

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

Amy Lester, PhD, MPH
Julie Bond, MPA

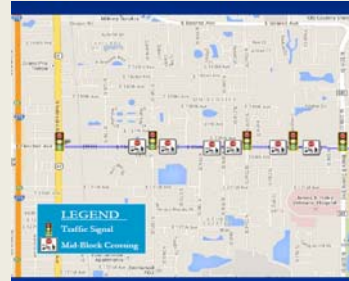
Center for Urban Transportation Research (CUTR)
University of South Florida



Project Background

Fletcher Avenue, Tampa, FL

- One of the highest pedestrian crash rates in Hillsborough County
 - 63 pedestrian accidents (2006-2010)
 - 3 fatalities, 22 incapacitating injuries
- Heavily used transit corridor
- Hillsborough County Complete Streets Project



Complete Streets

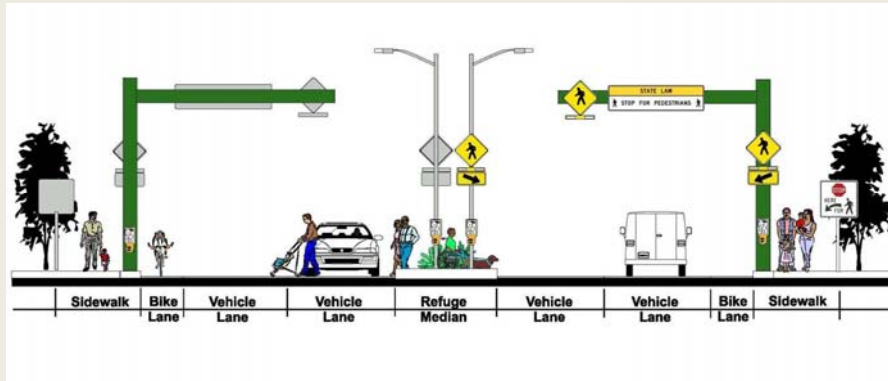
- **Complete Streets are streets for everyone.** They are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Complete Streets make it easy to cross the street, walk to shops, and bicycle to work. They allow buses to run on time and make it safe for people to walk to and from train stations.

• Source: Smart Growth America (2015) Retrieved from: www.smartgrowthamerica.org

Hillsborough County - Fletcher Avenue Complete Streets Project

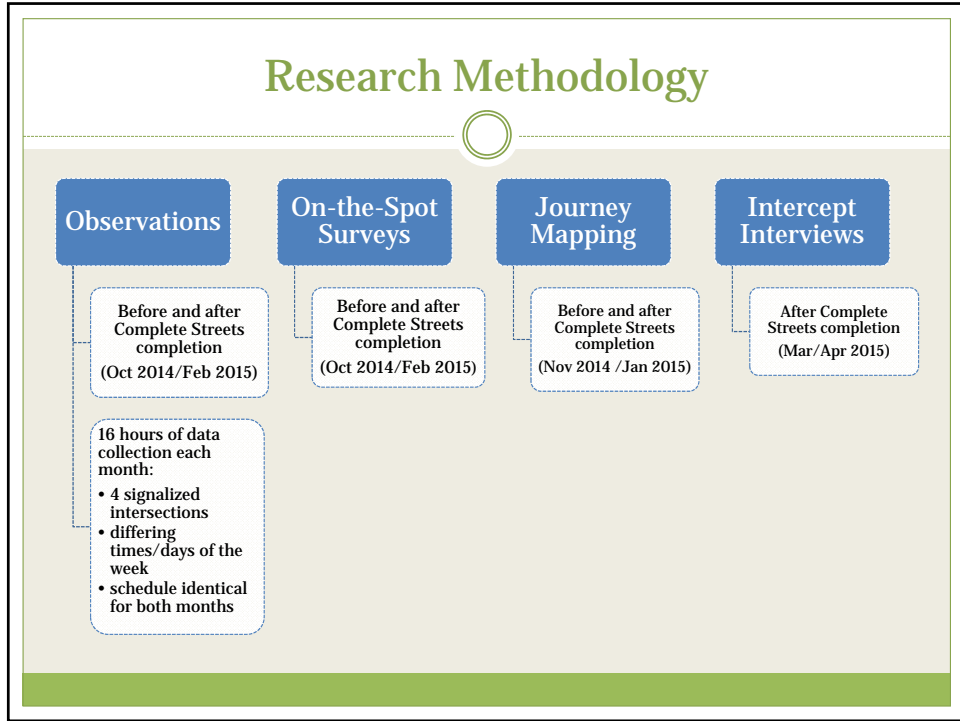
- Five midblock pedestrian crossings incorporating Rectangular Rapid Flashing Beacons (RRFBs)
- One mid-block pedestrian crossing with traffic signal
- Raised concrete pedestrian refuge islands
- Raised concrete traffic separators
- Bike lanes and wrong way signs
- Energy efficient LED street lighting
- Enhanced landscaping
- Lowered speed limit from 45 MPH to 35 MPH

