

WHAT'S YOUR TYPE?

A multidimensional cyclist typology

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ABSTRACT

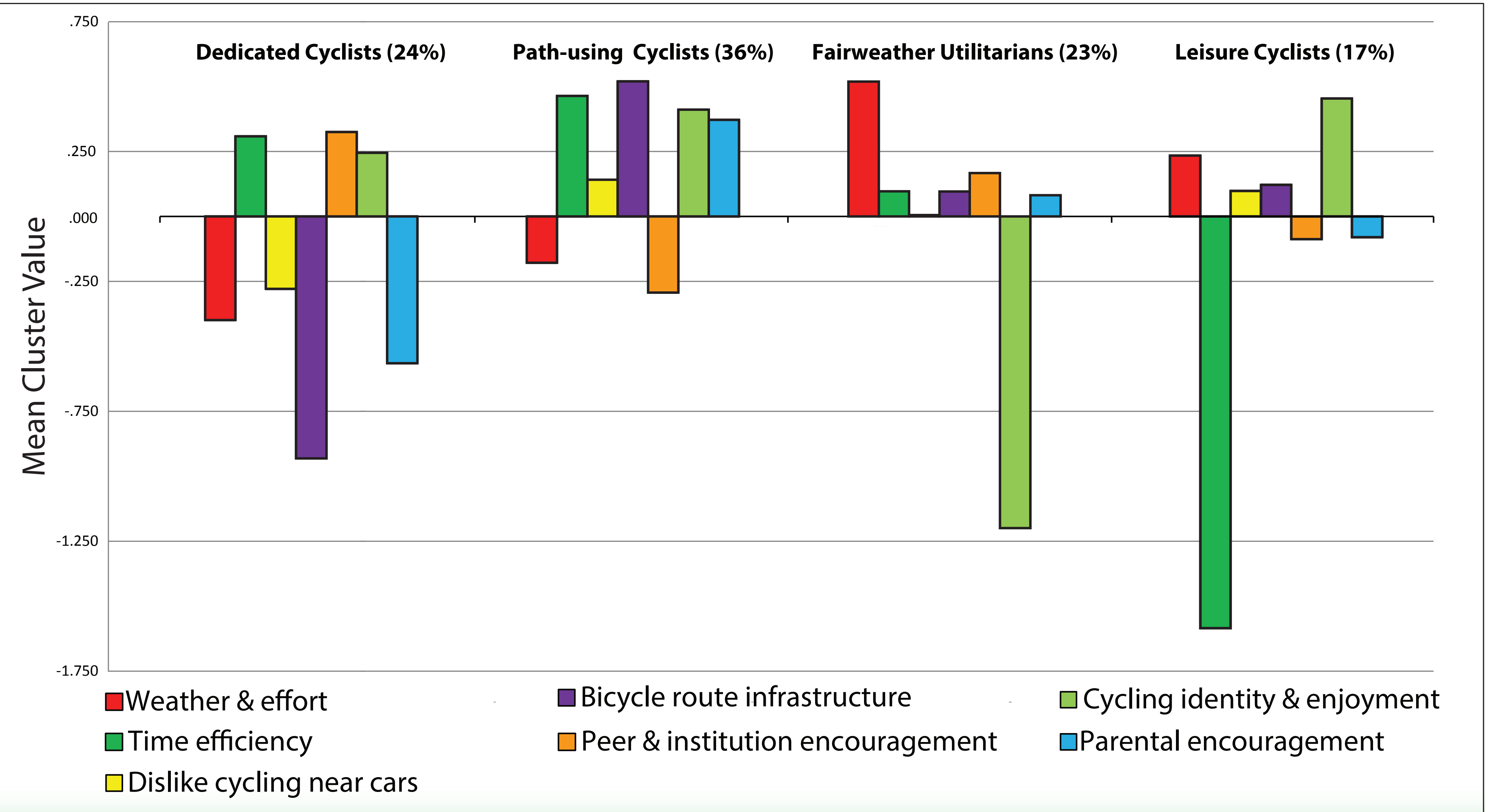
- Increasing bicycle use for **utilitarian trips** is a common city objective
- Cyclists **react heterogeneously** to interventions and infrastructure
- A bilingual **online survey** of Montreal cyclists used to analyze this diverse population
- A **multidimensional cyclist typology** based on seven factors derived from 35 proven cycling determinants
- Four **cyclists types**:
 - Dedicated cyclists
 - Path-using cyclists
 - Fairweather utilitarians
 - Leisure cyclists
- Cycling **frequencies** of each group respond differently to potential interventions
- Health** promotion and the construction of segregated bike paths are good measures to **encourage first-time** or resuming cyclists
- A well-connected and **direct route** of bike lanes as well as promoting the **speed, flexibility and convenience** of bicycle would be a **cost-efficient** way to increase frequency of utilitarian trips.

