

# Implementation of a Smart, Dockless Bikeshare System and Development of a Bicycling Action Plan in Ithaca, NY

Final Report | Report Number 21-25 | October 2021

## **NYSERDA's Promise to New Yorkers:**

NYSERDA provides resources, expertise, and objective information so New Yorkers can make confident, informed energy decisions.

### **Our Vision:**

New York is a global climate leader building a healthier future with thriving communities; homes and businesses powered by clean energy; and economic opportunities accessible to all New Yorkers.

### **Our Mission:**

Advance clean energy innovation and investments to combat climate change, improving the health, resiliency, and prosperity of New Yorkers and delivering benefits equitably to all.

# **Implementation of a Smart, Dockless Bikeshare System and Development of a Bicycling Action Plan in Ithaca, NY**

*Final Report*

Prepared for:

**New York State Energy Research and Development Authority**

Albany, NY

Robyn Marquis  
Project Manager

Prepared by:

**The Center for Community Transportation**

Ithaca, NY

Jennifer Dotson  
Executive Director

and

**Bike Walk Tompkins**

Ithaca, NY

Margaret Johnson  
Director

Hector Chang  
Interim Program Director

Grace Johnston  
Communications & Outreach Coordinator

## Notice

---

This report was prepared by The Center for Community Transportation while performing work contracted for and sponsored by the New York State Energy Research and Development Authority (hereafter “NYSERDA”). The opinions expressed in this report do not necessarily reflect those of NYSERDA or the State of New York, and reference to any specific product, service, process, or method does not constitute an implied or expressed recommendation or endorsement of it. Further, NYSERDA, the State of New York, and the contractor make no warranties or representations, expressed or implied, as to the fitness for particular purpose or merchantability of any product, apparatus, or service, or the usefulness, completeness, or accuracy of any processes, methods, or other information contained, described, disclosed, or referred to in this report. NYSERDA, the State of New York, and the contractor make no representation that the use of any product, apparatus, process, method, or other information will not infringe privately owned rights and will assume no liability for any loss, injury, or damage resulting from, or occurring in connection with, the use of information contained, described, disclosed, or referred to in this report.

NYSERDA makes every effort to provide accurate information about copyright owners and related matters in the reports we publish. Contractors are responsible for determining and satisfying copyright or other use restrictions regarding the content of reports that they write, in compliance with NYSERDA’s policies and federal law. If you are the copyright owner and believe a NYSERDA report has not properly attributed your work to you or has used it without permission, please email [print@nyserda.ny.gov](mailto:print@nyserda.ny.gov)

Information contained in this document, such as web page addresses, are current at the time of publication.

## Preferred Citation

---

New York State Energy Research and Development Authority (NYSERDA). 2021. “Implementation of a Smart, Dockless Bikeshare System and Development of a Bicycling Action Plan in Ithaca, NY,” NYSERDA Report Number 21-25. Prepared by The Center for Community Transportation, Ithaca, NY. [nyserda.ny.gov/publications](http://nyserda.ny.gov/publications)



## Abstract

---

Bike Walk Tompkins, of the Center for Community Transportation in Ithaca, NY, undertook two interrelated projects between spring 2018 and spring 2020: 1) a dockless bikeshare system launch in Ithaca and 2) development of a bicycling action plan for Ithaca and Tompkins County. With local oversight focusing on equitable access to the service, bikeshare enjoyed much greater-than-expected use by residents. From bikeshare user trip data, combined with extensive community outreach and research into best practices, BWT developed and finalized a strategic action framework – the “Bicycling for Everyone Plan” -- for use by local municipalities and organizations in Ithaca and Tompkins County to increase bicycling mode share. The Plan is organized by the League of American Bicyclists Bicycle-Friendly “Five Es” and features a detailed bicycle network proposal for the City of Ithaca.

## Key Words

---

Bikeshare, bicycling action plan, bicycle network map, equity in access, bicycle-friendly, field experiment, trip user data, stakeholder engagement

## Acknowledgments

---

Bike Walk Tompkins, a program of The Center for Community Transportation, would like to thank the following people who have contributed to the project:

Core Staff: Victoria Armstrong, Hector Chang, Jennifer Dotson, Grace Johnston-Fennell and Linda Holzbaaur and Steering Committee Members: Fernando de Aragón,\* Karim Beers, Kent Johnson, Margaret Johnson, Thomas Knipe, Tim Logue,\* Susan Powell, David West\* (\*also Center for Community Transportation Board of Directors members)

Andrea Bruns, Anna Cook, Molly Hajjar, Kartik Sribarra and the Ithaca Bike Champions—Gibrian Hagood, Devra Rivkin, Lynne Zazzara, Barbara Kane-Lewis, James Schultz, Steven Freidmutter, Gretchen Hildredth (2018 cohort) as well as Mustafaa Ali, Natalya Cowilich, Devra Rivkin, Barbara Kane-Lewis, Tziona Szajman (2019 cohort).

The Local Advisory Council for this NYSEERDA project, or Blueprint Working Group which met twice at the Tompkins County Chamber of Commerce to inform the Blueprint for Better Bicycling and smart bikeshare search process, first on November 14, 2017, and again on August 9, 2018. Participants are listed below.

### **Local Advisory Council Members**

Joel Abrams, Howard Hanna Realty  
Karim Beers, Get Your GreenBack Tompkins,  
Cornell Cooperative Extension of Tompkins  
County  
Bev Chin, Tompkins County Health Planning  
Council  
Diane Cohen, Finger Lakes ReUse  
Fernando de Aragon, Ithaca-Tompkins County  
Transportation Council  
Nicholas Desystemizer, Recycle Ithaca's  
Bicycles (RIBs)  
Jerry Dietz, CSP Management  
Jennifer Dotson, Center for Community  
Transportation  
Gary Ferguson, Downtown Ithaca Alliance  
Bill Goodman, Town of Ithaca Supervisor  
John Guttridge, Brightworks/Press Bay Alley  
Eric Hathaway, City of Ithaca Transportation  
Engineer  
Armin Heurich, Finger Lakes Cycling Club  
Samantha Hillson, Tompkins County Health  
Department  
Reed Huegerich, Cornell University  
Transportation  
Jon Jensen, Park Foundation  
Kent Johnson, City of Ithaca Engineering  
Margaret Johnson, Finger Lakes Cycling Club  
Anna Kelles, Tompkins County Legislature  
Tom Knipe, Tompkins County Department of  
Planning and Sustainability  
Frank Kruppa, Tompkins County Health  
Department  
Kris Lewis, Downtown Ithaca Alliance  
Tim Logue, City of Ithaca Engineering  
Rick Manning, Friends of Stewart Park  
Robyn Marquis, New York State Energy  
Research and Development Authority

Erin Martea, Ithaca Children's Garden  
John Mazzeo, Tompkins County Human  
Services Coalition  
Marshall McCormick, Finger Lakes Wealth  
Management  
Dave Megivern, Ithaca City School District  
(Lehman Alternative Community School)  
Dwight Mengel, Tompkins County  
Transportation Planner  
Laurie Miller, Cornell Institute for Public  
Affairs  
Harold Mills, Board of Directors, the Center for  
Community Transportation  
Deb Mohlenhoff, City of Ithaca Common  
Council  
Dawn Montagne, Way2Go Transportation  
Education Program of Cornell Cooperative  
Extension of Tompkins County  
Ducson Nguyen, City of Ithaca Common  
Council  
Susan Powell, Cornell Transportation Services  
Martha Robertson, Tompkins County  
Legislature  
John Rudd, Cayuga Medical Center  
Jennifer Tavares, Tompkins County Chamber of  
Commerce  
Elizabeth Thomas, Town of Ulysses Supervisor  
Frank Towner, YMCA  
Liz Vance, Ithaca Youth Bureau  
Scot Vanderpool, Tompkins Consolidated Area  
Transit  
Anke Wessells, Center for Transformative  
Action  
David West, Tompkins County Department of  
Planning & Sustainability  
Paul Winkeller, New York Bicycling Coalition  
Mark Witmer, Town of Caroline

# Table of Contents

---

Notice.....	ii
Preferred Citation.....	ii
Abstract .....	iii
Key Words .....	iii
Acknowledgments .....	iii
List of Figures .....	vi
Acronyms and Abbreviations .....	vii
Executive Summary.....	ES-1
<b>1 Smart Bike Sharing in Ithaca.....</b>	<b>1</b>
1.1 Bikeshare Selection, Testing, and Launch.....	1
1.2 Bikeshare Implementation.....	5
1.2.1 Collaborative Oversight.....	5
1.2.2 Bicycle Parking.....	6
1.2.3 Distributing Bikes Equitably.....	7
1.2.4 Creating Options for Lower Income Riders.....	7
1.2.5 Introducing E-Bikes and Expanding the Service Area.....	8
1.3 Outreach and Participant Engagement.....	9
1.3.1 <i>Streets Alive!</i> Ithaca, Film Festival and Other Community Events .....	9
1.3.2 Ithaca Bike Champions .....	11
1.3.2.1 Program Background .....	12
1.3.2.2 Program Development .....	13
1.3.2.3 Program Results and Lessons Learned.....	15
1.4 Bikeshare Data Analyses and Results.....	17
<b>2 Developing the Blueprint for Better Bicycling .....</b>	<b>21</b>
2.1 Initial Research, Data Collection and Analysis .....	21
2.1.1 Ithaca Bicycle Use and Attitudes Survey .....	22
2.1.2 Additional Data Collection and Community Outreach.....	23
2.2 The Blueprint for Better Bicycling.....	24
2.2.1 Engineering .....	25
2.2.2 Education .....	26
2.2.2.1 Adult Bike Skills Lessons Pilot .....	27
2.2.2.2 Bike Skills in Schools Pilot .....	28
2.2.3 Encouragement.....	30

2.2.4	Equity and Access.....	31
2.2.4.1	Adaptive Bike Library Pilot.....	32
2.2.4.2	Bike Repair Pop-ups and Community Bike Sale Pilots.....	33
2.2.5	Evaluation and Planning.....	34
2.2.6	Enforcement.....	36
2.3	Finalizing and Implementing the Bicycling for Everyone Plan.....	37
2.3.1	Rollout of the Plan.....	37
2.3.2	Partnerships.....	38
2.3.3	Next Steps for Bikeshare.....	39
2.3.4	New and Continuing Funding Relationships.....	39
<b>Appendix A. Bikeshare Selection Documents.....</b>		<b>A-1</b>
<b>Appendix B. Bike Champions Documents.....</b>		<b>B-1</b>
<b>Appendix C. Sample Blueprint Feedback Form.....</b>		<b>C-1</b>

## List of Figures

---

Figure 1.	Announcement of Upcoming Dockless Bikeshare in Ithaca.....	4
Figure 2.	LimeBikes Launch with Elected Officials (Spring 2018).....	10
Figure 3.	Volunteers at <i>Streets Alive!</i> Ithaca Open Streets Festival (Fall 2018).....	10
Figure 4.	Participants in <i>Streets Alive!</i> Ithaca Open Streets Festival (Fall 2018).....	11
Figure 5.	Ithaca Bike Champion Barbara (left) with Bike Ride Participants.....	12
Figure 6.	GIAC Seniors Program Participant Testing an Adult Recumbent Tricycle at IBC Event.....	16
Figure 7.	2018–2020 LimeBike Ridership in Ithaca, by Month and Type of Bicycle.....	18
Figure 8.	Analysis of Total LimeBike Traffic Volume.....	19
Figure 9.	Chord Diagram of Neighborhood Origin-Destination Pairs.....	19
Figure 10.	Proposed Better Bicycling Network for Ithaca.....	26
Figure 11.	Adult Learn-to-Ride Bike Skills Class.....	28
Figure 12.	Bike Repair Pop-up in a Downtown Ithaca Park.....	34

## Acronyms and Abbreviations

---

BWT	Bike Walk Tompkins
CCT	The Center for Community Transportation
GIAC	Greater Ithaca Activities Center
IBC	Ithaca Bike Champions
INHS	Ithaca Neighborhood Housing Services
NACTO	National Association of City Transportation Officials
NYSERDA	New York State Energy Research and Development Authority
RIBs	Recycle Ithaca's Bicycles
RFI	Request for Information
SMS	Short Message Service
TCAT	Tompkins Consolidated Area Transit

# Executive Summary

---

This final report describes work on two interrelated projects implemented by Bike Walk Tompkins in Ithaca, NY between spring 2018 and spring 2020, namely: (1) a dockless bikeshare system in Ithaca that builds off community momentum from that launch to lead the development of a (2) bicycling action plan for Ithaca and Tompkins County.

Section 1 of this report describes the bikeshare project. Bikeshare equipment was once all dock-based, requiring riders to start and end trips at designated docks, with the docks themselves as the “smart,” technologically connected, pieces of equipment. Starting in about 2017, “smart” bikes, or a GPS-enabled bikes with integrated locks, that could be left anywhere, appeared in North America, allowing a service access by a much wider range of individuals and communities and more fine-grained and comprehensive collection of actual trip data beyond sometimes arbitrary dock locations. From April 2018 to early 2020, Bike Walk Tompkins (BWT) led the successful implementation of smart bike sharing in Ithaca, NY. Made possible through collaborations across public, private, and nonprofit sectors and close oversight by BWT, Ithaca’s first bikeshare system effectively addressed initial concerns about problematic user placement of dockless bikes by working closely with the City of Ithaca and with the bikeshare company’s locally engaged and responsive operational manager. To realize the clear local intention to make bikeshare equitably available to people of diverse backgrounds and income levels, we used the intentional distribution of bikes in low-income neighborhoods. In collaboration with the private provider, BWT also offered discounts for low-income people, effective workarounds for those without smartphones and/or credit cards, and implemented education and outreach that successfully reached underserved communities to further encourage biking, using both shared and personal bikes.

Section 2 of this report describes the development of an action plan for better bicycling in the Ithaca and Tompkins County area. The availability of bikes to all types of people in the Ithaca area served as a powerful incentive, leading to a dramatic increase in biking locally in a very short time, an increase that was recognized in the community, in sharp contrast to earlier limited acknowledgement of biking by leaders. While the uptake of bikeshare had been expected at 10,000–20,000 rides per year, instead, we saw 70,000 rides in year 1 (2018) and 100,000 rides in year 2 (2019). The resulting newly prominent competition for road and sidewalk space helped specific needs emerge around more and better bicycling infrastructure. Simultaneously, we gained a trove of data showing routes and destinations most travelled by bikeshare users. From this, together with extensive community outreach and feedback as well as

research into best practices, BWT developed and finalized an action plan—initially named the “Blueprint for Better Bicycling” and later renamed “Bicycling for Everyone; an Action Plan for Ithaca & Tompkins County” (BFE) to emphasize the need to bring the recommendations off the page into the streets. Its recommended list of actions for local municipalities and stakeholders is organized by the League of American Bicyclists’ Bicycle Friendly America “5 E’s” scheme of Equity, Engineering, Education, Encouragement, and Evaluation. Under each “E,” the BFE puts forth a vision statement with a short set of goals and supports these with specific recommended actions and “how to” resources, all grounded in and tailored to the Ithaca urbanized area, but easily replicable in other urban communities of all sizes. The Engineering section of the plan offers a proposed Better Bicycle Network map for Ithaca, including six proposed routes and a menu of specific bicycle infrastructure projects needed to complete those routes.

