting and illumination** on sidewalks, bicycle routes, pathways, and underpasses
- Support development of **safe routes to school** plans for children and youth walking to school





# Strategic Direction 3: *Improve Maintenance*

## Background

To encourage walking and cycling in all seasons, winter cities such as Winnipeg need to maintain sidewalks and bikeways year-round, including snow removal in the winter.

## Key Directions

1. Maintain **sidewalk and bicycle networks**
2. Enhance **operations and monitoring**

## What We Heard

Maintenance and snow removal for pedestrian and cycling facilities emerged overwhelmingly as a top issue and priority. Many people said they would like to walk and cycle more in the winter. Common concerns included:

- Poor road / sidewalk conditions such as potholes and cracked pavements
- Lane striping worn away on many bicycle facilities;
- Need for better snow clearance on sidewalks, bicycle routes, and at intersections.

## What is Winnipeg Doing

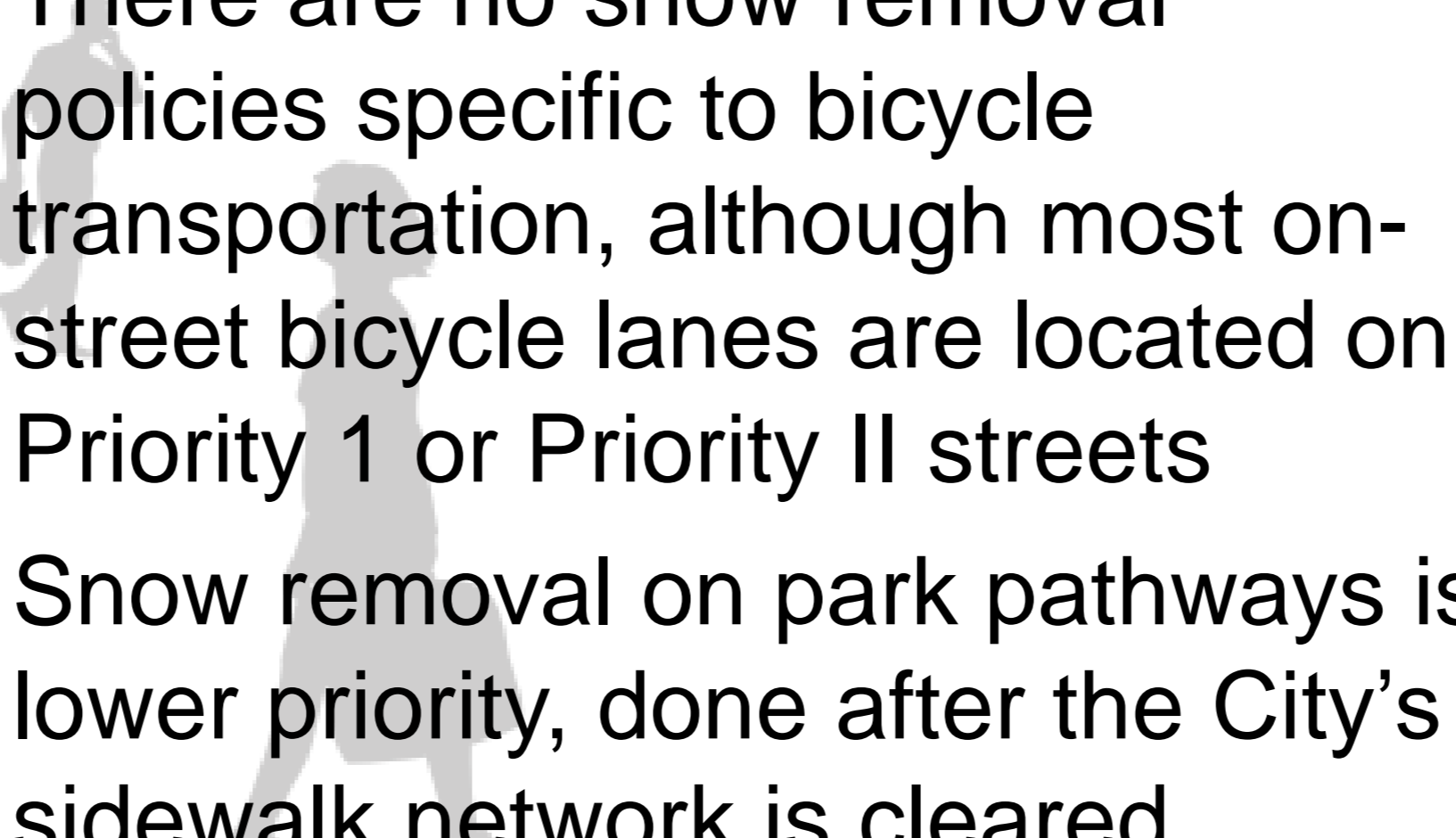
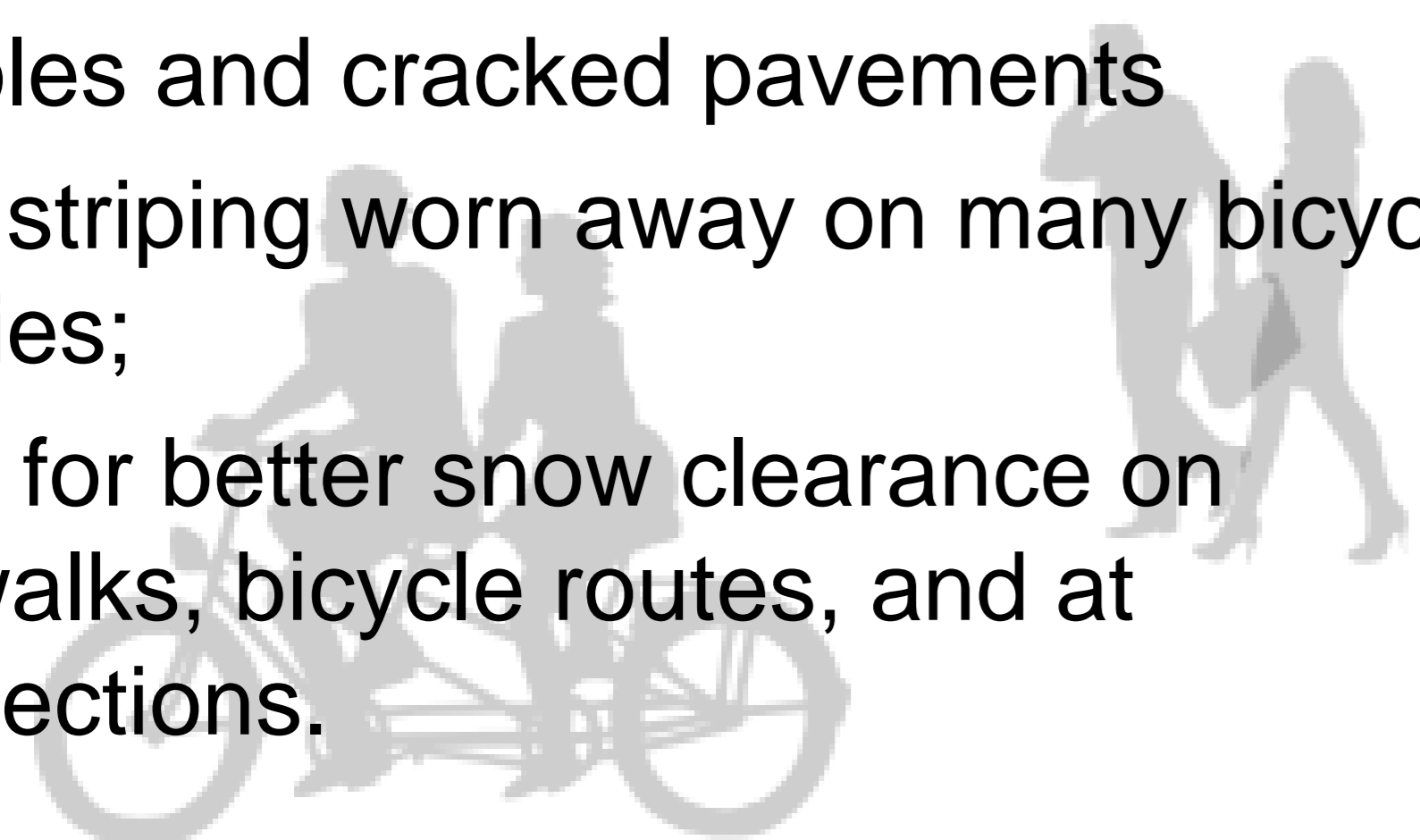
The City of Winnipeg's policy on *Snow Clearing and Ice Control* recommends 'Priority snow clearance on all P1 (Regional Roads) and P2 (Non-Regional bus routes and collector streets based on traffic counts), as well as some streets in industrial areas.' Under this policy:

- Sidewalks and active transportation trails are normally plowed on the same priority as adjacent streets. The current snow removal priority system for sidewalks is tied to the street priority system, regardless of pedestrian volume or demand for travel on given sidewalks
- Sidewalks near schools and senior citizen centres are given high priority
- There are no snow removal policies specific to bicycle transportation, although most on-street bicycle lanes are located on Priority 1 or Priority II streets
- Snow removal on park pathways is lower priority, done after the City's sidewalk network is cleared

## 3. Improve Maintenance

### Summary of Proposed Actions

- Develop a **separate snow removal priority** for sidewalks based on pedestrian demand:
  - **Priority I sidewalks:** Snow removed to bare pavement on sidewalks in Downtown, and, near hospitals and residences supporting seniors within 24 hours
  - **Priority II sidewalks:** Snow cleared to compact surface on sidewalks on major streets, bus routes, and near schools within 48 hours
  - **Special sidewalks:** Snow cleared to compact surface on sidewalks on all other residential streets within 24 hours
- Coordinate **bicycle facility maintenance**, refine the **sweeping program**, and continue investments in **path resurfacing**
- Refine priorities for snow-removal on **off-street pathways**
- Designate a **winter cycling network** for snow removal
- Develop a pedestrian and bicycle **counting and monitoring program**





# Strategic Direction 4: *Improve Vibrancy*

## Background

Land use patterns play key roles in determining how people travel through our City. Mixed land uses, higher density development, and streetscape improvements, can create more neighbourhood activity and local vibrancy. Walking and cycling can help create vibrant, liveable streets and support healthy, active lifestyles for people of all ages and abilities. There are a number of land use strategies that can help create more vibrant, safe, and comfortable streets and places that encourage walking and cycling.

## Key Directions

1. Enhance **streetscapes and the public realm**
2. Incorporate walking and cycling into **land development and site design.**

## What We Heard

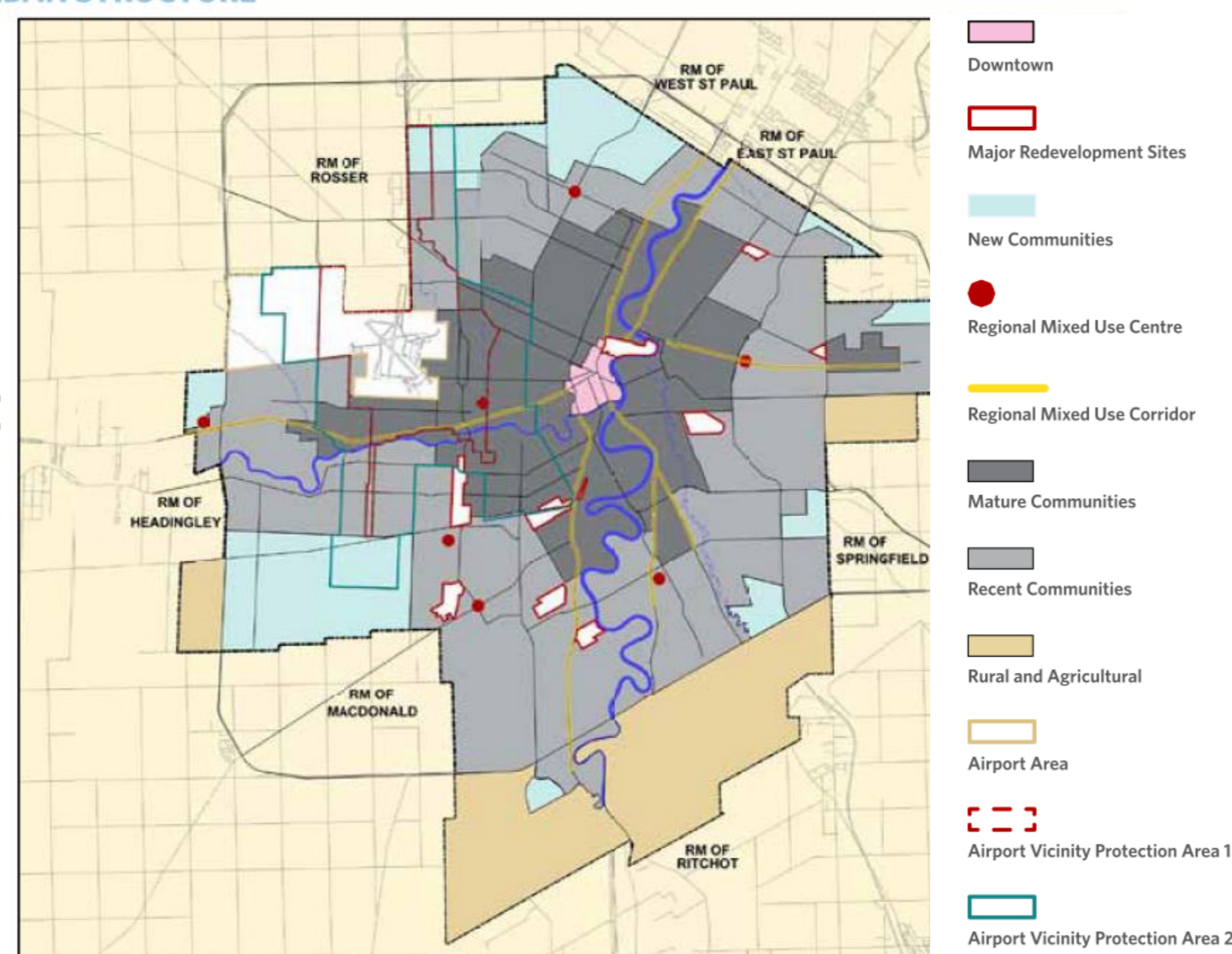
Stakeholders and the public identified a need for:

- Fewer car-oriented developments
- More compact and mixed-use land uses to encourage more walking and cycling
- Amenities such as rest areas, public art, garbage bins, wayfinding, water fountains
- Interactive public spaces and public art
- More playgrounds / recreational spaces for children and youth

## What is Winnipeg Doing

The **urban structure** within *OurWinnipeg* provides a framework and vision for growth and development into the future. *OurWinnipeg* envisions many of the centres and corridors identified in that urban structure to have pedestrian-oriented streetscapes, transit-supportive design, and increased accommodation for cyclists. More compact, dense, mixed-used development is identified for several centres and corridors throughout Winnipeg, where site design and building orientation encourage better use of walking, cycling, and transit.

URBAN STRUCTURE



## 4. Improve Vibrancy

### Summary of Proposed Actions

- Work with businesses to support **streetscape amenities** such as planters, patios, plazas, parklets, banners and public art
- Ensure **bicycle parking** is provided in mixed-use centres and corridors
- Ensure the **bicycle network provides access** to mixed-use centres and corridors
- Explore a checklist and work with the development industry to provide land development guidance on bicycle, pedestrian, and transit **supportive design and site planning**
- Investigate opportunities to incorporate pedestrian, bicycle, and transit network requirements into the plan approval process.
- Consider the use of **internal pedestrian and cycling plans** for major redevelopment sites
- New subdivisions should strive to have a road network that places **residents and employees within 400m of a future bus stop**



# Strategic Direction 5: *Improve Convenience*

## Background

Better convenience focuses on integrating various modes (transit, walking, cycling) and providing amenities such as bicycle parking and end-of-trip facilities, to increase ease of walking or cycling.

