Report of the

Jersey City Bike Infrastructure Working Group

EXECUTIVE SUMMARY

The Bike Infrastructure Working Group makes the following recommendations:

Bike Lanes and Sharrows

• Install a basic network of striped bike lanes and sharrows on city streets to interconnect neighborhoods, major destinations and mass transit stations. The network has been evaluated by the Jersey City Division of Engineering, Traffic and Transportation. The street segments that constitute the network are listed in Appendix B and mapped in Appendix C.

Bike Riding Ordinances

• Update the City's bike riding ordinances to become consistent with state law for riding in the street, and establish new rules pertaining to passenger safety, riding on sidewalks, and riding in bike lanes.

Bike Parking

- Increase bike parking to meet demand at public transit nodes, shopping centers, schools, office buildings and major institutions, using a variety of proven bike parking solutions.
- Pursue grants to install bike racks on public property, and encourage private entities on large lots to install bike racks for shoppers, students, employees and visitors.

Bike Share

• Hudson County has submitted a grant application to NJ DOT for \$540,000 for the first phase of a bike share program that would include Hoboken and downtown Jersey City.

Bike Safety Education and Enforcement

• Continue and expand the bike safety education and enforcement campaign that was launched in April 2012.

Communications Plan

- Roll out the bike infrastructure implementation plan (Ordinances, lanes, parking, safety campaign, etc.) with a press event.
- Develop a FAQ to post on city website on why bike lanes are good for Jersey City.

ACKNOWLEDGMENTS

The bike infrastructure working group was established on May 16, 2012 and chaired by Doug Greenfeld, AICP/PP. The following individuals, who are listed in alphabetical order, contributed to the working group effort:

Bob Cotter, FAICP/PP, Planning Director Zahire Estrella, Esq., Law Department Ivan Freire, Mayor's Office Doug Greenfeld, AICP/PP, Mayor's Office Lee Klein, PE, PTOE, Assistant City Engineer Chuck Lee, PE, City Engineer Jennifer Morrill, Mayor's Press Secretary Raj Mukherji, Deputy Mayor Andres Palmiter, BikeJC Kristin Russell, AICP/PP, City Planning Division Ian Sachs, PE, Hoboken Director of Transportation and Parking Matt Ward, BikeJC Jeff Wenger, AICP, City Planning Division

INTRODUCTION

Why formed / Mission

The bike infrastructure working group was convened to study and make recommendations pertaining to municipal bike infrastructure – including on-street bike accommodations, bike parking, bike share, and bike safety. It was charged with submitting a report on the next steps with respect to implementation of bike infrastructure, including the following: identification of specific streets, design standards for on street markings, budgets, priorities, schedules, and a public communications strategy. The working group was also charged with establishing bike rack standards and preparing updates to city ordinances for consideration by the municipal council.

Demand for Cycling Infrastructure

Demand for cycling infrastructure is growing nationwide and locally. The numbers of bikes parked daily at PATH stations has grown visibly over the last couple of years.

Bikes are more visibly more present now on city streets throughout Jersey City than they have ever been. Many new residents view bike infrastructure not only as an important amenity, but also as an indicator of a vibrant and desirable place to live.

BIKE LANES AND SHARROWS

It is recommended that the city install a basic network of striped bike lanes and sharrows.

Striped bike lanes are recommended within the network where street width permits. Bike lanes are a good way of designating space for cyclists to ride that otherwise does not exist. Prior to the installation of bike lanes on Grove Street, there was a very wide travel lane. Some drivers stayed in the middle, some to the right and some to the left. The bike lane delineates the space within which motor vehicles must travel, and leaves space for cyclists. Bike lanes also tell drivers getting out of parked cars to watch for bikes when opening car doors.

However, many of Jersey City's streets are not wide enough for bike lanes, or are wide enough for lanes only in certain sections. Sharrows (pictured below) are double chevrons marked on the street, and can be used in conjunction with, or in lieu of, bike lanes. Sharrows are often used in conjunction with a bike symbol stencil. Sharrows are very useful in connecting segments of striped bike lanes when the road narrows. Although they do not create a designated space for cyclists, sharrows are effective in trailblazing the route for cyclists, and for alerting drivers to the likely presence of bikes, and for alerting cyclists to share the road with cars. Sharrows are recommended within the network where the street is too narrow to support bike lanes.

Striped lanes and sharrows will also provide clear trailblazing designation of the preferred routes for cyclists that bike route signage alone does not. This trailblazing will divert some cyclists away from streets that are less desirable for bicycle usage.



