

# THANKS, EVERYONE!

The Let's Ride JC Bicycle Master Plan is intended to help our community build safer streets for everyone. It is the result of a collaborative effort between:

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To the Jersey City Council and all of the people who participated in the creation of this plan, thanks!











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# BEFORE YOU DIVE IN

Jersey City is a rapidly growing mid-size city, with nearly 300,000 residents and millions of visitors and commuters passing through its streets every day. It is a priority that our streets are safe for all who use them, regardless of age, ability or means of travel. In Jersey City, nearly 37 percent of households do not own a car, and 47 percent of our residents take some form or mass transportation to work. While we continue to promote sustainable and active transportation, we have developed a plan to significantly increase the number of people in our City who travel by bike.

We recognize that cycling is one of the most sustainable, healthy, low cost, and efficient modes of transportation. With the development of the City's first Bike Master Plan, we hope to increase this mode of transportation. For the last 10 months, we have conducted a series of public outreach activities to help form a plan that addresses the mobility needs of our residents. From traditional public workshops to handlebar surveys and the implementation of our first pop-up protected bike lane, the City worked alongside its community members for feedback.

The Bike Master Plan sets ambitious but achievable goals for Jersey City. With the creation of this plan, we have taken a major step towards our Vision Zero goal of eliminating traffic fatalities and injuries on Jersey City streets by 2026.

Consistent with our Vision Zero Action Plan, we are committed to reducing the number of cycling fatalities on City streets to zero by 2026. Currently, less than 1 percent of trips in the City are made by cycling. Through this plan, it is our goal to increase that number by 400% by 2026. The plan will serve as a blueprint for the strategic implementation of cycling infrastructure in order to make safe bikeways available and accessible to every resident of our City, ultimately increasing the number of people riding bikes across all demographics.

This master plan includes policy and programmatic recommendations for the City to achieve these goals, as well as a Bikeway Design Guide, which will help us design and implement high-quality facilities for our residents and make Jersey City one of the best cycling cities in the nation.

Sincerely,

Steven M. Fulop

Mayor, City of Jersey City



"While we continue to promote sustainable and active transportation, we have developed a plan to significantly increase the number of people in our City who travel by bike."

# THIS IS JERSEY CITY'S FIRST MASTER PLAN FOCUSED ON CYCLING

This is Jersey City's first bicycle master plan! While its completion represents an important milestone, it is only the first of many steps towards making Jersey City a community where cycling can be considered a safe and viable form of transportation for all people.

Let's Ride JC was commissioned by the City of Jersey City and lead by the Divisions of Planning and Engineering, Traffic & Transportation. The purpose of this document, and its companion Bikeway Design Guide, is to establish a vision and a blueprint for investing in more sustainable and efficient modes of transport. It contains information about the planning process, examines existing cycling conditions citywide, and provides recommendations for improved network connectivity, policies, and programs that, if implemented, will make Jersey City one of the best cycling cities in North America.

While this plan is primarily focused on bicycling, it really serves as an extension to many past, ongoing, and future planning efforts that aim to make Jersey City a more safe, inclusive, and accessible city. These include:

- Vision Zero Action Plan (2019)
- Parking Management Plan (Expected 2019/2020)
- School Travel Plan (Expected 2019)
- Pedestrian Enhancement Plan (2018)
- The Morris Canal Greenway Plan (2013)
- Jersey City Bike Lane Plan (2012)

- East Coast Greenway Plan (2012)
- JC-Hoboken Connectivity Study (2011)
- Downtown Circulation Study (2007)
- Bergen Arches Final Report (2002)

While the Let's Ride JC Master Plan provides opportunities to enhance cycling, it is not myopically focused. Rather, this is a plan to increase convenient access to transit; provide opportunities for green infrastructure that improves neighborhood beauty, reduces flooding, and reverses the urban heat island effect; It is also a plan to revive existing or uncover new neighborhood public spaces. The ultimate goal, of course, is to deliver safer streets for everyone, whether you ride a bicycle or not.

Finally, this is a plan that recognizes Jersey City does not exist in isolation. It is a highly dynamic urban center that exists within an even more dynamic metropolitan region. Thus, people's daily lives to do not stop at the City's boundaries. Thus, enhancing connectivity to adjacent municipalities (Hoboken, Bayonne, Newark, Secaucus, and New York City) is an essential aspect of this plan. Following through on the recommendations contained herein will allow Jersey City to not only enhance its economic competitiveness, quality of life, and environmental resilience but also further position the city as a transportation leader in Hudson County, the New York City metropolitan region, the State of New Jersey, and beyond.

# **VISION + GOALS**

### **THIS PLAN**

As Jersey City's first master plan devoted to improving cycling, this plan outlines street design and a range of policy and program recommendations to transition the City into a place where cycling is a viable and enjoyable transportation options for people of all ages and abilities, all year round.

# So, what would Jersey City be like if everyone felt safe cycling?

- Streets would be safe enough for parents to let their kids cycle to school, to the park, or to a friend's house without fear; and older adults could comfortably bike from their house to community destinations such as the grocery store, a local transit stop, friend meet-ups, the movies, or the pharmacy.
- Cycling would be one of many safe and convenient mobility choices for students and adults living or working in Jersey City, all year round.
- The transportation network would continuously improve people's access
  to their community by systematically reducing barriers like congestion,
  safety, and connectivity. Transport is the lifeblood of the local economy
  and is also a tool to enhance quality of life, encouraging people to stay in
  Jersey City and invest in our community.

# **PLAN VISION**

Jersey City will be a city where people of all ages and abilities travel safely around the city on a bicycle. This vision will become reality through the creation of a protected bike lane and neighborhood greenway grid connecting people living in all neighborhoods to social, cultural, transportation, recreation, and commercial destinations.









# PRIORITY NETWORK GOALS



To achieve its goals, Jersey City must develop a dense network of bikeways, which may be comprised of four basic types: shared use paths, protected bike lanes unprotected bike lanes, and neighborhood greenways. As proposed in more detail within Chapter 3, the implementation of the bikeway network is the single most important element of this plan, as no other goals will be possible without improving the city's street infrastructure.

# Plan, design, and implement bikeways on more than 50% of the city's street network.

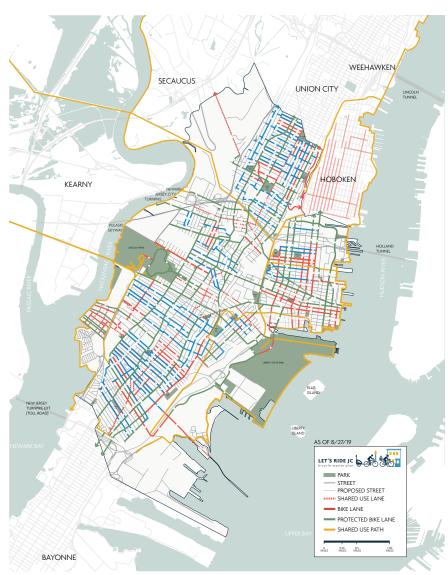
Jersey City has more than 218 miles of streets, nearly 190 miles of which are under the jurisdiction of the City. This plan aims to add or upgrade more than 121 miles of on-street bikeways to the street network, including more than 46 miles of protected bike lanes and shared use paths, 38 miles of neighborhood greenways, and 13 miles of conventional, unprotected bike lanes. Achieving this goal will require a strong focus on retrofitting most links in the city's Vision Zero High Injury Network (HIN) to include a bikway of some type, as well as prioritizing overall street safety as the priority in the face of competing demands for city street space.

# Provide a bikeway of some type within a quarter mile of all city residents.

No city resident should be more than a few blocks from a bikeway. Indeed, to achieve the desired equity, mode share, and safety goals described below, the bikeway network must be proximate to all Jersey City residents. Achieving this goal will take more than a decade but will ultimately allow the city to reach its network, safety, and equity goals.

# Build more than 20 miles of new shared use paths.

Whether for recreation or transportation, the completion of the city's shared use path network will add needed open space and green infrastructure, provide recreational and public health benefits, spur economic development, and create entirely new transportation links. However, achieving this goal will require a strong political commitment to Jersey City's most transformative but technically difficult active transportation projects, like the Bergen Arches, the Morris Canal Greenway, and the Hackensack River Greenway.



Let's Ride JC Full Network Plan

# **PRIORITY MODE SHARE GOALS**

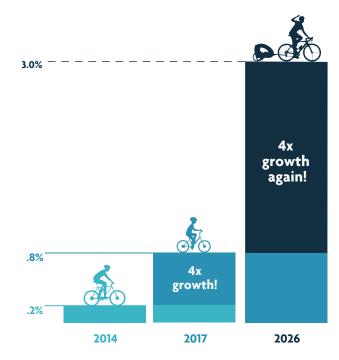


Beyond all other factors, if one doesn't feel safe riding a bicycle then cycling rates will always remain low. Indeed, the majority of cycling trips in cities are taken by young to middle-aged men. Thus, focusing infrastructure investments on the types of bikeways proven to attract more diverse users - children, women, older adults - is a key tenet of the Let's Ride JC bike master plan. Below are three overarching mode

share goals aimed at increasing cycling among all Jersey City residents.

- Increase cycling mode share 400% by 2026, surpassing 3% bicycle mode share (all trips) citywide.
  - Achieving this goal requires the buildout of the priority bicycle network, a commitment to implementing the Encouragement Action Plan, and continuously measuring ridership as outlined in the Evaluation Action Plan.
- Establish a 2019 baseline for the percentage of cyclists who are female; aim to achieve at least 50% of cycling trips to be taken by women by 2026.

Achieving this goal requires the buildout of a low-stress bicycle network, implementing the Encouragement and Education Action Plans, and continuously measuring cycling as outlined in the Evaluation Action Plan.



2026 Bicycle Mode Share Goal.

# Establish a 2019 baseline for the number of children cycling to school and double it by 2026.

Achieving this goal will require enhancing school education and the buildout out of an All Ages and Ability network links to schools, as well as the ongoing evaluation of cyclist and network characteristics.

Turn to Chapter 4's Planning and Evaluation section for more details on measuring and evaluating these mode share goals.

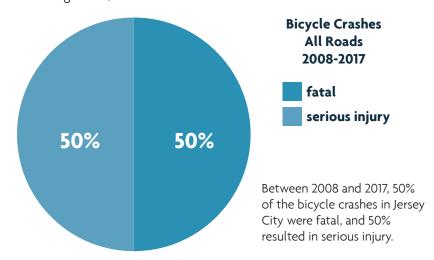
# **PRIORITY SAFETY GOALS**



Beyond all other factors, if one doesn't feel safe riding a bicycle, then cycling rates will always remain low. Thus, focusing infrastructure investments on the types of bikeways that demonstrably attract more diverse users is a key tenet of the Let's Ride JC Bike Master Plan. Below are three overarching safety goals aimed at improving the safety of all Jersey City residents.

# Decrease cycling fatalities and serious injuries to 0 by 2026, and hold it there.

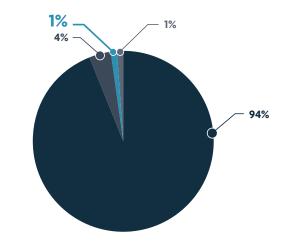
Achieving this goal will require increased investment in the the priority bikeway network (as well as all other forms of proven street safety improvements outlined in this and other City plans/policies) and committing to the phased rollout of the Equity, Evaluation, Education, Encouragement, and Enforcement Action Plans.



Data: Jersey City Vision Zero Action Plan.

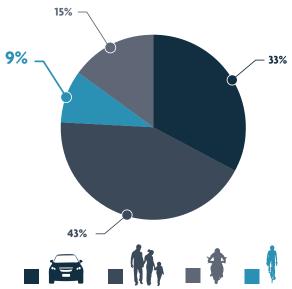
### Traffic Crashes All Roads 2008-2017

Traffic crashes involving bicyclists comprised and average of 1% of the total traffic crashes on all Jersey City's roads between 2008 and 2017.

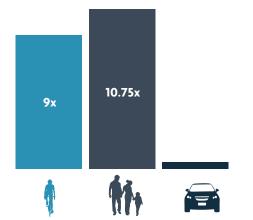


### Fatal Crashes All Roads 2008-2017

Although just 1% of the total traffic crashes, those involving bicyclists comprised an average of 9% of the total fatal crashes.



Data: Jersey City Vision Zero Action Plan.



Traffic crashes involving cyclists and pedestrians are 9 and 10.75 times more likely to be fatal, respectively, making these two modes of transportation the most vulnerable in Jersey City.

# Target bikeway and other safe street infrastructure investments along streets within the High Injury Network (HIN) identified in the Vision Zero Action Plan.

At a minimum, apply a tactical "quick build" approach along all 28 HIN links by 2026, prioritizing the most dangerous street segments and intersections within the HIN, especially where these segments overlap with access to schools, parks, senior centers, and corridors, within priority Communities of Concern. Achieving this goal will require an intentional and phased rollout of the Engineering Action Plan, supported by strong commitment to implementing the Evaluation, Education, and Enforcement Action Plans.

# Except for select regional highways, adopt a citywide policy that set a maximum 25mph design (not posted) speed along all city streets.

Because vehicular speed during a crash is the most important determinant of crash severity, all new street redesigns will target a design speed of 25mph or less by 2021, with the strongest emphasis being placed on corridors within the HIN. Along residential streets, or corridors with schools, the design speed should be 20mph or less.

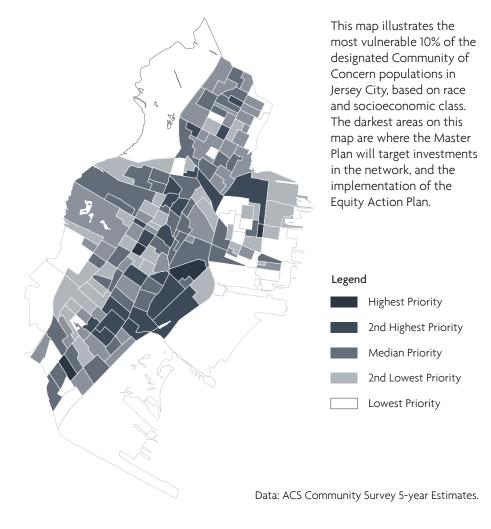
# PRIORITY EQUITY GOALS



Equity is a foundational pillar for this entire plan. Below are five overarching equity goals that must be obtained if cycling safety, mobility, and access enhancements are to be beneficial for all Jersey City residents. Failing to reach these goals will result in the failure to achieve this plan's broader network, mode share, and safety goals.

- Institutionalize equity within the city's mobility, neighborhood, and land use plans, programs, policies, and processes with a specific emphasis on the eradication of systemic (i.e., institutional and structural) racism and discrimination. Achieving this goal will require work outside the realm of bicycle planning, but will positively impact all future planning, policy, and program efforts carried forth by Jersey City.
- Ensure the full and fair participation and engagement of Jersey City's marginalized and historically and systemically excluded populations, disaggregated by race, religion, political or cultural group, age, gender, sexual preference or financial status. Achieving this goal will also require work outside the realm of bicycle planning, but will positively impact all future planning, policy, and program efforts carried forth by Jersey City.
- Increase the rate of bicycling among Jersey City's marginalized and historically and systemically excluded populations, disaggregated by race, religion, political or cultural group, age, gender, sexual preference or financial status.
- Reduce the number and percentage of bicycle-related fatalities and moderate to serious injuries among Jersey City's marginalized and historically and systemically excluded populations, disaggregated by race, religion, political or cultural group, age, gender, sexual preference or financial status.

Prioritize increased bike infrastructure investments and maintenance in areas identified as priority Communities of Concern, those that are the most vulnerable within such a designation. Achieving this goal will require consistent overlap with the Evaluation Action Plan, as well as the Priority Network Goals and Chapter 3 recommendations.





# WHAT IS BIKE PLANNING?

Bicycle planning— often referred to as "active transportation"— is the process of assessing and addressing the needs of a community in the area of bicycle infrastructure, programs, and policies.

It involves taking an inventory of the community's existing walking and bicycling facilities, and identifying strategies and tactics to build upon those resources to create safe and accessible streets for all people. Active transportation planning must include consulting with citizens of the community to facilitate their vision of future transportation network improvements — understanding their concerns, addressing their needs, and charting a way forward so that a more bicycle-friendly community can be built over time.

Of course, planning for increased cycling does not end with the adoption of this plan. Ongoing public engagement with Jersey City's citizens and City leaders will be required to facilitate the implementation of the vision set forth in the Let's Ride JC plan. Ultimately, bicycle planning is about providing a viable transportation choice that has proven to create lively streetscapes, a healthier population, and a more livable and sustainable urban environment that attracts human talent and economic prosperity for generations to come.





# WHY THIS PLAN?

Bicycling offers a simple solution to some of our society's most vexing social, public health, economic, and mobility challenges.

# How?

- Cycling is one of the lowest cost and most accessible forms of transportation. Indeed, the average cost of owning and operating a motor vehicle in Jersey City is approximately \$10,000/yr versus just a few hundred dollars for owning and operating a bicycle.
- Cycling is one of the healthiest forms of transportation, providing lowimpact physical activity as people go about their day-to-day tasks. A 2017 study found that compared to non-active commuting, commuting by bike is associated with the lowest risk of cardiovascular disease and cancer.
- Besides the production of the bicycle, cycling is a zero carbon transportation option.
- Besides walking, **cycling is the most spatially efficient mode of individual transport**, moving approximately 5x the number of people per standard lane width (11ft.) per hour than automobile.

This means cycling is a smart low-cost, environmental, space efficient, traffic decongestion tool. And after decades of being pushed to the margins of society— and our streets— people are returning to bicycling in locations where safe and inviting infrastructure is provided.

This exciting trend may be attributed to any number of related factors, but mostly demonstrates the fundamental need to accommodate cycling into a community's physical and social fabric. Indeed, by almost every measure, the

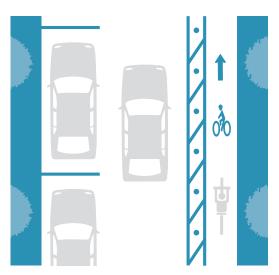


cities that accommodate walking and cycling today will continue to be some of our country's most healthy, safe, economically competitive, and equitable places in which to live. Thus, planning for cycling isn't just about cycling, it also means planning for a more inclusive and livable city.

The following pages include commonly used stats underscoring why.

The New York City Department of Transportation has found that the rate of expansion of their bicycle network corresponds to the rate of growth in cycling the following year.

On Salt Lake City's Broadway, replacing parking with protected bike lanes increased retail sales. A general street upgrade removed 30 percent of the auto parking from nine blocks of the major commercial street but improved crosswalks, sidewalks and added protected bike lanes.



In the first six months of the next year, retail sales were up 8.8 percent over the first six months of the prior year, compared to a 7 percent increase citywide. After the changes, 59% of business owners on the street said they supported them; only 18% opposed.



After the construction of a protected bike lane on 9th Avenue, local businesses saw a 49% increase in retail sales. On other streets, the average was only 3%.

Intersections in Montreal with protected bike lanes saw **61 percent more bike traffic** than comparable intersections with no bike infrastructure.

Where protected lanes were installed in New York and Washington D.C., the number of bikes on sidewalks immediately fell by an average of 56 percent.





# **MODE SHARE STATS**

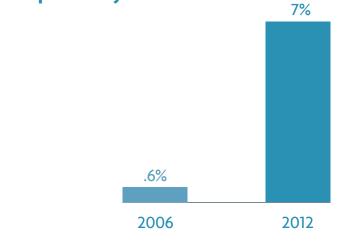
The average protected bike lane sees bike counts increase 75 percent in its first year alone.

After New York City installed a protected bike lane on Columbus Avenue,

- bicycling increased 56 percent on weekdays,
- crashes decreased 34 percent,
- speeding decreased,
- sidewalk riding decreased,
- traffic flow remained similar.
- and commercial loading hours/space increased 475 percent.

On Washington DC's first protected bike lanes, bike traffic has been growing **7 times faster** than the citywide rate.

In Seville, an 80-mile network of protected bike lanes boosted biking from .6 percent to 7 percent of trips in six years.



From 2006-2011, bicycling in San Francisco increased 71 percent, making up 3.5 percent of all trips in the city.

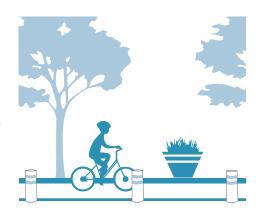
The greatest growth in bicycling came on Market Street, which has protected bike lanes. On Market Street, bicycling increased 115 percent from 2006, and 43 percent from 2010.



# **SAFETY STATS**

Cities with high bicycling rates tend to have lower crash rates for all road users.

Cities around the U.S. have found that protected bike lanes increase bicycle ridership, reduce motor vehicle speeding, reduce crashes and improve people's feelings of safety on those streets.



NACTO released an analysis demonstrating that increases in the number of bicyclists and bike lanes are associated with a reduced risk of injury across seven U.S. cities.

One year after the installation of a protected bike lane in downtown **Long Beach**, a city survey found an increase in walking and bicycling traffic and a decrease in the number of bicycle and car crashes.

Red light compliance on a protected bike lane in **Chicago** was observed to be 81% in 2013, compared to 31% before the protected lane was installed.

The safest bicycle routes in **Vancouver**, **BC**, and **Toronto**, **ON** were found to be:

- protected bike lanes on major streets
- local streets with traffic diversion
- off-street bike paths



Because they shorten crossing distances, control turning conflicts, and reduce traffic weaving, **New York City**'s protected bike lanes reduced injury rates for people walking on their streets by **12 to 52** percent.



# **EQUITY STATS**

In the U.S., 24% of all bicycle trips are made by women and 76% are made by men.



The costs of purchasing a bicycle was cited as a major obstacle to cycling by 60% of participants in focus groups of African, African American and Hispanic Portland residents.

A 2014 study conducted by People for Bikes revealed that people of color and the lowest-income households are the most dependent on cycling for transportation.

35% of participants in focus groups made up of African, African American and Hispanic Portland residents said that they did not have a place to store a bicycle where it would not get stolen.



More than half of older adults who reported an inhospitable biking, walking, and transit environment outside their homes said **they would bicycle**, walk, and take transit more if their streets were improved.



# JERSEY CITY TODAY

# **WE GOT THIS!**

Jersey City is the state's largest city and home to one of America's most jobrich downtowns. It is also one of the most diverse cities on the globe. And at 16,093 people per square mile, it's the 3rd densest community (with 100,000 or more people) in the United States.

Beyond population and density, the City's legacy public transport network is robust, which explains why 47% of residents take transit to work, a patronage surpassed in the United States by only New York City. Combined with walking and cycling, city residents' use of sustainable transport surpasses 56%. Compared to most other American cities, this is a significant accomplishment. However, with safer and more accessible streets, the city could see this number rise, especially with investments in cycling and walking infrastructure. With more than half of the city walking, cycling, or taking transit, it should be no suprise that car ownership rates are low. As of 2016, 37% of city residents were carless, a number that far exceeds the 8.7% nationwide average. For those Jersey City households who do own a car, a majority own only one vehicle.

The car-free and "car-lite" urban lifestyle available to many Jersey City residents is one reason why the city's population has spiked 9.4% since 2010. In that same time period the city has experienced virtually no new daily automobile trips, perhaps demonstrating the preferred lifestyle of its new residents and how a combination of transportation options absorb new growth. To be more clear, there has been a decrease in the raw number (-3,973) of motor vehicles counted (2010-2017) at NJDOT screenline locations. These tallies include primary locations such as NJ 440 (at Danforth Ave), Newark Ave (at JFK Blvd), Summit Ave (at Magnolia Ave), and West Side Ave (at Sip Ave). While some of these lower counts may be attributed to the



reconstruction of the upper level of NJ-139, the fact that vehicular traffic has not grown in lockstep with the city's population underscores the value of the city/region's public transit network. Put simply, as Jersey City grows, traffic doesn't have to get worse if the City continues to invest in sustainable transport. First and foremost this means investing in the city's walking and cycling network.

As outlined in the 2019 Jersey City Vision Zero Action Plan, certain street segments (both City and state managed) have been identified as part of the 'High Injury Network.' Of the segments that overlap with those recorded in

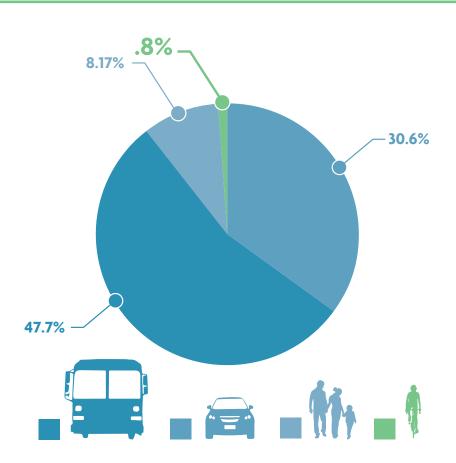
the NJDOT traffic counts, the majority have seen a decrease in traffic volume (as of 2017). These decreases may provide new opportunities to explore the re-allocation of space for more efficient and safe modes of urban transport.

And given the City's stated vision of becoming a more walkable, bikeable, and transit-served community, supporting this 'virtuous circle' of reduced demand is a necessity for Jersey City to continue to function as a livable and economically productive city. To be sure, such directives are articulated in every transportation-related plan adopted in the past decade and it appears the city is beginning to make good on its goals, which the implementation of Let's Ride JC will support further.

Until now, Jersey City has not had a dedicated plan defining strategies and priorities for cycling-related investments, especially those that seek to protect the city's most vulnerable users while increasing access to economic opportunity, open space, and community assets. In the pages ahead, we'll take a closer look at what improved cycling conditions can do for Jersey City, put forth ambitious but tangible goals for cycling improvements, and outline a path to help the City reach its larger safety and equity goals. In short, this plan has been a long time coming.

We Got This, JC!

# In short, this plan has been a long time coming.



Most Common Method of Travel, Jersey City, 2016. ACS 1-year Estimate.

According to 2016 estimates, cycling in Jersey City comprises just .8% of the mode share, which includes walking, driving alone, and taking public transit. When compared to the relatively higher likelihood of being involved in a fatal cycling crash, it becomes apparent that cycling (and walking) are disproportionately affected by the less than adequate existing street network conditions and lack of protected, connected facilities.

# **PLAN REVIEW + NETWORK ANALYSIS**

### WHAT WE DID: PLAN REVIEW

The Consultant team collected and reviewed existing plans, policies, and studies— more than 25 in total— that aim to support or positively impact cycling and/or mobility in Jersey City. These documents include road safety audits, connectivity plans, corridor studies, and greenway plans. A few examples include:

- Vision Zero Action Plan (2019)
- School Travel Plan (Expected 2019)
- Pedestrian Enhancement Plan (2018)
- East Coast Greenway Plan (2012)
- Jersey City Master Plan Circulation Element (2011)
- The Morris Canal Greenway Plan (2013)
- Jersey City Bike Lane Plan (2012)
- JC-Hoboken Connectivity Study (2011)
- Downtown Circulation Study (2007)
- Bergen Arches Final Report (2002)

The team has also continued to review safety audits and corridor plans under development for key city mobility links, such as Montgomery Street and Columbus Drive. Additionally, the project team has reviewed existing crash data and closely followed the city's ongoing Vision Zero Action Plan effort so that concerns of safety, equity, and access remain central themes within the Let's Ride JC Bike Master Plan.

Finally, the planning team reviewed a number of exciting regional projects that aim to link JC neighborhoods, but also to neighboring cities and across the northeast. These include:

- East Coast Greenway
- The Harbor Ring
- Hudson River Walkway
- Creek Trail
- Sixth Street Embankment
- Hackensack River Walkway

- Morris Canal Greenway Trail
- Bergen Arches Trail
- Essex Hudson Greenway

### WHAT WE LEARNED

Almost every one of these plans underscores the need for improving safety and access through better street design that includes robust, connected cycling infrastructure. But given the results on the ground, there is much work to be done, as Jersey City remains a challenging and unappealing place to ride a bicycle for the vast majority of people. The challenges are myriad, including but not limited to issues outlined in the following summary of Jersey City's existing bikeway network conditions.

## WHAT WE DID: NETWORK ANALYSIS

Despite 45 miles of existing on and off-street bikeways, cycling in Jersey City is difficult for most people. The network is not well connected within Wards, let alone between them; on-street bike lanes are too narrow; crossing major streets, let alone riding along them, is intimidating; and public bicycle parking is undersupplied. The following section provides a more detailed overview of the city's bikeway network, gleaned from the review of existing data, plans (like those listed above), and the experience of cycling the streets of every Ward with 60+ Handlebar Survey participants in July/August of 2018 (see page 30 for more details).

### WHAT WE LEARNED

# (a) Street Network

Jersey City is approximately 6 miles long, and 3.5-miles wide (at the
widest point), with an old street network that evolved over many
generations of development. Thus, very few streets connect multiple
neighborhoods, which creates pressure on just a handful of north-south

and east-west corridors to move people driving, transporting / delivering goods, walking, cycling, and taking transit.

- The city's neighborhood streets are a tangle of one-way and offset streets. While this ostensibly calms traffic, it also limits cycling connectivity to and across neighborhoods. In many instances, the direction of travel changes every block or two, making destinations more difficult and time-consuming to reach without cycling illegally.
- The few corridors that do link multiple neighborhoods are relatively narrow (often just two lanes of vehicular traffic with curbside parking. While narrow streets support walkability, the addition of bikeway infrastructure will tradeoffs in how street space (parking, travel lane width, number of travel lanes etc.) is currently allocated.
- Jersey City's primary corridors are often congested with vehicular traffic. Whether
  for movement or parking, this exacerbates an already intense competition for
  curbside space -- be it parking, pedestrian or cycling movement and access,
  commercial delivery and building service demands, bus stop activity, or taxi/ride
  hailing pick-up and drop-offs.
- Region-serving thoroughfares, highways, and rail corridors have reduced local connectivity in favor of regional mobility.
- Many neighborhood streets, especially in less historic parts of the city, feature a
  high-number of curb cuts, which presents additional conflicts for people walking,
  cycling, and driving and complicates bikeway design.

# (b) Bikeways

• There are 45 miles of bikeways in Jersey City. This network includes 35 miles of conventional bike lanes, 9 miles of shared use paths, one mile of protected bike lane, and one mile of streets with shared use lane markings. The majority of the on-street network features bikeways of substandard width, typically 4' in width, but occasionally as narrow as 3'.





- The existing on-street bikeways are marked and signed inconsistently, and do not offer intersection safety treatments, such as bike boxes, bicycle signal phases, and crossbike markings.
- 90% of all bikeway network intersections citywide (where individual bikeway links intersect) occur in Ward D and E, which means bikeway connectivity is severely limited in the majority of the city.
- Bus-bike conflict points are frequent, particularly where boardings and alightings occur curbside along corridors servicing multiple bus lines.
- The prevalence of offset and "T" intersections, and opposing one-way street segments create specific street and bikeway design challenges that limit the utility of existing bikeway segments where cyclists are the most vulnerable.
- Surface and grade separated highways and rail lines disrupt the existing bikeway network and make potential improvements more complex and expensive to implement.

## (c) Amenities/End-of-Trip Facilities

- On-street bike racks are limited in supply and often configured in ways that limit their usability.
- Known high demand bike parking locations, such as the Journal Square PATH station, feature low-quality racks that are often oversubscribed, effectively limiting their ability to ensure security and absorb demand.
- Wayfinding is challenging, not only because the streets are a tangle of one-way and two-way streets, but street connectivity is limited across neighborhoods.
- The CitiBike system is a tremendous amenity, but will always be of low utility to the majority of people until two things are accomplished:
- streets are made safer with more robust and connected bikeways and a

higher station density with citywide coverage is achieved, especially in transit-starved locations.

