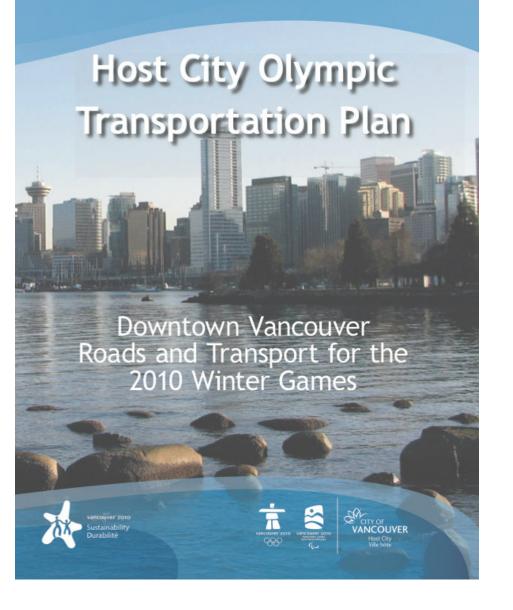
#### Host City Olympic Transportation Plan: A Sustainable Legacy for Vancouver

**Prepared by:** Dale Bracewell, P.Eng. Director, **Olympic Transportation Branch** October 7th, 2010

## Host City Olympic Transportation Plan: A Sustainable Legacy for Vancouver

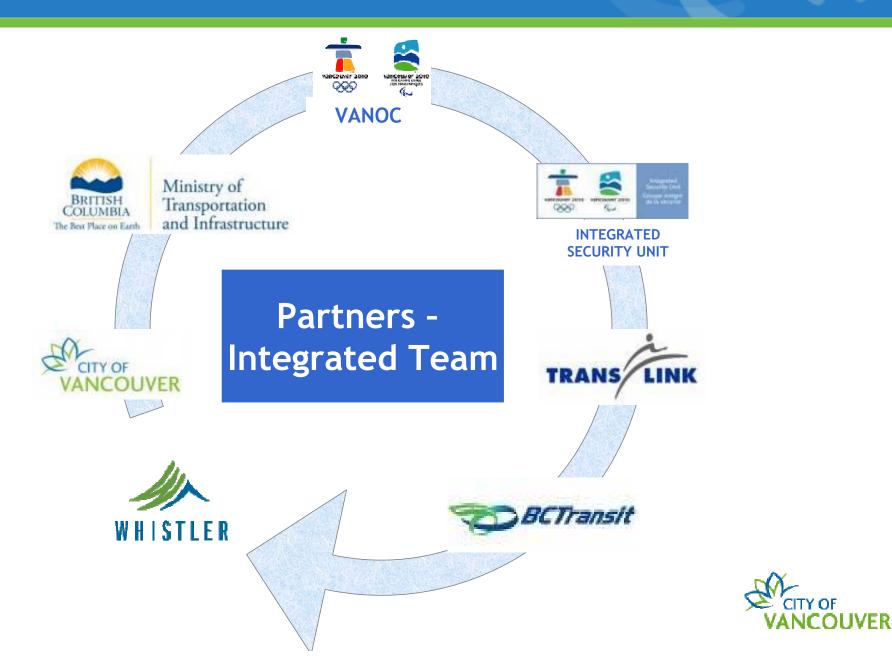


#### Purpose:

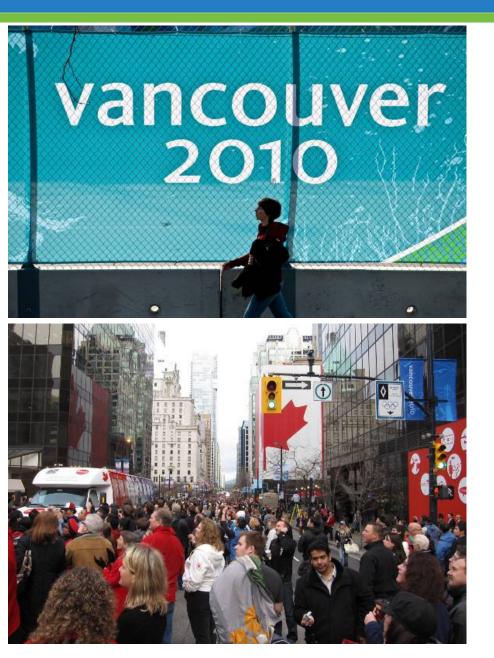
To provide key findings from the City of Vancouver's transportation monitoring efforts during the 2010 Olympic Winter Games