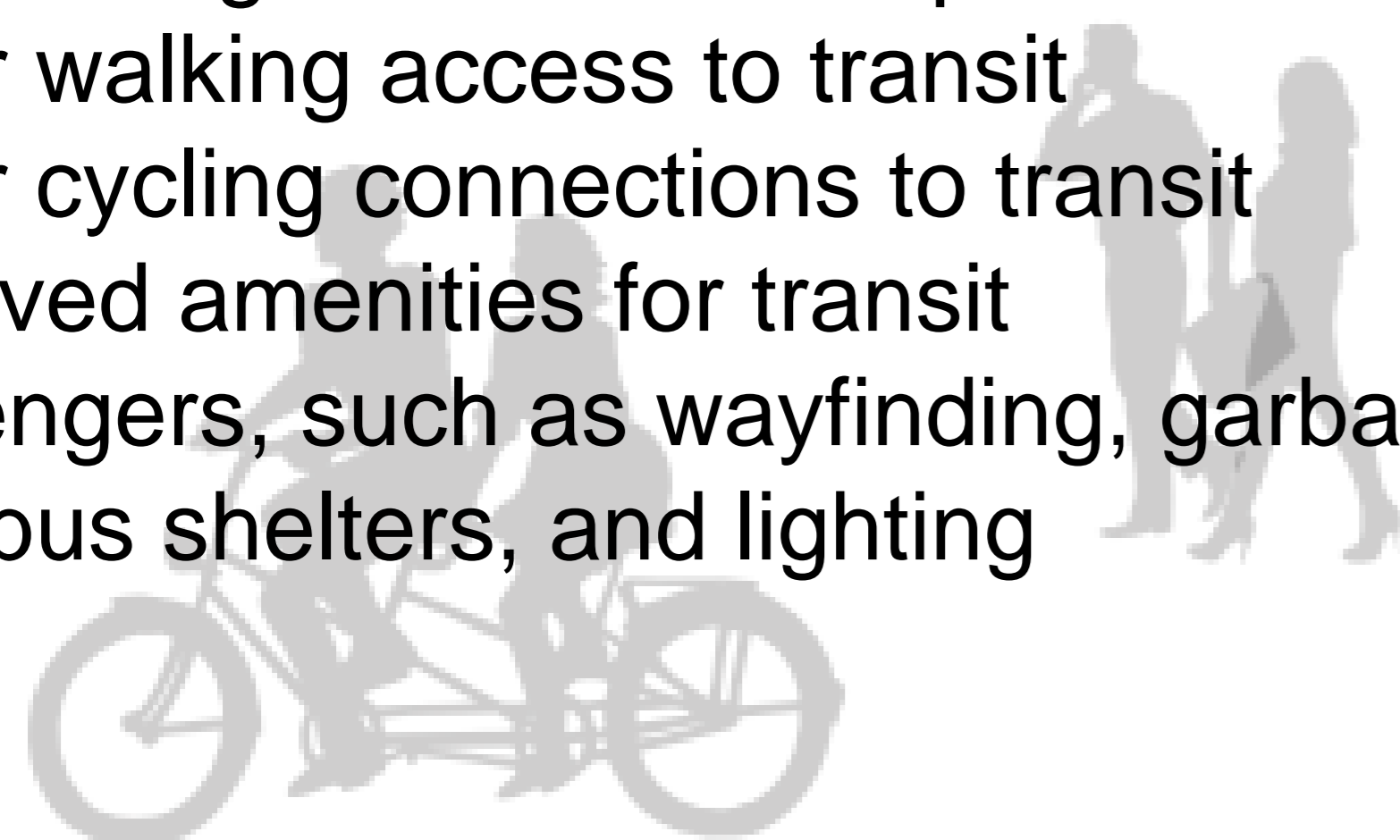
## Key Directions

1. Provide enhanced **bicycle parking and end-of-trip facilities**
2. Increase and improve **multi-modal connections**

## What We Heard

Stakeholders and the public identified a need for:

- More bicycle parking at key destinations throughout the City
- More end-of-trip facilities such as showers and clothing lockers at workplaces
- Better walking access to transit
- Better cycling connections to transit
- Improved amenities for transit passengers, such as wayfinding, garbage bins, bus shelters, and lighting



## What is Winnipeg Doing

**Bicycle Parking** The City provides bicycle parking facilities on public sidewalks and streets throughout the City. The Winnipeg Parking Authority actively manages bike parking rings, seasonal bike parking pads and the long-term bike corral at Millennium Library Parkade. The City requires that bicycle parking be provided in new developments outside the Downtown.

**Transit Integration** Transit service compliments cycling and walking modes by making it possible for pedestrians and cyclists to access more of the city, by replacing part of a long-distance walking or cycling trip with a segment using Winnipeg Transit. The City of Winnipeg has undertaken several initiatives to improve the experience of accessing and using transit for pedestrians and cyclists. These include bus shelters and benches, primarily at high activity stops, bicycle racks on 30 rapid transit busses (routes 160, 162, and 170), and bicycle lockers at several rapid transit locations, among them Ft. Rouge, Osborne and Harness, Osborne Junction and the Taylor Park and Ride.

## 5. Improve Convenience

### Summary of Proposed Actions

- Investigate ways to increase **integration of cycling with transit**
- Continue to work towards a **universally accessible transit system**
- Look for opportunities to provide **bicycle parking at high activity transit stops**
- Consider updating bylaws to require bicycle parking and end-of trip facilities in **new developments**
- Encourage **businesses to provide more short and long-term bicycle parking options**
- Require **large community events** to provide adequate bicycle parking
- Support a series of full-serve **bicycle parking stations** within Downtown
- Examine the feasibility of a **bike share program** in Winnipeg
- Work with partners to provide amenities such as **public bicycle pumps, bicycle maintenance stations, and bicycle parks**





# Strategic Direction 6: *Increase Awareness*

## Background

In addition to providing walking and cycling infrastructure, increasing awareness about walking and cycling can help encourage people to walk and cycle.

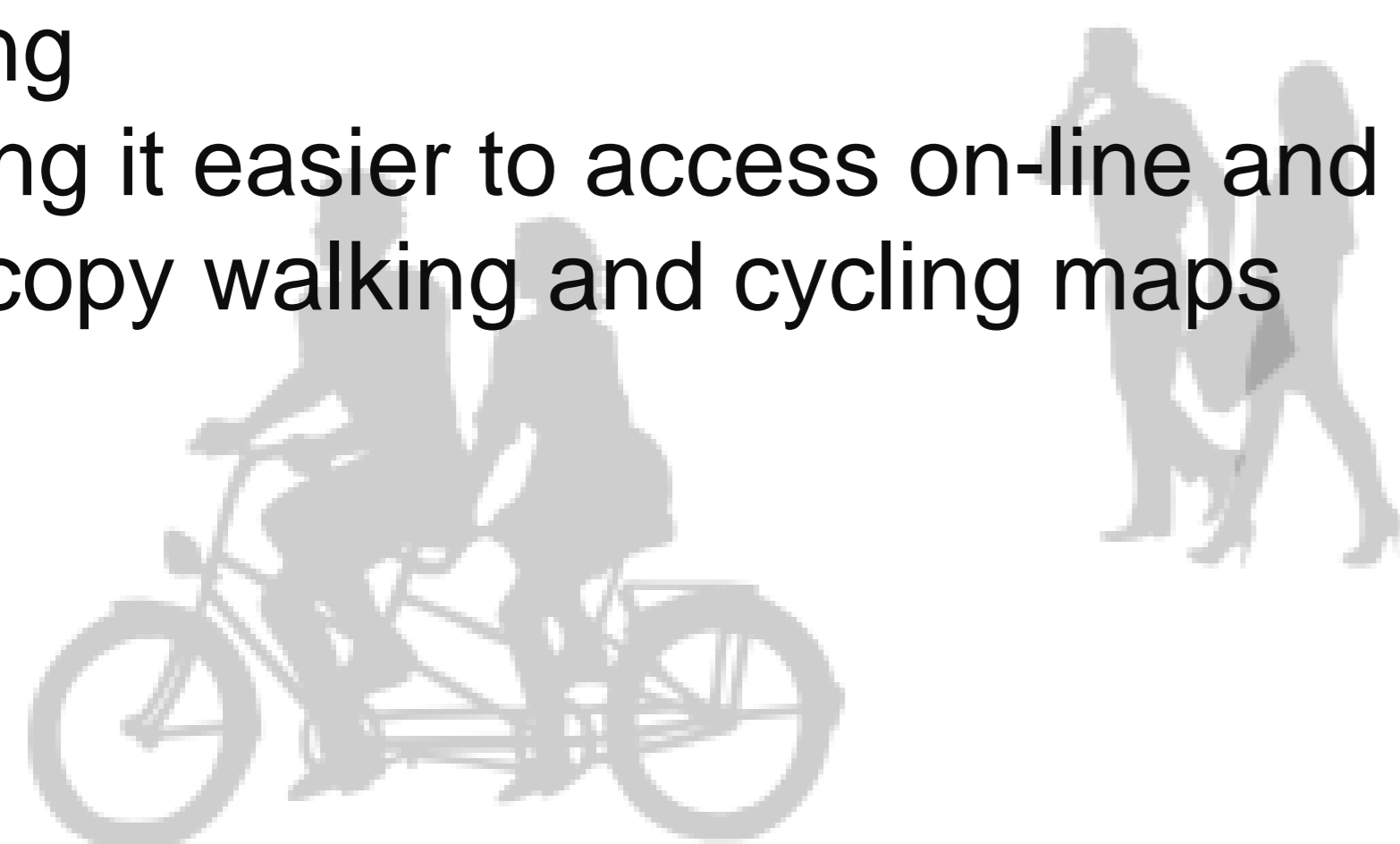
## Key Directions

1. Enhancing **wayfinding, signage, and trip planning**
2. Improving **education and awareness**
3. Increasing **marketing and communication**

