

Bushwick Community Bicycle Planning



2016

New York City Department of Transportation
Presented to Community Board 4, February 17, 2016



Biking in Bushwick



Flushing Ave



Myrtle Ave



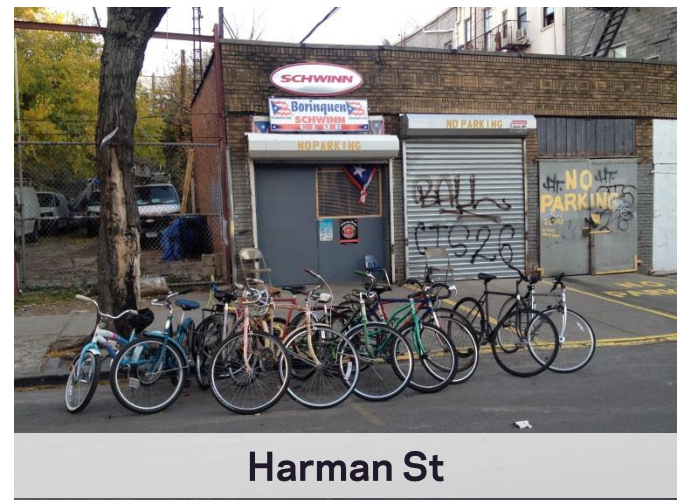
Evergreen Ave



Wilson Ave



Menahan St



Harman St

Benefits of Bike Lanes

For Cyclists:

- Routes cyclists via a safe network
- Designates riding space in roadway
- Reduces confusion on where cyclists should ride

For Drivers & Pedestrians:

- Increases awareness that cyclists are present
- Organizes street for different road users
- Calms speeding vehicle traffic
- Decreases sidewalk cycling



Community Bicycle Network Development Process

Planning

2015

- **Establish Partnership**
 - Community Board 4
 - Council Member Antonio Reynoso
 - Council Member Rafael Espinal
 - NYPD
 - NYC Department of City Planning
 - NYC Department of Transportation
 - NYC Department of Health and Mental Hygiene
- **Develop Steering Committee**
- **Collect Data from Public**



Community Bicycle Network Development Process

Planning

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- Establish Partnership
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Implementation

2016

- Seek Community Board support for Phase I projects
- Implement Phase I projects
- Steering Committee evaluation and input for Phase II

2017

- Seek Community Board support for Phase II projects
- Implement Phase II projects
- Steering Committee evaluation and input on full network

Community Planning Process

1 Community Outreach and Engagement

2 Data Collection and Evaluation

3 Street Network Limitations and Opportunities

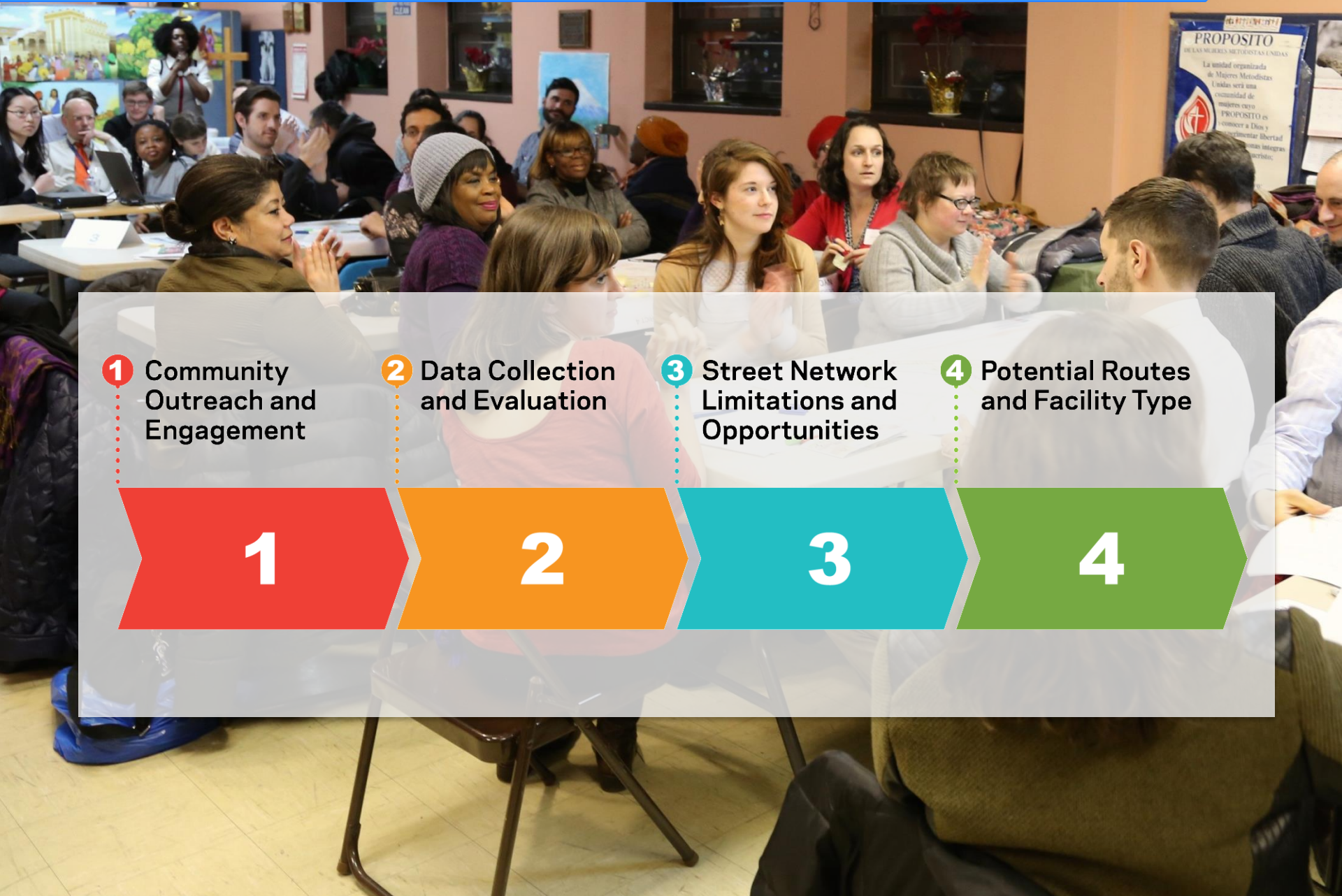
4 Potential Routes and Facility Type

1

2

3

4



1

Outreach and Engagement



2015 Steering Committee Meeting



2015 Shape Up Bushwick



February 2015 Workshop



April 2015 Mobile Workshop

1

Outreach and Engagement



Myrtle-Wyckoff L/M Stop Surveys



Jefferson L Stop Surveys



Bushwick Bike Shop



Borinquen Schwinn Club



Bravo Bike Shop

1

Outreach and Engagement

2014

AUGUST

Online Survey Launch

NOVEMBER

Kickoff Meeting

2015

FEBRUARY

First Community Workshop

MARCH & APRIL

Bike Shop Visits

APRIL

Mobile Workshop at Eco-Station
Earth Day Event

2015 (cont.)

APRIL

Public Surveying at Myrtle-
Wyckoff M/L Stop

MAY

Public Surveying at Jefferson L Stop
Visits to Schwinn Clubs & Bike Shops
Second Community Workshop

JUNE

Mobile Workshop at Shape Up
Bushwick
Mobile Workshop at Arts In Bushwick
Online Survey close out (6/30)