#### The Olympic & Paralympic Transportation Team (OPTT)



## Host City Olympic Transportation Goals



- A Successful Olympic Games
- A Functioning Urban City
- A Sustainable Olympic Games
- A Lasting Transportation Legacy



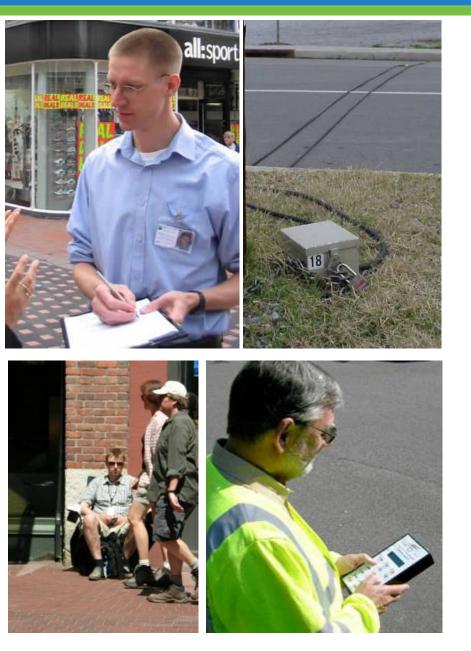
#### Host City Transportation Challenges



- Increased Travel Demand
- Reduced Road Capacity



#### Host City Transportation Monitoring



- Quantitative data for post-Games evaluation
- Data that has never previously been available
- Valuable to assess region's:
  - Ability to handle large-scale events
  - Response to sustainable
    transportation concepts



## Host City Transportation Monitoring: Key Sources of Data



#### • Pre-Games

- City of Vancouver Large Special Event Surveys (2007 & 2008)
- City, TransLink, & Transport Canada completed a "before" Downtown Screenline (November 2009)

#### • 2010 Winter Games

 City engaged UBC to conduct a Monitoring Study for the Downtown Screenline & Venue Surveys

(February 2010)



#### Host City Transportation Monitoring: Key Sources of Data





Various City monitoring efforts reported directly to Vancouver's Transportation Operations Centre

(February 2010)

