

# Safety and related barriers to bike sharing among low-income and diverse communities



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## Overview

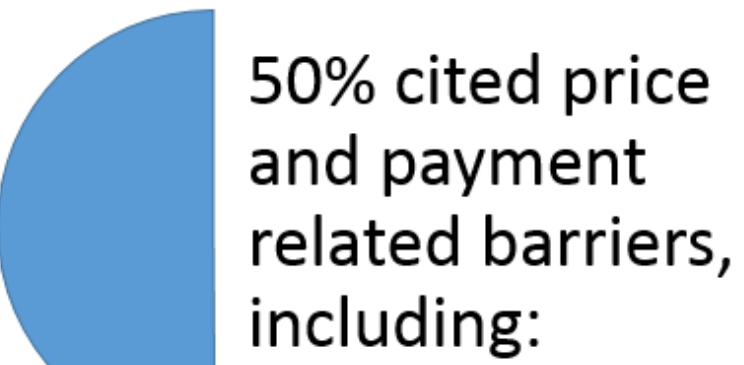
Bicycling in general and bike share specifically both offer the potential for a healthy and economical means of transportation and recreation. Both have the potential to benefit disadvantaged communities in helping make connections to transit, services and opportunities for education and employment. In 2015, the Better Bike Share Partnership (BBSP) awarded grants to agencies or organizations in six cities to fund efforts to increase the use of bike share in low-income and minority communities through efforts including placement of stations in target communities, subsidized memberships, and community outreach. Portland State University is evaluating those efforts in three cities – Philadelphia, New York, and Chicago – to understand current perceptions of bicycling and bike share, along with perceived barriers to use.

## Research Project Elements

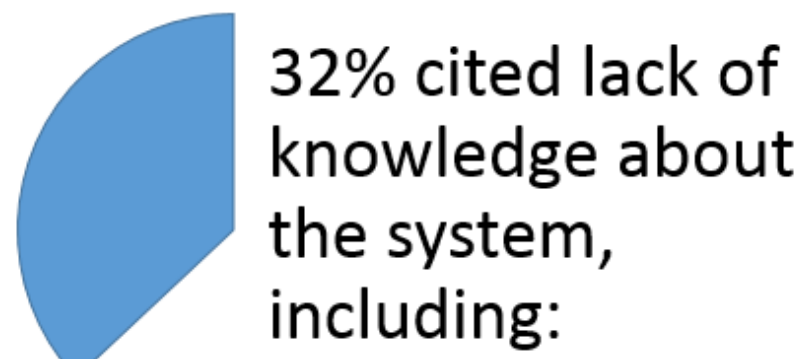
Element	Who / What	Where	Key Questions	When
Resident Surveys	Residents, whether or not they currently bike or use bike share	Areas around bike share stations in areas targeted for outreach / intervention through BBSP;	Barriers to bicycling and bike share; Awareness, perceptions use of bike share	Summer 2016
User Surveys	Bike share users	Users who were contacted by outreach efforts; Users from the target outreach areas	Value of bike share; Access to places and transit; Experience with bike share	Fall 2016
Bike Share System and Station Data	Existing system use data	Citywide, and in target areas	Bike Share use in target areas User demographics	Ongoing
Bike Share owner / operator scan	Agencies / entities planning and operating bike share systems	Nationwide	Defined equity policy? Consideration of equity in system planning and operations	Spring 2016, complete

## Findings from a survey of bike share operators

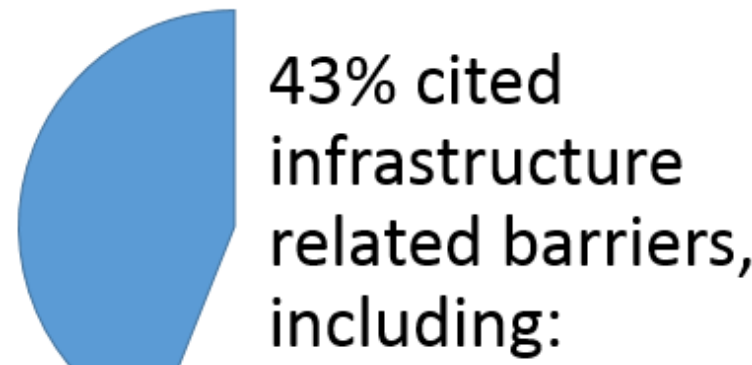
Over 80% of responding systems (44 systems) shared what they thought were key barriers to participation for underserved communities in their cities. Generally, the barriers fell into the categories of pricing and payment systems, various aspects of access, perceptions of bike share and bicycling in general, and awareness, education, and understanding of how the system works.