AUGUST

Bike Lanes Lesson at El Puente
Tabling at Maritza Davila Parade

Community Planning Process

2 Data Collection
and Evaluation

1

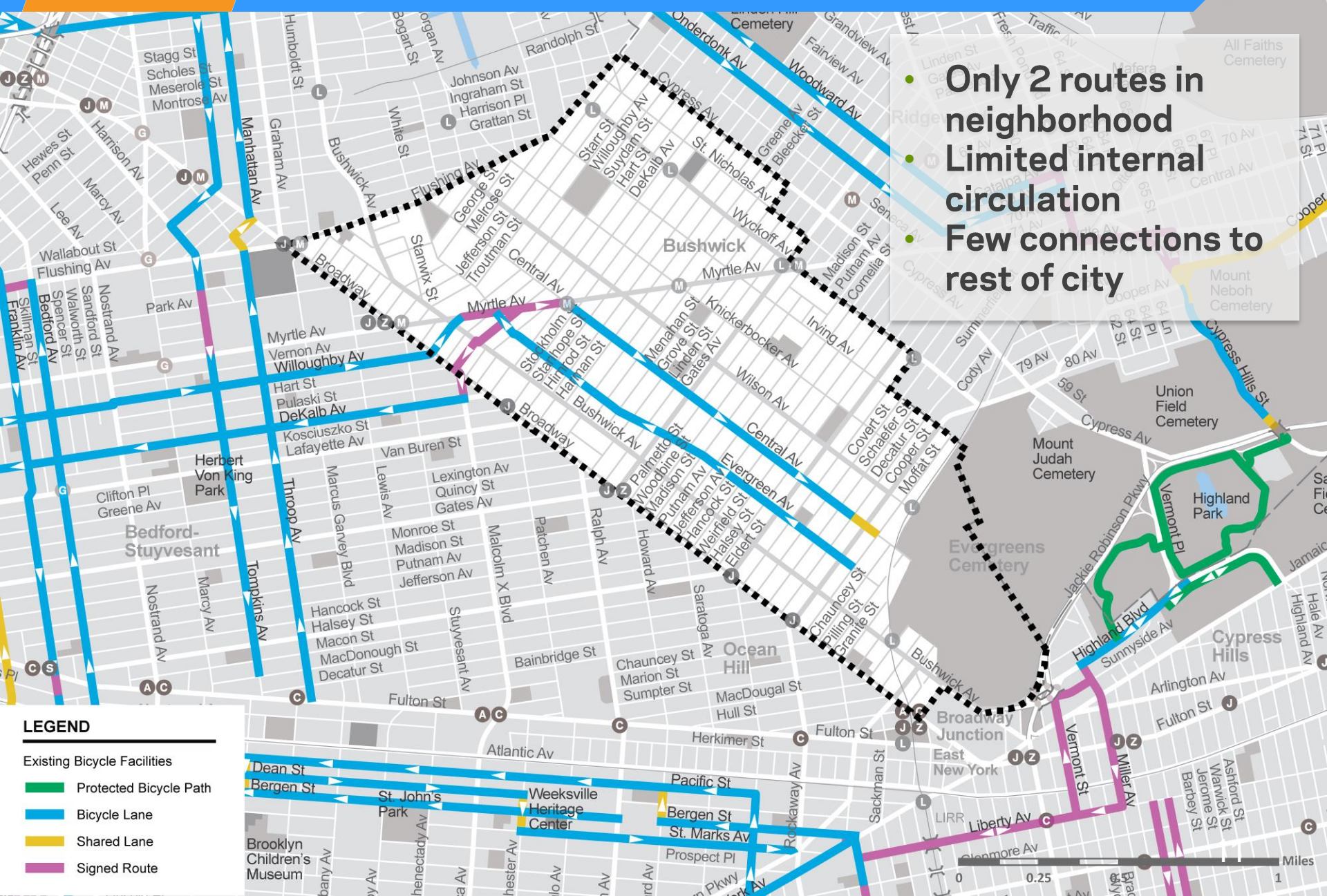
2

3

4

Existing Bicycle Network

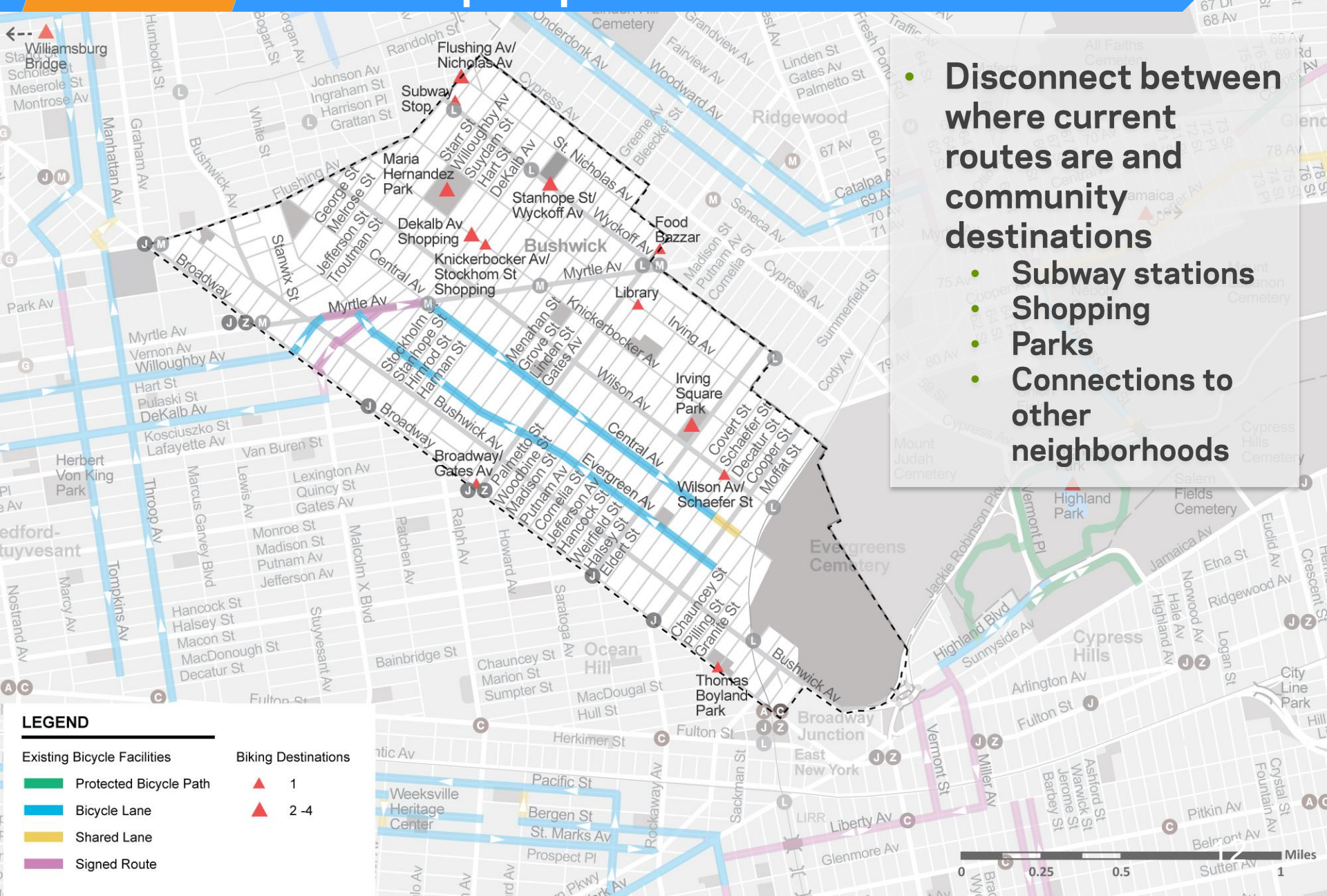
- Only 2 routes in neighborhood
- Limited internal circulation
- Few connections to rest of city



LEGEND

- Existing Bicycle Facilities
- Protected Bicycle Path
 - Bicycle Lane
 - Shared Lane
 - Signed Route

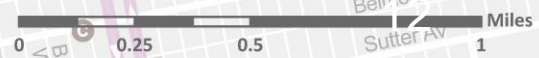
Data Collection and Evaluation Workshop: Top Destinations



- Disconnect between where current routes are and community destinations
- Subway stations
- Shopping
- Parks
- Connections to other neighborhoods

LEGEND

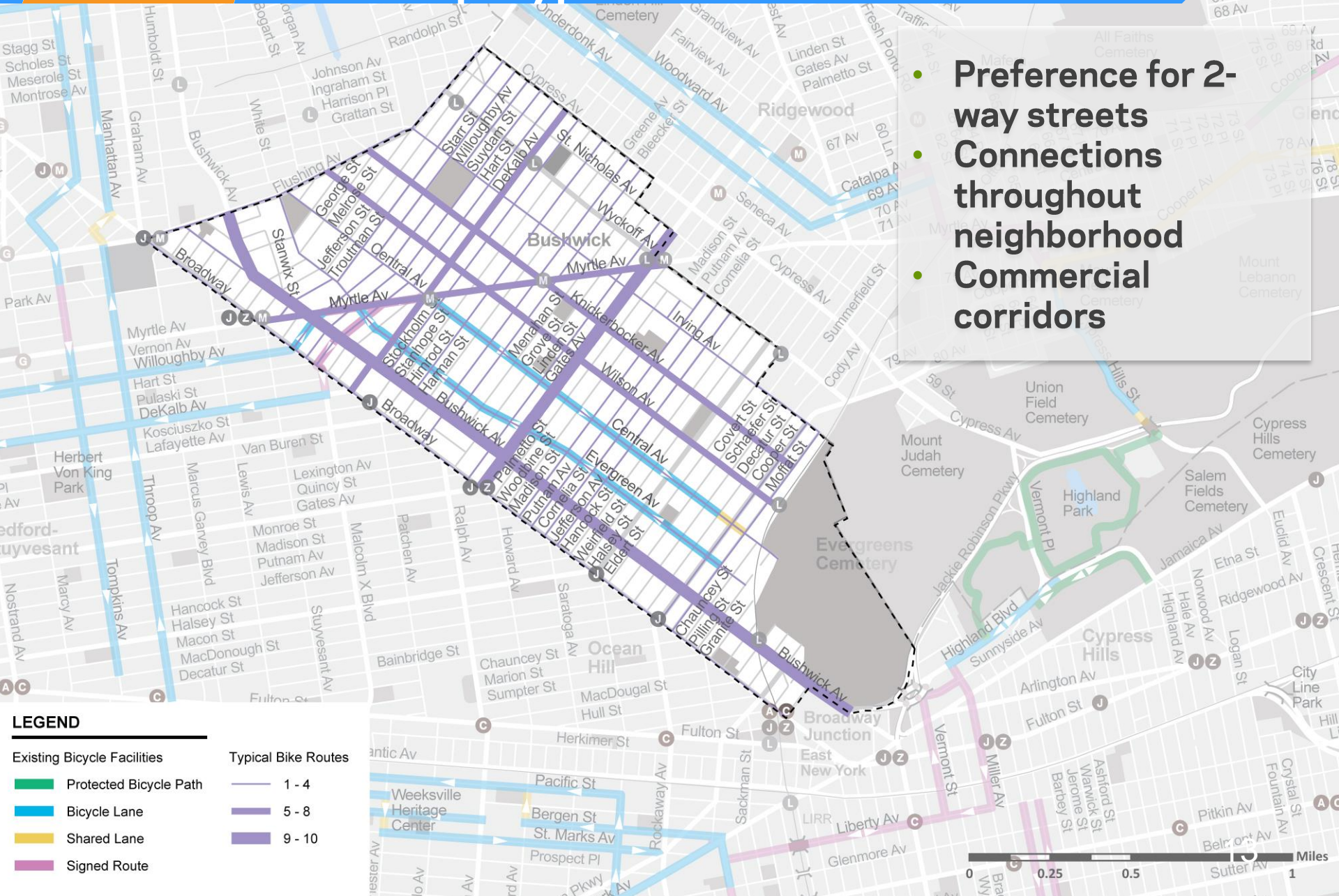
- | | | | |
|--|------------------------|---|-----|
| Existing Bicycle Facilities | | Biking Destinations | |
|  | Protected Bicycle Path |  | 1 |
|  | Bicycle Lane |  | 2-4 |
|  | Shared Lane | | |
|  | Signed Route | | |










Data Collection and Evaluation

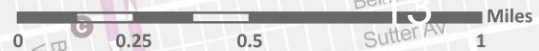
Workshop: Typical Bike Routes

- Preference for 2-way streets
- Connections throughout neighborhood
- Commercial corridors



LEGEND

 Protected Bicycle Path	 1 - 4
 Bicycle Lane	 5 - 8
 Shared Lane	 9 - 10
 Signed Route	



Data Collection and Evaluation Workshop: Streets Not Good for Biking


- People take routes despite not feeling comfortable
- Shows importance of connectivity

