



Bike Sharing in Low-Income Communities: Perceptions and Knowledge April – October 2015

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The Philadelphia Mayor's Office of Transportation and Utilities (MOTU) and The Bicycle Coalition of Greater Philadelphia

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Executive Summary

This report summarizes findings from a study of Indego, Philadelphia's bike share program, in designated underserved communities during the first season (April 2015 – October 2015). A baseline survey (May 2015) and follow-up survey (October 2015) were conducted to better understand general transportation behaviors, and usage and perceptions of Indego across its first six months of operation in areas surrounding the targeted stations. Over 500 local residents were surveyed during each wave of the study, and thus the findings represent the experiences, behaviors and knowledge of over 1,000 Philadelphians.

Indego launched on April 23, 2015 with around 70 bike share stations. The City of Philadelphia owns Indego and has committed to making Indego accessible to and inclusive of all Philadelphians in the program's service area. These efforts are supported by the Better Bike Share Partnership (BBSP), a collaboration between the City of Philadelphia's Mayor's Office of Transportation and Utilities (MOTU), Bicycle Coalition of Greater Philadelphia (BCGP), Bicycle Transit Systems (Indego's operator), the National Association of City Transportation Officials (NACTO), and PeopleforBikes. BBSP is funded by the JPB Foundation and seeks to "develop a replicable and socially equitable bike sharing model." The primary goal of Philadelphia's BBSP effort is "to foster awareness of and support for bike sharing as a means of transportation among low-income Philadelphians." BBSP provided funding for stations in designated underserved areas and supports a suite of engagement and marketing efforts to promote bike share as a transportation and recreational option.

The Better Bike Share Partnership has engaged Temple's Institute of Survey Research to conduct a study evaluating the short-term outcomes of the project to develop a replicable and socially equitable bike sharing model, and more specifically the perceptions and knowledge of bike share in the immediate neighborhoods surrounding 17 stations in designated underserved areas. This research represents a collaboration between the Institute for Survey Research at Temple University, the City of Philadelphia, and the Bicycle Coalition of Greater Philadelphia.

Findings from this study indicate:

- > The bus is the most commonly used form of transportation for people who live and work in the areas that surround the BBSP stations.
 - o Walking was more popular amongst respondents in the follow-up than in the baseline survey.
 - A higher proportion of those identifying as African American and female reported the bus as their primary mode of transportation as compared to those identifying as White and male. The opposite was true for walking and biking.
- Follow-up respondents reported higher rates of both car and bike ownership as compared to baseline respondents.
- There was a 9% increase in reported Indego usership between baseline and follow-up respondents (14% → 23%)
 - Comparing users to non-users, users were younger, and a higher proportion were students and employed.
 - Comparing member users to walk-up users (non-members), members were younger and a higher proportion identified as White and a lower proportion as Black or African American.
- There were significant increases in reports of knowing other users, being a member, and knowing a member from baseline throughout the first season.
- There was a significant decrease in the percentage of respondents who considered bike share a form of public transportation between the initial and subsequent survey.

- Amongst the 23% of respondents who had used Indego, the most commonly cited reasons for having used it (listed in order) were: convenience/ease, transportation, social reasons, the novelty or just to try it, need for another form of transportation, exercise/recreation, and cost effectiveness.
- Amongst the 77% who had not used Indego, the most commonly cited reasons for not using it were: not having enough information about it (or having misinformation such as believing they needed a credit card), in general not feeling as though they had a need or a chance (included "no reason," "no time," not having a reason, a need, or a chance), owning their own bike, preferring other modes of transportation, the cost, having health issues or disabilities, and having safety concerns.
- > The only significant difference in terms of Indego knowledge from baseline to follow-up was related to knowledge of the cost. Otherwise, there were no significant differences at all between baseline and follow-up measures of Indego-related knowledge.
- Having Indego-related knowledge was related to being younger, identifying as White, being from higher income households, being a student and being employed.
- Respondents in the follow-up study indicated more ways (per person) of learning about Indego indicating Indego awareness is becoming more widespread throughout the city, across multiple mediums.
 - The stations/kiosks are still the most popular way people learned about Indego (86% of people in the follow-up study cited this up from 65% at baseline).
 - There were large increases in the proportion of people learning about bike share from the Newspaper/Online (6% \rightarrow 28%) and Bus Shelter Ads (3% \rightarrow 20%). Learning about bike share from social media also increased significantly: Facebook (5% \rightarrow 15%), Instagram (2% \rightarrow 8%) and Twitter (2% \rightarrow 5%).

The follow-up study resulted in the following key recommendations:

- ✓ <u>Recommendation 1:</u> Promote using Indego for exercise, recreation, and as a way to spend time with friends, especially for low-income people.
- ✓ **Recommendation 2**: Reduce the cost of the walk-up ride to be more comparable with the price of a SEPTA ride or token.
- ✓ <u>Recommendation 3</u>: Consider deliberate wording in advertising that promotes Indego as a form of public transportation. Certainly changing the terminology of "member" to "pass" will help to address that but potentially figure out a way to integrate it more with SEPTA at major transportation hubs.
- ✓ **Recommendation 4**: Ensure that the messaging placed on kiosks, bus shelter ads, and newspaper/online sources provides clear information about critical Indego information.
- ✓ <u>Recommendation 5:</u> Use the reasons that people specified for using Indego as marketing and outreach points for accessing non-users.
- ✓ **Recommendation 6:** Continue to conduct similar research with further follow-ups to monitor changes in understanding and use of Indego as well as perceptions related to utility and public transportation.

Introduction

Project Background

The goal of this study is to assess changes in the perception and knowledge of bike sharing in Philadelphia during the first "season" (April 2015 – October 2015) of the bike sharing system being in place.

On Thursday, April 23, 2015, Philadelphia launched its bike share system, called Indego. At the time of this report, Indego had approximately 600 bikes and 70+ stations. Bike share represents an inexpensive, accessible, and healthy new form of public transit. It has been six years since Washington, D.C. launched the U.S.'s first bike sharing system. Since then, several other American cities have followed suit, including New York, Boston, Denver, and Chicago. While these programs have had varied results in terms of functionality, usership, and other metrics, all have been faced with the challenge of reaching and serving low-income urban residents as well as communities of color. In other words, this public transportation system—bike sharing—is primarily being used by those who have higher incomes, and bike share members do not represent the diversity of the cities in which they operate. Bike share's benefits are not yet reaching populations who stand to gain the most from a low-cost mobility option. In 2012, the Federal Highway Administration (FHWA) released a report titled, "Bike Sharing in the United States: State of the Practice and Guide to Implementation." The report suggests that "New [bike share] programs should implement additional mechanisms to provide program access to low-income and minority communities" (p. 33). Other cities have taken steps to make bike sharing more accessible to these groups, such as offering payment plans, options for non-credit cardholders, and bilingual information; however, these steps have been taken after the bike share systems launch, and many believe that involving low-income communities and communities of color from the beginning and in the planning process is critical.

Project to Develop a Replicable and Socially Equitable Bike Sharing Model

The City of Philadelphia owns Indego and has committed to making Indego accessible to and inclusive of all Philadelphians in the program's service area. These efforts are supported by the Better Bike Share Partnership (BBSP), a collaboration between the City of Philadelphia's Mayor's Office of Transportation and Utilities (MOTU), Bicycle Coalition of Greater Philadelphia (BCGP), Bicycle Transit Systems (BTS), the National Association of City Transportation Officials (NACTO), and PeopleforBikes. At the present time, MOTU manages Indego and BTS operates it. BBSP is funded by the JPB Foundation and seeks to "develop a replicable and socially equitable bike sharing model."

The <u>primary goal</u> of Philadelphia's BBSP efforts is "to foster awareness of and support for bike sharing as a means of transportation among low-income Philadelphians." As part of the BBSP, MOTU has identified 17 stations based on the income levels of the surrounding neighborhoods. The JPB Foundation's grant has funded a variety of initiatives in the City, including station equipment in underserved neighborhoods, the development of a cash-payment option, as well as a marketing and engagement effort at designated stations.

Below are the parameters outlined in the MOTU-BCGP agreement, which focus on community engagement and outreach.

<u>BBSP Grant Objective 2</u>: To foster awareness of and support for bike sharing as a means of transportation among low-income Philadelphians.

Year 1 (p. 16) - 2b) Implement outreach program

Activities:

- Coordinate and staff events centered around bike sharing stations in low-income neighborhoods
- Partner with local community leaders and organizations to spread the word
- Conduct bike safety classes and bike share rides
- Conduct street and door-to-door surveys to gauge perceptions and knowledge of bike share
- Evaluate program and implement changes

Output:

- At least one activity per week held from April—October near targeted neighborhoods
- Attend four community meetings per month in targeted neighborhoods
- Monthly activity reports filled out by station champions
- Yearly evaluation report written and shared with NACTO bike sharing group
- 500 residents in targeted neighborhoods are surveyed about bike share perceptions and knowledge

Short-term outcomes:

- Develop baseline percentage of survey respondents who:
 - Consider bike sharing a public transportation option (i.e., for survey respondents)
 - Know how to become a member
 - o Are aware of monthly payment plans
 - o Are aware of options to become a member without a credit card

Long-term outcomes:

- Residents in low-income neighborhoods with bike share view the system as part of public transportation options available to them
- Philadelphia's bike share system meets the social equity metrics set by the City

The grant specifies that "Bike Share Program Awareness" in low-income neighborhoods should be a measurable outcome of the city-wide implementation. This study is an evaluation of the **short-term outcomes** of the project to develop a replicable and socially equitable bike sharing system, or, more specifically, the **awareness**, **perceptions** and **knowledge** of bike share in the immediate neighborhoods surrounding these 17 stations.

About Institute for Survey Research

As a Philadelphia-based research institute, Temple University's Institute for Survey Research (ISR) specializes in working with urban and low-income populations. Over the course of the last 47 years, ISR has led or contributed to hundreds of projects on topics ranging from community safety and transportation to health and human services and juvenile justice. The majority of these projects have involved working with "hard to reach populations" to better understand their opinions, behaviors, and actions.

ISR has extensive experience leading projects related to:

- Low-income and minority populations
- The City of Philadelphia
- Philadelphia transportation
- Intercept studies

Temple ISR's diverse staff has always reached high response rates with target populations.

Methods

Study Design

This study aimed to observe and measure changes in the perceptions and knowledge of Philadelphia's bike share program, Indego, among local residents at the end of the "first season" (May 2015-October 2015) via intercept interviews. A baseline study was conducted in May of 2015 (three weeks after Indego's launch) with the goal of surveying 500 residents in 17 targeted neighborhoods. A follow-up study that replicated the baseline study was conducted five months thereafter with the goal of surveying 30 residents at each of the 17 sites, totaling 510 surveys. Temple's Institute for Survey Research (ISR) implemented the intercept interviews to achieve these goals. Intercept interviews were conducted in-person using pen and paper surveys and data was entered manually.

Intercept studies are used widely in the field of market research (Evans, Ellis, Santiago & Reed, 2007; Sudman, 1980). Intercept studies, also referred to as "mall intercept" and "shopping center sampling," have many benefits including low-cost and very limited interviewer travel time (Sudman, 1980), particularly when compared to address-based and face-to-face interviewers. In addition, intercept studies allow interviewers to have better control over the respondent interaction, and, when strategically placed, allow "members of the population of interest to be interviewed where they are doing something related to what one wants to measure" (Cowen, 1989, p. 16). While critiques of the intercept method certainly exist (mostly related to low response rates and non-response bias), this method is known to be an effective form of data collection specifically for evaluating public-impact programs (Evans et al., 2007) and issues of "local" concern (Cowen, 1989).

Instrument Design

Temple's ISR developed the survey instrument to align with the short-term outcomes of the Better Bike Share Partnership (BBSP). These outcomes include the awareness, perception, and knowledge of bike share among Philadelphia residents. The follow-up survey instrument was adapted from the baseline survey. Formatting changes were made to improve ease of survey administration and data collection procedures. Additional questions were also added, but original questions remained the same. See Appendix A to view the follow-up survey. Survey administration took approximately five minutes.

