

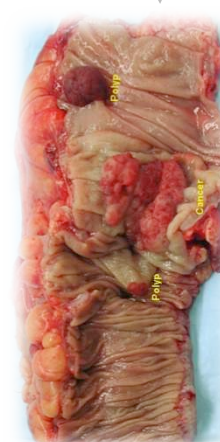
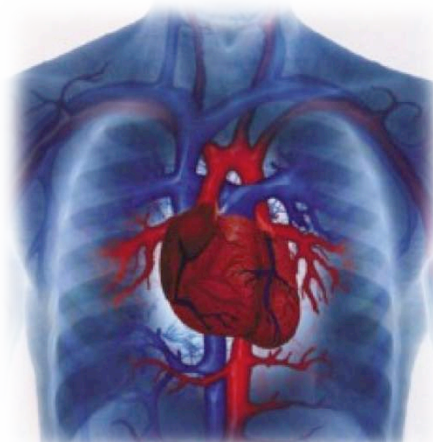
What route types best motivate cycling?



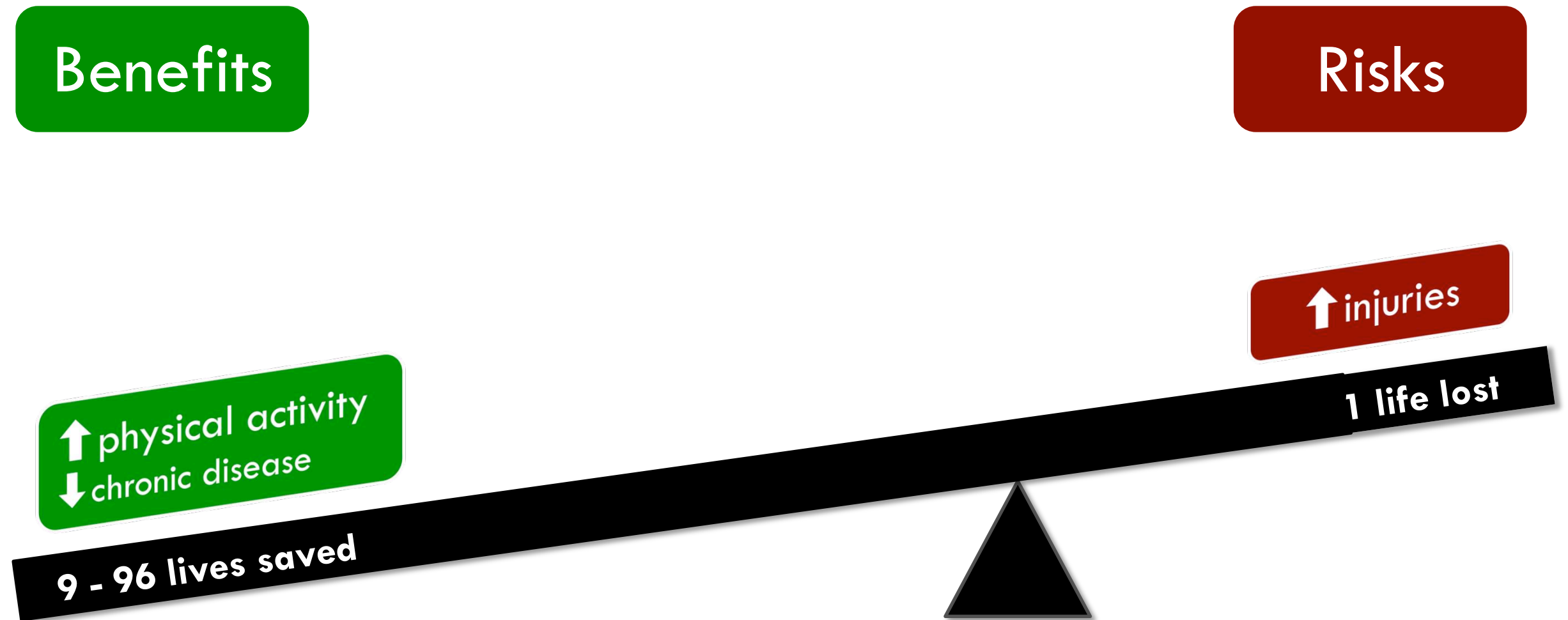
Evidence about route preferences & safety