Frequently spaced sharrows on narrow Thompson Street in Manhattan



Green backed sharrows through an intersection in San Francisco. Source: http://sf.streetsblog.org/2012/05/10/green-backed-sharrows-pleasantlysurprise-riders-on-the-wiggle/

Identification of Streets for Bike Lanes

The Bike Lanes Committee identified and prioritized streets for bike lanes and sharrows. Streets were selected for analysis based on the need to connect neighborhoods as well as major destinations such as transit hubs, employment centers, and parks. Streets were evaluated based on the criteria below. Initial field work eliminated certain streets due to observed traffic volumes and measured cartway widths.

Guiding principles that were used for Identification of streets for bike lanes:

- 1) Opportunity: Existing cartway width is sufficient to accommodate a striped bike lane for most of the length of the street segment without eliminating vehicular travel lanes or parking lanes (Striped lanes are preferred over sharrows. Use sharrows primarily for shorter connections between longer sections of striped bike lanes)
- Fulfill one or more goals or objectives of the circulation element of the master plan (e.g. improve connectivity between neighborhoods for cyclists, create a safe and secure bicycling environment)
- 3) Segment usage
 - a) Supports linkages between multiple origins and destinations (such as a neighborhood spine)
 - b) Supports multiple types of trip purposes (i.e. both transportation and recreational usage)
 - c) Provides access to PATH or HBLR station.
- 4) Critical link between other bike lane network components and major destinations

The Jersey City Division of Engineering, Traffic and Transportation measured cartways, and evaluated each street segment to determine if it would support a striped bike lane or sharrows. The results of the engineering evaluation are contained in Appendix B and mapped by the Division of City Planning in Appendix C.

Prioritization

The bike lanes and sharrows network has been mapped and prioritized. A **Table of Priorities for Bike Lanes and Sharrows** is provided in Appendix B starting on page 18 of this report. Higher priority was given to streets where the need for bike infrastructure is greatest and where there will be the biggest positive impact. The number of streets that are improved is dependent upon cost and funding availability. It is recommended that the City pursue a 2012 NJ DOT bikeways grant for bike lanes and sharrows. It is anticipated that NJ DOT will view such an application by the City of Jersey City very favorably. The grant deadline is October 15.

The committee also recommends that bike lane striping and sharrows for streets that are planned for bike lanes be included in the city's repaying contracts in order to reduce the cost of implementation. If a bike lane or sharrows street is slated for repaying, then the opportunity should be seized to include the installation of bike lanes and sharrows in the repaying contract regardless of the committee's

prioritization of the particular street. Also, streets slated for repaving that are not included in the committee's bike lane network should be evaluated at the time of preparing for repaving to determine if the street would be a logical addition to the bike lane and sharrows network.

BIKE RIDING ORDINANCES

It is recommended to amend the city's current ordinances as they pertain to bicycle riding in Jersey City. A proposed ordinance has been drafted by the Ordinance Committee of the Bicycle Infrastructure Working Group. The Ordinance Committee was comprised of representatives of the city's Law Department, Mayor's Office, City Planning Division and BikeJC.

The proposed ordinance makes the following changes:

- Adds consistency with NJ state law pertaining to bicycle riding on streets.
- Adds bicycle passenger safety requirements, which are particularly pertinent to children as passengers.
- Deletes provision that prohibits bicycling on sidewalks in commercial districts, which is difficult to enforce, in part because commercial districts are not defined.
- Establishes that pedestrians have the right-of-way on sidewalks. Permits cyclists to ride on sidewalks, but not faster than pedestrians are walking. Requires adult cyclists on the sidewalk to ride as close to the curb as is practicable
- Empowers city engineer to designate specific sidewalks where cycling is prohibited, and post signs as appropriate.
- Establishes rules for bicycling within bike lanes, using the same rules that Hoboken has already established to avoid confusion for cyclists.

It is our belief that the expanded and clarified ordinance will support bike riding in Jersey City and make safety a top priority. The full proposed ordinance is provided in Appendix A starting on page 9 of this report.

BIKE PARKING

There are various bicycle parking needs throughout the city. The greatest needs are at the public transit nodes - PATH Stations and Light Rail Stations. There is unmet need at many shopping centers and strip malls, schools, office buildings and major institutions.

Proven bike parking solutions are many and varied, and can include outdoor bike racks on the sidewalk, bike racks on the street near corners, bike lockers, and bike racks within parking garages, and in city

owned parking lots. Bike valet parking is also an option, and is a service already provided by Grove Street Bikes. In all cases placement has to be carefully planned to avoid creating obstructions for pedestrians and cars, and each installation must be evaluated on an individual site by site basis.

