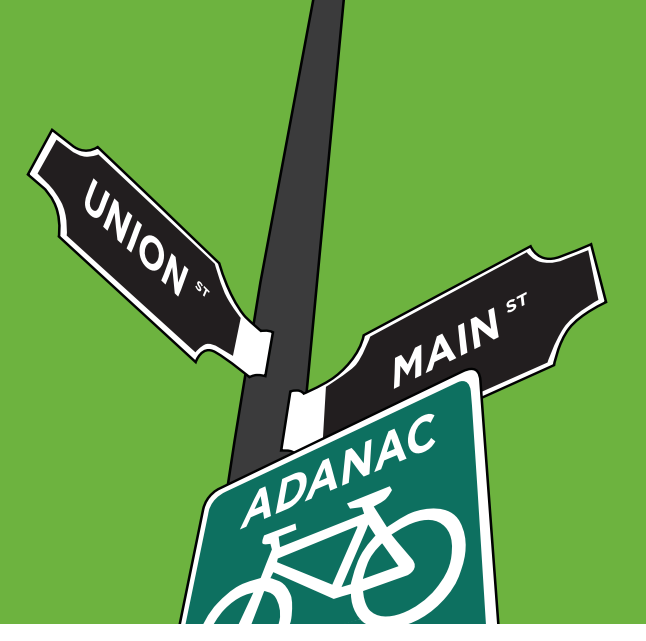


# The Project

## Adanac Bikeway Improvements: Gore to Carrall



### About the Adanac Bikeway

The Adanac Bikeway was the first local street bikeway built in Vancouver in 1993 and is currently one of the busiest bikeways in the city. The Adanac Bikeway extends from downtown Vancouver to Boundary Road, where it connects to Burnaby's Francis Union Bikeway and is a crucial connection in the overall cycling network.

The City is looking at upgrading specific sections of the Adanac Bikeway to better meet the needs of cyclists of all ages and abilities (AAA). Even though most of the bikeway is located on less busy residential streets, Union Street (west of Gore Avenue) is classified as a Regional Truck route and carries approximately 5000 vehicles per day. This section of Union Street poses a safety risk to cyclists and is inconsistent with other cycling facilities in the vicinity.



Adanac bikeway on Union Street east of Hawks Avenue

### Why are we doing this?

#### Safety:

- According to ICBC, the intersection of Union Street and Main Street is a top cyclist collision location in Vancouver (data from 2006 to 2011), and is the number one cyclist collision location along the Adanac local street bikeway.
- This section of Union Street overlaps with the regional truck route, forcing cyclists to share the road with high vehicle volumes, including large trucks and tour buses.

