

Franklin Avenue and Atlantic Avenue

Transportation Improvements

2015



Commissioner Polly Trottenberg New York City Department of Transportation
Presented on September 9, 2014 to Community Board 3 Transportation, Sanitation and Environment Committee

Background

- Franklin Ave is congested approaching Atlantic Ave
- Franklin Ave / Atlantic Ave is a high crash intersection
 - More injuries than 99% of Brooklyn intersections
 - 8 pedestrian injuries between 2008 and 2012
- Community Board 3 leadership mentioned other transportation issues in the district:
 - Congestion on Franklin Ave approaching Fulton St
 - Congestion on Tompkins Ave approaching Fulton St
 - Bike route markings on Tompkins Ave end at MacDonough St

Issue: Congestion On Franklin Ave Approaching Atlantic Ave

- Franklin Ave signal phase is only 35 seconds every 2-minute signal cycle
- Vehicle queue backs up past Lefferts Place during PM peak period



Issue: Congestion On Franklin Ave Approaching Atlantic Ave

Existing PM Signal Phasing



Atlantic Ave phase:
70 seconds



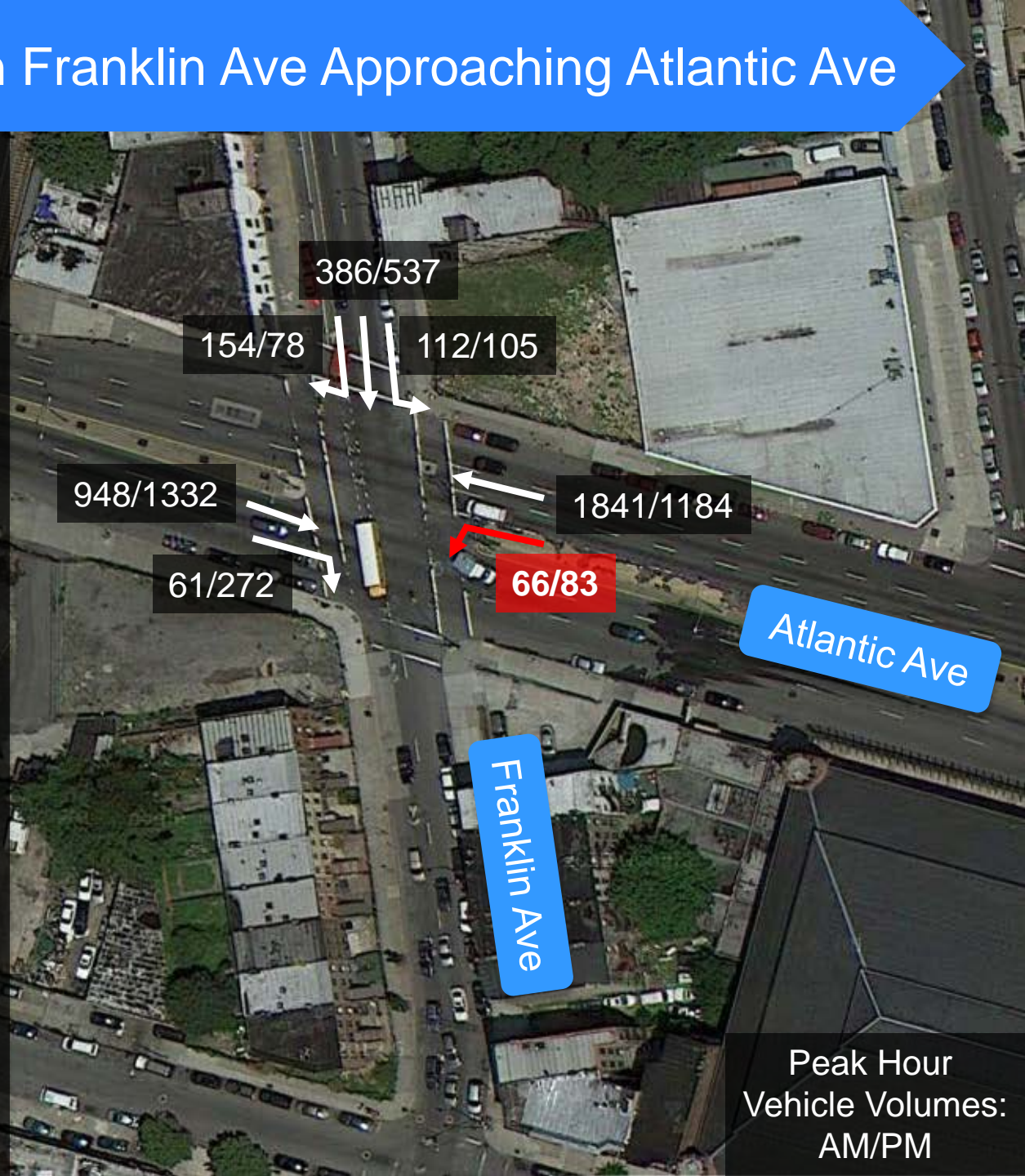
Westbound protected
phase: 15 seconds



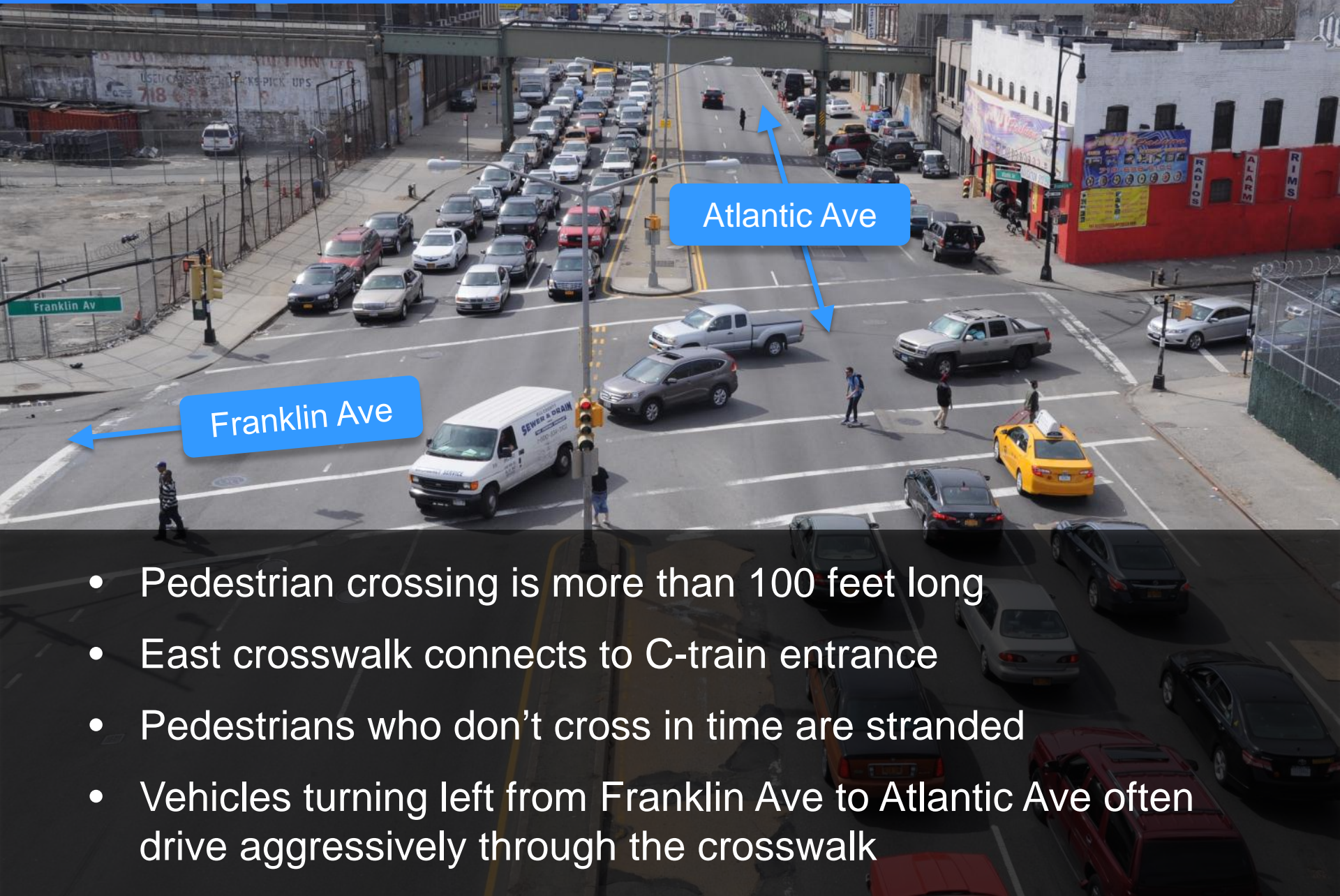
Franklin Ave phase:
35 seconds

Issue: Congestion On Franklin Ave Approaching Atlantic Ave

- Westbound left turn volumes are very small
- Protected westbound left turn phase receives a disproportionate amount of green time (2% of volume, 13% of signal time)



