

Lafayette Avenue

Buffered Bicycle Lane and Traffic Calming

2016



New York City Department of Transportation

Presented by the Bicycle and Greenway Program on January 19, 2016 to Community Board 2 T&PS Committee



Overview

Project Background

Existing Conditions

Issues

Proposed Design

**DeKalb Avenue
Comparison**

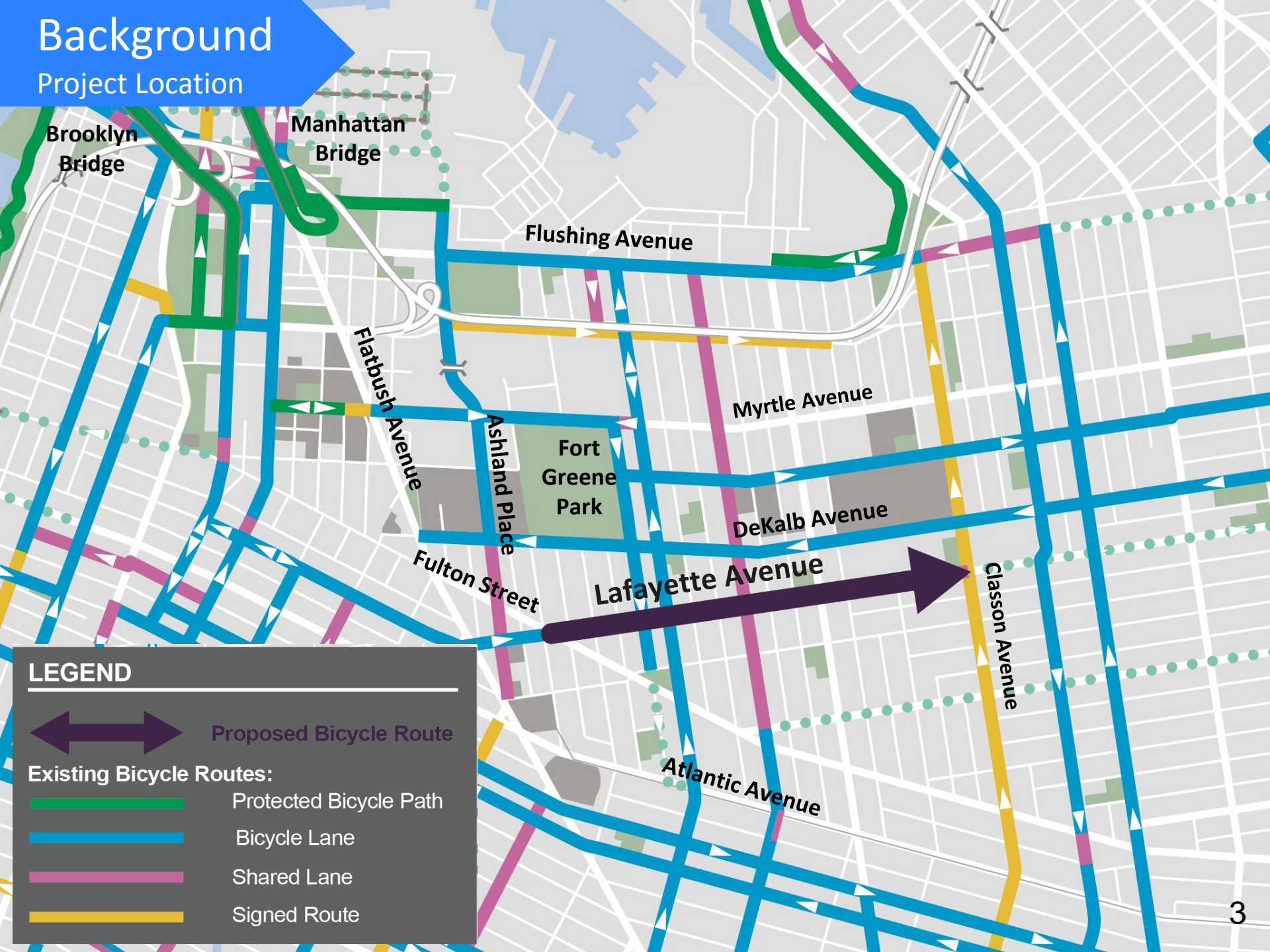
**Accessibility
Improvement**

Summary



Background

Project Location



LEGEND



Proposed Bicycle Route

Existing Bicycle Routes:



Protected Bicycle Path



Bicycle Lane



Shared Lane



Signed Route

Background

Previous Work

Bike Lane

Flatbush Ave to Fulton St

Installed 2009

Enhanced Shared Lane

Fulton St to Classon Ave

Installed 2012

**1,600 signatures requesting
bike improvements**

Collected in 2012

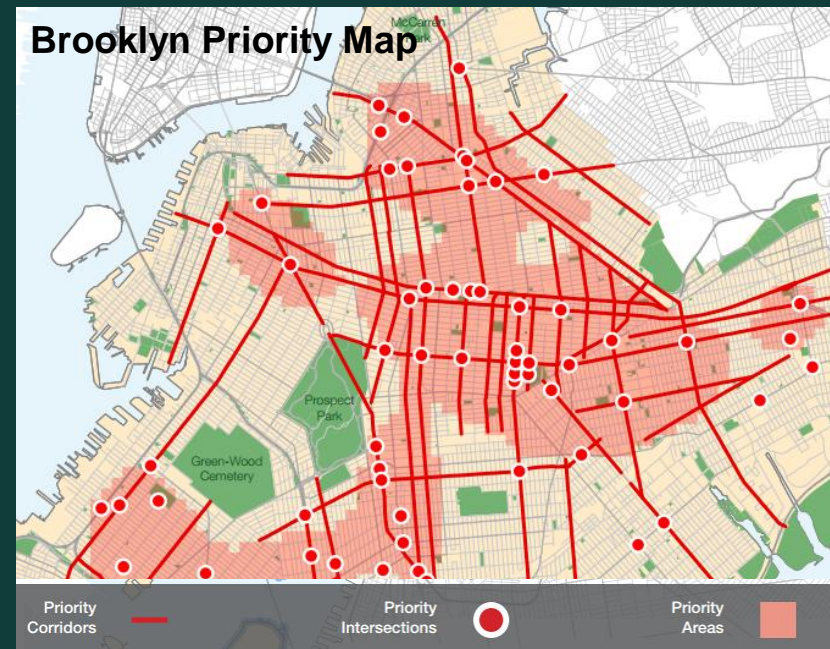
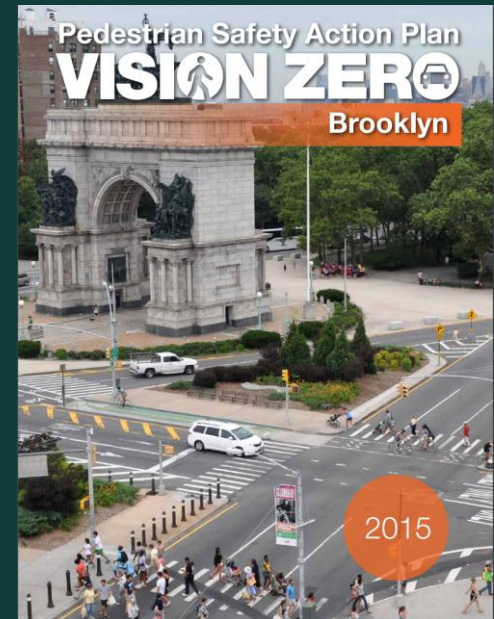


Background

Safety – Vision Zero

Vision Zero

- Multi-agency effort to reduce traffic fatalities in NYC
 - Borough Action Plans released in 2015
 - Priority Intersections, Corridors, and Areas identified for each borough
- Lafayette Ave from Fulton St to Adelphi St is within a Vision Zero Priority Area



Background

Safety

Lafayette Ave Fulton St to Adelphi St is within a **Vision Zero Priority Area**

2 pedestrians and 1 cyclist
severely injured 2010-2014
in the project area

Speeding
24% of off-peak vehicles

Lafayette Avenue - Fulton St to Classon Ave, BK Injury Summary, 2010-2014 (5 Years)

	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	27	2	0	2
Bicyclist	24	1	0	1
Motor Vehicle Occupant	132	2	0	2
Total	183	5	0	5



