



# Union Street One-Way Conversion & Safety Improvements

Presented to: Community Board 6

October 26, 2023

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## Background

# 1

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## Why Are We Here?

- Union St, between 8<sup>th</sup> Ave and Grand Army Plaza (GAP) is currently a two-way street with:
  - On-street parking on the north side;
  - One westbound travel lane; and
  - Two eastbound travel lanes (majority of south curb lane posted as "No Standing, 7am-10pm, All Days")
- During peak times, the south curb lane is frequently obstructed by illegally-parked delivery trucks and passenger vehicles.
- These conditions cause the south curb lane to be under-utilized for moving vehicles, effectively reducing the number of eastbound moving lanes from two to one.
- This results in severe congestion that spills back from GAP and gridlocks the 8<sup>th</sup> Ave/Union St intersection, degrading operations and compromising safety for all roadway users.



Above & below:  
S/W corner of Union St @ 8<sup>th</sup> Ave, looking east



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## Existing Conditions

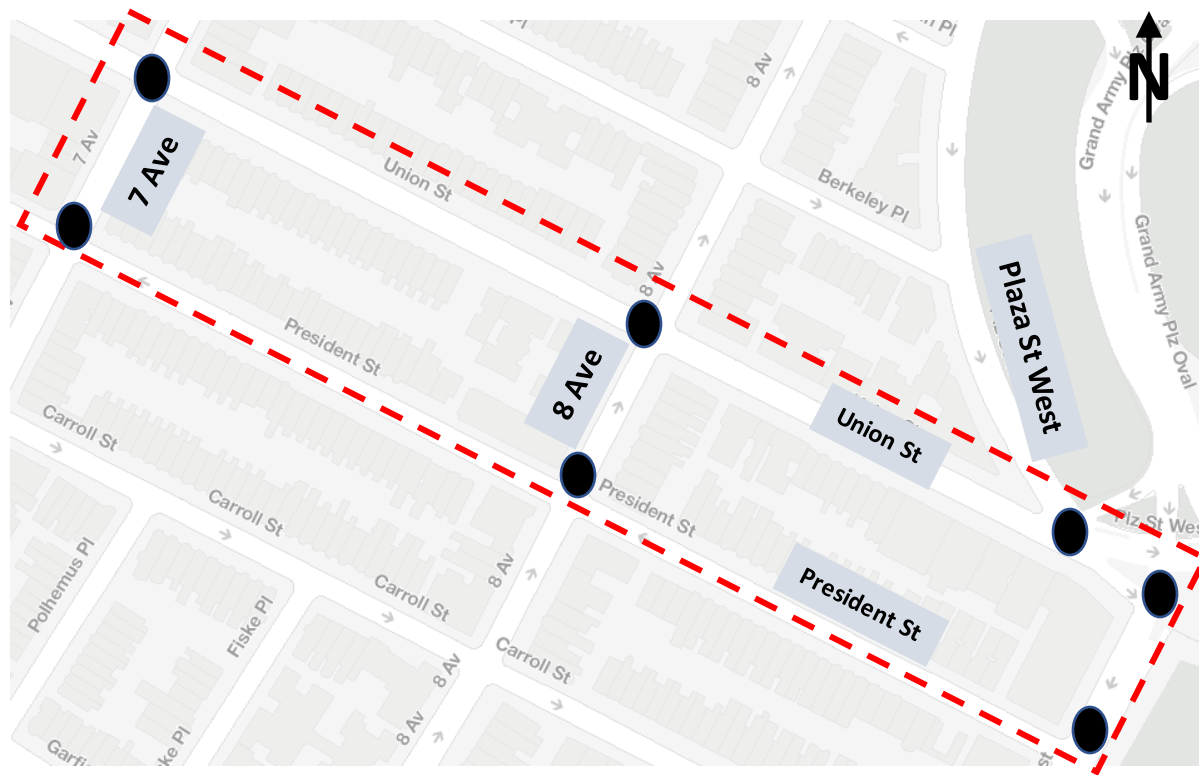
# 2



# Existing Conditions

## Study Area

- Project limits:
  - Union St and President St from 7<sup>th</sup> Ave to Prospect Park West
- Scope of study:
  - Conducted multiple site visits to observe field conditions and traveler behaviors.
  - Performed analysis using *StreetLight* to verify origins-destinations for re-routed westbound traffic on Union St.
  - Collected and analyzed turning movement counts and pedestrian crossing data.
  - Conducted intersection capacity analysis to evaluate traffic impacts of conversion on surrounding roadway network.

