Extent of Changes in Pedestrian and Bicyclist Attitudes and Behaviors Directly After a Complete Streets Project in Florida

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Background

The Tampa Bay area is ranked nationally as one of the least walkable metro areas in the United States. This study focused specifically on understanding the extent of changes in attitudes and behaviors of pedestrians and bicyclists using Fletcher Avenue between Nebraska Avenue and Bruce B. Downs Boulevard directly after the completion of a Complete Streets project.

The priority group was low socio-economic status individuals residing in the Tampa Bay area:
- Majority of Fletcher users live within ½ mile of corridor
- 67% have no vehicle access
- Heavily used transit corridor

Fletcher Avenue Complete Street

- Five midblock pedestrian crossings incorporating RRFBs
- One mid-block pedestrian crossing with traffic signal
- Raised concrete pedestrian refuge islands
- Raised concrete traffic separators
- Marked bicycle lanes and wrong way bicycle signs
- Energy efficient LED street lighting & enhanced landscaping
- Lowered speed limit from 45 MPH to 35 MPH

Results

<table>
<thead>
<tr>
<th>Pedestrian and Bicyclist Behaviors</th>
<th>Observations August 2014 (n = 862)</th>
<th>Observations February 2015 (n = 1,198)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count %</td>
<td>Count %</td>
</tr>
<tr>
<td>Use Crosswalk to Cross Street</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>664 76.6%</td>
<td>871 72.7%</td>
</tr>
<tr>
<td>No</td>
<td>208 23.4%</td>
<td>327 27.3%</td>
</tr>
<tr>
<td>Follow Crosswalk Signal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>331 38.2%</td>
<td>570 47.6%</td>
</tr>
<tr>
<td>No</td>
<td>536 61.8%</td>
<td>628 52.4%</td>
</tr>
<tr>
<td>Push Crosswalk Signal Button</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>381 44.0%</td>
<td>628 51.2%</td>
</tr>
<tr>
<td>No</td>
<td>486 56.0%</td>
<td>585 48.8%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bicycle Behaviors</th>
<th>Observations August 2014 (n = 245)</th>
<th>Observations February 2015 (n = 282)</th>
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<td></td>
<td>Count %</td>
<td>Count %</td>
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</table>

Wearing Bike Helmet
- Yes 6 2.4% 13 4.6%
- No 239 97.6% 269 95.4%

Riding on Sidewalk
- Yes 217 86.0% 233 81.9%
- No 38 14.0% 51 18.1%

Riding on Street and Riding With Traffic
- Yes 16 6.5% 45 16.0%
- No 239 93.5% 237 86.0%

Perceptions of Safety Crossing Fletcher Avenue (Surveys)

Talking About Safe Walking and Biking (Interviews)

“Public outreach by walking the streets and open promotion”
“What you are doing - talking, walking, by the same people every day”
“What do you are doing. Give out safety items, vests, and lights”

Discussion

Formative research was conducted to gain a rich understanding of the target audience’s needs and wants, values, motivators and barriers, and everyday lives:
- Participant Observation
  - More than 75% crossed at a crosswalk
  - Almost half used the crosswalk improperly
- Behavioral Surveys
  - Signal taking too long to change was a barrier identified by nearly 25%
  - Almost half felt unsafe while crossing Fletcher Avenue
- In-Depth Interviews
  - Almost half felt unsafe while crossing Fletcher Avenue
  - Crosswalk location and timing was the most often identified barrier
  - Individuals wanted to learn about crosswalk safety from on-the-street ambassadors

Conclusions

Built environment improvements by themselves do not necessarily change pedestrian and bicyclist behaviors. The data collected from this research allows transportation professionals and others to gain a better understanding of the factors that influence pedestrian and bicyclist attitudes and behaviors after the completion of a Complete Streets project. Tailored educational strategies and messages can then be used to complement built environment investments to influence behavior change.

Acknowledgements

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