# (d) Safety

- Traffic crash data collected for the City's Vision Zero Action Plan revealed nearly 100 people were killed in traffic while more than 200 were seriously injured (2008 - 2017).
- Serious and fatal traffic crashes disproportionately harm people cycling and walking. While cyclists and pedestrians were involved in only 1% and 4% of all crashes respectively, they were involved in 9% and 43% of all traffic fatalities. This means that people walking and cycling are involved in only 5% of all crashes but experience 53% of citywide traffic fatalities. This is unacceptable and more can be done to protect the most vulnerable street users.

### **EXISTING CONDITIONS SUMMARY**

- 1. Jersey City's street work is challenging to navigate by bicycle.
- Bikeway design must be improved citywide and its distribution needs to be more equitable across all Wards.
- 3. Better bicycle parking + wayfinding are needed compliments to the physical cycling network.
- 4. People cycling and walking are disproportionately killed in traffic crashes, which helps explain why safety is repeatedly mentioned as the largest barrier to more people cycling with more frequency.





















# PUBLIC INPUT SUMMARY

Pivotal to the creation of the Master Plan is the input of Jersey City itself. The consultant team obtained a variety of public input from JC through a number of hands-on and online mediums.

The Let's Ride JC project placed public input and public action at the center of planning process. Starting in June 2018 and finishing in April 2019, a wide variety of conventional and creative communications mediums/activities were utilized to give Jersey City residents and business owners as many opportunities as possible to engage with the planning process. The following overview provides a summary of all public input and public action activities, and how feedback has directly informed the Let's Ride JC Master Plan.

- 1 Technical Advisory Committee Meetings
- 2 Ward Tour Demonstration Project
- 3 Project Website + Social Media
- 4 The Handlebar Survey
- 5 Public Workshops
- 6 Bergen Avenue Demonstration Project
- 7 Focus Group Meetings
- 8 Streetfilms

# (1) TECHNICAL ADVISORY COMMITTEE MEETINGS

The Technical Advisory Committee (TAC) served a key role in the development and delivery of this project. The TAC provided technical oversight while also providing a sounding board for the projects, policies, and programs incorporated into this draft plan. TAC members represent a wide range of City departments and external agencies with community partners who want to advance transportation options across the city and the region. TAC members were engaged at three different points in the planning process, providing guidance for public engagement activities, draft vision and goals, and reviewing the plan draft prior to its public release on April 2nd, 2019.

# (2) WARD TOUR DEMONSTRATION PROJECT

Wherever possible, the public input process leveraged highly visible community events led by local organizations with large followings. The first such effort was aligning the project launch with the Ward Tour, an annual bike ride that attracts more nearly 3,000 cyclists that are as diverse as the city itself. Ward Tour is organized and led by Bike JC, Jersey City's primary bicycle advocacy organization.

The Let's Ride JC team joined the pre-ride, ride, and post-ride festivities, handing out more than 1,000 postcards directing people to the project website and Instagram page. While some members of the team rode the route with participants, others set up a temporary protected bike lane, which served as the gateway to the after party bike valet. Finally, Clarence Eckerson, Jr. of Streetfilms documented the Ward Tour ride and produced a short video about the ride and its role as the launch of Let's Ride JC. Ultimately, the footage captured was rolled into a film about the whole project (see page 41 of this chapter for more information).



The Ward Tour demonstration project was the Master Plan team's first engagement with the public at large, and served as an opportunity to notify riders and other event attendees of the planning process. The printed matter (like the cards pictured at right) directed people to both the new plan website, and encouraged people to follow the effort on Instagram.



# Visit

# letsridejc.com

to learn more about Jersey City's first bicycle master plan.

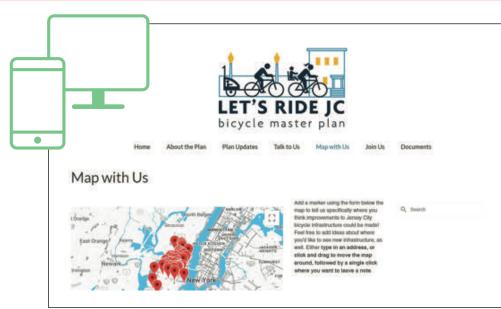


# (3) PROJECT WEBSITE + SOCIAL MEDIA

The Let's Ride JC project website was launched in conjunction with the Ward Tour. It included a project overview, news page, calendar of events, a short online survey, project documents, and an online mapping tool where more than people shared specific location based comments about the city's current cycling conditions.

Instagram was used as the preferred social media channel. At the time this plan was published 38 posts garnered 398 followers, with dozens of comments received on various posts. It is expected that the city will continue to utilize this established communication channel to provide ongoing plan implementation, program, and policy updates.







# (4) THE HANDLEBAR SURVEY

### WHAT WF DID

Between July 21 and August 6, 2018, the consultant team led six public bicycle tours within each of the City's wards. Each route was between 4 - 5 miles in length, and was selected so that participants experienced a diversity of representative conditions found within each ward. More specifically, each route was designed to link parks and open spaces, civic destinations, and local commercial districts.

Handlebar Survey participants were asked to evaluate specific street segments along each route using a numerical scale of 1 to 4. This includes everything from pavement quality, the behavior of people driving motor vehicles, and the presence or lack of cycling infrastructure. Participants were also asked to share comments for each of the survey questions to further contextualize the numeric scoring of reach Handlebar Survey route segment.

Below is a summary of what was learned / heard from participants following all six Handlebar Surveys.

### WHAT WE LEARNED

Overall, tour participants gave the cycling experience in Jersey City a rating of 1.67 out of 4.

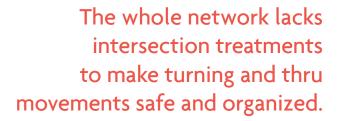
- Participants repeatedly identified a **lack of north-south connections** in the bike network.
- There are **no bike lanes on the major streets which link neighborhoods** across the city.
- **Existing bike lanes are okay**, but they could be designed better and provide stronger connections to key areas of the city.
- Many riders reported streets feeling 'tight' and unsafe for cycling.



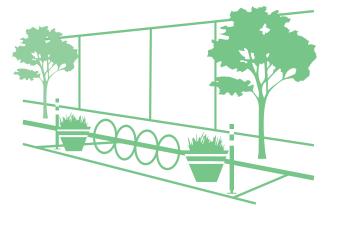
- Vehicle speeds represent the most tangible threat to cyclist safety on many corridors.
- Congestion slows vehicles to more comfortable speeds, but it's then harder to ride w/o facilities.
- Streets with many curb cuts feel unsafe due to traffic entering / exiting the roadway unpredictably.
- **Right on red bans are inconsistent** and it is very uncomfortable where they are allowed.
- Signalization and signal timing need to be improved for cyclists.
- Many cyclists admitted to frequently riding on the sidewalk where they feel unsafe in traffic.
- Beyond traffic, some riders feel unsafe from threats of crime or physical violence in certain areas of the city.
- CitiBike removed from the south side of the City significantly diminishes access and bike-friendliness.



Interactions between bikes and buses can be challenging and uncomfortable, especially along streets with multiple bus routes.







More high-quality bicycle parking is needed everywhere.



Better connections to parks and recreation destinations are needed.

There is virtually no dedicated wayfinding signage for cyclists.



Pavement conditions vary across the city, and this needs special attention on bike routes.

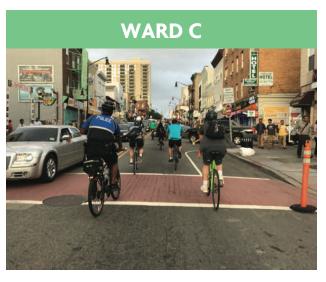


# WARD A

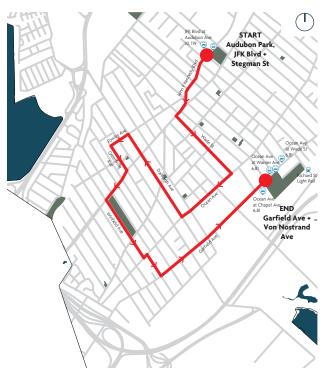
Ward A's route started at Audubon Park and ended adjacent to Bayside Park, and made sure to include portions of the larger N-S arterials, like Ocean, Garfield, and Bergen Avenues.

# WARD B

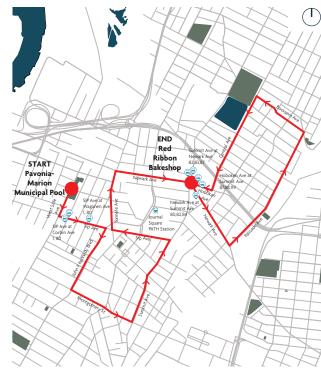
Ward B segments had the highest average rating at 2.03. This route included a large portion of West Side Avenue.



Ward C segments had the lowest average rating at 1.43. JFK Blvd in Ward C was among the lowest scored segments at 1.2







# WARD D PALISAD PIREHO PALISAD PALISAD PIREHO PIREHO

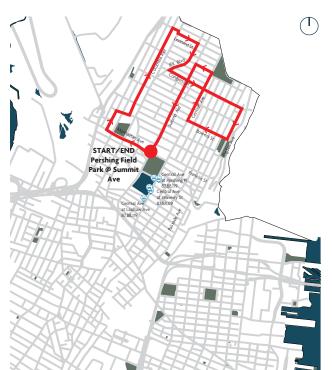
Ward D's route took riders along the Central Avenue commercial corridor, and explored the possibility of new N-S and E-W connections.

# WARD E STILL

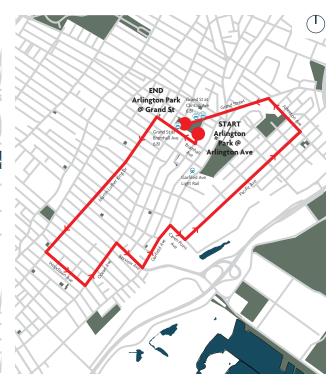
York St in Ward E scored the highest, with an average score of 2.7.



MLK Drive and Garfield Ave. in Ward F were among the lowest scored segments, both tied with JFK Blvd. in Ward C at 1.2.







# (5) PUBLIC WORKSHOPS

Three public workshops were organized over the course of the Let's Ride JC Planning process. The first workshop was held in September, the second in December and the third in March/April. The results of these engagements are summarized below.

# (a) Workshop #1

## WHAT WE DID

The first of three public Let's Ride JC workshops occurred on September 4th, 2018 at City Hall Chambers. Approximately 25 people were in attendance. Street Plans led participants through an introductory presentation and a number of workshop exercises, including asking individuals to respond to the following prompt:

# "What's your boldest vision for cycling in Jersey City?"

Responses were then reviewed, scored, and ranked by fellow workshop participants. The top five ideas to emerge (top score = 25) are included below, with the resulting score in parentheses.

- A city-wide network of protected bikeways linking north-south and east west (25)
- Build a bike-pedestrian bridge to Manhattan (24)
- Add a protected bikeway on Palisade Avenue (23)
- Invest in a Citibike expansion citywide (23)
- Develop a neighborhood greenway network within residential neighborhoods (23)





### Three other ideas of note, included:

- Install bicycle signals so that cyclists have a head-start through intersections
- Develop bike infrastructure that connects to each bordering city (Bayonne, Hoboken, Union City, Secaucus)
- Developing the Bergen Arches into an accessible park / shared use path

Participants then undertook a collaborative issue mapping session to identify common cycling destinations, locations where people don't feel safe (be it the threat of traffic violence, crime, personal safety, poor lighting etc.), and where they'd like to see bikeway network investments prioritized. The following three graphics display a composite response.

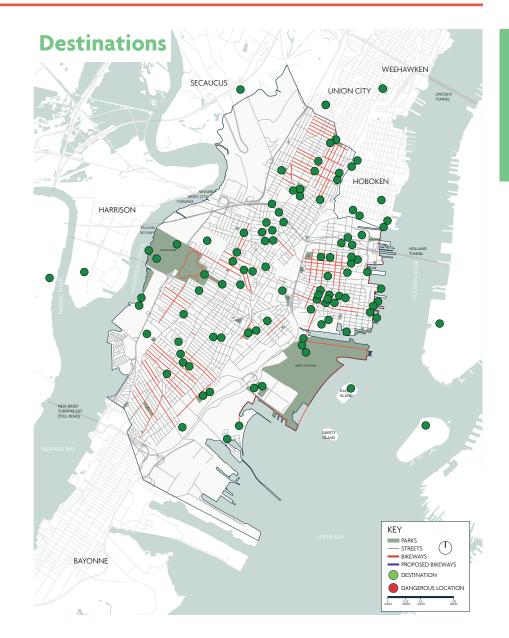
### WHAT WE LEARNED

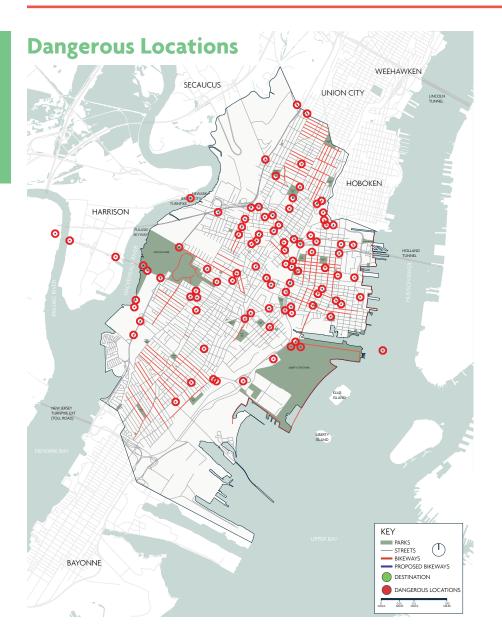
The top five ideas from the 25/10 exercise are summarized below (as voted by meeting participants) with the resulting score in parentheses.

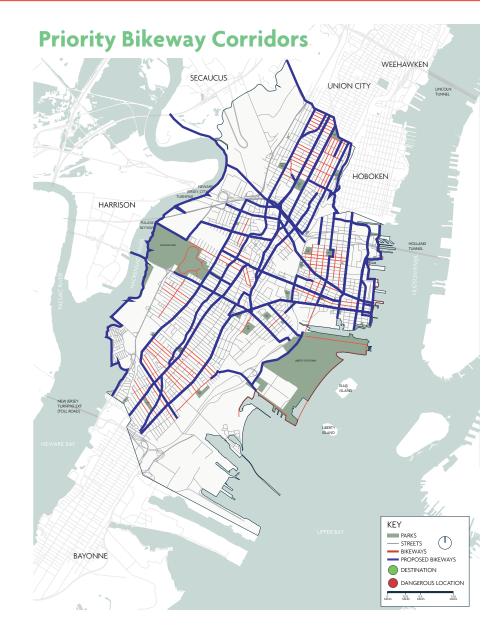
- "Create a city-wide network of protected bikeways linking the city north-south and east west" (25)
- "Build a bike-pedestrian bridge to Manhattan" (24)
- "Protected bikeway on Palisade" (23)
- "Citibike expansion citywide" (23)
- "Develop a Neighborhood Greenway network" (23)

Three other ideas of note include:

- "Use bicycle signals to give cyclists a head-start"
- "Develop bike infrastructure that connects to every bordering city"
- "Build the Bergen Arches"







#### (b) Workshop #2

#### WHAT WE DID

The second public workshop occurred on December 12th, 2018 at City Hall Chambers. The meeting served as a progress review, summarizing activities to date, an introduction to the draft cycling network with specific project proposals, an overview of the bikeway design guide. The meeting concluded with a facilitated discussion about the content presented and where the planning team should focus more of its effort as the Let's Ride JC plan and bikeway design continued to develop.

#### WHAT WE LEARNED

Participant feedback underscored the need to better articulate/visualize neighborhood greenway recommendations, and to fill in a few missing gaps in the proposed bikeway network.

#### (c) Workshop #3

#### WHAT WE DID

The third and final public meeting utilized an open house format that kicked off with an overview of the planning process, the Let's Ride JC bikeway plan, and the design guide. Participants were then encouraged to circulate around three main stations:

- **Station 1:** Featured a 24' x 16' map of the proposed cycling network.
- **Station 2:** Included a more focused look at the network plan, with detailed proposals for specific locations in each of the City's six Wards.
- Station 3: Offered an in-depth look at Bikeway Design Guide elements, with a special focus on how its contents will help the City overcome some of its unique mobility challenges.





#### (6) BERGEN AVE. DEMONSTRATION PROJECT

#### WHAT WF DID

Because fully protected bike lanes have not been implemented in Jersey City, the planning team designed and implemented a four-day working prototype to accomplish two main goals:

- Test the potential redesign of priority corridor (Bergen Avenue).
- Educate, inform, and solicit feedback from users, property owners, and constituents about Bergen Avenue but also cycling and mobility issues citywide.

The corridor was chosen after numerous candidates were vetted. In the end, Bergen Avenue was selected for three basic reasons:

- It's a high-visibility corridor used by thousands of people each day.
- It provides a critical connection between Journal and McGinley Squares, including linking schools, businesses, and cultural institutions.
- It provided an opportunity to showcase a 4-to-3 lane reassignment while virtually eliminating the currently illegal but common activity of doubleparking along the corridor.

Just as the project kick-off was aligned with Ward Tour, the Bergen Avenue demonstration project took place in conjunction with the annual JCAST festival, which occurred on October 4th-7th, 2018. The street redesign included converting the four lane corridor to three lanes, which allowed for a southbound parking-protected bicycle lane placed between a floating parking lane and the curb. The removal of a travel lane allowed for a very generous bikeway width of 10' (7' wide lane + 3' buffer), which is 75% wider than the city's existing on-street bicycle lanes.



Coming **COLUMBUS DAY WEEKEND**, crews will be installing a temporary protected bikeway on **BERGEN AVENUE** from Journal Square to McGinley Square.

The Bergen Avenue bikeway will use **temporary, removable materials** to test a street design that will show residents and businesses how permanent bike lanes could be implemented in Jersey City. The **pop-up bicycle lane** will run **one-way** for **six blocks** south from Sip Avenue to Montgomery Street, along the west side of Bergen Avenue. This configuration will be in place **for one weekend**, with installation happening on **Friday October 5**, and removal on **Monday, October 8**. The lane will be **75% wider than normal bike lanes found across Jersey City**, and will include symbols which are inclusive of other active mobility uses such as scooters and skateboards. There will also be a painted mural in the bikeway near Montgomery Street to bring creativity and community engagement into the streets during **JCAST 2018**.

On-street parking will be maintained by shifting the parking spaces away from the curb into a **new "floating" parking lane**, and placing the bikeway between the parked cars and the sidewalk to provide physical protection for cyclists. During installation and removal of the lane, there may be limited closures to certain parts of the west side of street (similar to when workers are servicing utilities). The Bergen Avenue pop-up bikeway is a public outreach component of the Jersey City Bicycle Master Plan effort currently underway.



#### @letsridejc #letsridejc

For more information about the Jersey City Bicycle Master Plan, please visit www.letxridejc.com. The Bergen Avenue Bikeway Demonstration Event and the Jersey City Bicycle Master Plan are a collaboration between the Jersey City Division of City Planning and Street Plans Collaborative with Arterial LLC, Equitable Cities, and Streetfilms. For questions or comments please contact Ed Janoff, Senior Director of Project Development at Street Plans Collaborative: edifStreetralians or pr The project also included MUTCD compliant signs, vertical delineators temporarily epoxied to the asphalt, and a new type of pavement marking intended to invite people using other low-impact or "micro" mobility modes, such as scooters, skateboards, and rollerblades. Finally, the terminus of the route at Bergen/Montgomery featured a large street mural in place of a redundant right turn lane, which was designed by Bike JC board member, Deirdre Newman.

#### WHAT WE LEARNED

While the project was only in place for three days, it accomplished and revealed a number of valuable lessons.

- It was instantly popular with people traveling by bike, scooter, skateboard etc.
- Observationally, the impact on traffic flow was minor.
- The design prevented double-parking on the southbound side of the street, an ongoing issue that reduces mobility for all street users and creates safety concerns.
- Although bus drivers were instructed to bypass the stops, many elected
  to pick up or drop off passengers at the curb. In those instances, the type
  of positive interactions between buses, cyclists, and pedestrians the
  design aimed to create were achieved.
- Without a protected bike/micro-bility lane on the northbound side of Bergen, many people moved contra-flow on the southbound side; suggesting an opportunity to further test one-way vs. two-way configurations in this specific corridor.
- Most questions or concerns raised in the field were about parking and how to negotiate the "floating" parking lane that was tested; no comments were received about reduction in the number of spaces available.





- Few, if any, complaints were received from cyclists sharing the lane with other users.
- A few retailers noted the street redesign made the sidewalk feel wider, improving their visibility, and reducing conflicts with people cycling, skating, or scooting on the sidewalk.

While none of these results offer conclusive evidence, the above lessons learned, positive community interaction, and method for delivering the demonstration point to new ways Jersey City can engage the public while testing various redesign elements at a low cost. Turn to Chapter 5 of this plan, or Chapter 9 of the Bikeway Design Guide to learn more about this "quick build" approach to project delivery.

#### (7) FOCUS GROUP MEETINGS

In December of 2018, the project team organized three focus group meetings, comprised of residents, community leaders, and political leaders and their staff. These meetings offered a more in-depth, focused conversation for specific areas of the city. Each meeting began with an overview of the planning process to date and a presentation of early concepts being developed for the master plan and the bikeway design guide. The larger purpose of these meetings was to see if the process and ideas being put forth were generally in step with expectations. Feedback on key issues like parking, street design, facility types, and gaps in the draft network were received and incorporated into subsequent drafts of this plan.





#### 8) STREETFILMS

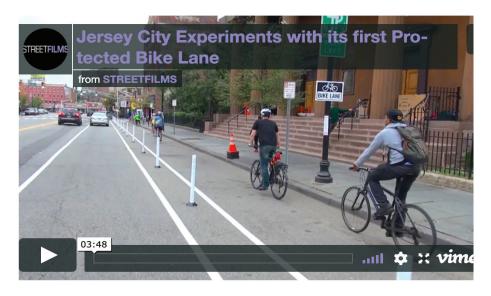
Clarence Eckerson, Jr. of the New York City based non-profit StreetFilms captures best practices and innovations in urban transportation and public spaces from around the globe. Streetfilms played a key role in documenting and disseminating three short films about the making of Let's Ride JC. These films include:

- Ward Tour
- Bergen Avenue Demonstration Project
- Final Draft Public Meeting
- The Making of Let's Ride JC

The four videos that were created during the planning process garnered more than 20,000 views (and growing!), effectively broadcasting a new approach to transportation planning in Jersey City and to an audience around the globe.







# HOW PUBLIC INPUT SHAPED THE PLAN

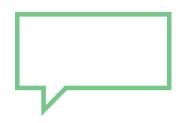
All of the public input efforts summarized above helped the consulting and City team facilitate thousands of interactions with Jersey City's residents, business owners, advocates, and political leaders who shared many diverse opinions, concerns, and desires for better cycling (among many other related issues!). This input helped shape the plan in more ways than we can summarize here. That said, the following pages highlight some of the most common issues that arose repeatedly throughout the planning process and how the plan and/or the design guide responds directly.

Over 25,500 interactions contributed to the making of this plan.

```
4 Streetfilms +
3 Public Workshops +
3 TAC Meetings +
3 Focus Group Meetings +
1 Demonstration Project +
1 Project Website Map and Survey +
1 Light Up Ride +
1 Ward Tour +
1 Bike Prom +
1 Instagram Account =

25,572 Let's Ride JC interactions (and counting)!
```

# WHAT WE HEARD



# WHAT WE DID



"Jersey City needs a **dense**, **connected bikeway network**, that includes 'low-stress' protected facilities appropriate for people of all ages and abilities. This network **must link all corners of the city.**"

We've drafted a **bold, and dense network of cycling links** that put a low-stress bikeway - defined as a neighborhood greenway, shared use path, or protected bike lane - within a quarter mile of every resident in the city, if not much closer. For more details, turn to Chapter 4 to review the Let's Ride JC Network Plan.

"This Plan must include **tangible goals** that hold our elected officials and city staff accountable to implementing the vision."

The Evaluation Action Plan in Chapter 4 places strong **emphasis on publicly monitoring implementation progress**, including recommending the City issue a public report each year. This would include tracking everything from crashes, to network miles built, to the advancement of education and encouragement campaigns.

"Traffic violence or otherwise, **safety on the street is a huge priority.** It has to be the major focus of the plan and not just on major streets like Montgomery or the Boulevard"

Safety— for all street users— is a top priority of this plan for all streets, but especially along the High Injury Network identified in the City's 2019 Vision Zero Action Plan. Consistent with that effort Let's Ride JC sets forth the goal of eliminating cycling fatalities and serious injuries by 2026 and provides further policy, planning, and design details to help the city achieve this goal.

"Many of us ride frequently to neighboring cities, but very few if any bike connections exist in and out of Bayonne, Union City, or Hoboken."

The cycling network plan **proposes the enhancement of physical connections to adjacent cities**, as well as establishing larger connections via a metropolitan region-serving shared use path system and better cycling accommodations at transit stations. To that end, protected bike lanes and shared use paths linkages are recommended for Secaucus (x1); Bayonne (x3); Hoboken (x5); and Union City (x5). For more details, turn to Chapter 4 to review the Let's Ride JC Network Plan.

# WHAT WE HEARD



# WHAT WE DID



"Building out this network will cause a lot of on-street parking to be impacted. **Is this plan feasible?**"

Whether it's parking, travel lane widths, or number of travel lanes, the implementation of the Let's Ride JC network plan will require tradeoffs between competing users of the city's streets. That said, Jersey City is currently **developing a parking management plan** that will set new policy and management strategies to optimize parking supply for the current and coming residents. Moreover, there are many design configurations for the city streets that allow for the introduction of robust bikeway infrastructure while maintaining on-street parking access. Every consideration will be made for people requiring disability parking/access, commercial loading needs, and other curbside uses while also providing a greater number of transportation options that reduce the long-term need to build and maintain parking.

"I'd bike more frequently if I was guaranteed a safe place to park. As things are now, I'm worried about my bike being stolen."

Increasing the supply of reliable and safe bicycle parking for shortand long-term parking needs is critically important to the success of Jersey City's cycling network. This includes both along commercial and residential streets, but also at transit stations and within private buildings. More **bicycle parking details are available in Chapter 4** of this plan and within Chapter 6 of the Let's Ride JC Bikeway Design Guide.

"We need better bike lanes but I'm concerned about investments in streets pricing people out of our neighborhood. How will this plan benefit everyone?

Building a robust cycling network will support lower transportation costs and result in safer access to jobs, recreation, transit, and other community destinations. Such investments have shown to make neighborhoods more desirable and increase property value, which can lead to displacement for the most vulnerable among us, the very people who stand to benefit most from the initial investment. Chapter 4 of this plan outlines a comprehensive 14-point action plan for prioritizing Jersey City's most vulnerable populations, what we call priority Communities of Concern.

# WHAT WE HEARD



# WHAT WE DID



"I don't bicycle but I do support the streets being made safer for everyone. However, people driving are not the only ones who need education about safety and courtesy. I'm most often a pedestrian who feels threatened by people biking on sidewalks or riding the wrong way in streets and bike lanes."

First and foremost, this plan **recommends robust infrastructure upgrades that will result in "good" behavior.** For example, safer and more direct bikeways have been shown to greatly reduce sidewalk and wrong-way riding. Additionally, the Education Priority Action Plan contains 6 ways to educate all street users, including cyclists, on how to navigate new types of street designs intended to enhance safety for everyone.

"Maintenance is a large concern of mine. Poor pavement and deteriorating lane markings reduces the usability and safety of the street. Chapter 5 of this plan **outlines best practices for maintenance of cycling infrastructure**. Recommendations include the prioritization of additional funding and new strategies for reducing maintenance costs of streets over the mid- to long-term.

"Creating a plan is one thing, but implementing it is quite another.

How will this effort create change in the near-term?"

Chapter 5 of this plan and Chapter 9 of the Let's Ride Bikeway Design Guide **provides recommended practices for utilizing a quick-build approach implementation**. This includes demonstration, pilot, and interim design projects to enable fast-action on the streets of Jersey City. Additionally, the 2-year Priority Grid Plan outlined in Chapter 5 offers one way to approach implementation with little more than paint, posts, signs, and planters. Finally, the Implementation Plan recommends a pilot and interim design design project for important but complex links in the network, with a path for implementation in the next 5-10 years.

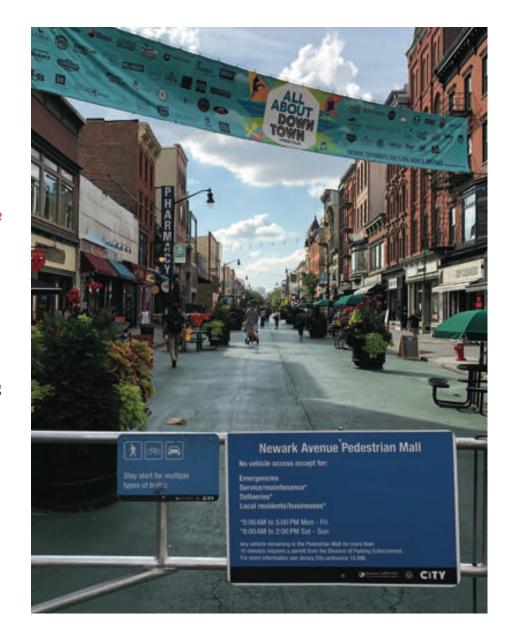


### **DESIGNING SAFE STREETS**

The Let's Ride JC study area includes all 14.8 square miles of land within the city's borders. In order to make bicycle travel a viable citywide and regional option, this study looks closely at Jersey City's borders to make connections with existing and potential infrastructure in neighboring municipalities. That said, the primary focus of this master plan is to increase cycling on Jersey City streets. Because the City's existing bikeways are so disjointed, this plan focuses on identifying critical bicycle facilities and overall improvements that connect and improve existing links in the network

The network plan ensures that key destinations — commercial districts, employment centers, civic and educational institutions, and parks— will be well-served by the proposed network.

And given that nearly half of all residents commute via public transport, increasing multi-modal connectivity is also a critical goal of this plan. Existing and planned transportation facilities, such as bus routes, transit stations, and park and ride locations, are particularly important destinations for cyclists, especially in areas of the city that lack high-frequency transit services (defined as headways of 15 minutes or less).



## **NETWORK APPROACH**

Before assigning bikeway types, the unique characteristics of each street and its physical context are considered holistically.

Analysis includes street widths, street types, existing land uses, urban form, residential and commercial density, traffic control devices, posted speed limits, actual travel speeds, and existing/projected traffic volumes.

When conducting this analysis, special attention is paid to how each of these elements affects the perceived and actual comfort for all types of bicyclists. North America's leading cities are now designing bikeways to accommodate the least confident user. This approach provides an opportunity to increase bicycle mode share by further enriching the safety of the overall bikeway network. Peter Jacobsen's frequently cited "Safety in Numbers" research shows that safer bicycling conditions attract more bicyclists to the roadway, which in turn, creates even safer conditions, and ever more people bicycling. This so-called 'virtuous cycle' is set in motion when accommodating the most vulnerable users becomes a standard approach enhancing the viability of bikeway networks.

To that end, research conducted by Roger Geller, Bicycle Coordinator for the City of Portland, Oregon, identifies four general types of bicyclists, of which the majority seek more comfort and safety. "Riding a bicycle should not require bravery. Yet, all too often, that is the perception among cyclists and non-cyclists alike," says Geller. Bikeway infrastructure that appeals to those who are interested in bicycling, but who are too often deterred by the perception—and reality—of unsafe bicycling conditions, is emphasized in this plan.

