CYCLING EQUITY: Barriers to Bike Access and Use in Communities of Color

Charles T. Brown, MPA
National Association of City Transportation Officials (NACTO) Webinar
August 15, 2017
Research Purpose, Questions and Methodology

• Purpose
  – Ascertain barriers to and identify solutions to bicycle use among Blacks and Hispanics

• Research Questions
  1. Why do Blacks and Hispanics choose not to bicycle?
  2. What prevents current B-H’s from choosing to bicycle more?
  3. What can be done to encourage all of them to bicycle more often?

• Methodology/Data Collection
  – Literature Review
  – Two focus groups ($50 cash incentive)
  – Intercept surveys in 34 towns
  – Two surveys (bicyclists & non-bicyclists)
About the Respondents

Demographic Characteristics of Survey Respondents

- 2,061 intercept surveys collected
- 38% Black/African-American, 32% Hispanic/Latino, 16% White, 3% Asian, 4% Biracial
- Persons in age group 18 – 24 years old made up the largest share of respondents (21%)
- 54% percent of respondents were males
- The educational attainment of the respondents is lower than the population of New Jersey as a whole but comparable to the population residing within the study area (i.e., 34 towns)
- The respondents are poorer than the population within the study area and New Jersey as a whole
- 80% of households have two or more adults present
- 49% of households have no children present
- More than one-quarter (27%) of households reported not having bicycles present
- Respondents reported having few motor vehicles available in their households than those in the study area and NJ as a whole
MAJOR TAKEAWAY: Nearly 1 in 4 (21%) spent their formative years outside the US.
Select Results from Questions Unique to the Bicyclist Survey
MAJOR TAKEAWAYS: The majority (56%) bicycle to be HEALTHIER and to have FUN.
MAJOR TAKEAWAYS: Nearly 1 in 4 (22%) feel they can safely bike to local parks or trails from their homes.
MAJOR TAKEAWAYS: An overwhelming majority (93%) are not active in bicycle clubs/organizations.
Select Results from Questions Unique to the Bicyclist Survey
**MAJOR TAKEAWAYS:** Majority (84%) know how to bicycle, and more women and Hispanic respondents are interested in learning than their counterparts.
Non-Bicyclists – Reasons for not Cycling

MAJOR TAKEAWAYS: More than one-quarter (28%) do not own a bicycle and 11% don’t feel safe.
Non-Bicyclists – Negative Bicycle Experiences

MAJOR TAKEAWAYS: More than one-quarter reported having had a negative bicycling experience and a sizable minority stated that it limits how often they choose to cycle.
Questions Identical in Both Surveys
Survey Findings: Cost and Maintenance

MAJOR TAKEAWAYS:

• More than one-quarter (28%) of all respondents feel that a bicycle is too expensive to purchase and maintain.
MAJOR TAKEAWAYS: The majority of all respondents (54%) were not aware of CitiBike (NYC) or Indego (Philadelphia).
Survey Findings: Bike Share Programs

**MAJOR TAKEAWAYS:** Overwhelming majority (85%) stated they would use bicycle share.
MAJOR TAKEAWAYS: The majority of all respondents (60%) believe bicycling is done by the middle class; however, more than one-quarter (29%) believe it is done by the poor.
Survey Findings: Access to Political Power
Survey Findings: Access to Political Power

MAJOR TAKEAWAYS:

- Majority (56%) of all respondents believe that it is unlikely that government would do so.
Survey Findings: Government Support and Investment

MAJOR TAKEAWAYS:

• Majority (63%) of all respondents do not feel their government supports and invests in cycling.
MAJOR TAKEAWAYS:

- Nearly 8 out of every ten respondents stated they would like a bike lane on their street.
Survey Findings: Safe Bicycle Storage

MAJOR TAKEAWAYS:

- Less than 1 out of 4 non-bicyclists reported having a safe place to store their bicycles, versus 9 out of 10 bicyclists.
Survey Findings: Bicycle Theft

MAJOR TAKEAWAY:

• One-third of all respondents reported being victims of bike theft.
• 43% of males reported being victims; males reported being victimized more than TWICE as much of females.
Survey Findings: Child Safety

MAJOR TAKEAWAYS:

• The majority of all respondents (54%) do not feel that children are safe from traffic when bicycling in their neighborhoods.
Survey Findings: Professional Bicycle Training

MAJOR TAKEAWAYS:

- A majority of all participants (90%) have not received professional bicycle training.
Survey Findings: Perceived Police Harassment

MAJOR TAKEAWAYS:

- More than 1 out of every ten respondents (13%) reported being unfairly stopped by a police officer.
- Males reported being stopped at a rate 7x than that of females.
## Survey Findings: Perceived Barriers to Cycling