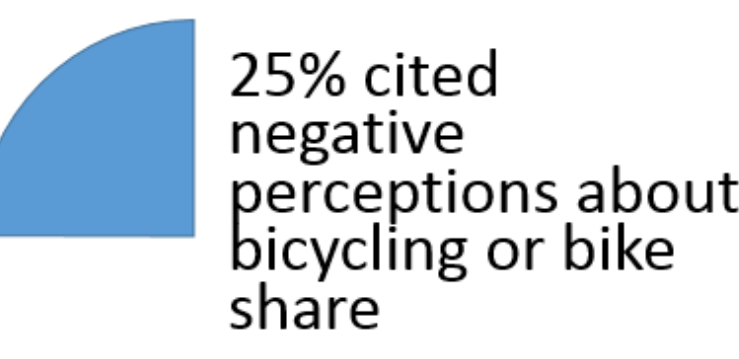
Barrier	Potential Solutions
35% cost to use the system	reduced price options
35% lack of credit or debit card	cash payment options
10% internet or smart phone access	public internet and kiosks



Barrier	Potential Solutions
23% complicated rental structure	Simplify time restrictions; Consistent fares
7% language barriers	Materials in key languages



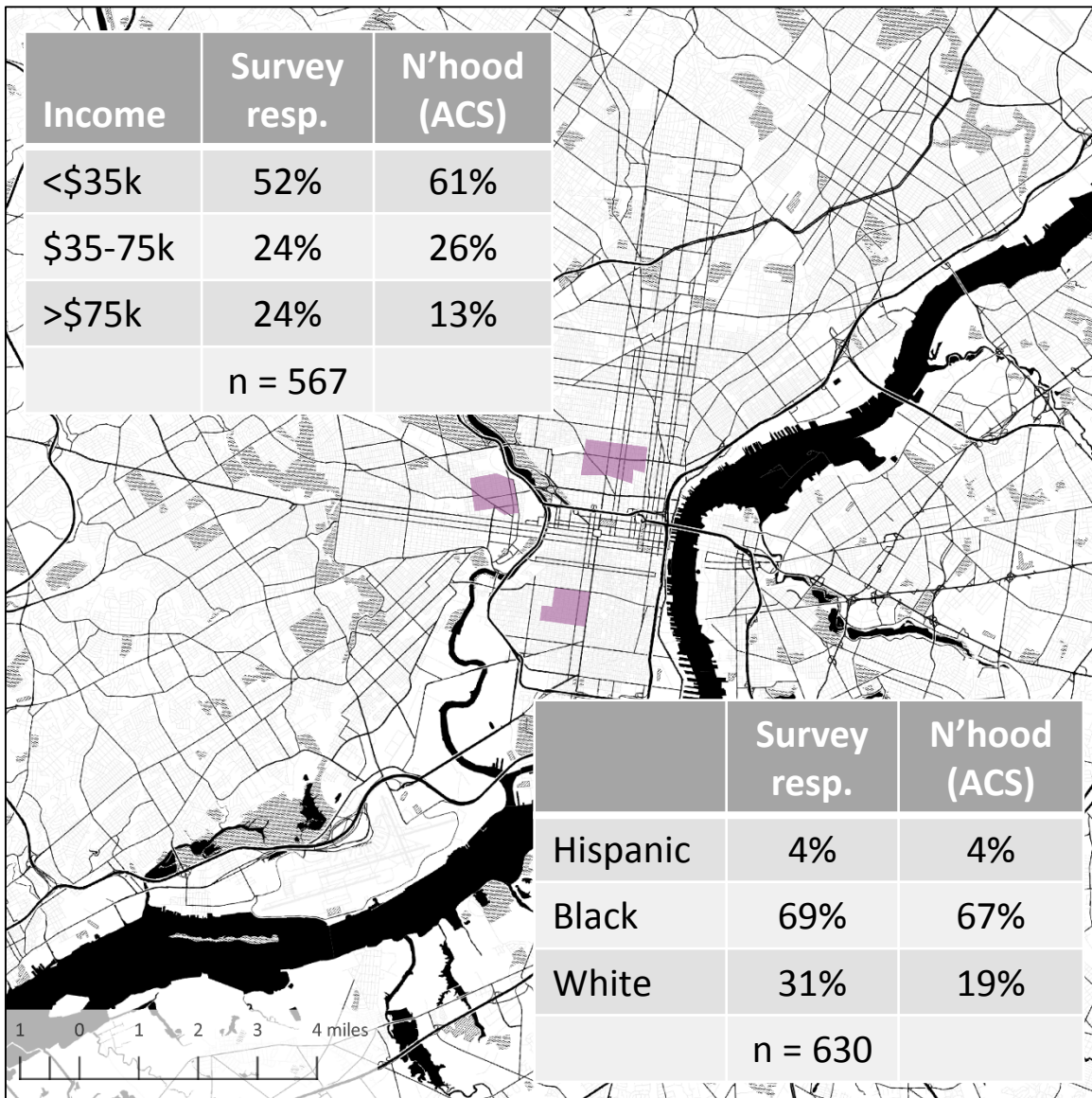
Barrier	Potential Solutions
41% Lack of stations in underserved areas	New Stations
14% Lack of safe bike networks in underserved areas	Build out low stress networks