Background

Citi Bike in CB 2

Installed 2013

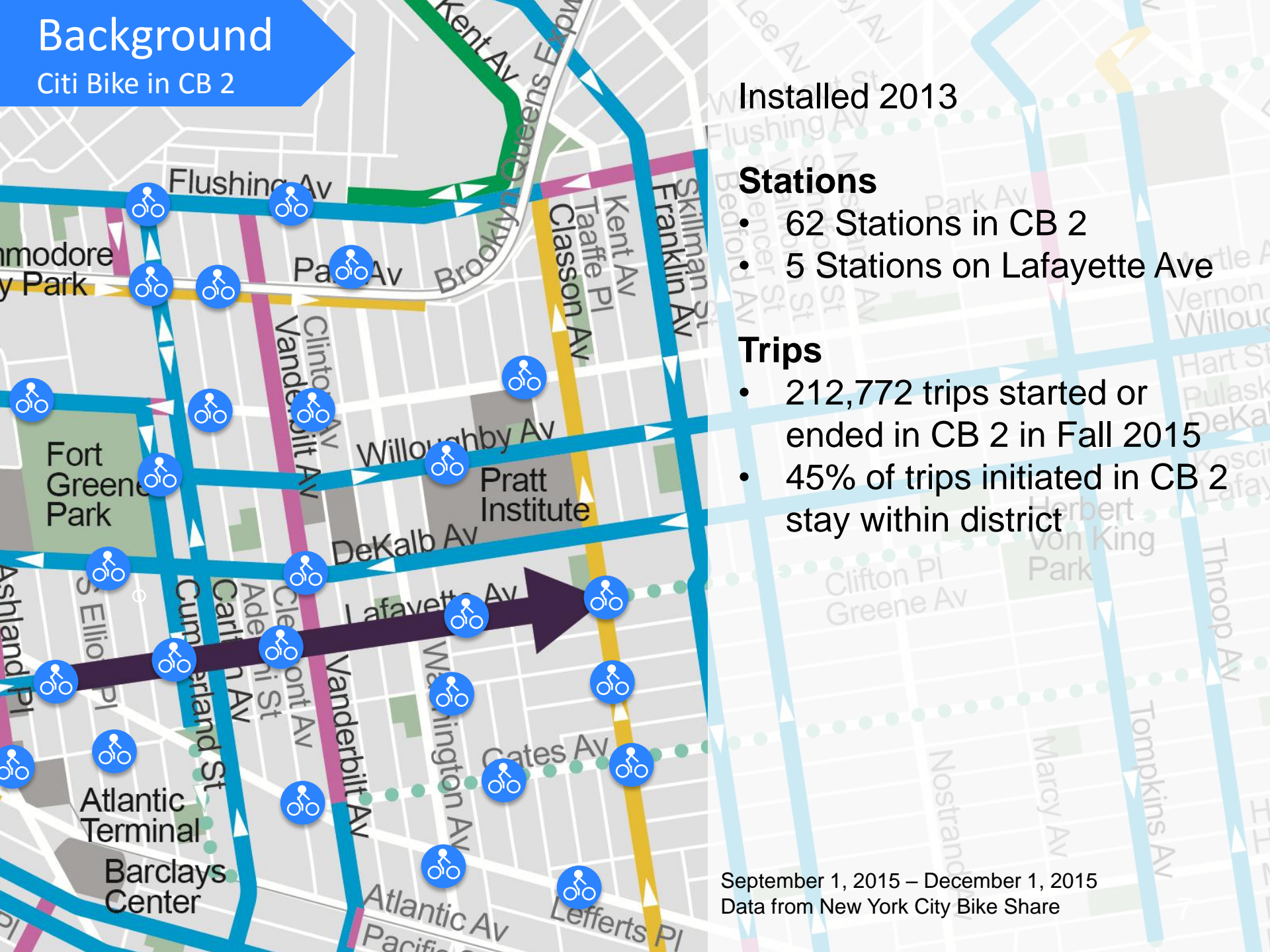
Stations

- 62 Stations in CB 2
- 5 Stations on Lafayette Ave

Trips

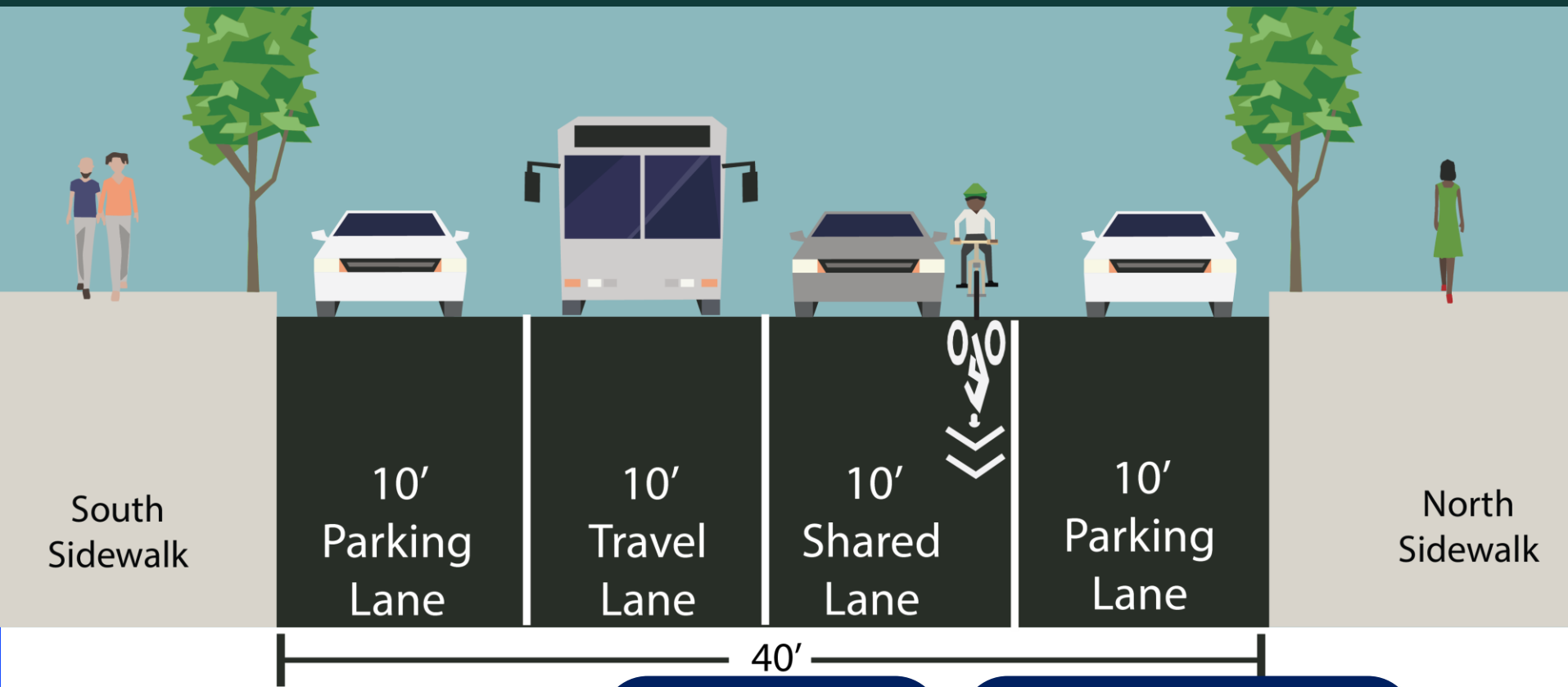
- 212,772 trips started or ended in CB 2 in Fall 2015
- 45% of trips initiated in CB 2 stay within district