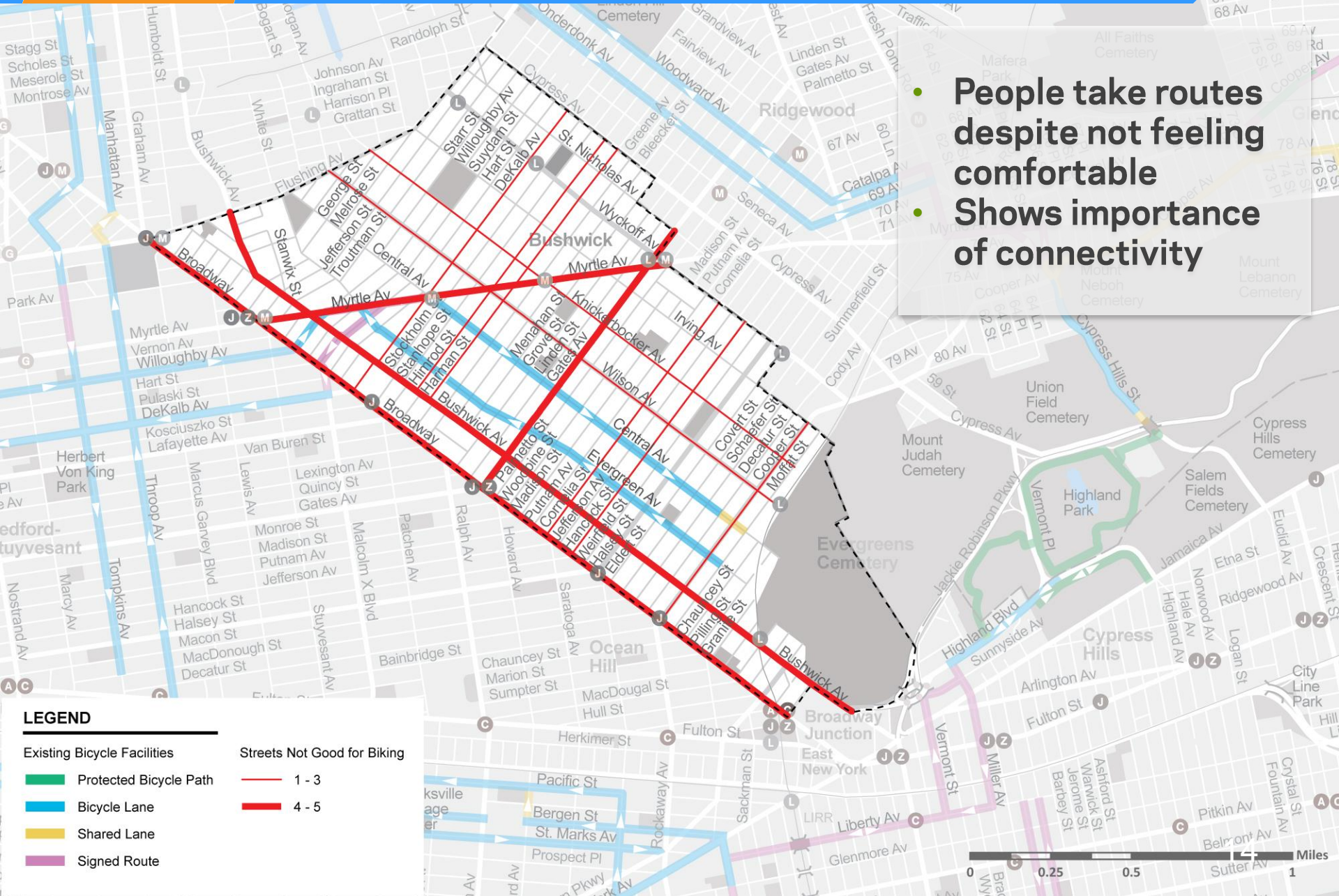
LEGEND

Existing Bicycle Facilities

-  Protected Bicycle Path
-  Bicycle Lane
-  Shared Lane
-  Signed Route

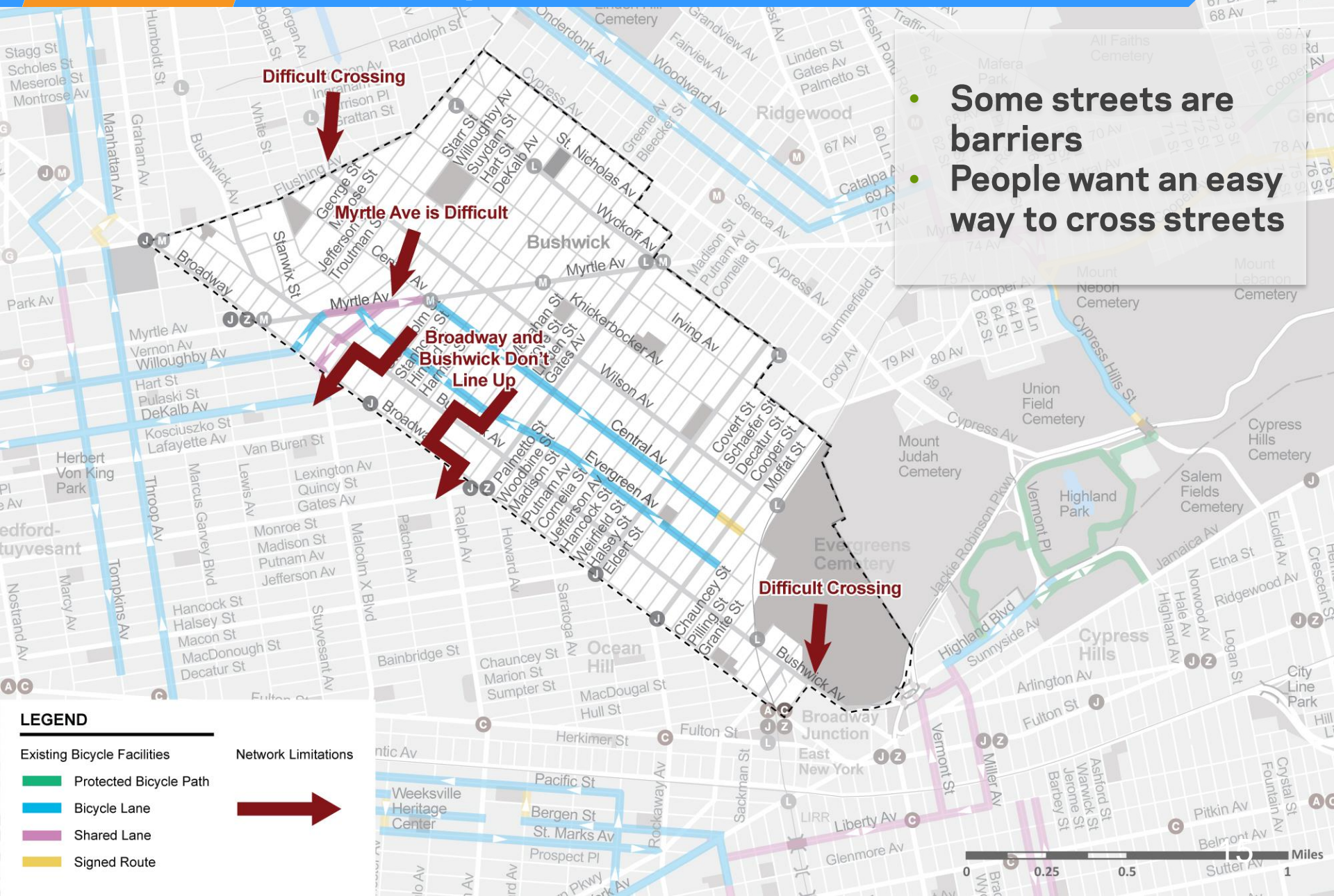
Streets Not Good for Biking

-  1 - 3
-  4 - 5



Data Collection and Evaluation Workshop: Problem Areas

- Some streets are barriers
- People want an easy way to cross streets



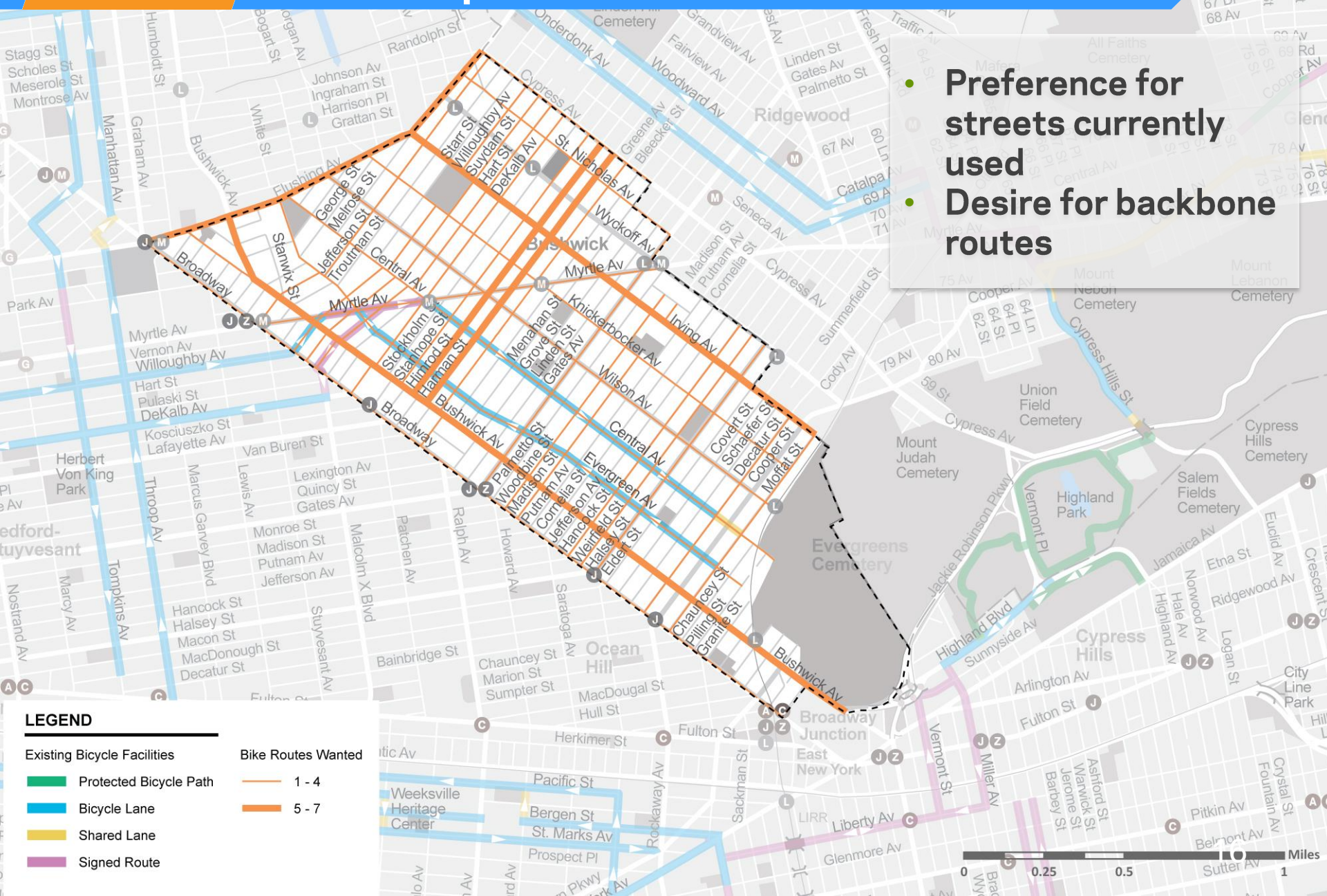
LEGEND

	Protected Bicycle Path
	Bicycle Lane
	Shared Lane
	Signed Route
	Network Limitations





Data Collection and Evaluation Workshop: Bike Routes Wanted



- Preference for streets currently used
- Desire for backbone routes

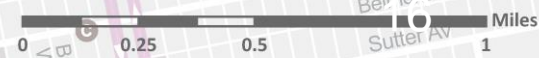


LEGEND

Existing Bicycle Facilities	
	Protected Bicycle Path
	Bicycle Lane
	Shared Lane
	Signed Route