<table>
<thead>
<tr>
<th>Variables</th>
<th>All Respondents</th>
<th>Bicyclists</th>
<th>Non-Bicyclists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fear of traffic collision</td>
<td>58%</td>
<td>48%</td>
<td>68%</td>
</tr>
<tr>
<td>Fear of robbery/assault</td>
<td>30%</td>
<td>29%</td>
<td>30%</td>
</tr>
<tr>
<td>Fear of being profiled by the police</td>
<td>14%</td>
<td>16%</td>
<td>13%</td>
</tr>
<tr>
<td>Fear of verbal harassment</td>
<td>10%</td>
<td>8%</td>
<td>12%</td>
</tr>
<tr>
<td>Fear of being stranded with broken bicycle</td>
<td>20%</td>
<td>18%</td>
<td>22%</td>
</tr>
<tr>
<td>Cost of bicycle maintenance</td>
<td>11%</td>
<td>9%</td>
<td>13%</td>
</tr>
<tr>
<td>Pavement Condition</td>
<td>26%</td>
<td>25%</td>
<td>27%</td>
</tr>
<tr>
<td>Pregnancy/small children</td>
<td>9%</td>
<td>8%</td>
<td>9%</td>
</tr>
</tbody>
</table>

- **Fear of traffic collision**: 58% ranking 1, 48% ranking 1, 68% ranking 1
- **Fear of robbery/assault**: 30% ranking 2, 29% ranking 2, 30% ranking 2
- **Fear of being profiled by the police**: 14% ranking 5, 16% ranking 5, 13% ranking 5
- **Fear of verbal harassment**: 10% ranking 7, 8% ranking 7, 12% ranking 5
- **Fear of being stranded with broken bicycle**: 20% ranking 4, 18% ranking 4, 22% ranking 4
- **Cost of bicycle maintenance**: 11% ranking 6, 9% ranking 7, 13% ranking 5
- **Pavement Condition**: 26% ranking 3, 25% ranking 3, 27% ranking 3
- **Pregnancy/small children**: 9% ranking 7, 8% ranking 8, 9% ranking 6
Survey Findings: Perceived Barriers to Cycling

**Fear: A Silent Barrier to Bicycling in Black and Hispanic Communities**

**By Charles Brown, MPA**

Should transportation professionals be more concerned about the personal safety of cyclists in Black and Hispanic communities? At the Alan M. Voorhees Transportation Center (VTC), the fear of being robbed and assaulted while bicycling ranked as the number two barrier to bicycling, second only to the fear of a traffic collision in our most recent study of bicycle access and usage among Blacks and Hispanics in thirty-four neighborhoods throughout New Jersey (see Table 1).

While the fear of a traffic collision does not come as a surprise—New Jersey cycling deaths are on the rise and the state has designated a Pedestrian/Bicycle Focus State by the Federal Highway Administration (FHWA) --“Black and Hispanic” collectively fear of being robbed or assaulted while cycling is an eye-opener, a frightening bell of revolution. Considering the perceived difficulty in robbery and assaulting a cyclist, as opposed to a pedestrian who is moving at a much slower pace, this timely revelation has more to do with the overall ranking than the known fact that more Blacks and Hispanics reside in locations with disproportionate amounts of crime.

With only a few exceptions, the overwhelming majority of the Black and Hispanics that responded to our survey were residents in the “Major Urban” centers and the “Urban” 15 municipalities in New Jersey as classified by the New Jersey State Police. During the period of 2005-2014, 70 major urban centers recorded for 38 percent of all violent crime. Similarly, the majority of all murders occurred in the Urban 15 municipalities, along with 27 percent of all sexual assaults, 20 percent of-known sexual offenders, and 11 percent of bicycle theft.

Since “crime prevention is everybody's business,” the personal safety of Black and Hispanics cyclists are no longer be ignored or dismissed by transportation professionals as simply a police issue. Transportation professionals must be more concerned about the personal safety of bicyclists in Black and Hispanic communities, and how to fix it.

Transportation professionals are responsible for the mobility and safety needs of all road users. As evident on the ITE website, “The Institute of Transportation Engineers serves as an international educational and scientific association of transportation professionals who are responsible for meeting mobility and safety needs.” However, however, it can be argued that when it comes to the needs of all road users, transportation professionals have prioritized the mobility and safety needs of vehicles over the needs of bicyclists and pedestrians during an era in which vehicle have dominated roadways. There can be reluctance by municipal and county engineers to endorse and support complete streets policy adoption and implementation, even though doing so would be the first step towards mobility and safety for all road users, especially for traditionally underserved communities.

Crash statistics fragment the reality and reality of safety. Two often-proposed solutions are traffic safety-rich and personal safety back-up plans. This is the reason, in part, to transportation professionals' reliance on crash statistics to assess the safety of a particular roadway or corridor. The issue with this often-used sole approach to the assessment of crime statistics, transportation professionals are fragmenting the reality and reality of safety; safety is best understood as being both traffic related and personal.

Decisions cannot be made in a bubble or outside the social context and realities of these communities. If only crash statistics are used to influence design improvements, there may be a reduction in vehicle-cyclist crashes, but an increase in frustration among residents if the design leads the way parts of roadways that they seek to avoid. These residents are experts of their communities, and if their social realities are not taken more seriously during community engagement and public involvement activities, their personal safety concern will remain even present and a dangerous reality for them and their families. Furthermore, the use of crash statistics absent of crime statistics leads to funding and policy decisions that only target safety from one angle.