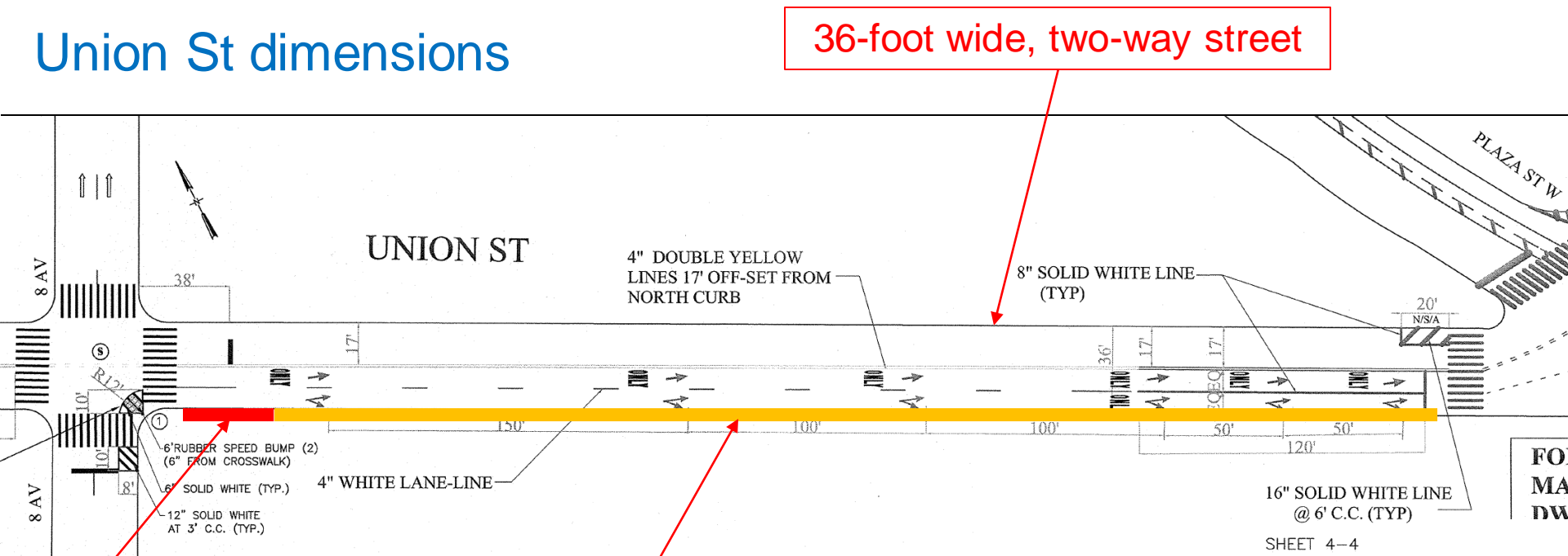


Study Area =

TMC and Pedestrian Count locations = ●

# Existing Conditions

## Union St dimensions



NSA

Most of south curb has:  
"No Standing, 7am-10pm, all days" restriction  
to provide for two eastbound travel lanes.

# Existing Conditions

## Moving-lane blockages along south curb

South curb lane is often obstructed by illegally-parking/standing vehicles performing deliveries or other curbside activity, effectively creating only one eastbound through lane.



Union St, between 8<sup>th</sup> Ave and Plaza St West



S/W corner Union St @ 8<sup>th</sup> Ave, looking east



# Existing Conditions

## Congestion spillback to 8<sup>th</sup> Ave/Union St

Congestion on eastbound Union St spills back from Grand Army Plaza onto 8<sup>th</sup> Ave, obstructing both the east crosswalk and northbound through vehicles on 8<sup>th</sup> Ave.