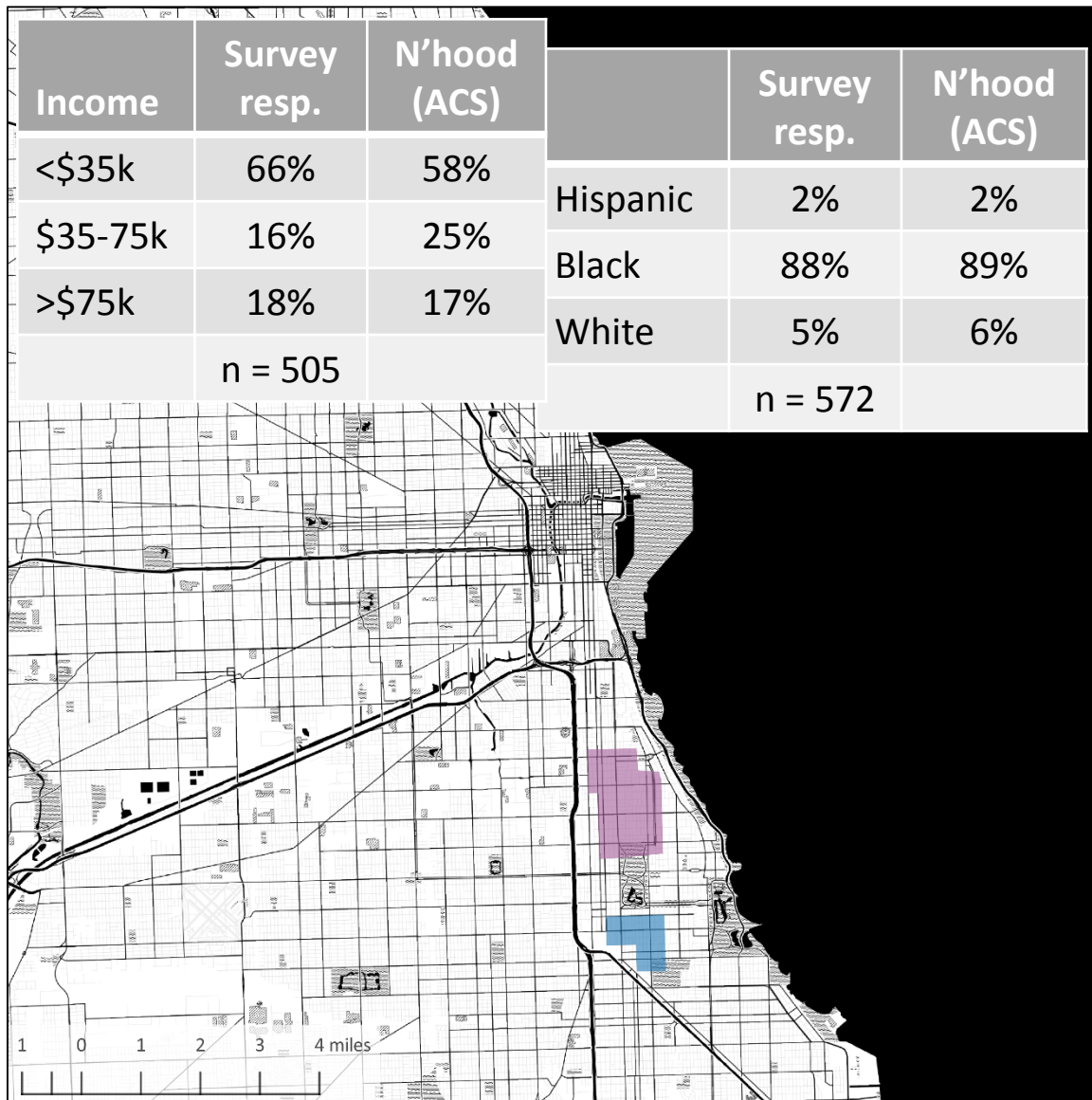
## Acknowledgments

This research is made possible by grants from the Better Bike Share Partnership (including PeopleForBikes) and the National Institute for Transportation and Communities (NITC), a national University Transportation Center, as well as the generous help of our partners in Philadelphia, Chicago, and New York City.