The City Planning Division is currently in the process of evaluating a zoning ordinance to require parking as part of certain types of new development.

Grants can be pursued to install bike racks on public property. On private property, existing large lot users such as shopping centers, universities, and hospitals can be encouraged to install bike racks for their shoppers, students, employees and visitors.

The City Council has approved a bike rack trust fund to facilitate installation of bike racks on the sidewalk in the public right-of-way by the Department of Public Works using funds provided by property owners. This arrangement will eliminate the need for property owners to obtain a Franchise Ordinance in order to install a bike rack. We are awaiting approval of the trust fund by the New Jersey Division of Local Government Services.

BIKE SHARE

Bike sharing is a service by which bicycles are made available for short term rental at self serve kiosks. Bikes can be picked up at one kiosk and returned to another. Bike sharing has emerged world-wide as one of the fastest growing alternative transportation options for urban and suburban environments. Bicycle rental plans are offered at varied and affordable annual, monthly, and daily rates, attracting everyday commuters, recreational users, and tourists. Bike share systems have proven especially effective in urban environments as bicycles are considered the most efficient mode of transportation for short trips, require little in terms of new infrastructure construction, promote a healthy community, and take the burden of safely storing a bicycle off of the user. By making bicycles available at transit stations, bike sharing has also proven a great complimentary system to public transportation networks, helping with the "first and last mile" of trips.

Hudson County has taken the lead in seeking grant funding and corporate sponsorship for a regional bike share system. Currently an application has been submitted by Hudson County to the NJ DOT Transportation Enhancement Program for a grant of \$540,000. The first phase of the system would entail installation of dozens of bike share kiosks in Hoboken and downtown Jersey City.

BIKE SAFETY: EDUCATION AND ENFORCEMENT

The City has already initiated a number of educational items in conjunction with the launch of the demonstration bike lanes on Grove Street in April 2012. A safe cycling flyer in English and Spanish was developed in partnership with BikeJC and disseminated, a PSA was filmed and broadcast on JC1, and

Hudson TMA posted hung safe cycling information from the handlebars of bikes parked near Grove Street PATH station.

Education and Enforcement of safe cycling should continue, and it is recommended that a Safe Cycling Education and Enforcement Committee be institutionalized as an ongoing endeavor of the Mayor's Office.

Mission Statement: The Safe Cycling Education and Enforcement Committee is dedicated to building the community's awareness of cyclists as professional delivery services, commuters and recreational users throughout the city. The committee will produce and inform the public through collaborative meetings, educational workshops and publications to better integrate cycling into the community.

Proposed Activities:

Education

- Develop a Jersey city Safe Cycling Website
- Install "Watch for bikes!" signs at all vehicular entrances to the city
- Develop a new PSA
- Educational Publications: Develop educational kits for pedestrians, businesses and community organizations.
 - Bike Signs What do they mean?!
 - Biking around the City
 - Interviews and Photographs of cyclist around the city (testimonials)
 - Cycling Health Benefits
 - o Bike Lanes The positive and negative impacts to the urban surrounding
- **Delivery Services Program:** Provide businesses the opportunity to install bike racks as a joint partnership with the city. In return, their Bike Delivery Service are to recognize Cyclist Safety and Etiquette in the city.

Enforcement

It is recommended that the JCPD actively enforce New Jersey statutes and City ordinances that pertain to bike safety.

COMMUNICATIONS PLAN

• Roll out the bike infrastructure implementation plan (Ordinances, lanes, parking, safety campaign, etc.) with a press event.

• Develop a FAQ to post on city website on why bike lanes are good for Jersey City

Appendix A

ORDINANCE AMENDING CHAPTER 239 (PARKS) AND CHAPTER 242 (PEACE AND GOOD) ARTICLE VI (ROLLER SKATES, IN-LINE SKATES, SKATEBOARDS AND BICYCLES) OF THE JERSEY CITY MUNICIPAL CODE

THE MUNICIPAL COUNCIL OF THE CITY OF JERSEY CITY HEREBY ORDAINS:

A. The following amendments to Chapter 239 (Parks) are hereby adopted:

PARKS

§239-1 through §239-6 No Change

§239-7 - Use of Bicycles

No person in a park shall:

- A. Ride a bicycle on other than a paved vehicular road or path designated for that purpose. A bicyclist shall be permitted to wheel or push a bicycle by hand over any grassy area or wooded trail or on any paved area reserved for pedestrian use.
- [B. Ride a bicycle other than on the right hand side of the road paving as close as conditions permit, and bicycles shall be kept in single file when two or more are operating as a group. Bicyclists shall at all times operate their machines with reasonable regard to the safety of others, signal all turns, pass to the right of any vehicle they are overtaking, and pass to the right of any vehicles they may be meeting]
- [C. Ride any other person on a bicycle.]
- [D]B. Leave a bicycle in a place other than a bicycle rack when such is provided and there is a space available.
- [E]C. Leave a bicycle lying on the ground or paving, set against trees or in any place or position where other persons may trip over or be injured by it.
- D. Lock or set a bicycle against a tree.