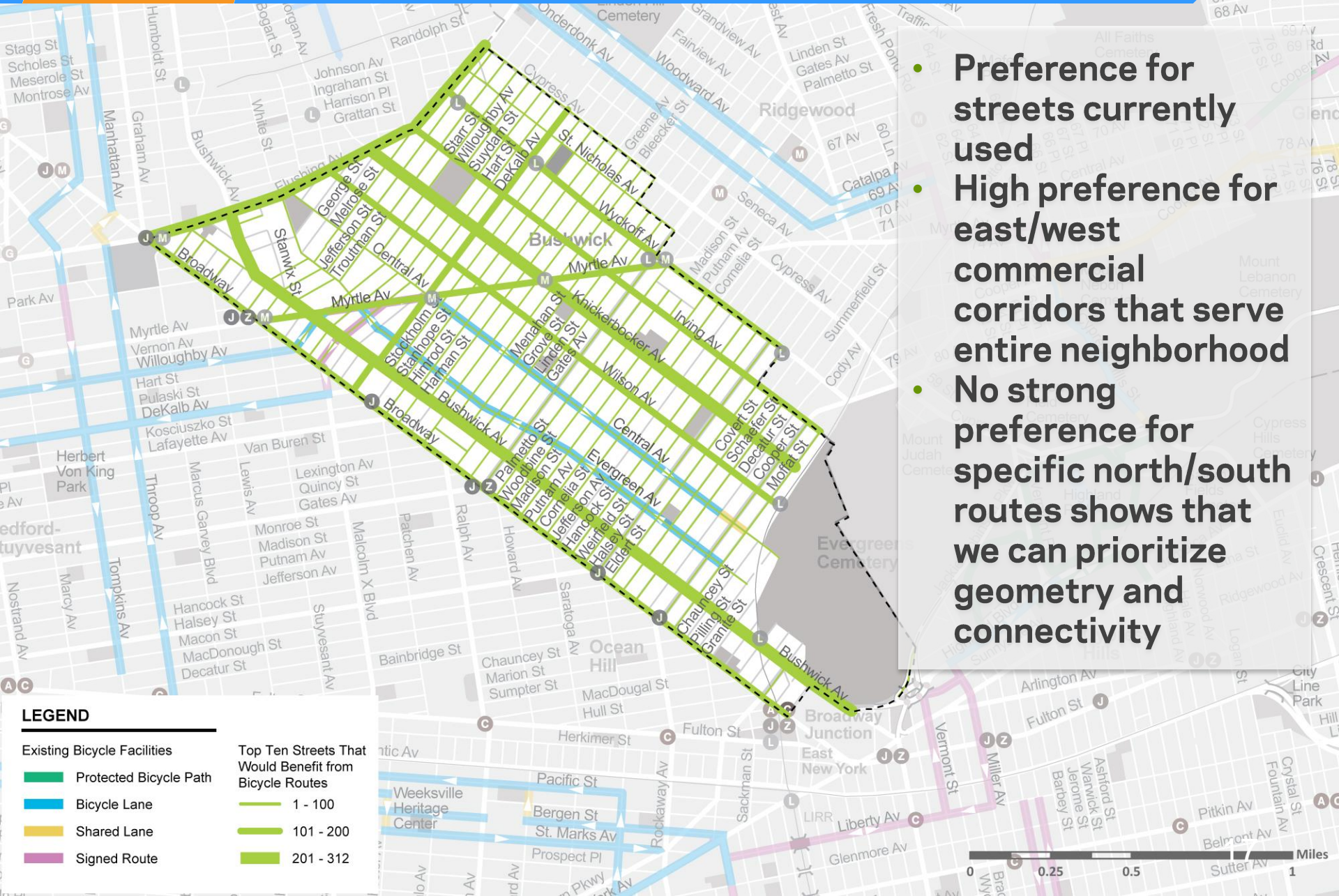
Bike Routes Wanted

	1 - 4
	5 - 7



Data Collection and Evaluation

Survey: Bike Routes Wanted



Street Network and Facility Type



3

Bushwick Street Types

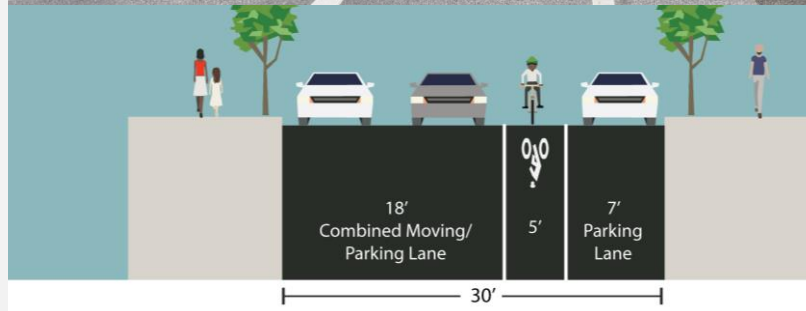
1-Way Residential



Starr St



91st St, QN



- Bulk of Bushwick's north/south streets
- Typically 30' wide
- Low traffic volumes

DEDICATED LANE Width - 30'

- Streets can fit:
 - Space for cyclists
 - Space for motor vehicles
 - No parking impact

3

Bushwick Street Types

1-Way Mixed-Use

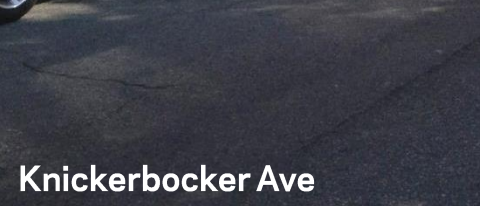


- Some of Bushwick's east/west streets
- Wider streets
- Retail destinations
- Higher traffic volumes

DEDICATED LANE

Width - 34'

- Streets can fit:
 - Space for cyclists
 - Narrows travel lane to calm traffic
 - No parking impact
 - Cyclists kept out of door zone



3

Bushwick Street Types

2-Way Mixed-Use



Myrtle Ave

2-Way Corridors



Bushwick Ave



Vanderbilt Ave, BK



- Remainder of Bushwick Streets
- 34-44' width is too narrow for bicycle lanes on two-way without significant changes
- Complicated geometries
- Higher traffic volumes

SHARED LANE

Width - 42'

- Only option for low-impact facility in narrow space
 - No parking impact
 - No travel lane impact
- No dedicated space for cyclists
- Not ideal for high volume streets
- Many of these streets parallel a 1-way pair that would be a better alternative



Short-Term Projects

- **Low-Impact:**
 - Little or no parking loss
 - No travel lane loss
- Standard design
- Quick buildout
- Low cost

Anticipated installation
Summer of 2016



Long-Term Projects

- **Higher-Impact:**
 - Potential parking loss
 - Potential travel lane loss
- More complex design
- Robust traffic modeling
- Potentially higher-cost

Continue to work with
community to evaluate
potential long-term
opportunities

4

Potential Routes

4 Potential Routes and Facility Type

1

2

3

4



Connectivity

- “Key destinations”
- “Routes wanted”
- “Routes used”
- To existing network
- In/outside neighborhood
- Grid change



Safety

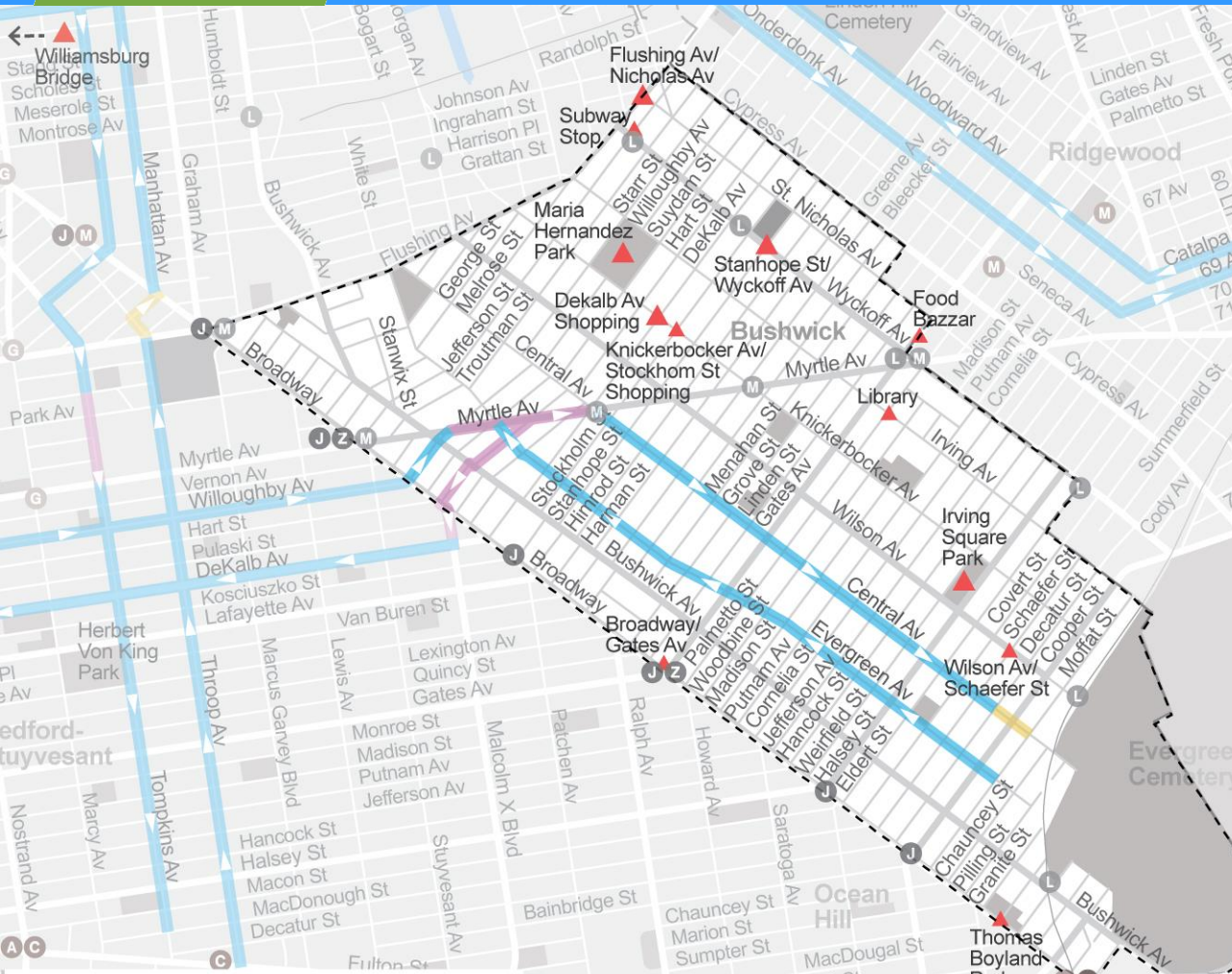
- “Street not good for cycling”
- “Problem areas”
- Vision Zero
- Conflicting movements
- Traffic volumes

Safety is both an issue and an opportunity



Geometry

- Design limitations and opportunities
- Street width
- Facility type



Destinations

In Bushwick:

- Shopping on Knickerbocker and DeKalb Aves
- Subway stations
- Parks

Out of Bushwick:

- Jamaica
- Highland Park
- Broadway Junction
- Bedford-Stuyvesant
- Ridgewood
- Williamsburg & Williamsburg Bridge

LEGEND

Existing Bicycle Facilities

- Protected Bicycle Path
- Bicycle Lane
- Shared Lane
- Signed Route

Biking Destinations

- 1
- 2-4





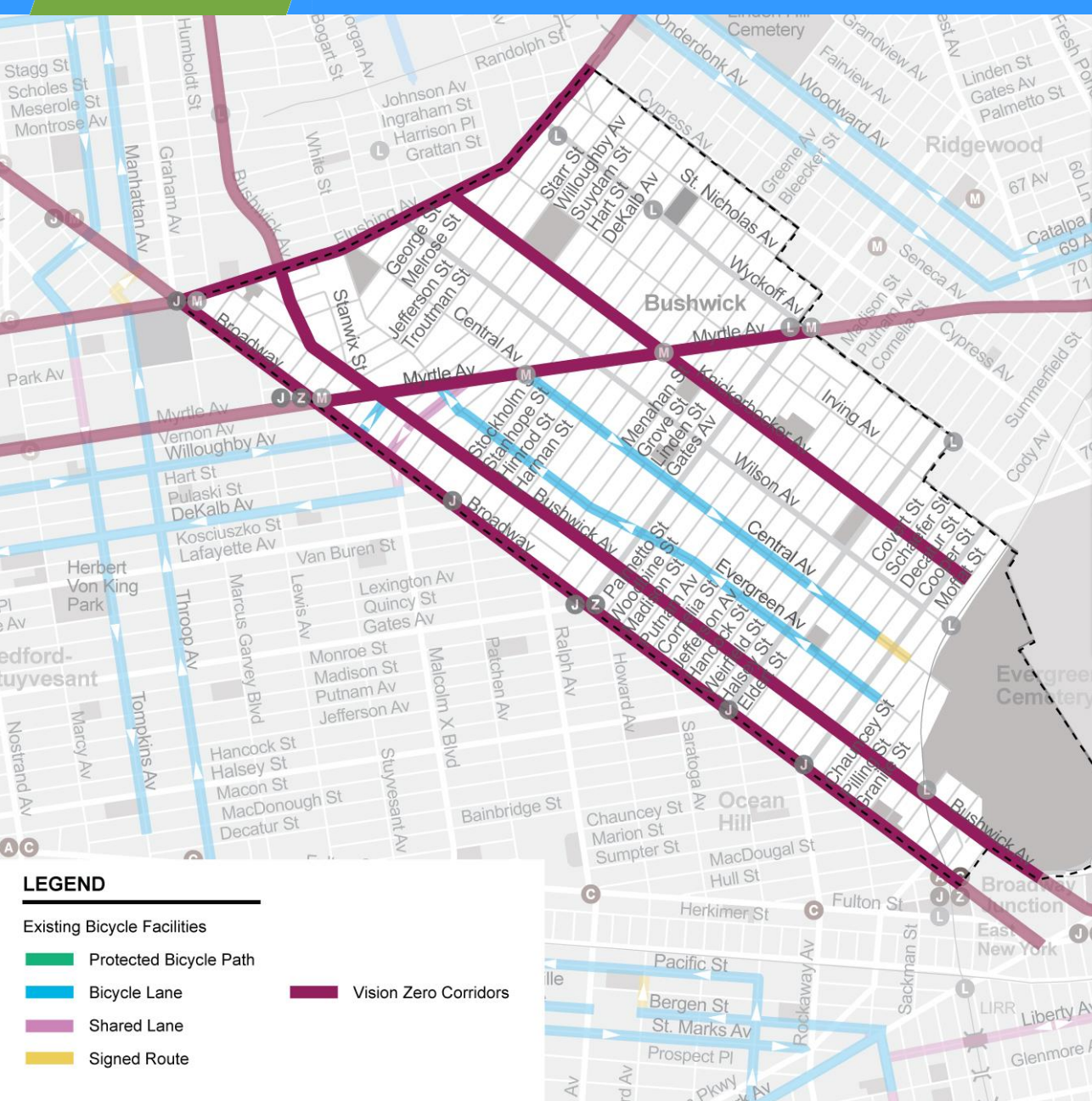
Street Grid/Network

- Certain streets are barriers
- Grid changes
- Dead ends
- T-intersections
- One-way changes