Kay Teschke, Anne Harris, Conor Reynolds, Peter Crompton, Meghan Winters
School of Population & Public Health
The University of British Columbia

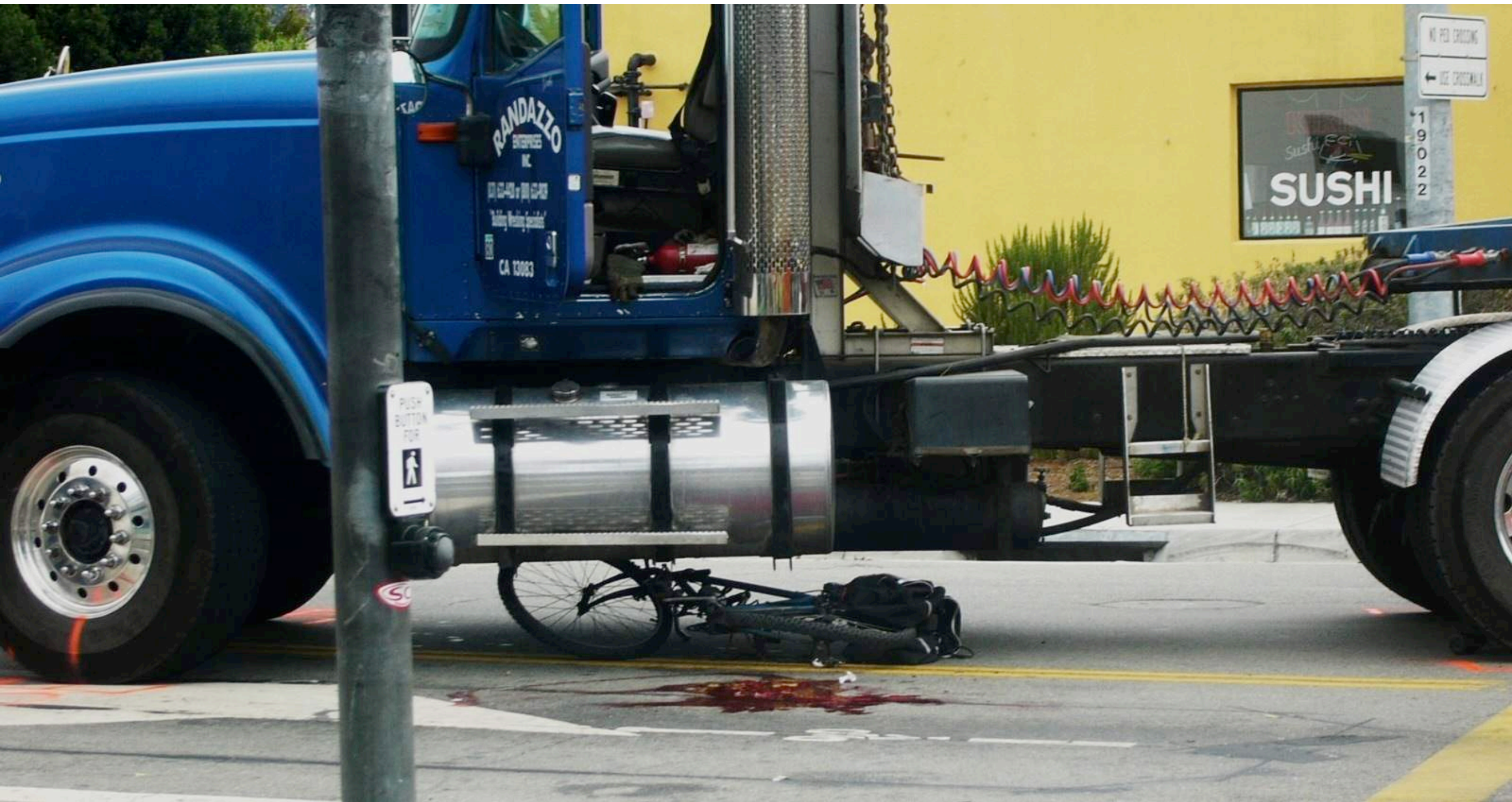




Benefits of cycling outweigh injury risk



But safety concerns deter cycling in North America



Two studies ...

