Monroe Drive/Boulevard Complete Street Concept Development Process

1. Review of Previous Plans
2. Existing Conditions Data Collection & Analyses
   - Vehicle/Bike/Ped Counts + Crash Data + Transit Routes
3. Community Engagement #1
   - August 2016
   - Shared Previous Plans/Existing Conditions & Received Input on Community Needs
4. Community Engagement #2
   - February 2017
   - Presented Improvement Options & Received Community Feedback
5. Analyzed Improvement Options
6. Developed Improvement Options
7. Conducted Complete Streets Network Analysis
8. Refined Alternatives & Developed Recommended Concept
9. Community Engagement #3
   - June 2018
   - Share Recommended Concept & Receive Final Community Feedback
10. Finalize Concept
## Previous Plans Reviewed

- Atlanta Beltline Master Plan (Sub Area 4)
- Atlanta Beltline Master Plan (Sub Area 5)
- Atlanta Beltline Master Plan (Sub Area 6)
- Eastside Trail Counter Results for Q1 2016
- Transit Oriented Atlanta
- Cargo Atlanta
- Cycle Atlanta Phase 1.0
- Connect Atlanta: Street Design Guide
- Move Atlanta: Active, Balanced & Complete Streets
- Connect Atlanta Plan: Transportation Plan
- Henry W. Grady High School Safe Routes to School
- Atlanta Region Bicycle Transportation Pedestrian Walkways Plan
- Walk.Bike.Thrive!
- Piedmont Heights Blueprints
- The Virginia-Highland Neighborhood Master Plan
- Piedmont Park Northern Expansion
- Preliminary Assessment for Community Revitalization at 10th and Monroe
- Preliminary Neighborhood Plan Documents
- Bicycle Route Masterplan Project Status Map
- Project Status Map
- Old Fourth Ward Master Plan
- Oakland Cemetery Master Plan
- Imagine Downtown: ENCORE (2009 Update)
- Eastside Atlanta Redevelopment Plan & Tax Allocation District #5 – Eastside
- Boulevard Road Safety Audit Report
- Boulevard – Pedestrian Mobility Improvements
- Memorial Drive – MLK Jr. Dr. Area Revitalization Study

## Existing Conditions

### Monroe Drive / Boulevard Complete Streets
- Current Hourly Traffic Volumes
- Crash Location Heat Map
- Current Bike Facilities and MARTA Routes & Stops

## Highlights of Community Engagement #1

### What Modes Are Most Important to You?

- **Transit**
- **Driving**
- **Bicycle**
- **Walking**

### Major Comments & Concerns
- Support for Complete Streets Improvements
- Safety Should be Top Priority
- Support for Maintaining Existing Number of Lanes in the Corridor
- Support for Road Diet
- Monroe Drive at 10th St/Beltline/Virginia Ave—Major Congestion and Safety Issues
- Concerns Over Increased Cut-Through Traffic into the Neighborhoods
- Support for Landscaped Medians
- Storm Water Drainage Issues North of 10th St
- Bike Accommodation Should be Protected or Separated from Vehicular Traffic
- Delivery Truck Parking on Monroe Dr During Rush Hour is a Problem
- Repair Broken/Unsafe Sidewalks and Make Crossings ADA Compliant
- Left Turns Causing Congestion
- Two-way Piedmont Ave to Relieve Monroe Dr Congestion
- Crossing Street as Pedestrian or Bicyclist is Unsafe
- Explore Roundabouts on Monroe Dr
- Synchronize Signals
- Improved Enforcement and Traffic Calming Needed
- Restore MARTA Bus Service Between 10th St and Piedmont Ave
- Problem Intersections: Woodward Ave, Memorial Dr, Decatur St, Freedom Pkwy, 10th St, Park Dr, Amsterdam Ave, Piedmont Ave, Armour Dr
Developed Improvement Options

Identified existing and future needs by comparing previous planning recommendations against existing conditions analysis results and input received as part of community engagement #1