## What We Heard

Stakeholders and the public identified a need for:

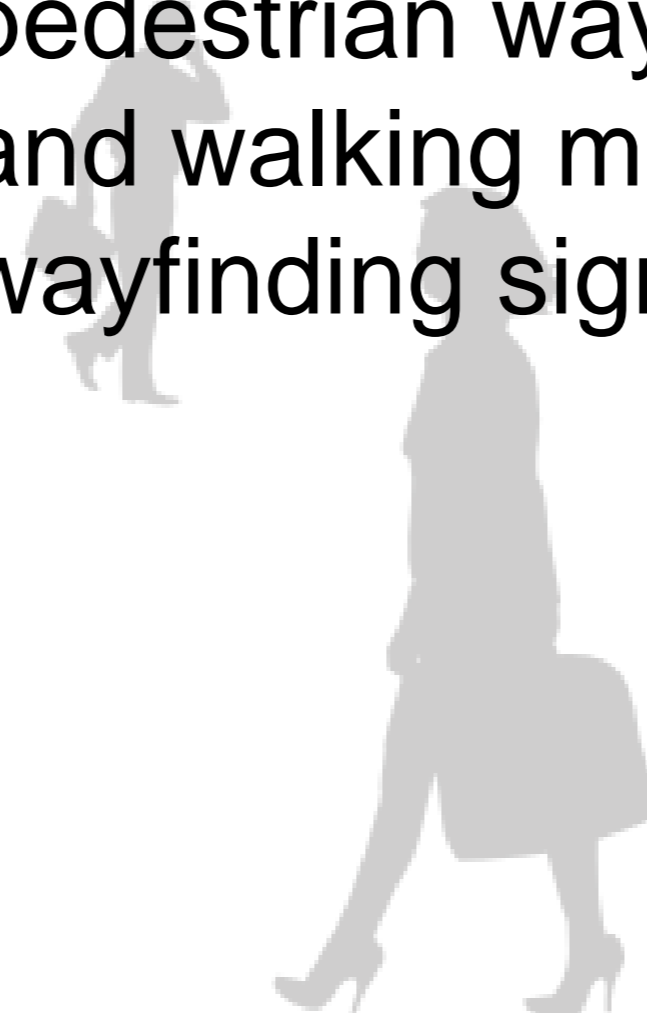
- More information and education for all road users
- More wayfinding measures
- More information about walking and cycling
- Making it easier to access on-line and hardcopy walking and cycling maps



## What is Winnipeg Doing

The City, with its partners, hosts several education and awareness efforts including developing and distributing bicycle and trail maps, supporting Bike to Work Week, providing information about walking/cycling and safe commuting, and allowing road closures for community events. In addition to City-driven initiatives, programs through MPI and advocacy groups augment local education and awareness efforts around the 'rules of the road', benefits of walking and cycling, and road safety.

The City also has implemented a variety of wayfinding measures, largely focused on pedestrians and vehicles (mainly within the Downtown and at key visitor destinations such as The Forks). Wayfinding typically consists of pedestrian wayfinding signage, tourist and walking maps, and traffic wayfinding signs.



## 6. Increase Awareness

### Summary of Proposed Actions

- Continue to support **education, campaigns, and community events** that support walking, cycling, transit, and road safety
- Develop an **interactive trip planning tool** for pedestrians and cyclists to use via mobile applications or online
- Support **walking and cycling education** for children and youth through safe routes to school programming
- Develop a **visual identity or 'brand'** for the City's walking and cycling-related communications
- Develop **guidelines for wayfinding** and signage to ensure common and consistent wayfinding measures for pedestrians and cyclists across Winnipeg
- **Expand pedestrian wayfinding information** to facilitate easier navigation to key neighbourhood / community destinations





# Implementation and Costs

## Implementation

The full implementation of the pedestrian and bicycle networks will require significant capital and on-going investments over the next twenty years.

As this is a long-term plan over the next twenty years, the City will be prioritizing investments over the short, medium and long-term. The City has prepared order-of-magnitude cost estimates for all projects requiring capital or ongoing annual operating costs.

The full cost to implement the Pedestrian and Cycling Strategies is approximately \$334 million over the long-term. To help implement the plan and leverage funding from other sources, the City should seek funding from other levels of governments, partnerships with the development industry, and integration of cycling and pedestrian improvements with other plans and projects.

Under current policy and plans, approximately \$55 million of the proposed pedestrian and bicycle networks will be funded through existing road renewal programs, development projects and major capital projects.

The City will also be reviewing and providing recommendations for sidewalk and bicycle infrastructure related programs in the Capital Budget to help achieve the long term plan.