Jersey City currently maintains a 45-mile bikeway network. The majority of this network, (36 miles) is comprised of on-street bikeways covering 16% of the city's 218-mile street network. The Let's Ride JC network plan almost than triple the size of the bikeway network to 121 total network miles. The Bikeway



Network Plan is also comprised of 10 total bikeway types, and 8 types of intersection safety improvements. When fully implemented, 55% of the city's streets will include a bikeway of some type. Within this proposed network, 70% would consist of "low-stress bikeway types — protected bikeways, shared use paths, and neighborhood greenways.

#### HOW DO WE GET THERE?

More specifically, the implementation of the Bikeway Network Plan includes a number of strategic moves that respond to Jersey City's unique street network, land use, urban design, and topographical conditions. Additionally, the recommendations contained herein are informed by the consultant team's data collection, existing conditions analysis, key stakeholder and public input process, and a best practices approach to bikeway design. The result is a 11-point approach to network implementation, which is further illustrated at 25 locations found across the City (see each Ward Bikeway Plan for more details). When implemented, recommendations will advance transportation planning, environmental, and street safety goals, policies, and objectives put forth by previous documents like the Vision Zero Action Plan and the JC Walks Pedestrian Enhancement Plan.

- Add bikeways, protected wherever possible, to every street in the City's High-Injury Network, starting with corridors within priority Communities of Concern locations.
- Prioritize bicyclist safety and bus operations with specific bus-bike conflict treatments along all corridors with bus stops.
- Introduce traffic-calming, wayfinding bikeway markings, and other public space/green infrastructure enhancements within a network of "neighborhood greenways" along residential streets.
- Enhance intersection design with design treatments that prioritize bicycle and pedestrian movements, minimize conflicts, and reduce cyclist exposure to motor vehicle traffic.
- Where space does not permit bikeways on both sides of bi-directional corridors, re-assign parking or install uni-directional bikeways with its "pair" on the closest, most practical adjacent corridor.

- Continue bikeway connectivity by installing protected curbside or leftturn bays through offset and T-intersections.
- Focus bicycle parking investments on upgrading the quality of existing racks and adding to supply at PATH and Light Rail transit stops, and enhancing quality and supply along commercial corridors.
- Install bikeways to existing and future shared use path segments, like the Morris Canal Greenway, Hackensack Riverwalk, and the Hudson Riverfront Walkway.
- 2 Ensure schools have safe, low-stress bicycle connections and high-quality bicycle parking.
- Improve regional connectivity by installing bikeways to the border of all adjacent cities.
- Upgrade existing, sub-standard conventional bike lanes to neighborhood greenways, or in the least, to be a minimum of 5' in width, with consistent markings, signing, and intersection / conflict zone treatments.

#### LET'S RIDE JC BIKEWAY DESIGN GUIDE

The Let's Ride JC bicycle network plan is supported by the Let's Ride JC Bikeway Design Guide. This nine chapter document includes all of the design and dimensional details for assembling better streets for cycling. This includes detailing the 11-point approach to network implementation listed above. The document contains information for designing bikeways, including a robust neighborhood greenway toolkit, intersection treatments, signs and information, bicycle parking, the inclusion of shared active mobility, green infrastructure, and guidance for adopting an iterative quick build approach to project implementation.

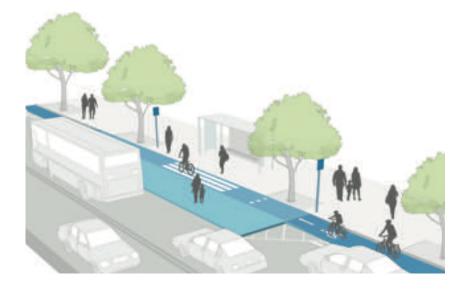
The Let's Ride JC Bikeway Design Guide was created to provide an illustrative, technical resource for City agencies, transportation consultants, citizens, and community groups in the development and implementation of the bicycle network outlined in this chapter. Compiled within are typical bikeway and street design treatments one might find in standard traffic engineering manuals as well as best practice design elements that have proven to increase safety and access for all street users. The manual also highlights typologies and suggested treatments which are specific to common conditions in Jersey City such as narrow, one-way neighborhood streets, offset intersections, bus stops along constrained streets, and rail crossings.

The guidance in this manual is culled from local, national, and international sources which specifically include the NJDOT Complete Street Design Guide, NACTO Urban Bikeway Design Guide, FHWA's Separated Bike Lane Planning and Design Guide, and FHWA's Manual on Uniform Traffic Control Devices. Further inspiration is pulled from projects implemented in other cities as well as examples of innovation from around the globe. A comprehensive list of references and resources is included in the manual's appendix should readers want to learn more.



# **LET'S RIDE JC**Bikeway Design Guide

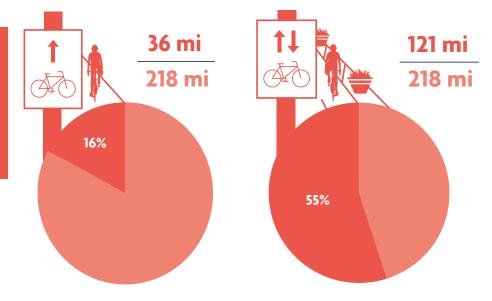
June 2019



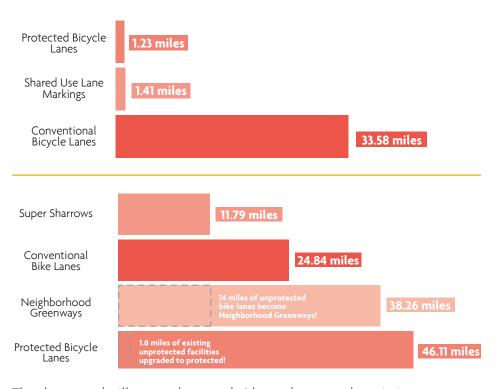


### CITYWIDE NETWORK

This Master Plan takes Jersey City's existing on-street bikeway network from comprising just 16% of the total street network to 55%. This means that just over half of Jersey City's streets will have a bikeway facility of some kind if the plan is fully implemented!

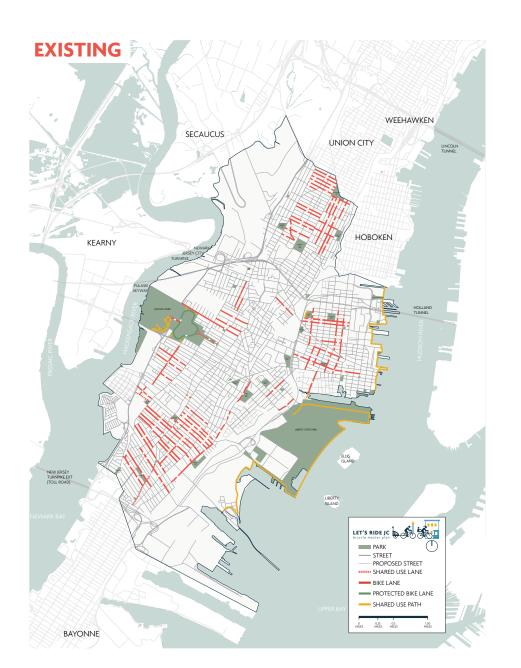


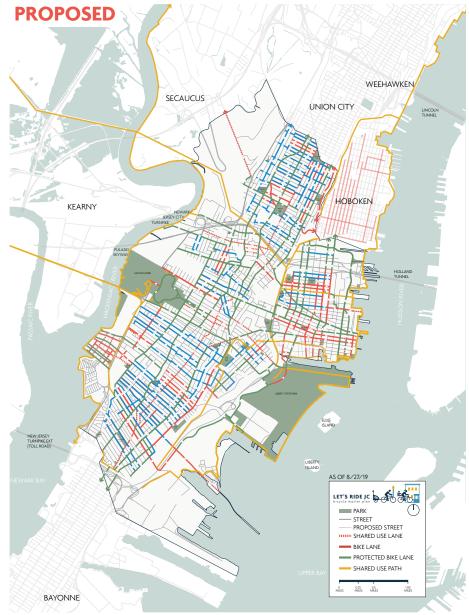
There are currently three types of on-street bikeway facilities found in Jersey City: conventional bike lanes, protected bike lanes, and shared use lane markings. It's important to note that most of the existing conventional bike lanes are sub-standard, often not reaching the minimum 5' width. Furthermore, the only protected facility in the city is the loop within Lincoln Park (Lakeview Drive/Lincoln Park/Lookout Drive). Not only does Let's Ride JC propose a tripling of the on-street bikeway network, but it also proposes more than 40 times the number of protected bike lanes!



The above graphs illustrate the growth/change between the existing on-street network and the proposed. All facilities grow in number, with the addition of the Neighborhood Greenway facility. Additionally, the Master Plan proposes that all future shared use lane markings become "super sharrows" to more boldly designate space for cyclists in travel lanes.

A part of the growth in the proposed on-street network involves the "upgrading" of existing unprotected (conventional) bike lanes. In the Master Plan proposed network, 14 miles of existing unprotected bike lanes will become part of Neighborhood Greenways, where the facility is the entire street itself! Also, three miles of existing unprotected bike lanes will be converted to protected bike lanes.





# GO BY BIKE, GO BY TRAIN!

New Jersey Transit, PATH, and Hudson-Bergen Light Rail provide transit service throughout Jersey City. The presence of this infrastructure greatly enhances access across the city and region. Given the high value of this infrastructure, Jersey City should work closely with its partners to continue to expand transit options, intensify land use patterns near transit, and design streets that prioritize walking and bicycling. This is how the city's growth will be sustainable, decreasing traffic and its myriad negative externalities.

The type and quality of transit service aside, planners generally accept that the average person will walk up to half a mile to transit if the environment is safe, convenient, and interesting. This radial distance is most often referred to as the "pedestrian shed." After this approximate radial limit is reached, however, it is assumed that transit's ability to attract ridership decreases as distance from the station increases.

Yet, if one considers that the average bicyclist can travel three times faster than the average pedestrian, the formulation of nuanced "bicycle sheds" can greatly expand transit station catchment areas, while also improving the extent and utility of the regional bikeway network. Indeed, just as a 5-or 10-minute walk should be convenient and enjoyable for the pedestrian, so too should it be for the average cyclist, who can cover three times the ground with an equal outlay of time.

While the bicycle shed is an important conceptual planning tool, it is meaningless without the physical development of bicycle infrastructure that further supports bicycling. Each "bicycle shed" should not be conceived in isolation, but as part of a regional bikeway and transit network. Such a network should be designed to connect people to important destinations—

schools, neighborhood and regional employment centers, open space, and of course, local and regional transit systems.

The maps on the following two pages demonstrate the reach of the existing and proposed public transportation options for Jersey City residents. The one mile transit shed map illustrates that PATH trains and the Hudson-Bergen Light Rail systems provide the backbone of Jersey City's non-motorized transport network. Most areas around these transit lines are walkable - and certainly within easy cycling distance - of existing and planned transit stops. Moreover, the proposed bikeway network would create many routes to and from transit.

Expanding the transit shed to just one mile - which is an easy cycling distance distance for most people- puts the majority of Jersey City's street grid within the catchment area of transit. The one-mile bicycle transit shed map demonstrates just how many Jersey City residents could potentially be encouraged to bike to and from transit if street designs encouraged it.

#### PEDESTRIAN SHED (1/4 MILE)

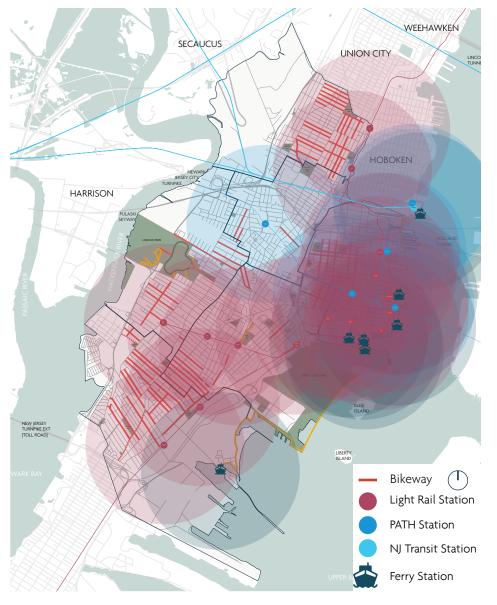
# WEEHAWKEN SECAUCUS UNION CITY HOBOKEN HARRISON Light Rail Station

PATH Station

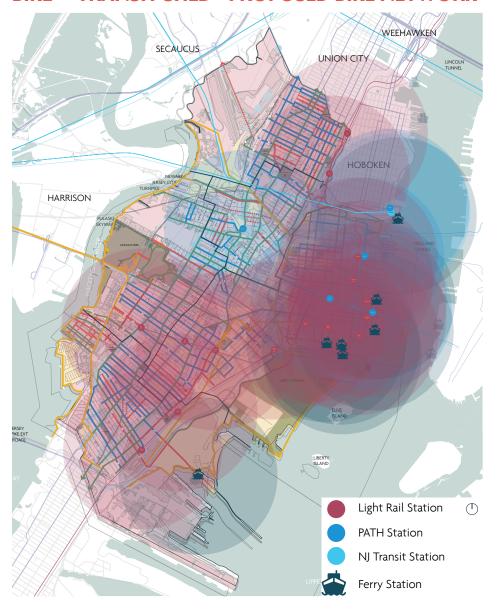
NJ Transit Station

Ferry Station

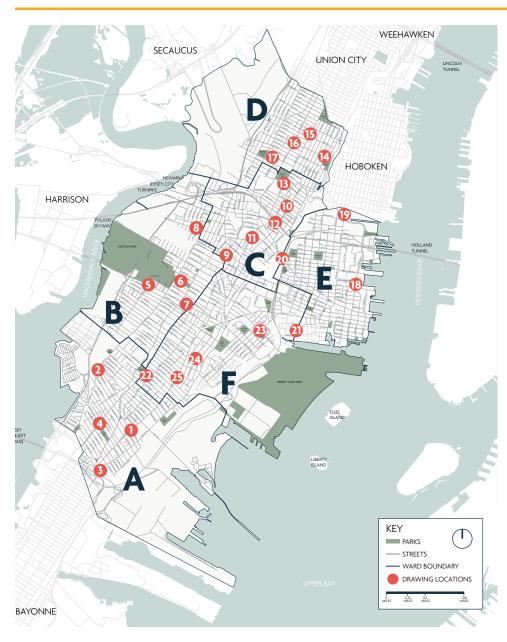
#### **BIKE <> TRANSIT SHED - EXISTING BIKEWAY NETWORK**



#### **BIKE 43 TRANSIT SHED - PROPOSED BIKE NETWORK**



# LOCATION DRAWINGS



| WARD A                          | 61          |
|---------------------------------|-------------|
| 1. Ocean Avenue                 |             |
| 2. West Side Avenue             |             |
| 3. Garfield Avenue              |             |
| 4. Bartholdi Avenue             |             |
| WARD B                          | 7           |
| 5. Mallory Avenue               | •           |
| 6. Belmont Avenue               |             |
| 7. Communipaw Avenue            |             |
| 8. Sip Avenue                   |             |
| WARD C                          | 83          |
| 9. Bergen Avenue                |             |
| 10. Laidlaw/Collard/Beacon Ave. |             |
| 11. Newark Avenue               |             |
| 12. Summit Avenue               |             |
| 13. Reservoir Avenue            |             |
| WARD D                          | <b></b> 93  |
| 14. Palisade Avenue             |             |
| 15. Bleeker Street              |             |
| 16. Summit Avenue               |             |
| 17. Sherman Place               |             |
| WARD E —                        | 103         |
| 18. Washington Avenue           |             |
| 19. Marin Blvd.                 |             |
| 20. Nerwark Avenue              |             |
| 21. Jersey Avenue               |             |
| WARD F ————                     | <del></del> |
| 22. Stegman Street              |             |
| 23. Johnston Avenue             |             |
| 24. Carteret Avenue             |             |

25. Ocean Avenue



### WARD A PLAN

#### WARD PROFILE

Ward A, known generally as the Greenville neighborhood, shares a city border with Bayonne and is hemmed in by the New York Harbor and Hackensack River on its eastern and western edges. Large tracts of industrial and recreational land uses form its eastern edge while large big box commercial and large parcels of newly/soon to be transformed industrial land are to the west. These edges provide employment and shopping destinations but are currently difficult to reach safely on a bicycle. The elevated New Jersey Turnkpike and NJ-440 create connectivity and safety barriers. Creating safer connections to and along the city's waterfront is a major opportunity to improve quality of life and support recreational and utility/commuting cycling for Ward A residents.

Beyond the highways, Ward A is characterized by lower volume east-west residential streets, and higher volume north-south mixed-use corridors. The east-west streets often feature offset intersections and a tangle of one-way directional travel patterns, which makes circulation challenging. The Ward's north-south thoroughfares include neighborhood serving commercial, civic, and entertainment destinations, and provide access to NJ Transit's extensive bus network. Thus, linking people to and along these corridors with safe bikeways is a high priority, especially for a diverse population of people who rely on walking, cycling, and the public transportation network to get around the city and region.

Finally, Ward A neighborhoods are punctuated by a number of quality, medium-sized parks (McGovern Park, Columbia Park, Bayside Park, Audobon Park, Fricchione Park). This civic infrastructure provides important social, environmental, and recreational benefits, particularly in the warmer months of the year.

Turn the page for more details about Ward A's existing cycling network and the Let's Ride JC plan to make it better.



#### **EXISTING NETWORK PROFILE**

Among the city's six Wards, Ward A has the second-most number of bikeway miles. However, the network is primarily comprised of conventional bike lanes of sub-standard width (3' or 4') with a 10:1 ratio between east-west and north-south segments, which reveals a clear disparity in the cycling network. Of the 17 existing bikeway segments, only three of them intersect, meaning network connectivity is weak. East-west bicycle travel is also complicated by the width and / or traffic volumes utilizing Ward A's north-south corridors, which makes crossing these important corridors intimidating, if not dangerous for the majority of people.

Between 2008-2017, 62 bicycle crashes occurred in Ward A resulting in 28 serious injuries and 9 fatalities. Most crashes occurred along the following Vision Zero High Injury Network (HIN) segments:

NJ 440
JFK Boulevard
Old Bergen Road
Ocean Avenue
Garfield Avenue
Cator Avenue
Lembeck Avenue
Dwight Street (short segment)
Fulton Street (short segment)

Of these 9 segments, only Cator Avenue and Fulton Avenue have dedicated bike lanes.

Major and/or important Ward A destinations to be reached on a bicycle include important commercial districts (Ocean Avenue, MLK Drive, JFK Boulevard, etc.) eight schools, twelve places of worship, Greenville Library, Richard Street and Danforth Avenue light rail stations, Audubon Park, Bayside Park, McGovern Park, and employment / retail centers on Ward A's eastern and western edge.

#### **Ward A Bike Network Miles**



#### Ward A Crash History (2008-2017)

Crashes: 62

**Moderate Injuries: 25** 

**Serious Injuries: 28** 

Fatalities: 9

#### **Ward A CitiBike Access**

Docks: 0

Stations: 0

**Area:** 6.95 sq. mi.

**Station Density:** 0/sq. mi.

#### **EXISTING NETWORK PROFILE**

Existing Bikeway Segments: 23

Total Bikeway Miles: 9.92

Existing Bikeway Types: 3

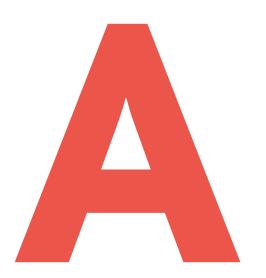
 Conventional Bike Lanes (Sub-standard): 7.89 mi

• Shared Use Lane Markings: .91 mi

• Shared Use Paths: 1.13 mi

Bikeway Connectivity: 10

intersections





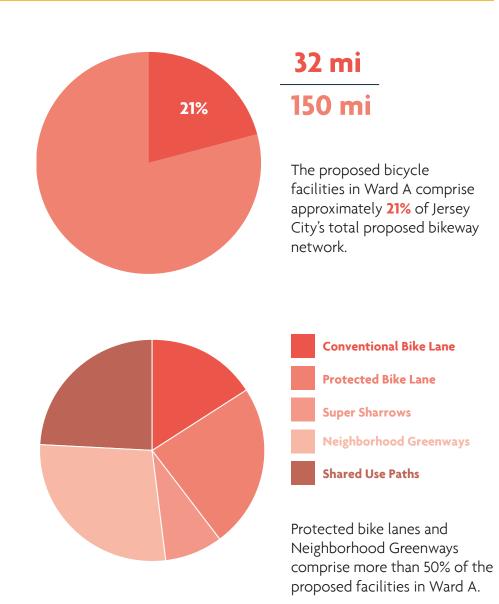
#### **PLAN SUMMARY**

The proposed Ward Plan seeks to balance the network with improved access and safety along the Ward's north-south corridors while also improving east-west connectivity. The proposed north-south segments are primarily comprised of protected bike lanes and the Morris Canal Greenway. Neighborhood greenways proposed for east-west connections offer entirely new connections or upgrade existing bike lanes. Due to a variety of offset intersections, the neighborhood greenway system will also rely upon short north-south segments along major corridors so that safe crossings are feasible. Additional enhancement will come in the form of traffic-calming features that support other citywide goals, such as improving stormwater management, increasing tree canopy, and improving safety for all modes of travel. Due to spatial constraints and many one-way streets, many network segments will be paired with a facility on a parallel street.

Implementing the proposed Ward A network will require focused and sustained City investment, tradeoffs between competing priorities, and the calibration of facility design to best meet the needs of people living, working, and traveling through Ward A. Above all, safety should be prioritized for all, even if that comes at the expense of vehicular speed or throughput.

The following four location profiles illustrate existing and proposed conditions along four key links in the Ward A network.

- Ocean Avenue
- West Side Avenue
- Garfield Avenue
- Bartholdi Avenue



#### **PLAN SUMMARY**

Proposed Bikeway Segments: **56** 

Total Bikeway Miles: 32.23

Proposed Bikeway Types: 5

• Conventional Bike Lanes: **5.13 mi** 

• Protected Bike Lanes: 7.64 mi

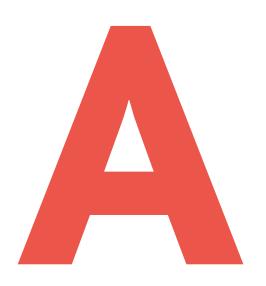
• Super Sharrows: 2.97 mi

• Neighborhood Greenways: 8.96 mi

• Shared Use Paths: 7.54 mi

Bikeway Connectivity: 107

intersections





# OCEAN AVE. @ CATOR AVE.

#### **Existing**

AADT: N/A

**2008 - 2017 Bike/Ped Crashes:** 7 (no

fatalities)

VZ HIN: Yes (Ocean Ave. + Cator Ave.)

Community of Concern Location: Yes

Existing Bikeway: None

Transit: NJ Transit Bus Lines 6, 81

Community Assets Served: Ocean Avenue commercial district, Bayview Cemetery, Dr. Maya Angelou Elementary School 20, Ezra Nolan Middle School 40



#### **Proposed**

**Proposed Bikeway:** Parking Protected Bike Lane (northbound)

Bikeway Limits: Merritt St. to

Woodlawn Ave.

Total Segment Length: 1.15 mi.



## WEST SIDE AVE. @ MCADOO AVE.

#### **Existing**

AADT: N/A

2008 - 2017 Bike/Ped Crashes: 4 (0 fatalities)

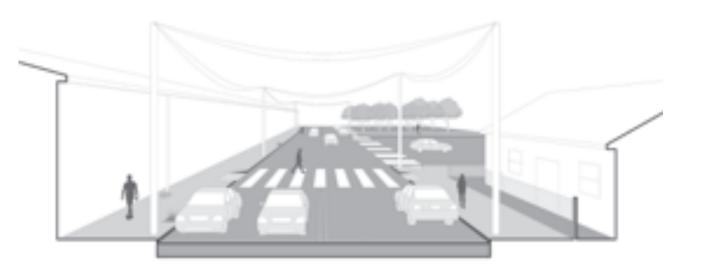
**VZ HIN:** No

Community of Concern Location: Yes

Existing Bikeway: None

Transit: NJ Transit Bus Line 80

Community Assets Served: Courtney Fricchione Park, NJCU, West Side Theatre, Academy Charter School, John J. Moore Athletics and Fitness Center

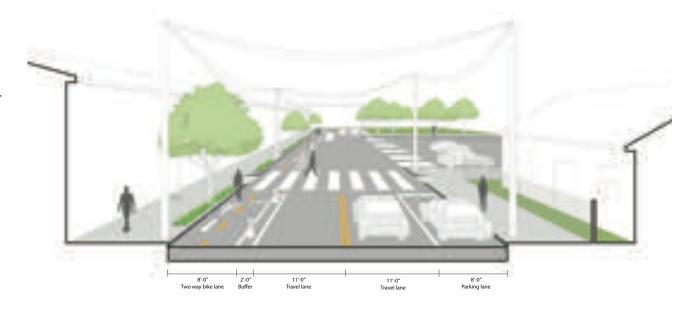


#### **Proposed**

**Bikeway Facility:** Two-way barrier protected bike lane (west side of corridor)

Bikeway Limits: Danforth Ave. to Culver Ave.

Total Segment Length: .75 mi.



### GARFIELD AVE. @ MERRITT ST.

#### **Existing:**

AADT: N/A

2008 - 2017 Bike/Ped Crashes: 8 (1 fatality)

VZ HIN: Yes

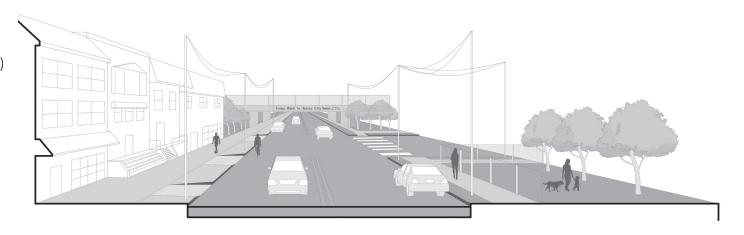
Community of Concern Location: Yes

**Existing Bikeway:** Conventional Bike Lane, Stegman St. to Cator Ave. (southbound)

Transit: Richard Street, Danforth Street

Light Rail Stations

Community Assets Served: Bayside Park, Richard Street, Danforth Street Light Rail Stations, Bay View Cemetery, Ezra Nolan Middle School 40



#### **Proposed**

Proposed Bikeway: Protected Bike Lane (southbound), Cator Ave. to Bayonne City Limit; Protected Bike Lane (northbound), Bayonne City Limit to Gates Ave.

**Bikeway Limits:** Stegman Street to Merritt Street

Total Segment Length: 1.45 mi.



### BARTHOLDI AVE. @ JFK BLVD.

#### **Existing**

AADT: N/A

2008 - 2017 Bike/Ped Crashes: 9 (3 fatalities)

**VZ HIN**: Yes (JFK Boulevard)

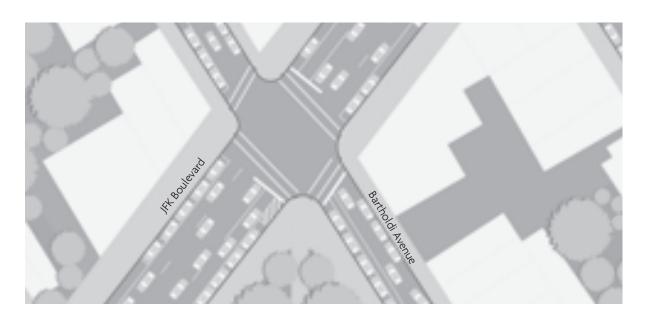
Community of Concern Location: Yes

**Existing Bikeway:** Conventional Bike Lane (westbound), Ocean Avenue to JFK Boulevard

Transit: NJ Transit Bus Line 10, 119

Destinations Served: Columbia Park, United

States Post Office



#### **Proposed**

**Proposed Bikeway:** Neighborhood Greenway (westbound)

**Bikeway Limits:** From Princeton Avenue along Winfield Avenue to Ocean Avenue, Ocean Avenue to Sycamore Road/Suburbia Drive along Bartholdi

Total Segment Length: .91 mi.





### WARD B PLAN

#### **WARD PROFILE**

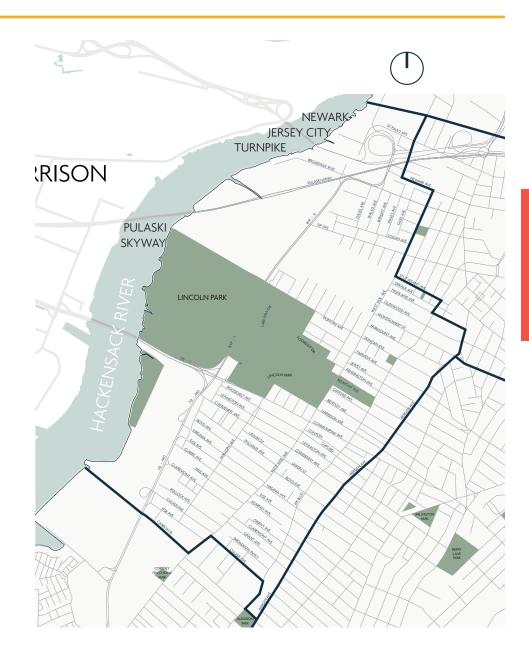
Ward B is comprised of the West Side, Lincoln Park, and Marion neighborhoods, which are defined by two key geographic features: the Hackensack River and Lincoln Park/Skyway Golf Course. Ward B is mostly built as dense, multi-family homes, mixed-use commercial buildings, and larger industrial buildings. However, several streets also include large single-family homes.

The Ward B street network is well-connected in places but is also disrupted vy Lincoln Park, Holy Name Cemetery, a tangle of surface and elevated highways, and multiple rail lines. From a circulation perspective, these physical realities put additional traffic pressure on the few north-south streets that travel through the Ward. These include: West Side Avenue, JFK Boulevard, and Bergen Avenue. Creating safer bikeway connections along these corridors will better utilize available street space for more space efficient modes, like walking, cycling, and transit.

The Ward's north-south thoroughfares include neighborhood and city-serving commercial, civic, and entertainment destinations, and provide access to NJ Transit's extensive bus network. Thus, linking people to and along these corridors with safe bikeways is a quality-of-life and equity priority, especially for people who rely on walking, cycling, and the public transportation network to get around the city and region.

Finally, besides Lincoln Park, Ward B has very little usable open space. Thus, transforming the city's residential streets into more usable public spaces (neighborhood greenways) and better linking people to / from Lincoln Park will greatly increase people's access to physical and psychological benefits associated with urban park use.

Turn the page for more details about Ward B's existing cycling network and the Let's Ride JC plan to make it better.



#### **EXISTING NETWORK PROFILE**

Despite having the city's only protected bike lane (Lincoln Park's Lookout/Lakeview Drive) cycling in Ward B is very challenging. Existing bikeway segments are short in length and do not connect to other links in the cycling network, thereby offering little utility to cyclists. Indeed, of the 16 existing bikeway segments, only three intersect. Moreover, the 7:2 ratio between east-west and north-south segments reveals a larger need to provide more balanced connectivity. East-west and north-south bicycle travel is further complicated by few appealing options, as only a couple of corridors (Sip Avenue, Communipaw Avenue) traverse the Ward and offer connectivity to other areas of the city. Moreover, the width and / or traffic volumes utilizing Ward B's main north-south corridors (West Side, JFK, Bergen), and east-west (Communipaw Avenue, Sip Avenue) corridors make cycling difficult for people who do not negotiate vehicular traffic with confidence.