LEGEND

- Streets Connecting All of Bushwick
- Stub Streets
- Connections on South Side of Bushwick
 - Dead End on North End of Street
 - Dead End on South End of Street
- Connections on North Side of Bushwick
 - Dead End on South End of Street










Vision Zero Priority Corridors

- Flushing Ave
- Myrtle Ave
- Bushwick Ave
- Broadway
- Knickerbocker Ave
- Has capacity for bike lane

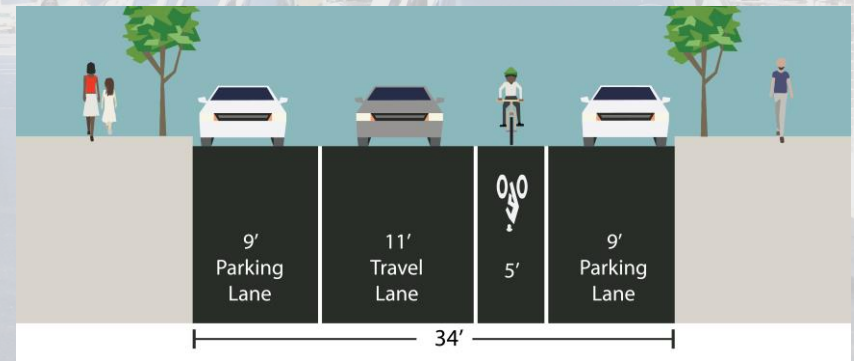
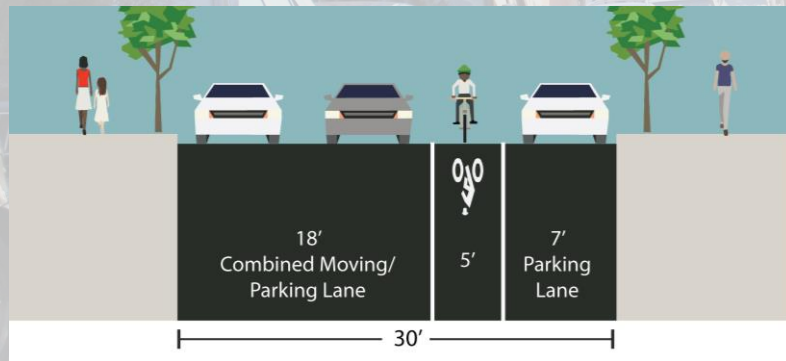
LEGEND

	Protected Bicycle Path
	Bicycle Lane
	Shared Lane
	Signed Route
	Vision Zero Corridors



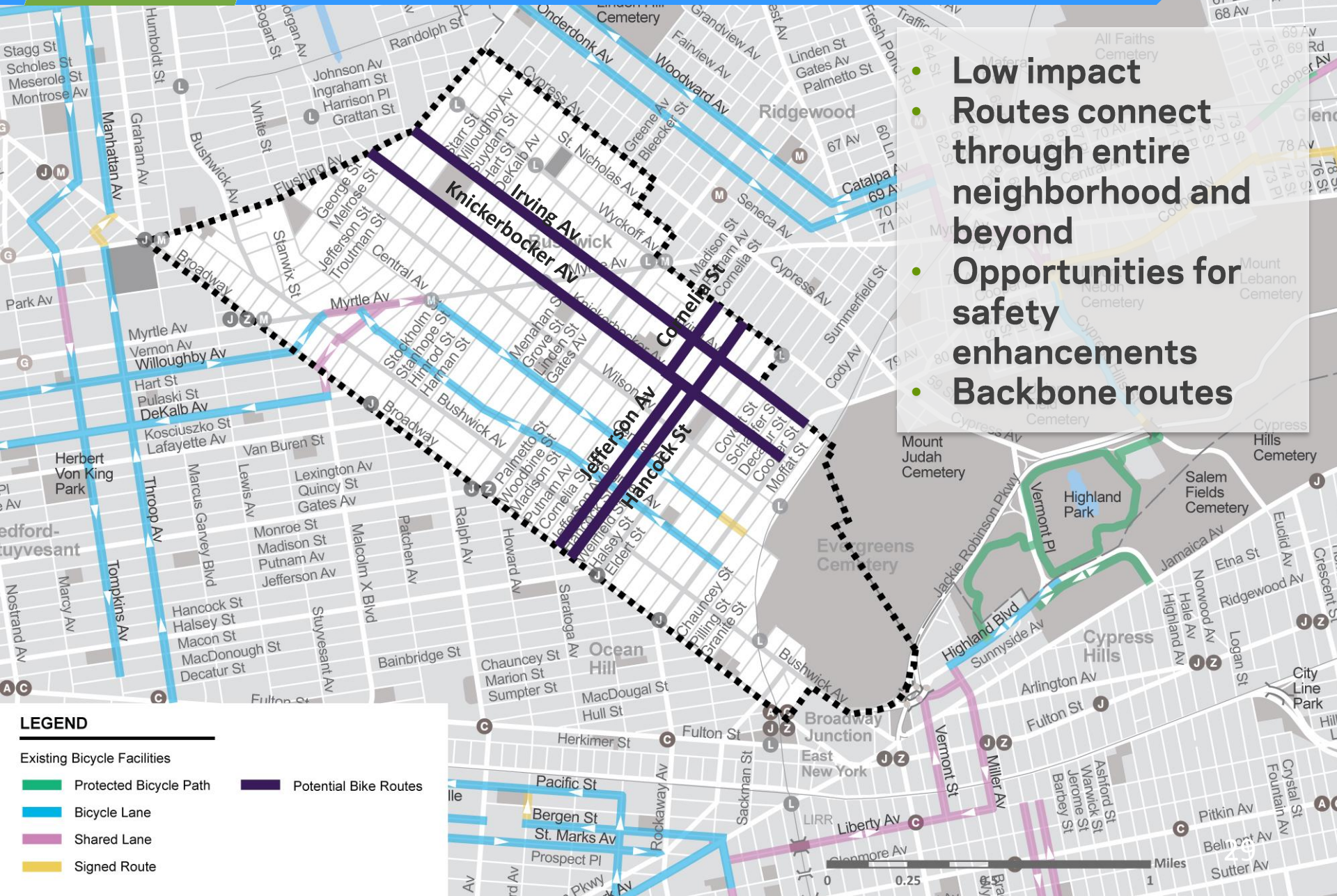


Bicycle lanes



2016 Proposed Bicycle Routes

- Low impact
- Routes connect through entire neighborhood and beyond
- Opportunities for safety enhancements
- Backbone routes



LEGEND

Existing Bicycle Facilities

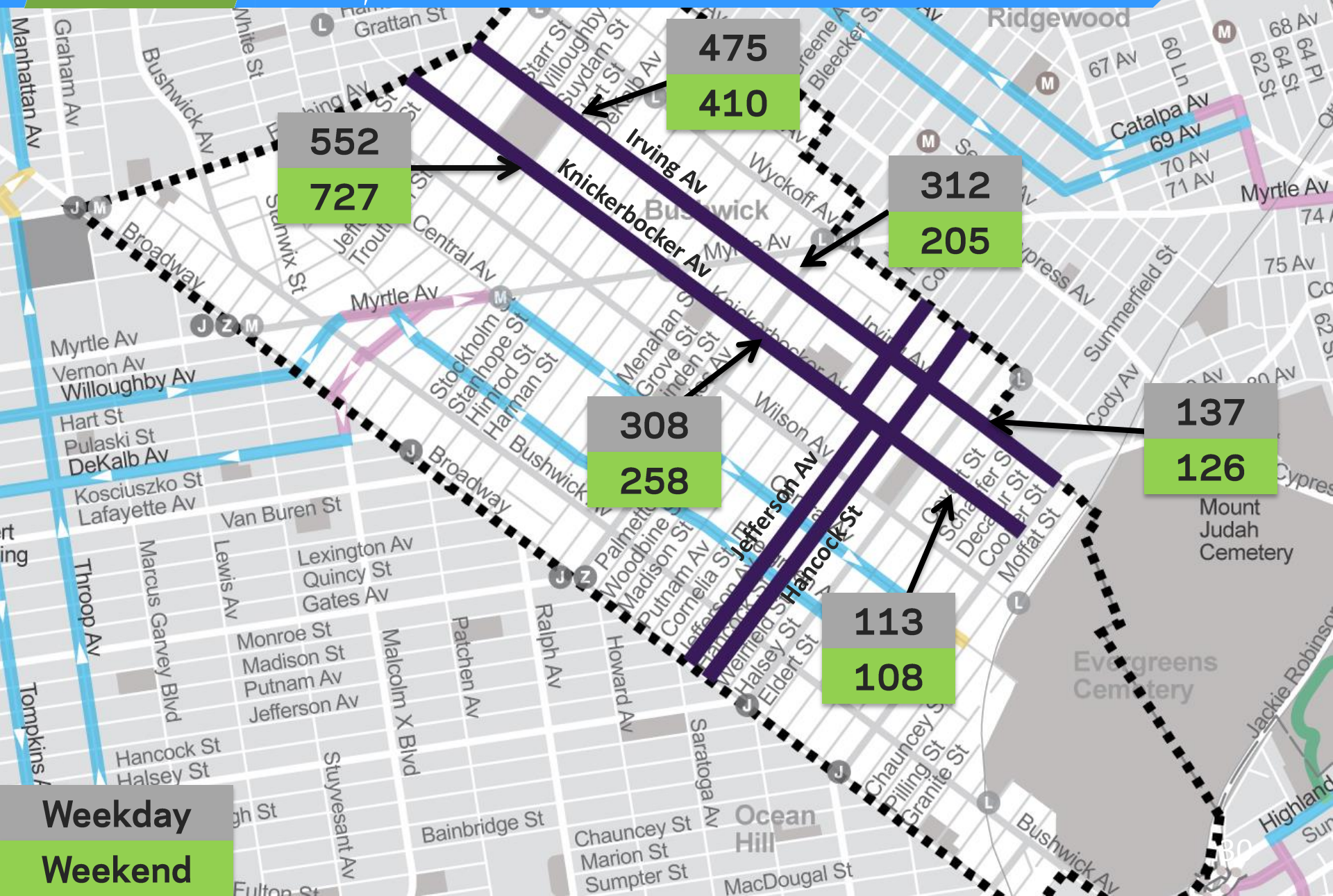
- Protected Bicycle Path
- Bicycle Lane
- Shared Lane
- Signed Route