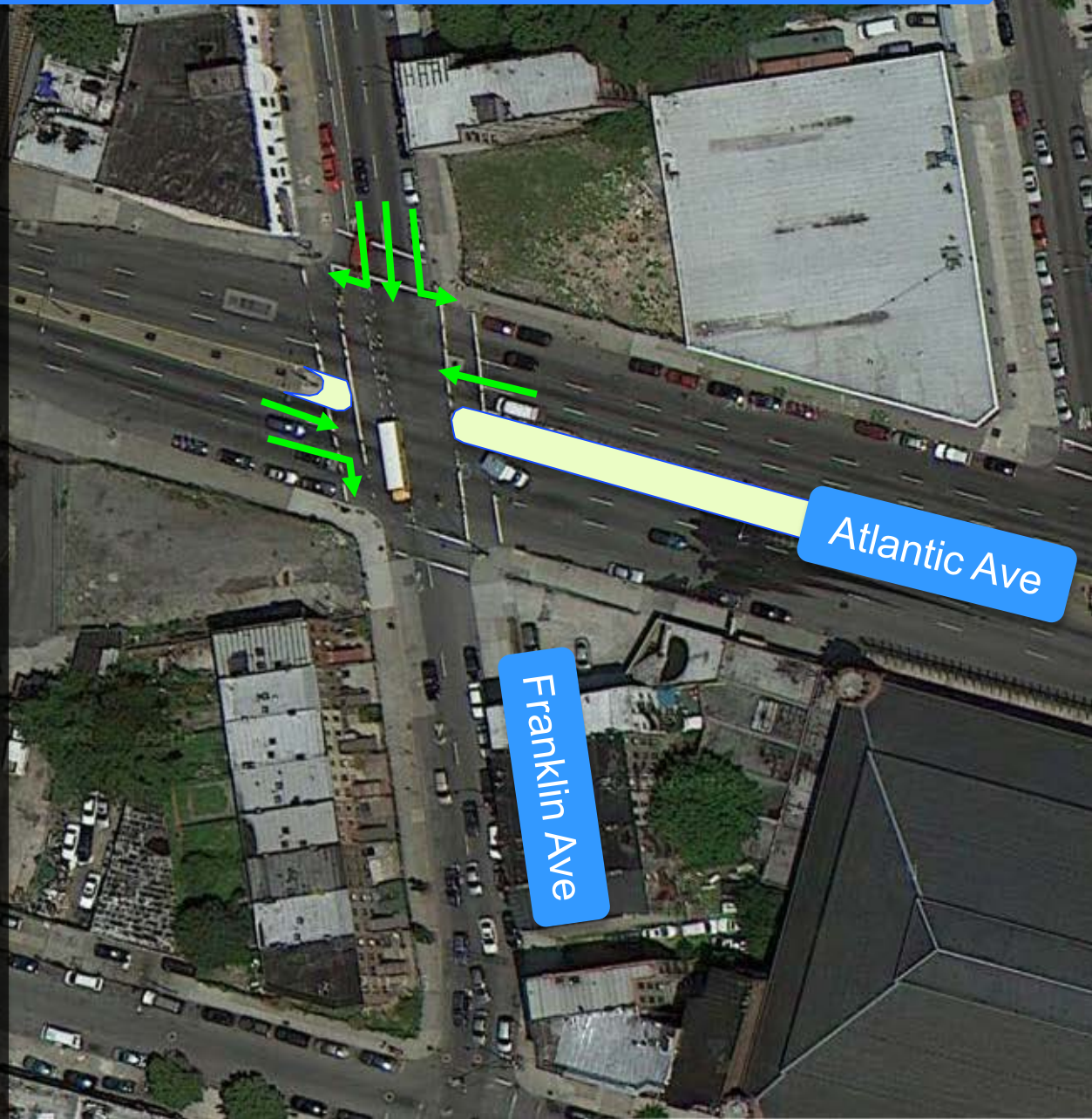
Issue: Atlantic Ave Pedestrian Crossing



- Pedestrian crossing is more than 100 feet long
- East crosswalk connects to C-train entrance
- Pedestrians who don't cross in time are stranded
- Vehicles turning left from Franklin Ave to Atlantic Ave often drive aggressively through the crosswalk