# 1 Smart Bike Sharing in Ithaca

---

Bikeshare equipment was once all dock-based, requiring riders to start and end trips at designated docks that were “smart,” technologically connected, pieces of equipment. Starting in about 2017, smart bikes, or a GPS-enabled bikes with integrated locks that could be left anywhere, appeared in North America. This service provided access to a much wider range of individuals and communities as well as allowed for a more fine-grained and comprehensive collection of actual trip data beyond the sometimes-arbitrary dock locations. From April 2018 to early 2020, Bike Walk Tompkins (BWT) led the successful implementation of smart bike sharing in Ithaca, NY. Through dedicated collaborations across public, private, and nonprofit sectors, Ithaca’s first bikeshare overcame initial barriers, using the dockless system and targeted outreach to realize its intentions to offer access to a wide range of people from diverse backgrounds, without regard to means.

## 1.1 Bikeshare Selection, Testing, and Launch

The process of selecting, testing, and implementing bikeshare in Ithaca realized the intention of a system accessible and flexible enough to address a wide variety of user needs.

The search for Ithaca’s bikeshare system provider started with hiring Bike Walk Tompkins’ (BWT) Active Transportation Coordinator (Hector Chang) in August 2017. To initiate this effort, Chang engaged a broad array of key local stakeholders in exploring bikeshare rates of return on investment (ROI’s) and then making a recommendation to the City of Ithaca. The group prioritized equity and access throughout the process of planning and implementation, selecting the dockless model and a provider with a track record of intentionally including distribution in low-income neighborhoods and innovating ways to make the service affordable and accessible to lower income people and those without smartphones and/or credit cards.

Early in the process, Chang reached out to Cornell University to discuss Cornell’s existing arrangement with Zagster, a docked bikeshare operator around which BWT’s original New York State Energy Research and Development Authority (NYSERDA) proposal for the project was built. By that time, however, news about several dockless bikeshare systems in major American cities had made headlines. So instead of simply developing a Request for Proposal for a 30-bike Zagster-style system, as had been planned, Chang attended the North American Bikeshare Association (NABSA) conference in Montreal in September 2017 to learn more about these new dockless options.



At the NABSA conference, Chang understood immediately that the North American, and worldwide, bikeshare industry was about to be disrupted by venture capital-fueled dockless bikeshares and that Tompkins County might not have to rely on a costly 30-bike planned expansion of the existing Zagster-based system on the Cornell campus to bring bikeshare to the rest of Ithaca. Chang also learned that transportation leaders in cities with dockless bikeshare had mostly positive perceptions of the systems due to their high ridership. He understood that the negative headlines depicting bikes piled up on streets did not reflect the experience of most people in these areas, and that the dockless nature of the bikeshare allowed otherwise unserved communities to easily benefit, while simultaneously offering a vast trove of bicycle-user data to local planners. Talking to representatives of the bikeshare companies, both traditional and dockless, it was clear that all players were in expansion mode and would come to cities of almost any size, so long as they were invited.

Given the growing number of companies entering the bikeshare market and their interest in entering any municipality that would let them, it was certain that there would be at least a handful of companies interested in serving the Ithaca market. However, given the small population size of Ithaca (30,100), not all companies would be interested. Therefore, Bike Walk Tompkins decided to assemble a Bikeshare Advisory Committee with involvement from City of Ithaca, Cornell University, and BWT/CCT staff in October 2017 to develop a Request for Information (RFI) to determine which companies were interested in serving the Ithaca market and simultaneously get answers to a list of questions for ease of cross-comparison. The RFI's questions revolved around six categories:

1. Fleet: type of vehicles, quantity proposed, specifications, additional features.
2. User Experience: registration and payment methods, price per ride, discounted tiers, support.
3. Parking Rules and Policies: proposed service area, in-app education, geofencing options.
4. Proposed Operations: questions differed depending on whether a vendor needed a local operating partner or whether they proposed a turnkey operation.
5. Data: data feed types, ownership of data, share-ability.
6. Cost to Partner: expected cost of bikes, stations, software.

Some of the questions focused on equitable system experience for people of lower-income and vulnerable backgrounds. These included questions about alternatives to smartphones for system registration and actual use of the bikes, alternatives to credit cards and credit holds, discounted pricing tiers, and proposed service areas. The RFI was distributed in November 2017 with BWT/CCT staff expecting three to five responses, based on the existing relationships built through the bikeshare conference. A copy of the RFI is included in appendix A.

By the RFI's closing at the end of November 2017, the team had 10 proposals in hand, from BCycle, Bewegen, CycleHop, Dropbike, Koloni, LimeBike, Ofo, Pace (Zagster), Spin, and U-bicycle. Out of the 10, LimeBike, Ofo, and Spin rose to the top because they did not require local funding and had a proven track record in the U.S. (at the time, Dropbike and U-bicycle were nascent operators in Canada). This was the clear consensus of the Bikeshare Advisory Committee, despite the earlier wariness of dockless and venture capital-based services. However, these three were offering the most bikes with the lowest start-up costs, and further, met all our other criteria. The committee used standardized summary sheets for each proposal to best cross-compare based on multiple criteria. An example summary sheet is also included in appendix A.

In addition to reviewing the responses, Hector carried out in-person visits and interviews in Seattle in early January 2018 with operations teams from Ofo, Lime, and Spin, all three of which were competing in Seattle at the time. Hector also interviewed Tom Fucoloro, the Seattle Bike Blog writer covering the bikeshare beat closely. Much useful, insider information was gleaned from that trip, including insights related to Spin's fading star, Ofo's highly corporate manner, and Lime's frankness in dealing with the City of Ithaca and its competitors. The biggest takeaway from the Seattle visit was that multiple bikeshare operators in one city was a major factor leading to piles or gluts of bikes as competing companies tried to flood the market in hyperlocal spots. While multiple operators could be feasible in a large city like Seattle where there is geographical room to spread out, it was unlikely to be positive for a small, very compact city like Ithaca. Based on the visit and the RFI responses, Hector drafted a memo for local stakeholders outlining the clear sense that a single dockless bikeshare company was most promising for Ithaca and Tompkins County.

In mid-January 2018, BWT moved ahead with its top choices. The team solicited more information from Ofo and Lime, such as draft MOUs, and requested sample bikes to be delivered to Ithaca. Bikes were test-driven by CCT staff, stakeholders from the Advisory Committee, and elected leaders, providing key feedback. By late February, the number of bikes, coverage area, and contribution to support bike infrastructure was finalized for the top two candidates, Ofo and LimeBike. The Bikeshare Advisory Committee and BWT/CCT staff made a final recommendation of LimeBike as BWT's preferred provider for the City of Ithaca. This was presented to the Mayor for the City to consider a Memorandum of Understanding with LimeBike. BWT also recommended, with City staff concurrence, that LimeBike would first launch in the downtown "flats" area of Ithaca, partly as the most feasible zone for success due to the greater likelihood of strong uptake, and partly to avoid any conflict with Cornell University, due to their continuing wariness about a dockless system, particularly inappropriate parking.

The dockless bikeshare launch received considerable media coverage when BWT announced the program with an eye-catching, one-page announcement (see Figure 1). LimeBike launched the dockless bikeshare system in Ithaca on April 20, 2018, with more than 200 dockless bicycles, all staged in the downtown and neighborhood flats of Ithaca. This set the stage for emphasizing that many people of Ithaca’s diverse community would embrace dockless bikes, minimizing the perception that bikeshare is just for students or young people.

**Figure 1. Announcement of Upcoming Dockless Bikeshare in Ithaca**

**BIKEWALK TOMPKINS** | **Dockless Bikeshare in Ithaca**  
Expanding Transportation Options for Our Community

**Bikeshare is coming to Ithaca in April 2018!** Bike Walk Tompkins and the City of Ithaca have invited LimeBike, a private dockless bikeshare operator, to set up a community-wide bikeshare system. The bicycles will make it easy and affordable to make quick trips across town.

**What Is Dockless Bikeshare?**  
Bikesharing allows people to borrow bicycles on demand for short one-way trips. **Dockless bike-sharing allows bicycles to be locked and parked freestanding**, without the need for stations or special parking racks or “docks.”

**Adjustable Seat Post**  
Fits people up to 6’6”

**Integrated Wheel Lock with GPS and Cellular Connection**  
Rear wheel locked when bicycle is not in use. GPS and cellular allow users to find and unlock bicycles on a smartphone app.

**Red Reflector Light**

**Internal Gear Hub** (Final bicycle model may vary)

**Bell**

**8-Gear Shifter**

**Cell Phone Holder**

**Large Basket with Solar Panel**

**Pedal-Powered Flashing Light**  
Front and rear lights remain on without pedaling to ensure night visibility

**Solid Foam Tires with Fenders**

**Drum Brakes (on both)**

**How Will It Work?**

- **200+ bicycles will be available to the public starting April 2018 at \$1/ride (or less)**
- **Riders will use a smartphone app to locate and unlock bicycles** (access without smartphones will be made possible)
- **Riders will be instructed on the rules of the road and how to park the bikes correctly**
- **Get in-person tips on biking and bikeshare from BWT’s Ithaca Bike Champions**

**What Should You Expect?**

- Bicycles available anywhere you want them in the City of Ithaca
- LimeBike will take care of the system with oversight from local stakeholders
- 24/7 hotline (1-888-LIME-345) available to report issues
- No local (municipal) subsidy required
- More people will find out how easy and quick it is to take short trips by bike

**Find Out More About Bikeshare**  
**Bike Walk Tompkins** has been leading the initiative to bring bikeshare to Ithaca as part of the **Blueprint for Better Bicycling** project. Learn more about bikesharing and its benefits at:  
**[bikewalktompkins.org/bikeshare](http://bikewalktompkins.org/bikeshare)**

**Bike Walk Tompkins** aims to make Ithaca and Tompkins County a community where walking and biking are safe and convenient for people of all ages and abilities. The **Blueprint for Better Bicycling** is currently funded by a NYSERDA/NYS DOT grant which will also bring bikeshare to Ithaca. Bike Walk Tompkins is a project of Ithaca Carshare, and funded in part by the Park Foundation. To learn more about our work, visit [bikewalktompkins.org](http://bikewalktompkins.org) or call (607) 301-3181.

## **1.2 Bikeshare Implementation**

Overcoming initial concerns and logistical barriers, BWT facilitated the launch of a popular, dockless bikeshare system in downtown Ithaca with intentional distribution of bikes in lower-income neighborhoods. This included discounted fees for people below a certain income threshold and access for those without a smart phone or a credit card.

### **1.2.1 Collaborative Oversight**

Upon launching, it quickly became clear that the bikeshare program was wildly popular among a variety of communities within the Ithaca area, including both residents and visitors. The uptake of bikeshare had been expected at 10,000—20,000 rides. Instead, there were 70,000 rides in Year 1 and 100,000 rides in Year 2. The team noted a particular appreciation for the bikeshare among young people, leading to LimeBikes as an element of youth culture locally. For example, there was a rap made about LimeBikes at the Community Unity Music Education Program summer camp. This high volume of uptake meant overseeing implementation of the bikeshare to align with local stakeholders' intentions, which was a complex challenge.

To support robust oversight and facilitate community relations of LimeBike in Ithaca, the Lime Equity Maintenance and Oversight Network (LEMON) group was formed the weeks prior to the launch of the system and met on a regular basis, while LimeBike operated in Ithaca. LEMON consisted of the local operations manager for LimeBike and a representative from the City of Ithaca, Cornell University, and Bike Walk Tompkins, all of whom participated in the larger bikeshare advisory committee. A good rapport was quickly established between the LEMON group and the newly hired LimeBike operations manager, who had been an Ithaca resident for 15+ years. Other than the Memorandum of Understanding (MOU), which had a limited list of key performance indicators related to customer service and maintenance that LEMON was monitoring, no additional formal documentation was established between LimeBikes, BWT and the City of Ithaca. LEMON maintained consistent communication and collaborated on well-defined informal policies and procedures to provide oversight and encourage best practices. Within the structure of LEMON, which was outlined in the MOU, the City of Ithaca deferred to BWT unless it was a legal matter or one that came through City staff or elected officials' experience with LimeBike users or detractors.

With LimeBike responsible for day-to-day bikeshare operations, BWT focused on monitoring compliance with performance standards as well as monitoring the geographic distribution and use of the bikes, while the LimeBike operations manager balanced local guidance with company needs. Two issues that highlight the nature of this “informal” collaboration between LimeBike and BWT in overseeing the bikeshare system are bike parking and geographic distribution of bikes.

### **1.2.2 Bicycle Parking**

Initially, LEMON followed the example set in other cities where LimeBike staged bikes in bike racks to demonstrate proper parking of dockless bikes. Communication prior to and throughout the initial rollout from the City of Ithaca and BWT made this a clear expectation and rule to follow when using LimeBikes, due to an elevated level of concern among residents that bikes would be left in random and undesirable locations. However, some local cyclists, advocating loudly for their concerns, expressed concern about dockless bikes using scarce bike parking to elected officials and in electronic public forums. One repeated criticism was that since LimeBikes did not require a bike rack, due to a self-locking system and kickstand, they could be parked anywhere and did not need to take bike rack parking spaces away from bikes that needed it. The City of Ithaca Council Members and Mayor agreed with public comment on this issue. Another, less frequently voiced but also important concern, was that bikes left on sidewalks could block wheelchair users, the elderly, and other mobility-impaired persons.

LEMON took on problem-solving for a solution regarding LimeBike parking that worked for all parties, leading to Lime updating communication about parking and messaged that LimeBike riders should park next to but not in bike racks, and that, if leaving bikes on the sidewalk, riders should use the section of the sidewalk between the curb and the through zone in which street furniture and amenities, such as lighting, benches, newspaper kiosks, utility poles, tree pits, and bicycle parking are typically placed (known as the “furniture zone”). This affirmed that bikes could be left anywhere so long as the sidewalk was not blocked.

The community embraced the freedom and access that dockless bike sharing brought, overcoming fears that these bikes would be left in inappropriate locations. The local acceptance of dockless bikeshare stands in contrast to the experience of other communities which experienced poor management of bicycle placement in dockless programs, leaving widely shared images of bikes of various colors piled up on street corners or haphazardly tipped over on streets and sidewalks. Residents of Ithaca expressed an openness to dockless bike sharing, which quickly came to be perceived as an asset to address longstanding local transportation needs and enhance leisure time.

### **1.2.3 Distributing Bikes Equitably**

Ithaca's hilly landscape and varied needs for transportation access in the local and university communities provided a challenge and an opportunity to work with LimeBikes on the proper geographic distribution of bikes for optimal usage. Community members wanted bikeshare to be available to everyone, so in addition to making sure that it was affordable, priority was given to Ithaca's residential neighborhoods. The dockless model was essential to achieving access and equity goals.

BWT was aware that LimeBikes preferred to place bikes on its more well-used corridors, to increase the usage and revenue of the private company. The team worked with LimeBikes to find places to stage the bikes whenever they were rebalancing geographic distribution, with at least one centrally located "hub" per neighborhood where bikes would typically be found by riders. Through our partnership, Lime assigned hubs in Southside—outside Southside Community Center and Stone Quarry Apartments (INHS), on Ithaca's Northside outside GIAC, at 210 Hancock Street (INHS) and at Hickeys Music Center and on Ithaca's West Hill (at the intersection of Elm and Floral), so that bikes were reliably available in all these neighborhoods. These targeted areas were chosen based on (1) their roles as activity hubs for lower-income and nonwhite community members, (2) consistent availability of space to stage bikes during rebalancing, and (3) bikeshare use metrics showing these locations were naturally occurring "hotspots" of bikeshare activity in their respective neighborhoods.