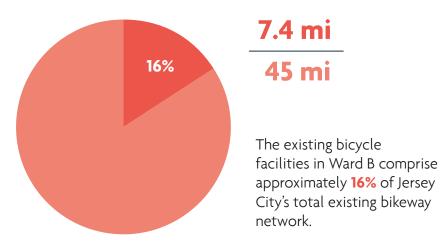
Between 2008-2017, 65 bicycle crashes occurred in Ward B resulting in 23 serious injuries and 16 fatalities. The majority of crashes occurred along the following Vision Zero High Injury Network (HIN) segments:

- Route 1/9
- NJ-440
- JFK Boulevard)
- Bergen Avenue
- West Side Avenue
- Sip Avenue

- Clendenny Avenue
- Duncan Avenue
- Communipaw Avenue
- Broadway
- Montgomery Street

Of these 10 segments, only Duncan Avenue features dedicated bike lanes. Thus, an emphasis on more connectivity and street safety are a critical part of improving access within Ward B. Important Ward B destinations to be reached by bicycle include commercial districts (West Side Avenue, JFK Boulevard, Communipaw Avenue, Bergen Avenue) ten schools, two libraries, eleven places of worship, the West Side Avenue light rail station, and Lincoln Park.

#### **Ward B Bike Network Miles**



#### Ward B Crash History (2008-2017)

Crashes: 65

**Moderate Injuries: 26** 

**Serious Injuries: 23** 

**Fatalities: 16** 

#### **Ward B CitiBike Access**

Docks: 71

Stations: 4

**Area:** 2.48 sq. mi.

**Station Density:** 1.16/sq. mi.

#### **EXISTING NETWORK PROFILE**

Existing Bikeway Segments: 15

Total Bikeway Miles: 7.45

Existing Bikeway Types: 4

 Conventional Bike Lanes (Sub-standard): 4.77 mi

• Protected Bike Lanes: 1.23 mi

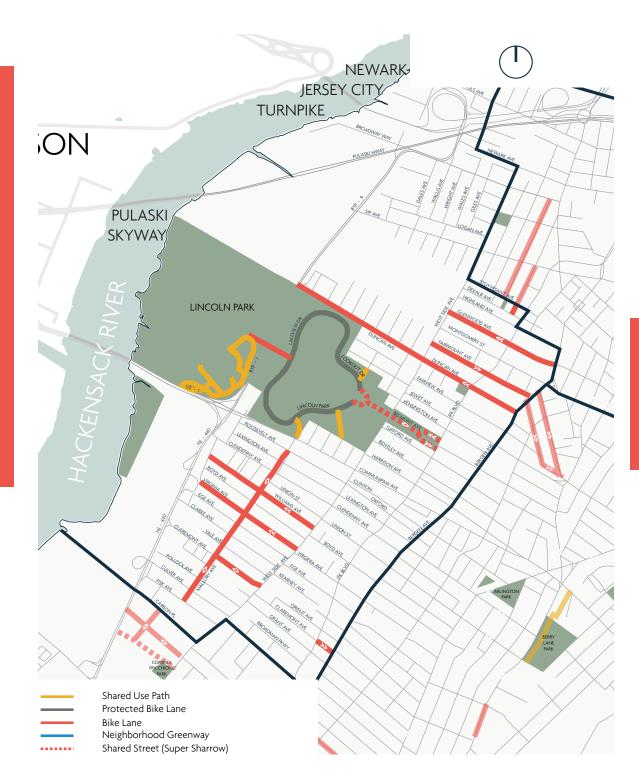
• Shared Use Lane Markings: .5 mi

• Shared Use Paths: .95 mi

Bikeway Connectivity: 11

intersections





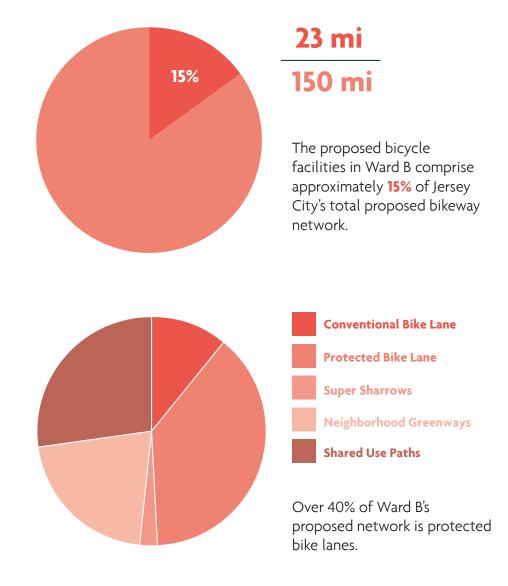
#### **PLAN SUMMARY**

The Ward B network plan aims to improve access and safety along critical north-south corridors (West Side Avenue, JFK Boulevard, Bergen Avenue), but also east-west corridors like Sip Avenue, Montgomery Street, and Communipaw Avenue so that Ward B's neighborhoods are more cohesively linked together. A small number of east-west neighborhood greenway links will also introduce a variety of bikeway enhancement through traffic-calming and green infrastructure. Such interventions will be particularly important where neighborhood greenway routes jog to the north or south across major corridors like JFK Boulevard or West Side Avenue.

Implementing the proposed Ward B network will require targeted but sustained investment, especially along corridors in the high-injury network. Tradeoffs between competing priorities, and the calibration of facility design to match the unique street conditions and needs of people living, working, or traveling through Ward B. Above all, safety should be prioritized for all, even if that comes at the expense of vehicular speed or throughput.

The following four location profiles illustrate existing and proposed conditions along four key links in the Ward B network:

- Mallory Avenue
- Belmont Avenue
- Communipaw Avenue
- Sip Avenue



Proposed Bikeway Segments: 48

Total Bikeway Miles: 21.9

Proposed Bikeway Types: 5

• Conventional Bike Lanes: 2.41 mi

• Protected Bike Lanes: 8.78 mi

• Super Sharrows: .5 mi

• Neighborhood Greenways: 4.8 mi

• Shared Use Paths: 5.5 mi

Bikeway Connectivity: 57

intersections





# MALLORY AVE. @ COMMUNIPAW AVE.

### **Existing**

**AADT:** 10,741 (2017)

2008 - 2017 Bike/Ped Crashes: 3 (0

fatalities)

**VZ HIN**: Yes (@ Communipaw)

Community of Concern Location: Yes

Existing Bikeway: Conventional Bike Lanes

Transit: NJ Transit Bus Line 1 (along

Communipaw)

**Community Assets Served:** Lincoln Park, Communipaw Avenue commercial

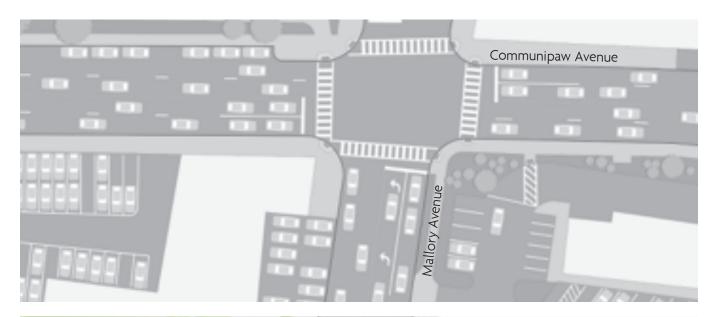
businesses

### **Proposed**

**Proposed Bikeway:** Conventional Bike Lanes Intersection Safety Upgrades (See Right).

**Bikeway Limits:** Between Communipaw Avenue and Roosevelt Avenue and; Fisk Avenue and Culver Avenue; Claremont Avenue and Yale Avenue (Northbound)

Total Segment Length: .2 mi.





# BELMONT AVENUE @ WEST SIDE AVE.

### **Existing**

AADT: N/A

2008 - 2017 Bike/Ped Crashes: 0

**VZ HIN:** No

Community of Concern Location

Yes

Existing Bikeway: Shared Use Lan

Markings

Transit: NJ Transit Bus Lines 1+ 80 (West Side Avenue), 10 + 119 (JFK

Boulevard)

Community Assets Served:

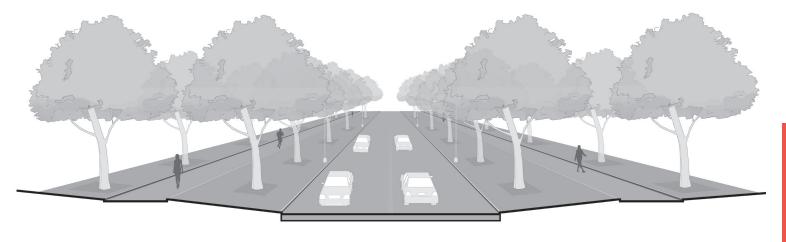
Lincoln Park, Joseph H. Brensinger School (PS 17)

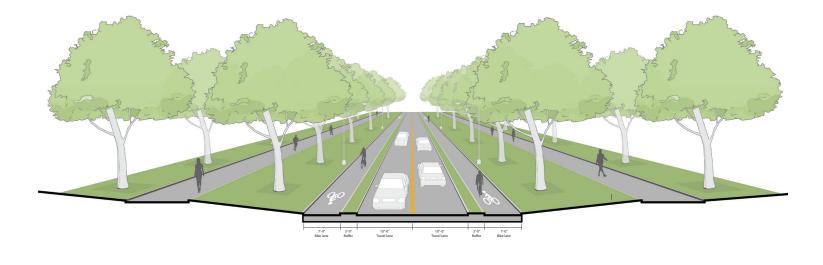
#### **Proposed**

**Proposed Bikeway:** Protected Bike Lanes / Super Sharrows

**Bikeway Limits:** Lincoln Park Fountain to Summit Avenue

Total Segment Length: .47 mi.





# **COMMUNIPAW AVENUE**

### **Existing**

AADT: N/A

2008 - 2017 Bike/Ped Crashes: 8 (3 fatalities)

**VZ HIN**: Yes

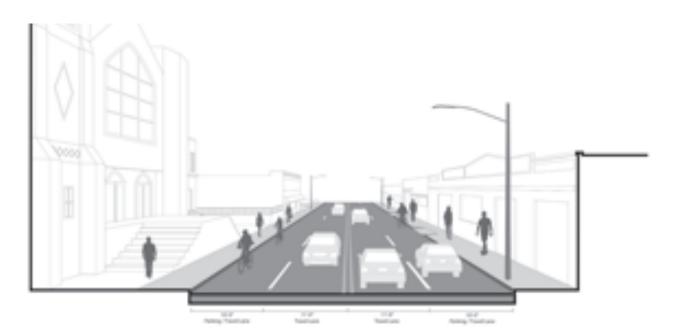
Community of Concern Location: Yes

Existing Bikeways: None

Transit: NJ Transit Bus Lines 1

**Community Assets Served:** Lincoln Park, Communipaw Avenue Commercial

Businesses



### **Proposed**

**Proposed Bikeway:** Barrier-Protected Bike Lane (Eastbound); Parking-Protected Bikeway (Westbound)

Bikeway Limits: BYP 1 + 9 to Garfield Avenue

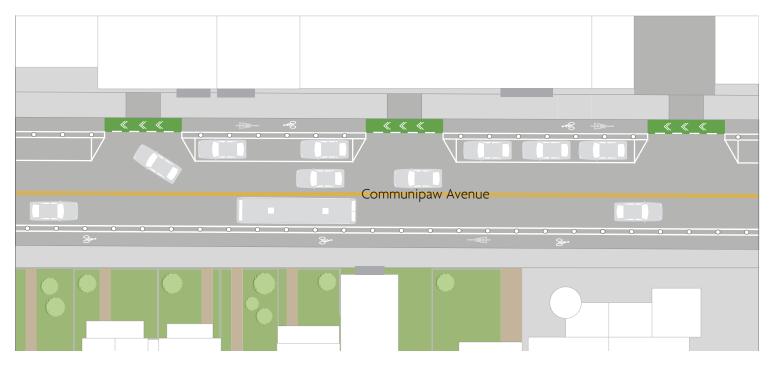
Total Segment Length: .47 mi.



# **EXISTING**



# **PROPOSED**



# SIP AVENUE

### **Existing**

AADT: 10,338, between Emerson / Field Avenue (2015); 11,699, between Jones Street/ Summit Avenue (2010)

2008 - 2017 Bike/Ped Crashes: 3 (2 fatalities)

**VZ HIN**: Yes

Community of Concern Location: Yes

Existing Bikeways: None

**Transit**: NJ Transit Bus Line 1, 80 (nearest stop between Corbin/West Side Avenue)

Community Assets Served: Liberty High School, Journal Square commercial businesses, Journal Square PATH station



### **Proposed**

**Proposed Bikeway:** Barrier-Protected Bike Lane **Bikeway Limits:** Between NJ 1/9 and Summit Avenue

Total Segment Length: 1.07 mi.







# WARD C PLAN

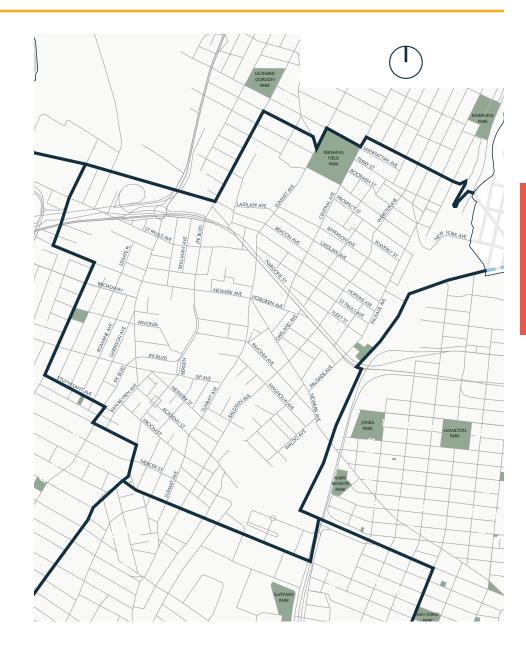
#### WARD PROFILE

Ward C is comprised primarily of the Mcginley Square, Journal Square, Bergen Square, India Square, and the lower part of the Heights neighborhood. Ward C is mostly built as dense, multi-family homes, mixed-use commercial buildings, and larger industrial buildings. However, several streets also include large single-family homes.

The Ward C street network is irregular and confusing to navigate. A mess of one-way streets, meandering streets, highway and rail infrastructure provide for a lot of disruption in the grid. Moreover, Journal Square features the confluence of numerous regional modes of transportation, which places enormous pressure on a few key corridors to provide access for people walking, cycling, taking the bus, PATH train, and driving to local and regional destinations. Such streets include: JFK Boulevard, Bergen Avenue, Sip Avenue, Summit Avenue, Newark Avenue, and Tonnelle Avenue. Building safe and appealing bike infrastructure along these corridors will better utilize limited street space by providing for more space efficient modes of transportation, like walking, cycling, and transit.

Finally, improving cycling connectivity to/from Pershing Field Park and other nearby parks in adjacent city wards is critically important for residents, as Ward C has very little usable open space.

Turn the page for more details about Ward C's existing cycling network and the Let's Ride JC plan to make it better.



#### **EXISTING NETWORK PROFILE**

With five short, disconnected segments of substandard conventional bike lanes, Ward C has the least amount of bike infrastructure in the City. Of the 5 existing bikeway segments, none of them intersect, which severely limits cycling mobility and safety a dense and fast-growing area. Additionally, existing rail/highway infrastructure make north-south and east-west bicycle travel particularly complicated, as high volumes of traffic are concentrated on only a few surface streets, which makes cycling along or across these corridors very challenging. Bicycle parking is also in short supply, particular along commercial corridors and at the Journal Square PATH station.

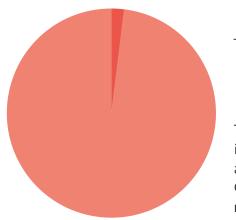
Ward C is the most dangerous area to bike in Jersey City. Between 2008-2017, 91 bicycle crashes occurred in Ward C resulting in 23 serious injuries and 17 fatalities. The majority of crashes occurred along the following Vision Zero High Injury Network (HIN) segments:

- Tonnelle Avenue
- Sip Avenue
- JFK Boulevard
- Bergen Avenue
- Newark Avenue
- Summit Avenue

- Baldwin Avenue
- Academy Street
- Montgomery Street
- NJ-139
- Central Avenue

None of these 11 segments feature dedicated bike infrastructure. Thus, an emphasis on more connectivity and street safety are a critical part of improving access within Ward C. Important Ward C destinations needed to be connected by cycling infrastructure includes mixed-use commercial/employment districts (Bergen Avenue, Newark Avenue, Sip Avenue, Summit Avenue etc.), eleven schools, twenty two places of worship, two libraries, three universities, cultural institutions like Mana Contemporary and Loew's Jersey theatre, CarePoint Health's Christ Hospital, the Journal Square PATH station, and Pershing Field Park – the largest and one of the only open spaces in Ward C. To date, reaching these important community assets by bike is unappealing if not perceived to be too dangerous by most people.

#### **Ward C Bike Network Miles**



# 1 mi 45 mi

The existing bicycle facilities in Ward C comprise approximately **2%** of Jersey City's total existing bikeway network.

#### Ward C Crash History (2008-2017)

Crashes: 91

**Moderate Injuries:** 51

**Serious Injuries:** 23

Fatalities: 17

#### **Ward C CitiBike Access**

Docks: 195
Stations: 9

**Area:** 1.35 sq. mi.

**Station Density:** 6.67/sq. mi.

#### **EXISTING NETWORK PROFILE**

Existing Bikeway Segments: 5

Total Bikeway Miles: 1.08

Existing Bikeway Types: 1

• Conventional Bike Lanes (Sub-standard): **1.08 mi** 

Bikeway Connectivity: **0 intersections** 



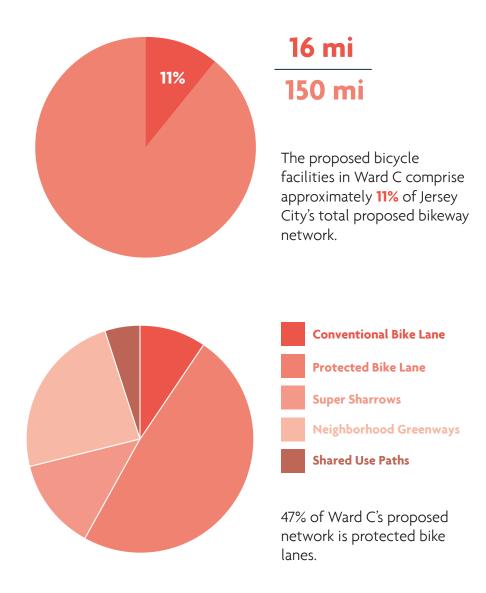


The goal of the Ward C bikeway network plan is to dramatically increase the number of bikeways, with a strong focus on introducing protected bikeways and other safety enhancements along critical HIN corridors. A small number of east-west neighborhood greenway links will also introduce a variety of bikeway enhancements, rationalize directional travel along one-way streets, and provide traffic-calming and green infrastructure. Such interventions will be particularly important where neighborhood greenway cross north-south corridors like JFK Boulevard, Summit/Baldwin Avenues, and Central Avenue.

Implementing the proposed Ward C network will require targeted but sustained investment, especially along HIN corridors. Tradeoffs between competing priorities, and the calibration of facility design to match the unique streets conditions and needs of people living, working, or traveling through Ward C. Above all, safety should be prioritized for all, even if that comes at the expense of vehicular speed or throughput.

The following five location profiles illustrate existing and proposed conditions along four key links in the Ward B network.

- Bergen Avenue
- Laidlaw/Collard/Beacon Ave.
- Newark Avenue
- Summit Avenue
- Reservoir Avenue



Proposed Bikeway Segments: 29

Total Bikeway Miles: 17

Proposed Bikeway Types: 5

• Conventional Bike Lanes: 2.2 mi

• Protected Bike Lanes: 7.6 mi

• Super Sharrows: 2.6 mi

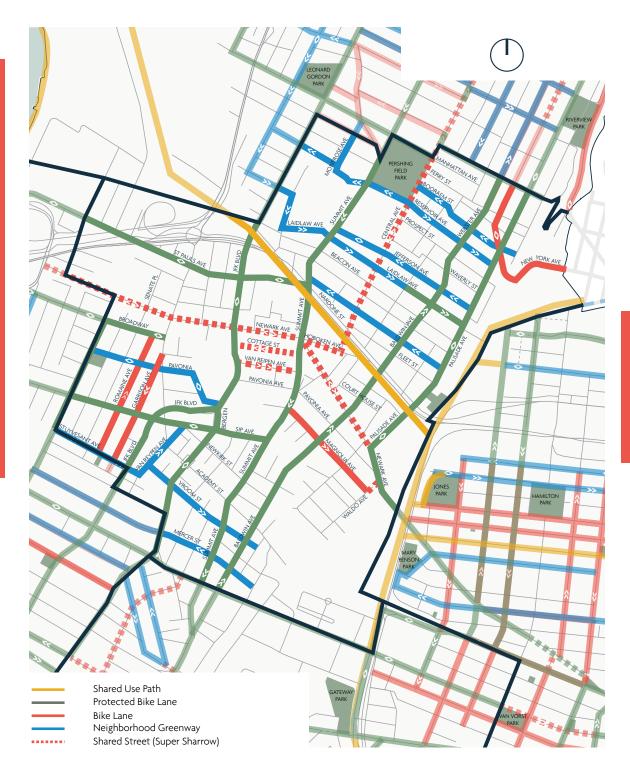
• Neighborhood Greenways: 3.9 mi

• Shared Use Paths: .8 mi

Bikeway Connectivity: **59** 

intersections





# BERGEN AVENUE @ VROOM ST.

### **Existing**

AADT: 14,996 (2017)

Bike/Ped Crashes: 10 (3 fatalities)

**VZ HIN**: Yes

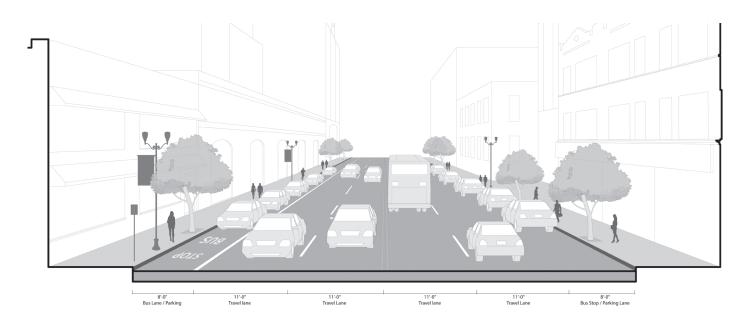
Community of Concern Location: Yes

Existing Bikeways: None

Transit: Journal Square PATH, NJ

Transit Bus Lines 80, 87

Community Assets Served: Journal Square business district, McGinley Square business district, Martin Luther King Jr. High School, Old Bergen Church, Hudson Catholic Regional High School



# **Proposed**

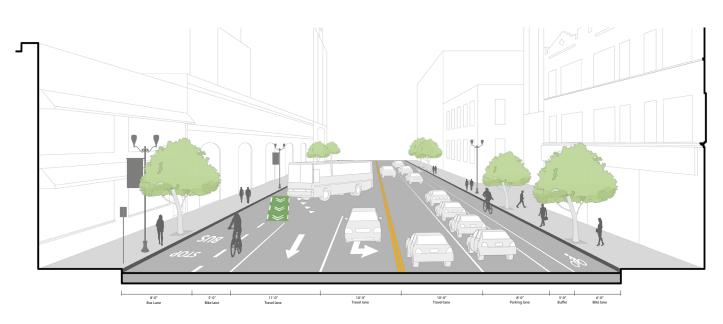
Proposed Bikeways: Parking-Protected

Bike Lanes

Bikeway Limits: Duncan Avenue to JFK

Boulevard

Total Segment Length: .5 mi.



# LAIDLAW AVE. Between Oakland/Palisade

### **Existing**

AADT: N/A

2008 - 2017 Bike/Ped Crashes: 1 (0 fatalities)

VZ HIN: No

Community of Concern Location: Yes

Existing Bikeways: None

Transit: NJ Transit Bus Lines 87, 88, 119 @ Central Avenue, 123 @ Palisade Avenue

Community Assets Served:: CarePoint Christ Hospital, Patricia M. Noonan Elementary School, Franklin L. Williams Middle School 7

## **Proposed Bikeway**

Proposed Bikeways: Neighborhood Greenway with Parking-Protected Bike Lanes (between Oakland Avenue and Palisade Avenue)

Bikeway Limits: Palisade Avenue to JFK Boulevard (includes short segments of Collard Street and Beacon Avenue)

Total Segment Length: .78 mi.





# NEWARK AVENUE | @ BALDWIN AVE.

### **Existing**

AADT: N/A

2008 - 2017 Bike/Ped Crashes: 10 (4 fatalities)

**VZ HIN:** No

Community of Concern Location: Yes

Existing Bikeways: None

Transit: NJ Transit Bus Lines 80, 82, 84

Community Assets Served: William Dickinson High School, Newark Avenue commercial district, Hudson County Superior Court, Jersey City Free Public Library - Five Corners Branch, Eastern International College, Mana Contemporary

## **Proposed**

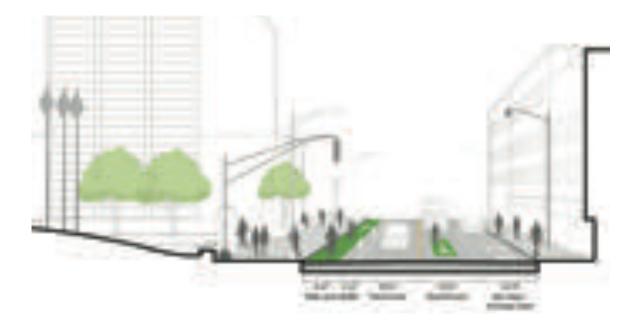
**Proposed Bikeways:** Super Sharrows with Pocket-Protected Bike Lanes and Traffic-Calming, and Barrier-Protected Bike Lanes

Bikeway Limits: Baldwin Avenue to Christopher

Columbus Drive

Total Segment Length: 1.33 mi.





# SUMMIT AVENUE @ MAGNOLIA AVE.

#### **Existing**

**AADT:** 15,105 (2017)

2008 - 2017 Bike/Ped Crashes: 14 (1 fatality)

VZ HIN: Yes

Community of Concern Location: Yes

Existing Bikeways: None

Transit: NJ Transit Bus Lines 83, 87, 88, 119

Community Assets Served: Journal Square PATH station, Jersey City Free Public Library - Five Corners Branch, Patricia M. Noon Elementary, St. Joseph's School for the Blind, Pershing Field Park, Eastern International College, Mana Contemporary

### **Proposed Bikeway**

**Proposed Bikeways** Super Sharrows with Pocket-Protected Bike Lanes and traffic-calming, Barrier-Protected Bike Lanes

**Bikeway Limits:** Baldwin Avenue to Christopher Columbus Drive

Total Segment Length: 1.5 mi.





# RESERVOIR AVE. @ CENTRAL AVE.

#### **Existing**

AADT: N/A

2008 - 2017 Bike/Ped Crashes: 1 (0 fatalities)

VZ HIN: Yes

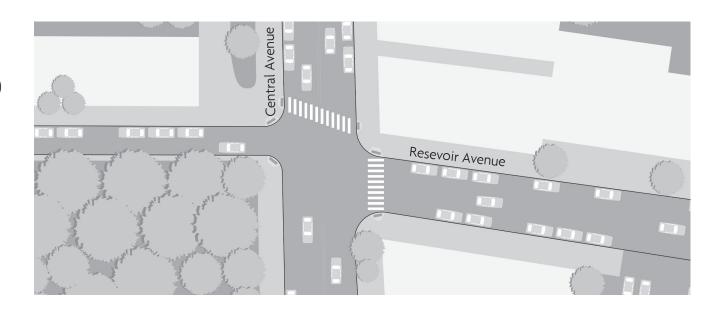
Community of Concern Location: Yes

(Central Avenue)

Existing Bikeways: None

Transit: NJ Transit Bus Lines 84, 86, 123 (at Palisade Avenue); 87,88, 119 (at Central Avenue); 2,88, 125 (at JFK Boulevard)

Community Assets Served: Pershing Field



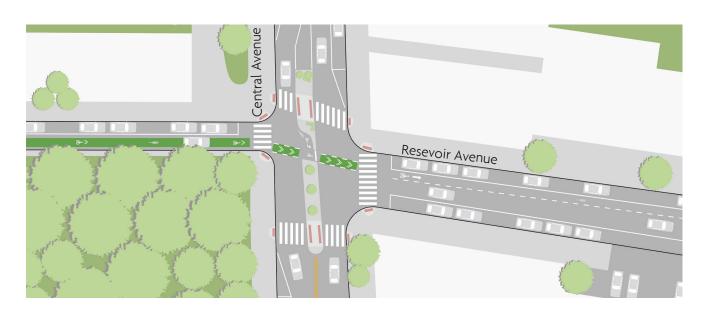
### **Proposed**

Proposed Bikeways: Neighborhood Greenway

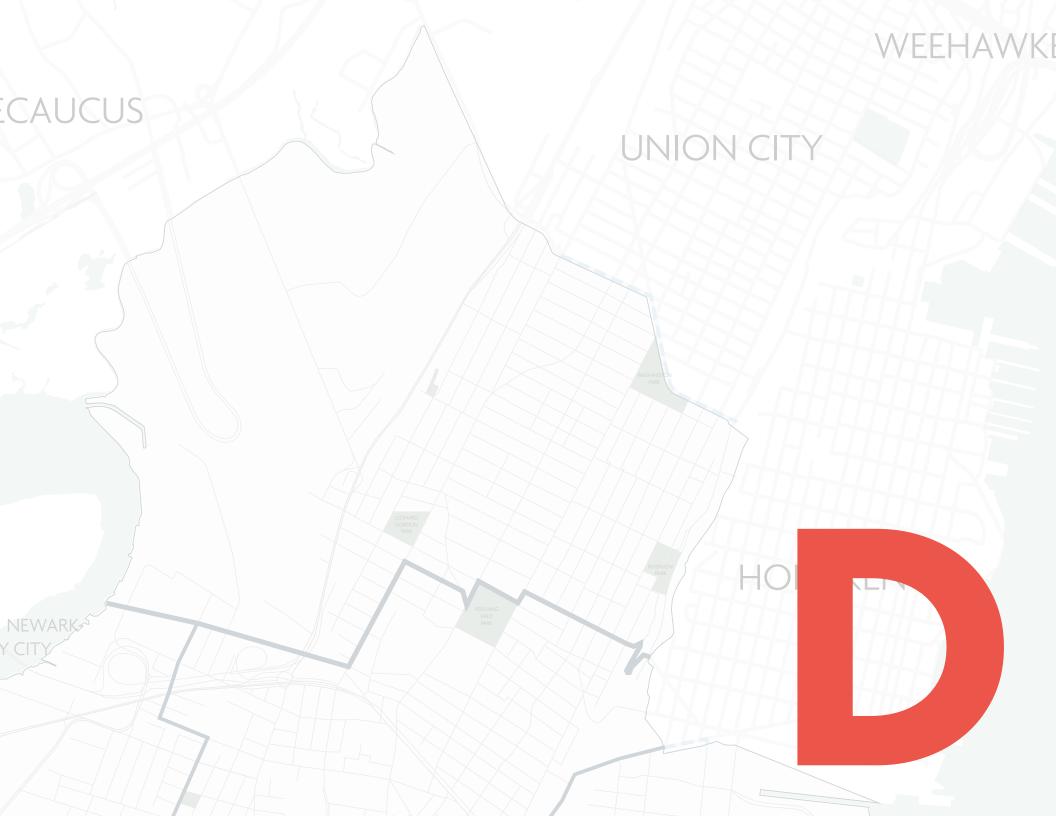
**Bikeway Limits:** Palisade Avenue to Liberty

Avenue

Total Segment Length: .82 mi.