Proposed Enhancements to Franklin/Atlantic Intersection

- Ban the westbound left turn from Atlantic Ave to Franklin Ave
- Redistribute the green time associated with the protected left turn phase to Franklin Ave and Atlantic Ave phases
- Build concrete pedestrian islands on Atlantic Avenue



Traffic Analysis

- Westbound left turn volumes are very small
- Nearby intersections (e.g. Grand Ave, Brooklyn Ave) can easily absorb the additional vehicle volume
- Congestion on Franklin Ave would be significantly reduced as a result of the additional green time



Proposed Enhancement: Improved Traffic Flow

Existing PM Signal Phasing



Atlantic Ave phase:
70 seconds



Westbound protected
phase: 15 seconds



Franklin Ave phase:
35 seconds

Proposed Enhancement: Improved Traffic Flow

Proposed PM Signal Phasing



Atlantic Ave phase:
80 seconds



Franklin Ave phase:
40 seconds

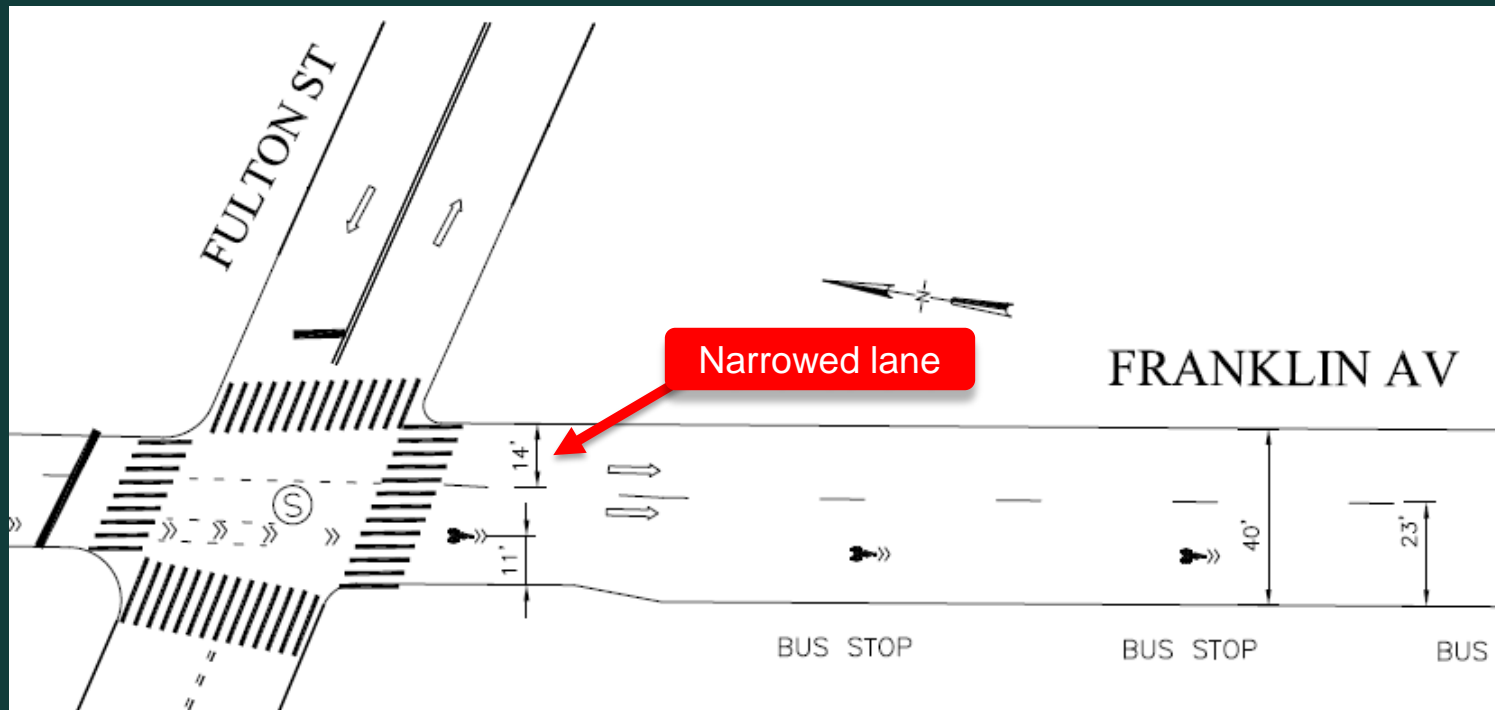
Proposed Enhancement: Concrete Pedestrian Islands