September 1, 2015 – December 1, 2015
Data from New York City Bike Share



Existing Conditions

Shared Lane



**B38 Bus
Route**

**Moderate
Traffic
Volumes**

*AM Peak: 467 vph
PM Peak: 611 vph*

Bike Volumes

*12 Hour Weekday: 577
12 Hour Weekend: 455*

15% increase since 2011

Issues

Off-Peak Hours

**Excess street
capacity**

*leads to speeding
and erratic driving*

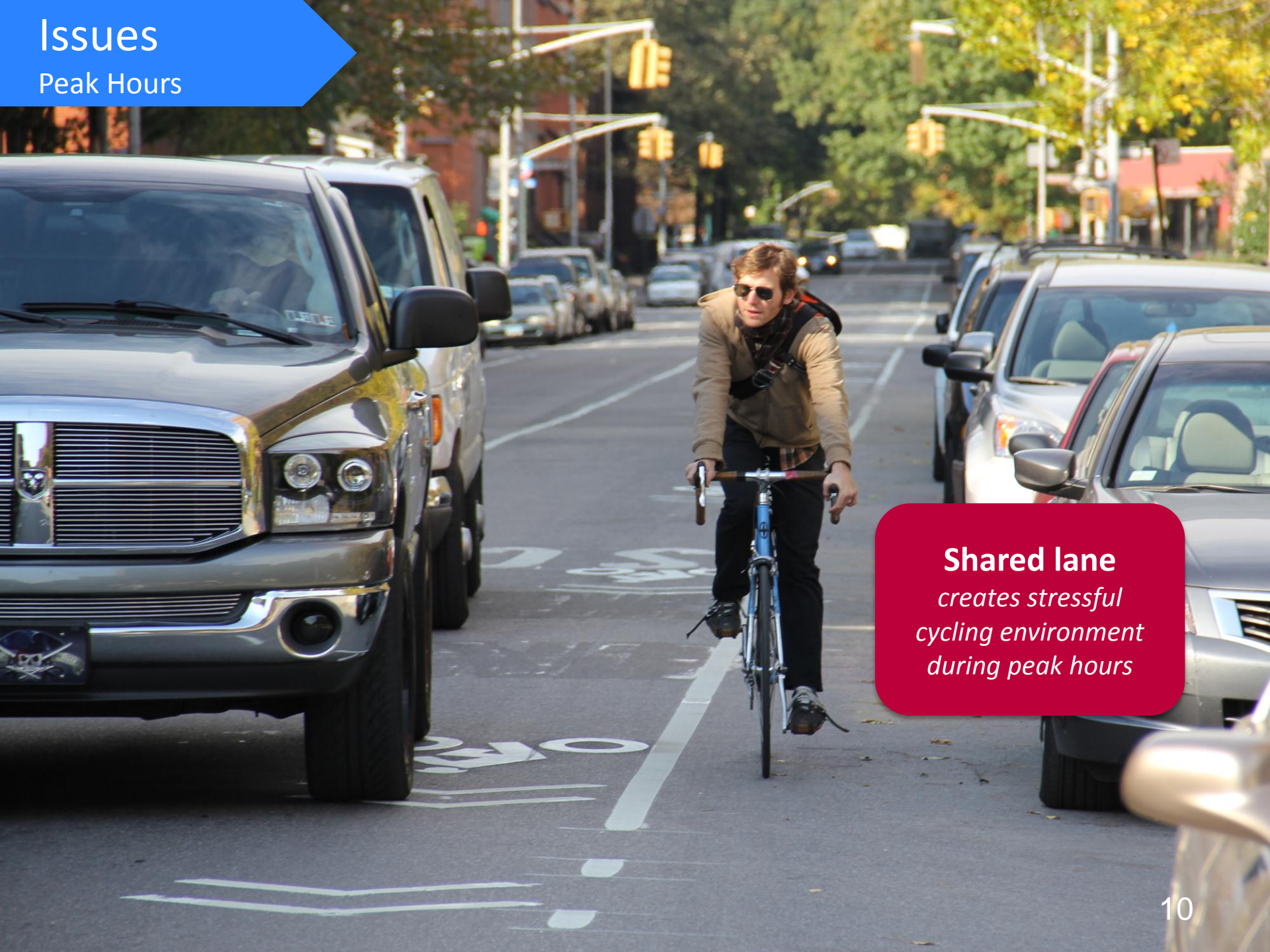


**Lack of dedicated
bike space**

*encourages riding on
both sides and provides
less predictability*

Issues

Peak Hours



Shared lane
*creates stressful
cycling environment
during peak hours*

Issues

Increasing biking in NYC

Weekday Bicycle Volumes

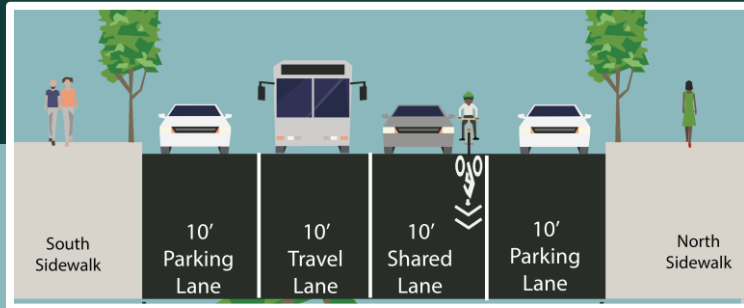
	Before	After
DeKalb Ave	161	1,029
Lafayette Ave	489	577