METHODOLOGY

- Bilingual online cycling behavior survey from mid-May to the end of June 2013
 - Survey advertized through media, newsletter and email list
 - 2,644 respondents, final sample of 2,004
 - 7 sections, 94 questions
- Principal component analysis with 35 variables creating 7 components
- Clustering of components to create 4 types of cyclists
- Chi-square test to further differentiate the types

ANALYSIS

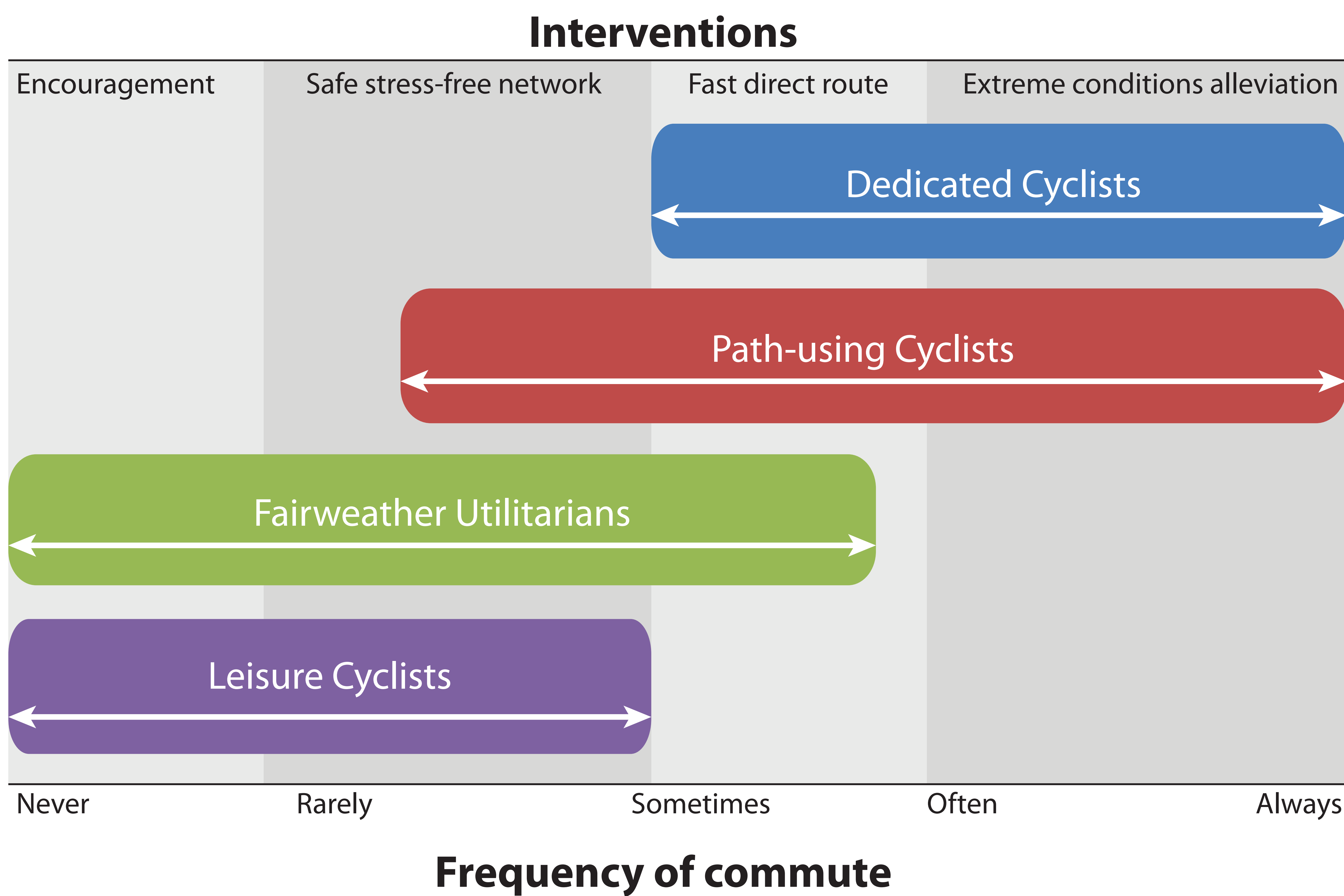
- Dedicated cyclists' (24% of the sample)**
This group is:
 - Not strongly impacted by the weather
 - Motivated by speed, predictability, and flexibility of bicycle trips
 - Influenced by peer and employer/school encouragement
 - Identifying as cyclists
 - Less keen on bicycle-specific infrastructure
 - Not encouraged by parents during childhood
- Fairweather utilitarians (23% of the sample)**
This group is:
 - Highly influenced by context
 - Strongly impacted by weather
 - Affected by cycling convenience compared to other mode
 - Preferring to use bicycle paths
 - Motivated by peers and institutional encouragement
 - Largely defined by members do not consider themselves cyclists



ANALYSIS (continued)

- Leisure cyclists (17% of the sample)**
This group is:
 - Not influenced by bicycle speed or convenience
 - Identifying as cyclists and enjoy riding
 - Influenced by weather conditions
 - Not keek on riding close to cars
 - Perfering to use infrastructure segregated from trafic
 - Cycling mostly as a hobby or family activity
- Path-using cyclists (36% of the sample)**
This group is:
 - Not so affected by weather
 - Motivated by convenience of cycling
 - Identifying as cyclists and enjoy riding
 - Preferring to use a continuous bicycle route
 - Preferring segregated by a physical barrier bike path
 - Disliking proximity to moving or parked cars
 - Was encouraged by parents to use bicycle both as a way to reach destinsations and recreational activity

CONCLUSIONS



FOUR DISTINCT CYCLIST TYPES

The four types of cyclists found in this research are distinct and give expected results when testing with control measure like frequency of utilitarian trips.They would react differently to interventions.

FIRST-TIME CYCLISTS MOTIVATIONS

Health as a motivation and the construction of segregated bike path are good measures to encourage first-time or resuming cyclists

INCREASING FREQUENCY MOTIVATIONS

A well-connected and direct route of bike lanes as well as promoting the speed, flexibility and convenience of bicycle would be a cost-efficient way to increase frequency of utilitarian trips.

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