Potential Bike Routes



Existing Bicycle Volumes

June, 2015



Weekday

Weekend

4

Knickerbocker Ave, Irving Ave

Existing Conditions

34' Wide

- Mixed-use (residential & commercial)
- 1-way street
- Curbside parking lanes



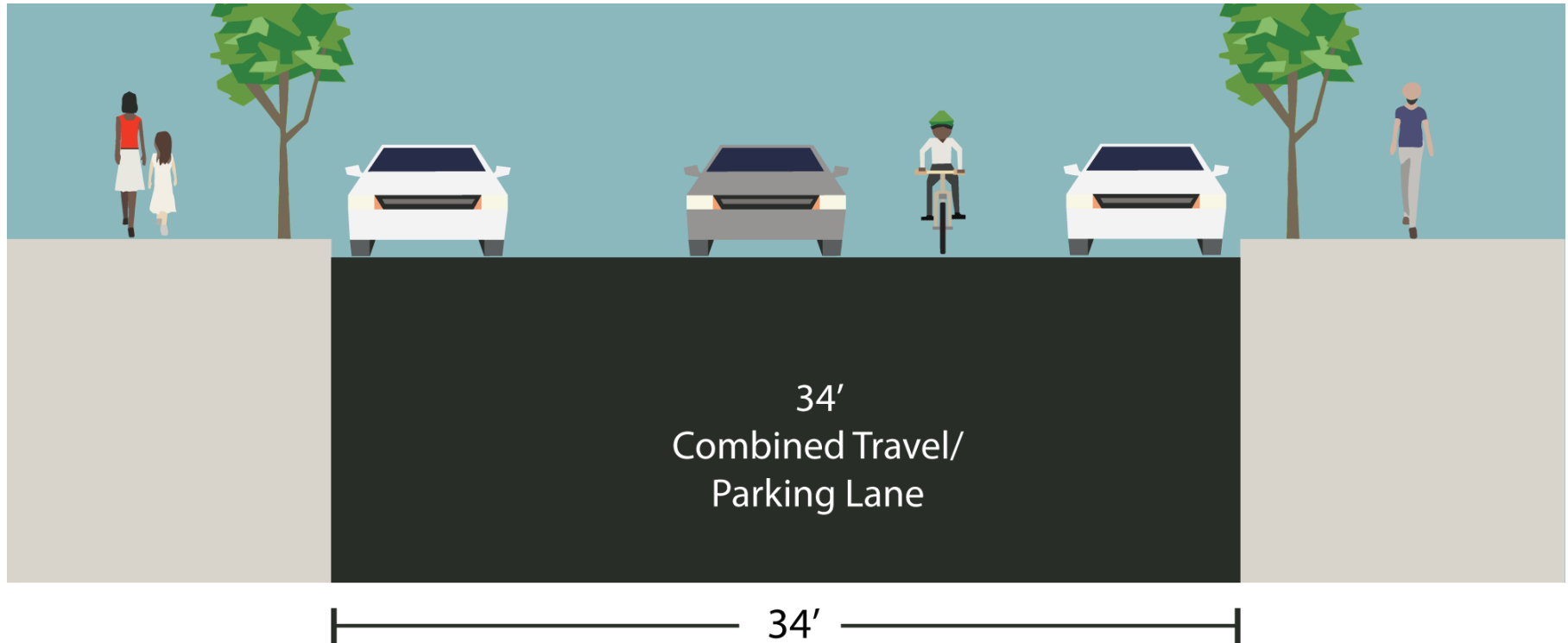
Wide Travel Lane

- Encourages Speeding

Lack of Markings

- No dedicated space for cyclists

Existing



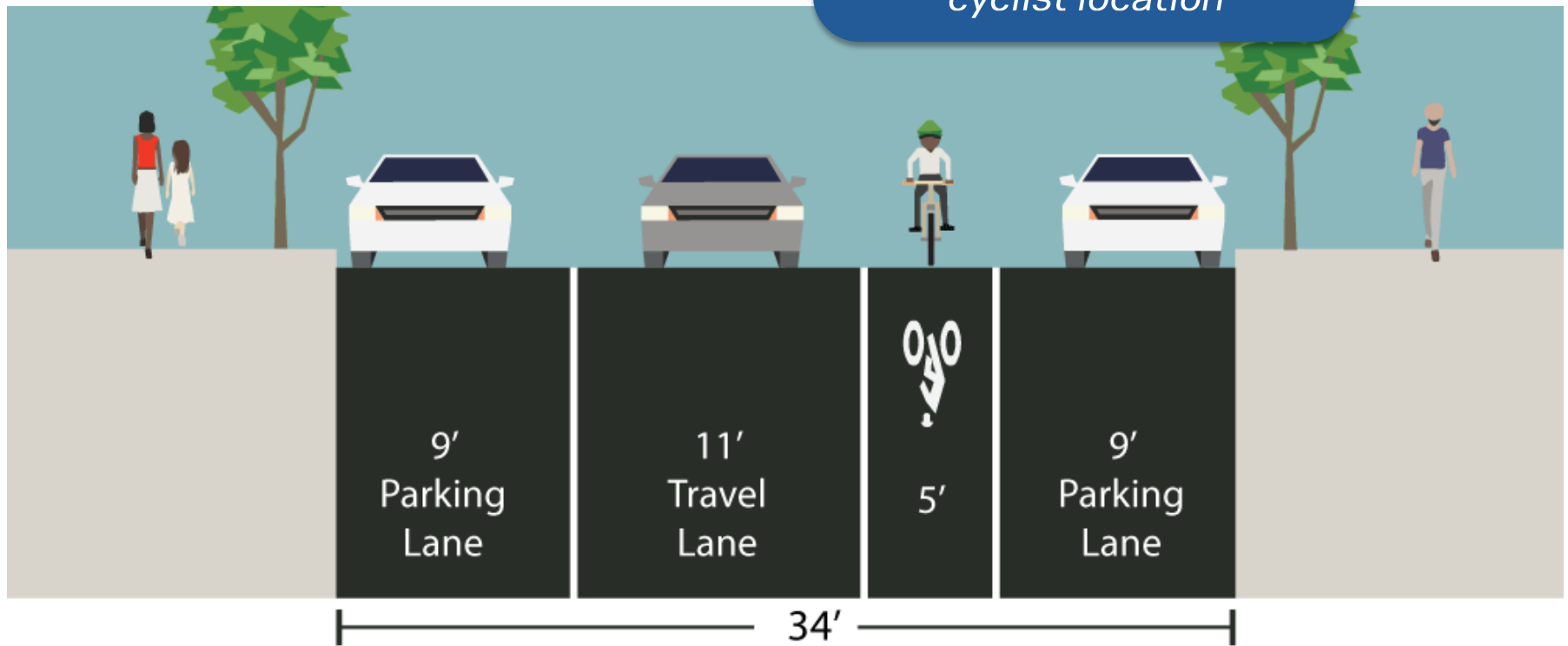
Standard Width Travel Lane

- Calms traffic

Bike Lanes

- Provide dedicate space for cyclists
- Increase predictability of cyclist location

Proposed



Knickerbocker Ave

Existing Conditions- *Flushing Ave to Melrose St*



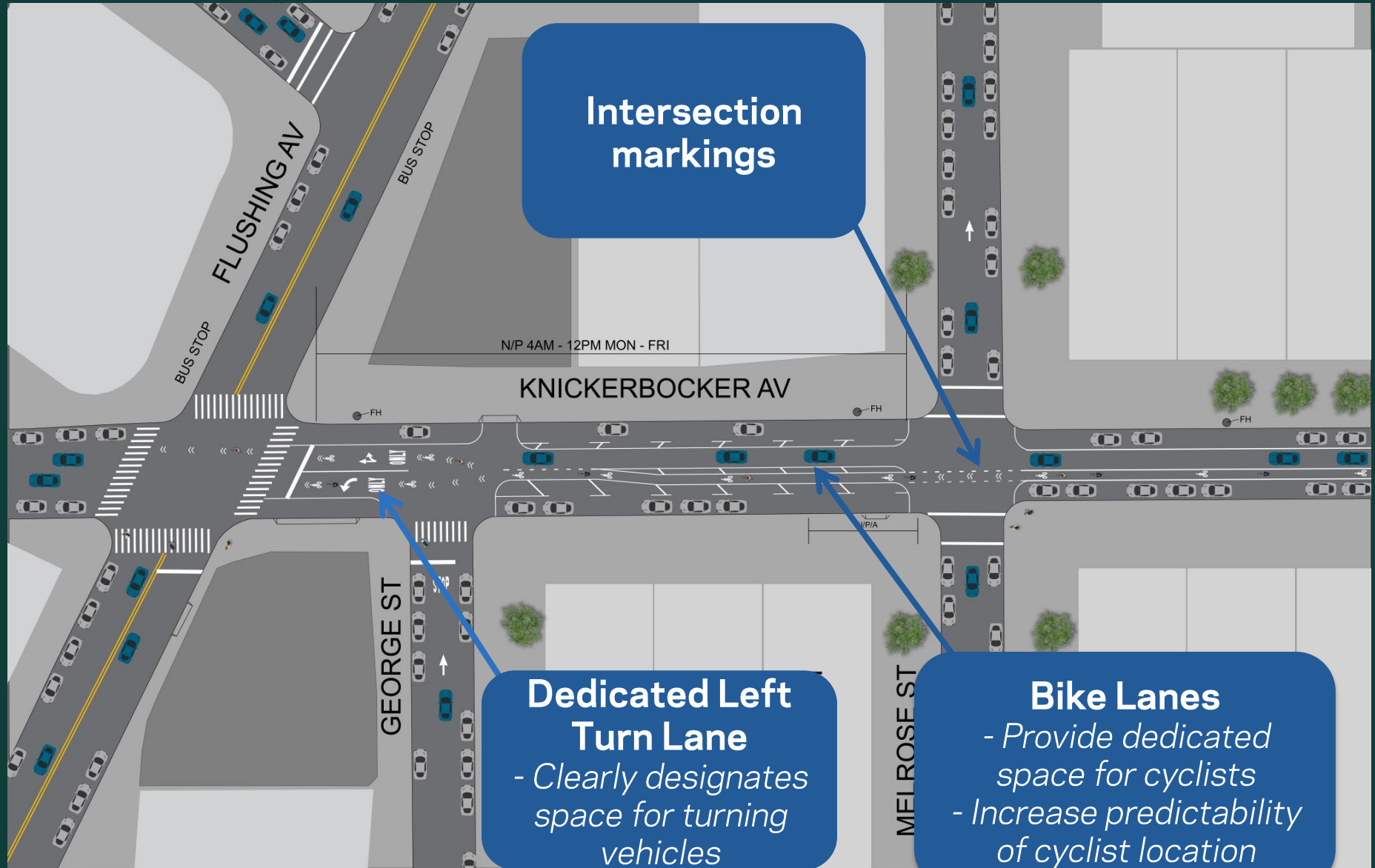
**Knickerbocker Ave
Flushing Ave to
Melrose St**

Wide Travel Lane
- Encourage speeding

Lack of Markings
- No dedicated space for cyclists

Knickerbocker Ave

Proposed Design - *Flushing Ave to Melrose St*



Intersection markings

Dedicated Left Turn Lane

- Clearly designates space for turning vehicles

Bike Lanes

- Provide dedicated space for cyclists
- Increase predictability of cyclist location