239-8 through 239-17 No Change

B The following amendments to Chapter 242 (Peace and Good) Article VI (Roller Skates, In-Line Skates, Skateboards and Bicycles) are hereby adopted:

PEACE AND GOOD

ARTICLE VI

Roller Skates, In-Line Skates, Skateboards and Bicycles

§ 242-8. - Helmet

A. No one under 18 years of age may ride upon in-line skates, <u>bicycles</u>, roller blades, roller skates, skateboards or similar devices without wearing a properly fitted and fastened helmet which meets the standards of the American National Standards Institute (ANSI Z 90.4 bicycle helmet standard), the United States Consumer Product Safety, or the Snell Memorial Foundation's 1984 standard for protective head gear for use in bicycling or a helmet designed for use with the particular device being used.

B. No person operating a bicycle shall allow another person to ride as a passenger on a bicycle unless;

(1) Such passenger is carried in a proper bike seat, trailer or other bicycle accessory that complies with the Snell Memorial Foundation, the Safety Equipment Institute, or the United States Consumer Produce Safety Commission, and contains adequate provision for retaining the passenger in place and for protecting the passenger from moving parts of the bicycle; and such bike seat, trailer or other bicycle accessory is used in accordance with manufacturer's age and weight requirements and limitations; and

(2) Such passenger is wearing a properly fitted and fastened helmet meeting the standards in §242-8(A)

(3) No passenger on a bicycle shall be carried in a pack fastened to the operator.

§ 242-9. - Violations and penalties.

<u>A.</u> Anyone who violates a requirement of [this article] § 242-8 shall be warned of the violation by the enforcing official. His or her parent or legal guardian may be fined a maximum of \$50. [\$25 for the first offense and a maximum of \$100 for each subsequent offense.] There shall be a presumption that the parent or guardian failed to exercise reasonable supervision or control over the person's conduct. A fine may be waived if an offender or his or her parent or legal guardian presents suitable proof that an approved helmet or bike seat has been purchased since the violation occurred.

§ 242-9.1. - Definition; bicycle riders subject to traffic regulations; [riding bicycles on business district public sidewalks prohibited.] riding bicycles on sidewalks regulated.

- A. As used herein, "bicycle" means a vehicle propelled by human power upon which a person may ride, having two tandem wheels, either of which is twelve (12) inches or more in diameter, and may be any vehicle generally recognized as a bicycle though equipped with two front or rear wheels.
- B. All persons operating bicycles shall have all of the rights and shall obey all applicable laws of the State of New Jersey and ordinances of this city, particularly those regulating traffic. Bicycle riders shall obey the same rules as the drivers of motor vehicles unless inapplicable.

(1) Any person operating a bicycle within a roadway shall obey the instructions of the official traffic control signs, and other control devices applicable to vehicles, unless otherwise directed by a police officer.

 (2)
 Whenever authorized signs are erected indicating that a vehicular turning movement is restricted, no person operating a bicycle within a roadway

 shall disobey the direction of any such sign, except where that person demonstrates from the bicycle to make the turn, in which event such person shall then obey the regulations applicable to pedestrians.

(3) No person shall ride or operate a bicycle within a roadway in any direction except that permitted of vehicular traffic traveling on the same side of the roadway, or that permitted in a bike lane.

(4) Any person operating a bicycle within a roadway shall stop for pedestrians in crosswalks.

(5) Persons riding bicycles within a roadway shall not ride more than two abreast except on paths or parts of roadways set aside for the exclusive use of bicycles. C. Every person riding a bicycle within a roadway shall ride as near to the right roadside as practicable exercising due care when passing a standing vehicle or one proceeding in the same direction. A bicyclist may move left under any of the following conditions;

	(1)	To make a left turn from a left turn lane or pocket;			
	<u>(2)</u>	To avoid debris, drains, or other hazardous conditions on the right;			
	(3)	To pass a slower moving vehicle;			
traffic;	(4)	To occupy any available lane when traveling at the same speed as other			
otherwi	<u>(5)</u> ise ride i	To travel no more than two abreast when traffic is not impeded, but in signal file;			

(6) Every person riding a bicycle in the street, shall ride in the same direction as vehicular traffic, unless riding in a bike lane that is marked for travel in a different direction.