“Cycling in Cities” Opinion Survey

N=1400
in Metro Vancouver

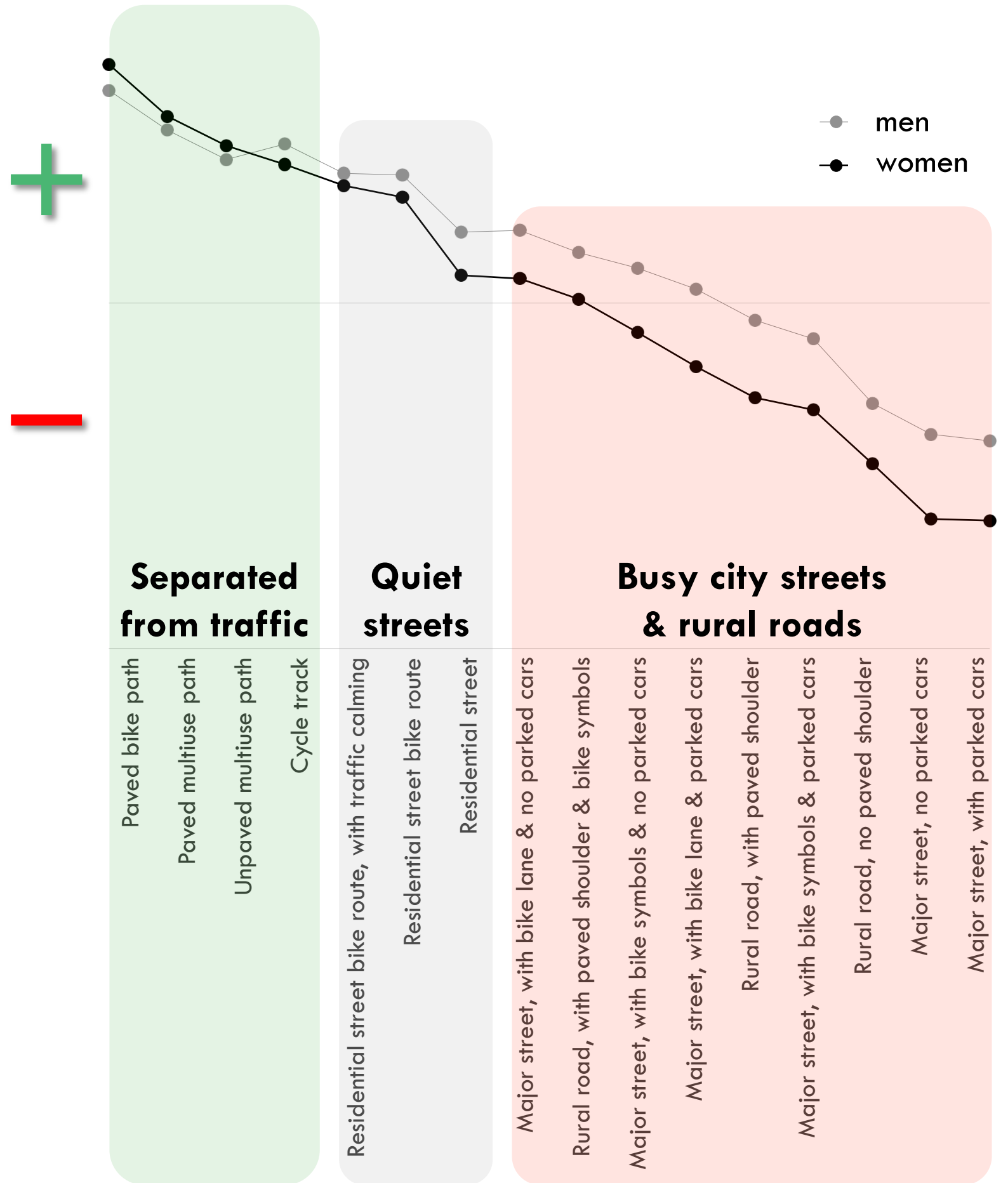
16 route types, 73 potential
motivators or deterrents

“Bicyclists’ Injuries & the Cycling Environment” Case-Crossover Study

N=690
in Vancouver & Toronto

15 route types, other route
features

Choosing to bike... route type matters



Two studies ...