#### Demand:

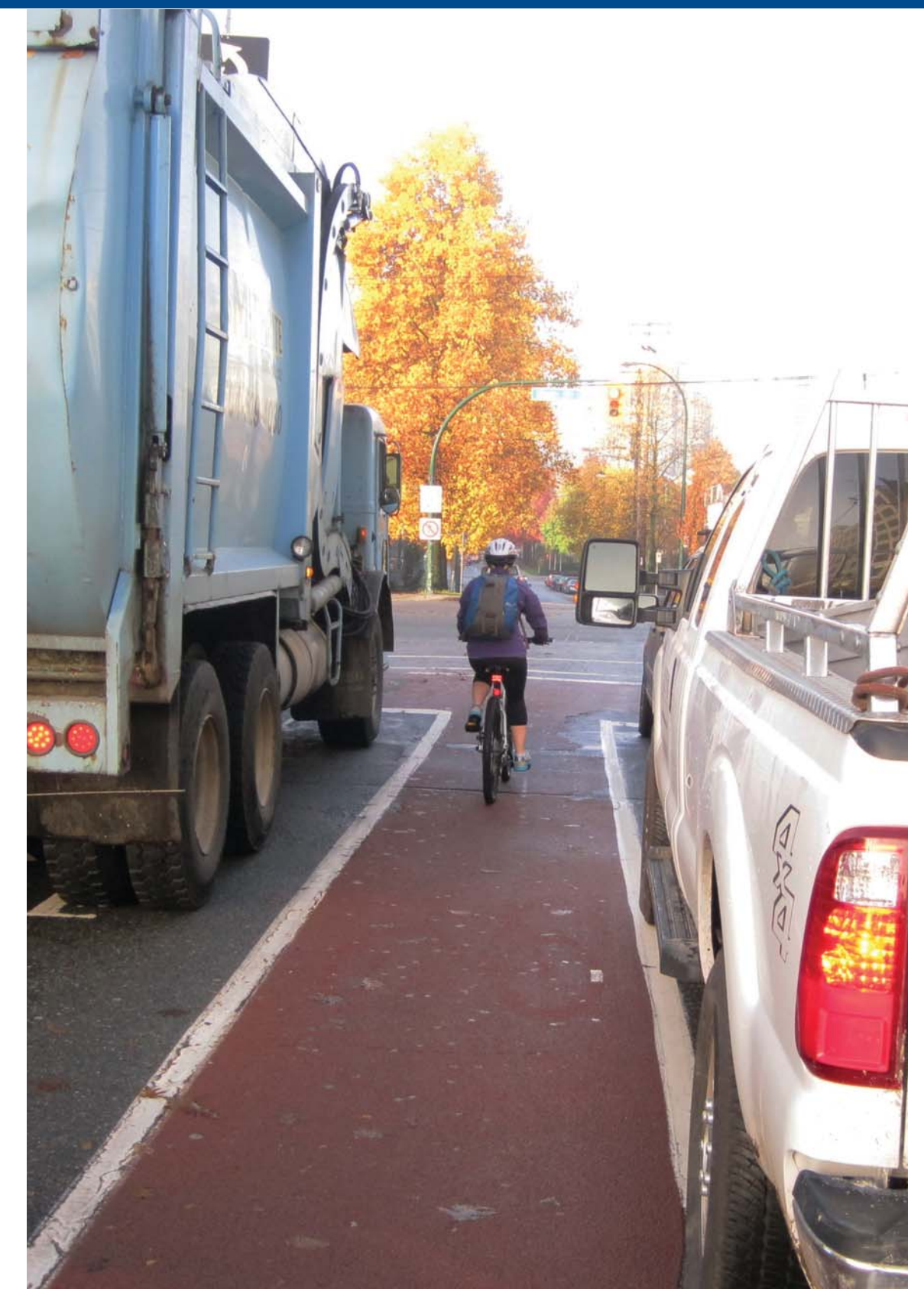
- East of Main Street, Union Street carries an estimated 4000 cyclists per day in the summertime, making it one of the busiest cycling routes in the City. As a comparison the volumes on Burrard bridge and Dunsmuir separated bike lanes are 5000 and 2000 cyclists per day in the summer time respectively.

#### Network:

- This section of Union Street provides a crucial connection between existing all ages and abilities cycling facilities on Carrall Street, the Dunsmuir Viaduct, Seaside Greenway and Adanac Local Street Bikeway east of Gore Street.

#### Policy:

- This project was approved in principle as part of the 2040 Transportation Plan and was recommended for implementation in 2013