- [C.]D. It shall be unlawful for any person to operate or ride a bicycle in any of the following places:
 - (1) On any public property where signs are posted by the Traffic Engineer prohibiting such use.
 - (2) On private property where a sign prohibiting bicycle riding has been posted by the owner, lessee or person in charge of such property.

 E.
 Bicycle Lanes. Whenever a bicycle lane has been established on a roadway, any person operating a bicycle upon the roadway at a speed less than the normal speed of traffic moving in the same direction shall ride within the bicycle lane, except that such person may move out of the lane under any of the following situations:

(1)Whenever overtaking or passing another bicycle, vehicle or pedestrianwithin the lane or about to enter the lane if such overtaking and passingcannotbe done safely within the lane.cannot

(2) When preparing for a turn at an intersection or into a private road or driveway.

(3) When reasonably necessary to leave the bicycle lane to avoid debris or other hazardous conditions.

(4) No person operating a bicycle shall leave a bicycle lane until the movement can be made with reasonable safety and then only after giving an appropriate signal.

<u>F.</u> <u>In addition to bicyclists, the following are permitted to use bicycle lanes;</u>

(1) Individuals using roller blades, scooters, and skateboards; and

(2) Individuals using motorized wheelchairs with an orange safety flag at least five feet above the street level; and

(3) Bicyclists with attached trailers for children with an orange safety flag attached to the rear of the portage vehicle at least five feet above the street level.

<u>G.</u> <u>Riding on sidewalks.</u>

(1) Pedestrians shall have the right of way on all sidewalks and in all crosswalks.

(2) Every person riding a bicycle on a bike path or sidewalk that is about to enter or cross a roadway shall yield the right-of-way to all traffic on such roadway.

(3) No person shall ride a bicycle upon a sidewalk at a speed greater than the walking speed of pedestrians on the same sidewalk.

(4) Persons riding a bicycle upon a sidewalk shall yield the right-of-way to any pedestrian and shall give an audible signal before passing the pedestrian.

(5) Adults riding a bicycle upon a sidewalk shall keep as close to the curb, as is practicable, to allow pedestrians to walk along sidewalks without impedance.

<u>H.</u> Equipment. It shall be unlawful for the driver of the bicycle to wear more than one earphone attached to an audio device while operating a bicycle.

I.Carry Articles. No person operating a bicycle shall carry any package, bundle, orarticle which prevents the rider from keeping both hands upon the handlesbars.

<u>J.</u> <u>Clinging to moving motor vehicles is prohibited.</u>

K. Lamps and equipment on bicycles.

(1) Bicycles in use when dark shall be equipped with a lamp on the front which shall omit a white light visible from a distance of at least 500 feet to the front and with a red reflector on the rear of a type which shall be visible from 50 feet to 300 feet to the rear. A lamp omitting a red light visible from distance of 500 feet to the rear may be used in addition to the red reflector.

(2) Bicycles shall be equipped with a brake which will enable the operator to make the braked wheel skid on dry, level, clean pavement.

(3) Bicycles shall be equipped with a bell to serve as audible signal to vehicles, pedestrians, and other bicyclists.

[§ 242-9.2. - Violations and penalties.]

[A. Any person, except a minor who violates §242–9.1 shall be submit to a minimum fine of fifty dollars (\$50.00) and a maximum fine as provided in Chapter 1. General Provisions. §1–25.] [B. Any minor who violates and provisions of § 242-9.1 shall, upon a first offense, receive a written warning addressed to the minor's parents or guardian. The minor and the parent may also be advised that a second violation will make them liable for a fifty-dollar (\$50.00) fine or community service as provided in Chapter 1. General Provisions § 1-25, and that a third or subsequent offense will make them liable to a minimum fine of one hundred dollars (\$100.00) and a maximum fine as provided in Chapter 1. General Provisions, § 1-25.]

§ 242-9.3. - Use restricted.

<u>A.</u> <u>It shall be unlawful for any person to ride or use a skateboard or scooter in any of the following places:</u>

(1) On any public property or sidewalk where signs are posted by the Traffie-City Engineer prohibiting such use.

(2) On private property where a sign prohibiting bicycle riding has been posted by the owner, lessees, or person in charge of such property.

- [A.] No person may ride or use a skateboard or scooter on the streets and sidewalks of all commercially zoned districts within the City.]
- B. No person less than seventeen (17) years of age may ride or use a motorized scooter, motorized skateboard, or motorized roller skates on any roadway, sidewalk or public property within the City of Jersey City. The motor need not be engaged in order for a person to be in violation thereof.