“Cycling in Cities” Opinion Survey

N=1400
in Metro Vancouver

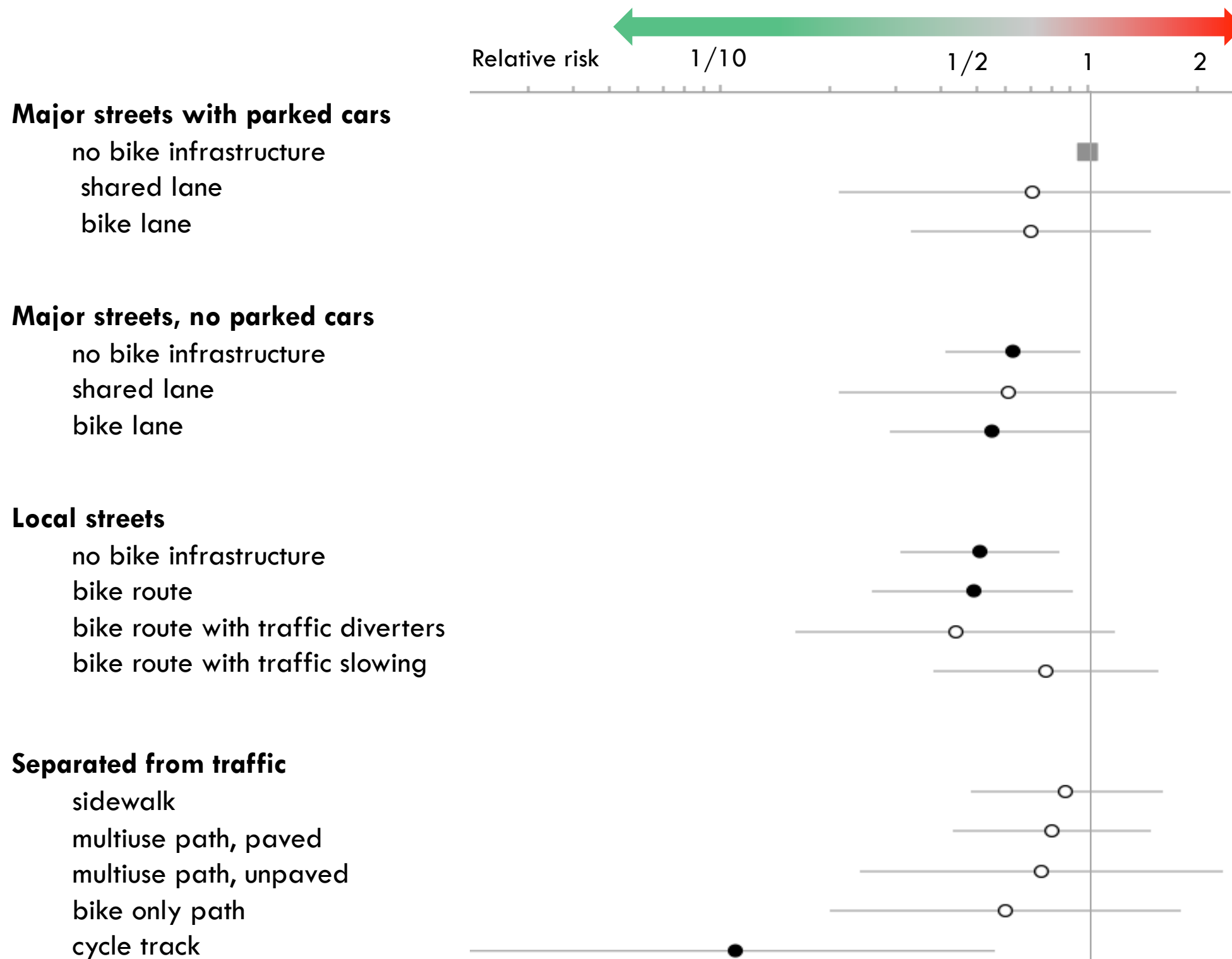
16 route types, 73 potential
motivators or deterrents

“Bicyclists’ Injuries & the Cycling Environment” Case-Crossover Study

N=690
in Vancouver & Toronto

15 route types, other route
features

Injury risk ... route type matters



Two studies ...