Hillsborough County - Fletcher Avenue Complete Streets Project Rendering



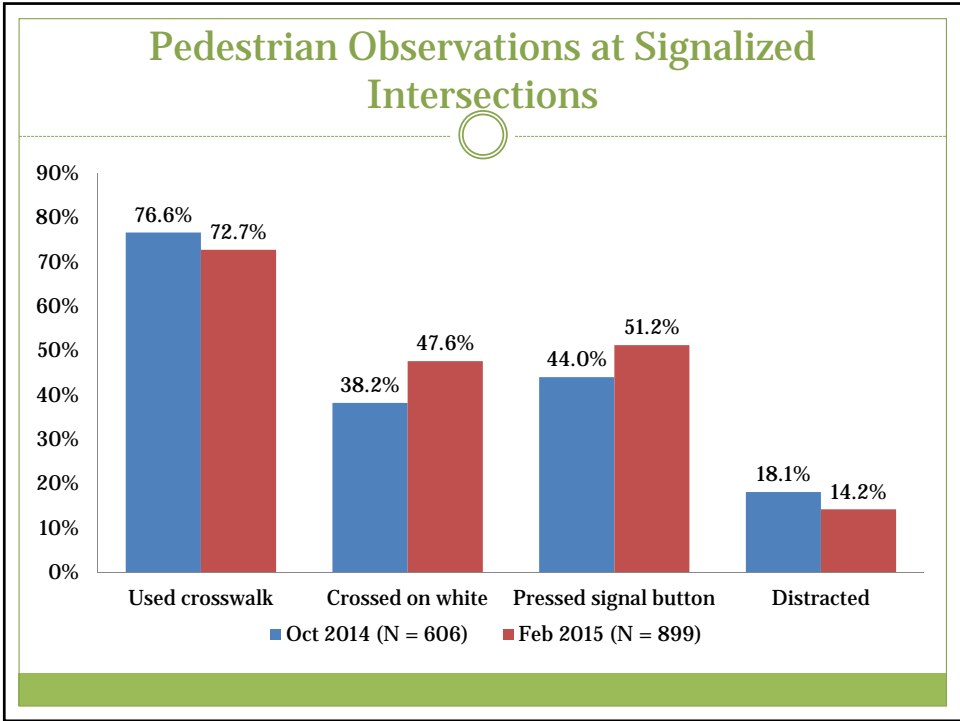
Purpose of Research

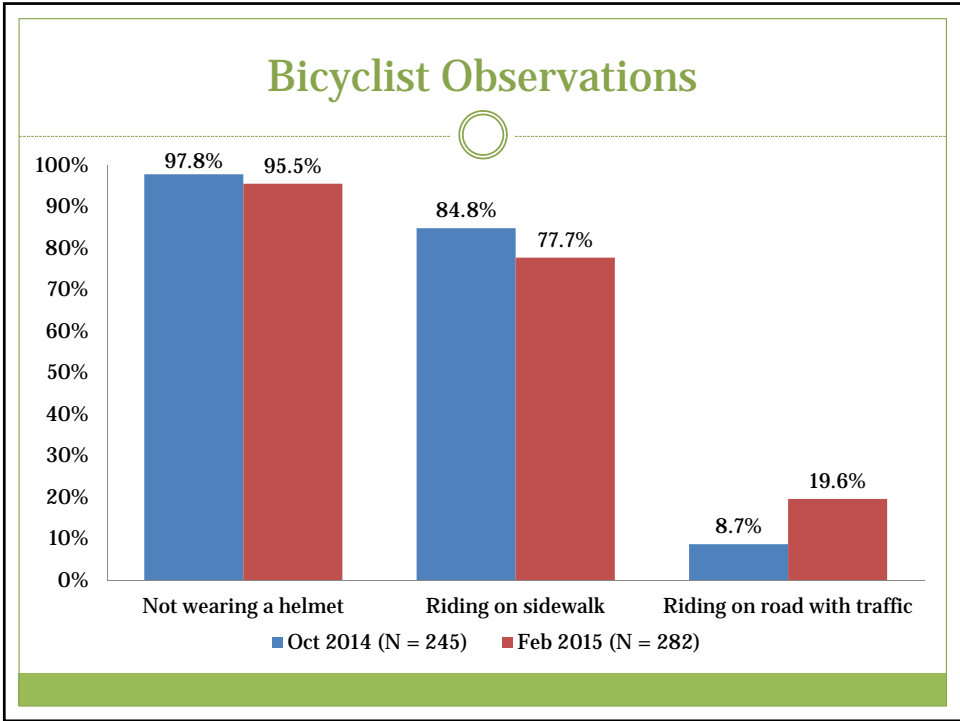
- To study perceptions, attitudes and behaviors of walking, biking and safety along Fletcher Avenue