§ 242-9.4. - Definitions. No Change

§ 242-9.5 - Violations and penalties.

[A. Any person who violates this article shall be subject to a fine of not less than twenty-five dollars (\$25.00) for the first offense and not more than two hundred fifty dollars (\$250.00) for subsequent offenses.]

A.Any person, except a minor, who violates § 242-9.1 and § 242-9.3 shall be subjectto a minimum fine of fifty dollars (\$50.00) and a maximum fine as provided inChapter1, General Provisions § 1-25.Chapter

 B.
 Any minor who violates any provision of § 242-9.1 and § 242-9.3 shall, upon a first offense, receive a written warning addressed to the minor's parents or guardian. The minor and the parent may also be advised that a second violation will

 make them liable for a fifty-dollar (\$50.00) fine or community service as provided in Chapter 1.
 provided in Chapter 1.

 General Provisions § 1-25, and that a third or subsequent a minimum fine of one hundred dollars (\$100.00)
 and a maximum fine as provided in Chapter 1.

 Chapter 1. General Provisions. § 1-25.
 1-25.

- [B.]C. In addition to subsection (A) of this section, any member of the Police Department who witnesses a violation of this subsection shall confiscate the motorized scooter, motorized skateboard, or motorized roller skates which shall remain in police custody until such time as a the matter is adjudicated in the Municipal Court and the violator pays any fine that is ordered. Should the defendant be found guilty of the alleged violation, the vehicle will be forfeited.
- <u>A police officer shall only issue a fine for a violation of any provision of § 242-9.1 and § 242-9.3 by a person less than fourteen years of age to the parent or guardian of such person if the violation by such person occurs in the presence of such person's parent or guardian and where such parent or guardian is eighteen years of age or more. Such fines shall only be issued to such parent or guardian, and shall not be issued to the parent less than fourteen years of age.
 </u>
- C. All ordinances and parts of ordinances inconsistent herewith are hereby repealed.
- D. This ordinance shall be a part of the Jersey City Code as though codified and fully set forth therein. The City shall have this ordinance codified and incorporated in the official copies of the Jersey City Code.
- E. This ordinance shall take effect in the manner as prescribed by law.
- F. The City Clerk and the Corporation Counsel be and they are hereby authorized and directed to change any chapter numbers, article numbers and section numbers in the event that the codification of this ordinance reveals that there is a conflict between those numbers and the existing code, in order to avoid confusion and possible accidental repealers of existing provisions.

<u>NOTE</u>: All new material is <u>underlined</u>; words in [brackets] are omitted.

For purposes of advertising only, new matter is indicated by **boldface** and repealed matter by *italic*.

Appendix B

Table of Priorities for Bike Lanes and Sharrows

Priority	Street	From	То	Road Can Support
1	Central Ave.	Hoboken Ave.	Fleet St.	1 One-Way Bike Lane
1	Central Ave.	Pavonia Ave.	Newark Ave.	2 One-Way Sharrows
1	Christopher Columbus Dr	Greene St.	Hudson St.	2 One-Way Sharrows
1	Christopher Columbus Dr	Marin Blvd.	Greene St.	2 One-Way Sharrows
1	Christopher Columbus Dr	Monmouth St.	Marin Blvd.	2 One-Way Bike Lanes
1	Cook St	Hoboken Ave.	Newark Ave.	1 One-Way Sharrows
1	Erie St.	10th St.	Middle of the Block	1 One-Way Bike
1	Erie St.	12th St.	14th St.	1 One-Way Bike
1	Erie St.	14th St.	16th St.	1 One-Way Bike
1	Erie St.	Middle of the Block	12th St.	1 One-Way Bike
1	Erie St.	Newark Ave.	10th St.	Lane 1 One-Way Bike
1	Hoboken Ave.	Oakland Ave.	Central Ave.	Lane 1 One-Way Bike
1	Magnolia Ave.	West Termination	Summit Ave.	Lane 2 One-Way
1	Manila Ave. / Grove St.	2nd St.	Newark Ave.	Sharrows 1 One-Way Bike
1	Manila Ave. / Grove St.	6th St.	2nd St.	Lane 1 One-Way Bike
1	Manila Ave. / Grove St.	9th St.	6th St.	Lane 1 One-Way
1	Manila Ave. / Grove St.	Newark Ave.	CC Dr.	Sharrows 1 One-Way Bike
1	Manila Ave./ Grove St.	10th St.	9th St.	Lane 1 One-Way Bike
1	Manila Ave./ Grove St.		10th St.	Lane 1 One-Way Bike
1	Manila Ave./ Grove St.	14th St.	12th St.	Lane 1 One-Way Bike
				Lane 1 One-Way
1	Manila Ave./ Grove St.	16th St.	14th St.	1 One-Way Sharrows

