

# Bicycle Commuting in the Burlington Area: Influences of a Northern Climate

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# Background

**Variable weather conditions**

**+**

**Growing bicycle culture**



WHY?



# Objectives

- Provide rich understanding of individual bicycling perceptions from 24 commuters
- Develop a list of commuter issues
- Analyze nuances within environmental factors



# Previous Research

- Commuter challenges
  - Dill and Carr, 2003; Heinen et al, 2010; Pucher et al, 1999
- Weather conditions affecting bicycle commuting
  - Flynn et al, 2012



# Data and Methods

- 24 commuters
  - 4 focus groups
  - 5 in-depth interviews
  - Variety of commuters
- Qualitative analysis of guided interviews
  - Patton, 2002

# RESULTS



# General Weather

“It's very liberating, realizing the weather forecast is never right and realizing that it doesn't matter. I mean a lot of other people spend a lot of time worrying about it.”

-Women's Focus Group 2

“You're much more in touch with the weather.”

-Women's Focus Group 2



# Temperature

“I mean, okay, if it was 10 below November 1 and I was still riding, and there was no snow at all, no ice, I mean, I might think twice but, say down to 10 degrees is fine. Below 10 degrees tends to be tough because my fingers freeze up and then I don't feel safe.”

–Women's Focus Group 2

# Light Conditions

“There are enough... safe ways to get home in the dark that it really doesn't bother me very much.”

-Interview 4 (male)

“In the winter, there's not nearly as much light. A lot of the bikers I know who have been hit have been in the winter months.”

–Men's Focus Group 2

# Precipitation

“What scares me most of all [is] when I'm... in traffic [and] here's a parked car, here's the road, and that's a couple of feet between where the car's parked and the road which kind of gets dry because it's so busy, that's slushy. You know, it's in between. The two feet of neverland... is where we ride. And one false move and you're in a wheelchair.”

–Men's Focus Group 1

# Plowing and Road Salt

“For me it depends on how well the roads are plowed.... If the snow has just fallen and my tire can't really grab on to anything it just kind of pitches all over the place.”

-Women's Focus Group 1

“It gets up in the chain—the salt, all that muck—gets up in the chain which makes shifting kind of a pain.”

-Men's Focus Group 2

# Wind

“You know where the wind is from because it's always friend or foe.”

–Men's Focus Group 1



# Discussion

- Nuances may stem from extreme weather patterns
- Weather keeps some cyclists away from winter biking entirely
- Importance of safety
- Tailoring mitigation to climate
- Weather impacts are not gendered

# Next Steps



- Recommendations for policy and infrastructure development
- Safety as a priority

# Thank You!

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