- To see if attitudes and behaviors changed directly after the completion of the Complete Streets Project
- To determine the most effective way to educate and encourage Fletcher Avenue users

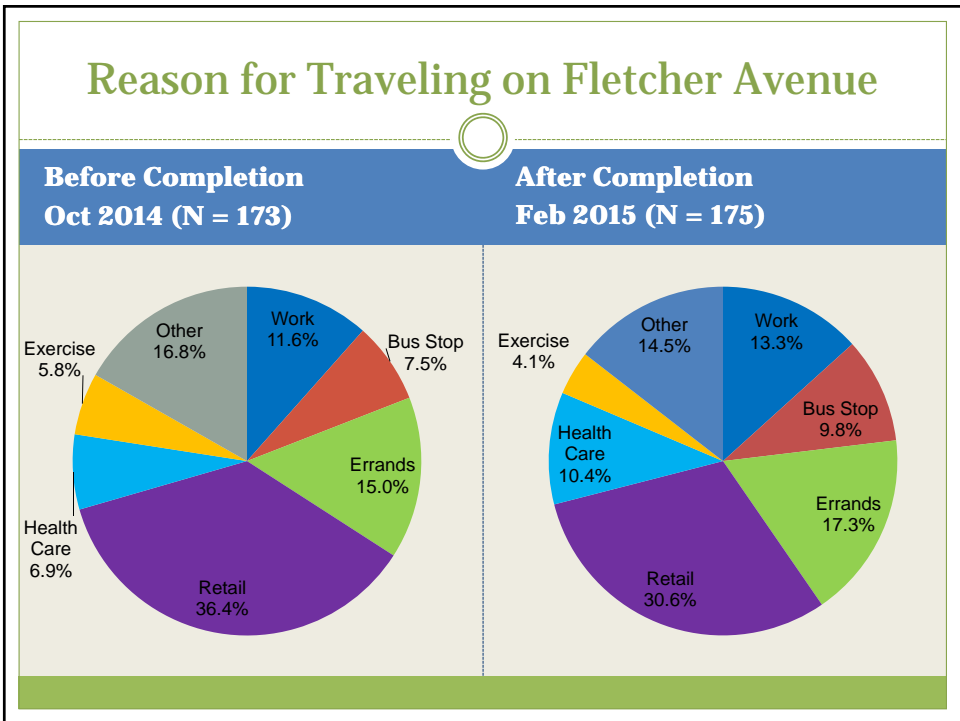
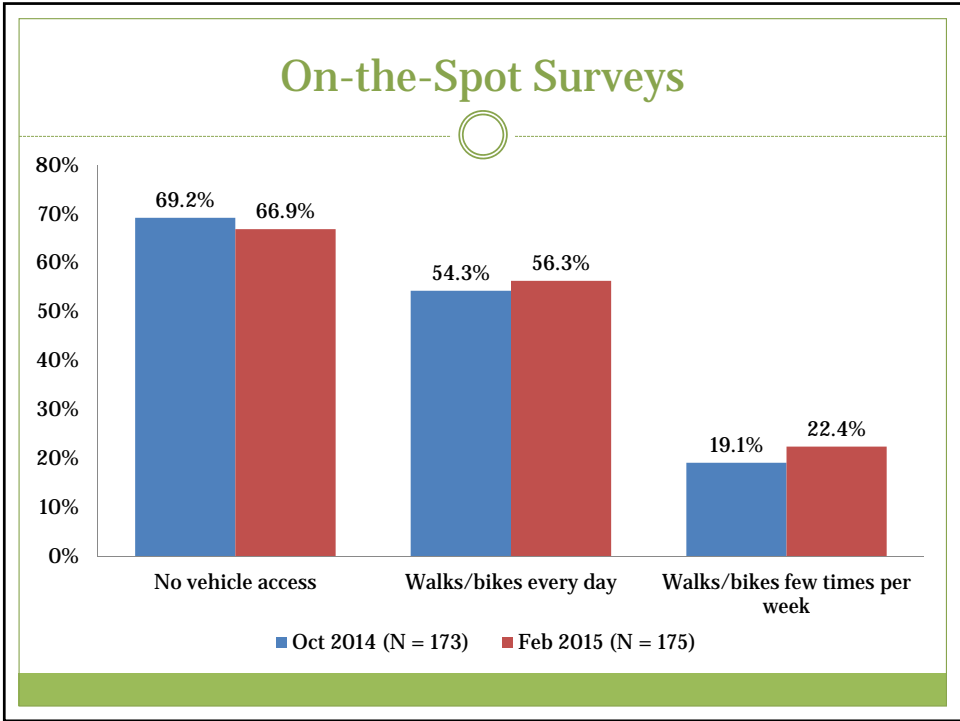