- Install concrete pedestrian islands on Atlantic Avenue
- Benefits:
 - Shorter crossing distance
 - Refuge for pedestrians who can't cross in time
 - Slows turning vehicles



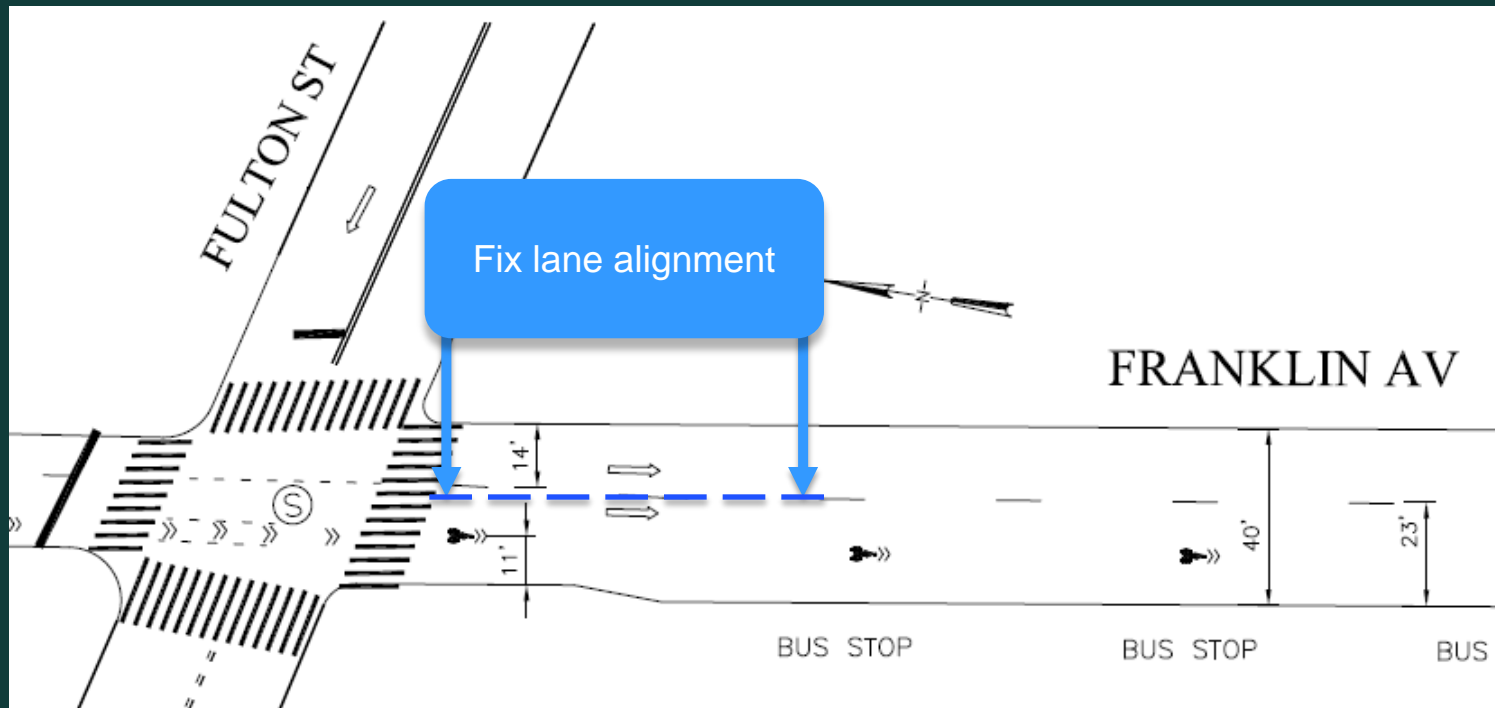
Issue: Congestion On Franklin Ave Approaching Fulton St