# WARD D PLAN

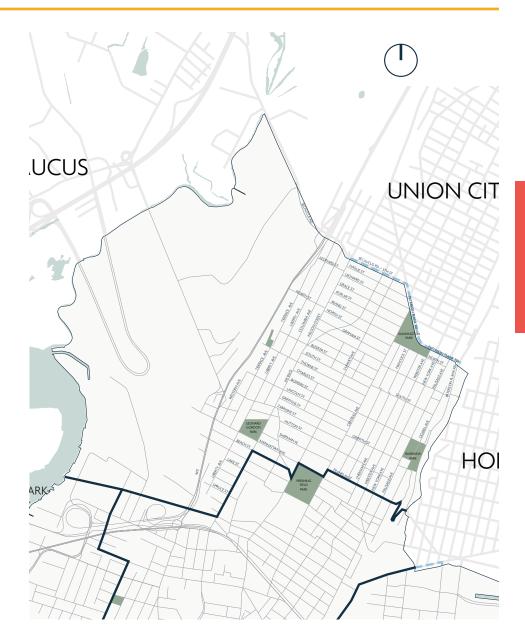
#### WARD PROFILE

Ward D is comprised of The Heights neighborhood and a large industrial zone between County Road and Secaucus Road. The Heights neighborhood features a mixture of single-family and multi-family homes, and mixed-use or commercial buildings along Central Avenue, the neighborhood's main street.

The Ward C street network was platted with three distinct grids. This creates a number of irregular, offset intersections wherever the grids meet. Along with the high number of one-way streets, traveling by car or bike in Ward E is more difficult than it might initially appear. Moreover, the region-serving JFK Boulevard slices through the grid at various angles, splitting the Ward's western slope neighborhood and the central Heights area with high volumes of motor vehicle traffic. With only a few other north-south streets that connect Ward D neighborhood to the rest of the city, the need to facilitate cycling connections east-west and north-south is pronounced.

Finally, Ward D neighborhoods are fortunate to have access to a number of medium-sized parks (Pershing Field Park, Riverview Park, Leonard Gordon Park, Washington Park). This civic infrastructure provides important social, environmental, and recreational benefits, particularly in the warmer months of the year and are within a short bike ride of most households.

Turn the page for more details about Ward D's existing cycling network and the Let's Ride JC plan to make it better.



#### **EXISTING NETWORK PROFILE**

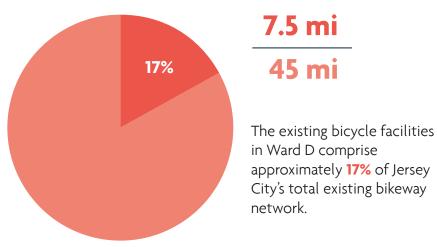
Comparatively, Ward D has a large number of existing bike lane segments, but they are short in length, disconnected, and like the rest of the city are of a sub-standard width. Moreover, the 3:1 ratio between east-west and north-south segments underscores the need for north-south connectivity. Two challenges commonly found in Ward D are the offset street grid centered on Central Avenue, which is coupled with directional changes in traffic-flow. These conditions make cycling east-west directly challenging.

Between 2008-2017, 58 Ward D bicycle crashes resulted in 18 serious injuries and 10 fatalities. The majority of crashes occurred along the following Vision Zero High Injury Network (HIN) segments:

- Tonnelle Road
- County Road
- Congress Street
- Paterson Plank Road
- Central Avenue
- Summit Avenue

None of the above segments feature dedicated bike infrastructure. Thus, putting an emphasis on more connectivity and safety on these six corridors is a critical part of improving cycling in Ward D, as well as increased access to neighborhood and city-serving destinations

#### **Ward D Bike Network Miles**



#### Ward D Crash History (2008-2017)

Crashes: 58

**Moderate Injuries:** 30

**Serious Injuries:** 18

Fatalities: 10

#### **Ward D CitiBike Access**

Docks: 50

Stations: 3

**Area:** 2.45 sq. mi.

**Station Density:** 1.22/sq. mi.

#### **EXISTING NETWORK PROFILE**

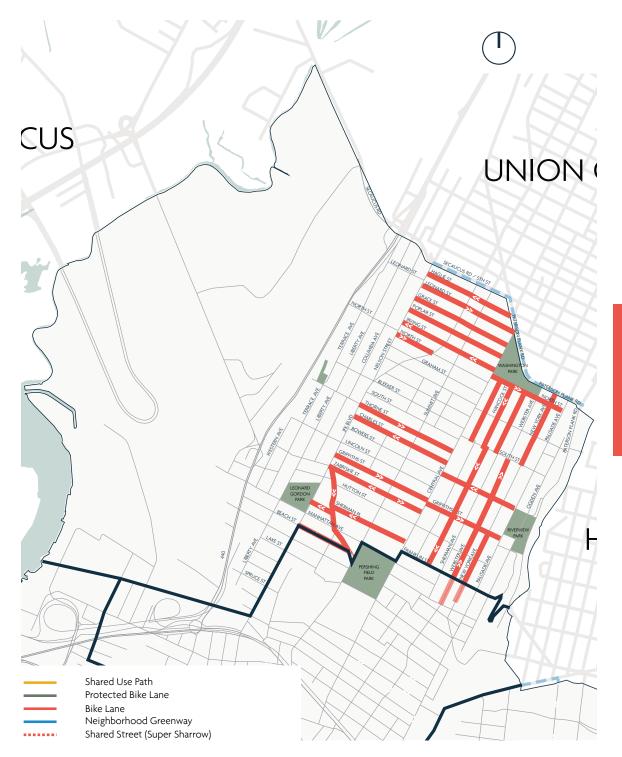
Existing Bikeway Segments: 25

Total Bikeway Miles: 7.48

Existing Bikeway Types: 1

 Conventional Bike Lanes (Sub-standard): 7.48 mi

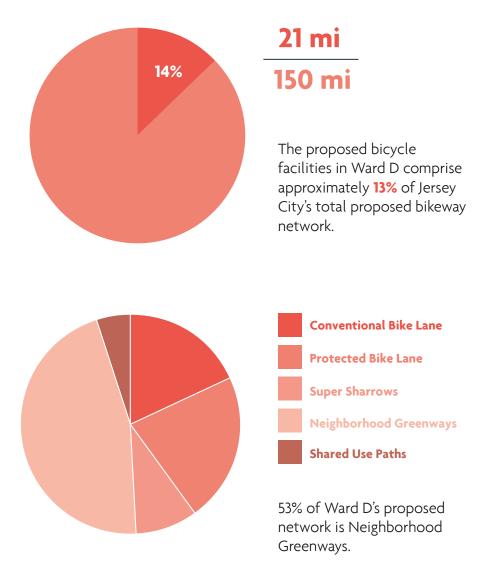
Bikeway Connectivity: 13 intersections



The Ward D bikeway plan is focused on enhancing cycling through two basic moves: 1) retrofit the limited number of north-south corridors with protected bike lanes (JFK Boulevard, Summit Avenue, Palisade Avenue) while also advancing seamless east-west network linkages with traffic-calming and a bevy of other neighborhood greenway improvements. The protected bikeway designs will require tradeoffs with parking or the wholesale transformation to one-way configurations granting 10-12' of street space to be repurposed into protected bike lanes. The east-west connections will place a strong emphasis on offset and T-intersections along Central Avenue where protect pocket curbside lanes or protected bicycle-turn lanes will provide better safety and connectivity. Some directional changes to the flow of traffic, or contra-flow bicycle lanes, may also be required to simplify the neighborhood greenway network.

Implementing the proposed Ward D network plan will require prioritizing street safety and access over vehicular throughput during a small percentage of the day, and resolve competing priorities through facility design that looks to optimize bicycle, pedestrian, and transit mobility. The following location profiles illustrate existing and proposed conditions along four key priority areas that represent a range of Ward D contexts and conditions.

- Palisade Avenue
- Bleeker/South Street
- Summit Avenue
- Sherman Place



Proposed Bikeway Segments: 39

Total Bikeway Miles: 20.1

**Existing Bikeway Types:** 

• Conventional Bike Lanes: 3.3 mi

• Protected Bike Lanes: 4.6 mi

• Super Sharrows: 1.8 mi

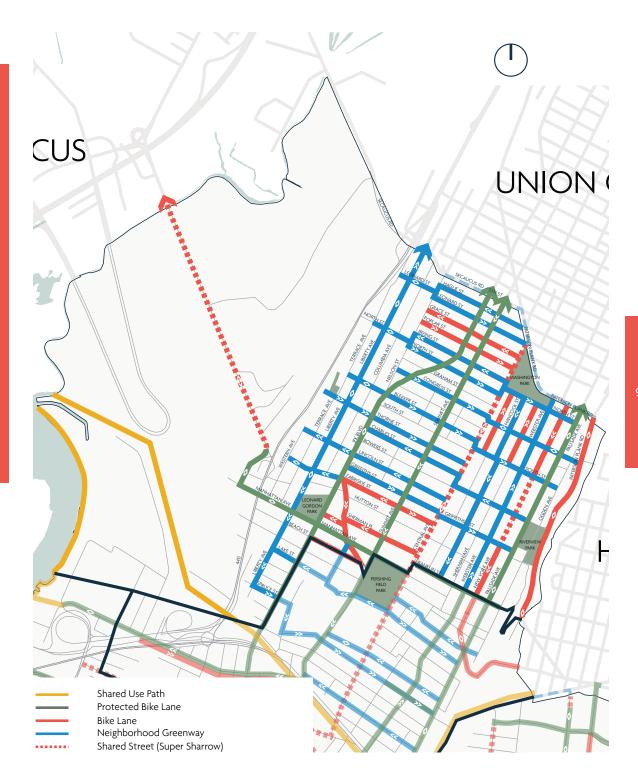
• Neighborhood Greenways: 9.4 mi

• Shared Use Paths: 1 mi

Bikeway Connectivity: 90

intersections





# PALISADE AVENUE | @ BOWERS ST.

### **Existing**

AADT: N/A

2008 - 2017 Bike/Ped Crashes: 5 (0 fatalities)

**VZ HIN:** No

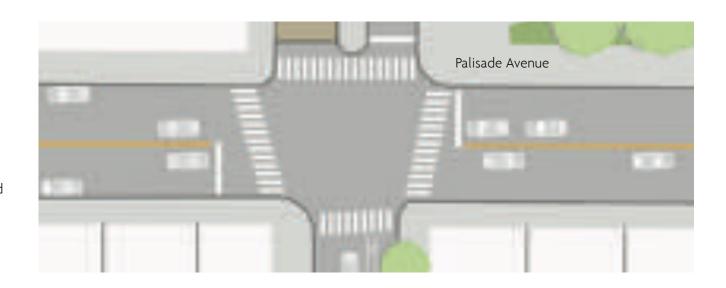
Community of Concern Location: Yes

Existing Bikeways: None

Transit: NJ Transit Bus Lines 84, 86, 87, 123, and

the 22, 119 (at Congress Avenue)

**Community Assects Served**:s Dickinson High School, Christ Hospital, and Riverview Park,



### **Proposed** Bikeway Facility:

Proposed Bikeways: Two-Way

Barrier Protected Bikeway

Bikeway Limits: Newark Avenue to Patterson

Plank Road

**Total Segment Length:** 1.7 mi



# BLEEKER/SOUTH ST. | @ CENTRAL AVE.

#### **Existing**

AADT: N/A

2008 - 2017 Bike/Ped Crashes: 3 (0 fatalities)

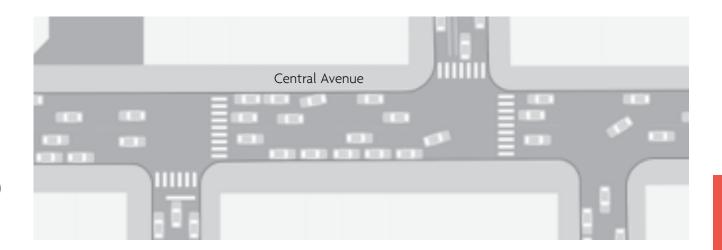
VZ HIN: Yes (Central Avenue)

Community of Concern Location: Yes

**Existing Bikeways:** Bikeway Facilities: Conventional Bike Lanes (South Street, between Ogden Avenue and Central Avenue)

Transit: NJ Transit Bus Lines 84, 86, 87,123 (at Palisade Avenue); 88, 119 (at Central Avenue); 82,83,87 (at Summit Avenue); 2, 88, 125 (at JFK Boulevard)

Community Assets Served: Christa McAuliffe School, Terrace Avenue Park, Central Avenue Commercial Businesses

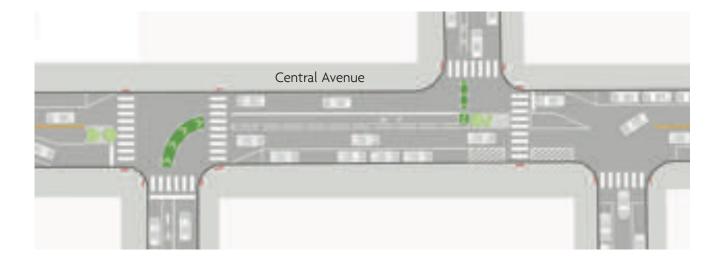


# **Proposed**

**Proposed Bikeways:** Conventional Bike Lanes (South Street, between Ogden Avenue and Central Avenue)

**Bikeway Limits:** Ogden Avenue to Terrace Avenue

Total Segment Length: .9 mi.



# SUMMIT AVENUE | @ BOWERS ST.

### **Existing**

AADT: 8,355 (2017)

2008 - 2017 Bike/Ped Crashes: 11 (O fatalities)

**VZ HIN: Yes** 

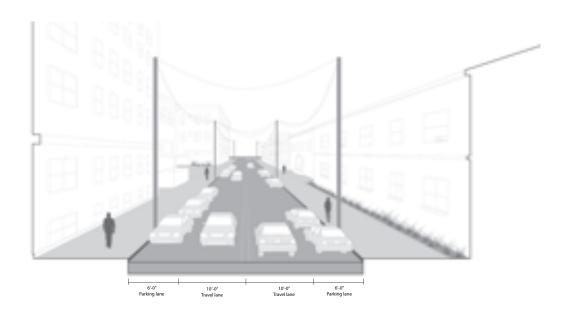
Community of Concern Location: Yes

Existing Bikeways: None

Transit: NJ Transit Bus Lines 82, 83, 87

Community Assets Served: Pershing Field Park,

neighborhood commercial businesses



### **Proposed**

**Proposed Bikeway:** Parking-Protected Bike Lane **Bikeway Limits:** 5th Street (Union City) to Baldwin
Avenue

Total Segment Length: 2.7 mi.



# SHERMAN PLACE @ SANFORD PLACE

### **Existing**

AADT: N/A

2008 - 2017 Bike/Ped Crashes: 1 (0 fatalities)

**VZ HIN**: No

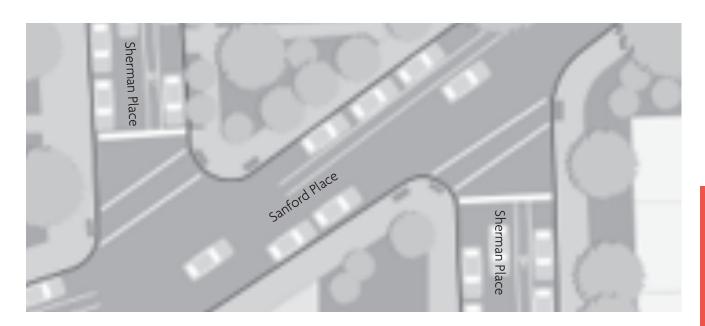
Community of Concern Location: Yes

Transit: NJ Transit Bus Lines 88, 119 at Central

Avenue

**Destinations Served:** Central Avenue

Commercial Businesses, Leonard Gordon Park



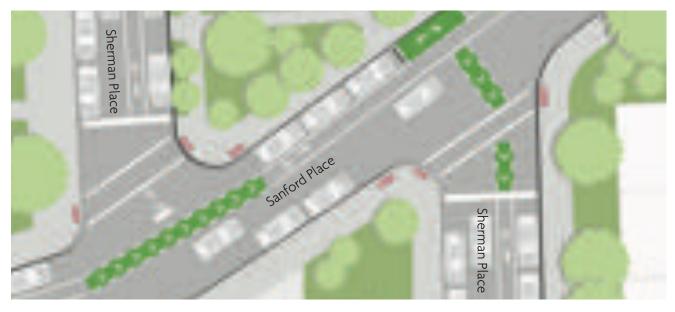
### **Proposed**

**Proposed Bikeway:** Conventional Bike Lane with Intersection Improvements (Ex. See Right)

**Bikeway Limits:** Central Avenue to JFK

Boulevard

Total Segment Length: .42 mi.





# WARD E PLAN

#### **WARD PROFILE**

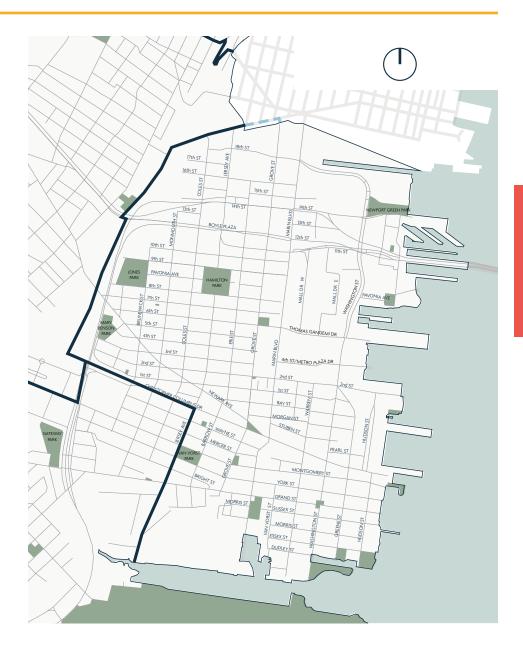
Ward E contains Jersey City's fast growing and dynamic downtown commercial district, and historic neighborhoods like Hamilton Park, Harsimus Cove, and Paulus Hook. All of these neighborhoods are within easy walking or cycling distance of the historic mixed-use Newark Avenue, and close to large employment and transit hubs at Grove Street, Exchange Place and Newport.

Compared to all other ward, the Ward E street network is the easiest and safest to navigate with a bicycle because the land use and urban design support walking, slower vehicular speeds (with a few exceptions) and the street grid is largely intact.

That said, several east-west corridors feature dangerous conditions for cycling. These include Montgomery Street, Grand Street, Christopher Columbus Drive, and the 12th/14th Street Holland Tunnel corridors. However, as of the writing of this plan, the first three streets will receive safety upgrades in the near future. North-south streets like Marin Boulevard and Washington Boulevard link important destinations but are also currently hostile for cycling.

Finally, Ward E neighborhoods are fortunate to have access to a number of small and medium-sized parks (Hamilton Park, Jones Park, Newport Green, Van Vorst Park, Mary Benson Park, Morris Canal Park, and Liberty Harbor State park nearby). This civic infrastructure provides important social, environmental, and recreational benefits, particularly in the warmer months of the year and are within a short bike ride of most households.

Turn the page for more details about Ward E's existing cycling network and the Let's Ride JC plan to make it better.



#### **EXISTING NETWORK PROFILE**

With 6 north-south segments and 7 east-west segments, Ward E is the home of the city's most balanced ward-based bikeway network. However, it's comprised primarily of conventional bike lanes (of substandard width). There are also significant gaps in the network, and given traffic volume, speed, and crashes, a need for protected lanes exists along main corridors like Montgomery Street, Grand Street, Washington Boulevard, Marin Boulevard, and Christopher Columbus Drive. Home of the city's core business district, it's most historic walkable neighborhoods, three PATH stations, five light rail stations, and several ferries to/from Manhattan, Ward E offers the potential for the largest short-term ridership gains. That said, there is also a pronounced need for higher-quality bicycle parking facilities, increased CitiBike station density, network gap closures, and the enhancement of existing links.

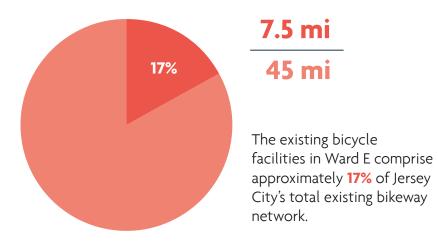
Between 2008-2017, 61 bicycle crashes occurred in Ward E resulting in 19 serious injuries and 4 fatalities. While still four too many, that's 67% fewer fatalities than the average tallied in the city's other five wards. The majority of crashes occurred along the following Vision Zero High Injury Network (HIN) segments:

- Grove Street
- Jersey Avenue
- Columbus Drive
- Grand Street

- Montgomery Street
- Marin Boulevard
- Monmouth Street

Two of the above corrirdors above feature dedicated bike infrastructure (Montgomery Street, Christopher Columbus Drive). Thus, putting an emphasis on more connectivity and safety is a critical part of improving cycling across Ward E and into adjacent city neighborhoods. Such connections are especially important given the jobs, services, and regional transportation infrastructure that exists in Ward E's neighborhoods. These destinations include Newark Avenue (restaurant row), Grove Street/Exchange Place/Newport PATH stations, all five light rail stations, Hudson River Waterfront, Newport Centre Mall, five key parks, 13 schools, two libraries, sixteen churches, and countless other community and cultural assets.

#### **Ward E Bike Network Miles**



#### Ward E Crash History (2008-2017)

Crashes: 61

**Moderate Injuries: 38** 

**Serious Injuries:** 19

Fatalities: 4

#### **Ward E CitiBike Access**

**Docks:** 442

Stations: 23

**Area:** 3.01 sq. mi.

**Station Density:** 7.64/sq. mi.

#### **EXISTING NETWORK PROFILE**

Existing Bikeway Segments: 13

Total Bikeway Miles: 7.53

Existing Bikeway Types: 2

• Conventional Bike Lanes (Sub-standard): **5.55 mi** 

• Shared Use Paths: 1.98 mi

Bikeway Connectivity: 15

intersections



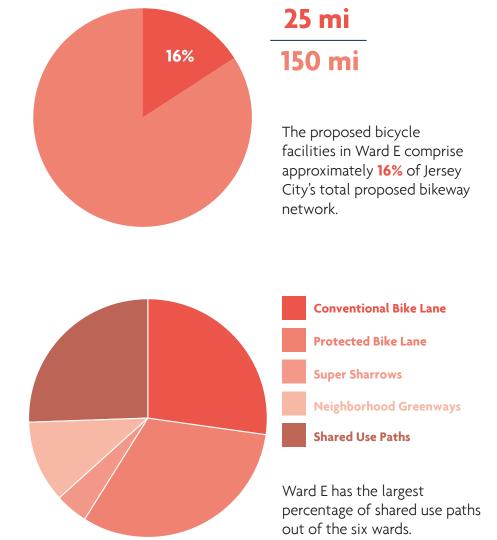


The proposed Ward E plan seeks to improve access throughout downtown Jersey City. Protected bikeways play an outsized role, largely in upgrading existing conventional bike lane segments (Montgomery Street, Christopher Columbus Drive, etc.) so that a wider audience of people feel comfortable cycling. The proposed Washington Street/Green Street/Washington Boulevard protected bikeway offers tremendous promise given the density of jobs and residences it would connect, including linking new growth areas north of Hamilton Park to the rest of downtown core. Protected lane segments on Montgomery Street, Grand Street, Newark Avenue, and Marin Boulevard will also better link downtown with adjacent neighborhoods and the adjacent municipality of Hoboken.

Implementing the proposed Ward E network will require sustained and targeted investment, with tradeoffs between competing transportation and public space priorities in an already dense and densifying area of the city. It is this reality that underscores the need to invest in low-impact and efficient modes of urban mobility, like cycling so that additional vehicular congestion doesn't strangle the growth and livability of downtown Jersey City.

The following location profiles illustrate existing and proposed conditions along four key priority areas that represent the a range of Ward E conditions:

- Washington Avenue
- Marin Blvd.
- Newark Avenue
- Jersey Avenue



Proposed Bikeway Segments: 45

Total Bikeway Miles: 24.4

Proposed Bikeway Types:

• Conventional Bike Lanes: 6.5 mi

• Protected Bike Lanes: 7.5 mi

• Super Sharrows: 1 mi

• Neighborhood Greenways: 2.9 mi

• Shared Use Paths: 6.4 mi

Bikeway Connectivity: 93

intersections





# **WASHINGTON BOULEVARD**

### **Existing**

AADT: N/A

2008 - 2017 Bike/Ped Crashes: 11 (O fatalities)

**VZ HIN**: No

Community of Concern Location: Partial

Existing Bikeways: None

**Transit:** Newport PATH, Newport Light Rail Station, NJ Transit Bus Lines 63, 64, 68, 86, 126Destinations Served: Pershing Field Park

Community Assets Served: Newport PATH, Newport Light Rail Station, Newport Centre, Hudson River Waterfront Walkway, Newport Green



### **Proposed**

Proposed Bikeway: Barrier-Protected Bike Lane Bikeway Limits: Dudley Street to Coles Street Total Segment Length: 2 mi.



### MARIN BLVD. @ 18TH ST.

#### **Existing**

**AADT:** 15,077 (2010)

2008 - 2017 Bike/Ped Crashes: 10 (2 fatalities)

**VZ HIN**: Yes

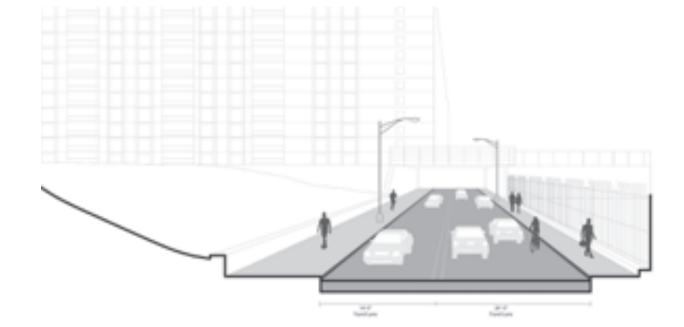
Community of Concern Location: Partial

Existing Bikeways: None

Transit: Marin Light Rail Station, Liberty

Harbor/Marin Ferry Stop

Community Assets Served: Liberty Harbor/ Marin Ferry Stop, Marin Light Rail Station, NJ Transit Bus Lines 1 (@ Grand Street), 80, 81, 82, 86 (@ Christopher Columbus Drive), 126



#### **Proposed**

**Proposed Bikeways:** Conventional Bike Lanes, Pocket Protected Bike Lanes, Protected Bike Lanes

**Bikeway Limits**: Liberty Harbor to Observer Highway (Hoboken)

Total Segment Length: 1.75 mi.



### NEWARK AVE @ WALDO AVE / PAVONIA AVE

#### **Existing**

AADT: N/A

2008 - 2017 Bike/Ped Crashes: 3 (0 fatalities)

VZ HIN: No

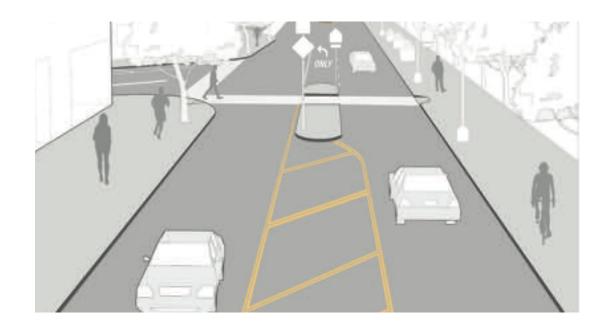
Community of Concern Location: Partial

Existing Bikeways: None

Transit: Grove Street PATH, NJ Transit Bus Lines 80, 82, 86

Community Assets Served: Grove Street PATH Station, Newark Avenue Restaurant Row, Mary Benson Park,

Dickinson High School



#### **Proposed**

Proposed Bikeway: Barrier-Protected Bike Lanes

Bikeway Limits: Columbus Drive to Baldwin Avenue

Total Segment Length: 1.1 mi.



## JERSEY AVENUE | @ AETNA/CANAL ST.

#### **Existing**

**AADT**: 8,650 (2017)

2008 - 2017 Bike/Ped Crashes: 7 (0 fatalities)

VZ HIN: Yes, North of Hamilton Park

Community of Concern Location: Partial

Existing Bikeways: None

Transit: NJ Transit Bus Lines 81, 80/82/86 (@ Newark Avenue), amd 126 @ 9th Street

**Destinations Served:** Hamilton Park, Newark Avenue Restaurant Row, Van Vorst Park,

Liberty State Park

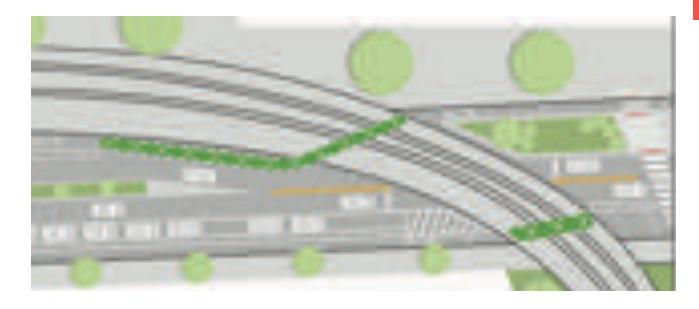


#### **Proposed**

**Proposed Bikeways:** Parking-Protected Bike Lane

**Bikeway Limits:** Grand St. to Johnston Ave. / Audrey Zapp Dr.

Total Segment Length: .48 mi.





### WARD F PLAN

#### **WARD PROFILE**

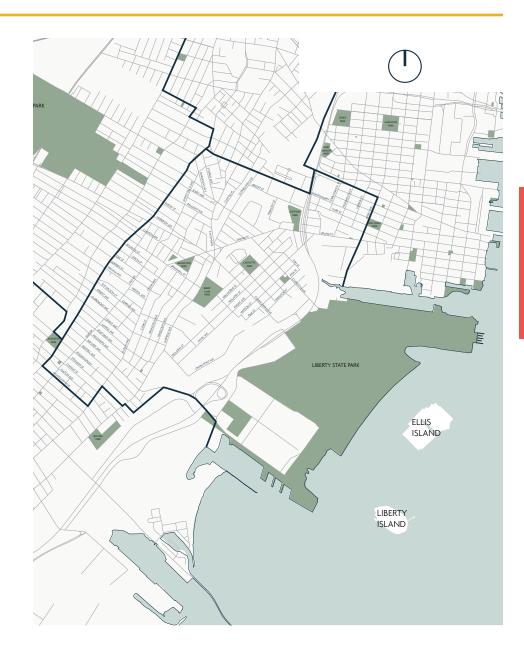
Ward F is comprised of three neighborhoods: Communipaw, Bergen/Lafayette, and portions of McGinley Square. Ward F features a mixture of dense residential streets, commercial avenues, and industrial areas slated for redevelopment. Ward F is distinctly defined by Liberty State Park, which forms the bulk of its eastern boundary and offers unprecedented views of the Statue of Liberty and the New York City skyline. Residents of the Ward's northwest corner are also in close proximity to Lincoln Park.

Unfortunatley, accessing Liberty State Park is challenging because the elevated Jersey Turnpike, limited access industrial land parcels, and the Hudson-Bergen Light rail line collectively create a virtually impenetrable barrier.