### **1.2.4 Creating Options for Lower Income Riders**

To ensure accessibility for lower income community members and riders without smartphone access, LimeBike created their Lime Access program to meet the needs of lower income members and provide options for people without a smartphone or credit card. Bike Walk Tompkins used income criteria already in place for Ithaca Carshare's Easy Access program (also run by CCT) to ensure that those who could provide proof of receiving government income benefits or proof of income below 150% of the Federal Poverty Level would receive discounted access. Lime Access provided a 50% off discount to qualified individuals, as well as an option to pay in cash through the PayNearMe network and access to bikes via text message instead of a smartphone application (or app) that required an Internet data connection. Lime was already developing the Lime Access program while the system was launching in Ithaca, and the Lime Access coordinator had no in-person contact with the program's users. However, Bike Walk Tompkins was instrumental in helping the Lime Access coordinator at the company in shaping improvements to the program by:

- Assisting Lime in determining eligibility requirements, including an option for on-the-ground human services agencies to vouch for an individual so that copies of sensitive documents such as Electronic Benefits Transfer and Medicaid cards did not need to be transmitted online.
- Creating an automatic form that standardized data entry for the Lime Access coordinator when signup was exclusively via email, which was then replicated for a more streamlined signup process available nation-wide.
- Supporting the coordinator in troubleshooting access to bikes via text message.
- accepting cash payments at BWT offices while Lime was setting up PayNearMe integration (which was only available at one location in Ithaca).
- Providing an in-person option for those not comfortable with independently accessing online form, where CCT staff, during weekday office hours, would fill in the form for the enrollee.
- Connecting the coordinator with more than 100 members of the Lime Access program and success stories from some of the members, which helped prove the program's success within the company. Ithaca hit a peak in sign-ups in the Lime Access program at the end of 2018.

BWT extended the impact of the Lime Access program by piloting “deputized” access to the program. We shared the internal process we used to sign people up for Lime Access with transportation liaisons at Ithaca High School, so that students needing bikeshare to access extracurricular activities could sign up at school through an in-person contact, who supported them by filling in the online form. After our local development of the program, Lime Access was adopted by the Lime company and implemented with all their bikeshare fleets in other cities.

### **1.2.5 Introducing E-Bikes and Expanding the Service Area**

In Autumn 2018, Lime expanded its service area to include College town and East Hill (the neighborhoods surrounding Cornell University) and began switching some pedal bikes out in favor of their new Lime-E pedal-assist electric bikes. The Lime-E bikes were classified as Class 1 electric bikes that only provided an electric assist when the rider was actively pedaling up to 15 mile per hour (mph). The bikes allowed people to go uphill more easily and to bike for longer distances. These e-bikes saw higher utilization than the pure pedal bikes, leading Lime to phase out regular pedal bikes. By mid-2019, there were only a handful of regular pedal bikes left in the fleet.

The e-bikes were used significantly more often than the pedal bikes on a trip/bike/day basis even though they cost more to use (\$3/hour as opposed to \$1/hour for regular pedal bikes), so by spring 2019, 90% of bikeshare bicycles were e-bikes, which better met demand in combination with the hilly landscape of the city. The popularity of the e-bikes meant that 2019 generated even higher ridership than 2018, despite the reduction of fleet size to around 230 bikes. With this, the average trip cost rose from \$1 to \$2.20 (based on cost for 8-minute ride on pedal versus e-bike, not including tax or discounts).

## **1.3 Outreach and Participant Engagement**

Bike Walk Tompkins conducted extensive outreach to raise community awareness of this new local transportation option, offering bicycling encouragement and education to underserved communities through targeted program offerings. We found that interest and participation in these offerings also exceeded initial expectations, a success that extended far beyond bikeshare itself to all types of biking.

### **1.3.1 *Streets Alive!* Ithaca, Film Festival and Other Community Events**

Bike Walk Tompkins has presented an annual *Streets Alive!* Film Festival in March since 2015, at the transition point between winter and spring, to get people excited about bicycling opportunities during the warmer weather, with attendance typically around 750 people. The team used the 2018 event for a sneak peek at a LimeBike and to share information about the upcoming bikeshare launch. Following this sneak preview, Bike Walk Tompkins used the increasing attention to garner press coverage for the upcoming bikeshare service, doing interviews with Spectrum News, the Ithaca Voice, and other local news publications.

Bike Walk Tompkins carried out outreach to community members about the new bikeshare and bicycling in general at our annual “open streets” festival called *Streets Alive!* Ithaca. The team has presented this event every April and September since 2012. For the April 2018 edition, a well-publicized and well-attended ribbon cutting and community ride for LimeBike took place in front of the Greater Ithaca Activities Center (GIAC) with participation by many elected officials (Figure 2). LimeBikes were placed along the Streets Alive! route so people could use them during the event. Event attendance reached 2,000 with many volunteers (Figure 3) and a steady flow of foot and bike traffic (Figure 4). Similar integration with the event (minus the ribbon-cutting, of course) was repeated in September 2018 as well as in April and September 2019, for both additional exposure to the bikeshare and an opportunity for people to safely test ride Lime’s evolving fleet options on streets closed to cars and open to people.



**Figure 2. LimeBikes Launch with Elected Officials (Spring 2018)**



**Figure 3. Volunteers at Streets Alive! Ithaca Open Streets Festival (Fall 2018)**





**Figure 4. Participants in *Streets Alive!* Ithaca Open Streets Festival (Fall 2018)**



In 2019 and 2020, Bike Walk Tompkins also launched a Winter Film series to engage community members in educational and inspirational bike culture in addition to serving as an ongoing outreach event for bikeshare. With five films in the series, 250 community members were exposed to new ideas and multicultural perspectives regarding cycling usage. Other community events that provided outreach opportunities included: Bike-to-Work Day, Adults Bike Day at West Village subsidized housing, Winter Solstice Rides, and a Traffic Calming Open House.

### **1.3.2 Ithaca Bike Champions**

To address potential inequities in knowledge and access to the bikeshare system, Bike Walk Tompkins developed a “community engagement officer” program called Ithaca Bike Champions (IBC) to coincide with the launch of the bikeshare system. Champions served as trained “bike ambassadors” tasked with direct service and community engagement with individuals and small groups within Tompkins County toward supporting more biking and bikeshare usage among vulnerable communities. Champions were recruited for their interest in sharing bicycling with the communities where they were connected, with an emphasis on communities that were under-resourced (such as those in public housing, senior centers, mental health support groups) or a community of color (such as those in Black-centered community

centers or Latino civic associations). Champions were hired and trained on aspects of bicycling, bikeshare, and event management; expected to work three to five hours a week on IBC projects; and were compensated for their time. The program ran in 2018 and 2019 and was successful in engaging communities not traditionally associated with bicycling, which have typically been overlooked in the deployment of bikeshare. The IBC program furthered BWT's mission of equitably breaking down barriers to bicycling and transforming people's perspective on their own abilities to ride. It also informed and influenced BWT's programmatic focus and needs and created lasting relationships with these key communities.

**Figure 5. Ithaca Bike Champion Barbara (left) with Bike Ride Participants**



### **1.3.2.1 Program Background**

The Ithaca Bike Champions program was inspired by, and blended features from, similar local and national educational programs. Locally, BWT drew inspiration from Get Your GreenBack Tompkins' Energy Navigators program, which are “peer educators” trained to help their friends and neighbors with practical energy conservation advice. The Energy Navigators program is in turn inspired by Master Gardener volunteer programs that are popular across Cooperative Extension programs across the United States, building on a proven community education model. Nationally, Bike Walk Tompkins relied on the resources provided by the Better Bike Share Partnership (BBSP), a not-for-profit collaboration among

municipalities and bikeshare companies to support equitable bikeshare systems. BBSP has information on how to start bikeshare ambassador programs, and BWT modeled the IBC program specifically on the Atlanta Bike Champions Training Guide. While similar, there were some key differences to note between the two programs BWT used as models. In 2018 and 2019, BWT blended features of these two ambassador and peer educator models. (In 2020 we paused the program due to the COVID-19 situation.) In 2021, Bike Walk Tompkins is shifting the IBC program to be more like the Energy Navigators peer educator model, with more volunteers relative to paid workers, to further the program’s sustainability and impact, and renaming it, accordingly, as the “Bike Mentors” program.

**Table 1. Comparison of Community Education Officer Models**

<b>Program Name and Type</b>	<b>Energy Navigators (community educators)</b>	<b>Atlanta Bike Champions (brand ambassadors)</b>	<b>Ithaca Bike Champions (2018-2019)</b>
<b>Recruitment</b>	Open to all	Targeted recruitment	Open to all
<b>Selection Criteria</b>	Selective, based on expressed interest in subject matter by applicant	Based on connection to target community or geographic area	Based on connection to target community and level of interest in bicycling
<b>Participants/Yr.</b>	15-25	5-7	5-7
<b>Training</b>	Rigorous, 20+ hours in weekly 2-hour chunks	Very rigorous, 40+ hours in multi-day chunks	Rigorous, 15+ hours in multi-day chunks
<b>Compensation</b>	None, as most are volunteers and the knowledge gained in training is seen as the “compensation”	Bimonthly stipend up to \$4,000 + transportation benefits	\$20/hr + transportation benefits
<b>Expectations</b>	50 hours of community service over a year	3-5 hours per week (October-May)	3-5 hours per week (May-September)
<b>Activities</b>	40% community outreach and 60% one-on-one advising or K-12 education	Attend community events, teach classes, and distribute information	60% community events (attend or generate), 20% group bike rides, 20% one-on-one

### **1.3.2.2 Program Development**

Bike Walk Tompkins was able to leverage the establishment of framework of the IBC program as part of this NYSERDA funded project into two competitive grant awards over the winter of 2017–2018, funds that were available as the program started: a Special Community Mobility Project grant from Tompkins County (funded by Federal Transit Administration mobility management funds) and a challenge grant from the Better Bike Share Partnership. The BBSP grant also introduced the BWT team to a cohort of grantees from other cities (i.e., Charlotte, Detroit, New Orleans, and Pittsburgh) who were also starting their own bike ambassador programs in the same year, access to a support network of current and past

grantees, and trainings on transportation equity and systemic racism. These expanded support networks, both local within Tompkins County and national with BBSP and funding made it possible for BWT to expand the program and hire twice the number of Champions than originally envisioned in the first year of the program, for a total of eight.

The program timeline targeted hiring and training Champions by the bikeshare system launch in concurrence with our late April “open streets” type festival called *Streets Alive!* Ithaca. With recruitment and hiring expected to take a month and training another month, planning for the IBC program began in earnest in February. A rough timeline for the stages of an IBC “season” can be seen in Table 2. Appendix B shows examples of key documents for implementing the Bike Champions project, including job description, job application, training checklist, custom timecard and example shared workplan.

**Table 2. Implementation Timeline for Ithaca Bike Champions Program**

Stage	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Record
Recruiting											Job Posting & Application
Training											Training Checklist
Events				(Variable for Champions, consistent for staff)							Special Timecard
Rides & 1-on-1											Special Timecard
Check-ins											Shared Do-list
All-Staff											Photos
Reporting											Project Report

Due to the part-time nature of the bike champion work, the expected irregular hours, limited supervision, and the emphasis on reaching out to low-income and minority communities, all stages of the program were designed to prioritize lowering barriers for Champion applicants, especially when compared with the processes of a “typical” job. For example, resumes and educational experiences were not required and not encouraged in the posting for applicants, trainings were held on evenings and weekends, flexibly scheduled monthly recurring one-on-one check-ins were scheduled with Champions, and Champions completed special timecards where participants were asked to describe tasks performed and the number of people reached for each period worked (to reduce reporting workload). Additionally, the IBC program not only lowered barriers but uplifted Champions and their communities by providing a well-advertised



high hourly wage (\$20/hr.), offering free or discounted access to bikeshare and bike rental options, supporting existing community-building events, generating new ones, and fostering a trusted network among the Champions as well as with BWT staff. These networks were invaluable to relay information from on-the-ground community members to BWT to inform programming priorities and/or share actionable information to other stakeholders BWT had access to. This combination of lower barriers of entry and an attractive program to join resulted in 25 applicants over the two years of the IBC program, of whom we accepted seven in 2018 and three (plus two alumni) in 2019.

### ***1.3.2.3 Program Results and Lessons Learned***

Ithaca Bike Champions served their ambassador roles well partly due to holding a position of trust in their communities. They provided BWT with relevant information related to service delivery and community needs. Bike Champions promoted relationship building between BWT and community members, often facilitating connections with people in specific demographic groups that, as an organization, would not typically have the capacity to reach, despite the ongoing commitment to inclusion and access. Engagement with populations such as senior citizens made us very aware of our shortcomings and we quickly acted to remove barriers to bicycling for this population where possible. This was a major learning opportunity and has had a lasting impact on the organization's overall approach to program development and delivery.

Most of the Champions used their time and resources to build community and enhance relationships first, then brought in the bikes, thus creating a stronger community through allyship—a tested practice of using power and privilege to achieve equity and inclusion while holding ourselves accountable to marginalized people's needs. Bike Champions organized dozens of themed bike rides, community building events, and educational opportunities. Examples of IBC-led events include a Bike Rave, a Waterfront Ride, a Mural Ride, an Ithaca Mamas Ride, and an Adults Bike Day at West Village low-income housing complex.

Some Champions dropped out of the program, while others did not fully meet our initially outlined expectations but, on balance, were clearly successful in what they took on. Others went above and beyond the original plans and expectations. Staffing costs for the Champions were lower than projected for both years, which was balanced by the higher-than-expected cost of considerable program management time. That said, the team also sees a path towards a “return on investment” ratio around one to five in terms of management time versus outreach and engagement time, a ratio which draws from Get Your GreenBack Tompkins's Energy Navigators program (in Cooperative Extension) as the program matures in future years.

Overall, the IBC program was wildly successful, beyond our expectations for reaching underserved communities. Bike Champions reached hundreds of people per year through the program and connected Bike Walk Tompkins and the Lime bikeshare to organizations and groups that we had not before worked with, such as the GIAC Seniors' Program, the Loaves & Fishes food pantry, Tompkins County Mental Health, the Women's Opportunity Center, the Jenkins Center (a day center for people with cognitive disabilities), and BOCES English-as-a-Second-Language classes. During their interactions, Champions directly assisted people with signing up for Lime Access, provided no cost helmets and bike riding tips, and became trusted friendly faces for bicycling in the communities with which they worked. Champions also provided direct feedback from the communities they represented that improved Bike Walk Tompkins' offerings and led to pilot project launches, such as bike skills lessons for adults, an adaptive bike library, and giveaways of bike helmets and lights.

**Figure 6. GIAC Seniors Program Participant Testing an Adult Recumbent Tricycle at IBC Event**



## 1.4 Bikeshare Data Analyses and Results

User data showed clearly that the availability of bikeshare in Ithaca made regular riders out of people who were previously infrequent riders or who faced cost or maintenance barriers to having their own bicycle. User survey responses suggest that community members of all ages, genders, ethnicities, incomes, and educational backgrounds used LimeBikes. The full set of LimeBike trip data analysis and user survey results is presented on the Bike Walk Tompkins website’s “Lime Data Reports” page<sup>1</sup>.