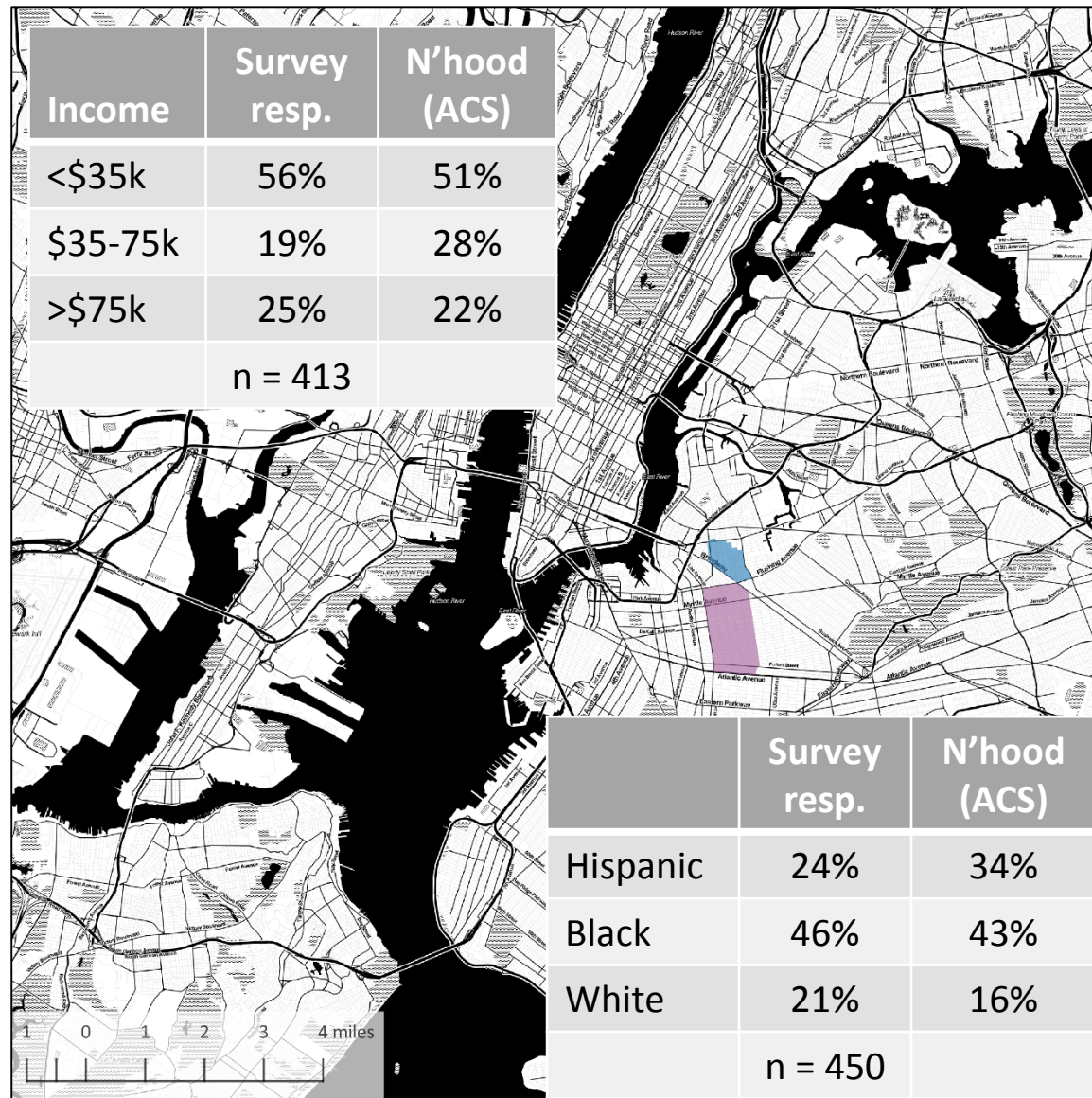
## Outreach and Research Target Areas



West, North, & South Philadelphia, Pennsylvania



Bronzeville & South Side (control) Chicago, Illinois

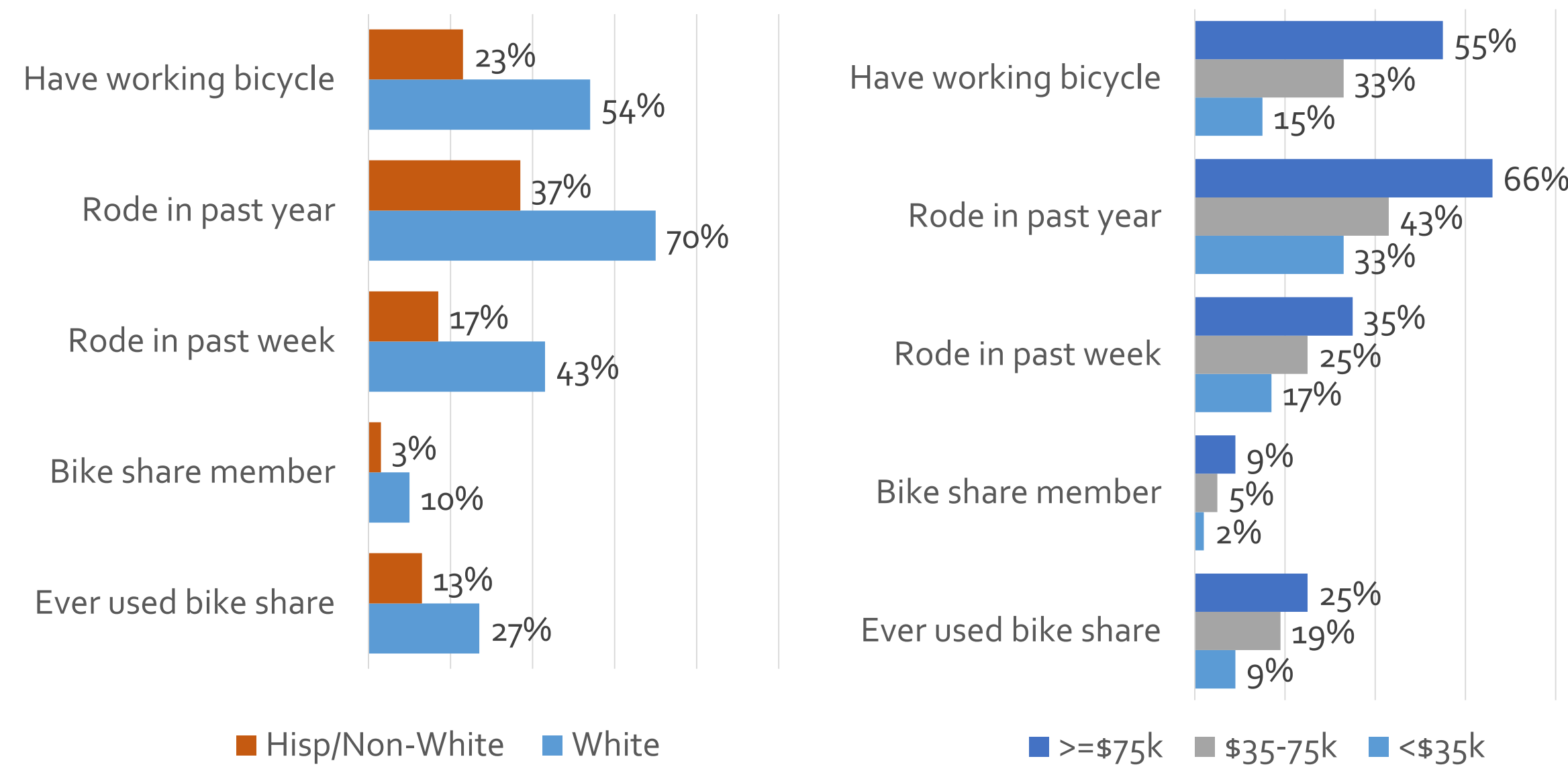


Bedford-Stuyvesant & East Williamsburg (control) Brooklyn, New York

## Key Findings from the Resident Survey

### Non-white and lower-income adults are less likely to own/ride a bike, or use bike share

*Of respondents under 65 years old who are able to ride a bike...*



### Everyone is concerned about traffic safety. Non-whites have additional safety concerns.

This is a “big barrier” to riding a bicycle (not just bike share)	White, Non-Hispanic	Hispanic and/or Non-White
Traffic makes riding a bike in my neighborhood feel dangerous	51%	51%
There might not be a safe place to leave a bike at the places I go	26%	42%
I don't have a safe place to store a bike at home	21%	30%
Riding a bike could cause me to be harassed or a victim of crime	8%	25%
Riding a bike could make me a target for police attention	2%	11%