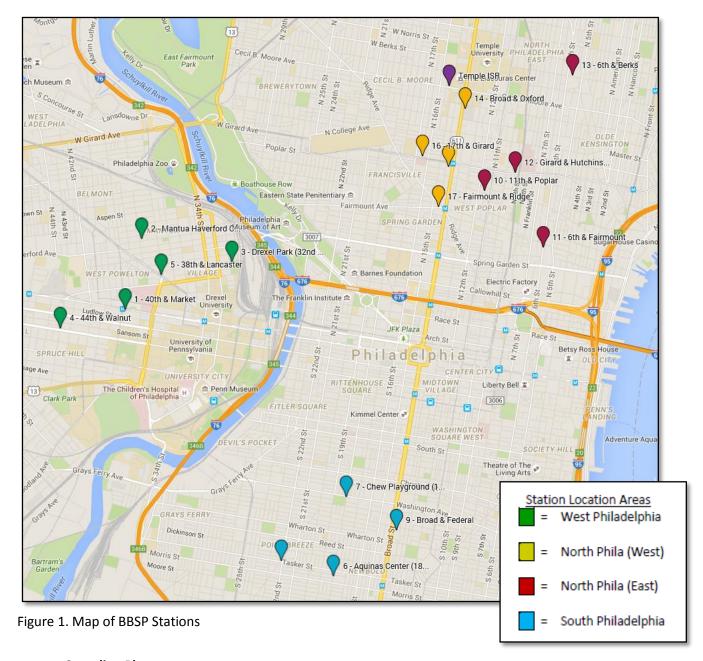
Responses that needed to be coded were part of questions that reflect primary goals of the study. These goals include measuring the percentages of survey respondents who considered bike share a public transportation option (i.e., for them), who know how to become an Indego member, who were aware of monthly payment plans, and who were aware of options to become an Indego member without using a credit card. Respondents were asked openly if they had specific knowledge of these items. If respondents reported "yes," they were subsequently asked to share all of their information on that topic (to demonstrate their knowledge). Respondents could report multiple answers to each sub-question, providing different levels of knowledge. Interviewers were trained to code responses in real-time, based on the respondents' descriptions of bike share information.

Lastly, the survey instrument collected basic demographic information as well as transportation-related behaviors of respondents.

Procedures

Site Selection

There were a total of 17 designated BBSP stations throughout Philadelphia, which fell into four neighborhoods: West Philadelphia, North Philadelphia West (West of Broad Street), North Philadelphia East (East of Broad Street), and South Philadelphia (see Figure 1). The purple icon denotes the location of Temple's ISR (to the north).



Sampling Plan

Prior to the baseline survey, the Study Director and BCGP staff visited all 17 stations to determine nearby pedestrian traffic flow. Sites were rated as low, medium, or high traffic areas. The sampling plan varied by intercept, depending on the site's pedestrian traffic level. Field interviewers were instructed to approach every person at low traffic sites, every third person at medium traffic sites, and every sixth person at high traffic sites. All volunteers were turned away, as the protocol called for systematic selection.

Both baseline and follow-up studies followed this sampling plan to ensure data were collected using the same methods at each site for both studies. Only persons passing by each site were intercepted. The goal was to obtain 29-30 completed surveys at each of the 17 sites, totaling approximately 500 surveys per study period.

Recruitment and Eligibility

Field interviewers were instructed to approach pedestrians based on the specified sampling plan and say:

"Hello, my name is _____ and I am working with the Institute for Survey Research to survey people in this area about the new Bike Share System called Indego. If you have a minute, I can see if you are eligible to take the survey. If you are, I will give you \$5 in cash after you complete the survey, which takes less than 5 minutes. Would you like to see if you are eligible for the survey?"

Four eligibility criteria were then reviewed on the updated Screener and Tally Sheet (Appendix B). Item #1 was added to the follow-up study to reduce overrepresentation of persons with multiple surveys. Qualified respondents:

- 1. Had not already taken the survey during the survey collection week
- 2. Know about the Philly Bike Share system called Indego
- 3. Are at least 16 years of age
- 4. Live or work within a 10-minute walk of the intercept location

Eligible respondents were asked to complete the survey, while those deemed ineligible were told/asked: "Thank you for your time – unfortunately you are not eligible for this survey. For research purposes, would you be willing to tell me your age, gender, race, and home zip?" Responses were subsequently recorded if the participant disclosed that information. Eligible survey respondents received \$5 in cash upon survey completion.

Data Management: Collection and Entry

During the baseline study, data collection and management were overseen by Megan Rosenbach, Education Director, at the Bicycle Coalition of Greater Philadelphia. Eight field interviewers were trained at ISR on Monday, May 18th, 2015. Interviewers participated in a full day of both classroom and on-the-job training. Data collection took place for five days, beginning on Monday, May 18th, and ending on Friday, May 22nd, 2015. A total of 530 surveys were completed, with a few sites exceeding the 30-survey quota. Screener and Talley Sheets were used to record approaches, refusals, eligibility screens, and completed surveys. Survey data were then entered electronically into Qualtrics.

In the follow-up study, all data management, including data collection, data cleaning, and data entry, was overseen by William Woodall, Field Project Manager, at ISR. Eight field interviewers (two of whom participated in the baseline data collection) were trained at ISR on Monday, October 19th, 2015. Interviewers participated in an eight-hour training session, which consisted of six hours of classroom training and two hours of on-the-job training. Data collection took place over the course of five days, beginning in the afternoon of Monday, October 19th, and ending on Friday, October 23rd, 2015. A total of 513 surveys were attempted. One survey was incomplete, and two surveys were voided due to ineligibility. The final completed survey count was 510, with exactly 30 surveys at each site. Interviewers recorded all approaches, refusals, eligibility screens, and completed surveys on a Screener and Tally Sheet (see Appendix A). Data entry was completed by staff at ISR; survey responses were keyed into an online version of the survey designed in Qualtrics. All tally sheet information was aggregated into an Excel Spreadsheet.

All surveys were administered directly following eligibility determination. All surveys were read aloud to respondents and responses were recorded by interviewers using pen and paper. Respondents were not shown the survey instrument itself. The two-page follow-up survey can be found in Appendix A.

Analysis and Reporting

Data analyses were conducted by Nina Hoe at the Institute for Survey Research. Quantitative data were analyzed using Stata. Qualitative data responses were coded by theme and totals were tallied using Excel and Stata.

The Recruited Sample

In the follow-up study, 510 eligible respondents completed the survey (530 completed the baseline survey). Table 1 compares demographic information of follow-up participants to demographic information of baseline participants (n=530)¹. The demographics of the sample taken at the follow-up survey were very similar to those at the baseline survey in many ways, however, there were significant differences in terms of age of the sample, race, employment status, low-income status, and caring for children. Statistically significant differences between baseline and follow-up respondents were calculated using Chi-square tests and significance levels are indicated. The follow-up survey captured respondents with a lower median age, 12% fewer people identifying as black or African American, but more people identifying with other races (6% identifying as "other"), as well as 9% more employed residents and 6% fewer people classified as "low-income²."

Table 1. Baseline and Follow-Up Survey Participant Demographics

	Base	line	Follo	w-Up		Base	eline	Follov	w-Up
						Freq	%	Freq.	%
Age, years**	n=5	528	n=	510	0 Income ^(NO)		530	N=510	
Median	3	7	3	32	< \$10,000	145	27%	122	24%
Range	16-	82	16	-74	\$10,000-\$24,000	105	20%	101	20%
Mean, SD	38.7,	14.9	36.5	, 15.0	\$25,000-\$34,999	69	13%	57	11%
	Freq.	%	Freq.	%	\$35,000-\$49,999	53	10%	64	13%
Gender ^(NO)	n=5	528	n=	510	\$50,000-\$59,999	19	4%	24	5%
Female	225	42%	215	42%	\$60,000-\$69,999	15	3%	18	4%
Male	300	57%	294	58%	\$70,000-\$95,000	17	3%	22	4%
Other	2	0%	1	0%	> \$95,000	21	4%	30	6%
Refused	3	1%	0	0%	Refused	86	16%	1	0%
					^a "Low-Income"*	221 n=506	44%	195 n=510	38%
Race***	n=5	30	n=!	510	People Supported by Income ^(NO)	n=506		n=501	
Asian or Pac. Isl.	11	2%	24	5%	1	244	48%	235	47%
Black or Afr. Am.	373	70%	294	58%	2 to 4	222	44%	227	45%
Hispan or Latino	39	7%	40	8%	5+	50	8%	39	8%
Native American White	6 91	1% 17%	5 101	1% 20%	Have or Care for Children Under 16*	n=	511	n=5	02
Other	9	2%	41	8%	Yes	195	38%	161	32%
Refused	1	0%	5	1%	1-2	-	_	119	24%
Student ^(NO)	n=5			500	3-4	-	_	33	7%
Yes	128	24%	139	28%	5+			1	0%
No	402	76%	361	72%	No	316	62%	341	68%
Employed**	n=5	528	n=	508					
Yes	273	52%	310	61%					
No	256	48%	198	39%					

Results of Chi-square tests indicated. * p<.05, ** p<.01, *** p<.001Table 2 shows respondent race by gender for both baseline and follow-up periods. Males constituted for 57-58% of responses for both periods while women constituted for 42-43%.

Table 2. Baseline and Follow-Up Respondent Race by Gender

¹ Note: Throughout the report, the following symbology is used to denote statistical significance in-text: * p<.05, ** p<.01, *** p<.001

² Classification of "Low-Income" status is explained in Appendix C

	Base	eline	Follo	w-Up
	Female	Male	Female	Male
Race	n=225	n=300	n=215	n=294
Asian or Pacific Islander	-	-	2%	3%
Black or African American	31%	40%	27%	30%
Hispanic or Latino	3%	5%	2%	5%
Native American	-	-	0%	1%
White	7%	10%	7%	12%
Other	2%	3%	2%	6%
Refused	-	-	1%	0%
Total	43%	57%	42%	58%

Figure 2 and Figure 3 below show the home and work zip codes of follow-up respondents. The size of the circles represents the relative number of people living or working in the specified zip code. The largest proportion of survey respondents lived and/or worked in the_19104 zip code, in West Philadelphia.

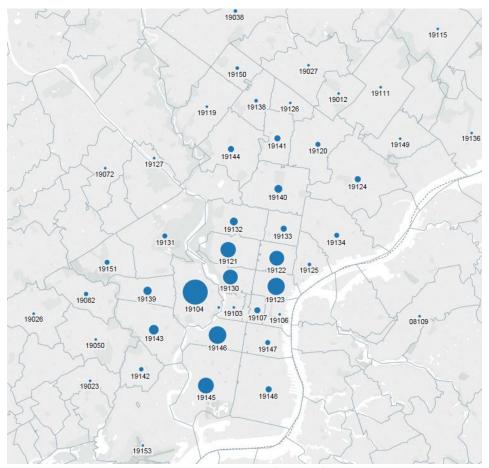


Figure 2. Survey Participant Home Zip Codes (n = 505)

Note: Smallest blue dot represents 1-19 people; largest dot represents 104 people

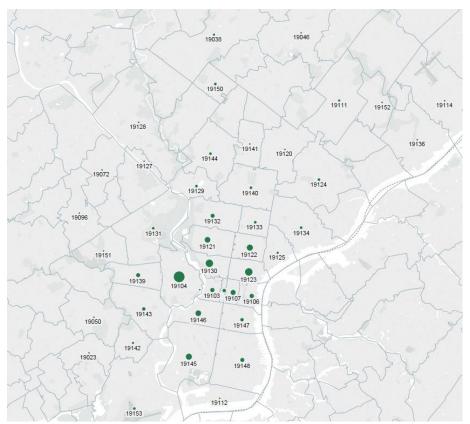


Figure 3. Survey Participant Work Zip Codes (n=292)

Note: Smallest green dot represent 1-9 people; largest dot represents 50 people

Respondents from the 19121, 19122, 19123, and 19145 Zip Codes

Respondents in the 19121, 19122, 19123, and 19145 zip codes were of particular interest to the BBSP team. Table 3 below displays some specific information about respondents from those zip codes.

Table 3. Respondents from the 19121, 19122, 19123, and 19145

	19121	19122	19123	19145	All			
#	39	36	49	41	510			
% of Sample	8%	7%	10%	8%				
Stations Captured	Broad & Oxford (36%)	6 th & Berks (39%)	6 th & Fairmount (41%)	18 th & Fernon (46%)				
	Broad & Girard (18%)	Girard & Hutch (28%)	11 th & Poplar (29%)	22 nd & Tasker (34%)				
Most Common Mod	Most Common Mode of Transportation							
Bike	5%	3%	6%	12%	8%			
Bus	33%	42%	39%	22%	30%			
Car	8%	19%	12%	24%	16%			
Other		3%	4%		1%			
Reg Rail	3%		4%	2%	3%			
Sub/Trolley	15%	25%	16%	20%	20%			
Walk	36%	8%	18%	20%	21%			
Student	38%	9%	16%	28%	28%			
Employed	54%	53%	67%	54%	61%			
Low-Income	49%	50%	39%	37%	38%			
Used Bike Share	13%	19%	31%	20%	23%			
Consider PubTrans	90%	78%	82%	85%	84%			

Survey Completion Rates

Interviewers in the follow-up study approached 1,654 people. A total of 512 surveys were completed, but two surveys were voided due to ineligibility, resulting in a final count of 510 completed surveys. Of the 1,654, 689 people agreed to screen, and 74% of those people were eligible. Using the AAPOR response rate calculator (RR1), the overall response rate for the follow-up study was 31%³.

Table 4 shows the number of people interviewers approached and the number of interviews completed at each station, as well as the completed-to-approach percentages during the follow-up study. Site 1 exhibited the lowest completed-to-approached percentage, while Site 2 had the highest percentage. Sites 1 and 2 demonstrated similar low and high rates comparatively to the other sites during the baseline study (data not shown – refer to baseline report for values).