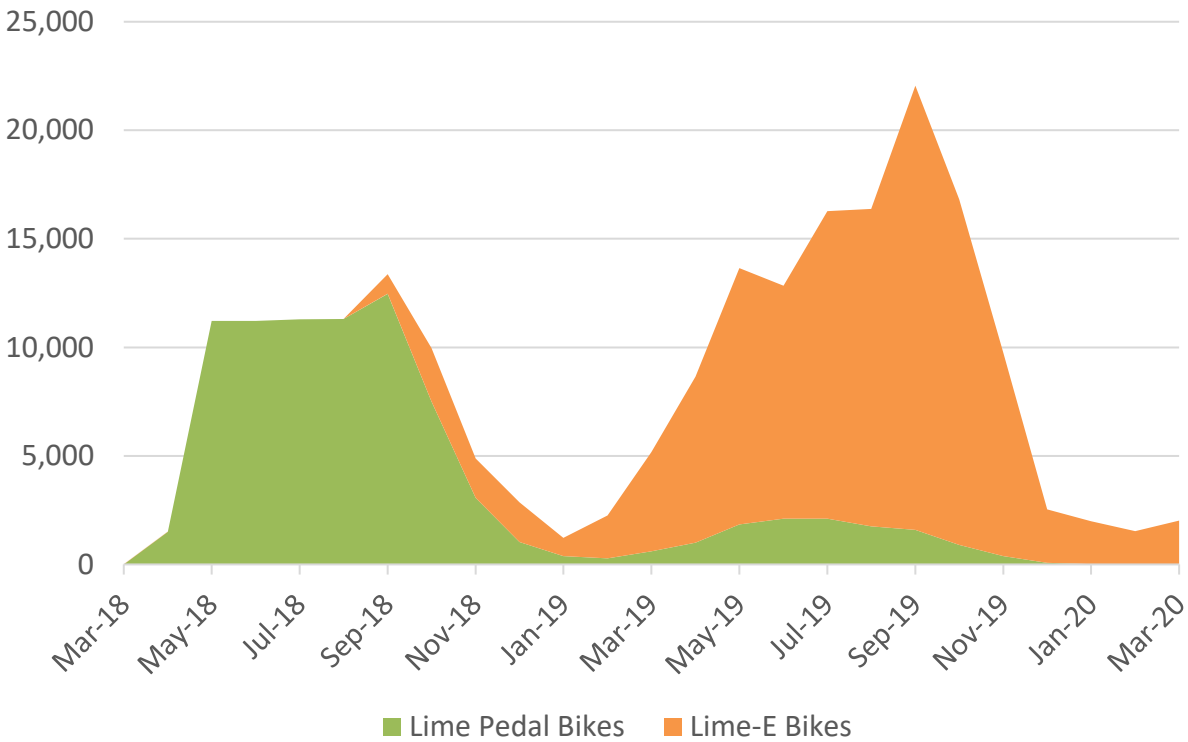
Bikeshare usage far surpassed initial projections of ridership. In 2018, LimeBike’s first year of operation in Ithaca, 77,606 rides were completed, with 11,250 to 13,500 bicycle trips completed monthly during the warmer months (see Figure 7). Rides accounted for in the cold month of December were 2,850 in 2018 alone, according to Lime trip user data. Moving into 2019, there were 100,300 trips taken on LimeBikes in 2019, with month-by-month ridership highest in the warmer months, peaking in September. There were strong signs that higher bikeshare use was correlated with peak times at major TCAT bus stations—we conservatively estimate that 4,300+ Lime trips were used for first mile/last mile connections to transit in 2019. Digging deeper, we found that the median bike trip duration was seven minutes long and the average was 12 minutes, short enough to suggest that most were for non-recreational, primarily transportation purposes.

---

<sup>1</sup> <https://www.bikewalktompkins.org/lime-reports>



**Figure 7. 2018–2020 LimeBike Ridership in Ithaca, by Month and Type of Bicycle**



Data on LimeBike activity in and around campus, student residences, and recreational areas show a seasonal fluctuation, but activity on and around campus exceeded that in the downtown Flats during the fall semester, despite Cornell’s policy of barring dockless bikeshare on campus. (While Cornell did not actively remove LimeBikes, there was an informal understanding that Lime would not deploy bikes on campus and during routine rebalancing would remove bikes that had been parked on campus.) In the Flats, the main axis of bikeshare activity was from Fall Creek–Downtown, while on East Hill, the main axis was North Campus–Central Campus–College town. The most frequently used street corridors for bikeshare in Ithaca included East and College Ave., Cayuga St., Stewart and Buffalo St., State St., Tioga St. and Plain St. This observed trip data was highly instrumental in developing the proposed Better Bike Network in the Blueprint portion of this NYSEERDA project (see Figures 8 and 9).

Figure 8. Analysis of Total LimeBike Traffic Volume

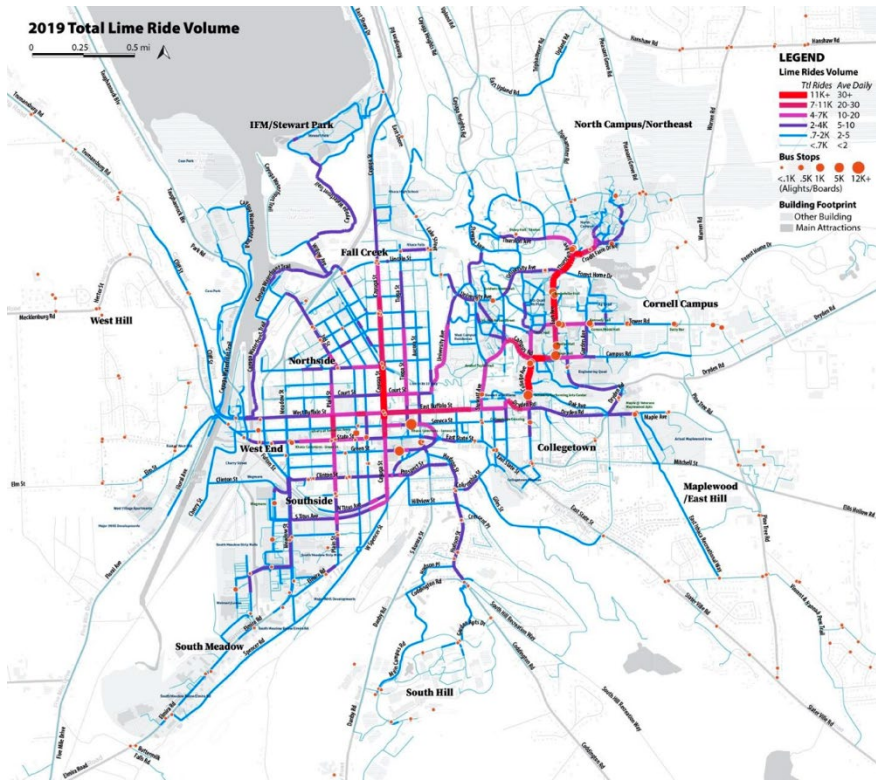
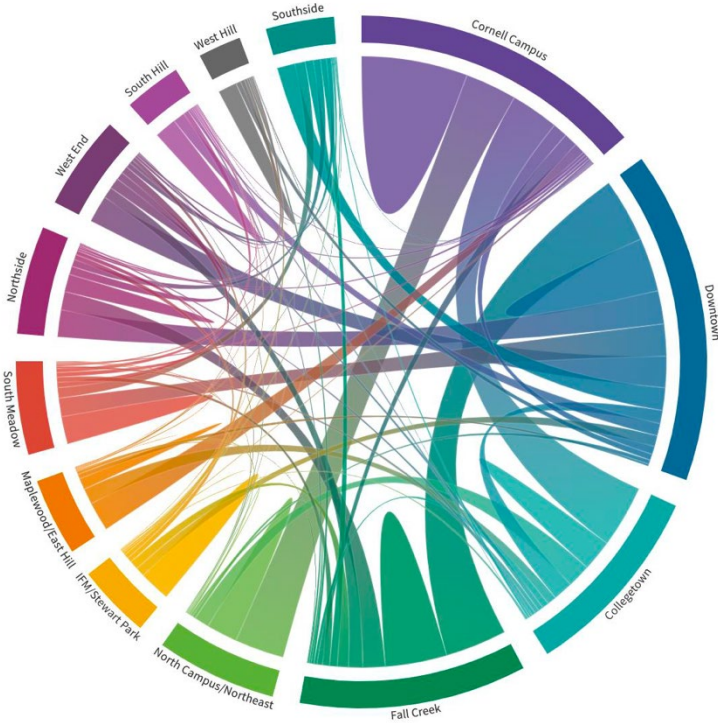


Figure 9. Chord Diagram of Neighborhood Origin-Destination Pairs



The LimeBike User Survey (LBU Survey) self-report is the closest thing to descriptive data about the users, since Lime only collected contact information. Lime was able to email a shareable link of the LBU Survey to all user accounts that had used a bike in Ithaca, which limits the results to an opt-in survey, rather than random. Nevertheless, the survey results suggest that community members of all ages, genders, races, incomes, and educational backgrounds used LimeBikes. Based on a comparison of these survey data with local demographics, it appears that people of color, students, and people from lower-income households had a higher tendency to be LimeBike riders. Access to Lime prompted users to shift away from other modes of transportation; the most reported changes were 37% of riders walked less often, 28% drove alone less often, and 24% took taxis or Ubers less often, thanks to bikeshare. The overwhelming majority of riders agreed that Lime was accessible, convenient, easy to use, well-maintained and good for the community, while non-riders who happened to get the shareable link and respond tended to disagree most with the statement that there were parking and community benefits from the bikeshare.

The 2018 Ithaca Bike Use and Attitudes Survey (see Section 2.1.1) random sampled phone survey, indicated one in five residents and one in four students in and around Ithaca had tried LimeBike when it was available. Based on results found in trip data, opt-in surveys of users and random-sample surveys of users and non-users, the team concludes that the mere presence of available bikes served as a powerful enticement which resulted in a dramatic increase in biking in the area. “If you put the bikes out, they will ride.” The competition for road and sidewalk space created by this increase in biking was immeasurably useful in pointing out specific needs for more and better bicycling infrastructure. In Spring 2020, LimeBike left the City of Ithaca following an announced pause in service due to the start of the COVID-19 pandemic. The pause was made permanent when Lime representatives notified the City in May 2020 that they had no intention of relaunching the fleet in Ithaca, leaving Bike Walk Tompkins to lead the process of identifying the next provider, a process that is currently underway.

## 2 Developing the Blueprint for Better Bicycling

---

From our experience with bike sharing and related outreach activities and programming, we acquired for our community a broad and deep set of experiential and user trip data that could be put to immediate use. From this, together with a literature review on best practices and many rounds of stakeholder input, the team developed and finalized a strategic framework to inform and guide municipal bicycle plans in Ithaca and surrounding areas in Tompkins County. It is designed to achieve the key objective of doubling the rate of bicycling activity in Ithaca.

Rather than purely aspirational, a “wish list” of bicyclists’ dream projects, the Blueprint is richly grounded not only in stakeholder input, but also in data collected through the bikeshare system experience, additional on-the-ground research and pilot projects, as described above. The Blueprint’s list of recommended actions is informed by the expressed wants and needs of the local community.

Tompkins County’s Blueprint for Better Bicycling (hereafter, the “Blueprint”) was initially inspired by similar projects in bike-friendly cities in the United States, in particular Portland, OR (The Street Trust’s Blueprint) and Burlington, VT (PlanBTV Walk Bike). These plans used the so-called “Five E’s” framework of the League of American Bicyclists (LAB)’s Bicycle Friendly Community program: Engineering, Education, Enforcement, Encouragement, and Evaluation, with a heavy emphasis on Engineering. The similarities in transportation access concerns, community support for bicycling, and progressive local politics between these locales and the Ithaca area catalyzed BWT’s work on a Blueprint to apply to our community.

In the current social context, traditional means for enforcement related to pedestrians, bicyclists, and the realm of transportation is generally being reconsidered. Therefore, our plan added one more “E” (Equity) and removed one “E” (Enforcement) in recognition of the unfolding dialogue about racial justice and public safety. (We note that LAB has also recently added Equity, Diversity & Inclusion as an “E” and removed Enforcement as a separate “E” reimagining it and weaving it more subtly throughout the other “E”s where appropriate. We are glad to see LAB catch up to our interpretation of the Five E’s framework!)

### 2.1 Initial Research, Data Collection and Analysis

BWT gathered data from surveys, pilot tests of programs, and input from local stakeholder key informants to develop the Blueprint/BFE.

### 2.1.1 Ithaca Bicycle Use and Attitudes Survey

An initial Bicycle Use and Attitudes Survey (“Ithaca Bike Survey”) was carried out in spring 2018, working with subcontractor the Yasamin Miller Group. A follow-up survey in spring 2020 sought to capture change and measure progress. Responses revealed a strong and increasing interest in biking and desire for better biking infrastructure. Full reports on the 2018 and 2020 Ithaca Bike Use and Attitudes Surveys can be found on the Bike Walk Tompkins website’s “Ithaca Bike Survey” page<sup>2</sup>.

The 2018 survey was the first comprehensive, randomized bicycling survey to be done in and around Ithaca, which asked people about their bicycling behaviors and attitudes. Results showed that there is a growing number of people bicycling in the Ithaca area and most people are interested in bicycling more often. We also learned that most want more bike infrastructure, with a stronger preference toward infrastructure that minimizes their exposure to moving vehicles while bicycling. Below are key findings from the 2018 survey:

- More than half of respondents (53%) had biked in the past year, and a sizable portion (20%) reported biking weekly or daily during the warmer months for errands.
- Those either definitely or potentially interested in biking more often in and around Ithaca amounted to 55%, and 48% said they would drive less often if they biked more often.
- A majority expressed that Ithaca’s hills and weather and feeling unsafe next to moving vehicles discouraged them from bicycling in and around Ithaca.
- Over 80% preferred bicycling facilities that are separate from vehicle traffic or shared only with low and slow vehicular traffic.
- Those who agreed or strongly agreed that there should be more bike infrastructure on local streets amounted to 77%.

The second Ithaca Bike Survey repeated the same questions as were asked in 2018. It was conducted in 2020, early in the COVID-19 lockdown, to capture peoples’ recollections of their pre-pandemic bicycling patterns while still in recent memory and to learn how the pandemic was affecting interest in and barriers to bicycling. The two sets of responses revealed, a shift away from using single-occupant vehicles as a mode of transportation and a significant increase in the prior season’s warm weather biking, possibly influenced by widespread bikeshare access. Perception of the role of biking in local transportation infrastructure increased by three percentage points from its 77% approval rate in 2018 to 80% in 2020, with an even greater proportion agreeing that better infrastructure is needed for safe biking.

---

<sup>2</sup> <https://www.bikewalktompkins.org/bike-survey>

Not surprisingly, responses to the Ithaca Bike Survey confirmed that safety, weather, and hills were the biggest barriers to bicycling in Ithaca. Other barriers, such as perceived lack of experience or not having a bike, while they did not affect most people, did affect certain groups of people disproportionately. For example, college students were disproportionately affected by lack of access to a bike, while women disproportionately indicated that they lacked the experience or skills to bike. These survey results guided our subsequent review of best practices from other communities, additional local data collection through the bikeshare and community outreach, and pilot tests of potential action steps.

The finding that most survey respondents had indicated feeling unsafe next to moving vehicles as one of their top barriers to bicycling led us to investigate approaches taken in other cities to increase bicyclists' sense of safety while out on the road. While we investigated the impact of public safety campaigns and on-road bike education in other communities, most of our safety-focused best practice research leaned on developing guidelines for creating bike infrastructure that conformed to the survey respondents' preference for bicycling separately from fast or heavy vehicular traffic. Therefore, the final plan tracks heavily with National Association of City Transportation Officials (NACTO)'s Designing for All Ages & Abilities guidance for their Urban Bikeway Design Guide, particularly the Engineering section. Additional best practice research informed key actions shown in the plan that have not yet been implemented in Ithaca and Tompkins County, such as an annual community leaders' bike ride and implementing Vision Zero and Complete Streets policies.

