Bike Lanes, On-Street Parking and Business

A Study of Bloor Street in Toronto’s Bloor West Village
Study Purpose: To determine

- current merchant assumptions about travel mode of customers, and their perceptions about impact of reduced parking in order to accommodate widened sidewalks or a new bike lane
- actual modal share and consumer behaviour of visitors and residents, and their preferences for changes in street use allocation
- Preference surveys not always necessary
Bike Lanes, On-Street Parking and Business *on Bloor Street*

Source: City of Toronto, 2008

Source: modified from Google Maps
Study Findings

- 4 out 5 visitors surveyed do not usually drive
- Merchants overestimated % who drive
- >50% of merchants believed removal of 50% of parking to accommodate active transportation would increase or not change their daily number of customers
- Visitors arriving by transit, foot or bicycle visit more often and report spending more money
- 58% of visitors surveyed would prefer to see street use reallocated for active transportation
Active Transportation Infrastructure for Livable Cities

Source: City of Toronto via Transport Canada
Source: Active Transportation - Canada
Source: CBC.ca
Source: City of Winnipeg
Active Transportation Infrastructure in Toronto

- City of Toronto Bike Plan (2001)
  - Proposed 495km of bike lanes by 2010
  - Installed 112 km as of October 2009
- City of Toronto Walking Strategy (2009)
- RFP issued (now closed) for Class Environmental Assessment Study of “a new bikeway on Bloor Street and Danforth Avenue”
Implementation Challenges

- Funding and staffing
- Procedural delays
- Perceptions of importance of on-street parking
- Perceived resident resistance to change
Study Description

- Merchant and Visitor Surveys
- 10 days: July 20 through August 1, 2009
- Field site visit to estimate on-street parking and alley/boulevard parking capacity
- Data collection from TPA website about municipal parking lot (Green P) capacity
Study Location

Bloor Street from Jane St to Kennedy Ave

Source: City of Toronto, 2008
Year 2: Bloor West Village

- Ward 13
- Ave hhld income $97,091
- 55% work related trips made by automobile
- 38% work related trip by public transit
- 71% non-work related trips made by car

Source: Google Maps
Street Layout

- Sidewalk, Street Furniture, Ring Posts and Plantings
- Parking Bay
- Parking/Travel
- Travel

16.5m average curb to curb

Source: Google Maps
Transportation and Accessibility

- Jane and Runnymede stations; 7 bus routes
- Bike Lane on Runnymede; shared roadway (Bikeway 19) on Runnymede/Kennedy Ave

Source: modified from Google Maps
Parking Infrastructure

447 Green P parking spaces
~ 100 On-street parking spaces
~ 190 additional private, alley and boulevard parking spaces

Source: modified from Google Maps
Merchant Survey

- Number of customers served on weekday and weekend
- % of customers who drive
- Impact of removal of 50% of on-street parking to accommodate wider sidewalks
- Impact of removal of 50% of on-street parking to accommodate a bike lane
Visitor Survey

- Purpose of visit
- Live in neighbourhood?
- Usual mode of travel
- $ spent/month
- # visits/month
- Preference for removing 50% of on-street parking for bike lane or widened sidewalks, or no change to current state
Data Collection and Limitations

- Summer data collection; does not capture potential variability of travel modes due to weather
- Visitor surveys may be slightly biased towards non-drivers due to intercept locations
- Merchants and pedestrians were not asked identical questions
Merchants and their Customers

- 30% serve >100 customers on a weekday
- 47% serve >100 customers on a weekend
- 69% of merchants believe that >20% of their customers drive
- 31% of merchants believe <20% of their customers drive

60% merchant response rate
Impacts of Street Use Reallocation: Merchant predictions

- **Widen Sidewalks**
  - Unchanged: 41%
  - Fewer Customers: 47%
  - More Customers: 12%

- **Bike Lane**
  - Unchanged: 44%
  - Fewer Customers: 46%
  - More Customers: 10%
Visitors in Bloor West Village

- 510 surveys completed July 20-August 1, 2009
- Even distribution among intercept locations
- 70% respondents live ‘in the area’, 30% do not
88% (450 of 510) were in Bloor West Village to purchase goods or services
Visitors Habits and Behaviour

Frequency of Visits to Bloor West Village

<table>
<thead>
<tr>
<th>Visits per month</th>
<th>Number of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to once per week</td>
<td>160</td>
</tr>
<tr>
<td>2-3 times per week</td>
<td>95</td>
</tr>
<tr>
<td>3-5 times per week</td>
<td>103</td>
</tr>
<tr>
<td>Daily</td>
<td>152</td>
</tr>
</tbody>
</table>

Estimated Monthly Spending in Bloor West Village

<table>
<thead>
<tr>
<th>Visits per month</th>
<th>Number of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $25</td>
<td>82</td>
</tr>
<tr>
<td>$26-99</td>
<td>130</td>
</tr>
<tr>
<td>$100-499</td>
<td>244</td>
</tr>
<tr>
<td>More than $500</td>
<td>52</td>
</tr>
</tbody>
</table>
Who Spends and Visits the Most?