Table 4. Number of participants approached per site

		Completed	Percent Completed
Station	Approached	Interviews	of Approached
1 - 40th & Market	190	30	16%
2 - Mantua Haverford Community Center	43	30	70%
3 - Drexel Park (32nd & Baring)	77	30	39%
4 - 44th & Walnut	83	30	36%
5 - 38th & Lancaster	126	30	24%
6 - Aquinas Center (18th & Fernon)	73	30	41%
7 - Chew Playground (18th & Washington)	71	30	42%
8 - Tasker & 22nd	98	30	31%
9 - Broad & Federal	156	30	19%
10 - 11th & Poplar	73	30	41%
11 - 6th & Fairmount	63	30	48%
12 - Girard & Hutchinson	116	30	26%
13 - 6th & Berks	68	30	45%
14 - Broad & Oxford	89	30	34%
15 - Broad & Girard	116	30	26%
16 - 17th & Girard	118	30	26%
17 - Fairmount & Ridge	94	30	32%
Total	1654	510	31%

Completed interviews exclude voided interviews (n = 2). Completed interviews are displayed as percent completed of persons approached. Approached persons include all persons approached to participate in the survey.

Limitations and Potential Threats to Data Validity

Limitations inevitably exist within the intercept-survey method. Since this method only captures people walking by particular locations on particular times of day, intercept-survey results risk underrepresenting certain populations surrounding each bike station. People that may have been underrepresented in the study are those that work during the hours of 9am and 6pm, the time frame in which the surveys were conducted. Surveys were also administered at each site on specific days during the week, so people who do not pass by the sites on certain

³ AAPOR RR3 = 39%, and estimates what proportion of unknown eligibility is actually eligible.

RR3 = (completed/(complete + partial + refusal + e(unknown)), where e = estimated proportion of eligible persons of nonrespondents: (510/(510 + 3 + 377 + .74(585)) = 39%

days may also have been missed. Lastly, the intercept method only captures those who pass by the stations, compared to a more inclusive approach that can capture people who also live or work within a specific region (i.e. via addressed-based phone calls, door-to-door canvassing, etc.).

For those persons who do pass by bike share stations, they must also be willing to acknowledge field interviewers and participate in a survey. Even though the survey's duration is approximately five minutes, people passing by may not have the time, interest, or motive to participate in surveys. Consequently, information about those who did not participate in the survey was not collected, limiting our ability to generalize our findings to the general populations surrounding each bike share location.

Regarding measurement, sources of measurement error as well as data processing error may inherently exist. Primarily, interviewers administered pencil-and-paper surveys and were trained to code some responses in real-time. Interviewers may have made errors in data recording, in terms of missing or skipping questions, or recording the incorrect answers. Additionally, despite training, interviewers may not have coded responses identically. Finally, errors may have occurred in data entry. However, measures were taken to ensure data collection and data entry errors were limited. This included a robust training curriculum with daily monitoring during the study period. Data was cross-checked and an electronic survey instrument was designed to flag inconsistencies. Despite possible sources of error, this report contains the most accurate data possible given the budget and timeframe.

Findings

Who Knows About Bike Share?

Of the 689 people who agreed to answer the screening questions, 599 (86.9%) reported that they knew about Indego, Philadelphia's bike share system. Table 4 shows the percentages of those who knew about Indego at each study location. The sites at the Mantua Community Center and Drexel Park had the highest percentages, while Girard and Hutchinson had the lowest percentage.

Table 5. Knowledge of Indego

Tuble of Michael of Michael	Agreed to	Knew About	% Knew About
Station	Screen	Indego	Indego
1 - 40th & Market	49	44	89.8%
2 - Mantua Haverford Community Center	34	34	100.0%
3 - Drexel Park (32nd & Baring)	31	31	100.0%
4 - 44th & Walnut	34	31	91.2%
5 - 38th & Lancaster	32	30	93.8%
6 - Aquinas Center (18th & Fernon)	40	33	82.5%
7 - Chew Playground (18th & Washington)	36	34	94.4%
8 - Tasker & 22nd	33	31	93.9%
9 - Broad & Federal	45	40	88.9%
10 - 11th & Poplar	42	35	83.3%
11 - 6th & Fairmount	38	34	89.5%
12 - Girard & Hutchinson	54	39	72.2%
13 - 6th & Berks	40	34	85.0%
14 - Broad & Oxford	36	32	88.9%
15 - Broad & Girard	52	41	78.8%
16 - 17th & Girard	51	42	82.4%
17 - Fairmount & Ridge	42	34	81.0%
Total	689	599	86.9%

Who Was Ineligible?

Interviewers were instructed to collect four basic pieces of demographic information about individuals who screened ineligible for the survey: age, gender, race, and home zip code. If respondents were unwilling to share this information, interviewers were permitted make a reasonable estimation. In the follow-up study, 179 people were deemed ineligible, while 510 were eligible. Table 6 compares the demographics of those who were eligible to those who were ineligible. The only significant difference was that African Americans represented a higher proportion of the ineligible respondents (73%) than the eligible respondents. The primary reason that African Americans were ineligible was because they did not live or work within a 10 minute walk of the intercept location.

Table 6. Demographics of Follow-up Survey Eligible (n=510) and Ineligible (n=179) Respondents

	, ,	` ,				
	Median	Mean	Range			
Eligible	32	36.5	16-74			
Ineligible	32	36.2	12-86			
	Male	Female	Other			
Eligible	58%	42%	0%			
Ineligible	60%	40%	0%			
	Asian or Pacific	Black or African	Hispanic	Native		
	Islander	American**	or Latino	American	White	Other
Eligible	5%	58%	8%	1%	20%	8%
Ineligible	4%	73%	6%	0%	13%	4%
	Within Philadelphia	Outside Philadelphia				
Eligible	95%	5%				
Ineligible	97%	3%				
	Eligible Ineligible Eligible Ineligible Eligible Ineligible	Median Eligible 32 Ineligible 32 Male Eligible 58% Ineligible 60% Asian or Pacific Islander Eligible 5% Ineligible 4% Within Philadelphia Eligible 95%	Median Mean Eligible 32 36.5 Ineligible 32 36.2 Male Female Eligible 58% 42% Ineligible 60% 40% Asian or Pacific Black or African Islander American** Eligible 5% 58% Ineligible 4% 73% Within Philadelphia Outside Philadelphia Eligible 95% 5%	Image Median Mean Range Eligible Ineligible 32 36.5 16-74 Ineligible 32 36.2 12-86 Male Female Other Eligible 58% 42% 0% Ineligible 60% 40% 0% Asian or Pacific Islander Black or African American** Hispanic or Latino Eligible 5% 58% 8% Ineligible 4% 73% 6% Within Philadelphia Outside Philadelphia Eligible Eligible 95% 5%	Median Mean Range Eligible 32 36.5 16-74 Ineligible 32 36.2 12-86 Male Female Other Eligible 58% 42% 0% Ineligible 60% 40% 0% Asian or Pacific Black or African Hispanic Native Islander American** or Latino American Eligible 5% 58% 8% 1% Ineligible 4% 73% 6% 0% Within Philadelphia Outside Philadelphia Eligible 95% 5%	Median Mean Range Eligible 32 36.5 16-74 Ineligible 32 36.2 12-86 Male Female Other Eligible 58% 42% 0% Ineligible 60% 40% 0% Asian or Pacific Black or African American Hispanic or Latino Native American Islander American** or Latino American White Eligible 5% 58% 8% 1% 20% Ineligible 4% 73% 6% 0% 13% Within Philadelphia Outside Philadelphia Eligible 95% 5%

Results of Chi-square tests indicated. * p<.05, ** p<.01, *** p<.001

How Do People Get Around?

The survey asked respondents several general questions about their use of transportation in the city. Figure 4 illustrates the percentage of respondents in both the baseline and follow-up studies who reported using each form of public transportation offered in Philadelphia. Transportation categories were not mutually exclusive—individuals could have reported using all seven forms of public transportation. Respondents in the follow-up study indicated using more transportation options overall.⁴

In the follow-up study, walking was the most commonly used form of transportation used by survey respondents (80%). This was also a 19% increase from baseline. Second most common modes were bus and subway/trolley (70% each), followed by car (44%), bike (40%), then regional rail (32%). Seven percent (7%) of respondents reported using other modes of transportation, which included taxi cabs (and Uber), skateboards, and scooters. One person reported using Indego.

⁴ The baseline and follow-up surveys were administered by different interviewers. Overall dfferences in the number of transportation options reported by each of the respondent may be due to interviewers' interviewing styles – and more specifically, reading or not reading all response options as instructed.

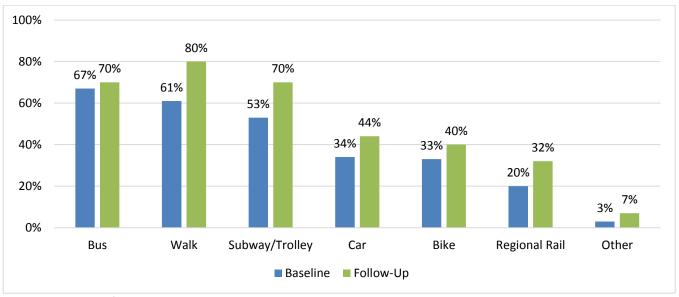


Figure 4. Modes of Transportation Used

Respondents were also asked to identify the mode of transportation that they used the most (see Figure 5). Use of the bus was reported as the most prevalent mode of primary transportation in the follow-up study. With regards to bicycling, 40% of respondents in the follow-up study said they use a bike as a form of transportation, compared to 33% in the baseline. However, only 8% indicated bike usage as their main form of transportation, compared to 10% in the baseline.

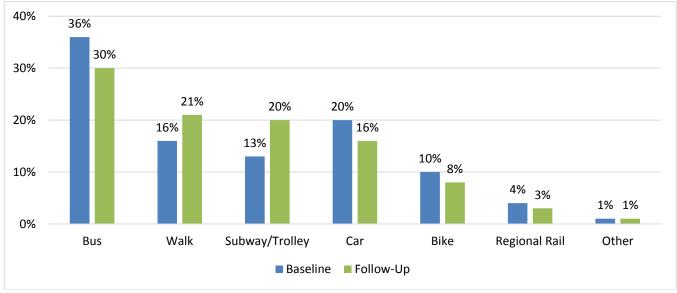


Figure 5. Most Used Mode of Transportation

There were significant differences in both car and bike ownership between the baseline and follow-up surveys (see Figure 6). In both cases, ownership was higher amongst the follow-up sample: car ownership was 30% at follow up while only 23% in the baseline. In addition, 42% of respondents in the follow-up reported owning a bike, compared to 29% at baseline. In general, the follow-up sample was younger, had a lower proportion of African Americans, had a higher proportion of people employed, a lower proportion of low-income people, and a lower proportion of those who were caring for children under the age of 16. For example, independent of other factors, employed people were more than twice as likely to own a bike as compared to unemployed people***. This may be related in some ways to ownership behavior.

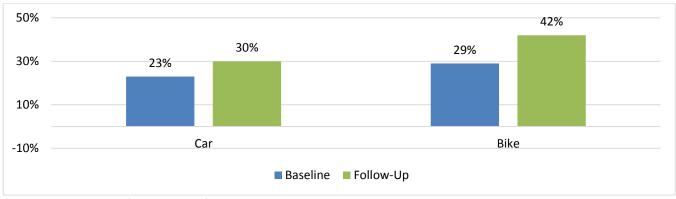


Figure 6. Ownership (Car and Bike)

Table 7 shows the primary mode of transportation used by different racial and gender groups. In the aggregate at the follow-up survey, there were notable differences in terms of transportation among racial groups in both the baseline and follow-up surveys. In the follow-up, 41% of Black or African Americans reported that the bus was their most commonly used form of transportation; however only 11% of White and 13% of Asian or Pacific Islander respondents did. In addition, while 17% of White respondents reported that a bike was their most commonly used form of transportation, only 5% of Black or African American respondents did. Finally, 41% of White respondents said that walking was their primary form of transportation, 16% of African-American respondents did.