“Cycling in Cities” Opinion Survey

N=1400
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16 route types, 73 potential
motivators or deterrents

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N=690
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15 route types, other route
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graph TD; A["“Cycling in Cities”  
Opinion Survey  
N=1400  
in Metro Vancouver  
16 route types, 73 potential  
motivators or deterrents"] --> D["Do they agree?"]; B["“Bicyclists’ Injuries &  
the Cycling Environment”  
Case-Crossover Study  
N=690  
in Vancouver & Toronto  
15 route types, other route  
features"] --> D;
```

Do they agree?

Busy streets . . . arterials, collectors



400 to 2200 vehicles / hour
0 to 170 bikes / hour

Busy street, parked cars, no bike infrastructure
Least safe, greatest deterrent to cycling



Rural road, no bike infrastructure
Less safe, deters cycling



Photos: Jack Becker, Third Wave Cycling

Busy street, sharrows

Less safe, deters cycling



Busy street, parked cars, bike lane
Less safe, deters cycling



Busy street, no parked cars, bike lane
Safer, neutral impact on cycling



Busy street, separated bike lane

Safest, motivates cycling



Quiet streets . . . local, residential



10 to 130 vehicles / hour
0 to 110 bikes / hour

Quiet street

Safer, neutral impact on cycling



Quiet street, bike route

Safer, motivates cycling