Ward F's residential streets are primarily organized on an east-west axis. Navigating these streets is challenging because only two of them (Communipaw Avenue and Montgomery Street) come close to touching the east and western borders. Along with one-way streets, this makes east-west movement by bus, bike, or car a very circuitous endeavor. Ward F's north-south thoroughfares include neighborhood serving commercial, civic, and entertainment destinations, and provide access to NJ Transit's extensive bus network. Thus, linking people to and along these corridors with safe bikeways is a high priority, especially for a diverse population of people who rely on walking, cycling, and the public transportation network to get around the city and region.

Beyond Liberty State Park, those living in the central/north portions of Ward F have great access to high quality parks (Arlington Park, Berry Lane Park, Lafayette Park, Gateway Park).

Turn the page for more details about Ward F's existing cycling network and the Let's Ride JC plan to make it better.



#### **EXISTING NETWORK PROFILE**

With just over 10 miles, Ward F has the most extensive bikeway network in the city. It is comprised primarily of conventional bike lanes (of substandard width and the Hudson River Walkway through Liberty State Park). The existing network distribution is relatively balanced, however very few segments actually link to each other, making connectivity a major challenge.

Ward F's dense housing, vibrant commercial district and wide variety of parks/open spaces (Liberty State Park, Berry Lane Park, Arlington Park, Lafayette Park, Gateway Park) provide the base conditions for future cycling growth. However, there is a need for much more high-quality bicycle parking facilities along commercial corridors, expanded access to CitiBike stations, and the closure of major gaps in the bikeway network.

Between 2008-2017, 58 bicycle crashes occurred in Ward F resulting in 24 serious injuries and 8 fatalities. The majority of crashes occurred along the following Vision Zero High Injury Network (HIN) segments:

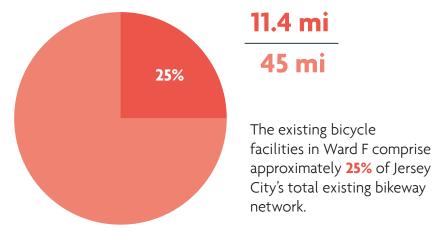
- Garfield Avenue
- Communipaw
- MLK Drive
- Grand Street

- Ocean Avenue
- Summit Avenue
- Baldwin Avenue
- Bergen Avenue

Of the eight segments listed above, none have dedicated bike infrastructure. Thus, putting an emphasis on retrofitting these eight corridors with bikeways and other safety enhancements will save human lives and is a critical aspect of improving access in Ward F and beyond.

Important Ward F destinations needed to be connected by cycling infrastructure include Communipaw Avenue/Bergen Avenue, MLK Drive/Ocean Avenue/Bergen Avenue commercial districts, Liberty State Park, Liberty Science Center, Arlington Park, Gateway Park, Berry Lane Park, Liberty State Park, three libraries, eight schools, seventeen places of worship, and the Garfield Avenue / MLK Drive Light Rail Stations.

#### **Ward F Bike Network Miles**



#### Ward F Crash History (2008-2017)

Crashes: 71

**Moderate Injuries:** 39

**Serious Injuries: 24** 

Fatalities: 8

#### **Ward F CitiBike Access**

**Docks:** 160

Stations: 10

**Area:** 4.98 sq. mi.

**Stations Density:** 2.01/sq. mi.

#### **EXISTING NETWORK PROFILE**

Existing Bikeway Segments: 21

Total Bikeway Miles: 11.36

Existing Bikeway Types: 2

• Conventional Bike Lanes (Sub-standard): **6.81 mi** 

• Shared Use Paths: 4.55 mi

Bikeway Connectivity: **7** 

intersections





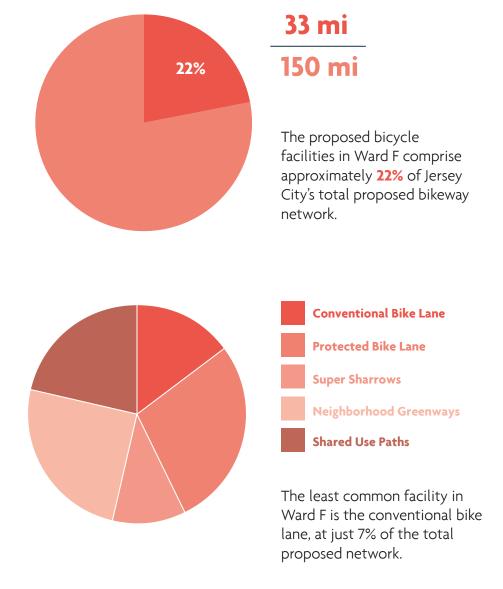
#### **PLAN SUMMARY**

The proposed Ward F plan seeks to improve access throughout a variety of Jersey City's south-central neighborhoods. Proposed protected bikeways along Ocean Avenue, Summit Avenue, Grand Street, Communipaw Avenue, as well as shared use paths like the Morrison Canal Greenway, provide the backbone of the Ward's north-south and east-west cycling network. Of particular note is east-west protected bikeway proposed for Communipaw Avenue, which would connect Jersey City's two largest parks: Liberty State Park and Lincoln Park. In addition, the redevelopment of industrial land centered upon Pacific Avenue and Carteret Avenue presents a chance to include world class streets into a newly redeveloped neighborhood.

Like all other ward plans, the implementation of the Ward F network will require sustained and targeted investment, with tradeoffs made between competing transportation and public space priorities. More specifically, providing low cost transportation options to existing transit and open space infrastructure will greatly reduce barriers to employment opportunities and Jersey City's largest open space resources.

The following location profiles illustrate existing and proposed conditions along four key priority areas that represent the a range of Ward F conditions:

- Stegman Street
- Johnston Avenue
- Cartaret Avenue
- Ocean Avenue



#### **PLAN SUMMARY**

Proposed Bikeway Segments: **57** 

Total Bikeway Miles: 33.3

Proposed Bikeway Types: 5

• Conventional Bike Lanes: 5.4 mi

• Protected Bike Lanes: 8.0 mi

• Super Sharrows: **4.5 mi** 

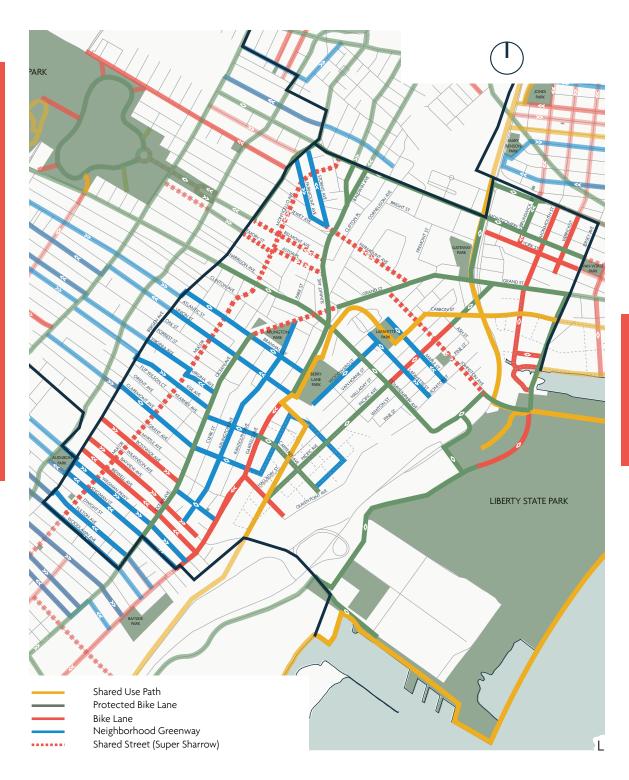
• Neighborhood Greenways: **8.3 mi** 

• Shared Use Paths: 7.1 mi

Bikeway Connectivity: 90

intersections





## STEGMAN STREET | @ BERGEN AVE.

#### **Existing**

AADT: N/A

2008 - 2017 Bike/Ped Crashes: 3 (0 fatalities)

**VZ HIN:** No

Community of Concern Location: Yes

**Existing Bikeways:** Conventional Bike Lanes (Garfield Avenue to Bergen Avenue); West Side Avenue to NJ-440

Transit: NJ Transit Bus Lines 80 (@ West Side Avenue) 10, 119 (@ JFK Boulevard), 87 (@ MLK Drive), 6, 81 (@ Ocean Avenue)

Community Assets Served: Whitney M. Young Jr. Community School 15, MLK Drive business district, Audobon Park, James F. Murray Elementary School 38, New Jersey City University



#### **Proposed**

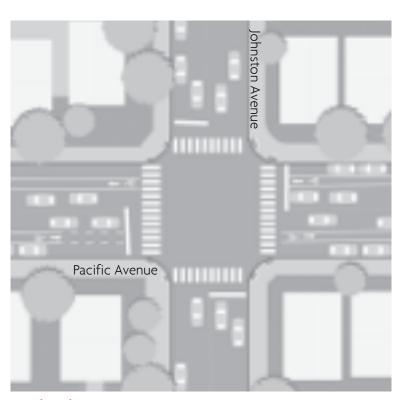
**Proposed Bikeways:** Neighborhood Greenway with Protected Bike Lanes Between MLK Drive / Bergen Avenue

Bikeway Limits: Garfield Avenue to NJ-440

Total Segment Length: 1.3 mi.



### JOHNSTON AVE. @ PACIFIC AVE.



#### **Existing**

AADT: 7,357 (Pacific Avenue @ Johnston)

2008 - 2017 Bike/Ped Crashes: 4 (1 fatality)

**VZ HIN**: No

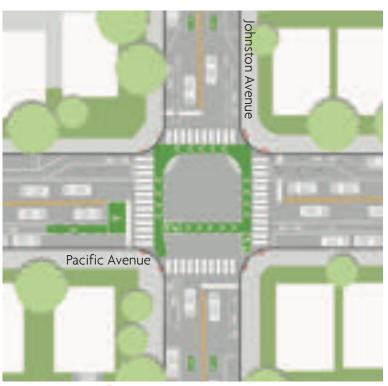
Community of Concern Location: Partial

Existing Bikeways: None

Transit: Liberty State Park Light Rail Station, NJ Transit Bus Line 6

Community Assets Served: Liberty State Park, Liberty Science Center, Liberty State Park Light Rail Station, Dr. Lena Edwards

Park, Lafayette Pool



#### **Proposed**

**Proposed Bikeways:** Conventional Bike Lanes, Protected Pocket Bike Lanes

Bikeway Limits: Phillip Street to Grand Street

Total Segment Length: .75 mi.

## CARTERET AVE. @ ARLINGTON AVE.

#### **Existing**

**AADT:** 2,787 (2017) @ Arlington, between

Carteret Avenue / Union Street

2008 - 2017 Bike/Ped Crashes: 4 (O fatalities)

**VZ HIN:** No

Community of Concern Location: Partial

Existing Bikeways: None

Transit: NJ Transit Bus Lines 6, 81 (Ocean Avenue)

Community Assets Served: Garfield Park, Extra

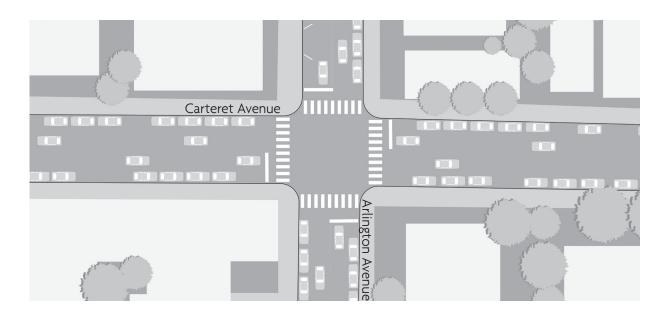
Super Market

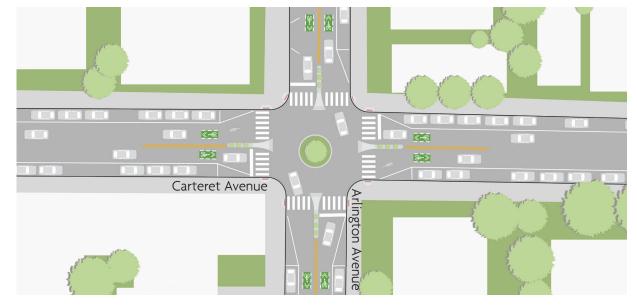
#### **Proposed**

**Proposed Bikeways:** Neighborhood Greenway (Sidewalk Level Protected Bike Lane (Bergen Avenue to MLK Drive)

Bikeway Limits: Pacific Street to Ocean Avenue

Total Segment Length: 1 mi.





## OCEAN AVENUE @ WILKINSON AVE.

#### **Existing**

AADT: N/A

2008 - 2017 Bike/Ped Crashes: 17 (1 fatality)

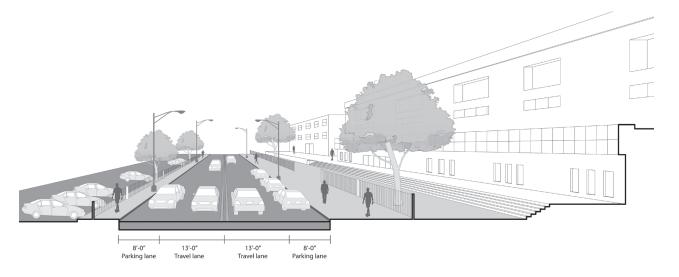
**VZ HIN**: Yes

Community of Concern Location: Yes

Existing Bikeways: None

Transit: NJ Transit Bus Lines 6, 81

Community Assets Served: Fred Martin Elementary School, Ocean Avenue Commercial Businesses, Arlington Park



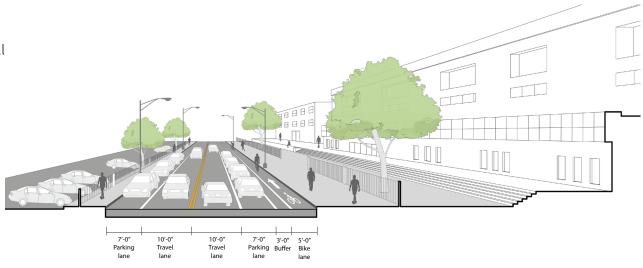
#### **Proposed**

**Proposed Bikeway:** Parking-Protected Bike Lane (Northbound)

Bikeway Limits: Woodlawn Avenue to Bramhall

Avenue

Total Segment Length: 1.05 mi.



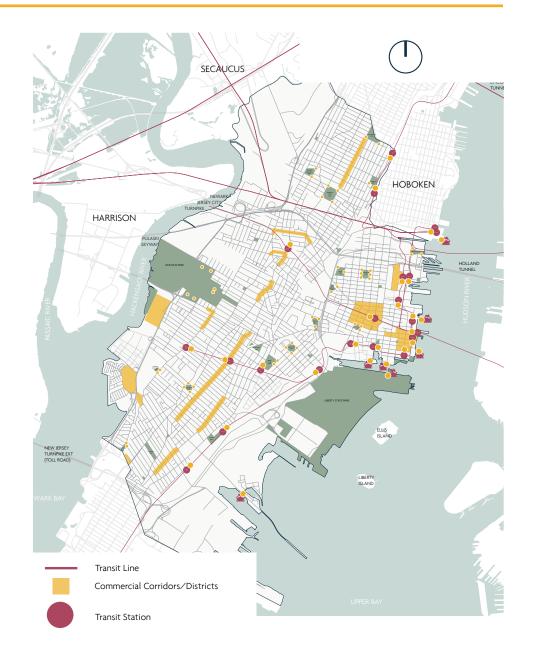
### **BICYCLE PARKING PLAN**

Improving bicycle parking options for both short and long-term use is critically important to supporting cycling as a viable mode of transportation.

Jersey City has increased bicycle parking supply by adding on-street racks intended for short-term use within commercial districts. Jersey City's Bicycle Parking Ordinance also ensures bicycle parking is installed as properties are (re)developed. Finally, CitiBike docking stations are located throughout certain neighborhoods and provide easy and secure bike parking. These advancements provide a foundation for improved bicycle parking. However, even a cursory analysis of Jersey City's cycling "hot spots" (Journal Square PATH, Grove Street PATH, Lincoln Park, Pershing Field Park etc.), reveals that supply is not meeting the current, let alone the coming demand resulting from continued investment in cycling infrastructure. And without an increase in supply and quality, it will be difficult for Jersey City to obtain the bicycle mode share goals set forth in this plan. Thus, a more robust approach must be taken to accommodate cycling growth, including adding high-capacity bicycle parking facilities, especially at the city's primary transit stations and commercial/employment nodes.

#### **RECOMMENDATIONS**

The goal of the following recommendations is to support cycling through the provision of more high quality, plentiful, and visible bicycle parking options that serve residents and visitors for years to come. These recommendations are intended to address needs citywide but will ultimately be implemented at the block and individual building scales. These recommendations must be subject to site analysis before each installation is completed so that bicycle parking remains convenient, placed properly in the public right-of-way or off-street within private or public property in which it is located. The following recommendations should be revisited and updated regularly as Jersey City's bicycle mode share increases and the city realizes more neighborhood-level population and employment growth.



### Action #1: Undertake a physical bicycle parking supply analysis.

Conducting a detailed review of Jersey City's bicycle parking is beyond the scope of this project. However, the City should do a detailed inventory of the location, type, condition, and use of its bicycle parking supply. Mapping locations and demand will help further calibrate and implement the more general recommendations contained herein.

#### HOW?

**Step 1:** Gather existing bicycle parking location data and analyze weaknesses in current data sets.

Step 2: Develop a data collection plan.

**Step 3:** Execute data collection plan.

**Step 4:** Evaluate results, formulate recommendations, and publish bicycle parking supply map.

#### WHO?

**Lead:** Planning Division, Department of Engineering, Traffic, and Transportation

**Support:** Bike JC, Hudson County, NJTPA, Special Improvement Districts

#### WHFN?

Undertake analysis in 2019/2020. Should resources be limited, the initial count/analysis may be conducted by volunteers.

### Action #2: Add more medium and high-capacity bicycle parking facilities.

Update the city's existing bicycle parking ordinance to include guidance on the application of on-street bicycle corrals, bicycle shelters, and bicycle rooms / stations. Create an easy pathway for interested property or business owners to co-sponsor (and/or request) bicycle corrals/shelters at high demand areas, such as popular bars/restaurants, retail shops, civic sites, and within site triangle visibility zones (street corners). Work with key property owner(s) and agencies at all rail transit stations to develop high-capacity bicycle parking, including "stations" with a range of amenities such as indoor or secured parking, basic bicycle repair tools/supplies at the highest demand areas.

#### HOW?

**Step 1:** Following the completion of the bicycle parking analysis included in recommendation #1, identify the proper bicycle parking type for areas with high/oversubscribed bicycle parking demand, including commercial or residential areas currently without on-street bicycle parking options.

**Step 2:** Develop an implementation plan that includes funding, partnerships, and maintenance plans.

**Step 3:** Implement increase bicycle parking supply as funds and partnerships permit.

**Step 4:** Evaluate results, update bicycle parking supply map, and publish each year in the annual cycling report.

#### WHO?

**Lead:** Department of Public Works, Division of Planning, Division of Engineering, Traffic, and Transportation

**Support:** Bike JC, Hudson County, NJTPA, Special Improvement Districts

#### WHEN?

Implement increased bicycle parking by 2020, and annually moving forward as funding/capacity allows.

#### Action #3: Remove non-conforming bike racks.

Remove any/all existing non-conforming bike racks (wheelbender rack, wave racks, etc.) within the public-right-of-way or within or adjacent to public buildings (schools, government offices etc.) and replace with the recommended bike park parking types included in Chapter 6 of the Let's Ride JC Bikeway Design Guide.

#### HOW?

**Step 1:** Following the completion of the bicycle parking analysis included in recommendation #1, parse out the list of locations and rack types that need to be upgraded and prioritize their replacement.

**Step 2:** Work with various city departments to fund and replace non-conforming bicycle parking on public land (streets, parks, schools, etc.).

#### WHO?

**Lead:** Department of Public Works, Department of Engineering, Traffic, and Transportation

**Support:** Bike JC, Hudson County, NJTPA, Special Improvement Districts, Division of Parks and Forestry, Jersey City Public Schools

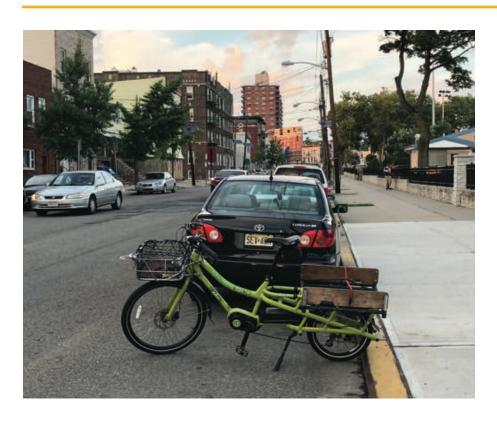
#### WHFN?

Replace all non-conforming bicycle parking by 2022.



#### Action #4: Add more art racks.

Create an easy pathway for interested property or business owners to work with local artists and non-profits to sponsor and add unique artistic bike racks to the city's streetscape. Art racks should reinforce the local identity of local neighborhoods but also conform to the basic performance and design standards outlined in Chapter 6 of the Let's Ride JC Bikeway Design Guide. Schools, parks, civic institutions, and unique arts districts (ex. Powerhouse Arts District) should be considered as priority receiving areas.



#### HOW?

**Step 1:** Gather existing bicycle parking location data and analyze weaknesses in current data sets.

**Step 2:** Develop a data collection plan.

**Step 3:** Execute data collection plan.

**Step 4:** Evaluate results, formulate recommendations, and publish bicycle parking supply map.

#### WHO?

**Lead:** Department of Public Works, Department of Engineering, Traffic, and Transportation

**Support:** Bike JC, Hudson County, NJTPA, Special Improvement Districts. Office of Cultural Affairs

#### WHFN?

Undertake analysis in 2019/2020. Should resources be limited, the initial count/analysis may be conducted by volunteers.

### Action #5: Revise the City's Bicycle Parking Ordinance.

Section 345-70.C of Jersey City's zoning code provides basic performance measures and bicycle parking ratios for various land uses. The ordinance should be updated in a variety of ways to reflect best practice in bicycle parking design, type, location, and ratios.

Developing well-calibrated bicycle parking ratios requires a close analysis of the city's present and anticipated land use, urban form, density, urban design, and bicycle mode share characteristics. Such an effort is outside the scope of this plan, but should be one of the first recommendations delivered after the adoption of this plan and the completion of the bicycle parking analysis included in the recommendation #1. A list of recommended revisions and additions to the bicycle parking ordinance are identified below.

#### **RECOMMENDED REVISIONS + ADDITIONS:**

 Revise Section 345-70.C.1 so that rather than have all standards apply citywide, bicycle parking types, ratios, and performance requirements should be calibrated further to match the city's present and future land use, urban form, density, and urban design, and mode share characteristics. Review at least every five years and update as necessary.

- Revise Section 345-70.C.3 to include different allocations and standards for short and long-term bicycle parking.
- Revise Section 345-70.C.3 to allow multiple uses or adjacent buildings to pool long-term parking requirements into a single common area, enclosure, or facility if located within close proximity of all the buildings it serves.
- Revise Section 345-70.C.3 to make clear that any bicycle parking space that meets the requirements for both short- and long-term bicycle parking may contribute to the minimum requirement for one type or the other, but not both.
- Revise Section 345-70.C.3 so that a property owner who
  cannot meet the requirements for bicycle parking on-site can
  contribute to a dedicated public bicycle parking fund (not just
  a general fund), which would be a new fund established by the
  City. This new fund would finance additional public bicycle
  parking spaces throughout Jersey City where supply/quality is
  not presently sufficient.
- Revise Section 345-70.C.3 to establish long- and short-term bicycle parking ratios for residential buildings as a function of total bedrooms, not units, and add a baseline minimum number of spaces per building for buildings with a total of four or more units.
- Revise Section 345-70.C.3 to increase short- and long-term bicycle parking requirements for Office use; improve supply/ demand accuracy by requiring short-term parking ratios to utilize a square footage calculation while long-term parking ratios should be calculated using the number of current or anticipated employees; and explicitly require a minimum number of spaces provided for each short- and long-term parking category.

- Revise Section 345-70.C.3 to improve short and long-term bicycle parking requirements for retail/restaurant by using 1,000 square foot increments for short-term parking ratios; long-term parking ratios should be calculated using the number of current or anticipated employees; explicitly require a minimum number of spaces provided for each short- and long-term parking category.
- Revise Section 345-70.C.3 so that manufacturing/production, and warehouse uses peg long-term bicycle parking requirements to the number of employees, not the amount of square footage; explicitly require a minimum number of spaces provided for each short- and long-term parking category.
- Revise Section 345-70.C.3 to require short-term Municipal/ Cultural Facilities/Community Facilities to be a function of square footage ratio, while long-term ratios should be tied to the number of employees; explicitly require a minimum number of spaces provided for each category.
- Revise Section 345-70.C.3 to require short-term Office bicycle parking supply to use square footage ratios, and long-term bicycle parking ratios be pegged to the number of employees; explicitly require a minimum number of spaces provided for each category.
- Revise Section 345-70.C.3 to increase the number of long-term bicycle parking spaces required for automobile parking lots/garages; require short-term bicycle parking be provided along the perimeter or within a single ground floor parking space of a parking garage near the entrance/exit, or nearest surface parking lot near the entrance/exit.

- Revise Section 345-70.C.4. to distinguish between short- and long-term bicycle parking types (see Chapter 6 of the Let's Ride JC Bikeway Design Guide).
- Revise Section 345-70.C.4.c.5 to allow property owners to contribute to the proposed Jersey City Bicycle Parking Fund in lieu of providing short-term sidewalk parking, or to replace one on-street parking space with spaces for up to 12 on-street bicycle parking spaces.

#### HOW?

**Step 1:** Following the completion of the bicycle parking analysis included in recommendation #1, identify the above as well as additional changes to the City's bicycle parking ordinance; work to establish the dedicated Jersey City Bicycle Parking Fund.

**Step 2:** Formulate final ordinance change recommendations and submit for approval along with the establishment of the Bicycle Parking Fund.

**Step 3:** Inform and educate property owners/developers/business owners about the ordinance changes.

#### WHO?

**Lead:** Division of City Planning

**Support:** Department of Engineering, Traffic, and Transportation, Bike JC

#### WHEN?

2021.



### INTRODUCTION

The majority of this plan's recommendations are devoted to bikeway infrastructure-related recommendations. However, if Jersey City is to become a leading city for cycling, it must go beyond infrastructure with recommendations that support policy and programmatic advancements in the following five areas:

- 1 Equity
- 2 Evaluation + Planning
- 3 Education
- 4 Encouragement
- 5 Enforcement

This chapter of the plan provides recommendations for actions that fall into one of these five categories. It is important to note that nearly all recommendations in this section will require a collaborative effort between Jersey City's Divisions of Planning, Engineering, Traffic & Transportation, Parking, and other City, county, and state agencies, as well as the City Council, non-profit organizations, local businesses, and residents. Indeed, Engineering, Parking, and Transportation cannot implement these recommendations without support and leadership from a network of strong and willing partners.



While the City should take the lead on implementing these recommendations, many education, encouragement, and enforcement campaigns require regional cooperation. Brochures, and other media messages, for example, may be produced in greater quantities at a lower unit cost and distributed more effectively when done in partnership with neighboring municipalities, regional governmental agencies such as NJTPA, Port Authority, Hudson County, and the New Jersey Department of Transportation, and non-profit organizations like Safe Streets JC and Bike JC.

A total of 29 actions for advancing equity, evaluation and planning, education, encouragement, and enforcement efforts are outlined in the pages that follow. In time, much more could be integrated into Jersey City's efforts to promote bicycling. However, for the foreseeable future, the City's current fiscal and staff resources may limit its ability to do so.

## **EQUITY**



The action items listed below were developed to ensure that all Jersey City residents have safe and equitable access to the city's bikeway network and are not denied full and fair participation in transportation decision-making processes. For the purposes of this plan, and the protection of marginalized and historically and systemically excluded populations, the following nine equity variables have been included within the 12-point Equity Action Plan.

- Race/ethnicity
- Language
- Geographic
- Process/participation
- Physical ability
- Income
- Gender
- Cultural
- Modal

# Action #1: Institutionalize commitment to equity through the adoption of a citywide equity transportation action plan (racial/ethnic/gender equity).

Consider the adoption of a Transportation Equity Action Plan to institutionalize the city's commitment to advancing racial equity through not just cycling but all its transportation programs, processes, and policies. The Transportation Equity Action Plan is 100% consistent with recommendations found within the City's Vision Zero Action Plan, and cements a collective vision of equity that aims to eradicate long-standing institutional and structural barriers to access and mobility for historically and systemically excluded populations due to their race, religion, political or cultural group, age, gender, or financial status.

#### HOW?

- **Step 1:** Create a transportation equity guiding statement.
- **Step 2:** Identify desired results and community outcome indicators.
- **Step 3:** Develop actions to achieve each outcome.
- **Step 4:** Create performance measures for each action and identify a target completion date.
- **Step 5:** Identify the lead position or body that holds the position accountable for the completion of each action.
- **Step 6:** Publish progress report annually, or within a time period agreed upon by the City and the Jersey City Racial Equity Citizen Council. Cross publish relevant findings in the annual Jersey City Cycling Trends report outlined in the Evaluation and Planning Action Plan (recommendation #3/#4 on page 143-144).

#### WHO?

**Lead:** Mayor's Office, Division of Planning, Division of Traffic & Transportation

Support: Jersey City Equity Citizen Council (JCRECC)

#### WHEN?

Beginning in 2020, publish progress report annually, or a time period agreed upon by the City.

#### **SUCCESS METRIC:**

The adoption and implementation of a citywide Racial Equity Action Plan.

# Action #2: Foster more equitable treatment of diverse languages in the public sphere, communications and marketing, and planning processes (language equity)

Nearly half (47%) of Jersey City children age 5-17 are persons with languages other than English spoken at home, whereas the majority of adults age 18+ (54%) are persons who speak a language other than English at home. While Spanish is the second most commonly spoken language at home for children and adults (31.6% and 22.3%, respectively), the other languages spoken at home among adults are a diversity of languages of Indo-European and Asian/Islander origin. [i] Given this language diversity, it is important that all citywide communications and marketing take this into account when directly and indirectly engaging with its residents. Doing so would ensure language equity and remove barriers to obtaining information related to access and mobility (like cycling) for residents who speak languages other than English.

#### HOW?

**Step 1:** Adopt and implement a Language Equity/Access policy for the City.

**Step 2:** Create a list of all primary and secondary languages spoken at home for children and adults.

**Step 3:** Ensure that all newly-created communication media—print media, tv and radio, direct mail and digital/social media—reflects the needs and diversity of City residents and target audiences for plans, projects, and programs, when and where necessary.

**Step 4:** Create language equity goals and performance measures.

**Step 5:** Empower Jersey City office of Communication to oversee completion of and monitor adherence to stated goals.

#### WHO?

**Lead:** Jersey City Office of Communication

#### WHEN?

From 2019 onward, on a project by project basis as well as strategic updates to the City's communication media via print media, tv and radio, direct mail and digital/social media.

#### SUCCESS METRIC:

A measured increase in diversity of languages used in print / digital communications and marketing materials, as well as increases in non-English speaking residents attending and participating in public outreach and engagement events, including for project planning efforts related to cycling and other forms of mobility.

## Action #3: Prioritize street and bikeway investment, and maintenance in Communities of Concern (CoCs) (racial and geographic equity).

The Jersey City Vision Zero Action Plan identified that an overwhelming majority of bicycle fatalities and moderate to severe injuries occur in census tracts classified as Communities of Concern. The majority of the bicycle high-injury network is also located such locations. To improve the safety and mobility for residents in these areas of the city, there should be a strong commitment to the prioritization and distribution of safe street investments in those communities.

