

## **FRANKLIN AVE**

### Safety Improvements

Presented to Brooklyn Community Board 9
March 8, 2017





#### INTRODUCTION

Franklin Ave
Eastern Parkway to Empire Blvd

Roadway will be resurfaced Spring 2017

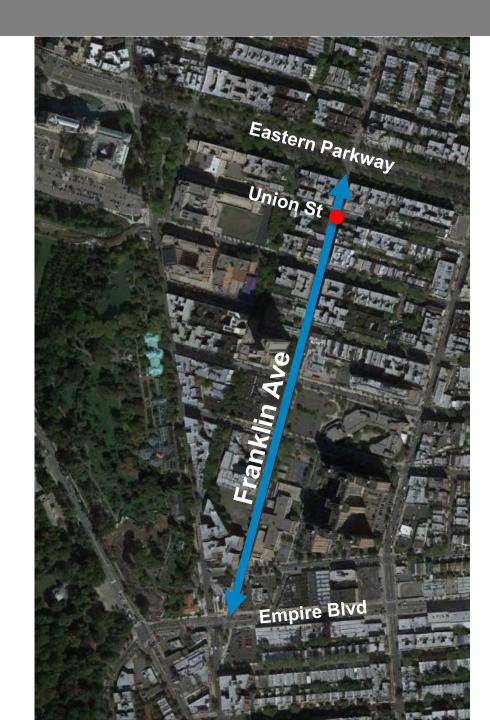
CM Cumbo requested traffic calming at Union St, Fall 2016

Current roadway markings are substandard

After repaving, markings will be installed using current design standards to increase safety along the corridor

#### **Presentation Overview:**

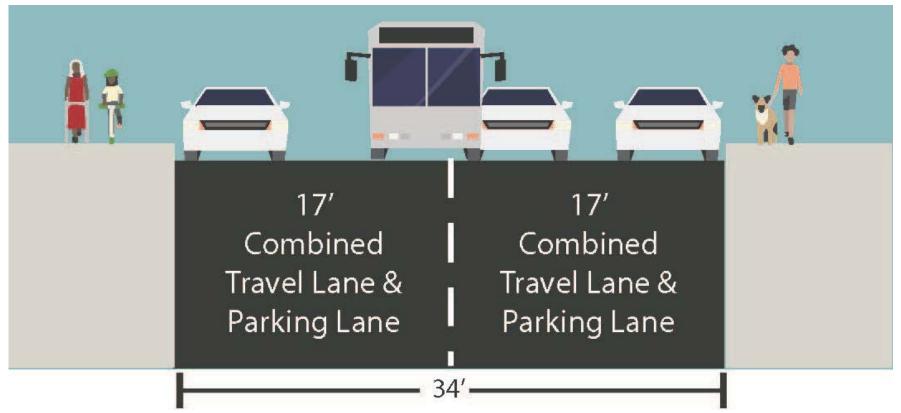
- Existing Conditions and Issues
- Proposed Design
- Next Steps



#### **EXISTING CONDITIONS**



**Substandard Lane Widths** 



#### **ISSUE – Narrow Travel Lanes, Low Vehicular Volumes**



- Uncomfortably narrow lanes for drivers, motorists often straddle lanes, make less predictable movements
- Substandard lane width for buses (11 ft lane is standard on bus routes)
- Less than 500 vehicles in peak hour, typical threshold for one lane is +/- 700

#### **ISSUE – Narrow Parking Lanes**



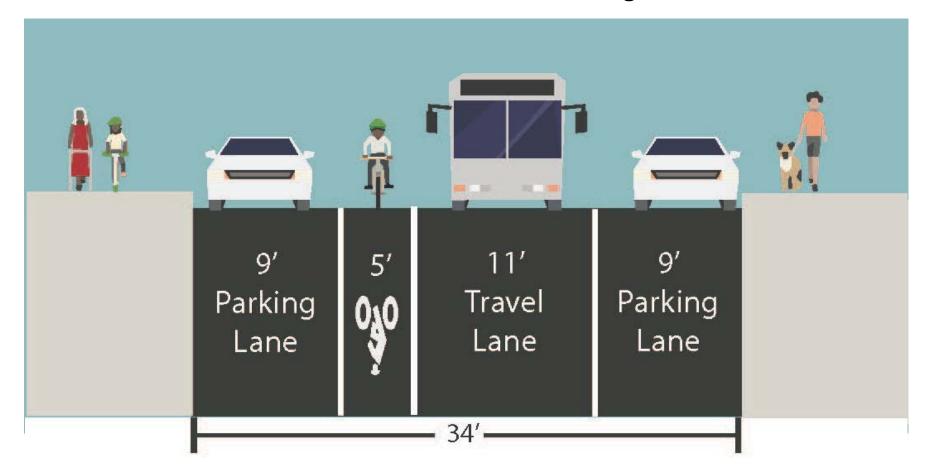
 Uncomfortable to enter/exit parked vehicles because moving vehicles travel so close to parked vehicles