Priority	Street	From	То	Road Can Support
1	Manila Ave./ Grove St.	City of Hoboken	16th St.	2 One-Way Sharrows
1	Monmouth St.	Mercer St.	CC Dr.	1 One-Way Bike Lane
1	Monmouth St.	Montgomery St.	Mercer St.	1 One-Way Bike Lane
1	Montgomery St.	Bergen Ave.	Tuers Ave	2 One-Way Sharrows
1	Montgomery St.	Tuers Ave	Varick St.	2 One-Way Sharrows
1	Newark Ave.	7th St	6th St.	2 One-Way Bike Lanes
1	Newark Ave.	Central Ave.	Oakland Ave.	2 One-Way Sharrows
1	Newark Ave.	Manila Ave.	Erie St.	2 One-Way Sharrows
1	Newark Ave.	Pavonia Ave.	7th St	2 One-Way Bike Lanes
1	Oakland Ave.	Hoboken Ave.	Rt. 139	2 One-Way Bike Lanes
1	Oakland Ave.	Newark Ave.	Hoboken Ave.	1 One-Way Bike Lane
1	Oakland Ave.	Rt. 139	Fleet St.	2 One-Way Sharrows
1	Summit Ave.	Magnolia Ave.	Mid betw Summit & Pavonia	2 One-Way Bike Lanes
1	Summit Ave.	Mid betw Summit & Pavonia	Pavonia Ave	2 One-Way Bike Lanes
1	Varick St.	CC Dr.	Montgomery St.	1 One-Way Bike Lane
2	Belmont Ave.	JFK Blvd.	Bergen Ave.	1 One-Way Bike Lane
2	Belmont Ave.	U-Shape	JFK Blvd.	1 One-Way Bike Lane
2	Belmont Ave.	West Side Ave.	U-Shape	2 One-Way Bike Lanes
2	Bright St.	Mid Sect.bet monmouth & Varick	Mid Sect.bet Varick & Jersey Ave.	2 One-Way Bike Lanes
2	Bright St.	Mid Sect.bet. Varick & Jersey Ave.	Jersey Ave.	2 One-Way Sharrows
2	Bright St.	Monmouth St.	Mid Sect.bet Monmouth & Varick	2 One-Way Sharrows
2	Carteret Ave.	Ocean Ave	Pacific Ave	2 One-Way Sharrows
2	Grand St.	Grove St.	Jersey Ave.	2 One-Way Bike Lanes

Priority	Street	From	То	Road Can Support
2	Grand St.	Jersey Ave.	Pacific Ave	2 One-Way Bike Lanes
2	Jersey Ave.	Aetna St.	Grand St.	2 One-Way Bike Lanes
2	Jersey Ave.	Audrey Zapp Dr.	Cul-de-sac	2 One-Way Sharrows
2	Jersey Ave.	Cul-de-sac	Foot Bridge	2 One-Way Bike Lanes
2	Jersey Ave.	Foot Bridge	Aetna St	2 One-Way Sharrows
2	Jersey Ave.	Grand St.	Bright St.	2 One-Way Sharrows
2	Lincoln Park Circle	Mallory Ave	West Side Ave.	1 One-Way Bike Lane
2	Lincoln Park Oval	Lincoln Park Oval	Lincoln Park Circle	2 One-Way Bike Lanes
2	Mallory Ave.	Culver Ave.	Communipaw Ave	2 One-Way Bike Lanes
2	Mallory Ave.	Fisk St	Culver Ave.	2 One-Way Sharrows
2	Monmouth St.	Grand St.	Montgomery St.	1 One-Way Bike Lane
2	Oakland Ave.	Fleet St.	Prospect Ave.	2 One-Way Sharrows
2	Pacific Ave.	Carteret Ave.	Light Rail Crossing	2 One-Way Bike Lanes
2	Pacific Ave.	Communipaw Ave	Grand St.	2 One-Way Bike Lanes
2	Pacific Ave.	Light Rail Crossing	Communipaw Ave	2 One-Way Bike Lanes
2	Varick St.	Montgomery St.	Bright St.	1 One-Way Bike Lane
3	6th St.	Jersey Ave.	Newark Ave.	1 One-Way Bike Lane
3	6th St.	Manila Ave.	Jersey Ave.	2 One-Way Sharrows
3	6th St.	Marin Blvd.	Manila Ave.	2 One-Way Bike Lanes
3	7th St.	Newark Ave.	Manila Ave./Grove St.	1 One-Way Bike Lane
3	Bergen Ave.	Bayview Ave.	Van Nostrand Ave.	2 One-Way Sharrows
3	Bergen Ave.	Montgomery St.	Bayview Ave.	2 One-Way Sharrows
3	Bergen Ave.	Sip Ave.	Montgomery St.	2 One-Way Sharrows