DeKalb Ave Counts from July 2007 and June 2012
Lafayette Ave Counts from May 2011 and May 2015

**Dedicated space
for bicycles**
*is more effective at
promoting cycling*

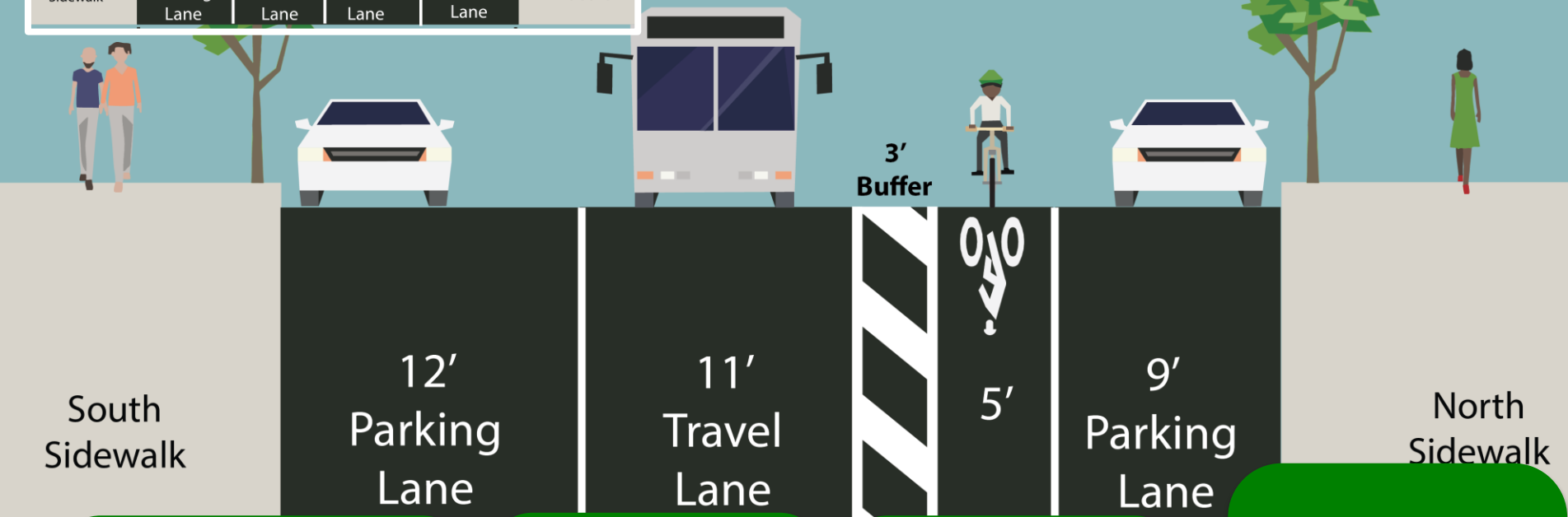
Proposed Design

Roadway Configuration



Traffic Calming

Organized Traffic Flow



Wide Parking Lane

facilitates bus drop off/pick up and vehicle access

Travel Lane Removal

discourages speeding and erratic driving

Buffered Bike Lane

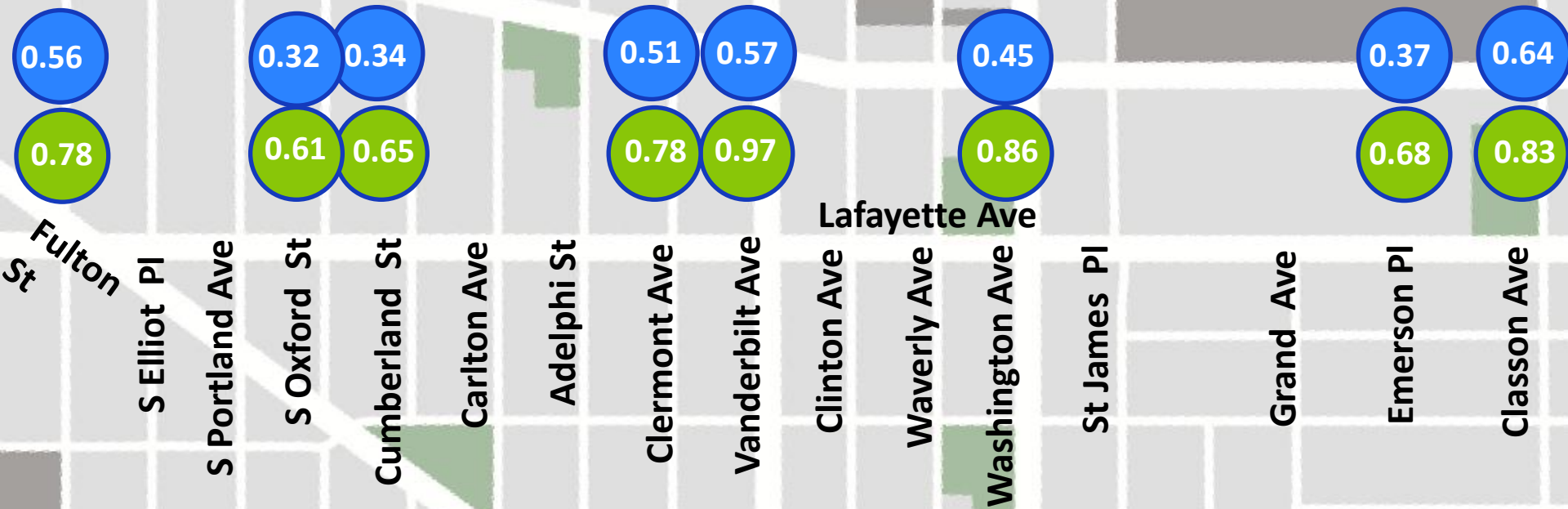