VANCOUVER TRANSPORTATION OPERATIONS CENTRE



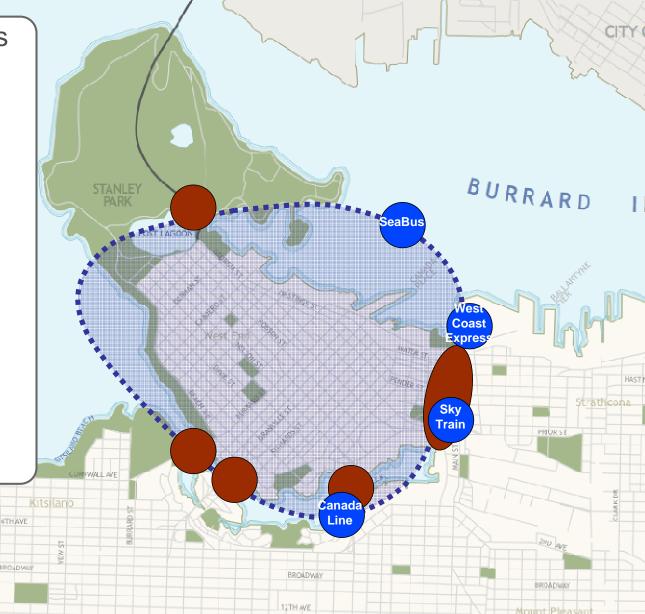
#### TRANSPORTATION METRICS

## Downtown Screenline Methodology: All Modes, All Entry Points, 24 Hours a Day

#### 24 hour counts at all entry points

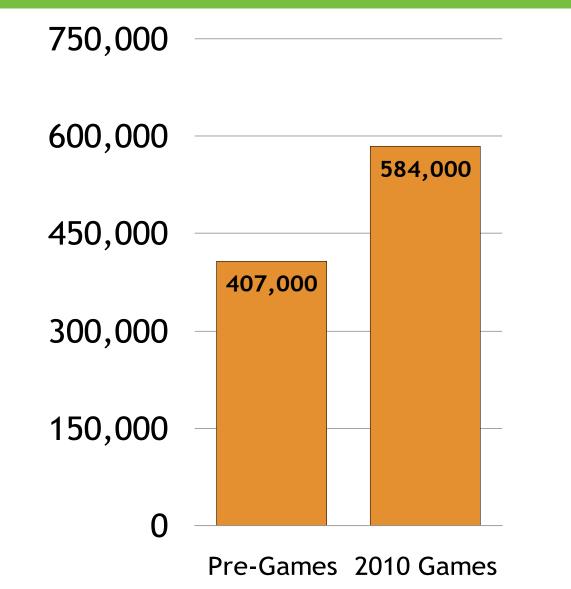
- Includes bridges, roads, & all transit systems
- Includes all transportation modes
- Captures only trips crossing the screenline boundary
- Does not include trips fully within Downtown
- Does not include trips fully outside Downtown

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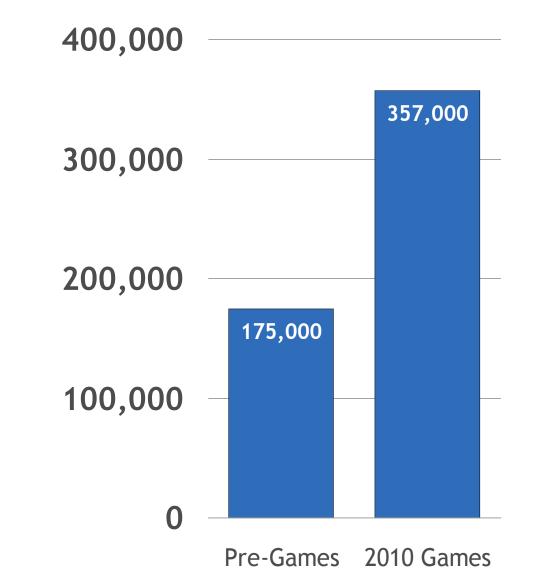
# Increased Travel Demand for the Games

Number of Person-Trips over 24 hours



Downtown Transportation network accommodated 44% increase in person trips over 24 hours.

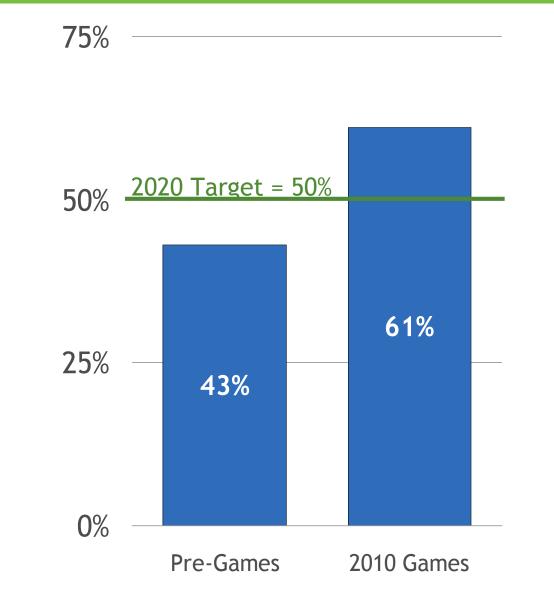
# Sustainable Trips Doubled for the Games



Trips to Downtown by walking, cycling, and transit more than doubled over 24 hours.



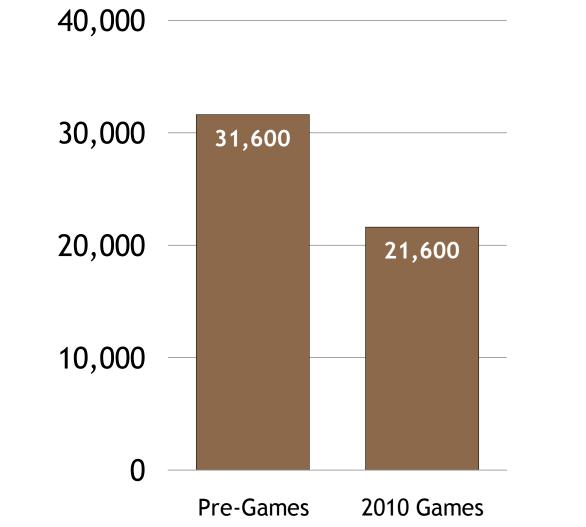
# Sustainable Transportation Mode Split



Vancouver achieved the 2020 Greenest City mobility target for trips to Downtown during the 2010 Winter Games.