#### HOW?

**Step 1:** Reference the identification and prioritization of the City's Communities of Concern, especially the census block groups comprised of the most vulnerable (Priority Communities of Concern) within this Equity Action Plan, as well as the City's Vision Zero Action Plan.

**Step 2:** Identify needed street and bikeway investments within CoC census block groups.

**Step 3:** Prioritize the investments in the highest and 2nd highest priority census block groups (Priority CoCs).

**Step 4:** Monitor annual investments spatially, by mode, (i.e., motorized versus non-motorized travel) within the city, and crash data.

**Step 5:** Publish findings annually in the Jersey City Cycling Trends Report.

#### WHO?

**Lead:** Business Administrator, Engineering Traffic & Transportation

**Support:** Jersey City Department of Housing, Economic Development and Commerce

#### WHEN?

Starting in 2020, carried forward annually.

*SUCCESS METRIC:* Increased investment and maintenance of streets and bikeways in communities of concerns.

# Action #4: Ensure the full and fair participation of low-income and minority communities in the transportation decision-making process (process equity).

Public outreach and engagement are vital to ensuring the transportation system meets and addresses the collective needs and safety concerns of all Jersey City residents. Additionally, Environmental Justice (EJ) Executive Order 12898 demands full and fair participation of low-income and minority populations throughout the entire transportation decision-making process. Given the history of systematically excluding certain populations from fully participating in transportation processes on the basis of their race, religion, and sexual preference, ensuring their full and fair participation is paramount.

#### HOW?

**Step 1:** Map the existing location of low-income and minority populations at the census block group level in the City.

- **Step 2:** Create public involvement plans with strategic actions to engage low-income and minority communities.
- **Step 3:** Host meetings at a time and location that best serves the aforementioned populations.
- **Step 4:** Ensure that all communication media is translated into languages that match the demographics of the target populations (see Action #2 on page 131).
- **Step 5:** Partner with non-profit and community service organizations that frequently interact or provide services to these populations.
- **Step 6:** Listen carefully to the concerns of these populations and ensure that their voices and input are valued, captured, and included in the establishment of new city plans, policies, and programs.

#### WHO?

**Lead:** Jersey City Engineering, Traffic, and Transportation Department, and Division of City Planning

#### WHFN?

Starting in 2019, on a project-by-project basis.

SUCCESS METRIC: Measuring and communicating demographic data, resulting in the increased participation of low-income and minority populations in transportation decision-making processes.

## Action #5: Document and increase mobility and access for the elderly and persons with disability (ability equity).

Jersey City's transportation network presents unique challenges and opportunities for the elderly and persons with disabilities to safely access and move throughout the city whether for leisure, recreation, or commuting purposes. Moreover, these populations are increasingly vulnerable and often times more likely to be victims of traffic violence. Understanding their unique infrastructure needs and potential barriers to safe access and mobility is critical in providing protection and opportunities for viable transportation options.

#### HOW?

- **Step 1:** Map the existing location of the elderly and persons with disabilities at the census block group level.
- **Step 2:** Solicit funding and/or on-call consulting support from the New Jersey Department of Transportation to carry out a senior walkability/cycling audit in the city.
- **Step 3:** Conduct a senior (and persons with disabilities-focused) walkability/cycling audit to identify relevant environmental and infrastructure concerns for these populations.
- **Step 4:** Publish a Senior Walkability/Cycling and Persons with Disabilities report highlighting the findings of the audit as well as a strategic list of recommendations to improve overall mobility.
- **Step 5:** Implement street safety redesigns, cycling or otherwise, with a focus on improving mobility for seniors and persons with disabilities.



Jersey City's transportation network presents unique challenges and opportunities for the elderly and persons with disabilities to safely access and move throughout the city whether for leisure, recreation, or commuting purposes. Moreover, these populations are increasingly vulnerable and often times more likely to be victims of traffic violence. Understanding their unique infrastructure needs and potential barriers to safe access and mobility is critical in providing protection and opportunities for viable transportation options.

#### HOW?

**Step 1:** Map the existing location of the elderly and persons with disabilities at the census block group level.

**Step 2:** Solicit funding and/or on-call consulting support from the New Jersey Department of Transportation to carry out a senior walkability/cycling audit in the city.

**Step 3:** Conduct a senior (and persons with disabilities-focused) walkability/cycling audit to identify relevant environmental and infrastructure concerns for these populations.

**Step 4:** Publish a Senior Walkability/Cycling and Persons with Disabilities report highlighting the findings of the audit as well as a strategic list of recommendations to improve overall mobility.

**Step 5:** Implement street safety redesigns, cycling or otherwise, with a focus on improving mobility for seniors and persons with disabilities.

#### WHO?

**Lead:** Jersey City Engineering, Traffic, and Transportation Department, and Division of City Planning Department of Human Services, Division of Community Development

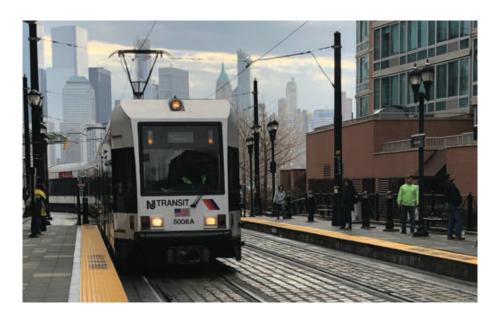
**Support:** New Jersey Department of Transportation

#### WHEN?

Conduct audit as soon as possible, incorporating findings into the detailed design and delivery of street redesign projects.

#### SUCCESS METRICS:

- Reductions in the number and percentage of injuries and deaths of the elderly and persons with disabilities
- Enumeration of specific infrastructure investments catering to the safety, security and mobility of the elderly and persons with disabilities
- Establishment of a Senior Citizen Advisory Council (If not already established)



# Action #6: Evaluate and mitigate the unintended real estate consequences of improved mobility and access on low-income and minority communities (income equity).

Investments in transportation infrastructure can result in unintended outcomes for low-income and minority communities that such infrastructure is intended to serve. This includes displacement and increased police activity and surveillance. It is imperative that changes in the transportation network are evaluated and mitigated to avoid disproportionate impacts on low-income and communities of color when investments in streetscape improvements (like cycling) are made.

#### HOW?

**Step 1:** Review existing zoning, development and redevelopment plans, master plans to identify policies and actions which may increase displacement in areas with populations of low-income and minority groups.

**Step 2:** Develop, support, or encourage community land trusts.

**Step 3:** Adopt or strengthen inclusionary zoning practices as needed.

**Step 4:** Encourage and facilitate equitable community benefit agreements with potential developers and real estate investors.

**Step 5:** Strengthen rental protections for existing tenants in the city.

#### WHO?

**Lead:** Jersey City Department of Housing, Economic Development, and Commerce (HEDC)

Support: Jersey City Division of City Planning

*SUCCESS METRIC:* Establishment of a strategic plan to address before, during- and after-stages of gentrification and displacement.

# Action #7: Engage with women to deepen understanding of any behavior and usage differences to improve overall access and mobility (gender equity).

When it comes to accessing cycling infrastructure, women have unique safety and mobility challenges/needs than men. As such, it is imperative that a deeper understanding of collective needs and challenges be documented and analyzed to better reflect and respond to collective demands for increased cycling access and mobility in Jersey City.

#### HOW?

**Step 1:** Analyze and document the disparities in traffic-related injuries by gender across all modes.

**Step 2:** Host focus groups with and/or administer intercept surveys of women in the city to deepen the city's understanding of behavior and usage differences of women. Disaggregate findings across racial and ethnic groups.

**Step 3:** Require gender parity on City-sponsored committees related to all planning and transportation projects.

#### WHO?

**Lead:** Jersey City Engineering, Traffic, and Transportation Department, and Division of City Planning

#### WHEN?

Begin outreach and focus group convenings in 2020, require gender parity on City committees as soon as possible.



#### SUCCESS METRICS:

- Increase in gender parity within bicycle mode share
- Reduction in the number and percentage of fatalities and injuries among women while bicycling

# Action #8: Engage with foreign-born populations to deepen understanding of behavior and use preferences to improve overall access and mobility (cultural equity).

42% of Jersey City's population is foreign-born, with nearly half of the forty-two percent listing a country in continental Asia (49%) as their place of birth, followed by Latin America (34%), Africa (11%) and Europe (6%).[ii] In order to improve cultural equity among Jersey City foreign-born residents, it is imperative that cultural differences be documented to understand how it impacts a population's perception and understanding of bicycling within the American context.

#### HOW?

**Step 1:** Map the existing location of the foreign-born populations at the census block group level in the City.

**Step 2:** Solicit funding and/or on-call consulting support from the North Jersey Transportation Planning Authority, Sustainable Jersey or New Jersey Department of Transportation to carry out cycling audits in areas with higher concentrations of foreign-born population in the City.

**Step 3:** Conduct cycling audits to identify relevant environmental and infrastructure concerns for these populations.

**Step 4:** Summarize findings in a report, to be included within the annual Jersey City Cycling Trends report, outlining a strategic list of recommendations to improve overall cycling and mobility options.

**Step 5:** Host focus groups with and/or administer intercept surveys in areas with higher concentrations of foreign-born populations in the

city to deepen the City's understanding of behavior, usage, and cultural needs and concerns of foreign-born populations. Disaggregate findings across racial and ethnic groups.

**Step 6:** Use findings to inform street redesign projects.

#### WHO?

**Lead:** Jersey City Engineering, Traffic, and Transportation Department, and Division of City Planning, Department of Health and Human Services

**Support:** Jersey City Department of Health & Human Services, and New Jersey Department of Transportation

#### WHEN?

Undertake cycling audit by 2020; review and utilize findings in all street redesign projects.

#### SUCCESS METRICS:

- Increase cycling mode share amongst all foreign-born populations
- Reductions in the number and percentage of injuries and deaths of foreign-born residents and in locations with higher percentages of foreign-born residents.

## Action #9 Explore possibility of documenting the race/ethnicity of all users involved in traffic stop and accidents.

The race and ethnicity of motorists, bicyclists, and pedestrians remains unknown in the event of a vehicular-pedestrian/bicycle crash or traffic stop; that is, unless the crash results in a fatality. At that point the race and ethnicity of the victim can be determined through the Fatality Analysis Reporting System (FARS), which "is a nationwide census providing NHTSA, Congress and the American public yearly data regarding fatal injuries suffered in motor vehicle traffic crashes." The collection of this data can assist in the allocation and distribution of educational resources and bicycle and roadway infrastructure investments in areas populated with these affected populations.

#### HOW?

**Step 1:** Research and identify other local and national best practice examples of policies and programs aimed at getting city/municipal police departments to collect the race and ethnicity of all users during traffic stops.

**Step 2:** Draft and adopt a municipal policy in support of law enforcement collecting race and ethnicity data during traffic stops.

**Step 3:** Conduct a training with police officers to educate and make them more aware of the new policy.

**Step 4:** Collect data and share findings annually with the public.

#### WHO?

**Lead:** Jersey City Police Department

Support: Jersey City Office of Diversity & Inclusion

#### WHEN?

Starting in 2022, publish results annually.

#### SUCCESS METRICS:

- Racial and Ethnic Database of Traffic Stops and Accidents.
- Reduction in the number and percentage of disparities in traffic stops

Action #10: Partner and collaborate with local non-profit organizations, schools, churches, and community centers to provide bicycles to low-income and minority residents (income equity).

Increasing the number and percentage of people bicycling on Jersey City's streets will help improve the safety and mobility of all bicyclists in the city. Unfortunately, many low-income and minority residents do not own, have access to, or utilize bike share at a rate comparable to their counterparts. National best practices prove that city and non-profit partnerships and collaboration increase the number of bicycles available to low-income and minority residents.

#### HOW?

**Step 1:** Identify the number of non-profit agencies and groups that provide free or reduced cost bicycles to low-income and minority communities. If none, support a mechanism to do so.

**Step 2:** Publish an up-to-date list on the city's website and distribute information through schools, after school programs, libraries, and other city service providers.



#### WHO?

**Lead:** Jersey City Engineering, Traffic, and Transportation Department, and Division of City Planning, Department of Health and Human Services

**Support:** Jersey City Office of Communications, Bike JC

#### WHEN?

Beginning in 2019, distribute relevant information annually at service provider locations, and as encouragement or other education opportunities arise.

#### **SUCCESS METRICS:**

- Public listing of non-profits and agencies providing bicycles to lowincome and minority communities on the city's website
- Establishment of a partnership/collaboration with a non-profit or local bicycle shop that provides free and reduced cost bicycles to low-income and minority residents

# Action #11: Enforce and adhere to Title VI of the civil rights act of 1964 and environmental justice Executive order 12898 (racial/ethnic/Income equity).

Title VI of the 1964 Civil Rights Act demands prohibition against exclusion from participation in, denial of benefits of, and discrimination under federally assisted programs on grounds of race, color, or national origin." Executive Order 12898—Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Population "requires federal agencies to achieve environmental justice by identifying and addressing disproportionately high and adverse human health or environmental effects, including the interrelated social and economic effects of their programs, policies, and activities on minority populations and low-income populations in the United States." Both are critical and foundational in the protection of vulnerable users on Jersey City's streets.

#### HOW?

**Step 1:** Encourage staff to take courses on Title VI and Environmental Justice that are offered by FHWA and FTA.

Step 2: Monitor staff and consultant compliance of Title VI and EJ.

#### WHO?

**Lead:** Jersey City Engineering, Traffic, and Transportation Department, and Division of City Planning

Title VI of the 1964 Civil Rights Act demands prohibition against exclusion from participation in, denial of benefits of, and discrimination under federally assisted programs on grounds of race, color, or national origin." Executive Order 12898—Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Population "requires federal agencies to achieve environmental justice by identifying and addressing disproportionately high and adverse human health or environmental effects, including the interrelated social and economic effects of their programs, policies, and activities on minority populations and low-income populations in the United States." Both are critical and foundational in the protection of vulnerable users on Jersey City's streets.

#### HOW?

**Step 1:** Encourage staff to take courses on Title VI and Environmental Justice that are offered by FHWA and FTA.

Step 2: Monitor staff and consultant compliance of Title VI and EJ.

#### WHO?

**Lead:** Jersey City Engineering, Traffic, and Transportation Department, and Division of City Planning

#### WHFN?

Ongoing in perpetuity from 2020 onward.

#### SUCCESS METRICS:

- Percentage of staff trained in Title VI and EJ
- Periodic documentation of an adherence to Title VI and EJ

### Action #12: Increase investments in bike infrastructure and maintenance (modal equity).

Historically, a disproportionate share of infrastructure investments has gone towards the goal of improving vehicular mobility on Jersey City's streets. However, these investments have not yielded increased mobility and have ultimately stunted the growth of more efficient and economically productive forms of urban transport. Thus, given the growth of cycling across the city and the disproportionate share of bicyclists involved in fatal and serious injuries, it is imperative that additional funds go towards new and improved bikeway infrastructure to improve safe access and equitable mobility for all Jersey City residents.

#### HOW?

**Step 1:** Document annual spending on bike infrastructure and maintenance, disaggregated by each City ward.

**Step 2:** Map investments in bike infrastructure and maintenance across the city, disaggregated by each City ward.

**Step 3:** Evaluate and compare annual expenditure of funds by mode in the city.

**Step 4:** Report findings in annual Jersey City Cycling Trends report.

#### WHO?

**Lead:** Jersey City Engineering, Traffic, and Transportation Department, and Division of City Planning, Business Administrator

#### WHEN?

Starting in 2020, publish results annually.

*SUCCESS METRIC:* Annual increase in investments in new bikeway infrastructure and maintenance in CoCs.



### **EVALUATION**



As Jersey City's first citywide bike master plan, there are a lot of evaluation mechanisms and ongoing planning efforts that will need to be developed and informed by the collection and evaluation of data. Achieving the goals set forth in this plan will require frequent evaluation and ongoing planning to keep the projects and initiatives outlined in the plan responsive to the city's ever-changing political and physical conditions. To that end, these 4 priority recommendations aim to focus resources, identify tangible steps, and clarify how governmental and community partners should be involved.

### Action #1: Ensure adequate staff is provided to carry out bicycle planning and coordination.

Jersey City has the right ingredients to become a great cycling city, but limited staff resources are an impediment to the fast progress residents want and deserve to see. Jersey City should ensure plan to increase city capacity for the planning, implementation, and evaluation of cycling projects. When

When needed, this capacity should be added so that the City's Department of Engineering, Traffic, and Transportation, Division of City Planning, Department of Public works, consultant teams, and community groups such as Safe Streets JC and Bike JC, are able to move projects forward in a timley manner. A key task for the City to take on is the establishment of a best practices data collection program that results in an annual cycling trends summary report (see Action #4).

Finally, expanded capacity will allow for the advancement of demonstration and "Quick Build" pilot / interim design projects, which will speed up the implementation of needed safety projects (see chapter 9 in the Bikeway Design Guide for more information).

#### HOW?

**Step 1:** Determine resources available for hiring bicycle coordinator.

**Step 2:** Develop and publish job description.

**Step 3:** Interview/Hire Bicycle Coordinator.

**Step 4:** Onboard Coordinator.

#### WHO?

**Lead:** Department of Engineering, Traffic + Transportation

**Support:** Mayor's Office, Department of Administration Jersey City Council

#### WHEN?

Potential start date: September 1, 2020

**SUCCESS METRIC:** Bicycle Coordinator hired

### Action #2: Establish screenline bicycle counts at locations citywide.

Use automated counting technology to conduct discrete or continuous counts along key cycling corridors, including tracking cycling rates before and after bikeway improvements are delivered.

#### HOW?

**Step 1:** Determine resources available for establishing automated screenline counts.

**Step 2:** Determine screenline count methodology/technology (if any).

Step 3: Select at least one location in each ward.

**Step 4:** Conduct counts annually (at minimum), following National Bicycle and Pedestrian Documentation Project protocols.

**Step 5:** Evaluate, summarize, and format for publishing in the

Annual Let's Ride JC Cycling Trends report

#### WHO?

Lead: Department of Engineering, Traffic + Transportation

Support: Hudson County, Hudson County TMA, NJTPA, and Bike JC

#### WHEN?

Starting spring 2020, conduct screenline analysis annually (at minimum).

### Action #3: Develop a cycling trends data dashboard.

Data collection must go beyond the U.S. Census' Journey to Work report and existing crash reporting protocols. Beyond citywide screenline counts (see Action 2), establishing a more robust cycling "data dashboard" will help Jersey City focus its data collection efforts and communicate transparently to the public about progress made toward Let's Ride JC Master Plan implementation. Data to be collected may include but is certainly not be limited to:

- Crash location hotspots and fatalities/serious injury trends
- Bicycle mode share trends with focus on Communities of Concern (see Action #2, See Equity Action Plan)
- Annual miles added to the bikeway network (broken down by type, Ward, etc.)
- Miles of bikeway network maintained/upgraded etc.
- Citibike ridership trends and expansion (bike/stations)
- On and off-street bicycle parking supply growth

#### Key tactics for improving data collection:

- Use automated counting technology to conduct discrete or continuous counts along key corridors.
- Partner with advocacy organizations and universities to host manual walk/bike counts for other priority locations without automated counters
- On priority corridors use intercept surveys to measure how people arrive at key commercial or employment destinations. Use the results to inform infrastructure design and space allocation decisions.
- Work with JCPD to improve crash data collection. Then, expand
  efforts to evaluate crash data at problem intersections and create
  site-specific action plans to improve safety quickly with "quick
  build" interim design projects

#### HOW?

**Step 1:** Establish data to be collected, sources/methods, protocols, and schedule.

**Step 2:** Collect data.

**Step 4:** Evaluate, summarize, and visualize data.

**Step 5:** Adjust street design, network investments, enforcement priorities, and education efforts as needed.

#### WHO?

**Lead:** Bicycle Coordinator, Department of Engineering, Traffic, and Transportation, Jersey City Press Office



Support: NJTPA, Bike JC, NJ DOT, and CitiBike

WHEN?

Launch full data dashboard in the winter of 2020

Action #4: Publish Jersey City Cycling Trends biannually, capturing findings from the previous two calendar years.

This concise annual report will openly communicate successes / shortcomings in identified priority areas (lower crashes, less injuries, more people living in communities of concern biking etc.) and help direct priorities in the coming years.

### HOW?

Step 1: Compile all information collected within the data dashboard.

**Step 2:** Draft a concise report with representative graphics, outlining key accomplishments, findings, and year-on-year trends.

**Step 3:** Publish and disseminate annual report.

Step 4: Use findings to adjust priority projects, programs, and policies for coming year(s).

### WHO?

**Lead:** Department of Engineering, Traffic, and Transportation Jersey City Press Office

Support: BikeJC

### WHFN?

Publish every other spring, covering the two previous calendar years.

### Cycling in the City

Female commuter cycling increased more than 2x faster

than male commuter cycling from 2014 to 2017

**Average Annual Growth Rate:** 2014-2017

+3.9% Male

**+9.3%** Female



## **EDUCATION**

Parking Protected Bikeways create safer streets for everyone. New York City's protected bikeway on 9th Avenue led to a

56%
REDUCTION IN
INJURIES TO ALL
STREET USERS,
INCLUDING A

Reduction in injuries to people on bikes

29% Reduction in injuries to people walking

NYCDOT, 2012 - Measuring the Street

Jersey City lacks a measurable bicycle education program tied to specific goals and outcomes. To raise awareness about everything from how to pass a cyclist safely, to how to sign up for CitiBike, to why investing in cycling infrastructure is a benefit for all jersey City residents, Jersey City will need to work across agencies, departments, and jurisdictions, as well as with local non-profits who may help reach a wider cross section of people. The five priority actions outlined below provide key recommendations that build on existing, if not unrelated efforts and seek to take them to the next level through coordination, funding, and measurable actions.

When education campaigns are crafted, great care should be taken to appeal to cyclists and non-cyclists alike. Too often such campaigns unintentionally reinforce the widely held belief that bicycling is, and will always be, a marginal activity reserved for children and athletic, risk-adverse men. By contrast, truly successful efforts position cycling as a normal mode of transportation that does not require expensive bicycles, extreme travel patterns, and/or special equipment or outfits.

Action #1: Develop educational outreach materials for new projects, especially those that introduce designs, policies, or laws not previously applied in Jersey City.

Bike boxes. Protected bike lanes. Crossbikes. Two-stage turn boxes. Bike signals. The Let's Ride JC Master Plan recommends a wide range of bikeway design elements that currently don't exist in Jersey City. Thus, a broader effort to engage bicyclists and the wider traveling public about the rollout of new projects and their design elements and concomitant policies, programs, and traffic laws will be required.

### HOW?

**Step 1:** Develop a list of bikeway / and or street design elements and related policies/laws/programs to be introduced in the first three years of Plan implementation.

**Step 2:** Develop a graphically-driven digital and physical public communication campaign to introduce new projects and all supportive policies/programs/laws. This may include posters/flyers, radio or billboard messaging, website FAQs, demonstration projects, social media campaigns, and in-person outreach at specific locations during special events or other key opportunities to educate the traveling public.

**Step 3:** Develop education campaign goals/metrics.

**Step 4:** Evaluate campaign and impact, publish results in annual Cycling Trends Report.

### WHO?

**Lead:** Department of Engineering, Traffic, and Transportation Jersey City Office of Innovation,

**Support:** Bike JC, Safe Streets JC, Board of Education, Vision Zero Task Force, Hudson County, NJTPA

### WHEN?

Publish annually in February/March covering the previous calendar year.

# Action #2: Share local bicycle information, safety tips, project/event news through official City and partner communication channels.

Periodically convey bicycle-related news, such as the implementation of a new bikeway facility, the installation of a new CitiBike station, reminder of traffic laws, and/or how to access large events without driving via the City's social media and other print communication channels. These efforts may be concentrated during National Bike Month (May) but should be disseminated year round with some measure of consistency so relevant information is provided in a timely manner.

#### HOW?

**Step 1:** Develop an annual cycling education communication plan geared towards all streets users. Identify information to be conveyed, medium(s) in which the information will be communicated (digital, print, radio etc.), and a calendar for when the information will be released.

**Step 2:** From 140 character or less tweets, to city news updates, to radio spots, print flyers and billboards, develop content to be disseminated over the life of the education campaign.

**Step 3:** Execute education communication campaign.

Step 4: Develop campaign goals/metrics.

**Step 5:** Evaluate campaign and impact (number of messages disseminated, number of people reached etc.), publish results in annual Cycling Trends Report.

### WHO?

**Lead:** Department of Engineering, Traffic, and Transportation, Jersey City Press Office

**Support:** Bike JC, Safe Streets JC, Board of Education, Vision Zero Task Force, Hudson County, NJTPA

### WHEN?

Publish annually in February/March covering the previous calendar year.

### Action #3: Support existing and expand Safe Routes to School programs citywide with "street lab" projects co-created with Jersey City students

Hudson County TMA's Safe Routes to School program provides inschool bicycle education and training in Jersey City. Jersey City should continue to support this work, but also bolster the effort through the establishment of a collaborative "street lab" program that aligns Hudson County TMA efforts with the design and co-delivery of quick-build or demonstration projects. This will not only provide on-street experiential education for students, but ultimately educate the traveling public and enhance street safety at schools across the city.

#### HOW?

**Step 1:** Schedule a meeting with Division of Engineering, Traffic, and Transportation, and Transportation, Hudson County TMA

and Jersey City Board of Education representatives to discuss overlaying ongoing the Safe Routes to School classroom efforts with "street labs," the temporary or semi-permanent delivery of infrastructure that may be designed if not co-built by and with students.

**Step 2:** Match priority Vision Zero, Let's Ride JC Master Plan, and/or other relevant projects location with school locations and Safe Routes to School education locations.

**Step 3:** Plan and co-deliver physical projects as learning laboratories for students and surrounding neighborhoods to advance safety and non-motorized access to/from schools.

**Step 4:** Evaluate project impact (number of physical projects, safety data, number of students reached etc.), publish results in annual Cycling Trends Report.

### WHO?

**Lead:** Department of Engineering, Traffic, and Transportation, Jersey City Board of Education, Hudson County TMA

**Support:** Bike JC, Safe Streets JC, Vision Zero Task Force, Hudson County, NJTPA

### WHEN?

As soon as Safe Routes to School funding and curriculum planning allows.

### Action #4: Target drivers with safety information campaigns

Bicycle infrastructure is a relatively new phenomenon on Jersey City's streets. As a result, many professional and citizen-drivers are not well educated how to safely share the road with people walking or cycling. While safety education is important for all street users, people driving are exponentially more capable of inflicting harm on others. Thus, reaching drivers should be the focus of any/all future safety campaigns. Distracted driving is one topic where driver education would be valuable - Jersey City's advocacy organizations and overlapping government agencies should consider rolling out a campaign focused on this topic in April, Distracted Driving Awareness Month, and then carry it forward year-round. As new education campaigns are developed in years to come, it is important that words and images "normalize" cycling, sending the message that riding a bicycle is a transportation option for everyone, even if they don't have special skills or advanced safety equipment.

#### HOW?

**Step 1:** The Division of Engineering, Traffic, and Transportation, and Transportation, workshops with JCPD, Hudson County TMA, NJ DOT, Safe Streets JC, and Bike JC to outline the parameters of a multimedia, and ongoing driver safety campaign.

**Step 2:** Research funding mechanisms for developing and delivering a citywide campaign citywide; ensure campaign is translated to all major languages spoken in Jersey City. SEE EQUITY PLAN #X

**Step 3:** In 2021 launch a Distracted Driving Awareness campaign that is carried forth over the year but refreshed in April of each year.

**Step 4:** Summarize and evaluate campaign impact alongside a wide variety of safety other initiatives (campaign theme, impact on annual safety data, number of of people reached etc.), and then publish results in annual Cycling Trends Report.

### WHO?

**Lead:** Department of Engineering, Traffic, and Transportation, Jersey City Police Department, and Hudson County TMA

**Support:** Bike JC, Safe Streets JC, Vision Zero Task Force, Hudson County, NJTPA, NJ DOT, AARP New Jersey

### WHEN?

Develop campaigning in 2020, launch in 2021.

# Action #5: Develop and implement a five-year funding plan for this bicycle education action plan.

Not all recommendations included in this Action Plan will require spending City funds, but most efforts will include at least the outlay of staff time to support education efforts, attend meetings, apply for relevant grants etc. Regardless, there will be hard and soft costs associated with advancing the full contents of this Bicycle Education Action Plan. To establish predictability, Jersey City should commit to a five year funding plan, with room each year to adjust the funding for priority programs as needed.

### HOW?

**Step 1:** Establish Education Action Plan Work Plan and Priorities.

Step 2: Audit anticipated costs (time, money, materials).

**Step 3:** Request City budget support (where applicable); seek grants and other funding sources as needed and available.

**Step 4:** Spend dollars on specific bicycle education efforts.

### WHO?

**Lead:** Department of Engineering, Traffic, and Transportation, Jersey City Council, Jersey City Board of Education, Hudson County TMA

**Support:** Bike JC, Safe Streets JC, Vision Zero Task Force, Hudson County, NJTPA, NJDOT

### WHEN?

Develop the funding plan in 2019, implement for 2020-2025.

# **ENCOURAGEMENT**



This Encouragement Action PLan is all about finding ways to get more people on bikes more often. In the realm of bikeway planning the goal of encouragement effort should be to reach a broad and diverse constituency of city residents who may not only choose to cycle more frequently, but begin to view cycling as a normal aspect of city life. Offering a range of fun and inclusive programs can provide low-barrier entry points for new or less experienced people.

Fortunately, organizations like Bike JC and the Royal Men Foundation are already providing free, weekly, monthly, and annual rides that are fun, inclusive, and geared towards getting more people on bike more often. These activities provide a solid base from which to launch additional encouragement programs. However, to increase encouragement activities stronger partnerships are needed beyond the local advocacy sector. Educational institutions, local businesses and SIDs, major employers, and partnering government agencies/departments must buy in to community-building value of cycling to help increase programs large and small to get more people cycling. These organizations are typically leaders in creating or sponsoring festive events and activities, and are often well positioned to provide incentives and reduce barriers.

### Action #1: Develop and implement a pilot open streets program.

Open Streets programs temporarily close down city streets so that people may use them for non-motorized social and physical activity. Open Streets programs are now present in more than 130 cities across the country, with hundreds more found around the globe. Open Streets program data reveals financial benefits for local businesses, increased physical activity levels, and strong feeling of community inclusion.

### HOW?

**Step 1:** Establish political and funding support for creating and open streets pilot program.

**Step 2:** Set program pilot goals and develop an open streets brand identity.

**Step 3:** Form partnerships to plan, fund, and execute the pilot program.

**Step 4:** Evaluate the pilot program to uncover learnings for future program iterations.

### WHO?

**Lead:** Bicycle Coordinator, Department of Engineering, Traffic, and Transportation

**Support:** Jersey City Police Department and the Office of Diversity and Inclusion, Bike JC, Safe Streets JC, Vision Zero Task Force, Hudson County TMA, NJTPA, interested healthcare or foundation/funding partners

### WHEN?

Develop the open streets pilot program plan in 2020, implement in 2021.



## Action #2: Create an official Let's RIde JC citywide bikeway map.

As the city's bikeway network continues to be built out, there will be an increased need to provide people with up-to-date information about the location of all on- and off-street bikeways. This map should be available digitally as well as in print and display the network, along with basic traffic safety information, the location of significant destinations (parks, landmarks, transit stations, business districts etc.). Update and re-distribute the map on an annual basis, preferably in conjunction with the release of the annual Jersey City Cycling Trends report. Finally, share all new bikeway segment data with relevant partners (New Jersey Department of Transportation, Hudson County, NJTPA, East Coast Greenway, Harbor Ring Committee etc.) on a regular basis so that they can update regional maps.