Potential Improvement Options Identified:
- Milling, resurfacing & striping
- Lane reconfigurations
- Road diets
- Sidewalk repairs
- ADA ramp upgrades
- Curb extensions & pedestrian refuge islands
- New sidewalk
- Access management
- Intersection geometry improvements
- Roundabouts
- Protected bike intersections
- Traffic signal equipment upgrades
- Traffic signal phasing & retiming
- Pedestrian beacons & HAWKS signals
- Bike signal

Analyzed Improvement Options

Safety Analysis
(Potential Effect of Reducing/Increasing Injury, Fatal, and Total Crashes)

Alternative Modes Consideration
(Improved Accommodation for Pedestrians, Bicyclists & Transit)

Travel Time Simulation
(Build vs No-Build Scenarios)

Capacity Analysis
(Effects to Intersection Delay/Level of Service)

Constructability Design Considerations
Right-of-Way Impacts

Highlights of Community Engagement #2

- Presentation and Displays of Improvement Options & Analyses Results
- Real-Time Polling
- Questions & Answers Period
- Comment Cards
- Emailed Comments
- Provided Additional Information, Including Traffic Count Data on Renew Atlanta Website

The majority of comments received focused on:
- Support for road diet creating safer road for all modes of transportation
- Concern that road diet would increase “cut-through” traffic on local neighborhood streets due to increased travel times and intersection delay along the corridor, particularly north of 10th St
- Extend Monroe Dr/Boulevard complete street project south of I-20 to McDonough Blvd
- Desire for sidewalk improvements along entire length of corridor
- Support for bicycle and pedestrian safety improvements at Monroe Dr and 10th St
- Concern over increased vehicular delay at Monroe Dr and 10th St
- Support for pedestrian crossing improvements on Monroe Dr at Greenwood Ave
- Support for pedestrian safety and transit access improvements on Boulevard
Monroe Drive/Boulevard
- Road diet (reconfigure lanes to one lane in each direction with two-way left turn lane) leads to approximate 10% reduction in traffic using corridor segments analyzed during the peak hours.

Monroe Drive from 8th Street to Piedmont Avenue:
- Diverted traffic is distributed to alternative adjacent routes resulting in an average increase in traffic of 5-6% on affected facilities.
- Road diet results in slight increase in vehicle delay at most intersections, with notable additional delay at intersection with Piedmont Avenue.

Boulevard from McDonough Boulevard to Atlanta Avenue:
- Reconfiguration of lanes for road diet results in no quantifiable increase in vehicle delays at studied intersections and it is anticipated that this change will also result in significant improvement in travel safety in the corridor.

Monroe Drive/Boulevard Road Diets Alternate Route Impacts

<table>
<thead>
<tr>
<th>ROADWAY</th>
<th>FROM</th>
<th>TO</th>
<th>AVERAGE VOLUME INCREASES</th>
<th>AVERAGE VOLUME CHANGE</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>AM PEAK</td>
<td>PM PEAK</td>
</tr>
<tr>
<td>Piedmont Ave</td>
<td>Monroe Dr</td>
<td>14th St</td>
<td>373</td>
<td>313</td>
</tr>
<tr>
<td>Argentine Ave/Central Plk Pkwy</td>
<td>20th St</td>
<td>Highland Ave</td>
<td>35</td>
<td>70</td>
</tr>
<tr>
<td>Charles Allen Dr/Parkway Dr/Jackson St</td>
<td>10th St</td>
<td>Decatur St</td>
<td>371</td>
<td>111</td>
</tr>
<tr>
<td>Glen Iris Dr/Randolph St</td>
<td>Peachtree Ave</td>
<td>Edgewood Ave</td>
<td>40</td>
<td>36</td>
</tr>
<tr>
<td>N Boulevard</td>
<td>E Mooreside Dr</td>
<td>Boulevard</td>
<td>640</td>
<td>720</td>
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<tr>
<td>Peachtree Rd/Howland Ave</td>
<td>Lanier Rd</td>
<td>McDonough Blvd</td>
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<td>400</td>
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<td>Hank Aaron Dr</td>
<td>Memorial Dr</td>
<td>University Ave</td>
<td>270</td>
<td>240</td>
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<tr>
<td>Hill St</td>
<td>Decatur St</td>
<td>McDonough Blvd</td>
<td>365</td>
<td>200</td>
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<tr>
<td>Cherokee Ave</td>
<td>Memorial Dr</td>
<td>Atlanta Ave</td>
<td>35</td>
<td>45</td>
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<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>6%</td>
<td>5%</td>
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</table>