Priority	Street	From	То	Road Can Support
3	Fulton Ave.	Garfield Ave.	West Side Ave.	1 One-Way Bike Lane
3	JFK Blvd.	Bergen Ave.	McAdoo Ave.	2 One-Way Sharrows
3	Magnolia Ave.	Summit Ave.	Waldo Ave.	1 One-Way Bike Lane
3	Ocean Ave.	Carteret Ave.	Myrtle Ave.	2 One-Way Sharrows
3	Ocean Ave.	Myrtle Ave.	Merritt St.	2 One-Way Sharrows
3	Old Bergen Rd.	McAdoo Ave.	Merritt St.	2 One-Way Sharrows
3	Pavonia Ave.	Chestnut Ave	Summit Ave.	2 One-Way Sharrows
3	Pavonia Ave.	Newark Ave.	Chestnut Ave	2 One-Way Sharrows
3	Pavonia Ave.	Summit Ave.	JFK Blvd.	2 One-Way Bike Lanes
3	Sip Ave.	Bergen Ave.	Summit Ave.	2 One-Way Sharrows
3	South Terminal - Entr./exit	РА	Sip Ave.	2 One-Way Bike Lanes
3	Summit Ave.	Academy St.	Magnolia Ave.	2 One-Way Sharrows
3	Woodlawn Ave.	JFK Blvd.	Ocean Ave	1 One-Way Bike Lane
3	Woodlawn Ave.	Ocean Ave	Garfield Ave.	1 One-Way Sharrows
3	Woodlawn Ave.	West Side Ave.	JFK Blvd.	1 One-Way Bike Lane
4	13th St	Monmouth St.	Coles St	2 One-Way Sharrows
4	Academy / Mill Rd / Wayne	Summit Ave.	Cornelison Ave.	2 One-Way Sharrows
4	Coles St.	13th St	10th St.	2 One-Way Sharrows
4	Coles St.	18th St.	13th St.	2 One-Way Sharrows
4	Coles St.	10th St.	CC Dr.	1 One-Way Bike Lane
4	Cornelison Ave.	Florence St	Wayne St.	2 One-Way Bike Lanes
4	Cornelison Ave.	Johnston Ave.	Florence St.	2 One-Way Sharrows
4	Danforth Ave.	Princeton Ave.	West Side Ave.	2 One-Way Sharrows

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Priority	Street	From	То	Road Can Support
4	Johnston Ave.	Cornelison Ave.	Grand St.	2 One-Way Sharrows
4	Johnston Ave.	Grand St.	Light Rail Crossing	2 One-Way Sharrows
4	Johnston Ave.	Light Rail Crossing	Phillip St.	2 One-Way Sharrows
4	Monmouth St.	10th St.	13th St.	2 One-Way Sharrows
4	Monmouth St.	Christopher Col. Dr.	10th St.	1 One-Way Bike Lane
4	West Side Ave.	Danforth Ave.	Broadway	2 One-Way Sharrows
5	Bowers St.	Ogden Ave.	JFK Blvd.	1 One-Way Bike Lane
5	Bright St.	Cornelison Ave.	Florence St.	2 One-Way Bike Lanes
5	Florence St.	Cornelison Ave.	Montgomery St.	2 One-Way Bike Lanes
5	Florence St.	Montgomery St.	Bright St.	2 One-Way Sharrows
5	Grand St.	Bramhall Ave.	Communipaw Ave	2 One-Way Sharrows
5	Grand St.	Communipaw Ave	Ivy Place	2 One-Way Sharrows
5	Grand St.	Fairmount Ave	Pacific Ave	2 One-Way Bike Lanes
5	Grand St.	Ivy Place	Fairmount Ave.	2 One-Way Bike Lanes
5	Griffith St.	JFK Blvd.	Palisades Ave.	1 One-Way Bike Lane
5	Ocean Ave.	Bramhall Ave.	Carteret Ave.	2 One-Way Sharrows
5	Sip Ave.	Route 1 & 9	West Side Ave.	2 One-Way Sharrows
5	Sip Ave.	West Side Ave.	Bergen Ave.	2 One-Way Sharrows

Appendix C

Map of Proposed Bike lanes & Sharrows and Priorities