#### **ISSUE – Bike Lane Ends at Eastern Parkway**



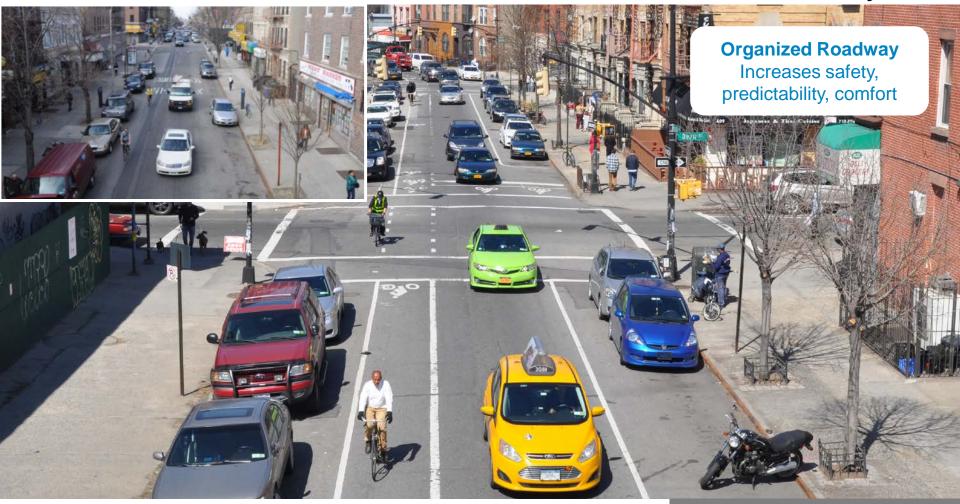
- No dedicated space to continue south
- Cyclist position in roadway unpredictable for drivers and pedestrians
- 260+ bikes counted in 12-hrs on weekday and weekend (May 2016)
- 18% of weekday bikes riding on sidewalk, compared to 4% where bike lane was installed north of Eastern Parkway

#### PROPOSED DESIGN – Standard Travel Lane, Parking Lanes, Bike Lane



- One standard width travel lane accommodates buses, more comfortable for drivers, improves predictability, easier for pedestrians to cross
- Wider parking lanes pull moving vehicles away from parked vehicles, facilitate entry/exit to/from parked vehicles
- **Bike lane** creates dedicated, predictable space for cyclists, separate from moving vehicles, discourages sidewalk riding to reduce pedestrian conflicts

#### PROPOSED DESIGN – Precedent: Franklin Ave North of Eastern Parkway



#### Redesigned 2014

- Injuries for all road users have decreased by 44% Compared to 28% south of Eastern Parkway
- Pedestrian injuries have decreased by 25% Compared to 8% south of Eastern Parkway

Vehicle volumes are approximately

1.5-2.5x higher north of Eastern Parkway

#### ISSUE – No Pedestrian Crossing at Union St, School Crossing at Carroll St



#### **Carroll St**



- No pedestrian crossing at Union St, volumes not high enough to meet
   Federal warrant for signal or stop sign, pedestrians cross at this location
- Uncontrolled school crossing at Carroll St does not meet current standards

#### ISSUE – Challenging Crossing for Drivers at Union St, Carroll St



- No signal or stop sign to stop vehicles on Franklin Ave
- Drivers must cross 2 lanes of traffic to continue on Union St, Carroll St
- Parked vehicles obstruct view of oncoming vehicles