# Reduced Vehicle Trips During the Games

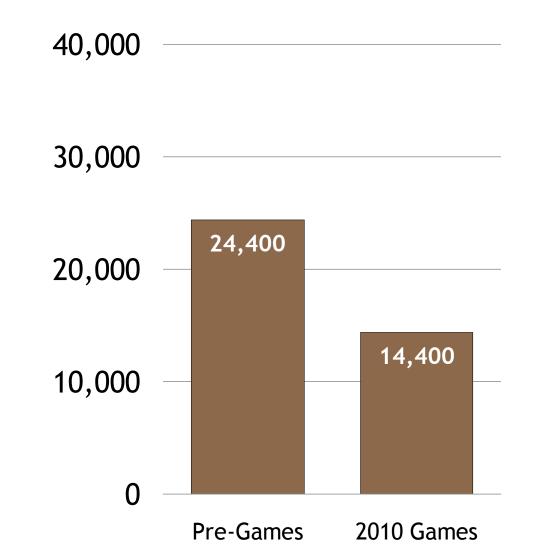


Vehicle trips to & from Downtown decreased by 29% during peak periods.



Based on average of AM peak inbound (7 to 9 AM) and PM peak outbound (4 to 6 PM) Source: City Screenline Counts. Pre-Games = November 2009. 2010 Games = February 2010

# Reduced Single Occupancy Vehicle Trips

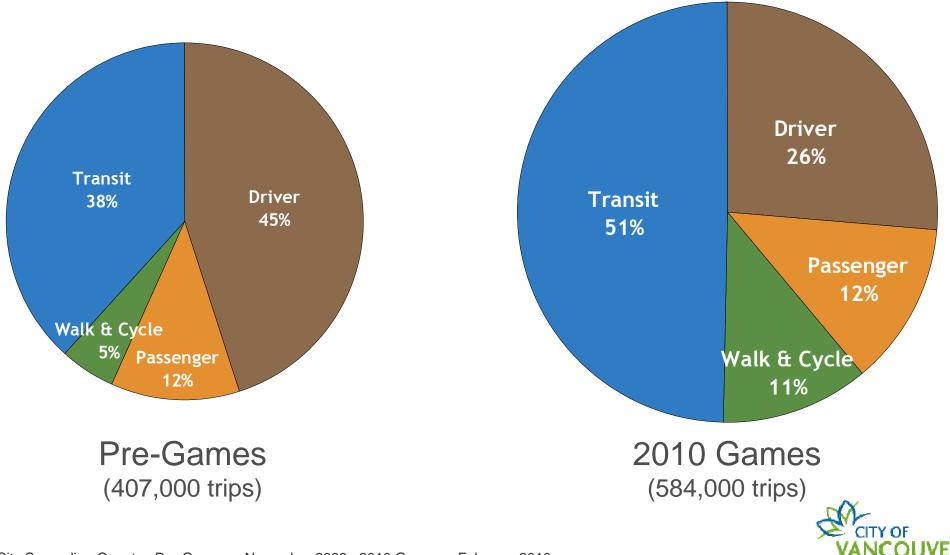


Single Occupancy Vehicle (SOV) trips to & from Downtown decreased by 41% during peak periods.



Based on average of AM peak inbound (7 to 9 AM) and PM peak outbound (4 to 6 PM) Source: City Screenline Counts. Pre-Games = November 2009. 2010 Games = February 2010

# Total Person Trips to Downtown (24 Hours During the Games)



# Walking & Cycling Across Downtown Screenline



Walking & Cycling across the Downtown screenline increased from 20,000 trips per day to over 65,000 trips per day



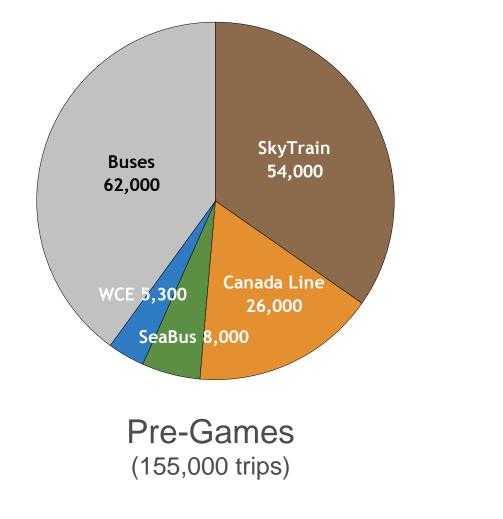
# Walking & Cycling Across False Creek Bridges