S/W corner of Union St @ 8<sup>th</sup> Ave, looking east



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## Proposed Improvements

# 3

## Street Direction Conversion and New Lane Markings

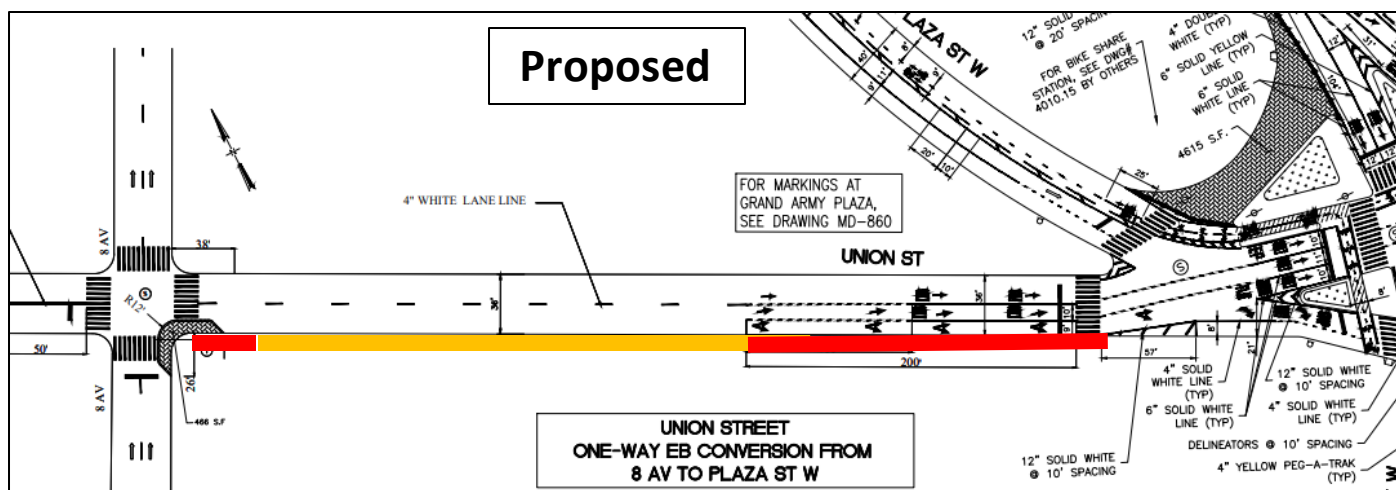
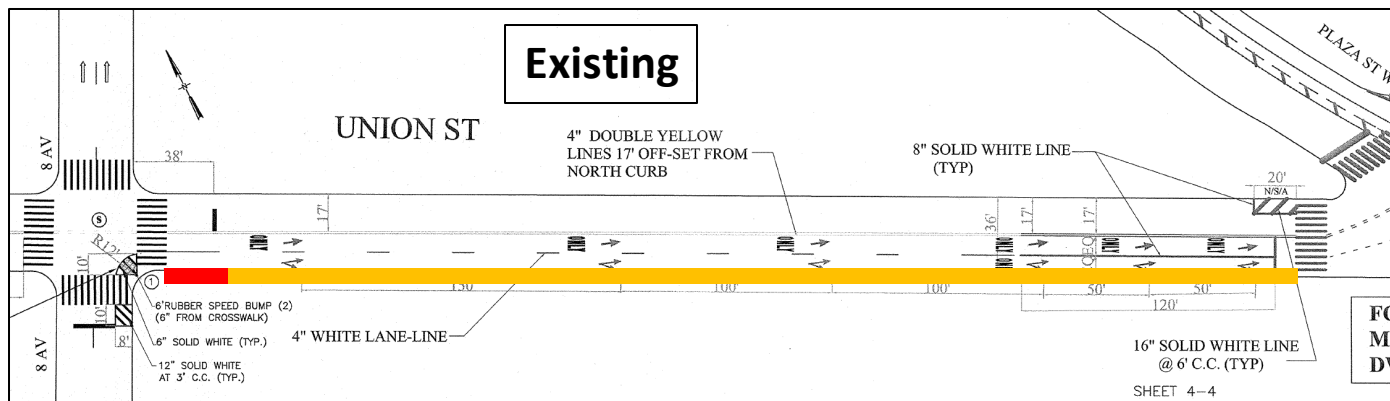
Flares to three lanes  
approaching GAP to  
match existing three  
lanes at Plaza St West.