### **2.1.2 Additional Data Collection and Community Outreach**

Community outreach was a significant source of feedback and input for the Blueprint. Through the *Streets Alive!* Ithaca open streets festival and community outreach at local events and festivals, we have been connecting with the community to hear what is wanted in creating a more bike-friendly city. We received over 200 completed online and paper feedback forms (see appendix C) at community events, with information about (1) the places people would like to go via bike, (2) interest in various bicycling encouragement initiatives, and (3) what people would “trade” for more bike infrastructure, in an exploration of where this sat in a community priority scheme. While information on preferred bicycling destinations and routes were eventually enhanced and superseded by the mammoth trip dataset collected from the LimeBike bikeshare system, we heard a strong community interest in “seeing people like [themselves]” reflected in the visible and acknowledged bicycling community locally. In addition, there was interest in the significantly polarized positions for and against removing on-street parking

and dedicated travel lanes for biking. Traffic changes that were slightly less polarizing were making fewer streets “through-streets” and lowering speeds for motor vehicles. These were factored into the decision-making process for developing routes in the Engineering section, with additional lessons learned from our community outreach efforts incorporated into other relevant sections.

Finally, we pilot tested various potential action items to see what the impact and reception would be like on a small scale. This was a strategy we employed for two of the other E’s: Education and Equity & Access. For example, from the survey BWT learned women disproportionately reported that a “lack of bicycling skills” was for them a barrier. We organized pilot bike skills lessons for adults in 2018 to see the overall demand and skill range of attendees. As expected, most people who attended were women, most of whom were beginners to bicycling and needed to learn how to ride a bike. For a subsequent expanded pilot test of adult bike skills lessons, we made changes to accommodate this group better. Pilot tests are highlighted in sections 2.2.2 (Education) and 2.2.4 (Equity and Access).

The Advisory Committee for this NYSERDA project convened to learn the findings of the first year of research for creating the Blueprint. About a dozen members of the committee were invited to participate in a more focused Blueprint Working Group based on their interest and engagement in the larger committee. The purpose of the working group was to take the information gathered through research and begin developing a plan. The Blueprint Working Group met and sketched out a vision for each of the five “E”s through a series of three workshops in the winter of 2018–19. The working group was composed of a mix of elected leaders, municipal staff, and active community members (see page 3 of this report for the full list of members). In each workshop, we challenged attendees to imagine what our community would look like having achieved the pinnacle of each “E,” to categorize and summarize the responses in group exercises and to produce a draft vision statement for each E. These drafts and themes served as the basis for each section of the Blueprint.

## **2.2 The Blueprint for Better Bicycling**

In the Blueprint for Better Bicycling, each “E” is anchored by a vision statement pulled from the drafts developed by the working groups mentioned just above. Every section includes a set of three to four strategic goals that are tied to each vision, all of which were also inspired by stakeholder engagement from community outreach. Finally, three to four action steps are fleshed out for each “E” that targets one or more of the goals. The Blueprint’s specific action steps were chosen based on our literature review, local collection of observational data, and community input.

## 2.2.1 Engineering

While safety was one of the top barriers to bicycling mentioned by respondents in the Ithaca Bike Use and Attitudes Survey, through the feedback collected from community members, the Blueprint Working Group, and the patterns emerging from bikeshare trip data, a new infrastructure-related barrier to bicycling emerged. The current bike network in and around Ithaca—composed of painted bike lanes and designated “bike boulevards”—did not take people to their desired destinations. Additionally, BWT also recognized that people who were already biking identified poor maintenance of existing bike infrastructure as a barrier to bicycling as well. Therefore, we set connectivity, safety, and maintenance as the three strategic goals to address in the Engineering section, under the vision of building a community where “infrastructure is designed to empower people of all ages and abilities to feel safe bicycling on a connected and well-maintained Better Bike Network.”

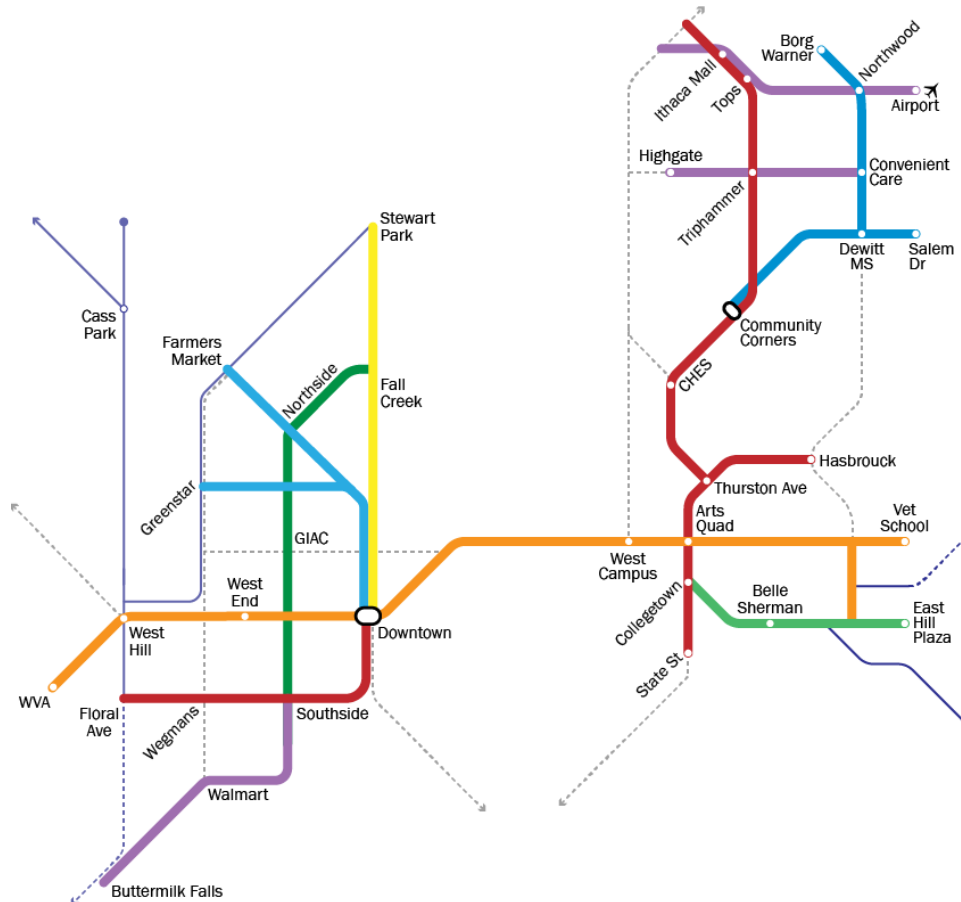
To address connectivity concerns, LimeBike data was instrumental to understanding where people wanted to go by bike. Most trips documented by Lime were short in distance but spanned neighborhoods (i.e., not just people joyriding downtown or in a park). Hotspots of activity included grocery stores and markets, shopping areas, schools, libraries, community centers, transit hubs, and parks. The Blueprint’s guidance for improving connectivity prioritizes use of connector and arterial streets that connect neighborhoods and strongly encourages direct access to community amenities with bike infrastructure. To address safety and maintenance concerns, BWT developed guidelines that are understandable by a lay audience and are rooted in the latest guidance from NACTO. The Blueprint prioritizes infrastructure that keeps people away from fast and heavy traffic by proposing major bike routes on quiet neighborhood streets wherever possible and proposing street designs that physically separate people bicycling from moving vehicles on unavoidable busier streets.

When considered as a whole, these concepts turned into what we call the Better Bike Network (see Figure 10 below), a proposal for a higher standard of bike infrastructure to be built in and around Ithaca. In December 2019, we did a series of two workshops with targeted elected leaders and staff to let them sketch out where the Better Bike Network should go based on bikeshare ridership data and how they would prioritize each of the sketched-out corridors. This info served as the basis for more detailed guidance on key projects related to infrastructure. We narrowed down the number of priority corridors to six, selected feasible routes that prioritized the three goals of the Engineering section, and highlighted



key projects that can be advanced sooner to build towards that vision. To further capture the imagination of people, BWT contracted with Whitham Planning and Design in February 2020 for conceptual renderings of each of the routes with Better Bike Network infrastructure in place. The resulting proposed Network can be found on Bike Walk Tompkins website’s “Bicycling for Everyone” page.<sup>3</sup>

**Figure 10. Proposed Better Bicycling Network for Ithaca**



## 2.2.2 Education

While knowledge of bicycling skills was not something most people in and around Ithaca said they lacked in the Ithaca Bike Use and Attitudes Survey, this was disproportionately felt by women and younger persons. Bike education can shore up those skills in everyone and especially build confidence in new riders in an equitable way. Additionally, the Blueprint Working Group and feedback from

<sup>3</sup> <https://everyone.bikewalktompkins.org>

community members suggested a more expansive definition of bike education; that is, education that not just teaches people how to bike but also education that teaches other road users on how to share the road with people bicycling. Thus, the goals and actions of the Education section coalesced around the vision of creating a community where “educational programs are readily available to prepare everyone for life in a community where bicycling is commonplace.” To get there, the action plan for the Education section focuses on making sure bike education is available at all levels (i.e., age, ability), integrated into existing offerings wherever possible (e.g., schools, college orientation, senior centers), and provided with an eye on increasing bicycle-readiness community-wide.

### **2.2.2.1 Adult Bike Skills Lessons Pilot**

Adult bike skills education began in a small pilot in 2018, with two or three classes, each of which had under 10 participants. Trainer-mentors hired as part of the Ithaca Bike Champions program led these classes in late August. Through the small pilot, we learned that most people who showed up were adults who wanted to (re-)learn to bike. While attendees were encouraged to bring their own bike, some showed up without one and others came with a bike that either did not fit them well or was otherwise not suited for teaching and learning. Additionally, without a registration system, it was hard to gauge how many people would show up to the classes, which made it difficult to plan for volunteers and supplies such as helmets.

In 2019, BWT incorporated lessons learned from the 2018 pilot by including a registration process and making a fleet of teaching bikes available to borrow during the class. To accommodate a wider range of female body sizes and inspire confidence, the teaching bikes were step-through bikes with a smaller frame and tires that were thicker than your average hybrid bike for increased traction. Easy-to-remove pedals were also a plus in the new fleet of teaching bikes, so that the bikes could be quickly transformed into “strider” bikes to more effectively teach beginners how to balance.

Additionally, in 2019, BWT expanded the pilot program to include two instructors and three levels of instruction based on a simplified curriculum of classes developed by Bike New York. There was consistent, high demand for Level One “Learn to Ride” classes, and lesser but still consistent demand for Level 2 “Bike Handling Skills” classes. There was some interest in the Level Three “Street-Riding Skills” class, but it was not comparable in demand to Level One and Two offerings. Most attendees at all levels identified as female, of a variety of ages, races, and ethnicities. All the classes were offered for free, in closed parking lots near downtown Ithaca, and primarily on weekends due to their popularity.

**Figure 11. Adult Learn-to-Ride Bike Skills Class**



BWT’s initial plan for 2020 was to focus solely on Level One instruction to formalize a curriculum at that stage and test out incorporating more capable Ithaca Bike Champions as co-instructors. As the impact of the coronavirus pandemic became clear, we adapted to offer one-on-one classes only and to rely on current staff to carry out socially distant lessons. This experience built on our understanding of community needs and best practices for teaching. Most one-on-one class participants were also female, and their personal lesson time doubled as consultation for bike fit, strategizing access to bike repair or affordable bicycles, and managing bicycling with children. We also brought bikes to participants’ places of residence for lessons at a nearby park or parking lot and through this we discovered more places to host future bike skills lessons across Ithaca’s neighborhoods. As the pandemic recedes in 2021, BWT will continue to adapt, document, and evaluate and evolve its adult bike skills offerings to develop a curriculum from beginner to commuter cyclist that can be shared and replicated in Ithaca and beyond.

### ***2.2.2.2 Bike Skills in Schools Pilot***

Bike skills education within the public education system had come up as a recurring theme in conversations with the Blueprint Working Group and in conversations with community members. A serendipitous opening to piloting bike education arose in late 2018 when a motivated vice-principal at a downtown Ithaca elementary school contacted Bike Walk Tompkins about assistance in sourcing kids’ bikes for their nascent bike program. At the same time, a representative from Cornell’s SC Johnson

College of Business contacted BWT looking for a home for dozens of kids' bikes that were bought and partially assembled as part of a team-building exercise. We made the connection and a pilot bike module within Beverly J. Martin (BJM) Elementary School's 2nd grade physical education (PE) program was launched in spring 2019.

BWT Director Victoria Armstrong assisted the BJM bike program as a bike skills educator working in collaboration with the physical education teacher and the vice-principal. Together, they developed a rough curriculum that took students from never having bicycled before to bicycling at a neighboring terrain park. The collaborators also found a place to store 15 bikes within the school building and found additional funding to purchase helmets and adjustable training wheels. The pilot program was a clear success. Most of the students in two 2nd grade classes completed the full curriculum and the physical education instructor noted that it engaged students that were usually harder-to-reach in other modules of the PE program.

The success of the BJM bike program catalyzed interest in two other elementary schools to start developing bike programs of their own in the fall of 2019. However, new barriers to implementation started developing in these two new programs, which allowed Bike Walk Tompkins to compare the experiences of different school bike programs and identify factors for success in the BJM program. Storage of the bikes was often the first barrier, as the interested elementary schools did not have sufficient space within their buildings to house a fleet of 20 or more kids' bikes. One school decided to store a smaller number of bikes in an existing outdoor shed, while another sought funding for a new dedicated outdoor shed for a full fleet of bikes. Additionally, at BJM, there was a tri-partite group made up of a PE teacher, an administrator, and the BWT bike skills educator working together to ensure success of the program. The ingredients for success included having a PE educator available to carry out the module with students, an administrator to arrange funding and space for the program's equipment, and a bike skills educator serving as subject matter expert and outside advocate for the program. At the two schools that wanted to pilot the program, either the PE educator or the administrator were uninterested or too overwhelmed to fully support a new initiative like a bike skills program. This became harder as the COVID-19 pandemic shut down all schools. As reopening occurred in late 2020, two new schools seeking more instructional opportunities outdoors reached out to BWT about setting up a bike skills program.

Looking ahead, as the Blueprint is implemented, we will continue to assess ways to reduce the workload on the schools to incorporate a bike module within their physical education programs so that this opportunity can be made available at all elementary schools and beyond. BWT has assisted in schools sharing bikes so that they do not sit idle in one school while another needs them. We have researched possible movable storage options, such as a trailer to bring a moveable bike fleet from school to school, so that this sharing could occur more easily in the face of limited school storage space, but have, so far, found the cost to be prohibitive. Maintenance of bikes has also been an issue, and BWT has stepped in to fix some bikes. Currently, we are looking at procuring a different fleet of bikes that can better accommodate older children so that curricula can be built orienting kids toward riding on the road for transportation.

### **2.2.3 Encouragement**

The Encouragement section benefits from Bike Walk Tompkins’s vast experience in organizing events and other initiatives to engage people with bikes—from open streets festivals to community engagement officers and themed events. The Blueprint Working Group and community feedback also found areas where our local bike culture could be improved upon, such as offering more regular bicycling engagement opportunities throughout the year and building a broader and more diverse coalition through it, all in service of creating a community where “people and organizations openly support and find joy in bicycling as an everyday way of moving around.”

