The much anticipated marriage of cycling and transit: But how will they actually get along?

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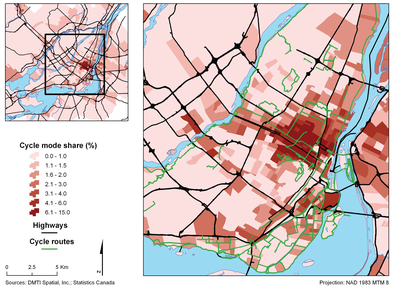
CYCLE-TRANSIT INTEGRATION: AN OPPORTUNITY TO EXPAND SUSTAINABLE TRANSPORT OPTIONS

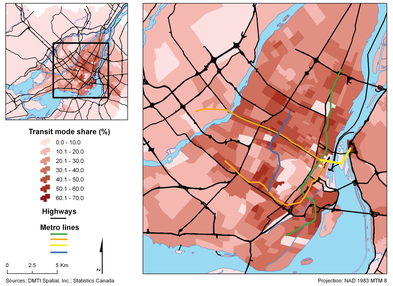
In order to better understand current and potential users of cycle-transit integration (CT) a survey was undertaken in Montreal during summer 2010. Highlights of the sample are:

- 1437 responses in an online format
- Survey outreach conducted using web media, print media, radio, physical flyers
- Cyclists were eager to participate (and are over-represented)
- Questions focused on current and potential usage, as well as user preferences
- Overall, 63 percent of respondents indicated they would be willing to combine bicycle and transportation for a trip.

CYCLING CONTEXT



TRANSIT CONTEXT



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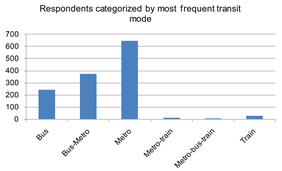
BIXI=BICYCLE + TAXI

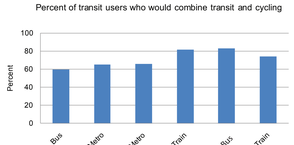
As of summer 2009, Montreal has a public bicycle system totalling over 400 docking stations and 4000 bicycles.

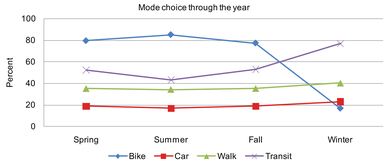
- 37 percent of respondents reported having used BIXI
- Of those, 52 percent used BIXI on a per-day basis, 46 percent had a yearly membership and 1 percent used a monthly membership
- In most cases, BIXI usage replaces trips normally made by other "green" modes, namely public transit (33%), a personal bicycle (25%) or walking (25%). 2% of BIXI trips are reported to replace car trips, while 4% add a trip which would otherwise not be made.

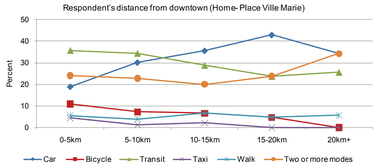
CHARACTERISTICS OF CURRENT AND POTENTIAL USAGE

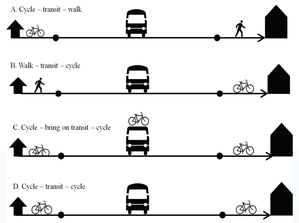
- Users of bus and metro represent majority of sample; however, train users report higher desire for cycle-transit integration
- In a winter city like Montreal, usage of transit and cycling inversely correlated
- Respondents selected most attractive integration scenario: option to bring bicycle on transit most desirable
- Bringing a bicycle on transit is more likely to be used for irregular trips; options involving parking a bicycle are more likely to be used for regular trips
- Overall, new cycle-transit trips would mostly replace current transit (34%) or car (25%) trips.
- However, the proportion of "green trips" which would be replaced by CT are higher closer to downtown

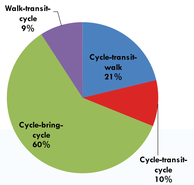


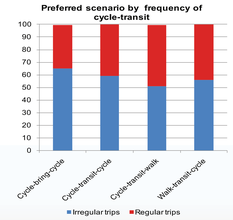










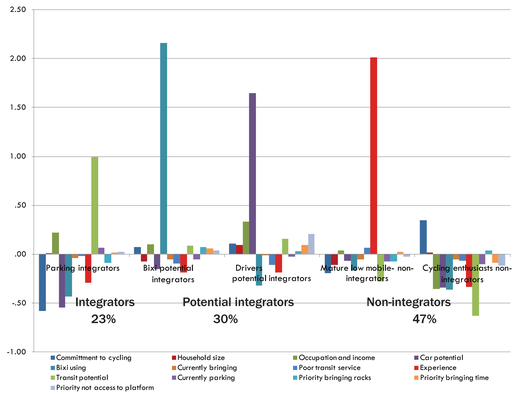


MARKET SEGMENTATION FOR CYCLE-TRANSIT INTEGRATION AND MAIN FINDINGS

FACTOR-CLUSTER ANALYSIS

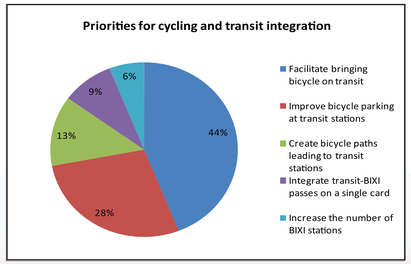
Factor-cluster analysis allows subdivision of a sample into distinct groups based on their characteristics

- Revealed three subgroups: current CT users, potential CT users and non CT users.
- Current integrators are transit users and are already parking their bicycles at transit stops
- There are two types of potential users: BIXI users and drivers. Both identified priorities related to bringing bicycle on transit vehicles
- There are two types of non-integrators: cycling enthusiasts and older respondents with poor access to transit
- Respondents not willing to integrate cycling and transit invoked most often a lack of convenience or their unwillingness to forego a cycling trip.



RESEARCH HIGHLIGHTS

- The option to bring a bicycle on transit is the most popular; however, scenarios involving parking a bicycle at one end are likely to be used more regularly.
- Measures facilitating parking at transit and those that enable bringing bicycles on board transit are recommended in tandem.
- Some transit users - particularly those using commuter rail - were most interested in CT, yet are smallest in number overall.
- Three of the five groups composing the transportation market were found to be current or potential cycling and transit users.
- A better knowledge of these groups' characteristics can help transit agencies to effectively match resources to their potential users' preferences.



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