provides dedicated space for cyclists

Signal Time Adjustments

allow more efficient traffic flow during peak hour

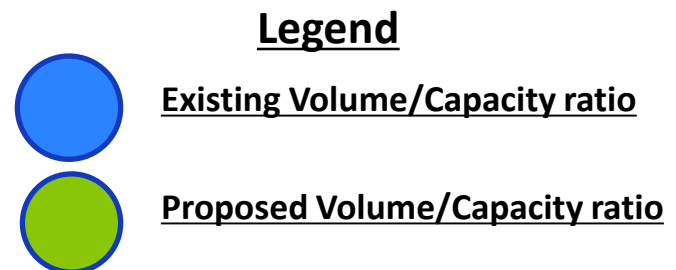
Proposed Design

Intersection Impacts



Lafayette Ave has excess capacity which can lead to speeding

Proposed design accommodates peak volumes



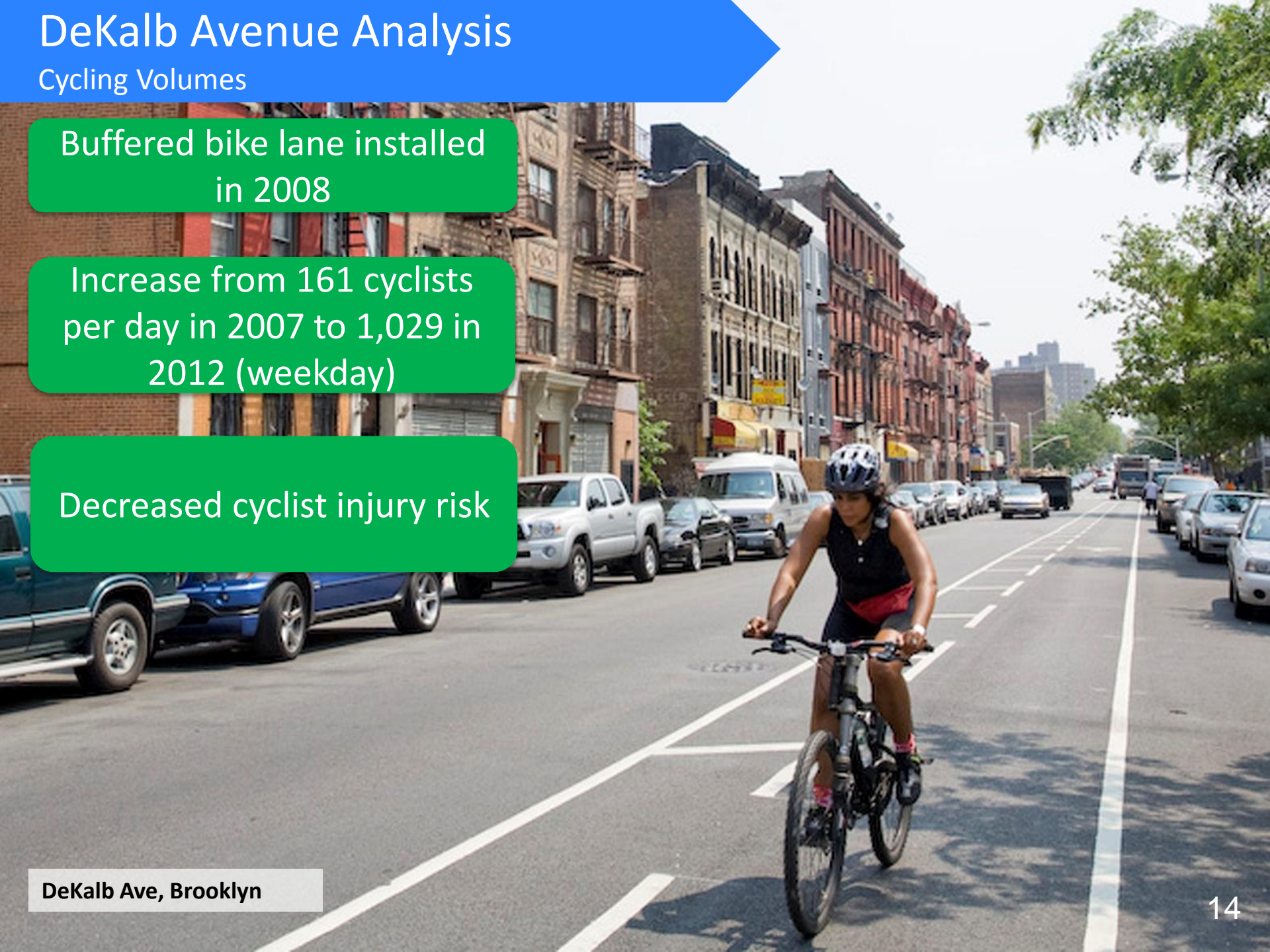
DeKalb Avenue Analysis

Cycling Volumes

Buffered bike lane installed
in 2008

Increase from 161 cyclists
per day in 2007 to 1,029 in
2012 (weekday)