Intersection of Main and Union streets

### Where are we doing this?



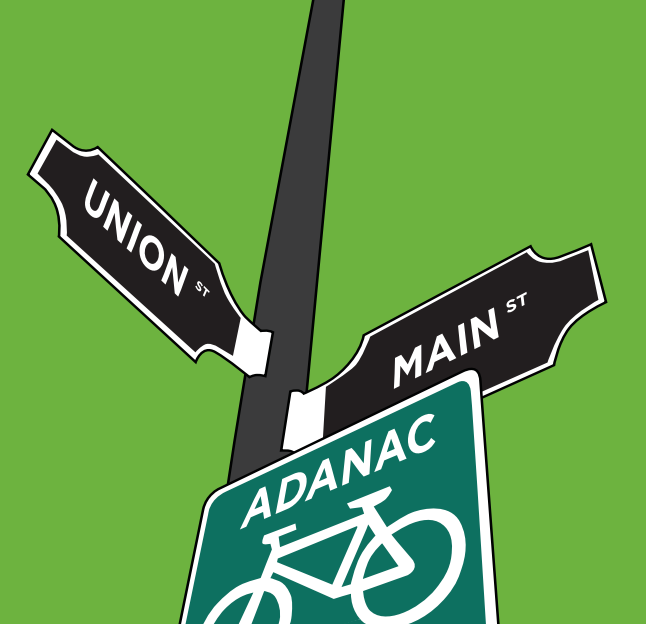
#### Legend

- (dashed line) Boundary between Downtown and Strathcona
- (solid blue line) Existing AAA Cycling Facility
- (solid green line) Existing Local Street Bikeway
- - - - (dotted green line) Existing Painted or Shared Use Bike Lanes
- (dotted orange line) Proposed AAA Upgrade
- 1100 → (red arrow) East/North Bound Vehicles
- ← 1700 (blue arrow) West/South Bound Vehicles
- (2800) (black text) Total Vehicle Volumes

Source: Transportation 2040 Plan

# Project Goals

## Adanac Bikeway Improvements: Gore to Carrall



### Goals of the project are to:

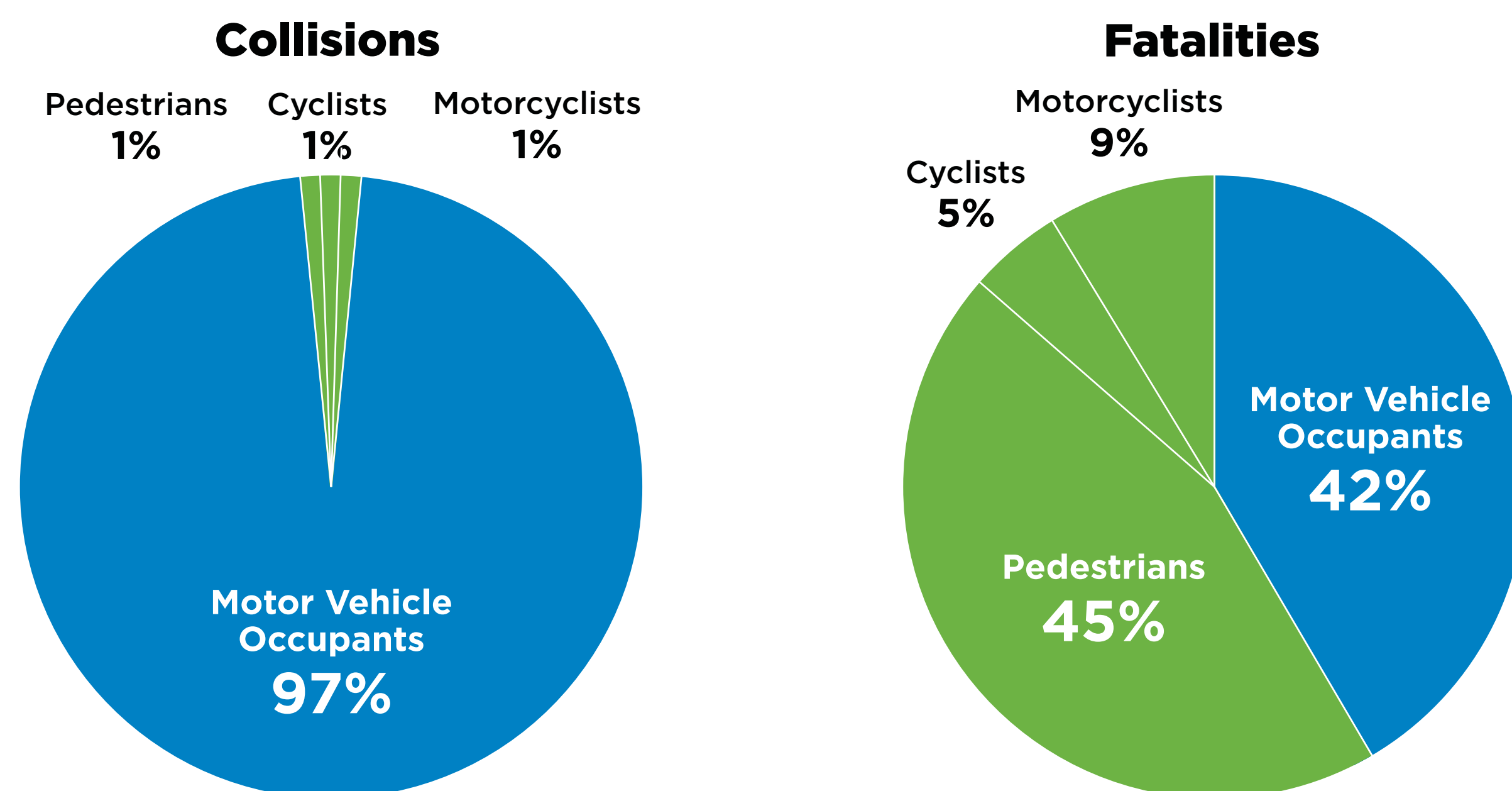
- Address safety concerns at the intersection of Main and Union streets.
- Upgrade this section of the Adanac Bikeway to AAA cycling standards, as directed by the Transportation 2040 Plan and provide a connection to the existing AAA cycling network in the area (Carrall, Dunsmuir, Seawall, etc.).
- Improve pedestrian facilities where feasible along Union Street between Quebec and Main streets.
- Discuss options to improve the demand for bike parking by introducing more bike parking facilities west of Gore Avenue.