# Proposed Improvements:

## Parking Regulation Refinements

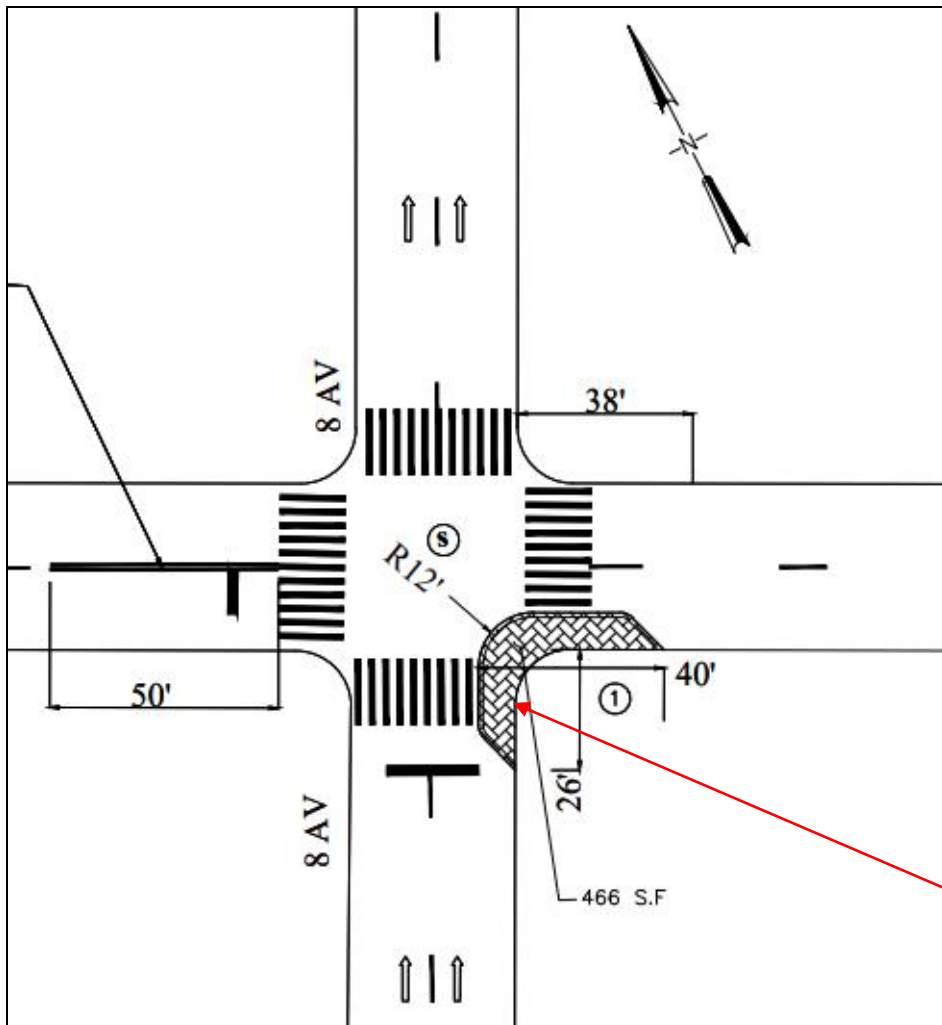
- Parking regulation modification on the south curb enhances intersection capacity approaching GAP and increases queue storage.
- Curb usage will be monitored and parking regulations refined as-needed.





# Proposed Improvements:

## Pedestrian Safety Improvement



### Benefits:

- Reduces pedestrian crossing distance across east and south crosswalks.
- Increases space for pedestrian circulation on the SE corner.
- Improves visibility between pedestrians on corner and approaching drivers.
- Helps establish more orderly traffic movement from 8<sup>th</sup> Ave onto Union St by physically discouraging illegal double-right turns.

Install painted curb extension on SE corner of 8<sup>th</sup> Ave / Union St intersection.

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## Next Steps

# 4

# Next Steps:

## Future Implementation

- Implementation schedule will be dependent on feedback DOT receives from CB 6.
- DOT to implement split phase signal at the intersection of Union St and 8<sup>th</sup> Ave in 2024.
- DOT will coordinate internally on the Grand Army Plaza capital study as proposals for both projects progress.



S/W corner of Union St @ 8<sup>th</sup> Ave, looking east



# Thank You!

Questions?



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