Bold indicates significant difference between the two groups, p<.05. Excludes respondents who are not physically able to ride a bike, as well as who answered “does not apply” to questions.

### Largest barriers to bike share are financial

*Of the non-white and lowest income respondents...*

- Top 3 barriers are concerns over having to pay for the bike if something happens, high membership costs, and using a credit card
- About 1/3 don't know enough about how to use bike share
- 30% of lowest income respondents do not have a smart phone
- About one-quarter cited not being able to ride with children as a major barrier and one-fifth cited concerns about adjusting the bike to fit them
- Few cited lack of stations or complicated sign-up and rental processes as a major barrier. Only about 10% cited not wanting to support bike share or being seen on a bike share bike.

### What might make non-white and lower-income adults use bike share?

Changes that would make respondent “much more likely” to use bike share	Hispanic, non-white	significantly different from whites?	Under \$35k	significantly different from higher incomes?
Free transfers between public transportation and bike share	32%	yes, lower	35%	no
Discounted membership or use options	29%	no	31%	no
More short-term membership or pass options (e.g. daily, weekly, or monthly instead of yearly)	29%	no	32%	no
Access to free or low cost helmets and other gear	26%	yes, higher	28%	yes, > 75k
Help finding safe ways to get where I need to go	25%	no	29%	yes, both
More stations where I want to go	24%	yes, lower	28%	no
Option to sign up or buy passes at a store instead of online	24%	yes, higher	29%	yes, > both
If more of my friends or family could use Indego with me	22%	yes, higher	23%	yes, > 75k
Organized rides for people like me	20%	yes, higher	23%	yes, > both
Easier way to pay with cash	20%	yes, higher	25%	yes, > 75k
More stations close together	20%	no	23%	no
If bike share users were more diverse	12%	yes, higher	14%	yes, > 75k

Excludes respondents who are not physically able to ride a bike.