EARLY HEALTH EFFECTS OF THE CENTRE CITY CYCLE TRACK PILOT NETWORK

Conference on Transport and Health
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Where’s Calgary?

http://www.meetingscalgary.com/location
THE SITUATION
Calgary bike riding?
More people are biking to work

2011: 0.9%  
2014: 1.4%

Now, 7-17% of workers commute by bike from communities with pathways or bike lanes connected to downtown

(Civic Census, 2014)
Existing bicycle demand in Centre City

- **12,500 bicycle trips/day** in and out of the Central Business District (2014; up 35% from 2006)
- 2.5% of people enter by bicycle in the a.m. peak hour

Employers already provide **locker rooms and 1,000s of private bike parking stalls**

Source: 2013 - The City of Calgary Downtown Cordon Count. The breakdown of transportation modes entering downtown from 7:15 to 8:15 a.m. on a weekday in May.
The Centre City area

140,000 workers
16,000 residents
Health care costs (Alberta)

- 44% of provincial spending (2014-2015)
- 4.1 million people, 83% urban
- 1.4 million people in the Calgary metropolitan area

Source: Government of Alberta
www.health.alberta.ca/about/health-funding.html
Transportation costs (Calgary)

- $1.1B = 23% of a $4.8B City budget (2014)
- 0.8% of the transportation budget is for on-street bicycle routes
THE PROPOSAL
More transportation choices
= a better transportation network

• Safety for all types of travel
• Good for business
• Cost effective
• Health
• Environment
• Available to all
What’s a cycle track?

A cycle track is a bike lane protected from moving cars, parked cars, and sidewalks. It can also be raised from the roadway.
Cycle tracks safety

• Nine times safer than an arterial road
• One of respondents’ most preferred route types

ajph.aphapublications.org/doi/pdf/10.2105/AJPH.2012.300762
296 km of traffic lanes in Calgary’s Centre City

5.6 km for the four pilot cycle tracks

1.9% of existing lanes are given to pilot cycle tracks
We are tracking...

Safety - pedestrians, cyclists, motorists

- collision reports
- 311 service centre calls
- mapping, trends, analysis
...we are tracking

Demographics & type of cyclists

✓ Gender
✓ Age
Design strategies

- Left Turn Signals
- Signal Timings
- Bicycle Signals
- Pavement Markings
- Signage
- Median Separation
First days
Anticipated ridership increase

- 2-4 times after one year
- Approx 20% per year for subsequent years
- Draws people from adjacent routes
Education program
Come and meet a Bicycle Ambassador

Move Together

Onward! Providing more travel choices to improve overall mobility in Calgary’s transportation system.
Cycle Track Safety Tips

Move Together

Take extra care at intersections, alleys and driveways

Find more safety tips at calgary.ca/cycletracks
THE (EARLY) OUTCOME
Stephen Avenue: walking and cycling
6 a.m. to 6 p.m.
Stephen Avenue: walking, cycling and driving after 6 p.m.

- Bike riding allowed in two directions all day
- New signs and pavement markings
More people are biking on the routes

12 Avenue West of 2 Street SW

16 Hour Two-way Bicycle Volumes (6 AM - 10 PM)

- Bicycle Volume
- Baseline
- Target
- Weekday Average
Bikes starting to outnumber cars on Stephen Avenue
A new type of person is biking

Fearless cyclists
- Cycling is a strong part of their identity.
- Generally undeterred by motor vehicles.
- Will consider cycling even in the absence of any visible bike facility.

Confident cyclists
- Cycling is a part of their identity.
- Slightly or moderately comfortable sharing the road with motor vehicles.
- Will consider cycling if the route is mostly on a bike facility.

Interested cyclists
- Do not identify as a cyclist.
- Not comfortable sharing the road with motor vehicles without a visible bike facility.
- Interested in cycling if the route is on a bike facility.

Reluctant cyclists
- Do not identify as a cyclist.
- Not comfortable sharing the road with motor vehicles without a visible bike facility.
- Not interested in cycling.

Source: The City of Calgary Cycling Strategy Research Public Telephone Survey 2011 (750 respondents)
New: women
New: children, families
12 Avenue cycle track example

• More bike trips: 190/day before; 1,000/day now
• Cost: benefit = 1 : 1.5
• Mortality risk reduction = 11%
  (Sample calculation with the WHO/Europe Health Economic Assessment Tool)
Early/anticipated outcomes

• Injury prevention
• Preventative health
  o Previous riders now ride more
  o New riders
  o More riding by women, older adults, children
• Social health
  o Independence
  o Interaction
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