Two of the key actions developed for the Encouragement section are evolutions of two of BWT’s signature programs: the *Streets Alive!* Ithaca open streets festival and the Ithaca Bike Champions community outreach initiative. To spread the joy of open streets to more neighborhoods in and around Ithaca, a smaller and more replicable open streets program should be piloted and targeted toward streets that would benefit from year-round traffic calming. Similarly, to reach more people and places, the Ithaca Bike Champions program could be expanded with volunteer champions that focus on one-to-one bicycling support (see page 15 for more information). Two additional key actions were inspired by the community’s desire to see themselves as part of our local bicycling culture and take direct action in making it better: a social marketing campaign and a mini-grant program, respectively. This is in line with the goal of building a stronger and more diverse pro-bicycling coalition.

The COVID-19 pandemic has pushed all organizations to connect with their supporters in new ways. As a newer program, BWT benefitted from being “digital first” already when communicating our message. Our ongoing social media presence and e-news communication supports BWT’s identifiability as a positive and constructive voice in the realm of bicycling and safe streets. Through sharing of information and events from partners in the movement for bike safety, equity and access, community partners, or from BWT internal resources, our reach inspires and connects people virtually and in person. The year 2020 challenged us to start new conversations related to our work online and conduct even more of our programming through virtual means.

What has been surprising is the level of participation, both in terms of numbers and engagement, from guests in our virtual events. Two trial “Zoom Happy Hours” garnered over 30 attendees each and had lively Q&A sessions, and a monthly lunchtime “bike networking” call generates considerable discussion about local bicycling issues among 15–20 attendees—a majority of whom are new to BWT staff. Moving forward, we will build on our current engagement and new relationships to generate more conversations about bicycling and people who bike in the local community by highlighting community members through a visual storytelling campaign. We have started this process by conducting virtual interviews with people who bike as their main transportation, including a community social worker and school-based food service employee, and will be using their stories to set the stage for a social marketing campaign soon.

#### **2.2.4 Equity and Access**

While actions that advance representation and inclusion of traditionally disadvantaged communities in bicycling are woven throughout the other “E”s in the Blueprint (see sections 1.3.2 and 2.2.2.1), bicycling support services typically do not engage people in bicycling if they do not have access to a bike. In fact, in our Ithaca Bike Use and Attitudes Survey, 30% of residents and more than 60% of college students say that a barrier to bicycling they face is the lack of a working bicycle; a barrier that can disproportionately affect people with lower incomes. However, bicycling can be one of the most cost-effective sources of reliable transportation and can be available to everyone if we work together as a community to overcome barriers to transportation by creating “affordable, convenient, and culturally-engaging bicycling opportunities.” As is the case with motor vehicles, there are many ways to gain and retain access to a bicycles—all are variations on either borrowing/renting or ownership and maintenance. A goal of the Equity and Access section of the Blueprint is to ensure that there is an inexpensive and widely available opportunity to rent, own, and maintain a bicycle in and around Ithaca. Bikeshare is an example of this in the context of bicycle rentals. For more

on the future of bikeshare in Ithaca, see section 1.2.4. BWT also pilot tested an adaptive bicycle library to cover the needs that were not being met by the bikeshare system available at the time (see section 2.2.4.1). In the context of affordable bicycle ownership and repair, community bike shops have filled this niche in other cities and BWT looks to build upon the lessons learned in our pilot test to expand the capacity of our local community bike shop. In addition to proactively developing culturally engaging outreach, we note that there is a need to further center the experiences of Black, Indigenous, and people of color in bicycling issues in and around Ithaca so that we can go beyond issues of surface representation and begin addressing the deeper inequities wrought by systemic racism in our local transportation landscape. In future work, we intend to integrate Bike Walk Tompkins' work more deeply in the lives of community members who have been marginalized due to race.

#### ***2.2.4.1 Adaptive Bike Library Pilot***

The bikeshare fleet brought by Lime did not include models that differed from the standard upright bicycle. This became a clear barrier to adoption when BWT started working with seniors and other people with mobility and balance impairments through the Ithaca Bike Champion program. To address this need, Bike Walk Tompkins pilot tested a bike lending library with a recumbent tricycle, a recumbent tandem, and a recumbent handcycle available to loan from a rented garage located on an Ithaca side street, several blocks from the city center. We also connected people to the Ithaca Youth Bureau's Ithaca Bike Rental program which offers adult tricycles and other adaptive equipment.

The adaptive bikes and trikes were well received at test rides that involved seniors and people with disabilities, as well as people who were learning to ride in our adult bike skills classes that needed a little encouragement after trying to balance on a bike. In 2018 and 2019, we offered people week-long loans of equipment from the library if they were interested in trying them out over an extended period. The theory was that the library allows people to test whether an adaptive bike or trike could be integrated into their life, as an inexpensive "steppingstone" toward ownership. However, fewer than five people have borrowed items from the library. Due to the inaccessible and obscure location of the library, coordinating equipment handover was a hassle and public exposure to the library was minimal. Additionally, prospective borrowers had trouble finding places to park the equipment safely in their residences. With the onset of the pandemic, BWT effectively paused the library for borrowing. We intend to reopen this option to the community now that it appears safe to do so, seeking a more visible and prominent location.

#### **2.2.4.2 Bike Repair Pop-ups and Community Bike Sale Pilots**

While BWT has worked informally with a community bike shop called Recycle Ithaca's Bicycles (RIB), a program of the Ithaca Southside Community Center, prior to the COVID-19 pandemic, that collaboration solidified with the increase in demand for affordable, socially distant transportation via bike during the pandemic. Community members who are car-free by choice or due to affordability were disproportionately impacted by bike shop closures and lack of inventory. BWT worked with RIBs to increase the capacity of their work by contracting an additional mechanic during the peak months of demand. BWT also organized a large-scale bike refurbishment and community bike sale event that paired RIBs' physical resources with BWT's harnessing of volunteer bike mechanic capacity to meet local demand for affordable bikes for sale.

Additionally, BWT piloted pop-up repair clinics at neighborhood parks during the summer months. Public engagement in these events was high, with contracted mechanics fixing over 30 bikes per three-hour pop-up and many people being turned away at the closing time of each event to give mechanics a chance to catch up. Through the pop-ups, we assured access to free basic bike repairs and safety checks for many types of participants, including ones who rely on bicycles as their main mode of transportation. Volunteers were also essential to the smooth operation of these pop-ups, and through this work, the staff at BWT have tapped into a potentially underutilized local pool of "hobbyist" bike mechanics who are interested in offering their time and in-kind donations to bolster access and equity efforts. These efforts revealed the commitment from community members to contribute to BWT work and laid the foundations for a long-term community bike shop and community space geared toward access and education.



**Figure 12. Bike Repair Pop-up in a Downtown Ithaca Park**



In the fall of 2020, parent organization of RIBs, the Southside Community Center (SSCC), temporarily halted its entire operations to revamp its board, staff, and programs. BWT has been supporting SSCC through consultation and conversations related to program development as the historically Black community center seeks to recenter all its programming around their mission of cultivating Black excellence while providing opportunities for engagement and education. BWT has been collaborating with SSCC on how their mission applies to a community bicycle repair and reuse program, and this relationship of support continues into 2021 as we seek the reopening of this beloved community bike shop.

### **2.2.5 Evaluation and Planning**

The Evaluation section also draws on Bike Walk Tompkins’ experience in connecting, engaging and educating decision makers on best practices. The Blueprint Working Group and community feedback called for increased assistance to municipalities in their own goal setting for bicycling improvements and in establishing consistent monitoring and evaluation to hold them accountable. This is reflected in the vision statement in the Blueprint’s Evaluation and Planning section, which states that the Blueprint seeks to build a community where “informed community leaders are committed to increasing bicycling by setting ambitious transportation goals, instituting effective policies and regularly evaluating progress.”

Planning and evaluation go together; it is important to take stock of what works and what does not to make improvements. This can be challenging for elected leaders and municipal staff who are not frequent bicyclists and therefore do not have personal experience with the challenges on bicycling on substandard infrastructure. We plan to address this by starting annual community leaders' bike rides that simultaneously function as bicycle audits and can provide press coverage to the issues at hand as well as to support improvements.

As decision leaders become more informed, BWT will be advocating for three separate but complementary policies to be implemented across all urban and suburban municipalities in Tompkins County:

1. **Vision Zero Strategy:** Conceptually, this is the “bare minimum” policy, as it targets safety changes at hotspots where vulnerable road users such as bicyclists get injured or killed. This policy is important for motivating urgently needed infrastructure changes, but is incomplete on its own, as it does not address bicyclists' safety and comfort municipality wide.
2. **Complete Streets:** If implemented correctly, this policy can induce ongoing, incremental change as municipalities examine their capital projects and ensure that, as capital improvements are made, as many of them as possible include accommodations for people walking, bicycling, and using alternative forms of transportation. Because of its incremental nature, this does not proactively push a municipality forward toward big picture goals for bike-ability.
3. **Bicycling Master Plan:** A bicycling master plan is a municipality's comprehensive roadmap to a safer and more connected network of bike routes. If properly crafted, having a bicycling master plan can guide systemic change toward a situation in which bicyclists' safety and comfort is consistently prioritized. The master plan also provides a document to which residents can hold their municipalities accountable.

Some municipalities in Tompkins County—particularly the Villages of Cayuga Heights, Village of Lansing, and the Town of Lansing, which together, comprise a sizable portion of Ithaca's suburbs—are small in terms of population and staffing, and therefore, limited in their capacity to implement the frameworks mentioned above. Bike Walk Tompkins could support their adoption and implementation by the county's smaller municipalities by providing community planning and consulting services, since these services could be provided at low or no cost. In fact, through the course of this project, the Village of Cayuga Heights contacted BWT about an issue regarding prioritization of bicycling improvements. While the issue was subsequently handled separately from this project, it illuminated the lack of capacity within smaller municipalities to implement bicycling improvements, offering a tantalizing preview of how these improvements could be implemented more widely with the appropriate, professional support.

Other municipalities in Tompkins County, such as the City of Ithaca and Town of Ithaca, have more staff and are more capable of implementing new policy. Neither of the municipalities, however, have a full-time planner dedicated to active transportation issues, so community planning services from a local third-party such as BWT could usefully supplement efforts to implement policy or infrastructure changes. This would be an extension of the role Bike Walk Tompkins already plays in helping the City of Ithaca with evaluative bicycle/pedestrian projects, such as applying for and retaining (or improving) the City’s League of American Bicyclists “Bicycle-Friendly Community” designation. Having more capable planning capacity within BWT could not only foster more ambitious goals and policies in collaboration with municipalities, but could also support BWT in more effectively holding municipalities accountable to their existing goals and policies through more systematic monitoring and evaluation.

### **2.2.6 Enforcement**

As previously mentioned, we removed the Enforcement section from the Blueprint, reflecting our reexamination of the role of law enforcement in public and traffic safety. Organizations whose lead we follow have also been reexamining the role of Enforcement in their plans; for example, the League of American Bicyclists (LAB) also excised “enforcement” from their framework and brought a critical lens to conversations regarding safety around the same time BWT moved incorporated the section. This came in the context of the racial justice movement that arose in May 2020 in response to the death of George Floyd, which sparked BWT to incorporate conversations about race, safety and anti-racism into the organization’s work. LAB’s recent work in this area—to minimize the necessity of police involvement in bicycle safety, to recognize the role that traffic stops have in perpetuating violence against Black and Brown people, and to acknowledge racial and ethnic inequalities in enforcement—resonates with BWT’s understanding of the harm caused through an enforcement-based approach to public and traffic safety. While BWT already had plans to limiting the role of police to one action out of three in our draft Blueprint’s Enforcement section, the decision was made to remove the section entirely due to its traumatic connotations for communities of color that are often overpoliced. The two actions that did not involve the police—Vision Zero plans and traffic safety messaging—were incorporated into the similar actions in the Evaluation and Planning and Education sections of the Blueprint, respectively.

While BWT respects the role of police in the community and is still open to collaborations that will advance bicycling for everyone, working with the police is now not an assumed aspect of reaching the goals of the Blueprint. Instead, we are following the leadership of allied organizations to reconsider how we define and create safety by reducing the need for law enforcement to be involved in the first place. This can be done through ensuring that our streets are designed to be self-enforcing (i.e., limit

speeding and crashes), equipping new cyclists with safety tools such as helmets and lights, and sharing knowledge about best practices for street riding and for theft prevention. This reframing and deemphasizing of the police’s role in the safety of bicyclists and all other road users is an ongoing process that BWT continues to explore internally and with community partners.

## **2.3 Finalizing and Implementing the Bicycling for Everyone Plan**

As we worked on the Blueprint process, an overarching mission began to emerge while researching, adapting, and planning. We keyed in on the overarching mission at the end of this process and renamed the Blueprint our “Bicycling for Everyone Action Plan” (or “B4E Plan”). This new name better reflects the central goal of the Blueprint, which is to give everyone in our community the opportunity to bike.

The coronavirus pandemic that arose starting in spring 2020 affected the rollout of the B4E Plan and created a need and opportunity to make the plan more accessible for remote viewing and presentation. BWT brought on temporary staff to turn the plan into a website, which is also more in line with our goal of making this a “living document” that can be updated and informed by experience as we at BWT and our local partners move forward on a variety of action steps. The plan was translated into an attractive website with eye-catching imagery and call-to-action buttons and information at the fingertips of anyone who can access the internet, making it more accessible to BWT’s core group of supporters and decision makers. The uncertain future posed by the pandemic caused us to adapt certain actions to meet the needs of COVID-19 recovery. For example, smaller open streets festivals can be carried out within public health guidance in later stages in the reopening and help people get reacquainted with public civic life. Furthermore, the lessons learned about equity throughout the COVID-19 pandemic will be carried forward in BWT’s goals and plans for the implementation of the plan.

### **2.3.1 Rollout of the Plan**

The completed Bicycling for Everyone (B4E) Action Plan has been presented to the BWT Steering Committee, members of the Blueprint Working Group and previewed at various local online talks and workshops. Bike Walk Tompkins is prepared to present it to other relevant stakeholders soon, particularly local leaders and decision makers that have not been as involved with the conceptualization stage of the plan. While we spent much of 2020 waiting for a more opportune time to carry out this public outreach

campaign, it is significant that the Center for Community Transportation (CCT) board and many of our local municipal boards and committees have been consistently engaged in and supportive of the production of the B4E Plan. We are confident that the support from community leaders, organizations, and community members will help sustain the project moving forward.

In the meantime, the B4E Plan website serves as a resource for communicating our community's vision for bicycling with BWT supporters, bicycling enthusiasts, key partners and other stakeholders. By taking the different approach of connecting with as many community members as possible through accessible, smaller, online events throughout the summer and fall of 2020, we succeeded in surpassing the 100 contacts intended by previously envisioned in-person bicycle summit. With the B4E Plan website as a tool, engagement has been high and is ongoing. BWT plans to distribute hard copy materials now that public health guidelines allow for their distribution, for added outreach potential for this project.

### **2.3.2 Partnerships**

Implementing the Ithaca Bike Champions (IBC) project helped BWT to strengthen existing community partnerships and to create new ones to support ongoing work and implementation of the Bicycling for Everyone action plan. Several partner organizations engaged with the IBC program in several ways, including offering the use of their space, sharing news about the program or one of its activities, or by hosting the IBCs for events, including:

- **Community centers and groups:** Greater Ithaca Activities Center (especially their senior program), the Southside Community Center, Northside United.
- **Public and mixed-income housing providers:** Ithaca Housing Authority, Ithaca Neighborhood Housing Services, West Village Apartments.
- **Government agencies:** Tompkins County Office of Mental Health, Tompkins County Health Department, Tompkins County Office for the Aging, the Ithaca-Tompkins County Transportation Council (ITCTC) Special Community Mobility Projects.
- **Other organizations:** Loaves and Fishes (food pantry), Womens' Opportunity Center, BOCES ESL classes (new immigrants and refugees), TC Chamber of Commerce & Visitors Bureau.