	Capital	Annual Operating
<b>Strategic Goal 1: Improve Connectivity</b>		
<i>City-wide bicycle network (including local networks and off-street pathways)</i>	\$125 million	\$1.1 million
<i>Downtown separated bicycle lane network</i>	\$7 million	\$100,000
<i>Spine network</i>	\$4 million	\$100,000
<i>Hydro and Rail rights-of-way opportunities</i>	\$26 million	\$100,000
<i>Eliminate sidewalk network gaps on major roads</i>	\$5 million	
<i>Sidewalk infill on local roads</i>	\$30 million	
<i>Sidewalk widenings</i>	\$35 million	
<i>Sidewalk and bike facility asset management</i>		\$50,000
<i>Grade separated crossings</i>	\$100 million	\$500,000
<b>Total</b>	<b>\$332 million</b>	<b>\$1.95 million</b>
<b>Strategic Goal 2: Improve Safety and Accessibility</b>	<b>\$450,000</b>	<b>\$50,000</b>
<b>Strategic Goal 3: Improve Maintenance</b>	<b>\$230,000</b>	<b>\$1.67 million</b>
<b>Strategic Goal 5: Improve Convenience</b>	<b>\$410,000</b>	<b>\$50,000</b>
<b>Strategic Goal 6: Increase Awareness</b>	<b>\$870,000</b>	
<b>GRAND TOTAL</b>	<b>\$334 million</b>	<b>\$3.72 million</b>





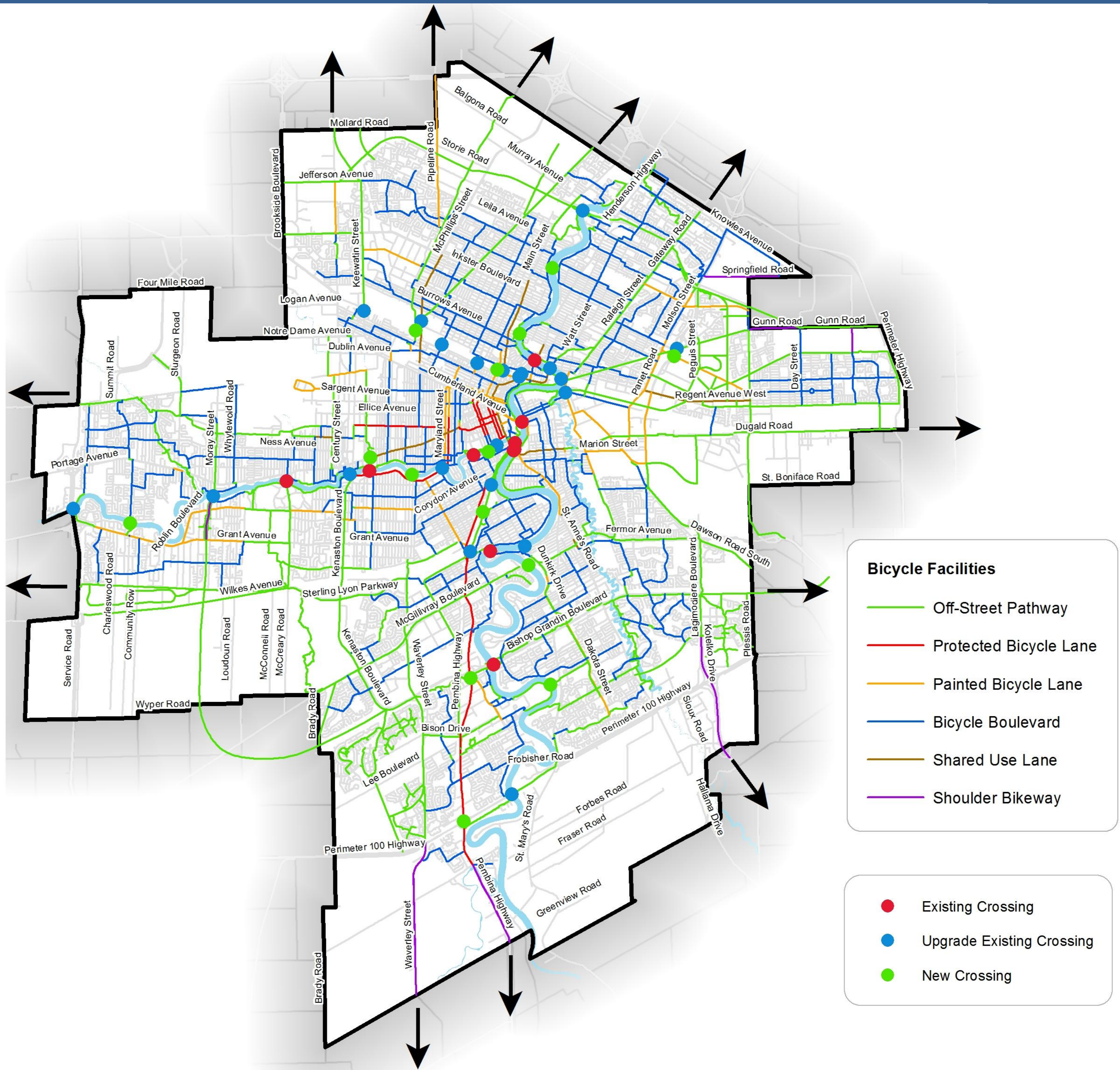
# Thank You!

Your comments and ideas are important for preparing the Pedestrian and Cycling Strategies.

For more information about the Pedestrian and Cycling Strategies, please visit our website at: [walkbike.winnipeg.ca](http://walkbike.winnipeg.ca) or e-mail us at: [walkbike@winnipeg.ca](mailto:walkbike@winnipeg.ca)