Knickerbocker Ave

Existing Conditions- Harman St to Bleecker St

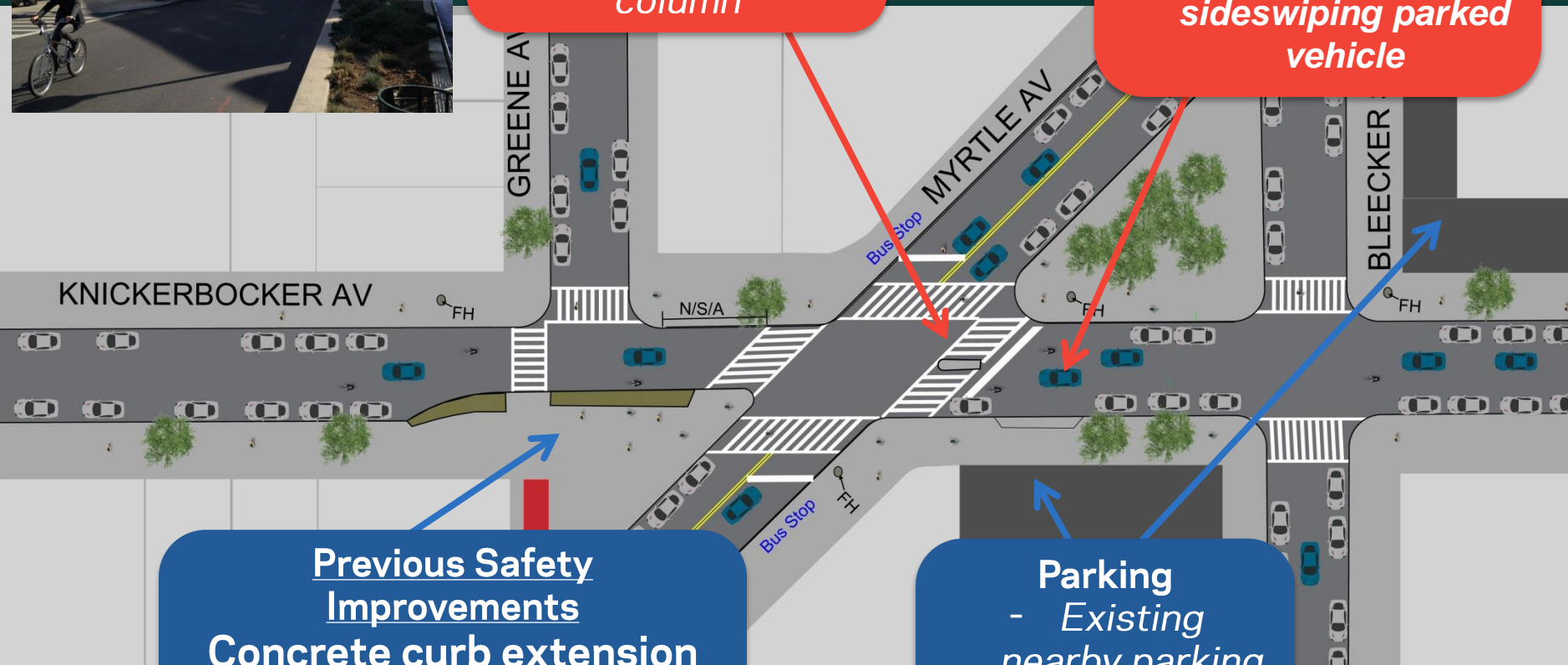


Elevated Train Columns

- Confusion around elevated train column

Lack of Markings

- No dedicated space for cyclists
- Potential for sideswiping parked vehicle



Previous Safety Improvements

Concrete curb extension

- New pedestrian space
- Access to subway
- Calms traffic

Parking

- Existing nearby parking lots provide alternatives to these spots

Knickerbocker Ave

Proposed Design- Harman St to Bleecker St



Markings
Guide drivers away from elevated train columns

Through and Right Turn Lane
- Clearly designates vehicular movements

Dedicated Left Turn Lane
- Clearly designates space for turning vehicles

KNICKERBOCKER AV

GREENE AV

N/S/A

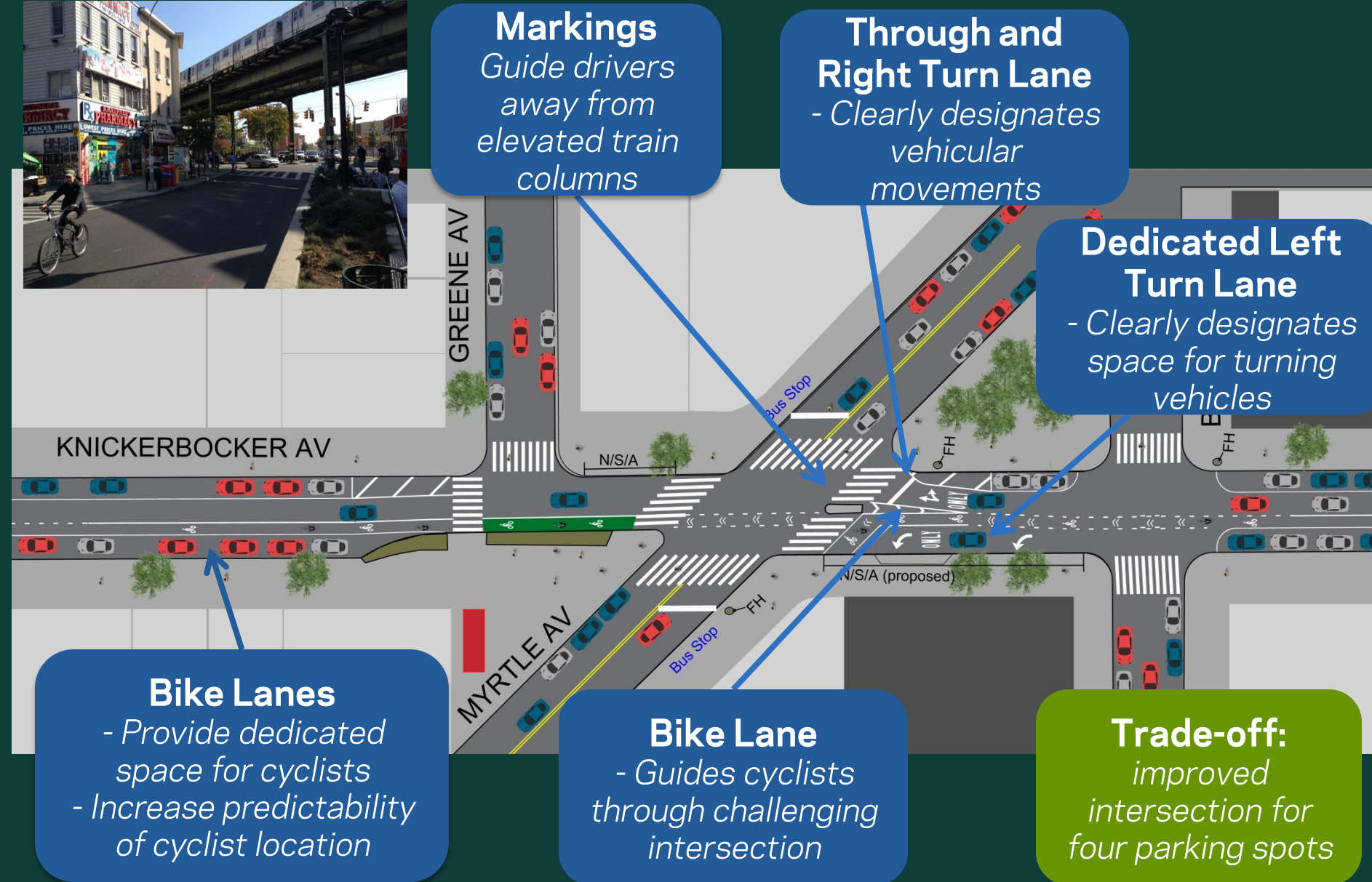
N/S/A (proposed)

MYRTLE AV

Bike Lanes
- Provide dedicated space for cyclists
- Increase predictability of cyclist location

Bike Lane
- Guides cyclists through challenging intersection

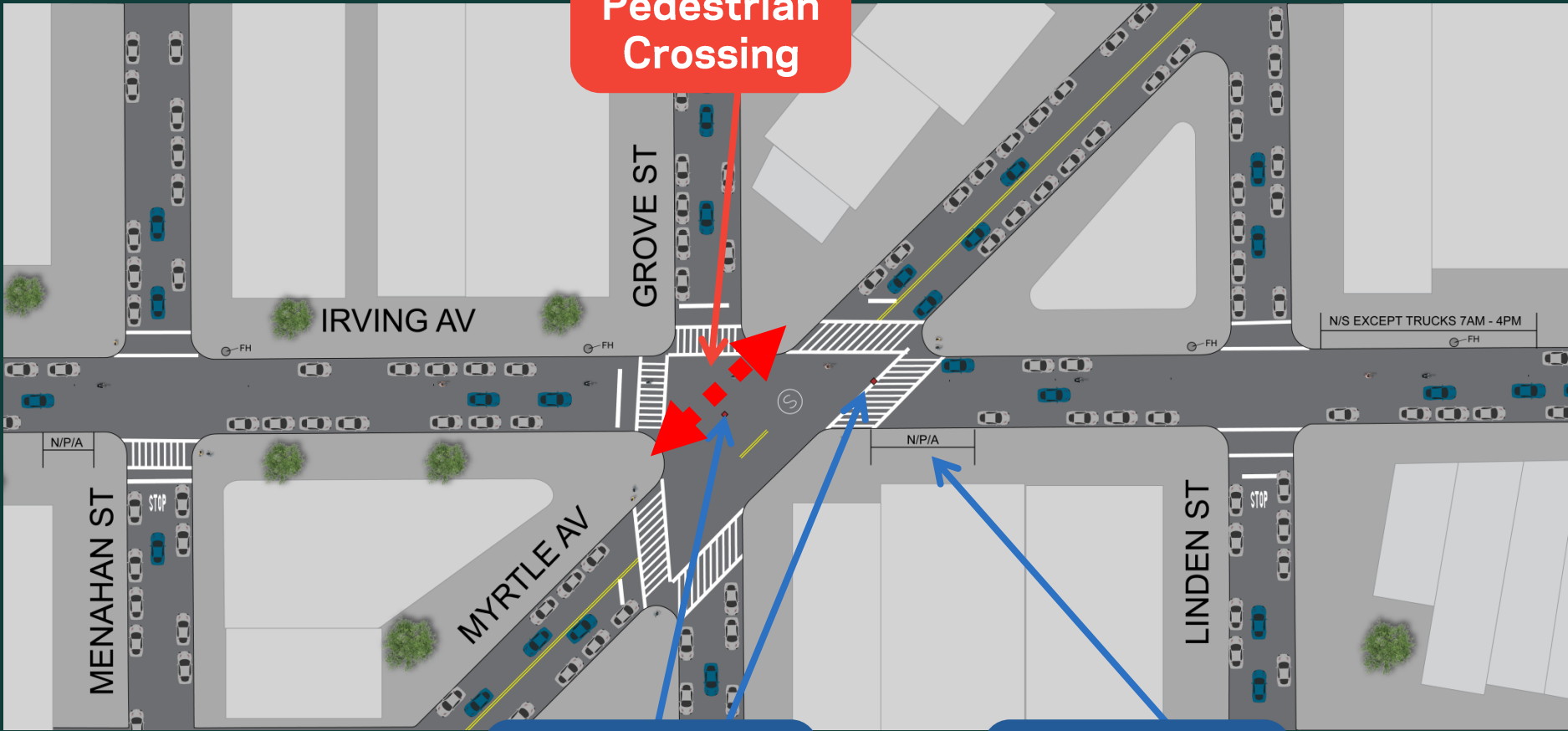
Trade-off:
improved intersection for four parking spots