Table 7. Primary Modes of Transportation by Race and Gender (Baseline and Follow-Up)

		В	aseline	(N = 530	0)			Fo	llow-Up	(N = 51	L O)	
	Bike	Bus	Car	Walk	Regional Rail	Subway or Trolley	Bike	Bus	Car	Walk	Regional Rail	Subway or Trolley
Sample	10%	36%	20%	16%	4%	13%	8%	30%	16%	21%	3%	20%
Race												
Asian or Pacific Islander	0%	18%	45%	27%	0%	9%	8%	13%	25%	33%	4%	17%
Black or African American	7%	39%	19%	16%	5%	13%	5%	41%	14%	16%	3%	20%
Hispanic or Latino	8%	38%	23%	5%	5%	18%	10%	23%	25%	8%	0%	35%
White	20%	26%	19%	19%	2%	13%	17%	11%	13%	41%	3%	12%
Native American	-	-	-	-	-	-	0%	40%	40%	0%	0%	20%
Other	19%	38%	6%	6%	0%	31%	7%	20%	20%	22%	5%	27%
Gender												
Female	8%	36%	21%	16%	6%	12%	6%	38%	18%	19%	2%	17%
Male	11%	36%	18%	16%	3%	14%	10%	25%	15%	23%	3%	22%

In addition, when separated by gender, there were significant differences observed for females by race in terms of transportation (see Table 7). This indicates that the differences in transportation uses observed among racial groups are heavily driven by females. In both surveys, a much higher proportion of White females identified biking (16%-23%) as their primary mode of transportation as compared to African American women (4%). Additionally, a much higher proportion of African American females (40%-49%a) reported the bus as their primary mode of transportation as compared to White women (11%-28%).

There were also significant differences in terms of mode of transportation, primarily related to bus and car usage, between low-income and non-low-income respondents*. In the follow-up study, 37% of low-income respondents

said the bus was their primary form of transportation while only 26% of non-low-income respondents did. In contrast, 22% of non-low-income respondents said car was their primary mode of transportation while only 8% of low-income respondents did.

Table 8. Primary Modes of Transportation by Gender, Stratified by Race (Baseline and Follow-Up)

			В	Baseline	(N = 53	0)		8% 30% 16% 21% 3% 10% 20% 30% 30% 0% 4% 49% 11% 14% 3% 0% 25% 50% 0% 0% 3% 16% 11% 22% 46% 3% 3% 0% 0% 50% 0% 0% 3% 0% 27% 27% 18% 0% 3%					
		Bike	Bus	Car	Walk	Regional Rail	Subway or Trolley	Bike	Bus	Car	Walk	Regional Rail	Subway or Trolley
Sample		10%	36%	20%	16%	4%	13%	8%	30%	16%	21%	3%	20%
Gender	Race												
	Asian or Pacific Islander	0%	0%	67%	33%	0%	0%	10%	20%	30%	30%	0%	10%
212)	Black or African American	4%	40%	21%	16%	7%	12%	4%	49%	11%	14%	3%	19%
Female (n=212)	Hispanic or Latino	7%	27%	27%	7%	13%	20%	0%	25%	50%	0%	0%	25%
ema	White	23%	28%	15%	23%	0%	8%	16%	11%	22%	46%	3%	3%
ш.	Native American	-	-	-	-	-	-	0%	0%	50%	0%	0%	50%
	Other	14%	43%	14%	0%	0%	29%	0%	27%	27%	18%	0%	27%
	Asian or Pacific Islander	0%	29%	29%	29%	0%	14%	7%	7%	21%	36%	7%	21%
(06	Black or African American	10%	38%	18%	17%	3%	13%	7%	33%	18%	18%	3%	21%
Male (n=290)	Hispanic or Latino	8%	46%	21%	4%	0%	17%	14%	21%	14%	11%	0%	39%
Male	White	18%	25%	22%	16%	4%	16%	17%	11%	8%	38%	3%	16%
	Native American	-	-	-	-	-	-	0%	67%	33%	0%	0%	0%
	Other	22%	33%	0%	11%	0%	33%	10%	17%	17%	23%	7%	27%

Uses and Views of Bike Share

The follow-up survey showed a 9% increase in reports of having used Indego – overall, 23% reported having used it (see Figure 7). However, amongst those who had not used it, the proportion of people who reported that they planned to use it decreased.

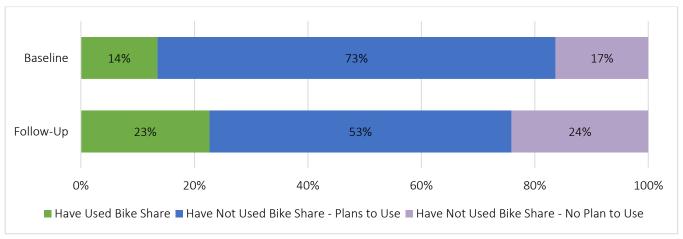


Figure 7. Ever Used Bike Share & Plans to Use Bike Share

Survey respondents also were asked a series of questions regarding their consideration of bike share as public transportation, their prior use of Indego, their current Indego membership status, their plans of using Indego, and their knowledge of others who used it or who were members. Figure 8 shows the percentage of respondents who reported the indicated behaviors.

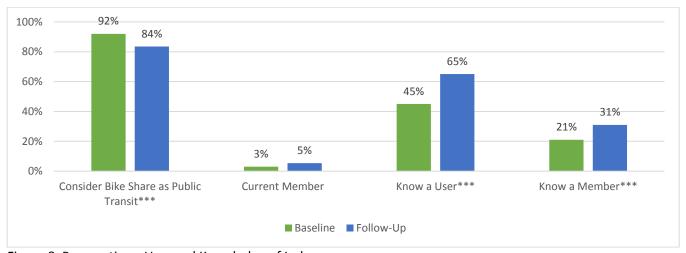


Figure 8. Perspectives, Use, and Knowledge of Indego

While there was a significant decrease in the proportion of people who said they considered Indego to be a form of public transportation, there were increases in the rates of membership, knowing a user, and knowing a member. Figure 9 below shows the cumulative number of checkouts across all of the BBSP stations from May 18th (the start date of the baseline survey) through October 23rd (the end of the follow-up study). The 20% increase in respondents knowing a user and 10% increase in knowing a member corresponds with the substantial increase in the number of checkouts across this time period.

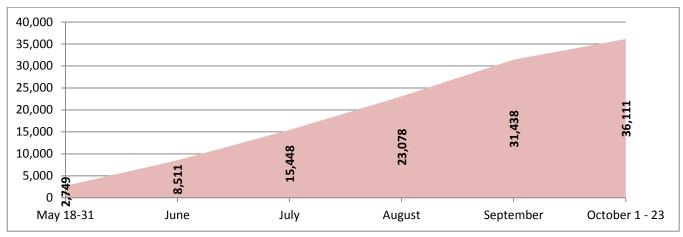


Figure 9. Cumulative Number of Checkout at BBSP Stations

Further exploration of the decrease in the proportion of people who considered Indego to be a form of public transportation showed that race*** and employment status** were significantly related. There was also a small increase in the proportion of people who reported being "not sure" from baseline (2%) to follow-up (4%). Those identifying as White (77%) or Asian (67%) were least likely to consider bike share to be a form of public transportation, while those identifying as Black or African American (84%) or Other races (95%) were more likely to report positively. In addition, a smaller proportion of employed people (83%) considered Indego a form of public transportation as compared to those who were unemployed (86%).

Although not statistically significant, the mean age for those who did consider it a form of public transportation was larger (37.1 years) as compared to those who did not (33.5). This disposition was not related to respondents' home zip code, gender, income, having kids, or having used Indego at some point. Looking at each zip code separately, there were no significant differences in terms of considering Indego public transportation, as well as comparing those who lived in the originally specified Indego zip codes (19102, 03, 04, 06, 07, 21, 22, 23, 25, 30, 45, 46, 47, 48) and those who did not. There were also no differences related to station location on an individual level, by region (i.e. West, South, North, etc.), or by level of usership at the station.

Amongst people **who had used Indego**, there were **no differences** related to considering it a form of public transportation based on their reason for using it. However, differences among those **who had not used it** where only marginally short of significance (p=.054). People who reported not biking or knowing how to ride a bike were the least likely to consider it public transportation (75%) as well as those who felt it was cost prohibitive (81%) and did not have enough information, including thinking that they needed a credit card (81%). Since walk-up rides do require a credit card and is more expensive than a SEPTA ride or token, this may be a deterrent for some potential users as well as contribute to their not seeing it as a form of public transportation.

Who is Using Indego?

Age, student status and employment status were all related to Indego use. In this study, 23% of survey respondents (115) self-reported using Indego. To better understand those individuals in the areas surrounding the BBSP stations who are using Indego as compared to those who are not using Indego, we compared the demographics of these groups both at baseline and follow-up. The demographics of non-users and users were very similar in the baseline study as compared to the follow-up.

Table 9. BTS Member Demographics and Survey Participant Demographics at BBSP Stations

	Base	eline	Follo	w-Up		Base	eline	Follo	w-Up
	Non-Users	Users	Non-Users	Users		Non-Users	Users	Non-Users	Users
N	456	74	395	115	N	456	74	395	115
Age*					Income				
Mean (SD)	39.7	32.4	37.8	32.0	Less than \$10,000	27%	27%	24%	24%
			(15.4)	(12.9)	\$10,000 - \$24,999	19%	23%	20%	18%
Gender					\$25,000 - \$34,999	13%	15%	9%	18%
Female	43%	40%	43%	41%	\$35,000 - \$49,999	10%	8%	13%	12%
Male	56%	60%	57%	59%	\$50,000 - \$59,999	4%	0%	5%	4%
Other	0%	0%	0%	0%	\$60,000 - \$69,999	2%	5%	3%	4%
Refused	1%	0%	0%	0%	\$70,000 - \$95,000	3%	3%	4%	6%
Race					Grtr than \$95,000	3%	9%	4%	5%
Asian or Pac Isl	2%	4%	4%	7%	Refused	17%	27%	0%	0%
Black or Afr Am	72%	59%	61%	49%	Low-Income			39%	37%
Hispanic or Latino	7%	12%	8%	9%	Student*				
Native American	1%	3%	1%	1%	Yes	21%	41%	25%	37%
White	16%	21%	18%	27%	No	79%	59%	75%	63%
Other	2%	0%	8%	7%	Employed*				
Refused	0%	1%	0%	0%	Yes	50%	63%	59%	67%
Indego Membership*	1%	19%	0%	24%	No	50%	37%	41%	33%

Results of Chi-square tests indicated for Follow-Up survey data. * p<.05, ** p<.01, *** p<.001

There were no significant differences between the users and non-users in terms of gender, race or income. However, when just comparing White to Black or African American respondents, a significantly a higher proportion of those identifying as White has used Indego (31%) as compared to those identifying as Black or African American (19%). There were also significant differences in terms of age, and student and employment statues. Overall at follow-up, users were younger, and a higher proportion were students and employed when compared to non-users. Twenty-four percent of users in the follow-up study were members, which is a 5% increase over the 19% reported at baseline.

There were no differences in the proportion of users as compared to non-users related to the particular station site. On average, 23% of survey respondents were users – and at the station level the percentage of users encountered ranged from 7% at 22nd and Tasker to 43% at 38th and Lancaster.

Uses of Indego

Respondents who reported that they had used Indego were also asked to indicate if they had used it to run errands, get to work, exercise, recreation or other reason. Figure 10 shows the proportion of people who reported the indicated uses of Indego.

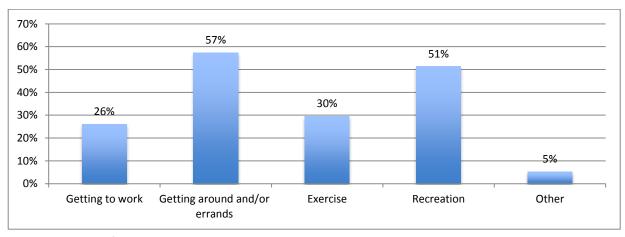


Figure 10. Uses of Indego

Overall, 30 of the 115 users said they had done so to get to work (26%), however of the 115, only 74 were employed, so 32% of working users said they had used Indego to get to work. The highest proportion of work-transportation users worked in the 19104 zip code – or the University City area (26%). Second, 13% worked in 19106 (Center City), 9% in 19145 (South Philadelphia/Point Breeze) and 9% in 19122 (Temple University).

Using Indego for recreation was significantly related to race* – 57% of Black or African American users and 80% of Hispanic users said they used it for recreation, whereas only 29% of White users did. A nearly significantly higher proportion of females (p=.088) used Indego for exercise (38%) as compared to males (24%). As well, low-income respondents were only half as likely to have used Indego to get around and/or for errands as compared to non low-income respondents (p=.068).

Low-Use Stations

Five stations were indicated as being "low-use" stations: 11th & Poplar, 39th & Mt Vernon, 18th & Fernon, 38th & Lancaster, and 6th & Berks, however, there was no correlation between the use reported by survey respondents. However, there were high rates of misinformation amongst non-users at 39th and & Mt. Vernon (22%) and 6th & Berks (20%) as compared to the overall survey (16%). Also, while 14% of all non-users said they were not using it because they had their own bike, 35% of non-users at 18th & Fernon did.

Member vs. Walk-Up Users

Of the 115 survey respondents who indicated using Indego, 24% reported being members (specifically, Indego30 members), while the remaining 76% (87 respondents) reported using the system as non-members, or as "walk-up" users. The walk-up ride option is where non-member credit card holders can walk up to a kiosk and use a credit card to check out a bike for \$4 for 30 minutes. Thus far, little has been known about these walk-up users, as they are not required (or prompted) to provide demographic information.