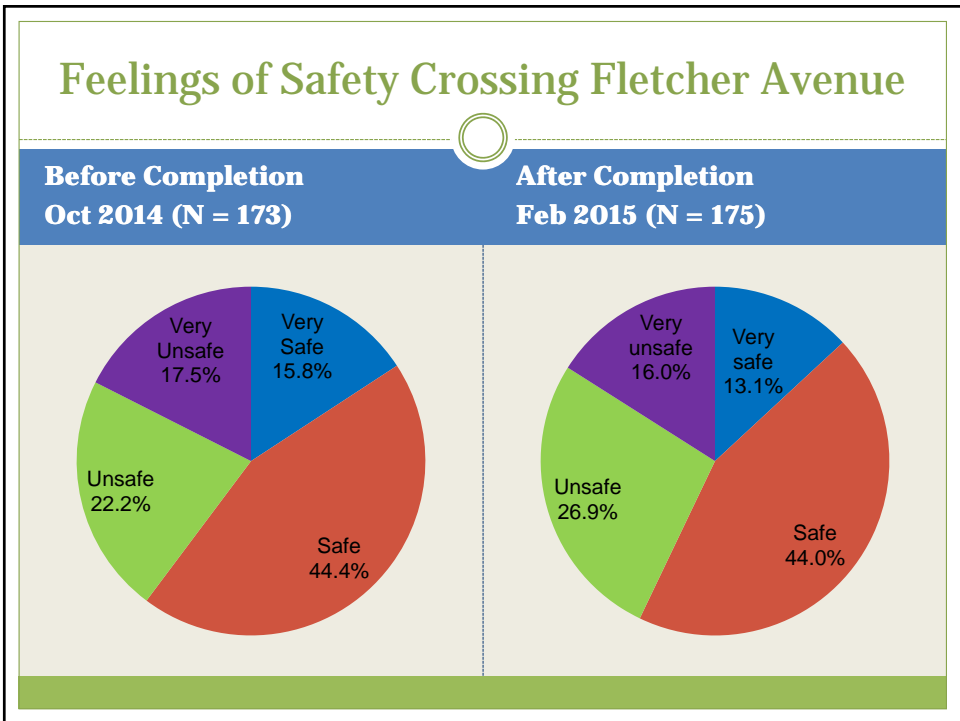
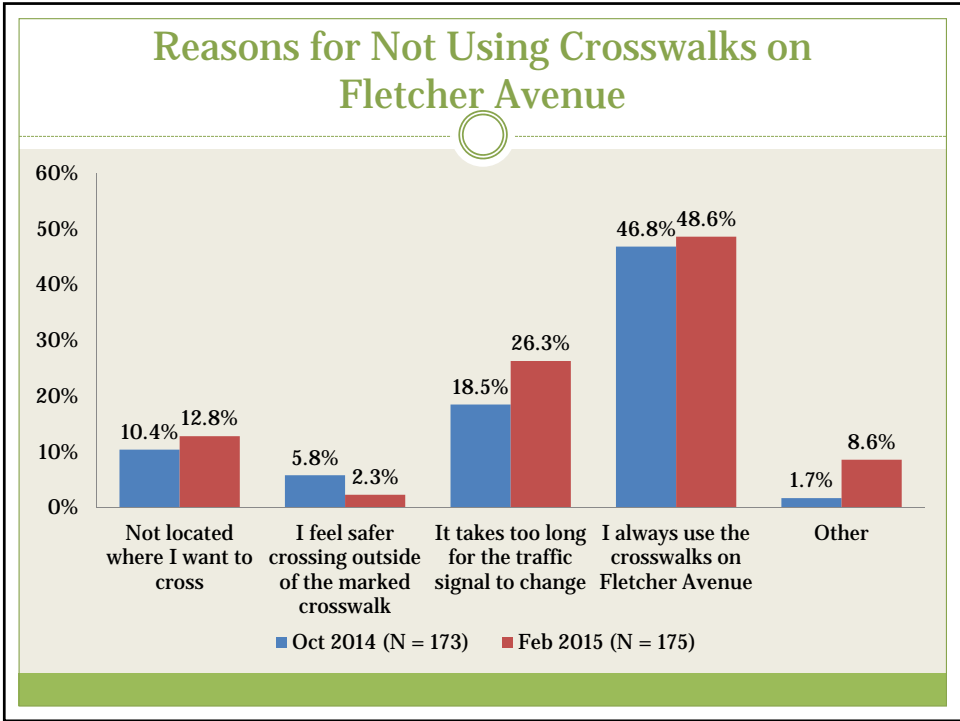
Sample Characteristics