Decreased cyclist injury risk

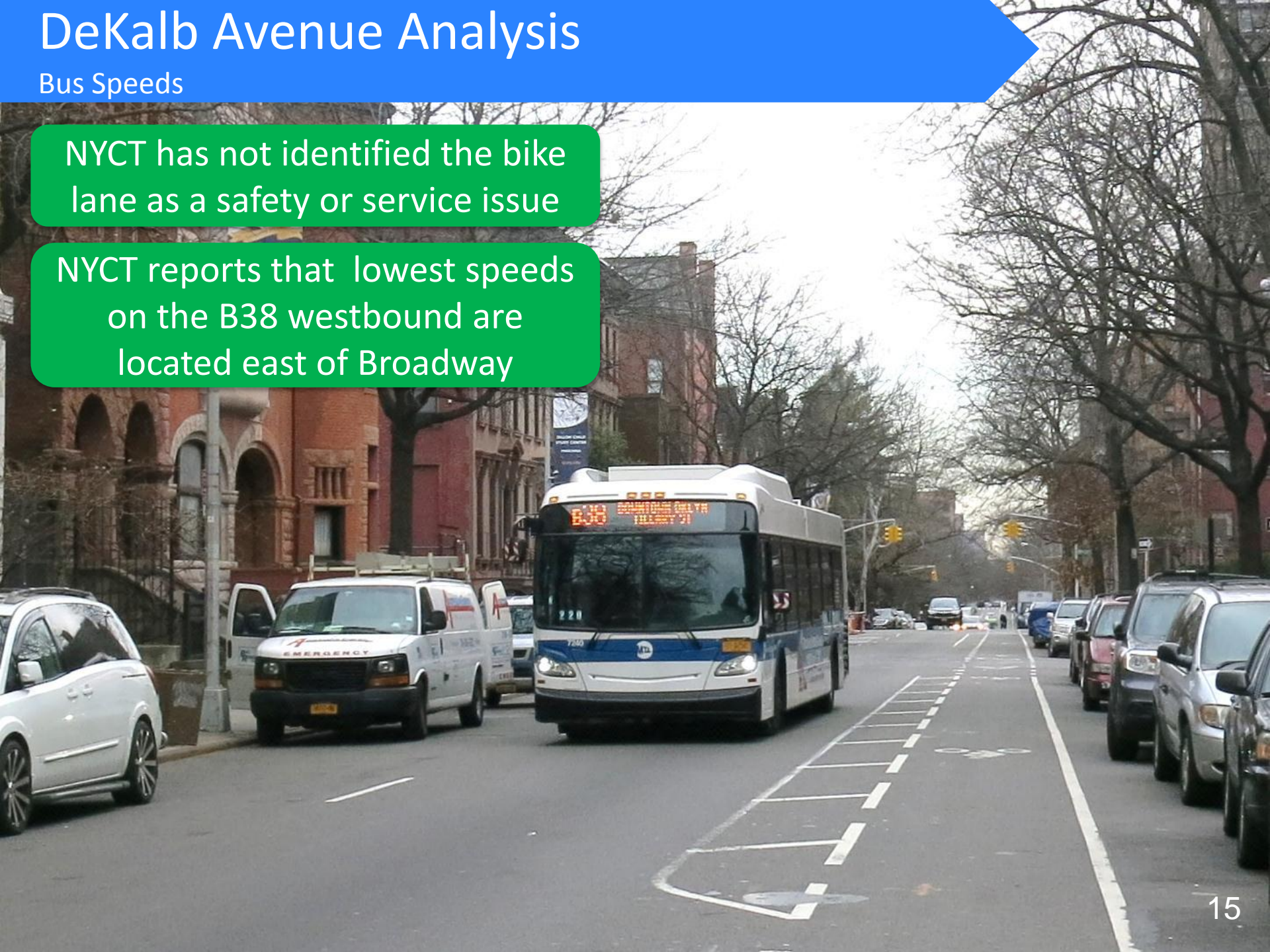


DeKalb Avenue Analysis

Bus Speeds

NYCT has not identified the bike lane as a safety or service issue

NYCT reports that lowest speeds on the B38 westbound are located east of Broadway



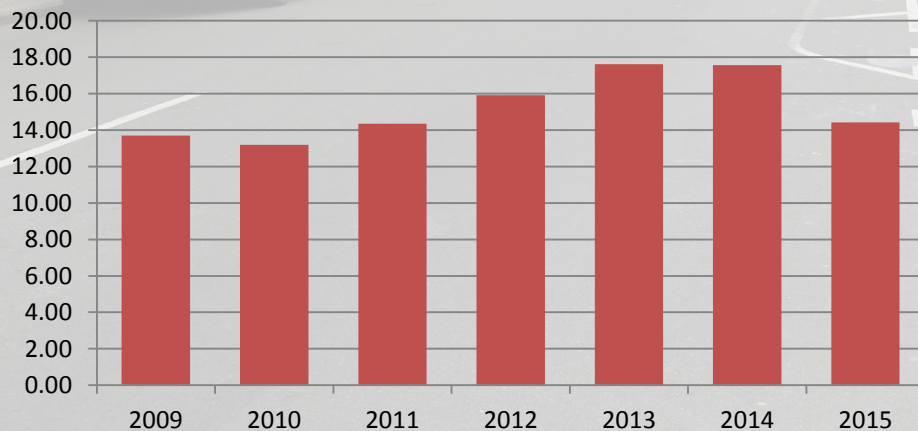
DeKalb Avenue Analysis

Travel Times

DeKalb Ave travel times have improved

- DOT will investigate issues with double parking and loading that may slow traffic and increase crash risk