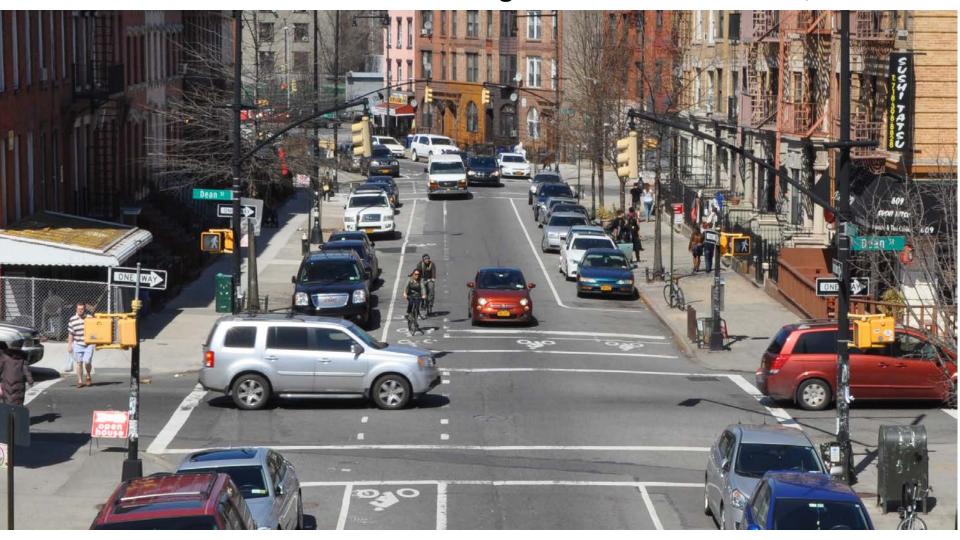
#### PROPOSED DESIGN – Pedestrian Crossing Upgrades at Union St, Carroll St



- Enhanced pedestrian crossings are installed at particular locations that do not meet warrants for signals or stop signs, but meet other specific safety criteria
- Painted curb extensions, daylighting, new crosswalks and signs create shorter, safer pedestrian crossings, alert vehicles of pedestrians crossing

\*\*\*Crosswalk and signs can only be installed if roadway is reduced to one lane

#### PROPOSED DESIGN – Easier Crossing for Drivers at Union St, Carroll St



- Easier to cross one motor vehicle lane, vehicle location more predictable
- Travel lane shifted away from parked cars due to bike lane, increasing visibility
- Daylighting improves visibility for drivers pulling out

#### SUMMARY

- Standard width travel lane accommodates buses, more comfortable for drivers
- Wider parking lanes make exiting/entering parked vehicles safer
- Bike lane provides dedicated space for cyclists, improves safety for all road users by increasing predictability of cyclist location
- New and upgraded pedestrian crossings at Union St and Carroll St create shorter, safer crossings, only feasible with lane reduction, requires daylighting (loss of less than 1 parking space on each side)
- New roadway design and daylighting make it <u>easier for drivers to cross</u> at Union St and Carroll St

#### **NEXT STEPS**

- Resurfacing scheduled for Spring
- Marking installation to follow resurfacing



# **Questions? THANK YOU!**











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#### **PROPOSED DESIGN – Safety Benefits**

#### Crashes and Injuries Two-Year After Analysis, Franklin Ave (Atlantic Ave to Eastern Pkwy) **Before** After Change 13/ 15/ 111/ 12/ '14/ **Average Average** Percent Actual 12 '13 '14 15 '16 **Total Crashes** 127 140 163 143.3 133 127 130.0 -13.3 -9% Crashes w/ Injuries 36.7 23.0 -13.7 31 25 36 43 21 -37% Motor Vehicle Occupant 32 34 36.0 13 17.5 -18.5 -51% 42 22 18 12.7 -3.2 Pedestrian 10 9.5 -25% 10 9 10 4.0 2.5 -1.5 -38% Cyclist 3 **Total Injuries** 52.7 29.5 -23.2 -44%

#### Crashes and Injuries

Two-Year After Analysis, Franklin Ave (Eastern Pkwy to Empire Blvd)

		Before				After			Change	
	'11/ '12	'12/ '13	'13/ '14	Average		'14/ '15	'15/ '16	Average	Actual	Percent
Total Crashes	68	71	80	73.0		81	65	73.0	0.0	0%
Crashes w/ Injuries	21	25	22	22.7		14	18	16.0	-6.7	-29%
Motor Vehicle Occupant	21	11	13	15.0		8	10	9.0	-6.0	-40%
Pedestrian	7	13	11	10.3		9	10	9.5	-0.8	-8%
Cyclist	3	5	2	3.3		2	2	2.0	-1.3	-40%
Total Injuries	31	29	26	28.7		19	22	20.5	-8.2	-28%

#### North of Eastern Parkway – Redesigned 2014

Injuries for all road users decreased by 44% Pedestrian injuries

## Pedestrian injuries decreased by 25%

Analysis compares average number of injuries in 2 years following implementation to average from 3 years prior to implementation

## South of Eastern Parkway

Injuries for all road users decreased by 28% Pedestrian injuries decreased by 8%