Seawall at Northeast False Creek

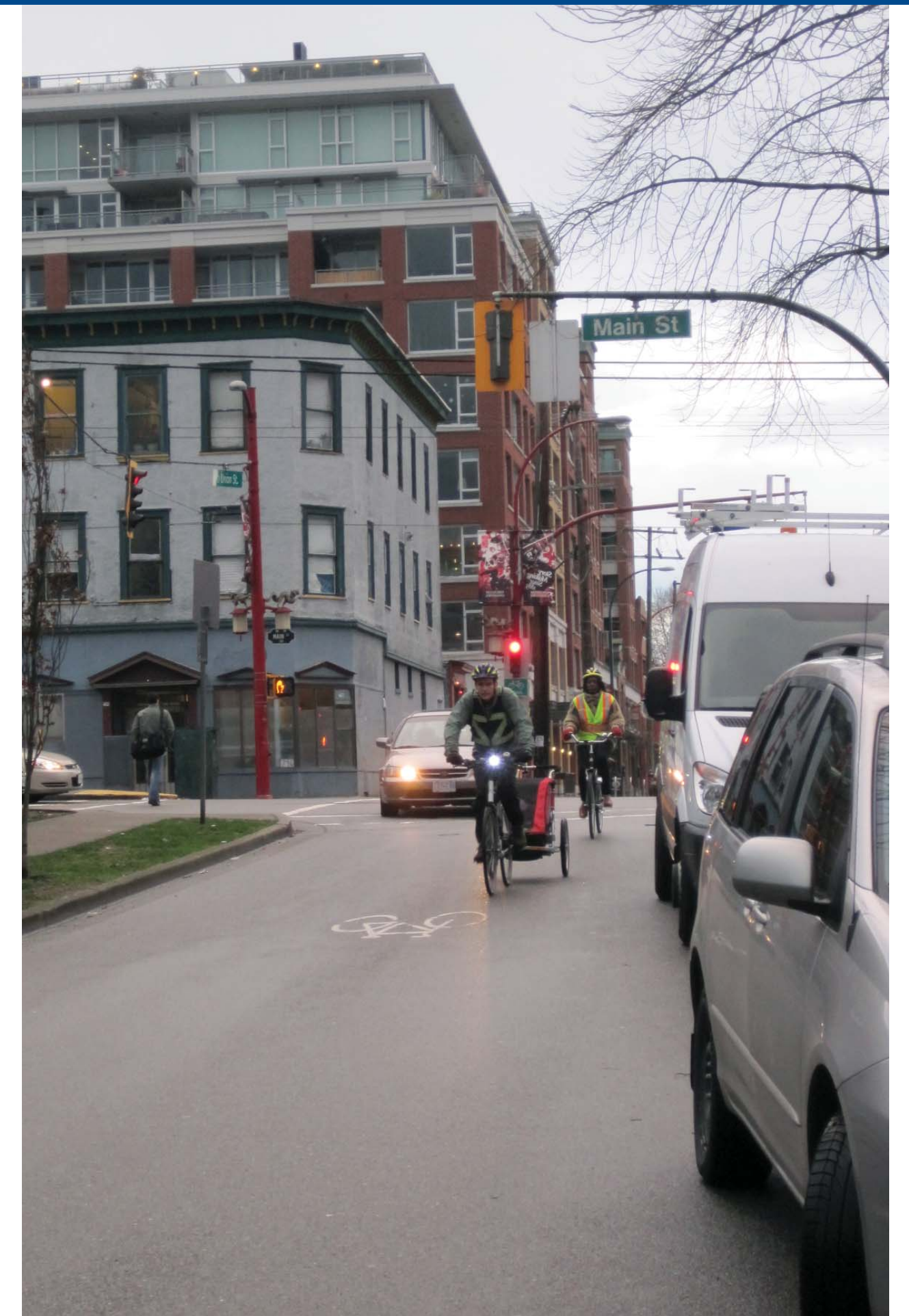
### Cyclist safety

The intersection of Union Street and Main Street is one of the top 10 cyclist/vehicle collision locations in Vancouver (ICBC data from 2006 to 2011).



Pedestrians, cyclists, and motorcyclists are involved in only **3%** of collisions, but account for almost **60%** of fatalities.

Source: ICBC 2005-2010, VPD 2005-2010



Adanac bikeway on Union Street west of Main Street

### The Viaducts

City Council has not yet made a decision on a future direction for the viaducts. In the meantime, there is an immediate need to improve safety and connectivity for people currently using the Adanac local street bikeway, as well as goals to encourage more people to walk and cycle in order to meet Vancouver's long-term transportation and sustainability policies and targets (Greenest City 2020 Plan and Transportation 2040 Plan).

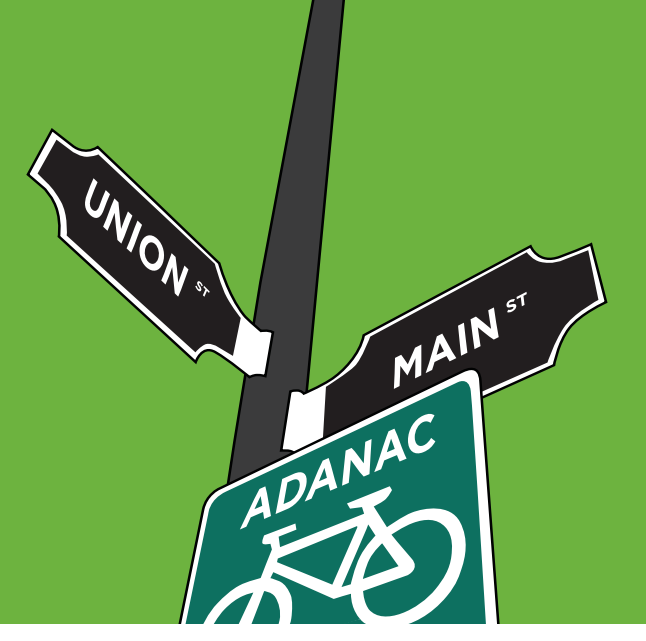
These cycling and walking improvements have been designed using temporary materials wherever possible to minimize costs and maintain flexibility to fit in with the long-term future of the viaducts and other transportation routes in the area.



Dunsmuir viaduct looking east to Downtown Vancouver

# Project Timeline

## Adanac Bikeway Improvements: Gore to Carrall



### Timeline

#### Policy

Cycling has been considered a transportation priority in Vancouver for over 25 years:

##### Vancouver Comprehensive Bicycle Plan

- Analyzed local cycling data and needs and explored the four fundamentals of cycling: engineering, education, enforcement and encouragement.

##### Bicycle Network Study

- Identified local street bikeways and four priority cycling corridors including the Adanac/Union Corridor.
- The Adanac Bikeway was approved by Council and constructed in 1993 as one of the first bikeways in the City.

More recently, Vancouver Council has adopted the following plans:

##### Greenest City 2020 Action Plan

- Sets out a broad long-term vision as well as ten specific goals to achieve by 2020 and to make walking, cycling and/or transit the preferred modes of transportation.