In addition, the following businesses and people supported the program by providing free or reduced cost goods and services:

- **Bikeshare and bike rental providers:** Lime, Ithaca Bike Rental.
- **Other retailers:** Swan Cycles (bike shop), Sweet Melissa's Ice Cream.
- **Friends of BWT:** James Hamilton (bike mechanic), Edna Brown (photographer), and others.

Similarly, the bikeshare project—its planning and coordination—also relied on and strengthened existing partnerships. Ultimately, the bikeshare operation was carried out and funded by LimeBikes. The company relied on community engagement supported by a collective process with local partners to establish what is widely acknowledged to have been a well-utilized bikeshare program.

### **2.3.3 Next Steps for Bikeshare**

Late 2020 saw the reconvening of the selection committee and review of data and feasibility to solicit new RFI's for a 2021 bikeshare. The same, more flexible RFI (Request for Information) method (as opposed to a more prescriptive Request for Proposal) was reemployed in 2020 as had been used in 2017, due to the uncertainty about what might be available considering the continuing instability of the bikeshare and shared micro-mobility market in terms of longevity of providers, vehicle fleet options, and the reining in of venture capital-fueled expansions. User data analysis and survey responses from the bikeshare project indicate a long-term potential for viable bikeshare in Tompkins County. Knowing the industry had shifted, BWT expected there would be fewer responses in 2020. Three companies responded to the 2020 RFI and the results are pending for a new bikeshare or shared micro-mobility operator in Ithaca.

### **2.3.4 New and Continuing Funding Relationships**

The Blueprint development and release of the Bicycling for Everyone plan generated interest and allowed us to leverage financial support from other funding sources, both private and public, both local and federal. In 2019 and in 2020, BWT received \$55,000 per year in additional, local grant funding from the Park Foundation for general operations, which in turn supported staffing and program development related to the plan. BWT also received a separate park grant to support the City of Ithaca in installing a public art bike sculpture (due to be placed along the Ithaca Waterfront Trail in summer of 2021), and to carry out a bike culture workshop in January of 2020 with Ayleen Crotty, the executive director of the Filmed by Bike Festival in Portland, OR. Crotty facilitated conversations, connections, and education to encourage engagement in creative aspects of bike culture in our community. BWT received an additional \$80,000 Park Foundation grant in 2021 to continue our work.

A \$27,500 grant from PeopleForBikes' Better Bike Share Partnership funded the first year of Ithaca Bike Champions in 2018. IBC garnered additional and consistent grant support through Federal Transit Administration funds administered by Tompkins County through its Special Community Mobility Projects grant for mobility management programs, totaling over \$85,000 across three years. The Community Foundation of Tompkins County is another local funding source that awarded BWT \$10,000 in 2020 to allow further outreach into underserved communities through the IBC program.

Lastly, the B4E Plan formed the basis for a new NYSERDA grant submission called "Implementing the Blueprint for Better Bicycling" which was submitted by The Center for Community Transportation in December of 2019 under PON 3833, Improving the Efficiency of New York's Transportation System. In March 2020, NYSERDA awarded CCT \$248,026 over two years to implement and support community implementation of the Blueprint for Better Bicycling, with the goal of contributing to the reduction of greenhouse gas emissions and improvements in social linkages, health outcomes, and socioeconomic equity in Ithaca and Tompkins County.

# Appendix A. Bikeshare Selection Documents

---





# Bikeshare in Ithaca Request for Information

**November 20, 2017**

**Bike Walk Tompkins**, a program of Ithaca Carshare, Inc., requests letters of interest from bikeshare system operators to launch a community-wide bikeshare system in Ithaca, NY, serving the Cornell University campus, downtown Ithaca, and surrounding areas by early spring 2018.

## **About Ithaca**

The City of Ithaca is located at the southern end of Cayuga Lake in Central New York. The city has a population of 30,014 (2010 Census) and is the commercial and cultural center of Tompkins County (population: 101,564). Ithaca is home to Cornell University and Ithaca College, and 60% of the population is currently enrolled in college or university. Ithaca receives the majority of Tompkins County's more than 840,000 annual visitors (2009). Ithaca has a climate typical of upstate New York, with moderate temperatures from spring to fall, and cold snowy winters.

Ithaca is defined by its geography carved by ancient glaciers. Downtown Ithaca is located on a flat area with the lake to the north and hills on the other three sides. Downtown is the home of a third of the population and a majority of the city's shopping, dining, grocery stores, and employment opportunities that are not affiliated with Cornell. The hills adjoining downtown have steep gradients of 8-10% for 0.5 miles (800 meters), which then flatten out to a more agreeable 2-3% gradient. The top of East Hill is home to Cornell and the Collegetown neighborhood, which together house half of the city's residents and provide additional dining and grocery shopping options. South Hill has Ithaca College and residential areas, and West Hill has the local hospital and residential areas with a focus on low-income housing.

Given the small area of the city (5.39 sq. mi.), residents primarily make short trips and this is reflected in the mode share to work: 40% walked to work, while 33% drove alone, 11% took public transit, 7% carpooled, and 2% bicycled (ACS 2011-2015). For their commute to school, 57% of Cornell students walked, 23% took public transit, 11% drove alone, 7% carpooled, and 2% bicycled (2008). While bicycling numbers are low, bicycling is primarily used for non-work or school trips within downtown and between places on East Hill. Anecdotally we have seen more people bicycling over the years as new bike infrastructure is completed and more people become aware of bicycling as a convenient mode of transportation. Ithaca was awarded Bronze by the League of American Bicyclists' Bicycle Friendly Communities program in 2016.

## The Process

We are interested in understanding the systems provided by potential bikeshare system providers, so will be looking for information about the following aspects of systems in a letter of interest:

- The primary type of bicycle, including:
  - Features that make the bicycle safe to ride during the day and night
  - Features that make the bicycle comfortable for riders given our geography
  - Features that make the bicycle comfortable for riders of different body sizes
  - Details about the locking mechanism, and availability of on-board GPS tracking
  - Details about the standard “look” of the bikes and potential customization options
  - Availability of alternative bicycles, such as electric, cargo or adaptive bikes/trikes
  
- The user experience, including:
  - Standard method of registration and potential alternative methods
  - Standard method to borrow and return bikes and potential alternative methods
  - Payment methods accepted, and details on holds placed on credit or debit cards
  - Standard pricing tiers, and whether discounts can be made available to certain groups
  - Availability of a 24-hour emergency helpline for users and non-users
  
- Flexibility in and enforcement of bicycle parking rules and policies, including:
  - Occasions when users are advised of bicycle parking rules and policies
  - Proposed parking rules within the university campus compared to within the city
  - Methods to de-incentivize undesirable parking, especially on a university campus
  - Methods to incentivize parking in areas of greatest demand
  - Map of proposed geofenced area in Ithaca where flexible parking would be allowed
  - Whether parking rules can be changed after launch, and existing users notified
  - Strategies to encourage biking to – and ensure parking order at – temporary events
  
- Details of any proposed contract with a local operator (i.e. Ithaca Carshare), including:
  - Services covered by the bikeshare vendor (i.e. your company), and a generalized list of services Ithaca Carshare would be responsible for
  - Capabilities of system management tools, and availability of a demonstration
  - Branding and look of user-facing software or apps, and customization options
  - Opportunities to monetize the system apart from user fees (e.g. sponsorships)
  - Details of product warranties and liability coverage provided by your company

- Potential of ownership of bicycles and related equipment

Bike Walk Tompkins Bikeshare in Ithaca RFI · Page 2

- Details of any proposed local operations by system provider (i.e. your company), including:
  - Number (in FTEs), seasonality, and typical pay rate of jobs created locally given proposed initial fleet size, and potential to contract out these services
    - Reporting methods and response time for improperly parked and damaged bicycles
    - Frequency of rebalancing, and criteria to determine when rebalancing is needed
    - Frequency of checkups on the entire fleet, and winter season plans
    - Localization of user-facing software and marketing campaigns
    - Partnerships with Bike Walk Tompkins and/or Cornell University to conduct outreach
    - Details of liability coverage provided by your company
- Availability and granularity of data to Ithaca Carshare and Cornell University, including:
  - Bicycle trip data such as number of trips per bike and GPS trails
  - Bicycle availability data such as number and locations of bikes in/out of service
  - User data such as names, email addresses, and university affiliation
  - Potential to survey users in the Ithaca area at least once a year
  - Legal ownership of data, and what can be shared with community partners and municipalities
- Cost and timeline to launch, including:
  - Proposed initial fleet size and any local one-time and recurring costs
  - Proposed fleet sizes in later years and any corresponding local costs
  - Expected mobilization time to public launch of bikeshare system

We would also like contact information for several references, ideally including both an active transportation advocacy organization and a university that your company has worked with. We are closely following conversations in Chicago and the Twin Cities regarding the future of bikeshare, especially how firms plan to interact with entities that have publically-minded goals.

Feel free to include other materials in addition to a letter of interest, either as attachments or links in the body of the email. Please mark any confidential documents clearly as such.

**Please send letters of interest and any additional materials by December 1, 2017 5 PM EST** to Hector Chang at [hector@bikewalktompkins.org](mailto:hector@bikewalktompkins.org), either as email attachments or as a link to download. Questions can also be directed to Hector via email or phone at (607) 301-3181 x1 prior to the deadline.



<b>Bikeshare Vendor</b>	
<b>Local Operator</b>	
<b>Other Partners</b>	

<b>A Bicycles</b>		
A1	Number of bikes	Initial Launch: Proposed Final:
A2	Safety features	
A3	Gears/features for hills	
A4	Rider features	
A5	Locking mechanism	
A6	On-board GPS	
A7	Standard look	
A8	Customization options	
A9	Alternative bikes	
<b>B User Experience</b>		
B1	Registration methods	
B2	Borrow/return methods	
B3	Payment methods	
B4	Credit card holds	
B5	Proposed pricing tiers	
B6	Discounts for groups	
B7	24-hr helpline	
<b>C Parking Rules and Policies</b>		
C1	Onboarding and reminders	
C2	Proposed parking in university	
C3	Proposed parking in city	
C4	De-incentivize bad parking	
C5	Incentivized parking	

C6	Extent of parking area	
C7	Parking changes after launch	
C8	Temporary event parking	
<b>D Contract with Local Operator</b>		
D1	Services covered by vendor	
D2	Services covered by operator	
D3	System management tools	
D4	Branding of software	
D5	Monetization opportunities	
D6	Product warranties	
D7	Vendor liability coverage	
D8	Ownership of bikes	
<b>E Operations by Vendor</b>		
E1	FTEs and local hire details	
E2	Potential to contract out	
E3	Reporting methods to bad parking and damaged bikes	
E4	Response time to bad parking and damaged bikes	
E5	Rebalancing frequency	
E6	Rebalancing criteria	
E7	Fleet checkups	
E8	Winterization	
E9	Localization of software	
E10	Partnership with BWT/CU	
E11	Liability coverage	
<b>F Availability of Data</b>		
F1	Bicycle trip data	
F2	Bicycle fleet data	

F3	User data	
F4	Survey users	
F5	Ownership of data	
F6	Shareability of data	
<b>G Cost</b>		
G1	Bicycles	
G2	Stations or docks	
G3	Software and service	
G4	Total cost/bike	
<b>H Other</b>		
H1	Launch timeline (post-signing)	
H2	Civic reputation	
H3	References from other places	
H4	Financial stability	
H5	Presence in the US	
H6	Other notes	

# Appendix B. Bike Champions Documents

---





# BIKEWALK TOMPKINS

## Ithaca Bike Champions Job Description

**Job Title:** Ithaca Bike Champion

**Compensation:** \$20/hr (up to \$2,800) + bikeshare pass

**Start Date:** March 19, 2017

**Duration:** 20-hr paid training in March + 3-5 hrs/week between April-September 2017

### ABOUT THE ITHACA BIKE CHAMPIONS PROGRAM

*Do you want to **see more of your friends, neighbors, and community members biking?***

*Are you excited to let people know about **Ithaca's new bikeshare system?***

*Want to be part of a group of peers that is **learning together about people's transportation challenges** and how they can be addressed in the future?*

Bike Walk Tompkins (BWT), a program of Ithaca Carshare, is seeking motivated people for our first-ever Ithaca Bike Champions Program. Bike Champions will work directly with their existing personal and professional networks they are part of (e.g. family, friends, neighbors, co-workers, classmates, etc.) to encourage biking as a safe and convenient way to move around, stay healthy, and have fun. Bike Champions will also be part of the launch of Ithaca's new bikeshare, guiding community members on how to use this new transportation system. Finally, Bike Champions will also increase the voice of transportation-disadvantaged people and communities in decision-making about how people move in and around Ithaca.

Bike Champions should be well-connected to the communities they want to work with. Bike Walk Tompkins will pay you to learn about safe bicycling, the bikeshare system, and how to organize and promote events. To promote bicycling, Bike Champions will be expected to organize several events that bring community members together, bicycle rides where community members can learn how to bike safely on the road, and meetings to engage community leaders and groups on bicycling issues and concerns.

### KEY RESPONSIBILITIES

#### TRAINING

- Complete a comprehensive 20-hour training (split over two weeks, childcare provided) to understand biking in and around Ithaca, the new bikeshare, and outreach & event management strategies.

#### EVENTS

- Assist in 2 Streets Alive! Ithaca events on April 29 and September 16, 2018.
- Organize at least 2 neighborhood events with wide appeal, either solo or in pairs.
- Organize and lead at least 3 bicycle rides in the season.

[www.bikewalktompkins.org](http://www.bikewalktompkins.org)

• [director@bikewalktompkins.org](mailto:director@bikewalktompkins.org)  
607-301-3181

•

## ACTIVITIES

- Engage in at least 2 meetings/interactions per month with community leaders or groups.
- Collect stories, photos, and observations from interactions with community members.
- Distribute materials on bicycling and the bikeshare at events and meetings.
- Attend monthly check-ins with Bike Walk Tompkins staff and other Bike Champions.

## USEFUL QUALIFICATIONS & SKILLS

*Prior experience or education is not necessary. However, here is a list of skills we are looking for:*

- Familiarity in a specific community in Ithaca that needs transportation support due to economic disadvantage (or other factors) and could benefit from biking and bikeshare.
- Ability to communicate and empathize effectively with people of all ages, abilities, cultural groups, and economic statuses about their transportation habits and challenges.
- Eagerness to share knowledge about bicycling in and around Ithaca and the new bikeshare system for the betterment of the community (prior knowledge not necessary).
- Comfortable engaging with people in a variety of settings, from one-on-one to large groups.
- Ready to listen, consider, and respect others' opinions even through controversy.
- Able to work independently on smaller projects, and cooperate and compromise with other Bike Champions and Bike Walk Tompkins staff on larger projects.
- Committed to following traffic safety laws and using appropriate safety gear while bicycling.

## TO APPLY

If you or someone you know is interested in becoming an Ithaca Bike Champion, complete an application form by **Friday, March 2, 2018 by 5 PM**. Applicants must be age 16 or older.

Applications can be downloaded and printed or completed on a computer or phone at [www.bikewalktompkins.org/champions](http://www.bikewalktompkins.org/champions). Paper applications are available in a mailbox right outside the Ithaca Carshare/Bike Walk Tompkins office **inside the Dewitt Mall behind Moosewood** (215 N Cayuga St, Ithaca, NY 14850). The Dewitt Mall is open Monday through Sunday, 8 AM to 9 PM.