Table 10 shows the demographic characteristics of the reported Indego users based on their membership status. For each variable, chi-square tests were performed to determine any significant differences between Indego member and non-member users. Amongst those who reported using Indego, there were significant differences between members and walk-up users in terms of age and race. On average, members were younger than walk-up users, and a higher proportion of members identified as White and a lower proportion of members identified as Black or African Americans compared to walk-up users. Specifically, in the follow-up survey, the average age for members was 27.4 years and for walk-up users was 33.7 years. Amongst members, 18% identified as Black or African American and 60% identified as White. In contrast, among walk-up users, 58% identified as Black or African American and 17% identified as White.

Table 10. Demographics of Indego Users: Members vs. Walk-Up Users

	Base	eline	Follo	w-Up		Base	eline	Follo	w-Up
	Members	Walk-Up Users	Members	Walk-Up Users		Members	Walk-Up Users	Members	Walk-Up Users
N	14	60	27	87	N	14	60	27	87
Age*					Income				
Mean	29.4	33.2	27.4	33.7	Less than \$10,000	0%	27%	22%	24%
Gender					\$10,000 - \$24,999	0%	18%	11%	21%
Female	43%	38%	41%	41%	\$25,000 - \$34,999	7%	8%	15%	19%
Male	57%	62%	59%	59%	\$35,000 - \$49,999	14%	3%	11%	13%
Other					\$50,000 - \$59,999	0%	3%	4%	5%
Refused					\$60,000 - \$69,999	21%	7%	7%	3%
Race**					\$70,000 - \$95,000	36%	25%	7%	4%
Asian or Pac Isl	14%	2%	11%	6%	Grtr than \$95,000	21%	8%	15%	2%
Black or Afr Am	36%	65%	18%	58%	Student				
Hispanic or Latino	7%	13%	4%	10%	Yes	57%	37%	41%	34%
Native American	0%	3%	0%	1%	No	43%	63%	59%	66%
White	43%	15%	60%	17%	Employed				
Other	0%	2%	7%	7%	Yes	86%	57%	81%	62%
					No	14%	43%	19%	34%

Results of Chi-square tests indicated for Follow-Up survey data. * p<.05, ** p<.01, *** p<.001

There were no differences between members and walk-up users related to car or bike ownership. However, amongst the users, there were significant differences between sites in terms of the proportion of member and walk-up users. Overall, 24% of all users were members, but the proportion of member users by sites ranged from 0% at several locations to 67% at 44th and Walnut.

Thoughts on Using Indego

The survey contained one open-ended question. All survey respondents were asked the question "Have you ever used the Philly Bike Share system?" If respondents answered "Yes," interviewers were directed to ask: "What did you use the Philly Bike Share system for?" If they answered "No," interviewers were directed to ask: "What are the reasons you have not used the Philly Bike Share system?" All answers were recorded, coded, and analyzed.

Why They Used Indego

As described above, 23% of respondents (117) indicated that they had previously used Indego, which was a 9% increase from the baseline survey (where 14% of people had used it). A total of seven codes were assigned to the responses. Five of the codes were used in the baseline analysis, and two additional codes were present in these data. Table 11 below shows the ranking of the codes used along with the frequency of their use and the percentage of people who gave a response in that category. In total, 123 codes were assigned to 117 responses. In summary:

- Those who reported having used Indego in the follow-up study indicated very similar reasons as those in the baseline survey (in the same order)
 - o Convenience/ease was the most common reason reported for using Indego.
- Two additional reasons for using Indego were referenced in the follow-up study:
 - o Riding it for social reasons for fun with friends, or because a friend recommended it.

- Riding Indego because other modes of transportation had failed such as the bus or trolley not running, or their own bike having a mechanical issue.
- Low-income users of Indego were 2.5 times more likely to have used it for exercise, recreation, to be
 with friends or for other social reasons as compared to non low-income users. Put another way, 38% of
 the low-income users reported using Indego for those reasons, while only 21% of non low-income users
 did.
- Among users, reasons for using were not related to: age, gender, race, being a student or being employed.

Table 11. Frequency and Rank of Codes Used

		Baseline			Follow Up				
Reasons for Using Bike Share	Rank	Freq.	%	Rank	Freq.	%			
Convenience/Easy	1	24	32%	1	36	29%			
Transportation	2	20	27%	2	20	16%			
Social/Friend Referral/Fun (New!)				2	20	16%			
Novelty/Try it/Support It	3	17	23%	4	17	14%			
Needed Other Transportation (New!)				5	14	11%			
Exercise/Recreation	4	9	12%	6	9	7%			
Cost-Effective	5	8	11%	7	7	6%			
Total		80	100%		123	100%			

The descriptions below organize the responses according to the relative frequency of the code and the rank of the code is indicated by square brackets [].

- [1] **Ease and convenience** were the most commonly reported reasons for using Indego (29%). Respondents reported, "It was convenient, close to home, a good way to get around without owning a bike;" "A lot quicker to get on bike during mid-day;" and "Convenient, good for going a few blocks, easy parking." Respondents who cited convenience and ease also reported that Indego was cost-effective and met needs not filled by other transportation options.
- [2] The second most common reason stated for using Indego was general **transportation**, **or getting around** (16%). Survey respondents reported that they had used it as a form of basic, everyday transportation to get to work, school, downtown and for errands. One person reported that it was a lot easier to go downtown with Indego because parking was not an issue.
- [2] Also reported as the second most common reasons, participants in the follow-up study reported using Indego for social reasons, because of a friend referral, or as a way to have fun (often with friends). Several participants reported that seeing friends or other people using the bikes had inspired them to give it a try, and to many, it "looked fun!" Others reported trying it, "As a group thing" or to have "Fun with friends." Of note, one person who had not used Indego said he hadn't because "it's hard to convince friends to use it," suggesting that he is often traveling with friends and the social, group aspect is important.
- [4] As in the baseline, many people still reported using Indego because of the **novelty**, and **"just to try it."** Several respondents reported just being curious about it, and trying it "just to experience it" or because "it was new."
- [5] A new theme that emerged since the baseline survey was the idea of Indego serving as a substitute for when other transportation modes failed or did not meet needs. Eleven percent of Indego-using respondents reported using Indego when they **needed other transportation**. For example respondents cited instances when the "trolley wasn't running" or in general feeling as though it was "cheaper than SEPTA." Also, several respondents reported using Indego during the Pope's visit when other transportation was not running. Finally, many people who owned their own bikes reported finding use for Indego when their own bikes were stolen or had mechanical issues.

[6] Also as in the baseline, respondents reported using Indego for **exercise and recreation** – which also included feeling as though it was the "healthier option."

[7] Finally, several people identified Indego as being **cost-effective** as compared to both SEPTA and owning and maintaining their own bikes.

The reasons identified by current users can help to inform marketing campaigns and outreach targeted to non-users. Indego is convenient, easy, fun, good exercise, cost effective, and a great opportunity to get exercise and spend time with friends and family!

Why They Did Not Use Indego

Seventy-seven percent of follow-up respondents reported that they had not used Indego. Table 12 below shows frequencies for the reasons respondents reported for not having used Indego; percentages represent the proportion of respondents who cited that reason. The table below organizes the responses according to the rank, or frequency of the code, indicated by square brackets []. The red fill/highlighting in cells indicates areas of particular interest for Indego, and areas where outreach efforts might be needed the most.

Table 12. Reported Reasons for Not Using Indego

		Baseline			Follow U _l	ρ
Reason Not Used	Rank	Freq.	Pct.	Rank	Freq.	Pct.
Did Not Have Information/Have Misinformation		77	21%	1	68	16%
 -Do Not Have Credit Card (think they need a credit card to use it) 		(26)	(7%)		(25)	(6%)
Have Not Had a Chance Yet/Just Learned About it	2	56	15%	2	57	14%
Own Their Own Bike	5	36	10%	3	55	13%
Prefer Other Modes of Transportation	7	36	10%	4	43	10%
No Reason	10	13	3%	5	36	9%
Cost	3	46	12%	6	31	8%
It is Not Convenient/Does Not Meet Needs	11	9	2%	7	29	7%
Health Issues/Disabilities/Age	8	21	6%	8	23	6%
Do Not Need It/Did Not Want To	6	35	9%	9	19	5%
Fear of Riding (Safety, Traffic, etc.) (New!)				10	14	3%
Don't Bike/Don't Like Bikes/Had Bad Experience	9	18	5%	11	13	3%
Too Busy/Do Not Have Time	4	42	11%	12	12	3%
Other/Miscellaneous	15	3	1%	13	7	2%
Weather	13	4	1%	14	2	0%
Issues with Indego System		9	2%	15	1	0%
Perception of Who Targeted Users		4	1%			

- 3% of people who said they had not used bike share in the follow-up reported having concerns related to safety of biking in the city and traffic (this did not come up in the baseline study at all).
- Items highlighted in red are those that are related to Indego specifically, and things of which they have control. While not having enough or correct information is still the biggest barrier, only 1 person in the follow-up study reported having issues with the Indego system and no one reported thinking it "was not for them."
- Items highlighted in purple are categories that were very similar or may actually be overlapping. These were people who when asked why they had not used Indego said things like "just haven't," "just haven't done it yet," "not sure," "don't need to," "don't want to," etc.

- Being low-income was significantly related to reasons for not having used Indego*.
 - A higher proportion of low-income respondents said they had not used it because they felt it was cost-prohibitive (11% as compared to 5% of non low-income respondents), thought they needed to use a credit card to use it, (9% as compared to 4% of non-low-income users) because they had health issues or disabilities, and because they did not feel like they had enough information in general.
- Reasons for not using Indego were significantly related to: age***, gender***, income**, employment**
 - The average age for those who reported health issues or disabilities (55.8 years old) and weather concerns (53.5 years old) was much older. The average age of those who owned a bike was younger (34.4 years old).
 - Related to gender, a higher proportion of men reported not having enough information, thinking they needed a credit card, owning their own bikes, and feeling it was cost prohibitive. A higher proportion of women reported safety concerns, not biking or knowing how to bike, and having health issues or disabilities.
 - Related to employment, a higher proportion of employed people reported owning their own bikes and a much lower proportion reported health issues or disabilities.

[1] As in the baseline survey, the most commonly cited reason for not having used Indego was **not having the necessary information** about what it was or how to use it, or **having misinformation about it.** Many survey respondents reported general lack of information:

- "Never had the right info about it."
- "I don't know how to use it."
- "Didn't know how to sign up."
- "I don't know how much it is or if you need a credit card."
- "I didn't know how much it cost."

Specifically, major type of misinformation was the [1a] **misperception of needing a credit card** to use Indego. Similar to the baseline survey, 6% of people in the follow-up survey reported that they hadn't used Indego because they didn't/don't have a credit card.

[2] At both baseline and follow-up, the second most common reason for not having used Indego was **not having had a chance to yet**. While at baseline, Indego had only been present in Philadelphia for 3.5–4 weeks, even after the first summer season, still about 15% of people who had not used it said they had not had a chance to. Again, this suggests (both explicitly and implicitly) that people are *planning to use Indego in the future*, but have not yet been able to – for whatever reason. Respondents indicated: "I just haven't gotten around to doing it;" "Haven't needed it yet;" and "Haven't had the opportunity yet."

[3] Another prevalent reason respondents reported not using Indego was that they **owned their own bikes**. As compared to the baseline, a higher percentage of people in the follow-up study reported this as a reason for not having used Indego. However, 42% of follow-up respondents reported owning a bike as compared to only 29% of people at baseline. Thus, the increase in prevalence of this reason for not using Indego may be related to the characteristics of the sample as compared to any changes taking place in Philadelphia during the study time period.

[4] Related to owning their own bicycles, non-Indego users in the follow-up study also cited **preferring other modes of transportation** – such as walking, driving, and using SEPTA. One respondent said: "I don't see the point – I have other means of transport." Other said, "Because I like to walk;" I'd rather walk;" or "I have a car."
[5] A significant proportion of non-users gave "no reason" as a response to the question of why they had not used Indego. In general, some people simply said: "no reason," "not sure," or "just haven't."

- [6] The **cost** of Indego was also a reason given for not having used it. Some respondents specifically said that it was "too expensive" or "cost too much" while others said they just didn't have any money at all, suggesting that no matter what the cost (just as long as there was a cost), they would not be able to use Indego. Several people expressed that, "funds are tight" and perhaps Indego was viewed an additional, luxury option, rather than a substitute for other modes of transportation like SEPTA.
- [7] A much higher proportion of people in the follow-up survey (7%) as compared to the baseline (2%) said that Indego was **not convenient and did not meet their needs.** Several follow-up survey respondents said that there were not stations near where they needed to go (i.e. home and/or work), and that the distances they traveled were too far to use Indego. Six people (5 of whom were female) specifically said that they could not use it because they were always with children and they could not bring their kids (and car seats) onto Indego. [9] Another group of non-users specified that they just **did not want to or need to**.
- [8] As in the baseline, several respondents indicated **health problems**, **disabilities**, **or age** as reasons for not using Indego. Follow-up survey respondents reported arthritis, back issues, weight issues, high blood pressure, and several other health conditions, as well as old age.