Personal safety concerns are universally shared yet culturally-known barriers to bicycling. Many transportation professionals have proposed creative design treatments and implemented international and national best practices to increase bicycling in Black and Hispanic communities with varying degrees of success. Whereas many minorities use bicycles to get to work, school, parks, visit friends and family, or run errands, few initiatives (e.g., Open Streets) or recommendations directly address this silent barrier to bicycling in Black and Hispanic communities (see figure 1). This is unfortunate considering that an increase in bicycling would lead to safety in numbers, less congestion, and overall reductions in air pollution. Increases in bicycling in minority communities can also lead to social change and economic impacts—the latter of which is a necessity in Black and Hispanic communities.

Transportation professionals should be more concerned about the personal safety of Black and Hispanic cyclists because they are in a position to change how the built environment either acts as a conduit or barrier to cycling activity; they are in a position to advocate for the use of crime statistics and crash statistics to ensure the best design solutions, and they have taken an active role to ensure the safety and safety of all road users and that includes bicyclists. Here are a few ways in which transportation professionals can make this change:

- Become aware of the need for pedestrian and bicycle facilities.
- Promote bicycle statistical crime statistics.
- Seek personal safety questions during public involvement meetings.
- Encourage complete streets policy adoption and implementation.
- Seek diverse transportation staff.

One way VTC has been involved in this issue is through participation in the National Active Transportation Diversity Task Force, which seeks to split equity through coalitionbuilding. The National Active Transportation Diversity Task Force is composed of a broad array of experts to engage in a national coalition walk from a local champion active travel activity to understand and assist states and to promote Complete Streets transportation in the urban context.

**References**

1. http://www.fps.sjsu.edu

**Figure 1. African-American family enjoying the Open Streets, CA, USA California (“Open Streets”).**

**Table 1. Ranking of barriers to bicycling for bicyclists and non-bicycler in Black and Hispanic Communities.**

<table>
<thead>
<tr>
<th>Variables</th>
<th>All Respondents</th>
<th>Bicyclists</th>
<th>Non-Bicyclists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fear of traffic</td>
<td>15%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Fear of crime</td>
<td>15%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Fear of being followed by stupid people</td>
<td>9%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Fear of injury</td>
<td>7%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Fear of being hit by trucks</td>
<td>5%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Discomfort</td>
<td>4%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Costs of bicycle</td>
<td>3%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Preparation to</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Programming</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

![Download Image](https://unsplash.com/photos/1234567890)

Charles Brown is an MPA student at the Alan M. Voorhees Transportation Center. His current research is bicycle usage and access in terms of biking and making it easier for people to get around.
## Survey Findings: Potential Solutions

<table>
<thead>
<tr>
<th>Variables</th>
<th>All Respondents</th>
<th>Bicyclists</th>
<th>Non-Bicyclists</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number</strong></td>
<td><strong>Ranking</strong></td>
<td><strong>Number</strong></td>
<td><strong>Ranking</strong></td>
</tr>
<tr>
<td>Bicycle lane between you and your destination</td>
<td>1071</td>
<td>1</td>
<td>517</td>
</tr>
<tr>
<td>Off-street bicycle path between you and your destination</td>
<td>1031</td>
<td>2</td>
<td>515</td>
</tr>
<tr>
<td>Secure bicycle parking at your destination</td>
<td>995</td>
<td>3</td>
<td>486</td>
</tr>
<tr>
<td>Better weather</td>
<td>970</td>
<td>4</td>
<td>480</td>
</tr>
<tr>
<td>If you did not have a car</td>
<td>963</td>
<td>5</td>
<td>459</td>
</tr>
<tr>
<td>If your destination was closer</td>
<td>949</td>
<td>6</td>
<td>440</td>
</tr>
<tr>
<td>Bicycle Events</td>
<td>871</td>
<td>7</td>
<td>460</td>
</tr>
<tr>
<td>If the bus/train was closer</td>
<td>730</td>
<td>8</td>
<td>367</td>
</tr>
<tr>
<td>If you did not have small children</td>
<td>652</td>
<td>9</td>
<td>337</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8232</strong></td>
<td><strong>4061</strong></td>
<td><strong>4171</strong></td>
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</tbody>
</table>
What’s Next?
Part II – Barriers to Bike Access & Use Among Minority Women
Walking Towards Justice Online Discussion
The Color of Law

Join Us for a Free Online Discussion
Wednesday, September 27th
2pm ET / 11 am PT

Register Today!

To provide an open platform for discussion and aid in identifying potential solutions to improve walkability for ALL, America Walks has launched a new social equity-inspired online discussion series, Walking Towards Justice. Walking Towards Justice is a discussion series that integrates literature into a discussion regarding the intersectionality of mobility, race, class, gender, and politics. Click here to learn more about the series.

The first discussion will explore the intersection of walkability and residential segregation. It will be facilitated by Charles Brown, MPA, America Walks board member and co-creator of this series, and include special guest, Richard Rothstein, author of The Color of Law: A Forgotten History of How Government Segregated America. Also joining the panel are nationally-known experts, Tamika Butler, Sahra Sulaiman, and Sonia Jimenez, JD.

Register Today!
Thank You!

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