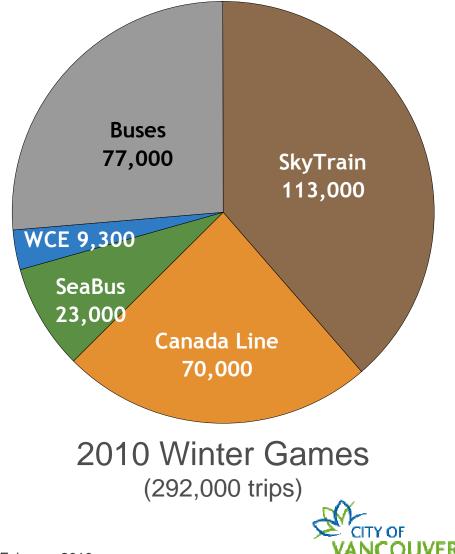


Walking & Cycling across the False Creek bridges increased from 5,000 trips per day to over 20,000 trips per day



# Increased Transit Trips During the Games



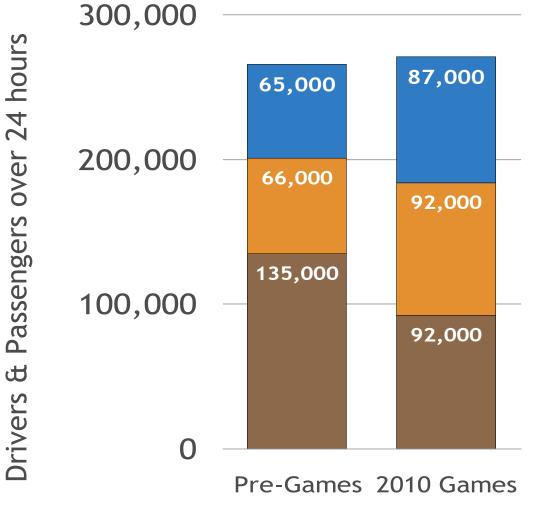


## Increased Average Vehicle Occupancy

1.5 Average Vehicle Occupancy 0.38 Average Vehicle 0.21 Occupancy 1.0 1.00 1.00 to & from Downtown 0.5 increased by 14% over 24 hours. 0.0 **Pre-Games** 2010 Games



#### Maintained Vehicular People Moving Capacity



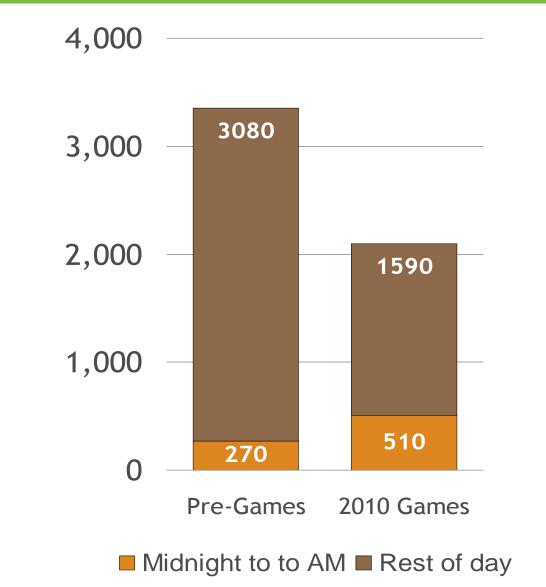
Vehicular peoplemoving capacity maintained with **20%** less road network into & out of Downtown.

SOV HOV Bus

SOV & HOV numbers include driver + passengers. Bus numbers include passengers only. Source: City Screenline Counts. Pre-Games = November 2009. 2010 Games = February 2010



## Goods Movement to Downtown

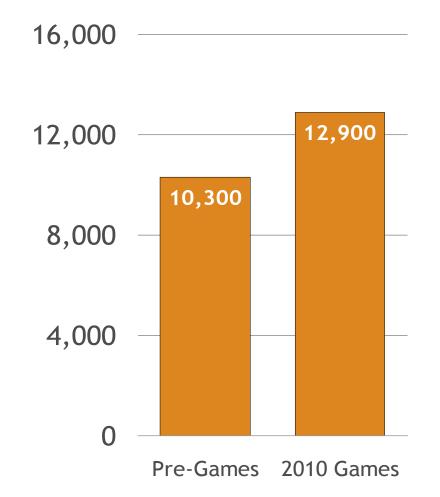


Truck volumes decreased by 37% over 24 hours...

