1. Background
2. Project Proposal
3. Summary
Background
**PROJECT CONTEXT**

**2007**
- Bike lanes installed on Centre St
direct cyclists from bridge north and to Greenway

**2017**
- **Protected bike lane connection installed on Centre St**
improves connection to the Brooklyn Bridge from south
- Shared route bike connections to Water St
  provides way finding through atypical street grid

**2018-19**
- **Protected bike lanes installed on Park Row**
  Extends connection to Brooklyn Bridge and to Chinatown

**2019**
- Bowling Green Shared Street (currently being installed) *Broadway, Morris St to Beaver St*
- **City Hall to Battery Park connection:**
  *Broadway, Whitehall St*

**2019 - Onwards**
- **Capital Projects Sidewalk Reconstruction**
  - Park Row
  - Water St at Whitehall (EDC)
Broadway Issues

*High pedestrian traffic, loading along designated bus routes*

**High pedestrian traffic**
- Pedestrians crossing midblock across multiple travel lanes and buses
- Conflict between pedestrians and left turns at Broadway and John St

**Express and local bus routes**
- M55, Staten Island (SIM), express buses and tour buses stop along Broadway between Barclay St and Battery Pl
- Truck loading occurs in designated bus lane and in front of bus stops along the west curb
- Cyclists frequently use the bus lane in both directions

**Loading Demand**
- East curb of Broadway between Fulton St and Morris St is signed as No Standing or Stopping Anytime
- Vehicles load in the bus lane, at the no standing zones or double park along the corridor
Broadway Biking
Future bike routes lead to Broadway
Lack of central connections to Bowling Green, Battery Park

Biking is growing in Lower Manhattan

- More than one million Citi Bike trips have started or ended on Broadway or Whitehall St, make up 15% of all trips in Lower Manhattan
  (Citi Bike Quarterly Report 2013 – 2019)

- 1,241 Cyclists on Broadway between Cortlandt St and Liberty
  (12 Hour Count, Midweek)

1,241

(Citi Bike Quarterly Report 2013 – 2019)
**Broadway Vehicle Volumes**

*Two designated vehicle lanes in addition to a bus lane*

- Traffic volumes drop significantly along the corridor
- High turn volumes conflict with high pedestrian traffic

Removing one vehicle lane between Barclay St and Morris St would provide space for:
- Pedestrian Improvements
- Commercial Loading
- Dedicated bicycle lanes without impeding vehicular traffic
Project Proposal
Broadway Project Goals

- Formalize and add loading space where possible
- Provide designated space for cyclists, separate from vehicles
- Connect City Hall, Brooklyn Bridge to Bowling Green, Waterfront path
- Improve pedestrian crossings and add painted sidewalk space at Wall St Subway Station
- Maintain traffic flow
Broadway Project Proposal

**Broadway Fulton St – Wall St, Exchange Pl – Morris St**

- Cyclists frequently use the bus lane
- High numbers of left turns conflict with pedestrians at John St
- Inconsistent curb regulations along the corridor
- Loading often observed in No Standing, No Stopping areas, or in the bus lane
**Broadway Fulton St – Wall St, Exchange Pl – Morris St**

**Typical Design**

**Existing**

- **West Sidewalk**
- **11 - 12’ Bus Lane**
- **10’ Travel Lane**
- **10’ Travel Lane**
- **7 - 11’ NSA/Loading**
- **East Sidewalk**

Length: 38 - 43’

**Proposed**

- **West Sidewalk**
- **11 - 12’ Bus Lane**
- **11 - 12’ Travel Lane**
- **8’ Loading Zone**
- **5’ - 6’ East Sidewalk**

Length: 38 - 43’

**Proposed**

- Provide dedicated bike lane
- Add split phase and dedicated turn lane for left turns onto John St
- Add new metered loading where feasible to separate bikes from vehicle traffic, buffer/delineate bike lane on narrow blocks
**Broadway John St**

*Signal timing improvements*

**Existing**

- **Cycle Length:** 90 s
- **Offset:** 45 s

**Proposed**

- **Cycle Length:** 90 s
- **Offset:** 40 s

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**Phase A**

- **Existing:**
  - Cycle Length: 60 s
  - Offset: 25 s
- **Proposed:**
  - Cycle Length: 40 s
  - Offset: 25 s

**Phase B**

- **Existing:**
  - Cycle Length: 30 s
  - Offset: 25 s
- **Proposed:**
  - Cycle Length: 25 s
  - Offset: 25 s

**Phase C**

- **Proposed:**
  - Cycle Length: 25 s
  - Offset: 25 s

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**Protected Movement**

**Permitted Movement**

**Red Phase**

**Pedestrian/Bike Crossing**
Broadway Project Proposal

Broadway Barclay St – Vesey St

- No bike route onto Broadway for cyclists arriving from Park Row bike lane/off Brooklyn Bridge
- Excess width marked with channelization
- Double left turns over long crossing distance at Park Row and Ann St
Broadway Project Proposal

Broadway Barclay St – Vesey St

**Proposed**

- Two-stage queue box for cyclists turning onto Broadway from Park Row
- Dedicated bike lane on Broadway in existing channelization
- Curbside bus lane and separated through lane and left turn lanes onto Ann St, Park Row
- Split phase eliminates conflict between pedestrians, cyclists and heavy left turns onto Ann St and Park Row
**Broadway**  *Barclay St – Vesey St*

**Signal timing improvements**

**Existing**
- **Cycle Length:** 90 s
- **Offset:** 32 s

**Proposed**
- **Cycle Length:** 90 s
- **Offset:** 32 s

Separate phases for left turns and pedestrians crossing on east side

*Legend:*
- **Green:** Protected Movement
- **Green:** Permitted Movement
- **Green:** Pedestrian/Bike Crossing
- **Red:** Red Phase
**Broadway Wall St – Exchange Pl**

**Existing**
- Pedestrians exiting and entering the train station frequently cross mid-block, or against through traffic.
- Narrow sidewalk due to ongoing construction.

**Proposed**
- Provide dedicated space for pedestrians and cyclists.
- Shorten pedestrian crossings at Wall St station entrances and Exchange Pl.
**Proposed**

**Shared Street SIP currently in progress for 2019**

- Coordination with Public Space Unit on overlap between proposed bike path design and shared street
Broadway, Whitehall St Beaver St – Pearl St

- Provide shared lane to guide cyclists
- Maintain existing pedestrian space
- Maintain existing loading
Whitehall St *Pearl St – Water St*

- Provide connection to Manhattan Waterfront Greenway
- Requires relocation of two NYS Banking Dept. spots to nearby block
- Removal of four Commercial Parking spots on the west curb of Whitehall St
Project Summary

- Provides and formalizes loading space
- Maintains traffic flow
- Provides designated space for cyclists, separate from vehicles
- Connects City Hall, Brooklyn Bridge to Bowling Green, Waterfront path
- Adds pedestrian space at Wall St Subway Station

Existing

- 11 - 12' Bus Lane
- 10' Travel Lane
- 10' Travel Lane
- 7 - 11' NSA/Loading

Proposed

- 11 - 12' Bus Lane
- 11 - 12' Travel Lane
- 8' Loading Zone
- 5' - 6' Buffer

Shared Street, 2019
DOT Public Space Project

New Pedestrian Space
Wall St Subway Entrance
Pedestrian Islands on Vesey St, Fulton St and Cortlandt St

SBL Split Phase

Manhattan Waterfront Greenway Connection
THANK YOU!

Questions?