Monroe Drive Average Intersection Delay

<table>
<thead>
<tr>
<th>Intersection</th>
<th>AM PEAK HOUR Average Delay (sec/veh)</th>
<th>PM PEAK HOUR Average Delay (sec/veh)</th>
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</thead>
<tbody>
<tr>
<td>1 Monroe Dr at Piedmont Ave</td>
<td>42</td>
<td>70</td>
</tr>
<tr>
<td>2 Monroe Dr at Amsterdam Ave</td>
<td>11</td>
<td>19</td>
</tr>
<tr>
<td>3 Monroe Dr at Park Dr</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>4 Monroe Dr at 10th St</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>5 Monroe Dr at Virginia Ave (N)</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>6 Monroe Dr at Virginia Ave (S)</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>7 Monroe Dr at 8th St</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>

Boulevard Average Intersection Delay

<table>
<thead>
<tr>
<th>Intersection</th>
<th>AM PEAK HOUR Average Delay (sec/veh)</th>
<th>PM PEAK HOUR Average Delay (sec/veh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Boulevard at Atlanta Ave</td>
<td>21</td>
<td>20</td>
</tr>
<tr>
<td>2 Boulevard at Englewood Ave</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>3 Boulevard at Custer Ave</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>4 Boulevard at McDonough Blvd</td>
<td>12</td>
<td>11</td>
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Monroe Drive / Boulevard Complete Street: Recommended Concept

**Freedom Parkway to Auburn Avenue**

- **Boulevard at Irwin Street Intersection Restriping & Signal Upgrade**
  - Alternative Mode: Increases sidewalk on north side of Irwin Street (across from Hope Hill Elementary)
  - Safety: Potential to reduce injury crashes by 21%***
  - Performance: No significant changes to vehicle travel times or delay
  - Constructability: Plausible within existing right-of-way

- **Boulevard at Irwin Street**
  - Alternative Mode: Removes Unsignalized Access Points at Intersection
  - Safety: Potential to eliminate 1-2 vehicle crashes per year (based on historic crash data)
  - Performance: No significant change to vehicle travel times or delay
  - Constructability: Plausible within existing right-of-way

- **Boulevard at Auburn Avenue**
  - Alternative Mode: Curb Extension & Signal Upgrade
  - Safety: Enhanced pedestrian safety due to increased visibility and lower vehicle turning speeds
  - Performance: Increased average delay (20-30 seconds) for eastbound traffic during PM peak hour
  - Constructability: Plausible within existing right-of-way

- **Boulevard at John Wesley Dobbs Avenue/Gain Street**
  - Alternative Mode: Reduces crossing distance on east leg of intersection
  - Safety: Potential to reduce injury crashes by at least 10%**
  - Performance: Projected decrease in travel times for southbound vehicles
  - Constructability: Right-of-way impacts to the west of the intersection

- **Addition of a leading left turn phase to either the North or South approaches of Boulevard at Irwin St**

- **Installation of accessible pedestrian signal providing audible indicators at Boulevard and Auburn Ave**

- **Milling, paving and striping**

- **Sidewalk and pedestrian ramp repairs and upgrades**

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* Safety Effects of Marked versus Unmarked Crosswalks at Uncontrolled Locations (HitcA, 2005)
** Highway Safety Manual (AASHTO, 2010)
*** A Full Bayes Multivariate Intervention Model with Random Parameters Among Matched Pairs for Before-After Safety Evaluation (ElBayoumy and Sajed, 2011)