- Signal timing coordination needs improvement
- Road narrows for 70' south of Fulton St
 - East side combined travel/parking lane narrows to 14'
 - Not wide enough for parked cars and moving cars
 - Effectively only one receiving lane



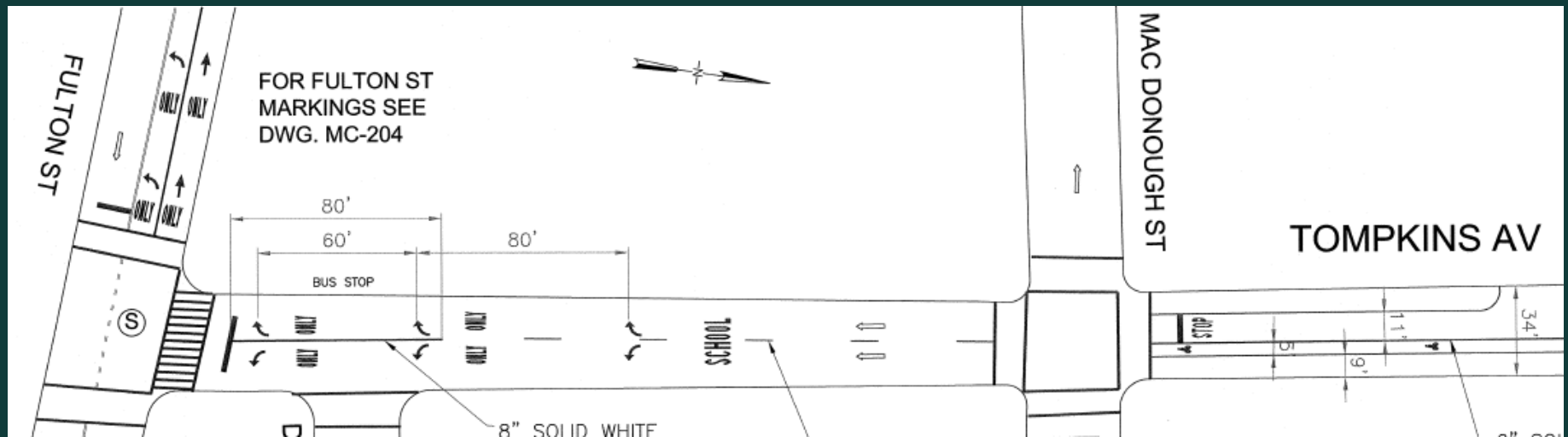
Proposed Enhancements to Franklin Ave

- Sync green phases to 25mph progression between Gates Ave and Fulton St
- Update markings so the east side combined travel lane is always 17' wide



Issue: Tompkins Ave Approaching Fulton St

- Traffic congestion
 - Signal timing coordination needs improvement
- Bike lane markings end abruptly at MacDonough St



Proposed Enhancements to Tompkins Ave

- Sync green phases to 25mph progression between Gates Ave and Fulton St
- Add shared lane markings and signage to Tompkins Ave south of MacDonough St to guide cyclists towards Brooklyn Ave / Atlantic Ave
 - No parking removal
 - No lane removal



Example of Shared Lane Markings:
Ocean Ave, Brooklyn

Summary of Proposal

- Increase green time for Franklin Ave approaching Atlantic Ave
- Build concrete pedestrian islands on Atlantic Avenue
- Sync green phases along Franklin Ave and Tompkins Ave north of Fulton St
- Fix lane alignment on Franklin Ave south of Fulton St
- Guide cyclists from Tompkins Ave bike lane with shared lane markings and guide signs

Benefits:

- Reduced congestion and delay for motorists and bus riders on Franklin Ave and Tompkins Ave
- Safer pedestrian crossing of Atlantic Ave at Franklin Ave
- Improved wayfinding and guidance for cyclists on Tompkins Ave

Planned implementation in Spring 2015

Questions?

Thank
You