##### Transportation 2040 Plan

- The plan aims to make cycling safe, convenient, comfortable and fun for people of all ages and abilities. Some of the goals of the 2040 Transportation Plan include:
  - Two thirds of all trips will be made by walking, cycling and transit by 2040
  - Zero traffic related fatalities
  - Identifies this project for implementation in 2013 with spot improvements along the entire bikeway planned over the next four years

1988

1992

2011

2012

#### Currently Underway

##### Viaducts and the Eastern Core Strategy

- The Eastern Core Strategy is a transportation and land use strategy for the lands surrounding the Georgia and Dunsmuir Viaducts and False Creek Flats.
  - This concept plan proposes the removal of the viaducts structures. The road network would then be reconfigured at grade, which would unlock the potential for more park land and mixed-use development.
  - At the same time, the plan would ensure that transportation routes to and from downtown, for both people and goods, remain.

##### Downtown Eastside Local Area Plan

- The goal of the Downtown Eastside local area plan is to create a vision and plan for the Downtown Eastside (DTES) that will focus on ways to improve the lives of the low-income DTES residents and community members.

#### We Researched

- City staff collected data, reviewed the road network, met with appropriate stakeholders (businesses located along the route, Vancouver Fire and Rescue, BC Hydro, Translink and the BC Trucking Association) and developed a design that fits within the City policy context and project goals, while balancing technical and financial considerations.

August 2012 to January 2013

#### We Present

- Staff will be presenting the design to the public in a series of public open houses in May 2013 to gather further feedback and discuss the project in greater detail. Staff will also continue to meet with stakeholders and businesses to present and discuss the design.

May 2013

#### We Recommend

- Using all of the information collected (data, policy, public feedback, technical and financial considerations), staff will further refine the design before presenting to Council. Given the uncertainty of the viaducts, staff will recommend constructing the upgrades using temporary materials to minimize project costs.

May/June 2013

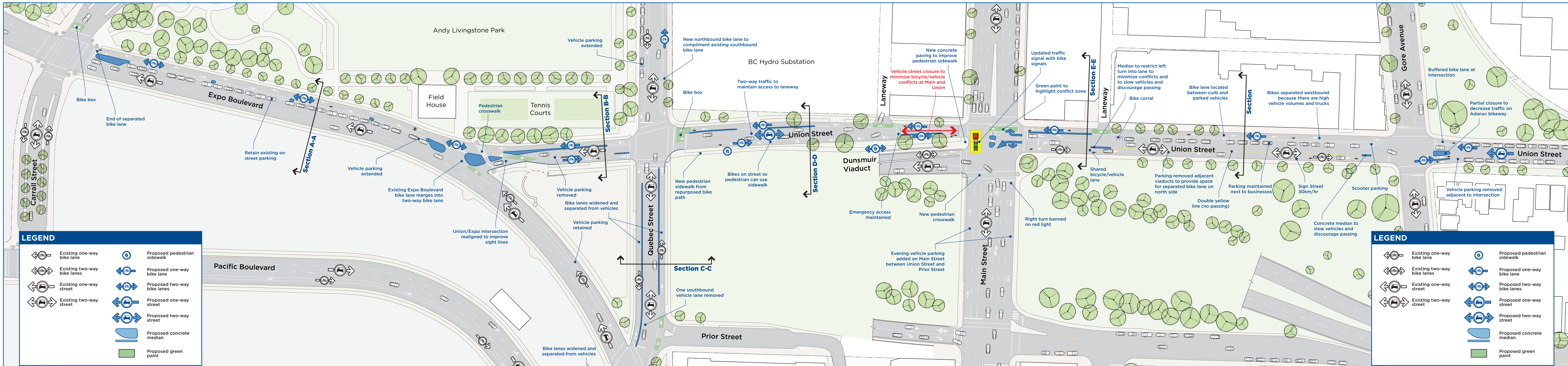
#### Report to Council

- City staff will report to Council with a recommended design along with the process and funding necessary to proceed with construction. Council will hear from the public before deciding how the project will proceed.