[10] A new reason for not using Indego that emerged in follow-up study was related to **safety and feeling scared or afraid of riding in traffic or the road conditions**. In particular, respondents reported the following:

- "Afraid to ride bike."
- "Don't like riding in traffic"
- "Afraid to be hit by car."
- "Afraid of drivers."
- "City biking scares me."
- "I am afraid of falling."
- "I don't ride bikes in Urban areas."
- "Afraid to ride bikes."
- "Haven't been on a bike since child, scared."
- "I don't want to fall off or get hit by a bus."
- "Traffic"
- "Scared to use bike."
- "Don't like biking around cars."

Among respondents who expressed safety concerns and fear around biking, a significantly higher proportion were female (77% as compared to 42% in the survey) and a lower proportion were low-income (23% as compared to 38% in the survey).

Related, several people also reported just [11] **not biking in general** (not knowing how to bike), or having had a bad experience on a bike in the past and thus not considering Indego use at all.

[12] As compared to the baseline survey where 11% of non-users reported that they were **too busy** to use Indego, only 3% said that in the follow-up. This drop may be a result of time, and people having had a chance to explore the option.

Only two people in the follow-up study reported anything to do with [14] **weather** and only one person had [15] **issues with the Indego system** (seeing full stations.).

Finally, a few of the miscellaneous reasons for not having used Indego included "they look corny" and "it's not worth it."

Summary

In summary, it is clear that more people are using Indego, and finding more and more reasons to do so. In terms of non-users, having clear and accurate information is still a barrier to use. Many non-users reported simply not having enough information to use Indego as well as thinking that they could only use it with a credit card. There also seems to be a significant proportion of the population that just does not want to use Indego — either for "no reason" or because they do not see a need to or do not want to. This group may be harder to reach, but given the many benefits, time will likely yield more people willing to try it.

Of note, one user who said Indego was convenient also mentioned that he was going to try and steal the tires off of the bike but was unable to. The theft proof parts are working!

Indego Knowledge

As described in the methods section, respondents were asked to report their knowledge on how to become a member, the different membership options, the cost, and the procedures to obtain a cash membership. In addition, the follow-up survey asked whether respondents knew of the smartphone application (or "the app"). People who reported "Yes" to knowing Indego information were asked to demonstrate all information they knew about the particular topic. Answers were coded in the field by interviewers. Respondents were able to provide multiple responses for each knowledge question. Figure 11 shows the percentages of people reporting knowledge at baseline and at follow-up. Figure 12 shows the percentages of people demonstrating knowledge of the topics at baseline and at follow-up, and finally, Figure 13 shows the percentages of people who reported "Yes" to the knowledge topics during baseline and follow-up, but demonstrated incorrect information.

The only significant difference in terms of Indego knowledge from baseline to follow-up was related to knowledge of the cost. Otherwise, there were no significant differences at all between baseline and follow-up measures of Indego-related knowledge (see Figure 12. Percentages of people demonstrating knowledge). However, related to having misinformation about Indego, there was a significant decrease in misinformation related to how to become a member and how to become a cash member, but an increase in misinformation related to the cost of using Indego (see Figure 13).

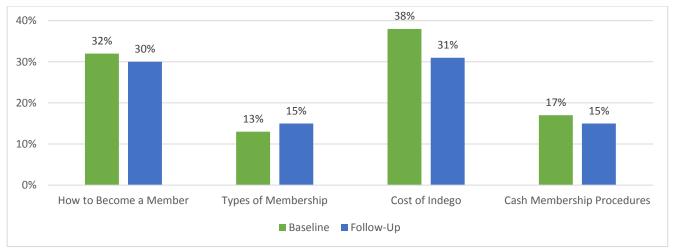


Figure 11. Percentages of people reporting knowledge

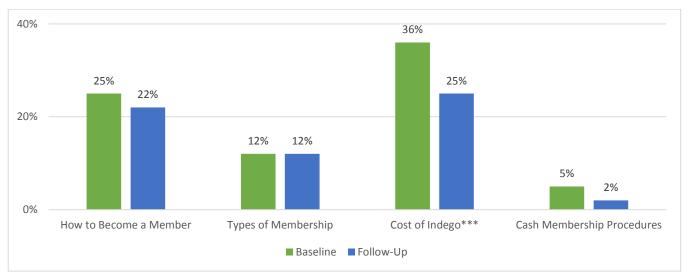


Figure 12. Percentages of people demonstrating knowledge

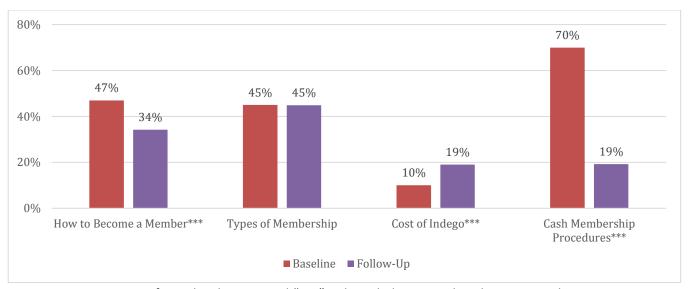


Figure 13. Percentages of people who reported "Yes" to knowledge items, but demonstrated incorrect information

Table 13 shows demographic information associated with various types of Indego knowledge. In both the baseline and follow-up, those who reported Indego knowledge were generally younger than the overall mean age of the survey respondents. Results also show that Indego knowledge was not related to gender. As far as race, proportions of Black or African American respondents with knowledge about Indego were generally lower than overall proportions of Black or African American respondents in both baseline and follow-up periods. The opposite trend was true for White, Asian or Pacific Islander, and Hispanic or Latino respondents; higher proportions of individuals from those race categories reported knowledge of Indego as compared to their relative representations during both time periods. See Table 13 to compare the "Survey" column to the columns under "Reporting Knowledge of..." for racial differences. In addition, those who were from higher income households, were students, or were employed represented greater proportions of those with Indego knowledge as compared to their representations in the overall baseline and follow-up surveys (see Table 13).

Table 13. Demographic Information and Indego Knowledge

		Base	line (N :	= 530)		Follov	v-Up (N	= 510)			
		Repo	rting Kı	nowledg	e of		Reporting Knowledge of				
	Survey Demo- graphics	How to Become a Member	Types of Membership	Cost of Indego	Cash Membership Procedures	Survey Demo- graphics	How to Become a Member	Types of Membership	Cost of Indego	Cash Membership Procedures	
Sample	530	32%	13%	38%	17%	510	30%	15%	31%	15%	
Mean Age, years	38.7	36.5	37.8	37.3	38.7	36.5	35.5	33.6	32.7	34.8	
Gender											
Female Male	43% 57%	43% 57%	48% 52%	48% 52%	39% 61%	42% 58%	49% 51%	42% 58%	43% 57%	45% 55%	
Race											
Asian or Pac. Isl. Black or Afr. Am. Hispanic or Latino Other White	2% 70% 7% 3% 17%	4% 60% 11% 5% 21%	3% 59% 14% 1% 22%	4% 66% 10% 3% 18%	2% 67% 6% 3% 22%	5% 58% 8% 8% 20%	6% 52% 6% 7% 28%	6% 38% 6% 10% 37%	6% 44% 9% 11% 28%	4% 60% 12% 5% 17%	
Annual Income											
< \$35,000 \$35,000 - \$59,999 > \$60,000 Student	72% 16% 12% 24%	64% 21% 10% 32%	57% 20% 23% 37%	69% 18% 13% 30%	68% 19% 13% 18%	55% 18% 14% 28%	49% 24% 17% 29%	51% 23% 15% 33%	56% 21% 15% 33%	55% 14% 14% 32%	
Employed	52%	64%	70%	58%	60%	61%	72%	73%	69%	65%	
Overall											

The following tables show the number and relative proportions of respondents who reported correct, partial, and incorrect information to knowledge questions. Response proportions are reported based on both entire sample sizes and on the number of people answering "Yes" for the respective knowledge question. Tables show both baseline and follow-up results.

Knowledge of How to Become an Indego Member

Respondents were asked, "Do you know how to become a member of the Philly Bike Share system?" Responses for both baseline and follow-up periods are summarized in Table 14. Respondents who said "Yes" to this question were subsequently asked to demonstrate their knowledge. Answers were coded into "Knew to Sign Up Online," "Partially Correct," and "Incorrect" categories. Reponses that included "call" or "over the phone" were coded independently as this method is technically correct, but not promoted.

Data suggest that respondents of the follow-up period exhibited no major shifts from baseline. A slight decrease of those who reported "Yes" to this question was observed (32% in baseline to 30% in follow-up). Overall changes in knowledge of obtaining membership via online appear static, however follow-up respondents seem to have

reported fewer details about payment methods when signing up online (e.g. online + card and online + cash) than did baseline respondents.

In general, there were fewer mentions of Family Dollar or 7-11 (independently and along with the online sign up) in descriptions of how to become a member in the follow-up survey as compared to the baseline.

Of importance, while demonstrated knowledge of how to become a member did not appear to increase from baseline to follow-up, reports that one could become a member at the kiosk (which is incorrect), decreased. This may be indicative of people having actually gone to the kiosk to attempt to join, and found they were unable to.

Table 14. Reported Knowledge of How to Become an Indego Member

		Baseline			Follow-Up	
Q: Do you know how to become a member			% of those			% of those
of the Philly Bike Share system?"		% of	reporting		% of	reporting
	# of	Total	"Yes"	# of	Total	"Yes"
	responses	(N=530)	(n=167)	responses	(N=510)	(n=152)
Reported "Yes"	167	32%	-	152	30%	-
Had Correct Information	131	25%	78%	109	21%	72%
Knew to Sign Up Online						
Sign Up Online (pay with card)	55	10%	33%	40	8%	26%
Sign Up Online (pay in cash at 7-						
11/Family Dollar)	8	2%	5%	3	1%	2%
Sign Up Online Only (no payment						
method provided)	68	13%	41%	74	15%	49%
Knew Family Dollar, 7-11	14	3%	8%	1	0%	1%
Incorrect				49	10%	32%
At kiosk	53	10%	32%	34	7%	22%
Other*	11	2%	7%	13	3%	9%
Call/Over the Phone	6	1%	4%	3	1%	2%
"Did Not Know" or "NA"	1	0%	1%	1	0%	1%

^{*}Other (follow-up only) includes: "App," "As long as you're eligible," "Debit + ID," "For \$15," "Have to register," "If you have a credit card," "Paperwork," "Prepaid at the store," "Tents set up where you sign in," "Through friends," "Using credit cards, but unsure of what," "Credit card," "Discounts"

Knowledge of Indego Membership Options

Overall, a greater proportion of respondents reported "Yes" to knowing the Indego membership options during the follow-up period compared to baseline (15% to 13%, respectively). The follow-up respondents demonstrated both a slight increase in correct knowledge and a decrease in incorrect knowledge of membership options, with the exception of Indego30Cash. In the follow-up study, none of the respondents were able to correctly describe the Indego30Cash membership option (see Table 15).

Table 15. Reported Knowledge of Types of Indego Memberships

Q: Do you know about the		Baseline			Follow-U	Jp
different membership			% of those		% of	% of those
•	# of	% of Total	reporting "Yes"	# of	Total	reporting "Yes"
options?	responses	(N=530)	(n=69)	responses	(N=510)	(n=78)
Reported "Yes"	69	13%	-	78	15%	-
Had Correct Information	61	12%	88%	66	12%	85%
Correct						
Indego30	42	8%	61%	56	11%	72%
Indego30Cash	16	3%	23%	0	0%	0%
IndegoFlex	17	3%	25%	23	5%	29%
Walk Up Ride	19	4%	28%	23	5%	29%
Incorrect	12	2%	17%	12	2%	15%

Knowledge of Cost

Overall, the proportion of respondents who reported knowledge of the cost of using Indego decreased from 38% to 31% from baseline to follow-up periods. However, the proportions of those who reported correct information remained generally the same, while proportions of respondents reporting incorrect information increased from 5% to 15% from baseline to follow-up periods.

During the follow-up period, some incorrect perceptions of cost included combinations of incorrect dollar amounts and incorrect time periods, such as \$1/use, \$10/hr, \$14/hr, \$15/30min, \$15/yr, \$20/24hrs, \$30/hr, \$30/mo, \$4.95/30min, \$4/hr, \$5/hr, and \$8/ride. Together, these data suggest that respondents have some knowledge of correct pricing information, such as the \$15, \$10, and \$4 price-points, but are not quite as clear as to how these map on to different time frames.