If you have any questions, please contact Hector Chang, Active Transportation Coordinator, at [hector@bikewalktompkins.org](mailto:hector@bikewalktompkins.org), by calling **(607) 301-3181 x1** during regular business hours, or in-person at the Ithaca Carshare/Bike Walk Tompkins office during our office hours, Monday through Friday, 12 PM to 5 PM.

[www.bikewalktompkins.org](http://www.bikewalktompkins.org)

• [director@bikewalktompkins.org](mailto:director@bikewalktompkins.org) •  
**607-301-3181**



# BIKEWALK TOMPKINS

## Ithaca Bike Champions Application Form

Thank you for your interest in becoming an Ithaca Bike Champion! Please complete this application form in full and submit it by Friday, March 2, 2018 by 5 PM, via e-mail, regular mail, or in-person (more details in the "How to Submit..." section). Resumes are not necessary. Interviews will take place between March 8-13, 2018. References may be requested later in the hiring process.

### PERSONAL INFORMATION

Full Name:

Local Address:

Are you 16 or over? Yes \_\_\_\_\_ No \_\_\_\_\_ Phone:

Email:

### QUESTIONNAIRE

*Responses in this section should not exceed the boxed space if typed. If handwritten, you may include up to one additional lined piece of paper of text for each question.*

1. What community needs transportation support in and around Ithaca, and why? What are your connections to this community? Could this community benefit from increased biking and the new bikeshare system?

Tompkins is a project of Ithaca Carshare, a 501(c)(3) organization • [www.ithacacarshare.org](http://www.ithacacarshare.org)

**QUESTIONNAIRE (CONTINUED)**

2. What are some activities or events that you will organize to encourage community members to try biking and bikeshare? What groups or leaders within the community will you try to arrange meetings with?

3. Why do you think you can succeed as an Ithaca Bike Champion? What would you like to gain from this program?

## ADDITIONAL DETAILS

4. How long have you lived in Ithaca? \_\_\_\_\_ 5.

What types of transportation do you usually use to get around? (e.g. walk, bike, TCAT, drive)

\_\_\_\_\_

6. Do you have experience biking in and around Ithaca? If Yes, how comfortable are you biking on Ithaca's streets? If No, what interests you about biking?

7. Can you commit to attending a 20-hour training in late March, 3–5 hrs/week from April to September, and helping out at *Streets Alive! Ithaca* on Sunday, Apr 29 and Sep 16, 2018?

Yes \_\_\_\_\_ No \_\_\_\_\_ Other \_\_\_\_\_ 8.

What's your general availability in late March? (This will help us schedule trainings)

\_\_\_\_\_ **HOW TO**

## SUBMIT THIS APPLICATION

### E-MAIL

Download this document, complete it, save it, and rename the saved file with your name.

Attach the file to an email addressed to [hector@bikewalktompkins.org](mailto:hector@bikewalktompkins.org), with "Ithaca Bike Champions Application" as the subject line. Send the email by Friday, March 2, 2018 by 5 PM.

### REGULAR MAIL

If you do not have a paper copy, download this document and print it. Paper copies are available at the Ithaca Carshare office inside the Dewitt Mall behind Moosewood (215 N Cayuga St, Ithaca).

Send your application in an envelope addressed to: Bike Walk Tompkins, P.O. Box 418, Ithaca, NY 14851. The envelope should be postmarked no later than Friday, March 2, 2018.

### IN-PERSON

You may also submit your printed copy of this application in-person at the Ithaca Carshare office during our office hours Monday through Friday, 12 PM to 5 PM.

[www.bikewalktompkins.org](http://www.bikewalktompkins.org) • [director@bikewalktompkins.org](mailto:director@bikewalktompkins.org) • 607-301-3181 Bike Walk



# BIKEWALK TOMPKINS

## Ithaca Bike Champions Training Program Checklist Summer 2019

- Intro to The Center for Community Transportation
- Intro to Bike Walk Tompkins
- IBC Online Hub
- Payroll and Benefits
- Bicycling and Employee Expectations

- Intro to Ithaca Bike Champions
- IBC Work Plan & Example Events
- Available Resources & Budget
- Interfacing with BWT & Other Champions
- Monthly Check-ins

### IBC BASIC KNOWLEDGE

### IBC ADVANCED KNOWLEDGE

#### BICYCLING RULES & RESOURCES

#### BICYCLE HANDLING

- Ithaca & NY State Bicycling Laws
- Riding on Trails & Sidewalks
- Helmet Fitting & Policy
- Local Bicycle Resources
- Local Bike Infrastructure & Route Choice Strategies

- Bicycle Fitting
- ABC Check
- Starting and Stopping
- Signaling & Scanning
- Rules of the Road

#### BIKESHARE (LIME)

#### BICYCLING WITH TRAFFIC

- BWT and Lime
- Registration and Pricing
- Unlocking and Locking a Bike
- Common Issues and FAQs

- Principles of Traffic Law
- Road Positioning
- Intersections
- Riding with a Group

#### LIME ACCESS

#### BICYCLE REPAIR

- About the Program
- Registration
- Payment

- Diagnosing Common Issues
- How to Fix a Flat Tire
- How to Tighten Brakes

#### COMPLEMENTARY TRANSPORTATION

- TCAT & Trip Planning
- Ithaca Carshare
- Way2Go Guide

# Ithaca Bike Champions Timesheet – sample

Date	Attend.	Description of Activity + Feedback Received	Hours	Review	Pay Date
4/7/2018		Ithaca Bike Champions training	5	HC	04/16/2018
4/10/2018	1	Talked to Walmart manager about doing bikeshare demo at staff meeting. Manager said it's not relevant.	0.5	HC	04/16/2018
4/11/2018	5	Did bikeshare demo with friends at GIAC. People liked the big basket, asked about paying with cash.	0.75	HC!	04/16/2018
4/12/2018		Emailed Hector catering order	0.25	HC	04/16/2018

# Appendix C. Sample Blueprint Feedback Form

---

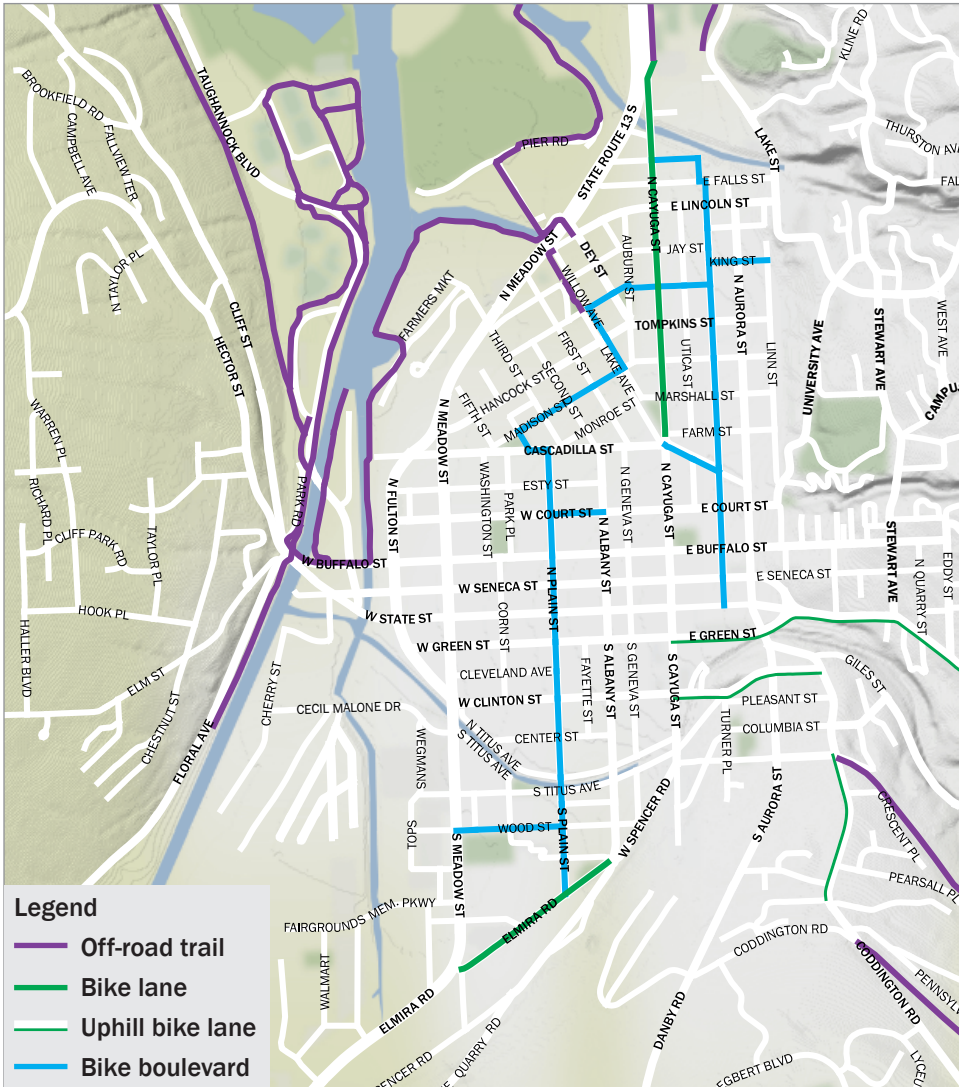


1 What neighborhood do you live in?

2 What places would you like to go by bike?

3 Where would you like to ride a bike?  
Draw a line along the routes you'd like to take

### Downtown and West Hill

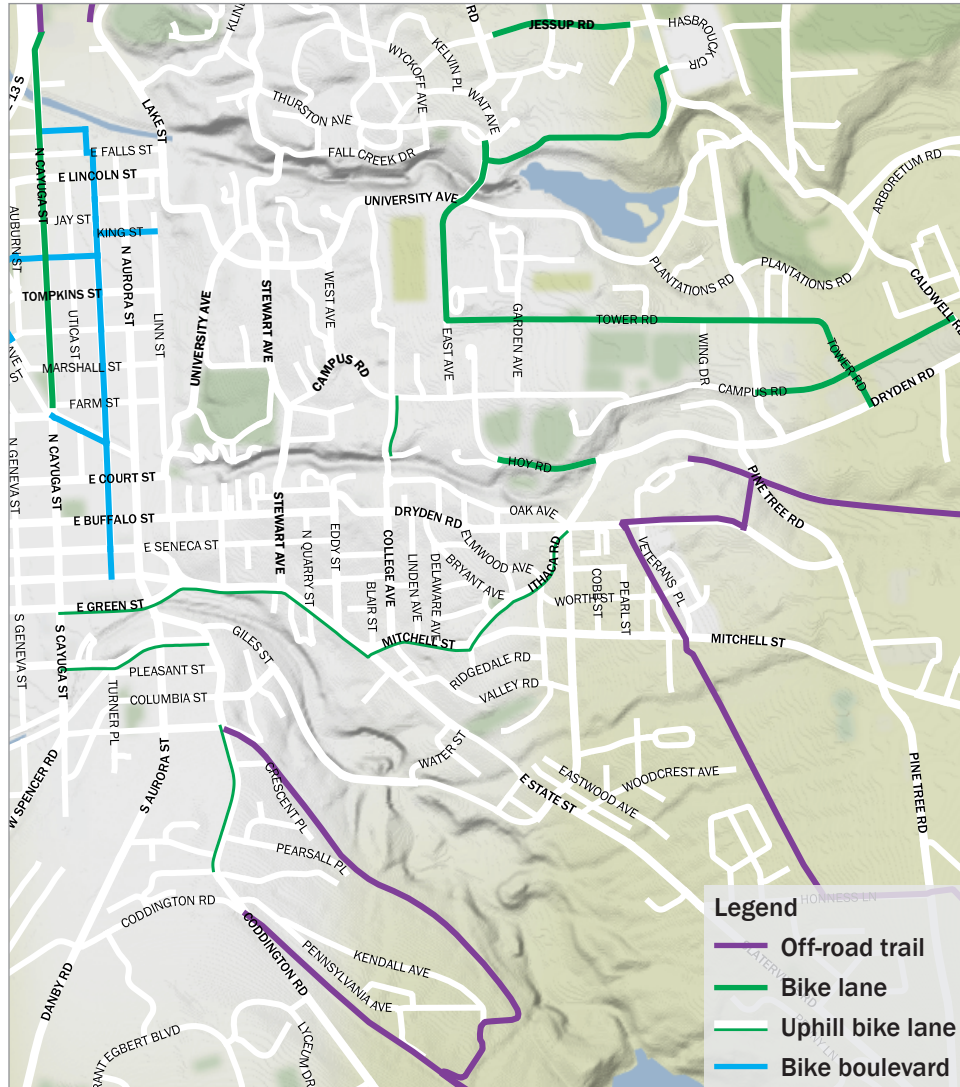


1 What neighborhood do you live in?

2 What places would you like to go by bike?

3 Where would you like to ride a bike?  
Draw a line along the routes you'd like to take

### East Hill and South Hill



4 Would the following encourage you to bike more often?

	Strongly Disagree		Strongly Agree	
More bicycle infrastructure on the street	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bike rides with other people at my skill level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Greater enforcement of existing traffic laws	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
More PSAs to all road users	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Seeing people like me riding bicycles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other things that would encourage you

4 Would the following encourage you to bike more often?

	Strongly Disagree		Strongly Agree	
More bicycle infrastructure on the street	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bike rides with other people at my skill level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Greater enforcement of existing traffic laws	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
More PSAs to all road users	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Seeing people like me riding bicycles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other things that would encourage you

5 Would you exchange the following for more bike infrastructure?

	Strongly Disagree		Strongly Agree	
Fewer on-street parking spaces	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fewer lanes for motor vehicles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fewer thru-streets for motor vehicles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lower speeds for motor vehicles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increase in taxes to fund construction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other comments

5 Would you exchange the following for more bike infrastructure?

	Strongly Disagree		Strongly Agree	
Fewer on-street parking spaces	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fewer lanes for motor vehicles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fewer thru-streets for motor vehicles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lower speeds for motor vehicles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increase in taxes to fund construction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other comments

6 Tell us about yourself (and help us ensure our outreach is equitable)

Gender  Race/Ethnicity

Age  Primary Occupation

6 Tell us about yourself (and help us ensure our outreach is equitable)

Gender  Race/Ethnicity

Age  Primary Occupation

7 Your contact info (required to enter raffles for prizes)

Full Name \_\_\_\_\_

Email/Phone \_\_\_\_\_

7 Your contact info (required to enter raffles for prizes)

Full Name \_\_\_\_\_

Email/Phone \_\_\_\_\_

NYSERDA, a public benefit corporation, offers objective information and analysis, innovative programs, technical expertise, and support to help New Yorkers increase energy efficiency, save money, use renewable energy, and reduce reliance on fossil fuels. NYSERDA professionals work to protect the environment and create clean-energy jobs. NYSERDA has been developing partnerships to advance innovative energy solutions in New York State since 1975.

To learn more about NYSERDA's programs and funding opportunities, visit [nyserda.ny.gov](http://nyserda.ny.gov) or follow us on Twitter, Facebook, YouTube, or Instagram.

**New York State  
Energy Research and  
Development Authority**

17 Columbia Circle  
Albany, NY 12203-6399

**toll free:** 866-NYSERDA  
**local:** 518-862-1090  
**fax:** 518-862-1091

[info@nyserda.ny.gov](mailto:info@nyserda.ny.gov)  
[nyserda.ny.gov](http://nyserda.ny.gov)



**NYSERDA**

**State of New York**

Kathy Hochul, Governor

**New York State Energy Research and Development Authority**

Richard L. Kauffman, Chair | Doreen M. Harris, President and CEO