# Detailed Policies and Actions

## Strategic Direction 1: Improve Connectivity

Key Direction	Action	Priority	Relative Cost
1A Expand and Enhance the Bicycle Network	i. Develop a complete, connected, and dense bicycle network throughout the City.	■	\$\$\$
	ii. Develop a Downtown separated bicycle lane network.	■	\$
	iii. Develop a spine network to provide high quality connections to Downtown from each area of the City.	●	\$
	iv. Develop local bicycle networks for each neighbourhood that connect to the spine network and to the Downtown.	●	\$\$
	v. Identify and prioritize gaps within the bicycle network.	▲	n/a
	vi. Continue to expand the off-street pathway network.	■	\$\$
	vii. Support the extension of the City's bicycle network to surrounding communities.	■	n/a
	viii. Develop and implement bicycle facility design guidelines that include a bicycle facility selection tool based on traffic speed and volumes.	▲	n/a
	ix. Update the Transportation Standards Manual to incorporate bicycle facilities.	▲	n/a
	x. Ensure that bicycle requirements be addressed in all new and renewal road projects that are part of the bicycle network or where the road provides connectivity or support to the bicycle network .	▲	\$\$
	xi. Pursue bicycle network improvements that establish access to major destinations throughout the City, including regional, community and neighbourhood mixed use centres and corridors, schools, libraries and parks.	■	n/a
	xii. Continue to provide, where appropriate and where suitable opportunities exist, bicycle infrastructure in conjunction with transit infrastructure such as rapid transit corridors.	■	n/a
	xiii. Design new neighbourhoods to include bicycle routes that are well integrated with the existing bicycle network.	■	n/a
	xiv. Where possible, utilize existing hydro and rail rights-of-way and surplus road rights-of-way as a means to provide comfortable, direct cycling routes.	●	\$\$
	xv. Maintain the asset management program for bicycle facilities and prioritize maintenance and improvements within the Downtown and along the spine network.	▲	n/a
	xvi. Develop a process to identify priorities for bicycle network implementation/improvements based on cycling potential, equity, connectivity, comfort, and cost.	▲	n/a
1B Expand and Enhanced the Sidewalk Network	i. Update sidewalk requirements for new developments in consultation with relevant stakeholders.	▲	n/a
	ii. Eliminate gaps in the sidewalk network on major roads, including regional roads, arterial roads, commercial and industrial collector roads, bus routes, and truck routes.	■	\$
	iii. Develop a sidewalk infill program in the capital budget to provide sidewalks on local roads in areas around schools, seniors centres, hospitals and other key destinations and to address gaps in the sidewalk network.	■	\$\$
	iv. Develop a sidewalk improvement program to widen sidewalks that do not meet the minimum standards. Ensure all sidewalk meet the City's minimum width standards.	▲	\$\$
	v. Provide wider sidewalks where feasible in areas of high pedestrian activity, including the downtown; regional, community and neighbourhood mixed use centres and corridors.	●	n/a
	vi. Develop a pedestrian facility maintenance categorization system.	▲	n/a
	vii. Seek strategic opportunities to implement new sidewalks through partnerships, other capital projects and programs and development opportunities on non-regional roads.	■	n/a
	viii. Regularly update the sidewalk inventory including condition, width, adjacent road classification, priority level, adjacent land use and integrate this information into a Geographic Information System.	▲	n/a
	ix. Refine the asset management program for sidewalks and prioritize improvements for areas around schools, seniors centres, hospitals and other key destinations.	▲	n/a
	x. Develop a process to identify priorities for sidewalk implementation based on walking potential, equity, connectivity, comfort and cost.	▲	n/a
1C Address Barriers	i. Improve existing grade separated crossings over major roads, rivers, and rail.	■	n/a
	ii. Develop new pedestrian and cycling grade separated crossings of rivers, rail, and major road corridors.	■	\$\$\$

Priorities: ▲ Short-Term ● Medium-Term ■ Long-Term

Relative Cost: \$ Low Cost (<\$5 million) \$\$ Moderate Cost (\$5-25 million) \$\$\$ Higher Cost (>\$25 million)



## Strategic Direction 2: Improve Safety and Accessibility

Key Direction	Action	Timeframe	Relative Cost
<b>2A</b> Provide Accessible Infrastructure	i. Continue to provide accessible curb ramps with tactile strips at intersection locations within City Standards.	■	n/a
	ii. Continue the current plan to upgrade all existing traffic signals with Accessible Pedestrian Signals by 2023.	●	n/a
	iii. Continue to add pedestrian countdown timers at warranted locations.	●	n/a
	iv. Increase connectivity to adjacent pedestrian infrastructure for transit stops .	●	n/a
	v. Ensure 100% of all bus stops are accessible.	●	n/a
	vi. Continue to upgrade existing infrastructure to meet Universal Design Standards.	■	n/a
<b>2B</b> Improve Pedestrian and Cyclist Safety	i. Conduct a pedestrian and cycling safety study to identify pedestrian and bicycle collision hotspot, identify where, when, why and with whom collisions involving pedestrians and cyclists are occurring, and to monitor collision trends over time.	▲	n/a
	ii. Conduct road safety audits on existing facilities with identified safety issues at strategic locations and for major capital projects.	●	\$
	iii. Continue to support research programs to improve pedestrian and cyclist safety innovations.	■	\$
<b>2C</b> Provide Pedestrian and Cycling Crossing Treatments	i. Maintain the inventory of all pedestrian crossing locations.	▲	n/a
	ii. Implement pedestrian crossing control in accordance with guidelines approved by Standing Policy Committee in January 2013.	▲	n/a
	iii. Identify additional pedestrian crossing control locations where warranted.	▲	n/a
	iv. Provide bike box treatments at intersections with high cycling activity and high collisions. Create a warranting process.	●	n/a
	v. Provide bicycle activated traffic signals on bicycle boulevards where they intersect arterial street intersections.	●	n/a
	vi. Continue to provide bicycle activated pushbuttons or detection at all traffic signals where required.	▲	n/a
<b>2D</b> Provide Well-Lit and Visible Pedestrian and Cycling Facilities	i. Improve visibility of underpasses with lighting and/or open design concepts.	●	n/a
	ii. Provide illumination along sidewalks, bicycle routes and pathways where deemed appropriate.	●	\$
	iii. Continue to follow standards to ensure CPTED principles are followed in pedestrian and bicycle facility design.	■	n/a
<b>2E</b> Develop Safe Routes to School	i. Support and encourage the development of Active and Safe Routes to School plans and provide appropriate infrastructure and operational improvements.	▲	\$



# Detailed Policies and Actions

## Strategic Direction 3: Improve Maintenance

Key Direction	Action	Timeframe	Relative Cost
3A Maintain the Sidewalk Network	i. Develop a separate snow clearing priority system for sidewalks to achieve a higher level of service for sidewalk clearing.	▲	\$
	ii. Develop a strategy to snow clear residential sidewalks within 24 hours	▲	n/a
	iii. Refine the priority network of off-street pathways for snow removal.	▲	n/a
	iv. Develop and encourage support programs to encourage resident sidewalk snow removal on residential streets.	●	\$
3B Maintain the Bikeway Network	i. Coordinate bicycle facility maintenance with Operating Programs, refine the sweeping program, and continue to invest in annual pathway resurfacing.	●	\$
	ii. Add accommodation of bicycle users during construction and maintenance activities to the City's Manual of Temporary Traffic Control in Work Areas on City Streets.	▲	n/a
	iii. Designate and prioritize a Winter Cycling Network for snow removal.	▲	\$
	iv. Design bicycle routes to facilitate snow removal and snow storage.	▲	n/a
	v. Continue to develop a pedestrian and bicycle counting and monitoring program.	●	\$