Table 16. Reported Knowledge of Indego Costs

Q. Do you know how much it		Baseline			Follow-U	р
costs to become a member of or use the Philly Bike Share system?	# of responses	% of Total (N=530)	% of those reporting "Yes" (n=200)	# of responses	% of Total (N=510)	% of those reporting "Yes" (n=158)
Reported "Yes"	200	38%	-	158	31%	-
Had Correct Information	190	36%	95%	128	25%	81%
Correct	148	28%	75%	87	17%	55%
\$15/month	88	17%	44%	73	14%	46%
\$10/yr + \$4/hr	11	2%	6%	2	0%	1%
\$4/30min	49	9%	25%	32	6%	20%
Partially Correct	91	18%	46%	56	11%	35%
\$15	50	9%	25%	30	6%	19%
\$10	1	0%	1%	10	2%	6%
\$4	40	8%	20%	26	5%	16%
Incorrect	10	2%	5%	23	5%	15%

Knowledge of the Cash Membership Procedures

While a smaller proportion of respondents in follow-up study reported that they knew how to become a member by just using cash decreased, there was an increase in the proportion of respondents who were correctly able describe the process of signing up online, obtaining a bar code, and bringing the bar code to Family Dollar or 7-11 and paying in cash.

Together, these results suggest that survey respondents not only increased cash membership procedure knowledge during the follow-up period, but also decreased incorrect responses. Table 17 shows cash membership procedure knowledge resulting for both baseline and follow-up periods.

Table 17. Reported Knowledge of the Cash Indego Membership Procedures

Q. Do you know if it is		Baseline	e		Follow-Up	
possible to become a member by just using	# of	% of Total	% of those reporting "Yes"	# of	% of Total	% of those reporting
cash?	responses	(N=530)	(n=90)	responses	(N=510)	"Yes" (n=78)
Reported "Yes"	90	17%	-	78	15%	-
Had Correct Information	29	5%	32%	10	2%	13%
Correct (Online → Barcode → 7/-11, Fam\$	8	2%	9%	28	5%	36%
Partially Correct	23	4%	25%	11	2%	14%
Online	11	2%	12%	1	0%	1%
7-11 or Family Dollar	12	2%	13%	10	2%	13%
Incorrect	39	7%	43%	13	3%	17%
At kiosk	27	5%	30%	8	2%	10%
Other*	12	2%	13%	4	1%	5%
"Don't Know"	24	5%	27%	2	0%	3%

^{*}Other (follow-up only) includes: "At subway station," "Bank card," "Stores," "Used cash"

Knowledge of the App

In the follow-up survey, respondents were also asked about their knowledge of a mobile app that showed station locations and the availability of bikes and docking stations. Table 18 shows the percentages of respondents who knew if a mobile app existed for Indego, has used an app, and were able to correctly name Indego's app (B-Cycle Now). While 23% of those surveyed had used Indego, only 16% knew that an app existed, 4% reported using one, and only 2% specified the B-Cycle App. Some of the other apps that respondents mentioned were: Bike2Go, City Mapper, Map My Ride, and BikePhilly.

Table 18. Reported Knowledge and Usage of Phone App of all Respondents During Follow-Up

	# of Responses	% of Total (N=510)	% of those reporting YES (n=83)
Knew if App Exists	83	16%	-
Has Used App	21	4%	25%
Correctly Named App	8	2%	10%

As in the baseline survey, the follow-up survey indicated that there were significant differences in reported Indego-related knowledge between those users who were members and users who were not members (or walk-up users) (see Table 19). Not surprisingly, members had much higher knowledge of Indego as compared to non-members.

Member vs. Walk-Up User Knowledge

Table 19. Indego User Knowledge: Members and Non-Members

	Ва	seline	Fol	ow-Up
Indego Knowledge Type	Members	Walk-Up Users	Members	Walk-Up Users
N	14	60	27	87
How to become a member***	100%	53%	 96%	44%
Types of membership options***	43%	27%	78%	20%
Cost of Indego***	100%	69%	100%	49%
Cash membership***	57%	23%	44%	16%
Mobile app***			70%	14%

Results of Chi-square tests indicated for Follow-Up survey data. * p<.05, ** p<.01, *** p<.001

How They Learned About Bike Share

In general, respondents in the follow-up study indicated more ways (per person) of learning about bike share. This makes sense given that it has now been around for 6 months and people have had the opportunity to learn about it from additional sources. The stations/kiosks are still the most popular way people learned about Indego (86% of people in the follow-up study cited this - up from 65% at baseline). There were large increases in the proportion of people learning about bike share from the Newspaper/Online (6% \rightarrow 28%) and Bus Shelter Ads (3% \rightarrow 20%). Learning about bike share from social media also increased significantly: Facebook (5% \rightarrow 15%), Instagram (2% \rightarrow 8%) and Twitter (2% \rightarrow 5%).

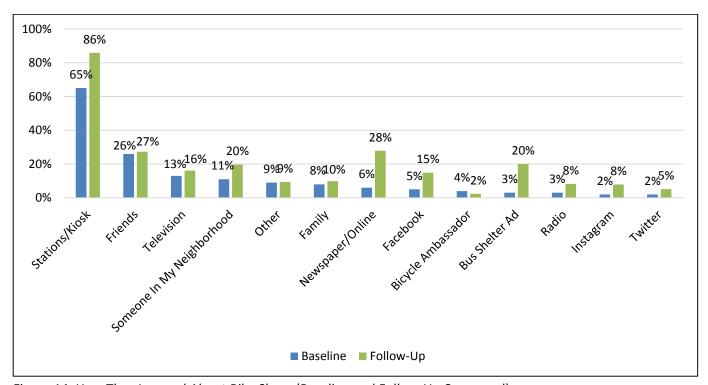


Figure 14. How They Learned About Bike Share (Baseline and Follow-Up Compared)

Table 20shows variation in how people learned about bike share related to demographic grouping. Cells that are highlighted in pink indicate values above the survey mean, while blue cells indicate values below the survey mean. Results show that people who learned about bike share from social media (including Facebook, Twitter, and Instagram) were younger on average, and people that learned about it from the radio, television and a bicycle ambassador were older. Overall, a higher proportion of females said they learned about bike share from Facebook

as compared to males. Related to race, a higher proportion of those who identified as Black or African American or Hispanic learned about bike share from bus shelter ads, while a lower-proportion of those who identified as White or other did. Finally, a higher proportion of those reporting income levels from \$35,000 - \$60,000 reported learning about Indego from someone in their neighborhood as compared to those making less than \$35,000 or more than \$60,000.

Table 20. Demographics of How They Learned about Indego

Table 20. Dem	ogra	phics o	f How 1	hey Le	arned	about I	ndego								
		N	Friends	Family	Radio	Facebook	Instagram	Television	Twitter	Bus Shelter Ad	Newspaper or Online	Seeing the Stations or Kiosk	Someone In My Neighborhood	Bicycle Ambassador	Other
Total	В	530	136	40	15	26	13	68	8	16	30	347	59	19	48
	F	510	139	50	42	76	40	82	26	102	142	438	100	12	48
% of Total	В	-	26%	8%	3%	5%	2%	13%	2%	3%	6%	65%	11%	4%	9%
	F	-	27%	10%	8%	15%	8%	16%	5%	20%	28%	86%	20%	2%	9%
Mean Age, Ye	ears														
			35.	34.	34.	30.	28.	40.	28.	47.	40.	38.1	40.	42.	36.
	В	38.7	6	2	3	6	2	4	9	5	0	30.1	1	0	2
			37.	35.	39.	31.	29.	40.	33.	34.	38.	36.6	37.	42.	35.
	F	36.5	1	5	8	9	8	0	2	3	9	30.0	7	6	4
Gender, %		N													
Female	В	225	28%	8%	2%	7%	3%	11%	1%	2%	4%	72%	11%	3%	10%
	F	215	26%	10%	10%	19%	10%	17%	5%	21%	27%	85%	16%	2%	8%
Male	В	300	24%	8%	3%	4%	2%	14%	2%	4%	7%	61%	11%	4%	9%
	F	294	28%	10%	7%	12%	6%	16%	5%	19%	29%	87%	22%	2%	10%
Race, %		N													
Asn/Pac Isl	В	11	55%	0%	0%	0%	0%	9%	0%	0%	0%	73%	9%	0%	0%
	F	24	25%	0%	0%	13%	8%	4%	0%	21%	17%	92%	21%	0%	13%
Blk/Afr Am	В	373	24%	9%	2%	5%	2%	16%	1%	3%	4%	62%	11%	4%	9%
	F	294	27%	11%	10%	17%	8%	20%	5%	24%	29%	85%	19%	2%	8%
Hisp/Lat	В	39	31%	5%	8%	5%	8%	3%	5%	8%	13%	67%	21%	3%	0%
	F	40	28%	8%	0%	13%	8%	20%	8%	23%	25%	90%	15%	3%	3%
White	В	91	24%	4%	3%	7%	4%	8%	3%	1%	9%	77%	11%	3%	14%
	F	101	21%	2%	7%	7%	5%	3%	7%	10%	27%	85%	18%	2%	16%
Other	В	16	38%	0%	0%	6%	0%	6%	0%	6%	6%	75%	0%	6%	6%
	F	41	46%	27%	15%	22%	12%	24%	2%	12%	34%	88%	29%	10%	10%
Annual Incom															
<\$35k	В	319	28%	8%	4%	5%	3%	14%	1%	3%	5%	63%	12%	3%	6%
	F	280	26%	9%	7%	14%	7%	17%	5%	20%	26%	85%	16%	2%	9%
\$35k - \$60k	В	72	22%	7%	1%	6%	6%	15%	4%	3%	8%	67%	10%	7%	14%
. 4501	<u>F</u>	88	28%	8%	10%	15%	11%	11%	6%	25%	33%	82%	30%	5%	14%
≥\$60k	B	53	30%	6%	0%	4%	2%	11%	0%	4%	11%	68%	8%	6%	15%
	F	70	39%	10%	13%	10%	7%	14%	9%	17%	34%	87%	17%	3%	9%
Student, %	В	128	33%	8%	3%	6%	4%	16%	3%	4%	8%	71%	10%	2%	11%
	F	139	29%	12%	5%	17%	9%	14%	6%	24%	28%	88%	22%	3%	12%

Employed,	В	273	28%	8%	3%	6%	4%	12%	3%	4%	8%	65%	9%	5%	11%
%	F	310	30%	10%	10%	16%	10%	17%	6%	21%	29%	86%	20%	3%	10%

Note: % are reported row percentages for each variables.

Member vs. Walk-Up User Knowledge

The only significant difference in terms of how members learned about Indego as compared to the walk-up users was related to the SEPTA bus shelter ads. Whereas only 11% of members said they had learned about Indego from the ads, 25% of walk-up users did. These results indicate that while bus shelter ads are informing people about Indego in general, there may be an opportunity to provide more membership-specific information here.

Table 21. How Indego Users Learned About Indego: Members and Non-Members

	Bas	seline		Fol	llow Up
	Members	Walk-Up Users		Members	Walk-Up Users
N	14	60	-	27	87
Seeing the stations/kiosks	50%	65%	-	81%	83%
Friends	21%	42%		19%	44%
Television	14%	10%		4%	9%
Someone in my neighborhood	14%	18%		15%	24%
Other	29%	7%		19%	14%
Family	0%	20%		4%	11%
Newspaper or online	7%	7%		27%	32%
Facebook	0%	10%		15%	15%
A Bicycle Ambassador	0%	5%		4%	1%
Ad on a bus shelter*	0%	3%		11%	25%
The Radio	7%	2%		4%	5%
Instagram	0%	5%		19%	13%
Twitter	7%	0%		0%	6%

Results of Chi-square tests indicated for Follow-Up survey data. * p<.05, ** p<.01, *** p<.001

Discussion and Conclusions

From baseline to follow-up, there were increases in reported:

- ✓ Using of Indego
- ✓ Knowing other users
- ✓ Being a member
- ✓ Knowing other members

There were also increases in:

✓ The number of sources where people were learning about (or being exposed to) Indego.

Individuals who live and work around the 17 BBSP stations are seeing the kiosks, learning about it online and from newspapers, hearing about it from friends, seeing the bus shelter ads, and hearing about it on social media.

However, there were no increases in knowledge of how to become a member, the different membership options, and the procedures to obtain a cash membership.

These findings indicate that while exposure to Indego has increased throughout the City during the "first season" in 2015, and awareness is coming from multiple mediums, individuals who live and work around the 17 BBSP stations still lack knowledge of the specifics of the system and membership.

In addition, many people cited "not having enough information" as a reason for not having used Indego (and many specifically referenced needing a credit card).

Recommendations

The following recommendations are made with the intent of increasing the understanding and use of Indego, and increasing the perception of Indego as a form of public transportation in the city, particularly for low-income and minority residents as well as females.