| | Observations Aug 2014 (n = 867) | | Observations Feb 2015 (n = 1,198) | | On-the-Spot Surveys Aug 2014 (n = 173) | | On-the-Spot Surveys Feb 2015 (n = 175) | | Intercept Interviews Mar/Apr 2015 (n = 98) | |
|--|---------------------------------------|-------|---|-------|---|-------|---|-------|---|-------|
| | Count | % | Count | % | Count | % | Count | % | Count | % |
| Mode | | | | | | | | | | |
| Pedestrian | 606 | 69.8% | 899 | 75.1% | 123 | 71.1% | 142 | 81.1% | 83 | 84.7% |
| Bicycle | 245 | 28.3% | 282 | 23.5% | 50 | 28.9% | 32 | 18.3% | 14 | 14.3% |
| Wheelchair | 16 | 1.9% | 17 | 1.4% | 0 | 0% | 1 | 0.6% | 1 | 1.0% |
| Age | | | | | | | | | | |
| | NA | | NA | | NA | | NA | | Mean 42.4 years | |
| Gender | | | | | | | | | | |
| Male | NA | | NA | | NA | | NA | | 72 | 73.5% |
| Female | | | | | | | | | 26 | 26.5% |
| Access to a Private Vehicle | | | | | | | | | | |
| Yes | NA | | NA | | 53 | 30.8% | 58 | 33.1% | 32 | 32.7% |
| No | | | | | 120 | 69.2% | 117 | 66.9% | 66 | 67.3% |
| Residence Distance from Fletcher Avenue | | | | | | | | | | |
| Within ½ mile | NA | | NA | | 81 | 47.1% | 59 | 33.9% | 58 | 59.3% |
| Greater than ½ mile | | | | | 92 | 52.9% | 116 | 66.1% | 40 | 40.7% |
| Homeless | | | | | NA | | NA | | 8 | 8.2% |