June 2013

# Recommended Design

## Adanac Bikeway Improvements: Gore to Carrall



**LEGEND**


**LEGEND**


**SECTION A-A**  
EXPO BLVD: Carrall St to Union St

**What's Different?**

- Removed the existing westbound painted bike lane and added a two-way separated bike lane against the north curb.
- The vehicle parking is moved from curb side to the south edge of the new bike lane.
- Added 5 metered parking spaces.
- Expo from Union Street to Carrall Street will have two westbound vehicles lanes, consistent with Expo Boulevard east of Union Street.

**Why?**

- Provide an all ages and abilities cycling route connecting the Adanac Bikeway and Dunsmuir Viaduct to the Carrall Street Greenway.
- A two-way cycling connection will improve access to the Carrall Street Greenway.

**SECTION B-B**  
UNION ST: Expo Blvd to Quebec St

**What's Different?**

- Added one-way eastbound and westbound separated bike lanes on the north and south side of Union Street from Quebec to Expo Boulevard.
- The vehicle intersection at Union Street and Expo Boulevard is realigned to improve sight lines between motorists and pedestrians.
- Loss of 8 metered parking spaces.

**Why?**

- Provide an all ages and abilities cycling route from the Adanac Bikeway to the new separated bike lanes on Expo Boulevard.

**SECTION C-C**  
QUEBEC ST: Pacific Blvd to Union St

**What's Different?**

- Separated the existing bike lanes with concrete barrier and widened them to accommodate passing between Union Street and Pacific Boulevard.
- Removed a southbound vehicle lane.
- A northbound painted bike lane added between Union Street and Keefer Avenue.
- Added more metered parking adjacent to Andy Livingstone Park.
- Traffic signals modified to accommodate bike lanes.

**Why?**

- Provide an all ages and abilities cycling route from the Adanac bikeway to the Seaside bike route.

**SECTION D-D**  
UNION ST: Quebec St to Main St

**What's Different?**

- Added one-way separated and painted bike lanes on both sides of Union Street from Main to Quebec streets.
- Street closure on Union Street from Main Street to alleyway west of Main.
- Added pedestrian sidewalk on south side of Union Street.
- Loss of up to 23 unregulated parking spots.

**Why?**

- Provides an all ages and abilities cycling facility from Main to Quebec streets.
- Reduces traffic volumes and eliminates conflicts between large vehicles and cyclists.
- Improves pedestrian connectivity and access.
- Vehicle closure required to provide adequate space for cyclists at Main Street and address vehicle cyclist collisions in intersection.

**SECTION E-E**  
UNION ST: Main St to Lane East of Main St

**What's Different?**

- Added one-way separated bike lane on the north side of Union Street from Gore Avenue to Main Street.
- Two-way vehicle traffic maintained.
- Vehicles travelling down Union Street must now turn onto Main Street or the Dunsmuir Viaduct.
- Parking maintained adjacent to businesses on the north side of the street.

**Why?**

- Union Street from Gore Avenue to Main Street is a regional truck route and carries relatively high vehicles volumes and large trucks (mostly westbound).
- Bicycle separation on the north side is required to reduce conflicts and provide an all ages and abilities connection between the Adanac Bikeway and Dunsmuir Viaduct.
- Two-way vehicle traffic maintained to support local businesses and provide vehicle circulation.
- Vehicle access to Union Street west of Main Street is restricted as this is the least restrictive method of reducing bicycle/vehicle conflicts at the intersection while maintaining existing traffic flow on Main Street.

**SECTION F-F**  
UNION ST: Lane East of Main St to Gore Ave

**What's Different?**

- Added one-way separated bike lane on the north side of Union Street from Gore to Main streets.
- Two-way vehicle traffic maintained.
- Parking maintained adjacent to businesses on the north side of the street.

**Why?**

- Union Street from Gore Avenue to Main Street is a regional truck route and carries relatively high vehicles volumes and large trucks (mostly westbound).
- Bicycle separation on the north side is required to reduce conflicts and provide an all ages and abilities connection between the Adanac Bikeway and Dunsmuir Viaduct.
- Parking is maintained on the north side of the street to provide access to businesses and residences.
- Bicycle corral improves the pedestrian realm by removing parked bicycles from the sidewalk. They also encourage cyclists to stop and visit local businesses.
- Two-way vehicle traffic maintained to support local businesses and provide vehicle circulation.