- ✓ <u>Recommendation 1:</u> Promote using Indego for exercise, recreation, and as a way to spend time with friends, especially for low-income people.
 - Place Indego stations along and around "the loop," possibly including the Falls Bridge, the Grandstands, St. Joe's Boathouse, the Girard Bridge area, and on the MLK side near other recreation-related stops (where there are already pieces of exercise equipment).
 - Low-income people are 2.4 times more likely than non low-income to use Indego for exercise, recreation, and as a way to spend time with friends.
 - Also low-income respondents do not see Indego as a "Convenient and Easy" way to get around the City as compared to non-low-incomes
 - However, being able to use Indego for exercise, recreation, and social reasons may be an important gateway for users to become more comfortable on the bikes, and eventually see them as a convenient and easy form of transportation.
 - A higher proportion of females reported using Indego for recreation and exercise as compared to male users. Also, a higher proportion of females who had not used Indego expressed safety concerns and being afraid of riding in traffic. Providing infrastructure for women to use Indego for recreation and exercise may increase their comfortability on the bikes in general, which will lead to increased usage for transportation.
- ✓ **Recommendation 2**: Reduce the cost of the walk-up ride to be more comparable with the price of a SEPTA ride or token.
 - Low-income individuals, those identifying as Black or African American, and females, are using the bus and subway/trolley at the highest rates.
 - Low-income individuals report not using Indego because it was cost-prohibitive and because they do not have a credit card at higher rates than non low-incomes.
 - Although we do not know how SEPTA users are paying for services (buying tokens or weekly/monthly passes), If you are currently not a member (or passholder), a one-way trip costs \$4, while one SEPTA token costs \$1.80.
 - Low-income, minority, and female residents may not see Indego as a viable alternative to SEPTA (the public transportation that they use). This may contribute to people feeling as though this is not a form of pubic transportation (and instead something separate for recreation for example).
- ✓ <u>Recommendation 3</u>: Consider deliberate wording in advertising that promotes Indego as a form of public transportation. Certainly changing the terminology of "member" to "pass" will help to address that but potentially figuring out a way to integrate it more with SEPTA at major transportation hubs.
- ✓ **Recommendation 4**: Ensure that the messaging placed on kiosks, bus shelter ads, and newspaper/online sources provides clear information about the critical Indego information.
 - The most common reason for not having used Indego, particularly for low-income residents, was not having enough information.
 - What are the critical pieces of information Philadelphia residents need to know about Indego (particularly low-income and minority residents)?

- o A pass/membership can be purchased using cash?
- o Rides can be one-way?
- ✓ **Recommendation 5:** Use the reasons that people specified for using Indego as marketing and outreach points for accessing non-users.
 - Convenience/Easy
 - > Transportation
 - Social/Friend Referral/Fun
 - ➤ Novelty/Try it/Support It
 - ➤ Needed Other Transportation
 - > Exercise/Recreation
 - Cost-Effective

Indego should be branded as a cheap and convenient alternative to other transportation options.

- ✓ <u>Recommendation 6:</u> Continue to conduct similar research with further follow-ups to monitor changes in understanding and use of Indego as well as perceptions related to utility and public transportation.
 - *As noted in the "Limitations" section. It is important to have data collected in the same manner to be able to make meaningful comparisons across time. Investing in quality data collection procedures will allow for real, measurable changes to be monitored. This follow-up study is somewhat limited given that the baseline data collection was not overseen by ISR.

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Appendices

Appendix A. Interviewer Tally Sheet

																Da	te:				
			BSP Base		•			and	Tally	Shee	t					Tin	ne on site	:			
Interviewer ID: Site ID:								Time off site:													
Approach: Hello, my name is and I am						n wo	orking with the Institute for Survey Research to survey people in this area about														
the	new	Bike Sha	re Syste	m call	ed <u>Ind</u>	ego.	lf you	have	a mi	nute,	I can	see if y	ou are	eligil	ble to	take	the surv	ey. If y	ou are, I w	ill give you \$5 in o	cash
afte	r you	ı comple	te the s	ırvey,	which	take	s less	than	5 mii	nutes	. Wou	ıld you l	ike to	see if	f you a	are el	igible for	the s	urvey?		
_		DILITY: C			١г.	£ 1515	LIGIBI	-		1						-1		A - 1' - '	- - C+ -'-		
								or your time – unfortunately you are not eligible for this survey. Ou be willing to tell me your age, gender, race, and home zip?"													
		E4 and/	or E5			For re	esearc	n pu	rpose	es, wo	ould y	ou be w	IIIIng '	o tell	me y	our a	ge, gend	er, rac	e, and nom	ie zip?"	
If re	spor	ndent pu	shes int	erviev	ver for	info	rmati	on, tl	ne fo	llowin	ng sta	tement	s may	be us	sed:						
١,	•	•						-			_					nd in	the news	s."			
١,																			you for you	ur time."	
			,,			_				,		1							<u> </u>		
	Α	В	С		D		Questi E		F		G	Н				К	**Qi	M M	igible (leave BLANK if r	refuse)	
?#		S1.	E1. Have	F	2. Do	_	Are		Do	_	o you	H Eligible?	Δσr	ed to	 	view	Notes	D1.	D2.	D3. Race?	D4.
	Approached	Agreed to screen?	to this surv	ou taken you know about his survey is week? Philly's Bike Share system, Indego?		you at least 16 years old?		you Work within a 10 minute walk of here?		Live within a 10 minute walk of here?			_	view?	Complete?			Age?	Gender?	API=Asian, Pac Isl B=Black/Afr Am HL=Hispanic/Latino W=White, O=Other NA=Native Amer	Home zip code?
1	Υ	Y N	7 N	Y	N	Υ	N	Υ	N	Υ	N	Y N	Υ	N	Υ	N			M F O		
2	Υ	Y N	1 Y	Y	N	Υ	N	Υ	N	Υ	N	Y N	Υ	N	Υ	N			M F O		
3	Υ	Y N	Y N	Y	N	Υ	N	Υ	N	Υ	N	Y N	Υ	N	Υ	N			M F O		
4	Υ	Y N	7 N	l Y	N	Υ	N	Υ	N	Υ	N	Y N	Υ	N	Υ	N			M F O		
5	Υ	Y N	/ Y	Y	N	Y	N	Υ	N	Y	N	Y N	Υ	N	Υ	N			M F O		
7	Y	Y N	Y	Y	N	Y	N	Y	N		N	Y N	Y	N	Y	N			M F O		
8	Y	Y N Y N	Y	Y	N	Y	N N	Y	N N		N N	Y N Y N	Y	N N	Y	N N			M F O		
9	Y V	Y N	Y	T V	N	V	N	T V	N		N	YN	Y	N	Y	N			M F O		
10	V	Y N	Y 8	V	N	V	N	V	N	V	N	Y N	Y	N	Y	N			M F O		
11	Y	Y N	Y	Y	N	Y	N	Y	N	e y	N	YN	Y	N	Y	N			M F O		
12	Υ	Y N	Y N	Y	N	Y	N	Y	N	Υ	N	Y N	Y	N	Y	N			M F O		
13	Υ	Y N	Y	Y	N	Υ	N	Υ	N	Υ	N	Y N	Υ	N	Υ	N			M F O		
14	Υ	Y N	Y	Y	N	Υ	N	Υ	N	Υ	N	Y N	Υ	N	Υ	N			M F O		
15	Υ	Y N	A Y	Y	N	Υ	N	Υ	N	Υ	N	Y N	Υ	N	Υ	N			M F O		

Appendix B. BBSP Follow-Up Survey

BBSI	Philadelphia Bike Shai October 2	Interviewer ID:			Station ID:	Interview #: 1						
	Currently, what forms of		-	_			PTIONS and che	ck all that apply]				
	Which one do you use th		Γrolle	y O Bike	O Regiona	al Rail	O Other:					
Q3. I	Q3. Do you owna car? O Yes O Noa bike? O Yes O No											
11	Q4. Do you consider the Philly Bike Share system to be a part of the public transportation system in Philadelphia? O Yes O No O Not Sure											
Q5.	Q5. Have you ever used the Philly Bike Share system? O Yes O No [Skip to Q8]											
If Q5 = Yes	Q7. What are the reasons you chose to use the Philly Bike Share system? [Skip to Q10]											
Q5 = No												
=	Q9. Do you plan to use the Philly Bike Share system in the future? O Yes O No O Not sure											
Q10.	Q10. Do you know other people who have used the Philly Bike Share system? O Yes O No											
Q11.	Q11. Are you a member of the Philly Bike Share system? O Yes [type]:O No											
Q12.	Do you know anyone e	lse who is a memb	er of	the Philly Bik	e Share sys	tem?	O Yes O No					
Q13.	Approximately how ma	any minutes walkir	ng do	you live from	the neares	t Philly I	Bike Share station	n?				
Q14.	How did you learn abou	ut the Philly Bike S	hare	system? [REA	D ALL OPTI	ONS an	d check all that a	apply]				
☐ Fa	☐ Friends ☐ Facebook ☐ Twitter ☐ The stations/kiosks ☐ A Bicycle Ambassador ☐ Family ☐ Instagram ☐ Ad on a bus shelter ☐ Someone in my (Name) ☐ Radio ☐ Television ☐ Newspaper or online neighborhood ☐ Other:											
	For the remaining (_					
Q15.	Q15. Do you know if there are any smartphone apps in which you can get real-time bike and dock info? O Yes O No [Skip to Q17]											
	Q16. Have you ever us	sed one of these a	pps?	O Yes [Wh	ich?]			O No				
Q17.	Q17. Do you know how to become a member of the Philly Bike Share system? O Yes O No [Skip to Q19]											
	Q18. Can you tell me the ways that you know how someone can become a member? [Check all that apply] COMPLETE INFO PARTIAL INFO Go online & pay with credit card Go online (no further info) At the kiosk Go online & sign up for cash Membership, then 7-11 or Family \$											
Q19.	Q19. Do you know about the different membership options? O Yes O No [Skip to Q21]											
	Q20. Can you tell me all of the different membership options you know about? [Check all that apply] Indego30 / Monthly IndegoFlex / Yearly + Pay-Per-Ride Other: Indego30 Cash / Monthly (CA\$H) Walk-Up Ride											

Q21. Do you know how much it cost to become a member of or use the Philly Bike Share system? O Yes O No [Skip to Q23]									
Q22. Can you tell me how much it costs? [Check all that apply] COMPLETE INFO PARTIAL INFO OTHER Indego30 = \$15/month (30 days) \$15 IndegoFlex = \$10/yr + \$4/ride \$10 \$4 for 30 mins at kiosk \$4									
Q23. Do you know if it is possible to become a member by just using cash (without having to use O Yes O No [End Section and Skip to D1]	e a credit/debit card)?								
Q24. Do you know <i>how</i> to become a member by just using cash (without having to use a credit/debit card)? O Yes O No [End Section and Skip to D1]									
Q25. What are the ways someone can become a member by just using cash? [Check COMPLETE INFO PARTIAL INFO OTHER Sign-up online, get barcode Sign-up online At the k (from PayNearMe), take to 7-11 or Go to 7-11 or Family Dollar Other: Family \$ to make a cash payment We are almost finished — now we just have a few more question	iosk								
D1. What is your age?	O Prefer not to say								
D2. What is your gender? O Male O Female O Other	O Prefer not to say								
D3. Which best describes your race or ethnicity? O Asian or Pacific Islander O Black or African American O Hispanic or Latino O Other:	O Prefer not to say								
D4. What is your household's annual income from all sources before taxes? ○ Less than \$10,000 ○ \$50,000 - \$59,999 ○ \$10,000 - \$24,999 ○ \$60,000 - \$69,999 ○ \$25,000 - 34,999 ○ \$70,000 - \$95,000 ○ \$35,000 - \$49,999 ○ Greater than \$95,000	O Prefer not to say								
D5. Including you, how many people are supported by this income?	O Prefer not to say								
D6. How many children do you have or care for under the age of 16?	O Prefer not to say								
D7. Are you currently enrolled in school (full-time or part-time)? O Yes O No	O Prefer not to say								
D8. What is the highest level of education you have received? O Less than a H.S. diploma O H.S. diploma / GED O Some college, but no degree O Associate's degree (occupational/academic degree) O Vocational school or other of O Bachelor's degree O Master's degree O Professional school degree (MD, DDC, JD, PhD, EdD)	ertificate program O Prefer not to say								
D9. What is your home zip code?	O Prefer not to say								
D10. Are you currently employed? O Yes O No [Skip to D12]	O Prefer not to say								
D11. What is your work zip code?	O Prefer not to say								
D12. In a few months, we are going to be following-up and asking a few of the same questions about Philly Bike Share in the Philadelphia. Would it be okay if we asked you a few questions via text message or email in the Fall? We will not share your information with anyone else and would only contact you as a follow-up to this survey. O No O Yes Phone: () Receive text messages? O Yes O No Email: Receive text messages?									
That is the end. Thank you very much for your time!									

Г

Appendix C. Low Income Classification

Low Income Identifier

Estimated Annual Household Income		2	3	4	5	6	7	8	9+
Less than \$10,000	LI								
\$10,000 - \$24,999		LI							
\$25,000 – 34,999			LI						
\$35,000 - \$49,999					LI	LI	LI	LI	LI
\$50,000 - \$59,999						LI	LI	LI	LI
\$60,000 - \$69,999							LI	LI	LI
\$70,000 - \$95,000									LI
Greater than \$95,000									