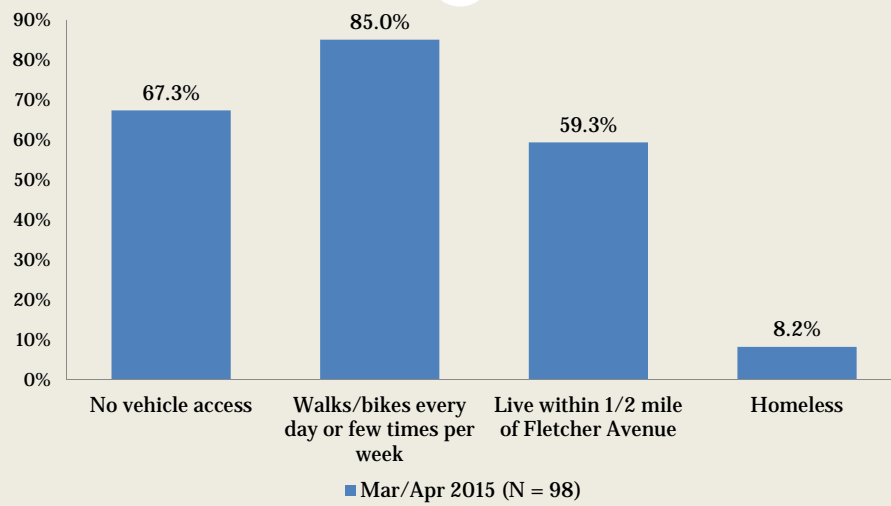


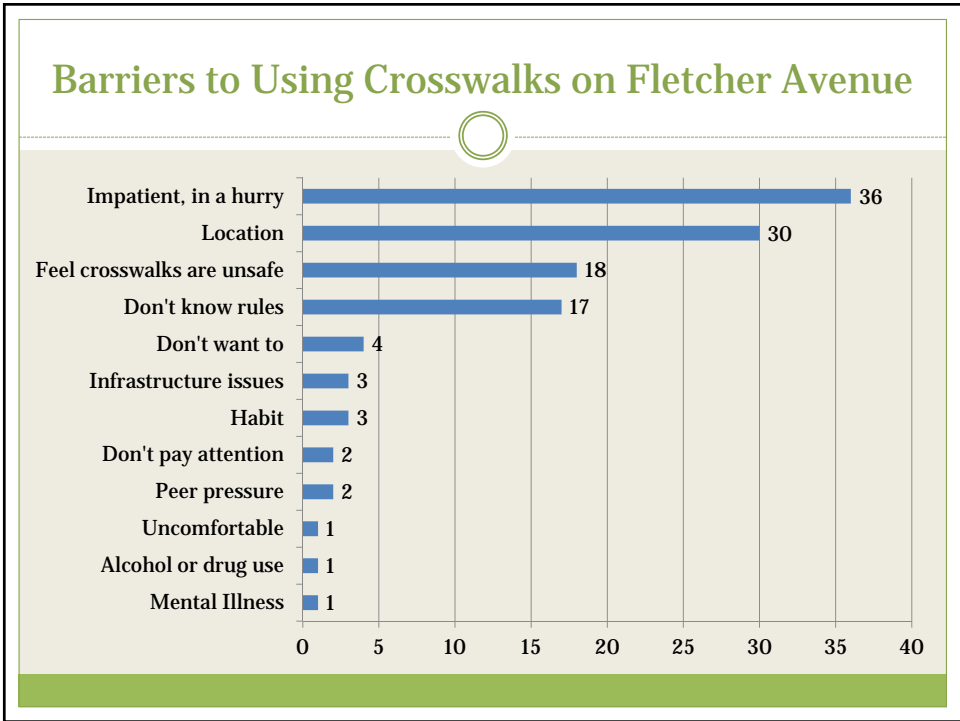
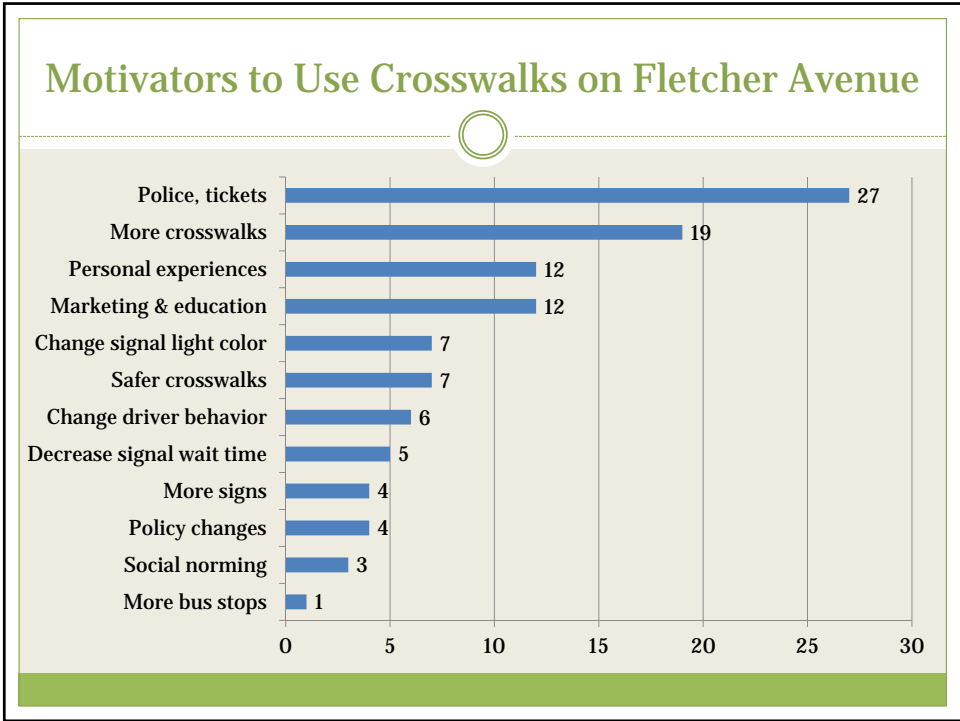