### HOW?

**Step 1:** Make use of the base data provided in this bicycle master plan to establish an official existing conditions/bikeway network map.

**Step 2:** Track all projects that include bikeway components and update the map annually.

**Step 3:** Publish and share the map with all local, regional, and state partners.

### WHO?

**Lead:** Bicycle Coordinator, Department of Engineering, Traffic, and Transportation

**Support:** Hudson County TMA, Bike JC, Safe Streets JC, Vision Zero Task Force, Hudson County, NJTPA, NJDOT

### WHEN?

Create the first map for release in 2020, update and publish annually.

### Action #3: Establish annual Bike Month and Bike-to-Work Week activities.

Every year most cities and states designate May as National bike month, which includes a wide variety of programs and events that encourage cycling, including the bike-to-work week challenge whereby companies and departments compete against each other to see who can cycle the most miles. While the City should not be responsible for programming and entire month of activities, it should make an annual proclamation and partner with support other organizations and businesses in carrying out Bike Month and Bike-to-Work Week activities.

### HOW?

**Step 1:** Issue annual Mayoral proclamation promoting Bike Month activities, redoubling commitment to increasing cycling in Jersey City.

**Step 2:** Use Citywide communication channels to promote City and partner organization/business activities.

**Step 3:** Track participation and earned media for inclusion in the annual Jersey City Cycling trends report.

### WHO?

**Lead:** Department of Engineering, Traffic, and Transportation, and the Jersey City Mayor's Office

**Support:** Hudson County TMA, Bike JC, Safe Streets JC, Vision Zero Task Force, Hudson County, NJTPA, NJDOT

### WHEN?

Partner with Bike JC and other organizations to launch the City's first Bike Month in May 2020.

# Action #4: Support targeted events and programs that engage underrepresented groups, such as women and seniors.

Census data continues to show that recent growth in cycling is very heavily weighted towards men. Data from AARP surveys also indicate that a high percentage of people aged 45 and over would bike more often if conditions were better. As street redesign projects in this plan roll out, Jersey City and its partners should focus programming on inspiring underrepresented groups, such as women and seniors, to be leaders in active transportation. Events could include group rides, peer-to-peer encouragement initiatives, workshops, or social network groups.

### HOW?

**Step 1:** Co-sponsor a local bicycle summit to brainstorm events and programs that will encourage underrepresented groups to participate.

**Step 2:** Establish a short-term outreach plan with willing partners and establish new opportunities to engage people.

**Step 3:** Cross-promote rides, events, and social activities that encourage people to cycle more often.

### WHO?

**Lead:** Department of Engineering, Traffic, and Transportation **Support:** Hudson TMA, Bike JC, Safe Streets JC, Vision Zero Task Force, Hudson County TMA, NJTPA, NJDOT, New Jersey Bike Walk Coalition, CitiBike (Lyft), Port Authority, Jersey City Office of Diversity and Inclusion

### WHEN?

Organize local workshop/summit in 2020.

Action #5: Continue working with agency and departmental partners to promote bicycling as part of an overall strategy for community-building and transportation demand management (TDM) services, as well as the implementation of the Vision Zero Action Plan.

Continue to enhance multi-modal transportation programs, events, and activities with various state, regional, and city departments/agencies, as well as local community businesses and organizations.

### HOW?

**Step 1:** Undertake a global scan to identify all current cycling encouragement activities and partners.

**Step 2:** Establish new partnerships as needed.

**Step 3:** Track encouragement activity with all partners and publish in annual Jersey City Cycling Trends report.

### WHO?

**Lead:** Department of Engineering, Traffic, and Transportation **Support:** Hudson County TMA, Bike JC, Safe Streets JC, Vision Zero Task Force, Hudson County TMA, NJTPA, NJDOT, New Jersey Bike Walk Coalition, CitiBike (Lyft), Port Authority

### WHEN?

Ongoing.



## **ENFORCEMENT**



Laws and regulations are essential to establishing rules of the road. However, as laws are established, it is important that police officials know how to enforce and apply them in an equitable manner (see the Equity Action Plan Recommendations #4, #9, and #11 for more details).

Communities that excel in the area of enforcement typically have law enforcement officials that regularly walk and bike as part of their duties. They also have structures in place to create strong relationships between advocacy groups, community organizations, neighborhood leaders, and fellow law enforcement officials. The following three recommendations build from the Equity Action Plan recommendations related to enforcement, and seek to ensure that measures created for regulating the use of roads makes transport safe for all modes, and for all types of roadway users.

# Action #1: Revise crash reporting protocol to collect more robust data for crashes involving people walking or biking.

Crash reports are typically entered by a police officer into a crash report template created by the State. The templates include space for written descriptions as well as diagrams and coded information to describe what occurred. As the number of people traveling to work by alternative modes increases nationwide, states and cities are looking more closely at crash reporting protocols. The information requested on most crash report templates across the country focuses on motor vehicle crashes, with very limited opportunities to provide details of crashes involving a person walking or biking. Jersey City should work with State and local officials to spearhead amendments to data collection protocols. Additional variables that merit consideration on a crash data template include: type of bicycle environment (presence of and/or type of bike facility on the street), more nuanced detail on potential car and bike impact points (including open doors, side mirrors, etc.), turn/impact patterns, and vehicle type details (sedan, pick-up truck, commercial truck, bus, etc.), and whether or not the driver was using an electronic device/cell phone when the crash occurred. Training regarding the use of updated protocols should include best practices for unbiased data collection and crash investigation.

### HOW?

**Step 1:** Identify current gaps in crash reporting, and evaluate existing data collection protocols.

**Step 2:** Prioritize new variables to include in data collection based on gaps in existing protocol.

**Step 3:** Adopt and implement new crash data template.

### WHO?

**Lead:** Jersey City Police Department,

**Support:** Bicycle Coordinator, Department of Engineering, Traffic, and Transportation

### WHEN?

Evaluate existing protocol in 2019, execute revised protocol in 2020.

### Action #2: Revise traffic laws to allow the 'Idaho Stop Law'.

The Idaho Stop Law allows cyclists to treat stop signs like yield signs, and red lights like stop signs, legalizing the maintenance of a cyclist's momentum as they cautiously approach intersections and other points of potential conflict with motor vehicles. Since this was (first) enacted in Idaho in 1982, cyclist injuries decreased approximately 14%. Other states have adopted versions of the law, but no other state has fully followed suit. The law does not legalize unsafe cycling, like not yielding to pedestrians or proceeding wrecklessly through intersections, but rather further legitimizes cycling as a safe, viable, and efficient form of transportation. Once the law is included, an education campaign should follow to ensure that all roadway users acknowledge that the cyclist behavior allowed under the law is permitted, and not meant to endanger other users.

### HOW?

**Step 1:** Convene State and local representatives to devise an amendment to the current traffic laws that would include a local version of the Idaho Stop Law.

**Step 2:** Amendment is approved and adopted by the state.

**Step 3:** State and local jurisdictions execute education campaign regarding the changes to the traffic laws.

### WHO?

**Lead:** NJDOT, Department of Engineering, Traffic + Transportation, Law Department

**Support:** Jersey City Office of the Mayor, BikeJC

### WHEN?

Devise proposal for amendment in 2019. to be proposed in 2020.

### Action #3: Reduce bike theft.

As evidenced in Chapter 2, the threat of bike theft and the lack of adequate and safe places to lock up a bike are substantial deterrents for those in Jersey City wishing to cycle more. A combination of infrastructural and enforcement measures can be taken to reduce this threat. See Chapter 3's Bicycle Parking Plan for recommendations on how to best streamline and provide for better bicycle parking. Additional measures, like more policing and making the crime of bike theft a more serious offense, could help further discourage it from happening, and make cyclists more comfortable that their bike will be safe when they arrive at their destination.

#### HOW?

**Step 1:** Analyze recent incidences of bike theft for opportunities to reduce their frequency, identifying locations and conditions of higher incidents.

**Step 2:** Increase regular policing at "hot spot" locations, with the

idea to sustainably expand the policing model to cover more of the city on a regular basis.

**Step 3:** Elevate the severity of the penalty for bike theft.

**Step 4:** Combine policing efforts and improvements to bicycle parking facilities with police department neighborhood watch programs.

### WHO?

Lead: Jersey City Police Department, Division of City Planning

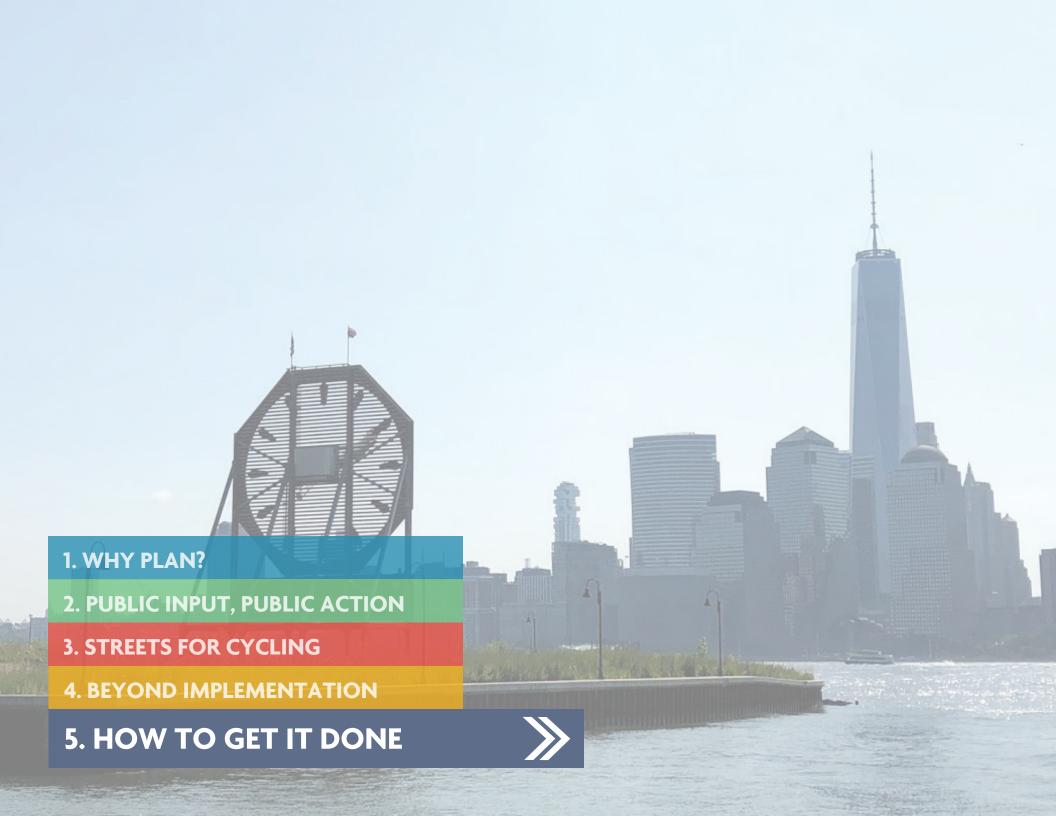
**Support:** Bicycle Coordinator, Department of Engineering, Traffic, and Transportation

### WHEN?

2021.







# HOW TO GET IT DONE

We have a bike plan, now what?! For this plan to become a reality, prioritizing a "minimum grid" network for implementation, committing to increased/ sustained funding, building staff capacity, focusing on maintenance, and never losing sight of the City's overall Vision Zero goals will all be essential for long-term success.

This short chapter introduces the project priority matrix tool and the results of applying it to the Bikeway Network Plan; explores a variety of local and state funding strategies; and concludes with three key strategies for rapidly building the Let's Ride JC Bikeway Network. At the time of writing, implementation was already well underway on a number of priority protected bikeway network segments, even before this plan was formally adopted. Go JC, go!

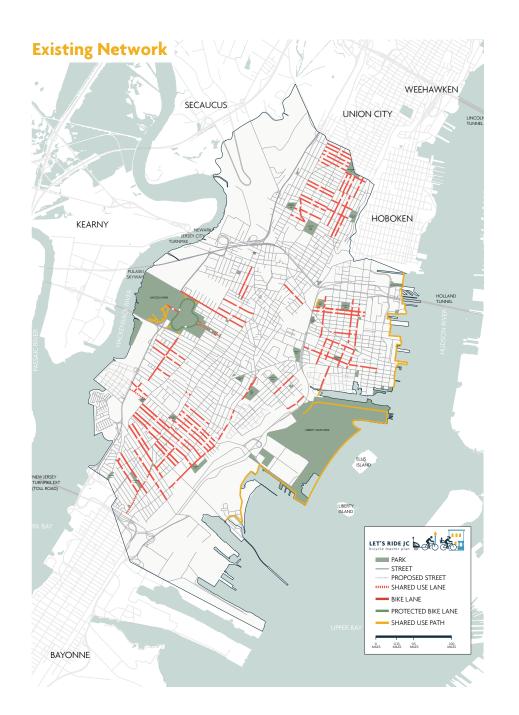


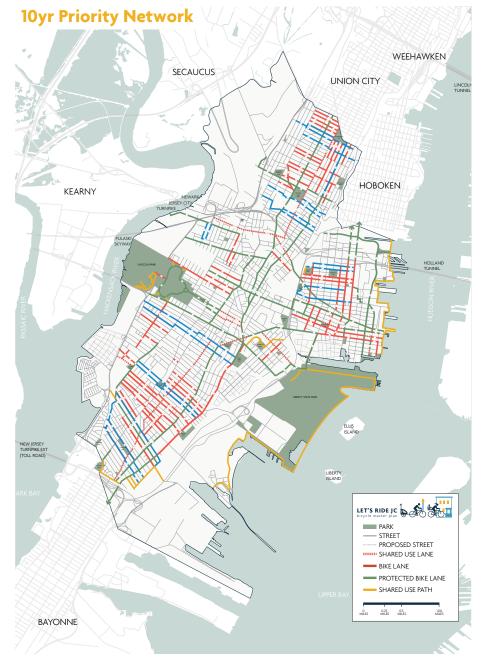
# PRIORITY NETWORK PLAN

The Let's Ride JC Prioritization Matrix uses the below 12 criteria to determine what links in the network should be considered a priority for implementation. Some criteria, such as "Improves Safey," require professional judgement and should be based on specific project elements proven to reduce traffic speed and/or reduce crash frequency/severity.

### **PROJECT PRIORITIZATION MATRIX**

| ,   |   |      |  |  |  |
|---|---|------|--|--|--|
| Summit Avenue (Between X and Y) Point             |   |      |  |  |  |
| 1. Improves Safety*                               | Major improvement = 3   |      |  |  |  |
| *n  | Significant improvement = 2   |      |  |  |  |
| *Project reduces known                            | Modest improvement = 1  |      |  |  |  |
| 2. Provides Safe Routes to School                 | Bikeway passes by a school entrance = 3   |      |  |  |  |
|   | Bikeway is located on side street of school entrance = 2  |      |  |  |  |
|   | Bikeway is one block from school entrance = 1   |      |  |  |  |
| 3. Community of Concern                           | Bikeway links more than 3 priority communities of concern = 3   |      |  |  |  |
|   | Bikeway links more than 1 communities of concern = 2  |      |  |  |  |
|   | Bikeway links one priority community of concern = 1   |      |  |  |  |
| 4. High Injury Network (HIN) Segment              | Provides all ages and abilities facility along a HIN segment = 3  |      |  |  |  |
|   | Provides an improved cycling facility along a HIN segment = 2   |      |  |  |  |
|   | Provides a safe crossing over a HIN segment = 1   |      |  |  |  |
| 5."Completes" the Street                          | "Completing the street:" provides significant bike, pedestrian, and/or transit enhancements = 3                             |      |  |  |  |
|   | "Completing the street:" provides moderate bike, pedestrian, and/or transit enhancements = 2                                |      |  |  |  |
|   | "Completing the street:" provides minor bikeway, pedestrian, and/or transit enhancements = 1                                |      |  |  |  |
| 6. Motor Vehicle Traffic Impact                   | Little to no anticipated impact = 2   |      |  |  |  |
|   | Some perceived but still manageable impact (e.g. longer queues) = 1   |      |  |  |  |
| 7. Increased Connectivity                         | Intersects with more than 8 bikeways = 3  |      |  |  |  |
|   | Intersects with more than 4 bikeways = 2  |      |  |  |  |
|   | Intersects with more than 2 bikeways = 1  |      |  |  |  |
| 8. Access to Transit                              | Direct connects with a rail transit and more than one bus stop = 3  |      |  |  |  |
|   | Directly connects to a rail transit stop = 2  |      |  |  |  |
|   | Directly connects with more than one bus stop= 1  |      |  |  |  |
| 9. Public Input                                   | Identified by the public as a desirable future facility multiple times = 2  |      |  |  |  |
|   | Identified by the public as a desirable future facility once = 1  |      |  |  |  |
| 10. Ease of Implementation                        | Exclusively in the public right-of-way with few cost complications or changes to traffic patterns = 2                       |      |  |  |  |
|   | Some modifications to curbs/traffic lanes required, use of private property and/or modest engineering challenges = 1        |      |  |  |  |
|   | ROW negotiations/acquisition and sidewalks along multiple private properties required; signigicant engineering required = 0 |      |  |  |  |
| 11. Order-of-Magnitude Cost                       | 3 = < \$100,000 2 = < \$250,000 1 = < \$500,000   |      |  |  |  |
| 12. Urban Design Appeal /<br>Green Infrastructure | 'Gotta Have It! = 2 Desirable = 1 Ho-Hum= 0   |      |  |  |  |
| Point Total                                       |   | X/32 |  |  |  |





## PRIORITY MATRIX RESULTS

| Phase 1 Priority Projects              | Ward(s)     | Score | Length     | Bikeway Type(s)   |
|--|-------------|-------|------------|---|
| 1. Summit Avenue                       | C, D, F     | 25    | 3.2 miles  | Protected Bike Lane   |
| 2. Ocean Avenue                        | A, F        | 24    | 2.2 miles  | Protected Bike Lane   |
| 3. Bergen Avenue                       | B, C, F     | 24    | 1.1 miles  | Protected Bike Lanes  |
| 4. Montgomery Street                   | B, C , F, E | 23    | 2.0 miles  | Protected Bike Lanes / Conventional Bike Lanes / Super Sharrows |
| 5. Christopher Columbus Drive          | E, F        | 23    | 1.17 miles | Protected Bike Lanes  |
| 6. Newark Avenue                       | B, C, E     | 23    | 2.18 miles | Protected Bike Lanes / Super Sharrows + Traffic-Calming         |
| 7. Congress Avenue                     | D           | 23    | .71 miles  | Super Sharrows + Traffic-Calming                                |
| 8. West Side Avenue                    | A, B        | 22    | .91 miles  | Protected Bike Lanes  |
| 9. Communipaw Avenue                   | B, F        | 22    | 2.2 miles  | Protected Bike Lanes  |
| 10. Central Avenue                     | C, D        | 22    | 1.6 miles  | Super Sharrows + Traffic-Calming                                |
| 11. Brunswick Avenue                   | F           | 22    | .2 miles   | Protected Bike Lanes  |
| 12. Grand Street                       | E, F        | 22    | 2.15 miles | Protected Bike Lanes / Conventional Bike Lanes / Super Sharrows |
| 13. MLK Drive                          | A, F        | 22    | 1.52 miles | Super Sharrows + Traffic-Calming                                |
| 14. Garfield Avenue                    | A, F        | 21    | 1.85 miles | Protected Bike Lane / Conventional Bike Lane                    |
| 15. Washington Boulevard / 18th Street | E           | 21    | 2.15 miles | Protected Bike Lanes  |
| 16. Morris Canal Greenway Segment 3    | А           | 21    | .96 miles  | Shared Use Path / On-Street Bikeway                             |
| 17. Marin Boulevard                    | Е           | 21    | 1.47 miles | Protected Bike Lanes / Conventional Bike Lanes                  |
| 18. Morris Canal Greenway Segment 5    | А           | 20    | 1.16 miles | On-Street Bikeways  |
| 19. Sip Avenue                         | В, С        | 20    | 1.1 miles  | Protected Bike Lanes  |
| 20. Franklin Street / Manhattan Avenue | D           | 20    | 1.25 miles | Protected Bike Lanes  |

| 21. Wegman Parkway / Audobon Avenue              | A, F    | 20 | 1.05 miles | Neighborhood Greenway   |
|--|---------|----|------------|---|
| 22. Stegman Street / Stegman Parkway             | A, F    | 20 | 1.07 miles | Neighborhood Greenway / Protected Bike Lane                     |
| 23. Clandenny Avenue / Bramhall Street           | B, F    | 19 | 1.4 miles  | Neighborhood Greenway   |
| 24. Belmont Avenue / Gifford Avenue              | B, F    | 19 | .95 miles  | Protected Bike Lanes / Super Sharrows + Traffic-Calming         |
| 25. Baldwin Avenue / Webster Avenue              | C, D, F | 19 | 2.46 miles | Protected Bike Lane / Neighborhood Greenway                     |
| 26. Laidlaw Avenue /                             | С       | 19 | .89 miles  | Neighborhood Greenway / Protected Bike Lane                     |
| 27. North Street                                 | D       | 19 | .6 miles   | Neighborhood Greenway   |
| 28. Greene Street                                | Е       | 19 | .68 miles  | Protected Bike Lanes / Conventional Bike Lanes / Super Sharrows |
| 29. Danforth Avenue                              | F       | 18 | 1 mile     | Protected Bike Lanes  |
| 30. Broadway                                     | В, С    | 18 | .57 miles  | Protected Bike Lanes  |
| 31. Grove Street                                 | Е       | 18 | .68 miles  | Protected Bike Lanes / Conventional Bike Lanes                  |
| 32. Brunswick Avenue                             | F       | 18 | .5 miles   | Protected Bike Lanes  |
| 33. Johnston Avenue                              | F       | 18 | .55 miles  | Super Sharrows + Traffic-Calming                                |
| 34.Bartholdi Avenue / Pearsall Avenue            | А       | 17 | .9 miles   | Neighborhood Greenway   |
| 35. Cator Avenue                                 | А       | 17 | 1.03 miles | Neighborhood Greenway   |
| 36. Jefferson Avenue                             | С       | 17 | .48 miles  | Neighborhood Greenway   |
| 37. Booraem Street                               | С       | 17 | .32 miles  | Neighborhood Greenway   |
| 38. 2nd Street                                   | Е       | 17 | .7 miles   | Neighborhood Greenway   |
| 39. Jersey Avenue                                | Е       | 17 | .49 miles  | Protected Bike Lanes  |
| 40. 10th Street                                  | Е       | 16 | .57 miles  | Neighborhood Greenway   |
| 41. 9th Street                                   | Е       | 16 | .5 miles   | Neighborhood Greenway   |
| 42. Morris Canal Greenway Segment 4              | А       | 15 | .15 miles  | Shared Use Path   |
| 43. Morris Canal Greenway Segment 10             | F       | 15 | .36 miles  | Shared Use Path / On-Stret Bikeway                              |
| 44. Lake Street / Troy Street / Reservoir Avenue | C, D    | 15 | .8 miles   | Neighborhood Greenway   |
| 45. Williams Avenue / Union Street               | B, F    | 15 | 1.38 miles | Neighborhood Greenway   |
| 46. Morris Canal Greenway Segment 10             | F       | 14 | .32 miles  | Shared Use Path / On-Street Bikeway                             |
| 47. Neptune Avenue                               | А       | 14 | .66 miles  | Neighborhood Greenway   |
| 48. Irving Street                                | D       | 14 | .38 miles  | Neighborhood Greenway   |
| 49. Dales Avenue / Wallis Avenue                 | В       | 13 | .57 miles  | Neighborhood Greenway   |
| 50. 5th Street                                   | E       | 12 | .5 miles   | Neighborhood Greenway   |

# **FUNDING OPPORTUNITIES**

While budgets change from year to year, the City's latest capital budget allocated \$600,000 per year for the creation of new bike lanes. This Plan recommends tripling that number, while also increasing staff and/or consulting capacity to ensure that the 10-year Priority Network Plan is achieved. This section outlines a number of available strategies and funding sources that can be used to augment the city's dedicated bike infrastructure fund.

Jersey City currently spends a small fraction of its available capital budget on bikeway infrastructure. However, the amount specified above does not include numerous other local, regional, state, or federal sources that can be used to increase funding for bikeways, nor does it include money allocated for larger infrastructure projects that may include a bikeway component.

Many of the priority projects recommended in this plan already have already received funding for improvements that include bike infrastrucucture, namely protected bike lanes. This includes key segments of Grand Street, Montgomery Street, Washington Boulevard, and Christopher Columbus Drive. Other major projects, such as the construction of the Morris Canal Greenway have also been funded with regional grants, which will result in five new segments of the shared use path. Unlike this transformative piece of infrastructure, the majority of the priority projects identified in this plan require relatively low-cost changes to City streets that may be incorporated into ongoing projects and maintenance/resurfacing activities with little additional cost. However, implementing this plan will require a shift in focus and emphasis to increase funding allocated for projects that include bike infrastructure. While Jersey City's most recent capital plan allocates \$600,000 solely for bike lanes, additional strategies and funding will be needed to ensure the priority network is built in 10 years time (or less) and that non-infrastructure programs are developed and sustained over time.

### Strategies to pay for plan recommendations

There are a many ways Jersey City can pay for the implementation of this plan. For a more complete list of available funding programs, head over to FHWA, NJ DOT, NJTPA websites. Or, visit the New Jersey Bicycle & Pedestrian Resource Center, which outlines 16 state and federal funding sources that can be spent on bikeway infrastrcuture.

Beyond formal funding programs, we've provided a short list of 5 strategies to consider while pursuing the implementation of this plan.

### 1. Allocate More Capital Funding to Bikeway Projects

Every year, the city allocates millions of dollars to capital street projects, which are further supported by regional, local, and even federal grants. The City's currently capital plan includes \$600,000/year for bikeways. This provides an important foundation but to achieve the goals outlined in this plan, the City budget will have to reflect an increased committment to physical infrastructure so that the priority network and all of the safety, mode share, and equity goals outlined in this plan can be achieved in a reasonable timeframe.

### 2. Dedicate a larger share of local paving funds to bicycle projects

Every year, Jersey City allocates resourceds for paving of local streets. Bikeway

projects are an eligible use of these funds, and currently the City does not require a percentage of of the resources be spent on bikeways. To start, the city could allocate 3.2% of this budget to be aligned with the this plan's priority mode share goals.

### 3. Bundle funds from a variety of sources (whenever possible)

Because many of the projects in this plan have benefits that extend well beyond cycling (such as green infrastructure, enhancing walkability, improving access to transit, and overall street safety for all users), there will be opportunities to leverage funding for projects by bundling funding from several sources. Examples include stormwater projects as part of a greenway; or park funding for projects that enhance the bike path connections. Whatever the source, get creative and look for overlapping wins across municipal departments, plans, policies, and goals.

### 4. Use Federal Funding (judiciously)

Numerous pots of federal funding is available for cyling projects. Some of these are available through competitive grants from NJDOT/NJTPA, as well as directly from the FHWA for very large projects. Because of the lengthy and sometimes laborious process that needs to be followed with federal funding, it is best used for high cost projects, transformative projects that have no other way of getting funded.

### 5. Partnerships

Whether it's partnering with private development projects to improve bike infrastructure (bikeways, bike parking etc.), or working closely with local community non-profit organizations to encourage, educate, and even build demonstration projects, a wide variety of partnerships will translate into speeding up the implementation of this plan. A great place to start is by mapping the partnership eco-system and identifying what projects or initiatives can be aligned with this plan.

### **Recent Funding Sources**

Over the past four years ersey City received over \$18 million dollars for street safety/upgrade projects. A number of these proejcts include major bike network components.

The below list outlines the source, project, and amount of funding received from each source.

### NJTPA Local Safety Program 2015-16:

- Montgomery Street/Dr. MLK Boulevard intersection improvements (\$1.6 million)
- Communipaw Avenue intersection improvements (\$817,400)

### NJTPA Local Safety Program 2016-17:

- Marin Boulevard Safety Improvements (\$885,838)
- Intersection Improvements at Oakland Avenue and St. Pauls Avenue (\$288,524)

### NJTPA Local Safety Program 2017-18:

- West Side Avenue Pedestrian Safety Improvements, \$3.8 million
- Sip Avenue Pedestrian Safety Improvements, \$2.6 million

### NJTPA Congressional Earmark Repurposing 2016

Johnston Avenue Roadway Improvements (\$1.3 million)

### NJTPA Regional Transportation Alternatives Program 2017

• Morris Canal Greenway segments 3,5,10, and 11 (\$3.5 million)

### NJDOT Transit Village Program 2017

• Sidewalk and Intersection improvements at Pavonia, Sip, Summit Avenues (\$220,000)

### NJDOT Transportation Alternatives Program 2018

• Johnston Avenue Safety Improvements (\$1 million)

### NJDOT Municipal Aid 2018

• Washington Boulevard and Central Avenue (\$2.2 million)

## **BUILDING THE NETWORK**

### Strategies to build the network

While allocating City funds and pursuing external grants are both critical for building out the bike network, a change in the City's street design approach must also continue.

### 1. Quick-Build Implementation

To make the plan a reality, we need to move a lot faster to get projects on the ground. Greater reliance on phased or "rapid implementation" solutions using less expensive materials can be effective and efficient, and provide for a more adaptable transportation network. This will not only bring substantial transportation benefits sooner, but allow for reconsideration and adaptation as transportation patterns continue to shift in the coming decade. While funding for cycling projects is dedicated to projects already in development, rapid implementation using lower cost materials and pavement marking may become this plan's primary implementation tool. Indeedm many of the 10-Year Priority Network Plan recommendations can be done initially using lower cost approaches such as lane reassignment and establishing protected bike lanes with interim and adjustable barrier elements.

Communities across the country are using rapid implementation techniques to quickly build out their bicycle networks and crossing improvements — sometimes leaving low-cost materials in place for several years until there is an opportunity to upgrade to more robust facilities. The advantage of this approach is that the City can learn from the interim design and engage public input based on the user's experience with the infrastructure, taking this input into consideration as funding is acquired for the more permanent infrastructure.

Rapid Implementation also means getting started now with planning and design for challenging but important projects. The good news is that this approach is already underway: this master planning process outlines 50 priority projects, several of which are already funded and moving through the design phase towards implementation.

### 2. A Holistic Approach to Street Reconstruction

While many of the projects in this plan can be implemented with lower cost, quicker techniques, some City streets will be reconstructed each year to address a multitude of needs: underground utility repair or replacement, stormwater infrastructure, structural instability, and more. With this plan, it will be easier to coordinate reconstruction projects so that when streets are dug up, they get put back together with any bikeway infrastructure proposed in this plan. This holistic approach to street reconstruction also will allow the leveraging of a variety of funding sources that can be combined to build complete street projects. However, in some instances waiting for these big projects may not be a option; targeting streets that will see reconstruction with interim design or pilots is an intelligent way to best understand what should be designed, even if reconstruction is more than a year away.

### 3. Make sure the people power needed is in place

We need more than just funding to build this infrastructure. We also need people who have the time and resources to coordinate the planning, designing, construction and maintenance of the resulting network. This means hiring additional staff who are primarily focused on the implementation of safety projects on the ground.

Maintaining this enhanced network will also require investing in the right fleet of equipment and training operators on how to best maintain protected bike lanes and other types of safety infrastructure that the City doesn't currently have in place.

### You can do this!

Let's Ride JC is an ambitious plan, but with consistent funding, political support at all levels of city government, and staff available to do the work, it will get done. The end result will be a modernized, attractive and safe street network that offers city residents and workers a higher quality of life by providing real choices in how they get around. This is a future worth investing in!