Quiet street, bike route, with traffic diversion
Safest, motivates cycling



Quiet street, bike route, with traffic circle
Less safe, motivates cycling



Off-street . . . sidewalks, bike/multiuse paths



vehicles not counted
0 to 170 bikes / hour

Sidewalk

Less safe

Photo: San Francisco Citizen



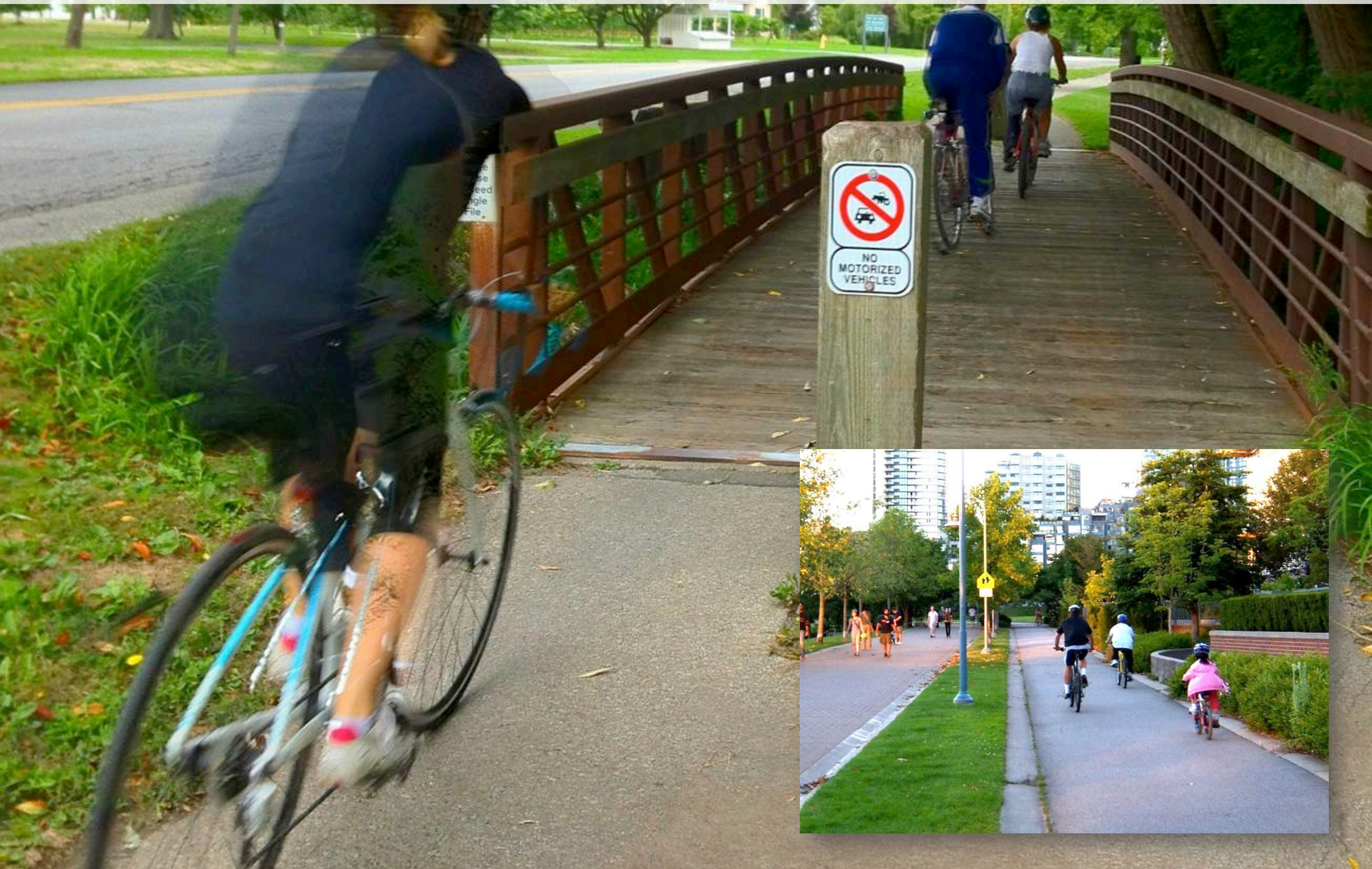
Multi-use path

Less safe, motivates cycling

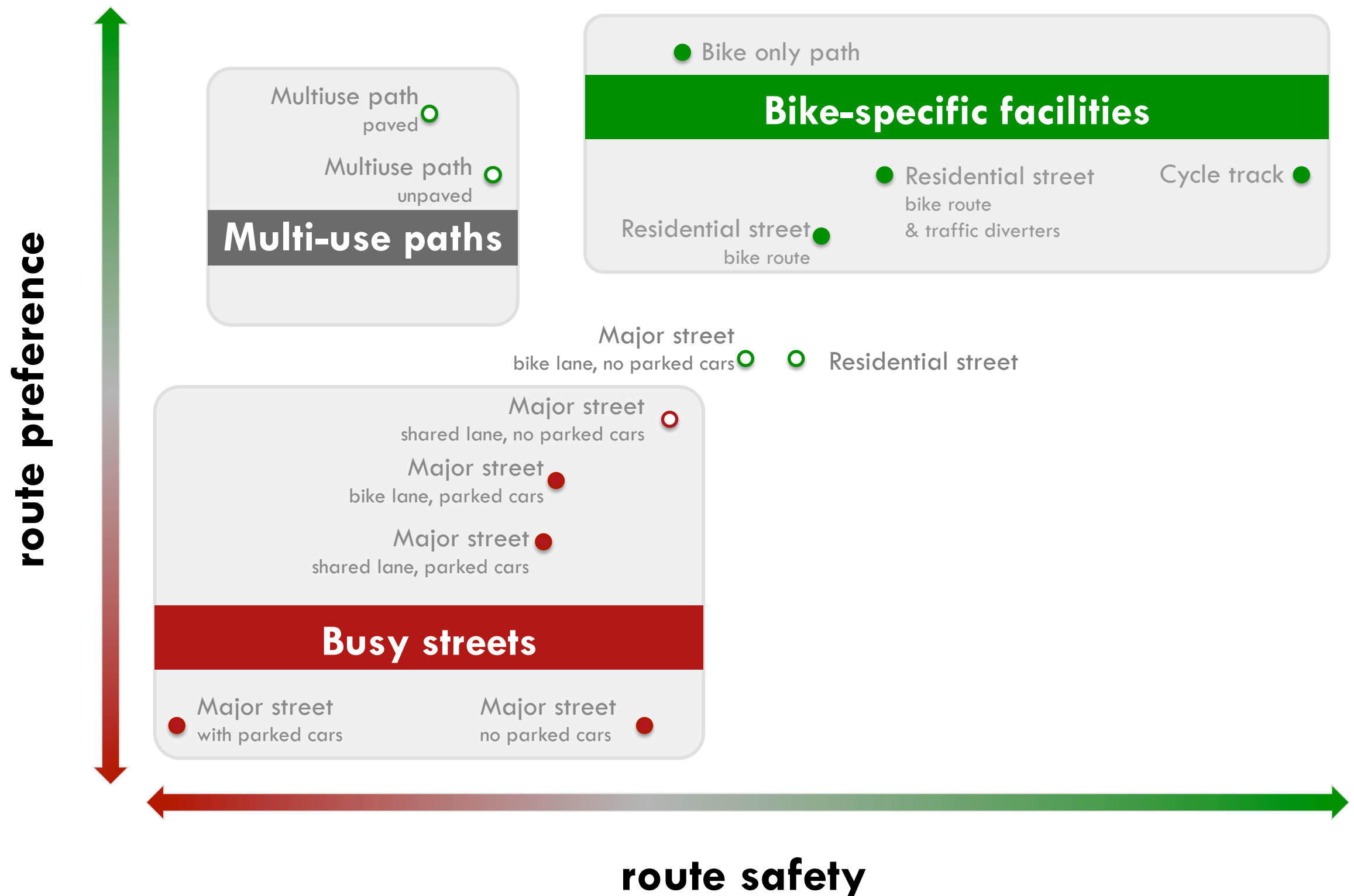


Bike path

Moderate safety, **strongest cycling motivator**



Do preferences & safety agree?



Busy streets
separated bike lanes
“cycle tracks”

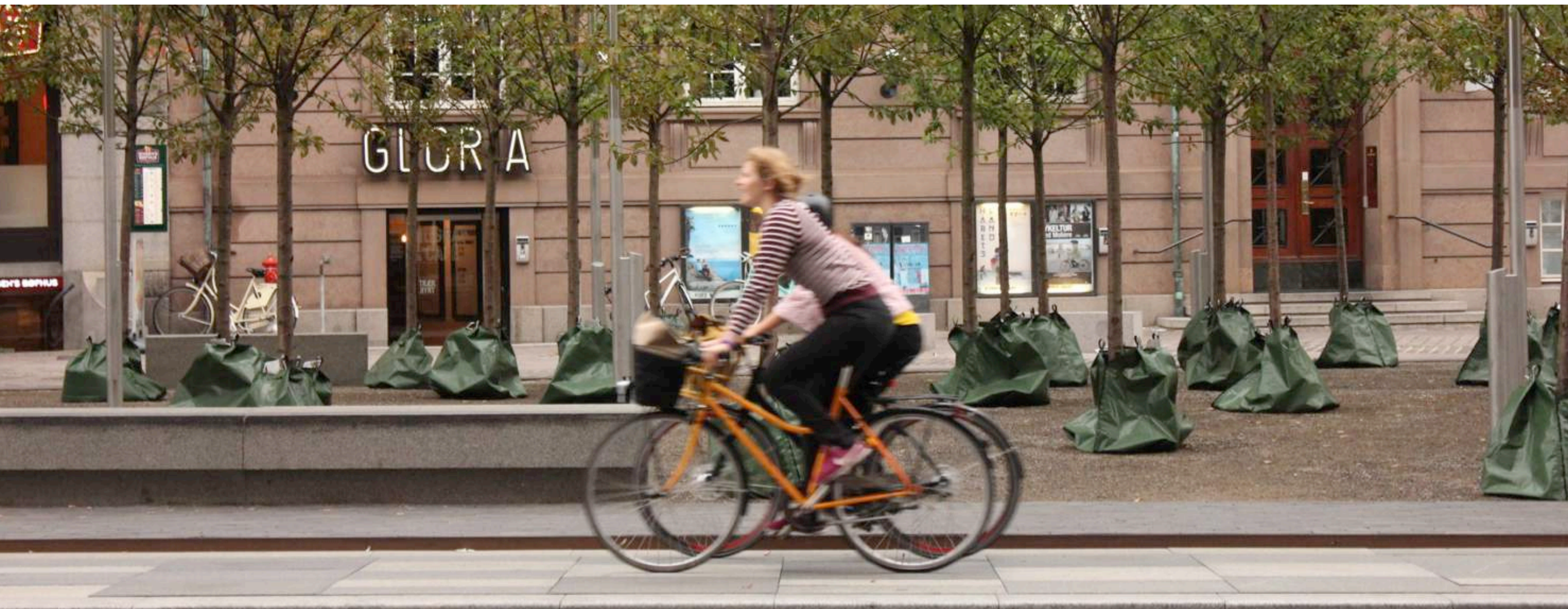


Quiet streets
bike routes with
traffic diversion



Off-street
bike only paths





cyclingincities.spph.ubc.ca

@kteschke