Fletcher Avenue Journey Mapping



Intercept Interviews





Barriers to Using Crosswalks on Fletcher Avenue

- “It is not always convenient to walk to the crosswalk. This is the only reason I can think of why someone would avoid safety.”
- “Lack of convenience. When trying to get to the Family Dollar and the laundry mat, there is no crosswalk nearby.”



Perceptions of Safety on Fletcher Avenue

- “I don’t feel safe, I feel cautious. You do right of way but drivers don’t care. Seventy percent of drivers don’t know [pedestrians have] right of way, are distracted, or have no signal and are turning. [Drivers] have tinted windows and you can’t make eye contact. [Drivers are] concerned that the car behind will blow the horn.”
- “I have been here a long time, and seen the difference between crosswalk and no crosswalk. Seems safer now then when there was no crosswalk.”

Ways to Stay Safe on Fletcher Avenue

- “Look before you cross. Be very careful and watch for cars because they don’t stop. Be cautious, look both ways and take a second look.”
- “Pay attention to surroundings. Be aware. Just because you are paying attention doesn’t mean others are.”



Talking About Safe Walking & Biking

- “Outreach; public outreach by walking the streets and open promotion.”
- “What you are doing – talking, walking, by the same people every day.”
- “Do what you are doing. Give out safety items, vests, and lights.”



Conclusions

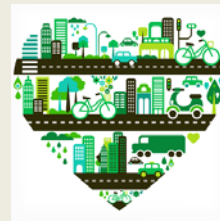


- Dangerous behaviors continue to exist after completion of the Fletcher Avenue Complete Streets project.
- To influence behavior change, it is important to completely understand the problem, and identify what the important barriers are that people are facing.
- A 5 “E” approach is critical to encourage safe driver, pedestrian and bicyclist behaviors.
- Continuing education and encouragement is important after Complete Streets are in place.

Thank You!



Amy Lester, PhD, MPH
Postdoctoral Scholar, TDM Program
Center for Urban Transportation Research
University of South Florida
alester1@cutr.usf.edu



Julie Bond, MPA
Senior Research Associate, TDM Program
Center for Urban Transportation Research
University of South Florida
bond@cutr.usf.edu