E.165 St
Jerome Ave to Melrose Ave
Corridor Safety Improvements

New York City Department of Transportation
Presented by Research, Implementation & Safety—May 6, 2015—CB 4 Bronx
Why E. 165th St? Vision Zero Priority Corridor

- **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
    - **E. 165 St** identified as a priority corridor in the Bronx
Need: Why E. 165 St?

Vision Zero Priority
- E. 165 St a Priority Corridor with 23.1 Killed or Severely Injured (KSI) crashes per mile
  - Top 10% of corridors in the Bronx
- Two pedestrian fatalities at Grand Concourse and E 165 St since 2009

Senior Area
- Within the East Concourse Senior Pedestrian Focus Area (SPFA)

E 165 St - Jerome Ave to Melrose Ave, BX
Injury Summary, 2009-2013 (5 Years)

<table>
<thead>
<tr>
<th></th>
<th>Total Injuries</th>
<th>Severe Injuries</th>
<th>Fatalities</th>
<th>KSI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian</td>
<td>37</td>
<td>5</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Bicyclist</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Motor Vehicle Occupant</td>
<td>184</td>
<td>11</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>227</td>
<td>16</td>
<td>2</td>
<td>18</td>
</tr>
</tbody>
</table>

Fatalities, 01/01/2009-2/2/2015: 2
- Pedestrian: 2
- Bicyclist: 0
- Motor Vehicle Occupant: 0
Need: E. 165 St Crash Types

E. 165 St and Grand Concourse

- **Failure to Yield Crashes**
  - 50% of the total pedestrian crashes were failure to yield crashes
    - More than 50% higher than the borough average

- **Left Turn Motor Vehicle Crashes**
  - 28% of all motor vehicle crashes were left turn crashes
    - Nearly 3 times more than the borough average
Need: Why E.165 St?

Existing Use
Traffic data and analysis demonstrates:

- High pedestrian volumes crossing E. 165 St at Grand Concourse
- High percentage of vehicles turn left onto Grand Concourse
- Peak volumes on E. 165 St only necessitate one travel lane in each direction
Need: Why E.165 St?

Existing Configuration

Two-way—three widths

- Jerome Ave to Walton Ave—35 ft. wide, one lane in each direction
- Walton Ave to Sherman Ave—75 ft. wide, two lanes in each direction
- Sherman Ave to Melrose Ave/Park Ave/Webster Ave—30 ft. wide, one lane in each direction
Need: Why E.165 St?

Connection possibilities with the existing Bicycle Network

- Current north/south bike routes cross E. 165 St at:
  - Jerome Ave
  - Gerard Ave
  - Walton Ave
  - Grand Concourse
  - Melrose Ave/Park Ave
Existing: Walton Ave to Sherman Ave

- 75 ft. wide
  - Two travel lanes in each direction with extra wide lane widths
    - Lack of lane designation encourages unsafe behavior
      - Speeding, swerving, and double parking
Proposed: Walton Ave to Sherman Ave

Redesign street to accommodate appropriate traffic volumes
- Add flush median and left turn bays at Grand Concourse, Walton Ave, and Sheridan Ave

Increase pedestrian safety
- Construct pedestrian refuge islands on E. 165 St at Grand Concourse
- Add high visibility crosswalks to increase pedestrian visibility

Increase Bicycle Network connectivity
- Install bike lanes to connect to existing north/south bike routes at Grand Concourse and Walton Ave
Proposed: E. 165 St and Grand Concourse

- Install left turn bays from E. 165 St onto Grand Concourse
- Better organize traffic, help traffic flow, and help reduce left turn crashes
- Construct pedestrian islands on E. 165 St at Grand Concourse in new flush median
- Shorten pedestrian crossing distances and help reduce pedestrian crashes
Proposed: E. 165 St and Grand Concourse

- Install left turn bays at E. 165 St onto Grand Concourse to better organize traffic and help traffic flow.
- Install an east/west bike lane to connect to existing north/south Bike Network routes.
- Construct pedestrian refuge islands to shorten crossing distances and provide a refuge for slower pedestrians.
- Install a flush median to provide space for left turn bays and pedestrian refuge islands while maintaining traffic flow.
- Install left turn bays at E. 165 St onto Grand Concourse to better organize traffic and help traffic flow.
Existing: Melrose Ave to Sherman Ave

- 30 ft. wide
- No Parking Anytime on north side of street
- Travel lanes not properly aligned, vehicles traveling over the centerline
- Existing north/south bike routes at Melrose Ave and Park Ave
Proposal: Melrose Ave to Sherman Ave

- Realign double yellow centerline and add parking lane stripe
  - Better organize traffic and help traffic flow

- Upgrade crosswalks to high visibility
  - Increase pedestrian visibility

- Install shared lane bicycle markings and guide signs
  - Increase Bicycle Network connectivity

Existing

- North Sidewalk: 15' Travel Lane
- South Sidewalk: 15' Combined Travel / Parking Lane

Proposed

- North Sidewalk: 11' Shared Lane
- South Sidewalk: 8' Parking Lane
Example of Shared Lane

Crotona Ave & Fordham Rd
Existing: Jerome Ave to Walton Ave

- 35 ft. wide
- Parking on both sides of the street
- Existing north/south bike routes at Jerome Ave, Gerard Ave, and Walton Ave
Proposal: Jerome Ave to Walton Ave

- Add parking lane stripe
  - Better organize traffic and help traffic flow

- Upgrade crosswalks to high visibility
  - Increase pedestrian visibility

- Install shared lane bicycle markings and guide signs
  - Increase Bicycle Network Connectivity

Existing

Proposed
Benefits of Proposal

Benefits

- **Better organize traffic**
  - Proposed design is designed for appropriate volumes
  - Addition of left turn bays will better organize traffic and help traffic flow

- **Reduce speeds and inappropriate driver behavior**
  - New markings will visually constrain roadway for drivers and reduce speeds

- **Reduce Crashes**
  - Pedestrian refuge islands at Grand Concourse and E. 165 St reduces crossing distances for pedestrians and provides a refuge for slower pedestrians
  - Dedicated left turn bays will reduce left turn crashes
  - Lower speeds reduce the likelihood of injury crashes and fatality crashes

- **Increase Bicycle Network Connectivity**
  - Installing east/west bike routes on E. 165 St will allow cyclists to connect to five existing north/south routes