Visitors who usually do not drive are significantly more likely to visit more than 3 times per week, than those who usually drive.

Visitors who usually do not drive are significantly more likely to spend more than $100 per month, than those who usually drive.
Preferences for Street Use Reallocation: Visitors

Drivers are split 56 (no change) to 51 (change)
Preferences According to Spending

Visitors who spend more than $100 per month are significantly more likely to prefer a change in street use allocation to widen sidewalks or add a bike lane.

[Bar chart showing preferences for street use allocation for visitors spending less than $100 per month and more than $100 per month. The chart indicates that more visitors prefer to widen sidewalks or add a bike lane when spending more than $100 per month.]
### Bloor West Village vs Annex

<table>
<thead>
<tr>
<th>Neighbourhood Characteristics</th>
<th>BWV</th>
<th>Annex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical street width</td>
<td>16.5m</td>
<td>12.2m</td>
</tr>
<tr>
<td>% work and non-work trips by automobile</td>
<td>55%</td>
<td>32%</td>
</tr>
<tr>
<td></td>
<td>71%</td>
<td>45%</td>
</tr>
<tr>
<td>Household density</td>
<td>2259/km²</td>
<td>3882/km²</td>
</tr>
<tr>
<td>Average household income</td>
<td>$97,091</td>
<td>$81,301</td>
</tr>
</tbody>
</table>
Comparison with Annex Merchants

<table>
<thead>
<tr>
<th>Comparison of Annex and Bloor West Village Merchant Perceptions</th>
<th>Annex</th>
<th>Bloor West Village</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completed Surveys</td>
<td>61 (55%)</td>
<td>96 (60%)</td>
</tr>
<tr>
<td>Widen Sidewalks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase Customers</td>
<td>35%</td>
<td>13%</td>
</tr>
<tr>
<td>No Change</td>
<td>40%</td>
<td>41%</td>
</tr>
<tr>
<td>Decrease Customers</td>
<td>25%</td>
<td>46%</td>
</tr>
<tr>
<td>Bike Lane</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase Customers</td>
<td>30%</td>
<td>11%</td>
</tr>
<tr>
<td>No Change</td>
<td>44%</td>
<td>44%</td>
</tr>
<tr>
<td>Decrease Customers</td>
<td>25%</td>
<td>46%</td>
</tr>
</tbody>
</table>
## Comparison with Annex Visitors

<table>
<thead>
<tr>
<th>Comparison of Annex and Bloor West Village Visitor Survey Results</th>
<th>Annex</th>
<th>Bloor West Village</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Surveys</strong></td>
<td>538</td>
<td>510</td>
</tr>
<tr>
<td><strong>Live or Work in Area</strong></td>
<td>55%</td>
<td>70%</td>
</tr>
<tr>
<td><strong>Mode of Travel</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walk</td>
<td>46%</td>
<td>46%</td>
</tr>
<tr>
<td>Bicycle</td>
<td>12%</td>
<td>5%</td>
</tr>
<tr>
<td>Public Transit</td>
<td>32%</td>
<td>24%</td>
</tr>
<tr>
<td>Car</td>
<td>10%</td>
<td>21%</td>
</tr>
<tr>
<td><strong>Preferences in Changes to Street Use Allocation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Widen Sidewalks</td>
<td>16%</td>
<td>15%</td>
</tr>
<tr>
<td>Bike Lane</td>
<td>62%</td>
<td>43%</td>
</tr>
<tr>
<td>No Change</td>
<td>22%</td>
<td>42%</td>
</tr>
</tbody>
</table>
Merchants over-estimate % of customers who drive to their neighbourhood; most common mode of travel is walking

Majority of visitors would prefer to see a change in street use allocation in favour of widened sidewalks or a bike lane

Majority of merchants expect an increase or no change in their daily number of customers as a result of a change in street use allocation
Lessons Learned: Methodology

- Visitors and merchants have their own, unique, geographic boundaries of ‘neighbourhood’ – provide an explicit definition.
- Ask similar questions for more confident comparisons – think about what types of comparisons you want to make.
  - preference vs anticipated impacts or behaviour changes.
- Open ended questions may provide greater insight, but could require lengthy analysis.
Follow-up survey in June to find out if others are using the tools and survey design

Good potential for post-implementation research if Bloor/Danforth bike lane is installed

Complete Streets Forum – Apr 22-23 – balancing the needs of all road users
Acknowledgements

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