... but increased between midnight and 6 am.



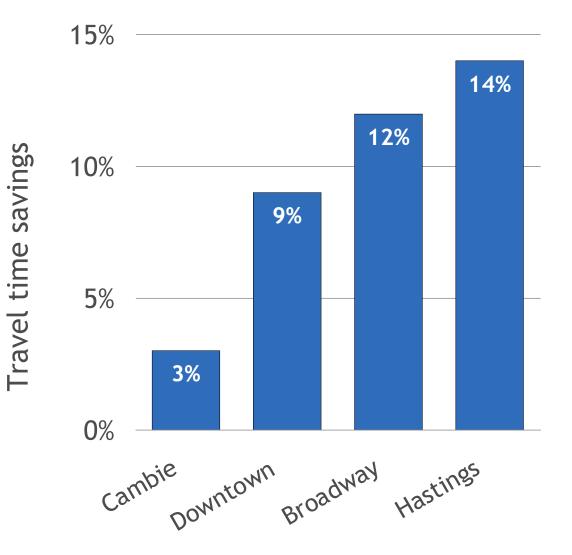
## Increased Taxis During the Games



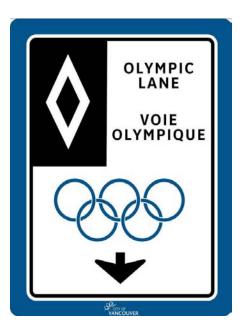
Taxis to Downtown increased **25%** over 24 hours.