Irving Ave

Existing Conditions- *Menahan St to Linden St*

**Desired
Pedestrian
Crossing**



**Elevated Train
Columns**

**Existing
Day lighting**

New Crosswalk

Intersection markings

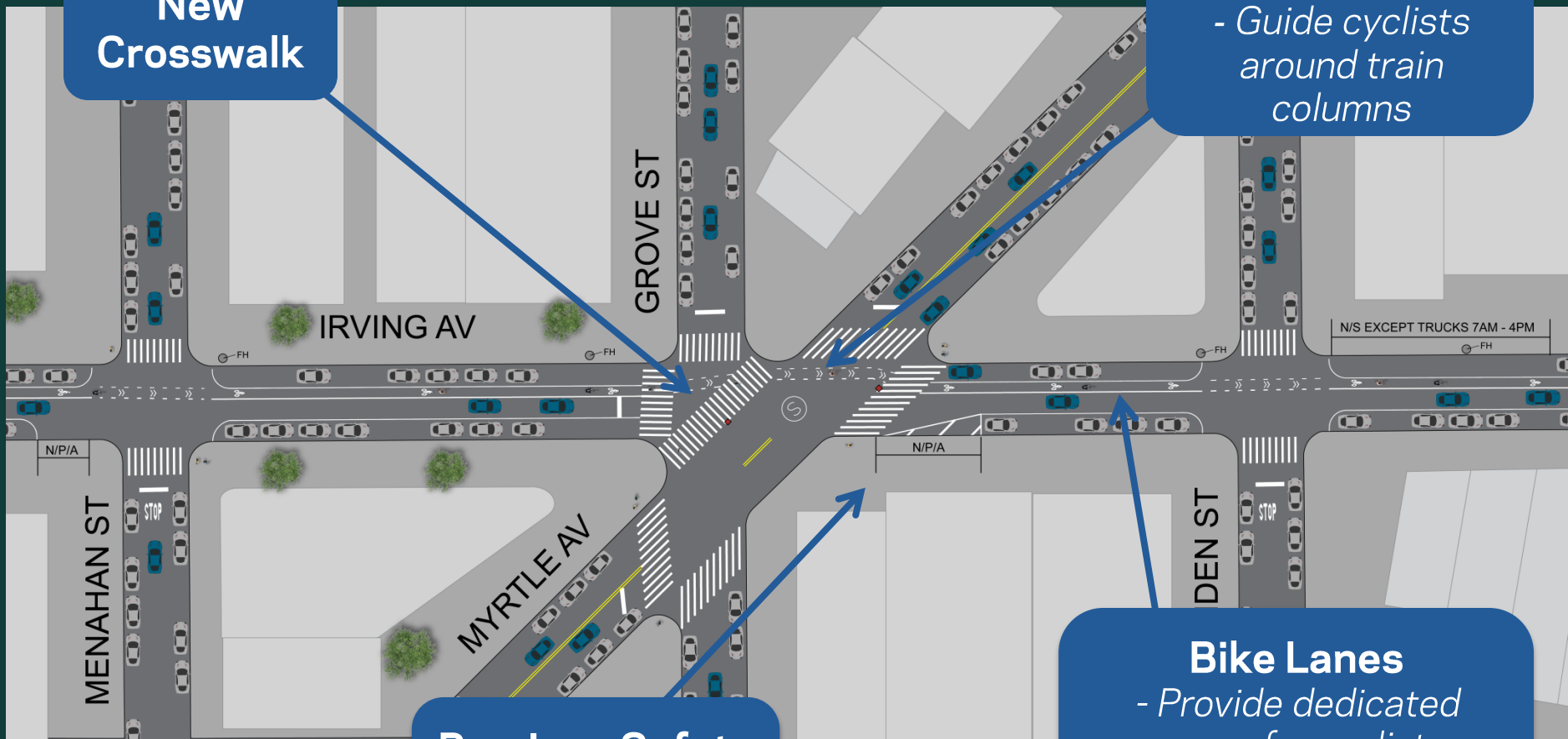
- Guide cyclists around train columns

Previous Safety Improvement

- Day lighting

Bike Lanes

- Provide dedicated space for cyclists
- Increase predictability of cyclist location



4

Jefferson Ave/Cornelia St, Hancock St

Existing Conditions

30' Wide

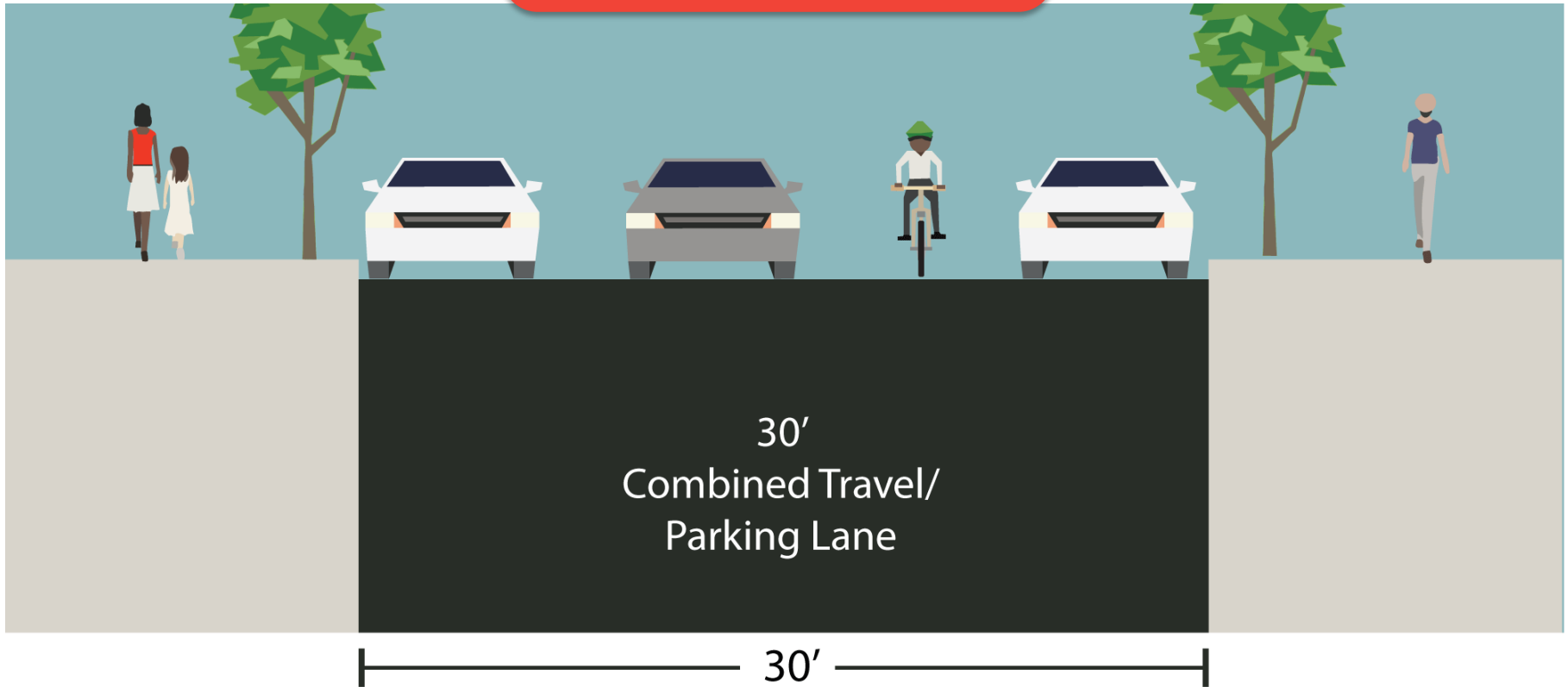
- Mixed-use (residential & commercial)
- 1-way street
- Curbside parking lanes



Hancock St

Lack of Markings

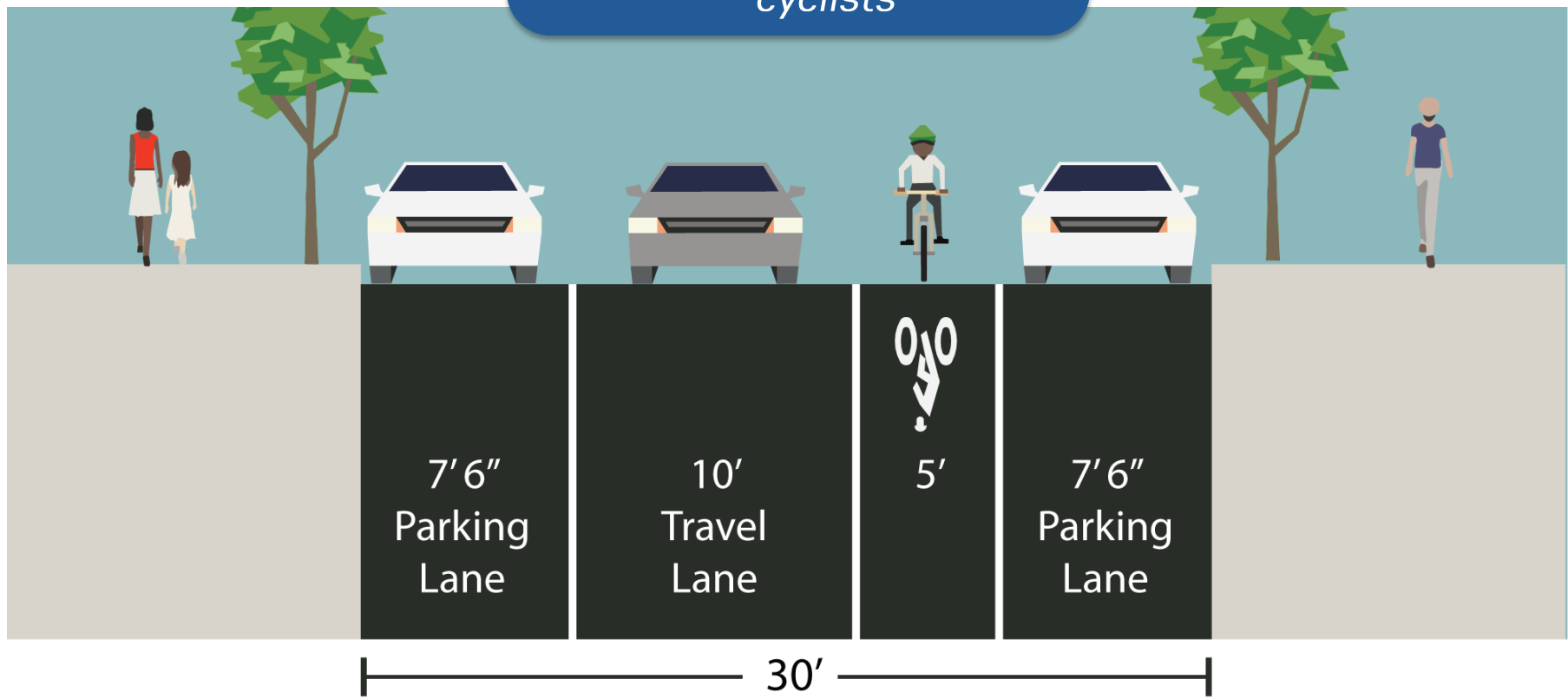
- *No dedicated space for cyclists*
- *Invites speeding*

Existing

Bike Lanes

- Increase predictability of cyclist location
- Dedicated space for cyclists

Proposed



- **Improves Safety**
 - Provides dedicated space for cyclists
 - Discourage speeding
- **Improves Mobility**
 - Build network in Bushwick
 - Opportunities to expand network beyond neighborhood



- **2017 Priorities:**
 - Build out western network
 - Low impact
 - Local circulators
 - Connection to Highland Park
- **Steering committee will work to determine routes**



Questions?

**Thank
You**

nyc.gov/dot