Finding Latent Demand for Cycling
In Low Density Suburbs
Beth Savan and Trudy Ledsham, with thanks to Max Pfertner and George Liu
BECC Conference, October 2015

Based on our retrospective analysis of cycling trips using the Transportation Tomorrow survey, we asked:

1. Who cycles?
2. What characterizes cycling trips?
3. What factors are associated with higher rates of cycling?
4. Do some adjacent municipal wards show behavioural differences?
5. What factors should we consider when selecting target sites and populations for pro-cycling interventions?

We identified Eight Key Characteristics correlated with cycling mode share

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<th>Degree of Impact</th>
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<tbody>
<tr>
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<tr>
<td>Urban structure that allows short trips</td>
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Where will cycling interventions be more likely to enjoy success?

We should direct cycling interventions to:
1. The people most likely to take up cycling (those with transport needs, existing social norms and role models) in areas with:
   - Medium to high population density
   - Within 5 km of high destination density
   - Medium to high cycling service facility density
   - Relatively level terrain
   - Where we have strong community partnerships

Conclusions of Mapping Study

We will find latent demand for cycling where these factors coincide:

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Literature and Mapping Study Indicate:

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Methods

Mapping TTS data [DMG, 2011]
Cycle Trip Density
Share of Mode Share
Share of Trip mode share
Population Density
Excluding zones with less than 400 total trips (Industrial)

Plus
Bike infrastructure (City of Toronto, 2015)
Subway, LRT and Rail transit stops (TTC and GO), Metrolinx Mobility Hubs
Points of Interest
Planned Bike Hubs (Malvern Family Resource Centre/Metcalf) and "Recipe for Community" program at Scarborough Village

*Source: Mapping Cycling Behaviour in Toronto (Ledsham, Liu, Watt and Wittmann, 2013)*
Active Cycle Toronto Ward Groups

Next steps for interventions

- Demographic analysis (of newcomers likely to accept additional lifestyle change(s) if possible
- Physical inspection of barriers and integration of land use variables (access to GO stations, connectivity, streetscape aesthetics, hills)
- Identify potential partners in preferred sites, focusing on those with:
  - Internal leaders committed to cycling programming
  - Experience with analogous programs capable of adaptation to include cycling adoption
  - Familiarity with cycling skills, equipment and technical issues

Further Recommendations to build cycling mode share

- Pair cycling adoption programs with pro-cycling policy as well as with infrastructure investment
- Speed reduction, particularly in bicycle friendly areas, is a key factor in making cycling feel safe, even in the absence of protective infrastructure
- Provision of branded bike not cars for government and agency employees
- Bike Share and CargobikeShare hub installation
- Require covered bike parking and repair hubs at transit stations and employment, study and recreational destinations
- Create multi-pronged promotion activities, including conspicuous role models, cycleways, and partner with local NGOs to run bike rallies, provide secure bike parking at all government-owned, public and private facilities, health and long-term, financial and local economy benefits of cycling.

How else can we build cycling mode share in low density suburbs?

- How can advocacy organizations help here?
- What is the role of bicycle commerce in this task?
- How can women help to normalize cycling behaviour?
- Can recreational cyclists evolve into transportation cyclists?
- How can municipalities partner with community groups to focus efforts on areas with likely latent demand?

Contact

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Many thanks to
Max Pfertner, George Liu and the City of Toronto
Trudy please correct these factors as I couldn’t find the document listing the criteria for partner selection and am going from memory
Beth Savan, 9/24/2015