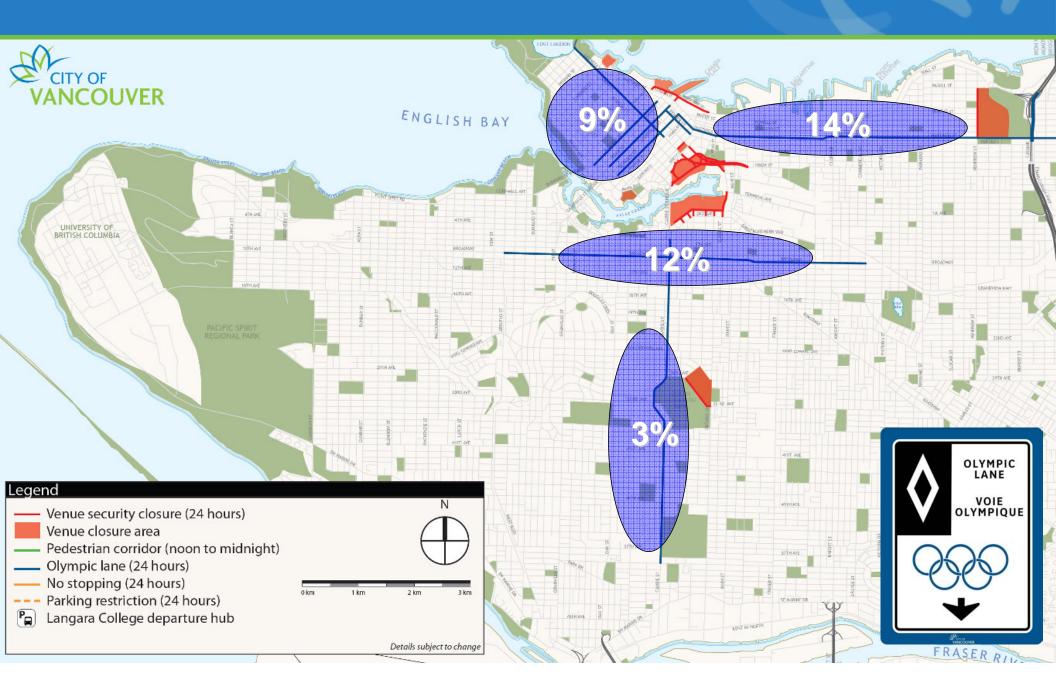
# **Olympic Lanes Travel Time Savings**



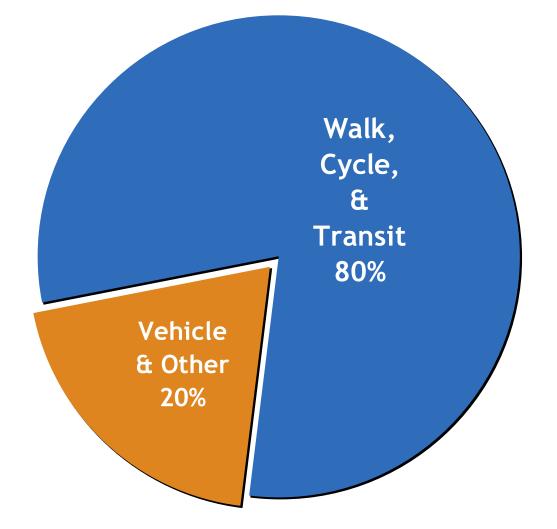
For accredited vehicles in Olympic Lanes compared to general purpose lanes. Source: City of Vancouver 2010 Winter Games Transportation Operations Centre Olympic Lanes provided a travel time savings of 3 to 14 percent.



# **Olympic Lanes Travel Time Savings**



# **Spectator Sustainable Transportation**

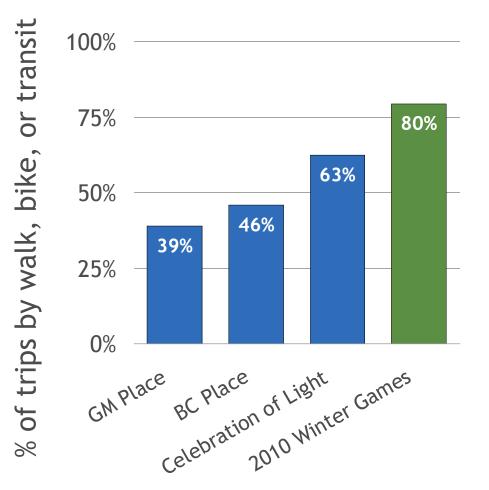


Almost **80%** of spectators at Downtown venues walked, cycled, or took transit.



Downtown venues = BC Place, GM Place, LiveCity Yaletown Source: Host City Olympic Transportation Plan Downtown Monitoring Study (UBC)

# **Spectator Sustainable Transportation**



Almost **80%** of spectators at Downtown venues walked, cycled, or took transit.



Downtown 2010 Winter Games venues = BC Place, GM Place, LiveCity Yaletown Source: Host City Olympic Transportation Plan Downtown Monitoring Study (UBC)

# **Olympic Line Streetcar Ridership**



The Olympic Line carried over half a million riders in just 60 days.

Olympic Daily Ridership: 18,600 Average Daily Ridership: 9,200

Source: City of Vancouver Host City Team



### Vibrant Downtown Pedestrian Corridors

Over 350,000 people used the Downtown Pedestrian Corridors on its busiest days H

## Secure Bicycle Parking at Venues

#### Free Bike Parking During the 2010 Winter Games

#### PROVIDED BY THE CITY OF VANCOUVER

BC Place Nelson Street at Pacific Boulevard under the Cambie Bridge

Canada Hockey Place Union Street at Quebec Street, west tennis court at Andy Livingstone Park

Pacific Coliseum Off East Hastings Street at Lillooet Street, along main entrance walkway Vancouver Olympic/ Paralympic Centre Peveril Avenue at Manitoba Street

LiveCity Downtown Beatty Street at West Pender Street

Visit the Host City website at vancouver.ca for more information.

LiveCity Yaletown Off Drake Street across from LiveCity entrance

#### Canada Line Olympic Village Station

V

VANCOUVER

Off West 6th Avenue between the Canada Line and Olympic Line Stations

Over 3,400 people used the free valet bike parking at venues and LiveCity sites.

OUVER

Source: Better Environmentally Sound Transportation for the City of Vancouver

# THANK YOU !!!

- Olympic Transportation Team Partners
  - VANOC, TransLink, Ministry of Transportation & Infrastructure, Integrated Security Unit, BC Transit, Municipality of Whistler
- Residents, Businesses, and Visitors
- Media
- City of Vancouver Host City and Transportation Staff

Walking will be the best way to get around downtown Vancouver during the 2010 Winter Games.

Know Before You Go, visit TravelSmart2010.ca.

Proud partners in Olympic and Paralympic transportation planning





## Looking forward from 2010 to 2020

The transportation **legacy** of the Host City Olympic Transportation Plan was a proven local example of a large scale travel behaviour **shift to sustainable modes**, in unprecedented and record numbers.