DeKalb Avenue
Average Taxi Speed by Year



DeKalb Avenue Analysis

Traffic Volume Comparison

DeKalb Ave:

AM Peak: 661 vph

PM Peak: 572 vph

Lafayette Ave

AM Peak: 467 vph

PM Peak: 611 vph



Counts taken at DeKalb Ave between Franklin Ave and Classon Ave, May 2014
Counts taken at Lafayette Ave and Cumberland St and Carlton Ave, January 2015

Accessibility Improvement

Lafayette Ave and Cumberland Street

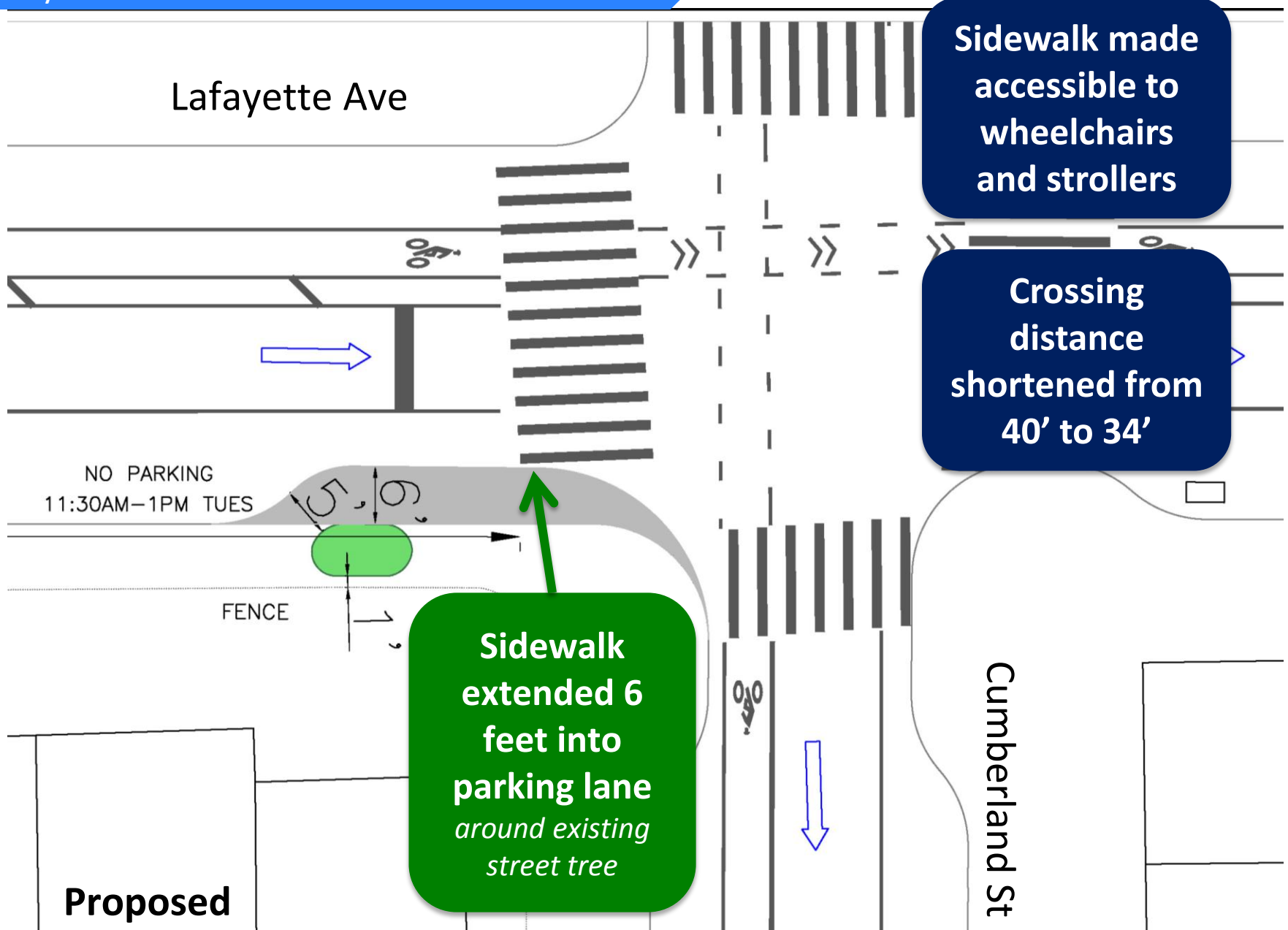
**Southern
sidewalk not
accessible**

Due to growth of tree



Accessibility Improvement

Lafayette Ave and Cumberland Street



Summary

Signal time adjustment to avoid traffic congestion

Dedicated bicycle facility

Design accommodates bus movements and vehicle access

Improve ADA accessibility at Cumberland Ave

Safe eastbound cyclist connection between Brooklyn and Manhattan Bridges, Downtown Brooklyn, Fort Greene, Clinton Hill, and Bedford Stuyvesant



Questions?

Thank
You

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