## Strategic Direction 4: Improve Vibrancy

Key Direction	Action	Timeframe	Relative Cost
4A Enhances Streetscapes and the Public Realm	i. Ensure the bicycle network provides access to mixed use corridors and centres.	■	n/a
	ii. Ensure bicycle parking is provided in the public right-of-way at destinations in mixed use centres and corridors.	■	n/a
	iii. Continue to work with businesses to support public amenities such as planters, patios, plazas, parklets, banners and public art along mixed use centres and corridors in the Downtown.	▲	n/a
4B Land Development and Site Design	i. Improve interdepartmental efficiency in identifying pedestrian and cycling requirements for development agreements.	▲	n/a
	ii. Work with the development industry and other stakeholders to support the practical implication of walkable and cyclable communities	▲	n/a
	iii. Explore a checklist to provide land development guidance regarding bicycle and pedestrian network design, and pedestrian, bicycle and transit supportive site planning.	▲	n/a
	iv. Investigate opportunities to incorporate pedestrian, bicycle and transit network requirements into the Plan Approval Process.	▲	n/a
	v. Consider the use of pedestrian, cycling and transit network plans to support walkability and cyclability considerations in Area Structure Plans, precinct plans and area master plans.	▲	n/a
	vi. Continue to support downtown development by upgrading sidewalks where required as redevelopment occurs.	▲	n/a
	vii. Ensure site design in redevelopment sites to enhance pedestrian and bicycle connectivity within mixed use centres and corridors	▲	n/a
	viii. Ensure that the bicycle network and sidewalk network provide connections to all Mixed Use Centres and Corridors.	▲	n/a
	ix. Upon completion, new subdivisions should have a collector road network that strives to place all residents and employees within 400 metres of a bus stop.	▲	n/a
	x. Aim to have an internal street and pathway network within the development site together provide an acceptable level of pedestrian and cycling connectivity.	▲	n/a
	xi. Aim to achieve pedestrian and cycling connections from new development sites to surrounding existing and anticipated networks.	▲	n/a

Priorities: ▲ Short-Term ● Medium-Term ■ Long-Term

Relative Cost: \$ Low Cost (<\$5 million) \$\$ Moderate Cost (\$5-25 million) \$\$\$ Higher Cost (>\$25 million)



# Detailed Policies and Actions

## Strategic Direction 5: Improve Convenience

Key Direction	Action	Timeframe	Relative Cost
<b>5A</b> Provide Bicycle Parking and End-of-Trip Facilities	i. Demonstrate leadership in providing short-term bicycle parking for visitors to City of Winnipeg facilities and secure long-term parking and end-of-trip facilities (showers, change rooms, etc) for all employees at municipal buildings.	●	\$
	ii. Consider updating the Downtown Zoning Bylaw to require bicycle parking in new developments.	▲	n/a
	iii. Consider updating the City-wide Zoning Bylaw to enhance requirements for bicycle parking and end-of-trip facilities where appropriate in new developments City-wide.	▲	n/a
	iv. Continue and expand partnerships with businesses and business improvement zones to implement short-term bicycle parking in the public right-of-way.	●	\$
	v. Develop a program to support businesses in existing developments to add retrofit existing buildings to provide bicycle parking.	●	\$
	vi. Encourage that all event coordinators provide adequate temporary bicycle parking to serve corporate-sponsored and large community events.	▲	
	vii. Continue to work with BIZes and individual businesses to expand the bicycle corral program.	▲	\$
	viii. Support development of publically-available bicycle parking stations in downtown.	▲	\$
<b>5B</b> Increase and Improve Multi-Modal Connections	i. Transit to continue its existing program of monitoring demand for new or expanded transit shelters throughout Winnipeg, and to provide shelter where conditions meet Transit's established criteria.	●	n/a
	ii. Transit to investigate the feasibility of various methods to increase the integration of cycling and transit in Winnipeg.	●	n/a
	iii. Transit to continue to look for opportunities to provide bicycle parking at rapid transit stations, park-and-rides, and high activity transit stops.	▲	n/a
	iv. Continue to look for opportunities to maximize connectivity between the pedestrian and bicycle networks and transit network.	■	n/a
	v. Continue to work towards a universally accessible transit system.	■	n/a
	vi. Conduct a Bike Share Feasibility Study.	●	\$



# Detailed Policies and Actions

## Strategic Direction 6: Increase Awareness

Key Direction	Action	Timeframe	Relative Cost
<b>6A</b> Enhanced Wayfinding, Signage and Trip Planning	i. Develop Pedestrian and Cycling Wayfinding Guidelines.	▲	n/a
	ii. Enhance and Expand Pedestrian Wayfinding Information in the Downtown as well as community and neighbourhood mixed use centres and corridors.	▲	\$
	iii. Continue to produce and annually update the City-Wide Cycling Map.	▲	\$
	iv. Develop Neighbourhood-Based Walking and Cycling Maps.	▲	\$
<b>6B</b> Improve Education and Awareness	i. Make bicycle and pedestrian trip planning information widely accessible.	▲	\$
	ii. Support and encourage targeted community outreach programs for vulnerable populations.	▲	\$
	iii. Continue to support Active and Safe Routes to School programming.	▲	\$
	iv. Support providing bicycle education for primary school children.	▲	\$
	v. Support the development of Bicycle-Friendly Business Districts.	▲	\$
	vi. Support the development of a bicycle tourism initiative.	▲	\$
	vii. Work with partners to develop and deliver information materials outlining the benefits of walking and cycling.	▲	\$
	viii. Support the development of a road safety awareness campaign for all road users.	▲	\$
	ix. Continue to support and advertise special events and programs to promote walking and cycling.	▲	\$
	x. Support events that encourage on-going neighbourhood-level walking and cycling.	▲	\$
	xi. Integrate walking and cycling information into existing resources.	▲	\$
	xii. Support the development of a Bicycle Tri-It Library.	●	\$
<b>6C</b> Increase Marketing and Communications	i. Develop a comprehensive branding strategy and visual identity for all walking and cycling related communications from the City of Winnipeg.	▲	\$
	ii. Work with vulnerable groups and find out what their key issues are in order to better communicate with them.	▲	\$
	iii. Develop a campaign using positive messaging to promote walking and cycling.	▲	\$

Priorities: ▲ Short-Term ● Medium-Term ■ Long-Term

Relative Cost: \$ Low Cost (<\$5 million) \$\$ Moderate Cost (\$5-25 million) \$\$\$ Higher Cost (>\$25 million)